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Cautionary Statement: ETANGO-XP / ETANGO-XT PROJECTS SCOPING STUDY

The Etango-XP / Etango-XT Scoping Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of either: (1) potential expansion to the Etango Project's throughput to 16 Mtpa (Etango-XP); or (2) potential extension of the life of mine from the current 15 years to 27 years (at 8 Mtpa throughput) (Etango-XT). It is a preliminary technical and economic study of these two options to determine the potential viability of an increase in either capacity or an extension to the life of mine of the Etango Project, which has previously been the subject of a Definitive Feasibility Study (DFS) in 2022 (including Ore Reserve declaration) at an 8 Mtpa development scale (Etango-8).

The Etango-XP / Etango-XT Scoping Study outcomes, production target and forecast financial information referred to in this release are based on low accuracy level technical and economic assessments that are insufficient to support the estimation of Ore Reserves. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before Bannerman will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

Of the Mineral Resources scheduled for extraction in the Scoping Study production plan, approximately 11.7% are classified as Measured, 88.3% as Indicated and 0.0% as Inferred. 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. Inferred Resources were excluded from the Scoping Study production schedule. Bannerman confirms that the financial viability of the Etango-XP and Etango-XT Projects is not dependent on the inclusion of Inferred Resources in the production schedule.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). The Competent Person's Statement is found in Appendix A of this ASX release. For full details of the Mineral Resources estimate, please refer to Bannerman ASX release dated 6 December 2022, *Etango-8 Definitive Feasibility Study*. Bannerman confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that ASX release continue to apply and have not materially changed.

This release contains a series of forward-looking statements. Generally, the words "expect," "potential", "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, to differ materially from those expressed or implied in any of our forward-looking statements, which are not guarantees of future performance. Statements in this release regarding Bannerman's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of metals, capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe Bannerman's future plans, objectives or goals, including words to the effect that Bannerman or management expects a stated condition or result to occur. Forward-looking statements are necessarily based on estimates and assumptions that, while considered reasonable by Bannerman, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.

Bannerman has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this ASX release. This includes a reasonable basis to expect that it will be able to fund the development of the Etango-XP or Etango-XT Project upon successful delivery of key development milestones and when required. The detailed reasons for these conclusions are outlined throughout this ASX release and in Appendix B. While Bannerman considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, pre-production funding in excess of A$320M is required. There is no certainty that Bannerman will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Bannerman's shares. It is also possible that Bannerman could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Etango Project. These could materially reduce Bannerman's proportionate ownership of the Etango Project.

No Ore Reserve has been declared in this Scoping Study. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions, including sufficient progression of all JORC modifying factors on which the production target and forecast financial information are based, have been included in this ASX release.

BANNERMAN energy

ASX ANNOUNCEMENT
18 March 2024

ETANGO-XP AND ETANGO-XT SCOPING STUDY

Bannerman Energy Ltd (**ASX:BMN, OTCQX:BNNLF, NSX:BMN**) (**Bannerman** or **the Company**) is pleased to advise of the completion of a Scoping Study evaluating future higher throughput and operating life cases for its flagship Etango Uranium Project (**Etango**) in Namibia. Two future phase options have been evaluated: a post ramp-up expansion in throughput capacity to 16 Mtpa (**Etango-XP**) or an extension of operating life to 27 years (**Etango-XT**).

Bannerman is currently advancing Front End Engineering and Design (**FEED**), offtake marketing and strategic financing workstreams on its base case 8 Mtpa Etango development (**Etango-8**), which was the subject of a Definitive Feasibility Study (**DFS**) (refer Bannerman ASX release dated 6 December 2022, *Etango-8 Definitive Feasibility Study*). Bannerman remains fully committed to the timely development of Etango-8, which is a highly attractive standalone project. The Scoping Study evaluation of the Etango-XP and Etango-XT cases has been undertaken to demonstrate the potential technical and economic viability of subsequent expansion and/or life extension options for Etango post successful construction and ramp-up of Etango-8.

KEY OUTCOMES

- **Etango-XP (mine and plant throughput expanded to 16 Mtpa from operational Year 5):**
  - **LOM U_3O_8 output of 95.2 Mlbs over 16 years (Etango-8 DFS: 52.6 Mlbs over 15 years)**
  - **Annual average U_3O_8 output (post plant expansion) of 6.7 Mlbs (Etango-8: 3.5 Mlbs)**
  - **Expansion phase capex of US$325M (Etango-8: zero)**
  - **LOM average all-in-sustaining cash cost (AISC) of US$42.5/lb U_3O_8 (Etango-8: US$38.1/lb)**
- **Etango-XT (life extension with mine and plant throughput maintained at 8 Mtpa):**
  - **LOM U_3O_8 output of 95.2 Mlbs over 27 years (Etango-8 DFS: 52.6 Mlbs over 15 years)**
  - **Annual average U_3O_8 output of 3.5 Mlbs (Etango-8: 3.5 Mlbs)**
  - **No expansion phase capex (Etango-8: zero)**
  - **LOM average AISC of US$45.3/lb U_3O_8 (Etango-8: US$38.1/lb)**
- **All Etango-8 cost estimates (including pre-production capex of approx. US$320M) remain materially unchanged; increased opex estimates associated with Etango-XP / XT are predominantly driven by higher requisite strip ratio**

Key Financial Outcomes: Etango-8, -XP and -XT Projects

Key Financial Metrics	Etango-8	Etango-XP			Etango-XT		
Uranium price (US$/lbs U_3O_8)	**65**	**65**	**80**	**95**	**65**	**80**	**95**
Free cashflow (post-tax) (US$M)	695	939	1,804	2,669	984	1,847	2,711
Pre-tax IRR (%)	21.0	20.8	32.2	41.3	22.8	33.5	42.4
Post-tax IRR (%)	**17.0**	**16.9**	**26.6**	**34.0**	**18.6**	**27.4**	**34.4**
Pre-tax NPV_8 from base FID (US$M)	369	445	1,017	1,590	411	862	1,314
Post-tax NPV_8 from base FID (US$M)	**209**	**250**	**615**	**974**	**241**	**526**	**809**

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- **Future feasibility work on Etango-XP and Etango-XT options capable of ready fast-tracking given all resource drilling, geotechnical, metallurgical, process and environmental workstreams already complete as part of previous DFS-level project evaluation.**

Commenting on the Etango-XP / XT Scoping Study results, Bannerman Chief Executive Officer, Gavin Chamberlain, said:

"Developing the world-class Etango Project at an initial 8 Mtpa throughput scale is our core focus. We undertook the Etango-XP / XT Scoping Study in order to demonstrate the ready technical and financial viability of expanding or extending our base case Etango operation following its successful construction and ramp-up.

"As evidenced by the announced outcomes, the Scoping Study has categorically demonstrated this further growth optionality. In short, the long-term scalability of the world-class Etango resource remains highly robust under the base case Etango-8 approach to initial project development."

Bannerman Executive Chairman, Brandon Munro, added:

"I am delighted that we have more formally demonstrated the longer-term optionality delivered by our large-scale Etango uranium resource. While the XP and XT cases are readily viable at our base case Etango-8 DFS price assumption of US$65/lb, their economics are clearly supercharged in higher price scenarios.

"As such, what the Scoping Study emphatically evidences is the significant underlying value residing in Etango's huge in-ground leverage to, and scalability with, higher uranium price outlooks. The ability to enact either the XP or XT plans, post-delivery of the initial Etango-8 development, affords Bannerman substantial real option value across a range of long-term uranium price outcomes."

Key Physical Parameters: Etango-8, -XP and -XT Projects

Key Physical Parameters	Unit	Etango-8	Etango-XP	Etango-XT
Life of mine (LOM)	years	15	16	27
Long-term mine and process throughput	Mtpa	8	16	8
Total ore mined and processed	Mt	113.5	210.2	210.2
Total waste mined	Mt	253.3	670.3	670.3
Average strip ratio	x	2.2	3.2	3.2
Average uranium head grade	ppm U_3O_8	240	234	234
Forecast uranium recovery	%	87.8%	87.8%	87.8%
LOM uranium production	Mlbs U_3O_8	52.6	95.2	95.2
Average annual uranium production	Mlbs U_3O_8 pa	3.5	5.9 / 6.7^	3.5
Peak annual uranium production	Mlbs U_3O_8 pa	4.1	7.8	4.8

^ 5.9 Mlbs pa is LOM average Etango-XP output and 6.7 Mlbs pa is average Etango-XP output post expansion completion

This ASX release was authorised on behalf of the Bannerman Energy Board by:

Brandon Munro, Executive Chairman

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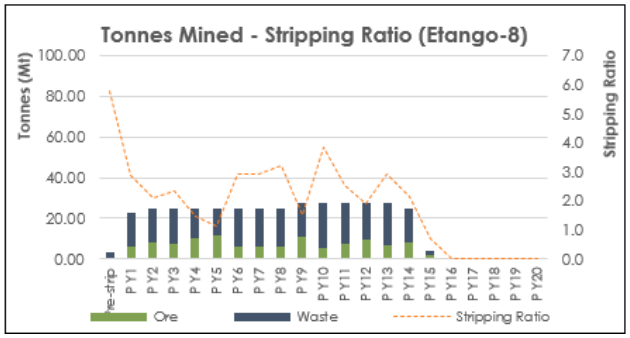
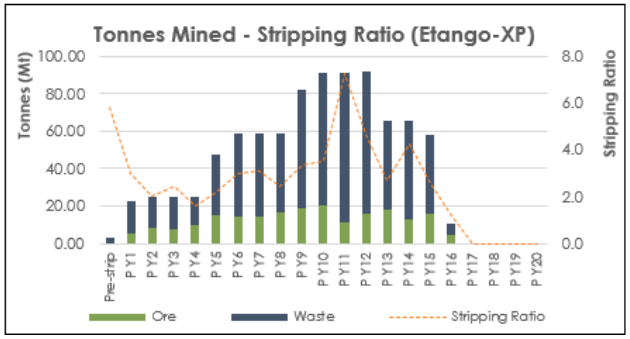
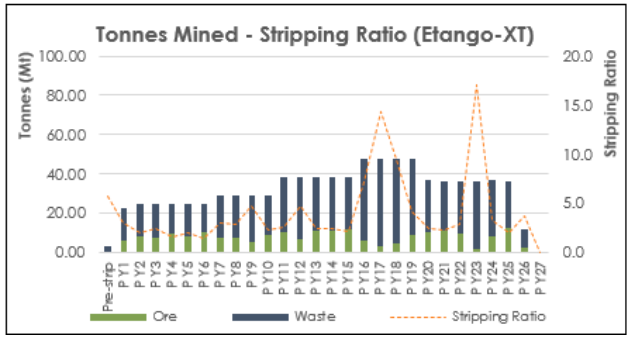
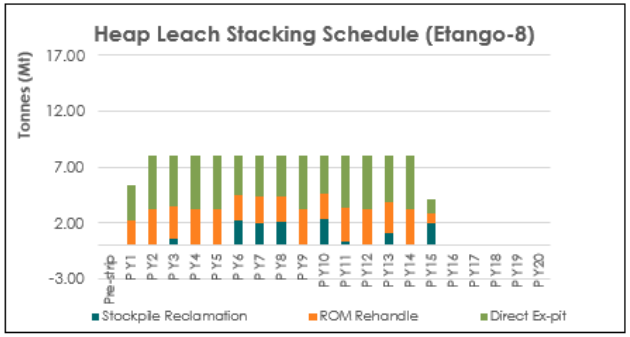
Forecast Mine Schedule

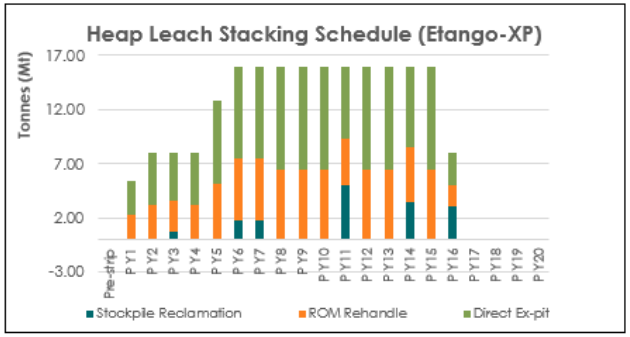


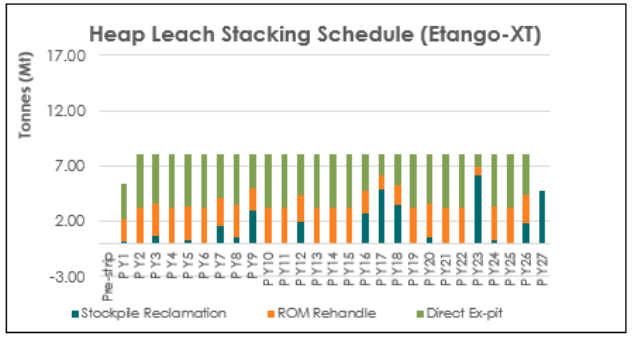




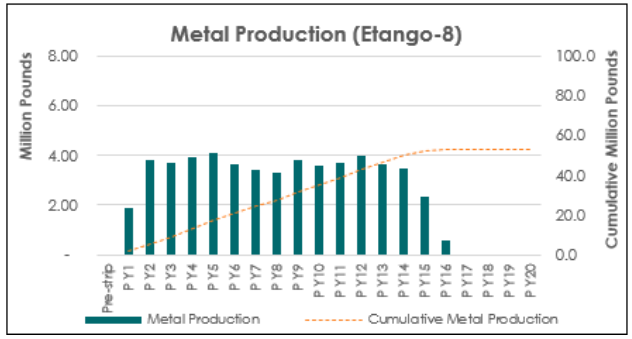
Forecast Process Schedule

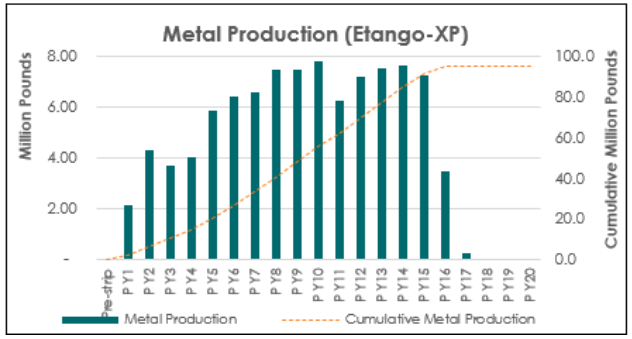


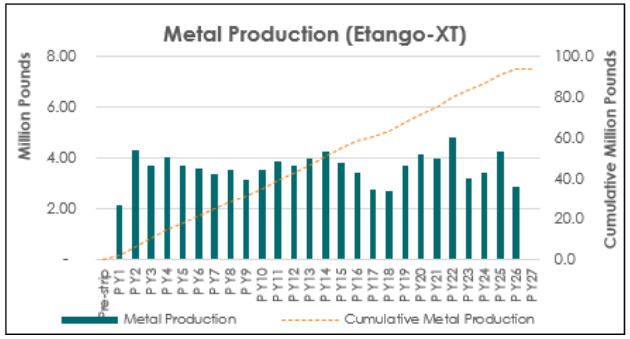




Forecast Uranium Output







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Key Financial Outcomes: Etango-8, -XP and -XT Projects

Key Financial Outcomes	Unit	Etango-8		Etango-XP			Etango-XT		
Price Inputs									
LOM average uranium price	**US$/lb U_3O_8**	**65**	**80**	**65**	**80**	**95**	**65**	**80**	**95**
US$/N$	N$	17.56	17.56	17.56	17.56	17.56	17.56	17.56	17.56
Valuation, Returns and Key Ratios									
NPV8 (post-tax, real basis, ungeared)	**US$M**	**209**	**436**	**250**	**615**	**974**	**241**	**526**	**809**
NPV8 (pre-tax, real basis, ungeared)	US$M	369	725	445	1,017	1,590	411	862	1,314
IRR (post-tax, real basis, ungeared)	**%**	**17.0%**	**24.6%**	**16.9%**	**26.6%**	**34.0%**	**18.6%**	**27.4%**	**34.4%**
IRR (pre-tax, real basis, ungeared)	%	21.0%	30.0%	20.8%	32.2%	41.3%	22.8%	33.5%	42.4%
Payback period (post-tax, from first prod.)	**Years**	**4**	**3**	**6**	**5**	**4**	**4**	**3**	**2**
Pre-tax NPV / Pre-production capex	x	1.2	2.3	1.4	3.2	5.0	1.3	2.7	4.1
Cashflow Summary									
Sales revenue (gross)	**US$M**	**3,421**	**4,210**	**6,187**	**7,615**	**9,043**	**6,187**	**7,615**	**9,043**
Total operating costs	US$M	1,952	1,978	3,967	4,014	4,060	4,219	4,265	4,312
Project operating surplus	**US$M**	**1,469**	**2,232**	**2,220**	**3,601**	**4,982**	**1,968**	**3,349**	**4,731**
Pre-production + expansion capex	US$M	(317)	(317)	(642)	(642)	(642)	(318)	(318)	(318)
LOM sustaining capex	US$M	(51)	(51)	(82)	(82)	(82)	(96)	(96)	(96)
Project net cashflow (pre-tax)	**US$M**	**1,099**	**1,863**	**1,495**	**2,877**	**4,258**	**1,554**	**2,936**	**4,317**
Project net cashflow (post-tax)	US$M	695	1,172	939	1,804	2,669	984	1,847	2,711
Unit Cash Operating Costs									
Mining	US$/t mat.	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5
Mining	US$/lb U_3O_8	16.3	16.3	21.8	21.8	21.8	23.1	23.1	23.1
Processing	US$/t ore	5.4	5.4	6.5	6.5	6.5	6.9	6.9	6.9
Processing	US$/lb U_3O_8	14.9	14.9	14.4	14.4	14.4	15.3	15.3	15.3
G&A and closure costs	US$/lb U_3O_8	2.6	2.6	2.1	2.1	2.1	2.6	2.6	2.6
Product transport, port, freight, conversion	US$/lb U_3O_8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Total cash operating cost (ex-roy./levies)	**US$/lb U_3O_8**	**35.0**	**35.0**	**39.6**	**39.6**	**39.6**	**42.2**	**42.2**	**42.2**
Royalties and export levies	US$/lb U_3O_8	2.1	2.6	2.1	2.6	3.1	2.1	2.6	3.1
Total cash operating cost (excl. sust. capital)	*US$/lb U_3O_8*	*37.1*	*37.6*	*41.7*	*42.2*	*42.7*	*44.3*	*44.8*	*45.3*
All-in-sustaining-cost (AISC)	**US$/lb U_3O_8**	**38.1**	**38.6**	**42.5**	**43.0**	**43.5**	**45.3**	**45.8**	**46.3**

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ABOUT BANNERMAN ENERGY (ASX:BMN, NSX:BMN, OTCQX:BNNLF)

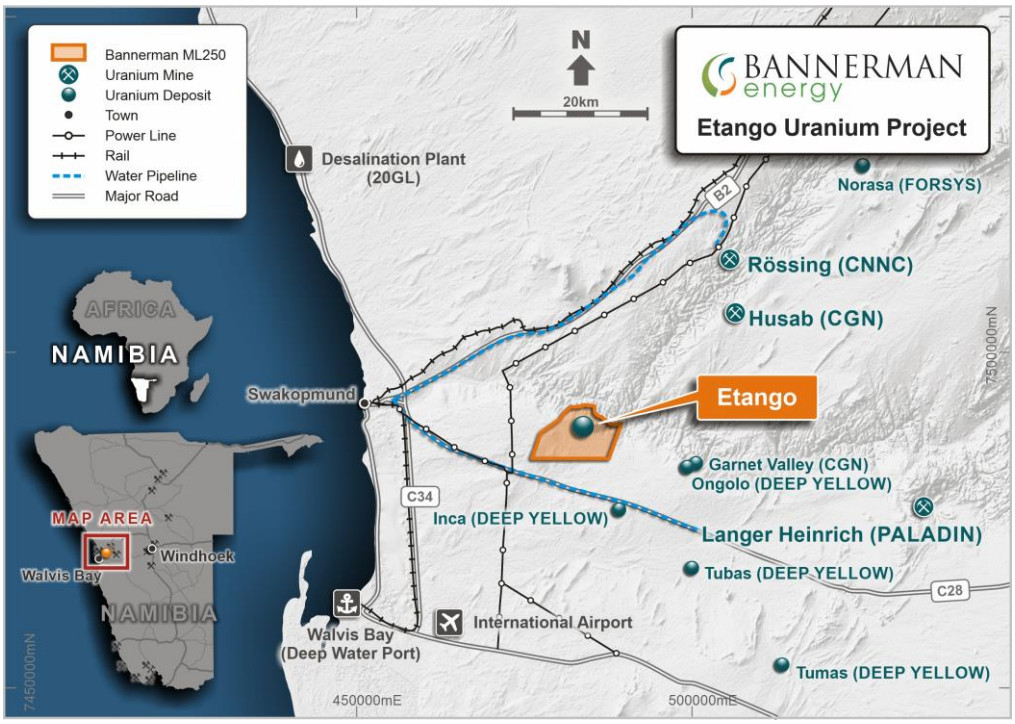
Bannerman Energy Ltd is a uranium development business listed on the Australian and Namibian stock exchanges and traded on the OTCQX Market in the US. Its flagship asset is the advanced Etango Uranium Project located in the Erongo Region of Namibia.

Etango has benefited from extensive exploration and feasibility activity over the past 15 years. The Etango tenement possesses a globally large-scale uranium mineral resource[1]. In December 2022, a Definitive Feasibility Study (DFS)[2] was completed on the Etango-8 Project, confirming to a definitive-level the strong technical and economic viability of conventional open pit mining and heap leach processing of the Etango deposit at 8Mtpa throughput (for average annual output of 3.5 Mlbs U_3O_8). Bannerman previously completed advanced studies on an alternative, larger development pathway – a 20Mtpa development at Etango.

Etango's advanced credentials are further highlighted by the construction and multi-year operation of the Etango Heap Leach Demonstration Plant, which comprehensively de-risked the conventional acid heap leach process to be utilised on the Etango ore. All environmental approvals have been received for the proposed Etango mine and external mine infrastructure, based on a 12-year environmental baseline. Bannerman was awarded the Mining Licence for Etango in December 2023 and is progressing all key project workstreams towards a targeted positive Final Investment Decision (FID) in parallel with strengthening uranium market fundamentals.

Namibia is a premier uranium investment jurisdiction, with a 45-year history of uranium production and export, excellent infrastructure and support for uranium mining from both government and community. As the world's third largest producer of uranium, Namibia is an ideal development jurisdiction boasting political stability, security, a strong rule of law and an assertive development agenda. The Bannerman team has ample direct experience in the development, construction and operation of uranium projects in Namibia, as well as extensive links into the downstream nuclear power industry.

Bannerman has long established itself as an Environmental, Social and Governance (ESG) leader in the uranium and nuclear energy sector. It is also a leader within Namibia on social development and community engagement and exercises best-practice governance in all aspects of its business. This was recently recognised with receipt of the 2023 African Mining Indaba's ESG Award for Community Engagement.



1 and 2. Refer to Bannerman's ASX release dated 6 December 2022, *Etango-8 Definitive Feasibility Study*. Bannerman confirms that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that ASX release continue to apply and have not materially changed.

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APPENDIX A - CONSENT FORM OF COMPETENT PERSON

According to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

Etango Uranium Project, Namibia – Etango-XP and Etango-XT Scoping Study Report ("Technical Report") for Bannerman Energy Limited

Etango-XP and Etango-XT Scoping Study
March 2024

STATEMENT

The results of the Scoping Study with the Technical Report titled "Etango-XP and Etango -XT Scoping Study" dated 13 March 2024 (the "Technical Report") by Bannerman Resources Limited ("Bannerman") on the Etango Uranium Resource that underpins the production targets are based on, and fairly represent, information and supporting documentation reviewed by Mr Werner K Moeller. Mr Werner K Moeller is since 2016 a Director and Principal Mining Engineer of Qubeka Mining Consultants CC ("Qubeka") based in Klein Windhoek, Namibia. Before 2016, he was a director and principal mining engineer at VBKom Consulting Engineers (Pty) Ltd, based in Centurion, South Africa. He is an active member or fellow of the following professional associations:

- South African Institute of Mining and Metallurgy - MSAIMM nr. 704793.
- Australian Institute of Mining and Metallurgy - FAusIMM nr. 329888.
- Canadian Institute of Mining, Metallurgy and Petroleum – MCIM nr. 708163;

Mr Werner K Moeller is a graduate of the University of Pretoria, South Africa and holds a Bachelor's degree, majoring in Mine Engineering (2001) and an Honours degree, majoring in Industrial Engineering (2002). He is practising as a mining engineer and has practised his profession continuously since 2002.

I, Werner Klaus Moeller, herewith confirm that I am the Competent Person for this Technical Report as declared in the above document and that:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a competent person as defined by the JORC Code, 2012 Edition, and I have more than five years of experience relevant to the style of mineralisation and type of deposit described in this Technical Report and the activity for which I am accepting responsibility.
- I am a Fellow of The Australasian Institute of Mining and Metallurgy.
- I have reviewed the Report to which this Consent Statement applies.

His relevant experience for the purpose of this Technical Report review is:

- Operational experience in numerous mines in Africa and Namibia, including three years at the Rössing Uranium Mine.
- Mine planning and study experience on a large number of uranium projects, including the Rössing Uranium Mine, Husab Uranium Mine and Forsys Metals Corp's Norasa Project.

- Project manager for numerous feasibility studies all over Africa.

He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity 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. Neither Mr Werner K Moeller nor Qubeka has a direct or indirect financial interest in, or association with Bannerman, the properties and tenements reviewed in this statement, apart from standard contractual arrangements for reviewing this Technical Report and other previous independent consulting work. Qubeka has been paid a fee for the time spent reviewing this Technical Report. The present and past arrangements for services rendered to Bannerman do not compromise Qubeka's independence with respect to this declaration. He has disclosed to the reporting company the entire nature of the relationship between myself and the Company, including any issue that investors could perceive as a conflict of interest.

I verify that the Technical Report is based on and fairly and accurately reflects the information in the Technical Report in the form and context in which it appears.

CONSENT

I consent to the release of documentation relating to the Technical Report and this Consent Statement by the directors of Bannerman Energy Limited.

[Signature of Competent Person] Dated at Windhoek, Namibia, on 13th March 2024.

Werner Moeller BEng(Mining), BEng(Hons)(Industrial), MSAIMM, FAusIMM, MCIM

Professional Membership: Fellow, Australian Institute of Mining & Metallurgy (AusIMM) | Membership Number: 329 888
Director Qubeka Mining Consultants CC

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Appendix B - Scoping Study Report

Bannerman Mining Resources (Namibia) (Pty) Ltd

1587P2 Etango XP and XT Concept Study

Report
Scoping Study Report

Document No. **1587P2-0000-BA10-RPT-0001**

Revision: **F**

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1. Executive Summary

1.1 Project Overview

The Etango Uranium Project in the Erongo region of Namibia is currently in its Front-End Engineering and Design (FEED) phase. This follows completion of a Definitive Feasibility Study (DFS) in December 2022 focussed on the processing of 8 million tonnes per annum (Mt/a) of ore to produce uranium oxide (U_3O_8) (Etango (8Mt/a)).

Bannerman Mining Resources Namibia (Pty) Ltd (Bannerman) started a process in late 2023 to evaluate the following future development options, for potential implementation post construction and ramp-up of the Etango 8Mt/a project:

- The expansion (Etango-XP) of the facility by an additional 8Mt/a to a total capacity of 16Mt/a of ore and
- The extension (Etango-XT) of the Etango (8Mt/a) Life-of-Mine (LOM) past the current 15-year mine life while maintaining the processing throughput rate at 8Mt/a.

The post-expansion LOM for the Etango-XP study is expected to be approximately 12 years, based on the current pit design expansion, with a phased transition in mining operations from 8Mt/a to 16 Mt/a, commissioning of the 16 Mt/a expansion in Production Year 5 and closure in Year 16.

The LOM extension for the Etango-XT business case, based on the equivalent Etango-XP pit design expansion, increases to a 27-year mine life. Note, under the Etango-XT business case, the life of the mining operation increases to 26 years, and the processing operation has a life span of 27 years, with the final processing year dedicated to low-grade stockpile reclamation and treatment.

The Scoping Study (Study) was initiated to formalise development scaling evaluations undertaken on the Etango resource as part of, and following, the Etango (8Mt/a) DFS. A key criterion was that the expansion (Etango-XP) or extension (Etango-XT) project should not impact the completion schedule of the initial 8Mt/a facility (Etango (8Mt/a)). While the Etango (8Mt/a) Project provides a reduced scale of production entry, it does so without removing the option of subsequent process expansions or potential LOM extensions.

This 2024 Etango-XP Scoping Study, which investigates doubling the processing throughput rate to 16 Mt/a after running the initial Etango (8Mt/a) operation for five years, represents the successful culmination of that work. The following four start-date opportunities were explored in a Trade-Off Study performed in 2023 for up-scaling the Project's processing throughput rate to 16 Mt/a, as summarised in Table 1-1. Scenario 5 represents the Etango-XT business case by extending the Etango (8Mt/a) LOM without a plant expansion to 16 Mt/a.

On an annual resolution, a comprehensive LOM production schedule run was performed for each of the four plant expansion developments and the LOM extension scenario. The Project's operating and capital expenditures were determined from the production physicals, and the cashflows and financial indicators for each business case scenario were analysed in a cashflow model. The outcome of this trade-off analysis indicated that the NPV ranking for the four Etango-XP up-scaling opportunities shows that an early commissioning date in Production Year 5 of the 16 Mt/a expansion generates the highest Project NPV.

The results of the Trade-Off study indicated that Scenario 1 of the Etango-XP options and Scenario 5, the Etango-XT option, should be investigated in more detail in a Scoping Study. Wood PLC was appointed to perform the Scoping Study for the expansion and extension project. The Study utilised the design of the

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current 8Mt/a facility and effectively considered installing a second, identical 8Mt/a train. No optimisation in terms of size and capacity of additional circuits was performed.

Table 1-1: Etango-XP and Etango-XT Business Case Scenario

Plant Expansion or LOM Extension Scenario	Plant Expansion Commission Date	Plant Throughput after Expansion (Mt/a)	Scenario Selection Criteria
Etango-XP Scenario 1	Year 5	16	The plant up-scaling start date corresponds approximately with the Etango (8Mt/a) capital payback period.
Etango-XP Scenario 2	Year 7	16	The mining expansion start date links approximately with the Etango (8Mt/a) mining contractor supply end date.
Etango-XP Scenario 3	Year 10	16	The mining expansion start date matches the transition from the southern pushback four to five.
Etango-XP Scenario 4	Year 12	16	The mining expansion start date matches the transition from the southern pushback five to six.
Etango-XT Scenario 5	Not Applicable	8	No plant expansion is planned, but the life-of-mine is based on the Etango-XP Study's ultimate pit design inventory.

The average plant feed grade in the Etango-XP pit design expansion reduces from 240 ppm U_3O_8 to 234 ppm U_3O_8. Apart from the throughput and average grade, all other processing parameters remain as per the 8Mt/a plant. The process flow is captured in Figure 6-1 in Section 6.2 of this report.

A brief simulation was performed to assess the impact of the reduced feed grade on the process. More detail is captured in Section 6.3 of this report. No notable deviations in the plant processing parameters are predicted down to a feed grade of 180ppm U_3O_8.

The 2021 Etango Mineral Resource estimate was used for this Study, consisting of 206.8Mlb U_3O_8 at a cut-off grade of 100ppm U_3O_8 (13.3 Mlb Measured, 136.4 Mlb Indicated and 57.1 Mlb Inferred). The current Etango drill hole database, on which the 2021 Etango Mineral Resource model is based, consists of 939 drill holes for 239,032 metres. The database can be further broken down into diamond drilling (105 holes) and reverse circulation drilling (834 holes).

The deposit is a large, shallow uranium deposit amenable to open-pit mining. The orebody will be mined as a conventional shovel and truck operation, with bulk mining augmented by more selective mining in areas with narrow ore zones. Mining will apply conventional open pit methods, and the whole mining operation, except for the mine technical services function, will be outsourced to a reputable mining contractor (Contractor), including drilling, blasting, loading, and hauling of ore and waste.

The North Pit, South Pit, and Satellite Pit of the Etango (8Mt/a) DFS pit design have consolidated into a Single Pit for the Etango-XP and Etango-XT Study with an additional Satellite Pit further south. The Etango-XP and Etango-XT Study's ultimate pit design supports a Measured and Indicated Classified ore inventory of 210.2 million tonnes compared to the 113.5 million tonnes ore inventory in the Etango (8Mt/a) DFS pit design. The Etango ultimate pit design has an average run-off mine (ROM) uranium (U_3O_8) head grade of 234ppm at a U_3O_8 cut-off grade of 100ppm. A total of 670.3 Mt of waste material must be stripped to expose the 210.2 Mt of ore material at an average stripping ratio of 3.2 over the LOM. The total contained U_3O_8 metal within the ultimate pit is 108.4 million pounds (Mlb) with a plant recovery of 87.80%, a total of 95.2 million U_3O_8 product pounds will be produced over the LOM.

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Two LOM production schedules were produced for the Etango-XP and Etango-XT Study with a maximum material movement of approximately 27 Mt/a for the first four years of the LOM production schedule to supply ore at 8Mt/a. An initial ramp-up period of 12 months has been incorporated for the processing plant to attain the initial nameplate capacity of 8Mt/a. For the Etango-XP business case, the second 8Mt/a processing stream was commissioned during the fifth production year, with 16 Mt/a stacking capacity achieved in Year 6 of the LOM production calendar. The LOM for the 16 Mt/a stacking operation is approximately 12 years (from the time of expanded output).

The Etango-XT business case, on the other hand, maintained a processing throughput rate of 8Mt/a and a LOM extension of a further 12 years on top of the 15-year mine life of the Etango (8Mt/a) business case, resulting in a total LOM of 27 years.

All estimates were generated to conform to the American Association for the Advancement of Cost Engineering International (AACEI) Class 5 guidelines and considered the entire scope of facilities as addressed in the previously completed Definitive Feasibility Study (DFS). The Study focused on deliverables that would support the generation of estimates to the required accuracy only and focused on CAPEX, OPEX, required footprints for all expansions, and major risks and opportunities for the entire scope of facilities. This report deals with the major topics addressed in the Study, and brief summaries of each topic are included below.

1.2 OPEX Summary

The combined operating expense for the 16 Mt/a facility, compared with that for the 8Mt/a facility for the Etango (8Mt/a) DFS and Etango-XT Study, is captured in Table 1-2 below. The principal unit operating cost increases are attributed to the added waste mining cost, due to an increased stripping ratio and longer horizontal and vertical hauling routes of the ultimate pit for the Etango-XP and Ext Study. While some fine-tuning and optimisation can be achieved in subsequent phases, the values presented are adequate to make a valid decision on the feasibility of the expansion or extension in terms of operating costs. Detailed OPEX calculations are contained in Section 9.

Table 1-2 Operating Cost Summary

Item	Etango (8Mt/a) DFS	Etango-XP Study	Etango-XT Study	Etango (8Mt/a) DFS	Etango-XP Study	Etango-XT Study	Etango (8Mt/a) DFS	Etango-XP Study	Etango-XT Study
	Average Annual Cost (USDM)	Average Annual Cost (USDM)	Average Annual Cost (USDM)	Unit Cost (USD/t ore)	Unit Cost (USD/t ore)	Unit Cost (USD/t ore)	Unit Cost (USD/lb U_3O_8)	Unit Cost (USD/lb U_3O_8)	Unit Cost (USD/lb U_3O_8)
Mining	57.15	129.70	84.39	7.55	9.87	10.44	16.29	21.80	23.05
Processing	52.36	87.58	55.93	6.92	6.52	6.92	14.92	14.39	15.28
Owners Costs	8.10	12.33	8.10	1.04	0.81	1.04	2.23	1.78	2.29
Closure costs	1.12	2.09	1.29	0.15	0.16	0.16	0.32	0.35	0.35
Other Costs (Selling, Royalty, Levy)	13.49	22.87	14.06	1.56	1.52	1.52	3.36	3.36	3.36
Total Sustaining Capital	3.39	4.75	3.69	0.45	0.39	0.46	0.97	0.86	1.01
Total	**135.38**	**258.44**	**167.77**	**17.89**	**19.67**	**20.75**	**38.09**	**42.54**	**45.33**

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1.3 CAPEX Summary

CAPEX Estimates were generated for the relevant contributors as captured in Table 1-3 below. More detailed information is contained in the report in Section 10. The most notable prospect for savings is in the Owner's Costs, where external infrastructure costs are captured and are achieved because of the infrastructure installed for the 8Mt/a facility.

Table 1-3 CAPEX Summary

Total Project CAPEX	Units	Etango (8Mt/a)	Etango-XP		Etango-XT
			Pre-Prod. Capital	Expansion Capital	
Mining	Mt	12.73	12.73	59.06	12.80
Processing	Mt	240.06	240.06	241.80	240.06
External Infrastructure	Mt	39.59	39.59	11.99	39.59
Owner's G&A	Mt	25.09	25.09	11.77	25.09
Total Pre-Production & Expansion Capital LOM	**Mt**	**317.47**	**317.47**	**324.63**	**317.54**
Total Sustaining Capital	**Mt**	**50.87**	**82.05**		**96.02**

1.4 Economic Analysis

Figure 1-1 to Figure 1-2 below shows the projected LOM cashflow for each scenario.

Figure 1-1: Forecast Life-of-Mine Net Cashflows (US$65/lb U_3O_8) – Etango-XP

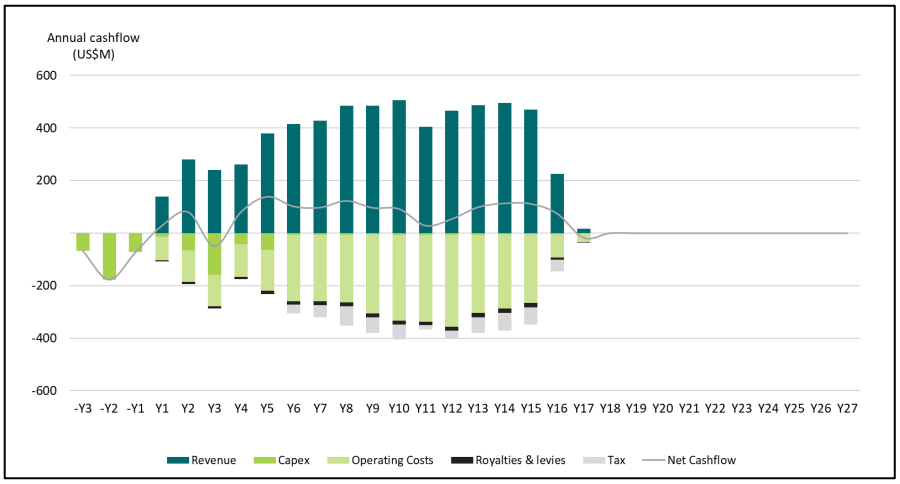

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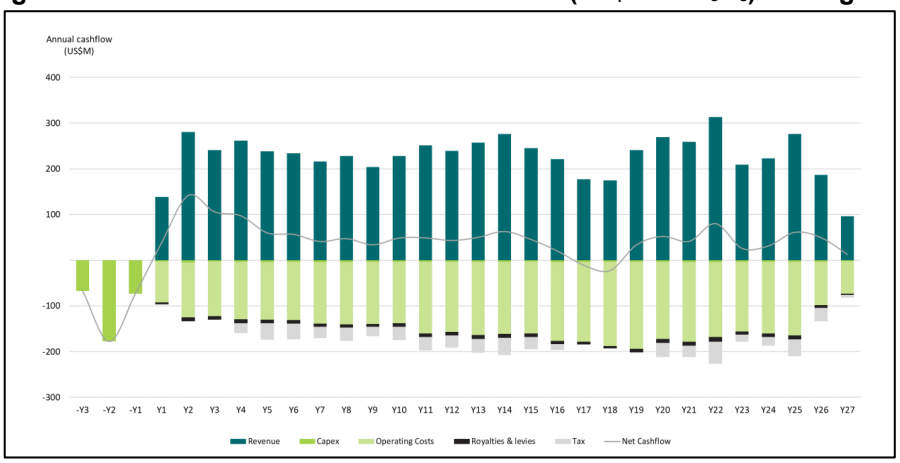
Figure 1-2: Forecast Life-of-Mine Net Cashflows (US$65/lb U_3O_8) – Etango-XT



Key financial results for the Etango-XP and Etango-XT business cases are presented in Table 1-4 below.

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Table 1-4: Key Financial Outcomes for Etango (8Mt/a), Etango-XP, and Etango-XT

Key Financial Outcomes	Unit	Etango (8Mt/a)	Etango-XP	Etango-XT
Price Inputs				
LOM average uranium price	US$/lb U3O8	65	65	65
US$/N$	N$	17.56	17.56	17.56
Valuation, Returns and Key Ratios				
NPV_8 (post-tax, real basis, ungeared)	**US$M**	**209.1**	**250.2**	**240.6**
NPV_8 (pre-tax, real basis, ungeared)	US$M	368.9	445.3	410.7
IRR (post-tax, real basis, ungeared)	**%**	**17.0%**	**16.9%**	**18.6%**
IRR (pre-tax, real basis, ungeared)	%	21.0%	20.8%	22.8%
Post-Tax Payback from First Production	Years	4	6	4
Pre-Tax Payback from First Production	Years	4	6	4
Pre-tax NPV / Pre-production capex	x	1.2	1.4	1.3
Cashflow Summary				
Sales revenue (gross)	US$M	3,421	6,187	6,187
Mining opex	US$M	(857)	(2,075)	(2,194)
Processing opex	US$M	(785)	(1,370)	(1,454)
G&A opex	US$M	(118)	(170)	(218)
Product transport, port, freight, conversion	US$M	(65)	(118)	(118)
Royalties and export levies	US$M	(111)	(201)	(201)
Project operating surplus	US$M	1,484	2,253	2,001
Pre-production & expansion capital expenditure	US$M	(317)	(642)	(318)
LOM sustaining capital expenditure	US$M	(51)	(82)	(96)
Project net cashflow (pre-tax)	US$M	1,099	1,495	1,554
Tax paid	US$M	(404)	(556)	(570)
Project net cashflow (post-tax)	US$M	695	939	984
Unit Cash Operating Costs				
Mining	US$/t material mined	2.4	2.4	2.5
Mining	US$/lb U3O8	16.3	21.8	23.1
Processing	US$/t ore	5.4	6.5	6.9
Processing	US$/lb U3O8	14.9	14.4	15.3
G&A	US$/lb U3O8	2.2	1.8	2.3
Closure costs	US$/lb U3O9	0.3	0.4	0.4
Product transport, port, freight, conversion	US$/lb U3O8	1.2	1.2	1.2
Total cash operating cost (ex-royalties/levies)	US$/lb U3O8	35.0	39.6	42.2
Royalties and export levies	US$/lb U3O8	2.1	2.1	2.1
Total cash operating cost	US$/lb U3O8	37.1	41.7	44.3
All-in-sustaining-cost (AISC)	US$/lb U3O8	38.1	42.5	45.3

Sensitivity analysis demonstrates that Etango-XP and Etango-XT's economic performances are most sensitive to changes in the uranium price. Both scenarios are affected by factors that significantly affect cash operating margins.

