LAM
Lake Austin Mining

WHITE WELL GOLD PROJECT

PREFEASIBILITY STUDY REPORT

DOCUMENT NO. LAM-WW-J-RP-020

JUNE 2024

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DISCLAIMER

This report is an update of a Prefeasibility Study (PFS) prepared by Lake Austin Mining Pty Ltd (LAM). It is part based on information provided by LAM and/or its technical consultants and part on information not within the control of LAM. Whilst it is believed that the information, conclusions and recommendations will be reliable under the conditions and subject to the limitations set forth herein, LAM does not guarantee their accuracy. The use of this report and the information contained herein shall be at the user's sole risk, regardless of any fault or negligence of LAM.

1.0 EXECUTIVE SUMMARY

1.1 Introduction

This Pre-Feasibility Study (PFS) is an update of the 2019 PFS prepared by LAM.

The items listed below have since been completed by LAM in response to the recommendations proposed in the 2019 PFS.

- Completion of a groundwater search program including drilling, casing and testing production bores to ensure the plant water requirements are met.
- Updating flora and fauna surveys to include the complete operations with borefield and camp footprints, and the northern access corridor
- Securing miscellaneous licence L20/87 and associated clearing permit, providing the option for a northern access corridor via the Cogla Downs road.
- Updating associated approvals and permits.
- Commencing refurbishment of the scrubber / screening circuit.
- Dangerous Goods Licence (diesel fuel storage).
- Explosives Storage Licence.
- Shire / Department of Health approval for a waste water treatment facility.

In May 2024, on the back of rising gold prices, a moderating labour market and easing of supply, LAM updated the financial model and PFS to incorporate the following.

- Gold price changed from AU$2,200 to AU$3,500.
- Capital cost increases based on industry factoring.
- Operating cost increased based on industry factoring and updated numbers provided by MSCS.
- Provision for construction of the northern access road.
- Provision for expanding the groundwater search, and upgrading the borefield if required.

This PFS therefore supersedes the 2019 PFS.

All prices and costs included in this report are expressed as Australian dollars.

1.2 Key Project Highlights

The White Well gold project is unique in that the gold is contained in quartz stock work hosted in a highly weathered kaolinite ore body. Test work has shown that the ore can be mined and washed through a conventional scrubber / trommel screening circuit and the kaoalinite clay washed out leaving gold rich quartz concentrate that can be processed through a conventional CIP circuit.

- The project is located near Cue in Western Australia on a granted Mining Licence M20/54.
- The project is fully approved and permitted and can be in operation within 12 months of project declaration.
- The White Well resource contains 100,949 ounces of mineable gold hosted in a kalonitic quartz stock work.
- The deposit will be mined using conventional open cut mining techniques. The strip ratio is low (1.9:1) and the ore is largely free dig.
- The mined ore will be pre-concentrated using an ore scrubbing circuit to produce circa 713,000 tonnes of quartz concentrate, grading 4.13g/t.
- LAM has already purchased the scrubbing and screening circuit and commenced refurbishment of the equipment.
- The quartz concentrate will be processed through a small scale, semi-modular conventional CIP plant located on site.
- The project will produce circa 92,873 ounces of gold bullion over three years.
- The total capital cost for the project is circa AU$40M.

Summarised in Table 1 following are the key financial parameters based on an average gold price of AU$3,5000/oz.

Table 1 - Key Financial Parameters

Item	Value
Gold recovered, oz	90,977
Revenue, $k (at AU$3,500/oz)	$317,510,432
Total Project Costs, $000s	$216,736,662
AU$/t primary ore (All in Cost)	$46.37
AU$/oz (All in Cost)	$2,392
EBIT DA	$147,403,552
EBIT (excl. Sunk Costs), $k	$100,773,769
C1 Cash Operating Cost (excl. Royalty) AU$/oz	$1,880
NPV @ 8.0%, $k (Pre Tax)	$77,296,577
IRR, % (Pre Tax)	120%
Max. Cash Drawdown, $k	-$38,653,081
Payback Period, Years	1.92
Mine Life, Years	4

1.3 Background

LAM acquired the White Well project in 2015 and between 2016 and 2019 carried out a number of studies, metallurgical test work programs, diamond drilling program to test transitional zones along with securing permits and approvals to operate the project.

