For personal use only

ASX Release 27 August 2026

Honeymoon NFS confirms continued economic production

Boss has established world-class ISR technical capability, operating experience and advanced modelling which underpin a robust pathway to long-term economic uranium production

Highlights

- **Successful NFS confirms economic production pathway –** New Feasibility Study (NFS) confirms that a wide-spaced ISR wellfield design is viable and is forecast to support continued economic uranium production at Honeymoon until at least FY34, with forecast life-of-mine production, of approximately 13.8Mlbs U_3O_8 drummed over a nine-year operating period.
- **Wider well spacing materially lowers costs –** Increasing wellfield spacing mitigates the impact of the lower Mineral Resource Estimate (MRE) and reduces life-of-mine AISC by approximately $30/lb on a like-for-like basis compared with applying the original planned wellfield spacing to the updated MRE.
- **Favourable deposit characteristics –** The wide-spaced wellfield design is enabled by Honeymoon's unique combination of favourable deposit characteristics, including a combination of high permeability and hydraulic connectivity, effective aquifer confinement, low natural groundwater-flow velocity and low acid consumption.
- **Benchmarking inline against established ISR operations –** Key wellfield design and operating parameters have been benchmarked in line with several ISR operations in Kazakhstan.
- **Adopted world-class technical approach to ISR mine planning –** Utilising deposit-scale reactive transport modelling (RTM) calibrated against extensive historical operating data, representing a world-class technical approach to ISR mine planning.

Cautionary Statement

The production target and forecast financial information referred to in this announcement (including attachments) is based on 65% Indicated Mineral Resources and 35% Inferred Mineral Resources over the 9-year life-of-mine. The first 4 years of the production target is underpinned by 89% Indicated Mineral Resources and 11% Inferred Mineral Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target will be realised.

The Company believes that it has a reasonable basis for providing the production target and forward-looking statements in this announcement as the Inferred Mineral Resources are not the determining factor in project viability (noting, most significantly that Honeymoon is already in production). Refer to Section 12 of the New Feasibility Study (attached to this announcement) for the material assumptions underpinning the production target and forecast financial information.

FOR FURTHER INFORMATION PLEASE CONTACT:

Boss Energy Limited
ABN 38 116 834 336

Level 1, 420 Hay Street, Subiaco
Western Australia 6008

Matthew Dusci - Managing Director/ CEO
+61 (08) 6263 4494

ASX: BOE
OTCQX: BQSSF

www.bossenergy.com

For personal use only

Life-of-mine plan, production and cost

- **Nine-year production profile –** Forecast life-of-mine production, of approximately 13.8Mlbs U_3O_8 drummed over a nine-year operating period, to reach 1.9Mlbs per annum from FY30 to FY33.
- **Lower cost through higher PLS grades and reduced infrastructure –** Average C1 cost of A$50/lb (US$35/lb) and AISC of A$79/lb (US$55/lb),[1] reflecting an increase in concentration of uranium in the pregnant leach solution (PLS) grade by circa 28% and reduction in wellfield infrastructure of circa 50% as compared with the historical design being applied to the updated MRE.
- **Capital-light ongoing transition to wide-spacing** – Most of the total capital is sustaining capital which is phased as new wellfields are brought online over the life-of-mine. Minimal additional facilities capital of $48M to be phased over the next three years (total of $58M over life-of-mine).
- **Disciplined capital allocation through transition –** The short-term production and cost profile reflects mine-development uncertainty since July 2025 and Boss' disciplined decision to limit further investment in legacy wellfields where the expected returns did not deliver an acceptable return on capital. This approach prioritised long-term value and balance-sheet strength while balancing near-term production during the transition to the wide-spaced wellfield design, which commenced in January 2026.
- **Substantial recovery of MRE reduction –** Forecast life-of-mine production is 26% lower as compared to the 2021 EFS[2], reflecting a substantial recovery of a 63% decline from the 2019 MRE to the updated MRE at a like for like cut-off grade of 250 ppm. This demonstrates the benefit of the wide-spaced wellfield design to enable a reduction in cut-off grade to 100 ppm which has brought substantial low-grade resource into an economic wellfield design.

Established operation and infrastructure

- **Existing infrastructure –** Full ongoing utilisation of the existing processing plant, trunklines and other infrastructure.
- **Proven processing performance –** Since restarting in April 2024, Honeymoon has produced more than 2.3Mlbs of drummed U_3O_8, demonstrating proven processing performance and the effectiveness of the ongoing lixiviant chemistry and resin loading and unloading processes.
- **Targeted capacity upgrades –** Completion of NIMCIX column 6 and the staged expansion of the Water Treatment Plant (WTP) are required to support the life-of-mine production schedule.
- **Production upside –** Earlier delivery of the Water Treatment Plant expansion or continued optimisation of water treatment requirements could accelerate the production ramp-up.

[1] *C1 cost and AISC reflect the life-of-mine average to 2034*

[2] *Refer to ASX Release dated 21 June 2021, titled "Updated Feasibility Study identifies lower costs and increased financial returns". Comparison adds back drummed production up to 30 June 2026 of 2.3Mlbs for a like for like comparison.*

For personal use only

Updated Mineral Resource Estimate

- **Updated Mineral Resource –** Updated Honeymoon Deposit MRE of 21.4 Mt @ 440 ppm[3] U_3O_8 for 20.8 Mlbs of U_3O_8 metal at 100 ppm cut-off, comprising 66% Indicated and 34% Inferred.[4]
- **Updated Mineral Resource foundation –** NFS is underpinned by an updated MRE incorporating substantially increased drilling density, revised geological interpretations, estimation methodology, incorporated operating permeability data, and experience gained since production recommenced. This enables a materially enhanced understanding of the mineralisation grade and distribution, geology and permeability.
- **Uranium in clay has been excluded –** The updated MRE includes only uranium hosted within permeable reservoir sands that is considered contactable by lixiviant, based on a newly developed permeability model.
- **Updated estimation methodology –** The MRE incorporates a reduction in cut-off grade from 250 ppm to 100 ppm U_3O_8, a change in estimation approach and the application of ISR-specific criteria for assessing the reasonable prospects for eventual economic extraction.
- **Decrease compared with previous resource –** The updated Honeymoon MRE (at a 100 ppm U_3O_8 cut-off and depleted as of 30 June 2026) represents a decrease in metal of 15.1 Mlbs U_3O_8 (-42%), with an average grade reduction of 220 ppm U_3O_8 (-33%) compared to the 2019 MRE (at a 250 ppm U_3O_8 cut-off and depleted through to 2019)[5], which supported the 2021 EFS. At a 250 ppm cut-off and without accounting for depletion, the U_3O_8 metal has decreased by 63%, and the U_3O_8 grade has increased by 16% from the 2019 Honeymoon MRE to the updated MRE.

Improvement, growth and approvals

- **Further wellfield optimisation potential –** The NFS identifies opportunities to further optimise wellfield spacing, which could reduce infrastructure requirements and improve capital efficiency, recovery and unit costs.
- **Brooks Dam North included in the mine plan —** The NFS life-of-mine production target includes Brooks Dam North, which contributes approximately 15% of forecast production. Production from this domain requires the planned Honeymoon Mine Extension, with approvals targeted by 2030.
- **Regional growth opportunity beyond the NFS –** Jasons Deposit and Gould's Dam contain a combined Mineral Resource of 45.1Mlbs U_3O_8[6] and are not included in the NFS life-of-mine plan. Their proximity, and similarity of deposit characteristics, to Honeymoon potentially provide a low-capital pathway to extend mine life and increase production by leveraging existing infrastructure, ISR capability and the operating workforce, subject to studies.

A conference call will be held today, Thursday, 27 August 2026, at 7am AWST (9am AEST).

To register and listen in live, please click on the link below:

https://loghic.eventsair.com/568147/931415/Site/Register

---

[3] The Mineral Resource is mainly based on equivalent U_3O_8 (eU_3O_8), without adjusting for localised radiometric disequilibrium effects.

[4] Due to localised variances in forecast recovery rates of Indicated and Inferred material, the production target and forecast financial information referred to in this announcement (including attachments) is based on 65% Indicated Mineral Resources and 35% Inferred Mineral Resources over the 9-year life of mine.

[5] Refer to ASX Release dated 25 February 2019, titled "149% Increase in Measured & Indicated Mineral Resources over Honeymoon Re-start Area"

[6] Refer to ASX Release dated 19 March 2026, titled "Gould's Dam and Jasons Deposit Mineral Resource and Permitting Update." Jasons Deposit MRE comprises 13.3Mt @ 410 ppm U_3O_8 for 12.0Mlbs U_3O_8 metal. Gould's Dam MRE comprises 38.7Mt @ 388ppm U_3O_8 for 33.1Mlbs U_3O_8 metal. Refer to Important Notices for further detail on the Gould's Dam and Jasons Deposit MRE, including the Mineral Resource Classification

For personal use only

Boss Energy Limited (ASX: BOE; OTCQX: BQSSF) ("**Boss**" or "the **Company**") is pleased to announce the outcomes of the updated Mineral Resource Estimate (MRE) and New Feasibility Study (NFS) for its 100%-owned Honeymoon Uranium Operation in South Australia.

The NFS establishes a new economic life-of-mine plan for Honeymoon, that is founded on new world-class technical capability but, critically, incorporates growing operating data and experience built since production restarted in April 2024.

The study incorporates additional drilling, an updated Mineral Resource, detailed permeability and geometallurgical analysis, actual wellfield performance and advanced reactive transport modelling. Combined, this work has materially improved Boss' understanding of the distribution of uranium mineralisation, permeability, hydraulic connectivity and the geochemical processes controlling uranium recovery. As a result, the Company views that the NFS represents a detailed study upon which to deliver a long-term, viable uranium operation.

The NFS confirms a wide-spaced five-spot, 8 pattern, wellfield design as optimal for the development of Honeymoon. The design reduces the number of wells and associated surface infrastructure required to access an equivalent mineralised area, lowering the relative cost of development. The wider-spacing and refined operational design are enabled by deposit characteristics at Honeymoon which results in significantly lower acid consumption and much higher lixiviant residence time. As a result, the increased effective recoveries enable more of Honeymoon's extensive lower-grade mineralisation to be incorporated into the production plan.

The existing Honeymoon processing facility remains the foundation of the operation, with consistent operations since April 2024, demonstrative of a robust flowsheet design that retains capacity to support future production growth.

Boss CEO and Managing Director, Matthew Dusci, commented:

"The New Feasibility Study establishes a technically robust pathway for Honeymoon and delivers a fundamental step change in the operation's cost structure.

"86,670 metres of new drilling, commercial ISR operating data, deposit-wide permeability modelling and advanced reactive transport modelling have transformed our understanding of the deposit and how it can be most effectively developed.

"This work has enabled us to redesign the wellfields around the characteristics of the orebody. The selected wide-spaced design accesses more of the resource with substantially fewer wells and less infrastructure, while increasing lixiviant residence time to support higher PLS grades and improved recoveries. Together, these benefits materially reduce capital intensity and operating costs, establishing a structurally lower-cost pathway for Honeymoon compared with the previous wellfield design.

"The NFS provides a high-confidence base-case production plan from an established operating platform, with the processing plant and core infrastructure already in place. Importantly, this base case is not the limit of Honeymoon's potential. There remains significant scope to further optimise well spacing, recovery, production, costs and mine life as operating data continues to build.

"The NFS includes only the Honeymoon Mineral Resource and excludes Gould's Dam and Jasons Deposit. The broader Honeymoon region comprises a combined Mineral Resource of 65.9Mlbs U_3O_8, including 45.1Mlbs at Gould's Dam and Jasons Deposit. These resources provide substantial potential to increase annual production and extend mine life by leveraging Honeymoon's established infrastructure, operating workforce and Boss' ISR capability.

"With the base-case plan established, our focus is now on execution, optimisation and growth. We have a clear pathway to drive further value from Honeymoon and progressively establish it as the centre of a larger, low-capital regional uranium production hub. Boss' strong balance sheet provides the capacity to readily fund the additional capital identified in the NFS.

"I would like to acknowledge the exceptional effort and technical capability of the Boss team and our consulting partners in delivering the New Feasibility Study and updated Mineral Resource Estimate."

For personal use only

For personal use only

1. Honeymoon Feasibility Study Outcomes - Summary

1.1. Introduction

Boss initiated the Honeymoon Review after the review of delineation drilling and operating performance identified potential challenges that may arise in achieving nameplate capacity as previously outlined in the EFS. This was largely due to the potential for less continuity of mineralisation and leachability. As a result of the Honeymoon Review, Boss withdrew the EFS after identifying:

- less continuity of higher-grade mineralisation, with mineralisation occurring in more discrete pods;
- reduced overlap between mineralised lenses across stacked horizons, limiting the ability to use the same wellfield infrastructure to access multiple horizons;
- a material proportion of MRE mineralisation occurring within or adjacent to lower-permeability material; and
- less uranium under leach per wellfield as the wellfield design was constrained to higher-grade mineralisation.

The Honeymoon Review did recognise an opportunity in that the Honeymoon Deposit observed extensive, laterally continuous lower-grade mineralisation that was not expected to be economically captured under the previous EFS wellfield design.

Boss therefore commenced the NFS, to establish a materially lower-cost approach to developing the Honeymoon Deposit. Central to this work was assessing whether increased spacing between injector and extraction wells could reduce wellfield development and infrastructure requirements and enable the lower-grade mineralisation to be economically recovered.

To determine the technical and economic viability of the wider-spaced wellfield design, Boss undertook a comprehensive, multidisciplinary program of work, including:

- an updated MRE, reported and classified in accordance with the JORC Code (2012), supported by accelerated delineation drilling and increased drill density;
- development of updated deposit-wide geological and permeability models;
- hydrogeological, geochemical and geometallurgical studies;
- analysis of extensive historical and recent operating data and wellfield performance;
- development and calibration of an advanced reactive transport model integrating the deposit's geological, hydrogeological and geochemical characteristics;
- assessment of alternative well spacings and wellfield configurations, including predicted uranium recovery, production-solution grades and reagent consumption;
- preparation of detailed wellfield designs, development schedules and life-of-mine production forecasts; and
- completion of the supporting engineering, capital cost, operating cost and economic evaluation for the NFS.

The scope of the NFS was to confirm the technical, operational and economic viability of the wide-spaced wellfield design and establish a base life-of-mine plan for the Honeymoon Deposit. Given the accelerated timeframe and defined scope of the study, the NFS does not represent a fully optimised case, with a range of opportunities remaining to seek to improve production, recovery, development timing and costs. The NFS is also limited to the Honeymoon Deposit and does not include the potential future development of Gould's Dam or Jasons Deposit resources.

Further details of these studies are provided in the *Honeymoon New Feasibility Study and Honeymoon Mineral Resource Estimate – Technical Overview*, effective August 2026 and attached to this release.

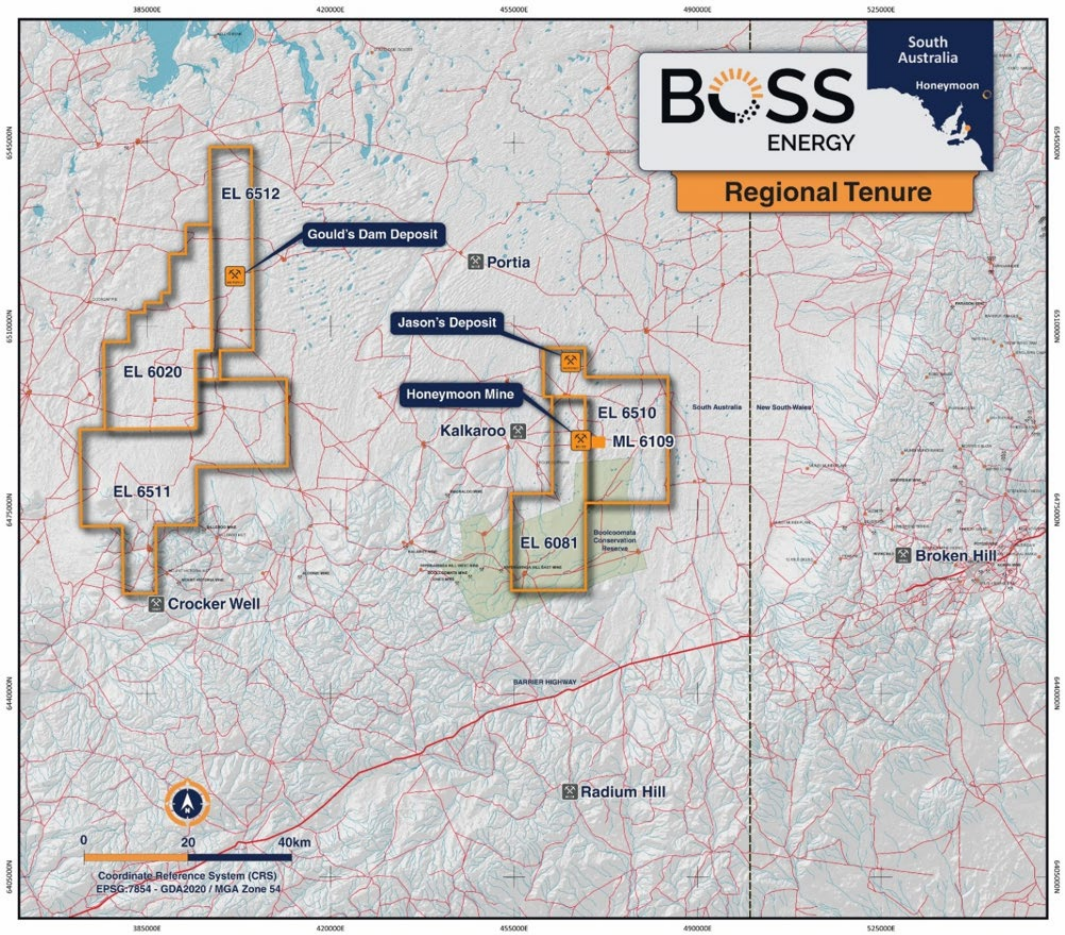


Figure 1: Location map showing the Honeymoon Operation

1.2. NFS at a Glance

The NFS defines a wide-spaced, 8-pattern, five-spot wellfield design, based on 49 m injector-to-extractor spacing, as the base-case development scenario, with increases in spacing identified as an optimisation opportunity. This compares with the EFS design, which adopted injector-to-extractor spacing of approximately 30-40 m. The wide-spaced design is expected to improve operating efficiency and pregnant leach solution (PLS) grades by:

- increasing residence time within the mineralised aquifer, allowing the lixiviant more time to interact with the uranium mineralisation;
- increasing the distance travelled by the lixiviant, enabling more uranium mineralisation to be contacted each time it passes through the mineralised aquifer; and
- placing a larger portion of the mineralised area under leach within each wellfield, which results in using fewer wells, wellhouses and associated infrastructure to develop an equivalent mineralised area.

The NFS is underpinned by an updated MRE, reported and classified in accordance with the JORC Code (2012), an advanced RTM calibrated against actual operating performance, and feasibility-level assessments of the wellfields, processing plant and supporting infrastructure required to deliver the life-of-mine plan and pre-feasibility study level estimates for the WTP. It also incorporates the regulatory and environmental approvals pathway.

For personal use only

The NFS life-of-mine plan is based solely on the Honeymoon MRE. However, the Honeymoon infrastructure and wide-spaced wellfield design has potential applicability to the satellite resources of Jasons Deposit and Gould's Dam. Studies are underway to determine the most economical way to leverage these resources to extend the life-of-mine plan and increase annual production beyond that presented in the Honeymoon-only NFS.

Table 1: Honeymoon NFS at a glance summary of NFS parameters

Honeymoon NFS Parameter	Unit	NFS outcome
MRE		
Honeymoon Mineral Resource	Mlb U_3O_8	20.8
Indicated / Inferred Mineral Resource	%	66 / 34
Within / Outside ML6109	%	87 / 13
Production[1]		
Mine total extraction	Mlb U_3O_8	14.5
Mine total drummed	Mlb U_3O_8	13.8
Indicated / Inferred Drummed	%	65 / 35
Within / Outside ML6109	%	85 / 15
Maximum annual drummed production	Mlb U_3O_8	1.9
Life-of-mine duration	years	9
Wellfields		
Total wellfields (including existing)	#	59
Total wells (including existing)	#	1,340
Average active wellfields	#	16
Wellfield recovery	%	90
Selected injector-to-extractor spacing	m	49
Long-term uranium price assumption	US$/lb U_3O_8	90
Cost		
C1 Cost (to 2034) [2]	$/lb U_3O_8	50 (US$35)
AISC (to 2034) [2]	$/lb U_3O_8	79 (US$55)
Sale price[3] less AISC (to 2034)	$/lb U_3O_8	50 (US$35)
Additional enabling capital	A$M	58

[1] This production target must be read in conjunction with the cautionary statement on page 1 of this announcement, which includes that "there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised".

[2] Cost average based on weighted average cost from 2027 to 2034. 2035 not included as costs are considered not meaningful.

[3] Sale Price based on US$90/lb uranium price and AUD:USD of 0.70.

For personal use only

Refer to Section 12 of the New Feasibility Study attached to this announcement for the material assumptions underpinning the production targets and forecast financial information, as required by ASX Listing Rules 5.16.1 and 5.17.1.

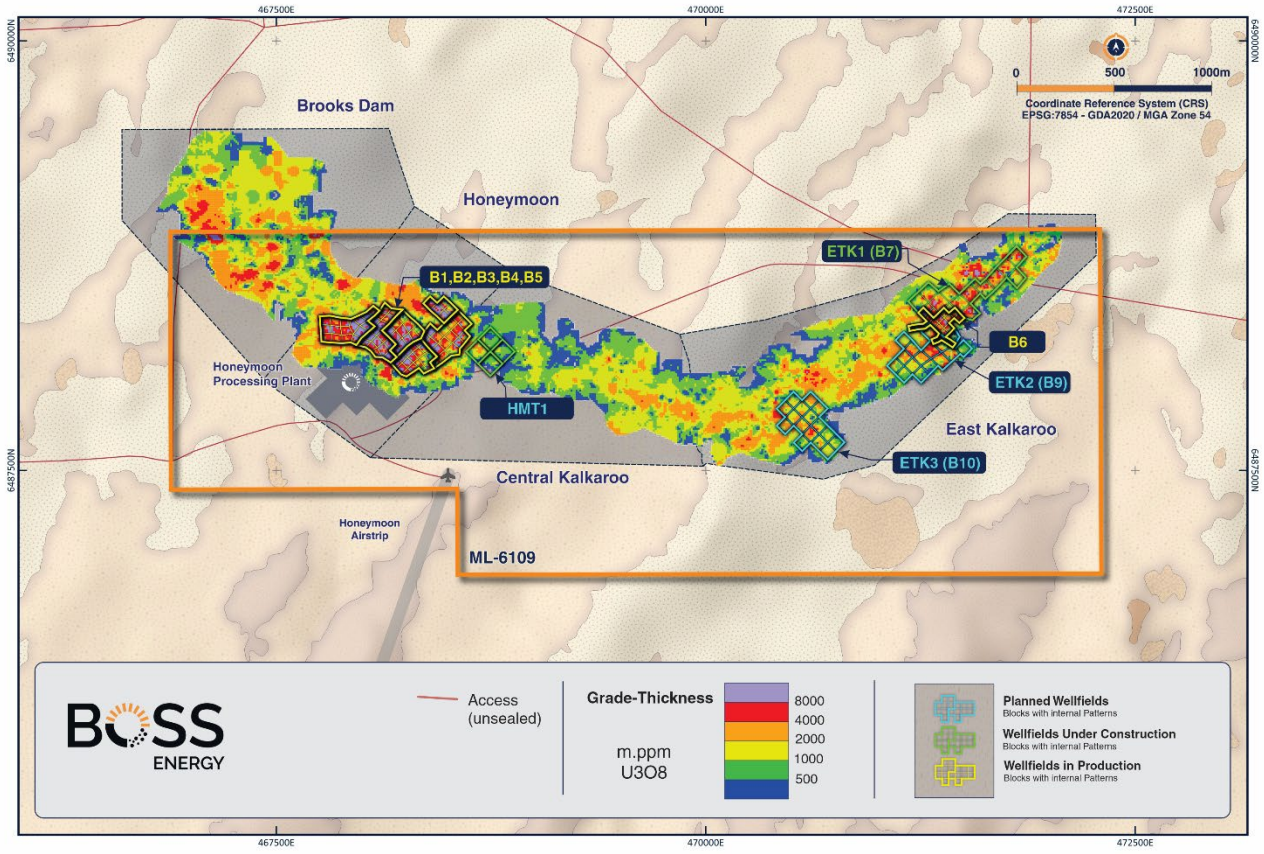


Figure 2: Image showing continuous mineralisation of the Honeymoon Deposit with outlines of the current wellfields

For personal use only

For personal use only

2. Honeymoon Deposit Mineral Resource Overview

The following section summarises the material information relevant to the Honeymoon Deposit (Honeymoon) MRE, in accordance with ASX Listing Rule 5.8.1. The MRE covers the Honeymoon Deposit only and excludes the Jasons Deposit and Gould's Dam resources. Further information is referred to the attached Honeymoon MRE Technical Overview and JORC Code Table 1, which is included in Appendix 1 of the Honeymoon MRE Technical Overview.

2.1. Summary

The updated Honeymoon MRE was prepared by RSC Global Pty Ltd (RSC) and is effective 30 June 2026. The estimate comprises 21.4 Mt @ 440 ppm U_3O_8 for 20.8 Mlbs U_3O_8 metal. It comprises 66% Indicated and 34% Inferred Mineral Resources by U_3O_8 metal. Approximately 87% of uranium is located within Mining Lease 6109, with the balance located on the Company's exploration licence EL6081.

Table 2: Honeymoon in-situ MRE (effective 30 June 2026)

Resource Classification		Grade	Metal	
	Mt	ppm U_3O_8	Kt U_3O_8	Mlbs U_3O_8
Indicated	12.1	510	6.2	13.7
Inferred	9.3	350	3.2	7.1
TOTAL	**21.4**	**440**	**9.4**	**20.8**

Notes:

The MRE is classified in accordance with the JORC Code (2012)[7].
The Mineral Resource database has a cut-off date of 31 December 2025.
The effective date of the MRE is 30 June 2026.
The MRE is reported at an in-situ cut-off of 100 ppm U_3O_8. A grade-thickness (GT) cut-off of GT≥400 m.ppm U_3O_8 was applied selectively in border areas of the MRE.
Only the recoverable portion of blocks ≥100 ppm U_3O_8 is reported.
The Mineral Resource is constrained to an ISR-amenable permeability threshold of KSDR≥100 mD.
The Mineral Resource is mainly based on equivalent U_3O_8 (eU_3O_8), without adjusting for localised radiometric disequilibrium effects.
The MRE is reported net of depletion from the Honeymoon in-situ recovery (ISR) extraction of 3.3 Mlbs U_3O_8 (1.5 Kt U_3O_8) as of 30 June 2026 by subtraction of extracted metal tonnes from Indicated Resource metal tonnes.
The MRE is reported on an in-situ tonnes basis.
The MRE is rounded to reflect the level of confidence in the estimate at the time of reporting.
Totals may vary due to rounding.
The MRE is reported both within the Honeymoon ML6109 license and outside in EL6081 license.

A substantial program of work has been completed to improve the geological understanding of the Honeymoon deposit and increase confidence in the MRE. This included significantly increasing drilling and data coverage, reviewing and validating historical drilling information, refining the geological and mineralisation interpretations, and adopting an updated resource estimation approach that incorporates permeability and other factors relevant to ISR extractability.

The updated Honeymoon MRE (at a 100 ppm U_3O_8 cut-off and depleted as of 30 June 2026) represents a decrease in metal of 15.1 Mlbs U_3O_8 (-42%), with an average grade reduction of 220 ppm U_3O_8 (-33%) compared to the 2019 MRE (at a 250 ppm U_3O_8 cut-off and depleted through to 2019) (Table 3). This reflects significant new data, tighter geological domaining, depletion and the application of ISR-specific

[7] *Joint Ore Reserves Committee (JORC). (2012). Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (The JORC Code). The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia, 2012.*

For personal use only

extractability and reasonable prospects of eventual economic extraction (RPEEE) criteria, including permeability constraints partially offset by a reduction in cut-off grade from 250 ppm to 100 ppm. On a like-for-like basis, compared with the 2019 MRE, at a 250 ppm U_3O_8 cut-off and without accounting for depletion, the tonnage has decreased by 68%, U_3O_8 metal has decreased by 63%, and the U_3O_8 grade has increased by 16% (Table 4).

2.2. Data and Deposit Understanding

The updated Honeymoon Deposit MRE reflects a substantial improvement in the geological and hydrogeological understanding of the Honeymoon Deposit since the previous MRE completed in 2019. Key advancements include:

- completion of an additional 685 drillholes for approximately 86,670 m of drilling within the MRE model area;
- a comprehensive review and quality ranking of prompt fission neutron (PFN) data;
- updated geological interpretations incorporating the expanded drilling database and improved understanding of mineralisation controls within the Yarramba palaeovalley system;
- development of deposit-wide permeability models using downhole Nuclear Magnetic Resonance (NMR) data to better define permeable domains relevant to ISR mining; and
- integration of commercial ISR production performance data, providing direct calibration of geological, hydrogeological and recovery assumptions to actual observed operating.

The data cut-off for input into the MRE was drilling completed up to 31 December 2025. Subsequent drilling data will be included in future MRE updates and otherwise incorporated into detailed wellfield design and operational planning as well as further optimisation of the LOM plan.

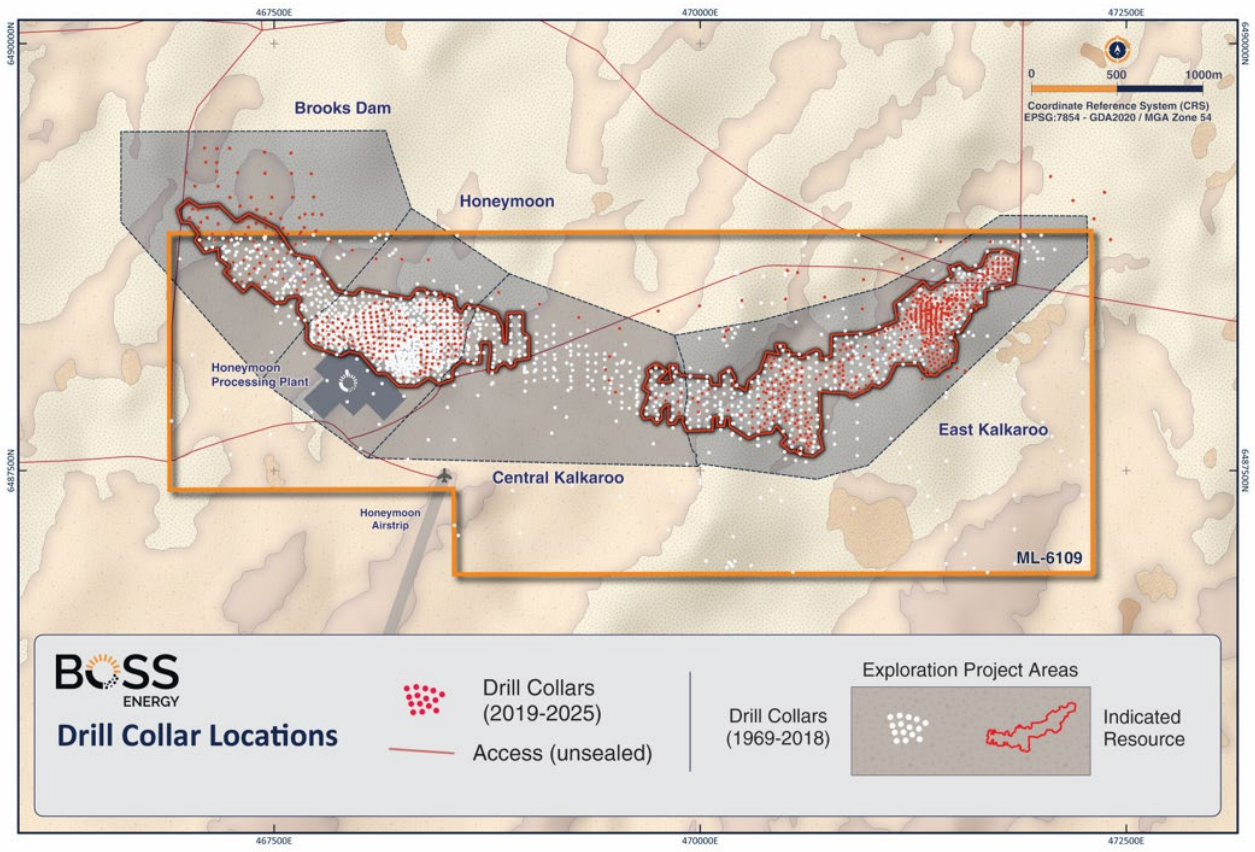


Figure 3: Image showing drilling completed since 2019 informing the new Mineral Resource. This represents a 34% increase in drill metres

For personal use only

2.3. Geology and Geological Interpretation

Honeymoon is a sandstone-hosted palaeovalley uranium deposit within the Yarramba palaeovalley. Mineralisation is predominantly hosted in permeable sands of the Eyre Formation at depths of ~80–120 m, and occurs as a series of pods and tabular bodies controlled by redox interfaces, permeability contrasts, and the geometry of the palaeovalley. Geological interpretation is based on the distribution and continuity of mineralised sands across the lower and upper Eyre Formation, with mineralisation predominantly hosted in the basal aquifer and locally associated with roll-front systems and fault structures. The mineralisation is controlled by localised redox interfaces and permeability contrasts within the host sediments.

2.4. Drilling Techniques

Drilling at Honeymoon has been undertaken using rotary mud, diamond core, sonic and aircore methods, with rotary mud drilling comprising 97% of the dataset used for the MRE. The MRE incorporates drilling data available as of 31 December 2025, with drill spacing ranging from 5–40 m at Honeymoon, 10–60 m at East Kalkaroo, 20–100 m at Central Kalkaroo and 20–150 m at Brooks Dam.

2.5. Sampling and Analytical Data

Uranium grades are derived principally from calibrated downhole gamma logging, which measures radiometric response as a proxy for equivalent uranium grade (eU_3O_8), supplemented by PFN logging, which measures uranium content directly (pU_3O_8). PFN data were quality-ranked, subject to a 250 ppm U_3O_8 detection limit, and validated against chemical assays from sonic drill core. NMR and induction logging provide supporting porosity, permeability and lithological data. As ~99% of the MRE data are derived from equivalent uranium grades, the associated uncertainty was considered in classification and precludes classification as Measured Mineral resources.

2.6. Resource Estimation Methodology

The MRE is based predominantly on uranium grades derived from downhole gamma and PFN logging. Grade estimation was constrained to the Eyre Formation using geological and permeability models developed from downhole geophysical data, supported by drill-chip logging and diamond and sonic core observations. NMR-derived permeability data were used to distinguish permeable and impermeable domains, applying a 100 mD permeability threshold.

Four geographical estimation domains were defined at Brooks Dam, Honeymoon, Central Kalkaroo and East Kalkaroo to reflect differences in geological setting and grade distribution. The U_3O_8 estimation domains were derived by intersecting the Eyre Formation layer with the permeable unit of the permeability model, and with the four geographical domains. The lateral extent of the estimation domains was limited by an area delineated by an 80-m radius buffer around drillholes with grade-thickness (GT) ≥1,000 m.ppm U_3O_8 for the entire Eyre Formation. The choice of 80 m as an extrapolation distance is consistent with areas of larger drill spacing at Brooks Dam (up to 150 m) and Central Kalkaroo (up to 100 m), and is supported by variographic ranges between 60 m and 250 m across the different geographical zones and the tabular nature of the mineralisation. The maximum distance of extrapolation locally reaches 130 m. No extrapolation beyond the nominal sample spacing was used.

To minimise dilution from low-grade material (below the 100 ppm U_3O_8 cut-off), two service variables at a 100 ppm U_3O_8 cut-off were used in the variographic analysis and estimation process:

- an indicator variable set to 1, where U_3O_8 grades are ≥100 ppm and 0 otherwise (controlling the geometrical extent of mineralisation); and
- the product of this indicator and the U_3O_8 grade (to control the metal content of the mineralisation).

U_3O_8 grades were estimated into 10 m × 10 m × 0.5 m blocks using ordinary co-kriging of the service variables composited at 0.25 m. Domain-specific search parameters and top cuts were applied to reflect the geometry and grade distribution of the mineralisation and limit the influence of high-grade outliers.

A dry bulk density of 1.9 g/cm³ was assigned based on estimated porosity and the limited available density measurements. The model was validated through visual comparisons with drilling data, swath plots and statistical comparisons of input data and estimated block grades. A comparison with forecast production from the five operating wellfields in the Honeymoon domain also indicates that the MRE is globally unbiased at the current operating scale.

2.7. Resource Classification

The Mineral Resource has been classified as Indicated and Inferred in accordance with the JORC Code (2012). Classification reflects confidence in geological and grade continuity, the permeability model, drillhole spacing and the quality and reliability of the underlying data.

Drillhole spacing analysis indicates that an Indicated classification requires a minimum dice-five drill pattern spacing of 80 m at Honeymoon and 100 m at Brooks Dam, Central Kalkaroo and East Kalkaroo. The analysis identified nominal Measured spacing requirements of 30 m × 30 m at Honeymoon and 40 m × 40 m elsewhere; however, no Mineral Resources have been classified as Measured Resources.

The classification indicated by drill spacing was downgraded from Measured to Indicated and from Indicated to Inferred due to uncertainty associated with the predominance of gamma-derived equivalent uranium data, uncorrected radiometric disequilibrium, limited dry bulk-density measurements, permeability-domain continuity and grade continuity. The Competent Person considers that potential local bias from radiometric disequilibrium is not material to the global MRE, due to the offsetting effects of positive and negative disequilibrium.

2.8. Cut-off Grade

With operational experience at Honeymoon, together with preliminary life-of-mine studies incorporating actual operating cost data (C1 and AISC), a long-term uranium price assumption of US$90/lb U_3O_8 and the application of a wide-spaced wellfield design, indicate that mineralisation above 100 ppm U_3O_8 has reasonable prospects for eventual economic extraction supported by the NFS. Accordingly, a 100 ppm U_3O_8 reporting cut-off grade has been adopted for the current MRE.

Resource reporting first applied a 100 ppm U_3O_8 cut-off to the total block grade and then only considered the proportion of the block with U_3O_8 ≥100 ppm estimated by the service variables.

2.9. Reasonable Prospects of Eventual Economic Extraction (RPEEE)

The Honeymoon Deposit MRE is reported as a realistic inventory of mineralisation that, under assumed and justifiable technical, economic and development conditions, may become economically extractable by ISR mining.

A key component of the RPEEE assessment was the consideration of permeability thresholds relevant to ISR mining. These were incorporated using deposit-wide permeability models derived from downhole NMR datasets.

Mineralisation has been excluded from the MRE based on ISR extractability criteria and RPEEE considerations, primarily reflecting permeability constraints within portions of the deposit.

By applying ISR-specific extractability criteria from operating data during resource estimation and classification, the updated MRE is expected to provide a strong foundation for forecasting wellfield performance.

For personal use only

The NFS supports and documents the viability of economic extraction.

2.10. Comparison with 2019 MRE

The comparison of the 2026 Honeymoon MRE at a 100 ppm U_3O_8 cut-off (cut-off grade used in 2026) and depleted as of 30 June 2026 with the 2019 MRE at a 250 ppm U_3O_8 cut-off (cut-off grade used in 2019) and depleted through to 2019 indicates a decrease in U_3O_8 metal by 15.1 Mlbs U_3O_8 (-42%) (Table 3). The change primarily reflects the incorporation of significant new data, constraining mineralisation to tighter geological domains and the application of an ISR-specific resource estimation methodology, including:

- the inclusion of 685 drillholes for 86,670m of additional drilling in the model compared to the previous MRE in 2019;
- updated geological interpretations, estimation domains, and resource estimation methodologies;
- application of Reasonable Prospects for Eventual Economic Extraction (RPEEE) criteria to exclude mineralisation hosted within lower permeability lithologies, considered less amenable to ISR extraction; and
- revision of the reporting cut-off grade from 250 ppm U_3O_8 to 100 ppm U_3O_8.

The updated MRE confirms the key findings of the Honeymoon Review announced on 18 December 2025, particularly the importance of permeability and extractability considerations along with less continuity of higher-grade mineralisation (above a 250 ppm cut-off).

Several work programs remain ongoing and will be incorporated into future updates of the MRE, including:

- an accelerated resource delineation drilling program commenced in September 2025 to increase data density and improve the resource understanding:
- the updated MRE used drilling data available to 31 December 2025, incorporating 161 drillholes for 20,632 m from this program. Since the data cut-off date, a further 262 drillholes for 31,411 m have been completed. The drilling program was completed in June 2026 and will be incorporated into the next Mineral Resource update;completion of the historical drilling and downhole geophysical data review and validation program;
- refinement of geological interpretations and three-dimensional geological models across the deposit; and
- completion of radiometric disequilibrium studies and incorporation of the outcomes into future resource estimation work where appropriate.

For personal use only

For personal use only

Table 3: Comparison of 2026 (depleted to 30 June 2026) and 2019 (depleted through to 2019) MREs for the Honeymoon Deposit

MRE (depleted basis)	Resource Classification	Mt	Grade ppm U_3O_8	Metal	
				Kt U_3O_8	Mlbs U_3O_8
2019 (250 ppm U_3O_8 cut-off)	Measured	3.1	1,100	3.4	7.6
	Indicated	14.3	610	8.7	19.2
	Inferred	7.0	590	4.1	9.1
	Total	**24.5**	**660**	**16.3**	**35.9**
2026 (100 ppm U_3O_8 cut-off)	Measured	-	-	-	-
	Indicated	12.1	510	6.2	13.7
	Inferred	9.3	350	3.2	7.1
	Total	**21.4**	**440**	**9.4**	**20.8**
Difference	Measured	-3.1	-1,100	-3.4	-7.6
	Indicated	-2.2	-100	-2.5	-5.5
	Inferred	2.3	-240	-0.9	-2.0
	Total	**-3.1**	**-220**	**-6.8**	**-15.1**
Relative Difference	Measured	-100%	-100%	-100%	-100%
	Indicated	-16%	-15%	-29%	-29%
	Inferred	32%	-41%	-22%	-22%
	Total	**-13%**	**-33%**	**-42%**	**-42%**

The comparison of the 2026 Honeymoon MRE at a 100 ppm U_3O_8 cut-off and depleted through to 2019[8] with the 2019 MRE at a 250 ppm U_3O_8 cut-off and depleted through to 2019 indicates a decrease in U_3O_8 metal by 12.6 Mlbs U_3O_8 (-35%).

On an equivalent basis, the comparison of the undepleted 2026 MRE at a 250-ppm U_3O_8 cut-off with the undepleted 2019 MRE at a 250 ppm U_3O_8 cut-off indicates a decrease in tonnage by 68% and in U_3O_8 metal by 63%, and an increase in U_3O_8 grade by 16% (Table 3). This comparison has been added to illustrate the variance associated with changes to the cut-off grade and with the effects of depletion in comparison with Table 4.

[8] *Based on the 2026 MRE of 20.8 Mlbs, adding back depletion of 2.5 Mlbs extracted which equates to 23.3 Mlbs.*

For personal use only

Table 4: Comparison of 2026 and 2019 MREs at a 250-ppm U_3O_8 cut-off on an undepleted basis

MRE (undepleted basis)	Resource Classification	Mt	Grade ppm U_3O_8	Metal	
				Kt U_3O_8	Mlbs U_3O_8
2019 (250 ppm U_3O_8 cut-off)	Measured	3.4	1,100	3.8	8.4
	Indicated	14.4	610	8.7	19.2
	Inferred	7.0	590	4.1	9.1
	Total	**24.8**	**670**	**17**	**36.7**
2026 (250 ppm U_3O_8 cut-off)	Measured	-	-	-	-
	Indicated	6.1	840	5.2	11.4
	Inferred	1.8	570	1.0	2.2
	Total	**7.9**	**780**	**6.2**	**13.6**
Difference	Measured	-3.4	-1,100	-3.8	-8.4
	Indicated	-8.2	230	-3.6	-7.8
	Inferred	-5.2	-20	-3.1	-6.9
	Total	**-16.9**	**110**	**-10.8**	**-23.1**
Relative Difference	Measured	-100%	-100%	-100%	-100%
	Indicated	-57%	38%	-41%	-41%
	Inferred	-75%	-3%	-75%	-75%
	Total	**-68%**	**16%**	**-63%**	**-63%**

2.11. Combined Honeymoon Catchment Mineral Resource

Across Honeymoon, Gould's Dam and Jasons Deposit, Boss has a combined Mineral Resource of 73.3 Mt at 410 ppm U_3O_8 for 65.9 Mlbs U_3O_8 metal. The concentration of these resources within one operational catchment provides the opportunity to apply Boss's ISR capability and leverage existing processing and supporting infrastructure across multiple deposits.

Table 5: MRE for the Honeymoon, Gould's Dam and Jasons Deposit (effective 30 June 2026)

Deposit	Tonnes (Mt)	Grade (ppm U_3O_8)	Metal (Mlbs U_3O_8)
Honeymoon	21.4	440	20.8
Gould's Dam	38.7	388	33.1
Jasons	13.3	410	12.0
Total	**73.3**	**410**	**65.9**

The Gould's Dam and Jasons deposits Mineral Resources are not included in the NFS production plan and remain subject to further studies, tenure and regulatory approvals. Refer to the Important Notices in this announcement for further detail regarding the Mineral Resource for Gould's Dam and Jasons Deposit, including the Mineral Resource classification.

For personal use only

3. Deposit Characteristics

The wide-spaced wellfield design is supported by a combination of favourable geological, hydrogeological and geochemical characteristics at Honeymoon. The key enabling characteristics are:

- **Laterally extensive, lower-grade mineralisation** — Higher-grade mineralisation occurs in discrete pods within a broader, laterally continuous envelope of lower-grade mineralisation. Wider well spacing increases the volume of mineralised aquifer swept by each pattern, enabling the broader mineralised system to contribute to production. Mineralisation also occurs over a number of stacked lenses.
- **Favourable vertical continuity** — Mineralisation commonly occurs over substantial thicknesses, supporting effective wellfield sweep and efficient utilisation of wider-spaced patterns.
- **High permeability and flow capacity** — Aquifer testing and extraction well performance demonstrate high hydraulic conductivity and permeability, supporting sustained hydraulic connectivity and operational flow rates across greater distances. The aquifer is laterally extensive, hydraulically connected and in hydraulic equilibrium effectively behaving as a single interconnected flow system. This continuity provides the hydraulic foundation required for successful implementation of wider injector-to-producer spacing.
- **Strong lateral hydraulic conductivity and control** — The overlying Namba Formation forms an effective confining unit. Together with the low natural ground-flow velocity, this supports hydraulic containment, limits dilution and enables controlled circulation at the selected 49 m injector-to-extractor spacing.
- **Favourable mineralogy and low reagent demand** — Acid consumption is low, reflecting the limited presence of carbonate and reactive clay. This allows the lixiviant to remain effective over the longer flow paths and residence times associated with wider well spacing. Oxidant consumption is also expected to remain favourable, with the future mining areas interpreted to be less reducing than the historical production areas used to calibrate the model.

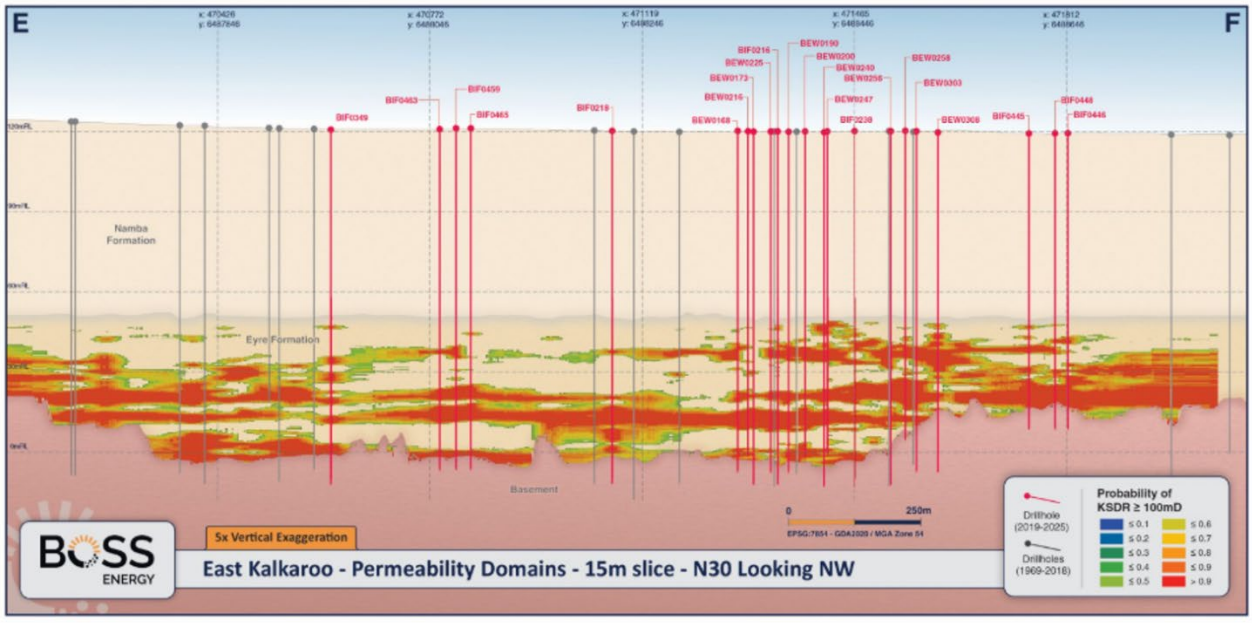


Figure 4: Cross section view of East Kalkaroo displaying permeability as estimated through probability of KSDR values>100mD.

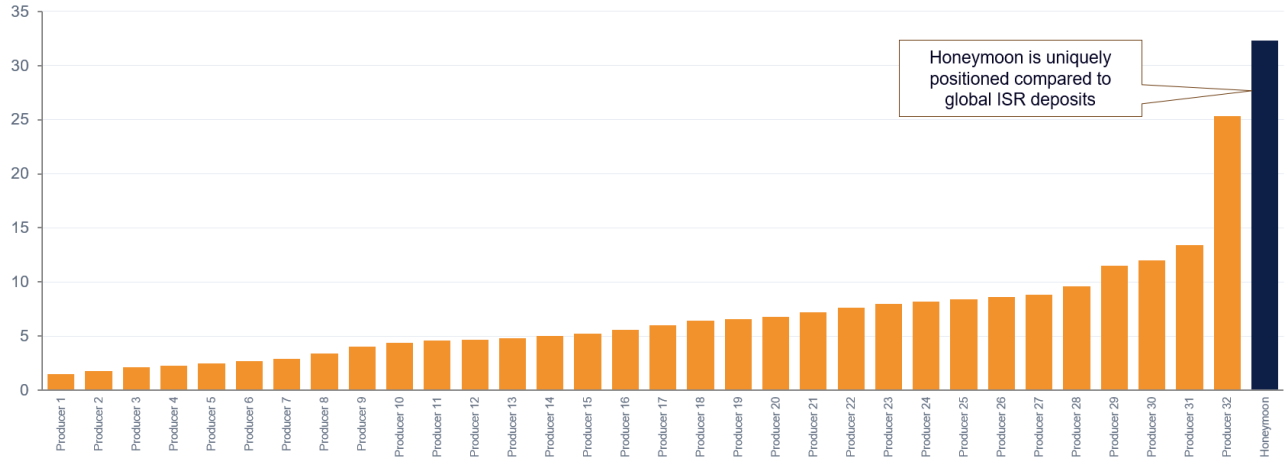


Figure 5: Estimated average flow rates for ISR operations with Honeymoon having a significantly higher flow rate compared to other ISR operations (Source: Boss Operating Data and publication under the International Atomic Energy Agency (IAEA) Nuclear Energy Series) (International Atomic Energy Agency (IAEA), 2016)[9]

4. Our Approach

The NFS is underpinned by a physics-based, three-dimensional Reactive Transport Model (**RTM**) which replaces empirical recovery factors and rule-of-thumb assumptions as the basis for wellfield design, recovery forecasting and mine-planning. The RTM creates a digital twin of the Honeymoon deposit that simulates the coupled groundwater flow and geochemical reactions that control in-situ recovery, directly linking the three-dimensional resource model to then feed directly into the life-of-mine production schedule.

To improve the accuracy of simulated outputs, the RTM was calibrated against both historical Uranium One production (2011–2013) and recent Boss operating wellfields (April 2024–January 2026), spanning materially different wellfield designs and operating conditions which together provide a rich data set across a broad range of conditions. This provides confidence that the model captures the fundamental controls on uranium recovery, PLS grade, pH evolution and reagent consumption specific to Honeymoon. The calibrated recovery curves feed directly into wellfield design and the life-of-mine schedule.

Conventional ISR planning typically relies on fixed recovery factors or empirical production curves. The RTM instead provides a time-dependent, spatially distributed representation of reservoir behaviour. It simulates the movement of injected lixiviant between wells while simultaneously accounting for the chemical reactions between the solution, native groundwater, uranium-bearing minerals and reactive gangue. Each simulated wellfield is therefore assigned a production response reflecting its own local grade distribution, mineralised thickness, permeability, hydraulic connectivity and geochemistry, rather than a single generic recovery assumption applied across the deposit.

Simulations were performed using the HYTEC reactive transport code (developed by the Centre for Geosciences, Mines Paris, PSL University), integrated within a dedicated Boss Energy pre- and post-processing pipeline. All simulations were run internally by Boss on dedicated computing servers, enabling fully three-dimensional calculations across the complete inventory of deposits rather than relying on simplified representative cases or scaling relationships.

[9] *International Atomic Energy Agency (IAEA). (2016). In Situ Leach Uranium Mining: An Overview of Operations.*

For personal use only

For personal use only

From the resource, hydrogeological, geochemical and operational inputs, the RTM generates continuous time-dependent outputs spanning:

- **Production chemistry** — PLS uranium grade (tenor), pH evolution and redox response;
- **Recovery performance** — uranium extraction profiles, cumulative recovery and uranium remaining in the reservoir;
- **Hydraulic performance** — breakthrough timing, hydraulic residence time and sweep efficiency;
- **Reagent demand** — acid and oxidant consumption through the wellfield life; and
- **Spatial recovery progression** — lixiviant distribution, uranium depletion and areas of delayed recovery, in three dimensions.

5. Wellfield Spacing and Design

The wellfields have been designed using an integrated workflow that combines the updated three-dimensional Mineral Resource model with geological, permeability, hydrogeological and geochemical models and a calibrated RTM. This enables each wellfield configuration to be assessed based on uranium recovery, production timing, reagent consumption, development requirements and overall economic value.

The base-case design adopts a five-spot pattern with 49 m injector-to-extractor spacing, compared with approximately 35 m historically used at Honeymoon. The five-spot configuration provides relatively direct flow paths between injection and extraction wells, supporting effective lixiviant distribution, improved sweep efficiency and a faster production response. The adopted spacing benchmarks within ranges adopted by significant and established ISR operations in Kazakhstan.

Table 6: Comparison of injector-to-extractor spacing at selective ISR deposits.

Deposit	Region	Well spacing (injector to extractor)	Pattern geometry
Honeymoon – Intermediate (NFS base case)	Australia	49m	Five-spot
Honeymoon – Larger (Optimisation opportunity)	Australia	70m	Five-spot
Chieli / Karamuran	Kazakhstan	40m	Seven-spot
Budenovskoye 2 / Karatau	Kazakhstan	45-50m	50% Five-spot; 50% linear
JV Inkai	Kazakhstan	35-45m; 50-65m	Seven-spot; Line drive
Kharasan 2	Kazakhstan	45–50m	Seven-spot

Source: Boss operating data, publication under the IAEA Nuclear Energy Series (International Atomic Energy Agency (IAEA), 2016)[10], *and Cameco Inkai Operation Technical Report* (Cameco Corporation, 2024)[11].

Wider spacing increases lixiviant residence time and contact with the mineralisation, supporting increased uranium dissolution and higher uranium concentrations in the production solution. It also enables a larger area of mineralisation to be developed using fewer wells and less associated surface infrastructure.

[10] *International Atomic Energy Agency (IAEA). (2016). In Situ Leach Uranium Mining: An Overview of Operations.*

[11] *Cameco Corporation. (2024). Inkai Operation, Turkestan Region, Republic of Kazakhstan, National Instrument 43-101 Technical Report.*

For personal use only

RTM simulations evaluated injector-to-extractor spacing ranging from 35 m to 70 m, together with alternative pattern geometries, flow rates, production layers and uranium-dissolution assumptions. The modelling was calibrated against historical and recent Honeymoon operating data and applied across the Honeymoon, East Kalkaroo and Brooks Dam resource areas.

Compared with the historical wellfield design, the 49 m base case is expected to deliver:

- a reduction in the AISC of approximately A$30/lb;
- an increase in modelled ultimate recovery from approximately 80% to approximately 90%;
- a reduction in the estimated number of life-of-mine wells from approximately 2,480 to approximately 1,340;
- a reduction in the number of individual wellfields from approximately 116 to approximately 53;
- an increase in recoverable uranium per extraction well from approximately 15,400 lbs to approximately 33,000 lbs U_3O_8;
- higher uranium concentrations in the production solution; and
- reduced requirements for wellhouses, spider-lines, electrical connections and other supporting wellfield infrastructure.

The 49 m spacing provides an appropriate balance between uranium recovery, production timing, development intensity and operational flexibility. It also provides greater confidence in hydraulic control and dilution management than the wider configurations evaluated.

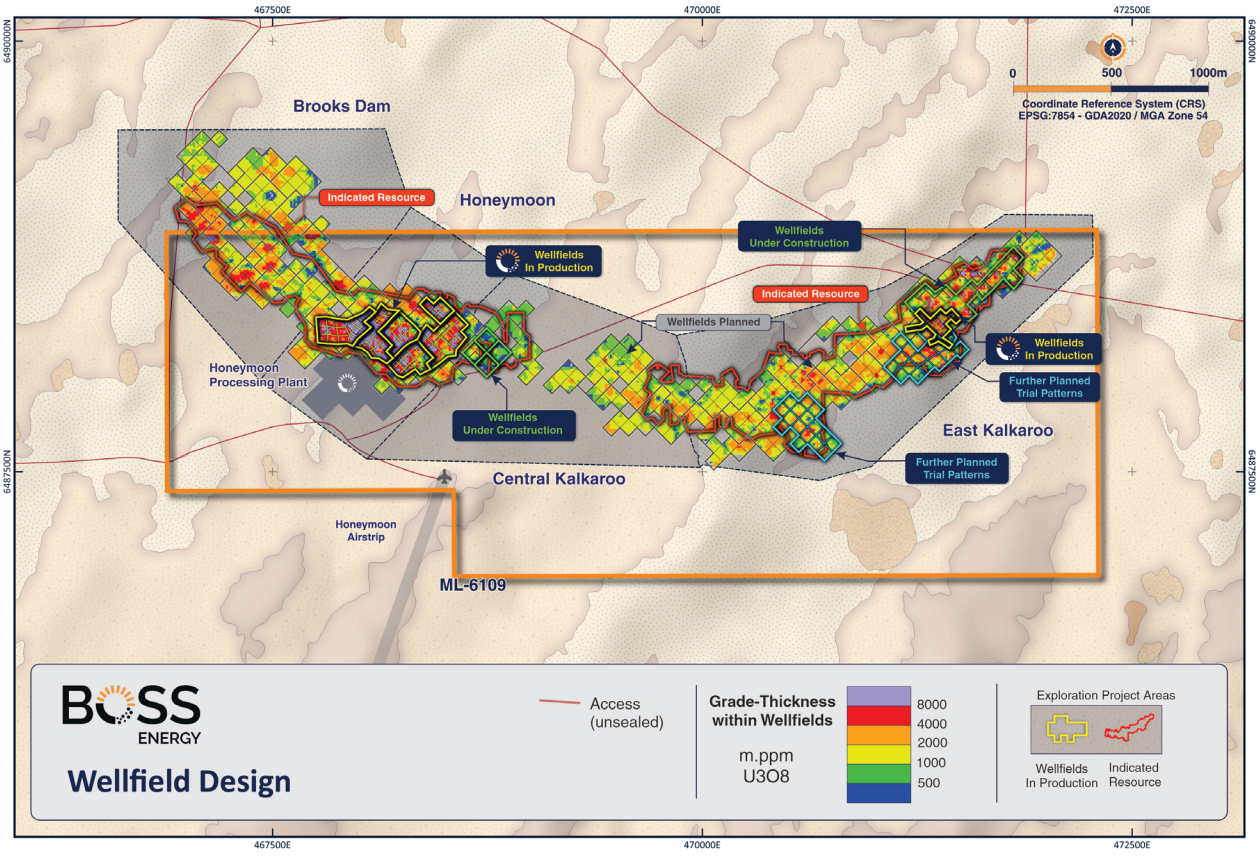


Figure 6: The wellfield design for the Honeymoon Deposit on a 49m injector-to-extractor spacing as used in the NFS.

For personal use only

Modelling indicates that injector-to-extractor spacing of up to 70 m may provide further value through additional reductions in well numbers and infrastructure and increased uranium recovery per well. Further field trials and RTM work are planned to validate hydraulic control, dilution behaviour and long-term recovery performance at these wider spacings.

The wellfield layout will continue to be refined as additional drilling, geophysical logging, hydrogeological information and operating data become available. This may result in local changes to well locations, screened intervals, pattern geometry, spacing and development sequence without materially changing the overall design basis.

Table 7: Modelled impact of well spacing (RTM simulation outcomes)

Unit	Unit	Historical	Intermediate (NFS)	Larger
Injector-to-extractor spacing	m	35	49	70
Wells (injection and extraction)	#	2,480	1,340	670
Wellfields (new)	#	116	53	37
Peak PLS tenor	mg/L	40–80	50–100	60–180
Average PLS tenor	mg/L	29	37	40
U_3O_8 per extraction well	lbs	15,400	33,000	67,000

The benefit of wide-spaced wellfields can be seen by comparing the EKT1 trial wellfield at East Kalkaroo, with a predominant injector-to-extractor spacing of 58 m, to the originally designed wellfields for the same location (historical B7 and B9 design) on an injector-to-extractor spacing of 30 m. EKT1 develops a materially larger area of mineralisation using fewer wells, increasing lixiviant residence time and uranium recovery per well while reducing wellfield capital intensity.

The comparison between the designs for this portion of the Honeymoon deposit:

- develops more than twice the wellfield area with approximately one-third fewer wells;
- places approximately twice the pounds of U_3O_8 under leach and recovers approximately twice the uranium;
- increases average PLS grade from approximately 25 mg/L to 36 mg/L;
- increases average production from approximately 499 lbs/day to 748 lbs/day;
- increases mean lixiviant residence time from approximately 21 days to 180 days, providing greater contact time with the mineralisation;
- reduces sustaining capital intensity from approximately A$41/lb to A$19/lb;
- reduces C1 costs from approximately A$58/lb to A$46/lb and AISC from approximately A$107/lb to A$74/lb; and
- increases the estimated post-tax IRR from approximately 45% to 261%, based on the assumptions applied for that wellfield.

The wider-spaced EKT1 configuration achieves these outcomes despite targeting lower average-grade mineralisation and operating at a similar average daily flow rate.

For personal use only

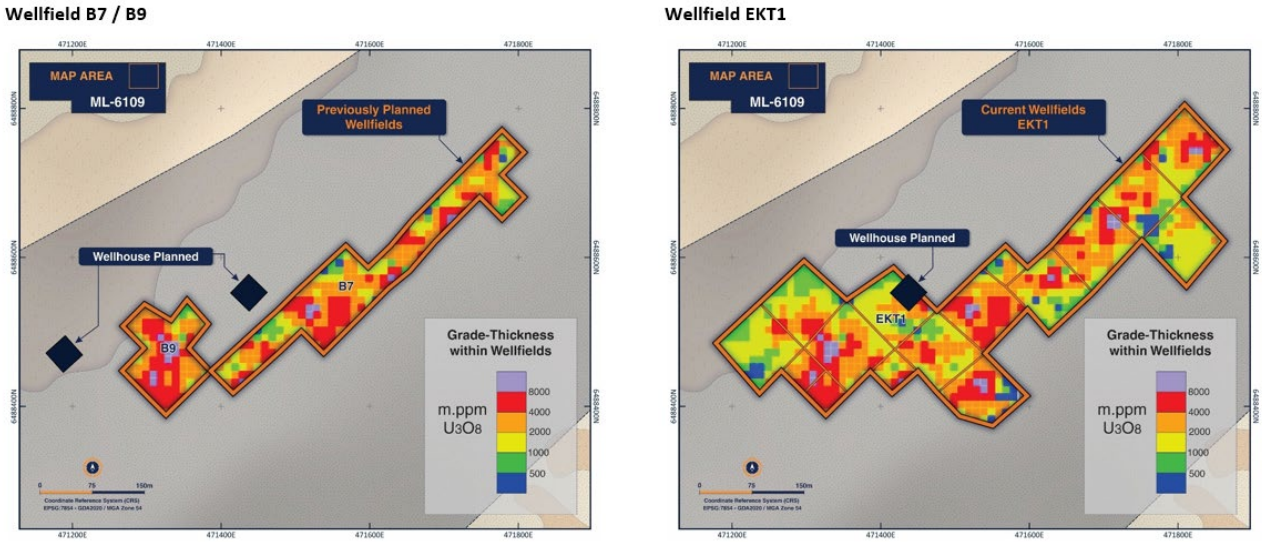


Figure 7: Comparison of Wellfield B7 / part of B9 with EKT1

6. Process Plant and Infrastructure

The existing Honeymoon processing plant is an established operating facility. The NFS confirms that the existing plant, together with committed capacity and reliability upgrades, can support the life-of-mine production schedule.