Figure 1-3 and Figure 1-4 show the sensitivity of project NPV (post-tax and ungeared) to changes in crucial inputs for Etango-XP and Etango-XT.

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Figure 1-3: Sensitivity of Project Net Present Value (post-tax, ungeared) to Key Inputs – Etango-XP (Base US$65/lb U_3O_8)

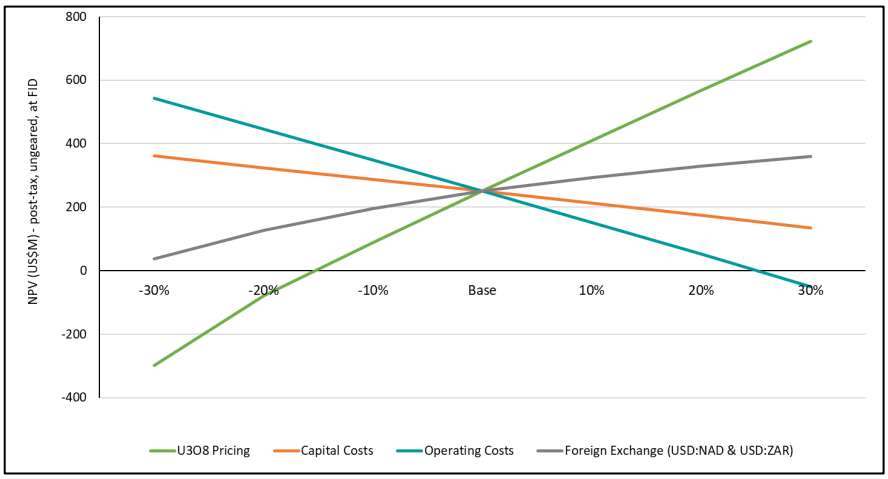
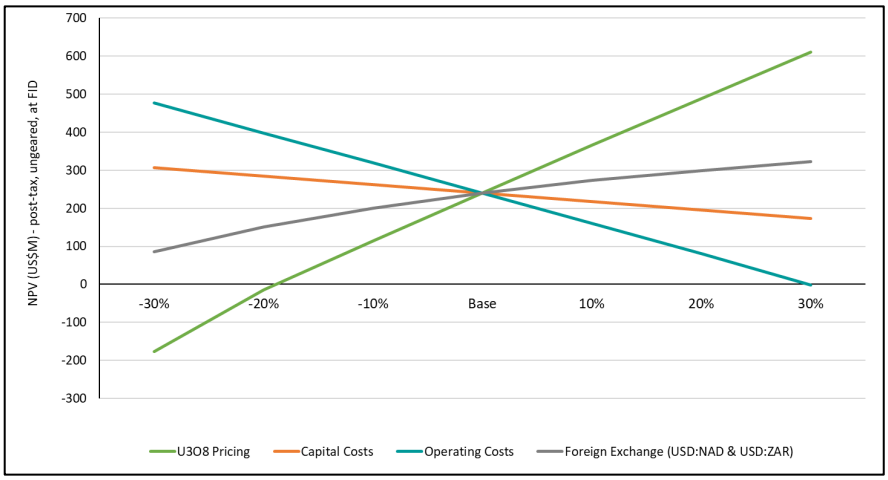


Figure 1-4: Sensitivity of Project Net Present Value (post-tax, ungeared) to Key Inputs – Etango-XT (Base US$65/lb U_3O_8)



For U_3O_8 sales prices above US$65/lb, project economics see an immediate and significant uplift. Table 1-5 displays the potential financial outcomes at U_3O_8 prices of US$65/lb, US$80/lb, and US$95/lb.

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Table 1-5: Sensitivity of Project Financial Metrics to U_3O_8 Price

Financial Metric	Unit	Etango (8Mt/a)		Etango-XP			Etango-XT		
		US$65 /lb	US$80 /lb	US$65 /lb	US$80 /lb	US$95 /lb	US$65 /lb	US$80 /lb	US$95 /lb
Total revenue	US$M	3,420.7	4,210.1	6,187.0	7,614.8	9,042.6	6,187.0	7,614.8	9,042.6
Total EBITDA	US$M	1,484.0	2,247.7	1,495.4	2,876.8	4,258.1	1,554.4	2,935.8	4,317.2
Project free cashflow (pre-tax)	US$M	1,098.9	1,862.6	939.0	1,803.8	2,668.5	984.0	1,847.4	2,710.7
Project free cashflow (post-tax)	US$M	694.9	1,172.3	939.0	1,803.8	2,668.5	984.0	1,847.4	2,710.7
Project IRR - pre-tax, ungeared, at FID	%	21.0%	30.0%	20.8%	32.2%	41.3%	22.8%	33.5%	42.4%
Project IRR - post-tax, ungeared, at FID	%	17.0%	24.6%	16.9%	26.6%	34.0%	18.6%	27.4%	34.4%
Project NPV - pre-tax, ungeared, at FID	US$M	368.9	724.6	445.3	1,017.5	1,589.6	410.7	862.4	1,314.0
Project NPV - post-tax, ungeared, at FID	US$M	209.1	435.5	250.2	615.3	974.3	240.6	525.9	808.9
AISC	US$M	2,004.3	2,029.9	4,049.5	4,095.9	4,142.3	4,315.1	4,361.5	4,407.9
AISC	$/t ore p	17.66	17.88	19.27	19.49	19.71	20.53	20.75	20.97
AISC	$/lb U3O8 prod.	38.09	38.57	42.54	43.03	43.52	45.33	45.82	46.31
Payback period - post-tax, from first production	year	Year 4	Year 3	Year 6	Year 5	Year 4	Year 4	Year 3	Year 2

1.5 Risk and Opportunities

Potential risks identified for the expansion phase are:

- Sterilization of the Ondjamba and Hyena Resources by stockpiles or Heap Leach Pads with incorrect plant layout.
- Inability to service expanded operating facility with current infrastructure in the case of Etango X.
- Air-borne dust limits due to increased mining activity in the case of Etango X.
- Any price fluctuations outside the control of the project.
- Construction activity interference with operations in the case of Etango X.

Key opportunities identified for the expansion phase are:

- Lowering the mining unit operation costs with further fleet selection optimisation.
- Combination and sharing of infrastructure and services between the two plant trains.
- Provision for future expansion by installed capacity or footprint allowance in the 8Mt/a facility.
- Optimisation of commonalities and links between the two plant trains.
- Investigation into the optimal capacity of the second plant train.

1.6 Conclusions and Recommendations

The Etango-XP and Etango-XT Scoping Study was undertaken with the objective of establishing the technical and financial viability of subsequently expanding or extending the Etango (8Mt/a) operation following its successful construction and ramp-up. The Scoping Study has clearly demonstrated this viability.

Developing the Etango Project at an initial 8 Mtpa throughput scale remains Bannerman's core focus. As a result, it is not intended to advance expansion and/or extension options for Etango to more advanced technical evaluation immediately, but rather at an appropriate future point in time. It should be noted that, as a result of the existing recent DFS-level evaluation of Etango (Etango-8) across all key workstreams, a definitive level study on expansion and/or extension of the initial Etango-8 development is capable of relative fast-tracking and accelerated completion.

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2. Study Team

A suitably skilled and experienced team, with sufficient knowledge of the existing Etango Project and uranium operations was assembled to expedite the study. The Scoping Study is developed in consultation with the following stakeholders:

- Bannerman Mining Resources (Namibia) (Pty): Client
- Wood PLC
- Creo Engineering Solutions
- Qubeka Mining Consultants

3. Tenement Status

Mining Licence (ML) 250 was granted to Bannerman Mining Resources (Namibia) (Pty) Ltd (Bannerman Namibia) in December 2023 and is valid for a period of 20 years. Bannerman Energy Limited (Bannerman) is the 95% owner of Bannerman Namibia. The other 5% is owned by the One Economy Foundation, a not-for-profit Namibian organisation.

The ML250 tenement boundaries (on which the Etango (8Mt/a) Project is located) in the UPS coordinate system are listed in Table 3-1.

Table 3-1. Boundary Coordinates of ML250

Point	Latitude	Longitude	Point	Latitude	Longitude
1	-22.74946691	14.76743169	14	-22.67941300	14.85850920
2	-22.71482701	14.78056313	15	-22.68637693	14.85850078
3	-22.69692059	14.80815289	16	-22.69012014	14.86067310
4	-22.68610553	14.81663750	17	-22.69257865	14.86437079
5	-22.67974493	14.82507706	18	-22.69395045	14.86892804
6	-22.68015492	14.82641439	19	-22.69731670	14.87342538
7	-22.68041865	14.82931121	20	-22.69925408	14.87768732
8	-22.67952022	14.83544141	21	-22.70244290	14.88036123
9	-22.67944634	14.83906323	22	-22.70345387	14.88246941
10	-22.67771838	14.84327198	23	-22.70398521	14.88561867
11	-22.67764326	14.84577939	24	-22.70403171	14.88924292
12	-22.67834397	14.84859239	25	-22.70212912	14.89775004
13	-22.67830891	14.85493602	26	-22.74979035	14.87921802

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4. Geology and Mineral Resource Estimate

4.1 Local Geology

Uranium mineralisation at the Etango Project is predominantly hosted by a stacked sequence of leucogranitic bodies (generally referred to as alaskite) that have intruded the host Damara Sequence of metasedimentary rocks on the western flank of the Palmenhorst Dome. The main mineralised bodies are associated with the Khan Formation and the lower part of the Chuos Formation (as shown in Figure 4-1) but also occur within 400 metres of the contact between the Etusis and Khan Formations (Mouillac et al., 1986). Uranium mineralisation at Etango is defined within an approximately +5km long zone trending southeast to northeast that dips moderately (30° to 50°) to the west (see Figure 4-2). The dominant primary uranium mineral at Etango is uraninite (UO_2), with minor primary uranothorite ($(Th,U)SiO_4$) as well as some uranium in solid solution in thorite (ThO_2). Minor uranium is also present in the minerals monazite, xenotime and zircon, either as minute inclusions or crystal lattice substitution. Secondary uranium-bearing minerals observed include coffinite and betauraniphane (both uranium silicate minerals). Approximately 90% of logged mineralised intervals (>50 ppm U_3O_8) at the Etango Project occur within alaskite (Alaskite Dominant (AD); however, not all of the alaskite is mineralised, with only about 60% mineralised in total. Minor uranium mineralisation is also found in the metasedimentary sequences (Alaskite Sub-Dominant (ASD)) close to the alaskite contacts, almost certainly from metasomatic alteration and in minor thin alaskite stringers within the metasediments.

Figure 4-1: Outcrop of uranium-bearing alaskite

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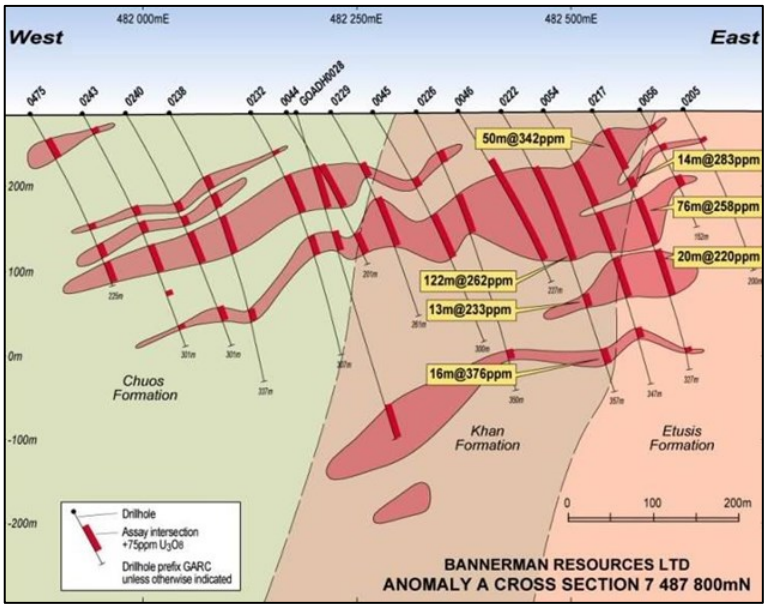

Figure 4-2: Selected cross-section of Etango mineralisation

4.2 Mineral Resource

The 2021 Etango Mineral Resource update for Etango is based on the 2015 Etango Mineral Resource model, which incorporates additional drilling, as illustrated in Figure 4-3, over several parts of the Etango project. Uranium mineralisation has been defined inside a grade envelope defined by Categorical Indicator Kriging, using a lower cut-off of 50 ppm U_3O_8 and a lithological constraint to ensure that the majority of samples in the Alaskite Dominant (AD) category have a dominant Alaskite lithology. The Alaskite Sub-Dominant (ASD) mineralisation, which has the same cut-off grade but not the same Alaskite constraint, has been modelled outside of the AD and is mutually exclusive with the AD mineralisation. In addition to the definition of grade shells using the categorical (probabilistic) approach, a further constraint was applied to remove areas of extrapolation at the edges of the orebody.

For both the AD and ASD mineralisation, a Uniform Conditioning (UC) estimation approach has been adopted. This is a recoverable resource estimation technique, based upon ordinary kriging into large blocks (panels), which seeks to predict the resources available at the time of mining using the assumption of a selective mining unit (SMU) related to the production rate and equipment.

The Etango block model was created with the parent block dimensions of 25 mE by 25 mN by 8MRL, which was selected based on the average drill spacing across the deposit. The 2015 Etango Mineral Resource block model was sub-celled down to 6.25 mE by 12.5 mN by 4 mRL (the SMU size), based on a 220-t off-road haul truck from the 2015 DFS OS, to ensure adequate volume resolution of the mineralised domains. For the 2021 Etango Mineral Resource model, the SMU chosen was further reduced to 2.5 mE by 5 mN by 4 mRL, reflecting the smaller mining equipment proposed for the 2022 Etango (8Mt/a) DFS project, which envisages a smaller (8Million tonne per annum plant throughput), higher-grade operation than previously considered.

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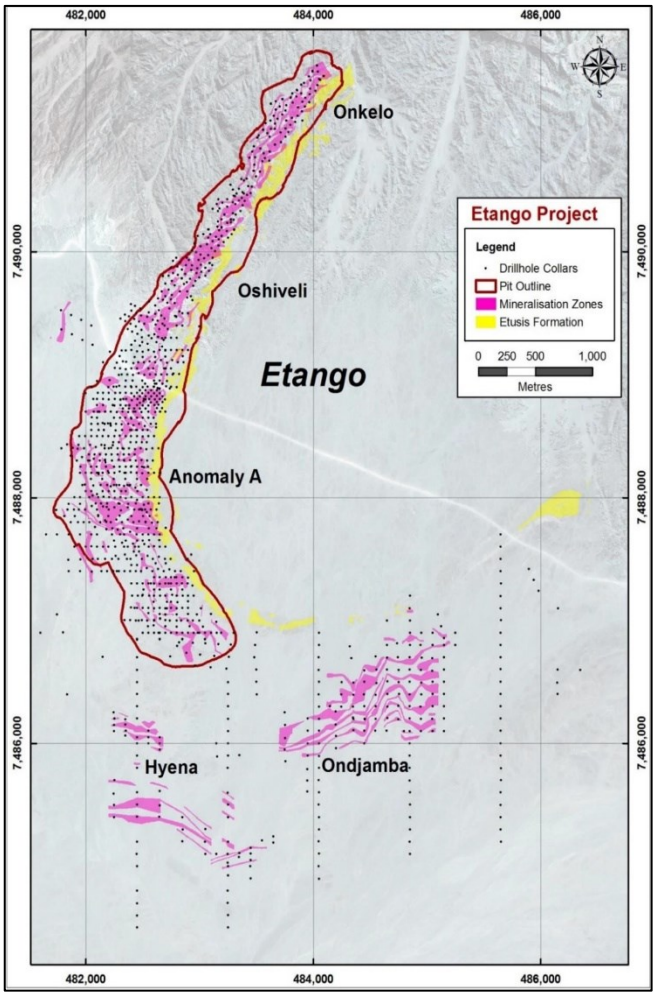

Figure 4-3: Plan view of drill holes used in the 2015 Etango Mineral Resource estimate

The current Etango drill hole database, on which the 2021 Etango Mineral Resource model is based, consists of 939 drill holes for 239,032 metres. The database can be further broken down into diamond drilling (105 holes) and reverse circulation drilling (834 holes). A plan view of the drill hole locations is presented in Figure 4-3. The 2021 Etango Mineral Resource model has been reported within a US$ 75/lbs optimal pit and above a cut-off of 55 ppm U_3O_8, as detailed in Table 4-1, and, for reference, above 100 ppm in Table 4-2. The 2021 Etango Mineral Resource estimate was used for this Study.

Table 4-1: 2021 Etango Mineral Resource, reported within a US$ 75 pit shell above a 55 ppm U_3O_8 cut-off

Resource Category	Tonnes (Mt)	Grade (U_3O_8 ppm)	Contained U_3O_8 Mlb
Measured	32.4	201	14.3
Indicated	345.7	195	148.5
Inferred	140.6	200	62.0
Total	**518.6**	**197**	**224.9**

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Table 4-2: 2021 Etango Mineral Resource, reported within a US$ 75 pit shell above a 100 ppm U_3O_8 cut-off

Resource Category	Tonnes (Mt)	Grade (U_3O_8 ppm)	Contained U_3O_8 Mlb
Measured	26.6	226	13.3
Indicated	276.9	223	136.4
Inferred	112.5	230	57.1
Total	**416.1**	**225**	**206.8**

The Ondjamba and Hyena prospects have not been tabulated, as at the time of reporting, these have not changed since previously being reported in August 2010.

The Mineral Resource has been classified into Measured, Indicated and Inferred categories based on geological and grade continuity, drillhole spacing and estimation quality. The Measured category was applied to blocks that were informed either in pass one or two, where the drill spacing was 25 m x 25 m x 50 m and the slope of regression statistic was generally greater than 0.9. The Indicated category was applied to blocks estimated in the first or second pass, where the drill spacing was nominally 50 m x 50 m or 100 m x 100 m, where the grade tenor was moderately consistent, and the regression slope was between 0.3 and 0.9. Any material that did not meet the criteria for Measured or Indicated was allocated to the Inferred category, apart from extrapolated or laterally extensive mineralisation, which was set to potential using some "unclassified" solids.

The 2015 Etango Mineral Resource and 2021 Etango Mineral Resource estimates, completed by Optiro with the assistance of Bannerman, closely reflect the proposed grade control and mining approach, which is gamma probing of relatively widely spaced blastholes supplemented by a truck scanning station. This approach is highly effective at two of the world's foremost open-pit uranium deposits (Rössing in Namibia and Ranger in Australia). Using a recoverable resource post-processing technique reflects best practices for uranium mineralisation and closely matches the recovery from a truck scanning operation as planned at Etango. Since reporting the updated 2021 Etango Mineral Resource, no further drilling has been done, and the underlying assumptions remain valid.

This Scoping Study adopts a mill-limiting cut-off grade of 100 ppm U_3O_8 to report ore tonnes from the pit design. Bannerman confirms that it is unaware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the resource estimate continue to apply and have not materially changed.

5. Mining Studies

5.1 Pit Optimisation & Design

The Etango Project has benefited from extensive exploration and feasibility activity over the past 15 years. The Etango tenements possess a globally large-scale uranium mineral resource of 224.9 Mlb U_3O_8 at a cut-off grade of 55 ppm U_3O_8 (14.3 Mlb Measured, 148.5 Mlb Indicated and 62.0 Mlb Inferred). A 20 Mt/a development at Etango was the subject of the 2012 Definitive Feasibility Study (2012 DFS) and a DFS Optimisation Study (2015 OS) completed in 2015. Bannerman has also constructed and operated a Heap Leach Demonstration Plant at Etango, which has de-risked the acid leach process to be utilised on the Etango material. In July 2021, Bannerman completed a Pre-Feasibility Study (PFS) in 2021 and a DFS in 2022 on the 8Mt/a development of Etango called the Etango (8Mt/a) Project. The Etango (8Mt/a) Study has demonstrated

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that this accelerated, starter-scale Project is strongly amenable to development – both technically and economically.

While the Etango (8Mt/a) Project provides a reduced scale of production entry, it does so without removing the option of subsequent expansion. This 2024 Etango-XP Scoping Study, which investigates doubling the processing throughput rate to 16 Mt/a after running the initial Etango (8Mt/a) operation for five years, represents the successful culmination of various project scaling work.

The mining engineering-related scope of work that formed the basis of the Etango-XP and Etango-XT Study was conducted by Qubeka Mining Consultants (Qubeka) and comprised of the following mine planning cycle:

- Pit Optimisation: The position and shape of the final pit boundary is optimised given the geological and economic parameters of the deposit as well as the mining, processing and market parameters;
- Mine Design: The optimal pit shell generated during pit optimisation is further refined by a detailed pit design which incorporates access ramps, bench configurations and detailed mining constraints;
- Mine Production Schedule: The material contained within the designed pit shell is then scheduled according to feasible tonnage and processing plant targets for the Etango-XP and Etango-XT Study respectively, and
- Mining OPEX and CAPEX: The mining operating and capital cost estimate for the study.

Inferred resources were excluded from the pit optimisation runs and were classified as waste during the LOM production schedule runs. The objective of the open pit optimisation process is to determine a generalised open pit shape (shell) that provides the highest value for a deposit. From the analysis of all the shells generated in the optimisation process, a single shape was selected as the guide for a practical ultimate pit design.

The Study pit optimisations were done using the Whittle Four-X (Whittle) pit optimisation software. The Whittle software package, utilising the Lerchs Grossman algorithm, is considered leading practice and widely used in the mining industry for open pit optimisation. By inspection of the incremental pit shells and resultant financial metrics, the ultimate pit shell and the mining sequence are determined, which in turn guides individual stage or pushback designs. These intermediate mining stages allow the pit to be developed practically and incrementally while at the same time targeting the highest value ore and deferring waste stripping. Table 5-1 lists the parameters used for the pit optimisation study.

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Table 5-1: Pit optimisation input parameters

Item	Unit	Parameter
Mill throughput	Mt/a	8 or 16
Base Currency		United States Dollars (US$)
Exchange Rate	N$: US$	17.56
Real Annual Discount Rate	%	8.00
Uranium price	US$/lb	65
Royalty	%	3.00
Export levy	%	0.25
Transport, shipping, marketing and sales	US$/lb	1.10
Processing costs	US$/t ore	7.41
Average mining cost	US$/t material	2.36
Total owner's cost	US$/t ore	0.61
Processing overall recovery	%	87.80
Mining dilution	%	0 (dilution in model)[1]
Mining recovery	%	100 (recovery in model)[1]
Overall pit wall slope angle	degrees	43 - 48

1: The process of creating the grade shells used for estimating the panel grades of the resource model incorporated dilution into the grade shells by applying a below economic cut-off grade and relatively low probability of 0.4. A haul truckload will effectively be the SMU of the grade control process by employing radiometric truck scanning. The larger block size will incorporate dilution and mining loss.

From this pit optimisation study, derived from the Measured and Indicated resource only, a suitable shell for the Etango-XP and Etango-XT Study final pit shell is selected, as indicated in Figure 5-1. The objective of the pit design process was to transform the pit shell obtained from the optimisation into a practical pit, including ramps, bench and berm configurations, by considering all the required inputs. The practical pit design forms part of a critical input for the LOM production scheduling processes. The Whittle pit optimisation outputs, design criteria, and geotechnical constraints were input parameters to design the practical final pit. Pushbacks were based on the interim selected Whittle shells and designed using the recommended geotechnical parameters and pit design criteria derived from the equipment strategy and current world best practices. Table 5-2 summarises the Etango-XP and Etango-XT Study ultimate pit design inventory compared to the Etango (8Mt/a) DFS Reserve pit design.

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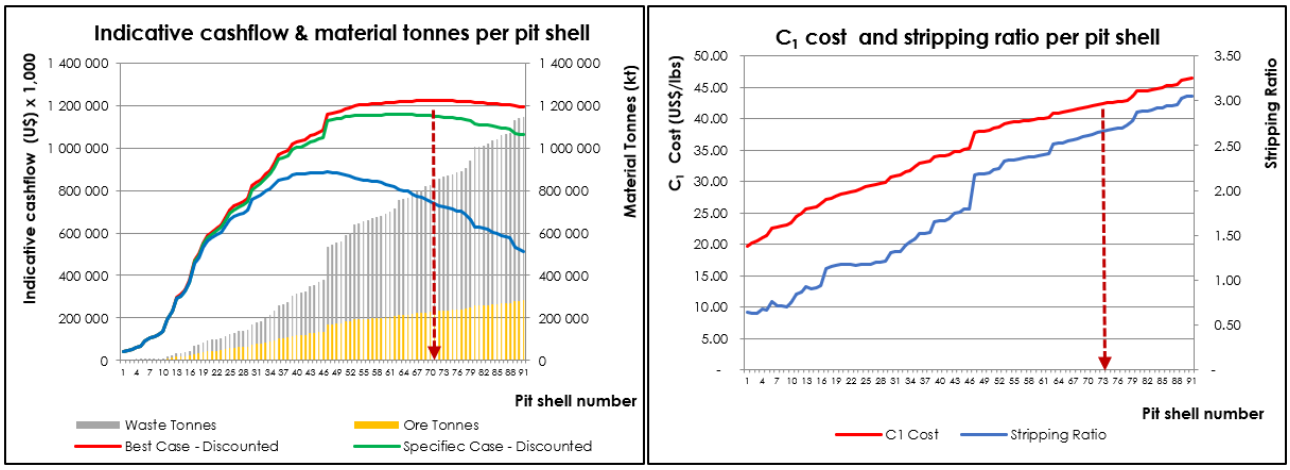

Figure 5-1: Selected pit optimisation shell (revenue factor 1 shell) on the Whittle graphs

Etango-XP and Etango-XT Study's ultimate pit design supports a Measured and Indicated Classified ore inventory of 210.2 million tonnes with an average run-off mine (ROM) uranium (U_3O_8) head grade of 234ppm at an elevated U_3O_8 cut-off grade of 100ppm. A total of 670.3 Mt of waste material must be stripped to expose the 210.2 Mt of ore material at an average stripping ratio of 3.2 over the LOM. The total contained U_3O_8 metal within the Etango-XP and Etango-XT Study's ultimate pit is 108.4 million pounds (Mlb), and with a plant recovery of 87.80%, a total of 95.2 million U_3O_8 product pounds will be produced over the LOM.

Table 5-2: Ultimate practical pit design inventory

Parameter	Unit	Etango (8Mt/a) DFS	Etango-XP and Etango-XT Study
Cut-off Grade	ppm	100	100
Measured Classified Ore	Mt	15.6	24.6
Indicated Classified Ore	Mt	97.9	185.6
Total Ore	**Mt**	**113.5**	**210.2**
Waste	Mt	253.3	670.3
Total Material Mined	Mt	366.8	880.4
ROM Head Grade - Overall Material	**ppm**	**240**	**234**
Strip Ratio	Ratio	2.2	3.2
ROM Head Grade	ppm	240	234
Contained Metal (U_3O_8)	Mlb	60.0	108.4
Recovery	%	87.80%	87.80%
Drummed Metal (U_3O_8)	Mlb	52.6	95.2

The operation's marginal ore cut-off grade (COG) was calculated using the uranium price of USD 65/lbs. It was assumed that the heap leach operation would carry all the fixed supervision, general and administrative (SGA) costs. With the current revenue, cost base and processing recovery assumptions, the marginal process limiting ore COG is 75ppm U_3O_8. The elevated ore reporting COG, though, in consultation with Bannerman management, is reported at an elevated COG of 100ppm. Thus, all ore within the marginal ore grade bin between 75 to 100ppm U_3O_8 will be stockpiled separately within the waste dump locations.

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Figure 5-2 illustrates the ultimate practical pit designs of the Etango (8Mt/a) DFS (left) and the Etango-XP and Etango-XT Study (right) studies in plan view. The pits were designed with a dual pit access strategy along the eastern and western pit highwalls. The North Pit, South Pit, and Satellite Pit of the Etango (8Mt/a) DFS pit design have consolidated into a Mega Pit for the Etango-XP and Etango-XT Study with an additional Satellite Pit further south.

The pit optimisation process has highlighted the importance of pit staging in improving project value. An analysis of the pit optimisation outputs was used to identify those areas that the optimisation process considers to be high value. Therefore, the smaller pit shells (lower revenue factor) provide guidance towards the location of interim stage designs. Careful consideration is given to ensure mining access is coherent, bench turnover rates are realistic, and minimum mining widths are compliant.

The ultimate Etango-XP and Etango-XT Study pit will be mined in eleven pushbacks, which represent areas that the optimisation process considers to be of high value by:

- Maximising grade to the heap leach in the early years;
- Deferring waste stripping as far as possible into the future and
- Ensuring design criteria such as overall and batter slopes are maintained.

The aim of using the various pushbacks was to achieve a lower strip ratio in the early years to increase the Project's NPV. The layout of the mining pushback is shown in Figure 5-4. The elongated-on strike and crescent shape of the orebody and thus pit limited the number of practical pushbacks to be designed.

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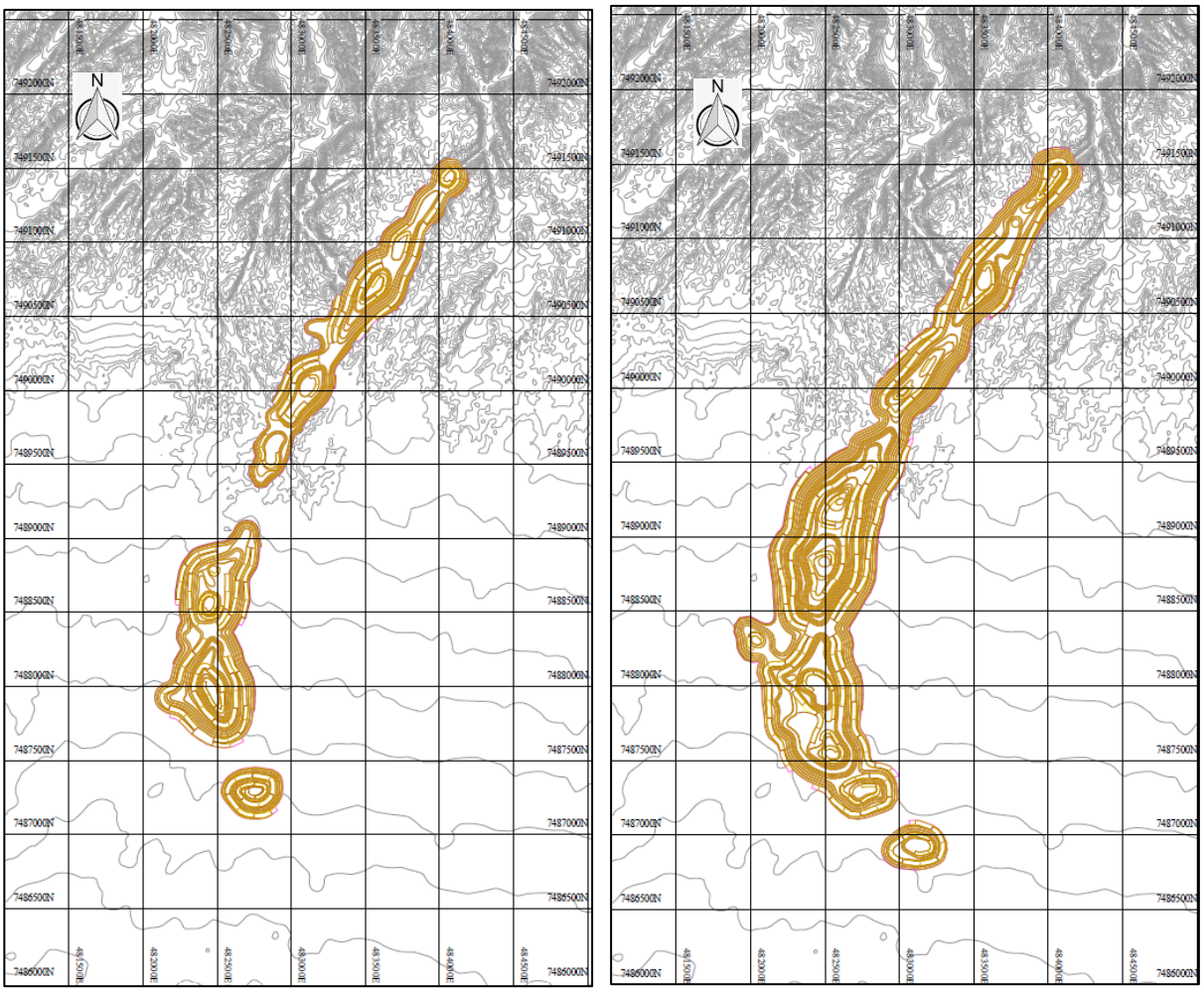

Figure 5-2: Ultimate practical pit design of the Etango (8Mt/a) DFS (left) and the Etango-XP and Ext Study (right)

5.1 Mining Method and Schedule

The deposit is a large, shallow uranium deposit amenable to open-pit mining. The orebody will be mined as a conventional shovel and truck operation, with bulk mining augmented by more selective mining in areas with narrow ore zones. Mining will apply conventional open pit methods, and the whole mining operation, except for the mine technical services function, will be outsourced to a reputable mining contractor (Contractor) - this includes drilling, blasting, loading and hauling of ore and waste.

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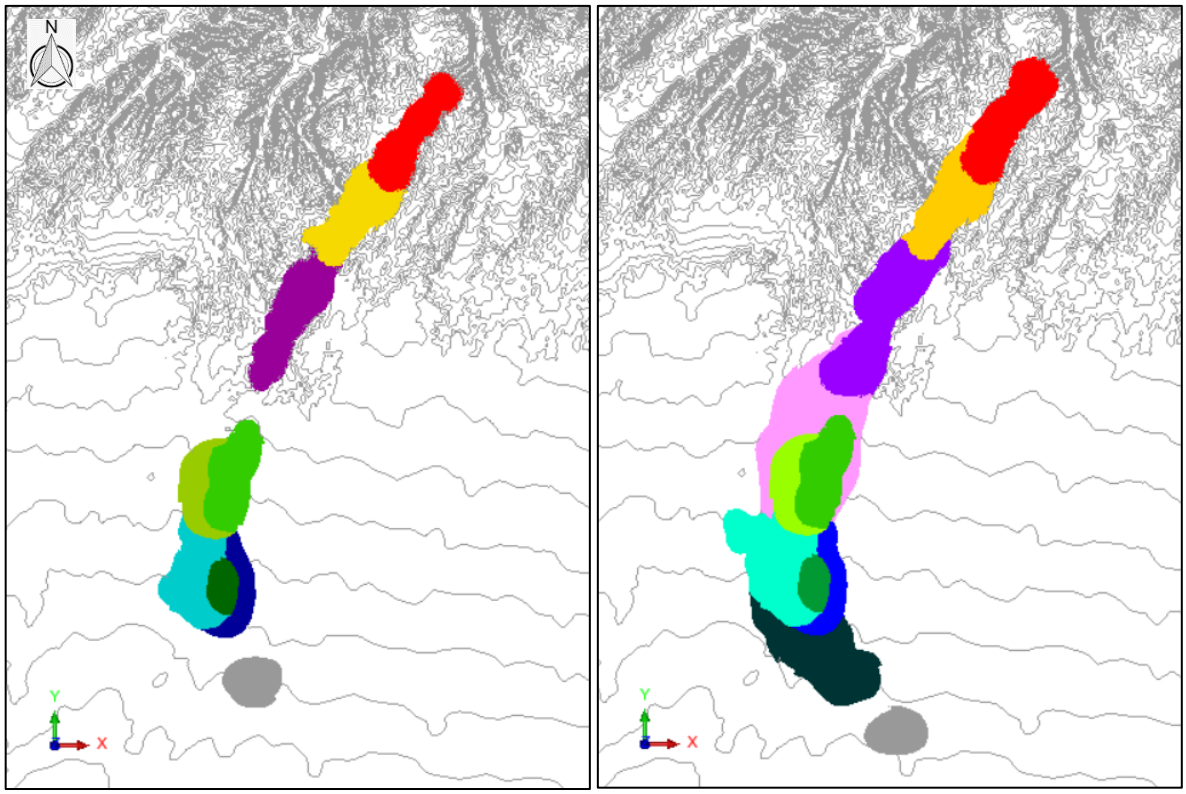

Figure 5-3: Mining pushbacks (stages) of the Etango (8Mt/a) DFS (left) and the Etango-XP and EXT Study (right) pit

The 2022 Etango (8Mt/a) DFS proposed a mining equipment fleet comprising 100-t off-road haul trucks and suitably sized excavators for the 25 Mt/a steady state mining rate. For the Etango-XP Study, it was assumed that once the plant expansion was commissioned and the total tonnes mined increased to 60 to 90Mt/a, a bigger-sized mining equipment fleet comprising 180-t off-road haul trucks and appropriately matched excavators would be deployed. For the Etango-XT Study, the mining equipment fleet remains 100-t off-road haul trucks as in the 2022 Etango (8Mt/a) DFS. For the Etango-XP and Etango-XT Study, it was again assumed that mining would take place by conventional open pit methods and that the whole mining operation, as during the 2022 Etango (8Mt/a) DFS, will be based on a contract mining business case.

The Contractor will be responsible for supplying all materials, equipment, facilities, services, and supervision and labour necessary to carry out the mining operations per the mining contract specifications. Details of this contract supply and other mining specifics, as well as the bill of quantities for tonnes by material type per area and bench elevation, were contained in the schedule of rates in the request-for-quote (RFQ) document for the 2022 Etango (8Mt/a) DFS and in general include the supply of the drilling, blasting, loading and haulage of waste and ore material from the mining area to specific waste rock dump, and stockpile locations in the Project's mining area. The supply includes providing support services to allow safe and efficient supply performance per the Mining Contract.

The height of the mining benches was determined according to the physical characteristics of the mineralisation, the ore body and the distribution thereof in the host rock and the size of the mining equipment and are in line with the 2022 Etango (8Mt/a) DFS assumptions. Drilling and blasting would be performed on

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12 m high benches. Waste benches will be excavated in a bulk mining fashion with shovels on a single 12 m bench. In comparison, mineralised benches will be selectively loaded in three 4 m flitches using backhoe excavators to minimise ore loss and dilution.

Similarly to the 2022 Etango (8Mt/a) DFS approach, radiometric truck scanning (discrimination) and downhole gamma probing will be employed as the definitive grade control process, as is common practice in large-scale open-pit uranium mines in Namibia. This means that the selective mining unit in the mining process will be a single truckload. The pit with interim pushbacks was designed to allow for the deferring of waste stripping as much as possible. Most of the higher-grade feed ore is situated in the deeper areas within the pit; therefore, access to these areas is crucial. The pushback stages were designed to provide access to the shallower portions of the orebody on the southern side and expand to the north. Scheduling of waste stripping and ore mining within the various pushbacks will focus on optimising the plant feed grade while ensuring ROM stockpile capacity as far as possible. The stockpile strategy is to maintain at least two months of ROM ore on finger stockpiles to allow for flexibility in blending to optimise recovery and plant throughput. The two months are considered optimal and sufficient to manage the risk of model variability, allowing for stripping and eliminating the possibility and inherent ore supply disruptions from the pits. After mining stops, the processing plant will continue running on stockpiles as long as the uranium produced returns a positive cash flow.

Correspondingly to the 2022 Etango (8Mt/a) DFS, the Etango-XP and Etango-XT Study schedule was produced with a maximum material movement of approximately 27 Mt/a for the first four years of the LOM production schedule to supply ore at 8Mt/a. An initial ramp-up period of 12 months has been incorporated for the processing plant to attain the initial nameplate capacity of 8Mt/a. A strategic ROM ore stockpile will be used to manage the tonnage and grade of the ore feed to the processing plant. The Etango-XP and Etango-XT Study schedule incorporates a steady mining ramp-up over two years to 25 Mt per annum, as illustrated in Figure 5-4. The pre-strip period is three months, with a total of 3.18Mt mined from the first pushback. After the pre-strip period, the ore inventory on the grade control and ROM stockpiles is 470 kt.

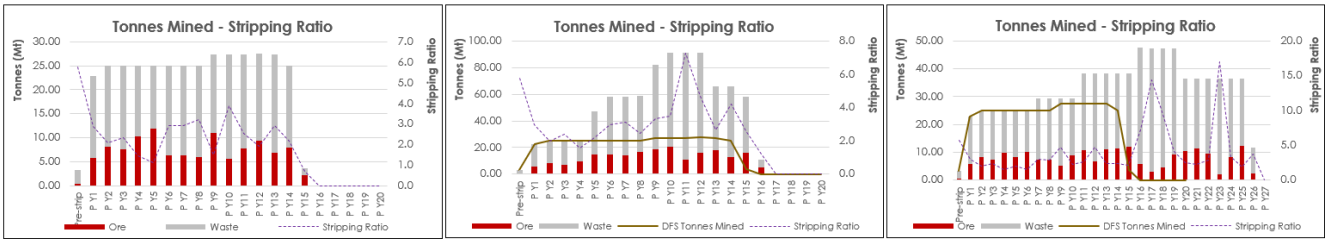

Figure 5-4: Total tonnes mined and stripping ratio of the Etango (8 Mt/a) (left), Etango-XP (middle) and Etango-XT Project (right)

Respective material movement increases for the Etango-XP Study after year four, and the associated average stripping ratio is presented in Figure 5-4 in the middle graph. During the fifth production year, the second 8Mt/a processing stream was commissioned with 16Mt/a stacking capacity achieved in Year 6 of the LOM production calendar. The LOM for the 16Mt/a stacking operation is approximately 12 years, as illustrated in Figure 5-5 in the middle graph.

After year four, the material movement for the Etango-XT Study is identical to the 2022 Etango (8Mt/a) DFS production profile until year 7, as illustrated in Figure 5-4 in the right graph. During the seventh production year, the waste stripping needs to be gradually increased to a maximum mining rate of 48Mt/a for the Mega Pit to maintain an 8Mt/a stacking operation and extend the LOM by another 12 years for the Etango-XT Study, as illustrated in Figure 5-5, the right graph.

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The mine schedule employs a variable cut-off grade approach (Figure 5-5) to maximise the Project's NPV. Following this approach, the cut-off grade is flexed during the mine schedule to maximise metal production as early as possible.