LAM purchased a high capacity scrubbing and screening plant from Iluka to process the ore and produce a gold rich quartz concentrate. LAM also investigated a number of options to treat the White Well concentrates through neighbouring mills in the district or via a standalone, small scale Carbon in Pulp (CIP) plant located on site.

In 2019, LAM approved the development of a Prefeasibility Study based on mining and processing the ore on site through a scrubber screening circuit to produce a high-grade concentrate and processing the concentrate through a small scale semi-modular CIP plant, also located on site.

The Board also commissioned a ground water search program to investigate suitable water sources for the operations along with making application for a northern access corridor to the site.

The PFS was co-ordinated by LAM with input from Minesite Construction Services (MSCS) and specialist consultants in relation to geological, hydrogeological, mining, metallurgical, processing, engineering and financial disciplines.

Due to substantial changes in cost inputs and increased gold price since 2019, LAM has elected to update the PFS.

The key physicals for this updated PFS remain unchanged with a mining inventory of 4.76Mt primary ore @ 0.66g/t, for 100,949 ounces contained in kaolinite-hosted quartz vein stock work. This is mined from a 90m deep open pit and includes an existing oxide ore stockpile comprising 81,000t @ 1.31g/t for 3,400 ounces. The open pit waste to ore ratio is 1.9 to 1.

The process is based on washing the ore through a scrubber wash plant to remove the kaolinite clay host rock, screening, desliming and gravity separation. Based on a mass yield of 15%, a total of 713kt quartz concentrates are recovered at a grade of 4.13g/t and an effective gold recovery of 93.8%. Concentrates will be treated through a conventional CIP plant to be located on site at a gold recovery of 96%.

The overall process recovery of 90% results in a total gold production of 90,977 ounces.

1.4 Tenure

LAM currently holds the tenements listed in Table 2.

Table 2 - LAM's Mining Tenements

Tenement	Purpose	Size (ha)	Expiry Date
Mining Lease M 20/54	White Well Operations	599.75	18/05/2029
Miscellaneous Licence L 20/73	Southern access road corridor	36.00	23/07/2038
Miscellaneous Licence L 20/87	Northern access road corridor	73.35	03/12/2041

LAM's tenement locations, adjacent tenure and other infrastructure are shown in Figure 2.

Access agreements have been executed between LAM and the following neighbouring tenement holders:

- L 20/73 - Big Bell Gold Operations Pty Ltd (Westgold Resources Ltd), and
- L 20/87 – Musgrave Minerals Ltd and Cullen Resources Ltd.

All commitments for LAM's tenements have been fulfilled up to the end of the 2023/2024 reporting year including:

- Combined annual (technical) report for M 20/54.
- Mine Rehabilitation Fund assessment.
- Form 5 tenement expenditure reports that have verified LAM's expenditure commitments of $60k per year have been fulfilled since acquisition.
- Annual environmental reports (AER) have been submitted for all tenements.
- Cue Shire rates and DEMIRS rental fees are paid and up to date for all tenements as at May 2024.

LAM has been granted miscellaneous licence L 20/87 to enable a northern access road corridor to M20/54 from the Cogla Downs road. LAM has executed access agreements with Musgrave Minerals and Cullen Resources where L 20/87 traverses their exploration tenements.

1.5 Environmental, Social and Heritage

Flora and Fauna surveys have been completed for the White Well and Tuckabianna leases proposed to be traversed by LAM, inclusive of targeted flora and malleefowl surveys completed.

- Over M 20/54 in 2012, level 1 flora and fauna surveys (by Cobra Mining).
- Over M 20/54 and P 20/2433 in September 2019 (by LAM) prior to the groundwater drilling program.
- Over the L 20/87 northern access corridor in July 2020 (by LAM) required for clearing permit CPS 9138/1.

The surveys indicated the absence of any Threatened flora or fauna on the tenements, however, one *Priority 3 Taxon* flora was identified in 2019 at 3 locations over 1.0 km south of the proposed operations, with 2 occurrences along drill site access tracks but well south of and beyond the proposed camp boundaries. This will require avoidance of any clearing within a 10m radius of the shrub, but is considered low risk due to limited occurrence and distance from the White Well operational area. Identification of this shrub in any future areas to be cleared will require appropriate DEMIRS reporting and permission where clearing is essential.