The Water Treatment Plant (WTP) is the key infrastructure enabler of the wellfield development rate, supplying reverse-osmosis permeate for wellfield conditioning and first flush. Wellfield scheduling is also constrained by NIMCIX column and trunkline capacity, which will require forward planning of wellfields to ensure capacity is being optimised for flow and PLS grade.

The additional infrastructure and process upgrades required to deliver the NFS production plan are predominantly capacity expansions based on established process chemistry, flowsheets and operating practices already in use at Honeymoon. The principal upgrades are:

- **Water treatment plant** - A two-stage upgrade comprising Stage 1, which involves optimisation of the existing water treatment plant and is targeted for completion in Q4FY27, and Stage 2, which comprises a major capacity expansion to ~300 m^3/h reverse-osmosis (RO) feed and is targeted for Q3FY28. Supporting water-management infrastructure, including raw-water bores, liquid-disposal capacity and gypsum-storage facilities, will be expanded progressively over the life-of-mine.
- **NIMCIX column 6** - Completion of construction and commissioning of column 6 will increase nominal flow capacity from 2,450 m^3/h to 2,940 m^3/h, representing an increase of 20%. The additional capacity is required from the beginning of FY30 given the increased forecast flow from the wellfields.
- **Wellfield infrastructure** - Wellfield infrastructure will be installed progressively and will largely continue the proven design and operating approaches currently used at Honeymoon. A modular eight-pump wellhouse, aligned with the nominal eight-pattern wellfield layout, will be introduced. The modular design allows wellhouse equipment to be recovered, refurbished and redeployed as individual wellfields reach the end of their operating lives.
- **Brooks Dam Trunkline & HV extension -** A trunkline and HV extension will be required to bring wellfields in the Brooks Dam domain online. The total trunkline will be 2.0 km long which compares to 3.4 km for the East Kalkaroo trunkline that has already been completed. The Brooks

Dam trunkline will be phased with 1.5 km completed by Q1 FY28 and subsequently extended by up to 0.5 km once the HME has been granted.

7. Life-of-Mine Plan and Cost

The baseline life-of-mine sequence for the Honeymoon Deposit delivers approximately 14.5 Mlbs U_3O_8 extracted with 13.8 Mlbs U_3O_8 drummed over a nine-year operating period to FY35 (13.6 Mlbs drummed to FY34). The production profile ramps to a nominal plateau of 1.9Mlbs U_3O_8 drummed per annum from FY30-FY33.[12]

All financial values are stated in real Australian dollars (A$) as at the fourth quarter of FY2026, do not allow for escalation (unless otherwise noted) and exclude Australian goods and services tax (GST).

Table 8: Key metrics to 2034 by financial year[13]

Metric by financial year	Unit	2027	2028	2029	2030	2031	2032	2033	2034	Total to 2034
Flow	Mm^3	17	20	21	22	24	25	23	21	172
Grade	mg/L	36	36	39	41	38	37	39	33	37
U_3O_8 extracted	Mlbs	1.4	1.6	1.8	2.0	2.0	2.0	2.0	1.5	14.3
Recovery	%	95	95	95	95	95	95	95	95	95
Total U_3O_8 Drummed	**Mlbs**	**1.3**	**1.5**	**1.7**	**1.9**	**1.9**	**1.9**	**1.9**	**1.4**	**13.6**
AISC										
C1	$/lb	53	54	49	46	47	48	47	56	50
Royalties, Rehabilitation and other	$/lb	7	7	7	7	7	7	7	7	7
Sustaining capital – Plant	$/lb	2	1	0	0	0	0	0	0	0
Sustaining capital - Wellfields	$/lb	25	28	29	26	21	22	20	5	22
Total AISC	**$/lb**	**88**	**90**	**85**	**79**	**75**	**77**	**74**	**68**	**79**
Total Sustaining Capital	**$M**	**35**	**45**	**50**	**49**	**40**	**42**	**39**	**7**	**308**
Process Facilities Capital										
Processing infrastructure	$M	20	11	9	2	2	2	2	-	49
Wellfields infrastructure	$M	5	2	-	-	-	-	-	-	7
Plant improvement	$M	2	0	-	-	-	-	-	-	2
Total Process Facilities Capital	$M	**26**	**13**	**9**	**2**	**2**	**2**	**2**	-	**58**
Total Capital	**$M**	**61**	**58**	**60**	**51**	**42**	**45**	**41**	**7**	**366**

The timing to achieve annual drummed production of 1.9 Mlbs U_3O_8[14] is principally linked to the availability of additional water-treatment capacity required to flush and commission new wellfields. The NFS schedule does not incorporate potential timing improvements from optimisation of the design, procurement and construction of the additional water-treatment plant, nor the reduced water requirements indicated by recent wellfield-flushing performance. Successful delivery of these optimisation initiatives has the potential to bring forward the ramp-up to annual drummed production of 1.9 Mlbs U_3O_8.[15]

[12] This production target must be read in conjunction with the cautionary statement on page 1 of this announcement, which includes that "there is a low level of geological confidence associated with Inferred mineral resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised".

[13] As above

[14] As above.

[15] As above.

For personal use only

Over the life-of-mine plan to 2034, AISC averages approximately A$79/lb U_3O_8 (US$55/lb), with C1 cash costs averaging approximately A$50/lb U_3O_8 (US$35/lb). Operating-cost assumptions are based on actual FY25 and FY26 performance, adjusted to reflect the transition to intermediate well spacing and leaching-performance forecasts generated by the reactive transport model.

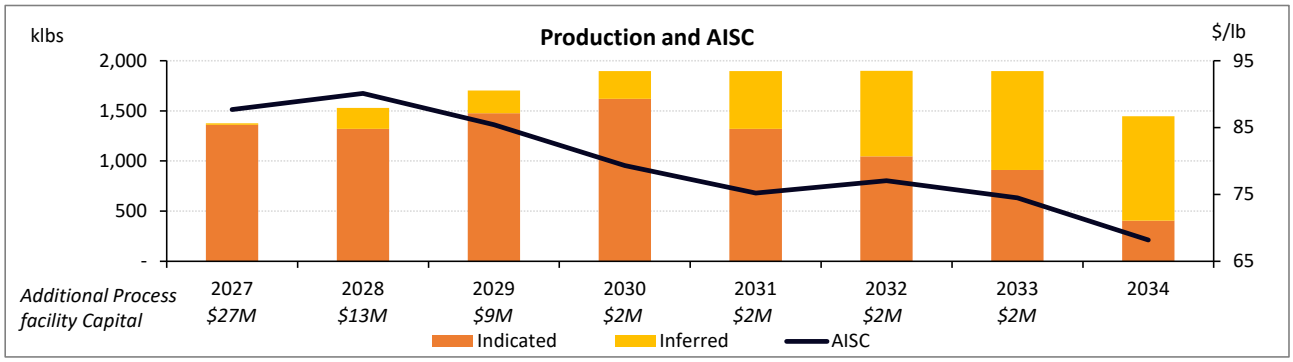


Figure 8: Drummed production, AISC and process facility capital to FY34 by financial year.[16]

Wellfield production is assumed to continue until the predicted PLS tenor declines below the cut-off grade of 10 mg/L U_3O_8, consistent with current operational practices, and will continue to be reassessed as economic and operational conditions evolve. Approximately 85% of life-of-mine drummed production is sourced within ML6109, with the remaining 15% sourced from Brooks Dam North on EL 6081 forming part of the planned Honeymoon Mine Extension approval application process. Production from outside ML6109 is not scheduled to commence until 2030, providing sufficient time for Boss to obtain the necessary regulatory approvals.

Total additional process and supporting infrastructure capital over the life-of-mine plan is approximately A$58M. This principally comprises upgrades and a new water treatment plant ($24M), additional gypsum ponds ($11M), NIMCIX column 6 ($8M), and the Brooks Dam trunkline and HV power extension ($4M).

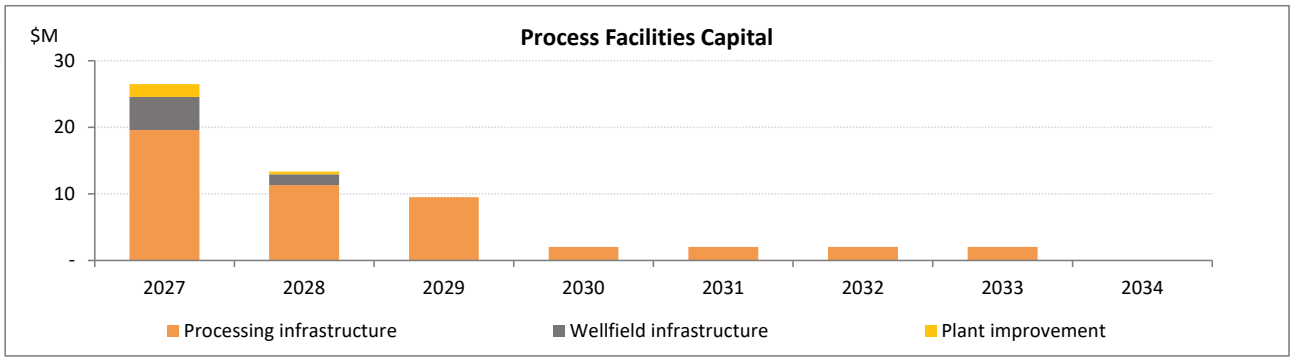


Figure 9: Process Facilities Capital by financial year.

[16] *This production target must be read in conjunction with the cautionary statement on page 1 of this announcement that "there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral resources or that the production target itself will be realised".*

For personal use only

Total sustaining capital over the life-of-mine plan is forecast at approximately $308M, principally comprising $118M of wellfield equipment including wellhouses, filter skids, piping and pumps, $102M for initial reagent fills of the wellfields (first fill) and $82M for production-well development.

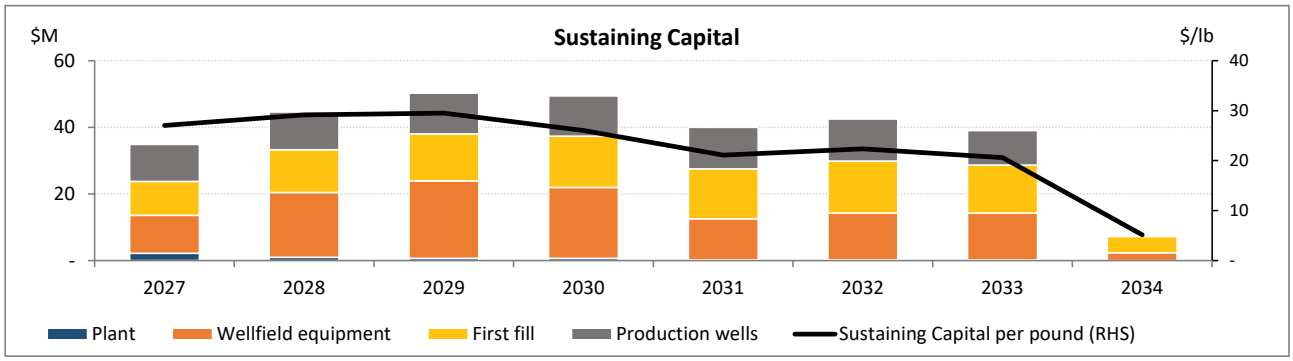


Figure 10: Sustaining Capital by financial year.

The life-of-mine mining schedule comprises the development and operation of 59 wellfields, incorporating approximately 1,340 wells. An average of 16 wellfields is expected to be active over the life-of-mine, increasing to a peak of 23 active wellfields in 2032. Each wellfield is forecast to cost approximately A$5–7M, depending on its configuration and the extent of equipment reuse.

8. Approvals Pathway

Honeymoon currently operates on Mining Lease 6109 under an approved Program for Environment Protection and Rehabilitation (PEPR). Near-term wellfield development within ML6109 will be managed through staged updates to the existing PEPR in consultation with the South Australian Department for Energy and Mining (DEM). A PEPR update has been submitted to DEM for assessment.

Additional tenure and approvals will be required where proposed wellfields and their associated hydraulic-control and monitoring envelopes extend beyond ML6109, including the northern wellfield areas forming part of the proposed Honeymoon Mine Extension (HME). The HME approvals process has commenced, with preparation of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 referral and the South Australian Mining Lease Proposal underway.

The NFS assumes that the required approvals will support production from the HME from early 2030. This is considered achievable based on the work completed to date and engagement with the relevant regulatory authorities.

9. Growth and Opportunity

Given the NFS accelerated timeframe and defined scope, the NFS does not represent a fully optimised life-of-mine plan for the Honeymoon Deposit. There remain numerous opportunities to further enhance value and potentially accelerate the production ramp-up, including:

- accelerating the design, procurement and construction of the additional WTP capacity;

For personal use only

For personal use only

- increasing PLS tenor and recoveries to utilise spare production capacity in the back end of the plant;
- reducing water requirements for wellfield conditioning and flushing, informed by recent operating performance;
- accelerating wellfield drilling, construction and commissioning to bring new wellfields into production earlier, coupled with the water treatment plant;
- further optimising wellfield spacing and design;
- optimisation of reagent consumption and 're-use' of first fill reagent;
- exploring capital cost improvement initiatives on wellhouse capital costs; and
- improving plant availability and pursuing incremental, relatively low-capital debottlenecking opportunities.

Beyond the NFS Honeymoon Deposit life-of-mine plan, Gould's Dam and Jasons Deposit provide meaningful future growth optionality for the Honeymoon operating platform. Boss will also continue to assess brownfields opportunities within the broader Honeymoon palaeovalley and regional greenfields exploration potential across its tenure. Further details on these opportunities will be presented at the Investor Day in September.

10. Summary

The NFS confirms a clear and economically robust pathway for Honeymoon to deliver long-term uranium production from the existing operating platform under a base case scenario for a nine-year production profile with total forecast drummed production of approximately 13.8Mlbs U_3O_8 and annual production reaching 1.9Mlbs from FY30 to FY33 at an average AISC of $79/lb from FY27 to FY34.[17]

By integrating the updated MRE, materially expanded drilling and operating data, advanced permeability modelling and deposit-scale reactive transport modelling, Boss has established a substantially improved technical foundation for mine planning, wellfield design and production forecasting.

The central outcome of the NFS is the adoption of a wide-spaced ISR wellfield design, which is expected to materially lower development intensity by reducing the number of wells, wellfields and associated surface infrastructure required to access the resource. This design mitigates the impact of the updated MRE and delivers a materially improved cost structure, including an approximate A$30/lb reduction in life-of-mine AISC on a like-for-like basis compared with applying the original planned wellfield spacing to the updated MRE.

Honeymoon's favourable deposit characteristics are key enablers to this outcome. The combination of laterally extensive mineralisation, high permeability and hydraulic conductivity, effective aquifer confinement and hydraulic control, low groundwater-flow velocity and favourable mineralogy with low reagent demand supports the selected 49 m injector-to-extractor spacing and provides the geological and hydrogeological basis for further optimisation over time.

The NFS also benefits from Honeymoon's established processing plant, trunklines and supporting infrastructure, with only targeted enabling facilities capital required to support the life-of-mine plan. Since restart, the operation has demonstrated proven processing performance.

[17] *This production target must be read in conjunction with the cautionary statement on page 1 of this announcement, which includes that "there is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised".*

Importantly, the NFS establishes a base case rather than the limit of Honeymoon's potential with further optimisation and acceleration opportunities identified across the wellfields, plant and supporting infrastructure which could improve recoveries, reduce unit costs and increase production.

Through the comprehensive work performed during the NFS, Boss has identified a wellfield design that economically extracts uranium from low-grade, high permeability deposits. This work has promoted Gould's Dam and Jasons Deposit as potentially significant low-cost resources that could be developed to either extend the mine life and / or increase annual production at Honeymoon, subject to studies that are underway.

The significant amount of work performed as part of the NFS and its recently developed ISR technical ability has resulted in a step change in Boss' ISR capability which uniquely positions Boss to execute on a pipeline of optimisation and growth opportunities over the next several years.

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

For further information, contact:
Matt Dusci
Managing Director and Chief Executive Officer
P: +61 (8) 6263 4494
E: boss@bossenergy.com

For personal use only

For personal use only

Important Notices

Forward-Looking Statements

This announcement contains certain forward-looking statements provided by or on behalf of Boss with respect to potential future matters. Forward-looking information may include, without limitation, statements regarding plans, strategies and objectives of Boss, production and financial guidance, financial forecasts, estimates of project milestones and timing and expected costs or production outputs. In some cases, forward-looking information can be identified by terms such as "may", "will", "should", "expect", "plan", "anticipate", "believe", "intend", "estimate", "predict", "potential", "continue" or other similar expressions concerning matters that are not historical facts. Guidance as to production, unit costs and capital expenditure is based on assumptions, budgets and estimates existing at the time of assessment which may change over time impacting the accuracy of those estimates. These estimates are developed in the context of an uncertain operating environment including in respect of inflationary macroeconomic conditions, and uncertainties surrounding the risks associated with mining which may impact production and have a flow on effect on sales. Actual results may therefore vary significantly depending on these risks and the timing required to address them.

Forward-looking statements reflect Boss's expectations at the date of this announcement, however they are not guarantees or predictions of future performance or statements of fact. Forward-looking information involves known and unknown risks, uncertainties and other factors (many of which are beyond the control of Boss and its directors and management) which may cause the actual results, performance or achievements of Boss and its business to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Accordingly, undue reliance should not be placed on forward-looking information.

The forward-looking statements in this announcement reflect various assumptions by or on behalf of Boss (which assumptions may prove to be inaccurate). Accordingly, this is another reason why such statements are subject to significant business, technical, legal, economic and competitive and other uncertainties and contingencies and other factors which may be beyond the control of Boss which could cause actual results or trends to differ materially from the forward-looking statements in this announcement, including but not limited to differences or inaccuracies arising from price and currency fluctuations, geotechnical factors, geological and mining factors, estimated continuity of mineralised horizons, metallurgical and processing factors, sales factors, drilling and production results, development progress, operating results, mineral resource estimates, legal issues, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries, approvals and cost estimates, environmental risks, ability to meet funding requirements, share price volatility, uranium markets and other matters. Accordingly, there can be no assurance that such forward-looking statements and projections will be realised.

Boss makes no representations as to the accuracy or completeness of any forward-looking statements or projections or that any forecasts will be achieved. Additionally Boss makes no representation or warranty, express or implied, in relation to, and (to the maximum extent permitted by law) no responsibility or liability (whether for negligence, under statute or otherwise) is or will be accepted by Boss or by any of its officers, directors, shareholders, partners, employees, or advisers as to or in relation to the accuracy or completeness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this announcement or any omission from this announcement.

Boss does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in Boss's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

Mineral Resource estimates are necessarily imprecise and depend on interpretations and geological assumptions, minerals prices, cost assumptions and statistical inferences (and assumptions concerning other factors, including mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors) which may ultimately prove to be incorrect or unreliable. Mineral Resource estimates are regularly revised based on actual exploration or production experience

For personal use only

or new information and could therefore be subject to change. In addition, there are risks associated with such estimates, including (among other risks) that minerals mined may be of a different grade or tonnage from those in the estimates and the ability to economically extract and process the minerals may become compromised or not eventuate. Accordingly, this is another reason why no assurances can be given of whether the production guidance, financial forecasts or other forecasts or other forward-looking statements or information in this announcement will be achieved.

Effect of Rounding

A number of figures, amounts, percentages and estimates in this announcement are subject to the effect of rounding. Accordingly, the actual calculation of these figures may differ from the figures set out in this announcement.

Past Performance

Past performance information, including past share price performance of Boss and past Honeymoon Project information, given in this announcement is given for illustrative purposes only and should not be relied upon as (and is not) an indication of Boss's (or anyone else's) views on Boss's future activities, guidance or financial performance or condition. Past performance of Boss cannot be relied upon as an indicator of (and provides no guidance as to) the future performance of Boss.

Competent Persons Statements

1. Honeymoon MRE

The information in this announcement that relates to the Honeymoon Mineral Resources is based on information and supporting documentation compiled by Mr. Guillaume Lorilleux, a Competent Person, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM) and member of the Australian Institute of Geoscientists (AIG). Mr. Lorilleux is Principal Resource Geologist at RSC, a global resource development consultancy. Boss Energy Ltd has also contracted RSC to provide limited contracting and other advisory services. The full nature of the relationship between Mr. Lorilleux, RSC, and Boss Energy Ltd, including any issue that could be perceived by investors as a conflict of interest, has been disclosed. Mr. Lorilleux has sufficient experience that 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' (**JORC Code**). Mr. Lorilleux consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

2. Honeymoon Production Target

The Mineral Resource Estimates underpinning the production targets contained in this announcement have been prepared by a Competent Person in accordance with the requirements of the JORC Code.

3. Gould's Dam and Jasons Deposit MRE

The information in this announcement that relates to the Gould's Dam and Jasons Deposit MRE was reported in an announcement entitled 'Gould's Dam and Jasons Deposit Mineral Resource and Permitting Update' released by the Company on 19 March 2026 (Competent Person: Mr Ingvar Kirchner).

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the Gould's Dam and Jasons Deposit MREs in the relevant market announcement continue to apply and have not materially changed.

For personal use only

Gould's Dam and Jasons Deposit Resource at March 2026

Resource Classification	Tonnage (Million Tonnes)	Average Grade (ppm U_3O_8)	Metal (Kt, U_3O_8)	Metal (Mlb, U_3O_8)
Gould's Dam (March 2026)				
Indicated	7.5	465	3.5	7.7
Inferred	31.2	369	11.5	25.4
Total	**38.7**	**388**	**15.0**	**33.1**

Notes:

The model is reported unconstrained and above a 250ppm U3O8 lower cut-off grade and 100mD Ksdr permeability (unit millidarcy; mD) lower cutoff for all mineralisation subdomains in consideration of potential for recovery by ISR processing.
The U3O8 lower cut-off grade reflects the assumed lower detection limit of the PFN tool. • A Ksdr permeability is assumed to be moderate permeable equivalent to a well-sorted sand/gravels which would be amenable for ISR mining.
There is no historic depletion by production.
Estimation of the combined PFN data and disequilibrium factored gamma data with high-grade cuts is by ordinary kriging using dynamic anisotropy for the mineralised zones.
The definition of the mineralised zones is refined by conditional indicator kriging (CIK) estimate based on a 250ppm U3O8 indicator and a resultant estimated 17% probability of being above the indicator cut-off grade. The subdomains are used as hard boundaries.
Density is for the Eyre Formation based on analyses of sonic core as 1.9 t/m3, which is consistent with semi-consolidated quartz sandstone.
The model assumes agglomeration of 10mE x 10mN x 1mRL parent blocks for definition of well fields for production in the Gould's Dam area. The surrounding areas that are still at an early stage of resource definition with less available data were modelled on larger 40mE x 40mN x 1mRL panels.
The model does not account for dilution, ore loss, hydrogeology, or recovery issues. Continuity of high-grade U3O8 is expected to be locally erratic throughout the palaeovalley. These parameters should be considered during the mining study as being dependent on the ISR treatment process.
Classification is according to JORC Code Mineral Resource categories.
Estimated disequilibrium factors applied to the gamma data cannot fully mitigate the risk of assumptions about the tenor of uranium mineralisation based on that gamma data. The gamma data does not directly measure uranium.
A Mineral Resource requires technical and economic evaluation and consideration of modifying factors for conversion to an Ore Reserve. It is possible that not all Mineral Resource will convert to an Ore Reserve.
Totals may vary due to rounded figures.

Resource Classification	Tonnage (Million Tonnes)	Average Grade (ppm U_3O_8)	Metal (Kt, U_3O_8)	Metal (Mlb, U_3O_8)
Jasons Deposit (March 2026)				
Indicated	4.8	464	2.2	4.9
Inferred	8.5	380	3.2	7.1
Total	**13.3**	**410**	**5.4**	**12.0**

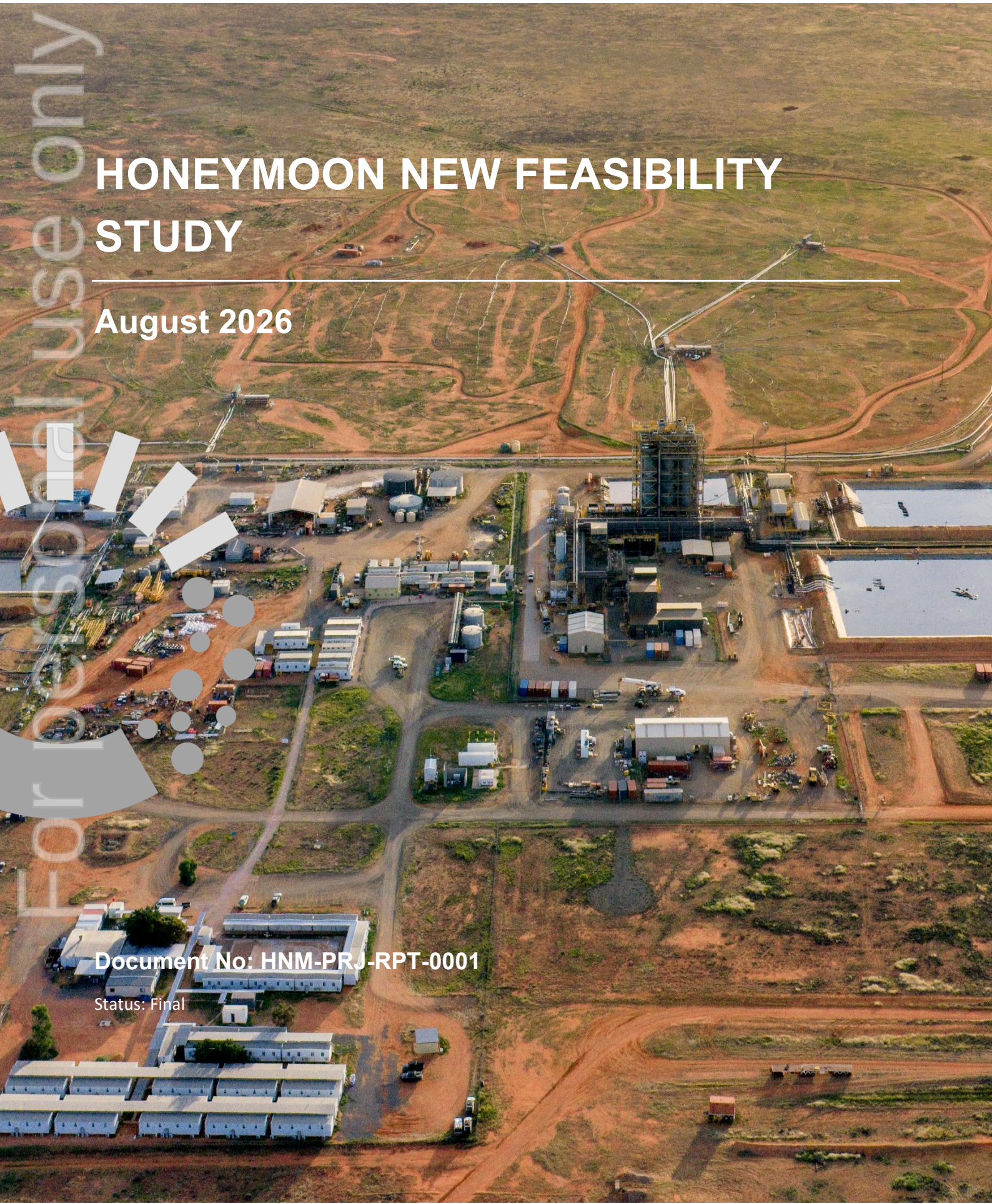
Notes

The model is reported unconstrained and above a 250ppm U3O8 lower cut-off grade and 100mD Ksdr permeability (unit millidarcy; mD) lower cutoff for all mineralisation subdomains in consideration of potential for recovery by ISR processing.
The U3O8 lower cut-off grade reflects the assumed lower detection limit of the PFN tool.
A Ksdr permeability is assumed to be moderate permeable equivalent to a well-sorted sand/gravels which would be amenable for ISR mining.
There is no historic depletion by production.
Estimation of the combined PFN data and disequilibrium factored gamma data with high-grade cuts is by ordinary kriging using dynamic anisotropy for the mineralised zones.
The definition of the mineralised zones is refined by conditional indicator kriging (CIK) estimate based on a 250ppm U3O8 indicator and a resultant estimated 17% probability of being above the indicator cut-off grade. The subdomains are used as hard boundaries.
Density is for the Eyre Formation based on analyses of sonic core as 1.9 t/m3, which is consistent with semi-consolidated quartz sandstone.
The Jasons model assumes agglomeration of 40mE x 40mN x 1mRL parent blocks for early-stage resource definition with wide spaced fences, closer spaced drilling along the fences and good proportion of recent, quality data. The model is held on 10mE x 10mN x 1m sub blocks to accommodate a lithological model generated by Boss.
The model does not account for dilution, ore loss, hydrogeology, or recovery issues. Continuity of high-grade U3O8 is expected to be locally erratic throughout the palaeovalley. These parameters should be considered during the mining study as being dependent on the ISR treatment process.
Classification is according to JORC Code Mineral Resource categories.
Estimated disequilibrium factors applied to the gamma data cannot fully mitigate the risk of assumptions about the tenor of uranium mineralisation based on that gamma data. The gamma data does not directly measure uranium.
A Mineral Resource requires technical and economic evaluation and consideration of modifying factors for conversion to an Ore Reserve. It is possible that not all Mineral Resource will convert to an Ore Reserve.
Totals may vary due to rounded figures.

For personal use only

HONEYMOON NEW FEASIBILITY STUDY

August 2026



Document No: HNM-PRJ-RPT-0001

Status: Final

For personal use only

Acknowledgement of Country

Boss Energy's South Australian operations and exploration activities are located on the traditional lands of the Adnyamathanha, Ngadjuri and Wilyakali peoples.

Boss Energy acknowledges the Traditional Owners and Custodians of these lands and waters and recognises their enduring connection to Country, culture and community. We also recognise the importance of protecting the environment and preserving cultural heritage, knowledge and traditions for future generations.

We pay our respects to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples.

For personal use only

Important Notices

Forward-Looking Statements

This document contains certain forward-looking statements provided by or on behalf of Boss with respect to potential future matters. Forward-looking information may include, without limitation, statements regarding plans, strategies and objectives of Boss, production and financial guidance, financial forecasts, estimates of project milestones and timing and expected costs or production outputs. In some cases, forward-looking information can be identified by terms such as "may", "will", "should", "expect", "plan", "anticipate", "believe", "intend", "estimate", "predict", "potential", "continue" or other similar expressions concerning matters that are not historical facts. Guidance as to production, unit costs and capital expenditure is based on assumptions, budgets and estimates existing at the time of assessment which may change over time impacting the accuracy of those estimates. These estimates are developed in the context of an uncertain operating environment including in respect of inflationary macroeconomic conditions, and uncertainties surrounding the risks associated with mining which may impact production and have a flow on effect on sales. Actual results may therefore vary significantly depending on these risks and the timing required to address them.

Forward-looking statements reflect Boss's expectations at the date of this document, however they are not guarantees or predictions of future performance or statements of fact. Forward-looking information involves known and unknown risks, uncertainties and other factors (many of which are beyond the control of Boss and its directors and management) which may cause the actual results, performance or achievements of Boss and its business to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Accordingly, undue reliance should not be placed on forward-looking information.

The forward-looking statements in this document reflect various assumptions by or on behalf of Boss (which assumptions may prove to be inaccurate). Accordingly, this is another reason why such statements are subject to significant business, technical, legal, economic and competitive and other uncertainties and contingencies and other factors which may be beyond the control of Boss which could cause actual results or trends to differ materially from the forward-looking statements in this document, including but not limited to differences or inaccuracies arising from price and currency fluctuations, geotechnical factors, geological and mining factors, estimated continuity of mineralised horizons, metallurgical and processing factors, sales factors, drilling and production results, development progress, operating results, mineral resource estimates, legal issues, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries, approvals and cost estimates, environmental risks, ability to meet funding requirements, share price volatility, uranium markets and other matters. Accordingly, there can be no assurance that such forward-looking statements and projections will be realised.

Boss makes no representations as to the accuracy or completeness of any forward-looking statements or projections or that any forecasts will be achieved. Additionally Boss makes no representation or warranty, express or implied, in relation to, and (to the maximum extent permitted by law) no responsibility or liability (whether for negligence, under statute or otherwise) is or will be accepted by Boss or by any of its officers, directors, shareholders, partners, employees, or advisers as to or in relation to the accuracy or completeness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this document or any omission from this document.

Boss does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in Boss's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

Mineral Resource estimates are necessarily imprecise and depend on interpretations and geological assumptions, minerals prices, cost assumptions and statistical inferences (and assumptions concerning other factors, including mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors) which may ultimately prove to be incorrect or unreliable. Mineral Resource estimates are regularly revised based on actual exploration or production experience or new information and could therefore be subject to change. In addition, there are risks associated with such estimates, including (among other risks) that minerals mined may be of a different grade or tonnage from those in the estimates and the ability to economically extract and process the minerals may become compromised or not eventuate. Accordingly, this is another reason why no assurances can be given of whether the production guidance, financial forecasts or other forecasts or other forward-looking statements or information in this document will be achieved.

Effect of Rounding

A number of figures, amounts, percentages and estimates in this document are subject to the effect of rounding. Accordingly, the actual calculation of these figures may differ from the figures set out in this document.

Past Performance

Past performance information, including past share price performance of Boss and past Honeymoon Project information, given in this document is given for illustrative purposes only and should not be relied upon as (and is not) an indication of Boss's (or anyone else's) views on Boss's future activities, guidance or financial performance or condition. Past performance of Boss cannot be relied upon as an indicator of (and provides no guidance as to) the future performance of Boss.

For personal use only

Competent Persons Statements

1. Competent Persons Statement — Honeymoon Mineral Resource Estimate

The information in this document that relates to the Honeymoon Mineral Resources is based on information and supporting documentation compiled by Mr. Guillaume Lorilleux, a Competent Person, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM) and member of the Australian Institute of Geoscientists (AIG). Mr. Lorilleux is Principal Resource Geologist at RSC, a global resource development consultancy. Boss Energy Ltd has also contracted RSC to provide limited contracting and other advisory services. The full nature of the relationship between Mr. Lorilleux, RSC, and Boss Energy Ltd, including any issue that could be perceived by investors as a conflict of interest, has been disclosed. Mr. Lorilleux has sufficient experience that 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' (JORC Code). Mr. Lorilleux consents to the inclusion in the document of the matters based on his information in the form and context in which it appears.

2. Competent Persons Statement — Honeymoon Production Target

The Mineral Resource Estimates underpinning the production targets contained in this document have been prepared by a Competent Person in accordance with the requirements of the JORC Code.

For personal use only

Table of Contents

1. Introduction and Study Context 10
1.1 Honeymoon Background 10
1.2 Study Background and Rationale 10
2. Project Setting and History 12
2.1 Land Tenure and Ownership 12
2.2 Location and Site Access 13
2.3 Project and Study History 14
3. Geology and Resource Estimate 16
3.1 Regional Geological Setting 16
3.2 Deposit Geology 16
3.3 Drilling 17
3.4 Honeymoon Deposit Mineral Resource Estimate 19
3.4.1 Reasonable Prospects for Eventual Economic Extraction 20
3.4.2 Comparison with the 2019 Mineral Resource Estimate 21
4. Hydrogeology and Permeability 22
4.1 Aquifer Setting 22
4.2 Hydraulic Parameters 22
4.3 Confining Unit Performance 23
4.4 Permeability and flow 23
4.5 Permeability Model 25
5. Mineralogy, Geometallurgy and Leaching Characteristics 28
5.1 Geometallurgy 28
5.2 Mineralogy 28
5.3 Acid-Consuming Minerals 29
5.4 Oxidant-Consuming Minerals 30
5.5 Uranium Mineralogy 30
5.6 Application and Ongoing Work 30
5.7 Lixiviant Chemistry 31
6. Reactive Transport Models 33
6.1 Development 33
6.2 Application to Honeymoon 33
6.3 Reactive Transport Model Inputs 35
6.4 Reactive Transport Model Outputs 36
6.5 Calibration and Validation 39
6.5.1 Calibration methodology 39
6.5.2 Calibration results 40
6.6 Application to the New Feasibility Study 42
7. Wide-Spaced Wellfield Design 43
7.1 Wellfield Design Basis 43

For personal use only

For personal use only

7.2 Wellfield Configuration 47
7.3 Technical and Economic Wellfield Design Constraints 49
7.4 RTM Design Simulations 51
7.5 RTM Simulation Inputs 51
7.6 Additional simulations 52
7.7 RTM Results 53
7.8 Spacing Selection 57
7.9 Wellfield Spacing Data from Analogous Deposits 60
7.10 Reactive Transport Model recovery curves vs historical trends 60
7.11 Sensitivities on Flowrate and uranium dissolution kinetics 61
8. Wellfield Infrastructure 62
8.1 Wellfield Infrastructure Overview 62
8.1.1 Wells 62
8.1.2 Wellhouses 63
8.1.3 Filter Skids 63
8.1.4 Reticulation, Pipelines and Trunklines 63
8.1.5 Power Supply and Communications Infrastructure 63
8.1.6 Access Tracks and Laydown Areas 64
8.2 Trunkline Review and Assessment 66
8.2.1 Trunkline Configuration 66
8.2.2 Conditioning Capacity 67
8.2.3 PLS and BLS Capacity 67
8.3 Wellhouse Review and Assessment 67
8.3.1 Wellhouse Reuse 69
8.4 Power Distribution Review and Assessment 69
8.5 Wellfield Layout 70
8.6 Wellfield Infrastructure Implementation 70
9. Processing Plant 71
9.1 Plant Design Basis 72
9.2 Plant Capacity and Reliability Upgrades 72
9.3 Plant Capacity Increase 73
10. Supporting Infrastructure 74
10.1 Water Treatment Plant 74
10.2 Existing Constraints 75
10.3 Upgrade Strategy 75
10.4 Stage 1—Existing Plant Optimisation 76
10.5 Stage 2—Major Capacity Expansion 76
10.6 Planned Operating Capacity 79
10.7 Other Infrastructure 80
10.8 Implementation 80
11. Regulatory Approvals and Mining Tenure 82

11.1 Approvals Strategy 82
11.2 Existing Tenure and Approvals Coverage 83
11.3 Honeymoon Mine Extensional Approval Pathway 84
11.4 Work Completed 85
11.5 Implementation Program 86
12. Life-of-Mine Plan and Production Schedule 87
12.1 Sequencing basis 88
12.2 Sequencing results 89
13. Operating and Capital Cost 92
13.1 Operating costs 92
13.1.1 C1 Cost 92
13.1.2 Reagents and consumables 93
13.1.3 Labour, general and administrative 93
13.1.4 Other operating costs 93
13.2 Capital Cost Estimate 94
13.2.1 Sustaining capital 94
13.2.2 Process Facilities 95
13.3 Comparison to previous wellfield design 96
13.4 Summary forecast 100
14. Risks and Opportunities 101
14.1 Risks 101
14.2 Opportunities 103
15. Conclusion 105

For personal use only

For personal use only

Abbreviations

AACE	*Association for the Advancement of Cost Engineering*
AHD	*Australian Height Datum*
AISC	*All-In Sustaining Cost*
ANSTO	*Australian Nuclear Science and Technology Organisation*
AusIMM	*Australasian Institute of Mining and Metallurgy*
BD	*Brooks Dam (Area)*
BLS	*Barren leach solution*
Boss	*Boss Energy*
C1	*Direct cash cost*
Ca	*Calcium*
CEC	*Carpentaria Exploration Company Pty Ltd*
CIP	*Clean in place*
CK	*Central Kalkaroo (Area)*
Cl	*Chloride*
DEM	*Department for Energy and Mining*
DN	*Nominal diameter*
EFS	*Enhanced Feasibility Study*
EK	*East Kalkaroo (Area)*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
eU_3O_8	*Uranium grade based on gamma measurements*
EL	*Exploration licence*
Fe	*Iron*
Fe^{2+}	*Ferrous Iron*
Fe^{3+}	*Ferric Iron*
$Fe_2(SO_4)_3$	*Ferric sulphate*
Fe-Ti	*Iron-titanium*
GST	*Goods and services tax*
GT	*Grade Thickness*
H_2O_2	*Hydrogen peroxide*
H_2SO_4	*Sulphuric acid*
HDPE	*High density polyethylene*
HM	*Honeymoon (Area)*
HME	*Honeymoon Mine Extension*
Honeymoon	*Honeymoon Uranium Operation*
HV	*High voltage*
HYTEC	*Reactive transport modelling code used in this study*
IAEA	*International Atomic Energy Agency*
IRR	*Internal rate of return*
ISR	*In-situ recovery*
IX	*Ion exchange*
kV	*Kilovolts*
JORC	*Joint Ore Reserves Committee*
K	*Hydraulic conductivity (where used in the hydrogeology discussion)*
k	*Intrinsic permeability (where used in the hydrogeology discussion)*
KPI	*Key performance indicator*
KSDR	*Permeability from NMR data (based on Schlumberger-Doll equation)*
Mg	*Magnesium*
ML	*Mining Lease*
MPL	*Miscellaneous Purpose Licence*
MRE	*Mineral Resource Estimate*
MRI	*Magnetic resonance imaging*
Na	*Sodium*
NFS	*New Feasibility Study*
NIMCIX	*Continuous ion-exchange technology*
NMR	*Nuclear Magnetic Resonance*
PEPR	*Program for Environment Protection and Rehabilitation*
PFN	*Prompt Fission Neutron*
PLS	*Pregnant leach solution*
PN	*Nominal pressure rating*
PSL	*Paris Sciences et Lettres University*
pU_3O_8	*Uranium grade based on PFN measurements*
PVE	*Pore volume equivalents*
Ra-226	*Radium-226*
RO	*Reverse osmosis*
RPEEE	*Reasonable Prospects for Eventual Economic Extraction*
RPR	*Reserve preparation ratio*
RTM	*Reactive Transport Modelling*
SO_4	*Sulphate*
SWIR	*Short-wave infrared*
TDS	*Total dissolved solids*
TIR	*Thermal infrared*
U	*Uranium*
U^{4+}	*Tetravalent uranium*
U^{6+}	*Hexavalent uranium*
U_3O_8	*Uranium Oxide / Triuranium octoxide*
VNIR	*Visible-near infrared*
WTP	*Water Treatment Plant*
XRD	*X-ray diffraction*

Units

#	*Number or count*
$	*Dollars*
$/lb	*Dollars per pound*
$M	*Million Dollars*
%	*Per cent*
µm	*Micrometres*
A$	*Australian dollars*
AUD	*Australian dollars*
AUD:USD	*Australian dollar to United States dollar exchange rate*
Bq/L	*Becquerels per litre*
g/L	*Grams per litre*
h	*Hour*
kg	*Kilogram*
kg/t	*Kilograms per tonne*
klbs	*Thousand pounds*
km	*Kilometres*
kt	*Thousand tonnes*
lbs	*Pounds*
m	*Metres*
m/day	*Metres per day*
m/year	*Metres per year*
m^2	*Square metres*
m^3	*Cubic metres*
m^3/h	*Cubic metres per hour*
mD	*Millidarcy*
mg/L	*Milligrams per litre*
Mlbs	*Million pounds*
Mt	*Million tonnes*
MVA	*Megavolt-amperes*
p.a.	*Per annum*
pH	*Measure of acidity or alkalinity*
ppm	*Parts per million*
T	*Tonnes*
US$	*United States dollars*

For personal use only

1. Introduction and Study Context

1.1 Honeymoon Background

The Honeymoon Uranium Operation (Honeymoon) is located in South Australia, near the South Australia-New South Wales border and approximately 80 km north-west of Broken Hill.

Uranium mineralisation at Honeymoon was discovered in 1972 and progressed through several decades of exploration, in-situ recovery (ISR) pilot trials and regulatory approvals. The mine and processing plant development was completed under the then owner, Uranium One and production of saleable quantities commenced in the first quarter of 2011.

After operating from 2011 to 2013, Honeymoon was placed on care and maintenance due to operational challenges and low uranium prices, before being acquired by Boss Energy (Boss) in 2015.

Boss successfully restarted the operation and commenced production in April 2024, declaring commercial production in January 2025. Since restart, Honeymoon has cumulatively extracted over 2.5 Mlbs of U_3O_8.

The operation has progressively ramped up, with its operating platform now comprising six producing wellfields, five NIMCIX columns, the East Kalkaroo trunkline and a proven flowsheet across wellfields and the operating plant.

1.2 Study Background and Rationale

Following its acquisition of Honeymoon in 2015, Boss completed a staged program of technical studies, test work and field trials that supported the redevelopment and restart of the operation. This program culminated in the June 2021 Enhanced Feasibility Study (EFS), which formed the basis for the final investment decision and restart program.

Production recommenced in April 2024 and commercial production was declared in January 2025. Operating experience and additional geological information obtained during the subsequent ramp-up provided Boss with a materially improved understanding of the deposit, wellfield performance and processing response.

In July 2025, Boss advised that delineation drilling undertaken to support the design of future wellfields at East Kalkaroo had identified less continuity of mineralised horizons than assumed in the EFS. This had the potential to require additional injection and extraction wells, increase sustaining capital intensity and affect the operation's ability to achieve the longer-term production profile contemplated by the EFS. Boss therefore initiated a technical review (Honeymoon Review) to assess the implications for the EFS assumptions and life-of-mine plan.

The Honeymoon Review incorporated delineation drilling results, actual wellfield operating performance, updated geological interpretation and specialist technical analysis. The Honeymoon Review identified differences between the assumptions underpinning the EFS and the Company's updated understanding of the deposit. These principally related to:

- less continuity of higher-grade mineralisation, with mineralisation occurring in more discrete pods than previously interpreted;
- reduced overlap between mineralised lenses across the stacked horizons, limiting the ability to use the same wellfield infrastructure to access multiple horizons;

- a proportion of the mineralisation occurring within or adjacent to lower-permeability material, potentially affecting its amenability to ISR recovery; and
- smaller wellfields under the EFS design due to the reduced continuity of higher-grade mineralisation.

The Honeymoon Review also confirmed the presence of extensive, laterally continuous lower-grade mineralisation that was not expected to be economically recovered under the EFS wellfield design and cut-off assumptions. Consequently, Boss withdrew the EFS in December 2025 and initiated the New Feasibility Study (NFS) to establish an updated life-of-mine plan reflecting the Company's improved understanding of the Mineral Resource, deposit characteristics and operating performance.

The NFS confirms a wide-spaced wellfield design as the preferred development approach for Honeymoon. The ISR mining method and existing processing flowsheet remain fundamentally unchanged; the principal change is the spacing and configuration of the injection and extraction wells. Compared with the wellfield design adopted in the EFS, the wide-spaced design is expected to:

- increase lixiviant residence time within the mineralised aquifer, allowing greater interaction with the uranium mineralisation;
- place a larger proportion of the mineralised area under leach within each wellfield;
- use fewer wells, wellhouses and associated surface and subsurface infrastructure to develop an equivalent mineralised area;
- improve pregnant leach solution grades; and
- reduce wellfield development costs and reagent consumption relative to the quantity of uranium recovered.

The NFS establishes a baseline life-of-mine plan and associated production targets for Honeymoon. It is underpinned by:

- an updated Joint Ore Reserves Committee (JORC) Mineral Resource Estimate (MRE), incorporating a revised geological interpretation and 685 holes totaling approximately 86,670 m of additional (since the 2019 MRE) drilling completed up to 31 December 2025;
- a Reactive Transport Model calibrated against historical and recent operating performance and integrated with three-dimensional resource, permeability and hydrogeological models to support wellfield design, recovery forecasting and production scheduling; and
- feasibility-level assessments of the wellfields, processing plant, supporting infrastructure, operating strategy and regulatory approvals required to deliver the life-of-mine plan.
- actual operating and wellfield capital costs adjusted for the outputs from the RTM.

The principal objective of the NFS is to confirm the technical, operational and economic viability of the wide-spaced wellfield design as the preferred pathway for extracting optimal value from Honeymoon and to define the basis for its progressive implementation. As Honeymoon is an established operating project with existing tenure, access, processing facilities, supporting infrastructure and operating systems, the NFS places particular emphasis on those aspects materially affected by the revised wellfield design.

The Gould's Dam and Jasons satellite deposits are not included in the NFS life-of-mine plan. However, based on Boss' current understanding of their geological and hydrogeological characteristics, both deposits are considered likely to be amenable to the wide-spaced wellfield design and represent potential future extensions to the Honeymoon operating platform.

For personal use only

For personal use only

2. Project Setting and History

2.1 Land Tenure and Ownership

The Honeymoon Uranium Operation is located in South Australia, approximately 80 km north-west of Broken Hill and near the South Australia–New South Wales border. Boss holds a 100% interest in the operation and the surrounding project tenure.

The project area comprises:

- Mining Lease (ML) ML6109;
- Exploration Licences (EL) EL6081 and EL6510; and
- Miscellaneous Purpose Licences (MPL) MPL15 and MPL92.

Delivery of the life-of-mine production profile set out in the NFS will require an extension of the existing mining tenure to incorporate Brooks Dam North as was captured in the original EFS. The required tenure applications and associated approvals will need to be obtained before production can commence from these areas. Details of this are captured in this report but do not prevent ongoing mining activities within the current approved tenure.

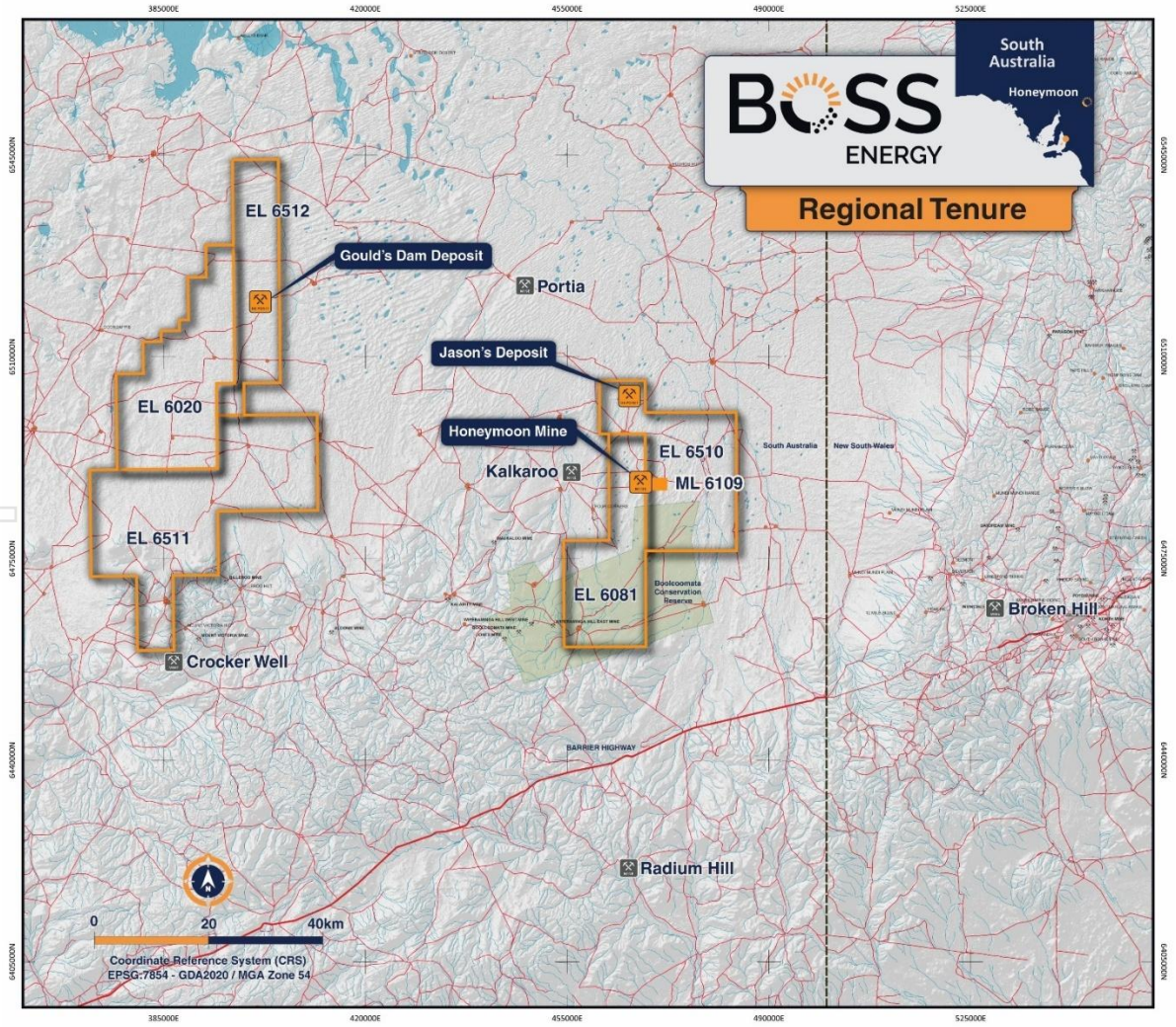


Figure 1: Location map showing the Honeymoon Operation

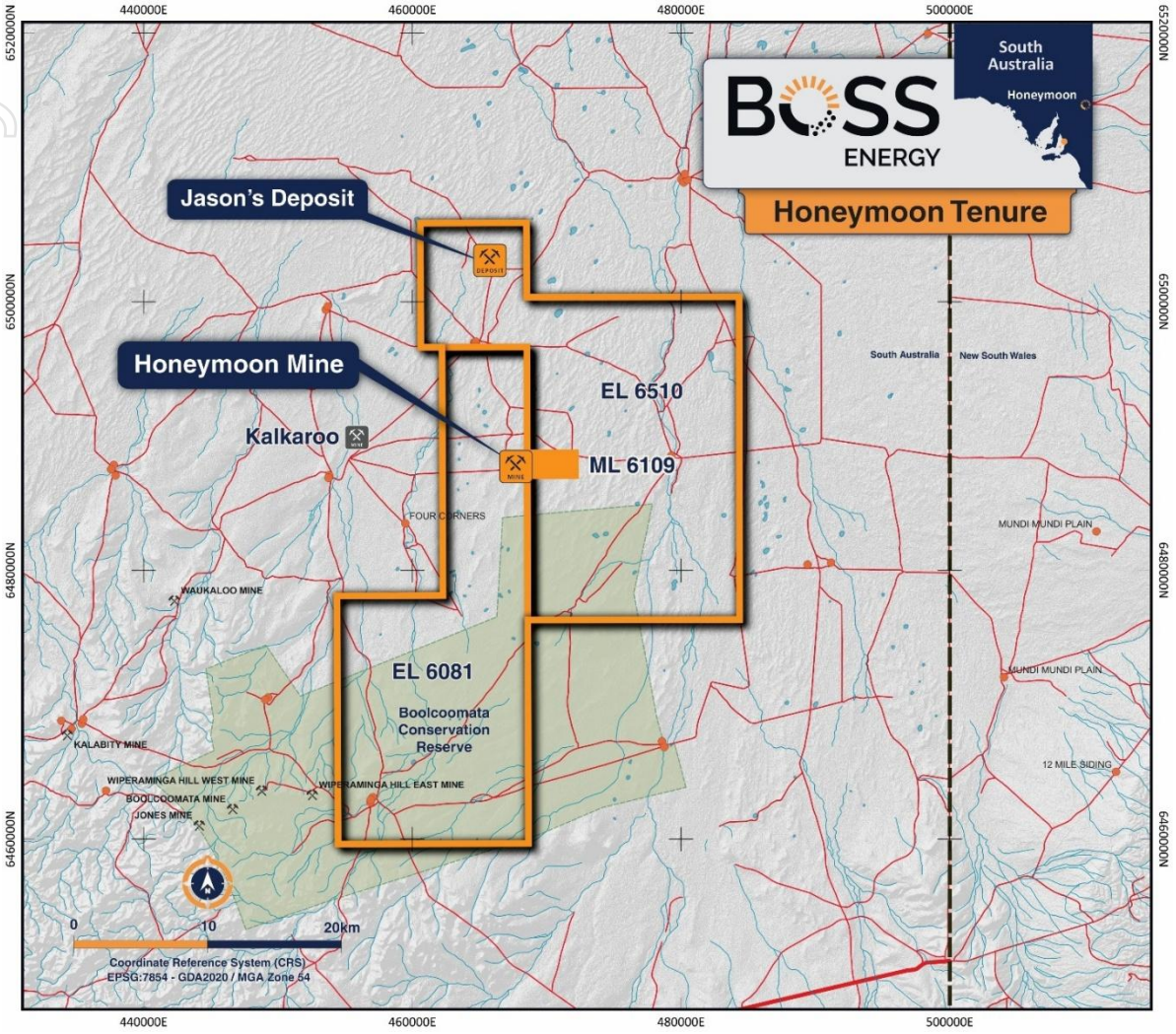


Figure 2: Localised map of the Honeymoon Operation

2.2 Location and Site Access

Access to the Honeymoon Uranium Operation is via established road networks from Broken Hill, approximately 80 km southeast of the site. From Broken Hill, access is provided by the Barrier Highway, Mulyungarie Road, and an existing unsealed mine access road connecting to the operation. These routes are used for the movement of reagents, consumables, equipment and uranium product, with Broken Hill serving as the principal regional logistics and services centre. Internal access roads connect the processing plant, wellfields, accommodation facilities and supporting infrastructure across the Project area. The operation has an on-site unsealed airstrip that supports the majority of workforce fly-in and fly-out movements. Road access can be temporarily affected by significant rainfall, and the operation maintains site-based accommodation, inventories and logistics arrangements to manage short periods of disruption.

For personal use only

For personal use only

2.3 Project and Study History

Uranium mineralisation was first identified within the Tertiary palaeochannel sediments at Honeymoon in 1972 by the Minad–Teton–CEC Joint Venture. At that time, ISR was an emerging mining method, and it was not until the late 1970s that the potential to extract uranium economically using ISR was established.

Following Commonwealth and South Australian Government approval of an Environmental Impact Statement, Minad constructed a demonstration ISR operation in 1982. However, before the wellfield and demonstration plant could be commissioned, changes in State and Commonwealth government policy delayed final approval to mine. The Project was subsequently placed on care and maintenance in March 1983.

Ownership of Honeymoon later passed to MIM Holdings and, in 1997, to Southern Cross Resources, which subsequently became part of Uranium One Inc. Following receipt of the necessary State and Commonwealth approvals, Southern Cross Resources undertook field-leach trials between 1999 and 2000. These trials used five interconnected well patterns and provided further information on the hydrogeological response of the deposit and its amenability to ISR extraction.

An Environmental Impact Statement was prepared in 2000 to support the proposed commercial development. Mining Lease ML6109 was granted in 2001, together with the associated approvals required for the operation and its supporting infrastructure. Construction approval was received in early 2008, construction commenced in 2009 and the operation was substantially completed during the first quarter of 2011.

Commissioning commenced shortly thereafter, with the first dried and drummed uranium oxide produced in August 2011. The operation produced approximately 0.74 Mlbs of U_3O_8 between 2011 and 2013 but did not achieve its nameplate production capacity. Performance was affected by challenges in achieving design production rates, instability in the leach chemistry, scaling and silica-management issues, and the high operating costs associated with the original solvent-extraction processing circuit. These factors, together with a prolonged decline in uranium prices, resulted in the operation being placed on care and maintenance in 2014.

Boss acquired Honeymoon from Uranium One in December 2015 and commenced a staged program of technical studies, test work and field trials to assess the potential to restart the operation.

A Scoping Study was completed in 2016, followed by a Pre-Feasibility Study in 2017. These studies evaluated alternative wellfield development and processing configurations and identified ion exchange as the preferred uranium recovery technology. Supporting metallurgical test work was undertaken by the Australian Nuclear Science and Technology Organisation (ANSTO), including assessment of alternative leaching conditions and ion-exchange resins.

A field-leach trial and associated ion-exchange pilot campaign were undertaken at Honeymoon during 2017. The field trial evaluated revised wellfield pre-conditioning and leaching strategies, while the pilot campaign demonstrated the ability of selected ion-exchange resins to recover uranium from Honeymoon's high-salinity leach solutions.

The results informed further processing technology assessments, trade-off studies and optimisation work undertaken during 2018 and 2019. This work culminated in a Restart Assessment and Feasibility Study completed in January 2020, which established the initial technical, operational and economic basis for restarting Honeymoon. The Feasibility Study contemplated a staged development comprising the initial

restart of the existing solvent-extraction plant, followed by the addition of an ion-exchange circuit to support increased production.

The development strategy was subsequently refined through the EFS completed in June 2021. The EFS adopted a wholly NIMCIX continuous ion-exchange flowsheet in place of the staged solvent-extraction and ion-exchange approach contemplated by the earlier Feasibility Study. It established the technical and economic basis for the redevelopment and formed the basis of the final investment decision and restart program.

Following the final investment decision, Boss refurbished and redeveloped Honeymoon. The work included construction of the new NIMCIX ion-exchange processing facilities, development of new wellfields and upgrades to supporting infrastructure. Production recommenced in April 2024, returning Honeymoon to production approximately ten years after it had been placed on care and maintenance. Commercial production was declared in January 2025.

For personal use only

For personal use only

3. Geology and Resource Estimate

3.1 Regional Geological Setting

The Honeymoon uranium deposit is located within the Callabonna sub-basin of the Lake Eyre Basin, a region that hosts several significant sandstone-hosted uranium deposits. The deposit occurs within the Yarramba palaeovalley, which is incised into weathered Mesoproterozoic basement rocks of the Willyama Group.

Uranium mineralisation at Honeymoon is hosted within permeable sand units of the Eyre Formation, which forms the principal regional aquifer. The overlying Namba Formation is dominated by clay-rich lacustrine sediments and provides an effective confining layer above the mineralised aquifer.

3.2 Deposit Geology

The Honeymoon Deposit comprises four areas from west to east: Brooks Dam, Honeymoon, Central Kalkaroo and East Kalkaroo. Recent drilling and passive seismic surveying have refined the interpretation of the palaeovalley, identifying a more complex geometry than previously understood, with separate channel systems extending north and east of Honeymoon.

The palaeovalley is filled by unconsolidated sediments of the Eyre Formation, which overlie weathered basement. At Honeymoon, the Eyre Formation is up to approximately 50 m thick and comprises multiple sequences of sand, silty sand and clay. These sediments form a heterogeneous network of channel and bar deposits, with localised variations in aquifer thickness, permeability and hydraulic connectivity.

The Eyre Formation is overlain by up to approximately 40 m of predominantly clay-rich sediments of the Namba Formation, which is overlain by the approximately 30 m thick Quaternary cover consisting of predominately clay rich sediments, silts and sands (Note that cross sections shown within this report exclude depiction of the Quaternary cover). The Namba Formation forms a regional confining unit above the mineralised Eyre Formation aquifer. Groundwater within the Eyre Formation is naturally saline.

Uranium mineralisation extends for approximately 6.0 km along the palaeovalley, reaches approximately up to 650 m in width and occurs at depths of approximately 80 m to 120 m below surface. Mineralisation is generally present as sub-horizontal, tabular bodies distributed across multiple stratigraphic horizons. Higher-grade mineralisation commonly occurs near contacts between sand- and clay-rich units, although this relationship is not consistent throughout the deposit.

Most mineralisation occurs within the basal sand units of the Eyre Formation, with generally thinner and lower-grade mineralisation also present in the middle and upper sand horizons. The mineralised sands contain fine-grained uranium associated with sedimentary and authigenic minerals. The occurrence of mineralisation across multiple horizons, together with variability in sand continuity and permeability, is an important consideration in Mineral Resource estimation, ISR recovery assessment and wellfield design.

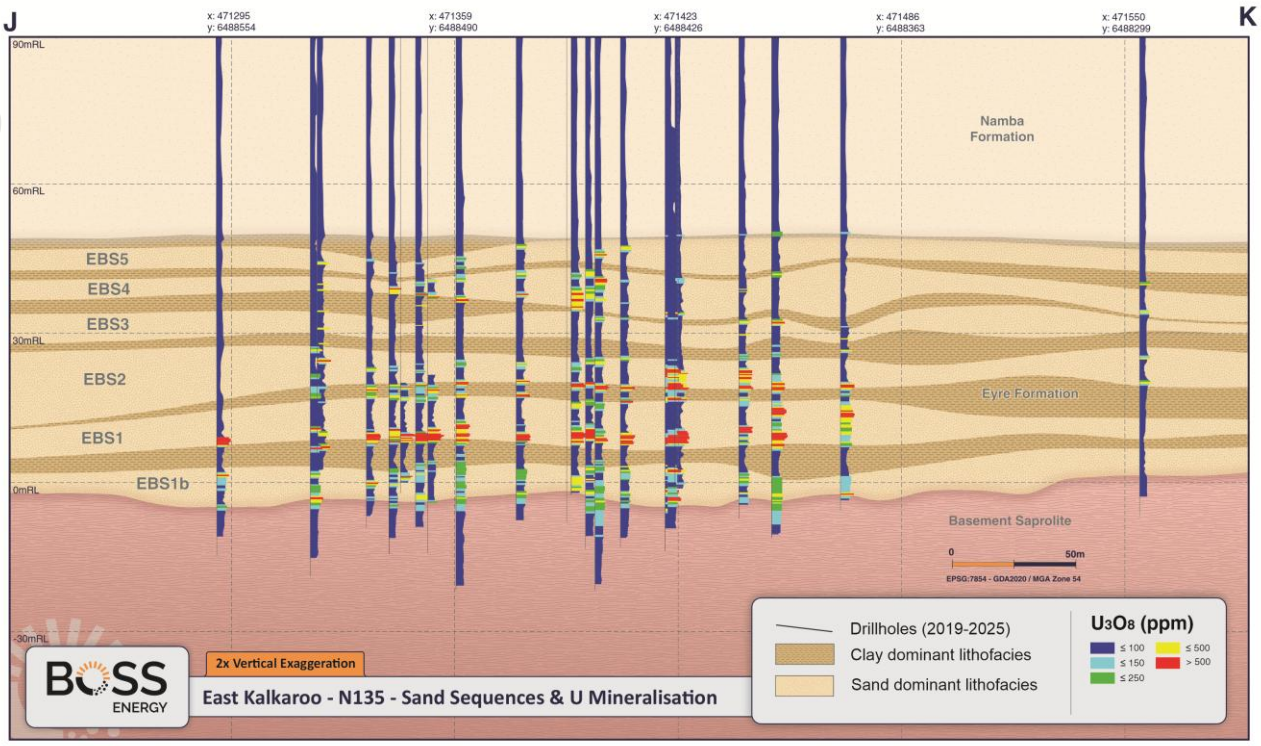


Figure 3: Section from the East Kalkaroo deposit illustrating the various lithofacies identified within The Eyre Formation and their relationship to uranium mineralisation.