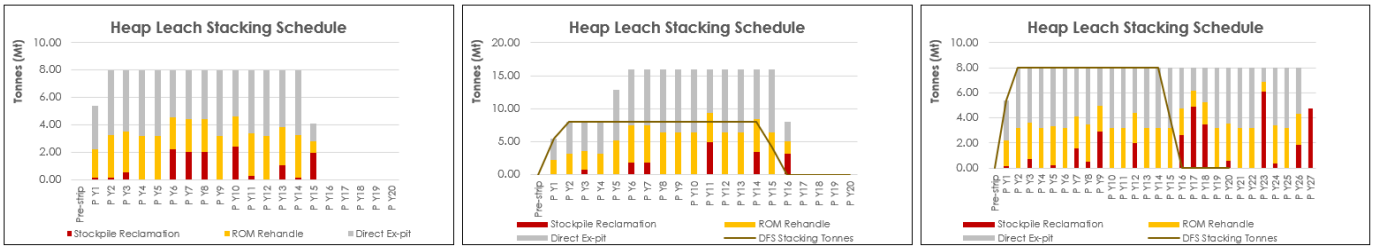

Figure 5-5: Total heap leach tonnes and associated grades stacked of the Etango (8 Mt/a) (left), Etango-XP (middle) and Etango-XT Project (right)

Figure 5-6 depicts on the left graph the final product pounds produced by the Etango (8Mt/a) DFS, which ranges between 1.7 and 4.3 million product pounds produced per annum to a total of 52.6 Mlb U_3O_8 product over the LOM. The metal production is further increased to between 5.8 and 7.8 million product pounds produced for the Etango-XP Study business case after the plant throughput is doubled to 16Mt/a (Figure 5-6, middle graph), resulting in a total of 95.2 Mlb U_3O_8 product over the LOM. The metal production for the Etango-XT Study fluctuates between 2.1 and 4.8 million product pounds produced over the 27-year LOM processing life (Figure 5-6, right-hand graph) to a cumulative of 95.2 Mlb U_3O_8 product over the LOM.

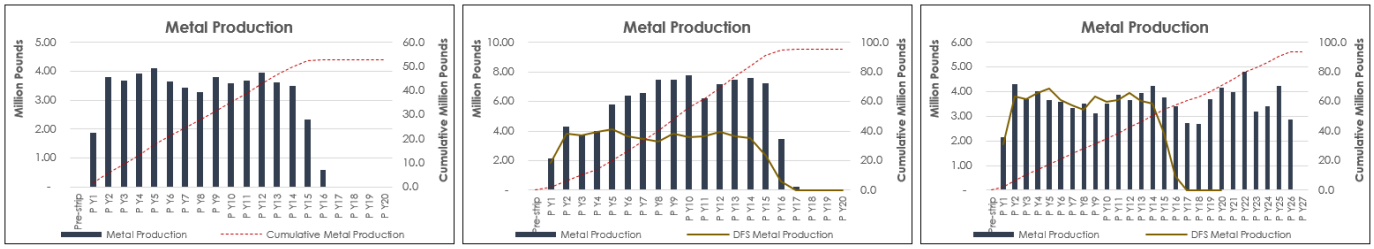

Figure 5-6: Total metal production of Etango (8 Mt/a) (left), Etango-XP (middle) and Etango-XT Project (right)

5.2 Fleet Selection

Bearing in mind that at the peak mining production between Years 6 to 14, a total of 60 Mt to 90 Mt of material needs to be moved for the Etango-XP Study business case, the following truck and shovel match on the ore and waste benches have been considered:

- A 200-t hydraulic backhoe shovel would be employed for selective ore mining;
- While a 400-t hydraulic backhoe shovel would be utilised for bulk waste-loading purposes and
- A 180-t capacity, off-highway rigid haul truck and standard open-cut drilling and auxiliary equipment will be required in both cases.

The Etango-XT Study mining equipment make-up will remain unchanged compared to the Etango (8Mt/a) DFS. The equipment selection assumptions will be revisited during future studies, and further detailed trade-off studies will be performed on both the expansion and extension business cases. Due to the large-scale mining envisaged, the backhoe excavator would be the preferred loader choice. The remainder of the mining production fleet consists of support equipment, including graders, track and wheel dozers, front-end loaders,

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rock breakers, and utility excavators. Diesel-powered truck and shovel operations, combined with an effective drill and blast plan, are well understood, highly flexible, and have significant manufacturer support due to the worldwide equipment population compared to electric-powered mining equipment. At this stage of the Project, a standard drill, blast, truck and shovel operation would be considered the lowest operating risk mining method in terms of cost and productivity. As such, the diesel-powered truck shovel operation has been selected as the preferred case for this study.

It is assumed that the Contractor will operate 361 days per annum (allowing for three lost days for public holidays and one lost day for weather downtime) on a 24-hour basis with shifts rotating on a 3- by 8-hour duration.

5.3 Geotechnical

As part of the 2012 DFS and 2015 OS studies, based on a 20 Mt/a plant throughput rate, Coffey Mining completed the geotechnical assessment for the proposed Etango open pit in October 2011. The results of this work were:

- The geotechnical data from which the geotechnical domains have been derived is based primarily on geotechnical logging of drill core and surface structural mapping;
- A total of 26 geotechnical drill holes were drilled from the Anomaly A, Oshivelo and Onkelo deposits to collect rock quality and structural data;
- The fault planes generally dip at shallow to moderate planes towards the west and are interpreted to daylight on both the southeast and northeast walls;
- Two types of geological contacts have been identified on the Etango deposit, namely:
- Alaskite – meta-sediment contact; and the
- Meta-sediment – lithology contacts (Chuos / Khan / Etusis)
- Kinematic analysis was undertaken where three modes of failure were examined for each of the sectors, and a slope configuration was calculated based on the selected bench height and
- Inter-ramp stability was also assessed using probabilistic techniques.

In general, the geotechnical investigations demonstrated that the fresh rock mass conditions are good and will allow for the excavation of steep slopes. On the smaller bench scale, there is potential to develop wedge or planar failures in areas due to the intersection of joints and batters. However, the calculated safety factors have highlighted that these should not present a significant issue. The risk associated with these failures can be mitigated by maintaining good blasting practices and batter slopes.

The Etango (8Mt/a) 2021 PFS and 2022 DFS Project updated pit designs were reviewed by Mine Technics (Pty) Ltd (MT), a Perth-based geotechnical consultancy with extensive experience in the Namibian uranium mining industry. The significant findings and key recommendations of the review are summarised below:

- The hanging wall and footwall slopes of the South Pit are steepened from the 2011 Coffey Mining geotechnical assessment to 55-degree inter-ramp slope angles (ISA) above 184mRL and to 60-degree ISA below this to the pit bottoms by virtue of tight concavely curved slopes.
- Data and model limitations preclude further steepening the North Pit slopes. It is advised to retain the footwall slopes at the 70-degree bench face angles and 9.5m berm widths, yielding ISA = 52.8 degrees, as advised by Coffey Mining in 2011. The hanging wall slope angles may be retained at the ISA = 55-degree, which MT advised for the 2021 PFS, based on experience from the nearby Rössing and Husab mines with the same geology.

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The bench height study in the 2012 DFS resulted in the adoption of 12 m benches mined in 3 – 4 m flitches to minimise ore loss and dilution. The Etango-XP and Etango-XT Study still maintain this approach.

5.4 Hydrogeological

Aquaterra undertook a detailed assessment of hydrogeological conditions and requirements for depressurising (dewatering) the pit walls as part of the DFS 2012. The conclusions from this work remain equally applicable to this Scoping Study.

It was determined that the relevant hydrogeological units are generally low hydraulic conductivity basement rocks. It was concluded that there will be limited natural drainage to the pit face; thus, little lowering of piezometric heads in the rocks behind the pit wall and elevated values may persist at, below and behind the pit walls over the life of the mine.

Modelling demonstrated that the steepest gradients in predicted heads would develop immediately under the base of the deepest part of the pit over the mine life. Additionally, a seepage face is predicted to develop on both pit walls and lie 100 to 200 metres above the base of the final pit depth at the end of mining.

The modelling assisted in identifying those areas where pressures will be high and where potential additional depressurisation might be required. However, groundwater is generally not expected to present a significant issue for mining activities.

6. Processing

6.1 Metallurgical Test work

All metallurgical test work applied for the 8Mt/a initial phase will be considered valid for the expansion work. Any test work identified in risk reviews or strategy sessions will be defined in more detail in subsequent phases. The current test work on Fe removal will progress to completion as per the current schedule and will not impact the Etango-XP and Etango-XT Study.

6.2 Process Flowsheet

For the Etango-XP Etango-XTStudy, the flowsheet utilised for the initial 8Mt/a facility will be duplicated. The process represented in Figure 6-1 applies. The abbreviated process description is as follows:

- Area 03010: Crushing
  - ROM is crushed in a three-stage crushing circuit equipped with dust suppression systems.
- Area 03020: Agglomeration
  - Crushed feed material is agglomerated by adding a binding agent and sulphuric acid to accelerate uranium leaching.
- Area 03040: Heap Leach
  - Agglomerated feed material is stacked in a Heap Leach pad operation and leached to recover uranium.
- Area 03030: Ripios Stacking
  - Spent ore or ripios is reclaimed for storage on a ripios storage facility.
- Area 03050: Ion Exchange and Nano Filtration
  - Ion Exchange.
    - Uranium is recovered from the PLS.

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    - Fe is scrubbed from loaded resin with dilute H_2SO_4.
    - A NaOH solution regenerates a portion of the eluted resin.
  - Nano Filtration
    - The nanofiltration plant primarily recovers H_2SO_4 in water, while U and Fe are retained in brine.
  - Polishing IX
    - Residual Fe is removed from the U-rich stream by ion exchange.
- Area 03060: Precipitation, Drying and Packaging.
  - U is precipitated as uranyl peroxide, $UO_4.xH_2O$.
  - The filtered product is dried and packaged for shipping.
- Area 03080: Reagents
  - Ferrous sulphate is delivered in bags and mixed with water for heap leaching.
  - Sodium Hydroxide is delivered in bags and mixed with water for use in the ion exchange and uranium precipitation processes.
  - Binding agent is delivered in bulk to silos, mixed with water and pumped to agglomeration.
  - The flocculant is delivered in bags and mixed with water before being used in the thickeners.
  - Hydrogen Peroxide is delivered in ISO tanks and used in heap leaching and uranium precipitation.
- Area 03090: Services
  - Plant air & Instrument air
  - Water
    - Fresh water
    - Potable water
    - Fire water
    - Demineralised water
- Area 03100: Sulphuric Acid
  - Sulphuric Acid is delivered in bulk and used in agglomeration, heap leach, ion exchange and product drying

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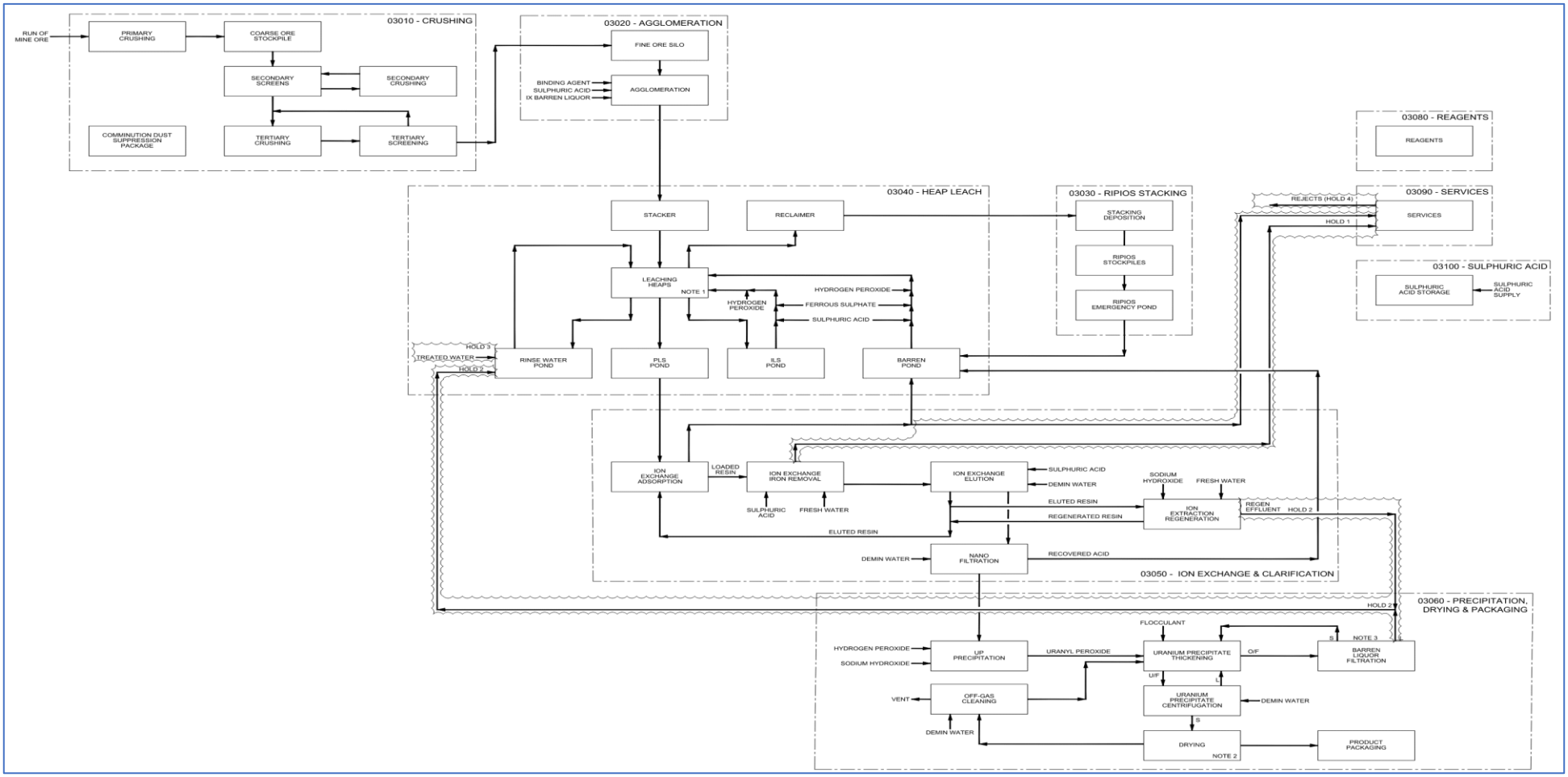

Figure 6-1: Etango X Block Flow Diagram

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6.3 Mass Balances

The mass balance utilised for the 8Mt/a base case was adjusted to determine consumptions and production rates. Apart from a reduction in U_3O_8 grade from 240ppm to 234ppm, no adjustments were made from the Process Design Criteria utilised for the 8Mt/a facility. A concern arose regarding the impact of reduced ore feed grade. Based on the schedule of production grades provided by Qubeka, the grade in the feed to the plant will reduce to 187ppm U_3O_8 in production years 6 and 11. Simulations were performed to assess the impact of this reduction on the IX and Ripios IX Operations. To ensure that abnormal low values were catered for, the simulation was completed for an ore feed grade of 160 ppm U_3O_8. The impact on the operations is listed in Table 6-1 below. The results of simulations indicated that the IX system could be operated efficiently by adjusting resin flow rates for varying grades. This will be investigated in more detail in subsequent studies. There was no investigation into possible Pregnant Leach Solution (PLS) management; this may be addressed in subsequent phases if worthwhile.

Table 6-1: IX Simulation Results

	Base Case-240 ppm U_3O_8		160 ppm U_3O_8		180 ppm U_3O_8	
	IX	**Rip-IX**	**IX**	**Rip-IX**	**IX**	**Rip-IX**
Q_{soln}, m^3/h	747	252.7	747	248.5	747	250
$Soln_{in}$, ppm U	274	33.8	169	21.4	195	195
$Soln_{out}$, ppm U	3.1	3.2	3.1	2.14	3.1	2.41
Q_{res}, m^3/h	6.46	0.57	6.08	0.63	6.1	6.12
Res_{in}, ppm U	1 065	1 026	1 065	1 026	1 065	1026
Res_{out}, ppm U	29 975	12 496	19 100	8 214	21 788	9285

Note: "soln" = U concentration in solution; "Res" = U loading on resin, "Q" = volumetric flow.

The process evaluation work was performed based on the process design parameters listed in Table 6-2 below.

Table 6-2: Expansion Design Basis

Parameter	Unit	Value
Average U grade	ppm U_3O_8	234
Minimum U grade	ppm U_3O_8	180
Abnormal U grade	ppm U_3O_8	160
Plant ROM throughput	Mt/a	16
U production	Mlb U_3O_8 /a	7.05

6.4 Processing Assumptions

The process design was based on the design criteria and response parameters of the initial 8Mt/a facility, adjusted for a reduction of average feed grade from 240ppm U_3O_8 to 234ppm U_3O_8. The following key assumptions are worth noting:

- For the Etango-XP Study, two (2) duplicate facilities each with a processing capacity of 8Mt/a of ore will be installed, capable of operating totally independently.

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- U grade in ripios remains constant regardless of the feed U grade. The percentage recovery of U to the PLS will therefore vary with feed grade.
- For purposes of the study, a U recovery from ore to final product of 87.8% was used.
- Concentration and degree of extraction of deleterious elements, such as iron (Fe), remain as per the 8Mt/a base case.
- The U feed grade will not drop below the minimum of 187ppm U_3O_8 as per the mining plan.

6.5 Proposed 16Mt/a Expansion Process Plant Layout

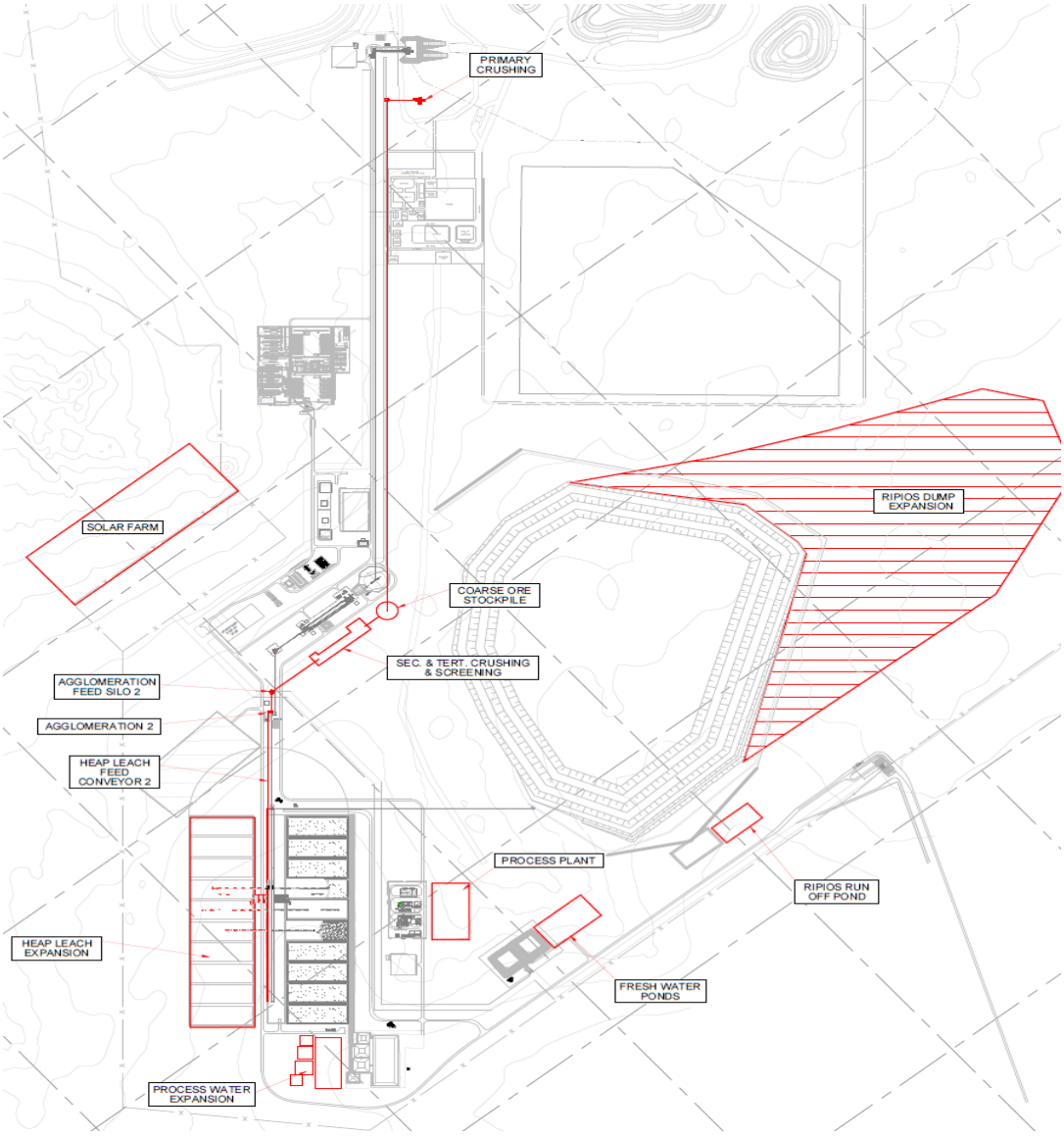

Figure 6-2: Proposed Etango X Process Plant Layout

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As depicted in Figure 6-2, the layout considers expansion to a total ROM treatment capacity of 16Mt/a by means of one additional 8Mt/a module, indicated in red. The additional module is envisaged to be a process flow duplicate of the 8Mt/a facility currently in progress. The critical information listed below applies:

- The planned expansion fits into the available site space but must be optimised in future exercises.
- The additional required real estate does not result in sterilisation of any currently known processable resource. All future work will account for this constraint.
- No provision or consideration was given to the commonality of processing trains and services, inter-train connections or crossovers.

7. Infrastructure

7.1 On-site Infrastructure

The Civil Infrastructure for the process plant includes the following:

- Earthworks, including earth dams and bunds
- Roads, Parking and Loading areas
- Stormwater Management
- Potable Water
- Sewers
- Sewage Disposal and Treatment
- Fencing
- Civil infrastructure for permanent and temporary buildings

The civil infrastructure is to be expanded to accommodate the process plant expansion to 16Mt/a, however, not all civil infrastructure needs to be" doubled-up" since some infrastructure would be already in place for the 8Mt/a process plant and could be shared between the two parallel process trains or expanded with modification to the existing design. Refer to the basis capital cost of estimate in Section 10 for assumptions on the infrastructure expansion.

- Buildings
  - Capacity and services of office buildings have been increased to allow for additional staff.
  - No additional Site Access Buildings are required.
  - The size and capacity of Maintenance Workshops have been increased.
  - Warehouse building size and handling systems have been increased.
- The sewer system and treatment plant will be expanded to meet increased demand.
- Fencing is to be extended only for new expansion. Fencing for temporary works and construction camp has not been included.
- Internal roads: No allowance for additional internal roads have been included.
- The parking area for the 8Mt/a design has been increased to allow for additional labour requirements.
- The potable water supply system has been upgraded for the 16Mt/a design.
- Based on the layout, the terraces, earth dams and bunds have been increased to allow for the 16Mt/a expansion.
- Other considerations

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- Haul Roads designs have been altered to allow increased traffic in (mining) pit and waste rock dump footprints.
- No upgrade to the main access road to the site has been allowed for
- The PV power plant capacity has been increased.
- The capacity of the plant's water supply has been increased. The pipeline size is adequate, but more pumping capacity has been costed.

7.2 Power

There are both Deep and Shallow Connection cost implications for supplying the Etango project with power from the national grid. The 8Mt/a design currently allows for 2 x 20MVA, 132/33 kV transformers at the substation.

As the power requirement for the 8Mt/a design is 14.096MVA and only 3% of the installed power base is for administrative buildings, the 16Mt/a design is expected to have a maximum demand of 27.770MVA (14.096 x 1.97). The expansion of the main 132/33kV substation will involve a challenging change-out process, considering that the 8Mt/a substation will be operational. The optimum solution would be to include 2 x 30MVA transformers upfront as part of the 8Mt/a design. Alternatively, a third 20MVA transformer can be installed when upgrading from 8Mt/a to 16Mt/a. As a last resort, a 20MVA spare unit can be obtained during the expansion to be on-site but not installed. The latter two options will result in power supply interruptions when executed, either during expansion or at the time of failure.

The main incoming transmission line (Part of the deep connection infrastructure) from NamPower's Kuiseb substation has a thermal capacity in the order of 137MVA. It is expected that the line will be able to supply at least 50MVA if voltage constraints are considered. Upgrades to the line and feeder bay at the Kuiseb substation are consequently not needed for the Etango-XP and Etango-XT Study.

The Etango-XP expansion will double the solar power supply integration with the grid supply. Provision has been made in the layout for an embedded solar plant being constructed on site. However, sourcing an offsite supply from a registered independent power producer is a likely and more financially viable alternative. Solar generation will be limited to 30% of the annual energy requirements for the Etango mine. There are, however, indications that the National Energy Control Board may approve an increase in the limits for co-generation from 30% to 50%. For this scoping study, the potential increase was not accounted for.

7.3 Water

7.3.1 Fresh Water Supply

The Etango processing plant will receive fresh water supply via a dedicated NamWater pipeline. The pipeline will be installed from the NamWater base station on the outskirts of the town of Swakopmund and run parallel to the C28 national road next to the existing pipelines for the Swakop Uranium and Langer Heinrich mines. It will divert from the C28 route at the Etango Mine access road T-junction and follow the access road to the Etango site, terminating at the main Fire Water Tank.

A detailed Etango fresh water supply scheme design has been completed for a 2-phase approach, including an initial capacity of 2.4Mm^3/a and an ultimate capacity of 5.0Mm^3/a. The 2.4Mm^3/a design meets the Etango processing plant requirement for 8Mt/a ore throughput. A subsequent upgrade of the water supply scheme with two additional booster pump stations will increase the water supply capacity to 5.0Mm^3/a and will meet the envisaged water demand for up to 20Mt/a ore throughput. See Figure 7-1.

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The water supply scheme design includes a Ductile Cast Iron (DCI) pipeline sized at 450mm diameter and will be sufficient for both phases, negating the need for extensive construction work on the pipeline itself during expansion. Construction of the additional booster pumps stations will happen without affecting the water supply continuity. A rapid tie-in strategy is catered for in the current design to bring the additional pump stations into operation.

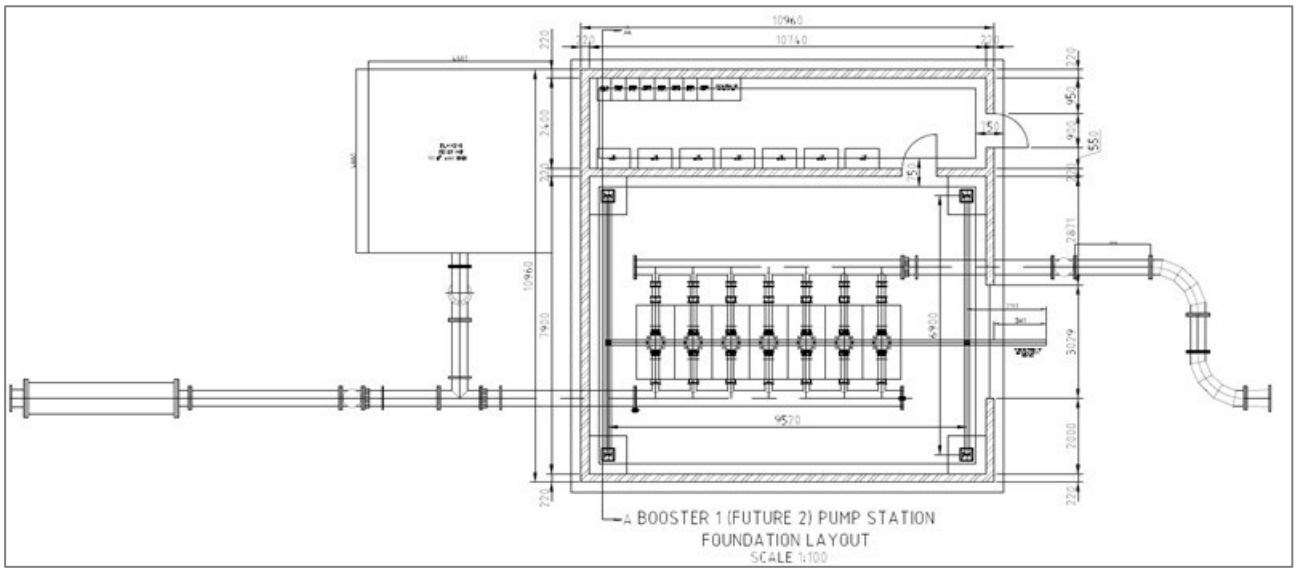

Figure 7-1 Typical layout of a new booster pump station

7.3.1 Construction Water Supply

The construction of the 16Mt/a expansion will require additional water for bulk earthworks and concrete. With the intention of duplicating the processing plant, it can be assumed that the construction water required for the fixed plant terraces and bulk concrete will be similar to that estimated for the 8Mt/a plant. However, the road infrastructure and admin facilities will typically not be expanded significantly. The following factors in Table 7-1 were applied to estimate the construction water required for the expansion works.

Table 7-1 Expansion works construction water supply requirements.

Activity	8Mt/a Plant Construction Water Quantity (m^3)	Increase (%)	Plant Expansion Construction Water Quantity (m^3)
Concrete	4 900	100%	4 900
Addition to Fill	213 500	70%	149 450
Water Trucks	20 000	20%	4 000
Camp	75 000	0%	0
Total (approximate)	313 400		158 350

For the 8Mt/a plant construction requirements, a construction water supply was estimated over 18 months. A design for 570m^3/day has been catered for and is currently being installed. The permanent fresh water supply

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scheme should be able to meet the additional demand even before expansion. However, should it be required, the current construction water supply scheme reclamation could be postponed after completion of the 8Mt/a process plant and be maintained to cater for the later expansion construction water requirements.

The current construction water supply scheme includes a gravity flow system consisting of an HDPE pipeline, which will tie off from the existing Rössing Uranium Mine fresh water supply pipeline next to the B2 national highway. The construction water supply pipeline will run past the Goanikontes Oasis and Swakop River Farmers, through the Swakop River Valley and up onto the plateau to terminate at a 700m^3 reservoir on the Etango site.

7.4 Roads

7.4.1 C28Main Road

During the FEED phase for the Etango 8Mt/a plant design, a condition assessment was performed on the C28 Main road, which includes a 23km section of the access route to the Etango mine site. Estimates of traffic numbers for the Etango construction and operations phases, the Langer Heinrich Mine operations, and general public traffic for the C28 road were used during the assessment. Refer to Table 7-2.

Table 7-2 Expected traffic for C28 Main Road assessment.

	Expected E80's					
	Year 1&2	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Etango Mine:						
Construction Equipment and Material	21 949					
Construction Workers	44 618					
Operational Traffic		39 442	39 442	39 442	39 442	39 442
Langer Heinrich Mine:						
Expected Generated Traffic	81 075	38 832	47 802	52 009	52 009	52 009
Normal Traffic (30 vpd) (4% growth annually)	21 900	11 388	11 844	12 317	12 810	13 322
Total Traffic	**169 542**	**89 662**	**99 088**	**103 768**	**104 261**	**104 773**
Total Accumulative Traffic	169 542	259 204	358 292	462 060	566 321	671 094

The assessment concluded that the current pavement is expected to withstand 300,000 E80s on the condition that regular maintenance to the seal layer is done. The road is expected to withstand the generated traffic for 4 years before reconstruction might be needed for the expected traffic numbers. Reconstruction will typically involve ripping, wetting and recompacting the top 150mm – 200mm gravel and adding a light seal again.

An increase in road maintenance frequency and intensity has been allowed.

7.4.2 Site Access Road

An unsealed gravel road design with a bitumen-based chemical dust suppressant was used for the Etango site access road. With the increase in traffic anticipated during and post-expansion from 8Mt/a to 16Mt/a, the addition of a light seal to the road surface has been allowed.

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7.5 Port and Acid Handling Infrastructure

An increase in the Etango throughput rate from 8Mt/a to 16Mt/a will effectively result in a doubling of the sulphuric acid demand, from 150 000t/a to 300 000t/a. For the Etango 8Mt/a DFS, it was assumed that Bannerman would establish a joint venture with an acid producer to construct and operate a 390,000t/a acid storage facility in the Port of Walvis Bay. See Figure 7-2.

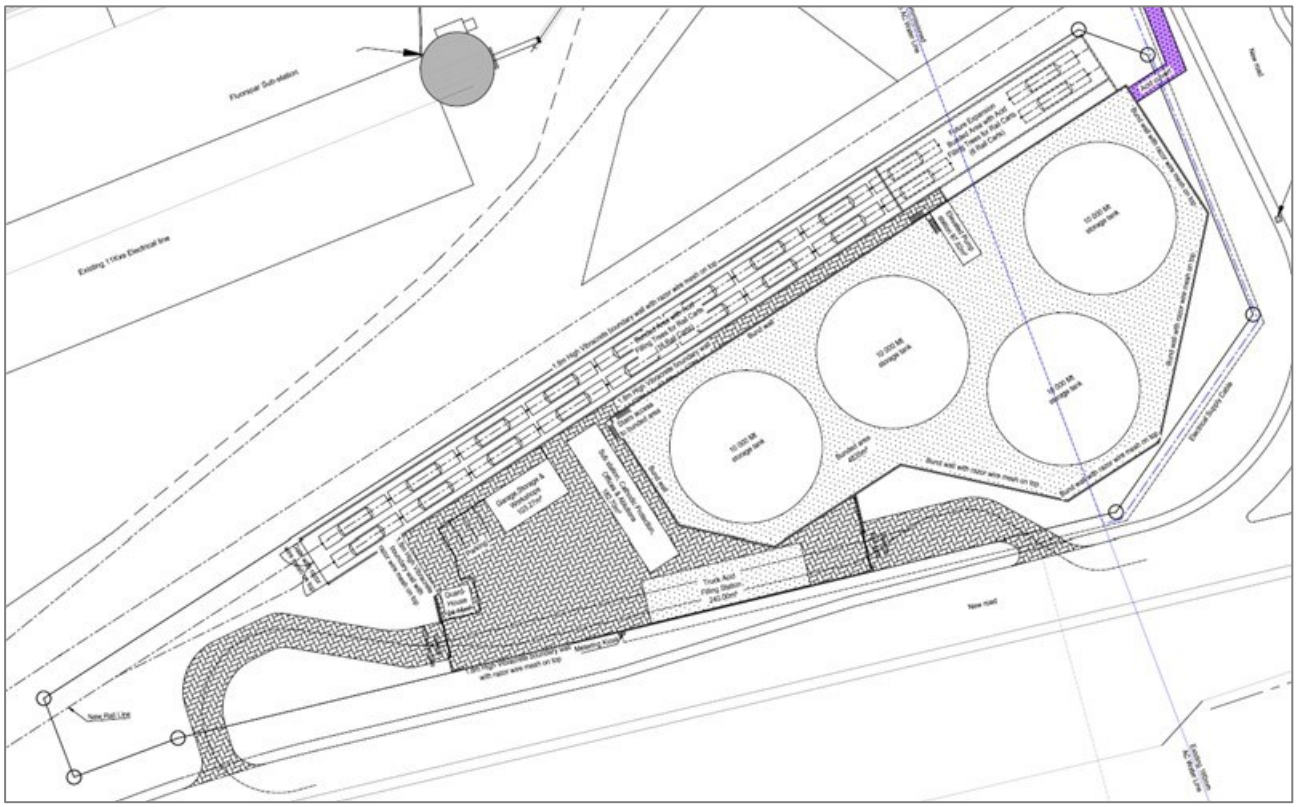

Figure 7-2 A Typical general layout of the shared Acid storage and handling facility at the Port of Walvis Bay

The modus operandi for the current design involves receiving acid by rail from a local supplier and imported suppliers, offloading the acid into the storage tanks, subsequently loading acid into road tankers and transporting acid by road to the Etango site. Importing acid by sea was allowed for in the design to ensure security of supply. Pumping acid to vessels also allows the export of excess acid generated locally, which local consumers do not require. Loading rail tankers for rail transport of acid to a potential future multi-modal rail siding was also already allowed.

Should the current design operational plan be maintained, the road tanker loading system will require a 100% increase in the daily design supply rate. That will require increasing the loading stations from 2 to 4 and increasing the pumping capacity from 60t/hour to 120t/hour. This will ensure a capacity to fill four road tankers per hour.

Increasing the road transport from 2 tankers per hour to 4 tankers per hour will significantly impact the already congested traffic through the town of Walvis Bay and may raise public concerns. Therefore, if a railway siding

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is constructed at the start of the C28Main road behind the Walvis Bay – Swakopmund Dune Belt, the acid will be railed from the port storage facility to the rail siding from where it can be trucked to the site. In addition to the railway siding infrastructure, Bannerman will need to acquire ISO Tank Containers, which can be transported on flatbed rail wagons and flatbed road trucks and transferred from train to truck with a reach stacker or overhead crane.

For the current scoping study, the latter operational mode was elected. Therefore, the port acid storage facility is sufficiently sized to meet the increase in the acid handling requirement, and no expansion requirements are currently foreseen. The construction and operation of a new railway siding are allowed for in the CAPEX and OPEX estimates. Operating with a rail siding will necessitate the purchase of ISO tank containers, the cost of which is also included in the CAPEX estimate.

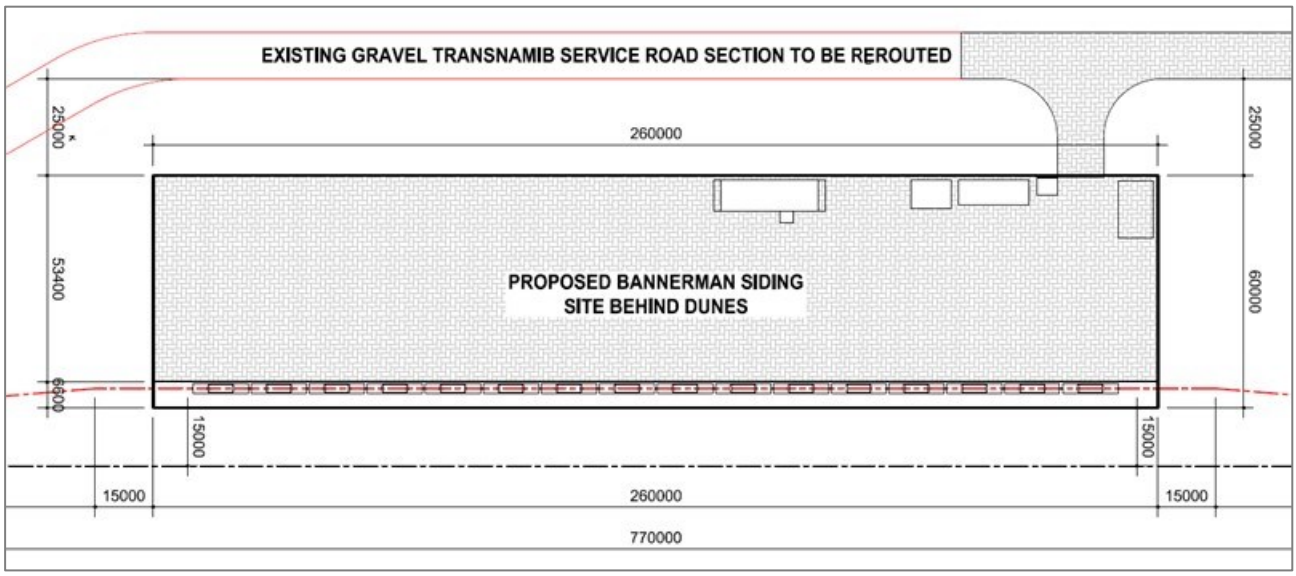

Figure 7-3 General layout of the Bannerman Multi-modal railway siding

8. Environmental and Social

8.1 Overview

For the Etango Project, the ESIA was prepared by Alex Speiser Environmental Consultants (ASEC) and Environmental Resources Management (ERM) and submitted in April 2012 for the 2012 20Mt/a DFS. The ESIA addressed a maximal plan for processing throughput and the mining layout of the project. Herein, this Etango-XP and Etango-XT Study is entirely consistent with this impact assessment, other than for project commencement, at a lower throughput rate.

The ESIA stands approved by the Ministry of Environment, Forestry & Tourism (MEFT), and an Environmental Clearance Certificate (ECC) continues to apply through renewal. The ECC will be subject to renewal in September 2024. An ECC for linear infrastructure is also in place and is valid until May 2025. The MEFT has granted Environmental Clearance Certificates (ECC's) for the electrical transmission line and the permanent water pipeline. Both permits are subject to renewal in August 2025. MEFT has also granted an ECC for an auxiliary or temporary water pipeline to the site, which is due for renewal in April 2026.

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8.2 Summary of ESIA

The relativity of project impacts is summarised in Table 8-1. Of these, the impact of the reduction in the invertebrate population on the project disturbance footprint and the loss of jobs post-closure are considered to be the only long-term major impacts once planned mitigation measures are in place.

Table 8-1 Environmental Impacts

Aspect	Issue	Project Phase	Post-mitigation Impact
Surface water	Diverted flow in 'level 1' - ephemeral drainage around disturbance area of project	Construction Operation & Post Closure	Moderate
Dust (PM_{10})	Occupational Health Remote receptors	Operation	Minor
Fauna	Reduced of abundance disturbance area of project	Construction Operation & Post Closure	Major
Flora	Habitat loss/degeneration & some rehabilitation changes	Construction Operation & Post Closure	Moderate
Road access	Access via D1991 & diversion	Construction Operation & Post Closure	Moderate
Employment	Job losses on closure	Post Closure	Major
Mine	Visual disturbance area of project of Pit, dust from blasting	Construction Operation & Post Closure	Major
Primary crusher	Visual disturbance, but removal on closure	Construction & Operation	Negligible
Visual – waste dumps	Visual disturbance, but rehabilitation change on closure	Operation & Post Closure	Moderate
Noise	Impact "sense of place"	Operation	Moderate

Significant positive outcomes are envisaged for direct and indirect economic benefits experienced by people in the district, and more widely within Namibia, in terms of:

- Employment opportunities.
- Training and development of skills.
- Wages and salaries flowing to local communities.
- Services and development of services capability.
- Government income (taxes and royalties).

8.3 Environmental and Social Management System

A framework has been designed for an Environmental and Social Management System (ESMS) in readiness for the Construction and Operational Phases of the Etango Project. The framework comprises:

- Policy
- Risks & Impacts
- Organisational Capacity & Competency

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- Emergency Preparedness & Response
- Stakeholder Engagement
- External Communications and Grievance Mechanisms
- Ongoing Reporting to Communities of Interest
- Monitoring and Review

This framework will bookmark the development of Environmental and Social management plans to address the potential impacts of the Etango Project.

Monitoring and Management Programs will be put in place for the following:

- External communications
- Climate, emissions and energy
- Human rights
- Stakeholder engagement and community development
- Groundwater
- Surface run-off
- Waste rock and ripios seepage
- Ambient dust

9. Operating Cost

9.1 Mining Operating Cost

This Etango-XP and Etango-XT Study's Mining Operating Cost (OPEX) estimate is based on a Class 5 accuracy level. All principles, philosophies, rates, costs and assumptions utilised to estimate the 8Mt/a OPEX calculations were used for the 16 Mt/a business case. For the 2022 DFS, it was assumed that mining would take place by conventional open pit methods and that the whole mining operation, except for the mine technical services function, would be outsourced to a reputable mining contractor company.

The Contractor will be responsible for supplying all materials, equipment, facilities and services, supervision and labour necessary to carry out the mining operations per the following mining contract specifications defined and listed in the 2022 DFS. The Project currency is in United States Dollars (USD), with all other currencies converted to USD. The Project's assumed exchange rate at the base date was Namibian Dollars (NAD) 17.56 /USD with a diesel cost of USD 0.88/L and a bulk explosive cost of USD 890.66/t.