A survey carried out in 2012 and more recent verification on the Aboriginal Heritage Inquiry system (AHIS) confirms the absence of any recorded heritage or archaeological sites. Review of AHIS and assessment by DPLH in the period between 2016 and 2019 served to verify this for other approvals and prior to LAM's drilling programs. Further clearance was obtained for L 20/73 and L 20/87 following extended heritage and archaeological review in the lead up to DEMIRS granting these tenements.

These and the stakeholder communications described in Table 3 have been pre-requisite for various permits and approvals including mining proposals, works approval, clearing permits, drilling and bore construction works.

Table 3 - Register of Stakeholder Communications

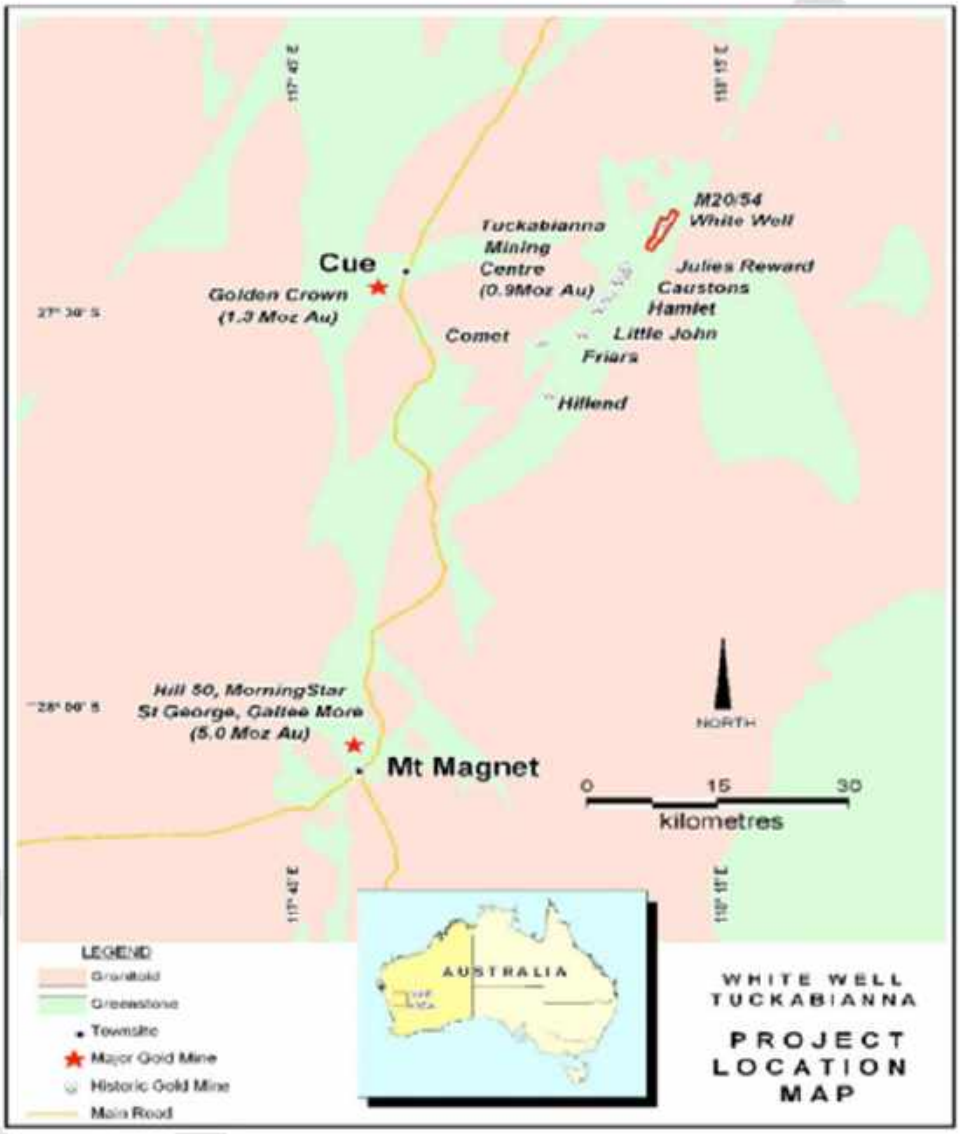
Stakeholder	Status	Action Required	Timing
Department of Planning, Lands and Heritage (DPLH) Heritage Clearance	Approved as part of the DMIRS Mining Proposal submission and L 20/87 application	Develop heritage management plan / notify DPLH on high level execution plan / schedule	Prior to commencement of site works
Cue Shire	Various correspondence and meetings at various stages have been exchanged for inclusion in Mining Proposal approvals and PFS, updating of project progress and evaluating options for camp location and road construction	Update project plan, discuss camp location options in Cue, northern access road construction and infrastructure and materials sourcing	On-going; prior to and after project declaration
Nallan Station	Various correspondence and meetings exchanged in relation to tenement transfer to LAM; issued notice of L20/87 approval; northern access road plans via Cogla Downs road, drilling programs, water supply, etc	Update project plan, finalise northern road access materials, water, grids fences, etc, interim camp site options	On-going; prior to and after project declaration
Karbar Station – northern access road install and usage	Prelim meeting early 2020; further subsequent correspondence and updates; issued notice of L20/87 approval	Continue communications	On-going; prior to and after project declaration
Main Roads	Initiated application for intersections on Great Northern Highway	Re-convene once final haulage route is confirmed	Prior to any road works
Meekatharra Shire	Initiated discussions regarding possible use of northern access to Burnakura	Further discussions with Shire prior to commencement.	Prior to any road works or haulage
Westgold Resources Ltd	Various and many discussions held on ore purchase or toll treatment opportunities and sharing of facilities	On-going communications as project planning and development progresses	On-going