3.3 Drilling

A total of 2,865 holes have been drilled across the Honeymoon deposit since 1969 by various companies (Table 1). Of these, 2,637 holes contain uranium data, including 2,067 used to inform the MRE. A subset of 824 holes also contains Nuclear Magnetic Resonance (NMR) data used to support permeability modelling. The remaining holes were excluded from the MRE because they did not contain suitable uranium data, including Aircore holes drilled primarily to test basement-hosted base-metal targets.

Since the previous MRE announced on 25 February 2019, 716 holes totalling 90,651 m have been drilled across the broader Honeymoon deposit. Of these, 685 holes totalling 86,670 m are located within the current MRE model area and were available for consideration in the updated estimate. Drilling relevant to the MRE was completed predominantly using rotary mud methods, supplemented by diamond core and sonic drilling. Drill spacing varies by area, ranging from approximately 20–150 m at Brooks Dam, 5–40 m at Honeymoon, 20–100 m at Central Kalkaroo and 10–60 m at East Kalkaroo (Figure 4).

An accelerated resource delineation drilling program commenced in September 2025 to increase data density and improve the geological and mineralisation interpretation. The updated MRE incorporates drilling data available as at 31 December 2025, including 161 holes totalling 20,632 m completed under this program. Following the data cut-off, a further 262 holes totalling 31,411 m were completed before the program concluded in June 2026. These subsequent drilling results are not included in the current MRE and are intended to be incorporated into a future Mineral Resource update.

For personal use only

For personal use only

Table 1: Total drillholes on the Honeymoon Deposit by date range and drill type with U_3O_8 data source

Time period	Company	Mud Rotary	Diamond	Sonic	Aircore	Number of holes	Metres	U_3O_8 data source
1969–1979	Sedimentary Uranium NL	148				148	18,209	Gamma
1971–1972	Mount Isa Mines	3				3	382	Gamma
1972–1982	Minad-Teton Australia	482	28			510	63,189	Gamma
1998–1999	Rio Tinto Exploration				23	23	2,874	-
1999–2006	Southern Cross Resources	484	13			497	60,566	Gamma/PFN
2009–2012	Uranium One Australia	724	5	5		734	90,544	Gamma/PFN
2018–2025	Boss Energy	936	2	12		950	119,741	Gamma/PFN
1969–2025	**Total**	**2,777**	**48**	**17**	**23**	**2,865**	**355,505**	**Gamma/PFN**

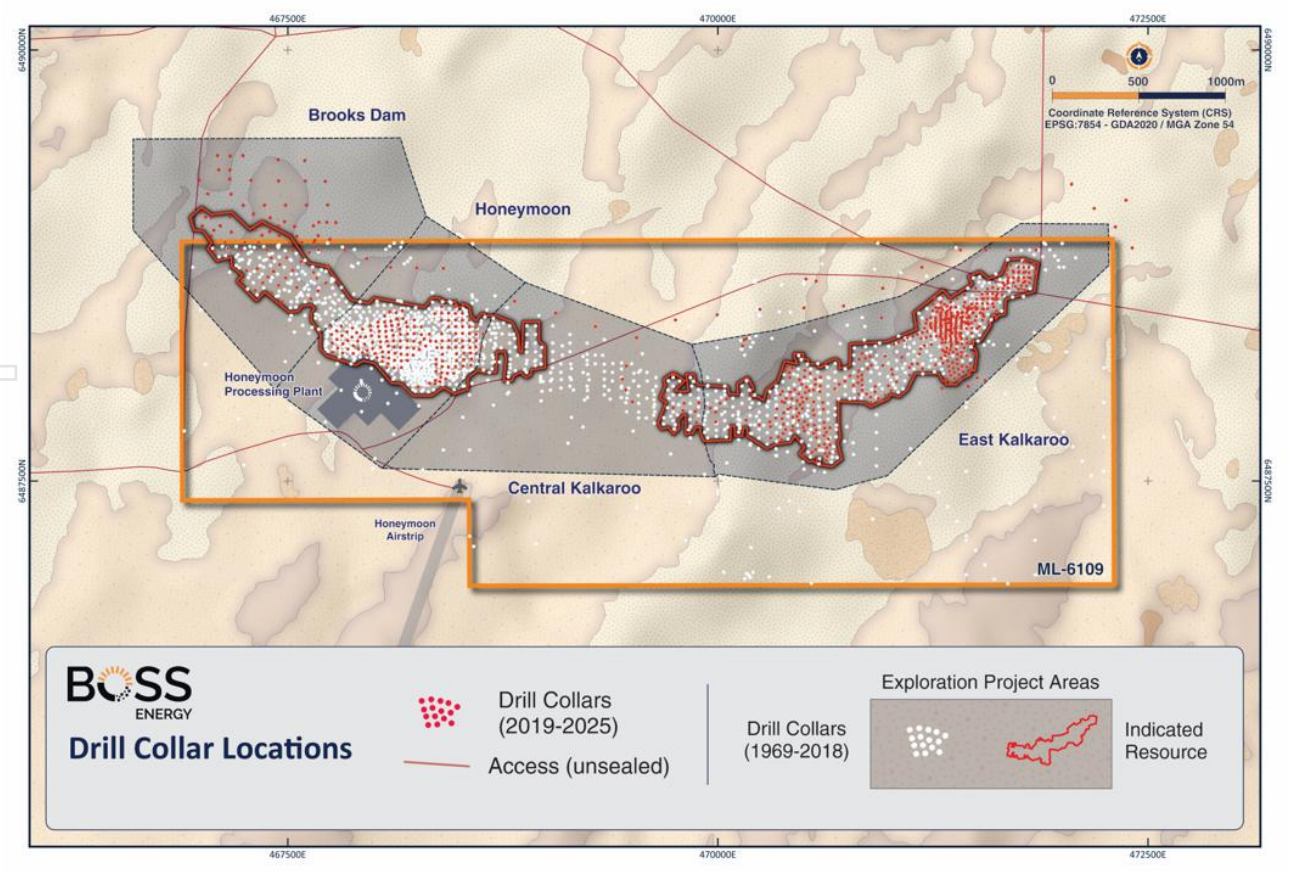


Figure 4: Image showing drilling completed since 2019 informing the new mineral resource.

For personal use only

3.4 Honeymoon Deposit Mineral Resource Estimate

The updated Honeymoon MRE was prepared by RSC Global Pty Ltd (RSC) and is effective 30 June 2026. The MRE has been classified and reported in accordance with the JORC Code (2012). The updated MRE is being released alongside the NFS. Refer to this release for details.

The updated Indicated and Inferred Mineral Resource for the Honeymoon Deposit comprises 21.4 Mt @ 440 ppm U_3O_8 for 20.8 Mlbs contained U_3O_8, reported above a 100 ppm U_3O_8 cut-off grade and depleted for production to 30 June 2026 of 3.3 Mlbs U_3O_8 (Table 2). This includes an Indicated Mineral Resource of 12.1 Mt at 510 ppm U_3O_8 for approximately 13.7 Mlbs U_3O_8, representing approximately 66% of the total contained uranium. The balance is classified as an Inferred Mineral Resource.

Table 2: Honeymoon Deposit in-situ Mineral Resource estimate (effective 30 June 2026)

Resource Classification	Grade		Metal	
	Mt	ppm U_3O_8	kt U_3O_8	Mlbs U_3O_8
Honeymoon Deposit				
Indicated	12.1	510	6.2	13.7
Inferred	9.3	350	3.2	7.1
TOTAL	**21.4**	**440**	**9.4**	**20.8**

Notes:

The Mineral Resource estimate is classified in accordance with the JORC Code (Joint Ore Reserves Committee (JORC), 2012)[1]
The Mineral Resource database has a cut-off date of 31 December 2025.
The effective date of the Mineral Resource estimate is 30 June 2026.
The Mineral Resource estimate is reported at an in-situ cut-off of 100 ppm U_3O_8. A grade-thickness (GT) cut-off of GT≥400 m.ppm U_3O_8 was applied selectively in border areas of the MRE.
Only the recoverable portion of blocks ≥100 ppm U_3O_8 is reported.
The Mineral Resource is constrained to an ISR-amenable permeability threshold of KSDR≥100 mD.
The Mineral Resource is mainly based on equivalent U_3O_8 (eU_3O_8), without adjusting for localised radiometric disequilibrium effects.
The Mineral Resource estimate is reported net of depletion from the Honeymoon in-situ recovery (ISR) extraction of 3.3 Mlbs U_3O_8 (1.5 kt U_3O_8) as of 30 June 2026 by subtraction of extracted metal tonnes from Indicated Resource metal tonnes.
The Mineral Resource estimate is reported on an in-situ tonnes basis.
The Mineral Resource estimate is rounded to reflect the level of confidence in the estimate at the time of reporting.
Totals may vary due to rounding.
The Mineral Resource estimate is reported both within the Honeymoon ML6109 license and outside in EL6081 license.

[1] *Joint Ore Reserves Committee (JORC). (2012). Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (The JORC Code). The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia, 2012.*

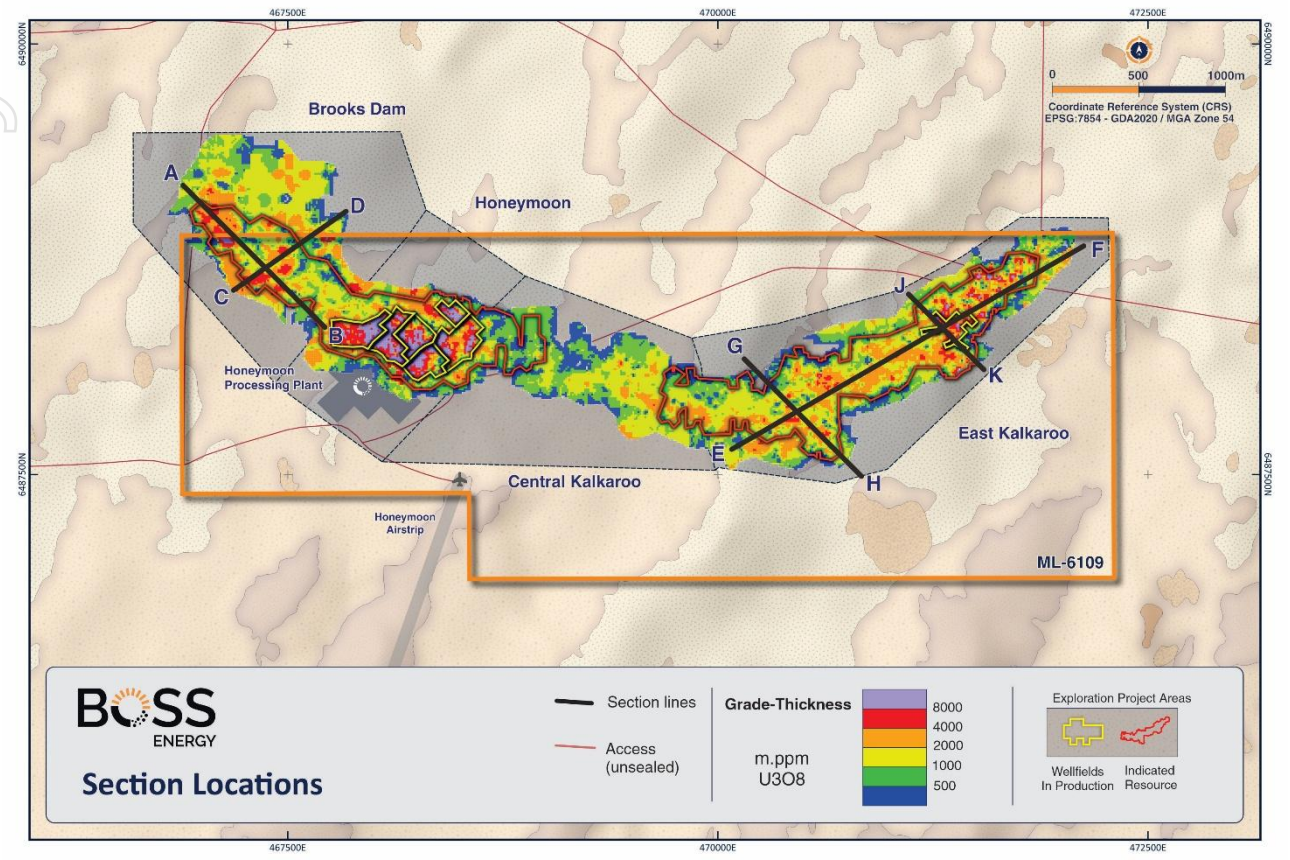


Figure 5: Plan view of the Honeymoon Deposit showing the deposit grade-thickness distribution of Resource blocks at 100 ppm U_3O_8 cut-off with continuous mineralisation over 6 km strike length, and geographical domains. See also the Honeymoon MRE Technical Overview 2026 for additional information.

Boss will continue work to improve resource confidence and support potential classification upgrades in future MRE. This work includes additional drilling at Brooks Dam, Central Kalkaroo and East Kalkaroo, continued review and validation of historical drilling data, further refinement of geological interpretations and three-dimensional geological models, and further assessment of radiometric disequilibrium and its application to resource estimation.

3.4.1 Reasonable Prospects for Eventual Economic Extraction

The Competent Person has undertaken an initial assessment of the factors likely to influence the Reasonable Prospects for Eventual Economic Extraction (RPEEE) and considers that the reported Mineral Resources provide a fair and reasonable indication of Honeymoon's potential for economic extraction by ISR mining.

Permeability is a key determinant of whether mineralisation is amenable to ISR extraction. The RPEEE assessment therefore incorporated deposit-wide permeability models developed from downhole NMR data and informed by operating performance at Honeymoon. Mineralisation that did not satisfy the applicable ISR extractability and RPEEE criteria was excluded from the reported Honeymoon Deposit MRE, primarily where it occurs within lower-permeability material considered less amenable to ISR recovery.

The application of ISR-specific permeability and extractability criteria provides a more technically informed inventory of potentially recoverable mineralisation and an improved basis for future conversion of Mineral Resources to Ore Reserves.

For personal use only

3.4.2 Comparison with the 2019 Mineral Resource Estimate

The comparison of the 2026 Honeymoon Mineral Resource estimate (MRE) at a 100 ppm U_3O_8 cut-off (cut-off grade used in 2026) and depleted as of 30 June 2026 with the 2019 MRE at a 250 ppm U_3O_8 cut-off (cut-off grade used in 2019) and depleted through to 2019 indicates a decrease in U_3O_8 metal by 15.1 Mlbs U_3O_8 (-42%), and an average grade reduction of 220 ppm U_3O_8 (-33%).

On an equivalent basis, the comparison of the undepleted 2026 MRE at a 250 ppm U_3O_8 cut-off with the undepleted 2019 MRE at a 250 ppm U_3O_8 cut-off indicates a decrease in tonnage by 68% and in U_3O_8 metal by 63%, and an increase in U_3O_8 grade by 16%.

The change reflects the incorporation of substantial new technical and operating information and the adoption of an ISR-specific resource estimation approach, including:

- 86,670 m of additional drilling within the resource model area since the 2019 MRE;
- updated geological interpretations, tighter estimation domains and revised resource estimation methodologies;
- recognition of less continuity of higher-grade mineralisation than previously interpreted;
- incorporation of deposit-wide permeability modelling and ISR operating data;
- application of RPEEE criteria that exclude mineralisation within lower-permeability material considered less amenable to ISR recovery; and
- reduction of the reporting cut-off grade from 250 ppm to 100 ppm U_3O_8, consistent with the technical and economic assumptions adopted for the NFS.

The updated Honeymoon Deposit MRE confirms the principal findings of the Honeymoon Review announced on 18 December 2025, particularly the reduced continuity of higher grade mineralisation and the importance of permeability and extractability in determining the resource inventory relevant to ISR development.

Further information on the updated Honeymoon Deposit MRE, including the full Mineral Resource statement and supporting JORC Code disclosures, is provided in the separate MRE announcement released concurrently with the NFS.

For personal use only

For personal use only

4. Hydrogeology and Permeability

4.1 Aquifer Setting

The principal aquifer relevant to the Honeymoon Uranium Operation is the Eyre Formation Aquifer, hosted within the Yarramba Palaeochannel. The aquifer is laterally extensive and hydraulically connected along the palaeochannel axis. It is confined above by the Namba Formation and below by Mesoproterozoic basement saprolite.

There are two consistently recognisable hydrostratigraphic units within the Eyre Formation Aquifer. Analysis of hydrostatic pressure responses to operational pumping at Honeymoon indicates that the Upper and Basal Members are in hydraulic equilibrium, with pressure changes transferred between the units. The two members therefore behave as a single interconnected aquifer system, hereafter referred to as the Eyre Formation Aquifer:

- **Basal Member** – Variable, coarse-grained and highly permeable sands occurring at depths of approximately 90 m to 120 m below ground level. The unit is interbedded with discontinuous silt and clay and is confined below by basement saprolite. The Basal Member hosts most of the economically significant uranium mineralisation at Honeymoon.
- **Upper Member** – Fine-grained, moderately low-permeability sands occurring at depths of approximately 75 m to 90 m below ground level. The unit is discontinuous, exhibits lateral facies changes from sand to silt and clay, and hosts minor uranium mineralisation. It is confined above by the Namba Formation. Groundwater flow is generally from east to west along the palaeochannel.

Groundwater within both members is naturally saline and contains elevated concentrations of dissolved solids, sulphate, chloride and naturally occurring radionuclides associated with the mineralised zones.

4.2 Hydraulic Parameters

The static groundwater level within the Eyre Formation Aquifer is approximately 50 m to 55 m below ground surface, corresponding to an elevation of approximately 65 m Australian Height Datum (AHD). The aquifer exhibits a natural pressure gradient from east to west along the palaeochannel, with an inferred potentiometric gradient ranging from approximately 1.2×10^{-4} to 1.7×10^{-4}.

The calibrated parameters from the validated regional groundwater-flow model developed by Groundwater Science (2012) are summarised in Table 3. An effective porosity of 0.30 was calibrated against tracer-equivalent monitoring data collected during liquid-waste disposal operations in 2016 and is considered representative for regional solute-transport modelling.

For personal use only

Table 3: Calibrated Aquifer Hydraulic Parameters

Hydrostratigraphic unit	Horizontal hydraulic conductivity (m/day)	Vertical hydraulic conductivity (m/day)	Comments
Namba Formation	0.001	0.0001	Typical of silty clay; regional confining unit
Eyre Formation Upper Member	1	0.1	Fine sand; consistent with aquifer-test results
Eyre Formation Basal Member	40	4	Medium- to coarse-grained, well-sorted sand; principal ISR ore host
Effective porosity (calibrated)	0.30	–	Calibrated against liquid-waste disposal monitoring data collected in 2016

Using the calibrated horizontal hydraulic conductivity of 40 m/day and a potentiometric gradient of 1.2×10^{-4}, the estimated natural groundwater-flow velocity in the Basal Member ranges from approximately 12 m/year, based on a conservative effective porosity of 0.15, to approximately 6 m/year using the calibrated effective porosity of 0.30. The latter estimate is consistent with long-term operational monitoring data and has been adopted as the best estimate of natural groundwater-flow velocity in the Basal Member (Boss Energy Ltd, 2023)[2].

4.3 Confining Unit Performance

The Namba Formation overlies the Eyre Formation Aquifer and acts as the regional confining unit. Its calibrated vertical hydraulic conductivity is 1×10^{-4} m/day, consistent with the range of 10^{-4} m/day to 10^{-6} m/day measured through laboratory permeability testing of core samples (Boss Energy Ltd, 2023)[2].

This vertical hydraulic conductivity is several orders of magnitude lower than the horizontal hydraulic conductivity of the underlying Basal Member. The pronounced contrast restricts vertical groundwater movement and establishes the Namba Formation as an effective hydraulic barrier between the Eyre Formation Aquifer and overlying near-surface groundwater systems.

4.4 Permeability and flow

Permeability is one of the most critical parameters governing the technical and economic performance of an ISR operation. It describes the ability of the host formation to transmit fluids through its interconnected pore network and therefore directly controls the movement of the leaching solution between injection and extractor wells. Together with mineralisation grade and leaching response, permeability controls achievable flow rates, well spacing, uranium recovery and wellfield productivity.

The favourable permeability of the Eyre Formation Aquifer is a key enabler of Boss's proposed wellfield development strategy. Higher permeability supports wider well spacing while maintaining adequate hydraulic connectivity between injection and extraction wells. Wider-spaced wellfields require fewer wells to access a given area of mineralisation, reducing drilling and wellfield infrastructure requirements, lowering

[2] *Boss Energy Ltd. (2023). Honeymoon Uranium Mine - Program for Environment Protection and Rehabilitation.*

For personal use only

capital intensity and providing greater flexibility in field development. These benefits depend on the aquifer sustaining the required flow rates and achieving an effective hydraulic sweep of the mineralised zones.

Permeability across the Honeymoon deposits has been characterised using multiple complementary datasets, including aquifer pumping tests, operational well performance and NMR logging. These datasets have been incorporated into the hydrogeological and permeability models used to assess wellfield configuration, hydraulic performance and production scheduling.

Aquifer testing measures hydraulic conductivity (K), which describes groundwater flow through the formation under actual field fluid conditions. This differs from permeability (k), which is an intrinsic property of the rock independent of fluid properties. Hydraulic conductivity is directly related to permeability but also reflects the density and viscosity of the groundwater present during testing.

Multiple aquifer tests in the Eyre Formation on the Honeymoon Mine Lease confirm a relatively high hydraulic conductivity, with an approximate average of 40 m/day. These pumping test results are further validated by both high specific capacity (amount of drawdown per flow rate) from operational wells with an average specific capacity ~5 m^3/h per metre drawdown. NMR logging also indicates a bulk average hydraulic conductivity >5 m/day across the mineralised aquifer.

Honeymoon extraction wells operate at an average flow rate of approximately 32 m^3/h. In many cases, the achievable flow rate is constrained by the capacity of the pump that can be installed within the well casing rather than by the hydraulic capacity of the aquifer. These flow rates are at the upper end of those reported for uranium ISR operations (Figure 6) and demonstrate the capacity of the Eyre Formation to support wider-spaced wellfields.

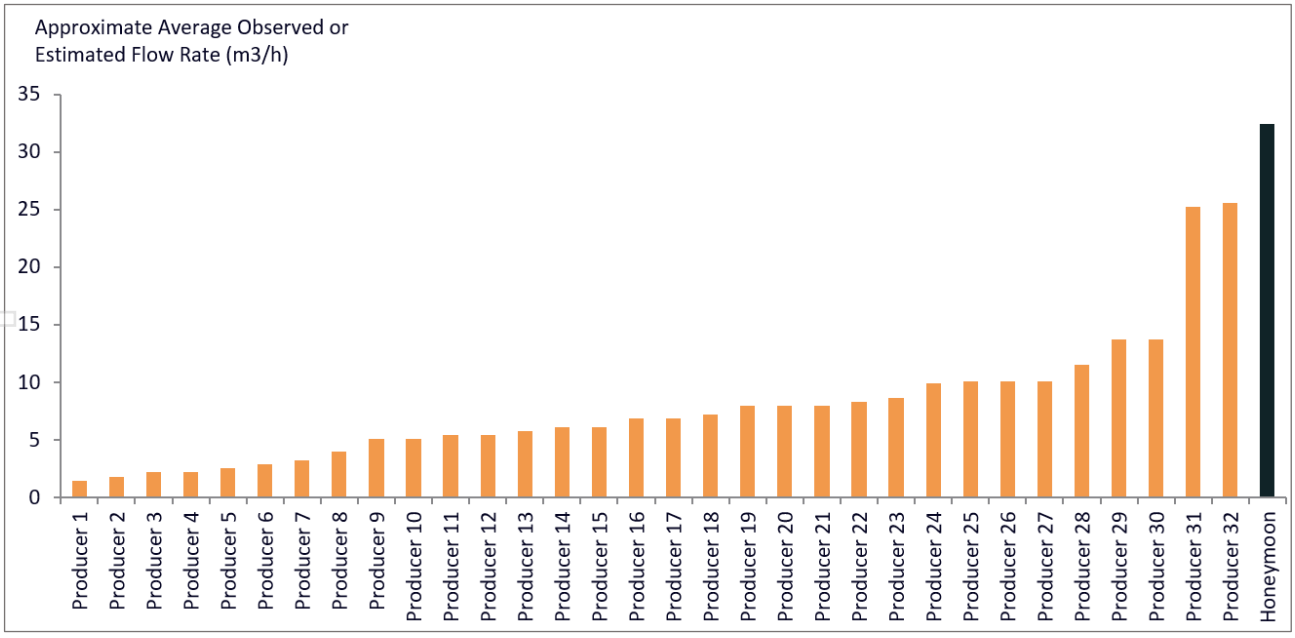


Figure 6: Estimated average flow rates for ISR operations with Honeymoon having significantly higher flow rates compared to other ISR operations. Data obtained from Boss Operating Data and publication under the International Atomic Energy Agency (IAEA) Nuclear Energy Series (International Atomic Energy Agency (IAEA), 2016)[3].

[3] *International Atomic Energy Agency (IAEA). (2016). In Situ Leach Uranium Mining: An Overview of Operations.*

The consistency between aquifer test results, NMR derived estimates and actual operating performance provides a strong empirical basis for the hydraulic assumptions adopted in this Study. In particular, the demonstrated well flow rates support the proposed wider-spaced wellfield design while maintaining the hydraulic connectivity and sweep efficiency required to deliver the production and recovery assumptions incorporated in the life-of-mine plan.

4.5 Permeability Model

NMR logging applies a transient magnetic field—using principles similar to medical Magnetic Resonance Imaging (MRI) to measure the pore-fluid characteristics of the formation surrounding a drillhole. The resulting data are used to estimate porosity and permeability, providing important inputs to the Mineral Resource estimate and wellfield design. All drillholes completed by Boss are logged using NMR. A total of 1,222 holes to August 2026 have been logged with NMR, amounting to 66,045 m.

The deposit-scale permeability model was developed using Schlumberger-Doll Research Permeability (KSDR) values derived from the NMR drillhole data. A KSDR threshold of 100 mD (millidarcies) was adopted to distinguish permeable from relatively impermeable lithologies. Indicator kriging was then used to estimate the probability that KSDR is equal to or greater than 100 mD throughout the deposit.

Permeable domains were defined as areas having a probability of at least 40% that KSDR is equal to or greater than 100 mD. This probability threshold was selected following visual assessment of the modelled domains in cross-section and comparison with the interpreted lithologies. The resulting permeable domains correspond predominantly with sand and gravel units, with minor silt and clay.

These domains were used to constrain the estimation of uranium mineralisation associated with redox boundaries within the permeable aquifer units. The permeability model therefore provides an important link between the geological interpretation, Mineral Resource estimate and identification of areas potentially suitable for ISR wellfield development.

The permeability model was also incorporated into the reactive transport modelling workflow. The NMR derived permeable domains were used to constrain groundwater flow and lixiviant transport, ensuring that simulated fluid movement is restricted to the same permeable aquifer units defined by the geological model. This provides a consistent framework between geological interpretation, Mineral Resource estimate and reservoir simulation presented in Section 6.

For personal use only

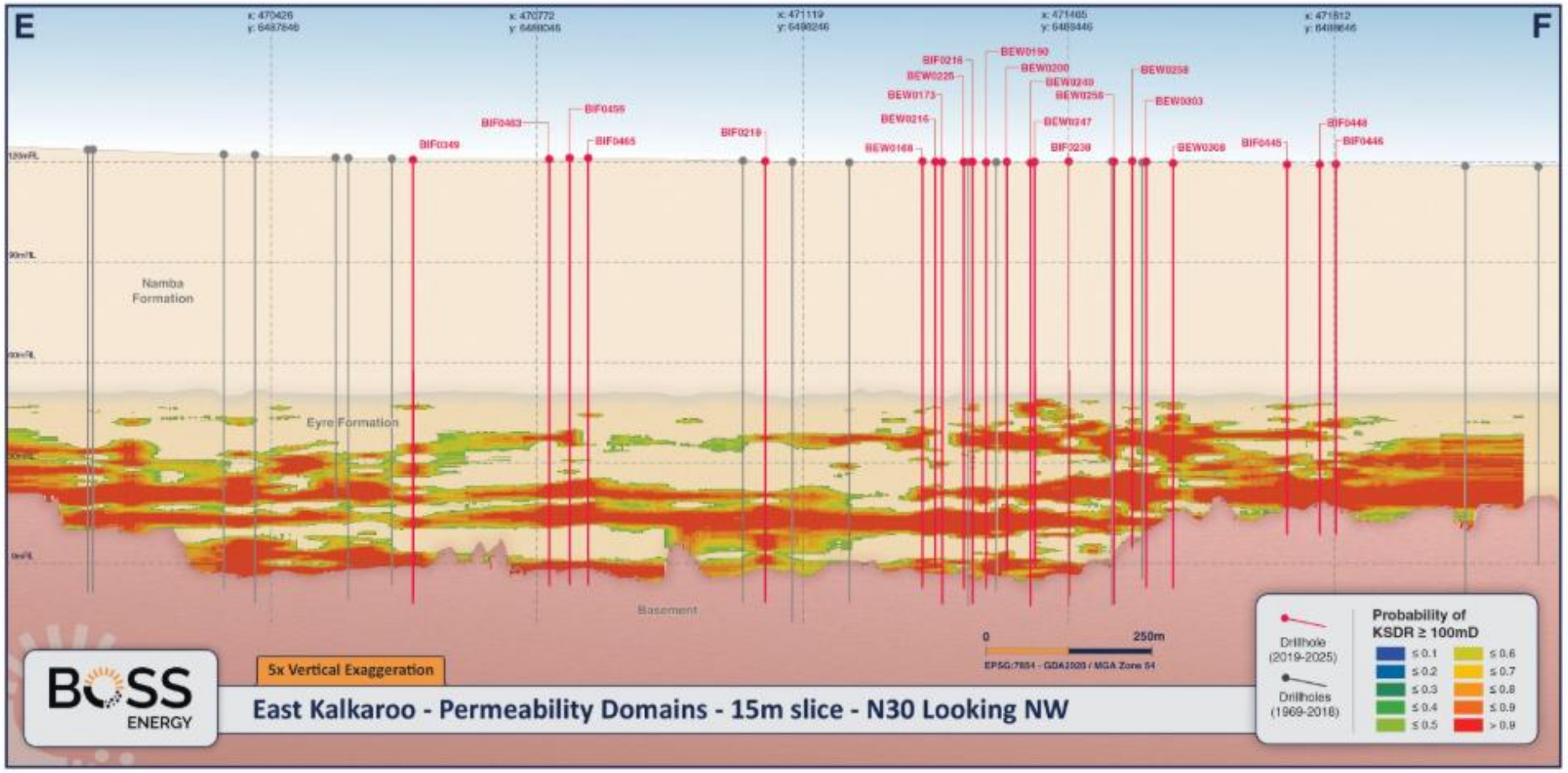


Figure 7: Cross section view of East Kalkaroo displaying the probability of KSDR values ≥100mD. See also the Honeymoon MRE Technical Overview 2026 for additional information.

personal use only

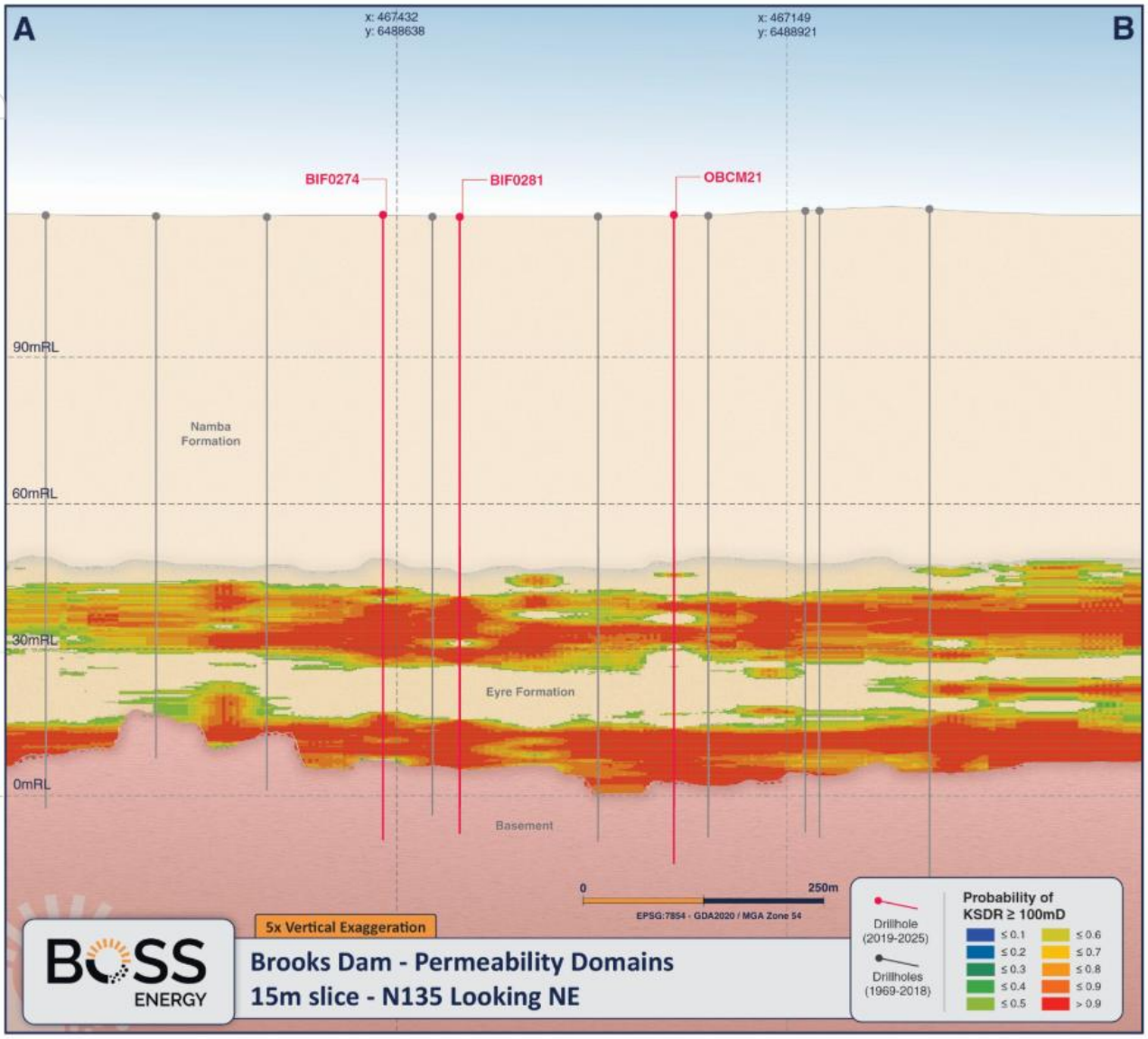


Figure 8: Cross section view of Brooks Dam displaying the probability of KSDR values ≥100mD. See also the Honeymoon MRE Technical Overview 2026 for additional information.

For personal use only

For personal use only

5. Mineralogy, Geometallurgy and Leaching Characteristics

5.1 Geometallurgy

Geometallurgy is an integrated, multidisciplinary approach that links geological variability with metallurgical performance to improve the predictability, efficiency and value of mineral resource extraction. It combines geological modelling, mineralogy, geo-statistics and process metallurgy to characterise ore types, their spatial distribution and their response to leaching.

For an ISR operation, geometallurgical performance is influenced by the interaction between uranium grade, mineralogy, permeability, groundwater chemistry and reagent consumption. Establishing quantitative relationships between these characteristics and leaching performance supports more reliable forecasting of wellfield performance and uranium recovery. This information can be used to optimise wellfield design and operation, refine production schedules and reagent requirements, and improve the reliability of operating cost and financial forecasts.

Boss has a systematic program of sample collection and analysis to characterise the principal ore and gangue types at Honeymoon and map their distribution in three dimensions across the deposit. The program will progressively improve the understanding of mineralogical information with the geological, Mineral Resource, permeability and reactive transport models.

The two principal categories of gangue material relevant to leaching performance at Honeymoon are:

- potential acid-consuming materials, principally carbonate minerals and reactive clay minerals such as smectite; and
- potential oxidant-consuming materials, including organic matter and sulphide minerals.

5.2 Mineralogy

More than 800 samples from Honeymoon have been analysed using visible-near infrared (VNIR), short-wave infrared (SWIR) and thermal infrared (TIR) spectroscopy. Infrared spectroscopy is a rapid and relatively low-cost analytical technique widely used in mining and exploration to identify minerals, including clays and carbonates, that may affect reagent consumption and leaching behaviour.

X-ray diffraction (XRD) analysis, which provides a more quantitative assessment of mineralogy, has been used to validate and calibrate the infrared spectroscopy results. The combination of these analytical methods enables a large number of samples to be screened efficiently while retaining a more quantitative mineralogical control through selected XRD analyses.

The analyses indicate that the principal gangue minerals within mineralised material comprise varying proportions of quartz, kaolinite and muscovite. Sulphide minerals, principally marcasite and pyrite, are also present.

The mineralogical data indicate a continuum in ore composition from clay-rich to quartz-rich material, consistent with visual observations of drill core and rotary mud chips. Uranium mineralisation is commonly associated with quartz-rich sands but also occurs within clay-rich material. Mineralogy must therefore be considered together with permeability and uranium grade when assessing the suitability and expected performance of mineralised material under ISR conditions.

For personal use only

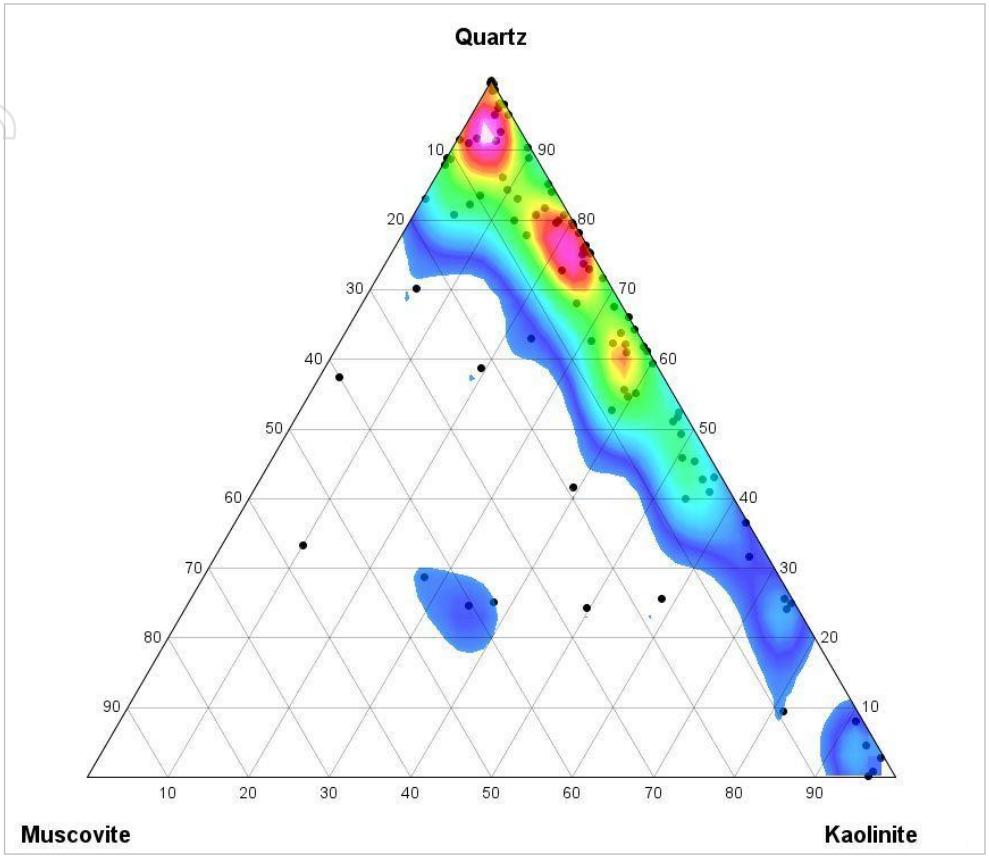


Figure 9: Ternary diagram showing variation in main gangue minerals at Honeymoon based on thermal infra-red analysis demonstrating uranium occurrence in quartz rich sands.

5.3 Acid-Consuming Minerals

Acid consumption is an important consideration for the technical and economic performance of acidic ISR operations. Carbonate minerals, such as calcite, can react rapidly with sulphuric acid, while certain reactive clay minerals may also increase acid consumption or affect permeability and fluid movement.

Acid consumption at Honeymoon has remained low, at approximatively 6 kg of sulphuric acid per tonne of rock under leach. This operating performance is consistent with the results of the mineralogical characterisation completed to date and is considered particularly favourable in the context of acid ISR operations.

The low acid demand is primarily attributed to the very limited abundance of carbonate minerals and highly reactive smectite-group clays within the mineralised sands. These mineral phases are commonly recognised as major contributors to acid consumption in sandstone-hosted ISR deposits. Their limited presence at Honeymoon is consistent with both historical operating performance and the calibrated RTM results described in Section 6.

The infrared and XRD analyses have not identified significant quantities of carbonate minerals or highly acid-consuming clay minerals. XRD analysis has identified minor quantities of interstratified illite-smectite in some samples. However, its average abundance is approximately 1.8%, compared with approximately 20% kaolinite, and it is therefore not expected to have a material effect on overall acid consumption.

Neither the infrared spectroscopy nor XRD datasets indicate appreciable carbonate mineralisation in the samples analysed. The low abundance of carbonate and reactive clay minerals provides mineralogical support for the low acid consumption observed during operation.

Although kaolinite is relatively abundant in some mineralised material, it is not considered to be a significant acid consumer under the applied leaching conditions.

5.4 Oxidant-Consuming Minerals

Oxidant-consuming material is another important contributor to reagent consumption and may affect the rate and efficiency of uranium leaching. Oxidising conditions are required to convert tetravalent uranium into the more soluble hexavalent form. Minerals or organic material that consume oxidant may therefore increase reagent demand and reduce the amount of oxidant available for uranium dissolution.

At Honeymoon, the principal oxidant-consuming gangue minerals appear to be the iron sulphides pyrite and marcasite, with localised occurrences of chalcopyrite also potentially contributing to oxidant demand. Organic matter may also consume oxidant where present, although sulphide minerals are currently considered the more significant source of oxidant demand.

Localised mapping of sulphide distribution across the deposit is ongoing. Results to date indicate that the areas with the highest sulphide abundance occur within the Honeymoon domain wellfields already under leach, particularly B1 to B5. The operating performance of these wellfields therefore provides direct information on the management of sulphide-related oxidant consumption under field conditions.

Localised zones of elevated sulphide abundance may require adjustments to wellfield design or operating conditions to account for increased oxidant demand and potential variability in leaching response. These adjustments may include changes to reagent concentrations, oxidation conditions, pattern dimensions, flow rates, wellfield sequencing or the duration of leaching.

5.5 Uranium Mineralogy

Uranium minerals at Honeymoon are generally very fine-grained, typically < 10 µm (often 1 µm to 3 µm) which is an impediment to their identification even using scanning electron microscopy. Minerals identified to date include uranium phosphates (including tristramite, torbernite and meta-autunite), coffinite, uraninite, and rare examples of the sulphate zippeite ($K_4(UO_2)_6(SO_4)3(OH)_{10}.4H_2O$). Zippeite may have developed after drilling. Minor amounts of U are contained in detrital monazite (0.08% to 0.18%). A large portion of the uranium in many samples remains unidentified and could be adsorbed onto Fe-Ti and Ti oxides.

5.6 Application and Ongoing Work

The NFS draws on both operating performance and the mineralogical characterisation completed to date. Observed acid consumption, since April 2024, provides the primary basis for the study assumptions, with the mineralogical results providing independent support for the low level of acid-consuming minerals within the deposit.

The current results indicate that:

- acid consumption at Honeymoon is low and consistent with the absence of appreciable carbonate mineralisation and the low abundance of reactive smectitic clay;
- the principal gangue mineral assemblage comprises quartz, kaolinite and muscovite;

For personal use only

- mineralised material ranges from quartz-rich sands to clay-rich material;
- pyrite and marcasite are the principal identified sulphide minerals and represent the main potential source of variability in oxidant demand; and
- the areas of highest sulphide abundance identified to date occur within wellfields already under leach (B1-B5), providing relevant operational data for future forecasting.

The geometallurgical program will continue beyond the NFS as additional samples, mineralogical analyses and operating data become available. Progressive integration of these data with the geological, permeability and reactive transport models is expected to improve the prediction of reagent consumption, leaching response and uranium recovery at the wellfield scale. This will support ongoing optimisation of wellfield design and operation throughout the life of the Honeymoon operation.

5.7 Lixiviant Chemistry

The lixiviant used at Honeymoon is derived from native groundwater within the Eyre Formation and conditioned with reagents to establish the acidic and oxidising conditions required to dissolve uranium from the mineralised host sands. The lixiviant chemistry is based on established operating conditions at Honeymoon and is adjusted where required to reflect the characteristics and performance of individual wellfields.

The principal reagent components of the lixiviant are:

- sulphuric acid (H_2SO_4), which reduces the solution pH and promotes the dissolution of uranium-bearing minerals;
- ferric sulphate ($Fe_2(SO_4)_3$), which provides ferric iron (Fe^{3+}) to maintain oxidising conditions within the mineralised zone. Ferric iron is reduced to ferrous iron (Fe^{2+}) as it participates in the oxidation of uranium; and
- hydrogen peroxide (H_2O_2), which is used to regenerate ferric iron and maintain the oxidising conditions required to convert tetravalent uranium (U^{4+}) to the more soluble hexavalent form (U^{6+}).

Under these conditions, uranium is oxidised and forms soluble uranyl sulphate complexes. The conditioned barren leach solution (BLS) is injected into the mineralised zone, where it contacts the uranium-bearing sands before being recovered through extraction wells as pregnant leach solution (PLS). The dissolved uranium contained in the PLS is subsequently recovered at the Honeymoon processing plant.

As the lixiviant passes through the mineralised zone, the acidic conditions may also mobilise iron, aluminium, manganese, naturally occurring radionuclides and other trace elements from the host sediments. Reagent addition also increases sulphate concentrations and changes the pH and total dissolved solids relative to native groundwater. The resulting PLS chemistry therefore reflects both the natural characteristics of the Eyre Formation groundwater and the geochemical reactions occurring during leaching.

Following uranium recovery, the resulting BLS retains residual acidity and elevated concentrations of dissolved constituents. Sulphuric acid, ferric sulphate and hydrogen peroxide are added as required to restore the acidic and oxidising conditions necessary for uranium dissolution before the solution is returned to the wellfield. Reagent addition is controlled to maintain the target lixiviant chemistry while managing uranium recovery, reagent consumption and the potential for mineral precipitation or formation damage.

For personal use only

For personal use only

Because PLS and BLS form part of the same recirculating solution circuit, concentrations of conservative or slowly changing constituents may be similar in the two streams. The principal difference is the lower dissolved uranium concentration in the BLS following uranium recovery, together with changes resulting from reagent addition and solution conditioning before reinjection. Representative PLS and BLS chemistry from Honeymoon is summarised in Table 4. These values are indicative and may vary between wellfields, sampling locations and stages of the operating cycle.

Table 4: Indicative Honeymoon mining-solution chemistry

Analyte	Unit	PLS average	PLS range	BLS average	BLS range
U_3O_8	mg/L	50	20–500	2	0–10
Fe	mg/L	3,000	1,500–3,500	3,000	1,500–3,500
SO_4	mg/L	20,000	5,000–25,000	20,000	5,000–25,000
Cl	mg/L	6,000	5,000–7,000	6,000	5,000–7,000
Ca	mg/L	580	400–900	580	400–900
Mg	mg/L	310	90–460	310	90–460
Na	mg/L	4,670	2,500–7,200	4,670	2,500–7,200
Ra-226	Bq/L	830	510–1,300	830	510–1,300
pH	units	1.3	1.2–1.5	1.2	1.1–1.5
TDS	mg/L	33,000	15,300–40,000	33,000	15,300–40,000

Native groundwater within the Eyre Formation is naturally saline and contains elevated sulphate and naturally occurring radionuclides within mineralised areas. These baseline characteristics restrict its suitability for potable, agricultural or stock use without treatment. ISR operations further modify this groundwater chemistry through reagent addition and the mobilisation of uranium and other aquifer constituents.

The mining-solution circuit is predominantly closed and recirculating. A controlled bleed stream is removed to maintain the hydraulic balance of the wellfield and manage the accumulation of dissolved constituents. The bleed stream is managed through the existing Honeymoon groundwater-treatment and liquid-waste management systems.

For personal use only

6. Reactive Transport Models

6.1 Development

Reactive Transport Modelling (RTM) has evolved over more than four decades from relatively simple analytical representations of groundwater flow and solute transport into a highly advanced computational methodology for simulating complex subsurface systems. Its development has been enabled by advances in numerical methods, geochemical thermodynamics, three-dimensional geological modelling and computing capacity. Modern RTM integrates groundwater flow with the advection, dispersion and diffusion of dissolved constituents and the chemical reactions occurring between fluids, minerals and gases. These reactions may include aqueous speciation, oxidation and reduction, adsorption and ion exchange, and the dissolution and precipitation of minerals.

The strength of RTM lies in its ability to solve these interdependent physical and chemical processes through both space and time within a single predictive framework. This allows changes in fluid chemistry to affect mineral reactions and, where relevant, enables those reactions to influence properties such as porosity, permeability and subsequent fluid movement. RTM therefore provides a substantially more sophisticated representation of subsurface behaviour than conventional flow-only models, static geochemical calculations or empirical forecasting methods.

RTM is now an established tool across the geosciences, environmental and resources sectors. Applications include groundwater-quality assessment, contaminant migration and remediation, geological carbon storage, radioactive-waste containment, geothermal development, petroleum systems, mineral alteration and ISR. Continued improvements in high-performance computing, model calibration and the representation of heterogeneous geological systems have enabled increasingly detailed simulations at field and reservoir scales. RTM is consequently regarded as one of the most advanced tools available for understanding subsurface fluid–rock interactions, evaluating alternative development strategies and forecasting system performance.

6.2 Application to Honeymoon

RTM was used to simulate the physical and geochemical processes controlling uranium recovery during ISR mining at Honeymoon. The model represents the movement of groundwater and injected lixiviant through the reservoir between injection and extraction wells, while simultaneously accounting for the chemical reactions occurring between the lixiviant, native groundwater, uranium-bearing minerals and reactive gangue phases.

This approach differs from conventional ISR planning methods that rely on fixed recovery factors or empirical production curves. Instead, RTM provides a time-dependent and spatially distributed representation of reservoir behaviour. It allows uranium mobilisation, transport, recovery, reagent consumption and solution chemistry to be forecast as a function of reservoir properties, wellfield geometry and operating conditions.

The RTM therefore provides a direct link between the three-dimensional resource model and the life-of-mine production schedule. Rather than applying a generic recovery assumption across the deposit, each simulated wellfield is assigned a production response that reflects its local uranium grade distribution, mineralised thickness, permeability, hydraulic connectivity and geochemical characteristics.

For personal use only

The principal role of RTM within the Feasibility Study was to:

- quantify expected uranium recovery and production timing for future wellfields;
- evaluate the impact of well spacing, pattern geometry and operating conditions on recovery performance;
- estimate acid and oxidant requirements under different leaching scenarios;
- support the comparison of alternative wellfield development strategies;
- generate wellfield-specific recovery curves for use in the life-of-mine schedule; and
- provide a technical basis for assessing risks and opportunities associated with future wellfield performance.

RTM simulations were performed using the HYTEC reactive transport code, developed by the Centre for Geosciences, Mines Paris, PSL University, and integrated within a dedicated Boss pre-processing and post-processing pipeline. This workflow converts resource, geological, hydrogeological and operating data into simulation inputs and processes model outputs into wellfield-specific recovery curves used directly for life-of-mine planning.

All simulations were performed internally by Boss on dedicated computing servers, enabling fully three-dimensional reactive transport calculations to be undertaken across the complete inventory of deposits considered in this study. This computational framework allowed the direct simulation of wellfield-scale recovery performance for the full resource base rather than relying on simplified representative cases or scaling relationships. Figure 10 presents the numerical model grids developed for the deposits included in the study and illustrates the spatial extent of the RTM.

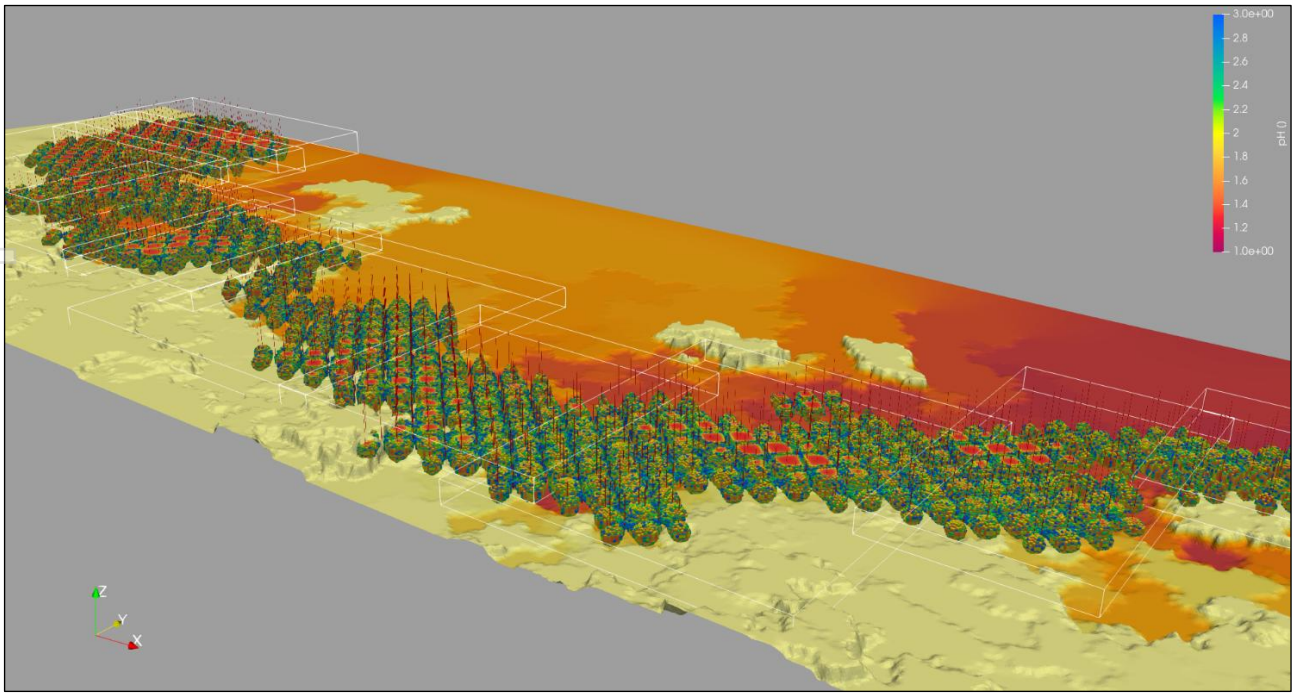


Figure 10: Three-dimensional reactive transport model grids developed for the deposits included in the NFS. The simulations were performed across the full inventory of wellfield development areas, enabling direct assessment of recovery performance and production forecasts at wellfield scale.

For personal use only

6.3 Reactive Transport Model Inputs

The RTM developed for Honeymoon incorporates the principal geological, hydrogeological, geochemical and operational characteristics that control ISR performance. The model was constructed to represent both the spatial distribution of uranium mineralisation and the reservoir properties governing lixiviant movement and contact with the mineralised horizons.

The primary input to the RTM is the three-dimensional resource block model. This defines the spatial distribution of uranium grade, mineralised thickness and recoverable uranium inventory available for simulated leaching. By using the resource block model directly, the RTM preserves the local variability in uranium distribution and allows production forecasts to be generated from the actual geometry of the mineralised domains rather than from averaged grade assumptions.

Hydrogeological inputs define the ability of the reservoir to transmit fluids between injection and recovery wells. These include the distribution of permeable facies, interpreted hydraulic conductivity, effective porosity and hydraulic connectivity within the productive intervals. These parameters control flow velocity, residence time, lixiviant breakthrough and the degree of contact between the injected solution and the mineralised material.

Geochemical inputs define the reactions occurring between the lixiviant and the reservoir. These include the uranium-bearing mineral phases, acid-consuming minerals, oxidant-consuming phases and other reactive components that may influence uranium mobilisation, reagent consumption or leaching efficiency. Particular attention was given to carbonate minerals, reactive clays and sulphide minerals such as pyrite, as these phases can influence acid demand, oxidant consumption and redox conditions.

Operational inputs define the way in which the wellfields are simulated. These include injection and recovery rates, well spacing, pattern geometry, screened intervals, injection chemistry, acid concentration, oxidant addition and production cut-off criteria. These inputs allow the model to test alternative wellfield design and operating scenarios under conditions representative of planned ISR operations.

A summary of the main input categories is provided in Table 5.

For personal use only

Table 5: Principal RTM input datasets

Input category	Description	Primary source
Uranium grade distribution	Spatial distribution of U_3O_8 grade and mineralised inventory	Resource block model
Mineralised geometry	Thickness, continuity and spatial arrangement of mineralised horizons	Resource block model and geological interpretation
Permeability	Distribution of permeable and less permeable reservoir units	Geological model, lithology interpretation
Effective porosity	Porosity available for fluid flow and solute transport	Core data, test work and calibration
Hydraulic conductivity	Reservoir transmissivity and flow behaviour	Hydraulic testing, operating data and calibration
Uranium mineralogy	Uranium-bearing phases controlling dissolution behaviour	Mineralogical and geometallurgical studies
Reactive gangue	Acid and oxidant consuming minerals, including carbonates, clays and sulphides	Mineralogical and geochemical characterisation
Operating conditions	Flow rates, well spacing, pattern geometry, screened intervals and lixiviant chemistry	Historical operations and NFS design assumptions
Calibration data	Production, PLS tenor, pH, flow rates and reagent consumption	Uranium One and Boss operating data

6.4 Reactive Transport Model Outputs

The RTM generates a comprehensive suite of hydraulic, geochemical and production outputs describing the progression of ISR recovery through time. Outputs can be extracted at multiple scales, ranging from individual grid cells and extraction wells to complete patterns, wellfields and groups of wellfields. This enables both detailed evaluation of local recovery processes and aggregation of results for operational forecasting and life-of-mine planning.

The principal outputs generated by the model describe five key aspects of wellfield performance:

- production chemistry, including uranium concentration in production solutions (PLS grade), pH evolution and redox response;
- recovery performance, including uranium extraction profiles, cumulative recovery and the quantity of uranium remaining within the reservoir;
- hydraulic performance, including breakthrough timing, hydraulic residence time and sweep efficiency;
- reagent demand, including acid and oxidant consumption throughout the wellfield life; and
- spatial recovery progression, including the distribution of lixiviant, uranium depletion and areas of delayed recovery within the reservoir.

A key feature of the RTM is that these outputs are generated as continuous time-dependent responses rather than simplified recovery factors or empirical production assumptions. The model therefore predicts not only how much uranium is expected to be recovered, but also when recovery occurs, how rapidly production declines, how reagents are consumed and how recovery evolves spatially throughout the reservoir.

In addition to conventional production forecasts, the RTM generates fully three-dimensional visualisations of flow, geochemical evolution and uranium depletion. These outputs provide direct insight into the mechanisms controlling wellfield performance, allowing areas of ineffective sweep, delayed reagent contact, poor hydraulic connectivity or incomplete uranium recovery to be identified and evaluated.

The combination of temporal and spatial outputs provides a powerful framework for both calibration and optimisation. Observed production chemistry and recovery trends can be directly compared against model predictions during calibration, while the resulting recovery curves, reagent consumption forecasts and depletion patterns are subsequently used to support wellfield design, development sequencing and life-of-mine planning.

Figure 11 illustrates examples of typical RTM outputs, including three-dimensional visualisations of lixiviant migration, uranium resource depletion and recovery progression within operating wellfields. Similar outputs are used throughout the following sections to evaluate model calibration, compare alternative wellfield designs and generate production forecasts for the NFS.

For personal use only

For personal use only

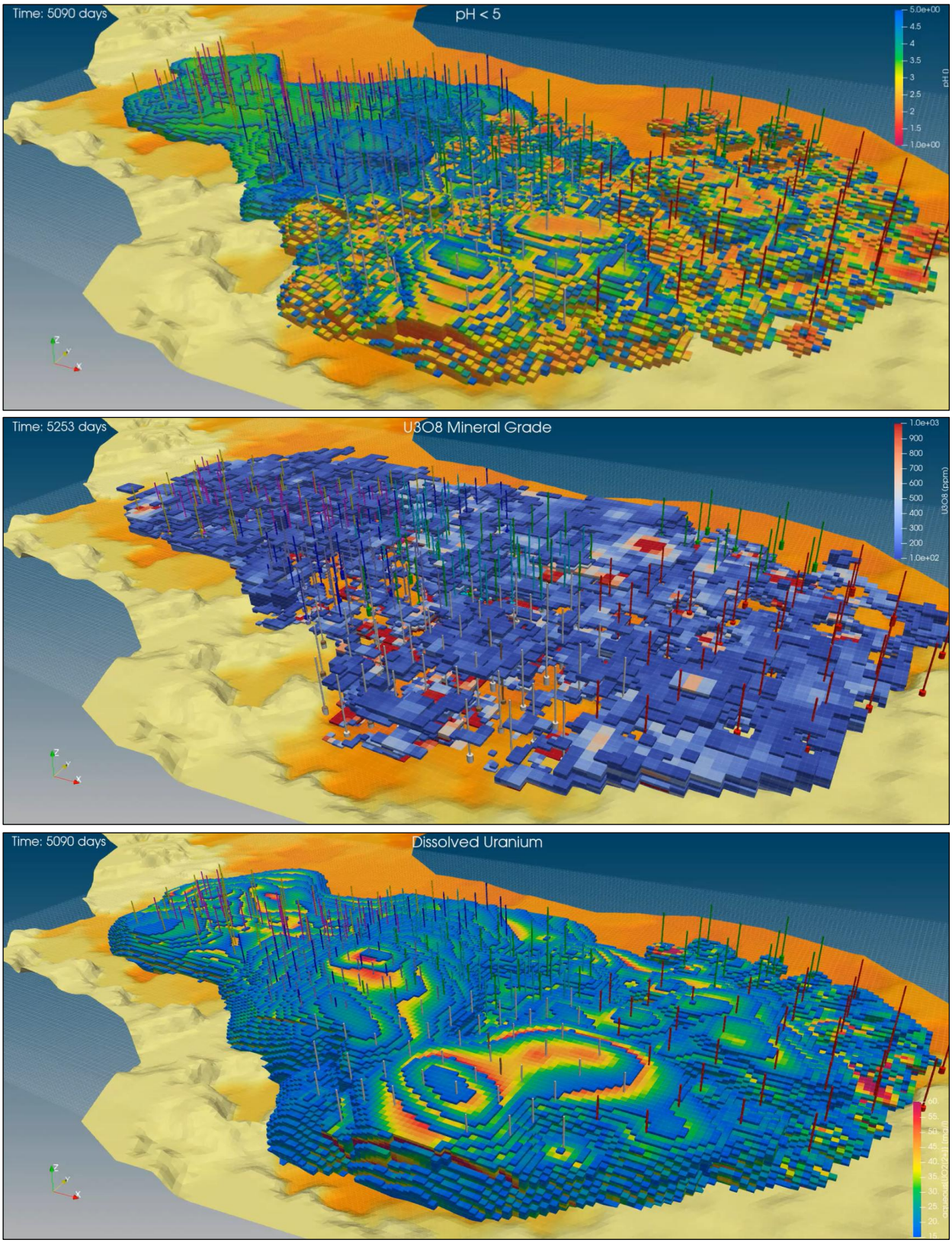


Figure 11: Example of three-dimensional reactive transport model outputs from the Honeymoon calibration simulations. The figure shows a representative late 2025 reservoir snapshot illustrating the extent of the acidic plume, the remaining uranium inventory and dissolved uranium concentrations. These simulated state variables describe the spatial evolution of recovery within the reservoir and are used to derive the production responses at individual extraction wells, including PLS grade, pH, recovery and production rate, which are subsequently compared against observed field measurements during calibration.