Details of this contract supply and other mining specifics, as well as the bill of quantities for bench volumes/tonnes by material type per area and bench elevation, were contained in the schedule of rates as part of the request for quote (RFQ) document distributed to the market during the 2022 DFS. The RFQ was based on an initial six-year contract period with the option to extend, and these rates were extrapolated over the LOM. The recommended equipment requirements and associated mining rates in the RFQ submissions were benchmarked to other Namibian operations and endorsed by Talpac productivity simulation runs. The data obtained from the Contractor's RFQ Schedule of Rates submissions includes the following information for the contract mining OPEX estimate of the 2022 DFS project:

- Site establishing cost (NAD);
- Site decommissioning cost (NAD);
- Fixed monthly cost (NAD/month);

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- Drill and blasting costs (NAD/bcm) for waste and ore;
- Loading and Hauling costs (NAD/bcm) for waste and ore per mining bench elevation;
- Daywork rates;
- ROM and stockpile rehandling cost (NAD/t); and
- Diesel consumption (L).

All mining technical services costs that the Owner incurs are classified as "Mining Owner Team Costs" and typically include:

- Light delivery vehicle (LDV) fuel and maintenance cost;
- Computer and hardware cost;
- Software cost;
- Training cost;
- External consultants' cost;
- PPE, general and office consumables cost;
- Grade control and resource expansion drilling cost; and
- Owner mining labour costs consisting of:
  - Mine planning team;
  - Mine surveying team;
  - Geological team;
  - Geotechnical personnel; and
  - Supervise general and administrative (SG&A) labour.

The technical services, management, and engineering labour components for the 8Mt/a facility mining owner team were adjusted to cater for the Etango-XP and Etango-XT Study's increase in production. Adjustments were based on function, and workload with managerial and administrative functions were mainly shared. In contrast, specific operating, maintenance, analytical, and other supporting function complements were increased to cater to the increased demands.

As summarised in Table 9-1, the overall Etango-XP mining unit cost increases by 3% compared to the Etango (8 Mt/a) scenario, to an average of USD 2.43/t over the LOM. This is primarily attributed to the longer haul cycles from the deeper bench elevations and the more extended travel on the waste rock dumps, resulting in an overall 11% increase in loading and hauling cost for the Etango-XP mining unit cost. There is a slight reduction in the variable mining unit costs (drilling & blasting, and stockpile rehandling) that are not elevation-dependent.

As summarised in Table 9-1, the overall Etango-XT mining unit cost increases by 6% compared to the Etango (8 Mt/a) scenario, to an average of USD 2.50/t over the LOM. This is primarily attributed to the longer haul cycles from the deeper bench elevations and the more extended travel on the waste rock dumps, resulting in an overall 13% increase in loading and hauling cost for the Etango-XP mining unit cost. The Etango-XP loading and hauling costs are slightly cheaper compared to the Etango-XT business, with the same tonnes moved over the LOM, and this is attributed to the economics of scale of the larger-sized mining equipment deployed for the Etango-XP scenario.

The philosophy of common managerial and administrative resources reduces the fixed Contractor and Owner cost per tonne of material mined. The total annual operating cost over the LOM is summarised in Figure 9-1

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for the 16 Mt/a scenario. Year on year, there are variances in the OPEX unit cost, which can be attributed to the changes in the layout of the mining operation. The variables here are the number of operating pushbacks, mining elevation and the distances from the pit to the dump/crusher. Another contributing factor to the varying OPEX unit cost is the split between bulk waste, selected waste, and ore material.

Table 9-1: Mining OPEX unit cost comparison between the Etango (8Mt/a) DFS and the Etango-XP Study

Total Mining OPEX	Units	Etango (8Mt/a)	Etango-XP	Var (%) to Etango (8Mt/a)	Etango-XT	Var (%) to Etango (8Mt/a)
Load, Haul & Secondary Mining Equipment	USD/t	1.57	1.73	11%	1.78	13%
Drill & Blast	USD/t	0.49	0.48	-2%	0.48	-2%
Stockpile Rehandling	USD/t	0.07	0.07	-1%	0.09	2%
Other	USD/t	0.02	0.02	-1%	0.12	-1%
Total Contractor Cost	**USD/t**	**2.31**	**2.40**	**4%**	**2.47**	**7%**
Total Owner Team Cost	**USD/t**	**0.04**	**0.03**	**-35%**	**0.03**	**-26%**
Total Mining OPEX	**USD/t**	**2.36**	**2.43**	**3%**	**2.50**	**6%**

9.2 Process Plant Operating Cost

The Processing Plant Operating Cost (OPEX) estimate at Class 5 accuracy, for expansion of Bannerman's Etango Uranium facility from 8Mt/a to 16Mt/a ROM throughput is reported below. All principles, philosophies, rates, costs and assumptions utilised for estimation of the Etango (8 Mt/a) OPEX calculations were used for the Etango-XP scenario. Values for the Etango (8 Mt/a) and Etango-XT options are identical.

The project currency is in United States Dollars (USD), with all other currencies converted to USD. The project exchange rate at the base date was 17.56 NAD$/USD.

- The operating, management, and engineering labour components for the Etango (8 Mt/a) facility were adjusted to cater for the Etango-XP facility. Adjustments were based on function, workload and the geographic layout of the facility. Managerial and administrative functions are mostly shared, while specific operating, maintenance, analytical and other supporting function complements were increased to cater for the increased demands.
- The Mining rates and grade as issued to Wood by Qubeka were utilised. Key items are listed below.
  - Ore mining rates.
    - PY5: 12.8Mt/a
    - PY6 to PY15: 16Mt/a
  - The average U_3O_8 content in feed to the plant from PY6 to PY15 is 234ppm. Calculations were based on this feed grade.
- Discussion of OPEX calculation results is tabled in Table 9-2. Note, unit cost calculations have been determined based on annual steady-state production under each business-case.
  - The total annual operating cost for a 16Mt/a plant increases by USD 51.5M, or 93%, from the 8Mt/a throughput.
  - The philosophy of common managerial and administrative resources results in a reduction of the process plant operating cost per tonne of ore of USD 0.24/t.

- The operating cost per lb of U_3O_8 produced only decreases by USD 0.15/lb U_3O_8 due to the decrease in feed grade.
- The charts in Figure 9-1 indicate that the contributors to Operating Cost for a 16Mt/a plant are similar to those for the 8Mt/a facility. Consumables remain the major contributor, while sulphuric acid is the major contributor to consumables. The acid price used in these calculations should be reviewed and confirmed in any subsequent phases. The options of on-site production of sulphuric acid, with potential cogeneration of electrical power, also justifies more detailed investigation.

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Table 9-2: Operating Cost Expansion Comparison – Process Plant

	PROCESS PLANT - 8Mt/a (Etango (8 Mt/a) and Etango-XT)				PROCESS PLANT - 16Mt/a (Etango-XP)				% Increase from Etango (8 Mt/a) to Etango-XP					
	Total Annual Cost	Unit Costs		% of Total	Total Annual Cost	Unit Costs		% of Total	Total Annual Cost Increase/%	Total Annual Cost Increase/%	Unit Cost Increase		Unit Cost Increase/%	
	$	($/ton)	$/lb U3O8		$	($/ton)	$/lb U3O8				($/ton)	$/lb U3O8	($/ton)	$/lb U3O8
FIXED COSTS	$ 12 477 031	$1,56	$3,36	22,54%	$21 099 249,60	$1,32	$2,91	19,75%	$8 622 218,60	69,10%	-$0,24	-$0,45	-15,45%	-13,28%
LABOUR	$ 5 837 031	$0,73	$1,57	10,55%	$9 339 249,60	$0,58	$1,29	8,74%	$3 502 218,60	60,00%	-$0,15	-$0,28	-20,00%	-17,95%
Process plant operations (excluding assay)	$ 2 797 031	$0,35	$0,75		$4 475 249,60	$0,28	$0,62		$1 678 218,60	60,00%	-$0,07	-$0,14	-20,00%	-17,95%
Process plant maintenance	$ 3 040 000	$0,38	$0,82		$4 864 000,00	$0,30	$0,67		$1 824 000,00	60,00%	-$0,08	-$0,15	-20,00%	-17,95%
GENERAL & ADMINISTRATION	$ 3 040 000	$0,38	$0,82	5,49%	$4 560 000,00	$0,29	$0,63	4,27%	$1 520 000,00	50,00%	-$0,10	-$0,19	-25,00%	-23,08%
Assay cost - fixed	$ 3 040 000	$0,38	$0,82		$4 560 000,00	$0,29	$0,63		$1 520 000,00	50,00%	-$0,10	-$0,19	-25,00%	-23,08%
VARIABLE COSTS	$ 42 873 016	$5,36	$11,55	77,46%	$85 718 932,58	$5,36	$11,84	80,25%	$42 845 916,81	99,94%	$0,00	$0,29	-0,03%	2,53%
POWER	$ 6 160 000	$0,77	$1,66	11,13%	$12 320 000,00	$0,77	$1,70	11,53%	$6 160 000,00	100,00%	$0,00	$0,04	0,00%	2,56%
WATER	$ 5 842 317	$0,73	$1,57	10,56%	$11 740 129,00	$0,73	$1,62	10,99%	$5 897 811,56	100,95%	$0,00	$0,05	0,47%	3,05%
CONSUMABLES	$ 27 488 177	$3,44	$7,40	49,66%	$54 887 720,58	$3,43	$7,58	51,38%	$27 399 543,25	99,68%	-$0,01	$0,18	-0,16%	2,40%
Sulphuric acid (98%)	$ 13 991 083	$1,75	$3,77		$27 982 165,58	$1,75	$3,87		$13 991 082,79	100,00%	$0,00	$0,10	0,00%	2,56%
Reagents (excluding acid)	$ 11 880 786	$1,49	$3,20		$23 672 939,00	$1,48	$3,27		$11 792 153,26	99,25%	-$0,01	$0,07	-0,37%	2,18%
Crushing circuit	$ 547 906	$0,07	$0,15		$1 095 811,00	$0,07	$0,15		$547 905,00	100,00%	$0,00	$0,00	0,00%	2,56%
Heap pad	$ 209 985	$0,03	$0,06		$419 969,00	$0,03	$0,06		$209 984,00	100,00%	$0,00	$0,00	0,00%	2,56%
IX resin	$ 370 229	$0,05	$0,10		$740 458,00	$0,05	$0,10		$370 229,20	100,00%	$0,00	$0,00	0,00%	2,56%
Nano filtration	$ 301 456	$0,04	$0,08		$602 912,00	$0,04	$0,08		$301 456,00	100,00%	$0,00	$0,00	0,00%	2,56%
Precipitation circuit	$ 186 733	$0,02	$0,05		$373 466,00	$0,02	$0,05		$186 733,00	100,00%	$0,00	$0,00	0,00%	2,56%
ASSSAY LAB	$ 102 521	$0,01	$0,03	0,19%	$210 000,00	$0,01	$0,03	0,20%	$107 479,00	104,84%	$0,00	$0,00	2,42%	5,04%
Assay cost - variable	$ 102 521	$0,01	$0,03		$210 000,00	$0,01	$0,03		$107 479,00	104,84%	$0,00	$0,00	2,42%	5,04%
MAINTENANCE	$ 3 280 000	$0,41	$0,88	5,93%	$6 561 083,00	$0,41	$0,91	6,14%	$3 281 083,00	100,03%	$0,00	$0,02	0,02%	2,58%
Maintenance cost	$ 3 040 000	$0,38	$0,82		$6 081 083,00	$0,38	$0,84		$3 041 083,00	100,04%	$0,00	$0,02	0,02%	2,58%
Mobile equipment rental	$ 240 000	$0,03	$0,06		$480 000,00	$0,03	$0,07		$240 000,00	100,00%	$0,00	$0,00	0,00%	2,56%
RIPIOS HANDLING	$ 3 600 000	$0,45	$0,97	6,50%	$7 200 000,00	$0,45	$0,99	6,74%	$3 600 000,00	100,00%	$0,00	$0,02	0,00%	2,56%
Mobile Trucking of Ripios	$ 3 440 000	$0,43	$0,93		$6 880 000,00	$0,43	$0,95		$3 440 000,00	100,00%	$0,00	$0,02	0,00%	2,56%
TOTAL	$ 55 350 047	$6,92	$14,92	100,00%	$ 106 818 182	$6,68	$14,76	100,00%	$51 468 135,41	92,99%	-$0,24	-$0,15	-3,51%	-1,03%

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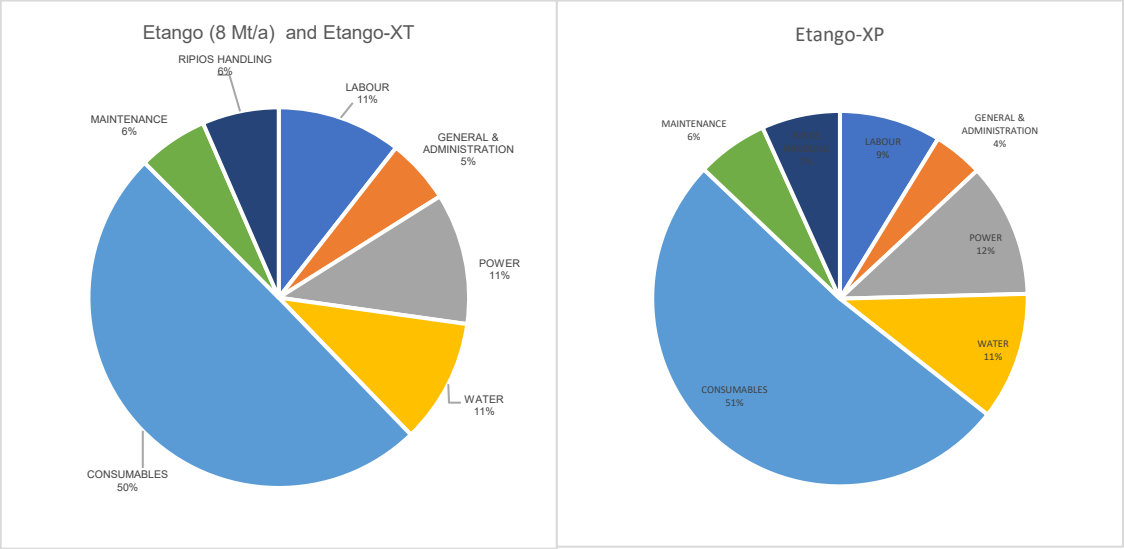

Figure 9-1: Operating Cost Estimate Breakdown for 8Mt/a (Etango(Mt/a)) and 16Mt/a (Etango-XP operations

9.3 G&A and External Infrastructure Operating Cost

General and administrative and external infrastructure operating costs were scaled to allow for an increase in the related costs for expansion from 8Mt/a to 16Mt/a. The following assumptions were made:

General Expenses:

- Site and Office Administration: A universal 20% increase was allowed for. These costs are not proportional to the processing plant capacity, however, due to an increase in labour and onsite activity, the related costs will increase for the plant expansion.
- Personnel: A 46% increase in cost was assumed, in relation to the increase in the labour cost.
- Major Insurances were increased by 62% to allow for the increase in insurance policy premiums.
- Facilities: In relation to the increase in labour cost, the site catering services was increased by 46%. The DFS omitted provision for an on-site emergency response service and related equipment. For the current scoping study an allowance was added to cater for a firefighting truck, ambulance, Med-rescue personnel and related equipment.
- Environmental Monitoring: No increase was applied.
- Transportation: The general freight allowance was calculated by assuming the unit cost per pound previously estimated in the Etango 8Mt/a DFS remains applicable. An increase in production from 3.6Mlb/a to 7.2Mlb/a was applied to the unit cost. Staff transport was increased by 46%.

External Infrastructure:

- Access Road Maintenance: The provision for road maintenance was doubled in line with the expected doubling in traffic mainly due to the increase in sulphuric acid demand and process consumables.
- Port Infrastructure: Labour cost was increased by 50% to allow for operating manpower required for the new railway siding.
- Lab Analysis, Materials and Consumables and Utilities: These costs were doubled as it is mostly proportional to the acid handling rate which will increase from 150,000t/a to 300,000t/a.

The Owner's G&A and External Infrastructure operating costs are summarised in Table 9-3.

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Table 9-3 Owner's G&A and External Infrastructure OPEX

Description	Etango 8Mt/a			Etango-XP 16Mt/a			Cost Variance					
	Total Annual Cost	Unit Cost (LOM)		Total Annual Cost	Unit Cost (LOM)		Total Annual Cost		Unit Cost Change			
	USD M	USD/t	USD/lb U3O8	USD M	USD/t	USD/lb U3O8	USD M	%	USD/t	%	USD/lb U3O8	%
GENERAL AND ADMIN EXPENSES												
Site office Administration	0.12	0.02	0.03	0.15	0.01	0.02	0.02	20%	-0.01	-38%	-0.01	-37%
Personnel	5.01	0.64	1.38	7.31	0.48	1.06	2.30	46%	-0.16	-25%	-0.32	-23%
Insurances / Fees	2.07	0.26	0.57	3.33	0.22	0.48	1.26	61%	-0.05	-17%	-0.09	-15%
Facilities	0.30	0.04	0.08	0.77	0.05	0.11	0.47	158%	0.01	32%	0.03	36%
Monitoring	0.20	0.03	0.05	0.20	0.01	0.03			-0.01	-49%	-0.03	-47%
Transport	0.13	0.02	0.04	0.22	0.01	0.03	0.09	67%	0.00	-14%	0.00	-12%
Other	0.10	0.01	0.03	0.10	0.01	0.01			-0.01	-49%	-0.01	-47%
TOTAL G&A (incl. Site Services)	**7.93**	**1.01**	**2.18**	**12.08**	**0.79**	**1.75**	**4.15**	**52%**	**-0.22**	**-22%**	**-0.44**	**-20%**
EXTERNAL INFRASTRUCTURE OPERATING COST												
Access Road Maintenance	0.07	0.01	0.02	0.10	0.01	0.01	0.03	43%	-0.002	-27%	-0.005	-25%
Port Infrastructure	0.11	0.01	0.03	0.15	0.01	0.02	0.04	41%	-0.004	-28%	-0.01	-26%
TOTAL EXTERNAL INFRASTRUCTURE	**0.18**	**0.02**	**0.05**	**0.25**	**0.02**	**0.04**	**0.07**	**42%**	**-0.01**	**-27%**	**-0.01**	**-25%**
TOTAL	**8.10**	**1.04**	**2.23**	**12.33**	**0.81**	**1.78**	**4.22**	**52%**	**-0.23**	**-22%**	**-0.45**	**-20%**

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A summary of the total contributions from project elements is contained in Table 9-4 below. Note, unit costs are calculated in Table 9-4 based on LOM production volumes and costs, reflecting the total LOM cost under each business case. As a result, fluctuations in ore grade, processing tonnes, and drummed U_3O_8 are captured. For Etango-XP, the final unit cost captures the LOM cost, accounting for variances in costs pre- and post-expansion.

Table 9-4 Operating Cost Summary

Item	Etango (8Mt/a) DFS	Etango-XP Study	Etango-XT Study	Etango (8Mt/a) DFS	Etango-XP Study	Etango-XT Study	Etango (8Mt/a) DFS	Etango-XP Study	Etango-XT Study
	Average Annual Cost (USDM)	Average Annual Cost (USDM)	Average Annual Cost (USDM)	Unit Cost (USD/t ore)	Unit Cost (USD/t ore)	Unit Cost (USD/t ore)	Unit Cost (USD/lb U_3O_8)	Unit Cost (USD/lb U_3O_8)	Unit Cost (USD/lb U_3O_8)
Mining	57.15	129.70	84.39	7.55	9.87	10.44	16.29	21.80	23.05
Processing	52.36	87.58	55.93	6.92	6.52	6.92	14.92	14.39	15.28
Owners Costs	8.10	12.33	8.10	1.04	0.81	1.04	2.23	1.78	2.29
Closure costs	1.12	2.09	1.29	0.15	0.16	0.16	0.32	0.35	0.35
Other Costs (Selling, Royalty, Levy)	13.49	22.87	14.06	1.56	1.52	1.52	3.36	3.36	3.36
Total Sustaining Capital	3.39	4.75	3.69	0.45	0.39	0.46	0.97	0.86	1.01
Total	**135.38**	**258.44**	**167.77**	**17.89**	**19.67**	**20.75**	**38.09**	**42.54**	**45.33**

10. Capital Cost

10.1 Mining Capital Cost

All pre-strip (start-up) production costs up to processing plant commissioning for the Etango-XP and Etango-XT were regarded as capital costs, which is in line with the 8Mt/a scenario. This encompasses contractor mobile plant, fixed facilities, and personnel mobilisation costs. It also caters for the establishment costs of the owner team management and technical services department. The Contractor's further expansion mobilisation and establishment cost for the Etango-XP operation in Years 5 & 6 of the LOM is categorised under start-up and expansion capital in Table 10-1. The mining start-up and expansion CAPEX estimate for the Etango-XP operation is USD 71.80 million, as summarised in Table 10-1, compared to the USD 12.80 million for the Etango-XT operation.

Table 10-1: Mining CAPEX estimate comparison between the Etango (8Mt/a) DFS and the Etango-XP Scoping Study

Total Mining CAPEX	Units	Etango (8Mt/a)	Etango-XP		Etango-XT
			Pre-Prod. Capital	Expansion Capital	
Mining capital - Vehicles, Scanners, Downhole probes etc.	US$M	0.50	0.50	1.74	0.56
Pre-strip mining cost (capitalised)	US$M	5.36	5.36	45.93	5.36
Contractor Mobilisation	US$M	4.88	4.88	3.27	4.88
Owner Mining - Labour; fuel, consultants etc.	US$M	0.34	0.34	0.48	0.34
Contractor Fixed Costs	US$M	0.00	0.00	0.00	0.00
Contingency	US$M	1.65	1.65	7.64	1.66
Total	**US$M**	**12.73**	**12.73**	**59.06**	**12.80**

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The Contractor will provide the following mining infrastructure as part of his mobilisation and establishment fees.

- Mining change house;
- Suitable fleet of mining equipment to perform the scope of work;
- Contractor offices;
- Warehouses;
- Heavy mobile equipment workshop;
- Light vehicle workshop;
- Maintenance pad;
- Tyre repair, storage and change-out facility;
- Explosive magazine and bulk emulsion storage facility;
- Pit Service and refuelling pad; and
- Pollution control systems.

10.2 Process Plant

10.2.1 Basis of Estimate

10.2.1.1 General

Bannerman Mining Resources (Namibia) (Pty) Ltd, hereafter Bannerman has contracted Wood to deliver a Scoping Study to evaluate a 16Mt/a operation/expansion upgrade. In support of this Wood has developed an Order of Magnitude (OOM) AACEI Class 5 project capital estimate for the process plant and associated infrastructure.

Wood has utilized common industry practices to develop the capital estimate that aligns with the Association for the Advancement of Cost Engineering International (AACEI) guidelines. See tables below:

Table 10-2: AACEI Guidelines

	Primary Characteristic	*Secondary Characteristic*		
ESTIMATE CLASS	**MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES** Expressed as % of complete definition	**END USAGE** Typical purpose of estimate	**METHODOLOGY** Typical estimating method	**EXPECTED ACCURACY RANGE** Typical variation in low(L), and high(H) ranges[a]
Class 5	0% to 2%	Conceptual planning	Capacity factored, parametric models, judgment, or analogy	L: -20% to -50% H: +30% to +100%
Class 4	1% to 15%	Screening options	Equipment factored or parametric models	L: -15% to -30% H: +20% to +50%
Class 3	10% to 40%	Funding authorization	Semi-detailed unit costs with assembly level line items	L: -10% to -20% H: +10% to +30%
Class 2	30% to 75%	Project control	Detailed unit cost with forced detailed take-off	L: -5% to -15% H: +5% to +20%
Class 1	65% to 100%	Fixed price bid check estimate	Detailed unit cost with detailed take-off	L: -3% to -10% H: +3% to +15%

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CLASS 5 ESTIMATE	
Description: Class 5 estimates are generally based on inferred resources defined by preliminary drilling exploration and metallurgical analysis and general experience with related projects to comply with disclosure standards such as NI 43-101. This would include a simple geological model and estimated grade of mineralization. A simple mine plan is then prepared that covers mining method (open pit, underground); gross production schedules; nominal plant capacity; assumed block flow diagrams and process rates; and conceptual definition of infrastructure needs. There may be a minimum of metallurgical test work and geotechnical, hydrological or other back up studies available. No design drawings or equipment specifications may be prepared beyond some rough notes and sketches by the project engineer, perhaps little more than proposed plant type, capacity and location. **Maturity Level of Project Definition Deliverables Required:** Key Deliverable and Target Status: Block flow diagram and assumed mine plan agreed by key stakeholders. 0% to 2% of full project definition. **End Usage:** Class 5 estimates are prepared for any number of strategic business planning purposes, such as but not limited to market studies, assessment of initial viability, evaluation of alternate schemes, rough project screening, project location studies, and long-range capital planning.	**Estimating Methods Used:** Class 5 estimates generally rely on available internal and industry data for similar previous projects. Gross unit costs may be applied to mining and excavation volumes. Equipment factoring techniques may be used to extend major plant equipment costs to include all commodities, and gross unit costs applied to building volumes, pipeline and other elements. Cost/capacity methods may be used for some plant elements. Indirect costs are factored from directs based on internal and industry experience with typical cost ratios and other parametric and modeling techniques utilized. **Expected Accuracy Range:** Typical accuracy ranges for Class 5 estimates are -20% to -50% on the low side, and +30% to +100% on the high side, depending on the technological, geographical and geological complexity of the project, appropriate reference information and other risks (after inclusion of an appropriate contingency determination). Ranges could exceed those shown if there are unusual risks. Declining quality and accessibility of ore bodies may be driving higher risks. The uncertainty varies by work type so that moderate ranges apply to structures, wider ranges apply to earthworks and infrastructure and narrower ranges apply to machinery (assuming applicable procurement data is available from similar past projects). **Alternate Estimate Names, Terms, Expressions, Synonyms:** Preliminary economic assessment or PEA (per NI 43-101), Geological study estimate, order of magnitude estimate, capacity factor estimate, conceptual study, venture analysis, scoping study, preliminary evaluation,

Additionally, Wood completed an AACEI Class 3 Definitive Feasibility Study (DFS) early in 2022 for the first 8Mt/a project (previous DFS). This study which was subsequently optimized on the request of Bannerman is relied upon to estimate the expansion capital required for the process plant and associated infrastructure. Direct Capital Costs

Process Plant and Associated Infrastructure

As referenced above the process plant and associated infrastructure capital costs are based on the DFS capital estimate developed during 2022. Wood is confident that this estimate is a firm basis for the expansion capital requirements considering that this is an AACEI Class 5 study.

Following a review of the DFS capital cost related to the process plant no savings were identified in this aspect of the scoping study and the DFS costs for process plant are the same as the original DFS capital cost estimate.

10.2.1.2 Indirect Capital Costs

Engineering, Procurement, and Construction Management (EPCM)

These are the services required for the project management, design engineering, procurement, and construction management costs that will eventually be confirmed as part of the EPCM bid. It comprises home office manpower requirements at agreed rates, home office expenses, and traveling costs, site office manpower

requirements at agreed rates, commissioning manpower, and site office expenses directly associated with the implementation of the project.

The EPCM fee has been factored as a percentage of the direct field costs. The factor percentage takes cognisance of the allowance as per the DFS estimate, minus an estimated reduction for the benefit if Wood designed and executed the first 8Mt/a phase for engineering.

This allowance encompasses the EPCM related to the process plant and associated infrastructure only.

Bonds, Guarantees & Insurance

The cost of bonds and guarantees are typically included in the tendered prices submitted by the mechanical/process equipment suppliers and construction contractors for the DFS used as base costs. These costs should be verified with fixed and firm price quotations before execution.

As per previous DFS base data no other bonds such as costs for advance payment guarantees, retention demand guarantees, and retention bonds after practical completion during the Defects Liability Period are allowed.

Insurance costs was included in the Owner's costs.

10.2.1.3 Contingencies

Wood has retained a similar contingency percentage that was allowed within the DFS estimate. The rationale is that the Scoping Study capital cost estimate was based on similar cost data as the DFS and hence, the contingency allowance should be similar and on the optimistic scale as per AACEI recommendation for Class 5 estimates.

10.2.2 Process Plant Capital Cost Summary

The Capital Cost estimate for 16Mt/a Expansion for the process plant is provided in Table 10-3 below in the traditional code of accounts. Note the estimate base date is Q3 2022 deriving from the DFS Optimization Capex exercise conducted in August/September 2022.

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Table 10-3 Process Plant Capital Cost Estimate Summary

Project Name	Etango 16Mtpa Expansion Class 5 (OOM)	**Base Date**	Q3 2022
Project Number	TBC	**Rev. Number**	05
Plant Type	Uranium	**Rev. Date**	24-Jan-24
Client	Bannerman Resources	**Prepared By**	P Nandi
Base Currency	USD	**Checked By**	SPJ (Fanie) Smit
		Approved By	SLT

Description	OOM Totals
Direct Cost	
Site Preparation/Infrastructure/Bulk Earthworks	28 866 137
Civils(Concrete Works)	21 245 336
Structural Steel	12 184 350
Architectural	2 976 315
Mechanical/Process Equipment	67 191 005
Platework, Tanks & Liners	7 221 417
Piping, Valves & Fittings	3 223 808
Electrical	11 599 444
Instrumentation	8 503 421
Mobile Equipment (Included in Owners Costs)	-
Mining (Incl. in Overall Summary)	-
External Infrastructure (Incl. in Overall Summary)	-
Contractors Indirect Cost	
Site Preparation/Infrastructure/Bulk Earthworks P&G's	862 416
Earthworks & Civils P&G's	4 880 365
Structural, Mechanical, Platework & Piping P&G's	8 124 475
Electrical P&G's	2 223 004
Instrumentation P&G's (Included in Electrical P&Gs)	-
Other Direct Costs	
Packing/Delivery/Shipping/Freight	3 161 486
Commissioning, Operational & Critical Spares (Provisional)	2 187 411
First Fill Lubricants & Re-agents	652 963
Vendor assist during Construction & Commissioning	2 020 240
Total Direct Costs	**187 123 593**
Home Office & Indirect Field Costs	
EPCM Man-hours Estimate (Process Plant & Related Infrastructur	22 454 831
Total Home Office and Indirect Field Costs	**22 454 831**
Total Net Costs (TNC)	**209 578 424**
Other Costs	
Bond Guarantees	-
Insurance	-
EPCM Fixed Contract Fee/Profit	-
Contingencies (Process Plant & Related Infrastructure)	31 436 764
Total Other Costs	**31 436 764**
Owners Costs (Incl. in Overall Summary)	-
Total Owner's Costs	**-**
Total Project Costs (TPC) without Escalation & ROE	**241 015 188**
Escalation	
Escalation from base date to contract award	-
Escalation from award through execution	-
ROE	-
Total Escalation and ROE	**-**
Estimated Total Project Costs (TPC)	**241 015 188**

Notes and Assumptions:
1. AACEI Class 5 Capital Cost Estimate Classification
2. Accuracy range Low: -20% to +50% and, high +30% to 100%.

Exclusions:
1. Escalation allowance from the estimate base date
2. Allowance for risk in foreign currency variations

10.3 Owner's Cost

10.3.1 External Infrastructure

10.3.1.1 Power Supply

Shallow Connection

Two options were identified for upgrading the Etango 132/33 kV substation for the 16Mt/a design:

1. Replace 2 x 20 MVA, 132/33 kV transformers with 2 x 30 MVA, 132/33 kV transformers upfront as part of the 8Mt/a design.
2. Add a third 20 MVA, 132/33 kV transformer during the expansion from 8Mt/a to 16Mt/a.

The costs of the different options can be seen in the Table 10-4 below.

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Table 10-4 Power supply shallow connection expansion options CAPEX

Description	8Mt/a: 2 x 20MVA	16Mt/a - Option 1: 2 x 30 MVA			16Mt/a - Option 2: 3 x 20 MVA		
	Total Cost (USD)	Total Cost (USD)	Increase (USD)	% Incr.	Total Cost (USD)	Increase (USD)	% Incr.
Preliminary and General Substations	361 321.81	409 841.17	48 519.36	13.4%	409 841.17	48 519.36	13.4%
New 132/33kV Etango Substation	2 121 216.18	2 717 826.60	596 610.42	28.1%	2 697 133.22	575 917.04	27.2%
NamPower 132KV Metering Station	145 311.30	145 311.30	0.00	0.0%	145 311.30	0.00	0.0%
132kV Steel Monopole OH Line	2 595 871.80	2 595 871.80	0.00	0.0%	2 595 871.80	0.00	0.0%
Kuiseb Substation 132kv Feeder Bay	1 102 779.04	1 102 779.04	0.00	0.0%	1 102 779.04	0.00	0.0%
Design and Construction Supervision (@5%)	316 062.22	348 581.50	32 519.27	10.3%	347 546.83	31 484.60	10.0%
Total	**6 642 562.35**	**7 320 211.40**	**677 649.06**	10.2%	**7 298 483.35**	**655 921.00**	9.9%

Upgrading the power infrastructure for 8Mt/a plant to the envisaged 16Mt/a would, depending on what option is selected, will cost an additional USD 0.66Million – USD 0.68Million.

To avoid an increase in the upfront CAPEX for the 8Mt/a plant, Option 2 was selected. The associated CAPEX is estimated at USD 0.66Million. For this scenario, the initial two 20MVA transformers will both become on-duty units. The 3rd 20MVA transformer will be installed during the expansion phase. Since the installation will happen inside the substation which will require any live connections to be disconnected for the time being, it will result in production interruptions at the time of installation.

Deep Connection

The Deep Connection charges are dependent on when the supply will be required from NamPower as some Deep Connection charges will not be charged ten (10) years after installation (all customer funded electrical infrastructure assets are deemed to be 'national assets' ten (10) years after commissioning and hand-over to NamPower).

The applicable deep connection changes depend on the maximum demand applied for at NamPower and the timeframe. Table 10-5 provides a comparison of the applicable deep connection costs.

Table 10-5 Power Supply Infrastructure - Deep Connection Costs

	MD (MVA)	Before Nov'25 (USD)	Before end 1st Qtr 2026 (USD)	After 29 Apr'26 (USD)
Deep connection cost for 8Mt/a design	15	2 259 798	1 360 300	987 994
Deep connection cost for 16Mt/a design	30	4 519 595	2 720 601	1 975 988

Total Costs

Considering that the operation of the 8Mt/a plant is scheduled to only start after April 2026, therefore any expansion will also only happen after April 2026.

The total Deep and Shallow Connection costs will then be as follows:

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Table 10-6 Cost summary for combined Deep and Shallow connection costs

	After 29 April 2026 (USD)
Deep Connection	1 975 988
Shallow Connection	655 9217
Total (NAD)	**2 631 909**

10.3.1.2 Water Supply Pipeline

The capital cost associated with expansion from 2.4Mm^3/a to 5Mm^3/a was based on the Etango 8Mt/a DFS basic design and cost estimate performed by Lund Consulting Engineers CC, dated 16 May 2022. Refer to Table 10-7. The main expansion costs will involve the detail design, supply and installation for 2 new booster pump stations.

Table 10-7 External water supply expansion CAPEX

Description	CAPEX (USD)
Civil and Structural	92 221.70
Electrical, Control & Instrumentation	1 270 424.89
Mechanical	577 328.13
Sub-Total	***1 939 974.72***
Design and Supervision	119 735.42
Total Cost	**2 059 710.14**

10.3.1.3 Roads

Based on the DFS rates for road construction, a unit rate for the sealing of the mine access road and re-sealing of C28 was determined.

Table 10-8 Access Road upgrade CAPEX

Description	Unit	Amount
Rip and Recompact	USD/km	3.1919
Regravel	USD/km	20.50
Seal Layer (Cape Seal)	USD/km	62.7676
Total Unit Cost	**USD/km**	**86.4545**
C28 Distance (assuming the cost of upgrading the 28km section will be split 3-ways between Etango, Langer Heinrich and Tsumas Mines)	km	8
Mine Access Road Distance from C28 to Admin Area	km	11
Total Distance for Road Upgrade	**km**	**19**
Cost of Road Upgrade	**USD**	**1 642 483**
Design and Construction Supervision (@6%)	USD	98 549
Total Cost	**USD**	**1 741 032**

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10.3.1.4 Port Acid Storage

For the Etango 8Mt/a DFS CAPEX estimate, a cost split based on proportional capacity requirements between Bannerman and DPMT was done and applied to the total CAPEX estimate for the DPMT facility. The prorated CAPEX contribution by Bannerman to the shared facility was allowed for in the costing. No additional capital expenditure is foreseen for increased Etango acid demand from 150,000mt/a to 300,000mt/a.

10.3.1.5 Multi-Modal Railway Siding

A basic engineering design for a railway siding was costed by Windhoek Consulting Engineers with base date 19 July 2022. The total CAPEX estimate is presented in Table 10-9. It includes an additional allowance for the expansion of the rail siding to accommodate a total of 22 rail carts and the cost of ISO tank containers required for the Etango 16Mt/a.

Table 10-9 Multi-modal Railway Siding CAPEX

Description	CAPEX (USD)
Preliminary and General	305 659.54
Rail Offloading	1 182 049.76
Spillage Handling Facilities	11 241.46
Rail Siding Requirements	35 436.01
Site Buildings	269 496.01
Site Works	1 018 271.28
Plant Access Roads	499 706.72
Bulk Electrical Supply	113 895.22
Sub Total 1	**3 435 756.00**
Contractors Profit & Attendance	12 482.91
Professional Fees & Disbursements	350 777.98
ISO Tank Containers	627 487.34
Sub Total 2	**990 748.23**
Total	**4 426 504.23**

10.3.2 G&A Owner's Cost

The owner's general and administration capital cost estimate was based on the Etango 8Mt/a DFS cost estimate, with the application of expansion factors. These factors were selected in relation to the expected increase in manpower and maintenance activities. Refer to Table 10-10.

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Table 10-10 Owner's G&A CAPEX

Description	8Mt/a Design CAPEX (USD)	% of DFS	Expansion CAPEX (USD)
Building Furniture	231 465.66	20%	45 729.40
Office & Meeting Room Electronics	111 841.69	20%	21 942.60
Workshop Tools & Equipment	594 507.40	96%	571 016.51
Mobile Equipment	696 570.96	18%	128 732.12
Construction Camp Management	6 462 737.05	0%	0.00
Construction Waste Management & Disposal	1 014 298.23	100%	1 014 298.23
Total	**9 111 420.99**	**20%**	**1 781 718.85**

10.3.3 Other Owner's Cost

Insurance

Since insurance is mostly related to the cost of equipment supply and installation, it was assumed that the insurance cost estimates for the 8Mt/a plant construction is directly applicable to the expansion considering the duplication of equipment during the expansion.

Pre-Production OPEX – Labour

A high-level onboarding study was conducted to determine the pre-production labour complement requirements. The Etango 8Mt/a DFS labour rates and manning plan were used. The following main assumptions were made:

- A senior project manager will be responsible for managing the EPCM contractor.
- Senior project engineers will be required, at least one per engineering discipline.
- Project planners and contract administrators will be required during the construction phase.
- Additional administrative personnel were allowed for in the Finance and Human Resource departments during the entire construction period.
- Additional process operational and maintenance personnel will be required to run and maintain the additional plant. These resources will typically be recruited during the commissioning phase.

Pre-Production OPEX – General & Admin

Other general and administrative pre-production costs were not allowed for, considering the Etango plant will be operational during the time of expansion with all business units being active as part of normal operations.

Pre-Production OPEX – Variable Power & Water

Considering the process plant being duplicated during the expansion from 8Mt/a to 16Mt/a, it was assumed that the same total power consumption can be used for the expansion construction works as what was estimated in the Etango 8Mt/a DFS. A total of 403,200kWh was allowed for per month, at a unit power cost of USD0.094/kWh.

Table 10-11 Construction Power cost for expansion works

Description	Unit	Amount
Construction Power Requirement for Expansion	kWh/month	403 200.00
Unit Cost	USD/kWh	0.0940
Cost of Power	**USD/month**	**38 00.914**

The cost of construction water was based on a unit price of USD2.98/m^3 of water as per the NamWater industry rates used in the Etango 8Mt/a DFS. A split of 70/30 was applied between the 1st and 2nd year of construction.

Table 10-12 Construction Water cost for expansion works

Description	Unit	Amount
Construction Water Requirement for Expansion	m^3	158 350.00
Unit Cost	USD/m^3	2.98
Cost of Water	**USD**	**471 883.00**

Consumables and First Fills

Capital cost allowance for process plant consumables and first fills were excluded because at the time of expansion the 8Mt/a plant will be operational.

10.3.4 Contingency

For Owner's Costs, a suitable contingency was previously derived during the DFS through a confidence assessment, during which the accuracies of all cost estimates were scored. Weighted contingencies were assigned based on the confidence assessment scores. Considering that the same cost estimates were used as a basis for the current scoping study, the same contingency weights can be applied.

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10.3.5 Owner's Pre-Production Capital Cost Summary

Table 10-13 Owner's Pre-Production and Expansion CAPEX Summary

Description	8Mt/a DFS Study CAPEX (USD)	% Of DFS	Expansion CAPEX (USD)
External Infrastructure			
Permanent Electricity Supply	8 897 104	30%	2 631 909
Permanent Water Pipeline	14 989 688	14%	2 059 710
Access Road	858 271	203%	1 741 032
Bulk Acid Storage at Harbour	8 884 981	0%	0
Railway Siding			4 426 504
Temporary Water Supply	1 820 238	0%	0
Communication and Internet	73 241	0%	0
Temporary Electricity Supply	327 078	0%	0
Contingency	3 739 002	30%	1 132 544
Total External Infrastructure	**39 589 603**	**30%**	**11 991 700**
G&A Owners cost	9 111 421	20%	1 781 719
Insurance	3 699 763	100%	3 699 763
Pre-Production OPEX Owner's Labour	7 854 918	55%	4 298 422
Pre-Production OPEX General & Admin	588 359	0%	0
Pre-Production OPEX Variable Power, Water, Consumables & Assays	2 538 035	55%	1 383 905
Contingency	1 296 702	47%	608 433
Total Owner's G&A	**25 089 197**	**47%**	**11 772 241**
Total Pre-Production and Expansion Owner's Cost	**64 678 801**	**37%**	**23 763 941**

10.3.6 Staying-in-Business Costs-Process Plant

For an increase form 8Mt/a to 16Mt/a, the progressive ripios rehabilitation cost was doubled. However, it was considered unreasonable to assume the Staying-in-Business (SIB) capital cost requirement for the 16Mt/a operation will be double that determined for the initial 8Mt/a operation. For the purposes of this scoping study an increase in the process plant SIB capital after expansion was estimated at 62%.

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Table 10-14 Processing SIB CAPEX Summary

Staying In Business	8Mt/a DFS Study CAPEX (USD)	% of DFS	Expansion CAPEX (USD)
Progressive Ripios Rehab	1 160 962	100%	1 160 962
Staying-in-business capital	45 231 685	62%	28 247 404
TOTAL	**46 392 647**	**62%**	**28 972 430**

10.4 Capital Cost Estimate Summary

The Overall Capital Cost estimate for 16Mt/a Expansion project is provided in Table 10-15 below.