Stakeholder	Status	Action Required	Timing
Musgrave Minerals Ltd	Executed access agreement for northern road corridor	On-going communications as project planning and development progresses	On-going
Cullen Resources Ltd	Executed access agreement for northern road corridor	On-going communications as project planning and development progresses	On-going
Yarraquin Station	Early discussions regarding usage of Tuckabianna road	No further action required	

1.6 Location and Access

The White Well project is located approximately 40km east of the township of Cue in Western Australia on mining lease M20/54. It is approximately 650km north of Perth, accessed via the Great Northern Highway (Figure 1)

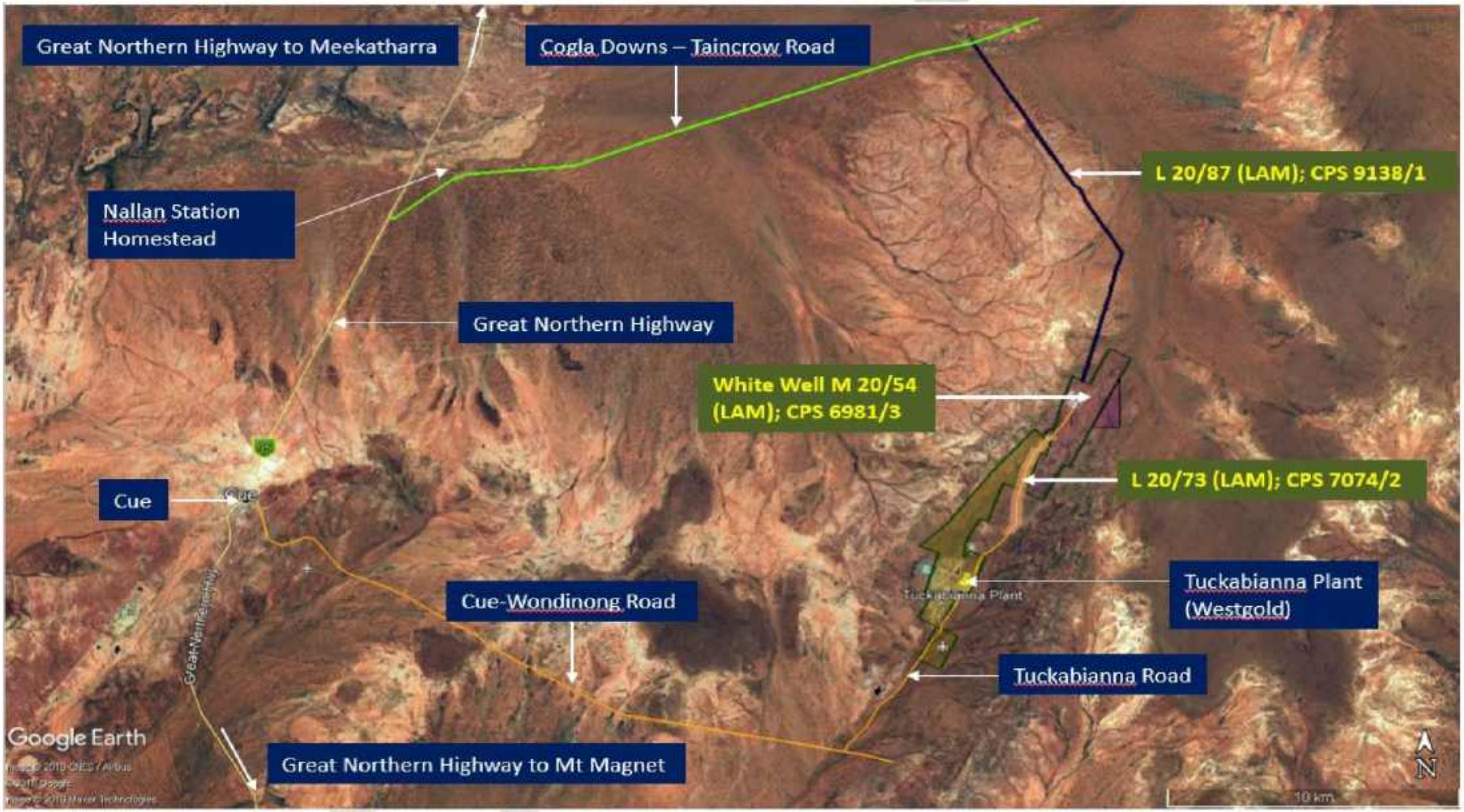
Figure 1 – White Well Location Plan



As shown in Figure 2, the site can be accessed from Cue via Wondinong Road and then the north-bound Westgold Tuckabianna access road. Alternatively, there is a northern access corridor via the Great Northern Highway north of Cue with a turn off 18km along the Cogla Downs Road beyond the Nallan Station homestead. LAM has the option to construct an alternative northern access road along the 13km corridor south of the Cogla Downs Road after having secured miscellaneous licence L 20/87.

There is an operating 1800 metre sealed airstrip suitable for up to 50-seater aircraft located approximately 5km from the Cue town centre.

Figure 2 – Regional Plan



1.7 Permitting and Approvals

The status of permits and approvals is detailed in Table 4 with the following key renewals required to be completed over the coming months.

- **Works Approval Renewal/Extension W5214-2012-1 (DWER)**: to be submitted by 2 June 2024 with expected approval by 31 August 2024. All that is required is a further 3-year extension on the term as there are no changes to be made on the content of the existing document. However, the application process has become very onerous due to the requirement for a new highly detailed TSF design "checklist".
- **Mining Proposal – Northern Access Road (DEMIRS)**: the department now requires this as a separate submission prior to commencement of any road works within the L 20/87 corridor. Expected approval approximately 3 months from date of submission (aim for mid-July 2024).
- **Mine Closure Plan Reg ID 76790 – Annual Update (DEMIRS)**: by 30 September 2024.