6.5 Calibration and Validation

6.5.1 Calibration methodology

The predictive capability of the RTM was assessed through calibration and validation against both historical Uranium One production data and recent Boss operating wellfields. The calibration dataset comprises three Uranium One wellfields operated between 2011 and 2013 and four Boss wellfields covering the period from April 2024 to January 2026.

These datasets provide a particularly robust calibration basis as they represent materially different wellfield designs and operating strategies. Historical Uranium One wellfields generally utilised closer injector-to-extractor spacing (~30 m), shorter screened intervals, lower circulation rates and less acidic operating conditions. In contrast, the current Boss wellfields in operation are based on injector-to-extractor spacings of approximately 35 m to 40 m, longer screened intervals, higher circulation rates and more acidic lixiviant conditions.

As a result, the calibration dataset spans a broad range of operating conditions and reservoir responses, allowing the RTM to be evaluated across different combinations of well spacing, flow rate, screen configuration and leaching chemistry rather than being calibrated to a single operating period or wellfield design.

Calibration focused on reproducing the principal indicators of ISR performance, including:

- uranium production over time;
- uranium concentration in production solutions;
- produced solution pH evolution;
- acid consumption trends; and
- oxidant consumption and response.

The calibration process typically involves adjustment of key petrophysical and geochemical parameters such as effective porosity, hydraulic conductivity, dispersivity, uranium dissolution kinetics and the abundance and reactivity of acid-consuming and oxidant-consuming minerals. To minimise the risk of overfitting and preserve predictive capability in future mining areas, calibration was intentionally restricted to a limited number of geochemical parameters known to exert first-order control on wellfield performance.

Hydraulic and transport properties derived from the resource modelling, hydrogeological interpretation and operational data were considered sufficiently well constrained at the scale of the deposit and were therefore not systematically adjusted during the calibration process. Calibration was instead focused on average carbonate abundance, clay mineralogy (kaolinite-to-smectite ratio), pyrite content and uranium dissolution kinetics.

The objective was not to force a numerical match for individual wellfields, but to identify a single, internally consistent parameter set capable of reproducing the principal hydraulic and geochemical responses observed across the operation.

For personal use only

For personal use only

6.5.2 Calibration results

The calibration dataset captures two distinct production periods at Honeymoon: the Uranium One operation (2011-2013) and the Boss restart period (2024-2026). These periods were operated under significantly different conditions, as described above, providing a robust test of the model's ability to reproduce a broad range of reservoir and production responses.

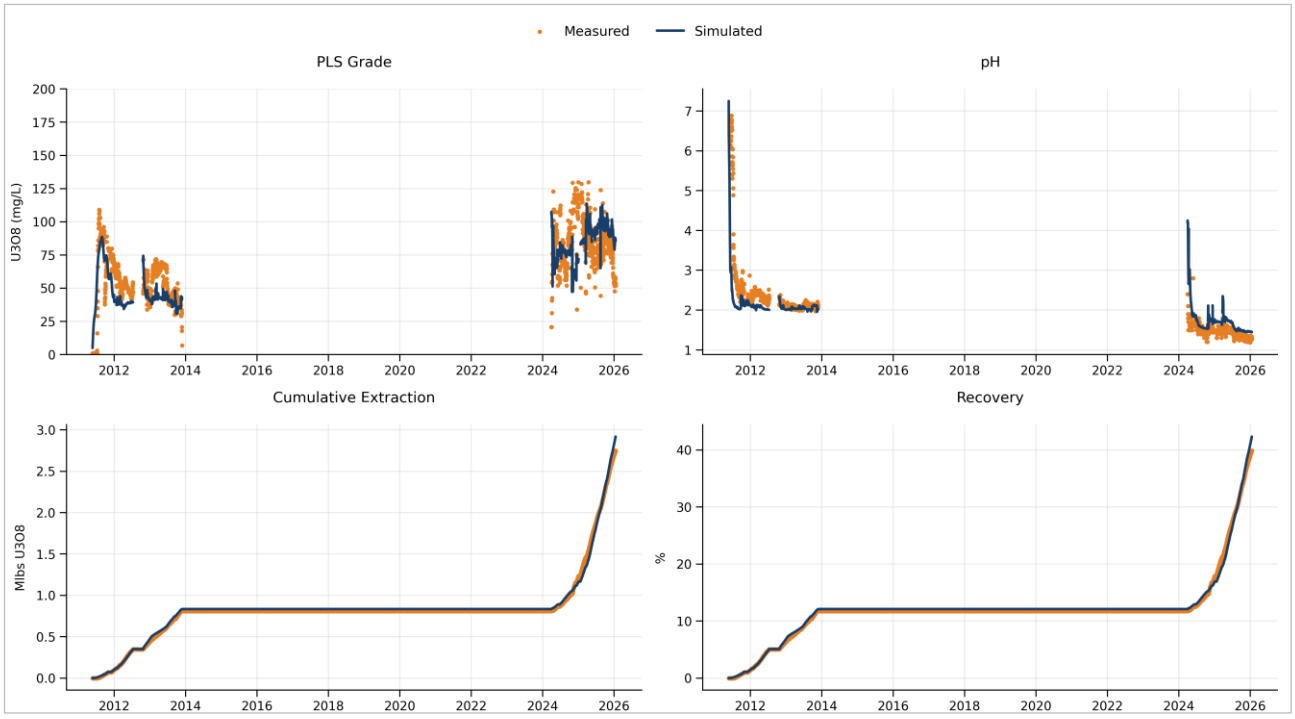


Figure 12: Global calibration results: comparison of simulated and observed PLS grade, pH, cumulative extraction and recovery.

The historical data show a clear contrast between these operating phases. During the Uranium One period, the average PLS grade was approximately 45 mg/L U_3O_8 at an average pH of 2.4, whereas the Boss operating period achieved an average PLS grade of approximately 80 mg/L U_3O_8 at an average pH of 1.4. The model successfully reproduces both operating regimes and the transition between them.

Agreement between simulated and observed trends is particularly strong for PLS grade and pH, the two primary observables used to assess reservoir model performance. As a result, cumulative uranium extraction and recovery are also reproduced with a high level of accuracy, providing confidence that the calibrated RTM captures the dominant hydraulic and geochemical controls governing uranium recovery at Honeymoon.

At the individual wellfield scale (Cf. Figure 13), the model reproduces cumulative uranium extraction with a mean absolute deviation of approximately 12% across the calibration dataset. Across the combined Uranium One and Boss production dataset, the difference between simulated and actual uranium production is reduced to approximately 7%.

The strong agreement observed across all seven calibration wellfields is particularly noteworthy given the significant variations in wellfield design, operating conditions, reservoir geometry and mineralisation encountered across the dataset. The absence of any systematic bias between Uranium One and Boss wellfields demonstrates that the calibrated parameter set remains applicable across a broad range of operating environments and reservoir conditions.

For personal use only

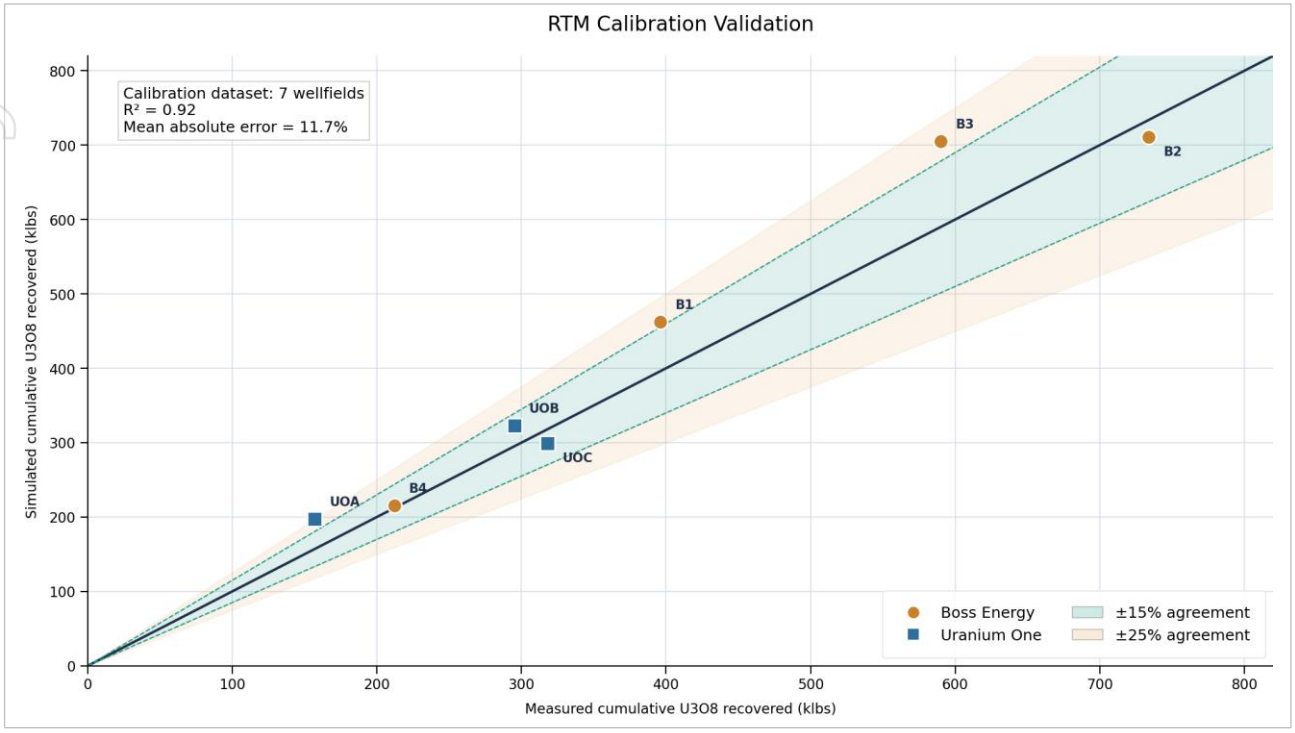


Figure 13: Comparison of measured and simulated cumulative uranium extraction for historical Uranium One and Boss wellfields used for RTM Calibration. At wellfield scale, with a unique set of calibration parameters, the model reproduces the cumulative extraction with a mean absolute deviation of 12% across the calibration dataset.

Beyond uranium production, the calibration confirms that the mineralogical controls incorporated within the RTM are consistent with observed field performance. Low carbonate abundance is reflected in the relatively low acid consumption observed across Honeymoon operations, while pyrite represents the primary control on oxidant demand and therefore a key parameter governing uranium mobilisation and recovery. In contrast, the contribution of clay minerals to long-term reagent consumption appears comparatively limited, consistent with both mineralogical investigations and operational observations. The alignment between mineralogical characterisation, calibrated model parameters and operating performance provides independent validation of the geo-metallurgical framework adopted for the study.

A key outcome of the calibration is that the same petrophysical and geochemical parameter set successfully reproduces wellfield performance across materially different operating conditions spanning more than a decade of Honeymoon operations. This indicates that the model captures the fundamental hydraulic and geochemical behaviour of the reservoir rather than providing a case-specific match to any individual operating period.

The calibrated uranium dissolution kinetics were subsequently applied unchanged to all future wellfield simulations, including the baseline development case and associated sensitivities. Consequently, differences in predicted recovery performance arise from variations in wellfield geometry, residence time, uranium inventory and reservoir characteristics rather than from adjustments to assumed leaching efficiency. This approach is supported by recent mineralogical investigations, which identified no evidence of materially different uranium mineral assemblages across the principal mining areas considered in the life-of-mine plan.

Early operating results from East Kalkaroo are consistent with this interpretation.

6.6 Application to the New Feasibility Study

The RTM was used to generate wellfield-specific production forecasts for the NFS. Dedicated simulations were undertaken for each development scenario evaluated during the study, including alternative well spacings, operating conditions and sensitivity cases.

The resulting recovery curves, production profiles and reagent consumption forecasts were incorporated directly into the mine scheduling workflow, allowing geological, hydrogeological and geochemical variability to be propagated through the life-of-mine schedule.

Simulation results were also used to evaluate alternative wellfield development strategies and quantify the impact of key technical uncertainties. The production forecasts, wellfield designs and life-of-mine schedule presented in the following sections are therefore derived directly from simulated reservoir performance.

For personal use only

For personal use only

7. Wide-Spaced Wellfield Design

7.1 Wellfield Design Basis

The wellfields have been designed to satisfy defined technical and economic criteria. Each planned production pattern is required to generate sufficient uranium recovery and economic value to support its development, operating and sustaining costs over the life of the wellfield.

The wellfield layout adopted for the NFS is presented in Figure 14. The design has been overlaid on the cumulative grade-thickness (GT) distribution derived from the Mineral Resource block model, illustrating the relationship between planned well locations and the spatial distribution of mineralisation. Figure 14 presents the wellfield layout across the full depth of the reservoir, incorporating all three mineralised horizons. Some patterns are vertically stacked across two or three horizons to account for the different mining levels.

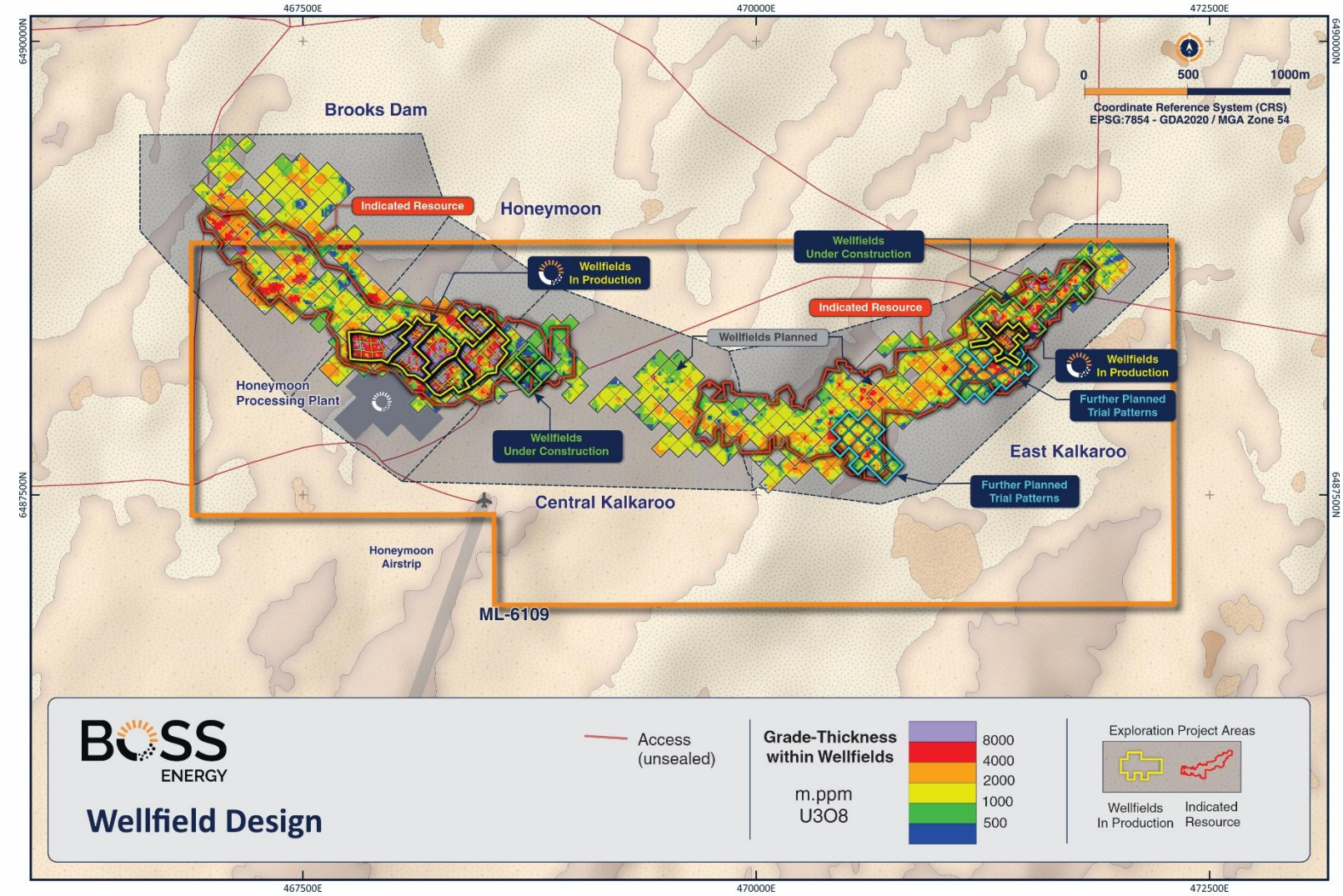


Figure 14: NFS wellfield design with cumulative grade-thickness distribution of uranium mineralisation.

For personal use only

For personal use only

The NFS wellfield layout represents the current design basis and will continue to be refined as additional drilling, geophysical logging, hydrogeological and operating data become available. This ongoing optimisation may result in local changes to well locations, screened intervals, pattern geometry, spacing and development sequence without materially changing the overall design basis.

The principal parameters considered during the wellfield design process included:

- wellfield configuration and pattern geometry;
- well spacing and pattern dimensions;
- number and arrangement of production levels within the mineralised horizon;
- layout and sequencing of patterns within each wellfield; and
- injection and recovery flow rates.

The modelling workflow described in Section 6 was used extensively to:

- generate the optimal well locations and associated screen intervals based on the three-dimensional resource block model, ensuring maximum interception of mineralised resources while meeting defined economic performance criteria at both pattern and wellfield scales;
- assess and compare alternative wellfield configurations by simulating uranium recovery, reagent consumption and overall wellfield performance; and
- develop an optimised wellfield development sequence and production profile through the integration of RTM-generated recovery curves, wellfield ramp-up characteristics and resource availability.

This methodology provides a systematic and technically robust basis for wellfield design. It combines a calibrated groundwater-flow and reactive transport model, validated against historical and current Honeymoon operating data, with the three-dimensional distributions of uranium grade, permeability and relevant geochemical characteristics contained within the supporting geological models.

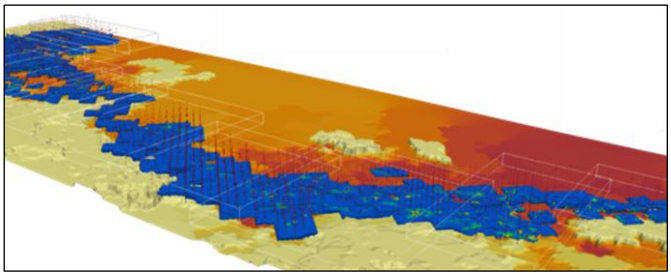
The resulting framework allows alternative wellfield layouts to be evaluated on the basis of recoverable uranium, production timing, reagent consumption, development capital, operating costs and overall economic value. The methodology also enables the evaluation of alternative well spacing and pattern configurations, allowing design optimisation based on recoverable uranium, wellfield capital intensity and overall economic value rather than solely on resource recovery metrics.

Each stage of this process produces detailed outputs used as input to the next analysis activity or model. The principal stages of this process with a visualisation of typical outputs are illustrated in the Figure 15.

For personal use only

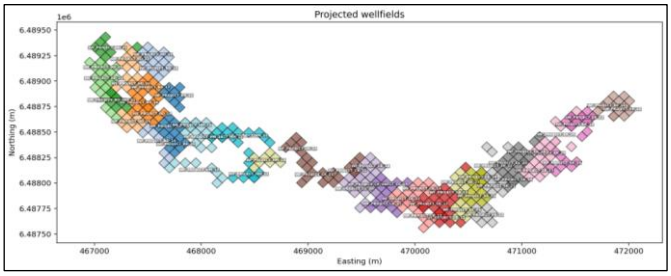
Stage 1

Resource Model



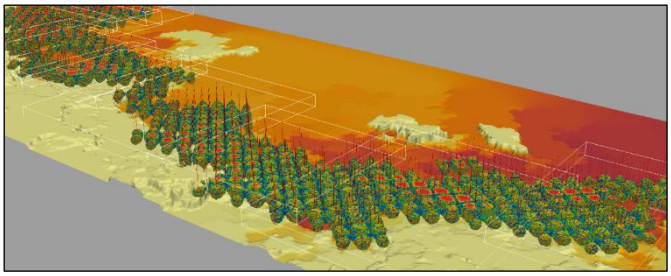
Stage 2

Wellfield Design



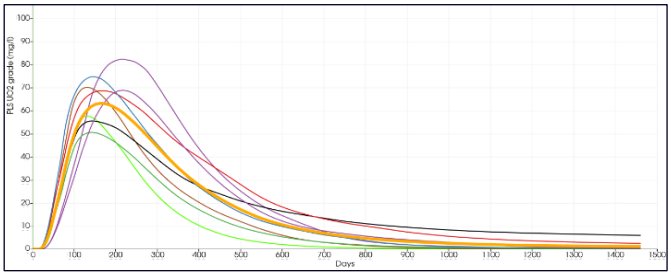
Stage 3

Reactive Transport Model



Stage 4

Recovery Curves



Stage 5

Production Profiles

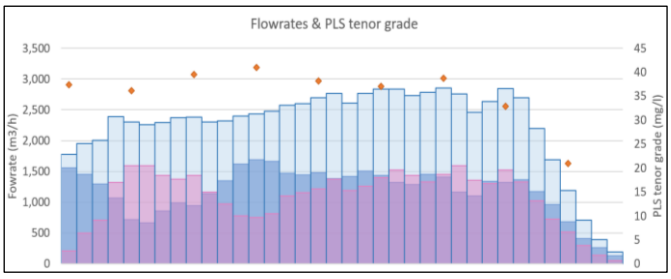


Figure 15: Integrated wellfield design and production-modelling workflow, showing the translation of the three-dimensional Mineral Resource model into the optimised wellfield layout, reactive transport simulations and wellfield recovery curves used to generate the scheduled production profile

7.2 Wellfield Configuration

Several well spacings were evaluated as part of the NFS, with nominal injector-to-extractor distances ranging from approximately 35 m to 70 m. (Note: for a regular five-spot pattern, the selected 49 m injector-to-extractor spacing corresponds to approximately a 70 m injector-to-injector spacing). This represents an increase from historical Honeymoon wellfield designs, where injector-to-extractor distances have generally ranged from approximately 30 m to 40 m.

As detailed in the following sections, well spacing forms part of a broader optimisation process that balances hydraulic residence time and fluid velocity against the kinetics of uranium dissolution and mass transfer within the orebody. The objective is to maximise uranium recovery and project value by providing sufficient contact time for leaching while maintaining favourable recovery rates and production profiles.

The five-spot pattern geometry was retained throughout the assessment because it has demonstrated favourable hydraulic performance and uranium recovery at Honeymoon. Compared with the hexagonal seven-spot pattern commonly used in Kazakhstan ISR operations, the five-spot configuration has a lower injector-to-extractor ratio and therefore requires greater injectivity from each injection well to sustain the planned pattern flow rate. Historical operating performance indicates that the Eyre Formation has sufficient hydraulic capacity to support the required injection rates. Injectivity is therefore not considered a material constraint on the selected geometry.

The five-spot configuration also provides shorter and more direct flow paths between injection and production wells than the seven-spot alternative. This supports more effective lixiviant distribution and sweep, reduces the potential for unswept areas and hydraulic dead zones, and promotes a faster uranium recovery response. Figure 16 compares the simulated response of equivalent five-spot and seven-spot wellfield patterns with identical injector-to-extractor spacing. Both the pH and uranium concentration profiles demonstrate a faster response for the five-spot configuration. Acid breakthrough occurs earlier, resulting in more rapid establishment of favourable leaching conditions and an earlier increase in uranium concentration within the production solution. The five-spot pattern reaches peak uranium grades sooner and exhibits a more concentrated production profile, while the seven-spot configuration displays a delayed and more gradual response. These results are consistent with the shorter flow paths and improved sweep efficiency associated with the five-spot geometry and support its selection as the preferred wellfield configuration for the NFS.

For personal use only

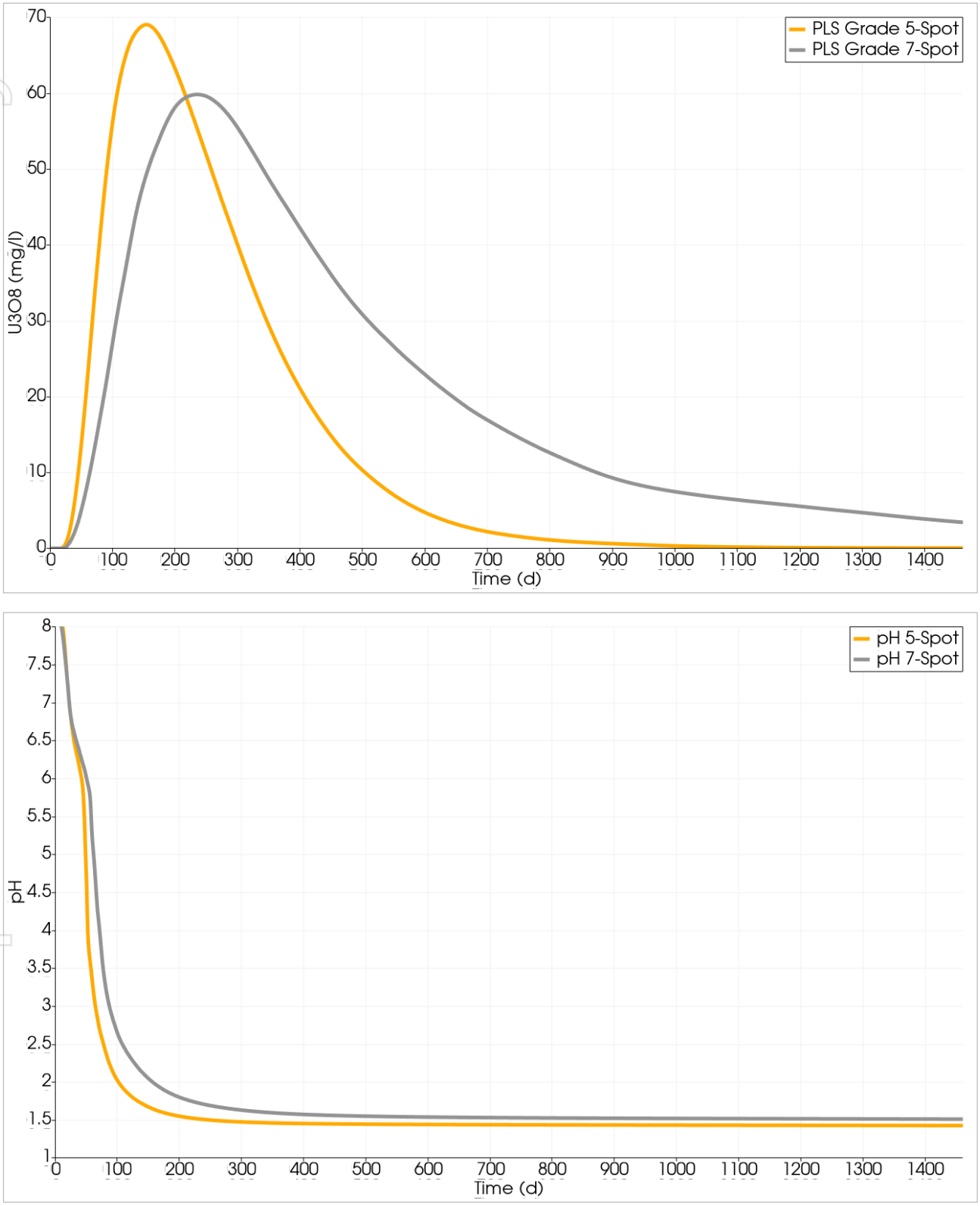


Figure 16: RTM simulated PLS grade and pH response for equivalent five-spot (orange) and seven-spot (grey) configurations. The five-spot pattern achieves earlier acidification and uranium mobilisation, resulting in a faster production response and improved sweep of the mineralised volume

For personal use only

For personal use only

7.3 Technical and Economic Wellfield Design Constraints

In addition to the pattern geometry, a series of technical and economic design constraints were implemented to ensure that the generated wellfields remain operationally realistic and economically robust. These parameters define the minimum mining selectivity criteria – including grade-thickness, vertical continuity and surface coverage - as well as the maximum number of mining layers and patterns per wellfield, wellfield configuration, screened interval lengths, and the lateral and vertical extents used for resource attribution. Together, these criteria ensure that each wellfield targets a sufficiently continuous and economically recoverable volume of mineralisation while remaining compatible with practical drilling, well completion and operating requirements.

The parameters adopted for the NFS base case wellfield design are summarised in Table 6.

Table 6: Wellfield design constraints parameters

Parameter	Unit	Value / Range	Comment
Injector-to extractor spacing	m	49	
Minimal GT cut-off	m.ppm U_3O_8	600	Pattern average
Minimal vertical continuity	m	4	4m @ 100 ppm U_3O_8
Minimal surface coverage	%	50	Preventing the selection of isolated or disconnected high-grade mineralized zones
Mining layers	#	3	Allows up to 3 overlapping patterns, each targeting one of the mineralized horizons of the Eyre Formation
Number of patterns per wellfield	#	8	
Wellfield Layer Configuration	-	Single / Multi	
Screened intervals	m	5 - 10	
Lateral and vertical extension	m	10 ± 4	Effective leaching buffer around the wellfield.

A dedicated three-dimensional wellfield-generation workflow was developed to systematically produce wellfield layouts while maintaining full traceability and compliance with the design criteria noted in Table 6.

The workflow applies spatial-search and optimisation algorithms to identify candidate well locations and screened intervals that maximise the interception of mineralised material while satisfying the applicable geological, operational and economic constraints.

The Mineral Resource block model is the primary input to the workflow and is used to generate and evaluate individual production patterns. Patterns that satisfy the design criteria are subsequently aggregated into single-layer or multi-layer wellfields, depending on the characteristics of the mineralised domains.

To focus the optimisation process on the remaining life-of-mine plan, all mineralised areas associated with existing or already drilled wellfields (B1, B2, B3, B4, B5, B6, B8, HMT1 and EKT1) were excluded from the pattern generation workflow. The optimisation routines were therefore applied only to the remaining unallocated resource inventory contained within the block model.

Figure 17 presents examples of wellfields generated using the automated workflow for three representative design configurations: a five-spot pattern at injector-to-extractor spacing of 49 m spacing, a five-spot pattern at injector-to-extractor spacing of 70 m spacing, and a seven-spot pattern at injector-to-extractor spacing of 50 m spacing.

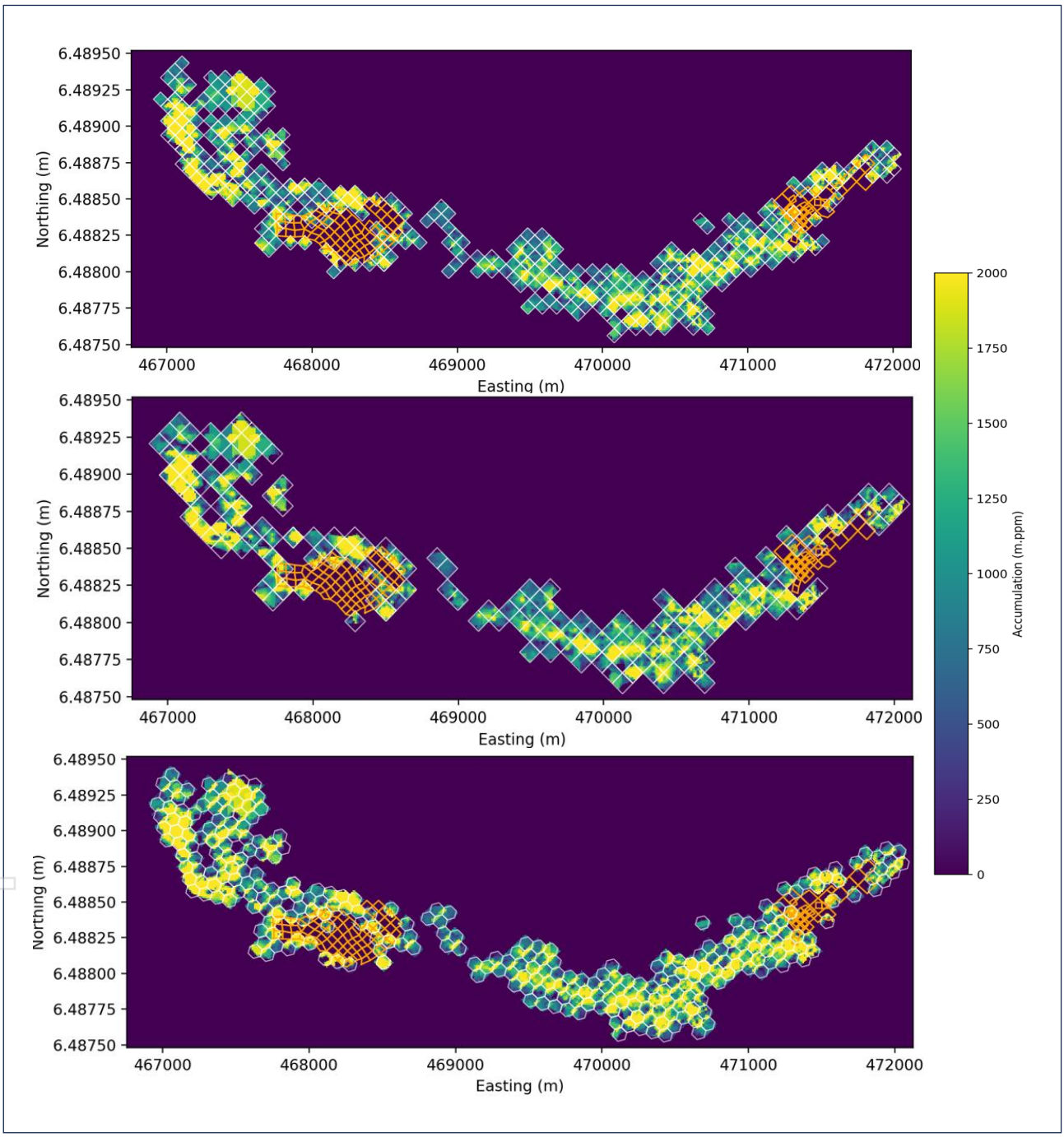


Figure 17: Wellfield patterns generated for three representative design configurations. From top to bottom: a five-spot pattern at injector-to-extractor spacing of 49m; a five-spot pattern at 70m injector-to-extractor spacing, and a seven-spot pattern at 50m injector-to-extractor spacing. The existing wellfields are shown in orange.

In addition to maximising resource capture, the workflow incorporates compactness criteria to minimise the footprint of individual wellfields and reduce the development cost associated with tertiary infrastructure, including spider-lines, electrical cables for the pumps and associated field facilities.

For personal use only

For personal use only

7.4 RTM Design Simulations

RTM as described in Section 6, was undertaken to evaluate the performance of alternative wellfield configurations and support the selection of design parameters for the life-of-mine plan.

The simulations quantified the effects of well spacing, pattern configuration and production strategy on uranium recovery, reagent consumption, production rates and project economics. The simulation inputs adopted for the NFS base case are presented below. Additional simulations undertaken as part of the NFS are described in Section 7.6.

7.5 RTM Simulation Inputs

Hydrogeological, geochemical and operational inputs were derived from calibrated RTM models and historical operating data from the Honeymoon wellfields. Further details regarding the RTM simulation inputs are presented in Section 6.

The simulation schedule was configured so that each wellfield included in the development sequence received at least four years of simulated production. This period was considered sufficient to capture the principal recovery phase and a significant portion of the recovery tail for most wellfields, including those containing higher-grade mineralisation.

Table 7: RTM Simulation Parameters

Parameter	Unit	Value / Range
Injector-to-extractor spacing	m	49
Pattern type	-	five-spots
Extraction rate	m^3/h	25
Lithofacies distribution	-	Similar to lithology interpretation used for the Resource Estimate
Sand Hydraulic conductivity	m/day	5
Effective porosity	%	30
Reactive mineralogy	-	yes
Initial uranium grade	ppm U_3O_8	Resource model
Acid concentration	g/L	3
Minimal simulation period	years	10

The operating life adopted for each wellfield is discussed in the following results sections. Wellfield termination was determined by applying an economic cut-off criterion, with production assumed to cease when uranium grades or recoverable production fell below the defined economic threshold.

7.6 Additional simulations

A total of 10 sets of wellfield simulations were completed to assess the sensitivity of uranium recovery, production performance and project economics to the principal design variables. Table 8 summarises the parameters evaluated.

The simulation program assessed wellfield configurations beyond those historically implemented at Honeymoon and identified opportunities to improve overall project value. The analysis considered a range of injector-to-extractor spacings, production flow rates, pattern geometries and uranium-dissolution kinetic assumptions representative of historical operating data and the RTM calibration work.

As described in Section 7.1, candidate wellfield designs were generated directly from the updated Mineral Resource block model. RTM simulations were then used to evaluate their recovery efficiency, production performance and economic outcomes.

The objective was to quantify the effect of each parameter on uranium recovery, production rates, wellfield development intensity and economic performance, and to support selection of the preferred design through a risk and opportunity assessment.

Table 8: RTM simulation matrix

Variable	Cases Tested
Injector-to-extractor spacing	35m, 49m, 56m, 63m, 70m
Pattern configuration	five-spots / seven-spots
Wellfield Layer Configuration	Mono layer and multi-layer well-field design
Flow rate scenarios	20, 25, 30
Uranium dissolution kinetics scenario	$H_{Honeymoon}$, $k_{Honeymoon}/10$
Resource domains	Honeymoon, East Kalkaroo, Brooks Dam

For personal use only

7.7 RTM Results

The simulation results demonstrate the relationship between well spacing, recovery performance and wellfield development intensity. These results formed the basis for selecting the preferred design and identified opportunities for future optimisation.

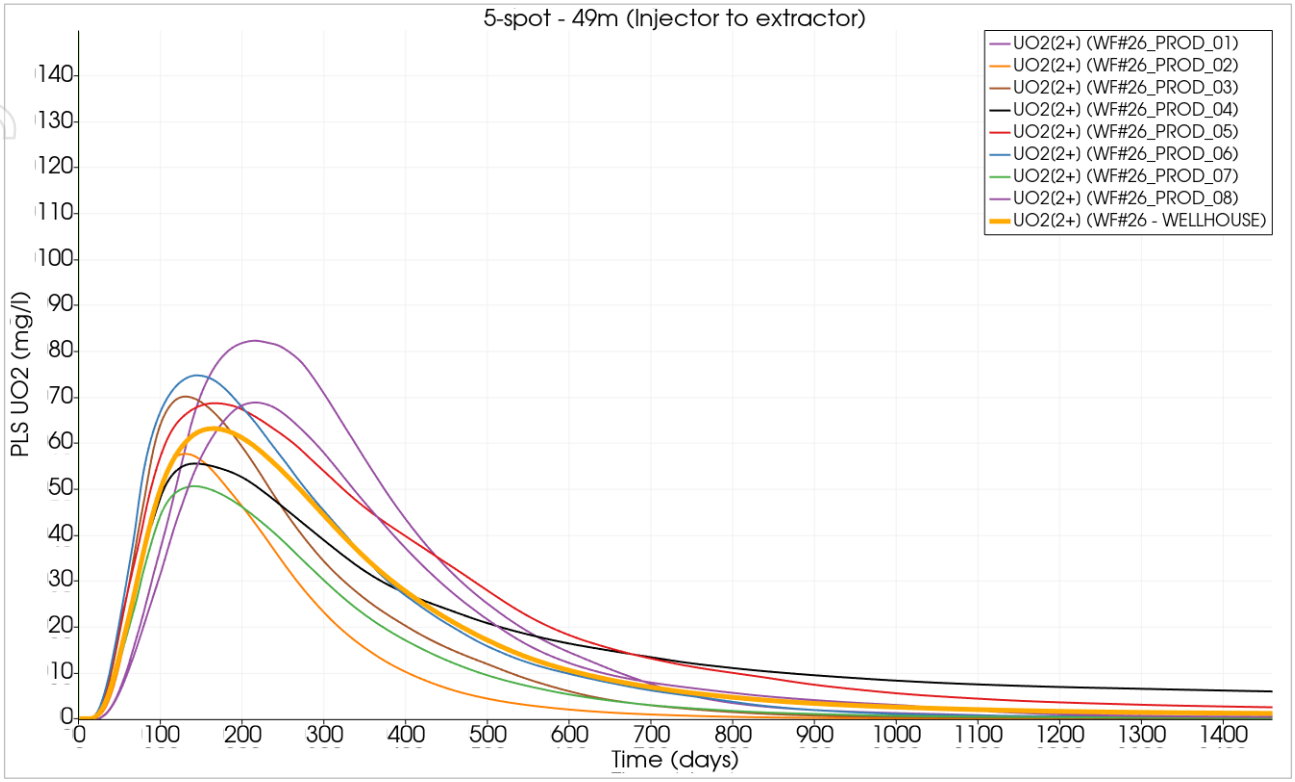
Figure 18 presents representative concentration profiles for two alternative wellfield configurations with injector-to-extractor spacings of 49 m and 70 m. Both wellfields are located in the central portion of Brooks Dam and are centred on the same mineralised area. Although the different spacings produce different wellfield footprints, the examples represent the same geological setting, hydrogeological conditions and mineralisation geometry.

Increasing the distance between injection and recovery wells results in longer residence times within the reservoir, increasing the contact time between the lixiviant and the mineralised material. This results in greater uranium enrichment of the production solution during the early stages of production, with peak concentrations increasing from approximately 60 mg/L for the 49 m injector-to-extractor spacing configuration to approximately 80 mg/L for the 70 m injector-to-extractor spacing configuration.

The reduced groundwater velocity associated with wider spacing also produces a broader production response. Peak production is reached after approximately 180 days in the 49 m injector-to-extractor case, compared with approximately 300 days in the 70 m injector-to-extractor case. Solution concentrations also decline more gradually as spacing increases, reflecting the slower progression of the lixiviant front through the reservoir.

Consequently, wider well spacing generally extends the duration of recovery and increases the time required to achieve near-complete extraction of the mineralised zone, as illustrated in Figure 19.

For personal use only



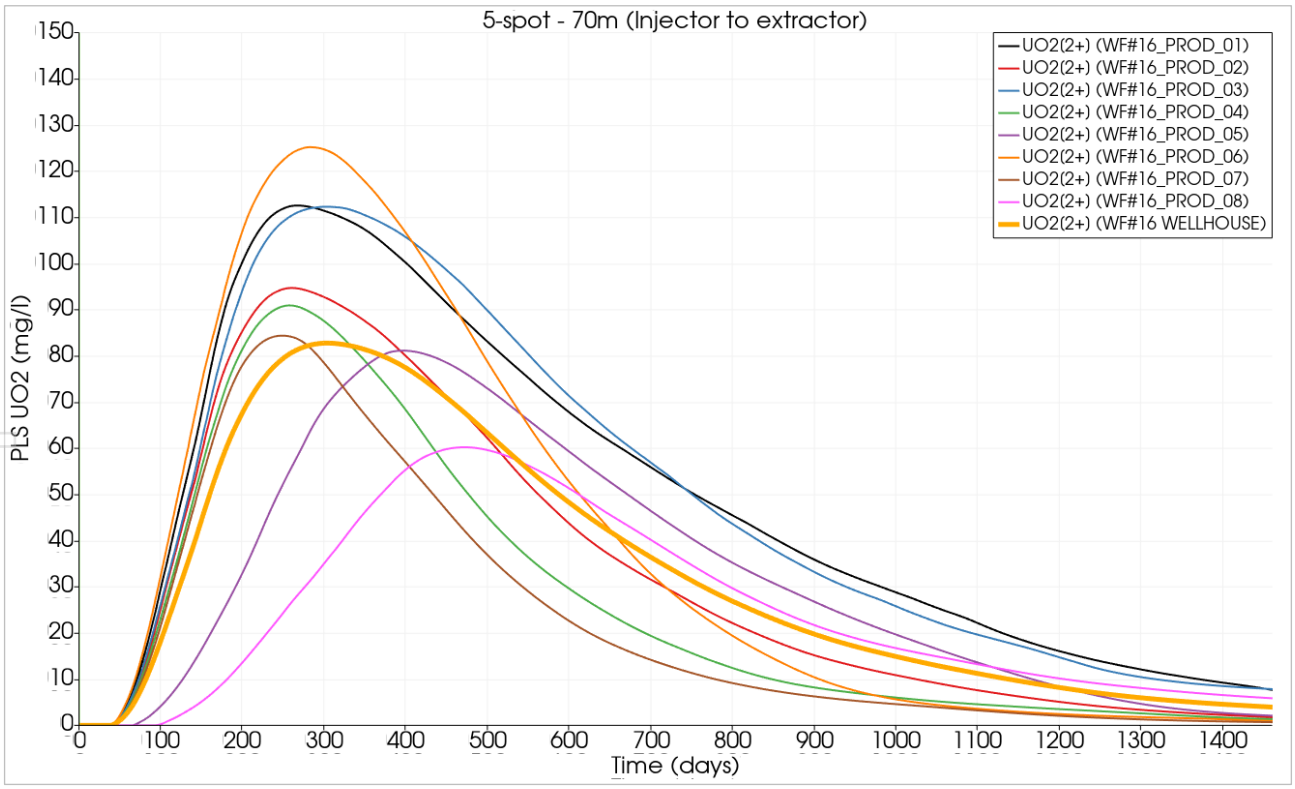


Figure 18: Example of RTM-simulated concentration profiles for two alternative wellfield configurations. A 49 m injector-to-extractor spacing is shown above, and a 70 m injector-to-extractor spacing is shown below. The bold line represents the aggregated wellfield response, while the thin lines show the responses of the individual patterns.

For personal use only

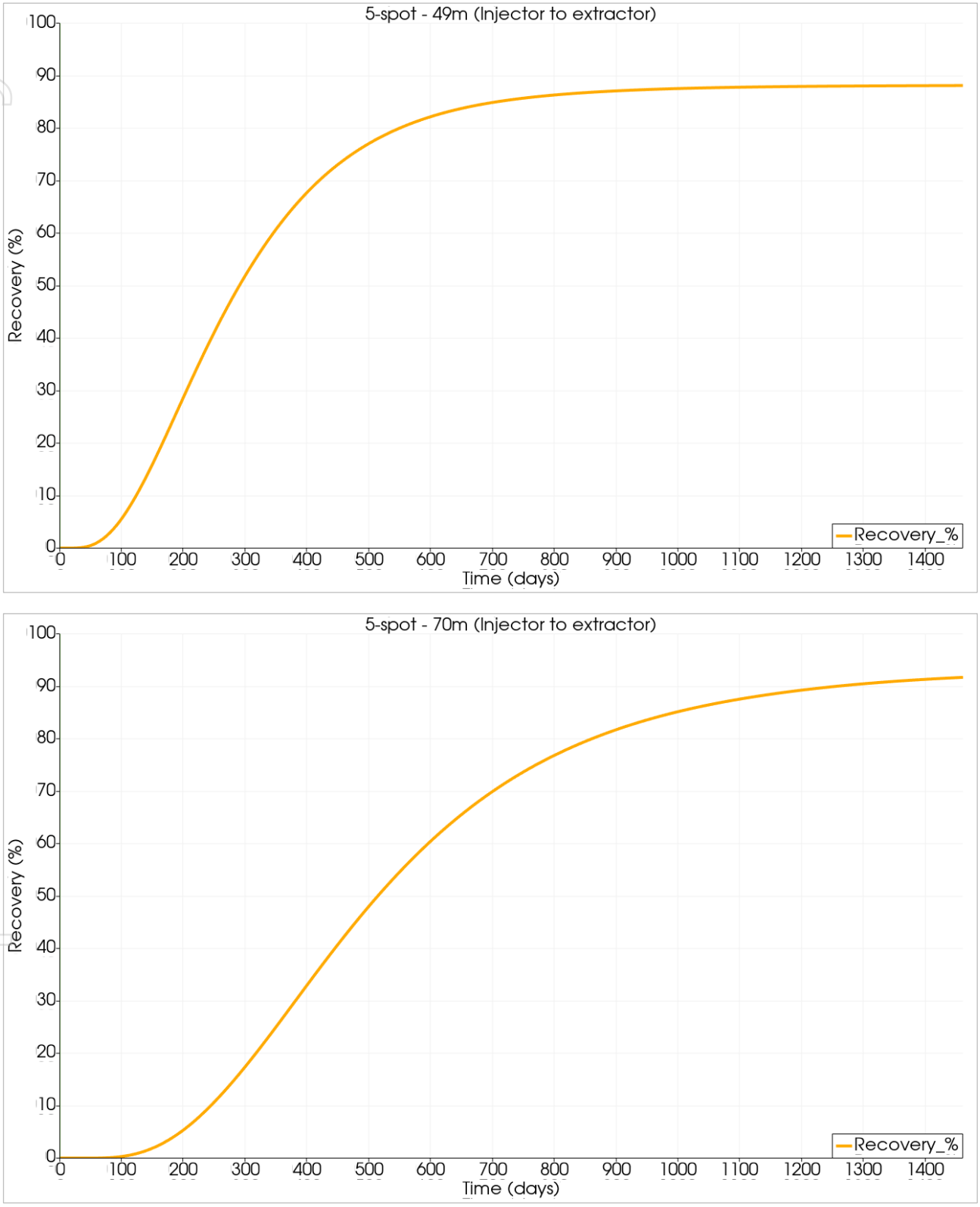


Figure 19: Example of RTM-simulated recovery curves for two alternative wellfield configurations. The 49 m injector-to-extractor spacing is shown above and the 70 m injector-to-extractor configuration is shown below. The recovery curves correspond to the same wellfields used to illustrate the two configurations in Figure 18.

For personal use only

For personal use only

The results also demonstrate that the benefits of increased spacing are not unlimited. While moderate increases in spacing improve recovery efficiency at the pattern scale, larger spacing configurations progressively reduce sweep efficiency and extend recovery periods.

Table 9 summarises the overall effects of well spacing on the RTM simulation results.

Key trends observed from the simulations include:

- Increasing well spacing materially increases fluid residence time, resulting in later breakthrough and greater uranium enrichment of the production solution. Mean residence time increases from approximately 80 days for the historical design to approximately 150 days for the NFS base case and 275 days for the larger spacing. Corresponding peak PLS tenors increase from approximately 40–80 mg/L to 50–100 mg/L and 60–180 mg/L, respectively.
- The recovery response broadens as spacing increases. Peak production occurs later, with breakthrough times increasing from approximately 15 days for the historical design to 40 days and 100 days, respectively. Similarly, the average recovery duration increases from approximately 280 days to 660 days and 1,200 days as spacing increases.
- Wellfield development intensity decreases substantially as spacing increases. The number of wells required to develop an equivalent resource inventory decreases from approximately 2,480 wells in the historical design to 1,340 and 670 wells, respectively. As a result, the amount of recoverable uranium supported by each production well increases from approximately 15,400 lbs U_3O_8 to 33,000 lbs and 67,000 lbs, respectively.
- Operational flexibility evolves as well spacing increases. Higher well densities result in a larger number of individual wellfields, providing greater flexibility to adjust development priorities and short-term production profiles. However, this flexibility comes at the cost of increased operational complexity, requiring the construction or reallocation, commissioning and management of a larger number of wellhouses and associated tertiary infrastructure. Conversely, larger spacing scenarios reduce field development requirements but provide fewer opportunities to actively manage production through wellfield sequencing.
- Acid consumption was also assessed as part of the RTM simulations. For each spacing scenario, sulphuric acid addition rates were adjusted to maintain an average PLS pH within the target operating range of approximately 1.4 to 1.5. Based on the RTM calibration against historical Honeymoon wellfield performance and supported by the initial operating observations from East Kalkaroo, this corresponds to an average acid concentration of approximately 3 g/L for the 49 m spacing case and 5 g/L for the 70 m spacing case.
- Acid consumption increases with well spacing because longer residence times result in greater interaction between the lixiviant and host formation. Simulated acid consumption increases from approximately 6 kg H_2SO_4/t of ore for the historical design to approximately 8 kg/t and 13 kg/t for the NFS base case and larger spacing cases, respectively. These simulated requirements remain relatively low for ISR operations and compare favourably with Kazakhstan ISR deposits, where acid consumption is commonly approximately 10–20 kg/t of ore.

For personal use only

Table 9: Overall impact of well spacing on RTM simulation outcomes.

Parameter	Unit	Historical Range	Intermediate Spacing	Larger Spacing
Well Spacing (injector-to-extractor) [4]	m	35	49	70
Well Spacing (injector-to-injector)	m	50	70	100
Wells	#	2,480	1,340	670
Peak PLS tenor	mg/l	40 - 80	50 - 100	60 - 180
Time to peak	Days	60 -130	120 - 250	200 - 400
Breakthrough time (Tracer Cut 10%)	days	15	40	100
Mean residence time	days	80	150	275
Ultimate recovery [5]	%	80	90	93
Average recovery time	days	280	660	1,200
H_2SO_4 consumption	kg/t ore	6	8	13
U_3O_8 / extraction well	lbs	15,400	33,000	67,000

7.8 Spacing Selection

Based on the results presented above, an injector-to-extractor spacing of 49 m was selected as the NFS base-case design. On a five-spot wellfield pattern, this would equate to an injector-to-injector spacing of 70 m.

Compared with the historical Honeymoon design, the selected configuration provides the following advantages:

- a substantial reduction in wellfield development intensity, decreasing the total number of wells required from approximately 2,480 to approximately 1,340, while maintaining comparable recovery performance;
- a significant reduction in the number of individual wellfields requiring development and operation, with the total wellfield inventory decreasing from approximately 116 wellfields to approximately 53 wellfields, assuming an average of eight patterns per wellfield. This reduces the number of wellhouses installed, spider-lines laydown, electrical connections and associated field infrastructure required throughout the life-of-mine;
- improved overall uranium recovery relative to the historical design, while benefiting from increased residence time and improved uranium enrichment within the production solution;
- a limited increase in acid consumption was not considered a limiting factor in the selection of the preferred 49 m injector-to-extractor spacing design;

[4] Historical spacing refers to the average injector-to-extractor spacing implemented within the B1 to B6 wellfields currently in operation with a spacing of ~ 35 m. Intermediate is a injector-extractor spacing of 49 m and larger spacing is at an injector-to-extractor spacing of 70 m.

[5] Ultimate recovery refers to the recovery of the uranium intercepted by the wellfield, as determined from the RTM simulations and wellfield sequencing (see Section 12).

- improved recoverable uranium per production well, increasing development efficiency and reducing capital intensity on a per pound recovery basis;
- retention of sufficient operational flexibility to manage development sequencing and short-term production requirements; and
- greater confidence in hydraulic control and dilution management relative to the larger spacing scenarios evaluated, while still benefiting from the strong hydraulic connectivity demonstrated within the Honeymoon deposits.

Although the 49 m injector-to-extractor spacing was adopted as the NFS base case, the simulation results indicate that larger spacings may provide opportunities for additional value. Further field validation is required, particularly in relation to hydraulic control, dilution behaviour and long-term recovery performance.

The interpretation of the RTM results is illustrated conceptually in Figure 20. Historical Honeymoon spacing provides insufficient residence time to maximise uranium-dissolution efficiency, while the largest spacing cases begin to exhibit diminishing returns. The selected 49m injector-to-extractor spacing design represents an intermediate position that balances recovery performance, development intensity and operational robustness.

For personal use only

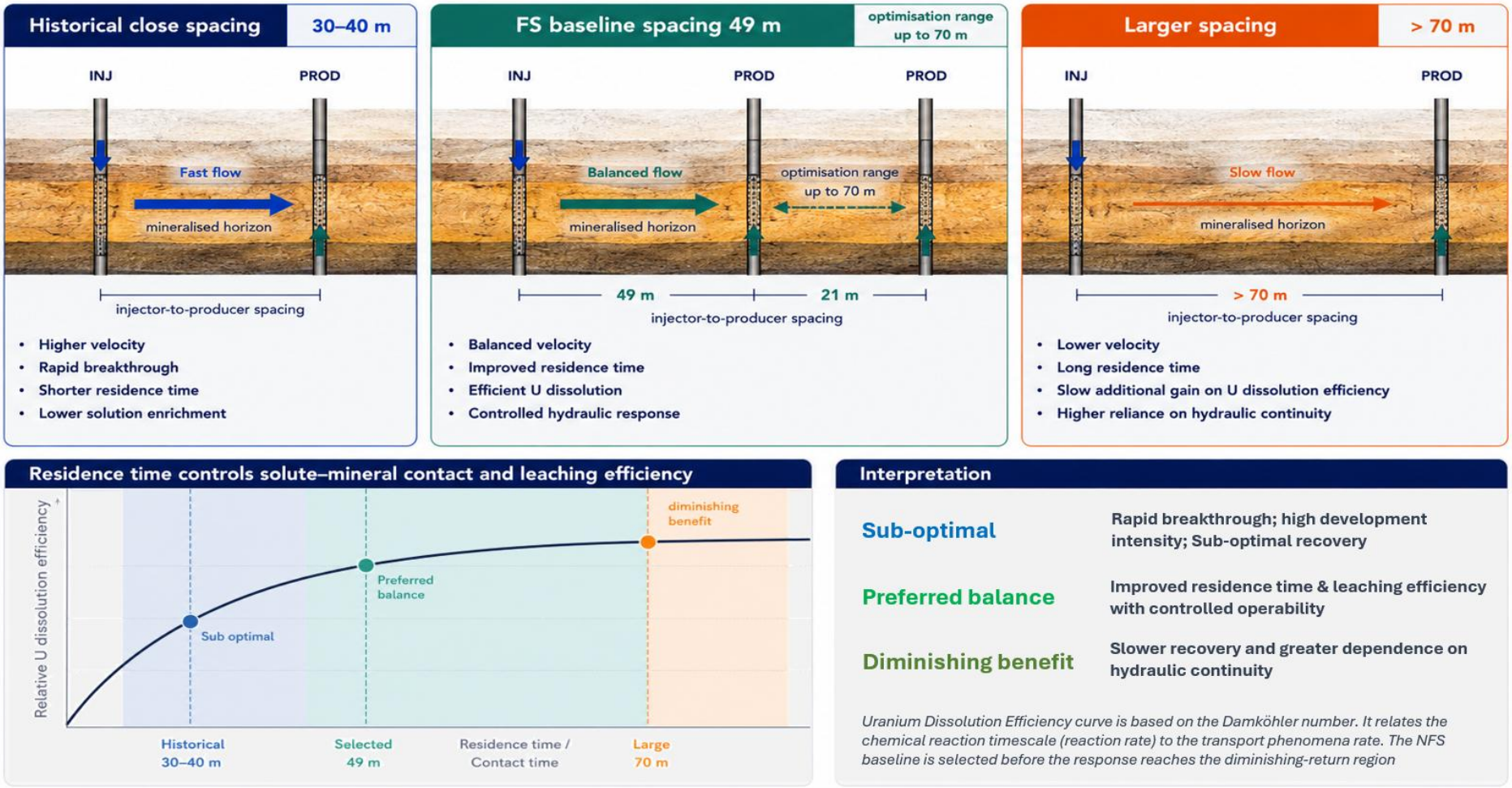


Figure 20: Conceptual effect of well spacing on flow velocity, residence time and uranium dissolution response. The figure illustrates the physical basis for the spacing trade-off evaluated through RTM simulations.

For personal use only

For personal use only

7.9 Wellfield Spacing Data from Analogous Deposits

The intermediate spacing proposed for the NFS base case, 49 m from injector-to-extractor, is consistent with the spacing adopted at several large ISR operations globally, where injector-to-extractor distances of approximately 40 m to 50 m are used.

Table 10 compares the spacing adopted for the NFS with selected analogous deposits. The comparison is limited to deposits with flow rates sufficient to support comparable wider-spaced wellfield configurations and is intended to be illustrative rather than exhaustive.

Table 10: Comparison of injector-to-extractor spacing at selective ISR deposits.

Deposit	Region	Well spacing (injector to extractor)	Pattern geometry
Honeymoon – Intermediate (NFS base case)	Australia	49m	Five-spot
Honeymoon – Larger (Optimisation opportunity)	Australia	70m	Five-spot
Chieli / Karamuran	Kazakhstan	40m	Seven-spot
Budenovskoye 2 / Karatau	Kazakhstan	45-50m	50% Five-spot; 50% linear
JV Inkai	Kazakhstan	35-45m; 50-65m	Seven-spot; Line drive
Kharasan 2	Kazakhstan	45–50m	Seven-spot

Notes:

Information obtained from Boss data, publication under the IAEA Nuclear Energy Series (International Atomic Energy Agency (IAEA), 2016)[6], and Cameco Inkai Operation Technical Report (Cameco Corporation, 2024)[7].

7.10 Reactive Transport Model recovery curves vs historical trends

Historical recovery performance at Honeymoon has typically been expressed as uranium recovery relative to the pore volume equivalents (PVE) circulated through the reservoir. Previous operating assumptions generally targeted approximately 70% uranium recovery after 70 PVE. This assumption was derived primarily from the interpretation of historical field leach test results and was subsequently adopted as a practical planning basis for earlier development studies.

Available ISR operating data indicate that the pore volume requirements necessary to achieve a given level of recovery vary significantly between deposits and operating conditions. For sandstone-hosted ISR operations of comparable grade, recoveries approaching 90% are commonly achieved within significantly lower pore volume ranges. Published information remains limited; however, available references and operating experience from Kazakh ISR operations generally indicate values in the order of 15 to 30 PVE to achieve high recovery levels, with richer wellfields occasionally extending into the 40 to 50 PVE range. Pore

[6] *International Atomic Energy Agency (IAEA). (2016). In Situ Leach Uranium Mining: An Overview of Operations.*

[7] *Cameco Corporation. (2024). Inkai Operation, Turkestan Region, Republic of Kazakhstan, National Instrument 43-101 Technical Report.*

volume requirements approaching 70 PVE would generally be considered relatively high for deposits of comparable grade.

Direct comparison with the current RTM results is not straightforward. The uranium distribution model has been substantially revised since the original operations, and most historical wellfields have been influenced to varying degrees by legacy Uranium One mining activities, as described in Section 6. These areas were previously leached using a different lixiviant chemistry and may therefore exhibit partial depletion and altered geochemical conditions relative to undisturbed mineralisation.

Wellfield B2 provides the most suitable benchmark because it is the only production area not materially affected by previous ISR activities. Wellfield B2 achieved approximately 90% recovery after 37 PVE, substantially outperforming the historical design assumption. By comparison, the RTM recovery curves for future wellfields using the selected 49 m injector-to-extractor spacing indicate that, on average, approximately 26 PVE is required to achieve 90% recovery.

This result should not be interpreted as evidence of improved intrinsic leaching efficiency. The same uranium-dissolution kinetics derived from calibration against historical Honeymoon wellfield performance were applied throughout the RTM simulation programme. Rather, the lower number of pore volumes required to achieve a given percentage recovery primarily reflects the generally lower uranium grades of a substantial proportion of the future wellfields relative to Wellfield B2.

Oxidative uranium dissolution is controlled by both reaction kinetics and reagent availability, principally acid and oxidant supply. Lower-grade mineralisation therefore generally requires fewer pore volumes of lixiviant to achieve a given percentage recovery. This behaviour is consistent with observations from ISR operations, where recovery per pore volume generally increases as the contained uranium inventory decreases.

7.11 Sensitivities on Flowrate and uranium dissolution kinetics

Additional sensitivity analyses were undertaken to assess the effects of production flow rate and uranium-dissolution kinetics.

Increasing production flow rates was generally not beneficial. Higher flow velocities reduced hydraulic residence time within the reservoir and, consequently, the duration of contact between the lixiviant and mineralised material. Across the simulated wellfield inventory, this resulted in lower overall recovery and a measurable reduction in total life-of-mine uranium extraction.

A conservative sensitivity case was also evaluated using uranium-dissolution kinetics ten times slower than those adopted for the base case. Although this scenario resulted in slower recovery and extended production tails, recovery remained approximately 70% after 50 PVE. This indicates that the wellfield designs remain economically viable under highly conservative kinetic assumptions.

Such a material reduction in dissolution kinetics is considered unlikely based on the mineralogical investigations completed across the Honeymoon deposits. These investigations have not identified material differences in uranium mineralogy that would be expected to fundamentally alter leaching behaviour. This interpretation is also broadly consistent with early operating observations from East Kalkaroo.

Consequently, neither the flow-rate sensitivities nor uncertainty in uranium-dissolution kinetics materially changed the preferred wellfield design. Well spacing remained the principal design variable influencing the balance between recovery performance, development intensity and overall project value.

For personal use only

For personal use only

8. Wellfield Infrastructure

8.1 Wellfield Infrastructure Overview

Wellfield infrastructure provides the physical systems required to develop, operate, monitor and progressively decommission the ISR wellfields. It connects individual injection and extraction wells to the existing Honeymoon processing facility and enables the controlled circulation of leach solutions through the mineralised aquifer.

The principal infrastructure components comprise injection, extraction and monitoring wells; wellhouses; filtration systems; PLS, BLS and conditioning-solution pipelines and trunklines; electrical distribution; telemetry and process-control systems; access tracks; and temporary construction and laydown areas.

The infrastructure layout has been developed to support the wellfield sequence, solution-flow requirements and production profile defined in the life-of-mine plan. Infrastructure will be installed progressively as new wellfields are developed, aligning capital deployment with the production schedule. Standardised and modular equipment will be used wherever practicable to simplify construction, operation and maintenance and to enable infrastructure to be relocated, reused or removed as wellfields advance through their operating life.

The design integrates the future wellfields with the existing Honeymoon processing, power, communications and control systems. Infrastructure corridors and equipment locations have been selected with consideration for hydraulic performance, operational access, environmental disturbance, future expansion and progressive rehabilitation.

8.1.1 Wells

Each ISR wellfield will comprise injection, extraction and monitoring wells.