Table 10-15: Capital Cost Estimate

Description	8Mt/a DFS Study CAPEX (M USD)	% of DFS	Expansion CAPEX (M USD)
Mining	12.73	464%	59.06
Process Plant	240.01	101%	241.80
External Infrastructure (Incl. EPCM Fees & Contingency)	39.59	30%	11.99
Owner's Costs (Incl. Contingency)	25.09	47%	11.77
Estimated Total Pre-Production and Expansion	**317.47**	**102%**	**324.63**
SIB Capex (including process plant & mining SIB)	50.87	61%	31.18
Estimated Total Project Costs (TPC)	**368.34**	**97%**	**355.81**

11. Financial Analysis

11.1 Uranium Market outlook and Product Marketing

The uranium market was fairly stagnant for the better part of a decade, stemming from the bear market cycle that began with the accident at the Fukushima-Daiichi nuclear power plant in 2011. This incident led to a rapid decline in demand for nuclear fuel in Japan, Germany, and many other countries over the following years. After several years of oversupply, during which consumers and intermediaries accumulated substantial inventories, this excess inventory largely diminished in 2022-2023.

Currently, the market is experiencing significant structural deficits. Ongoing geopolitical tensions, limited mid-term supply sources, and anticipated growth of the nuclear fleet have all contributed to upward pressure on nuclear fuel prices. U_3O_8 spot prices recently increased to a 16-year high of over US$100 per lb.

Most market commentators expect uranium long term contract prices to substantially and sustainably increase to their assumed long-term price forecast or beyond over the 2-3 years driven by a number of factors, including:

a) A substantial shift in global energy policy occurred at the COP28 conference, where over 20 countries committed to tripling nuclear energy capacity by 2050. This commitment highlights nuclear energy's key role in climate goals and has increased demand expectations for uranium.

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b) Demand for uranium is projected to steadily increase through 2040 and beyond, particularly in growth markets such as China, South Korea, France, Sweden, the UK, Poland, Japan, Eastern Europe, Turkey, and the MENA region. According to the most recent Reference Scenario of the WNA Nuclear Fuel Report, uranium requirements are predicted to nearly double from 2023 levels.

c) Due to a decade of under-investment hindering uranium project development, supply is anticipated to be tight in the short to mid-term. This under-investment not only affected junior uranium mining companies, preventing them from developing their projects, but also impacted three leading uranium producing companies (Kazatomprom, Cameco, and Orano) – each faced various disruptions, leading to a short-term reduction in production.

d) The surplus inventory from previous years of uranium market oversupply has largely been depleted. A range of short- and long-term drives have seen the arrival of expected structural market deficits from 2024.

e) Utilities are increasingly accepting higher base prices and broader price ranges in market-related pricing components. They are also increasingly agreeing to terms offering more favour to sellers. This demonstrates a willingness to secure supplies and diversify geographically amid geopolitical uncertainties.

Consistent with industry practice, Bannerman plans to obtain a diversified portfolio of long-term supply contracts with a blend of market-related and fixed-term escalated price mechanisms, subject to floor prices.

Notwithstanding the rapid escalation in spot and term uranium market pricing, the realised LOM uranium price forecast adopted for the Etango-XP / Ext Scoping Study has been maintained at US$65/lb U_3O_8. This was the price estimate utilised for the Etango-8 DFS (December 2022), PFS (August 2021) and Scoping Study (August 2020). Price scenarios of US$80/lb and US$95/lb have also been presented for broader comparability purposes with prevailing market uranium prices.

11.2 Economic Analysis

11.2.1 Financial Model Inputs and Assumptions

The financial model has been created in Microsoft Excel. Mining and processing data, and capital and operating cost estimates have been input into the financial model to enable the calculation of an internal rate of return (IRR) and a net present value (NPV) based on the indicative production and cash flow forecasts.

Note, the term dollars or $ refers to United States Dollars ($ US) unless otherwise specified.

11.2.1.1 Basis and Key Assumptions of Financial Model

The scope of the financial model has been restricted to the project level, excluding the effects of financing. The financial model incorporates a number of sensitivities, enabling users to assess the impact of variations in key input assumptions on project financials (refer Section 11.3 below).

The Etango Project is owned 100% by Bannerman Mining Resources (Namibia) (Pty) Ltd (Bannerman Namibia) which in turn is owned 95% by Bannerman and 5% by the One Economy Foundation (OEF).[1] The financial model

[1] The One Economy Foundation is a social welfare organisation (Reg. WO 468), which was launched in May 2016 and established in terms of the Namibian Companies Act as a Section 21 organisation (Association not for gain). Namibia, like many other countries, has a dual economy: the first economy consists of middle and high-income earners, and the second economy is made up of low-income earning persons. The One Economy Foundation thus serves as a bridge of socioeconomic opportunity, building an economy in which equality and shared prosperity thrive.

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outputs reflect the results of the project at the Bannerman Namibia level, allowing for an appropriate level of allocated administrative and corporate costs from owner entities.

The financial model reflects the equity cash flows of the Etango Project without any debt financing. Sensitivity analysis has been undertaken on a post-tax basis with respect to NPV and IRR.

All revenue and cost estimates are real and expressed in USD. To ensure consistency with the DFS, capital and operating costs are based on the DFS design and cost estimates and increased in line with additional capital or operating expenditure required under each scenario. Where appropriate, cost increases have been mitigated by operational synergies realisable under each scenario.

The key assumptions incorporated into the financial model are described in further detail as follows.

11.2.1.2 Production Physicals

The calculation of mine life and annual uranium oxide (U_3O_8) output is based on the mining and processing schedule for each scenario, which set out the appropriate parameters for these activities.

The resource model, production schedule, and accompanying capital and operating costs for mining, were prepared by Qubeka.

Further detail on production physicals and cost estimates is provided in sections 5, 6, 7, 9 and 10 of this report.

Note, for the purposes of this report, production physicals have been based on the November 2021 Resource Model with a 100ppm U_3O_8 cut-off grade, using Measured and Indicated Mineral Resources and excluding Inferred Mineral Resources.

11.2.1.3 Revenue

To ensure consistency with the DFS, the final uranium output is assumed to be sold at a base-case long term contract price of $65/lb of uranium oxide ($U_3O_8$). To reflect significant increases in the spot and long-term U_3O_8 price since the release of the DFS in December 2022, key financial results are also evaluated at $80/lb and $95/lb. Refer to Section 11.1.3 for sensitivity analysis of the U_3O_8 price, including the significant uplift to forecast project financials resulting from an increase in the uranium price.

Net revenue has been calculated after deducting State royalties (Section 11.2.1.4) and an allowance for the estimated selling cost per pound of U_3O_8 (Section 11.2.1.7), which incorporates freight, conversion, and marketing-related costs on sales.

11.2.1.4 Royalties

The financial model assumes a Namibian Government gross royalty of 3.00% of gross sales revenue in accordance with current Namibian legislation.

As the production and cash flow forecasts are estimated at project level, no vendor royalty is applied, i.e., consistent with the DFS, it is assumed in the Scoping Study that the 5% minority interest in Bannerman Namibia does not dilute to a contractual royalty of 2.85% net smelter return.

11.2.1.5 Corporate Tax

Uranium mining companies in Namibia are subject to company tax at the rate of 37.5% of taxable profits.

Capital is deducted for tax purposes on a straight-line basis over 3 years, in line with the accelerated depreciation schedule for uranium mining companies in Namibia.[2] Where deductions exceed income from

[2] Income Tax Act, 1981 (Act 24 of 1981) Sec 36 (3)

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mining operations, a taxable loss is created. Taxable losses may be carried forward to subsequent years and utilised indefinitely.

11.2.1.6 Foreign Exchange Rates

Capital and operating items in foreign currency were converted to USD using long-term foreign exchange rate estimates based on available economic research data from various investment and banking institutions including Economy Forecast Agency, Morgan Stanley, Wells Fargo, JP Morgan, Chase, and ING Financial Markets.

To remain comparable with the DFS, long-term foreign exchange rates utilised in the DFS were applied in the Scoping Study. Table 11-1 below summarises the long-term foreign exchange rate forecasts applied in the DFS and Scoping Study.

Table 11-1: Forecast Long-term Foreign Exchange Rates

Currency	Forecast Long-term DFS Foreign Exchange Rates		Reciprocal
Namibian Dollar	**USD:NAD**	**17.56**	0.06
South African Rand	**USD:ZAR**	**17.56**	0.06
Australian Dollar	**USD:AUD**	**1.63**	0.61
Great British Pound	**USD:GBP**	**0.98**	1.02
Canadian Dollar	**USD:CAD**	**1.45**	0.69
Euro	**USD:EURO**	**1.09**	0.92
Japanese Yen	**USD:JPY**	**150.50**	0.01
Chinese Yuan	**USD:CNY**	**7.58**	0.13

Refer to Section 11.3 for sensitivity analysis of the USD:NAD foreign exchange rate.

11.2.1.7 Selling cost: Freight, Conversion, and Sales-Related Costs

Consistent with the DFS, an allowance of $1.24/lb U_3O_8 sold has been made for freight, insurance, conversion, and marketing-related costs incurred on sales, and are summarised in Table 11-2, as follows. Indicative cost estimates were obtained from third-party industry participants.

Table 11-2: Selling Cost Assumption

Selling cost (Transport and Shipment, Insurance, Sales and Marketing)	$ US per pound U_3O_8 sold
	DFS
Product transport Mine gate to Walvis Bay	0.01
Product transport Walvis Bay to Conversion Facilities	0.67
Marine & transport insurance	0.01
Conversion facility charges (weighing and sampling, impurity penalties)	0.26
Sales and marketing	0.29
Selling Cost	1.24

11.2.1.8 Capital Costs

Capital costs are separated into key cost components, and comprise:

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Mining

- Mining equipment (including for mining fleet build-up and equipment replacement), pre-production costs including drilling and blasting, site preparation, contractor and owner labour, vehicles and ancillary equipment, design and contract completions, infrastructure and other fixed costs.

Processing

- Processing plant capital costs including site preparation/bulk earthworks, crushing, screening, stacking and reclaiming, agglomeration, solution handling and clarification, sulphuric acid handling at site, water distribution, EPCM man-hours, and other processing plant infrastructure and direct costs. Capital costs include first fills, opening stocks, spares, mobilisation and demobilisation and commissioning.

External Infrastructure

- General site works including access road, communications and internet, temporary and permanent water and electricity supplies, and Walvis Bay acid terminal.

Owner's G&A Costs

- Allowing for Owner's oversight and management in the preproduction phases, construction camp management, insurances, owner's pre-production labour, building furniture and electronics, mobile equipment and workshop tools.

Sustaining Capital

- General sustaining capital required to maintain existing capacity, including the refurbish or replacement of equipment and infrastructure reaching the end of its useful life, and the progressive rehabilitation of ripios.

Contingency

- The sum of money included in project cost estimates to allow for uncertainty. Project contingency is not intended to cover scope changes or project exclusions. For the DFS, a risk assessment was completed by the owner's engineering team by individual work-package, to ensure an accurate contingency estimate. For the Scoping Study, similar contingency percentages that were allowed within the DFS estimate have been maintained, on the rationale that the scoping study capital cost estimate was based on similar cost data as the DFS and hence, the contingency allowance should be similar and on the optimistic scale, per the AACEI recommendation for Class 5 estimates. It should be noted that the Processing Plant contingency has increased slightly, from 9.39% in the DFS to 12.11%.

Table 11-3: Weighted Average Contingency Estimates

Capital Stream	Weighted Average Contingency
Mining	14.85%
Processing Plant	12.11%
External Infrastructure	10.43%
G&A Owner's costs	5.45%
Total	**10.61%**

As previously stated, to ensure consistency with the DFS, capital and operating costs are based on the DFS design and cost estimates and increased in line with additional capital or operating expenditure required under

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each scenario. Where appropriate, cost increases have been mitigated by operational synergies realizable under each scenario.

DFS capital cost estimates were structured in line with the project work breakdown structure (WBS), and compiled based on a full engineering, procurement, and construction management (EPCM) execution strategy. Capital costs were estimated based on a range of sources, including bills of quantities and multiple source formal pricing enquiries from designated vendors and contractors. All tenders from the market were commercially and technically adjudicated and recommendations were prepared. These recommendations formed the basis of costing.

11.2.1.9 Operating Costs

Operating costs have been estimated for each of the key functions of the project and are separated into the following components:

Mining

- Drill, blast, load and haul (for ore and waste), major ancillary, minor ancillary equipment, infrastructure and other fixed costs, consumables, indirect expenses and mining labour.

Processing

- Processing costs include labour, power, sulphuric acid, reagents (excluding acid), diesel, water, consumables, ripios haulage (trucking), miscellaneous and maintenance.

Owner's costs

- Corporate allocations, administration, personnel recruitment and training, insurances, environmental monitoring, general freight and staff transport.
- External infrastructure operating costs including access road maintenance, payroll, rent, and utilities at the Walvis Bay acid terminal.
- Costs incurred in mine closure and reclamation.

Various operating unit costs are calculated within the model for each year of production, as follows:

Mining costs

- Per tonne moved and per tonne of ore processed, and also per tonne/pound of U_3O_8 produced

Processing

- Per tonne of ore processed and per tonne/pound of U_3O_8 produced

Operating costs

- Per tonne of ore processed and per tonne/pound of U_3O_8 produced.

Operating costs include all on-site costs and related overheads. Where appropriate, cost increases to accommodate increased plant capacity and/or extended mine life, have been mitigated by operational synergies realisable under each scenario.

As noted above, costs associated with the marketing, freighting and conversion of final product are modelled as deductions from revenue in accordance with industry and accounting practice.

The financial model does not incorporate any period-to-period deferrals of capitalised waste stripping costs associated with specific mining cutbacks, and hence reflects the actual cash cost incurred in each period.

The cash operating surplus comprises net revenue less annual operating costs. Estimates of annual net cash flow are derived after deducting capital expenditure and allowances for working capital from the relevant period's cash operating surplus.

11.2.1.10 Net Present Value (NPV)

Project NPVs are calculated on both annual before and after-tax net cash flows. Consistent with the DFS, a real annual discount rate of 8% has been assumed. The financial model is configured such that a range of discount rates can be applied, and corporate tax can be turned on or off. Refer to section 11.3.3 below for sensitivity analysis of the discount rate.

11.2.1.11 Internal Rate of Return (IRR)

The various IRRs for the project are calculated using the annual before and after-tax net cash flows.

11.2.1.12 Payback Period

The payback period is defined as the period in which the cumulative undiscounted before or after-tax net cash flows ultimately becomes positive. At this point, the Project will have paid back the initial development and working capital costs.

Payback is calculated from both first production and first construction.

11.2.2 Financial Model Outcomes

Based on the various assumptions and matters set out above, the economic evaluation of both scenarios for the purposes of this report has been prepared on the base case alternative of an open pit mining operation with processing undertaken by heap leach methods, at an assumed nominal throughput rate of 8Mtpa for the DFS base-case and Etango-XT, and 16Mtpa throughput for Etango-XP.

As noted above, the financial model has been built at the project level, excluding debt financing, and the financial sensitivity analysis is prepared on a pre-tax basis. In calculating the potential returns from the project, the fundamental assumptions discussed above and highlighted in Table 11-4 have been made.

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Table 11-4: Fundamental Assumptions of Financial Modelling Analysis

Assumption	Etango (8Mt/a)	Etango-XP	Etango-XT
Basis	Project level, pre- or post-tax and excluding any debt financing		
U3O8 price	US$65/lb	US$65/lb	US$65/lb
Phase 1 Development Period	2.75 Years	2.75 Years	2.75 Years
Phase 1 Annual Throughput	8Mt	8Mt	8Mt
Phase 2 Development Period	-	3.5	-
Phase 2 Annual Throughput	-	+8Mt (16Mt total)	8Mt
Total Mine life	15 years	16 Years	27 Years
Diesel fuel price	$0.88/L, delivered to site		
Sulphuric acid price	$100/t, delivered to site		
Raw water cost	$2.98/m3		
Power cost	$0.075/kWh		
Production rate	~1.7 - 4.3Mlb U_3O_8 per yr	~2.1 - 7.8Mlb U_3O_8 per yr	~2.1 - 4.8Mlb U_3O_8 per yr
Exchange rates	USD:NAD 17.56		
	USD:ZAR 17.56		
	USD:AUD 1.63		
	USD:GBP 0.98		
	USD:CAD 1.45		
	USD:EURO 1.09		
	USD:JPY 150.5		
	USD:CNY 7.58		

Key financial metrics forecast for each scenario, including net present value (NPV) and internal rate of return (IRR), are summarised in Table 11-5 (all projections are on a 100% project basis). Respective estimates from the DFS are shown for comparison.

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Table 11-5: Key Financial Outcomes for Etango (8Mt/a), Etango-XP, and Etango-XT

Key Financial Outcomes	Unit	Etango (8Mt/a)	Etango-XP	Etango-XT
Price Inputs				
LOM average uranium price	US$/lb U3O8	65	65	65
US$/N$	N$	17.56	17.56	17.56
Valuation, Returns and Key Ratios				
NPV_8 (post-tax, real basis, ungeared)	**US$M**	**209.1**	**250.2**	**240.6**
NPV_8 (pre-tax, real basis, ungeared)	US$M	368.9	445.3	410.7
IRR (post-tax, real basis, ungeared)	**%**	**17.0%**	**16.9%**	**18.6%**
IRR (pre-tax, real basis, ungeared)	%	21.0%	20.8%	22.8%
Post-Tax Payback from First Production	Years	4	6	4
Pre-Tax Payback from First Production	Years	4	6	4
Pre-tax NPV / Pre-production capex	x	1.2	1.4	1.3
Cashflow Summary				
Sales revenue (gross)	US$M	3,421	6,187	6,187
Mining opex	US$M	(857)	(2,075)	(2,194)
Processing opex	US$M	(785)	(1,370)	(1,454)
G&A opex	US$M	(118)	(170)	(218)
Product transport, port, freight, conversion	US$M	(65)	(118)	(118)
Royalties and export levies	US$M	(111)	(201)	(201)
Project operating surplus	US$M	1,484	2,253	2,001
Pre-production & expansion capital expenditure	US$M	(317)	(642)	(318)
LOM sustaining capital expenditure	US$M	(51)	(82)	(96)
Project net cashflow (pre-tax)	US$M	1,099	1,495	1,554
Tax paid	US$M	(404)	(556)	(570)
Project net cashflow (post-tax)	US$M	695	939	984
Unit Cash Operating Costs				
Mining	US$/t material mined	2.4	2.4	2.5
Mining	US$/lb U3O8	16.3	21.8	23.1
Processing	US$/t ore	5.4	6.5	6.9
Processing	US$/lb U3O8	14.9	14.4	15.3
G&A	US$/lb U3O8	2.2	1.8	2.3
Closure costs	US$/lb U3O9	0.3	0.4	0.4
Product transport, port, freight, conversion	US$/lb U3O8	1.2	1.2	1.2
Total cash operating cost (ex-royalties/levies)	US$/lb U3O8	35.0	39.6	42.2
Royalties and export levies	US$/lb U3O8	2.1	2.1	2.1
Total cash operating cost	US$/lb U3O8	37.1	41.7	44.3
All-in-sustaining-cost (AISC)	US$/lb U3O8	38.1	42.5	45.3

Etango-XPEtango-XTEtango-XP is modelled to achieve a post-tax payback within approximately 6 years from first production, whilst Etango-XT is anticipated to achieve a post-tax payback within 4 years from first production (at a U_3O_8 sales price of US$65/lb).

The NPV of the project, at an 8% real discount rate, is estimated to be $445.3 M before tax and $250.2 M after-tax for Etango-XP.

For Etango-XT, NPV_8 is estimated to be $410.7 M before tax and $240.6 M after tax. The internal rate of return of the project is estimated at 16.9% after-tax for Etango-XP, and 18.6% for Etango-XT.

The projected LOM cashflow for each scenario is shown in Figure 11-1 and Figure 11-2 below.

Figure 11-1: Forecast Life-of-Mine Net Cashflows (US$65/lb U_3O_8) – Etango-XP

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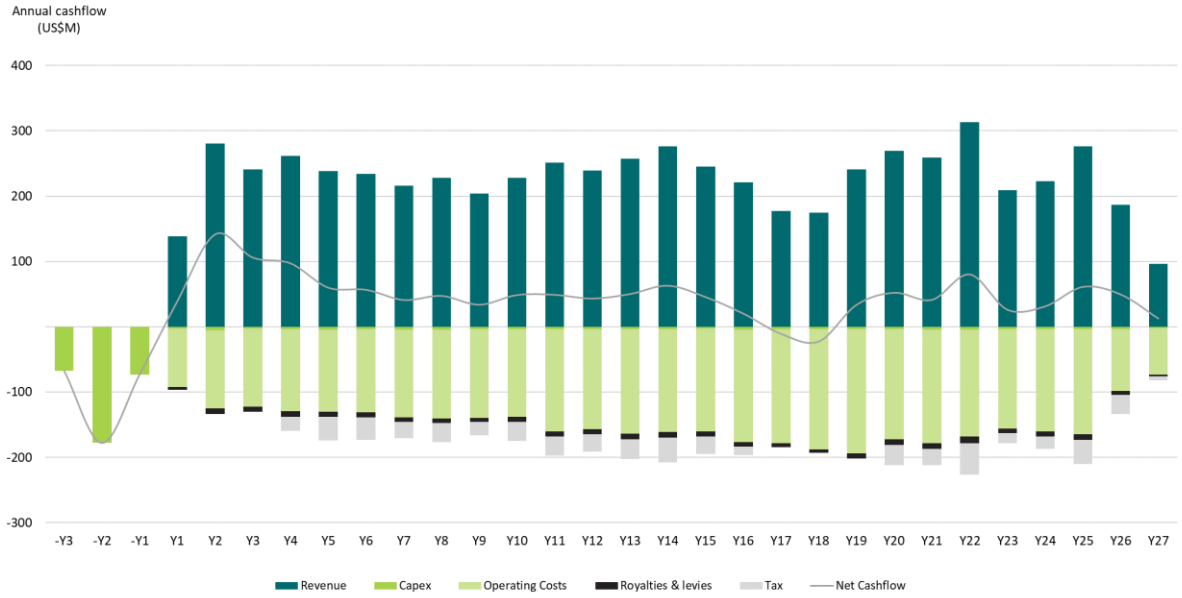
Figure 11-2: Forecast Life-of-Mine Net Cashflows (US$65/lb U_3O_8) - Etango-XT



Key outputs of each scenario on a pre-tax and post-tax basis are reported in Table 11-6 below.

Table 11-6: Key Financial Model Outputs

Project Economics	Etango (8Mt/a)		Etango-XP		Etango-XT	
	Pre-Tax	Post-Tax	Pre-Tax	Post-Tax	Pre-Tax	Post-Tax
U3O8 Sales Price Asssumption ($/lb)	65	65	65	65	65	65
NPV at a Discount Rate of 8% ($M)	368.9	209.1	445.3	250.2	410.7	240.6
Internal Rate of Return (%)	21.0%	17.0%	20.8%	17.4%	22.8%	18.6%
Payback Period (Post-Tax) from Start of Operation	Year 4	Year 4	Year 6	Year 6	Year 4	Year 4
Payback Period (Post-Tax) from Start of Construction	Year 7	Year 7	Year 9	Year 9	Year 7	Year 7
Production						
Quantity Ore Treated (Mt)	113.51	-	210.19	-	210.19	-
Uranium Oxide Produced (t U3O8)	23,870.69	-	43,175.11	-	43,175.11	-
Uranium Oxide Produced (M lb U3O8)	52.63	-	95.18	-	95.18	-
Revenue						
Net Revenue ($M, after royalties and levies)	3,244.03	-	5,867.50	-	5,867.50	-
Operating Unit Costs						
On-Site Costs/tonne Ore Treated ($/t ore)						
Mining	7.55	-	9.87	-	10.44	-
Processing (including infrastructure maintenance)	6.92	-	6.52	-	6.92	-
Owners costs (including administration)	1.04	-	0.81	-	1.04	-
Closure costs	0.15	-	0.16	-	0.16	-
Total Operating Costs ($/t ore)	**15.65**	-	**17.36**	-	**18.55**	-
Total Operating Costs ($/lb produced)	**33.76**	-	**38.33**	-	**40.97**	-
Marketing, freight and conversion ($/lb produced)	1.24	-	1.24	-	1.24	-
Operating Cashflow						
Operating cashflow pre-tax ($M)	1,416.39	-	2,137.48	-	1,871.96	-
Operating cashflow post-tax ($M)	-	1,012.39	-	1,581.11	-	1,315.59

At an initial throughput rate of 8Mtpa, increasing to 16Mtpa from Operating Year 5, the Project is modelled to produce between 2.1 to 7.8Mlb U_3O_8 per year under the Etango-XP scenario.

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With an all-in-sustaining-cost (AISC) over the life of mine estimated at $42.5/lb U_3O_8, operating cash flow is estimated to be $2,137.5 M over the LOM before tax, and $1,581.1 M after-tax in this scenario. Pre-production capital expenditure is estimated to comprise $317.5 M in engineering, construction and development costs for the initial 8Mt throughput capacity, and an additional $324.6 M to increase production capacity to 16Mt from Operating Year 5 (inclusive of $45.9 M in capitalised mining pre-strip cost). Over the LOM, sustaining capital totals $82.1 M. A summary of the Etango-XP pre-production, sustaining, and total capital costs is presented in Table 11-7 to Table 11-9 below.

In contrast, under the Etango-XT scenario, an 8Mtpa throughput is maintained for the duration of the extended 27 year LOM, with the Project modelled to produce between 2.1 to 4.8Mlb U_3O_8 per year.

With an all-in-sustaining-cost (AISC) estimated at $45.3/lb U_3O_8 over the life of Etango-XT, LOM operating cash flow is estimated to be $1,872.0 M before tax, and $1,315.6 M after-tax in this scenario. Pre-production capital expenditure is estimated to comprise $317.5 M in engineering, construction and development costs for the initial 8Mt throughput capacity. The extended mine life is supported through increased mining OPEX and sustaining capital, with LOM mining OPEX estimated at $2,194.2 M (compared to $2,075.2 M for Etango-XP), and sustaining capital estimated at $96.0 M (compared to $82.1 M for Etango-XP). A summary of the Etango-XT pre-production, sustaining, and total capital costs is presented in Table 11-7 to Table 11-9 below.

Table 11-7: Summary of Pre-Production and Expansion Capital ($ US million)

Pre-Production Capital	Etango (8Mt/a)	Etango-X					Etango-Ext		
		Pre-Prod. Capital US$	Expansion Capital US$	Total Capital Estimate US$	$ Variance from DFS	% Variance from DFS	Capital Estimate US$	$ Variance from DFS	% Variance from DFS
Mining	**12.7**	**12.7**	**59.1**	**71.8**	**59.1**	**463.8%**	**12.8**	**0.1**	**0.5%**
Pre-strip mining cost (capitalised)	5.4	5.4	45.9	51.3	45.9	856.3%	5.4	-	0.0%
Contractor Mobilisation	4.9	4.9	3.3	8.2	3.3	67.0%	4.9	-	0.0%
Mining capital - Vehicles; Scanners; Downhole probes	0.5	0.5	1.7	2.2	1.7	346.8%	0.6	0.1	11.4%
Owner Mining - Labour; fuel; consultants etc.	0.3	0.3	0.5	0.8	0.5	141.9%	0.3	-0.0	-0.3%
Contingency	1.6	1.6	7.6	9.3	7.6	463.8%	1.7	0.0	0.5%
Processing	**240.1**	**240.1**	**241.8**	**481.9**	**241.8**	**100.7%**	**240.1**	**-**	**0.0%**
Mechanical/Process Equipment	75.5	75.5	67.2	142.7	67.2	89.0%	75.5	-	0.0%
Site Preparation/Infrastructure/Bulk Earthworks	36.7	36.7	28.9	65.6	28.9	78.6%	36.7	-	0.0%
EPCM Man-hours Estimate	26.5	26.5	22.5	49.0	22.5	84.6%	26.5	-	0.0%
Civils(Concrete Works)	17.6	17.6	21.3	38.8	21.3	120.9%	17.6	-	0.0%
P&G's	15.4	15.4	24.9	40.3	24.9	161.2%	15.4	-	0.0%
Structural Steel	11.6	11.6	12.2	23.8	12.2	104.8%	11.6	-	0.0%
Electrical	11.5	11.5	11.6	23.1	11.6	101.2%	11.5	-	0.0%
Instrumentation	8.5	8.5	8.5	17.0	8.5	100.2%	8.5	-	0.0%
Platework, Tanks & Liners	7.1	7.1	7.2	14.3	7.2	101.7%	7.1	-	0.0%
Architectural	5.8	5.8	3.0	8.8	3.0	51.2%	5.8	-	0.0%
Piping, Valves & Fittings	3.2	3.2	3.2	6.5	3.2	100.2%	3.2	-	0.0%
Contingency	20.6	20.6	31.4	52.0	31.4	152.6%	20.6	-	0.0%
External Infrastructure	**39.6**	**39.6**	**12.0**	**51.6**	**12.0**	**30.3%**	**39.6**	**-**	**0.0%**
Water Supply	16.8	16.8	2.1	18.9	2.1	12.3%	16.8	-	0.0%
Electricity Supply	9.2	9.2	2.6	11.9	2.6	28.5%	9.2	-	0.0%
Acid Infrastructure	8.9	8.9	4.4	13.3	4.4	49.8%	8.9	-	0.0%
Access Road	0.9	0.9	1.7	2.6	1.7	202.9%	0.9	-	0.0%
Communications & Internet	0.1	0.1	0.0	0.1	0.0	0.0%	0.1	-	0.0%
Contingency	3.7	3.7	1.1	4.9	1.1	30.3%	3.7	-	0.0%
Owner's G&A	**25.1**	**25.1**	**11.8**	**36.9**	**11.8**	**46.9%**	**25.1**	**-**	**0.0%**
Owner's Pre-Production Processing OPEX	11.0	11.0	5.7	16.7	5.7	51.7%	11.0	-	0.0%
Admin & Site Services	9.1	9.1	1.8	10.9	1.8	19.6%	9.1	-	0.0%
Insurance	3.7	3.7	3.7	7.4	3.7	100.0%	3.7	-	0.0%
Contingency	1.3	1.3	0.6	1.9	0.6	46.9%	1.3	-	0.0%
Pre-production Capital (US$M) Before Contingency	**290.2**	**290.2**	**283.8**	**574.0**	**283.8**	**97.8%**	**290.2**	**0.1**	**0.0%**
Contingency	27.3	27.3	40.8	68.1	40.8	149.6%	27.3	0.0	0.0%
Total Pre-Production Capital (US$M)	**317.5**	**317.5**	**324.6**	**642.1**	**324.6**	**102.3%**	**317.5**	**0.1**	**0.0%**

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Table 11-8: Summary of Sustaining Capital ($ US million)

Sustaining Capital	Etango (8Mt/a)	Etango-XP			Etango-XT		
		Capital Estimate US$	$ Variance from DFS	% Variance from DFS	Capital Estimate US$	$ Variance from DFS	% Variance from DFS
Processing Plant	45.2	73.5	28.2	62.5%	84.6	39.4	87.1%
Mining	4.5	6.2	1.8	39.6%	9.1	4.6	102.7%
Rehabilitation of Ripios	1.2	2.3	1.2	100.0%	2.3	1.2	100.0%
Total Sustaining Capital (US$M)	**50.9**	**82.0**	**31.2**	**61.3%**	**96.0**	**45.2**	**88.8%**

Table 11-9: Summary of Total Capital ($ US million)

Total Capital	Etango (8Mt/a)	Etango-XP			Etango-XT		
		Capital Estimate US$	$ Variance from DFS	% Variance from DFS	Capital Estimate US$	$ Variance from DFS	% Variance from DFS
Pre-Production and Expansion Capital	317.5	642.1	324.6	102.3%	317.5	0.1	0.0%
Sustaining Capital	50.9	82.0	31.2	61.3%	96.0	45.2	88.8%
Total Capital	**368.3**	**724.1**	**355.8**	**96.6%**	**413.6**	**45.2**	**12.3%**

Figure 11-3 below presents for Etango-XP the annual cashflow spread of pre-production, expansion and sustaining (Stay-in-Business) capital across the life of the project (the initial 8Mt capacity construction period, Phase 2 development, and the LOM). Note, for the Etango-XP Phase 2 development (expansion to 16Mt/a), approximately $9.6 M in early works and optimisation studies is forecast for OY1, with 95.9% of infrastructure and processing plant construction to occur in OY2-OY4.

Figure 11-3: Pre-Production, Expansion, and Sustaining Capital Schedule for Etango-XP ($ US million)

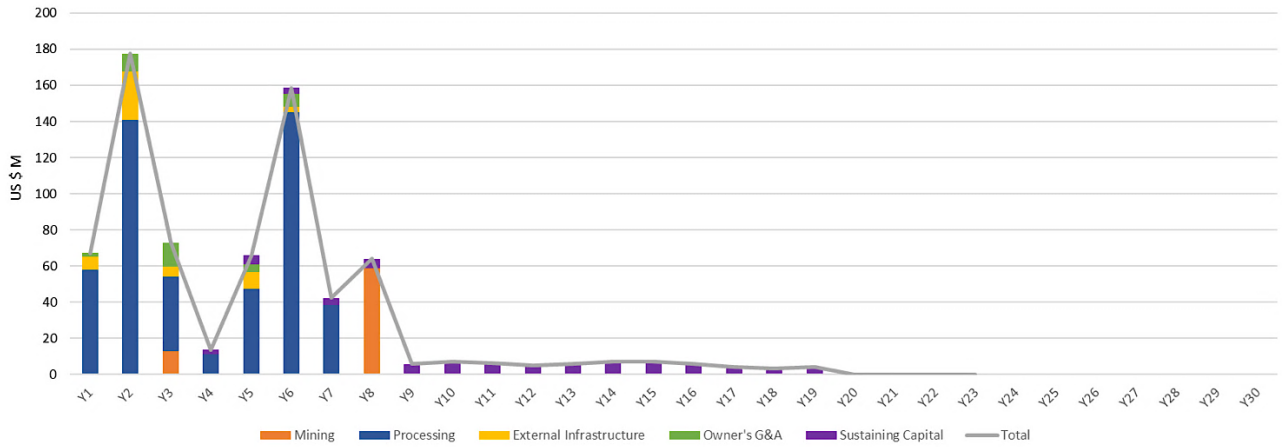

Figure 11-3 below presents for Etango-XT the annual cashflow spread of pre-production and sustaining (Stay-in-Business) capital across the life of the project (the 34 month construction period and the extended 27 year LOM).

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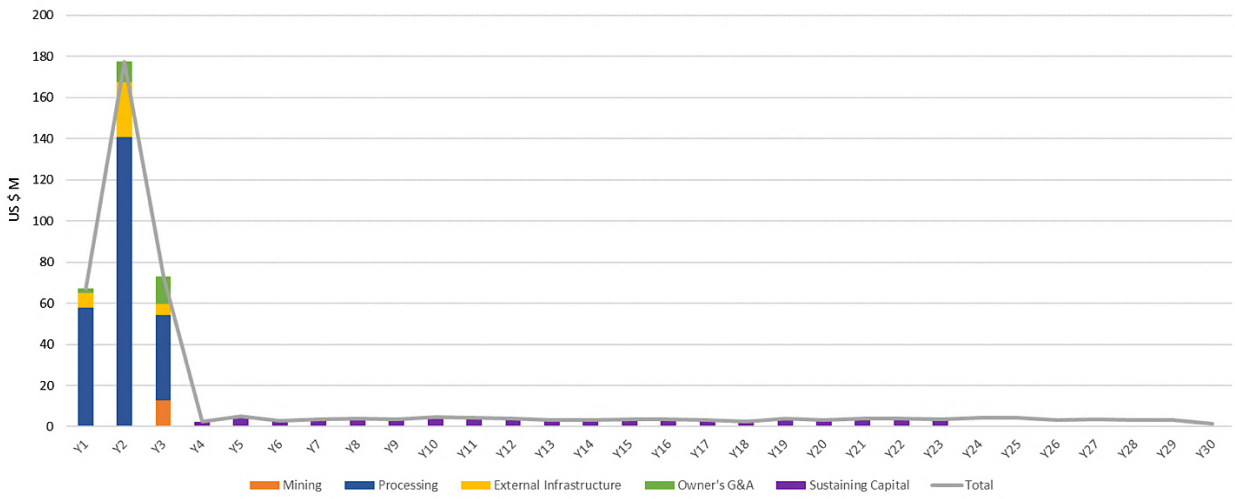
Figure 11-4: Pre-Production, Expansion, and Sustaining Capital Schedule for Etango-XT ($ US million)



Net revenues and unit operating costs per pound U_3O_8 are shown in Table 11-10 for each scenario.

Table 11-10: Revenue and Operating Costs

	Etango (8Mt/a)	Etango-XP	Etango-XT
U3O8 Sales Price Asssumption ($/lb)	65	65	65
Net revenue/tonne ore processed ($/t)	28.58	27.92	27.92
Net revenue/tonne U3O8 sold ($/t)	135,900.12	135,900.12	135,900.12
Mining operating costs/tonne U3O8 produced ($/t)	35,909.94	48,063.46	50,821.78
Mining operating costs/lb U3O8 produced ($/lb)	16.29	21.80	23.05
Processing operating costs/tonne U3O8 produced ($/t)	32,897.02	31,721.09	33,680.13
Processing operating costs/lb U3O8 produced ($/lb)	14.92	14.39	15.28
Owner's operating costs/tonne U3O8 produced ($/t)	5,625.53	4,707.95	5,816.85
Owner's operating costs/lb U3O8 produced ($/lb)	2.55	2.14	2.64
Total Operating costs (excl. sustaining capital)/tonne U3O8 produced ($/t)	74,432.49	84,492.50	90,318.76
Total Operating costs (excl. sustaining capital)/lb U3O8 produced ($/lb)	33.76	38.33	40.97

11.2.3 Annual and Cumulative Cash Flows

Figure 11-5 and Figure 11-6 depict the annual cash flows of the project, before and after tax, for Etango-XP and Etango-XT, at a base-case U_3O_8 sales price of US$65/lb.

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Figure 11-5: Annual Cashflow Before Tax (US$65/lb U_3O_8)

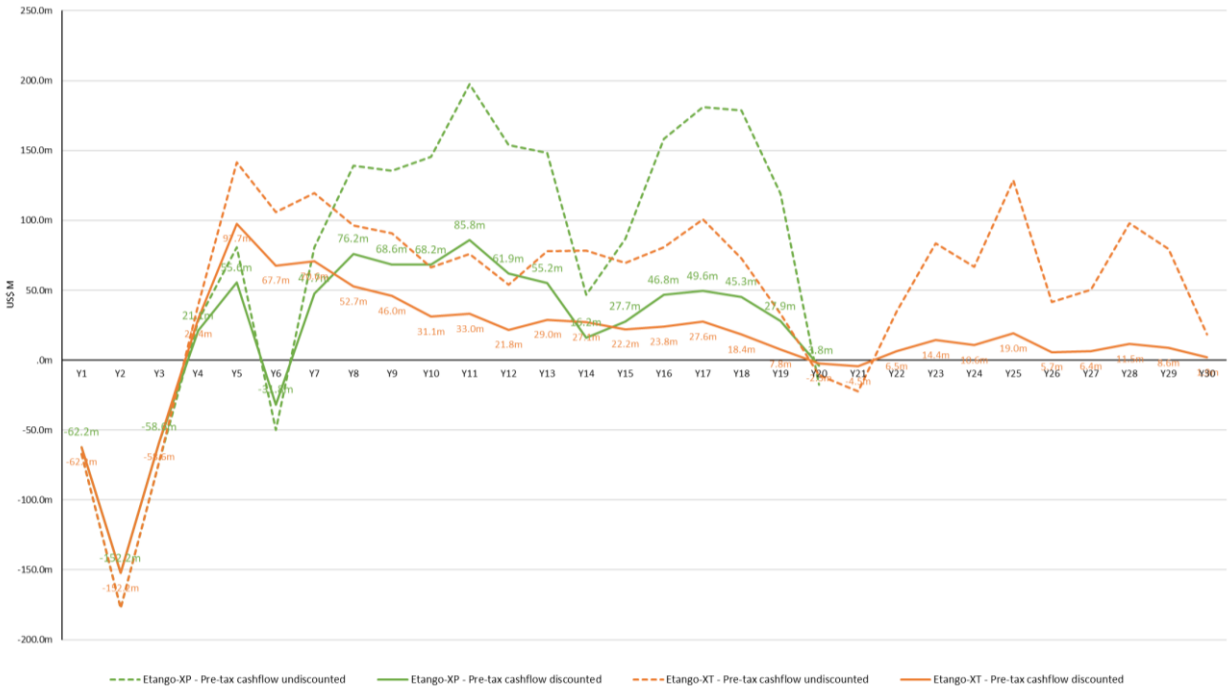


Figure 11-6: Annual Cashflow After Tax (US$65/lb U_3O_8)

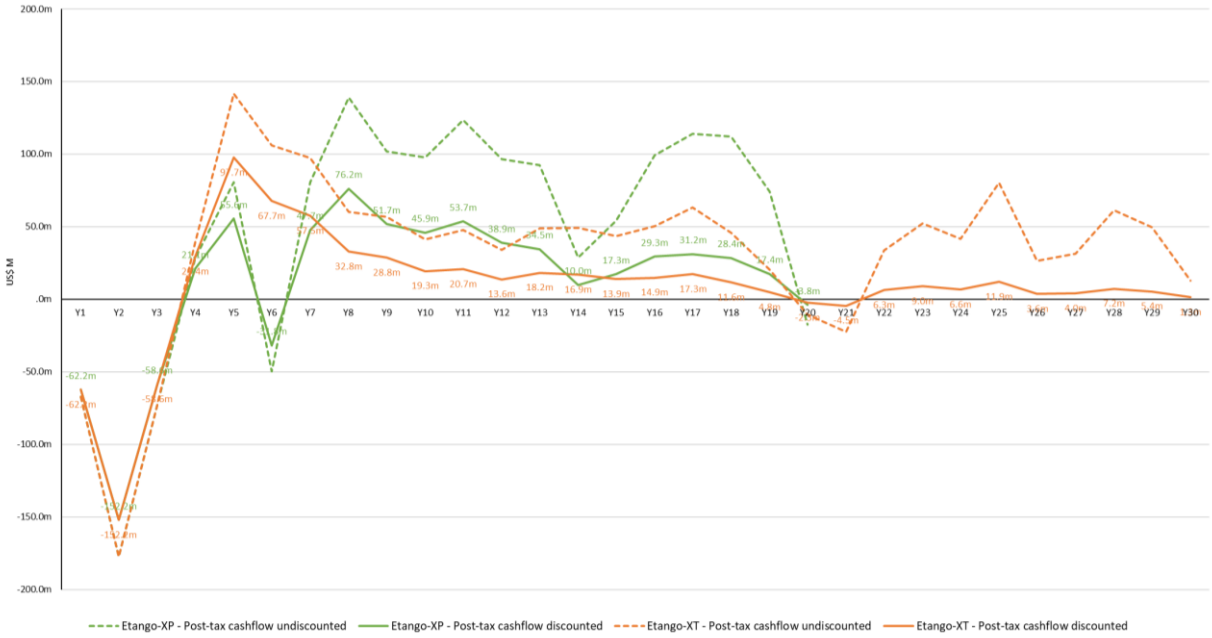
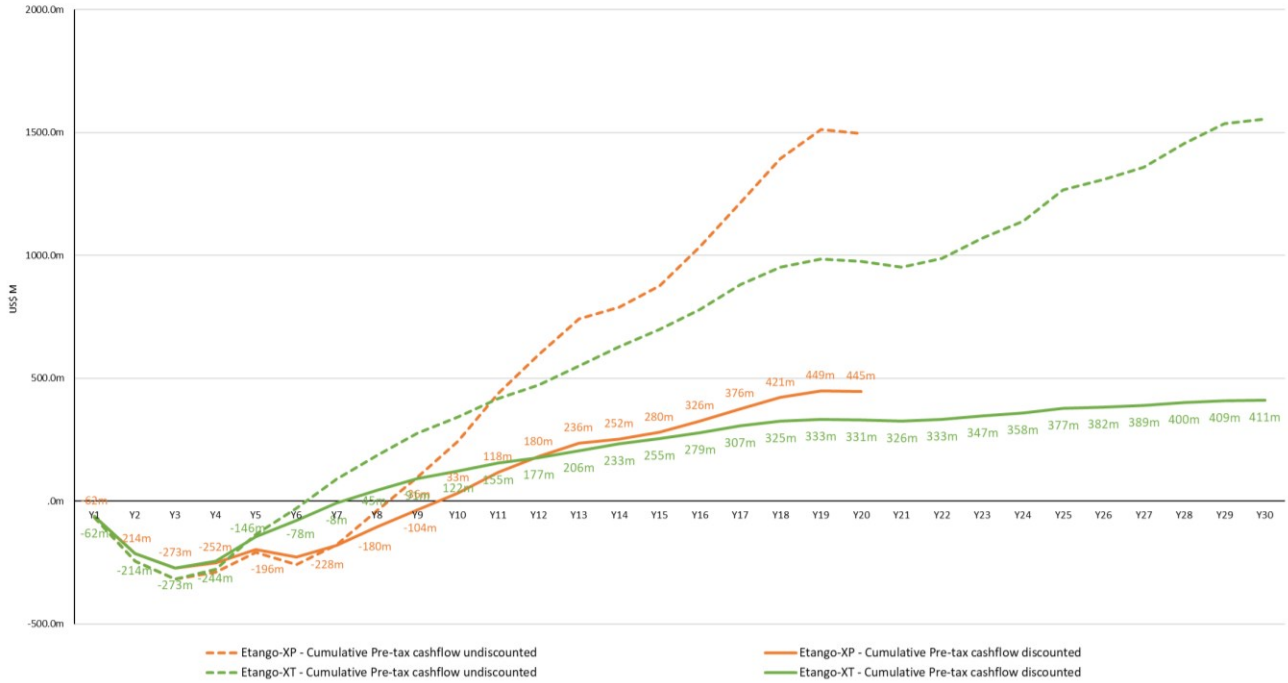


Figure 11-7 and Figure 11-8 depict the cumulative cash flows of the project before and after tax.