Table 4 - Register of Permits and Approvals

Permit	Status	Expiry Date	Action Required	Timing
WW Project Management Plan (DMIRS), PM-495-192919)	Approved / Current	N/A	Notify DMIRS on high level execution plan / schedule (project management)	At the date of project declaration, prior to commencement of site works.
Works Approval (DWER) W5214/2012/1	Extended to Aug 2024.	31 August 2024	Application to renew and extend for 3 years beyond 31 August 2024	In progress. to be submitted by 2 June 2024. Expect DWER approval by 31 August 2024
Operating Licence (per W5214/2012/1)	To be submitted to DWER	N/A	Final commissioning plan to be submitted for license approval	Prior to and at date of plant commissioning
WW Mining Proposal and **Mine Closure Plan (DEMIRS) Reg ID: 58394**	Approved / Current	N/A; MCP to be reviewed 12-monthly & submitted at 30 Sep each year	Latest MCP approved in January 2024, includes camp and borefield	Next update required by 30 September 2024 in the new format.
WW Mining Proposal Camp & Borefield Reg ID 83412	Approved / Current	N/A	Submitted 29 Jan 2020; No further action	N/A
M 20/54 Clearing Permit – CPS9504/1 (Incorporating camp & borefield)	Approved / Current	11 July 2027	DMIRS review complete; approved	
Malleefowl Survey (pre-site works)	To be submitted prior to site works	Subject to timing of commencement of site works	Completed by Botanica in Sep 2019	Updated survey required prior to commencement of site works