Injection wells will introduce BLS into the target mineralised zone. Extraction wells will recover uranium-bearing PLS and assist in maintaining hydraulic control within the mining zone. Monitoring wells will be used to measure groundwater levels, hydraulic pressure and groundwater quality within and surrounding each wellfield, including within relevant overlying aquifer units.

Wells will be drilled using conventional mud-rotary methods and geophysically logged to characterise lithology, aquifer conditions and uranium mineralisation. Injection and extraction wells will be equipped with the casing, screens, pumps and associated equipment required for their intended function. Monitoring wells will be completed across selected intervals to provide representative groundwater-level and water-quality data.

Well construction will incorporate appropriate sealing, integrity testing and monitoring requirements to maintain hydraulic control and protect surrounding groundwater systems.

8.1.2 Wellhouses

Wellhouses will provide local distribution, collection and control points for groups of injection and extraction wells. They will distribute BLS to injection wells, collect PLS from extraction wells, and enable individual well flows and pressures to be monitored and controlled using valves, meters, manifolds and associated instrumentation.

Each wellhouse will be connected to the existing Honeymoon central control system, allowing remote monitoring and operational control. Appropriate containment, alarm and shutdown systems will be incorporated into the design.

8.1.3 Filter Skids

Filter skids will be installed within the BLS distribution system upstream of the wellhouses. These units will remove suspended particulate matter from the circulating solution, reducing the potential for fouling of pipelines, well screens and the target formation.

The filter skids will incorporate suitable containment and monitoring arrangements to support safe operation and routine maintenance.

8.1.4 Reticulation, Pipelines and Trunklines

Surface reticulation pipelines will connect individual injection and extraction wells to their respective wellhouses. Trunklines will convey BLS, PLS and conditioning solutions between the wellfields and the existing Honeymoon processing facility. Pipeline diameters will vary according to their function and required flow capacity.

Pipelines will generally be constructed from high-density polyethylene (HDPE) and installed at or near ground level to facilitate inspection, maintenance and removal during decommissioning. The pipeline systems will incorporate appropriate isolation, pressure testing, process monitoring and leak-detection and response arrangements.

Two principal infrastructure corridors are proposed:

- the East Kalkaroo corridor, servicing the Central Kalkaroo and East Kalkaroo wellfields; and
- the Brooks Dam corridor, servicing the Honeymoon and Brooks Dam wellfields.

The trunkline systems have been sized against forecast quarterly solution flows and provide sufficient capacity to support planned production and wellfield conditioning. The corridor-based design enables infrastructure to be installed progressively in line with wellfield development and preserves the potential for future extension towards the Jasons deposit.

8.1.5 Power Supply and Communications Infrastructure

Power will be supplied to the wellfields through an 11 kV connection to the existing Honeymoon electrical system. Supporting infrastructure will include distribution lines, transformers, switchgear and local connections serving wells, wellhouses and monitoring equipment.

Telemetry and field communications infrastructure will connect the wellfields to the existing Honeymoon process-control and communications systems, enabling centralised monitoring, operational control and timely response to abnormal operating conditions.

For personal use only

8.1.6 Access Tracks and Laydown Areas

Access is established throughout the Honeymoon and East Kalkaroo production areas, including to the northeastern extent of ML 6109. Access to Brooks Dam and the Honeymoon Extension will be provided by progressively extending the existing service-road network from the Honeymoon area.

Additional access tracks will be established where required to support wellfield construction, operation, inspection, maintenance and emergency response. Temporary laydown and work areas may also be established for drilling, pipeline installation, equipment storage and other construction activities.

The final location and extent of access tracks and temporary work areas will be refined during detailed design. Existing tracks and disturbed areas will be used wherever practicable to minimise additional ground disturbance and vegetation clearance. Infrastructure and access routes that are no longer required will be progressively decommissioned and rehabilitated.

For personal use only

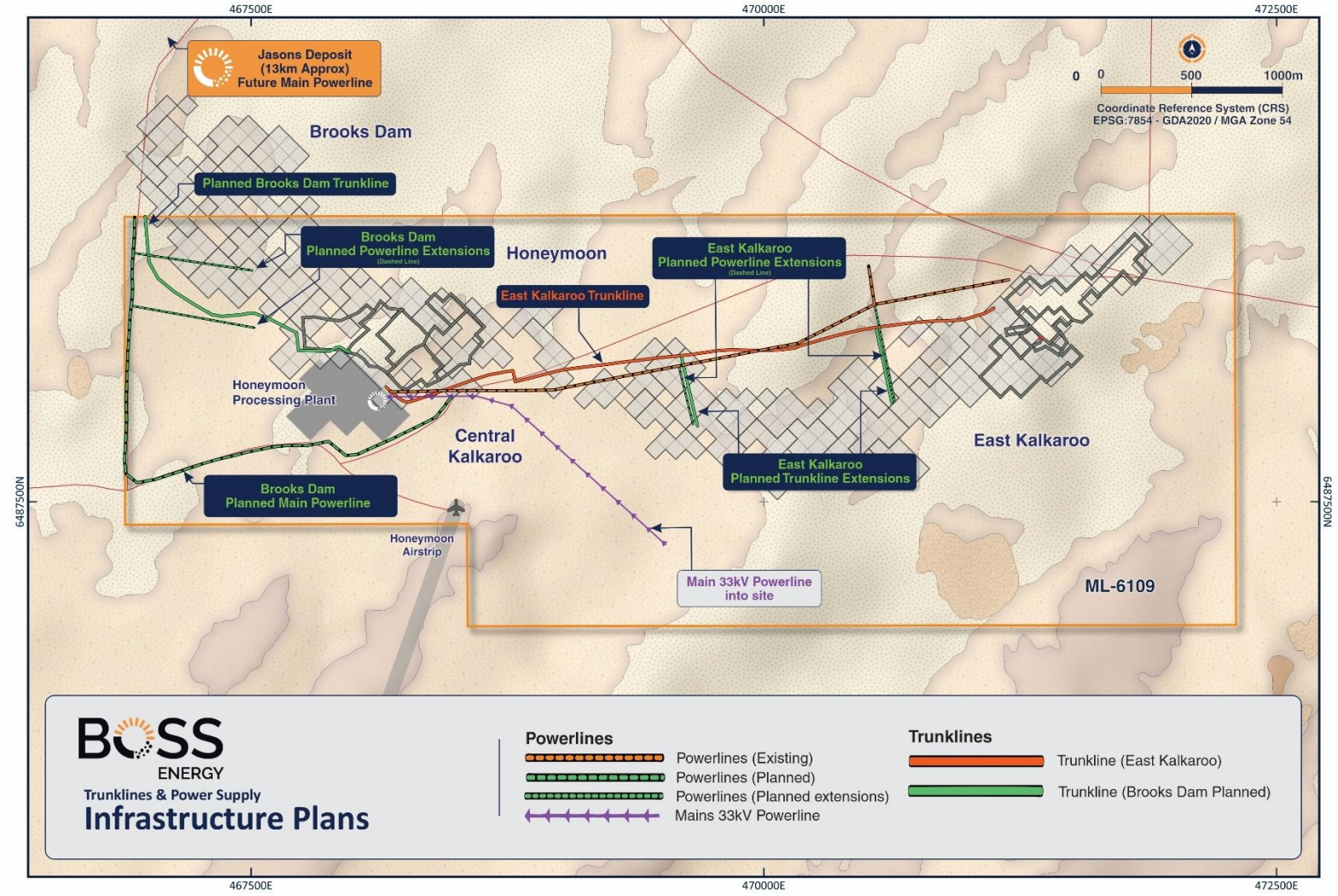


Figure 21: Trunkline and power distribution infrastructure plans for wellfield design at Honeymoon

personal use only

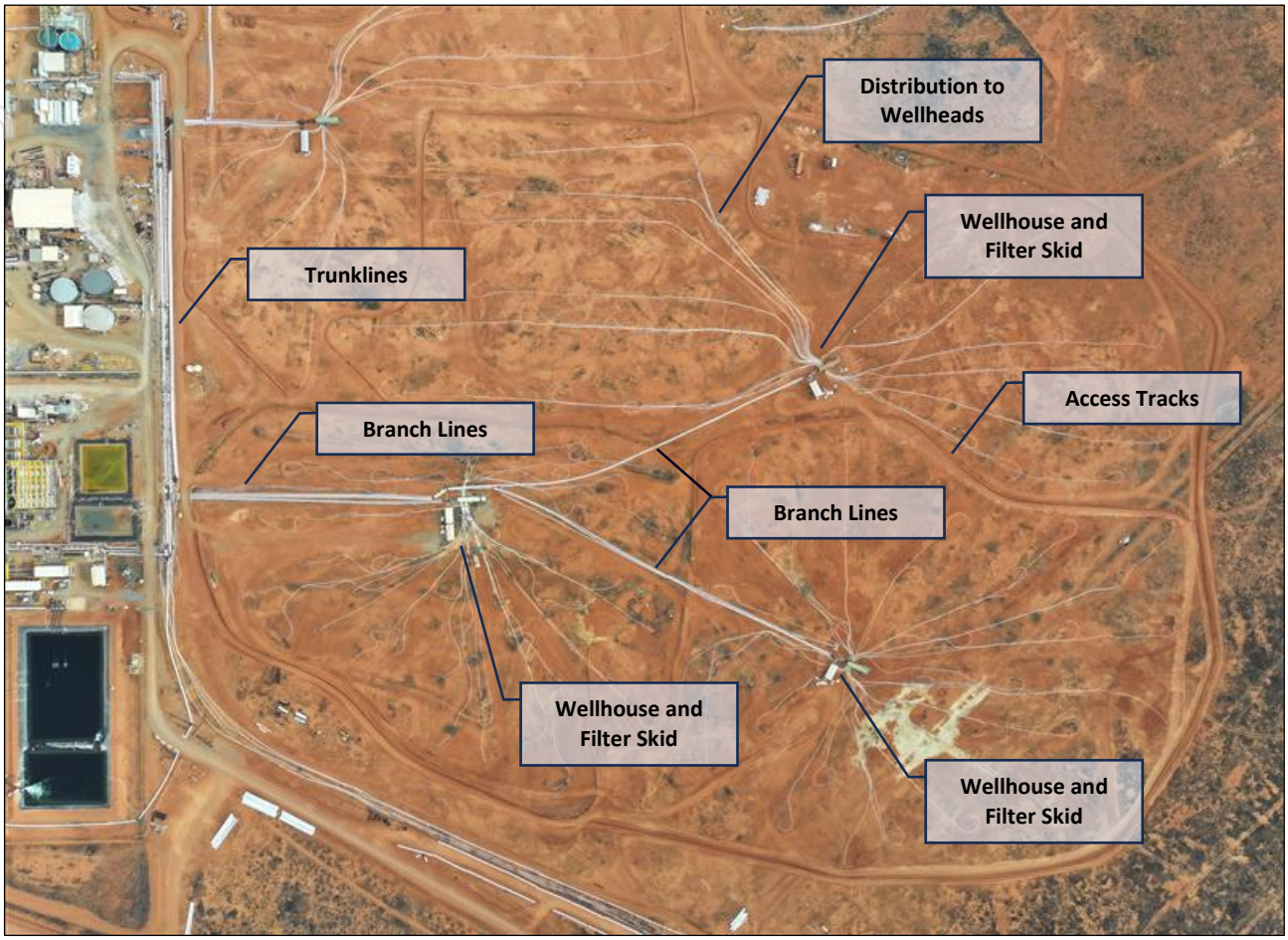


Figure 22: Photo of the current wellfields at Honeymoon illustrating trunklines from the Honeymoon Facility, branch line connections to wellhouses, and wellhouse distribution to wellheads

8.2 Trunkline Review and Assessment

8.2.1 Trunkline Configuration

Each principal corridor incorporates separate pipelines for PLS, BLS and wellfield conditioning. The East Kalkaroo trunkline is installed and operational, with future tie-in points and isolation valves incorporated for planned extensions. Additional branch lines will extend this infrastructure towards future Central and East Kalkaroo wellhouses.

The proposed Brooks Dam trunkline has been sized and its preliminary route verified from the Honeymoon processing facility to the northern boundary of the Mining Lease. Installation of the Brooks Dam trunkline will be staged to align with the wellfield development schedule, with completion in Q1 FY28.

The principal trunkline design criteria are summarised below.

For personal use only

For personal use only

Table 11: Trunkline Specifications

Service	Specification	Nominal size	Internal diameter	Design capacity
Conditioning	PE100, PN16	DN225	184 mm	200 m³/h
PLS/BLS	PE100, PN16	DN630	515.6 mm	2,000 m³/h

A trunkline availability of 90% has been adopted for the capacity assessment.

8.2.2 Conditioning Capacity

Conditioning requirements were derived from the wellfield development schedule using a nominal conditioning volume of one pore volume equivalent of groundwater for each new wellfield. Quarterly requirements were assigned to the relevant trunkline corridor and converted to average flow rates based on assumed availability.

The assessment confirms that both conditioning trunklines have sufficient capacity for the life-of-mine schedule. Each line can convey approximately 200 m³/h, compared with the nominal processing facility conditioning capacity of approximately 140 m³/h. This provides operating flexibility for overlapping conditioning campaigns, variable flushing requirements and potential acceleration of wellfield preparation.

8.2.3 PLS and BLS Capacity

Forecast PLS flows were derived from the reactive transport modelling and scheduled wellfield production profiles. The East Kalkaroo and Brooks Dam trunklines each have a design capacity of approximately 2,000 m³/h. Forecast operation is generally within the preferred pipeline velocity range of approximately 1.5 m/s to 2.5 m/s, and the assessment confirms that the trunklines can accommodate the production flows included in the life-of-mine plan.

BLS is distributed from the Honeymoon processing facility through the corresponding return trunklines. The existing pumping arrangement is adequate for near-term production. As mining progresses further from the processing facility, additional pressure may be required to maintain the necessary injection conditions. This can be provided through modification of the existing pump sets or installation of inline booster pumps. Final requirements will be confirmed through hydraulic modelling once the wellhouse locations and distribution piping layouts have been finalised.

8.3 Wellhouse Review and Assessment

Existing production wellfields are primarily serviced by 16-pump wellhouses. A smaller four-pump arrangement has been developed as part of recent wellfield trials to leverage the benefits of a simpler and more flexible configuration.

The life-of-mine infrastructure basis adopts an 8-pump wellhouse capable of supporting eight extraction wells and up to 28 injection wells. This configuration forms the basis of capital estimates and is aligned with the nominal eight-pattern wellfield layout and provides the following benefits:

- closer alignment between wellhouse capacity and individual wellfield development;
- earlier commencement of conditioning and production following completion of drilling and plumbing;
- shorter commissioning critical paths;
- reduced cable distances and voltage-drop requirements; and
- simplified structural, electrical, cooling and ancillary requirements.

The proposed design retains the proven pumping, instrumentation, control and modular plumbing arrangements used at Honeymoon. Simplification will principally involve separating electrical and piping installations and removing the need for a fully enclosed structure.

Initial wellfields, including Wellfield EKT2 and Wellfield EKT3, will use existing 16-pump wellhouses. The 8-pump configuration will be introduced following completion of detailed design and procurement. Final wellhouse selection will remain responsive to actual wellfield geometry, drilling outcomes and operating requirements.

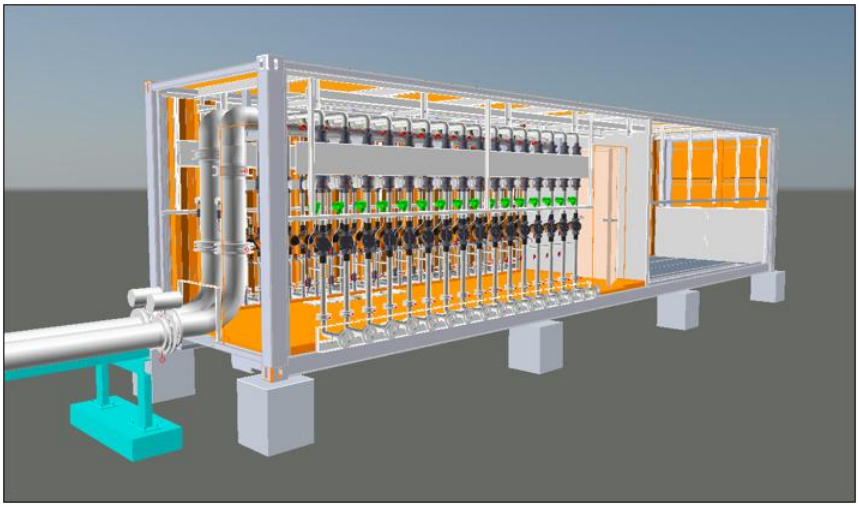


Figure 23: Existing 16-pump wellhouse design

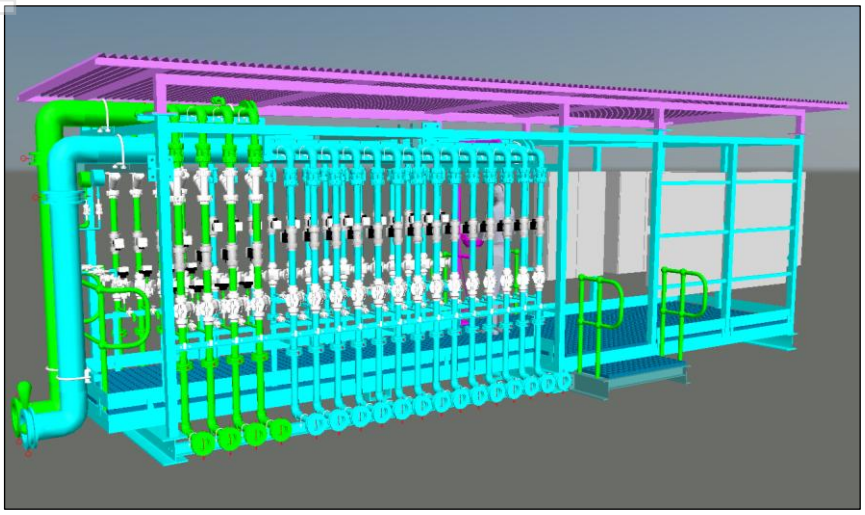


Figure 24: Proposed 8-pump wellhouse design

For personal use only

For personal use only

8.3.1 Wellhouse Reuse

The modular wellhouse design enables equipment to be recovered, refurbished and redeployed after individual wellfields reach the end of their production lives. The life-of-mine plan requires an average of approximately 16 active wellhouses, increasing to a peak of approximately 23.

The infrastructure schedule assumes a six-month period for decommissioning, relocation, refurbishment and recommissioning. On this basis, approximately 27 wellhouse redeployments have been identified over the current nine-year schedule. Recoverable components are expected to include structural steelwork, variable-speed drives, control equipment, major valves and a proportion of the surface electrical cabling.

The associated cost benefits have been included on a conservative basis and will be validated following completion of the first wellhouse relocation cycle.



Figure 25: Photo of Boss team working inside the wellhouse

8.4 Power Distribution Review and Assessment

Grid power is supplied to the Honeymoon processing facility from Broken Hill through an existing 33 kV overhead line with an approximate capacity of 6 MVA. An existing 33/11 kV, 7 MVA transformer supplies the 11 kV distribution network servicing Central and East Kalkaroo. This infrastructure is operational and currently supplies the B6 wellfield.

For personal use only

Additional branch lines will extend the East Kalkaroo network towards future wellhouse locations, minimising low-voltage cable lengths. Brooks Dam will be supplied through a new overhead high-voltage line and dedicated transformer, with secondary branches extending towards individual wellhouse clusters.

The production plan requires capacity to pump up to approximately 2,000 m^3/h from either principal mining area and up to approximately 3,000 m^3/h across the operation. Detailed power-system modelling is in progress to confirm transformer capacity, voltage performance and the final distribution configuration. The Brooks Dam design will also consider whether provision should be made for a future extension to the Jasons deposit.

8.5 Wellfield Layout

To support planning and evaluation activities, a range of wellfield layout scenarios have been developed and assessed based on the current resource model. The development and assessment of the wellfield layout is described in Section 7. The life-of-mine production planning described in Section 12 then forms the basis for sequencing these. These scenarios represent plausible extraction pattern configurations across the resource and provide a basis for understanding potential infrastructure requirements, construction sequencing and optimal production scheduling.

At a localised level, a typical wellfield is grouped into an 8 pattern configuration that allows for assessment of wellhouse placement, pipe lengths and cable sizing. Examples of typical wellfield layouts and their grouping into 8 pattern configurations as considered for infrastructure planning are highlighted in Figure 26. These groupings are derived directly from the simulation work and wellfield designing as documented in Section 7 and form the basis of projected infrastructure costs and scheduling.



Figure 26: Typical grouped 8 pattern wellfield layouts used for infrastructure planning and assessment. Each highlighted square represents a five-spot pattern consisting of an extraction well at its centre and an injection well at each of its corners. Corresponding colours represent grouping into 8 pattern sets to be serviced by a single 8-pump wellhouse.

8.6 Wellfield Infrastructure Implementation

Wellfield infrastructure will be delivered progressively in accordance with the mine development schedule.

These activities use established equipment, materials and operating practices. The remaining design work is therefore considered conventional and presents a low level of technical implementation risk. The resulting infrastructure provides a practical and scalable basis for the life-of-mine wellfield development program.

For personal use only

9. Processing Plant

The Honeymoon processing plant is an established operating facility and does not form part of the principal development scope of the NFS. Accordingly, the NFS does not include the design or construction of a new processing facility. Its focus is to confirm that the existing plant, together with committed capacity and reliability upgrades, can support the life-of-mine production schedule derived from the wellfield development plan.



Figure 27: Photo of existing Honeymoon processing plant



Figure 28: Overview of existing process plant areas at Honeymoon

For personal use only

9.1 Plant Design Basis

The processing plant uses ion-exchange technology to recover uranium from pregnant leach solution (PLS) produced by the wellfields. Uranium is stripped from the loaded resin using an eluant, with the concentrated eluate subsequently processed through precipitation, thickening, drying and packaging to produce uranium concentrate, or tri-uranyl octa-oxide (U_3O_8) product.

The plant design basis is aligned with the base-case production schedule adopted for the NFS. The principal capacity assumptions are summarised in Table 12.

Table 12: Processing plant nominal throughput criteria

Parameter	Unit	NFS design basis
Annual uranium production	Mlbs U_3O_8 p.a.	2.0
Total PLS flow (average)	m^3/h	2450 (2940 after column 6)
Total PLS flow (max instantaneous)	m^3/h	2660 (3190 after column 6)
PLS uranium grade	mg/L U_3O_8	31-45
Number of operating IX columns	#	5 + 1 to be installed
Plant Recovery	%	95%
Plant availability [8]	%	92 – 95%
Product specification	—	Meets ASTM C967

The NFS production schedule has been assessed against the capacity and operating requirements of the existing plant as outlined in Section 12. This assessment confirms the alignment between planned wellfield solution flows and grades, ion-exchange capacity and the downstream processing circuits.

9.2 Plant Capacity and Reliability Upgrades

As part of its ongoing continuous improvement program, Boss is implementing a series of capital upgrades to improve plant throughput, availability, utilisation and operational reliability. These works are being undertaken independently of the NFS and are principally directed towards debottlenecking the existing flowsheet, restoring or maintaining unit operation nameplate capacity, and addressing identified reliability and availability constraints.

Where an upgrade directly affects the NFS production basis—such as the completion of Ion Exchange column 6, refer the following section—the resulting change in processing capacity has been incorporated into the life-of-mine production schedule along with the required capital to achieve that basis. For other upgrades, the NFS production plan provides the basis for validating equipment capacity requirements and informing detailed design.

[8] *Plant availability increases are part of an ongoing program of works, incorporating continuous improvement across various maintenance programs and improvements to site access*

The work on plant reliability is intended to ensure that the existing plant can reliably support the NFS production profile, provide flexibility to expand beyond the NFS production profile and provide appropriate operating resilience over the life of the operation. Any further sustaining capital, reliability improvements or minor operational modifications required during the operating life have been considered separately from the principal wellfield development scope of the NFS.

9.3 Plant Capacity Increase

The Honeymoon Project as documented in the EFS included 6 NIMCIX trains as part of the ramp-up to achieve the stated nameplate capacity. The construction of columns 4 – 6 commenced in April 2025. On identifying the deviation from the EFS, and commencement of the Honeymoon Review, column 6 construction was paused, with columns 4 and 5 being completed and commissioned in April and June 2026 respectively. The main structure to accommodate column 6, along with the partial installation of the column, was completed and made safe prior to cessation of column 6 construction.

The life-of-mine developed as part of the NFS indicates that the current flow capacity will be reached by Q2 FY30. To achieve the life-of-mine production, column 6 will be completed, increasing the flow capacity, and hence the production capacity, of the plant.

The scope remaining to be completed includes:

- fiberglass jointing of the column sections;
- pipe supports, piping, valves, and pumps;
- electrical and instrumentation;
- pre-commissioning, including hydrotesting; and
- commissioning and resin loading

By completing the construction of column 6 the plant flow capacity will increase from 2450 m^3/hr to 2940 m^3/hr on an average basis allowing for cycle sequencing and resin transfers in which the flow to the column stops. The instantaneous flow rate to the columns will increase from 2660 m^3/hr to 3190 m^3/hr, and overall increase of 20%. To meet the require flow capacity in FY30 the completion of column 6 will commence in Q4 FY29.

For personal use only

For personal use only

10. Supporting Infrastructure

The supporting infrastructure required for the Honeymoon Operation is established and sufficient to support the life-of-mine production plan. Accordingly, no material expansion or change of the broader site infrastructure is required as part of the NFS with the exception of the Water Treatment Plant (WTP). The WTP provides treated water for wellfield conditioning, first flushing, bleed treatment, and process use. WTP capacity and availability are directly linked to the rate at which new wellfields can be commissioned and are therefore important enablers of the production schedule. This chapter focuses on the WTP expansion and the associated water-management infrastructure required to support its operation.

10.1 Water Treatment Plant

The WTP supplies reverse osmosis (RO) permeate for wellfield conditioning and general process requirements, including reagent preparation. Its capacity and availability are constraints on the rate at which new wellfields can be brought into production.

The life-of-mine plan assumes the commissioning of approximately eight new wellfields per year, with each wellfield conditioned over approximately 45 days. Delivery of this schedule requires sufficient water treatment capacity and permeate generation to support wellfield conditioning while continuing to meet the operating requirements of the process plant.

The WTP receives raw water, wellfield conditioning return liquor and BLS bleed. Treatment comprises:

- neutralisation to adjust pH and precipitate dissolved metals;
- softening to reduce calcium and other scale-forming constituents; and
- reverse osmosis to reject chloride and produce permeate suitable for reuse.

RO permeate is directed to the process plant and wellfields, while the RO reject stream is transferred to the Liquid Disposal Pond for disposal.

The wellfield flushing system takes permeate from the water treatment plant, adds sulphuric acid and injects the solution into the new wellfield pattern. This solution acidifies the wellfield pores and flushes the native groundwater from the aquifer. An equal volume of solution is extracted from that wellfield pattern, which is directed to the water treatment plant for treatment, essentially regenerating permeate to recirculate back into the wellfield.

Wellfield flushing is undertaken to manage the accumulation of constituents that can constrain operating capacity, particularly chloride, which can affect IX uranium recovery, and calcium, which can contribute to gypsum scaling in the wellfields. Chloride build-up can limit IX performance if not effectively controlled; however, the resin selected for Honeymoon has demonstrated the ability to reject higher chloride concentrations while maintaining uranium recovery under operating conditions.

Gypsum scaling was a key constraint during Uranium One's operation of the Honeymoon wellfield. Boss has actively managed this risk through flushing and bleed operations, with no evidence to date of scale formation in wellfield infrastructure or the processing plant. Calcium is present in the native groundwater and is also released through limited leaching of gangue minerals within the orebody and is required to be actively monitored and controlled.

The preparation of each wellfield is assumed in this NFS to require 1 pore volume equivalent (PVE) of flushing, to condition the wellfield for leaching, although the actual requirement will vary with individual wellfield mineralogy and solution chemistry. To date, Boss wellfields have required an average flush volume of approximately 0.7 PVE to manage calcium and chloride levels effectively. This indicates potential to accelerate wellfield development relative to the 1 PVE assumption adopted in the Study.

10.2 Existing Constraints

Operating experience has identified several limitations of the existing WTP affecting throughput, reliability and RO membrane longevity. These include:

- restrictions of gravity flow between the neutralisation clarifier overflow launder and softening reactors through to the softening clarifier;
- inadequate solids-settling performance of the neutralisation clarifier under elevated iron loading;
- limitations and condition issues within the reagent-dosing systems;
- insufficient instrumentation and pH-control capability;
- limited RO feed-tank capacity to adequately buffer feed flowrates;
- constraints within the existing RO feed and discharge manifolds; and
- Clean In Place (CIP) cycle times for the RO membranes.

Precipitate accumulation within the clarifier overflow launders has restricted gravity flow to the downstream process. Elevated iron concentrations in conditioning return liquor can also reduce solids-settling rates, increasing carryover to the RO circuit and contributing to membrane fouling.

The sodium carbonate and flocculant dosing systems are approaching the end of their service lives. Inadequate sodium carbonate dosing can allow elevated concentrations of scale-forming minerals to reach the RO plant, while inadequate flocculant addition further reduces clarifier performance. Limited automated pH control also constrains the ability to maintain optimum neutralisation and softening conditions.

The RO units perform most effectively when operated continuously at their intended duty. Insufficient or variable WTP feed, combined with limited RO feed-tank capacity, can cause frequent cycling. This reduces effective throughput and availability and increases membrane scaling, cleaning requirements and maintenance demand.

The EFS deferred the scope for an additional WTP, dedicated to wellfield conditioning, to the ramp-up of operations during stage 2. The deferral was based on the opportunity to reduce the overall size of the WTP, dependent on the actual WTP and flushing performance during stage 1. Based on the operational performance to date since restart, additional water treatment capacity is required to support the life-of-mine flushing and permeate production requirements and will be undertaken in two stages.

10.3 Upgrade Strategy

Stage 1 comprises near-term works to debottleneck the existing WTP, improving the capacity, availability and utilisation of the WTP and RO circuits. Stage 2 comprises the major expansion required to provide sustainable water-treatment capacity for the life-of-mine production schedule.

For personal use only

For personal use only

10.4 Stage 1—Existing Plant Optimisation

Stage 1 works are being implemented in parallel with the NFS and are intended to increase the volume and reliability of RO permeate available for wellfield conditioning. The principal works include:

- conversion of clarifier overflow launders from gravity discharge to pumped transfer, with pipework upgrades where required;
- installation of a gypsum return line to the softener;
- upgrades to the sodium carbonate dosing system;
- installation of a new RO manifold to increase flow;
- replacement of RO turbocharger units;
- installation of a new clean-in-place system capable of backflushing and high-flow membrane cleaning;
- development of an additional raw-water bore; and
- increased liquid-disposal pumping and bore capacity.

Conversion of the clarifier overflow systems to pumped transfer is expected to remove the hydraulic constraint associated with gravity flow. The new RO manifold is expected to increase the maximum capacity of each RO unit from approximately 110 m^3/h to approximately 150 m^3/h, allowing greater utilisation of the installed RO capacity while maintaining appropriate membrane operating conditions.

Following completion of Stage 1, the existing RO treatment train is expected to produce approximately 130 m^3/h of treated water. Higher RO feed rates can be achieved temporarily through raw-water blending; however, this operating mode depends on feed-stream conditions and increases membrane-fouling and equipment-availability risks. Stage 1 therefore provides an interim capacity uplift but does not remove the need for the Stage 2 expansion.

10.5 Stage 2—Major Capacity Expansion

Stage 2 addresses the fundamental WTP capacity constraint through:

- installation of a BLS bleed preconditioning and iron recovery circuit, reducing ferric sulphate import requirements;
- duplication of the neutralisation and softening unit operations;
- increased hydraulic supply from recovered process streams and raw water; and
- supporting upgrades to water supply, residue management and liquid-disposal infrastructure.

The completed Stage 2 expansion is designed to supply the RO plant continuously at its maximum feed rate of 300 m^3/h, producing approximately 210 m^3/h of permeate.

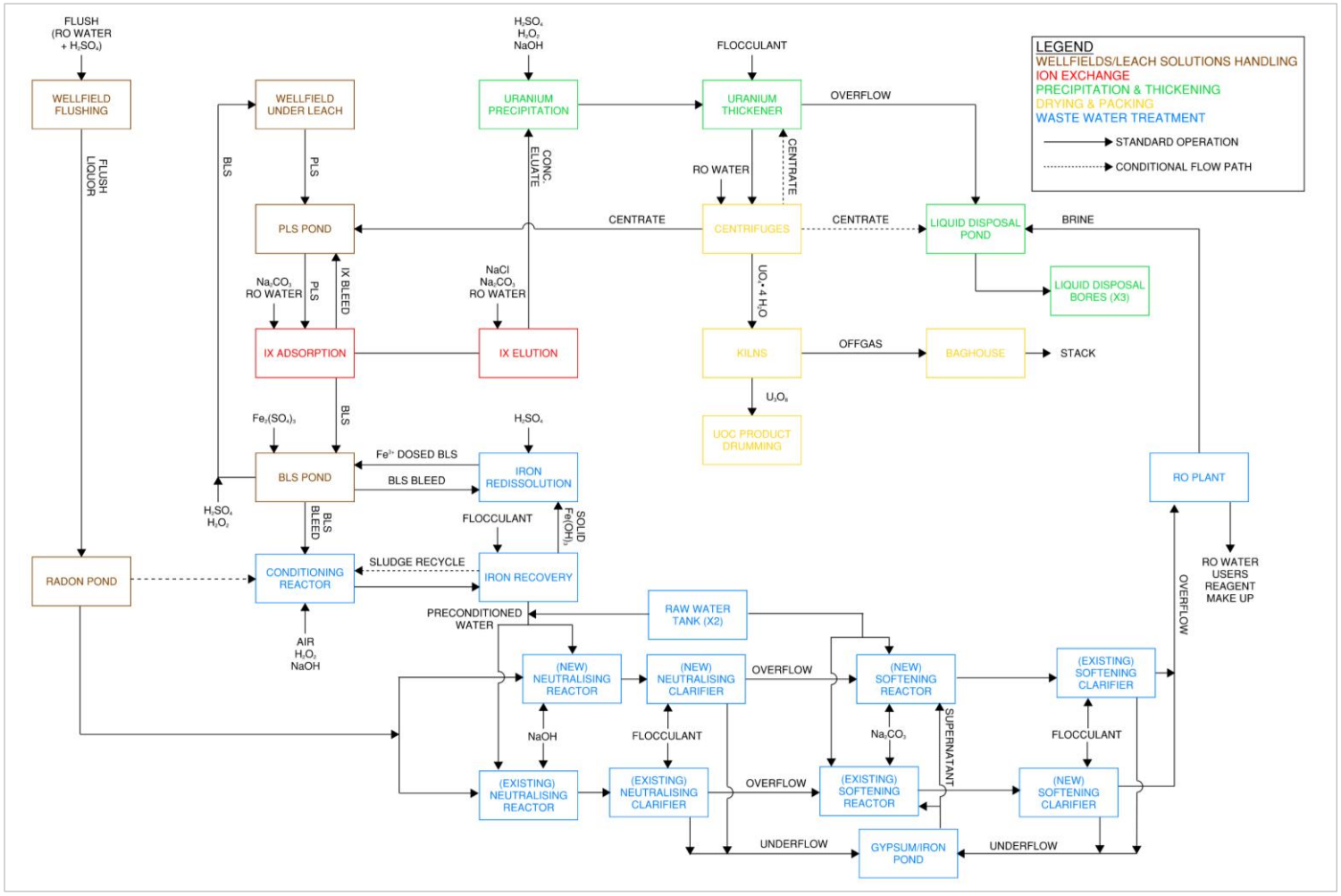


Figure 29: Proposed upgraded Water Treatment Plant Flowsheet

personal use only

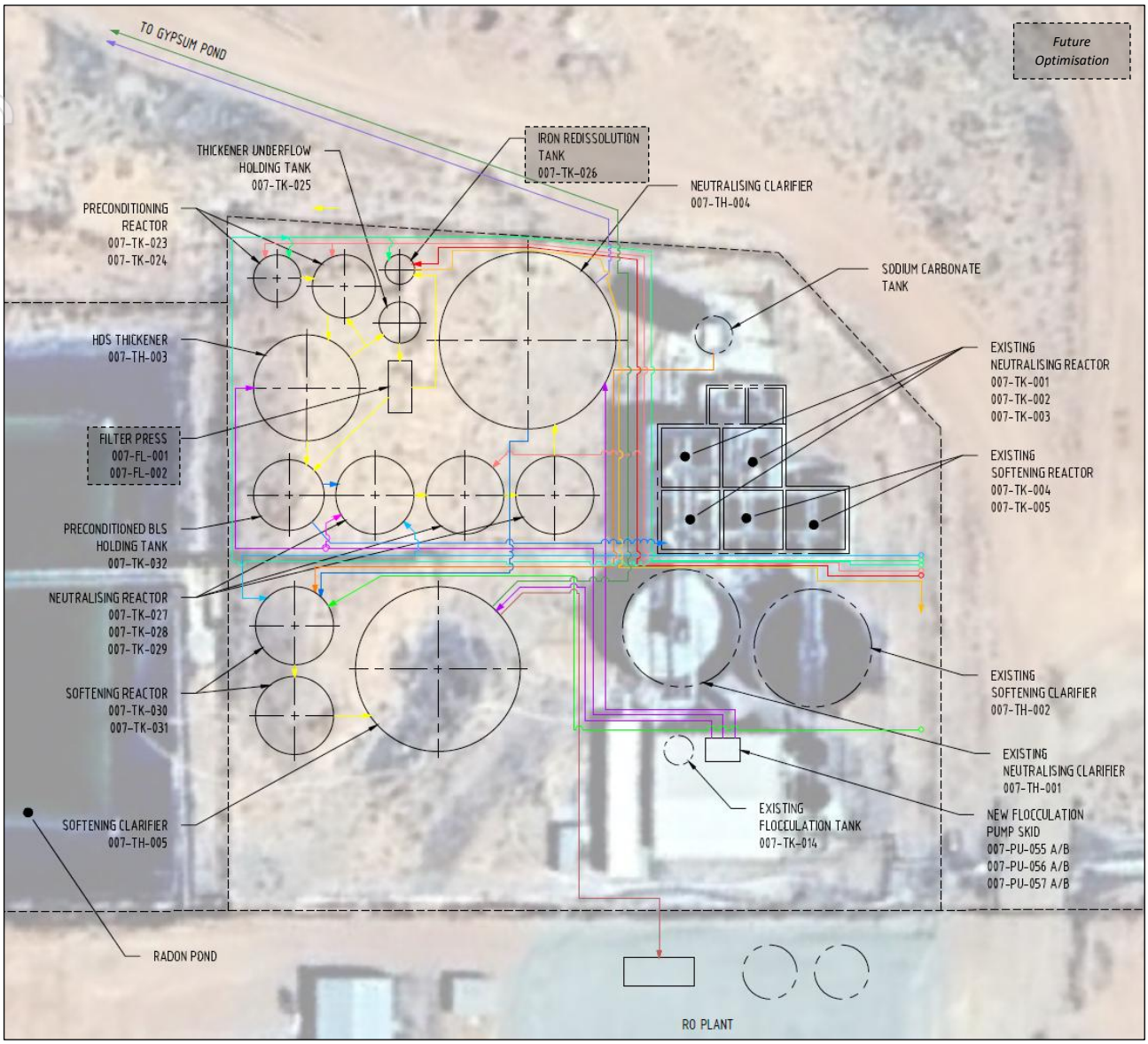


Figure 30: Proposed Upgraded Water Treatment Plant Layout

BLS Bleed Preconditioning

Stage 2 includes a BLS bleed preconditioning circuit intended to reduce iron loading to the neutralisation circuit and improve downstream clarifier performance. The current basis assumes iron-bearing solids can be recovered at a suitable underflow density and returned to the leach circuit as a slurry. Additional filtration, redissolution or associated equipment will remain subject to testwork outcomes and economic trade-off assessment.

The proposed preconditioning circuit will treat up to approximately 78 m^3/h of BLS bleed. The circuit is intended to selectively remove ferric iron and recycle to the leaching circuit to reduce ferric sulphate import and addition to the BLS pond.

Subject to operating conditions, the circuit may also be used to treat wellfield flushing return liquor, including iron removal and pH adjustment to approximately pH 4 before downstream treatment.

For personal use only

For personal use only

Additional Neutralisation and Softening Train

Stage 2 includes construction of a second neutralisation and softening train operating in parallel with the existing plant. The new train will duplicate the established process stages but will be sized to treat approximately 170 m³/h, supplementing the approximately 130 m³/h capacity of the existing train.

The combined trains will provide 300 m³/h of treated RO feed. This will substantially reduce reliance on raw-water blending, improve feed consistency and reduce RO membrane fouling and cleaning requirements.

10.6 Planned Operating Capacity

At a design RO permeate recovery of 70%, the Stage 2 system will generate approximately 210 m³/h of permeate from 300 m³/h of RO feed. After allowing approximately 70 m³/h for process plant requirements, approximately 140 m³/h will be available for wellfield conditioning and first flush.

Allowing for an estimated WTP availability of 90%, the effective conditioning capacity following Stage 2 is approximately 126 m³/h.

Table 13: Operating parameters of the Water Treatment Plant

Operating parameter	Stage 1 complete	Stage 2 complete
Neutralisation and softening capacity	130 m³/h	300 m³/h
Maximum RO feed rate	289 m³/h [9]	300 m³/h
RO permeate recovery	70%	70%
Maximum permeate production	202 m³/h	210 m³/h
Estimated process plant demand	60 m³/h	70 m³/h
Maximum water available for conditioning	142 m³/h	140 m³/h
Estimated effective availability	61–77% [10]	90%
Effective wellfield conditioning capacity	86–109 m³/h	126 m³/h

Although the Stage 1 maximum RO feed rate is comparable with the Stage 2 design rate, Stage 1 relies on raw-water blending and management of competing process-water demands. Consequently, its effective conditioning capacity and availability are lower and more variable. Stage 2 provides the sustained treatment capacity required to support the life-of-mine wellfield development schedule.

[9] *Dependent on raw-water blending to supplement treated WTP output.*

[10] *Dependent on feed-stream composition and operating conditions.*

For personal use only

10.7 Other Infrastructure

The increased WTP throughput will require corresponding expansion of supporting water-management infrastructure. The principal requirements include:

- additional raw-water production bores;
- increased liquid-disposal pumping and injection-well capacity; and
- progressive replacement of gypsum storage ponds.

Raw-water and liquid-disposal capacity will be expanded progressively as production increases. Gypsum storage capacity is consumed over time and will require staged replacement throughout the mine life. The existing gypsum pond is approaching the end of its available operating capacity, and replacement options will be incorporated into the ongoing infrastructure program.

10.8 Implementation

The first stage of the WTP workstream will involve the engagement of a specialist water treatment consultant to undertake a comprehensive review of the existing WTP. The objective of this review will be to confirm the current debottlenecking opportunities within the current facility and assess the potential to increase capacity through optimisation of existing infrastructure. The consultants will evaluate process constraints, equipment performance, operational bottlenecks, and potential low-capital improvements that could enhance plant throughput, verifying the current proposed scope.

In parallel with the debottlenecking assessment, a targeted test work program will be undertaken by an external specialist provider to support evaluation of a duplicate treatment train. The test work results will be used to establish the design basis, process design criteria, and equipment selection parameters required for a parallel WTP train capable of meeting the forecast production requirements.

Upon completion of the test work program, the specialist water treatment consultants will integrate the findings into a comparative options study. This study will define the scope, capital cost estimate, operating cost implications, implementation schedule, technical risks, and expected performance outcomes for both the debottlenecking option and the duplicate train option. An economic trade-off assessment will be completed to determine the timing, relative value and benefits of each alternative.

The outcomes of the options study will be reviewed by Boss for strategic consideration and selection of the preferred development pathway. Following option selection, the preferred solution(s) will advance through detailed engineering, execution planning, and final investment evaluation prior to a decision to implement.

Stage 1 is scheduled for completion in Q4 FY27. Stage 2 is scheduled for completion in Q3 FY28.

For personal use only

Table 14: Water Treatment Plant Implementation

Upgrade stage	Primary scope	Planned completion
Stage 1—existing plant optimisation	Debottlenecking of the existing WTP, including pumped clarifier transfers, dosing system upgrades, RO manifold upgrades, CIP improvements and supporting water-management works	Q4 FY27
Stage 2—major capacity expansion	BLS bleed preconditioning, duplicate neutralisation and softening capacity, increased hydraulic supply, and supporting water supply, residue and disposal infrastructure	Q3 FY28

Stage 2 will progress through process testwork, project definition, detailed design, procurement, construction and commissioning. The current schedule provides for internal scoping and testwork to commence in the first quarter of FY27, engineering design to commence in the third quarter of FY27, and major equipment installation to commence in the first quarter of FY28.

The Stage 2 scope and execution schedule remain subject to completion of testwork and detailed engineering. For the NFS, the planned capacity and implementation timing have been incorporated into the baseline production schedule so that wellfield commissioning rates remain aligned with forecast water-treatment capability.

For personal use only

11. Regulatory Approvals and Mining Tenure

11.1 Approvals Strategy

The existing Honeymoon operation holds full operational approvals and continues to operate on ML 6109 under an approved Program for Environment Protection and Rehabilitation (PEPR). Near-term production continuity requires only modification of the existing PEPR to reflect current operations and incremental change within the approved disturbance limits; new tenure and separate Commonwealth and State assessment are required only for the Honeymoon Mine Extension (HME), outside ML 6109.

Boss has engaged with the South Australian Department for Energy and Mining (DEM) throughout the NFS to confirm the approvals required to support the updated life-of-mine plan, maintain continuity of the existing Honeymoon operation and enable the proposed HME.

The approvals strategy comprises two related workstreams:

- **Existing Honeymoon Mining Lease (ML 6109)** - Staged updates to the approved PEPR to align the approval framework with current operations and accommodate near-term and future wellfield development within the existing lease.
- **Honeymoon Mine Extension** - Commonwealth and South Australian assessment, grant of a new ML over the adjoining northern wellfield areas and subsequent incorporation of the extension into an amended, integrated Honeymoon PEPR.

The workstreams are being progressed in parallel where practicable. This approach will maintain regulatory continuity for production within ML 6109, avoid unnecessary duplication and provide the tenure and operational approvals required to develop the extension.

At the NFS effective date, Boss had completed the applicable self-assessment and submitted the first PEPR update to DEM capturing the change to the wellfield spacing, with formal approval pending. The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) referral is complete and pending lodgement, preparation of the Mining Lease Proposal had commenced, and the supporting environmental, technical and stakeholder workstreams were progressing.

Boss has established a constructive working relationship with key South Australian and Commonwealth regulatory agencies, including the South Australian Department for Energy and Mining and the Commonwealth Department of Climate Change, Energy, the Environment and Water and other relevant agencies. The Company acknowledges the support provided by these government agencies for the continued operation and future development of Honeymoon. This early and ongoing engagement has assisted Boss in defining a clear and coordinated approvals pathway for the life-of-mine plan, while recognising that all applications remain subject to the applicable statutory assessment processes.

The life-of-mine plan assumes that all approvals required to commence production from the HME will be obtained by January 2030. This timing is believed to be achievable given the status of workstream and based on engagement with regulatory authorities.

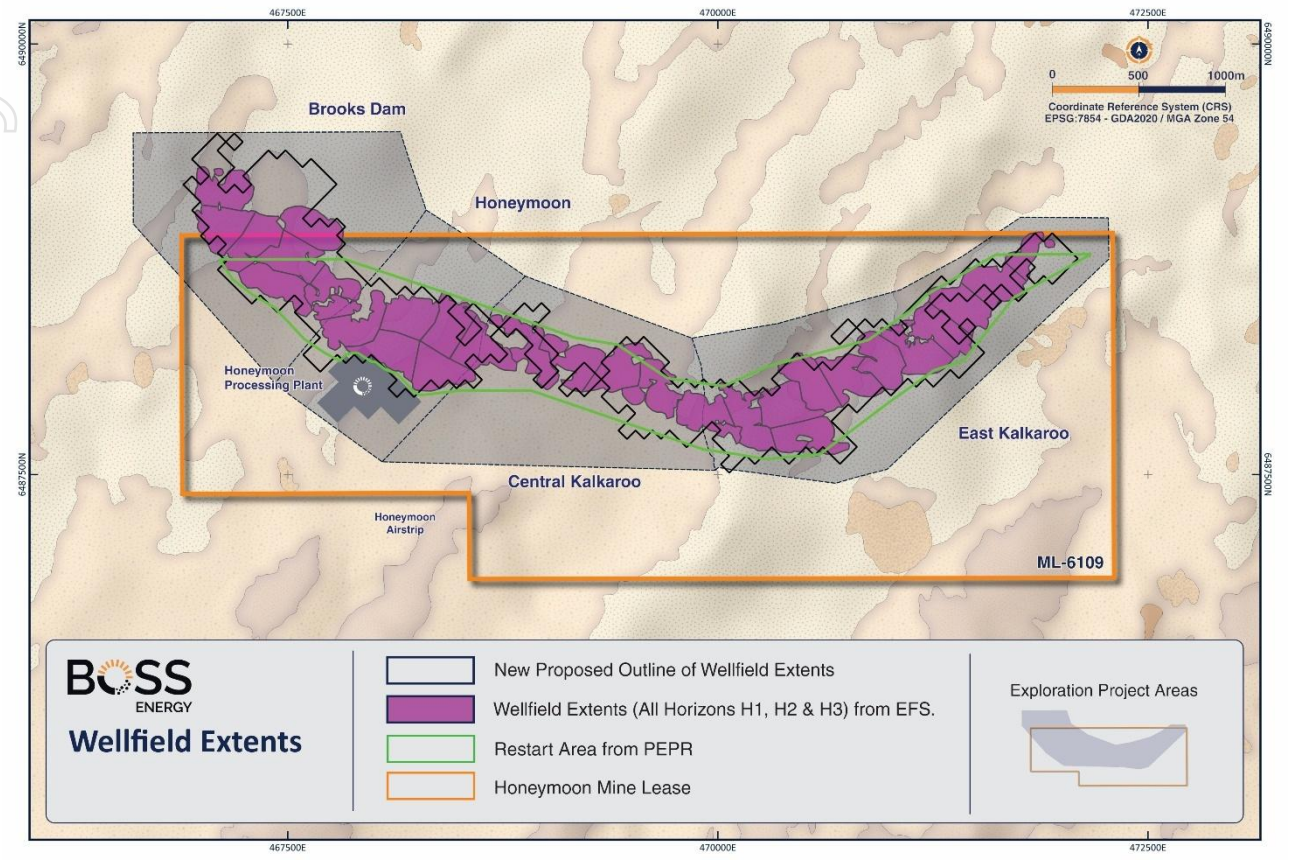


Figure 31 - Comparison between the new proposed wellfield outlines (black), all wellfield horizons from the EFS (purple) and the restart area from within the PEPR (green). The new wellfield outline contains a slightly larger footprint than previous designs.

11.2 Existing Tenure and Approvals Coverage

Honeymoon currently operates on ML 6109 under an approved PEPR. The updated life-of-mine wellfield outline extends beyond both the original restart configuration and, in the north, the boundary of ML 6109.

Within the ML 6109, the transition to a wide-spaced wellfield design does not, of itself, introduce a new environmental impact pathway. However, all development must remain within the ML extent and be consistent with the disturbance limits, environmental outcomes and management controls established under an approved PEPR.

The existing Honeymoon PEPR provides the environmental management framework for mining within ML 6109 and considers resource and wellfield areas beyond the original restart configuration. It cannot authorise mining outside the lease. For ISR mining, this constraint applies not only to the location of surface wellheads, but also to the injection, circulation and recovery of mining solution and the associated hydraulic-control envelope and monitoring network.

Consequently, portions of the Yarramba Palaeochannel mineralisation near and beyond the northern boundary of ML 6109 cannot be developed under existing tenure, either because the mineralisation lies outside the ML 6109 or because the wellfield geometry, infrastructure and groundwater-management controls cannot be accommodated within it. This is a tenure and approvals constraint rather than an absence of identified mineralisation or resource potential.

For personal use only

For personal use only

Within ML 6109, operational changes are being incorporated through staged modifications to the existing approved PEPR rather than a new approval:

PEPR Update 1 has been submitted and is intended to support uninterrupted near-term production while aligning the approval documentation with current operating practices. It includes updated ISR wellfield design principles, including larger pattern spacing; revised operational waste and native vegetation management plans and review of the applicability of the natural attenuation model to East Kalkaroo.

PEPR Update 2 may be required following completion of the NFS, further wellfield trials and detailed design. Its scope will depend on the extent of change from the currently approved operation and may include the updated life-of-mine schedule and resource or reserve basis, future wellfield sequencing, plant throughput, infrastructure and disturbance requirements, waste and gypsum management, and updated closure, rehabilitation and financial-assurance provisions. If required, submission is targeted for early 2027.

11.3 Honeymoon Mine Extensional Approval Pathway

Additional tenure is required where the proposed wellfields and their associated hydraulic-control and monitoring envelopes extend beyond ML 6109. The HME is intended to provide the tenure and approvals envelope for the northern wellfield areas, together with the required trunklines, power supply, monitoring infrastructure and access. Uranium-bearing solution from the extension would be transferred to the existing Honeymoon processing and supporting facilities, which are not expected to require material modification as a consequence of the extension.

The extension is being assessed using a development envelope and maximum predicted disturbance footprint rather than a fixed wellfield layout. This approach allows the final wide-spaced wellfield configuration and infrastructure corridors to be refined through detailed design, provided they remain within the nature, scale, location and impact extent assessed and approved.

The principal approval steps are:

- **EPBC Act referral and approval** - The HME project will be referred to the Commonwealth under the EPBC Act on the basis that ISR recovery of uranium constitutes the mining of uranium ore which is defined as a nuclear action under section 22(1)(d). For NFS planning purposes, Boss has assumed that the HME will be determined as a controlled action requiring Commonwealth assessment and approval. The preferred pathway is an accredited South Australian assessment under the EPBC Act using the Mining Lease Proposal and Mining Act assessment process, followed by a separate Commonwealth approval decision. The assessment approach will be confirmed following the EPBC Act referral decision.
- **New Mining Lease** - A Mining Lease Proposal will be submitted to DEM under the Mining Act 1971. It will define the proposed development and disturbance envelopes, baseline environmental, social and cultural values, stakeholder consultation, anticipated impacts and management measures. Grant of the Mining Lease will provide mining tenure over the extension area.
- **Integrated PEPR amendment** - Following grant of the new Mining Lease and receipt of the Commonwealth approval, the existing Honeymoon PEPR will be amended to incorporate the extension. The amended PEPR will be based on the current Honeymoon PEPR, updated to incorporate the new Mining Lease area, the extension wellfields and connecting infrastructure, and any additional environmental outcomes, measurement criteria, operating controls and approval conditions arising from the Mining Lease and EPBC Act assessments. It will provide a single, integrated environmental

For personal use only

management framework for the combined operation; a separate standalone PEPR for the extension is not proposed.

- **Native title, heritage and land access** - The applicable native title process will be completed in parallel with the approvals pathway. Aboriginal heritage requirements will be addressed through engagement, surveys, avoidance in final design and the applicable heritage agreement and management framework. Pastoral access arrangements will also be completed as required.
- **Ancillary authorisations** - The existing environmental, radiation, safeguards and export authorisations will be reviewed and varied where required to reflect the final extension scope. Because processing, groundwater treatment, reagent storage, product packaging and process-waste management will continue through the existing Honeymoon facilities, the current licences and permits are expected to remain the primary regulatory instruments.

This sequence is a conventional extension of the existing Honeymoon regulatory framework. The available lead time enables the major assessment, tenure and stakeholder workstreams to be completed in an orderly manner ahead of the planned commencement of extension production.

11.4 Work Completed

Boss has undertaken systematic heritage surveys across the planned wellfield development areas within ML 6109. Following surveys over the remainder of East Kalkaroo in May and June 2026, substantially all currently planned production areas have been surveyed, other than minor peripheral areas. Identified heritage sites, principally associated with claypans, will be incorporated as avoidance areas in the final wellfield and infrastructure layouts. Based on the survey results available at the NFS effective date, these sites are not expected to prevent development of the planned wellfields, although localised adjustments to well locations, access routes or infrastructure corridors may be required.

Substantial preliminary work has also been completed for the HME, including:

- definition of the proposed project area, wellfield extent, disturbance envelope and interface with the existing operation;
- review of historical ecological information and preliminary assessment of relevant EPBC Act listed matters;
- targeted ecological surveys
- review of historical groundwater, transport and natural attenuation studies and definition of extension-specific modelling requirements;
- additional baseline groundwater sampling of the Eyre Formation Aquifer;
- collection of project-specific radiological monitoring data;
- commencement of the Mining Lease Proposal; and
- engagement with Traditional Owners and stakeholders regarding native title, Aboriginal heritage and pastoral access.

This work builds on the substantial environmental, hydrogeological, operational and monitoring information already available for the existing Honeymoon operation and provides a sound basis for completing the extension assessments.

11.5 Implementation Program

The remaining program is focused on completing the extension-specific baseline and impact assessments, continued stakeholder engagement, submitting the EPBC Act referral and Mining Lease Proposal, progressing the applicable native title and heritage processes, and incorporating the extension into the integrated Honeymoon PEPR.

The principal technical activities include finalisation of the ecological and native vegetation assessments; completion of the radiological impact assessment; refinement of hydrogeological and geochemical models; and development of the monitoring, natural attenuation, rehabilitation and verification framework for the integrated operation.

These activities are established components of the assessment of an ISR uranium operation and are being advanced alongside detailed design. The final wellfield layout, infrastructure corridors and disturbance footprint will be maintained within the assessed development envelope, allowing design optimisation to continue without changing the fundamental project scope.

Boss has an established regulatory framework for continued operations within ML 6109 and a clearly defined pathway for the HME. The work completed to date, ongoing engagement with regulators and stakeholders, use of existing processing and supporting infrastructure, and ability to progress the principal workstreams in parallel provide confidence that the approvals program can support the life-of-mine schedule.

On this basis, the NFS assumes that the required approvals will be in place to support production from the HME from January 2030. This is considered a reasonable and achievable study assumption, supported by the existing approvals held for the Honeymoon operation, the advanced status of the extension approval workstreams and ongoing engagement with the relevant authorities. As with any statutory approvals process, the timing and final conditions are determined by the relevant authorities. On the basis of the work completed and the defined approvals pathway, approvals are not considered a principal project risk at the NFS effective date and will be managed through the project schedule, ongoing regulator engagement and maintenance of appropriate sequencing flexibility within ML 6109.

For personal use only

For personal use only

12. Life-of-Mine Plan and Production Schedule

Following selection of the preferred wellfield design, a life-of-mine sequencing exercise was undertaken to determine the timing and order of wellfield development. While the wellfield development strategy has been revised relative to previous studies, the processing plant, trunkline network and pumping infrastructure remain adequately sized to support the updated production profile and therefore retain their original design basis.

Table 15 summarises the principal KPIs of the baseline life-of-mine sequence. The resulting development plan delivers approximately 14.5 Mlbs U_3O_8 extracted over a nine-year operating period while maintaining a balanced relationship between uranium recovery, wellfield development intensity and operational manageability. The production profile is supported by 59 wellfields, 1,340 wells and an average of 16 active wellfields, providing a practical basis for long-term operation and production sustainability.

Table 15: Summary of the principal Key Performance Indicators (KPIs) of the baseline life-of-mine sequence.

Parameter	Unit	NFS
Mine Total Extraction	Mlbs U_3O_8	14.5
Mine Total Drummed	Mlbs U_3O_8	13.8
Maximum annual production	Mlbs U_3O_8 p.a.	1.9 - driven by PLS tenor
Total Wells	#	1,340
Total Wellfields	#	59 (eight 5-spot patterns)
Average Active Wellfields	#	16
Recovery	%	90
Life-of-mine Duration	Years	9

A summary of the proportion of drummed production by resource classification and resource that is within and outside of ML6109 is set out below.

Table 16: Resource classification and resource within and outside of ML6109

Resource classification (%)	Within ML6109	Outside of ML6109	Total
Indicated	55	10	**65**
Inferred	30	5	**35**
Total	**85**	**15**	**100**

For personal use only

12.1 Sequencing basis

Wellfield scheduling was constrained by the key operational and infrastructure assumptions summarised in Table 17 including processing plant capacity, trunkline capacity, minimum wellfield start-up intervals, infrastructure availability.

The minimal wellfield start-up interval is linked to the flushing phase which represents the critical path to ramping up. Prior to production, each wellfield is flushed using treated water to reduce calcium concentrations and minimise the risk of premature gypsum precipitation during acidification. Consistent with current operating practice, a target of approximately one pore volume equivalent (PVE) of permeate has been adopted. The capacity of the water treatment plant therefore constrains the rate at which new wellfields can be brought online and is reflected in the minimum wellfield start-up interval adopted for scheduling purposes. A dedicated section of this Feasibility Study discusses the planned expansion of the water treatment plant required to support future development rates (refer to Section 10).

Additional sequencing criteria were introduced:

- to prioritise Indicated Resources during the first year of the life-of-mine; and
- to maintain an appropriate balance between development of the Honeymoon, Brooks Dam and East Kalkaroo mining domains throughout the life-of-mine.

Table 17: Main operational and infrastructure assumptions used for the life-of-mine sequencing

Parameter	Unit	NFS	Comment
Patterns per wellfield	#	8	49 m injector-to-extractor patterns
Minimum start interval	Days	45 - 75	Represents the minimum time interval between the start-up of two wellfields. Constrained by the Water treatment Plan Capacity. A ramp-up over the 24 first months was considered to reflect the increase in water treatment capacity needed to support the development schedule
Plant hydraulic max. capacity (ave)	m^3/h	2,450 (2,940)	Current (column #6 operational Q2 FY30)
Trunkline hydraulic max. capacity	m^3/h	2,000	Per Trunkline (Honeymoon, East Kalkaroo, Brooks Dam)
Brooks Dam Trunkline extension		Q1 FY28	
Brooks Dam north Mining lease extension		Q3 FY30	

Each generated wellfield was assigned its own production profile derived from RTM simulation results. Consequently, the production response of each wellfield reflects not only its geometry and wellfield configuration, but also the local distribution of uranium grades, mineralised thickness and reservoir characteristics represented within the resource block model.

As a result, production forecasts are derived directly from simulated reservoir performance rather than from generic recovery assumptions, allowing geological and hydrogeological variability to be carried through to the life-of-mine production schedule.

Wellfield production was assumed to continue until the predicted PLS tenor declined below a cut-off concentration of 10 mg/L U_3O_8, which was adopted as the production termination criterion for life-of-mine scheduling purposes. This cutoff represents the breakeven point based on variable operating costs and an allocation of indirect costs. The cutoff concentration will continue to be optimised based on changing economic conditions and mine sequencing.

12.2 Sequencing results

Figure 32 to Figure 35 presents the principal outputs of the baseline life-of-mine sequence. The production profile increases progressively to reach a nominal plateau of 2 Mlbs U_3O_8 to the ion-exchange columns which results in 1.9 Mlbs U_3O_8 per annum after applying a 95% recovery factor.

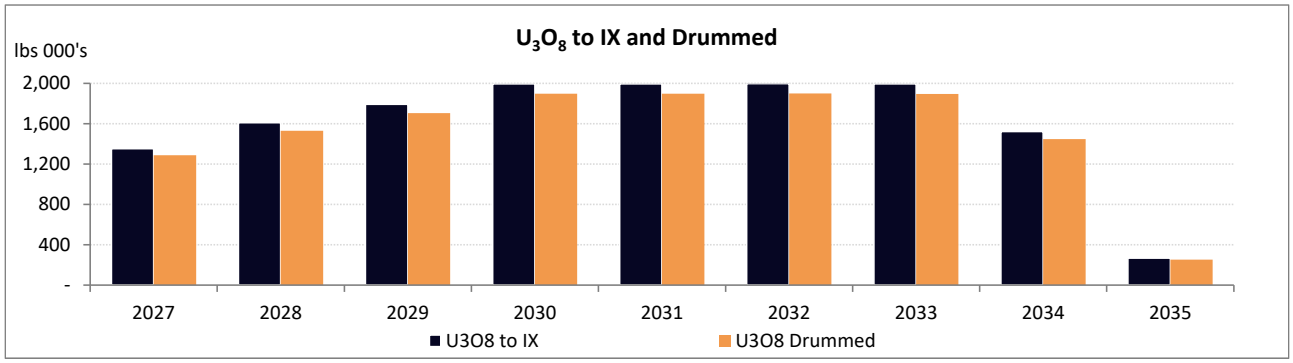


Figure 32: U_3O_8 to the ion-exchange columns and U_3O_8 drummed.