Figure 11-7: Cumulative Cash Flows Before Tax (US$65/lb U_3O_8)



Over the LOM, at a U_3O_8 sales price of US$65/lb, the undiscounted pre-tax cashflow of Etango-XP is $1,495.4 M. The discounted cashflow over this period is $445.3 M.

For Etango-XT, the undiscounted pre-tax cashflow over the LOM is $1,554.4 M. The discounted cashflow over this period is $410.7 M.

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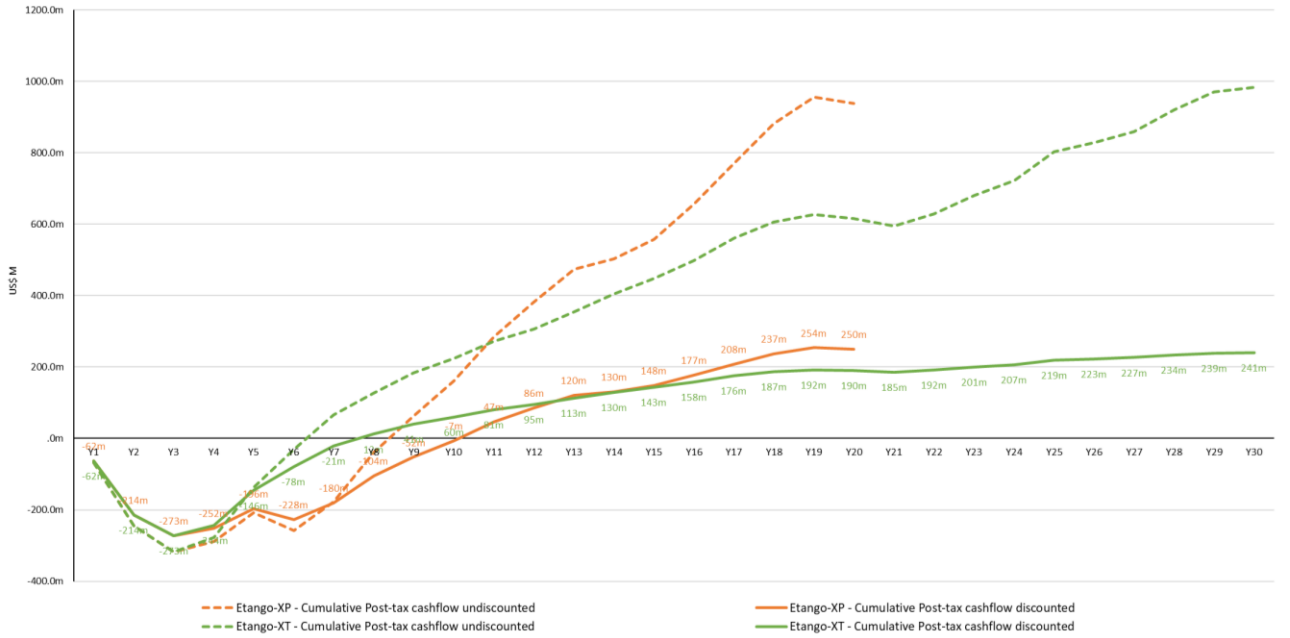
Figure 11-8: Cumulative Cash Flows After Tax (US$65/lb U_3O_8)



Over the LOM, at a U_3O_8 sales price of US$65/lb, the undiscounted post-tax cashflow of Etango-XP is $939.0 M. The discounted cashflow over this period is $250.2 M.

For Etango-XT, the undiscounted post-tax cashflow over the LOM is $984.0 M. The discounted cashflow over this period is $240.6 M.

11.3 Sensitivity Analysis

Various sensitivity analyses have been undertaken on key parameters within the financial model to assess the impact of changes upon the project NPV and IRR. The sensitivity analyses encompass specified variations to the base case assumptions for each of the following key parameters:

- U_3O_8 Price
- Capital Costs
- Operating Costs
- NAD & ZAR Foreign Exchange Rate Movements
- Discount Rate

In assessing the sensitivity of the project returns, each of the above parameters has been varied independently of the others. Accordingly, combined positive or negative variations in any of these parameters will have a more marked effect on the forecast economics of the project than will the individual variations considered, while variations in opposite directions could naturally have a negating effect on each other.

The convention adopted in this analysis is that negative sensitivities are adjustments that reduce project economics or value (for example, increased capital or operating costs) and, correspondingly, positive sensitivities are adjustments that improve project economics and value.

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11.3.1 Etango-XP

Figure 11-9, Figure 11-10, and Figure 11-11 show for Etango-XP the sensitivity results on NPV and IRR (post-tax and ungeared) to changes in key inputs.

Figure 11-9: Sensitivity of Project Net Present Value (post-tax, ungeared) to Key Inputs – Etango-XP (Base US$65/lb U_3O_8)

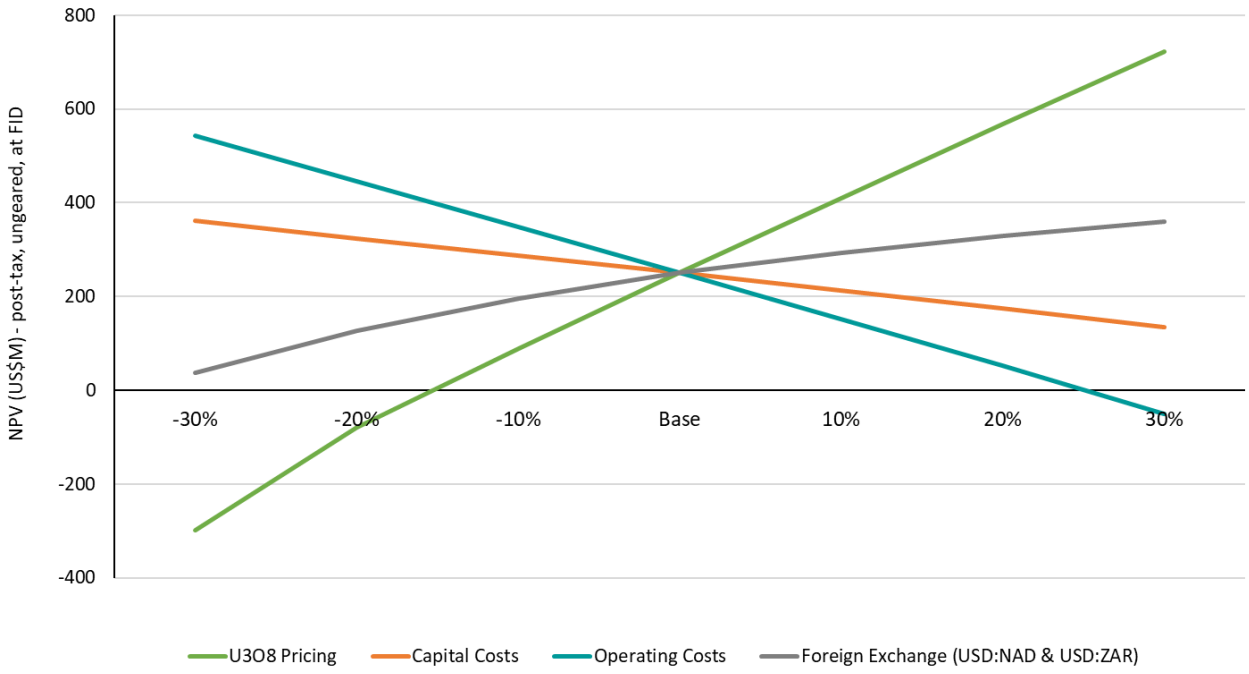


Figure 11-10: NPV Sensitivity to Key Inputs +/-10% - Etango-XP

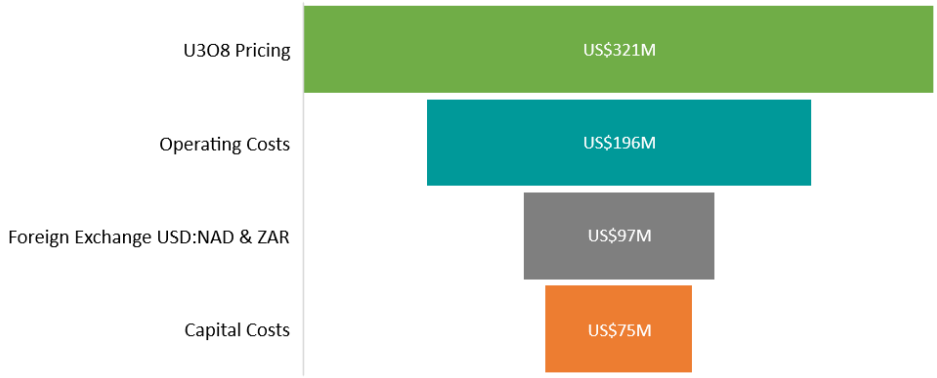
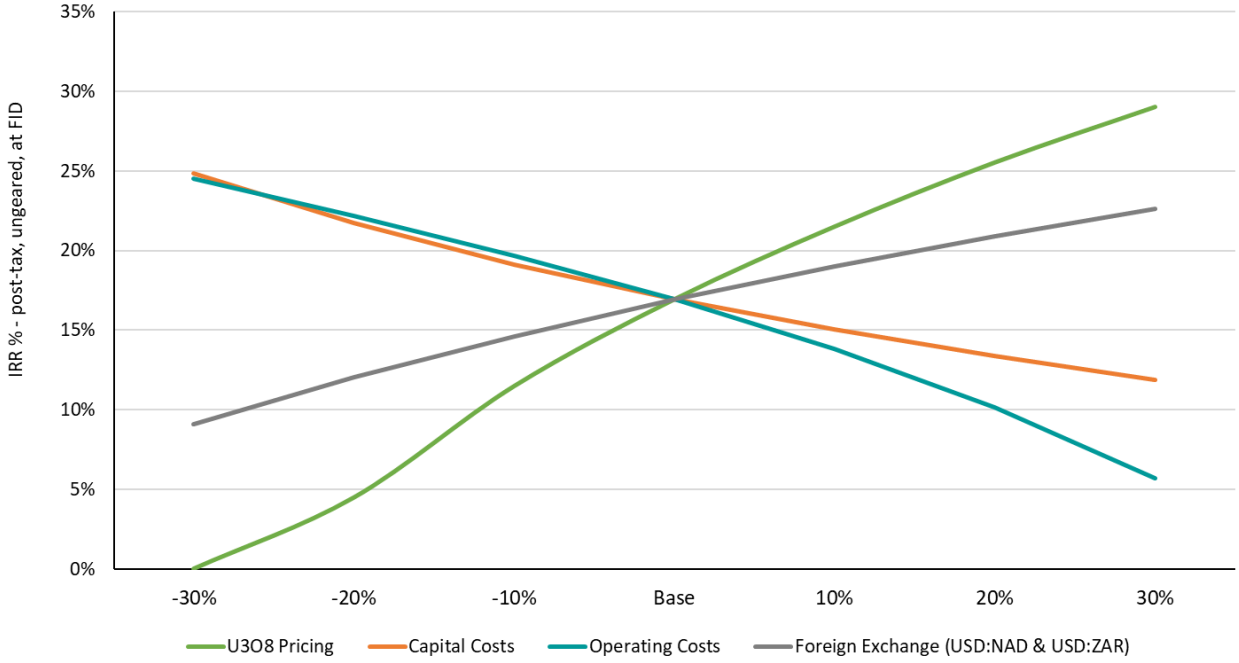


Figure 11-11: Sensitivity of Project IRR (post-tax, ungeared) to Key Inputs - Etango-XP (Base US$65/lb U_3O_8)



11.3.2 Etango-XT

Figure 11-12, Figure 11-13, and Figure 11-14 show for Etango-XT the sensitivity results on NPV and IRR (post-tax and ungeared) to changes in key inputs.

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Figure 11-12: Sensitivity of Project Net Present Value (post-tax, ungeared) to Key Inputs – Etango-XT (Base US$65/lb U_3O_8)

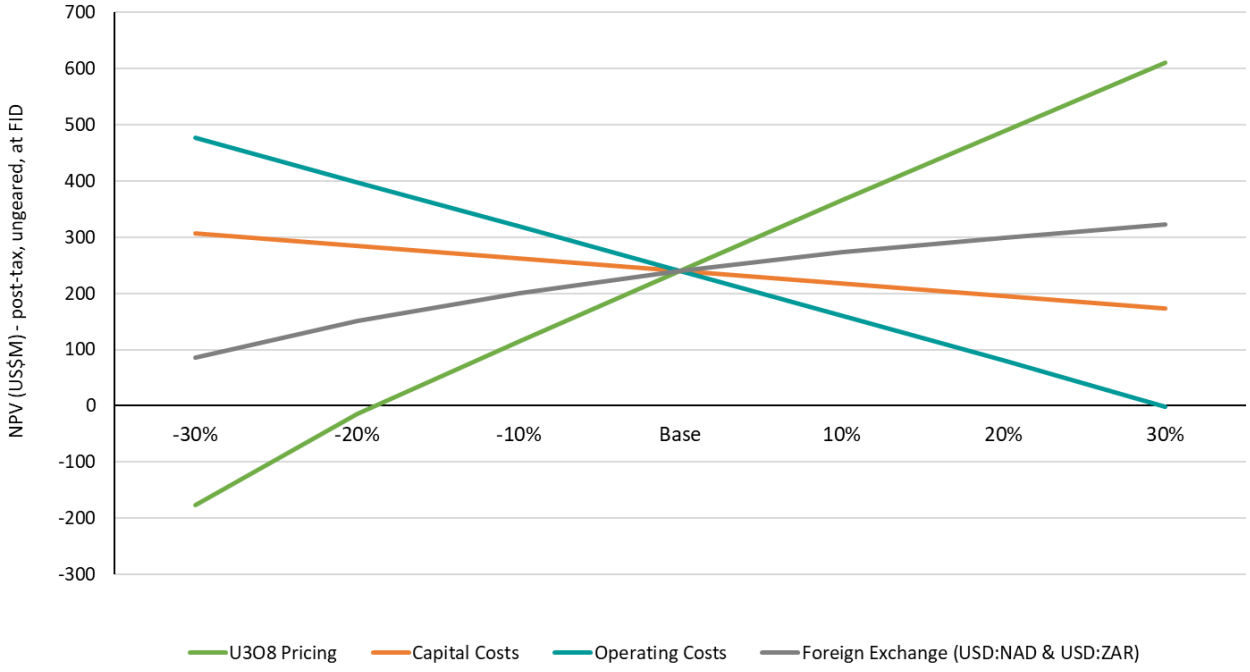

Figure 11-13: NPV Sensitivity to Key Inputs +/-10% - Etango-XT

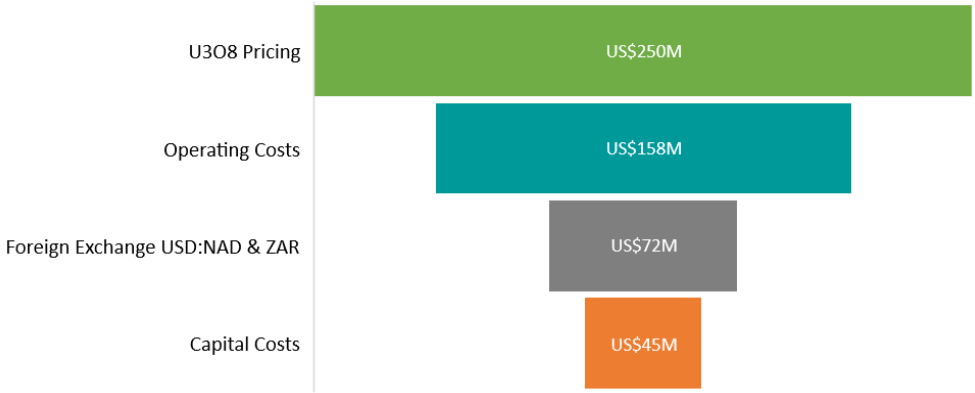

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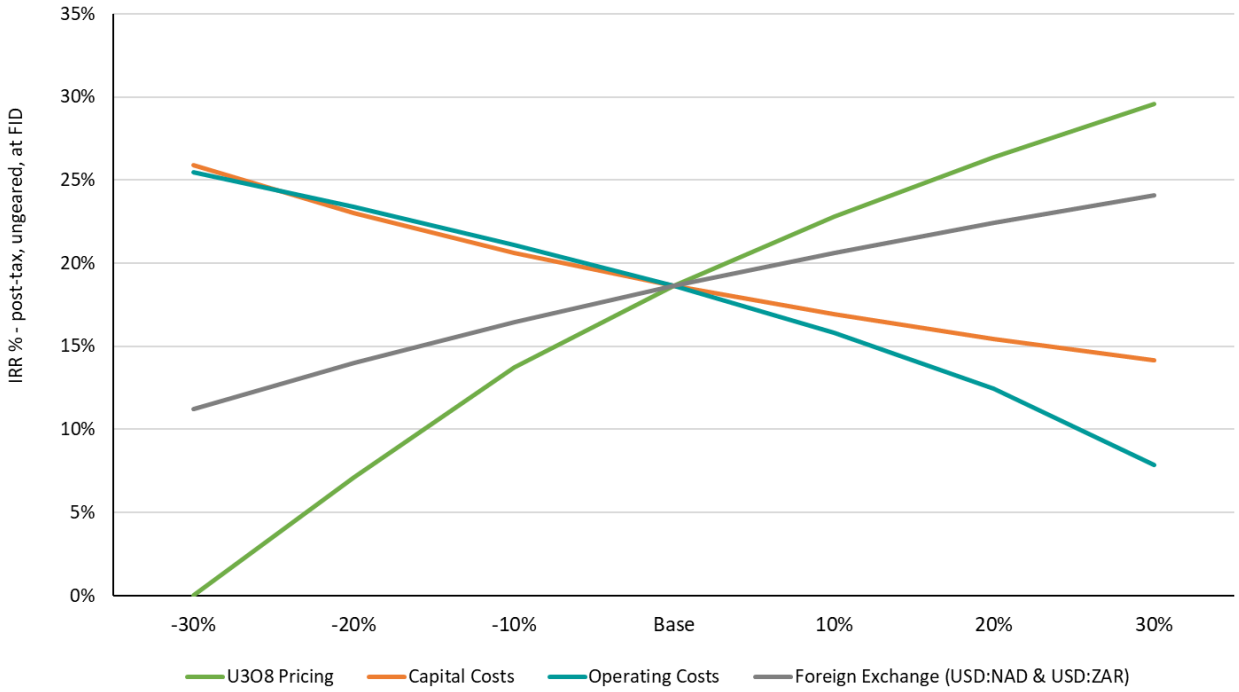
Figure 11-14: Sensitivity of Project IRR (post-tax, ungeared) to Key Inputs - Etango-XT (Base US$80/lb U_3O_8)



11.3.3 Relative Sensitivities

The sensitivity analysis demonstrates the economic performances of Etango-XP and Etango-XT are most sensitive to changes in the uranium price. Both scenarios are affected by factors which have the greatest bearing upon cash operating margins. A +/- 10% movement in the U_3O_8 sale price results in a +/- impact of ~$161M to NPV for Etango-XP, and ~$125M for Etango-XT.

The highest sensitivity following the uranium price is sensitivity to operating costs, which is unsurprising given the significant uplift in ore throughput under both scenarios. Accordingly, operating costs result in the second largest impact on the NPV, with +/- 10% impact to NPV of +/-$98M for Etango-XP, and +/- $79M for Etango-XT.

Subsequently, USD:NAD and USD:ZAR foreign exchange rates have the greatest impact on project NPV, with a +/-10% movement in exchange rates delivering a +/-$43-54M impact on NPV for Etango-XP, and +/-$32-40M impact for Etango-XT. Capital costs are the next most sensitive cost parameter (+/-10% impact to NPV: +/- ~$38M for Etango-XP, and +/- ~$22M for Etango-XT).

Each component is discussed briefly below, including sensitivity of project economics to the discount rate applied.

11.3.3.1 Sensitivity to Changes in U_3O_8 Prices

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As noted, Etango-XP is most sensitive to changes in uranium prices. Positive movements of 10% and 20% from the base case assumption of $65/lb U_3O_8 produce significant changes in the post-tax NPV from $250.2 M to $409.2 M and $567.1 M respectively, the latter with a post-tax IRR of 25.5%. Likewise, negative movements of 10% and 20% result in the post-tax NPV reducing from $250.2 M to $88.5 M and -$79.3 M, respectively.

Findings are similar for Etango-XT, with positive movements of 10% and 20% from the base case assumption of $65/lb U_3O_8 produce significant changes in the post-tax NPV from $240.6 M to $365.2 M and $488.2 M respectively, the latter with a post-tax IRR of 26.4%. Likewise, negative movements of 10% and 20% result in the post-tax NPV reducing from $240.6 M to $115.0 M and -$14.1 M, respectively.

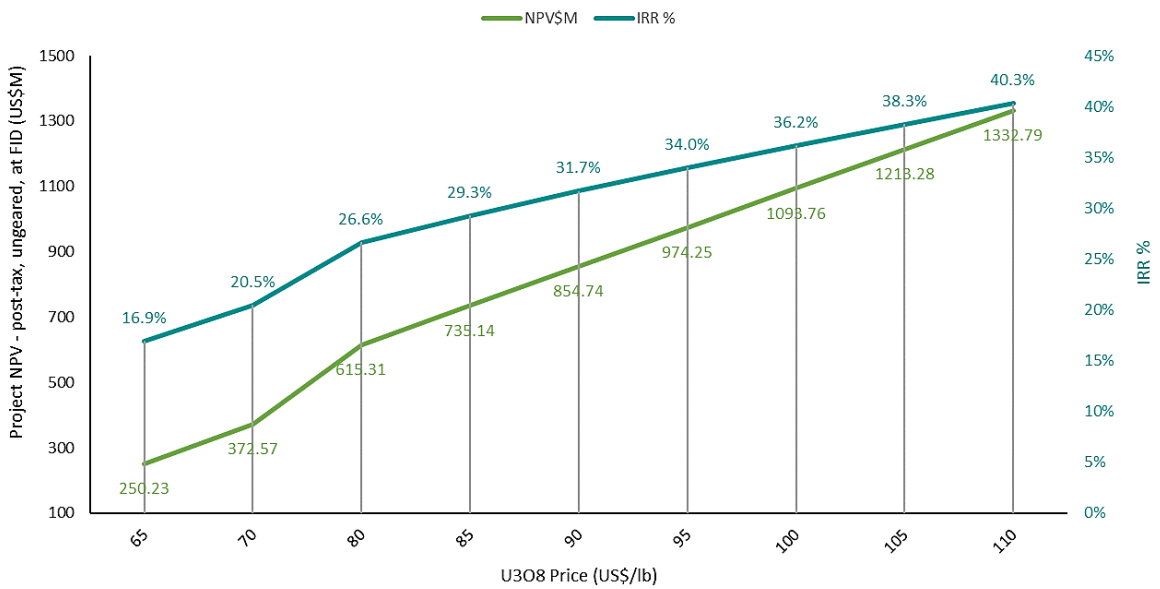
Should higher prices than the base case assumption be available, project economics under both scenarios see immediate and significant uplift. Table 11-11 displays the potential financial outcomes at U_3O_8 prices of US$65/lb, US$80/lb, and US$95/lb.

Table 11-11: Sensitivity of Project Financial Metrics to U_3O_8 Price

Financial Metric	Unit	Etango (8Mt/a)		Etango-XP			Etango-XT		
		US$65 /lb	US$80 /lb	US$65 /lb	US$80 /lb	US$95 /lb	US$65 /lb	US$80 /lb	US$95 /lb
Total revenue	US$M	3,420.7	4,210.1	6,187.0	7,614.8	9,042.6	6,187.0	7,614.8	9,042.6
Total EBITDA	US$M	1,484.0	2,247.7	1,495.4	2,876.8	4,258.1	1,554.4	2,935.8	4,317.2
Project free cashflow (pre-tax)	US$M	1,098.9	1,862.6	939.0	1,803.8	2,668.5	984.0	1,847.4	2,710.7
Project free cashflow (post-tax)	US$M	694.9	1,172.3	939.0	1,803.8	2,668.5	984.0	1,847.4	2,710.7
Project IRR - pre-tax, ungeared, at FID	%	21.0%	30.0%	20.8%	32.2%	41.3%	22.8%	33.5%	42.4%
Project IRR - post-tax, ungeared, at FID	%	17.0%	24.6%	16.9%	26.6%	34.0%	18.6%	27.4%	34.4%
Project NPV - pre-tax, ungeared, at FID	US$M	368.9	724.6	445.3	1,017.5	1,589.6	410.7	862.4	1,314.0
Project NPV - post-tax, ungeared, at FID	US$M	209.1	435.5	250.2	615.3	974.3	240.6	525.9	808.9
AISC	US$M	2,004.3	2,029.9	4,049.5	4,095.9	4,142.3	4,315.1	4,361.5	4,407.9
AISC	$/t ore p	17.66	17.88	19.27	19.49	19.71	20.53	20.75	20.97
AISC	$/lb U3O8 prod.	38.09	38.57	42.54	43.03	43.52	45.33	45.82	46.31
Payback period - post-tax, from first production	year	Year 4	Year 3	Year 6	Year 5	Year 4	Year 4	Year 3	Year 2

The sensitivity of Etango-XP NPV and IRR to U_30_8 price changes is shown graphically in Figure 11-15 below.

Figure 11-15: Sensitivity of post-tax NPV and IRR to U_3O_8 Price – Etango-XP



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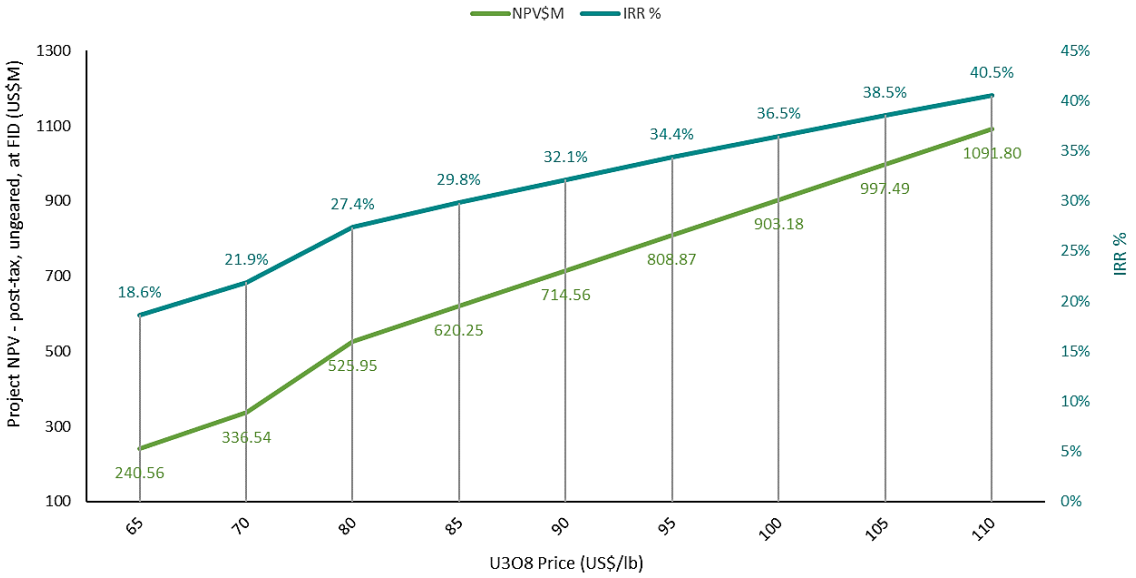
The sensitivity of Etango-XT NPV and IRR to U_30_8 price changes is shown graphically in Figure 11-16 below.

Figure 11-16: Sensitivity of post-tax NPV and IRR to U_3O_8 Price – Etango-XT



11.3.3.2 Sensitivity to Changes in Operating Costs

As noted above, given the large annual throughput of the project, financial performance under both scenarios is sensitive to changes in processing operating costs. The sensitivity of NPV and IRR to operating cost increases/decreases for Etango-XP and Etango-XT is shown graphically below in Figure 11-17 and Figure 11-18, respectively. Both scenarios assume a Base-case U_3O_8 sale price of US$65/lb.

Figure 11-17: Sensitivity of post-tax NPV and IRR to Movements in OPEX – Etango-XP

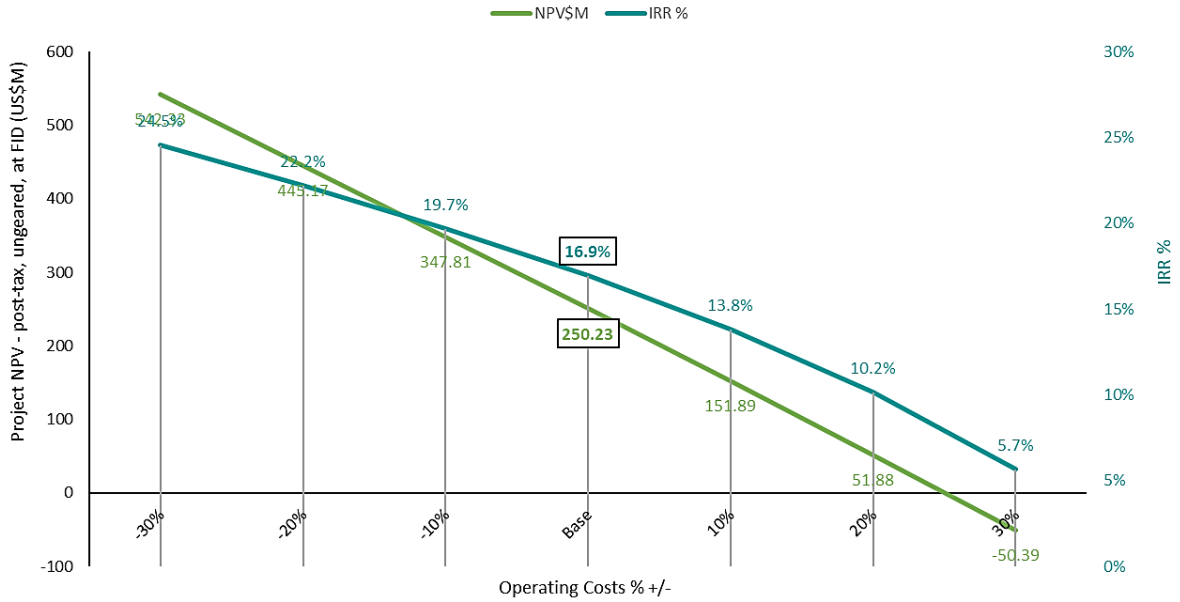
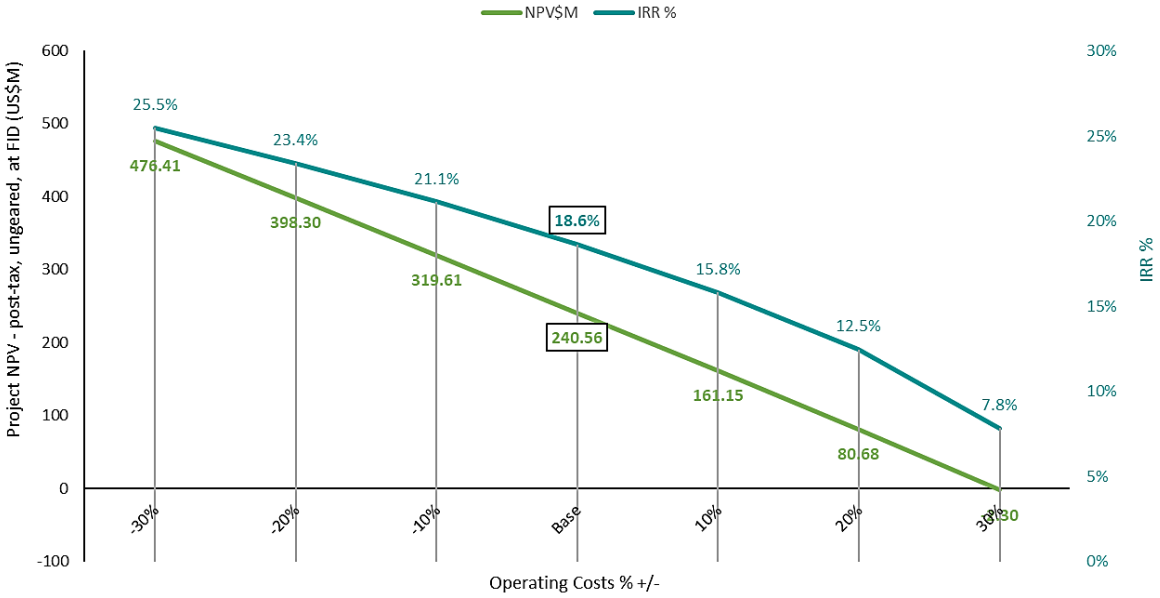


Figure 11-18: Sensitivity of post-tax NPV and IRR to Movements in OPEX – Etango-XT



11.3.3.3 Sensitivity to Changes in Foreign Exchange Rates

As a key driver of operating and capital costs, financial performance of the project is sensitive to changes in foreign exchange rates, specifically USD:NAD and USD:ZAR. The sensitivity of NPV and IRR to foreign exchange rate movements for Etango-XP and Etango-XT is shown graphically below in Figure 11-19 and Figure 11-20, respectively. Both scenarios assume a Base-case U_3O_8 sale price of US$65/lb.

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Figure 11-19: Sensitivity of post-tax NPV and IRR to Foreign Exchange Rate Movement – Etango-XP

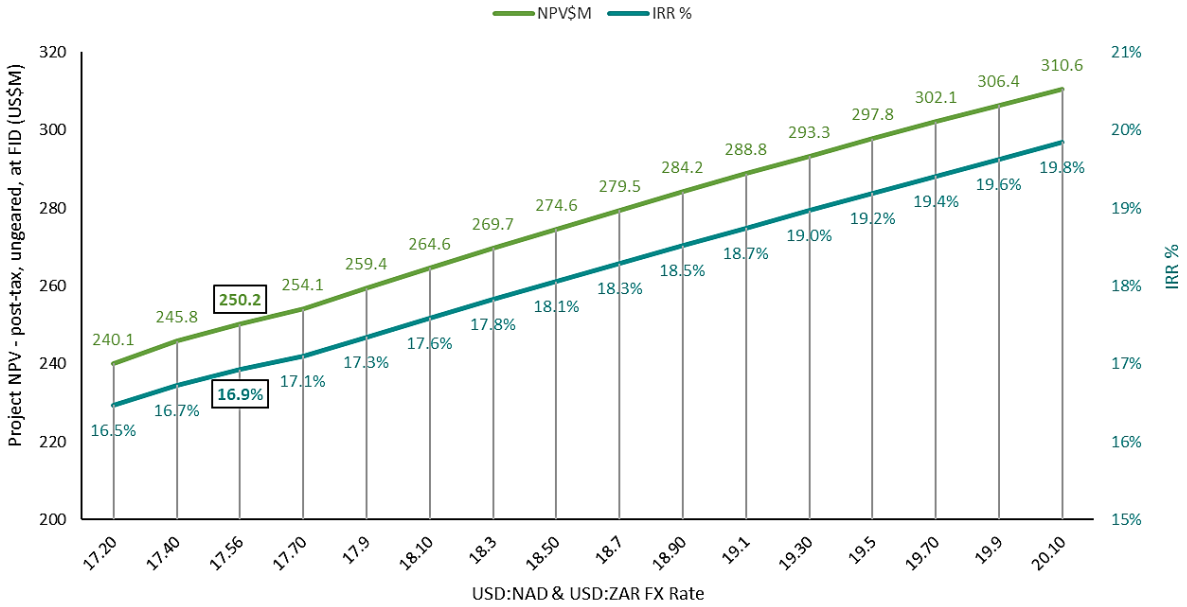
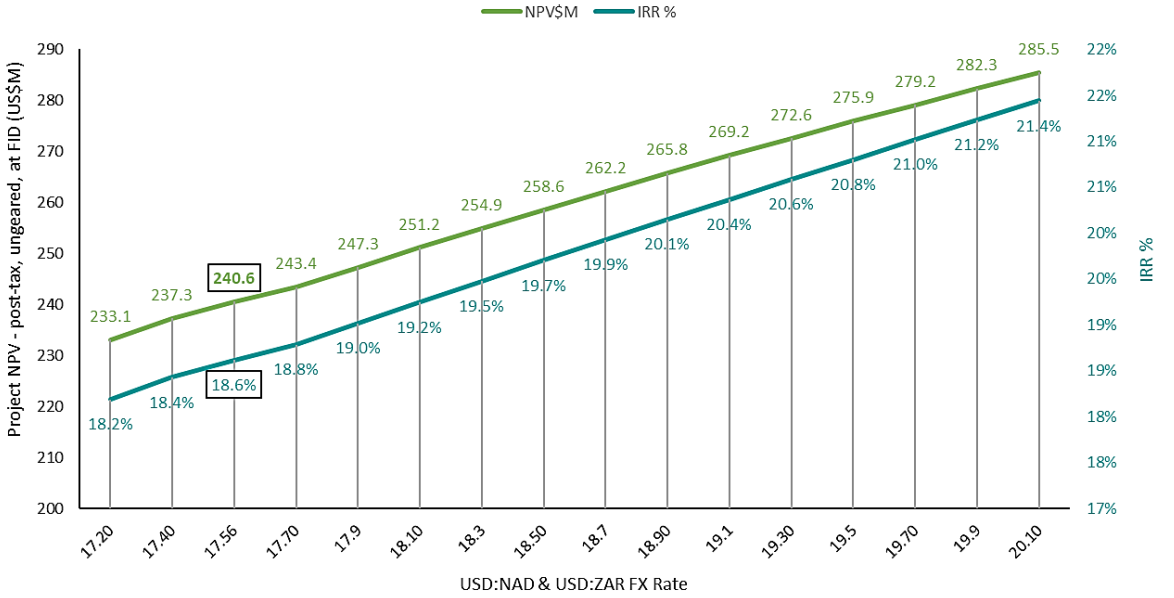


Figure 11-20: Sensitivity of post-tax NPV and IRR to Foreign Exchange Rate Movement – Etango-XT



11.3.4 Sensitivity to Movements in Capital Costs

Figure 11-21 and Figure 11-22 below shows the sensitivity of post-tax NPV and IRR to movements in capital costs for Etango-XP and Etango-XT, respectively. Both scenarios assume a Base-case U_3O_8 sale price of US$65/lb.