Water Abstraction Licence (DOW) GWL181566(2) Amended to GWL 181566(3)	Complete - Amended for 1.5GLitre annual usage (including pit dewatering); approved 2 November 2020	4 January 2026	No further action	4 January 2026

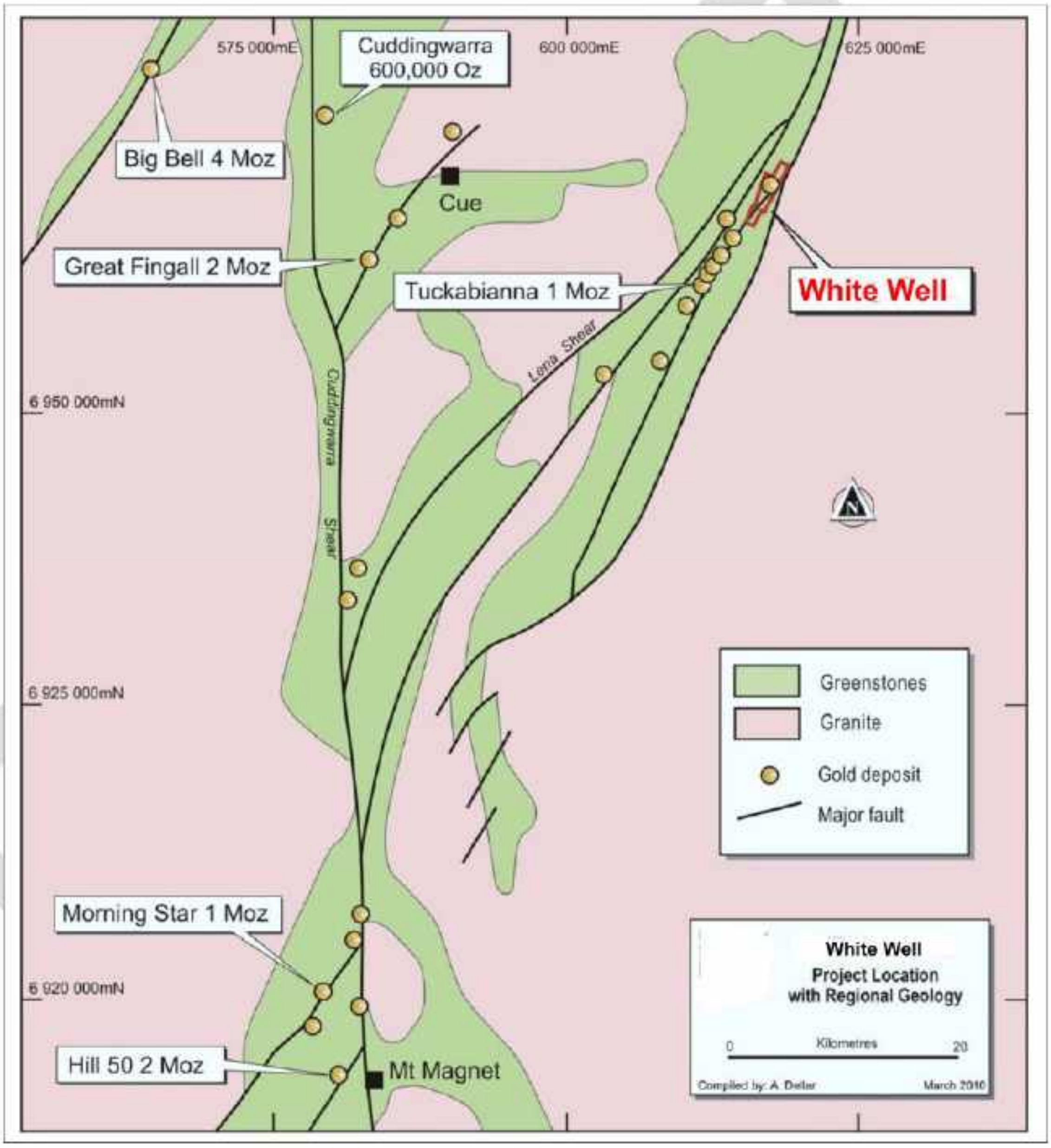
Permit	Status	Expiry Date	Action Required	Timing
DG Licence Explosives (No. ETS002840)	Approved / Current	15 July 2025	No further action	Renewal pre-15 July 2025
DG Licence Diesel Fuel (No.DGS022742)	Approved / Current	12 March 2026	No further action	Renewal pre-12 March 2026
DG Licence Cyanide (or other DGs) Storage	To be submitted subject to CIL plant/other DGs on-site.	TBA	Application to be submitted	During plant construction, prior to commissioning
Miscellaneous licence L20/87 (northern road corridor)	Approved / Current	TBA	N/A	
CPS Clearing Permit over L20/87 – CPS 9138/1	Approved / Current	Approved 30 March 2021	No further action	
Mining Proposal – L20/87 road construction	Required by DEMIRS separate to M 20/54 MP	TBA	Submit MP no later than mid-July 2024	Expect DEMIRS approval by mid-October 2024
DOH Waste Water Disposal Licence	Approved / Current (60 person WWTP)	Approved 30 March 2021	As built plans to be submitted to DOH following construction	Post construction