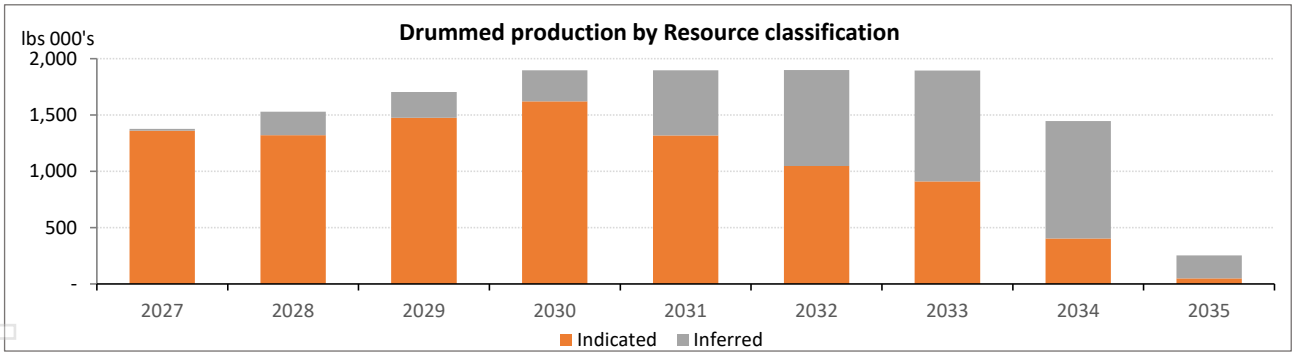


Figure 33: U_3O_8 drummed by resource classification.

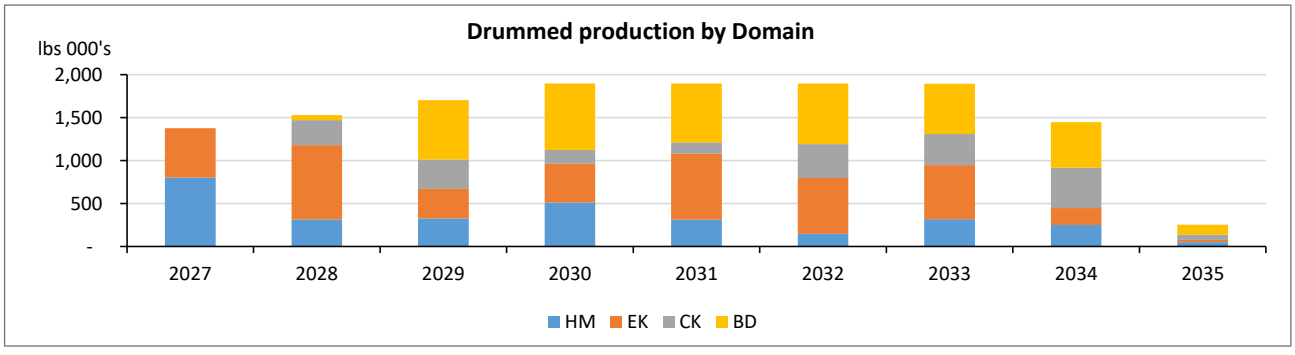


Figure 34: U_3O_8 drummed by domain (Honeymoon, East Kalkaroo, Central Kalkaroo and Brooks Dam).1

For personal use only

For personal use only

Figure 35 presents the flow rates together with average PLS tenor. Plant flow rates remain below the maximum hydraulic capacity throughout the life-of-mine, assuming NIMCIX column 6 is brought online by Q2 FY30, maintaining an operating margin of approximately 5–10% to accommodate maintenance activities and operational flexibility. Similarly, trunkline flow rates remain comfortably below the adopted operational limit of 2,000 m³/h. Average PLS tenor remains relatively stable at approximately 36 mg/L until 2033.

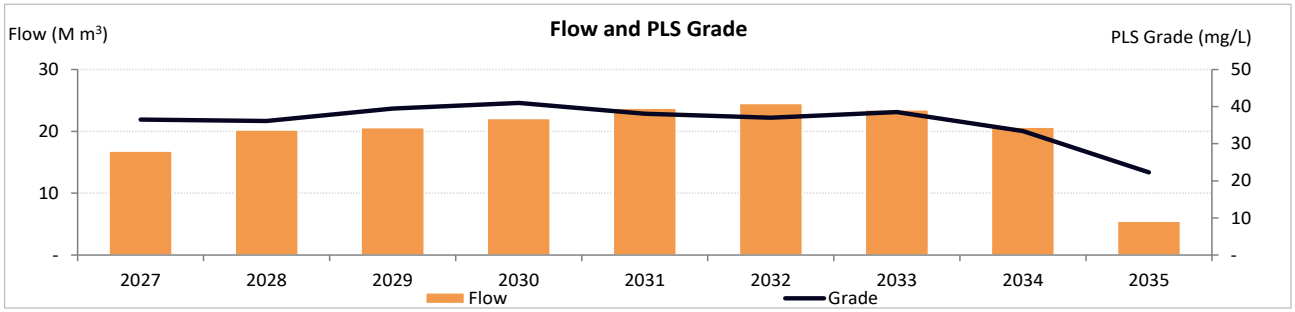


Figure 35: Total flow to the ion-exchange columns and average PLS grade.

Figure 36 shows the evolution of the number of active wellfields throughout the life-of-mine. The number of active wellfields increases from 6, 16 patterns wellfields at the start of 2027 to around 23, mostly 8 pattern wellfields by 2032, reflecting the wellfield inventory required to sustain a wellfield production rate of approximately 2 Mlbs U_3O_8 to the ion-exchange columns (1.9 Mlbs drummed U_3O_8). Drilling activity remains relatively stable throughout the mine life and includes a base level of approximately 200 technological wells per year. The rate of wellfield commissioning progressively increases from five wellfields per year during the initial ramp-up period to eight wellfields per year once steady-state operations are achieved, reflecting the planned expansion of pre-commissioning flushing capacity.

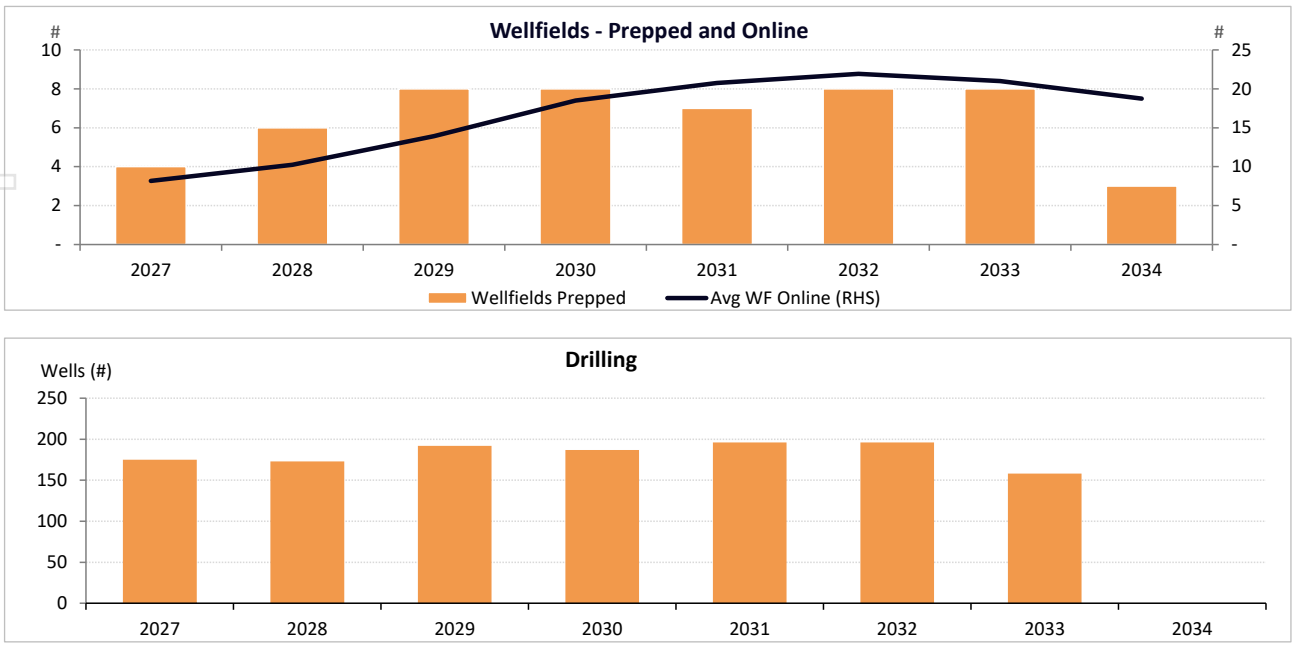


Figure 36: Summary of the baseline life-of-mine sequence showing drilling, wellfield commissioning schedule and simultaneous operation.

As wellfields mature, a growing proportion of individual patterns become depleted. This creates opportunities to rationalise field operations through the consolidation of production circuits and reconnection of active patterns, thereby reducing the number of wellhouses required.

The Reserve Preparation Ratio (RPR), which compares the recoverable uranium available within commissioned wellfields to annual production requirements, remains slightly above 2 during ramp-up and stabilises between 1.8 and 2.0 once steady-state production is achieved, indicating an appropriate level of reserve preparation throughout the life-of-mine. These values are consistent with recognised ISR operating practices, indicating that sufficient recoverable inventory has been prepared ahead of production requirements while maintaining an appropriate balance between reserve readiness and capital deployment.

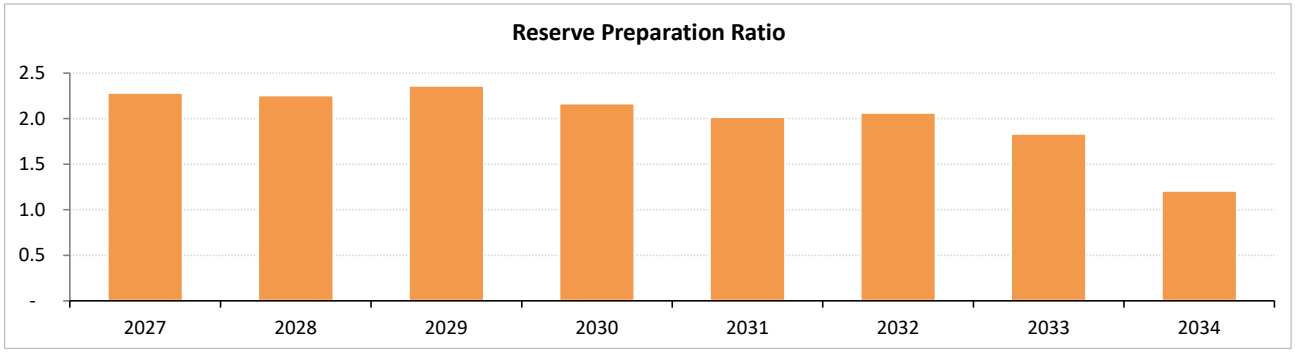


Figure 37: Summary of the baseline life-of-mine sequence showing Reserve Preparation Ratio.

For personal use only

13. Operating and Capital Cost

13.1 Operating costs

The estimated operating costs have been developed based on the physical assumptions in the life-of-mine plan and production schedule set out in Section 12 which reflects a ramp-up to 1.9 Mlbs drummed U_3O_8 in FY2030 and a transition to the NFS base case.

The estimated operating costs have been based upon a combination of sources and assumptions, including the following:

- actual operating costs recorded in FY2025 and FY2026
- actual reagent consumption data adjusted for a transition to the NFS base case
- leaching performance forecast based on the RTM
- estimated increases in wellfield operating costs are attributed to having a higher average number of wellfields operating concurrently
- estimated maintenance costs based on a life-of-mine through to 2035
- AUD:USD of 0.70
- flat real uranium price of US$90/lb
- contracted sales as at 30 June 2026
- labour costs based on current costs adjusted in future years to appropriately reflect production.

The operating cost estimates presented in this report are considered to have an accuracy of -10% /+ 15%. Unless otherwise indicated, all financial values are stated in real Australian dollars (A$) as of the fourth quarter of FY2026, do not allow for escalation (unless otherwise noted) and exclude Australian goods and services tax (GST).

13.1.1 C1 Cost

Annual C1 costs decrease slightly from FY27 to FY30 as production increases and the fixed cost per pound produced is fractionalised. To the extent that production can be ramped up faster (which is mostly dependent on the requirements and capacity for water treatment), it is expected that the C1 costs and AISC would decrease faster.

A breakdown of the operating cost by category is set out in Figure 38 below. Sulphuric acid and other reagents and consumables represent ~40% of annual operating costs.

For personal use only

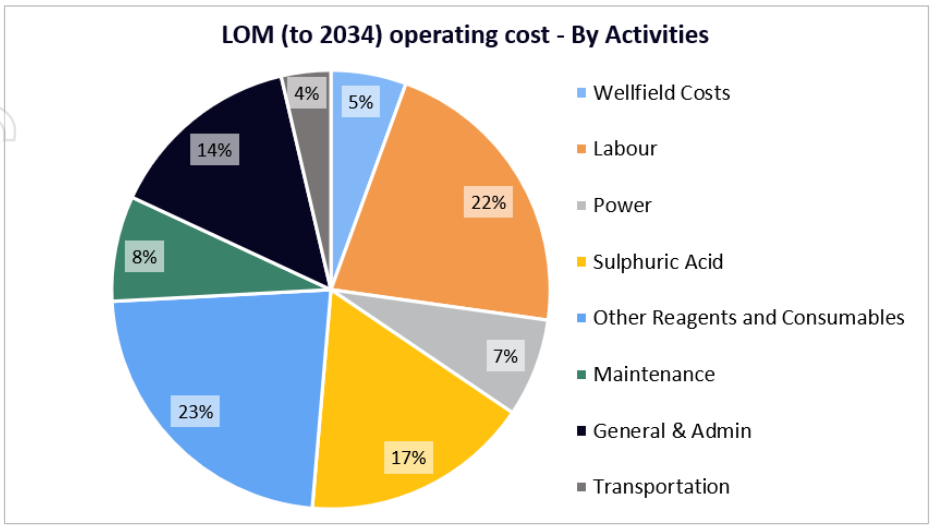


Figure 38: Operating cost by activities

13.1.2 Reagents and consumables

The largest component of operating costs is reagents and consumables, which represent approximately 40% of operating cost per pound produced. The primary driver of reagent cost is the average grade, which is a measure of the amount of uranium contained in each cubic metre of PLS, with sulphuric acid and hydrogen peroxide driving most of the cost. The remainder of reagent costs (a much smaller proportion) are comprised of sodium carbonate and sodium chloride and other reagents which are required during the elution, precipitation and thickening stages. This cost also includes the estimated cost of ongoing top-ups of resin beads, antiscalant for the RO plant and consumables during the drying and packing stage. Note that while ferric sulphate is one of the primary reagents used, the cost of this is capitalised as a 'first fill' and represented in sustaining capital which is included in the AISC for FY27. From FY28 onwards approximately 81% is allocated as first fill and represented in sustaining capital.

13.1.3 Labour, general and administrative

The largest component of costs is labour and general and administrative costs, which represent approximately 36% of annual operating costs. These costs are mostly fixed and demonstrate the opportunity to reduce fixed production costs per pound by increasing drummed production. The costs represent the cost for on-site team members, camp costs, flights, insurance, health and safety, environmental and radiation (including licenses and waste disposal).

13.1.4 Other operating costs

The other operating costs mainly consist of wellfield costs, maintenance, power and transportation costs (for U_3O_8 to the converter):

- Wellfield costs are mainly driven by the number of wellfields online and PLS flow. They primarily reflect the estimated cost of airlifting (injecting compressed air into wells to improve flow rates), repairing downhole pumps and replacing filter bags. These costs could potentially be reduced slightly if the larger well spacing is pursued.
- Maintenance costs are expected to remain mostly consistent with most of the cost related to maintaining the primary plant. Some increases in costs are expected as additional wellfields are operated in parallel.

For personal use only

13.2 Capital Cost Estimate

Total capital cost over the life-of-mine primarily comprises sustaining capital of $308M, relating to the cost of bringing on new wellfields. $58M of capital relates to process facilities, reflecting scheduled upgrades, the cost to complete NIMCIX column 6, as well as the planned increase to water treatment capacity to support the wide-spaced well design.

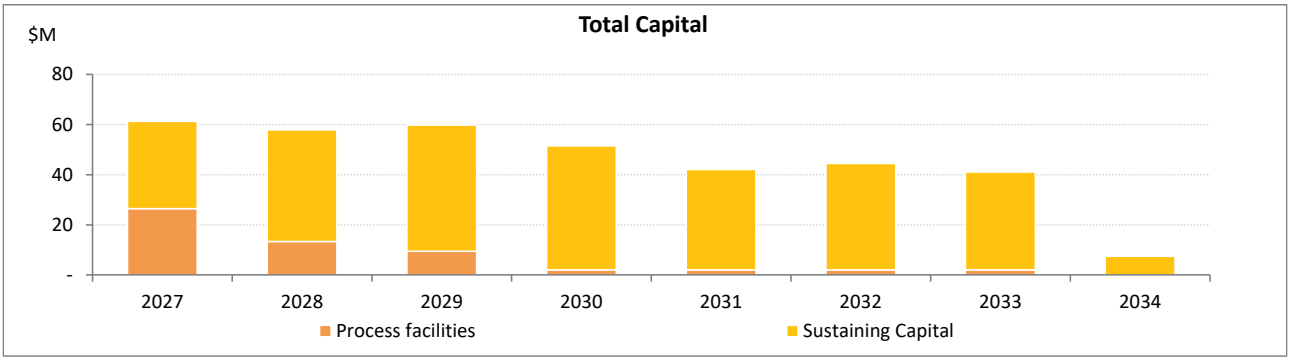


Figure 39: Capital cost estimate by Process facilities and Sustaining Capital

13.2.1 Sustaining capital

Sustaining capital costs ostensibly reflect the capital to install the additional wellfields but also includes on-going costs related to the plant and ancillary infrastructure to underpin the life-of-mine production plan.

Life-of-mine sustaining capex is estimated to be $308M, equating to an average of $22/lb over the life-of-mine. This primarily reflects the cost of bringing on additional wellfields: wellfield equipment of $118M; first fills of $102M; and production wells of $82M.

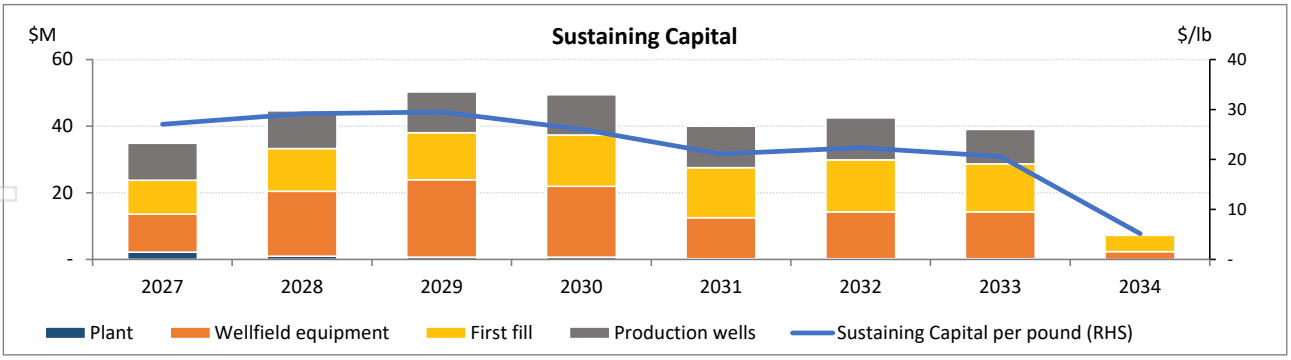


Figure 40: Sustaining capital profile

The costs reflect a combination of costs driven by the RTM (number of wells, wellhouses and quantity of flushing / first fill) as well as forecasts based on actual and estimated costs of wellfield infrastructure. The costs have been based on the future 8 pattern wellfield design for the NFS base case. On average, each wellfield is expected to cost between $5-7M depending on configuration and whether the equipment is all new or includes some reused equipment.

For personal use only

The primary drivers and composition of each cost are set out below:

- Wells are primarily comprised of drilling, casing and screening costs to install injection and extraction wells. The number of wells and costs have been based upon the NFS base case. These costs could potentially be reduced if the larger well spacing is pursued. No re-screening of wells has been assumed i.e. where new horizons are planned to be mined, a new well has been assumed.
- Wellfield infrastructure represents the cost to purchase (for a new wellfield) and install a new wellhouse as well as the HDPE pipes and pumps. It is expected that some of the wellhouse infrastructure can be reused, which has been assumed to be from FY31 onwards. These costs could potentially be reduced if the larger well spacing is pursued.
- Flushing and first fill costs represent the cost to treat one pore volume of water and fill one pore volume with the reagents that are required to bring the wellfield to the conditions required to enable leaching of the uranium. The costs are substantially represented by the cost of ferric sulphate, sulphuric acid and sodium hydroxide, which make up a smaller portion of the costs. These costs are expected to remain similar, regardless of the wellfield spacing.

The balance of the life-of-mine sustaining capex relates to the ongoing sustaining costs associated with maintaining the processing plant and supporting infrastructure. Plant sustaining capital is based on an estimate of ongoing capital required to sustain operating rates set out in the life-of-mine plan. On the basis that the plant has only recently been recommissioned, this cost has been estimated from industry averages.

13.2.2 Process Facilities

The life-of-mine plan requires approximately $58M in additional capital over the life-of-mine. This principally comprises Stage 1 and Stage 2 of the water treatment plant expansion ($24M), additional gypsum ponds ($11M), NIMCIX column 6 ($8M), and the Brooks Dam trunkline and HV power extension ($4M).

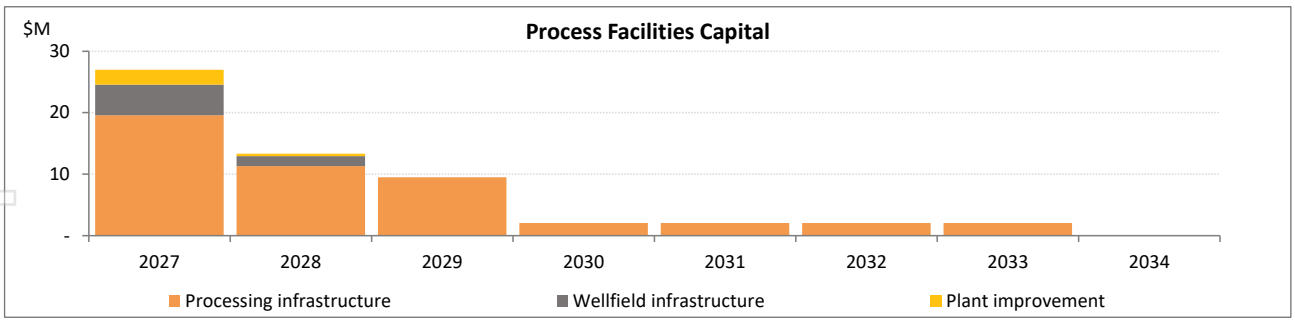


Figure 41: Process Facilities Capital

For personal use only

A summary of major capital estimates has been set out in Table 18 below based on the AACE class of estimate as nominated.

Table 18: Summary of major capital cost estimates

Upgrade	$M	AACE Class	Execution	Timing (operational)
Water treatment plant – Stage 1	5	4 (-30% / +50%)	12months	Q4 FY27
Water treatment plant – Stage 2	19	4 (-30% / +50%)	18months	Q3 FY28
NIMCIX column 6	7	2 (-15% / +20%)	6months	Q2 FY30
Brooks Dam Trunkline & HV extension	4	3 (-20% / +30%)	4months	Q1 FY28
TOTAL	**35**			

Additional key points to note are:

- Water treatment plant – Stage 1: Reflects the cost to implement the program set out in Section 10.4
- Water treatment plant – Stage 2: Reflects the cost to implement the program set out in Section 10.5
- NIMCIX column 6: Reflects the cost to implement the program set out in Section 9.3
- Brooks Dam Trunkline & HV Extension: Reflects the cost of building a trunkline and HV extension to enable the wellfields in the Brooks Dam domain to be brought online.

13.3 Comparison to previous wellfield design

As noted throughout the feasibility study, the NFS base case has substantially improved the cost structure at Honeymoon by improving PLS tenor grade and reducing the amount of wellfield infrastructure required. The benefits of the NFS base case (intermediate spacing) are demonstrated in Figure 42 below. Under the old wellfield design that was being pursued through the previous EFS, the AISC would have been, on average, almost $30/lb higher than under the NFS base case. This significant improvement demonstrates the benefits of the strong technical capability that Boss has now built.

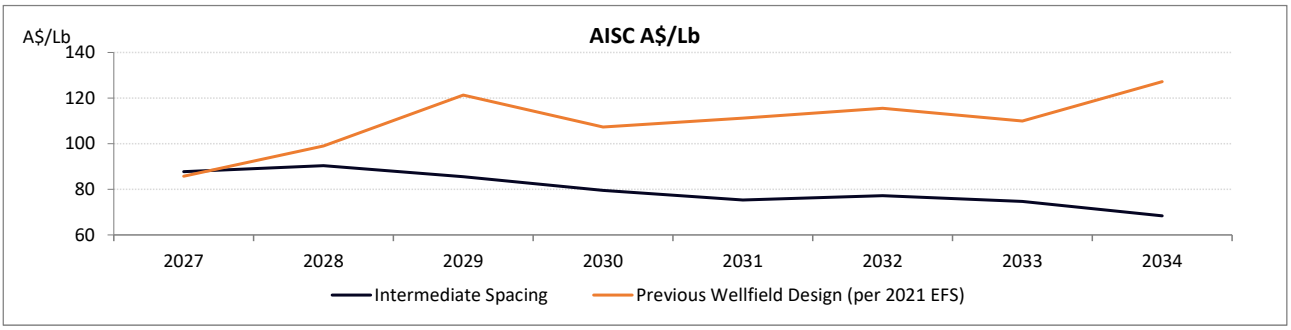


Figure 42: AISC for the NFS base case (Intermediate Spacing) vs the previous wellfield design

For personal use only

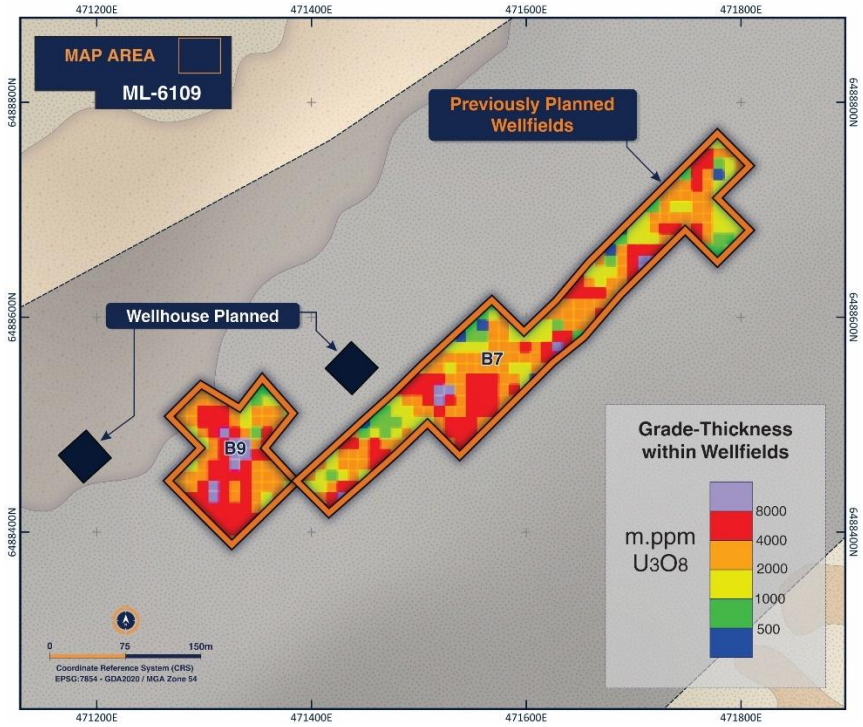
The NFS base case is expected to materially improve economic returns as compared to the previous wellfield design as the stepping out of the wellfield spacing is estimated to result in:

- a larger horizontal surface area and vertical distribution that has accumulated additional lower grade uranium into the wellfield that would have been excluded under the previous design;
- fractionalising the upfront capital of the wellfield infrastructure (such as the number of wellhouses, wells and pumps) over a greater distance and quantity of uranium; and
- increasing processing efficiency below ground by increasing the residence time and distance travelled by the lixiviant, resulting in a higher PLS grade which reduces the quantity of reagents required to achieve full extraction of the wellfield. This reduces the C1 cost and increases the average pounds produced each day.

An illustrative example of the expected benefit of the wide-spaced wellfield design is set out below based on the change from Wellfield B7 / Wellfield B9 into Wellfield EKT1, which is a trial pattern scheduled to commence flushing in August 2026.

For personal use only

Wellfield B7 / B9



Wellfield EKT1

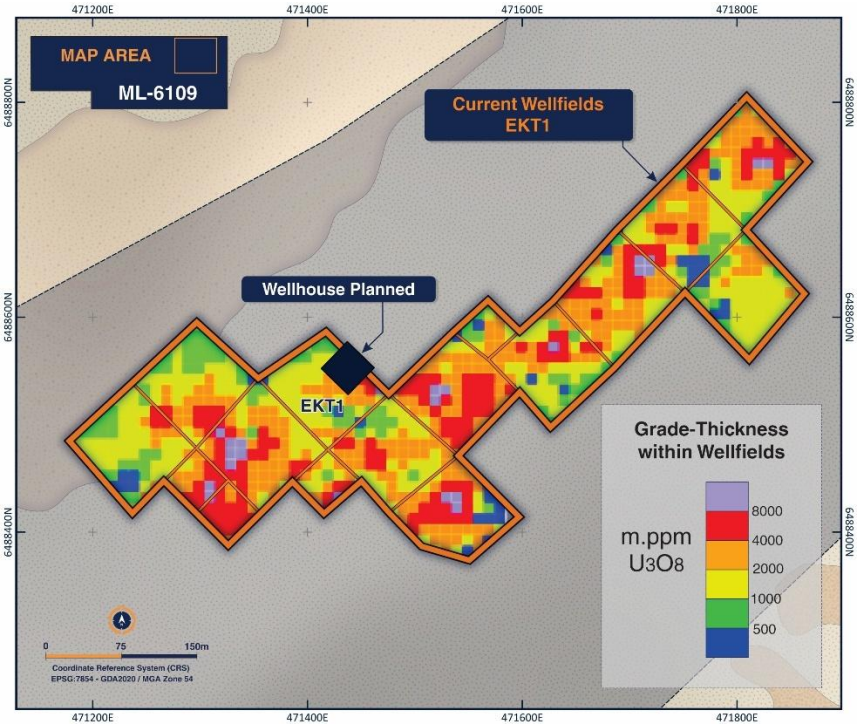


Figure 43: Comparison of previously planned wellfields, Wellfield B7 / Wellfield B9 to current trial Wellfield EKT1.

personal use only

For personal use only

Table 19: Comparison of Old Wellfield design (B7 + B9) and wide-spaced design at Trial Wellfield EKT1

Key Metric	Unit	Old Wellfield B7 + B9	Trial Wellfield EKT1
Wellfield size	m^2	39,086	91,604
Distance (Injector to extractor)	m	30 (22 patterns)	58 (12 patterns); 30 (4 patterns)
Distance (Injector to injector)	m	42 (22 patterns)	85 (12 patterns); 42 (4 patterns)
Average vertical screen interval	m	8.4	8.2
Average ore grade	ppm	351 (cutoff @250)	301 (cutoff @100)
Number of wells	#	66	44
Pounds under leach	klbs	329	637
Pounds recovered (PLS)	klbs	259	502
IRR	%	45	261
NPV (10% real post-tax discount rate)	$M	3	17
Revenue (@US$90/lb; AUD/USD: 0.70)	$M	31.8	61.1
Sustaining Capital	$M	10.7	9.7
C1 Cost	$M	15.0	23.2
AISC	$M	27.8	36.9
Revenue [11] *less* AISC	$M	4.0	24.2
Sustaining Capital	$/lb	41	19
C1 Cost	$/lb	58	46
AISC	$/lb	107	74
Revenue *less* AISC	$/lb	16	48
PVE	#	70	42
Pore Volume	m^3	101,829	232,333
Effective Pore Volume	m^3	66,925	151,414
Total flow	m^3	4,700,000	6,400,000
Time wellfield is online	days	519	671
Production per day	lbs	499	748
Residence time (TC10) [12]	days	5	42
Mean Residence Time (MRT)	days	21	180
Equivalent Transport distance (TC 10)	m	22	55
Equivalent Transport distance (MRT)	m	46	113
Average PLS grade	mg/l	25	36
Average flow per day	m^3	9,067	9,556

[11] *Revenue based on USD90/lb uranium price and AUD:USD of 0.70*

[12] *TC10 represents 10% recovery of the lixiviant injected.*

13.4 Summary forecast

Table 20: Summary of Life-of-mine forecast

	Unit	2027	2028	2029	2030	2032	2032	2033	2034	2035	Total	Total (to 2034)
Flow	Mm3	17	20	21	22	24	25	23	21	5	178	**172**
Grade	mg/L	36	36	39	41	38	37	39	33	22	37	**37**
U_3O_8 extracted	Mlbs	1.4	1.6	1.8	2.0	2.0	2.0	2.0	1.5	0.3	14.5	**14.3**
Recovery	%	95	95	95	95	95	95	95	95	95	95	**95**
Total U_3O_8 Drummed	**Mlbs**	**1.3**	**1.5**	**1.7**	**1.9**	**1.9**	**1.9**	**1.9**	**1.4**	**0.3**	**13.8**	**13.6**
AISC												
C1	$/lb	53	54	49	46	47	48	47	56	197	52	**50**
Royalties, Rehabilitation and other costs	$/lb	7	7	7	7	7	7	7	7	10	7	**7**
Sustaining capital – Plant	$/lb	2	1	0	0	0	0	0	0	-	0	**0**
Sustaining capital – Wellfields	$/lb	25	28	29	26	21	22	20	5	-	22	**22**
Total AISC	**$/lb**	**88**	**90**	**85**	**79**	**75**	**77**	**74**	**68**	**207**	**82**	**79**
Total Sustaining Capital	**$M**	**35**	**45**	**50**	**49**	**40**	**42**	**39**	**7**	**-**	**308**	**308**
Process Facilities Capital												
Processing infrastructure	$M	20	11	9	2	2	2	2	-	-	**49**	**49**
Wellfields infrastructure	$M	5	2	-	-	-	-	-	-	-	**7**	**7**
Plant improvement	$M	2	0	-	-	-	-	-	-	-	**2**	**2**
Total Process Facilities Capital	**$M**	**26**	**13**	**9**	**2**	**2**	**2**	**2**	**-**	**-**	**58**	**58**
Total Capital	**$M**	61	58	60	51	42	45	41	7	-	**366**	**366**

personal use only

For personal use only

14. Risks and Opportunities

Effective risk and opportunity management is fundamental to the delivery of the Honeymoon life-of-mine plan and the successful implementation of the revised wellfield development strategy. The NFS has been developed around a more detailed understanding of the resource, improved recovery forecasting, progressive transition to wider-spaced wellfield designs and targeted infrastructure upgrades designed to support long-term production continuity.

The risks and opportunities described below reflect the principal technical, infrastructure, schedule and execution matters identified through the study work completed to date.

14.1 Risks

Resource and Production Forecasting Uncertainty

The Mineral Resource estimate, recovery forecasts and life-of-mine schedule are based on the integration of geological, hydrogeological, mineralogical and operating datasets through a calibrated reactive transport modelling framework. While supported by extensive historical and current operating data, uncertainty remains in the extrapolation of these interpretations to undeveloped areas of the deposit.

Local variability in reservoir conditions may influence recovery response, production rates, reagent consumption and production timing relative to forecast values. Such differences may require adjustments to wellfield sequencing and development priorities during operations. However, the extensive inventory of potential wellfield locations and the modular nature of ISR development provide flexibility to adjust development priorities, wellfield sequencing and operating strategies where local performance differs from expectations, supporting long-term production continuity.

Pumping Capacity

As the overall wellfield profile changes with the life-of-mine, and the full extents of the deposit are accessed, demands on pumping equipment for the delivery of PLS, BLS and conditioning-solution evolve. Pending the results of detailed design, configuration, and installation of wellfield piping, long term adjustments may be required to system pressure. Potential solutions are straightforward in nature and would consider either modifications to the existing pump set at Honeymoon, or the addition of inline booster pumps as trunkline extensions are installed. These design additions are low risk to the proposed life-of-mine schedule and would be integrated into the ongoing program of work related to trunkline installation and extension. This design assessment and decision is straightforward in nature and will rely on final piping layouts to ensure that all potential system impacts are accounted for.

Wellhouse Reuse

The updated life-of-mine plan includes opportunities to improve capital efficiency through asset optimisation such as wellhouse reuse. The potential savings have been developed on assumptions and remain untested at an operational level and will do so until the first wellhouse cycle is complete. This value opportunity and the true costs/savings will remain an item of continuous development as operations progress. Boss has taken a conservative approach to the considered reuse potential by factoring in time and costs for refurbishment activities in reuse schedules and taking a minimalist view of reusable equipment items. These allowances both de risk the assumptions carried and allow for further opportunity to improve on these savings.

Capital Upgrades Supply Chain

Plant upgrades, in particular the Water Treatment Plant remain a key to providing uplift to wellfield conditioning rates and ability to bring areas of the deposit into production. Delays in commissioning this new plant puts production schedules at risk and would lead to a slower than planned ramp up schedule. Vendors of critical equipment items have been engaged during the NFS to ensure that long lead items have been accurately accounted for and that any assumptions around plant capacity and the step changes in throughput remain conservative in operation planning. Opportunity exists for early contractor engagement in these construction activities to potentially improve design and construct timelines. Any improvements gained in this space would relieve schedule risk in the production plan and overall life-of-mine plan.

Operating cost, reliability and operational readiness

Operating cost assumptions for power, reagents, labour, maintenance, logistics, water treatment and consumables are material to project economics. The ability to achieve forecast outcomes also depends on plant availability, maintainability, commissioning readiness, operator capability, critical spares and vendor support. Commissioning delays, insufficient training or unresolved construction defects could reduce margins, delay ramp up and production or increase safety and maintenance exposure.

Approvals, environmental permitting and stakeholder access

Construction, operation and future wellfield development depend on maintaining existing approvals and obtaining any additional regulatory approvals, land access arrangements, heritage clearances and environmental or radiation related approvals required to support the life-of-mine plan.

Approval gaps, changes to project footprint, incomplete environmental assessments, stakeholder concerns, regulator information requests or delays in land access and heritage processes could defer construction or production, increase holding costs, require scope changes or impose additional licence conditions, monitoring obligations or study requirements. Boss has maintained early engagement with DEM throughout the NFS to minimise these risks and provide confidence to the approvals strategy.

For personal use only

14.2 Opportunities

Wellfield Spacing and Design

Wider-spaced wellfield patterns represent a material capital efficiency opportunity under the revised life-of-mine plan. Where conditions are suitable, wider spacing may reduce drilling and installation costs while maintaining hydraulic connectivity, solution grades, flow rates and recovery.

The NFS has leveraged this opportunity already with revised wellfield design and spacing. This remains an ongoing opportunity for refinement that is to be validated through continuing trials and early production patterns. As new geological, hydrogeological and reactive transport modelling inputs are obtained, and where variability is encountered, spacing, screened intervals, flow rates and lixiviant chemistry can be adjusted to preserve recovery and production continuity.

Reagent Optimisation

Reagent consumption remains a significant operating cost driver in ISR operations and is influenced by groundwater chemistry, mineralogy and local reservoir conditions. While operating experience has demonstrated relatively low acid consumption at Honeymoon, opportunities remain to further optimise acid and oxidant utilisation through improved understanding of geochemical controls and field-scale operating responses.

Ongoing integration of operating data, in-situ trials, mineralogical characterisation and geochemical modelling is expected to support further refinement of reagent dosing strategies, reduce reagent consumption and improve recovery consistency across future wellfields.

Improved Understanding of Recovery Response

The growing operating database from Honeymoon and East Kalkaroo provides an opportunity to further refine understanding of uranium recovery behaviour under a range of geological and operating conditions. Particular emphasis can be placed on improving the relationship between recovery performance, pore volume exchange, hydraulic residence time and uranium grade distribution.

As additional wellfields are commissioned, production data can be incorporated into the reservoir modelling framework to improve forecasting accuracy, reduce development uncertainty and support ongoing optimisation of wellfield sequencing and life-of-mine planning.

Availability of Plant

Plant availability is a material opportunity to improve realised production under the life-of-mine plan. Key dependencies include reliability, maintainability, commissioning readiness, operator capability, critical spares and vendor support. Improved control of these factors would reduce unplanned downtime, maximise production throughput, and improve resilience to variability in solution grades, reagent demand and water treatment requirements.

To achieve a sustained uplift in operating availability, this opportunity should be progressed through formal operations, maintenance and reliability reviews as well as critical spares planning, and ongoing performance testing.

For personal use only

Continuation of Operating Cost Optimisation

Operating cost optimisation remains a continual value opportunity noting that the NFS economics are sensitive to power, reagents, labour, maintenance, logistics, water treatment and consumables. Elevated costs or poor reliability could reduce margins, delay ramp-up and increase operational exposure.

Benchmarking, sensitivity analysis, mass and energy balance refinement and validation of reagent and utility assumptions should target the principal cost drivers. As production ramps up, ongoing analysis of operating data will provide insight to refine maintenance strategies, consumables forecasts, and operating procedures.

Increased Resource Confidence

Future updates to the Honeymoon Mineral Resource Estimate provide an opportunity to increase resource confidence and classification. Further drilling, validation of historic drilling, improving geological interpretation and reconciliation against operating performance will improve confidence in resource continuity, grade, permeability, porosity and expected wellfield performance. This work will strengthen short- to medium-term planning and forecasting.

Future Deposits - Gould's and Jasons

Gould's and Jasons represent longer-term growth opportunities beyond the current Honeymoon life-of-mine plan. Their potential development could provide sequencing flexibility, extend mine life and support production rates as mining at Honeymoon declines.

Long-term capacity decisions for trunklines, BLS pumping and electrical distribution will preserve flexibility to accommodate these satellite deposits where practical, minimising future rework and capital duplication. Further drilling, technical studies and infrastructure assessments on these deposits will improve confidence in resource definition, development sequencing, infrastructure requirements and timing.

For personal use only

For personal use only

15. Conclusion

The NFS confirms a technically and economically viable pathway for the continued development of Honeymoon based on the progressive adoption of a wide-spaced wellfield design. This approach reflects the substantially improved understanding of the deposit developed through additional drilling, updated geological interpretation, permeability modelling, commercial operating experience and calibrated reactive transport modelling since production recommenced in 2024.

The NFS identifies a 49 m injector-to-extractor spacing, equivalent to approximately 70 m injector-to-injector spacing, as the preferred base-case design. Compared with the previous wellfield approach, the wider spacing enables a greater area of mineralisation to be accessed with fewer wells and less associated surface infrastructure, increases lixiviant residence time and supports higher PLS grades. These benefits reduce wellfield development intensity, improve the cost structure of the operation and support the economic extraction of a broader portion of the Mineral Resource.

The revised MRE on the Honeymoon Deposit provides a more robust foundation for the life-of-mine plan and reflects the current understanding of the distribution, continuity and permeability of the mineralisation. The calibrated reactive transport model integrates this geological and hydrogeological understanding with geochemical and operating parameters and provides the basis for forecasting uranium recovery, PLS grades, reagent consumption and wellfield performance. Calibration against historical Uranium One and recent Boss operating data provides confidence that the model captures the principal controls on ISR performance at Honeymoon.

The NFS also confirms that the life-of-mine plan can be delivered predominantly through the progressive development of modular wellfield infrastructure and the continued use of the existing Honeymoon processing plant. Most supporting infrastructure is already in place, with planned processing plant upgrades and expansion of the Water Treatment Plant as the principal additional infrastructure requirements. Completion of the Stage 2 Water Treatment Plant expansion is an important enabler of the life-of-mine production schedule.

Honeymoon's established operating platform, existing infrastructure, experienced workforce and regulatory framework provide a strong foundation for implementation. Delivery of the life-of-mine plan remains subject to maintaining existing approvals, securing the additional tenure and regulatory permissions required for future mining areas, including Brooks Dam North, and executing the scheduled wellfield and infrastructure development program.

Overall, the NFS establishes a clear, lower-cost pathway to sustained uranium production from Honeymoon while retaining flexibility to progressively optimise wellfield spacing, layouts and operating parameters as further drilling and production information becomes available. It provides the technical and economic foundation for Boss to proceed with the next phase of Honeymoon's development and positions the operation to generate long-term value from its established infrastructure and the Honeymoon Deposit Mineral Resource base.

For personal use only

For further information, contact:
Matt Dusci
Managing Director and Chief Executive Officer
P: +61 (8) 6263 4494
E: boss@bossenergy.com

For personal use only

HONEYMOON MINERAL RESOURCE ESTIMATE – TECHNICAL OVERVIEW

August 2026



Document No: HNM-PRJ-RPT-0002

Status: Final

For personal use only

Acknowledgement of Country

Boss Energy's South Australian operations and exploration activities are located on the traditional lands of the Adnyamathanha, Ngadjuri and Wilyakali peoples.

Boss Energy acknowledges the Traditional Owners and Custodians of these lands and waters and recognises their enduring connection to Country, culture and community. We also recognise the importance of protecting the environment and preserving cultural heritage, knowledge and traditions for future generations.

We pay our respects to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples.

Table of Contents

1. Overview 5

2. Project Location and History 6

2.1 Project Location 6

2.2 Project History 7

3. Geology & Geological Interpretation 9

3.1 Geology 9

3.2 Mineralisation 9

3.3 Controls on Mineralisation 9

4. Drilling Techniques 11

5. Sampling and Analytical Data (Downhole Geophysical Techniques) 13

6. Bulk Density 15

7. Resource Estimation Methodology 16

7.1 Geological Domains 16

7.2 Estimation Domains 18

7.3 Resource Estimation 19

8. Initial Assessment of Modifying Factors 27

8.1 Mining Methods & Parameters 27

8.2 Metallurgy 28

8.3 ESG 28

9. Uranium Market 29

10. Resource Classification 30

11. Cut-Off Grade 31

12. Comparison with 2019 MRE 32

13. Risks and Opportunities 36

14. Competent Person's Statements 38

15. Reference to Previous Reports 39

16. Important Notices 40

APPENDIX 1: JORC 2012 Edition, Table 1 42

APPENDIX 2: Drill results 66

For personal use only

For personal use only

Abbreviations

Ag	*Silver*
AISC	*All-In Sustaining Cost*
Al	*Aluminium*
As	*Arsenic*
AusIMM	*Australasian Institute of Mining and Metallurgy*
Ba	*Barium*
Be	*Beryllium*
Bi	*Bismuth*
Boss	*Boss Energy*
C	*Carbon*
C1	*Direct cash cost*
Ca	*Calcium*
Cd	*Cadmium*
Ce	*Cerium*
CEC	*Carpentaria Exploration Company Pty Ltd*
Co	*Cobalt*
Cr	*Chromium*
Cs	*Caesium*
Cu	*Copper*
DEM	*Department for Energy and Mining*
DHSA	*Drill Hole Spacing Analysis*
DN	*Nominal diameter*
Dy	*Dysprosium*
EL	*Exploration licence*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
Er	*Erbium*
Eu	*Europium*
eU_3O_8	*Uranium grade based on gamma measurements*
Fe	*Iron*
Fe-Ti	*Iron-titanium*
Fe^{2+}	*Ferrous Iron*
Fe^{3+}	*Ferric Iron*
$Fe_2(SO_4)_3$	*Ferric sulphate*
Ga	*Gallium*
Gd	*Gadolinium*
GT	*Grade-Thickness*
Hf	*Hafnium*
Ho	*Holmium*
IAEA	*International Atomic Energy Agency*
ICP	*Inductively coupled plasma*
In	*Indium*
ISR	*In-situ recovery*
K	*Potassium*
KSDR	*Permeability from NMR data (based on Schlumberger-Doll equation)*
La	*Lanthanum*
Li	*Lithium*
Lu	*Lutetium*
Mg	*Magnesium*
ML	Mining Lease
Mn	*Manganese*
Mo	*Molybdenum*
MPL	*Miscellaneous Purpose Licence*
MRE	*Mineral Resource Estimate*
MRI	*Magnetic resonance imaging*
MS	*Mass spectrometry*
Na	*Sodium*
Nb	*Niobium*
Nd	*Neodymium*
NFS	*New Feasibility Study*
Ni	*Nickel*
NIMCIX	*Continuous ion-exchange technology*
NMR	*Nuclear Magnetic Resonance*
NP	*Neutron Porosity*
OES	*Optical emission spectrometry*
P	*Phosphorus*
Pb	*Lead*
PEPR	*Program for Environment Protection and Rehabilitation*
PFN	*Prompt Fission Neutron*
PLS	*Pregnant leach solution*
Pr	*Praseodymium*
pU_3O_8	*Uranium grade based on PFN measurements*
Rb	*Rubidium*
Re	*Rhenium*
RPEEE	*Reasonable Prospects for Eventual Economic Extraction*
S	*Sulphur*
Sb	*Antimony*
Sc	*Scandium*
Se	*Selenium*
Sm	*Samarium*
Sn	*Tin*
SO_4	*Sulphate*
Sr	*Strontium*
Ta	*Tantalum*
Tb	*Terbium*
Te	*Tellurium*
Th	*Thorium*
Ti	*Titanium*
Tl	*Thallium*
Tm	*Thulium*
U	*Uranium*
U_3O_8	*Uranium Oxide / Triuranium octoxide*
U^{4+}	*Tetravalent uranium*
U^{6+}	*Hexavalent uranium*
V	*Vanadium*
W	*Tungsten*
Y	*Yttrium*
Yb	*Ytterbium*
Zn	*Zinc*
Zr	*Zirconium*

Units

#	*Number or count*
A$	*Australian Dollars*
%	*Per cent*
µm	*Micrometres*
g/cm^3	*Grams per cubic centimetre*
g/L	*Grams per litre*
kg	*Kilogram*
km	*Kilometres*
kt	*Thousand tonnes*
lbs	*Pounds*
m	*Metres*
m^2	*Square metres*
m^3	*Cubic metres*
m^3/h	*Cubic metres per hour*
mD	*Millidarcy*
mg/L	*Milligrams per litre*
Mlbs	*Million pounds*
Mt	*Million tonnes*
pH	*Measure of acidity or alkalinity*
ppm	*Parts per million*
T	*Tonnes*
US$	*United States Dollars*

For personal use only

1. Overview

This report summarises the material information relevant to the Honeymoon Deposit Mineral Resource. The Mineral Resource Estimate (MRE) covers the Honeymoon Deposit excluding Jasons and Gould's Dam deposits. Further information is provided in JORC Code Table 1, which is included in Appendix 1.

The updated Indicated and Inferred Mineral Resource comprises 21.4 Mt @ 440 ppm U_3O_8 for 20.8 Mlbs U_3O_8 metal, reported above a 100-ppm U_3O_8 cut-off grade and depleted for mining extraction to 30 June 2026 of 3.3 Mlbs U_3O_8 (Table 1).

Table 1: Honeymoon Deposit in-situ Mineral Resource estimate (effective 30 June 2026)

Resource Classification	Grade		Metal	
	Mt	ppm U_3O_8	Kt U_3O_8	Mlbs U_3O_8
Honeymoon Deposit				
Indicated	12.1	510	6.2	13.7
Inferred	9.3	350	3.2	7.1
TOTAL	**21.4**	**440**	**9.4**	**20.8**

Notes:

The Mineral Resource estimate is classified in accordance with the JORC Code (Joint Ore Reserves Committee (JORC), 2012)[1].
The Mineral Resource database has a cut-off date of 31 December 2025.
The effective date of the Mineral Resource estimate is 30 June 2026.
The Mineral Resource estimate is reported at an in-situ cut-off of 100 ppm U_3O_8. A grade-thickness (GT) cut-off of GT≥400 m.ppm U_3O_8 was applied selectively in border areas of the MRE.
Only the recoverable portion of blocks ≥100 ppm U_3O_8 is reported.
The Mineral Resource is constrained to an ISR-amenable permeability threshold of KSDR≥100mD.
The Mineral Resource is mainly based on equivalent U_3O_8 (eU_3O_8), without adjusting for localised radiometric disequilibrium effects.
The Mineral Resource estimate is reported net of depletion from the Honeymoon in-situ recovery (ISR) extraction of 3.3 Mlbs U_3O_8 (1.5 Kt U_3O_8) as of 30 June 2026 by subtraction of extracted metal tonnes from Indicated Resource metal tonnes.
The Mineral Resource estimate is reported on an in-situ tonnes basis.
The Mineral Resource estimate is rounded to reflect the level of confidence in the estimate at the time of reporting.
Totals may vary due to rounding.
The Mineral Resource estimate is reported both within the Honeymoon ML6109 license and outside in EL6081 license.

The Honeymoon Deposit MRE was prepared by full-time employee of RSC, and Competent Person, Mr Guillaume Lorilleux. Mr Lorilleux has over 16 years of experience in uranium, including over 10 years in exploration and resource estimation of sedimentary U deposits.

The MRE has an effective date of 30 June 2026, incorporating drilling completed to 31 December 2025 and has been depleted by for mining to 30 June 2026.

[1] Joint Ore Reserves Committee (JORC). (2012). Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (The JORC Code). The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia, 2012.

For personal use only

2. Project Location and History

2.1 Project Location

The Honeymoon Uranium Operation is located in South Australia, ~80 km northwest of Broken Hill, near the border of South Australia and New South Wales. The operation and significant surrounding tenure are owned 100% by Boss; the project area comprises one (1) granted Mining Lease (ML6109), two (2) granted Exploration Licences (EL6081 & EL6510) (Figure 1), and two (2) Miscellaneous Purpose licences (MPL15 & MPL92).

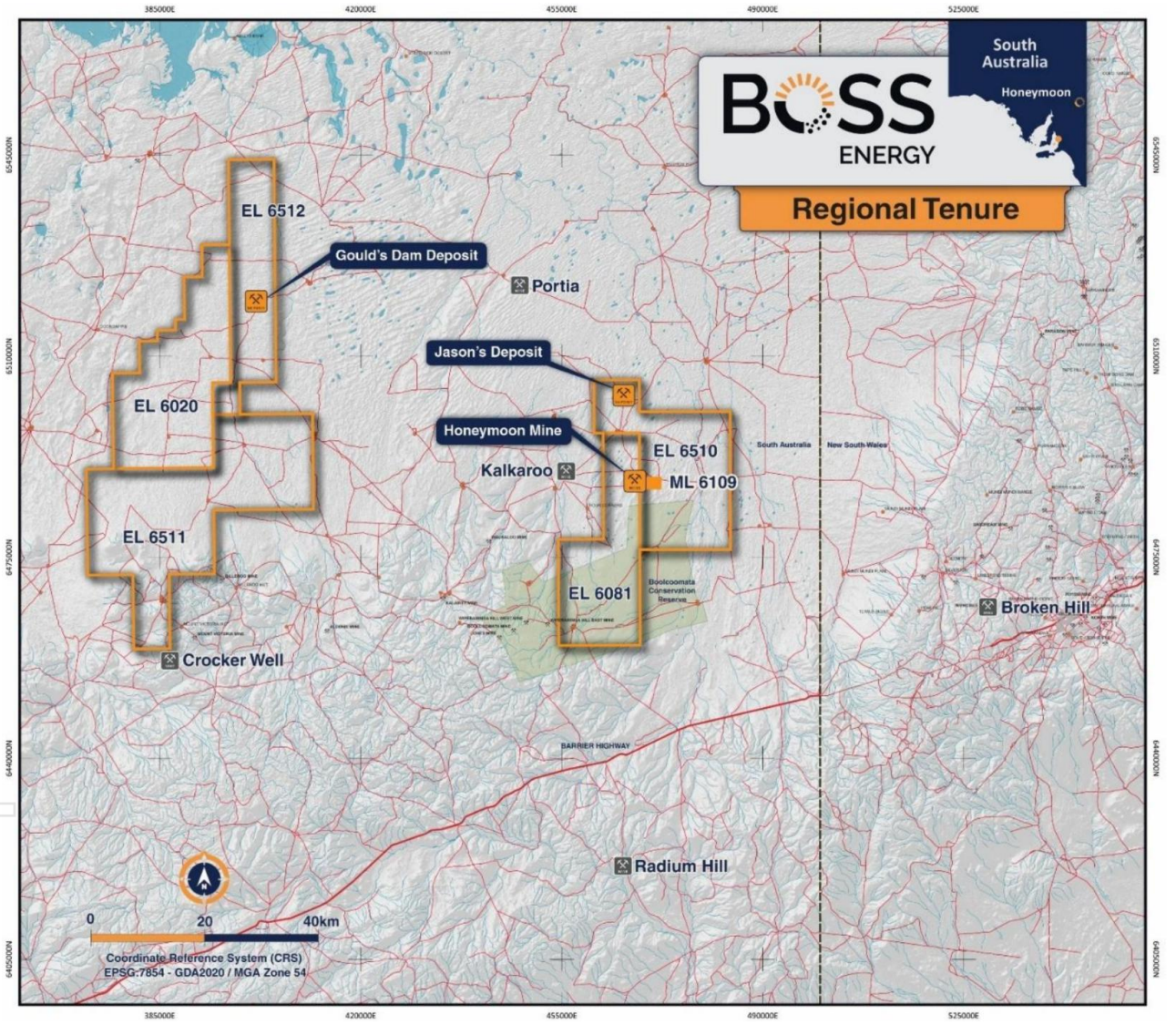


Figure 1: Location map of the Honeymoon Uranium Operation

2.2 Project History

1960s and Early 1970s

Exploration for Palaeogene-Neogene sediment-hosted uranium occurrences in the Lake Frome region of South Australia commenced in the late 1960s. The main exploration methods were open-hole rotary drilling and wireline geophysical logging. Surface geophysical methods, primarily resistivity and gravity surveys, were also used with limited success to locate and map palaeovalleys. Sedimentary Uranium NL discovered the East Kalkaroo deposit (now part of the Honeymoon Deposit) and the Yarramba Prospect (which became the Jasons Deposit) in 1970.

1971–1983: CEC, Minad-Teton & MTC Joint Venture

The Honeymoon Deposit was discovered in 1971–72 by Carpentaria Exploration Co Pty Ltd (CEC). A joint venture was subsequently formed by CEC, Mines Administration Pty Limited (Minad), and Teton Exploration Drilling Co Pty Ltd (Minad-Teton CEC JV), known as the MTC joint venture.

Drilling programs between 1972 and 1976 established the extent of the deposit, but feasibility studies concluded that it was too small to be mined economically by conventional open-cut or underground mining methods.

Following major advances in in-situ recovery (ISR) technologies in the United States and the USSR, a series of laboratory tests were carried out by the Australian Mineral Development Laboratories (AMDEL) in Adelaide, which confirmed that mineralisation at the Honeymoon Deposit was amenable to extraction using ISR.

Minad established a demonstration ISR facility at Honeymoon in 1982 with a wellfield of three 5-spot leach patterns, a liquid disposal well, monitor wells, and a pilot plant designed to treat pregnant leach solution.

In 1983 the project advanced through a feasibility study. Minad obtained approval for an Environmental Monitoring Plan and approval under the Radiation Protection and Control Act 1989 (SA). However, final Approval to Mine was deferred, due to the change in the federal government and restrictions imposed on uranium mining by the Three-Mines policy.

1983–1997: MIM Holdings Ltd

In June 1983, the project was placed under care and maintenance, and ownership of the Honeymoon assets passed to CEC's parent company, MIM Holdings Limited (MIM).

1997–2014: Southern Cross – Uranium One

In May 1997, Southern Cross acquired the Honeymoon leases and the Billeroo leases from MIM. Between 1999 and 2001, various hydrological test wells at Honeymoon and stratigraphic drilling at Honeymoon and East Kalkaroo were completed to define the extent of the Yarramba Palaeovalley, refine the stratigraphy and sedimentology of the Eyre Formation, update resource estimates, and to compile a three-aquifer hydrological model.

Southern Cross restored the demonstration plant and pilot wellfields, and commenced recovery of uranium as yellowcake slurry in April 1998. Production continued until August 2000.

A series of holes were drilled at Honeymoon in 2004, and logged using Prompt Fission Neutron (PFN) technology to accurately obtain direct in-situ measure of uranium grades, overcoming the need to correct gamma data for radiometric disequilibrium. In addition to PFN, sophisticated wireline logging tools were run to determine thicknesses of mineable sands and to characterise sand-clay lithologies. Of the 49 holes drilled

For personal use only

into the historical resource, 45 (92%) confirmed the presence of a high-grade uranium mineralisation suitable for ISR mining.

In 2005, Southern Cross merged with Aflease Gold and Uranium Resources Ltd. to become SXR Uranium One Inc, later renamed to Uranium One Inc. In 2008, Uranium One Australia formed a joint venture with Mitsui. Uranium One drilled 31,676 m of rotary mud holes at the Honeymoon Mine and 14,298 m of rotary mud holes on the East Kalkaroo domain.

Significant production started at Honeymoon in 2011, when the current mill and new wellfields were built and operated by Uranium One.

In March 2013, Uranium One was acquired by the Russian joint stock company JSC Atomredmetzoloto (ARMZ) and its affiliates.

Operations were suspended in November 2013 after production of 369 tU_3O_8, due to high operating costs, falling uranium price, and various technical challenges.

2015–2026: Boss Energy

Boss acquired the Honeymoon Deposit from ARMZ in December 2015, and conducted further drilling aimed at updating the resource and providing input into a new feasibility study. New MREs were released in 2016 and 2019 with the latter feeding into a feasibility study. On the basis of this study, modifications to the Uranium One plant were carried out and new wellfields constructed. The mill restarted in April 2024, and uranium production is ongoing.

For personal use only

For personal use only

3. Geology & Geological Interpretation

3.1 Geology

The Honeymoon Deposit is a sandstone-hosted palaeovalley-type (or basal channel type) uranium deposit. It is located in the Callabonna sub-basin of the Cenozoic Lake Eyre Basin, which overlies saprolitic metamorphic rocks of the Proterozoic Curnamona Province (Willyama Supergroup).

Uranium mineralisation is hosted by weakly consolidated aquifer sands of the Eyre Formation filling an ancient river valley (Yarramba palaeovalley), which has incised into Mesoproterozoic basement rocks of the Willyama Supergroup. The Eyre Formation sediments comprise several upward-fining sequences of interbedded sand, silt and clay collectively of up to 50 metres thick. The Eyre Formation is overlain by up to approximately 40 m of predominantly clay-rich aquiclude sediments of the Namba Formation, which is overlain by the approximately 30 m thick Quaternary cover consisting of predominately clay rich sediments, silts and sands (cross sections shown within this report exclude depiction of the Quaternary cover). The Namba Formation forms a regional confining unit above the mineralised Eyre Formation aquifer. Groundwater within the Eyre Formation is naturally saline. The palaeovalley floor is situated between 70 and 130 m below ground level.

3.2 Mineralisation

Uranium mineralisation extends over a 6-km strike length along the palaeovalley, is up to 650 m wide (Figure 2) and occurs at depths of ~80 m to 120 m below surface. Mineralisation occurs as a series of pods and tabular bodies, reaching thicknesses of up to 34 m at a 100-ppm U_3O_8 cut-off within permeable lithologies, and is predominantly hosted within the basal aquifer of the Eyre Formation. Locally, mineralisation is associated with arcuate roll-front systems and high-angle fault structures that intersect the host sedimentary sequence.

The Honeymoon Deposit is organised into four geographical domains, from west to east: Brooks Dam, Honeymoon, Central Kalkaroo, and East Kalkaroo (Figure 2). Higher-grade mineralisation at the Honeymoon and East Kalkaroo domains is typically concentrated where the lower sand units pinch out against the palaeovalley margin beneath overlying clay-rich horizons. Mineralisation at Brooks Dam is primarily hosted in the upper portion of the Eyre Formation, whereas mineralisation at Honeymoon, Central Kalkaroo and East Kalkaroo domains is mainly confined to the lower Eyre Formation.

3.3 Controls on Mineralisation

The mineralisation is controlled by localised redox interfaces and permeability contrasts within the host sediments. Uranium occurs as a range of uranium minerals including phosphates (e.g. tristramite), uraninite, coffinite, orthobrannerite and brannerite, often closely associated with Ti-rich phases such as ilmenite and rutile and also pyrite. However, the fine grain size (typically < 10 µm) means a significant proportion of uranium minerals cannot be reliably identified.