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Figure 11-21: Sensitivity of post-tax NPV and IRR to Movements in Capital Costs – Etango-XP

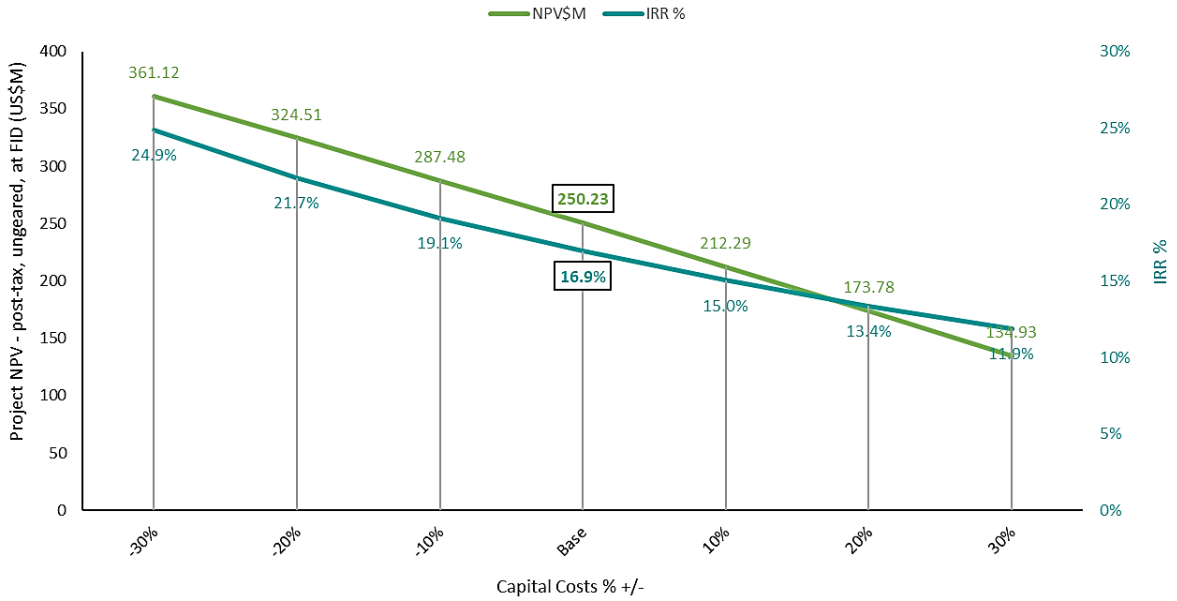
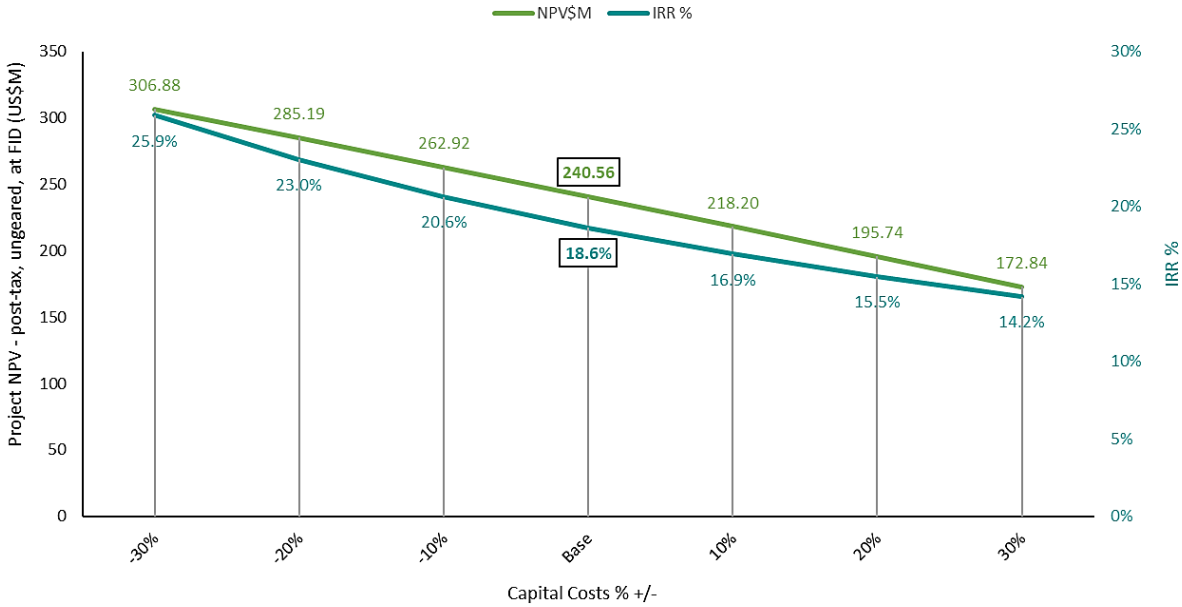


Figure 11-22: Sensitivity of post-tax NPV and IRR to Movements in Capital Costs – Etango-XT



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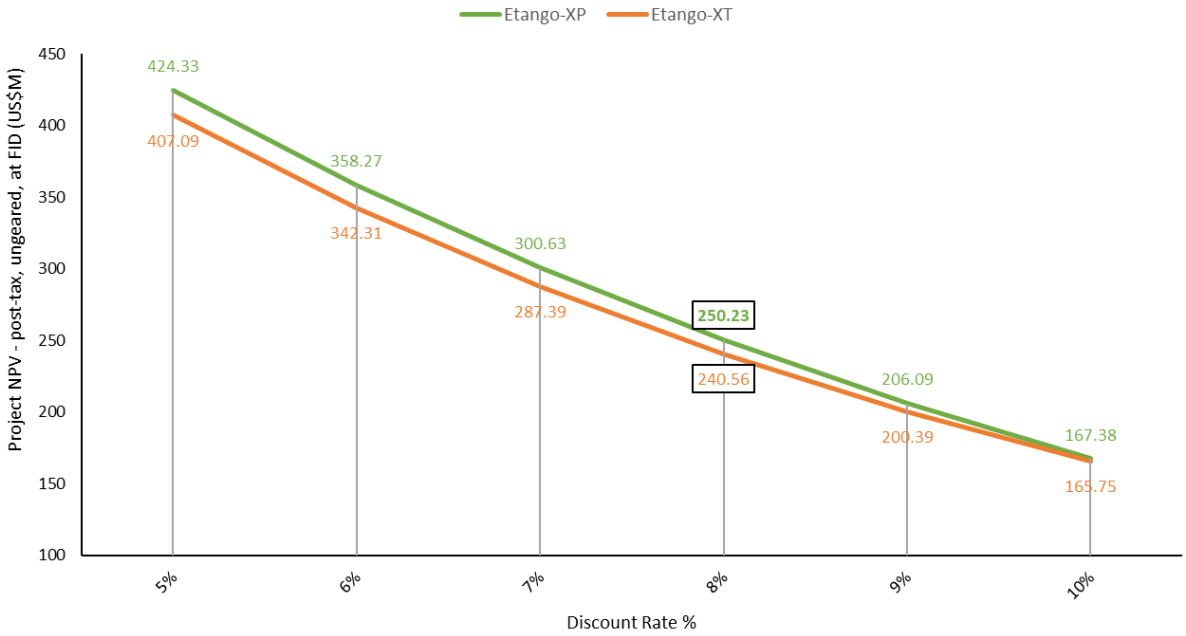
11.3.5 Sensitivity to Discount Rate

Figure 11-23 shows for both Etango-XP and Etango-XT the sensitivity of the project NPV (post-tax, ungeared, at first construction start) to variations in the discount rate (%) applied.

Consistent with the DFS, the base case financial analysis was undertaken using a discount rate of 8%, resulting in a project NPV of US$250.2 M for Etango-XP, and US$240.6 M for Etango-XT. At a discount rate of 5%, the project NPV increases significantly to US$424.3 M for Etango-XP, and US$407.1 M for Etango-XT.

Figure 11-23: Sensitivity of Project NPV (post-tax, ungeared) to Discount Rate



12. Project Risks

During a joint high-level risk and opportunity review session the risks listed below were identified. This list is not exhaustive and should be developed in more detail in formal risk assessment sessions.

- Mining operation costs.
  - Mining operations operating cost could be high if haul trucks with too small a load capacity are used. All future mining operations to be based on 150t trucks. The current tipping point design already caters for 150t trucks.
- Sterilization of the Ondjamba and Hyena Resources by stockpiles or Heap Leach Pads.
  - All Stockpile, Heap Leach Pads and Ripios Storage Facility locations should be selected to avoid sterilisation of workable uranium resources.
- Inability to service expanded operating facility.
  - Expand or update all service facilities such as offices, stores and workshops.
- Non-compliance with air-borne dust limits.
  - Revisit dust suppression strategy
- Insufficient water supply for future operations and construction phases.

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  - Upgrade site water supply pumps. The line is sized for 16Mt/a operation.
- Increase in sulphuric acid price with detrimental impact on operating costs.
  - Confirm sulphuric acid price and investigate alternative supply or on-site production.
- Construction interference with 8Mt/a operations.
  - Review constructability and phasing in datil in the subsequent phase(s)

13. Project Opportunities

The opportunities listed below were identified in a review session with the client.

Review and adapt the plant design during current FEED phase of the 8Mt/a process plant to provide for expansion. Future activities that should be considered include:

- Upgrading of the Primary Crushing circuit to 16 Mt/a. This may be done in addition to the 8Mt/a circuit to retain at least 50% throughput in the event of crusher downtime.
- Earthworks, and terracing and roads to be completed for both parallel plants which would reduce the construction duration for 2nd plant and reduce P&Gs
- Sharing of conveyors and stockpiles with cross-over and interconnection facilities.
- Sharing water and other ponds.
- Combination of raw material and reagent handling to cater for both plant throughputs.
- Installation of Water and Sewage treatment plants to cater for the 16Mt/a facility.
- Installation of Electrical Infrastructure and PV Power Plant for the 16Mt/a facility.
- Current design of warehouses, stores, workshop, offices, changerooms, messing, clinic and other facilities to include additional resources and activities or to be designed for future expansion.
- EC&I cabinets, networks, cable racks and other junctions to include capacity for expansion.

14. Synergies in Phase Two

Elements were identified that could be shared between the two facilities once the 16Mt/a expansion has been implemented. Considering the complexity associated with the plant expansion, and that such expansion may be performed in an operating radioactive facility, it is recommended that shared services be developed as far as economically feasible, as construction within an operating facility is never without significant hurdles. Some possible shared facilities identified to date include:

- Mining, service and haul roads
- General access and in-plant roads.
- Plant and Storm water drains and catchment pond.
- Reagent stores, tank farms and distribution systems.
- Admin, security, change house and other buildings.
- Section of plant or specific equipment items that could reasonably be sized for the 16Mt/a case.
- Category 3 storage facility
- Diverse supporting facilities
- Reagent and services costs, and possible reduction for bulk purchases.

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15. Reasonable Basis for Funding and Assumptions

To achieve the range of outcomes indicated in this Scoping Study, pre-production funding in excess of US$320M will likely be required.

There is no certainty that Bannerman will be able to source that amount of funding when required. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Bannerman's shares. It is also possible that Bannerman could pursue other value realisation strategies such as a sale, partial sale or joint venture of the Etango Project. This could materially reduce Bannerman's proportionate ownership of the Etango Project.

An assessment of various funding alternatives for the Etango Project has been made based on precedent funding transactions in the uranium and broader metals mining industry.

Bannerman has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Etango Project will be available when required. There are a number of grounds on which this reasonable basis is established:

- Global debt and equity finance for uranium projects is available, with counterparty appetite for this development funding supply growing strongly following the significant increase in market uranium prices over the past 3 years.
- The technical and financial parameters detailed in the Etango-8 DFS and Etango-XP / XT Scoping Study are robust and economically attractive.
- The Etango Project is located in Namibia, a leading uranium mining and export jurisdiction globally. Namibia possesses a well-established and clearly understood legal tenure and project permitting regulation.
- Bannerman has a current market capitalisation of approximately A$500 million and zero debt. The Company owns 95% of the Etango Project and has an uncomplicated, clean corporate and capital structure. Finally, 100% of the forecast uranium production from the Etango Project remains uncommitted. These are all factors expected to be highly attractive to potential strategic investors, offtake partners and conventional equity investors. These factors also deliver considerable flexibility in engagement with potential debt or quasi-debt providers.
- The Bannerman Board and management team has extensive experience in the global uranium, and broader resources, industry. They have played leading roles previously in the exploration and development, including project financing, of several large and diverse mining projects in Africa and elsewhere. In this regard, key Bannerman personnel have a demonstrated track record of success in identifying, acquiring, defining, funding, developing and operating quality mineral assets of significant scale.
- The Company has a strong track record of raising equity funds as and when required to further the evaluation and advancement of the Etango Project.
- Bannerman is targeting total pre-production and working capital funding being comprised of one,

some or all of: senior project debt, mezzanine debt, offtake prepayment, sale of a strategic asset interest, equity issuance and/or royalty/stream funding. As noted earlier, total pre-production funding (or equivalent) in excess of US$320M will likely be required. The final mix will depend on general market and mineral industry conditions, specific counterparty appetite and terms, and the Bannerman Board's prevailing views on optimal funding mix and balance sheet configuration. It should be noted that this funding strategy is subject to change at the Bannerman Board's discretion at any point. It should also be noted that, while the Bannerman Board holds a reasonable basis to believe that funding will be available as required, there is no assurance that the requisite funding for Etango-8 will be secured.

- Funding for any potential Etango-XP expansion is not required until after Etango is constructed and ramped-up, typically facilitating a far wider potential range of financing options for such an expansion versus initial project development.

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16. Conclusions and Next Steps

The Etango-XP and Etango-XT Scoping Study was undertaken with the objective of establishing the technical and financial viability of subsequently expanding or extending the Etango (8Mt/a) operation following its successful construction and ramp-up. The Scoping Study has clearly demonstrated this viability.

Developing the Etango Project at an initial 8 Mtpa throughput scale remains Bannerman's core focus. As a result, it is not intended to advance expansion and/or extension options for Etango to more advanced technical evaluation immediately, but rather at an appropriate future point in time. It should be noted that, as a result of the existing recent DFS-level evaluation of Etango (Etango-8) across all key workstreams, a definitive level study on expansion and/or extension of the initial Etango-8 development is capable of relative fast-tracking and accelerated completion.

More advanced study of these options is recommended to include:

- Provision for future expansion in the 8Mt/a facility. This would consider cost, constructability, schedule, and safety.
- Options for common and shared circuits or equipment in the 8Mt/a facility. This includes, among others, the installation of one primary crushing circuit. The option of combining all or part of the wet processing circuit may also be investigated.
- Investigation into sulphuric acid supply and the option of producing on site may also have additional benefits in power generation from waste heat.
- Review of the configuration of the infrastructure installed for the 8Mt/a facility to cater for operation of the 16Mt/a expansion.
- Review of all permitting conditions to ensure continued compliance.

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Appendix C - JORC Code, 2012 Edition – Table 1 Report

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.*	• Samples were obtained using both reverse circulation (RC) and diamond drilling (DD) methods. • RC drill samples were collected off the rig cyclone in large plastic bags at 1m intervals. The 1m sample was split in the field by Bannerman staff using a 75/25 riffle splitter. The 75% sample was placed into a bulk sample bag from which rock chip samples were taken and placed into a chip tray for logging by the geologist. The primary sample sent to the laboratory was obtained by splitting the 25% sample until a sample of approximately 500g to 1kg was obtained. A count per minute (CPM) reading was taken from this sample using a handheld scintillometer and recorded along with the sample condition (wet, dry, and moist). If the bulk sample was wet, a spear sample was taken. Intervals of recovered samples selected for analysis were based on alaskite lithology or intersections in non-alaskites that had a CPM greater than 300. • Diamond drill core was placed in core trays after drilling and taken to the Bannerman core logging and storage facility on site at Etango Project, where it was orientated, measured, logged and marked for sampling by the staff geologist. Sample intervals were determined by the geologist after logging. The sample lengths were nominally 1m; however, sample lengths ranging from 0.5 to 1.49m were selected where a lithological boundary was intersected. No sampling was undertaken across lithological boundaries. • For both RC and core, each sampled interval was generally preceded and followed by 2.0m of shoulder samples extending out beyond the interval of interest.
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).*	• Bannerman has completed a total of 945 RC (215,480m), 137 diamond (37,392m) and 21 RAB (1,875m) drillholes, for a total of approximately 254,747m, in and around the Etango Project. This drilling provided the geotechnical, hydrological, structural, lithological and uranium grade data over the Anomaly A, Oshiveli and Onkelo prospects and the plant site area that are the subject of this resource. • The RC holes for resource definition purposes were drilled using a bit diameter of 4.72" to 5.5". • Most of the diamond drillholes for resource delineation and grade estimation purposes were drilled using NQ diameter core barrels (47.6 mm core), with the bulk of the core being orientated by spearing after each run. A total of 29 diamond drillholes were drilled for geotechnical purposes using a NQ3 core barrel (45.1 mm core) • Twenty-eight drillholes were also completed using HQ core diameter (63.5 mm core) for metallurgical test work.

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Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC samples observed in the field were of suitable size and generally of consistent high recovery. Coffey International Limited (Coffey Mining) previously recommended that the RC sample recovery be routinely recorded and entered into the drillhole database. Based on this recommendation, Bannerman field staff undertook an analysis of the RC sample recovery in 2008. The samples were weighed before they were split and all samples returned a weight of ±20kg. The rocks in the mineral resource area are competent with very little cavities. Based on the results of the investigation Bannerman determined that routine recording of this data was superfluous as the RC sample recoveries were very high. • Diamond drill core recoveries and RQD were recorded during logging, with measurements taken downhole between drill runs which were generally in 3m increments. Recoveries were generally good, with the majority > 95%. From this data it is clear that the rock is very competent with very low levels of core sample loss.
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.*	• RC drill chips were logged for geological variables including lithology, colour, texture, hardness, degree of weathering, alteration, alteration intensity etc., and a small sample was kept from each meter in plastic chip trays as a logging record. • Diamond drill core was also logged for the same geological variables as RC samples. • Core was photographed in the trays at Bannerman's sample storage facility after logging and was securely stored after sampling. • The logging of geological features in both RC chips and core was mainly qualitative, with parameters such as degree of weathering, hardness, alteration intensity etc., being visually estimated by the logging geologist. • The entire length of all holes was logged from collar to end of hole.
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.*	• RC drill samples were collected off the rig cyclone in large plastic bags at 1m intervals. The 1m sample was split in the field by Bannerman staff using a 75/25 riffle splitter. The 75% sample was placed into a bulk sample bag from which rock chip samples were taken and placed into a chip tray for logging by the geologist. The primary sample sent to the laboratory was obtained by splitting the 25% sample until a sample of approximately 500g to 1kg was obtained. A count per minute (CPM) reading was taken from this sample using a handheld scintillometer and recorded along with the sample condition (wet, dry, and moist). If the bulk sample was wet, a spear sample was taken. Intervals of recovered samples, selected for analysis, were based on alaskite lithology or intersections in non-alaskites that had a CPM greater than 300. • Up to drillhole GOADH0022, core was cut longitudinally with a diamond saw and half core sampled for analysis. The residual half core was retained in the core box for reference whereas the primary core sample was sent to SGS Lakefield in Johannesburg (SGS Johannesburg) for crushing and analysis. Subsequent to GOADH0022, only quarter core was used for primary analysis. The core depths (in metres), sample intervals and sample numbers were marked on the core for later identification. • For both RC and core, each sampled interval was preceded and followed by 2.0m of shoulder samples extending out beyond the interval of interest.
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.*	• Initially all primary RC and diamond core samples were sent to SGS Johannesburg for crushing, pulverisation and chemical analysis. SGS Johannesburg is a SANAA accredited laboratory (T0169). • The samples were analysed by pressed pellet X-ray fluorescence (XRF) for uranium (and then converted to uranium

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Criteria	JORC Code explanation	Commentary
	• *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.*	oxide (U_3O_8) by calculation), niobium (Nb) and thorium (Th); and by borate fusion with XRF for calcium (Ca) and potassium (K). • Since December 2008, the sample preparation stages have been completed at SGS Swakopmund and pulp samples have then been forwarded to SGS Johannesburg for the analysis. Analysis for Ca and K was discontinued in March 2009. • Since December 2007, standards and blanks have routinely been inserted into the sampling stream at a nominal rate of 1:20. • RC field duplicate samples were sourced from the 75% reject as well as diamond core duplicates taken at the rate of 1 in every 20 primary samples. The sampling method was the same as used for the primary sample. Field duplicate samples were sent to Genalysis Johannesburg, and since January 12 2009 to SGS Johannesburg for assaying. • Based upon Coffey Mining's analysis of the duplicates data and the laboratory-based standards data, the Bannerman assaying is considered to meet acceptable industry standards for sample accuracy and precision and is acceptable for use in resource estimation studies. • From November 2007, Bannerman has used the Acquire commercial database software system to manage its drillhole data. The use of such database management software is considered to be of high industry standard as it enables the incorporation of large datasets into an organised, auditable structure. • Checks by Coffey Mining have identified no material issues with the database and it is considered acceptable for use in resource estimation.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Drilling and sampling operations were supervised by Bannerman geologists and samples were promptly bagged and taken to the onsite storage facility at Etango Project prior to shipment to the assay laboratory. It is considered that Bannerman has appropriate provisions in place to safeguard the sample security. • Bannerman has drilled eight pairs of Diamond/RC twinned-holes at its Anomaly A deposit since the commencement of exploration activities in 2006. The twinned-holes were drilled as a means of verifying mineralization intersection thicknesses as well as mineralization grades. Analysis has shown that there is no bias in the thicknesses of matching intersections of Diamond and RC twinned-holes as they are very similar and compare very well to each other across all thickness ranges. • Analysis of matching pairs of composite Diamond and RC length-weighted assay grades within a 5m radius of each other indicated that Diamond U_3O_8 grades are generally higher than those of RC. • Coffey Mining has visited the SGS Johannesburg facility and considered it to be well run and that the preparation and analytical methods used by SGS Johannesburg are appropriate. • Coffey Mining visited the Etango Project site during April 2008 and collected samples for the purposes of independent sampling. A total of 40 RC samples were collected directly after drilling and splitting and placed into plastic bags with numbered security tags attached. Once tagged, the bags were sent to Bannerman's sample storage yard for processing. • Ten diamond samples were also collected at Bannerman's core shed, and then placed in plastic bags with numbered security tags attached. The tagged samples were then sent to the SGS Johannesburg laboratories, where the security tags were inspected by Coffey Mining personnel, prior to sample preparation. • The results illustrated typical examples of mineralisation from the property.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine*	• All drillholes were surveyed for collar position and downhole deviation. • Bannerman uses Ellipsoid WGS84 and Projection UTM Zone 33 South as the coordinate system.

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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.*	• All but eight (8) drillhole collars were surveyed by licensed surveyors after drilling. The remaining eight holes were surveyed by Bannerman employees using a handheld Garmin GPS. • Drillhole azimuths were measured with reference to magnetic north. Drillholes have been surveyed with either a Leica Total Station or Leica GPS. All recorded coordinates are to within +/- 5cm in XYZ, with a greater accuracy for collars surveyed using the Leica Total Station. Collar coordinates surveyed by Bannerman with the handheld Garmin 60CSx GPS are to within +/- 3m in the XYZ. • Downhole directional surveys were initially taken using an Eastman single shot camera at nominal 30 m intervals (the first few holes only); however, for the vast majority of holes the practice has been to survey drillholes using a three component Fluxgate Magnetometer survey tool following completion of the drilling.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drilling has been conducted on a nominal 50 m x 50 m, to 50 m x 100 m drill spacing, with the bulk of the 50 m x 50 m drilling being completed in the area of the likely open-pittable resource. • A relatively small area of 25 x 50 m spaced drilling has also been completed in the centre of the Project area. • Drilling along strike and down-dip of the main mineralisation has targeted extensions to the mineralised zones and has been drilled on a nominal 100 m x 50 m spacing. • Composite RC drill samples were collected off the rig cyclone at 1m intervals, whereas diamond core was also sampled at 1m composite intervals; however, in core, sample lengths ranging from 0.5 to 1.49m were selected where a lithological boundary was intersected. No sampling was undertaken across lithological boundaries.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Due to the relatively shallow dip of the mineralised alaskite bodies (approximately 15-40° to the west) and the inclination of the RC and diamond drillholes (generally -60° to the east), the length of the drillhole intercepts are regarded as being close to the true thickness of the mineralised intervals. There is considered to be no bias due to the orientation of the drilling.
Sample security	• *The measures taken to ensure sample security.*	• Diamond drill core and RC samples (after initial splitting in the field) were taken daily from the field to Bannerman's secure storage facility on site at the Etango Project. • The prepared and packaged diamond core and RC samples for assaying were stored in the facility prior to pick up via courier. • All crushing, pulverising and splitting of the samples, subsequent to the original field splitting, was performed by a reputable assaying laboratory (SGS).
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Auditing and review of sample techniques and data has been carried out by Coffey Mining, an Australian-based international consulting firm specialising in the areas of geotechnical engineering, hydrogeology, hydrology, tailings disposal, environmental science and social and physical infrastructure. • The drilling, sampling and storage procedures used by Bannerman meet industry acceptable standards and the samples were considered by Coffey Mining to be of good quality and accuracy for the purposes of mineral resource estimation.

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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 Etango Project Mining Licence (ML) 250 is owned by the Namibian company Bannerman Mining Resources (Namibia) (Pty) Ltd (Bannerman Namibia), previously called Turgi Investments (Pty) Ltd (Turgi), which manages the Project. Bannerman Energy owns 95% of Bannerman Namibia, while the remaining 5% is held by the One Economy Foundation (OEF), a not-for-gain organisation in Namibia. • The initial Exclusive Prospecting Licence (EPL) 3345 (part of which has now been converted to the Mining Licence, ML250 where the Etango Project is located) was granted to Turgi Investments (Pty) Ltd, now Bannerman Namibia, on 27 April 2006, for an initial three-year period to explore for Nuclear Fuels. The first application for renewal for EPL 3345 was granted on 26 April 2009 for an additional two years without any reduction in area. The second application for renewal for EPL 3345 was granted on 27 April 2011 for an additional two years, with a 2.7% reduction in area followed by a third application for renewal with a 50% reduction in size granted from 27 April 2013. The fourth renewal was granted on the 27 April 2015 with no reduction in size. The fifth renewal was granted on the 27 April 2017 with a 25% reduction is size. On the 7 August 2017 part of the EPL 3345 was granted as a Mineral Deposit Retention Licence (MDRL 3345) for five-year extendable term with an area of 7 295 ha in size. The Retention Licence providing exclusive rights to tenure and the right (without obligation) to continue with exploration or development work. Bannerman submitted a Mining Licence (ML250) application on 3 August 2022 over the same area as the MDRL3345. The Mining Licence ML 250 was granted on the 14 December 2023 by the Ministry of Mines & Energy over the same area of 7 295 ha. • On 17 December 2008, Bannerman announced that its Namibian subsidiary, Bannerman Namibia, had entered into an agreement to settle the litigation previously brought by Savanna Marble CC (Savanna) and certain associated parties. Under the terms of the settlement agreement, Savanna agreed to discontinue its review application in the High Court of Namibia by which Savanna had sought a declaration that the grant by the Minister of Mines and Energy of Namibia of EPL 3345, on which the Etango Project is situated, was void. This settlement involved payments and the issue of shares to Savanna (as Bannerman has previously disclosed in public documents) and has removed any disputes to Bannerman's title to the Etango Project. The final payment and issue of shares to Savanna took place in December 2023 following the granting of the Mining Licence. All terms of the agreement with Savanna are now complete. • The mining royalty is currently stipulated by the Namibian Government to be 3% of revenue and the export levy on uranium at 0.25%. • Bannerman lodged an Environmental and Social Impact Assessment (ESIA) with the Namibian Ministry of Environment, Forestry and Tourism for open pit mining and heap leach processing. Formal Environmental Clearance was received in July 2012 valid for three years. The Environmental Clearance was renewed in 2015, in 2018 and then again in 2021 and is currently valid until 09 September 2024. Environmental clearance for the location and design of an infrastructure corridor for the access road, and water pipeline to the Etango Project was granted by the Ministry of Environment and Tourism in February 2013 valid for three years. This was renewed in 2016, 2019 and 2022 and is currently valid until 14 May 2025. Additional Environmental Clearances include: (i) the Environmental Clearance for an Electrical Transmission Line to the Etango Project currently valid until 23 August 2025, and (ii) the Environmental Clearance for a water pipeline from Swakopmund to the access turn-off the Etango Project currently valid until 10 August 2025. An Environmental Clearance application for the construction water pipeline was submitted on 5 September 2022 while

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Criteria	JORC Code explanation	Commentary
		the complete EIA documentation was submitted on 25 November 2022 for the Environmental Clearance process.The Environmental Clearance to conduct exploration activities and operate the Heap Leach Demonstration Plant on MDRL 3345 (now ML250) is valid until 4 August 2024. • No substantiative legislative, environmental, or social impacts have been identified for development of the Etango Project. The Erongo region already hosts several other large uranium producing operations, and uranium mining and processing is well understood in the local communities and by Government regulatory authorities. • The Etango Project enjoys local community support and is expected to have a significant positive impact on the Erongo Region and Namibian national economies, including local employment and skill training.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• In the 1970s the then South West African Geological Survey conducted a regional reconnaissance airborne radiometric survey that was followed by a further detailed spectrometer-magnetometer survey in 1974 over an area exceeding 100,000ha. Analysis of the airborne survey identified a broad thorium and uranium/thorium anomaly along the western flank of the Palmenhorst Dome. Prospect scale exploration within the Etango Project area commenced in 1975 with 134 percussion holes being drilled in the Anomaly A area. The exploration by previous owners was not conducted on behalf of or by Bannerman and little information remains available on this work. • From 1976 to 1978, Omitara Mines (a joint venture between Elf Aquitaine SWA and B & O Minerals) (Omitara) drilled 224 mostly vertical percussion drillholes on a reconnaissance grid of 400m north by 75m to 100m east along the western Palmenhorst Dome position and a reduced grid in some areas of 200m to 100m by 75m near the Anomaly A area. The percussion drillholes totalled 13,383m with depths ranging from 50 to 100m. An additional 9 diamond drillholes were drilled for a total of 2,100m. Holes drilled during this period were analysed variably by chemical assaying (X-ray fluorescence) and downhole gamma-ray spectrometry (calibrated at Pelindaba). Chemical assay results in the region of Anomaly A ranged up to the low thousands of ppm U_3O_8. • A total of 6,800m of trenching was completed using a Poclain Excavator to obtain exposure of the alaskites which were under the superficial cover of the Namib plain in the southwest of the Project area. The remnants of the trenching can still be seen today. Omitara also performed airborne radiometric surveys. • Mouillac, et al. (1986) mentions that by the beginning of 1978 “potential reserves are estimated to be several tens of millions of tons with a low average ore-grade”. • From 1982 to 1986 Western Mining Group (Pty) Ltd conducted regional mapping and drilled 22 percussion drillholes for 1,017m and conducted surface scintillometer surveys. A resource was estimated in 1986, but no historic figures are available. As a result of a dramatic decrease in the price of uranium in the 1980s exploration for this commodity all but ceased until 2005. • The exact sampling methods used for the historic drilling are not available and are not considered relevant to this report, as this drilling has not been included in any modelling or mineral resource work.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Primary uranium mineralisation in the Etango Project area is related to chloritized leucogranites, locally referred to as alaskites. The alaskites are often sheet-like, and occur both as cross-cutting dykes and as bedding and/or foliation-parallel sills, which can amalgamate to form larger, composite granite plutons or granite stockworks, made up of closely-spaced dykes and sills. These alaskite intrusions can be in the form of thin cm-wide stringers or thick bodies up to 200 m in width.

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Criteria	JORC Code explanation	Commentary
		• The alaskite bodies have intruded into the metasediments of the Nosib and Swakop Groups of the Damara Supergroup. These metasediments and alaskite intrusions flank the Palmenhorst Dome which is cored by Mesoproterozoic (1.7 2.0 Ga) gneisses, intrusive rocks and meta-sediments of the Abbabis Metamorphic Complex. • Uranium mineralisation in the Etango Project area occurs almost exclusively in the alaskite intrusives. Minor uranium mineralisation is also found in the metasedimentary sequences close to the alaskite contacts, probably from metasomatic alteration and in minor thin alaskite stringers within the metasediments. • The dominant primary uranium mineral is uraninite (UO_2), with minor primary uranothorite ($(Th,U)SiO_4$) and some uranium in solid solution in thorite (ThO_2). The uraninite is commonly associated with chloritized biotite in the alaskites and with ilmenite and magnetite within foliated alaskites. The primary uranium mineralisation occurs as microscopic disseminations throughout the alaskite, at crystal interfaces, and as inclusion within other minerals. Secondary uranium minerals such as coffinite ($U(SiO_4)(OH)_4$) and betauranophane ($Ca(UO_2)_2(SiO_3OH)_2{}_5H_2O$) occur as replacements of the primary minerals or as coatings along fractures. • QEMSCAN analysis indicates that about 81% of the uranium present is in primary uraninite, while 13% is in secondary coffinite and 5% is in secondary betauranophane (Freemantle, 2009). The remaining 1% of the uranium occurs in various minor phases including brannerite, betafite and thorite. Very minor amounts of uranium are also present in solid solution in monazite, xenotime and zircon. A very minor amount of primary betafite $(Ca,U)_2(Ti,Nb,Ta)_2O_6(OH)$ is also present.
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.*	• Most drillholes at Etango since Bannerman's ownership have been detailed in ongoing market releases.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short*	• Since a constant density is used, average intercept grades are simply length-weighted composites with no other cutting applied for reporting purposes. • Summary statistics of the sample length indicates that approximately 97.5% of the samples were collected at 1m intervals. Of the remainder, 1.5% were sampled at intervals <1m and 1% at intervals >1m. • No metal equivalents have been or are required to be reported.

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Criteria	JORC Code explanation	Commentary
	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.*	
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').*	• Due to the shallow dip of the mineralised alaskite bodies (approximately 15-40º to the west) and the inclination of the RC and diamond drillholes (generally -60° to the east), the length of the drillhole intercepts are close to the true thickness of the mineralised intervals.
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.*	• Relevant figures and tabulations are presented in the main text and Appendices.
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.*	• Relevant significant intercepts encountered in various exploration drill holes have been disclosed in prior public releases. • The data used in the current resource estimation is representative of mineralisation at the Etango Project. • Sample intercepts have been composited to 3m during resource estimation to ensure that all data is appropriately weighted. • Appropriate top cutting was applied to manage the impact of high-grade outliers on the resource estimates.
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.*	• Bannerman constructed a Heap Leach Demonstration Plant during Q4 2014 and Q1 2015 with the official opening on 24 March 2015. The Plant allows large column leach testing to be performed on ~30t samples. • A bulk sample consisting of approximately 3,000 tonnes of uranium bearing alaskite (ore) and approximately 300 tonnes of non-uranium bearing diamictite (waste) from the Chuos formation was collected at two separate locations approximately 300m apart. The ore sample covered an area of 12m x 26m situated over outcropping alaskites and the waste sample covered an area of 5m x 10m situated over outcropping metasediments of the Chuos formation. • A total of 98 blast holes were drilled to 4.5m depth at the ore sample site on a grid of 1.8m x 2.0m. All the holes on the ore sample were sampled in order to get a good indication of the grade of the ore sample. Drilling was done using a conventional blast hole drill rig (open hole percussion drilling) with a 89mm button bit. One composite sample was collected for each blast hole by collecting all the drill cuttings from the hole on a plastic sheet and splitting it through a 75/25 riffle splitter till a sample of approximately 1kg was obtained. All samples (98) were submitted to the Bureau Veritas Laboratory in Swakopmund for ICP-MS analysis for U, Th, Nb.

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		• A total of 35 blast holes were drilled at the waste sample site to depths ranging from 1.5m to 4.5m. Only 5 holes were sampled (in the same way as at the ore sample) in order to be sure that there is no significant mineralisation in the waste sample. All samples (5) were submitted to the Bureau Veritas Laboratory in Swakopmund for ICP-MS analysis for U, Th, Nb. • Extensive metallurgical testwork has been performed at the Heap Leach Demonstration Plant the results of which have all been disclosed in prior public releases.
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.*	• No more drilling is planned for Etango-XP or Etango-XT at this stage.

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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.*	• The database was supplied by Bannerman in csv format, which was then combined into a geological database for use in the resource estimation. • Data was assumed by Snowden Optiro (Optiro) to be correct. Optiro has verified a selection of drillhole collars during a site visit with a handheld GPS and found no errors.
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.*	• Optiro carried out a site visit to the Etango Project on the 3rd of September 2015. Ian Glacken (Director), who is acting as Competent Person, inspected the deposit area, the core logging and sampling facility, and diamond core and RC chips were also viewed. During this time, notes and photos were taken along with discussions held with site personnel regarding the available drill core and procedures. A number of minor recommendations were made on procedures but no material issues were encountered.
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 confidence in the geological interpretation is considered moderate, but has been mitigated to a degree by the modelling approach chosen. Geological domains used to constrain the grade estimation were generated using a Categorical Indicator Kriging (CIK) approach based on a two-stage flagging approach which used the lithology and grade information from downhole logging. Wireframes were generated from the probability estimates and were validated by visual inspection, volumetric assessment and statistical investigation. A secondary wireframe was also used to restrict the grade estimation to areas covered by drilling and consequently limit the uncertainty in the interpretation. • The drillhole data was coded on lithology prior to compositing. For the alaskite dominant (AD) mineralisation, if a composite contained more than 1/3 alaskite and ≥ 50ppm U_3O_8 then composite was retained. For the alaskite sub-dominant (ASD) mineralisation, no constraint on the lithology was used. The Etango deposit was separated into 3 domains. These areas are based on local changes in strike and dip directions of the mineralised trend throughout the deposit. The North Domain is defined as areas >7,488,950mN, the Mid Domain is defined as ≤7,488,950mN and ≥7,487,450mN and the South Domain as <7,487,450mN. • The selection of a different probability threshold for the grade shell would affect the volume of the mineralisation envelopes; however, they reflect the broad trends of the alaskite bodies. • Lithology logging codes were used to flag the drillhole data used in the creation of the estimation domain shells. • Utilisation of a CIK approach to generate the estimation domains includes a small percentage of below cut-off composites into the estimate. Assessing the amount of sub-grade material forms one of the criteria in assessing the selection of an appropriate probability grade shell. The shell is designed to reflect the broad continuity of both the alaskites and the grade continuity of the mineralised zones within the alaskite host.
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 Etango Project Mineral Resource area has dimensions of 7,000 m (north) by 4,200 m (east) and 500 m (elevation). It primarily includes the Etango deposit, as well as the smaller Hyena and Ondjamba deposits, which are not described in this Table 1 as they have been reported under JORC 2004.

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Criteria	JORC Code explanation	Commentary
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.* • *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.*	• Domaining: A Categorical Indicator Kriging (CIK) modelling approach was used to model the mineralisation domains used to constrain the grade estimation. For the main Alaskite Dominant (AD) mineralisation, drillhole sample data was flagged on the presence of alaskite (the host lithology) prior to compositing to 3 m. Compositing to 3 m was completed using a best fit method and there were no residuals. If more than 1/3 of the composite contained alaskite the composite was retained. A second flag, where U_3O_8 ≥50 ppm, was then applied. The probability estimate was completed on each of the three orientation domains, using a single search pass with a minimum of 1 and a maximum of 8 samples. A series of wireframes at various probability cut-offs were generated. The wireframe representing the 0.4 probability grade shell was deemed the most appropriate to represent the AD mineralisation after analysis by visual inspection, volumetric assessment and statistical investigation. For the Alaskite Sub-Dominant (ASD) mineralisation, all samples outside of the AD grade shell were retained (regardless of lithology) and were composited to 3 m. A threshold of 50 ppm was then used to code the composites. A probability estimate was completed on each of the three orientation domains using a single search pass of no more than 185 m (X) by 135 m (Y) by 18 m (Z) with a minimum of 4 and a maximum of 24 samples. A series of probability cut-offs was analysed and the wireframe representing the 0.4 probability was deemed the most appropriate in delineating the ASD mineralisation on the basis of statistical analysis and visual comparison. • Grade Estimation: Grade estimation for Etango was completed using Ordinary Kriging (OK) within the CIK grade shells for the AD and ASD domains. Grade estimation was carried out in Isatis and Datamine Studio 3 using a parent block of 25 m E by 25 m N by 8 m RL. A regular 3 m composite length was selected based on the geological setting and mining, including likely mining selectivity and bench/flitch height. For the AD mineralisation, compositing was stopped at the grade shell boundary and residuals of less than 1.2 m were retained by combining with the previous composite. Compositing within the ASD mineralisation was completed prior to flagging within the probability wireframes and composites were selected if the centroid of the sample composite was within the ASD grade shell wireframe. Top cuts were applied to all estimation domains; 1700 ppm to the mid AD and north AD domain, and 1300ppm to the south AD domain, and a top cut of 900ppm was applied to all ASD domains. For the AD mineralisation, two search passes were used with progressively larger and less restrictive searches. The search parameters were defined based on the variography of each AD domain as well as the data spacing. In general, for the AD domains, the first search was 100 m (X) by 100 m (Y) by 40 m (Z) and utilised 24 to 36 samples. This was extended up to 500 m (X) by 500 m (Y) by 120 m (Z) using 12 to 24 samples in the successive pass. For the minor ASD mineralisation, three search passes were utilised; the first and second search both averaged 200 m (X) by 120 m (Y) by 6 m (Z) and utilised a minimum of 3 (or 2) to 24 samples. This was extended to 10 times these ranges by the third pass and a minimum of 2 samples used. Over 90% of the ASD estimate was informed by the second pass. Soft domain boundaries were used between the orientation domains for both mineralisation styles. Discretisation was set to 7 (X) by 7 (X) by 5 (Z) for the AD domains and 10 (X) by 10 (Y) by 4 (Z) for the ASD domains. • Post-Processing: Local Uniform Conditioning (LUC) was applied to the Etango estimate using a SMU of 2.5m E by 5m N by 4 m RL. An Information Effect correction, assuming 3 m E by 3 m N by 1 m RL drilling, was applied, reflecting the likely grade control spacing. LUC was completed in Isatis for the AD domains and in Datamine Studio 3 using an in-house program for the ASD domains. The Mineral Resource quoted is the LUC estimate. • The Mineral Resource for Etango was completed by Optiro in June 2015 and was subject to pit optimisation using a uranium price of US$75/lb with reporting above a cut-off of 55ppm U_3O_8. No additional resource drilling campaigns or modelling work has been conducted since the June 2015 Mineral Resource update. In November 2021, Optiro

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nevertheless, was commissioned to review the June 2015 Mineral Resource, using the same 2015 pit optimisation shell, but this time reporting the Mineral Resource Estimate above a cut-off of 100ppm U_3O_8, labelled as the November 2021 Mineral Resource. The November 2021 Mineral Resource Estimate formed the basis of the Etango-XP and Etango-XT Scoping Study, which uses a marginal cut-off grade of 100ppm U_3O_8.

The Mineral Resource Estimates are shown below reflecting the different cut-off grades:

November 2021 Etango Mineral Resource estimate reported at a cut-off grade of 55 ppm U_3O_8

Reported at a cut-off grade of 55 ppm U_3O_8, constrained within the resource pit shell			
Resource Category	**Tonnes (Mt)**	**Grade (U_3O_8 ppm)**	**Contained U_3O_8 (Mlbs)**
Measured	32.4	201	14.3
Indicated	345.7	195	148.5
Inferred	140.6	200	62.0
Total	**518.6**	**197**	**224.9**

November 2021 Etango Mineral Resource estimate reported at a cut-off grade of 100 ppm U_3O_8

Reported at a cut-off grade of 100 ppm U_3O_8, constrained within the resource pit shell			
Resource Category	**Tonnes (Mt)**	**Grade (U_3O_8 ppm)**	**Contained U_3O_8 (Mlbs)**
Measured	26.6	226	13.3
Indicated	276.9	223	136.4
Inferred	112.5	230	57.1
Total	**416.1**	**225**	**206.8**

- There are no by-products.
- There are no relevant deleterious elements or non-grade variables of any major significance.
- The parent block used for the OK panel estimate was 25 m E by 25 m N by 8 m RL. The average drill spacing across the deposit is between 50 x 50 and 200 x 200. Subcelling was completed down to 2.5 m E by 5 m N by 4 m RL, which was the size of the SMU used in the post-processing routines.
- There is only one variable of interest, U_3O_8 (ppm).
- The geological interpretation of the grade shells was used to define the estimation domains for both the ASD and AD mineralisation domains.
- Statistical analysis showed the populations in each domain to generally have a low coefficients of variation (between 0.92 and 1.41), but it was noted that some of the estimation domains included outlier values that required grade cutting to be applied. Top cuts were chosen based on a combination of analysis techniques, including statistical analysis, population disintegration and review of statistical plots.