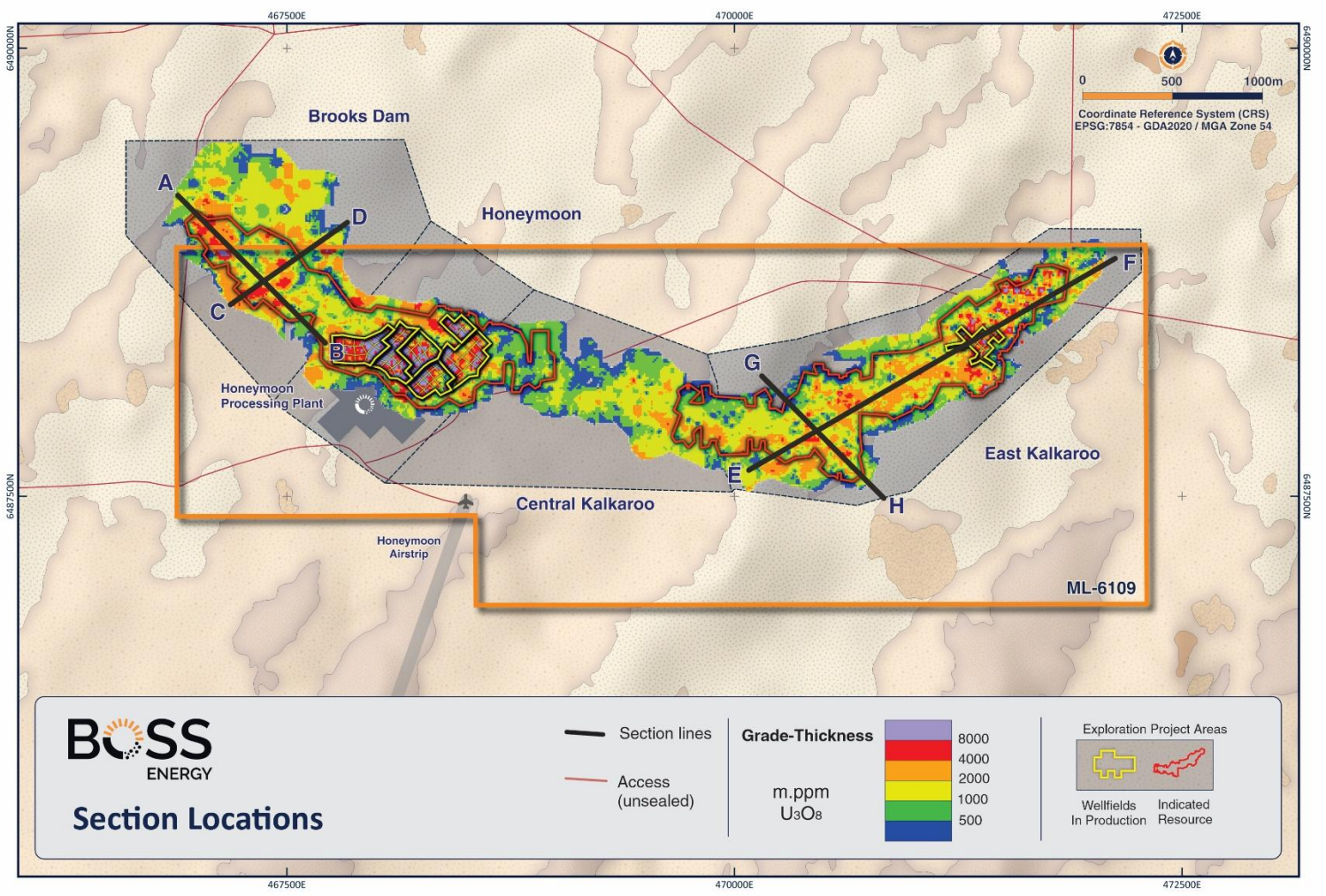


Figure 2: Plan view of the Honeymoon Deposit showing the deposit grade-thickness distribution of Resource blocks at 100 ppm U_3O_8 cut-off with continuous mineralisation over a 6-km strike length, and geographical domains

For personal use only

For personal use only

4. Drilling Techniques

A total of 2,865 holes have been drilled at Honeymoon since 1969 (Figure 3, Table 2) by various companies, including 2,637 holes containing uranium data, and 824 holes containing Nuclear Magnetic Resonance (NMR) data used for modelling permeability. This includes 716 holes for 90,651 m drilled since the 2019 MRE (ASX announcement dated 25 February 2019) (Figure 3).

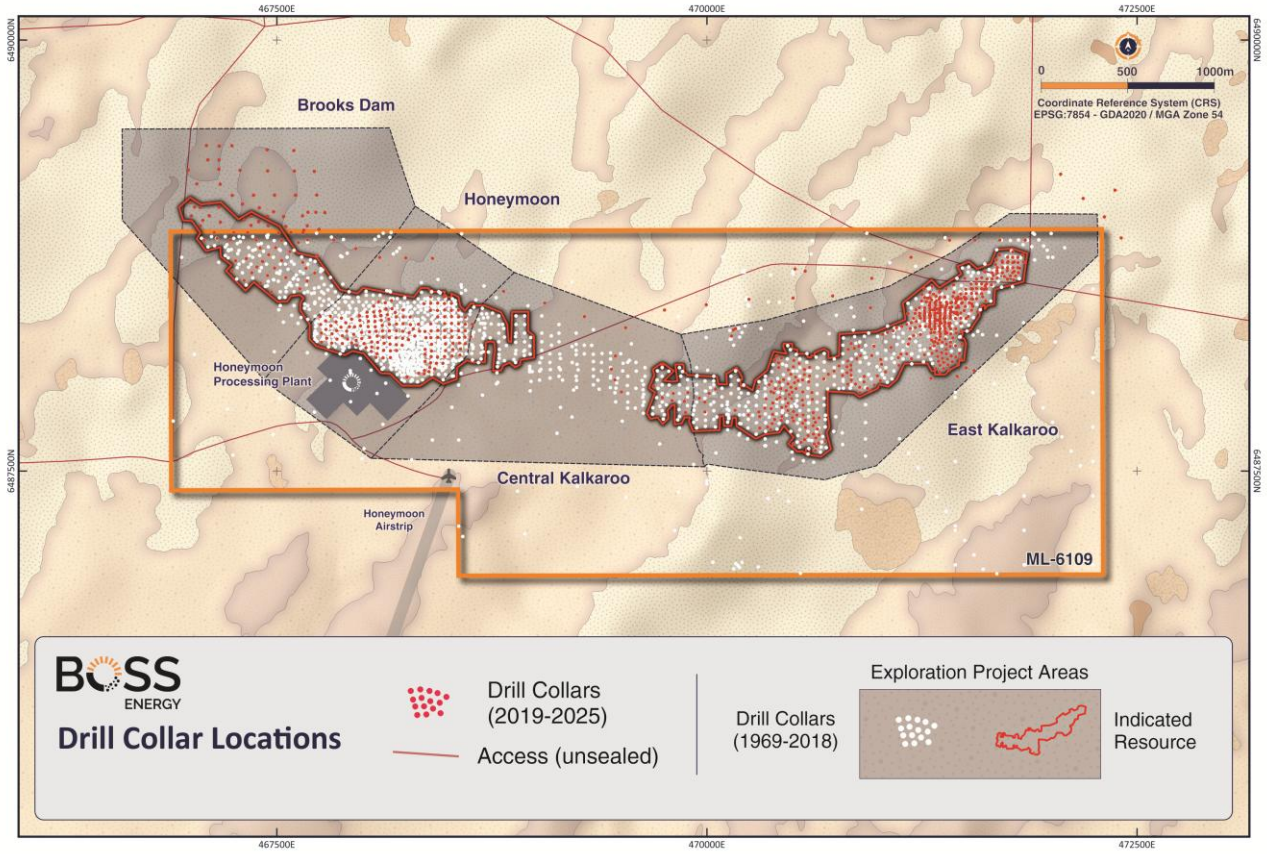


Figure 3: Honeymoon Deposit with the location of post-2019 drillholes (older holes in white)

The drilling has been completed by a variety of methods, including diamond drill core holes, sonic holes and rotary mud holes. Ninety-seven per cent (97%) of the drilling is via rotary mud holes. The drill spacing varies across the geographical domains: 20–150 m at Brooks Dam, 5–40 m at Honeymoon, 20–100 m at Central Kalkaroo, and 10–60 m at East Kalkaroo.

An accelerated resource delineation drilling program commenced in September 2025 to increase data density and improve the resource understanding. The updated MRE used drilling data available to 31 December 2025, incorporating 161 drillholes for 20,632 metres from this program. Since the data cut-off date, a further 262 drillholes for 31,411 metres have been completed. The drilling program was completed in June 2026 and will be incorporated into the next resource update.

Table 2: Total drillholes on the Honeymoon Deposit by date range and drill type with U_3O_8 data source

Time period	Company	Rotary Mud	Diamond	Sonic	Aircore	No. of Holes	Metres	U_3O_8 Data Source
1969–1979	Sedimentary Uranium NL	148				148	18,209	Gamma
1971–1972	Mount Isa Mines	3				3	382	Gamma
1972–1982	Minad-Teton Australia	482	28			510	63,189	Gamma
1998–1999	Rio Tinto Exploration				23	23	2,874	-
1999–2006	Southern Cross Resources	484	13			497	60,566	Gamma/PFN
2009–2012	Uranium One Australia	724	5	5		734	90,544	Gamma/PFN
2018–2025	Boss Energy	936	2	12		950	119,741	Gamma/PFN
1969–2025	**TOTAL**	**2,777**	**48**	**17**	**23**	**2,865**	**355,505**	**Gamma/PFN**

For personal use only

For personal use only

5. Sampling and Analytical Data (Downhole Geophysical Techniques)

Downhole geophysical logging forms a critical component of data collection and subsurface characterisation. Geophysical techniques are fundamental to the evaluation and development of ISR uranium deposits, providing continuous high-resolution data that support geological interpretation, mineralisation modelling and resource estimation. The Honeymoon Deposit benefits from an extensive downhole geophysical dataset, incorporating multiple logging tools that enable the measurement of radiometric response (uranium grade proxy), porosity, density and hydrogeological characteristics. The integration of these datasets provides a high level of confidence in the interpretation of mineralisation and the understanding of the orebody geometry.

Downhole geophysical techniques used at Honeymoon include the following:

- **Gamma:** scintillometric gamma probes were used to measure gamma rays converted to equivalent uranium content, denoted eU_3O_8, in 2,090 drillholes for a total of 229,368 m of survey. The depth of investigation of gamma probes varies according to environmental factors, but is up to 60 cm into the wall rock. As ~99% of the data used in the MRE are derived from gamma data (~92% considering the 100-ppm U_3O_8 threshold used to define service variables), the uncertainty with respect to equivalent uranium grade presents a risk to the Mineral Resource. The Competent Person has considered this risk as one of the reasons to downgrade the classification of the Mineral Resource from Measured to Indicated and from Indicated to Inferred categories. The risk associated with the use of equivalent uranium in the estimate precludes the ability to classify Measured Mineral Resources.
- **Prompt fission neutron (PFN):** PFN probes were used to measure uranium content, denoted pU_3O_8, in 1,606 drillholes for a total of 52,336 m surveyed since 2004. The radius of the volume measured by PFN probes is up to 40 cm, but is highly dependent on environmental factors such as porosity and drillhole diameter. Uranium data from PFN logging were retained for 7,314 25-cm-composites from 698 holes, after quality ranking of PFN calibration, and application of a lower detection limit of 250 ppm U_3O_8. PFN probes contain a scintillometer gamma ray detector, so the equivalent uranium content, denoted peU_3O_8, was also recorded and used for depth matching with other gamma runs. pU_3O_8 data were validated by comparison with chemical U_3O_8 data for 11 sonic drillholes of the BSC series. The Competent Person identified several sources of uncertainties related to the determination of pU_3O_8 data, including:
  - borehole diameter corrections based on theoretical diameters instead of real diameters which may vary significantly due to sand washouts;
  - the absence of correction of variations in fluid density, and formation density and porosity between the calibration pits and Honeymoon drillholes; and
  - a significant lack of repeatability of calibration runs for most calibrations between 2010 and 2026.

  The Competent Person considers that these uncertainties related to PFN calibration and data pose a low risk to the classification of Indicated resource due to the low proportion of PFN data.
- **Nuclear Magnetic Resonance (NMR):** NMR uses the application of a transient magnetic field (similar to a medical MRI scan) to the wall rock to measure different types of porosity and to calculate permeability, providing a critical input to resource estimation and wellfield planning. All holes drilled by Boss are logged with NMR. The Competent Person considers this associated uncertainty with respect to the KSDR values used for the MRE to be low risk to the classification of Indicated resources, based on simulations using the estimated block model that reproduces the mining production to date with an accuracy of ~±10%.

- **Induction:** the induction tool measures conductivity variations in the wall rock and is particularly useful (in conjunction with NMR) for identification of various lithologies. It also responds well to the presence of sulphides such as marcasite and pyrite, and work is progressing to calibrate the induction response in order to map sulphide abundance as part of geometallurgical studies.

For personal use only

6. Bulk Density

Dry bulk density was not estimated due to the paucity of density measurements. An average bulk density of 1.9 g/cm^3 was assigned to the entire MRE. This theoretical value is based on 30% average porosity for the mineralised sands, implying 2.67 g/cm^3 (specific gravity of quartz) × 70% = 1.87 g/cm^3. This value was rounded up to 1.9 g/cm^3 to account for pyritic cementation, and is consistent with the limited dry bulk density measurements available.

The bulk density applied to the previous 2019 MRE (ASX announcement dated 25 February 2019) was also 1.9 g/cm^3, based on the same criteria.

Further work is being completed to obtain sufficient bulk density data to support the estimation of bulk density at Honeymoon.

The Competent Person considers that the lack of density measurement incurs a minor risk of bias on the tonnage of U_3O_8 metal. Considering the expected limited variability of dry bulk density of aquifers of the Eyre Formation, the Competent Person considers the risk to be low with respect to the Indicated resource classification.

For personal use only

For personal use only

7. Resource Estimation Methodology

The Honeymoon Deposit MRE is based predominantly on downhole geophysical surveys, including gamma, PFN, and NMR. Chemical data from diamond and sonic drillholes were excluded from the MRE, as they represent <0.5% of the database, and were replaced by pU_3O_8 and eU_3O_8. Therefore, references to U_3O_8 grade inputs in the following sections represent pU_3O_8 and eU_3O_8 values.

7.1 Geological Domains

RSC generated models of the Eyre Formation and of the permeability. The models were based on downhole geophysical data with support from rotary mud chip logging and core observations from diamond/sonic drillholes. Contacts of the Eyre Formation with the underlying basement and the overlying Namba Formation were modelled to determine the volume of the Eyre Formation hosting uranium mineralisation.

The permeability model is based on the Schlumberger-Doll-Research permeability (KSDR) from NMR drillhole data, using a threshold of 100 mD to separate permeable and impermeable lithologies. This threshold was used to estimate the probability of KSDR ≥100 mD by indicator kriging. The permeable domains were determined using a probability ≥40% of KSDR ≥100 mD. This choice was based on visual assessment of the resulting domains in cross-section by comparison with lithologies. The permeable domains correspond mainly to sand, gravel, with minor silt and clay (Figure 4, Figure 5).

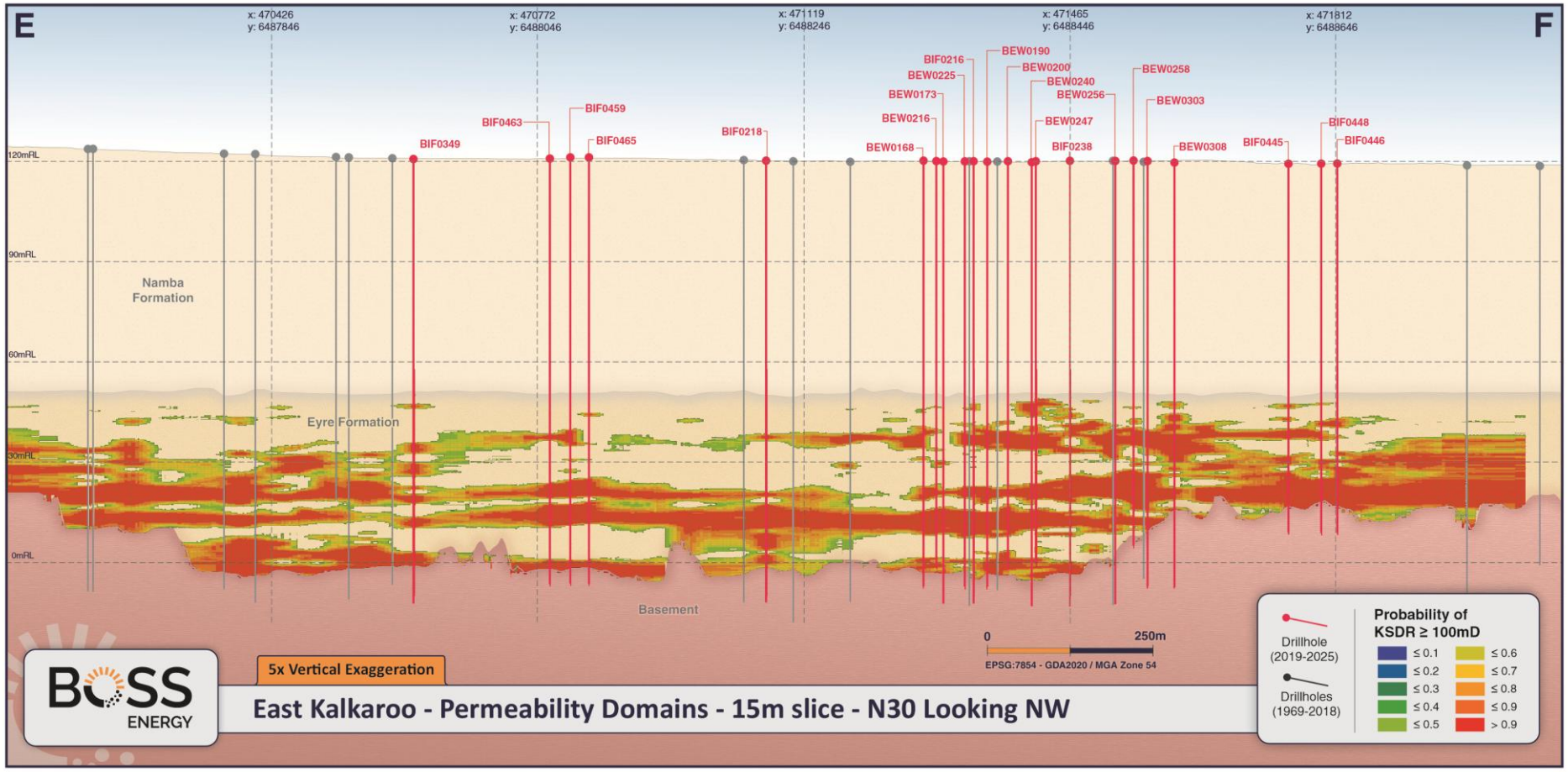


Figure 4: Cross-section view of East Kalkaroo, displaying the probability of KSDR values ≥100 mD

personal use only

For personal use only

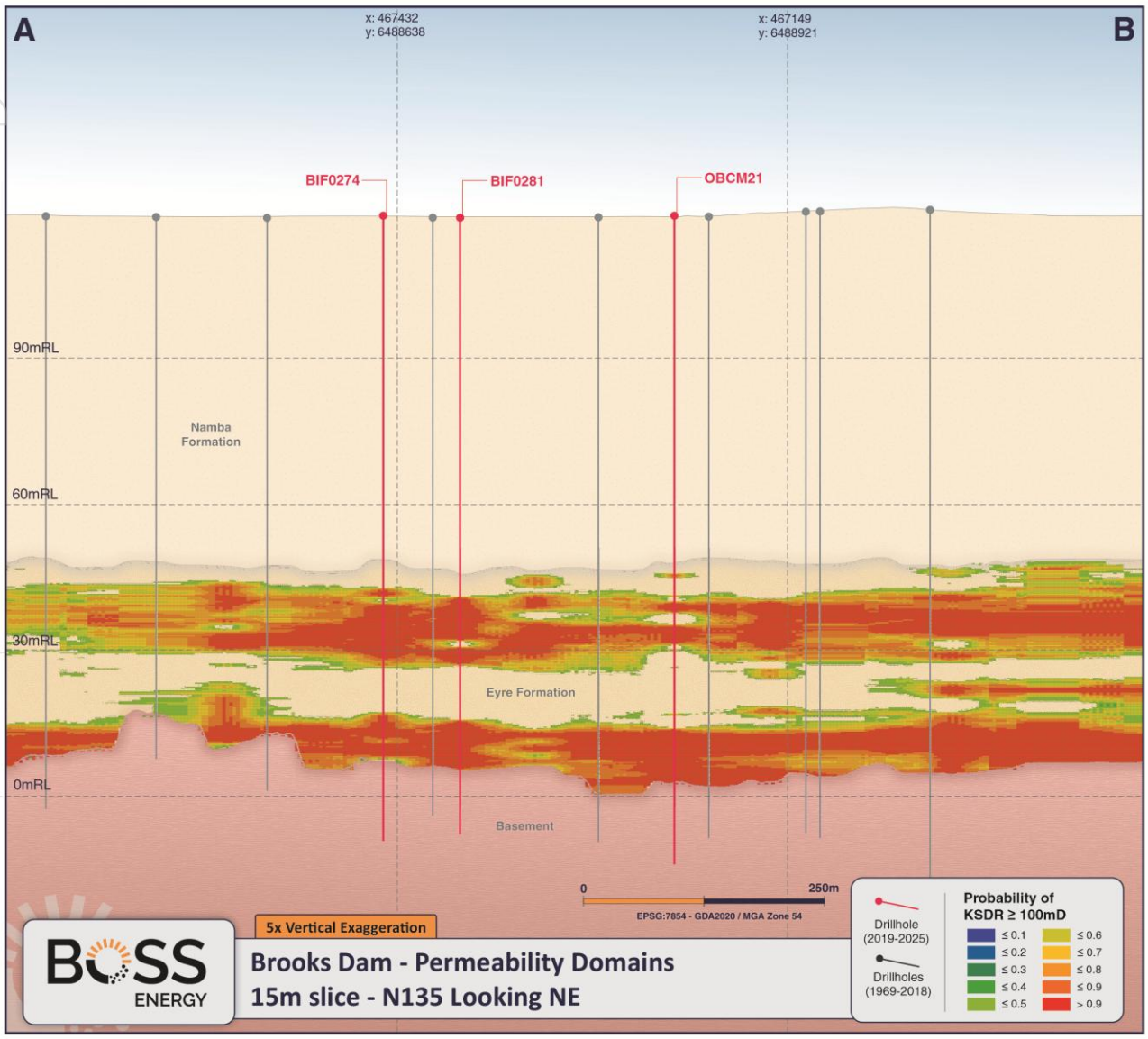


Figure 5: Cross-section view of Brooks Dam, displaying the probability of KSDR values ≥100 mD

7.2 Estimation Domains

The four geographical domains were used to ensure reasonable U_3O_8 grade stationarity, and to consider local differences in the geological setting. The boundaries between geographical domains follow potential structural features controlling variations of the elevation of the basement surface. The most prominent of these features, striking towards N30°, bounds the Honeymoon domain depocentre to the East at the limit with Central Kalkaroo. The highest grades occur at the Honeymoon domain, followed by East Kalkaroo.

Mineralisation at Brooks Dam is mainly located in the upper Eyre Formation, whereas mineralisation in the other areas is mainly located in the lower Eyre Formation.

The U_3O_8 estimation domains were derived by intersecting the Eyre Formation layer with the permeable unit of the permeability model, and with the four geographical domains. They were used to constrain the estimation of uranium mineralisation controlled by redox variations in aquifers. The lateral extent of the

For personal use only

estimation domains was limited by an area delineated by an 80-m radius buffer around drillholes with grade-thickness (GT) ≥1,000 m.ppm U_3O_8 for the entire Eyre Formation. The choice of 80 m as an extrapolation distance is consistent with areas of larger drill spacing at Brooks Dam (up to 150 m) and Central Kalkaroo (up to 100 m), and is supported by variographic ranges between 60 m and 250 m across the different geographical zones and the tabular nature of the mineralisation. The maximum distance of extrapolation locally reaches 130 m. No extrapolation beyond the nominal sample spacing was used.

7.3 Resource Estimation

The Mineral Resource estimation was undertaken as follows.

- The block model has a block size of 10 mX × 10 mY × 0.5 mZ, in accordance with the data spacing (20–40 m to 150 m at Brooks Dam, 5–40 m at Honeymoon, 20–100 m at Central Kalkaroo, and 10–60 m at East Kalkaroo).
- Following a review of contact analysis plots, soft domain boundaries were used between permeable and impermeable domains at Honeymoon and Central Kalkaroo, and hard domain boundaries were used between permeable and impermeable domains at Brooks Dam and East Kalkaroo. Soft boundaries were used between the different geographical domains.
- A composite length of 0.25 m was selected, based on the nominal length used in the database. This offers an acceptable compromise between capturing the desired precision of the estimation domain modelling, and matching the selectivity of the ISR mining operation (1-m minimum interval).
- To minimise dilution from low-grade material (below the 100-ppm U_3O_8 cut-off), two service variables at a 100-ppm U_3O_8 cut-off were used in the variographic analysis and estimation process:
  - an indicator variable set to 1, where U_3O_8 grades are ≥100 ppm and 0 otherwise (controlling the geometrical extent of mineralisation); and
  - the product of this indicator and the U_3O_8 grade (to control the metal content of the mineralisation).
- Due to the strongly skewed statistical distribution of U_3O_8 associated with very high grades, specific top cuts ranging from 1,500–8,000 ppm U_3O_8 were used to help identify the variographic structures of the main grade population. The bi-variate variograms of the two service variables displayed structures with ranges varying from 60–250 m. The only notable anisotropy was identified at East Kalkaroo with a major axis in the 60° direction, along the axis of the palaeovalley.
- Estimation of U_3O_8 was completed using ordinary co-kriging (COK) of the service variables in two passes. Geostatistical analyses were undertaken to support the search and estimation parameters used for each geographical domain. The search neighbourhood radius for the first pass was restricted to 50–150 m in the horizontal direction and three metres (3 m) in the vertical direction, with minimum and maximum sample numbers of 10–16 and 52, respectively. Search distances and optimum number of samples were selected to optimise kriging efficiency while ensuring that the percentage of negative kriging weights did not exceed 5%. The vertical search radius was constrained to reflect the tabular geometry of the deposits. A second estimation pass was applied to inform remaining blocks using a minimum of one sample, with a search radius of 300 m in the horizontal direction and six metres (6 m) in the vertical direction. No extrapolation beyond the nominal sample spacing was used.
- Top cuts, used to limit the influence of outliers, ranged from 2,500 ppm U_3O_8 at Brooks Dam to 13,000 ppm U_3O_8 at Honeymoon.

- The estimated variables comprise the proportion of each block with U_3O_8 ≥100 ppm and the product of this proportion by the U_3O_8 grade. The grade of the mineralised portion of each block with U_3O_8 ≥100 ppm was estimated by dividing the product variable by the corresponding proportion. Post-processing of the estimates included the application of a top cut of 4,000 ppm U_3O_8 to limit high-grade values resulting from very small, mineralised intercepts. The total U_3O_8 grade for each block was then calculated by considering an average grade of 50 ppm U_3O_8 for the portion of the block with U_3O_8 <100 ppm.
- Bulk density was assigned based on a theoretical value of 1.9 g/cm^3. This value is consistent with the limited dry density measurement data available.
- The resource model was validated by comparing drillhole data and block values visually in vertical and horizontal cross-sections, on swath plots, and statistically by comparing input and output domain means.
- Comparison of U_3O_8 metal within the five (5) Honeymoon wellfields currently in production in the Honeymoon domain, with the forecast well field contribution to production of 4.3 Mlbs U_3O_8 results in a relative difference of +10% at an 85% recovery factor and -10% at a 70% recovery factor. This indicates that the MRE is globally unbiased at the scale of the current operation.
- Resource reporting first applied a 100-ppm U_3O_8 cut-off to the total block grade and then only considered the proportion of the block with U_3O_8 ≥100 ppm estimated by the service variables.

A plan view of the estimate block grade-thickness is provided in Figure 2, and representative horizontal and vertical sections are illustrated in Figure 6, Figure 7 and Figure 8 for U_3O_8 grades, and in Figure 9, Figure 10 and Figure 11 for the recoverable portion of blocks ≥100 ppm U_3O_8.

For personal use only

For personal use only

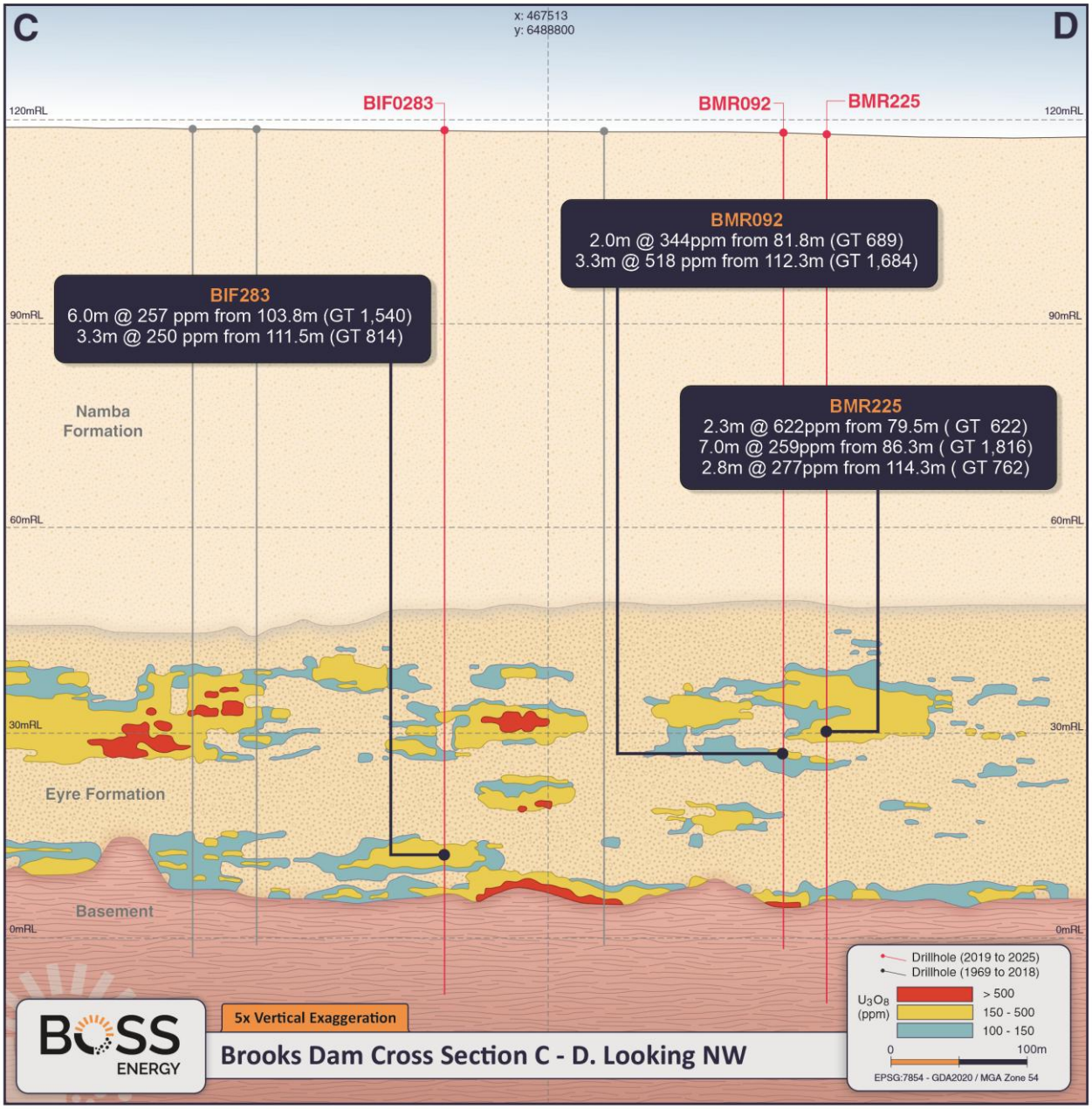


Figure 6: Representative U_3O_8 grade cross-section C-D Brooks Dam domain; 15-m-thick-slice (for location see Figure 2)

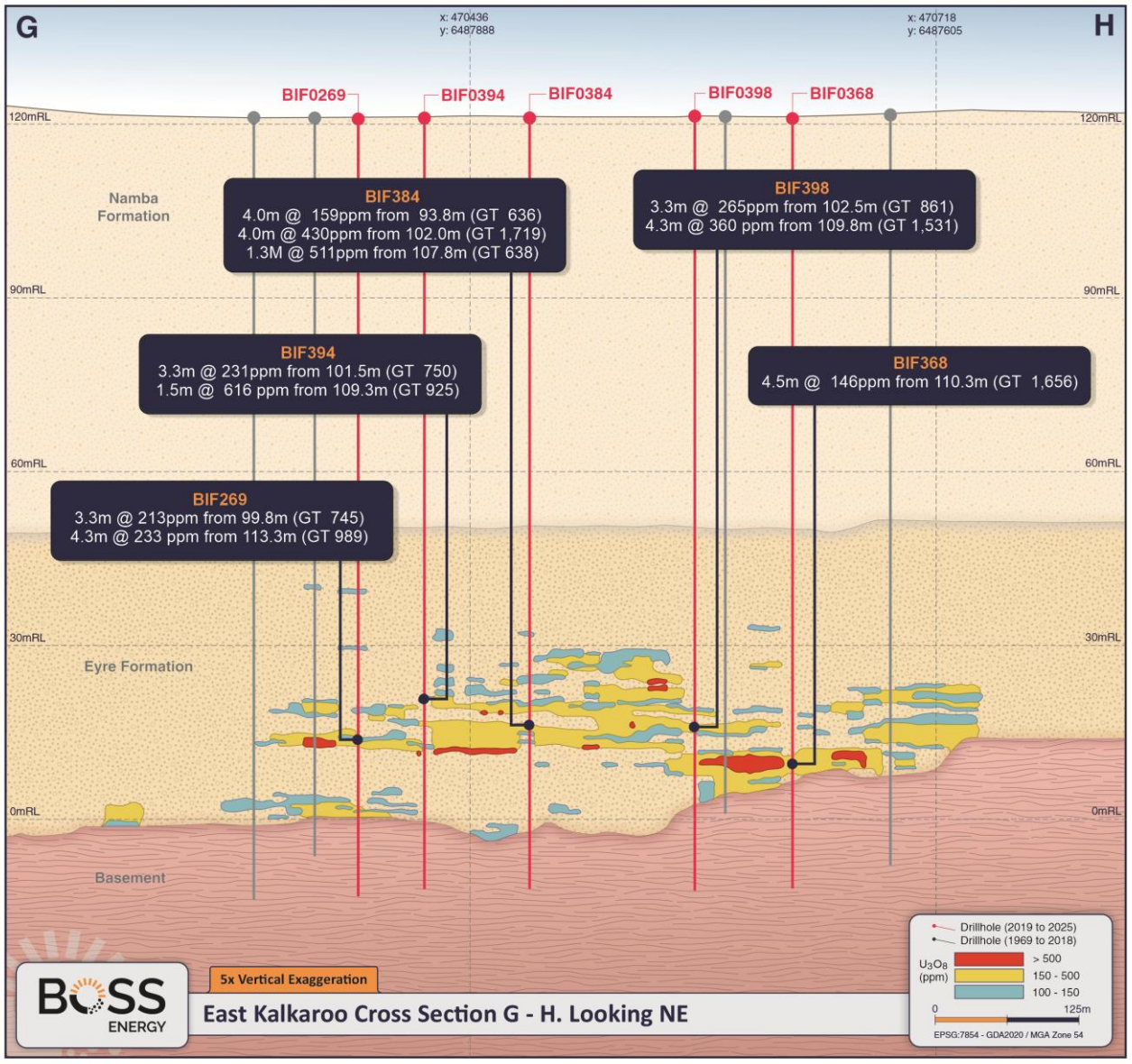


Figure 7: Representative U_3O_8 grade cross-section G-H East Kalkaroo domain; 15-m-thick-slice (for location see Figure 2)

For personal use only

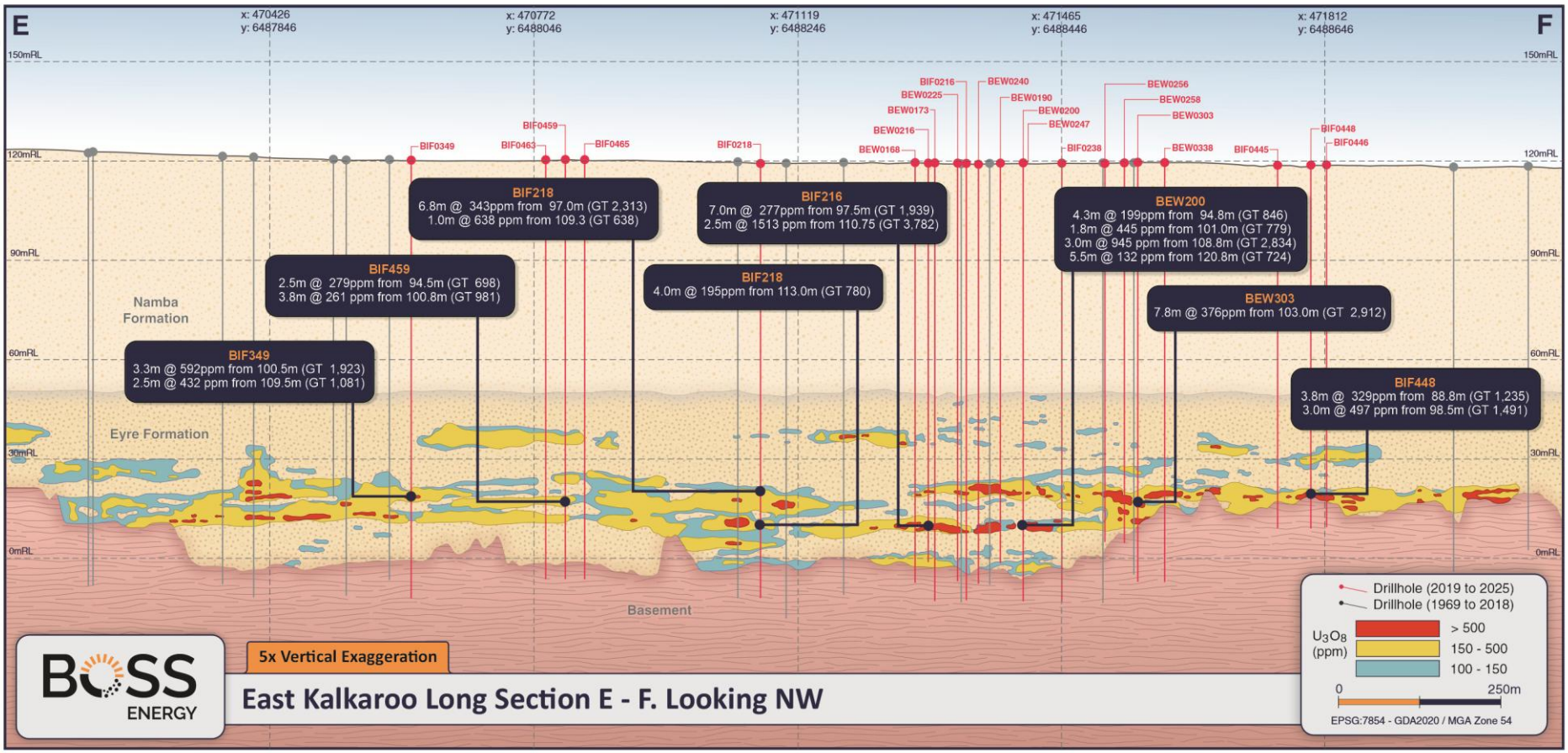


Figure 8: Representative U_3O_8 grade long section East Kalkaroo domain; 15-m-thick-slice (for location see Figure 2)

personal use only

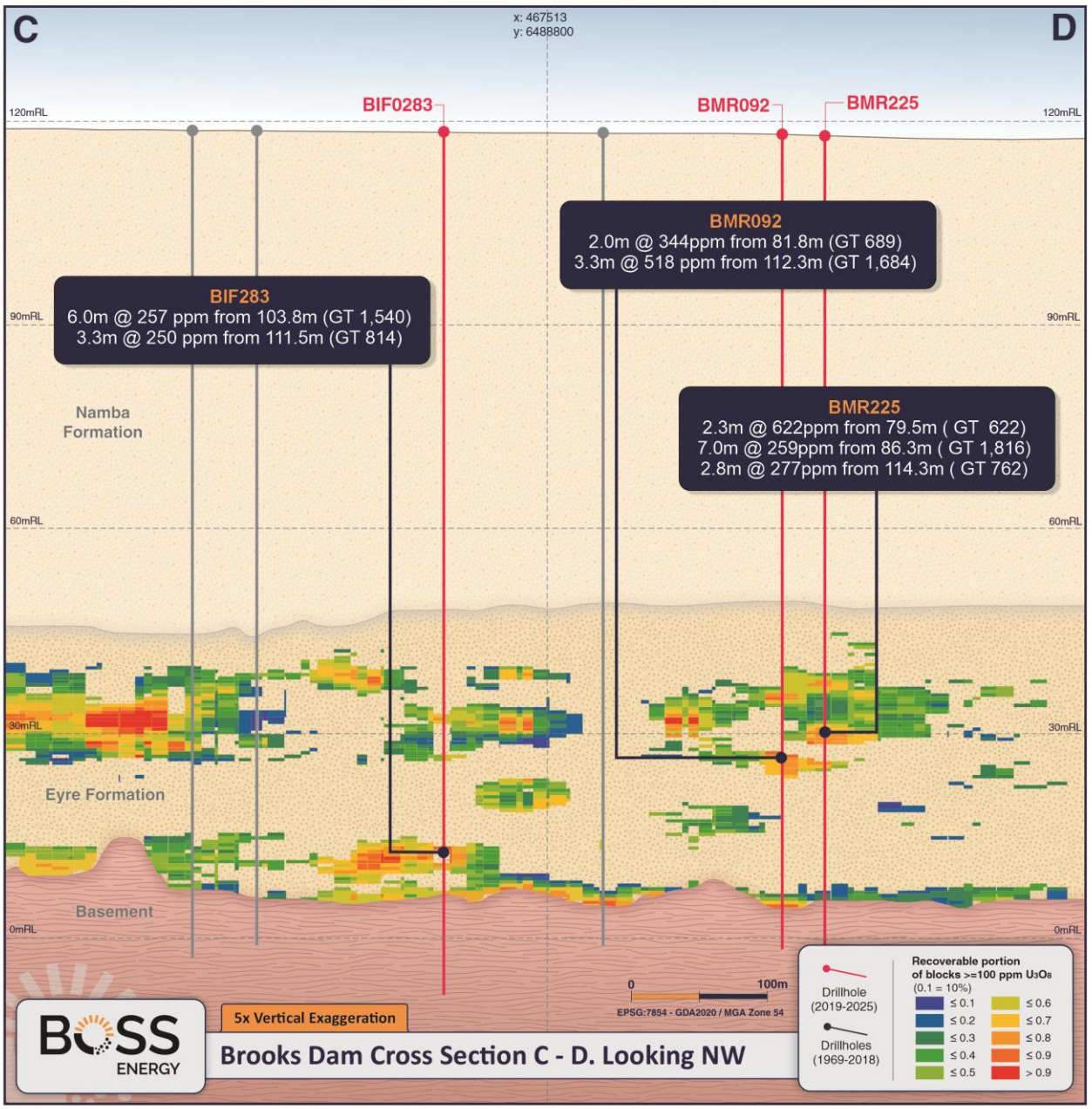


Figure 9 : Representative cross-section C-D Brooks Dam domain of recoverable portion of blocks ≥100 ppm U_3O_8; 15-m-thick-slice (for location see Figure 2)

For personal use only

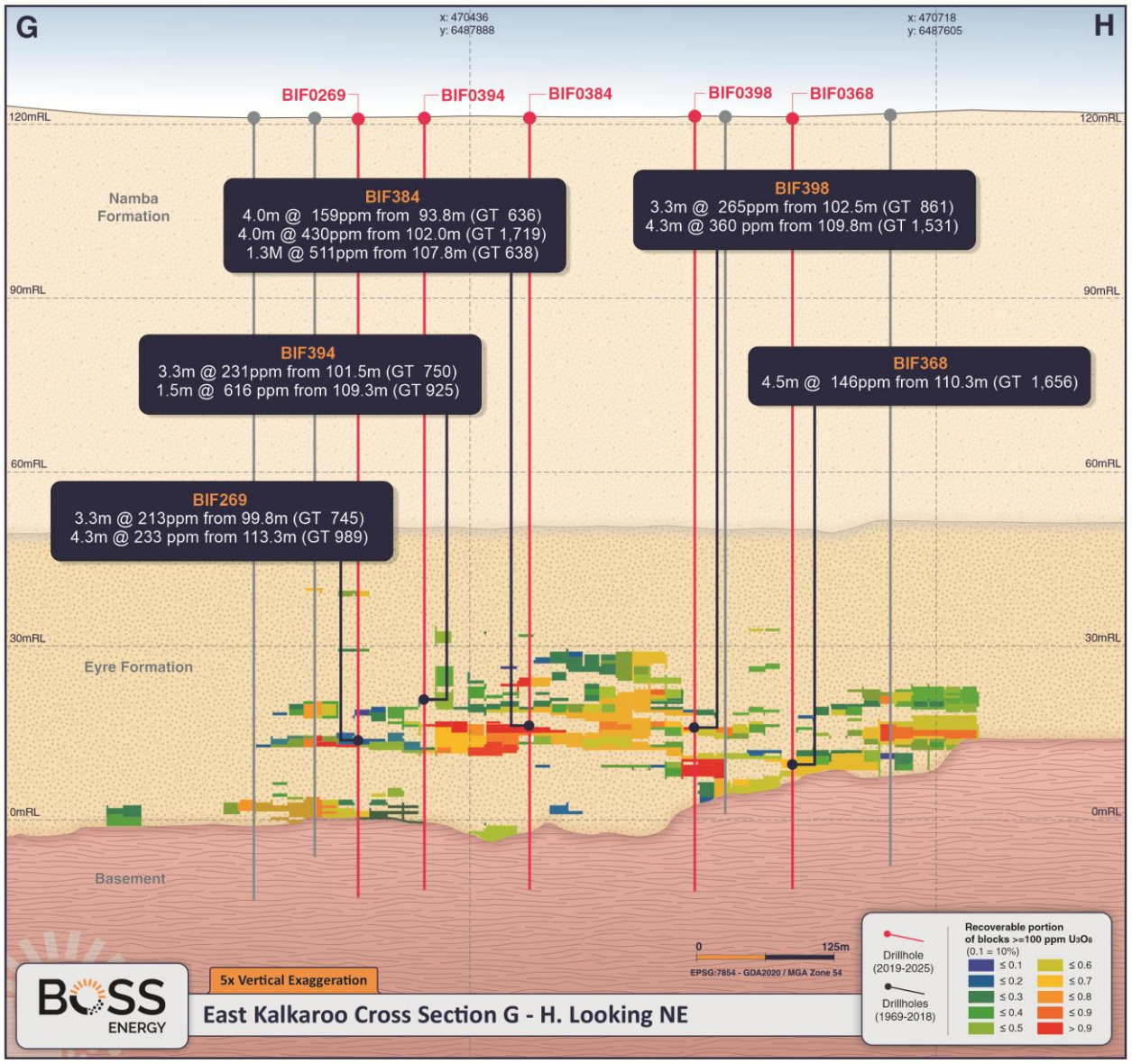


Figure 10: Representative cross-section G-H East Kalkaroo domain of recoverable portion of blocks ≥100 ppm U_3O_8; 15-m-thick-slice (for location see Figure 2)

For personal use only

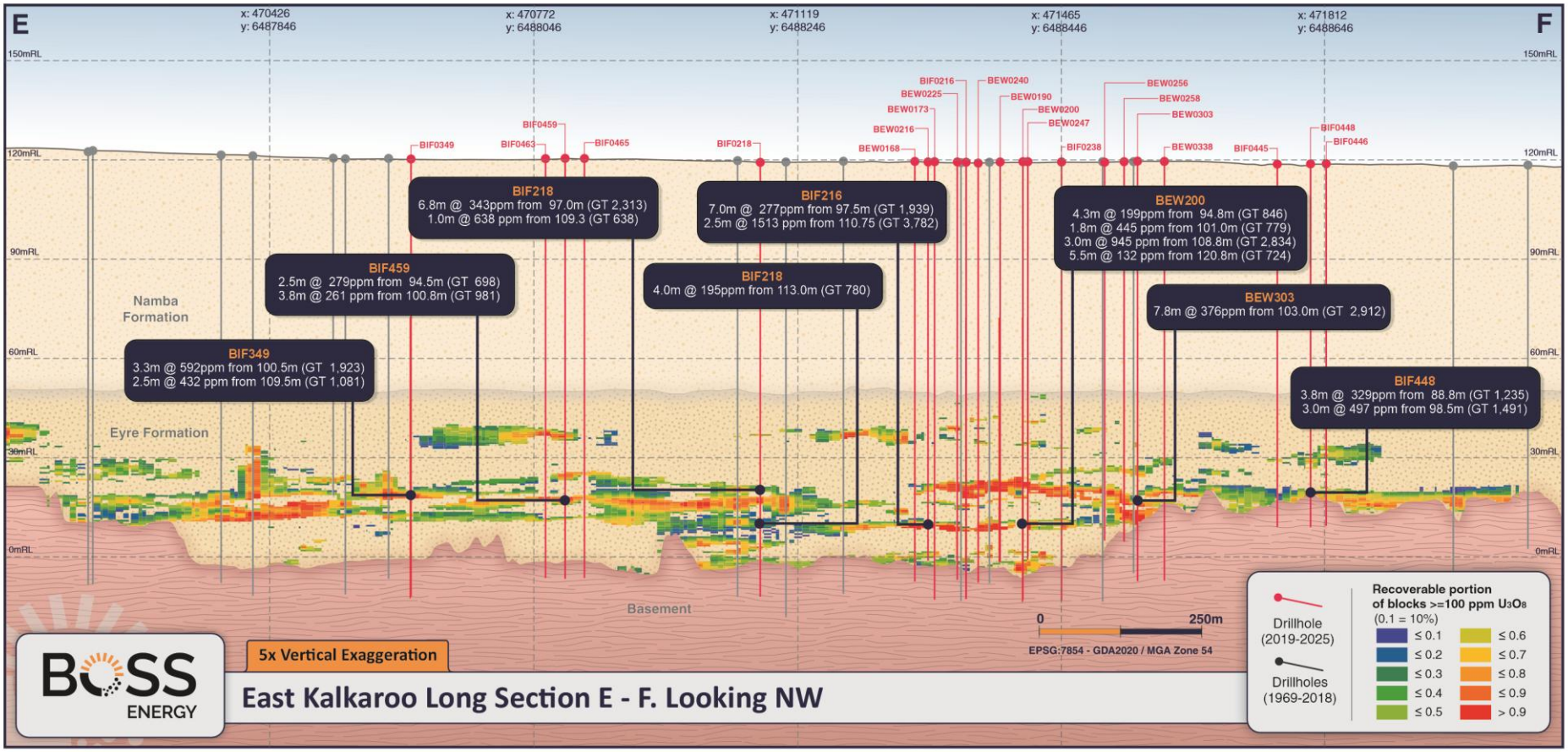


Figure 11: Representative long section East Kalkaroo domain of recoverable portion of blocks ≥100 ppm U_3O_8; 15-m-thick-slice (for location see Figure 2)

personal use only

For personal use only

8. Initial Assessment of Modifying Factors

Portions of the deposit that do not have reasonable prospects for eventual economic extraction (RPEEE) are not included in the Mineral Resource. The Mineral Resource reported here is a realistic inventory of mineralisation which, under assumed and justifiable technical, economic and developmental conditions, may become economically extractable.

8.1 Mining Methods & Parameters

The Honeymoon Deposit is currently being mined using the In-Situ Recovery (ISR) method within the Honeymoon domain, with mining activities also commencing in the East Kalkaroo domain. The East Kalkaroo domain exhibits the hydrogeological and geological characteristics required for ISR mining, and has demonstrated successful uranium recovery through commercial operations.

RPEEE was considered by excluding the following from the Mineral Resource:

- volumes of probability <40% of KSDR≥100 mD due to low permeability;
- border areas where the grade-thickness (GT) in the Eyre Formation is <1,000 m.ppm U_3O_8 based on drillhole data; and
- border areas where the cumulative thickness of estimated blocks at a 100-ppm U_3O_8 cut-off is <4 m.

The Competent Person considers the 100-mD threshold suitable to approximate the permeability limit for ISR mining, as supported by reconciliation of the block model with forecasted mining production.

To further optimise the development of the resource, the recently completed New Feasibility Study (NFS) evaluates the application of wider-spaced wellfield patterns compared to the existing ISR design. The objective of this work is to assess whether wider well spacing can maintain and potentially lift uranium recovery performance while improving project economics.

The wider-spaced wellfield design has the potential to reduce operating and capital intensity by increasing the volume of mineralisation accessed per injection and recovery pattern, extending leach residence times, reducing reagent consumption, and utilising wellfield infrastructure over a larger area of mineralisation. In addition, preliminary results indicate the potential for improved Pregnant Leach Solution (PLS) grades, which could further enhance processing efficiency and operating costs. The outcomes of this work are detailed in the NFS.

The increase in injector-to-producer well spacing from 30–40 m to 49 m, in the new wide-spaced wellfield design, is consistent with the 35–50 m spacing of producing ISR mines in Kazakhstan.

The Competent Person is not aware of any mining, metallurgical, economic, environmental, or social parameters that could impede further mining developments, using the same extraction and processing method as those in use at the Honeymoon mine.

8.2 Metallurgy

Honeymoon has been in continuous production following operational restart in April 2024. All production is from an in-situ recovery wellfield, which feeds an established ion exchange process plant, followed by precipitation and drying of uranium oxide concentrate, which meets offtake specifications and is sold into global markets.

Along with dozens of successful core leaching tests, Honeymoon has extensive reconciled production data providing a detailed understanding of actual recoveries and performance to date. Since April 2024, 2.5 Mlbs of U_3O_8 have been successfully extracted from the Honeymoon Deposit to 30 June 2026.

8.3 ESG

The Honeymoon Mine is an existing operating uranium mine with established and approved waste and process residue management systems in place. Waste streams generated through mining and processing activities are well understood, with approved disposal facilities and management processes established for the handling, containment, and disposal of process residues, low-level radioactive waste, liquid waste streams and general operational wastes.

Waste management activities are undertaken in accordance with the approved Program for Environment Protection and Rehabilitation (PEPR), Radiation Management Plan (RMP), and Radioactive Waste Management Plan (RWMP), and associated operational procedures. Existing waste disposal facilities have been assessed and approved by the Department for Energy and Mining (DEM) and Environment Protection Authority (EPA), with controls implemented to minimise potential environmental impacts and ensure regulatory outcomes and obligations are achieved. Existing approved waste management processes and disposal facilities are considered suitable to support ongoing operations, with no significant waste management constraints identified that would impact continued mining and processing activities.

A Native Title Agreement is in place with the Adnyamathanha, Ngadjuri and Wilyakali Traditional Owners (NAWNTAC) and the Wilyakali Traditional Owners. Both these agreements cover 100% of the Honeymoon Deposit area tenements.

The Competent Person is not aware of any other environmental constraints, licensing factors, social factors, landowner issues, or otherwise that would negatively impact the potential for eventual economic extraction at Honeymoon.

For personal use only

9. Uranium Market

A long-term uranium price assumption of US$90/lb U_3O_8 has been adopted for the MRE. This assumption is considered reasonable given prevailing uranium market conditions, including the strengthening long-term contracting market and the uranium price indicators available at the effective date of the estimate. The term uranium price reached ~US$90/lb in early 2026, and subsequently increased to US$95.50/lb by July 2026. The term market outlook also remains supported by forecast growth in nuclear generating capacity and uranium requirements, together with the need for investment in new mine supply to replace declining production from existing operations.

For personal use only

For personal use only

10. Resource Classification

The Competent Person has classified the Mineral Resource in the Indicated and Inferred categories in accordance with the JORC Code (2012). In areas classified as Indicated, geological evidence is sufficient to assume geological and grade continuity. In areas classified as Inferred, geological evidence is sufficient to imply but not verify geological and grade continuity.

The resource classification is based on the following considerations:

- Based on the planned increase of the mine production and associated wide-spaced wellfield design, RSC conducted a new drillhole spacing analysis (DHSA) in 2026. The study led to a revision of the minimum drillhole spacing requirements to control the estimation of grade and volume to within ±15% over a one-year period for an Indicated classification, and to within ±15% over a one-quarter period for a Measured classification.
- At Brooks Dam, Central Kalkaroo, and East Kalkaroo, a minimum drill spacing of 100 m on a dice-5 pattern is required to provide sufficient confidence for an Indicated classification.
- At the Honeymoon domain, a minimum drill spacing of 80 m on a dice-5 pattern is required for an Indicated classification.
- At Brooks Dam, Central Kalkaroo, and East Kalkaroo, a minimum drill spacing of 40 m × 40 m pattern is required for a Measured classification. At Honeymoon, a 30 m × 30 m pattern is required for a Measured classification.
- The controls on uranium mineralisation are well constrained at the scale of the Honeymoon Deposit.
- The permeability model was generated by indicator kriging; therefore, the degree of confidence with respect to geological continuity is limited, particularly in areas with wide drillhole spacing. This uncertainty is somewhat compensated by the lowering of the cut-off grade to 100 ppm U_3O_8.
- Approximately 99% of the uranium data used in the MRE (or ~92% considering the 100-ppm U_3O_8 threshold used to define service variables) are derived from gamma data. The Competent Person considers accurate modelling of the radiometric disequilibrium is not possible at this stage due to a lack of suitable data and the limited understanding of the disequilibrium's geological controls. Therefore, no correction for radiometric disequilibrium has been applied, which may introduce localised bias; however, the Competent Person does not consider this potential bias to be material for reporting a global MRE, due to the compensating effects of positive and negative disequilibrium. In addition, the radiometric disequilibrium has been partly addressed by applying a 250-ppm top cut on eU_3O_8 data for composites having pU_3O_8 <250 ppm. A comprehensive data review by the Competent Person is in progress, and will be incorporated in the next MRE. As such, confidence in the dataset is reduced for the current MRE.

The large amount of drillhole data at spacings suitable for the classification of Measured and Indicated Mineral Resources is negatively impacted by a lack of confidence in the data, the absence of correction for radiometric disequilibrium, the paucity of dry bulk density measurements, limited confidence in the continuity of the permeability model, and limited confidence in the grade continuity. Consequently, the theoretical resource classification based on the DHSA has been downgraded to Indicated (instead of Measured) and Inferred (instead of Indicated). These sources of uncertainty are being addressed and will be reflected in future updates of the MRE.

For personal use only

11. Cut-Off Grade

A cut-off grade of 100 ppm U_3O_8 was applied. Operational experience at Honeymoon, together with preliminary life-of-mine studies incorporating actual operating cost data (C1 and AISC), a long-term uranium price assumption of US$90/lb U_3O_8, and the application of a wide-spaced wellfield design, indicate that mineralisation above 100 ppm U_3O_8 has reasonable prospects for eventual economic extraction supported by the NFS. Accordingly, a 100-ppm U_3O_8 reporting cut-off grade has been adopted for the current MRE.

The evolution of grade and tonnage as a function of the U_3O_8 cut-off before depletion is presented in Figure 12.

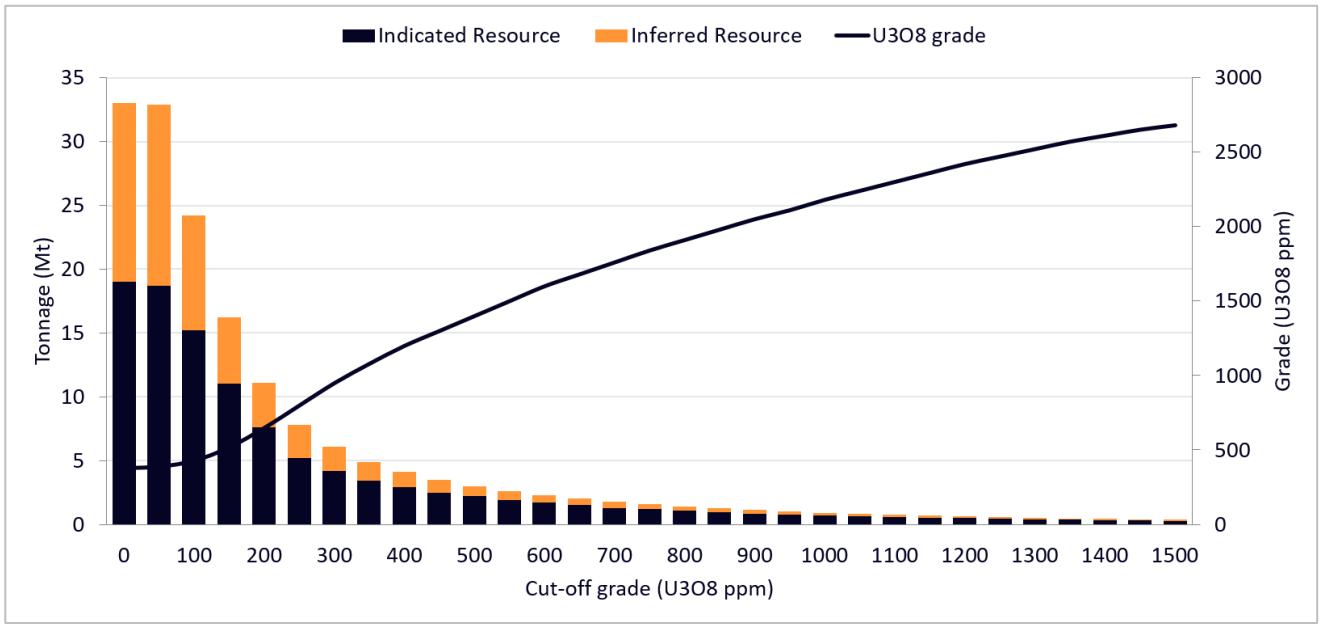


Figure 12: Honeymoon Deposit MRE grade-tonnage curve (undepleted)

For personal use only

12. Comparison with 2019 MRE

The comparison of the 2026 Honeymoon Mineral Resource estimate (MRE) at a 100-ppm U_3O_8 cut-off (cut-off grade used in 2026) and depleted as of 30 June 2026 with the 2019 MRE at a 250-ppm U_3O_8 cut-off (cut-off grade used in 2019) and depleted through to 2019 indicates a decrease in U_3O_8 metal by 15.1 Mlbs U_3O_8 (-42%), and an average grade reduction of 220 ppm U_3O_8 (-33%) (Table 3).

The changes in estimated metal tonnage at Honeymoon are due to the following factors (Figure 13):

- a change in the estimation domaining approach using permeability data to model favourable lithological units and considering geographical zones to account for spatial variability of geology and grade populations;
- the estimation of U_3O_8 combined with the estimation of the proportion of blocks ≥100 ppm U_3O_8 led to an increase in U_3O_8 grade at a 250-ppm U_3O_8 cut-off due to a reduction of the dilution caused by grades <100 ppm U_3O_8;
- the application of reasonable prospects for eventual economic extraction (RPEEE) constraints to exclude low-permeability lithologies (<100 mD) that are not amenable to in-situ recovery (ISR) mining, thus leading to a reduction in estimated tonnage;
- lowering the cut-off grade from 250 ppm U_3O_8 to 100 U_3O_8 ppm, following Boss' new mining strategy based on a wide-spaced wellfield design and excluding low-permeable lithologies, led to an increase in resource tonnage compared to the 2019 MRE; and
- the depletion[2] of 2.5 Mlbs U_3O_8 (1.1 kt U_3O_8) from mining as at 30 June 2026, since the 2019 MRE — the depletion has been applied by subtracting the extracted U_3O_8 metal tonnage from the U_3O_8 metal tonnage of the Indicated Resource, and recalculating the remaining tonnage accordingly.

[2] *The total depletion integrating U_3O_8 extraction prior to 2019 is 3.3 Mlbs.*

For personal use only

Table 3: Comparison of 2026 (depleted to 30 June 2026) and 2019 (depleted through to 2019) MREs for the Honeymoon Deposit

MRE (depleted basis)	Resource Classification	Mt	Grade ppm U_3O_8	Metal	
				Kt U_3O_8	Mlbs U_3O_8
2019 (250-ppm U_3O_8 cut-off)	Measured	3.1	1,100	3.4	7.6
	Indicated	14.3	610	8.7	19.2
	Inferred	7.0	590	4.1	9.1
	Total	**24.5**	**660**	**16.3**	**35.9**
2026 (100-ppm U_3O_8 cut-off)	Measured	-	-	-	-
	Indicated	12.1	510	6.2	13.7
	Inferred	9.3	350	3.2	7.1
	Total	**21.4**	**440**	**9.4**	**20.8**
Difference	Measured	-3.1	-1,100	-3.4	-7.6
	Indicated	-2.2	-100	-2.5	-5.5
	Inferred	2.3	-240	-0.9	-2.0
	Total	**-3.1**	**-220**	**-6.8**	**-15.1**
Relative Difference	Measured	-100%	-100%	-100%	-100%
	Indicated	-16%	-15%	-29%	-29%
	Inferred	32%	-41%	-22%	-22%
	Total	**-13%**	**-33%**	**-42%**	**-42%**

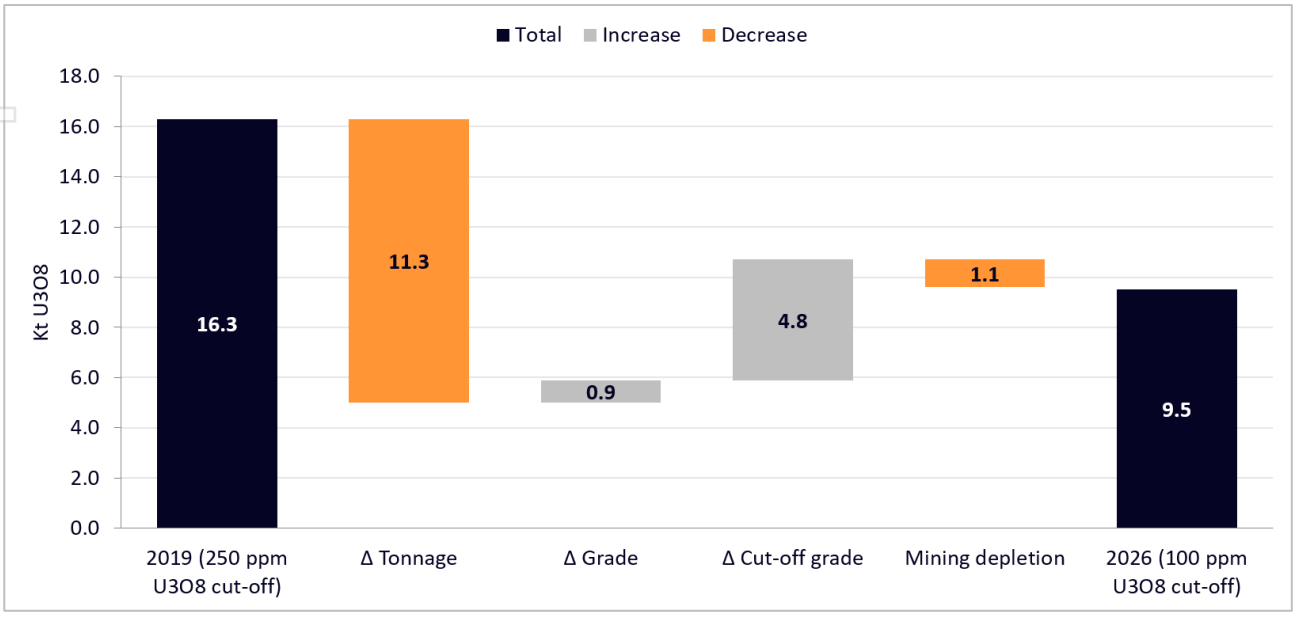


Figure 13: Main factors responsible for changes in U_3O_8 metal of the Honeymoon Deposit Mineral Resources between 2019 and 2026 (with mining depletion).