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Criteria	JORC Code explanation	Commentary
		• Validation of the block model included global comparison of the OK block model domain grades to the declustered and top cut input data and swath (profile) plots showing northing, easting and elevation comparisons. Visual validation of LUC and OK grade trends and metal distribution was carried out. The LUC block model was compared to the OK block model at a 0 ppm cut-off on a domain basis.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnes were estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Etango Mineral Resource was modelled using a 50 ppm U_3O_8 grade threshold. The resource has been reported above a 55 ppm U_3O_8 cut-off in the June 2015 Mineral Resource Estimate and above a 100 ppm U_3O_8 cut-off in the November 2021 Mineral Resource Estimate reflecting the marginal cut-off grade defined in Etango-8 and the Etango-XP and Etango-XT Scoping Study mining optimisation studies.
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 SMU of 2.5 m E by 5 m N by 4 m RL has been chosen based on a review of a range of sizes and the response of the estimate to those sizes. This SMU size is considered to be in line with similar deposits and similar mining methods in the local vicinity (e.g. Rössing). • The recoverable resource methodology (OK-LUC) is believed to partially incorporate mining dilution. In addition to the grade control approach (radiometric probing of blastholes) a further highly selective discriminant will be the use of truck scanning technology.
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 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.*	• The planned metallurgical process was determined following extensive metallurgical test work. The metallurgical process comprises three stages of crushing, agglomeration, followed by sulfuric acid heap leaching on an industry standard on/off heap leach pad followed by ion-exchange and nano-filtration extraction and drying. • Key metallurgical assumptions include: ✓ The expansion (Etango-XP) the facility's expansion by an additional 8Mt/a to a total capacity of 16Mt/a of ore, ✓ The extension (Etango-XT) of the Etango-8 Life-of-Mine (LOM) past the current 15-year mine life while maintaining the processing throughput rate at 8Mt/a, ✓ Metallurgical Recovery of 87.8%, and ✓ Total Sulphuric Acid consumption of 17.14 kg/t ore leached. (based on 100% concentration).

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Criteria	JORC Code explanation	Commentary
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.*	• Detailed waste and process residue designs were conducted during the Etango-8 2022 DFS. This process included geochemical characterisation and modelling of surface water and ground water impacts. Further details are reported in Section 4. • Bannerman lodged an Environmental and Social Impact Assessment (ESIA) with the Namibian Ministry of Environment and Tourism for open pit mining and heap leach processing. Formal Environmental Clearance was received in July 2012 valid for three years. Further renewals were granted in 2015, 2018 and 2021. The clearance may be further renewed and has current validity until September 2024. Environmental clearance for the location and design of an infrastructure corridor to the Etango Project was granted by the Ministry of Environment and Tourism in February 2013 and has been renewed in 2016, 2019 and 2022. The current Environmental clearance for the infrastructure is valid until May 2025. Further Environmental Clearances have been granted – (i) an Environmental Clearance for a 132kV electrical transmission line to the project valid until August 2025 and (ii) an Environmental Clearance for a main freshwater pipeline from the town of Swakopmund to the infrastructure corridor leading to the mine also valid until August 2025.
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.*	• There has been extensive density testing of both the alaskites and the metasediments from the Etango Project and the density is largely invariant. A default value of 2.64 t/m^3 has therefore been applied to all rock units and weathering types. The degree of surface weathering is minimal. Density measurements have been taken on core samples using a water-displacement approach. Voids or cavities in the rock are almost non-existent, so the specific gravity can be used as a proxy for the bulk density.
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 Mineral Resource has been classified into Measured, Indicated and Inferred categories on the basis of geological and grade continuity, drillhole spacing and estimation quality. The Measured category was applied to blocks which were informed either in pass one or two, where the drill spacing was 25m x 25m or 25m x 50m, and where the slope of regression statistic was generally greater than 0.9. The Indicated category was applied to blocks estimated in the first or second pass, where the drill spacing was nominally 50m x 50m or 100m x 100m, where the grade tenor was moderately consistent and where the slope of regression was between 0.3 and 0.9. Any material which did not meet the criteria for Measured or Indicated was allocated to the Inferred category, apart from extrapolated or laterally-extensive mineralisation which was set to potential using a number of 'unclassify' solids. All of the ASD material was classified as Inferred, reflecting the lower confidence in the geological continuity of these zones. The classification does consider data quality, geological confidence and grade continuity. • The classification applied does reflect the Competent Person's view of the deposit, and indeed was applied by the Competent Person.

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Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource Estimate of June 2015 at Etango reflects work carried out by International Resource Solutions, a consultant to Bannerman, which has been thoroughly reviewed by Optiro. A number of changes were made as a consequence of the review, including the modelling of the ASD mineralisation, which was carried out by Optiro. The classification incorporated the work of Optiro and Bannerman staff. In November 2021 Optiro reviewed the existing June 2015 Mineral Resource and re-declared the 2015 Mineral Resource at a cut-off grade above 100ppm U_3O_8, termed as the November 2021 Mineral Resource
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 Mineral Resource Estimate has not been subject to rigorous assessment of accuracy and confidence using any numerical or probabilistic approach. Areas of potential uncertainty are the detailed morphology of the alaskite bodies, the degree to which the current volume may change upon infill drilling, and the continuity of the ASD zones, which have been assumed to be relatively discontinuous in this estimate. Grade confidence, as defined by grade continuity modelling, is believed to be high. Data quality is high as reflected by the QAQC work. • The current Mineral Resource classification is believed to represent estimates suitable for scheduling on a minimum quarterly or six-monthly production interval, i.e. the production scale required for a DFS once mining modifying factor conversion has been achieved. • In November 2021 Optiro reviewed the Etango Mineral Resource estimate, first signed-off by Optiro in 2015 as part of a 2015 Etango Optimisation Study. There are no changes between the 2015 and 2021 Mineral Resource model, both being reported within a US$75/lb pit shell. The June 2015 Mineral Resource Estimate was reported above a cut-off grade of 55ppm U_3O_8 while the November 2021 Mineral Resource Estimate was constrained to the same pit shell, this time reported above a cut-off grade of 100ppm U_3O_8. Both estimates are reported in accordance with the JORC Code (2012). • No production data is available other than detailed grade control from a small trial mining exercise, which demonstrated a greater degree of grade continuity than currently assumed.

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Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• **No Ore Reserve has been declared for the Scoping Study.** • The November 2021 Mineral Resource Estimate as described in preceding sections of this Table was used as the basis of the Etango-XP and Etango-XT Study. • The November 2021 model employed a Uniform Conditioning (UC) estimation approach. This is a recoverable resource estimation technique, based upon ordinary kriging into large blocks (panels), which seeks to predict the resources available at the time of mining using the assumption of a selective mining unit (SMU) related to the production rate and equipment. This technique was used to model the selective mining unit consistent with the mining method, which employs radiometric truck scanning as currently adopted at neighbouring open pit uranium mines. .
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.*	• A site visit to the Etango deposit was undertaken by Mr Werner Moeller from Qubeka Mining Consultants, who is the Competent Person, and has been involved with the Project since 2011. Mr Moeller did the complete mining study for the Etango-8 Project which forms the basis of the Etango-XP and Etango-XT Scoping Study. This included discussions with technical personnel and conducting an inspection of the geology and the terrain.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• **No Ore Reserve has been declared for the Scoping Study.** • The Etango Project has benefited from extensive exploration and feasibility activity over the past 15 years. • A 20 Mt/a development at Etango was the subject of the 2012 Definitive Feasibility Study (2012 DFS) and a DFS Optimisation Study (2015 OS) completed in 2015. • Bannerman has also constructed and operated a Heap Leach Demonstration Plant at Etango, which has de-risked the acid leach process to be utilised on the Etango material. • In July 2021, Bannerman completed a Pre-feasibility Study (PFS) in 2021 and a DFS in 2022 on the 8Mt/a development of Etango called the Etango-8 Project. • The Etango-8 Project has demonstrated that this accelerated, starter-scale Project is strongly amenable to development – both technically and economically. • While the Etango-8 Project provides a reduced scale of production entry, it does so without removing the option of subsequent expansion, including the envisaged initial 20 Mt/a Etango scale. Towards the end of 2023, Bannerman began reviewing various Project up-scaling opportunities that might exist during the Etango-8 life-of-mine (LOM). This 2024 Etango-XP and Etango-XT Scoping Study, investigates a process to evaluate the following options: ✓ The expansion (Etango-XP) the facility's expansion by an additional 8Mt/a to a total capacity of 16Mt/a of ore, and ✓ The extension (Etango-XT) of the Etango-8 Life-of-Mine (LOM) past the current 15-year mine life while maintaining the processing throughput rate at 8Mt/a. • The Etango-XP and Etango-XT Scoping Study has benefited from this previous detailed work by: ✓ Utilising the geological model as described in the preceding sections of this table,

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Criteria	JORC Code explanation	Commentary
		✓ Updating the capital and operating cost estimates to ensure that these are current, and ✓ Updating the mining study to reflect the above changes in geological and economic parameters. • This is a scoping study and work has been carried out to an appropriate standard for this level of study. • The financial model developed internally by Bannerman was utilised for the Etango-XP and Etango-XT Scoping Study.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• The mill limiting cut-off grade (sometimes referred to as the marginal cut-off grade) for the project was calculated based on the economic parameters stated below ✓ Processing Cost, ✓ Selling Cost, ✓ G&A costs, ✓ Government Royalty, ✓ U_3O_8 Price, and ✓ Metallurgical Recovery. • The resultant cut-off grade used for ore reserve estimation was 100ppm U_3O_8. • During mine scheduling a variable cut-off grade approach was undertaken whereby the cut-off grade was changed on a period-by-period basis to enhance the project value.
Mining factors or assumptio ns	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected*	• The mineral resource model applied local uniform conditioning (to a panels of 25mE x 25mN x 8mRL estimated utilizing ordinary kriging) to estimate the grade in an SMU of 2.5 m E by 5 m N by 4 m RL which was chosen to represent the selectivity associated with radiometric truck scanning. • No further dilution and mining loss were applied to model as the SMU (of 2.5 m E by 5 m N by 4 m RL) utilized in the model is greater than the proposed mining method selectivity utilizing radiometric truck scanning. The ratio of SMU to truck size corresponds well with what neighbouring and other open pit uranium mines that employ this technique as reported in the literature. • Pit optimisations utilising the Lerchs-Grossmann algorithm (with Whittle Four-X) were undertaken to determine the economic limits of the open pit. The optimisation utilised the resource model described in preceding sections of this table, together with cost, revenue and geotechnical inputs. The resultant pit shells were used to develop detailed pit designs with due consideration for the geotechnical, geometric and access constraints. These pit designs were used as the basis for production scheduling and economic valuation utilising discounted cash flow methods to confirm economic viability. • Pit optimisation was confined to Measured and Indicated Resources with Inferred Resources treated as waste during this process. • Conventional drill, blast, loads & haul open pit operations were assumed consistent with operations in nearby located uranium mines. ✓ The Etango-XTStudy mining equipment make-up will remain unchanged compared to the Etango-8 DFS, and ✓ The mining was modelled based on mining equipment comprising 100-tonne class off-road haul trucks and 130-tonne excavators employed in back-hoe configuration for ore mining and 250-tonne face shovels for waste mining.

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Criteria	JORC Code explanation	Commentary
	mining methods.	• Bearing in mind that at the peak mining production between Years 6 to 14, a total of 60 Mt to 90 Mt of material needs to be moved for the Etango-XP Study business case, the following truck and shovel match on the ore and waste benches have been considered: ✓ A 200-t hydraulic backhoe shovel would be employed for selective ore mining, ✓ While a 400-t hydraulic backhoe shovel would be utilised for bulk waste-loading purposes, and ✓ A 180-t capacity, off-highway rigid haul truck and standard open-cut drilling and auxiliary equipment will be required in both cases. • Capital and operating cost assumptions were based on contractor mining. • The geotechnical parameters applied during the mine design process was based on a detailed geotechnical study conducted by Coffey mining in 2012 as part of the then DFS and which was informed by 26 geotechnical drill holes drilled to collect rock quality and structural data. In June 2022 Mine Technics did a geotechnical review and the resultant geotechnical recommendations are suitable for implementation at DFS level of reliability and are shown for the three pits of the Etango-8 Mine below.

Small Satelite Pits

	From-To Level	BH	BFA	BW	ISA toe-to-toe	Stack Height	12m Benches	Ramps on Slope	Stack Height	15m-wide De-couple Berms	
	mRL	m	deg	m	deg	m	No	No	m	mRL	
ALL SLOPES	280	12									Favourably tight concave slopes.
	136	24	80	9.6	60	144.0	12	2	48	N/R	**BUT: Single ramp access: Widen 20% to 30m** in larger southern satelite pit

Legend

mRL	Mining Level
BH	Bench Height
BFA	Bench Face Angle
BW	Berm Width
ISA	Inter-ramp Slope Angle
RW	Ramp Width
HW	Hanging-wall / Highwall Slopes
FW	Footwal Slopes
N/R	Not Required
Pb	Pushback
WS	Western Slopes (=HW)
ES	Eastern Slopes (=FW)
NS	Northern (Concave) End Slopes
SS	Southern (Concave) End Slopes

SOUTH PIT (E8_P2_pb1-5)
(Anomaly A, South)
Mining Years 1 and 7 to 14

Slope Direction	From-To Level	BH	BFA	BW	ISA toe-to-toe	Stack Height	12m Benches	Ramps on Slope	Stack Height	15m-wide De-couple Berms	
095°±30°	mRL	m	deg	m	deg	m	No	No	m	mRL	
HW											**HW design applies in CGN (+GR+GA)**
	292	12									Average surface elevation
	268	24	70	10.4	51	24.0	2	1		N/R	Local HW + MW zones (deeper in places)
	184	24	75	10.4	55	84.0	7	1	42	N/R	Faults along and below the ramps
	100	24	80	9.6	60	84.0	7	1	42	N/R	Favourably tight concave slopes.
	4	24	80	9.6	60	96.0	8	1	48	N/R	**BUT: Single ramp access: Widen 20% to 30m**

Slope Direction	From-To Level	BH	BFA	BW	ISA toe-to-toe	Stack Height	12m Benches	Ramps on Slope	Stack Height	15m-wide De-couple Berms	
285°±30°	mRL	m	deg	m	deg	m	No	No	m	mRL	**FW design applies in KGN+EGN (+GR+GA)**
FW	292	12									Average surface elevation
	268	24	70	10.4	51	24.0	2	1		N/R	Local HW + MW anticipated; lack of data
	184	24	75	10.4	55	84.0	7	1	42	N/R	Strike-faults possible; lack of data
	100	24	80	9.6	60	84.0	7	1	42	N/R	Favourably tight concave slopes.
	4	24	80	9.6	60	96.0	8	2	32	N/R	**BUT: Single ramp access: Widen 20% to 30m**

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<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
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<tr><td colspan="12">NORTH PIT (E8_P2_pb1-3)</td></tr>
<tr><td colspan="12">Onkelo and Oshiveli</td></tr>
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<tr><td></td><td colspan="2">From-To Level</td><td>BH</td><td>BFA</td><td>BW</td><td>ISA toe-to-toe</td><td>Stack Height</td><td>12m Benches</td><td>Ramps on Slope</td><td>Stack Height</td><td>15m-wide De-couple Berms</td><td></td></tr>
<tr><td></td><td></td><td>mRL</td><td>m</td><td>deg</td><td>m</td><td>deg</td><td>m</td><td>No</td><td>No</td><td>m</td><td>mRL</td><td></td></tr>
<tr><td>HW</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>HW design applies in CGN (+GR+GA)</td></tr>
<tr><td></td><td>From</td><td>268</td><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Average surface / top bench elevation</td></tr>
<tr><td>pb1</td><td>To</td><td>136</td><td>24</td><td>75</td><td>10.4</td><td>55</td><td>132</td><td>11</td><td>1</td><td>66</td><td>N/R</td><td>Recommend 30m-wide ramp from 196mRL</td></tr>
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<tr><td></td><td>From</td><td>88</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Average surface / top bench elevation</td></tr>
<tr><td>pb3</td><td>To</td><td>136</td><td>24</td><td>75</td><td>10.4</td><td>55</td><td>-48</td><td>-4</td><td>3</td><td>-12</td><td>N/R</td><td>Recommend 30m-wide ramp from 244mRL</td></tr>
<tr><td></td><td colspan="2">From-To Level</td><td>BH</td><td>BFA</td><td>BW</td><td>ISA toe-to-toe</td><td>Stack Height</td><td>12m Benches</td><td>Ramps on Slope</td><td>Stack Height</td><td>15m-wide De-couple Berms</td><td></td></tr>
<tr><td></td><td></td><td>mRL</td><td>m</td><td>deg</td><td>m</td><td>deg</td><td>m</td><td>No</td><td>No</td><td>m</td><td>mRL</td><td></td></tr>
<tr><td>FW</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>FW design applies in KGN+EGN (+GR+GA)</td></tr>
<tr><td></td><td>From</td><td>268</td><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Average surface / top bench elevation</td></tr>
<tr><td>pb1</td><td>To</td><td>136</td><td>24</td><td>70</td><td>9.5</td><td>53</td><td>132</td><td>11</td><td>2</td><td>44</td><td>N/R</td><td>Recommend 30m-wide ramp from 196mRL</td></tr>
<tr><td></td><td>From</td><td>292</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Average surface / top bench elevation</td></tr>
<tr><td>pb2</td><td>To</td><td>76</td><td>24</td><td>70</td><td>9.5</td><td>53</td><td>216</td><td>18</td><td>2</td><td>72</td><td>N/R</td><td>Recommend 30m-wide ramp from 172mRL</td></tr>
<tr><td></td><td>From</td><td>316</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Average surface / top bench elevation</td></tr>
<tr><td>pb3</td><td>To</td><td>136</td><td>24</td><td>70</td><td>9.5</td><td>53</td><td>180</td><td>15</td><td>2</td><td>60</td><td>N/R</td><td>Recommend 30m-wide ramp from 244mRL</td></tr>
</table>

The open pit mining configuration is based on 12 metre benches mined in three 4-4.5 metre flitches.
A minimum mining width of 35 metres was applied during mine design.
During the above process inferred mineral resources were excluded from mine schedules and economic valuations utilized to validate the economic viability of the Etango-XP and Etango-XT Scoping Study.
Mining methods assumed grade control will be based on radiometric down-the-hole logging systems (gamma logging) and supplemented by radiometric truck scanning which will determine the destination of the truck.
Waste rock dump designs done during the 2015 Optimisation Study were utilised for this study. Due to the significantly smaller pit and lower stripping ratio, there is sufficient space on the existing waste rock dump designs.
The study considered all the infrastructure requirements associated with a conventional truck and shovel mining operation including crushing and conveying systems, heap leach pad, waste dump and stockpile location, access routes, explosive storage, workshops, offices, change houses, crib rooms water and power.

</td></tr>
<tr><td>Metallurgical factors or assumptions</td><td>
The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.
Whether the metallurgical process is well-tested technology or novel in nature.
The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
</td><td>
The front-end metallurgical process proposed during the 2015 Optimisation Study and the Etango-8 (8Mt/a) DFS remains unchanged in the Etango-XP and Etango-XT Scoping Study. The metallurgical process was determined following extensive metallurgical test work during the previous studies. The back-end of the metallurgical process has changed from a solvent extraction process in 2017 to an ion-exchange followed by nano-filtration. Metallurgical test work on the ion-exchange and nano-filtration was done at the Heap Leach Demonstration Plant. The metallurgical process thus comprises of a three-stage crushing, agglomeration, followed by sulfuric acid heap leaching on an industry standard on/off heap leach pad followed by ion-exchange, nano-filtration and calcination. A simplified flow sheet is shown below.
</td></tr>
</table>

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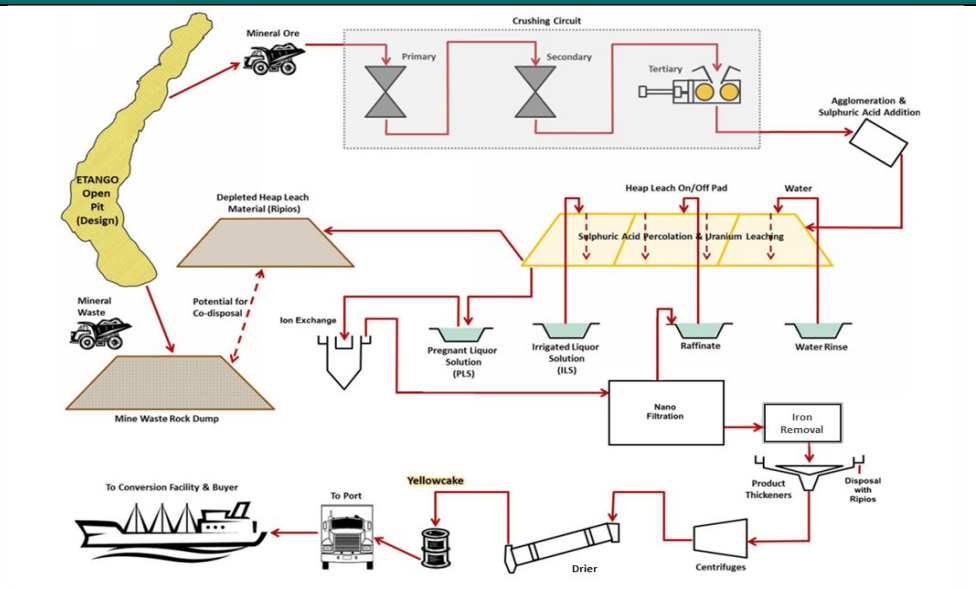
Criteria	JORC Code explanation	Commentary
	• *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	 • The Etango project is located in a well-established uranium mining district and the metallurgical process is, in general, a conventional uranium recovery circuit utilizing ion-exchange and nano-filtration extraction. While the ion-exchange process has been used for decades to extract uranium, nano-filtration is a bit more recent but has been employed by several uranium extraction plants. The heap leaching aspect can also no longer be considered novel in the context of the mineral district as several test heaps have been run by various uranium operators. However, this aspect has also been subjected to larger scale pilot plant testing as discussed below. • During the 2012 DFS and the Etango-8 (8Mt/a) DFS an extensive metallurgical test work campaign was undertaken comprising of ✓ Mineralogy analysis utilizing SEM/EDS and QEMSCAN, and ✓ Comminution characterization including UCS, Bond (Crushing index, Ai test, RWi test, BWi test), JK (Dwi. SMC) and dedicated High Pressure Grinding Roll (HPGR) testing. • Column leach testing including column leach variability testing and diagnostic testing. • Geotechnical testing of leach residue and solvent extraction test work, • Miscellaneous testing such as chloride analysis. • The above-mentioned tests were based on samples obtained from HQ core (28 holes were drilled specifically for metallurgical characterization purposes) together with ½ NQ core and ¼ NQ core retained for variability testing. • Column leach testing was based on a 15 392 kg composite sample obtained from 17 HQ drill holes across the deposit. Column leach variability testing was based on a composite of 479 kg of samples from 45 drill holes across the deposit.

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Criteria	JORC Code explanation	Commentary
		• A demonstration plant was commissioned in 2015 comprising four large section (2mx2m) cribs designed to; ✓ demonstrate the current proposed technology, ✓ confirm scale-up assumptions and ✓ test sensitivity to closed-circuit operation. • Each of the cribs allows the leaching of a ~30 tonne sample. The program included trial mining an area of the ore body including drilling, blasting, loading and hauling of a bulk sample (totalling ~3000 tons) to the demonstration plant location. • The results of the pilot plant (demonstration plant) test work confirmed the validity of the 2012 DFS processing parameters but also demonstrated that certain parameters were too conservative e.g. metallurgical recovery for the 2012 DFS and the 2015 Optimisation Study being 86.9% while the testwork indicated that this can confidently be put to 87.8%. The acid consumption on the other hand has increased slightly due to the back-end change from solvent extraction to ion-exchange/nano-filtration. The key parameters for the Etango-XP and Etango-XT Scoping Study, which remained unchanged from the Etango-8 DFS, were thus: ✓ The expansion (Etango-XP) the facility's expansion by an additional 8Mt/a to a total capacity of 16Mt/a of ore ✓ The extension (Etango-XT) of the Etango-8 Life-of-Mine (LOM) past the current 15-year mine life while maintaining the processing throughput rate at 8Mt/a. ✓ Metallurgical Recovery of 87.8% ✓ Total Sulphuric Acid consumption of 17.14 kg/t ore leached. (based on 100% concentration) • The final product must conform to certain specifications covering grade and impurities content and consistent with the capability of the downstream refinery to process it further. Penalty schedules will reflect the increase in downstream converter costs in the presence of high impurities content in the yellow cake product. Current specifications however vary depending on buyer. The potential deleterious elements in terms of final product are usually defined as defined as Th, V, Cl and Zr. • The pregnant leach solution (PLS) resulting from the heap leach contains the uranium and other impurities dissolved during the leaching process. These are treated in the ion-exchange exaction (IX) circuit; iron wash with diluted sulphuric acid and the nano-filtration plant. The selected flowsheet is already in use in the Uranium industry and thus includes tested technology and as such no project risk is anticipated from potential deleterious impurities. Furthermore, the demonstration plant test work programs have confirmed that there are no deleterious materials in the final product. A design for a Ripios (leach residue) dump was conducted by Wood plc to accommodate the Life of Mine process plant throughput.

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• *Environmental*	• *The status of studies of potential environmental* • *impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• The project is located in the Namib-Naukluft National Park and close to tourist attractions, such as the Moon landscape. The current land use is conservation and eco-tourism. It is noted that a number of precedents exist for uranium mining within the Namib-Nauklauft National Park, including the Langer Heinrich mine and the Husab uranium mine • Bannerman lodged an Environmental and Social Impact Assessment (ESIA) with the Namibian Ministry of Environment, Forestry and Tourism for open pit mining and heap leach processing. Formal Environmental Clearance was received in July 2012 valid for three years. This Environmental Clearance has been renewed on three further occasions in 2015, 2018 and 2021. The clearance may be further renewed and has current validity until September 2024. Environmental clearance for the location and design of infrastructure corridor to the Etango Project was granted by the Ministry of Environment, Forestry and Tourism in February 2013 and has also been renewed on three further occasions in 2016, 2019 and 2022 and is currently valid until September 2024. • The project is located in an extremely arid region of the Namib Desert. Rainfall in the Namib Desert is highly variable and unpredictable, varying from 0mm/annum to approximately 100mm/annum. • Hydrological, hydrogeological and geochemical characterisations were conducted by external consultants as part of the 2012 DFS. Geochemical characterization of waste rock indicated that the waste is not potentially acid-forming and that there is no significant elemental enrichment in the leachate. • Natural groundwater within the Bannerman lease area is highly saline with various metalloid levels such as Al, As, B, Ba, Cd, Cr, Fe, Mn, Mo, Pb, Sb, Se, U and V exceeding WHO DWQG (2008). None of the natural ground water sources are fit for domestic, agricultural or livestock use. Modelling of waste rock seepage is expected to blend in with the natural ground water in a 1:100 (seepage:groundwater) volumetric ratio and will, therefore, have little effect on the quality of the ground water. The ground water model indicates that seepage will migrate to the open pit; increasing as the pit deepens and the hydraulic gradient steepen.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Power for the Etango Project site will be fed by NamPower (the national power utility) from the 220 kV national grid through its substation located at Kuiseb. A 29km 132kV transmission line from the Kuiseb substation to the project site where a 132/33kV switchyard, two 20MVA transformers will be installed for the Etango-XT while two 30MVA transformers will be installed for the Etango-XP scenario. • Water for the Etango Project will be supplied by NamWater. Regional water capacity comprises of 13 million m^3/annum from regional aquifers and 20 million m^3/annum from the Orano owned desalination plant. The Government of Namibia is currently also investigated the building of a second desalination plant to ensure adequate water supply for the coastal region and possibly pumping water to some inland settlements. The Etango-XT water scheme will comprise two pump stations with an above-ground pipe line will be 32 km long and 450mm in diameter; while the Etango-XP water scheme will comprise four pump stations with the same diameter pipeline as the pipeline was already sized for the expansion scenario as part of the Etango-8 DFS. • The C28 road from Swakopmund to Windhoek passes approximately 5km from the project. A 6km spur road will be constructed to link the existing road to the Etango Project site. • The Project is located in close proximity (73km by road) to Namibia's largest port utilized by neighbouring uranium mines to export their product. • A number of regional towns are located close to the Etango Project including Swakopmund and Walvis Bay and represent the regional hubs servicing the Namibian uranium mining industry.

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Criteria	JORC Code explanation	Commentary
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital costs for the process plant and site infrastructure was obtained by Wood plc to a Class 5 accuracy level. The costs were primarily obtained by quotes for major pieces of equipment or by using existing databases within Wood plc as well as costs from recently constructed process plants. The estimate also included updates in bulk material costs, labour costs, freights rates, EPCM and accuracy provisions.

Capital Expenditure	Etango-8	Etango-XP	Etango-XT
Mining (US$m)	12.73	71.80*	12.80
Processing (US$m)	240.06	481.86	240.06
External Infrastructure (US$m)	39.59	51.58	39.59
Owner's G&A (US$m)	25.09	36.86	25.09
Total Capital LOM (US$m)	**317.47**	**642.10**	**317.54**
Total Sustaining Capital (US$m)	**50.89**	**82.05**	**96.02**

** Mining capital includes pre-strip of US$51.3 million*

- All pre-strip (start-up) production costs up to processing plant commissioning for the Etango-XP and Etango-ET were regarded as capital costs, which is in line with the Etango-8 study. This encompasses contractor mobile plant, fixed facilities, and personnel mobilisation costs. It also caters for the establishment costs of the owner team management and technical services department. The Contractor's further expansion mobilisation and establishment cost for the Etango-XP operation in Years 5 & 6 of the LOM is included in the capital estimate reported in the above table.
- Mining operating costs were provided by reputable mining contractors via a Request for Quotations (RFQ) campaign. This includes the drilling, blasting, loading and hauling costs. The average cost being taken from the RFQs received. The owner's cost for mine planning, grade control etc. have also been included.
- Wood plc determined the operating costs of the process plant. The consumables and utility consumption rates were determined from the design process and updated cost for reagents and consumables by RFQ to suppliers. A Memorandun of Understanding with a local sulphuric acid producer has been signed. The cost of sulphuric acid either from the local supplier or landed in the Walvis Bay port was taken as the average cost.
- Water costs were based on the current water prices provided by Namwater in their letter specifying that adequate water will be available from the current Desalination Plant.
- The electricity costs were obtained from Nampower's rate schedule and the use of independent power producers taking into account the Modified Single Buyer Model of Nampower.
- Labour costs were based on 2022 labour cost surveys conducted in Namibia.
- Exchange rates assumed in the study were based on 2021-2022 historical and long-term consensus price forecast and include:
  - ✓ 1USD:N$17.56
  - ✓ 1USD:AUD1.63
  - ✓ 1€:N$18.45
  - ✓ 1USD:¥:150.50
- The resultant average unit production cost of uranium oxide (including sustaining capital, royalties & levies) over the life of the project is summarised in the above table below.

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<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Operating Expenditure</th><th>Etango-8</th><th>Etango-XP</th><th>Etango-XT</th></tr>
<tr><td>Mining (US$/lbs)</td><td>16.29</td><td>21.80*</td><td>23.05**</td></tr>
<tr><td>Processing (US$/lbs)</td><td>14.92</td><td>14.39</td><td>15.28</td></tr>
<tr><td>Owners Costs (US$/lbs)</td><td>2.23</td><td>1.78</td><td>2.29</td></tr>
<tr><td>Closure costs (US$/lbs)</td><td>0.32</td><td>0.35</td><td>0.35</td></tr>
<tr><td>Other Costs (Selling. Royalty. Levy) (US$/lbs)</td><td>3.36</td><td>3.36</td><td>3.36</td></tr>
<tr><td>Total Operating Expenditure (incl. Royalties & Levies) (US$/lbs)</td><td>37.12</td><td>41.68</td><td>44.32</td></tr>
<tr><td>Total Sustaining Capital (US$/lbs)</td><td>0.97</td><td>0.86</td><td>1.01</td></tr>
<tr><td>Total Operating Expenditure (incl. Sust. Capital. Royal. & Lev.) - AISC (US$/lbs)</td><td>38.09</td><td>42.54</td><td>45.33</td></tr>
</table>
* Higher strip ratio (more waste mining cost) and deeper pit elevation
** Economics of scale (100-t haul truck mining fleet for Etango-XT vs 150-t haul truck mining fleet for Etango-XP)
</td></tr>
<tr><td>Revenue factors</td><td>• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.
• The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</td><td>• The head grade and U_3O_8 production was derived from the mine schedule. The average head grade of the life of mine was 234 ppm U_3O_8.
• This U_3O_8 price used for economic evaluation was USD 65/lb U_3O_8 in 2024 terms. The price was determined as described below under “Market assessment”.
• The selling costs which include product transport, insurance and weighing and assaying charges at the converters were included as per the 2015 optimisation study and 2022 DFS assumptions at USD 1.24/lb U_3O_8.
• The Namibian government currently levies a mining royalty of 3% and 0.25% export levy on revenue (less allowable deductions) which has been included in the financial modelling.</td></tr>
<tr><td>Market assessment</td><td>• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.
• A customer and competitor analysis along with the identification of likely market windows for the product.
• Price and volume forecasts and the basis for these forecasts.
• For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</td><td>• The latest Reference Scenario from the WNA Nuclear Fuel Report 2023 underscores a quick divergence (into a considerable deficit) between predicted nuclear reactor needs and the anticipated global uranium supply starting from 2030-2031, which is expected to escalate rapidly. The figure below shows the rapid divergence from 2030-2031:</td></tr>
</table>

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		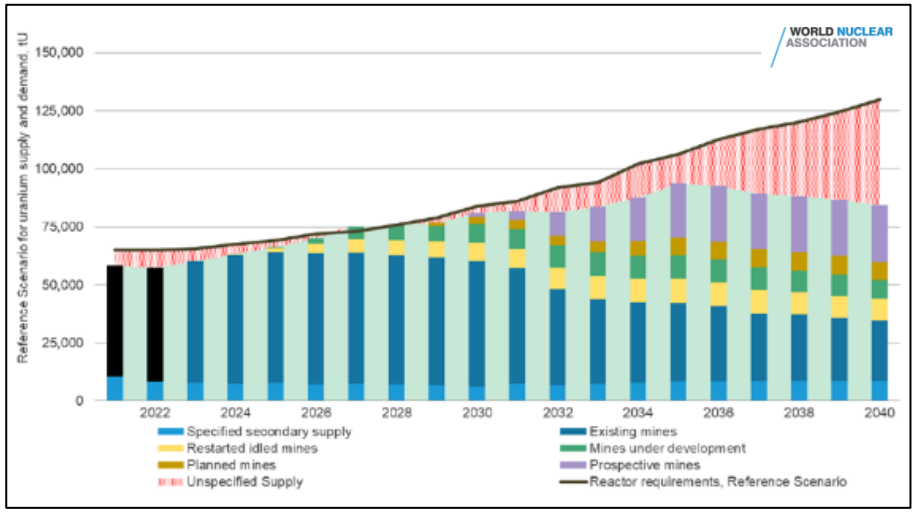 • The uranium market, stagnant for over a decade, has recently experienced a significant transformation. A bear cycle, triggered by the Fukushima-Daiichi nuclear accident in 2011, has been replaced by a bullish trend. By 2022-2023, the surplus inventory from previous years has largely been depleted. Geopolitical tensions, limited supply sources, uncertainty of long-term supplies, and the projected growth of the global nuclear fleet, have driven structural deficits in 2024. These factors are putting upward pressure on nuclear fuel prices. • This shift became clear in early 2023, when U_3O_8 spot prices reached a 16-year high of over $100 per lb. Trends in long-term contracts also show significant changes. Utilities are increasingly accepting higher base prices and broader price ranges in market-related pricing components. They are also agreeing to terms that favor sellers. This demonstrates a willingness to secure supplies and diversify geographically amid geopolitical uncertainties. • Consistent with industry practice, Bannerman plans to obtain a diversified portfolio of long-term supply contracts with a blend of fixed-term escalated prices and market price mechanisms, subject to floor prices. Prior to commencement of construction, a sufficient proportion of production is expected to be contracted with high-quality counterparties to enable conventional financing of the project, potentially in combination with strategic or off-take related financing.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Discounted cash flow analysis was undertaken utilizing the capital cost, operating cost and revenue parameters as described above. A government tax rate of 37.5% was applied to the model. For the purpose of discounted cash flow calculations, a discount rate of 8% was utilized. Cash flow calculation was done in 2021 financial terms. • Sensitivity testing was conducted on a range of economic parameters. The project is most sensitive to the uranium price with a financial breakeven price (the price at which NPV8 = zero, that is the net present value of project cash inflows are equal to cash outflows) occurring at ~USD 55/lb U3O8.

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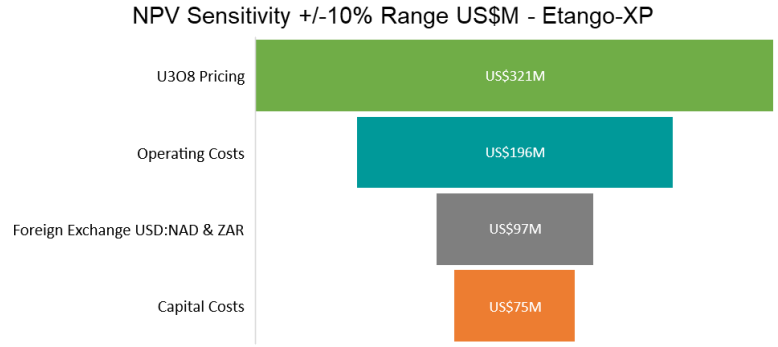
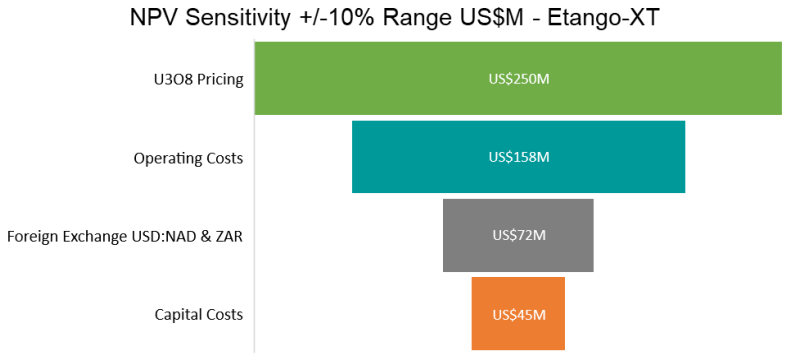
		• The highest sensitivity following the uranium price is sensitivity to operating costs, with a +/- 10% variance in operating costs impacting NPV by +/-$98M for Etango-XP, and +/- $79M for Etango-XT. • Subsequently, USD:NAD and USD:ZAR foreign exchange rates have the greatest impact on project NPV, with a +/-10% movement in exchange rates delivering a +/-$43-54M impact on NPV for Etango-XP, and +/-$32-40M impact for Etango-XT. Capital costs are the next most sensitive cost parameter (+/-10% impact to NPV: +/- ~$38M for Etango-XP, and +/- ~$22M for Etango-XT).  

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Criteria	JORC Code explanation	Commentary
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• There are no Native Title claims or equivalent over the ML 250 and therefore are no other land holders over the proposed mine site, and as such no land access agreements are required. There are privately owned small holdings outside the area of ML 250. However, these are not expected to be impacted by mining activities. • The proposed new Project access road will not cross any tenement held by others. • Extensive consultation with key stakeholders has been undertaken since 2008 including; ✓ newspaper adverts requesting comments on the project, ✓ public meetings (2008, 2009, 2010, 2011 and 2012) in the regional towns of Arandis, Swakopmund, Walvis Bay and the capital of Windhoek. ✓ meetings with regional and local government. ✓ focus group meetings (2008, 2009, 2010, 2011, 2012, 2014 and 2020) with Coastal Tourism Association of Namibia and/or neighbours. • The Etango Project enjoys local community support and is expected to have a significant positive impact on the Erongo Region and Namibian national economies, including local employment and skills training.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• The Etango Project Mining License (ML) 250 is held by the Namibian company Bannerman Mining Resources (Namibia) (Pty) Ltd which manages the project. Bannerman Energy owns 95% of Bannerman Mining Resources. • Initially the Exclusive Prospecting Licence (EPL) 3345 was granted to Bannerman (previously known as Turgi Investments (PTY) Ltd) with effect from 27 April 2006 to explore for Nuclear Fuel. Following an extensive drilling campaign, a Pre-feasibility Study, a Definitive Feasibility Study, an Optimisation Study and the construction of a Heap Leach Demonstration Plant, part of EPL 3345 was converted to a MDRL 3345 which provides strong and exclusive rights to tenure and the right (without obligation) to continue with exploration or development work. The MDRL 3345 covered an area of 7,295 hectares, which includes the Etango ore body, two satellite deposits at Hyena and Ondjamba and all planned mine infrastructure • Qualitative risk assessment has been undertaken throughout the Etango-XP and Etango-XT Scoping Study phases, no material naturally occurring risks have been identified through the above-mentioned risk management process.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral* • *Resources (if any).*	• **No Ore Reserve has been declared for the Scoping Study.** • The Ore Reserves consist of 14% Proved Reserves and 86% Probable Reserves. The Proved Ore Reserves is a sub-set of Measured Mineral Resources, and the Probable Ore Reserve is derived from Indicated Mineral Resources. Inferred resources were treated as waste with no economic contribution to the project. • The Competent Person is satisfied that the stated Ore Reserve classification reflects the outcome of technical and economic studies. • No Measured Resources were downgraded to Probable Ore Reserves due to uncertainty in modifying factors.

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Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• Aspects of the study was conducted by independent parties including: ✓ Resource Modelling completed by International Resource Solutions and reviewed by Optiro Pty Ltd. Optiro also conducted aspects of the resource modelling and classification. Ian Glacken of Optiro is acting as Competent Person for the Mineral Resources. ✓ Qubeka Mining Consultants conducted mine planning activities and the reserves statement. Mr. Werner Moeller of Qubeka Mining Consultants is acting as Competent Person for the Ore Reserves. ✓ Mr. Abraham Saayman from Mine Technics did the geotechnical review and provided the relevant parameters for the pit design. ✓ Wood plc reviewed the results of the demonstration plant trials. ✓ Wood plc developed operating cost and capital cost estimates for the process plant. ✓ Financial Modelling was undertaken by Bannerman, utilising modelling principles developed by Mazars Global Infrastructure Finance (Australia).
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• **No Ore Reserve has been declared for the Scoping Study** • The Mineral Resource Estimate has not been subject to rigorous assessment of accuracy and confidence using any numerical or probabilistic approach. Areas of potential uncertainty are the detailed morphology of the alaskite bodies and the degree to which the current volume may change upon infill drilling, and the continuity of the ASD zones, which have been assumed to be relatively discontinuous in this estimate. Grade confidence, as defined by grade continuity modelling is believed to be high. Data quality is high as reflected by the QAQC work. • The accuracy and confidence of modifying factors are generally consistent with scoping level accuracy with many of the technical factors remaining unchanged from the previous studies. The capital cost estimate for the fixed plant was done to an accuracy of ±30% which is consistent with a Scoping Study level of accuracy (typically -30% +30%).

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