In the 2019 MRE, U_3O_8 data were modified using a disequilibrium model based on an interpolation of pU_3O_8 and eU_3O_8 data. No correction was made for radiometric disequilibrium in the 2026 MRE. Due to the significant spatial variability of the radiometric disequilibrium, the limited understanding of its geological controls, and the lack of U_3O_8 data below the 250-ppm detection limit of the prompt fission neutron (PFN) tool, the Competent Person considered that accurate modelling of the radiometric disequilibrium was not possible at this stage.

The Competent Person considers the lack of correction for radiometric disequilibrium to have a minor impact on the global Mineral Resources for the Honeymoon Deposit.

The 2026 MRE contains no Measured Mineral Resources (Figure 2, Table 1). The relative proportion of higher-confidence resources (Indicated and Measured) decreased from 75% in 2019 to 66% in 2026.

The changes in resource classification at Honeymoon are due to several factors:

Positive factors (increased confidence):

- an additional 685 drillholes for a total of 86,670 m have been completed in the modelled area since January 2019; and
- an increase in planned annual production associated with an increase in wellfield injector-to-injector spacing from 56 m × 56 m to 70 m × 70 m, and up to 100 m × 100 m in the new mine plan, allowing relaxation of the minimum drillhole spacing requirements for Measured and Indicated classifications.

Negative factors (decreased confidence):

- lowering of the cut-off grade from 250–100 ppm U_3O_8 results in a major increase in the proportion of equivalent U_3O_8 (eU_3O_8) data, with ~1% PFN U_3O_8 (pU_3O_8) data used in the MRE (~8% at a 100-ppm U_3O_8 cut-off). (The lack of appropriate factors to convert eU_3O_8 to U_3O_8 to account for the radiometric disequilibrium typical of this deposit type represents a potential source of localised bias in the MRE. Increased production, together with larger wellfield spacing is likely to partially mitigate the effects of this imbalance); and
- limited confidence in uranium gamma datasets that were not reviewed as part of the MRE, combined with incomplete documentation on calibration parameters and quality control for a significant portion of uranium data acquired prior to 2012.

Comparison of U_3O_8 metal within the five Honeymoon wellfields currently in production in the Honeymoon domain, with the forecast life-of-mine production of 4.3 Mlbs U_3O_8, results in a relative difference of +10% at an 85% recovery factor and -10% at a 70% recovery factor. This indicates that the MRE is globally unbiased at the scale of the current operation.

On an equivalent basis, the comparison of the undepleted 2026 MRE at a 250-ppm U_3O_8 cut-off with the undepleted 2019 MRE at a 250-ppm U_3O_8 cut-off indicates a decrease in tonnage by 68% and in U_3O_8 metal by 63%, and an increase in U_3O_8 grade by 16% (Table 4). This comparison has been added to illustrate the variance associated with changes to the cut-off grade and with the effects of depletion in comparison with Table 3.

For personal use only

Table 4: Comparison of 2026 and 2019 MREs at a 250-ppm U_3O_8 cut-off on an undepleted basis

MRE (undepleted basis)	Resource Classification	Mt	Grade ppm U_3O_8	Metal Kt U_3O_8	Mlbs U_3O_8
2019 (250-ppm U_3O_8 cut-off)	Measured	3.4	1,100	3.8	8.4
	Indicated	14.4	610	8.7	19.2
	Inferred	7.0	590	4.1	9.1
	Total	24.8	670	17	36.7
2026 (250-ppm U_3O_8 cut-off)	Measured	-	-	-	-
	Indicated	6.1	840	5.2	11.4
	Inferred	1.8	570	1.0	2.2
	Total	7.9	780	6.2	13.6
Difference	Measured	-3.4	-1,100	-3.8	-8.4
	Indicated	-8.2	230	-3.6	-7.8
	Inferred	-5.2	-20	-3.1	-6.9
	Total	-16.9	110	-10.8	-23.1
Relative Difference	Measured	-100%	-100%	-100%	-100%
	Indicated	-57%	38%	-41%	-41%
	Inferred	-75%	-3%	-75%	-75%
	Total	**-68%**	**16%**	**-63%**	**-63%**

For personal use only

13. Risks and Opportunities

The JORC Code (2012) requires Competent Persons to disclose and discuss technical risks in resource estimation studies. This announcement provides a transparent summary of these risks, and, in the opinion of the Competent Person, the balance of these risks warrants the Mineral Resource to be classified in the Indicated and Inferred categories.

As with most MREs, the key risks include the quality of the drilling data, the drillhole spacing, and the quality and integrity of the domains used for estimation.

The risks associated with the MRE are captured in the resource classification.

The following low-to-medium risks have been identified by the Competent Person:

- There is a lack of confidence in eU_3O_8 data due to the lack of a review of eU_3O_8 data and metadata, which represents a low-to-medium risk considering mining reconciliation results in B1 to B5 wellfields.
- There is no radiometric disequilibrium model, which is partly addressed by applying a 250-ppm top cut on eU_3O_8 data where pU_3O_8 <250 ppm for the same intervals, and presents a low risk at the Deposit scale and a medium risk at the local scale, considering the wide-spaced wellfield design.
- The calibration of NMR data is based on sandstone, whereas aquifers at Honeymoon mostly consist of unconsolidated sands. The Competent Person considers this associated uncertainty with respect to the KSDR values used for the MRE to be low risk, based on simulations using the estimated block model that reproduce the mining production to date with an accuracy of approximately ±10%.
- The theoretical dry bulk density value is based on sand with 30% porosity for all lithologies. The Competent Person considers this a low risk, as the dry bulk density of 1.9 g/cm^3 is not expected to vary significantly in the aquifer.
- Elements that are likely to impact the uranium leaching process such as organic matter and pyrite have not been modelled. The Competent Person considers this a low risk to the Resource, given the possibility exists to increase the acid and oxidant concentrations of leaching solutions in those areas without compromising the economics of the mining operation.
- There is no litho-stratigraphic model for the Eyre Formation, which represents a low risk at the Honeymoon Deposit scale and a medium risk at the local scale.
- No interpreted mineralisation model is available, which represents a low risk at the Honeymoon Deposit scale and a medium risk at the local scale.

For personal use only

Boss and RSC are actively completing several workstreams which will be incorporated into future updates of the MRE. These include:

- further drilling to infill the current grid, notably at Brooks Dam, to improve the degree of confidence and enlarge the Indicated classification contour;
- an in-depth data and metadata review which is expected to increase confidence in the uranium data;
- a radiometric disequilibrium study, with the purpose of determining a radiometry-grade correlation and better understanding the spatial distribution of the disequilibrium;
- an NMR permeability model validation study by the University of Western Australia, which is expected to improve confidence in the NMR data or correct the data to consider more appropriate calibration parameters;
- a dry bulk density measurement campaign to evaluate density variability across the different lithologies and update density values for use in the next MRE if required;
- calibration of induction data to account for pyrite and to map the abundance of pyrite;
- a lithofacies interpretation, and lithostratigraphic modelling, to improve the geological interpretation of the mineralisation and the quality of the estimation domains; and
- integration of a mineralisation model into estimation domaining to consider the geological interpretation of the controls on mineralisation.

For personal use only

14. Competent Person's Statements

The information in this announcement that relates to the Honeymoon Mineral Resources and Exploration Results (to the extent such Exploration Results have not been previously announced by the Company (see Section 15 below regarding previously announced Exploration Results)) is based on information and supporting documentation compiled by Mr Guillaume Lorilleux, a Competent Person, who is a Fellow of The Australasian Institute of Mining and Metallurgy (AusIMM) and member of the Australian Institute of Geoscientists (AIG). Mr Lorilleux is Principal Resource Geologist at RSC, a global resource development consultancy. Boss Energy Ltd has also contracted RSC to provide limited contracting and other advisory services. The full nature of the relationship between Mr Lorilleux, RSC, and Boss Energy Ltd, including any issue that could be perceived by investors as a conflict of interest, has been disclosed. Mr Lorilleux has sufficient experience that 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 Lorilleux consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

For personal use only

15. Reference to Previous Reports

Drillholes included in the Honeymoon Deposit MRE that have not been previously reported by the Company are detailed in Appendix 2 of this Report. All other drillholes and intersections referenced in this release have been reported in compliance with ASX Listing Rules 5.7.1 and 5.7.2 in the Company's previous ASX announcements.

All Company Public Reports are available to view on https://bossenergy.com/investors/asx-announcements.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

For personal use only

16. Important Notices

Forward Looking Statements

This document contains certain forward-looking statements provided by or on behalf of Boss with respect to potential future matters. Forward-looking information may include, without limitation, statements regarding plans, strategies and objectives of Boss, production and financial guidance, financial forecasts, estimates of project milestones and timing and expected costs or production outputs. In some cases, forward-looking information can be identified by terms such as "may", "will", "should", "expect", "plan", "anticipate", "believe", "intend", "estimate", "predict", "potential", "continue" or other similar expressions concerning matters that are not historical facts. Guidance as to production, unit costs and capital expenditure is based on assumptions, budgets and estimates existing at the time of assessment which may change over time impacting the accuracy of those estimates. These estimates are developed in the context of an uncertain operating environment including in respect of inflationary macro-economic conditions, and uncertainties surrounding the risks associated with mining which may impact production and have a flow on effect on sales. Actual results may therefore vary significantly depending on these risks and the timing required to address them.

Forward-looking statements reflect Boss' expectations at the date of this document, however, these statements are not guarantees or predictions of future performance or statements of fact. Forward-looking information involves known and unknown risks, uncertainties and other factors (many of which are beyond the control of Boss and its directors and management) which may cause the actual results, performance or achievements of Boss and its business to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Accordingly, undue reliance should not be placed on forward-looking information.

The forward-looking statements in this document reflect various assumptions by or on behalf of Boss (which assumptions may prove to be inaccurate). Accordingly, this is another reason why such statements are subject to significant business, technical, legal, economic and competitive and other uncertainties and contingencies and other factors which may be beyond the control of Boss which could cause actual results or trends to differ materially from the forward-looking statements in this document, including but not limited to differences or inaccuracies arising from price and currency fluctuations, geotechnical factors, geological and mining factors, estimated continuity of mineralised horizons, metallurgical and processing factors, sales factors, drilling and production results, development progress, operating results, Mineral Resource estimates, legal issues, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries, approvals and cost estimates, environmental risks, ability to meet funding requirements, share price volatility, uranium markets and other matters. Accordingly, there can be no assurance that such forward-looking statements and projections will be realised.

Boss makes no representations as to the accuracy or completeness of any forward-looking statements or projections or that any forecasts will be achieved. Additionally Boss makes no representation or warranty, express or implied, in relation to, and (to the maximum extent permitted by law) no responsibility or liability (whether for negligence, under statute or otherwise) is or will be accepted by Boss or by any of its officers, directors, shareholders, partners, employees, or advisers as to or in relation to the accuracy or completeness of the information, statements, opinions or matters (express or implied) arising out of, contained in or derived from this document or any omission from this document.

For personal use only

Boss does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in Boss's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

Mineral Resource estimates are necessarily imprecise and depend on interpretations and geological assumptions, minerals prices, cost assumptions and statistical inferences (and assumptions concerning other factors, including mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors) which may ultimately prove to be incorrect or unreliable. Mineral Resource estimates are regularly revised based on actual exploration or production experience or new information and could therefore be subject to change. In addition, there are risks associated with such estimates, including (among other risks) that minerals mined may be of a different grade or tonnage from those in the estimates and the ability to economically extract and process the minerals may become compromised or not eventuate. Accordingly, this is another reason why no assurances can be given of whether the production guidance, financial forecasts or other forecasts or other forward-looking statements or information in this document will be achieved.

Effect of Rounding

A number of figures, amounts, percentages and estimates in this document are subject to the effect of rounding. Accordingly, the actual calculated or estimated figures may differ from the figures set out in this document.

Past Performance

Past performance information, including past share price performance of Boss and past Honeymoon Project information, given in this document, is given for illustrative purposes only and should not be relied upon as (and is not) an indication of Boss' (or anyone else's) views on Boss' future activities, guidance or financial performance or condition. Past performance of Boss cannot be relied upon as an indicator of (and provides no guidance as to) the future performance of Boss.

For personal use only

personal use only

APPENDIX 1: JORC 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.*	• A total of 2,865 holes (rotary mud, diamond, sonic) were drilled between 1969 and 2025 in the Honeymoon Deposit area. The Honeymoon Mineral Resource estimate is based on uranium data derived from geophysical surveys (gamma and PFN). • Gamma: scintillometric gamma probes were used to measure gamma rays converted to equivalent uranium content, denoted eU_3O_8, in 2,090 drillholes for a total of 229,368 m of survey. The depth of investigation of gamma probes varies according to environmental factors but is up to 60 cm into the wall rock. As ~99% of the data used in the MRE is derived from gamma data (or ~92% considering the 100-ppm U_3O_8 threshold used to define service variables), the uncertainty with respect to the radiometric disequilibrium presents a risk to the Mineral Resource. The Competent Person has considered this risk in downgrading the classification of the Mineral Resource from Measured to Indicated, and from Indicated to Inferred categories. • Prompt fission neutron (PFN): PFN probes were used to measure uranium content, denoted pU_3O_8, in 1,606 drillholes for a total of 52,336 m surveyed since 2004. The depth of investigation of PFN probes is up to 40 cm but is highly dependent on environmental factors such as porosity and drillhole diameter. Uranium data from PFN logging were retained for 7,314 25-cm-composites from 698 holes, after quality ranking of PFN calibration and application of a lower detection limit of 250 ppm U_3O_8. PFN probes contain a scintillometer gamma ray detector, so the equivalent uranium content, denoted peU_3O_8, was also recorded and used for depth matching with other gamma runs. pU_3O_8 data were validated by comparison with chemical U_3O_8 data for 11 sonic drillholes of the BSC series. • The data informing the MRE come from 2,067 holes in the modelled area after excluding poor quality data (data excluded for 430 holes in the modelled area). Uranium geochemical analyses were not used for resource estimation; however, they were used to validate the downhole PFN data by comparison with the U_3O_8 grades. The data informing the MRE comprise 98.1% eU_3O_8 data, 0.8% pU_3O_8 data, and 0.4% peU_3O_8 data. The remaining 0.6% and 0.1% of the data have been set respectively to 250 ppm eU_3O_8 for eU_3O_8 data >250 ppm for intervals where pU_3O_8 < 250 ppm, and to 125 ppm U_3O_8 for intervals where pU_3O_8 <250 ppm and no gamma data were available.

Criteria	JORC Code explanation	Commentary
		• A total of 685 samples with lengths of 0.05–1.5 m were collected from 11 sonic drillholes. Samples were dried and some were pulverised before analysis as required. For drillholes BSC007 to BSC015, samples were subject to mixed acid digest. Al, Ca, Cr, Fe, K, Mg, Mn, Na, P, S, Sc, Ti, and V were determined by inductively coupled plasma (ICP) optical emission spectrometry (OES), and Ag, As, Ba, Be, Bi, Cd, Ce, Co, Cs, Cu, Dy, Er, Eu, Ga, Gd, Hf, Ho, In, La, Li, Lu, Mo, Nb, Nd, Ni, Pb, Pr, Rb, Re, Sb, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Tl, Tm, U, W, Y, Yb, Zn, and Zr were determined by ICP mass spectrometry (MS). Fifty-five (55) samples were analysed for S and C by total combustion. For samples from drillholes BSC005 to BSC006, several analytical processes were performed: determination of Cu, Mo, Pb, and Zn by ICP-OES after mixed acid digest (as for BSC007 to BSC0015 above), determination of Ag by ICP-MS after digest in bromine, nitric acid and hydrochloric acid, Cr and Fe by ICP-OES, Th and U by ICP-MS after lithium metaborate fusion followed by nitric acid digestion, and C and S by total organic carbon by total combustion. • Downhole nuclear magnetic resonance (NMR) probes (WIREBmrTM-60 and WIREBmrTM-90, with diameters of 230 and 360 mm, respectively) were used to measure porosity and permeability in 824 drillholes in the Eyre Formation for a total of 46,020.75 m of survey. The porosity data indicate the presence of clay-bound, capillary-bound, and free-fluid porosity. • Downhole formation density probes were used to provide quantitative measurements of bulk density. However, these measurements were not calibrated with bulk density measurements on core, and therefore not used for the MRE. • Downhole neutron porosity (NP) probes were used to measure hydrogen content (hydrogen index, HI) in the formation. Porosity can be deduced by considering the effect of chlorine as a neutron absorber and the effect of bound water in clay and organic matter. However, these measurements were not calibrated with porosity measurements on core, and therefore not used for the MRE. • Downhole induction probes were used to measure the conductivity of the lithologies to identify sand, clay and zones rich in pyrite. Work is progressing to calibrate the induction response in order to map sulphide abundance. • Downhole resistivity probes were used to measure the resistivity of the lithologies to identify sand, clay and organic matter.
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).*	• All drillholes are vertical. Drill types are summarised in the following table:

personal use only

personal use only

Criteria	JORC Code explanation	Commentary

Drill Type	No. Holes	Years	Drillhole Series
Aircore	23	1998–1999	AC98YM and AC99YM
Rotary mud	2,777	1969–2025	Various, BDE, BDX, BEW, BIF, BMR, BMW, CMON, EKE, EMON, H, HEX, HM, HMCHK1, HMD, HMI, HML, HMP, HMW, IVCM, LDW, OBCM, OBM, OVM, PEM, PT, SEG, W
Diamond, Rotary Mud + Diamond Tail	48	1975–2025	SE, BDDH, EK, H, HEX, HMD, HML
Sonic	17	2011, 2017–2018	HEX, HMI, BSC

- Aircore (AC) drillholes targeted basement base metals, and no uranium data were collected.
- Diamond tails of rotary mud holes were drilled in the Eyre Formation.
- Theoretical drillhole diameters varied from 4–12 inches and these data are available for 50.5% of the holes, with diameters of 4 ¾, 5 1/8, 5 5/8, 6, and 9 inches the most frequently recorded. However, actual diameters may differ due to drillhole size reduction (Pers Com James Hewett, Boss database geologist), and the relevant metadata were not available for review. Additionally, real diameters typically increase in unconsolidated sands compared to theoretical diameters due to wash-out effects. The uncertainty related to diameter data incurs a risk on data quality, as diameter data are required to correct the effects of absorption of gamma rays and PFN neutrons by the fluid in drillholes for the calculation of pU_3O_8 and eU_3O_8. The Competent Person has considered this risk in downgrading the classification of the Mineral Resource from Measured to Indicated and from Indicated to Inferred categories.

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.*	• No recovery data are available for sonic and diamond drilling; however, the Competent Person does not consider recovery to be material to the MRE, as the data necessary for estimation are derived from downhole geophysical surveys.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Gamma surveys were conducted across the full length of the drillholes, whereas PFN surveys were performed only in the mineralised Eyre Formation, which is deemed appropriate by the Competent Person.
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.*	• Rotary mud samples were logged qualitatively with respect to lithology, composition, and grain size/morphology/sorting and semi-quantitatively for redox, relative abundance of goethite, haematite, limonite, and pyrite, organic matter, and weathering. Samples were systematically photographed, and rotary mud samples stored in chip trays. • The Competent Person considers the quality and representativity of the rotary mud samples to be poor and considers the resulting data to be unsuitable for the classification of high-confidence mineral resources, or to support mining and/or metallurgical studies. However, the Competent Person considers the combination of geological logging data with downhole gamma, resistivity, induction, and NMR logging data provides a support for lithological interpretation which is appropriate for the classification of high-confidence mineral resources. • Core and sonic samples have been logged to a level of detail which is appropriate for the classification of high-confidence mineral resources, as well as metallurgical and radiometric disequilibrium studies. • Drillholes have been logged from the surface to the bottom. • Geological logging interpretation data are available for 2,193 drillholes, representing 83% of the drillholes containing uranium data.
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.*	• Rotary mud samples were collected every metre using a shovel in the drilling fluid stream between the hole and the sump. The final sample kept in chip trays was collected manually from the sample pile laid on the ground for every metre drilled. • Half and quarter core samples of the 2017 and 2018 sonic drillhole program were collected by using a core saw. Half core samples were wrapped in shrink plastic and vacuum sealed for metallurgical and density studies. Quarter core samples were used for geochemical analyses, and the remaining quarter core were retained for reference. The sampling was based on lithology and PFN uranium grades. • Sonic hole samples were dried and pulverised as required before analysis. Details of sample preparation were not available for review; however, this is not considered a risk by the Competent Person as geochemical data from these samples were not used for the MRE.

personal use only

Criteria	JORC Code explanation	Commentary
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.*	• Uranium data derived from PFN measurements (pU_3O_8) ≥250 ppm have priority over equivalent uranium data derived from gamma ray measurements (eU_3O_8 or peU_3O_8). pU_3O_8 data were validated as a function of the quality of the PFN tool calibration characterised by a ranking, as well as the quality of the data acquisition parameters (speed of acquisition and anode kV). Unvalidated pU_3O_8 data were replaced by eU_3O_8 data or peU_3O_8 data if eU_3O_8 data are not available. peU_3O_8 data, associated with calibration done in calibration pits located at Honeymoon until 2018, were not used in the MRE as the gamma sensor of the PFN probes could not be calibrated due to too shallow drillholes. • Due to the low U_3O_8 cut-off grade, ~99% of the uranium data used for the MRE correspond to eU_3O_8. Several studies between 1970 and 2026 have demonstrated the presence of radiometric disequilibrium with U_3O_8/eU_3O_8 ratios that can be significantly above or below 1, even at a very local scale. This is typical for this type of deposit due to the differential mobility of ^{238}U with its daughter products, notably ^{226}Ra, ^{214}Bi and ^{214}Pb —, the latter two being strong gamma emitters. At Honeymoon however, the radiometric disequilibrium is also impacted by the mobility of radium in highly saline ground waters. No correction was made for radiometric disequilibrium in the MRE. Due to the significant spatial variability of the radiometric disequilibrium, the lack of understanding of its geological controls, and the lack of U_3O_8 data below the 250-ppm detection limit of the prompt fission neutron (PFN) tool, the Competent Person considers that accurate modelling of the radiometric disequilibrium was not possible at this stage. The spatial distribution of the radiometric disequilibrium and its controls require further investigation, and additional core data are needed to establish a robust radiometry-grade correlation. The Competent Person considers the lack of correction for radiometric disequilibrium has a minor impact on the global Mineral Resources for the Honeymoon Deposit due to compensation effects between areas with disequilibrium > 1 and areas with disequilibrium < 1. This assessment is supported by a comparison of U_3O_8 metal within the five Honeymoon wellfields currently in production in the Honeymoon domain with the forecast life-of-mine production of 4.3 Mlbs U_3O_8 which results in a relative difference of +10% at an 85% recovery factor and -10% at a 70% recovery factor. This indicates that the MRE is globally unbiased at the scale of the current operation. However, it is possible that biases may be found at a local scale. The increase of the production and associated size of wellfields and lower cut-off grade will somewhat de-risk the effect of the radiometric disequilibrium. More studies are ongoing to better understand the spatial distribution and controls of the disequilibrium to improve its consideration in the next resource estimate. The uncertainty related to radiometric disequilibrium presents a medium risk to the classification of Indicated mineral resources. • The PFN and gamma tool calibrations were performed at Honeymoon in custom-built pits during Uranium One and Boss Energy times between 2004 and 2018, and have been performed at the Adelaide calibration facility since 2018. The advantage of Honeymoon pits over Adelaide pits was

personal use only

Criteria	JORC Code explanation	Commentary
		to recreate the Eyre Formation aquifer and generate more adequate calibration parameters with less need for corrections for the formation. However, the pits failed in 2018, and attempts by Boss to re-establish pits failed. One issue identified with the Honeymoon pits is that they were not deep enough to allow the calibration of the gamma sensor of the PFN probe, as it is located in the upper part of the probe. The calibration frequency of the PFN tools varies between several days to nearly two years. Each PFN calibration is typically based on 3 runs for each calibration pit, and the average ratio of epithermal neutrons counts over thermal neutrons counts for the 3 runs is used. A significant lack of repeatability of calibration runs was observed for most calibrations between 2010 and 2026 indicating poor precision. Gamma tools have been calibrated regularly. Calibration data were still under review at the time of the MRE for ~45% of the data for which calibration certificates are available. • Spot checks of PFN measurements indicate that the signal can be very noisy, which demonstrates that the 250 ppm U_3O_8 lower detection limit used for the MRE is too low in these instances. The high level of noisiness, and the generation of spurious spikes as observed in many logs, could be related to PFN sampling intervals which vary between 1 and 3 cm, which could be too short for stable counting statistics. The PFN lower detection limit could also be negatively impacted by the absence of grades <470 ppm U_3O_8 in the Adelaide calibration pits, leading to determining calibration coefficients which generate negative grades for low epithermal neutron counts. • The quality of pU_3O_8 data is negatively impacted by the absence of correction of variations in fluid density, and formation density and porosity between the calibration pits and Honeymoon drillholes. • Regarding the borehole diameter corrections, the current factors used vary between 1.2 and 1.6, based on nominal drillhole diameter values. However, the determination of these factors is not documented. The hole diameters of AM7 calibration pits (96 mm, 108 mm, and 125 mm) in Adelaide are too small compared to most Boss drillholes (typically 142.9 mm for exploration/delineation and 228.6 mm for production wells) and do not allow a direct determination of the diameter correction factors for Boss drillholes. The correct application of borehole diameter correction factors for gamma data was still under review at the time of the MRE. The corrections are based on theoretical diameters, whereas real diameters may vary significantly due to washouts of sands, and, more rarely, swelling clays, as indicated by caliper data for drillholes of the BEW and BIF series. This introduces uncertainties in the calculation of pU_3O_8, eU_3O_8 grades and peU_3O_8 grades. • The Competent Person considers that abovementioned uncertainties related to PFN calibration and data pose a low risk to the classification of Indicated resource due to the proportion of PFN data <1% of the uranium dataset. However, as ~99% of the data used in the MRE is derived from

personal use only

Criteria	JORC Code explanation	Commentary
		gamma data (or ~92% considering the 100-ppm U_3O_8 threshold used to define service variables), the uncertainty with respect to equivalent uranium grades presents a medium risk to the classification of Indicated mineral resources. ● In 2024 and 2025, the precision of PFN tools was evaluated by repeating runs in a check drillhole. The repeatability of PFN runs was found globally acceptable within ± 2 standard deviation of the process mean with the exception of PFN08 between November 2024 and April 2025 for which pU_3O_8 data were invalidated and excluded for the MRE. ● The speed of PFN data acquisition should not exceed 0.6 m / min, and 0.5 m/ min is used in practice as confirmed by observations by the Competent Person on site and at the Adelaide calibration facility which is best practice for PFN logging. The anode voltage should not be <75 kV and the Competent Person found that it was closely monitored during the PFN logging process. ● PFN data for BEW0123, BEW0134, BEW0216, BEW0330 and BIF0230 were excluded by the Competent Person for the MRE due to inadequate speed and/or anode voltage acquisition parameters. ● The QC data related to eU_3O_8 data were still under investigation by the Competent Person at the time of the MRE. ● One point four per cent (1.4%) of the NMR data (659.25 m) were invalidated and excluded, based on tests performed by Orica Limited who is responsible for NMR data processing. The calibration of NMR data is based on sandstone, whereas aquifers at Honeymoon mostly consist of unconsolidated sands. The Competent Person considers this associated uncertainty with respect to the KSDR values used for the MRE to be low risk to the classification of Indicated resources, based on simulations using the estimated block model that reproduces the mining production to date with an accuracy of ~±10%. A NMR permeability model validation study is being carried out by the University of Western Australia and is expected to improve confidence in the NMR data or correct the data, to consider more appropriate calibration parameters. ● The Competent Person compared pU3O8 data with chemical analyses for 11 BSC drillholes, which indicated the absence of statistically significant bias above the lower detection limit of the PFN tool. Despite the small number of samples, this comparison provides confidence in the accuracy of PFN data above the detection limit of 250 ppm U_3O_8. A significant data scatter was observed, which is partly related to the spatial variability of U_3O_8, as the depth of investigation of PFN probes represents a larger volume than the core.
Verification of sampling and assaying	● *The verification of significant intersections by either independent or alternative company personnel.* ● *The use of twinned holes.*	● The Competent Person verified the calculations of slope and offset calibration parameters for several PFN calibrations selected randomly and did not find any discrepancies with the database.

personal use only

Criteria	JORC Code explanation	Commentary
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The Competent Person conducted spot checks of the pU_3O_8 grade calculation based on epithermal and thermal neutron counts in LAS files selected randomly and was able to reproduce the pU_3O_8 composite data. • The Competent Person checked the consistency between scans of historical logs and LAS files with data in the database and did not find issues in the database. • The verification process highlighted however several issues including the use of wrong LAS files (0.03% of the checks), missing or erroneous metadata in LAS files and conflicting metadata in different files. These issues highlight a lack of control over data and metadata acquisition and processing. The Competent Person considers this adds a layer of uncertainty on the MRE, and represents a low risk to the classification of Indicated resources. • The Competent Person has not verified the calculation of dead time and K factor, and the calculation of eU_3O_8 as gamma data were still under review at the time of this MRE. As ~99% of the data used in the MRE are derived from gamma data, the uncertainty with respect to equivalent uranium grades presents a medium risk to the classification of Indicated resources. • Numerous holes were drilled at close spacing by different operators throughout the history of the Honeymoon Deposit. Despite the high spatial variability of the U_3O_8 grade and the variability of acquisition conditions due to several types and generations of probes, the Competent Person considers that a statistical study of sample pairs is warranted to identify potential relative biases between drillhole series that could reflect the effect of different downhole geophysical tools and data processing parameters. • The data are stored in a Geobank database system, and managed by a database geologist. Several documents describe data import, processing and validation. eU_3O_8, peU_3O_8 and pU_3O_8 are calculated in Geobank from the raw data and calibration data, and generates 25-cm composites. The depth matching of gamma peaks is checked in Geobank, and corrected if required with visual checks to validate the results. The Competent Person considers that the database management system is fit-for-purpose for the MRE, but that several improvements are required, notably implementing a locking procedure for validated data, improving data consistency checks, integrating QC data, and improving the uranium data validation process to integrate more criteria related to calibration and data acquisition parameters. • The U_3O_8 data have been set respectively to 250 ppm for eU_3O_8 data >250 ppm for intervals where pU_3O_8 < 250 ppm, and to 125 ppm for intervals where pU_3O_8 <250 ppm and no gamma data were available.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine	• The grid system used is GDA94, MGA Zone 54.

personal use only

Criteria	JORC Code explanation	Commentary
	workings and other locations used in Mineral Resource estimation. ● Specification of the grid system used. ● Quality and adequacy of topographic control.	● A 2022 LiDAR survey was used to determine the collar elevation. The survey consisted of 10 points / m^2 with a vertical accuracy of ±10 cm at 1 sigma confidence interval. The survey was rectified using registered survey points installed at site before plant construction began. The Competent Person considers that the use of these LiDAR data to determine the collar elevation is fit-for-purpose. ● The Easting and Northing coordinates of collars were determined by DGPS surveying, with ±10–20 cm horizontal accuracy and with a ±10–20 cm vertical accuracy for 866 drillholes, and by GPS for 50 holes mainly in 2022. There are 1,948 drillholes in the database for which the topographic survey type is unknown. The precision of Easting and Northing values suggest that some of the coordinates of these drillholes were measured by DPGS and others by GPS. The total number of collars surveyed by low precision GPS would be 491. Repeat DGPS surveys were performed for 28 drillholes. After exclusion of one outlier, 75% of drillholes have horizontal distances between original collar and repeat collar location surveys >0.3 m, which is deemed too high considering the theoretical accuracy of DGPS of ±10-20 cm. This lack of precision could be related to the absence of satellite correction. Considering the low horizontal selectivity of ISR mining, the Competent Person considers the level of accuracy and precision of collar coordinates appropriate for the MRE. ● The competent person independently confirmed the Easting and Northing coordinates of two collars selected randomly with a handheld GPS within <2 m. ● The Competent Person could not assess the validation of the zero depth of each run, as the zero depth before and after each run is not recorded. The Competent Person considers that the associated risk is not material to classifying and reporting the MRE. ● The Competent Person assessed the depth-matching of gamma peaks between gamma and PFN tools for 521 drillholes of the BEW and BIF series, and found that the main peaks for >97% of the drillholes coincide within a 15-cm distance. PFN data were further depth-corrected for the remaining <3% for the MRE. The Competent Person considers that the depth correction of logs is fit-for-purpose for the MRE to a Measured resource classification level. ● The review of deviation surveys for 671 drillholes from 2011 to 2025 did not highlight deviations that would significantly affect the MRE. The Competent Person considers that the risk related to drillhole deviation on the MRE is low, considering the small deviation values and the lack of horizontal selectivity of ISR mining. ● The Competent Person considers that the location data are appropriate for the MRE to a Measured resource classification level.

personal use only

personal use only

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Data spacing and distribution</td><td>

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.

</td><td>

The drillhole spacing varies across the different domains: 20–40 m to 150 m at Brooks Dam, 5–40 m at Honeymoon, 20–100 m at Central Kalkaroo, and 10–60 m at East Kalkaroo.
The drillhole spacing analysis performed by RSC in 2026 resulted in the following minimum spacing requirements:

<table>
<tr><th>Domains</th><th>Indicated mineral resources</th><th>Measured mineral resources</th></tr>
<tr><td>Brooks Dam</td><td>100 m, dice 5</td><td>40 m × 40 m</td></tr>
<tr><td>Honeymoon</td><td>80 m, dice 5</td><td>30 m × 30 m</td></tr>
<tr><td>Central Kalkaroo</td><td>100 m, dice 5</td><td>40 m × 40 m</td></tr>
<tr><td>East Kalkaroo</td><td>100 m, dice 5 (or 80 m × 60 m)</td><td>40 m × 40 m (or 50 m × 30 m)</td></tr>
</table>

Notwithstanding other resource classification criteria, the current drillhole spacing is sufficient for Measured and Indicated resource classification.
Uranium grade and NMR data were composited to 25-cm intervals which is considered appropriate for geological domaining, and in relation to the vertical block size of 50 cm.

</td></tr>
<tr><td>Orientation of data in relation to geological structure</td><td>

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.

</td><td>

All holes were drilled vertically, which is approximately perpendicular to the sub-horizontal stratigraphy of the deposit, and appropriate for the orientation of the mineralisation, which is mostly tabular.

</td></tr>
<tr><td>Sample security</td><td>

The measures taken to ensure sample security.

</td><td>

Rotary mud chip samples and core are stored at the Honeymoon mine site behind secure fencing and locked gates. Chip samples are stored in shipping containers and core is stored in a combination of a lockable reefer freezer container (for the recent core), and standard shipping containers (for remains of older core).
Downhole raw geophysical data were collected, processed and validated by logging contractors (e.g. Borehole Wireline Services and Wireline Services) and Boss for PFN data, and provided in digital format before being loaded in Boss's central Geobank database. The database is backed up

</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		with a point-in-time restore system of 35 days, and a long-term retention system of weekly, monthly and yearly backups. ● Historical data (from 1969 to 1982) have been digitised from paper logs and are less accurate than original digital data of more recent years.
Audits or reviews	● *The results of any audits or reviews of sampling techniques and data.*	● The Competent Person reviewed informing data for the MRE, with the exception of gamma data for which the review was still ongoing at the time of the MRE. Several sources of uncertainty were identified as specified in previous sections on data quality and data verification.

For personal use only

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 Honeymoon Deposit area comprises one (1) granted Mining Lease (ML6109), two (2) granted Exploration Licences (EL6081 & EL6510) and two (2) Miscellaneous Purpose licences (MPL15 & MPL92). • The ML and MPLs are current through to 2043; EL6081 expires in 2028, and EL6510 expires in 2031. • All tenements are in good standing and are wholly owned by Boss Uranium Ltd. • A Native Title Agreement is in place with the Adnyamathanha, Ngadjuri and Wilyakali Traditional Owners (NAWNTAC) and the Wilyakali Traditional Owners. Both agreements cover 100% of the Honeymoon Deposit area tenements.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Honeymoon Deposit and surrounding areas of the Yarramba palaeovalley have been extensively explored and drilled by several different companies since 1969. • Work programs have included numerous geophysical surveys, extensive drilling programs, hydrogeological and metallurgical test work, and numerous evaluation studies during this time. • Several Mineral Resource estimates have been completed on the Honeymoon Deposit over the years, with the most recent MRE announced to the ASX on 25th February 2019.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Honeymoon Deposit is a sediment-hosted palaeovalley-type (or basal channel type) uranium deposit. It is located in the Callabonna sub-basin of the Cenozoic Lake Eyre Basin, which overlies saprolitic metamorphic rocks of the Proterozoic Curnamona Province (Willyama Supergroup). • Uranium mineralisation is hosted by weakly consolidated aquifer sands of the Eyre Formation filling an ancient river valley (Yarramba palaeovalley), which has incised into Mesoproterozoic basement rocks of the Willyama Supergroup. The Eyre Formation sediments comprise an upward-fining succession of up to 50 metres of interbedded sand, silt and clay. The Eyre Formation sand aquifers are overlain by the clay-rich Namba Formation aquiclude. The palaeovalley floor is situated between 70 and 130 m below ground level. • Uranium mineralisation extends over a 6-km-strike length and is up to 650 m wide (Figure 2). Mineralisation occurs as a series of pods and tabular bodies, reaching thicknesses of up to 34 m at a 100-ppm U_3O_8 cut-off within permeable lithologies, and is predominantly hosted within the basal aquifer of the Eyre Formation. Locally, mineralisation is associated with arcuate roll-front systems and high-angle fault structures that intersect the host sedimentary sequence.

personal use only

Criteria	JORC Code explanation	Commentary
		• Higher-grade mineralisation at the Honeymoon and East Kalkaroo deposits is typically concentrated where the lower sand units pinch out against the palaeovalley margin beneath overlying clay-rich horizons. Mineralisation at Brooks Dam is primarily hosted in the upper portion of the Eyre Formation, whereas mineralisation at Honeymoon, Central Kalkaroo, and East Kalkaroo is mainly confined to the lower Eyre Formation. A minor amount of mineralisation is hosted within the weathered saprolitic zone at the top of the basement bedrock. • The mineralisation is controlled by localised redox interfaces and permeability contrasts within the host sediments. Uranium occurs as a range of uranium minerals including phosphates (including tristramite, torbernite and meta-autunite), uraninite, coffinite, orthobrannerite and brannerite, often closely associated with Ti-rich phases such as ilmenite and rutile and also pyrite. Minor amounts of U are contained in detrital monazite (0.08% to 0.18%). However, the fine grain size (typically < 10 µm) means a significant proportion of uranium minerals cannot be reliably identified.

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*
	  • *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.*
		• Drillhole information for 29 previously unreported drillholes is provided in Appendix 2. All other drillholes and intersections referenced in this release have been reported in compliance with ASX Listing Rule 5.7.2 in the Company's previous ASX announcements.

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.*	• Intercepts that have not been previously reported by the Company are reported in Appendix 2 as gamma-derived eU_3O_8 and are reported above the nominal 100-ppm pU_3O_8 cut-off grade, 0.5-m minimum interval thickness, and maximum 1-m internal dilution. Results <100ppm are considered

personal use only

Criteria	JORC Code explanation	Commentary
	• *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.*	unreliable (and are therefore not considered "material" for the purposes of ASX Listing Rule 5.7.2) and this cut-off value is used for calculating uranium intersections. • No metal equivalents are reported.
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').*	• All drillholes are vertical. The uranium mineralisation is mainly tabular within sub-horizontal sedimentary units; therefore downhole intercepts are considered to accurately represent the true widths.
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.*	• All the appropriate and relevant diagrams have been included in the body of this 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.*	• All available drillholes related to the MRE have been included in the figures.
Other substantive exploration data	• *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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Mineralogical (infra-red spectroscopic and X-ray diffraction) studies on more than 500 samples indicate small amounts of potentially acid-consuming smectite and carbonate minerals in some samples, but in sufficiently low volume to not have a major impact. • As pyrite influences both acid and oxidant consumption as well as permeability, a study of the spatial distribution of pyrite by combining downhole induction measurements with analytical calibration is ongoing. The results are expected to be available for the next MRE to be used for the feasibility study.

personal use only

Criteria	JORC Code explanation	Commentary
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.*	• Further drilling is being carried out to infill the current grid at Brooks Dam to improve the degree of confidence and enlarge the Indicated classification contour. • An in-depth data and metadata review is ongoing and is expected to increase confidence in the uranium data. • A radiometric disequilibrium study is in progress with the purpose of determining a radiometry-grade correlation and better understanding of the spatial distribution of the disequilibrium. • An NMR permeability model validation study is being carried out by the University of Western Australia and is expected to improve confidence in the NMR data or correct the data, to consider more appropriate calibration parameters. • A dry bulk density measurement campaign is ongoing to evaluate density variability across the different lithologies and to update density values for use in the next MRE if required. • The calibration of induction data to account for and map pyrite abundance is underway. • A lithofacies interpretation and lithostratigraphic modelling is underway to improve the geological interpretation of the mineralisation and the quality of the estimation domains. • A mineralisation model will be integrated into estimation domaining to consider the geological interpretation of the controls on mineralisation. • A statistical study of paired data at close distance will be performed to identify potential relative grade biases between drillhole series.

personal use only

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Since 1999, the downhole geophysical logging data have been collected directly in digital format into industry standard LAS files. • Historical logging was collected onto paper via analogue charts that were digitised during the late 1990s. • All downhole logging data were loaded into a Geobank database where Boss ran a series of validation checks. • The Competent Person conducted its own validation queries on the data files extracted as at 31 December 2025, and found only minor inconsistencies that were corrected prior to the estimation. Checks included duplicate collar coordinates, interval gaps, overlaps and depth > maximum depth for all the tables, zero grades and consistency of lithology and stratigraphy. • Quality acceptance testing of the PFN data and metadata by the Competent Person, including calibration data, revealed several sources of uncertainty as indicated in section 1.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person for reporting the Mineral Resources visited the site from 05 to 07 February 2026. The visit included the observation of rotary mud and diamond drilling, the observation of rotary mud chip samples and diamond core, as well as downhole BMR and PFN logging operations. Discussions with site geologists and loggers allowed the Competent Person to better assess the data acquisition and quality control processes. No major issue was identified during the site visit.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The permeability model was generated by indicator kriging; therefore, the degree of confidence with respect to geological continuity is limited, particularly in areas with wide drillhole spacing. The level of confidence on the geological interpretation of the mineral deposit is sufficient for classification of Indicated and Inferred classification categories. The geological interpretation of the uranium mineralisation will benefit from an ongoing lithostratigraphic study at the scale of the Honeymoon Deposit for future MREs. • The top and bottom of the Eyre Formation determined by geological and downhole geophysical logging were used to model the surfaces of the top and bottom of the Eyre Formation by inverse squared distance. The Competent Person identified inconsistencies in the interpretation of the top of the Eyre Formation for ~90 drillholes which were corrected by Boss before finalisation of the Eyre Formation model. • No alternative interpretations were made in producing the MRE.

personal use only

Criteria	JORC Code explanation	Commentary
		• Within the Eyre Formation, the permeability was modelled using Schlumberger-Doll-Research permeability (KSDR) data from NMR drillhole data. This threshold was used to estimate the probability of KSDR ≥100 mD by indicator kriging. The permeable domains were determined using a probability ≥40% of KSDR ≥100 mD. This choice was made by the Competent Person based on visual assessment of the resulting domains in cross-section by comparison with lithologies. The permeable domains correspond mainly to sand, and gravel, with minor silt and clay, and were used to constrain the estimation of uranium mineralisation controlled by redox variations in aquifers. The permeability is considered a main factor controlling uranium mineralisation at Honeymoon, as uranium is typically leached and/or transported in aquifers by oxidising ground waters and deposited along oxidation/reduction interfaces within the aquifers or at contacts with less permeable lithologies, i.e. clays and silts. The complexity of the geometry of redox interfaces, and the poor quality of rotary mud samples and associated uncertainty of redox logging, did not allow use of the redox data to control the MRE by the Competent Person. • The continuity of the mineralisation is largely controlled by the continuity of the permeable host lithologies and the continuity of redox interfaces. Local variations in the amounts of reducing materials or variability in the permeability of the host lithologies can affect the continuity of grade and dimensions of mineralised bodies.

Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Honeymoon Deposit is hosted in the Yarramba palaeovalley, globally oriented east-west with a current strike of 6 km along its main axis. The mineralisation remains open along the 6-km long Honeymoon palaeovalley system.
		• The width of the mineralisation across strike varies between 650 m at Honeymoon to 400 m at Central and East Kalkaroo.
		• The extent of the mineral resource in the block model is:
		  • 466800 mE to 472100 mE (5,300 m in length);
		  • 6487500 mN to 6489500 mN (2,000 m width); and
		  • -7 mRL to 50 mRL (57 m height).

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• Estimation of U_3O_8 was completed by the Competent Person using ordinary co-kriging (COK) of service variables at a 100-ppm cut-off in Isatis v2011. Two service variables at a 100 ppm U_3O_8 cut-off were used in the variographic analysis and estimation to minimise dilution from low-grade material (below the 100-ppm U_3O_8 cut-off): • an indicator variable set to 1, where U_3O_8 grades are ≥100 ppm and 0 otherwise (controlling the geometrical extent of mineralisation); and

personal use only

Criteria	JORC Code explanation	Commentary
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• the product of this indicator and the U_3O_8 grade (to control the metal content of the mineralisation). • The estimation technique is deemed fit-for-purpose by the Competent Person for the application of a 100-ppm U_3O_8 cut-off and considering the low level of selectivity of ISR mining. • Four geographical domains were determined to ensure reasonable U_3O_8 grade stationarity and to consider local differences in the geological setting. From west to east, these were Brooks Dam, Honeymoon, Central Kalkaroo, and East Kalkaroo. The boundaries between geographical domains follow potential structural features controlling variations of the elevation of the basement surface. The most prominent of these features, striking towards 030°, bounds the Honeymoon depocenter domain to the East at the limit with Central Kalkaroo. The highest grades occur at Honeymoon, followed by East Kalkaroo. Mineralisation at Brooks Dam is mainly located in the upper Eyre Formation, whereas mineralisation in the other areas is mainly located in the lower Eyre Formation. The U_3O_8 estimation domains were derived by intersecting the Eyre Formation layer with the permeable unit of the permeability model, and with the four geographical domains. The lateral extent of the estimation domains was limited by an area delineated by an 80-m-radius buffer around drillholes with grade-thickness (GT) ≥1,000 m.ppm U_3O_8 for the entire Eyre Formation. The choice of 80 m as an extrapolation distance is consistent with areas of larger drill spacing at Brooks Dam and Central Kalkaroo, and is supported by variographic ranges between 60 m and 250 m across the different geographical zones. The maximum distance of extrapolation locally reaches 130 m. No extrapolation beyond the nominal sample spacing was used. • Following a review of contact analysis plots, soft domain boundaries were used between permeable and impermeable domains at Honeymoon and Central Kalkaroo, and hard domain boundaries were used between permeable and impermeable domains at Brooks Dam and East Kalkaroo. Soft boundaries were used between the different geographical domains. • A composite length of 0.25 m was selected, based on the nominal length used in the database. This offers an acceptable compromise between capturing the desired precision of the estimation domain modelling and matching the selectivity of the ISR mining operation (1-m minimum interval). • Top cuts, used to limit the influence of outliers, ranged from 2,500 ppm U_3O_8 at Brooks Dam to 13,000 ppm U_3O_8 at Honeymoon. • Due to the strongly skewed statistical distribution of U_3O_8 associated with very high grades, specific top cuts ranging from 1,500–8,000 ppm U_3O_8 were used to help identify the variographic structures of the main grade population. The bi-variate variograms displayed structures with ranges varying from 60–250 m. The only notable anisotropy was identified at East Kalkaroo with a major axis in the 60° direction, along the axis of the palaeovalley. Confidence in the quality of the

personal use only

Criteria	JORC Code explanation	Commentary
		experimental variography was enhanced at Honeymoon and East Kalkaroo by the presence of close-spaced drillholes which provided critical information on short-range grade continuity. • A block model was built using a block size of 10 mX × 10 mY × 0.5 mZ, in accordance with the data spacing (20–40 m to 150 m at Brooks Dam, 5–40 m at Honeymoon, 20–100 m at Central kalkaroo, 10–60 m at East Kalkaroo). • The estimation was completed in two passes with different parameters for each geographical zone. Geostatistical analyses were undertaken to support the search and estimation parameters used for each geographical domain. The search neighbourhood radius for the first pass was restricted to 50–150 m in the horizontal direction, and 3 m in the vertical direction, with minimum and maximum sample numbers of 10–16 and 52, respectively. Search distances and optimum number of samples were selected to optimise kriging efficiency while ensuring that the percentage of negative kriging weights did not exceed 5%. The vertical search radius was constrained to reflect the tabular geometry of the deposits. A second estimation pass was applied to inform remaining blocks using a minimum of one sample, with a search radius of 300 m in the horizontal direction and 6 m in the vertical direction. No extrapolation beyond the nominal sample spacing was used. • The estimated variables comprise the proportion of each block with U_3O_8 ≥100 ppm and the product of this proportion by the U_3O_8 grade. The grade of the mineralised portion of each block with U_3O_8 ≥100 ppm was estimated by dividing the product variable by the corresponding proportion. Post-processing of the estimates included the application of a top cut of 4,000 ppm U_3O_8 to limit high-grade values resulting from very small, mineralised intercepts. The total U_3O_8 grade for each block was then calculated by considering an average grade of 50 ppm U_3O_8 for the portion of the block with U_3O_8 <100 ppm. • The resource model was validated by comparing drillhole data and block values visually in vertical and horizontal cross-sections, on swath plots, and statistically by comparing input and output domain means. • Resource reporting first applied a 100-ppm U_3O_8 cut-off to the total block grade and then only considered the proportion of the block with U_3O_8 ≥100 ppm estimated by the service variables. • Comparison of U_3O_8 metal within the five Honeymoon wellfields currently in production in the Honeymoon domain, with the forecast well field contribution to production of 4.3 Mlbs U_3O_8, results in a relative difference of +10% at an 85% recovery factor and -10% at a 70% recovery factor. This indicates that the MRE is globally unbiased at the scale of the current operation. However, the reconciliation for individual wellfields is not as good as for the entire mine area with differences between -17% and -32% for B2 and between 37% and 13% for B4. Considering that the production of the wellfields covers several years, and the uncertainty attached to recovery factors,

personal use only

Criteria	JORC Code explanation	Commentary

		the classification of resources in the Measured category in the Honeymoon wellfield area appears to carry a certain level of risk.
		• Potential deleterious elements which may have a negative impact on the consumption of leaching reagents and/or on the uranium recovery are carbonates, pyrite, and organic matter, and were not estimated. The abundance of carbonates based on geological logging and mine production data is low and not considered a material risk by the Competent Person. The presence of abundant organic matter and pyrite is localised based on geological logging data and not considered a material risk by the Competent Person for the purpose of the MRE. A study of the spatial distribution of pyrite by combining downhole induction measurements with analytical calibration is ongoing. The results are expected to be available for the next MRE.
		• The current MRE differs materially from the 2019 MRE in methodology. The two MREs are not directly comparable due to a change in U_3O_8 cut-off grade.
		• The 2026 Honeymoon MRE has changed from the previous 2019 MRE due to the following:
		  • an additional 685 drillholes for a total of 86,670 m have been completed in the modelled area since January 2019;
		  • a change in the estimation domaining approach considering reasonable prospects for eventual economic extraction (RPEEE) constraints to exclude low-permeability lithologies (<100 mD) that are not amenable to ISR mining, thus leading to a reduction in estimated tonnage;
		  • the estimation of U_3O_8, combined with the estimation of the proportion of blocks ≥100 ppm U_3O_8, led to an increase in U_3O_8 grade at a 250-ppm U_3O_8 cut-off due to a reduction of the dilution caused by grades <100 ppm U_3O_8;
		  • lowering the cut-off grade from 250 ppm U_3O_8 to 100 U_3O_8 ppm, following the Company's new mining strategy based on a wide-spaced wellfield design and excluding low-permeable lithologies, led to an increase in resource tonnage compared to the 2019 MRE;
		  • no correction was made for radiometric disequilibrium in the 2026 MRE, whereas in the 2019 MRE, U_3O_8 data were modified using a disequilibrium model based on an interpolation of pU_3O_8 and eU_3O_8 data;
		  • the depletion of 2.5 Mlbs U_3O_8 (1.1 kt U_3O_8) from mining as at 30 June 2026 since the 2019 MRE; and
		  • factors related to the change of classification are described in the corresponding section below.

personal use only

Criteria	JORC Code explanation	Commentary
		• No by-products are assumed. Uranium as U_3O_8 is the sole commodity of interest.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages and metal are reported on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• With operational experience at Honeymoon, together with preliminary life-of-mine studies incorporating actual operating cost data (C1 and AISC), a long-term uranium price assumption of US$90/lb U_3O_8 and the application of a wide-spaced wellfield design, indicate that mineralisation above 100 ppm U_3O_8 has reasonable prospects for eventual economic extraction. Accordingly, a 100-ppm U_3O_8 reporting cut-off grade has been adopted for the current Mineral Resource estimate.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The Honeymoon Deposit is currently being mined using the In-Situ Recovery (ISR) method within the Honeymoon domain, with mining activities also commencing in the East Kalkaroo domain area. The deposit exhibits the hydrogeological and geological characteristics required for ISR mining and has demonstrated successful uranium recovery through commercial operations. • To further optimise the development of the resource, the recently completed New Feasibility Study (NFS) evaluates the application of wider-spaced wellfield patterns compared to the existing ISR design. The objective is to assess whether wider well spacing can maintain and potentially lift uranium recovery performance while improving project economics. • The wider-spaced wellfield design has the potential to reduce operating and capital intensity by increasing the volume of mineralisation accessed per injection and recovery pattern, extending leach residence times, reducing reagent consumption, and utilising wellfield infrastructure over a larger area of mineralisation. In addition, preliminary results indicate the potential for improved Pregnant Leach Solution (PLS) grades, which could further enhance processing efficiency and operating costs. • RPEEE were considered by excluding volumes of probability <40% of KSDR≥100 mD from the resource, by excluding border areas where the GT in the Eyre Formation is <1,000 m.ppm U_3O_8 based on drillhole data, and by excluding border areas where the cumulative thickness of estimated blocks at a 100-ppm U_3O_8 cut-off is <4 m. In assessing RPEEE, the Competent Person has evaluated preliminary mining, metallurgical, economic, environmental, social, and geotechnical parameters.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for*	• Honeymoon has been in continuous production following operational restart in April 2024; all production is from an in-situ leaching wellfield which feeds an established ion exchange process

personal use only

Criteria	JORC Code explanation	Commentary
	eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	plant, followed by precipitation and drying of uranium oxide concentrate, which meets offtake specifications and is sold into global markets. ● Along with dozens of successful core leaching tests, Honeymoon has extensive reconciled production data providing a detailed understanding of actual recoveries and performance to date. Since April 2024, 2.5 Mlbs of U_3O_8 have been successfully produced from the Honeymoon Deposit to 30 June 2026.
Environmental factors or assumptions	● *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	● The Honeymoon Mine is an existing operating uranium mine with established and approved waste and process residue management systems in place. Waste streams generated through mining and processing activities are well understood, with approved disposal facilities and management processes established for the handling, containment, and disposal of process residues, low-level radioactive waste, liquid waste streams, and general operational wastes. ● Waste management activities are undertaken in accordance with the approved Program for Environment Protection and Rehabilitation (PEPR), Radiation Management Plan (RMP) and Radioactive Waste Management Plan (RWMP), and associated operational procedures. Existing waste disposal facilities have been assessed and approved by the Department for Energy and Mining (DEM) and Environment Protection Authority (EPA), with controls implemented to minimise potential environmental impacts and ensure regulatory outcomes and obligations are achieved. Existing approved waste management processes and disposal facilities are considered suitable to support ongoing operations, with no significant waste management constraints identified that would impact continued mining and processing activities. ● The Competent Person is not aware of any other environmental constraints, licensing factors, social factors, landowner issues, or otherwise that would negatively impact the potential for eventual economic extraction at Honeymoon.
Bulk density	● *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* ● *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* ● *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	● The dry bulk density was not estimated due to the paucity of density measurements. An average bulk density of 1.9 g/cm^3 was assigned to the entire MRE. This theoretical value is based on 30% average porosity for the mineralised sands, implying 2.67 g/cm^3 (specific gravity of quartz) × 70% = 1.87 g/cm^3. This value was rounded up to 1.9 g/cm^3 to account for pyritic cementation, and is consistent with the limited dry bulk density measurements available. ● The bulk density applied to the previous 2019 MRE (ASX announcement dated 25 February 2019) was also 1.9 g/cm^3 based on the same criteria. ● The Competent Person considers that the lack of density measurement incurs a minor risk of bias on the tonnage of U_3O_8 metal. Considering the expected limited variability of dry bulk density of

personal use only

Criteria	JORC Code explanation	Commentary
		aquifers of the Eyre Formation, the Competent Person considers the risk to be low with respect to the Indicated resource classification. ● Further work is being completed to obtain sufficient bulk density data to support the estimation of bulk density at Honeymoon.
Classification	● *The basis for the classification of the Mineral Resources into varying confidence categories.* ● *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* ● *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The Competent Person has classified the Mineral Resource in the Indicated and Inferred categories in accordance with the JORC Code (2012). The resource classification is based on the following considerations. ● Based on the planned increase of the mine production and associated wide-spaced wellfield design, RSC conducted a new drillhole spacing analysis in 2026. The study led to revision of the minimum drillhole spacing requirements to control the estimation of grade and volume to within ±15% over a one-year period for an Indicated classification, and to within ±15% over a one-quarter period for a Measured classification. ● At Brooks Dam, Central Kalkaroo, and East Kalkaroo, a minimum drill spacing of 100 m on a dice-5 pattern is required to provide sufficient confidence for an Indicated classification. ● At the Honeymoon domain, a minimum drill spacing of 80 m on a dice-5 pattern is required for an Indicated classification. ● At Brooks Dam, Central Kalkaroo, and East Kalkaroo, a minimum drill spacing of 40 m × 40 m pattern is required for a Measured classification. At Honeymoon, a 30 m × 30 m pattern is required for a Measured classification. ● The controls on uranium mineralisation are well constrained at the scale of the Honeymoon Deposit. ● The permeability model was generated by indicator kriging; therefore, the degree of confidence with respect to geological continuity is limited, particularly in areas with wide drillhole spacing. This uncertainty is somewhat compensated by the lowering of the cut-off grade to 100 ppm U_3O_8. ● Approximately 99% of the uranium data used in the MRE are derived from gamma data (or ~92% considering the 100-ppm U_3O_8 threshold used to define service variables). The Competent Person considers accurate modelling of the radiometric disequilibrium is not possible at this stage, due to a lack of suitable data and the limited understanding of its geological controls. Therefore, no correction for radiometric disequilibrium has been applied, which may introduce localised bias; however, the Competent Person does not consider this potential bias to be material for reporting a global MRE due to the compensating effects of positive and negative disequilibrium. In addition, the radiometric disequilibrium has been partly addressed by applying a 250-ppm top cut on eU_3O_8 data where pU_3O_8 <250 ppm for the same intervals. A comprehensive data review by the

personal use only

Criteria	JORC Code explanation	Commentary
		Competent Person is in progress and will be incorporated into the next MRE to inform the new Feasibility Study. As such, confidence in the dataset is reduced for the current MRE. ● The large amount of drillhole data at spacings suitable for the classification of Measured and Indicated Mineral Resources is negatively impacted by a lack of confidence in the data, the absence of correction for radiometric disequilibrium, the paucity of dry bulk density measurements and limited confidence in the geological continuity. Consequently, the theoretical resource classification based on the DHSA has been downgraded to Indicated (instead of Measured) and Inferred (instead of Indicated). This is being addressed and will be reflected in future updates of the MRE.
Audits or reviews	● *The results of any audits or reviews of Mineral Resource estimates.*	● No audit or outside reviews of the MRE have been conducted.
Discussion of relative accuracy/ confidence	● *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* ● *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* ● *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	● The MRE is a global estimate. ● Local variations of U_3O_8 metal and grade are expected due to the lack of confidence on input data, effects of the radiometric disequilibrium, and the lack of confidence in the geological continuity. ● Comparison of U_3O_8 metal within the five Honeymoon wellfields currently in production in the Honeymoon domain, with the forecast wellfield contribution to production of 4.3 Mlbs U_3O_8, results in a relative difference of +10% at an 85% recovery factor and -10% at a 70% recovery factor. This indicates that the MRE is globally unbiased at the scale of the current operation.

personal use only

For personal use only

APPENDIX 2: Drill results

In accordance with ASX Listing Rule 5.7.2, the Company provides the following information, noting these are drillholes that have not previously been reported. All other intersections referenced in this release (e.g. within figures) have been previously reported.

Table 5: Previously undisclosed mineralisation intercepts at 100 ppm U_3O_8 cut-off as of 31 December 2025

Hole ID	Easting	Northing	RL	EOH	From	To	Width	eU_3O_8	Grade-Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm U_3O_8)
BEW0344	471353	6488542	118	127	108.25	110.00	1.75	534	935
BEW0345	468091	6488482	120	133	96.50	98.75	2.25	902	2,030
					102.75	106.50	3.75	373	1,401
BEW0346	468167	6488488	120	133	94.50	98.50	4.00	383	1,533
					102.25	106.50	4.25	303	1,287
BIF0462	471376	6488130	121	122	106.00	110.25	4.25	193	821
BIF0463	470788	6488054	120	127	109.00	110.25	1.25	609	762
BIF0464	471420	6488167	120	116	103.25	106.75	3.50	570	1,994
					108.00	109.50	1.50	812	1,218
BIF0465	470837	6488086	120	127	107.25	110.00	2.75	324	892
BIF0466	471469	6488182	120	134	82.00	84.50	2.50	453	1,133
BIF0467	470837	6488115	120	133	92.50	94.75	2.25	446	1,003
BIF0468	470871	6488152	120	133	101.25	103.75	2.50	405	1,014
					110.00	111.25	1.25	579	724
BIF0469	471473	6488148	120	122	No significant intercept				
BIF0470	470914	6488049	121	133	81.50	86.50	5.00	518	2,592
					101.50	105.75	4.25	415	1,763
BIF0471	471454	6488049	120	134	No significant intercept				
BIF0472	470913	6488016	121	121	83.00	86.00	3.00	220	661
					101.25	103.25	2.00	465	930
					111.25	113.00	1.75	930	1,628
BIF0473	471265	6488175	121	128	99.25	110.00	10.75	345	3,711
BIF0474	470974	6487998	122	121	No significant intercept				
BIF0475	471189	6488151	121	122	101.25	108.00	6.75	254	1,716
BIF0476	471008	6488024	121	121	98.75	103.25	4.50	300	1,350
BIF0477	471116	6488113	121	128	78.75	81.25	2.50	460	1,150
					100.50	103.50	3.00	273	819
BIF0478	470991	6488052	121	121	101.00	102.75	1.75	398	697
BIF0479	471113	6488158	121	128	101.25	105.75	4.50	269	1,211
BIF0480	471015	6488119	121	121	99.50	102.50	3.00	307	920
					106.00	110.25	4.25	216	918
BIF0481	471128	6488178	120	122	85.00	87.25	2.25	1,202	2,704
					98.75	107.25	8.50	285	2,421
					109.50	111.75	2.25	288	647
BIF0482	471010	6488147	120	127	No significant intercept				
BIF0483	471161	6488180	121	122	98.75	103.50	4.75	287	1,361
BIF0484	470958	6488170	120	121	101.25	105.50	4.25	328	1,395
					115.25	118.50	3.25	258	839
BIF0485	471420	6488167	120	116	No significant intercept				
BIF0486	470893	6488170	120	139	101.25	104.00	2.75	391	1,076
BIF0487	471407	6488086	120	115	106.75	111.75	5.00	139	693

Note: Grade-thickness values may vary due to rounding.

Values are reported above the nominal 100-ppm pU_3O_8 cut-off grade, 0.5-m minimum interval thickness, and maximum 1-m internal dilution. Results below 100 ppm are considered unreliable (and are therefore not considered "material" for the purposes of ASX Listing Rule 5.7.2) and this cut-off value is used for calculating uranium intersections.

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

For personal use only