1.8 Geology

1.8.1 Regional Geology

The overall geology of the deposit is well defined and understood, particularly in the oxide zone where 76% of the drill data applies. The ore body is contained within highly weathered and altered quartz sericite schists that host steeply dipping south easterly quartz veins containing the gold.

Figure 3 – Regional Geology



1.8.2 Local Geology

The White Well deposit geology differs from the general Tuckabianna deposits due to its occurrence in the weathered acid volcanics (Figure 3). The volcanic unit has undergone regional shearing with a splay of the major shear seen in the White Well open pit.
The shear shows strong quartz veining of at least three generations and of various thicknesses from centimetre-sized veins through to veins upwards of 15 to 20cm thick.

The acid volcanic is weathered down to approximately 80m below surface with the original felspathic minerals altering to kaolin clay.

1.8.3 Grade Variability Along Strike

There is apparent minor variation of gold grade along the strike of the ore body.

There is a very weak trend of increasing grade from the southerly end of the ore body to the northerly end. There are a number of higher grade areas within the orebody, however the order of magnitude of variation in the gold grades is less than 1.

The risk associated with variability in grade is low.

1.8.4 Geological Variability

The deposit is overlain by an average five metres of hard lateritic cap rock. Below this, vertical variation of the oxide zone consists of decreasing clay content commensurate with deceasing weathering with depth. Quartz veins in the top 20 metres of the deposit directly below the cap rock are generally barren.

The depth of the transitional zone has been interpreted to occur between 60m to 90m below surface, based on colour change in drill samples and the four diamond drill holes drilled by LAM in 2016. The boundary between the oxide and transitional zones is generally gradual. In general, rock strength and rock competency increases with depth.

Drilling and sampling of the transitional zone had been limited with less than one quarter of the project drill holes testing this zone. Additional diamond drilling completed in April 2016 indicates circa 19% of the mining inventory is defined as transitional ore.

The risk associated with changes in rock properties at depth includes the impact on wash plant processing, mass yield and mining digability with depth.

1.8.5 Change in Feed Grade

The project average gold grade is 0.66g/t at a 0.20g/t lower cut off. This includes the existing stockpile (previously referred to as the "pimple") which is estimated to contain 81,000 tonnes at 1.31g/t. There has been sufficient sampling and assaying to demonstrate that head grade variability should be minimal.

Total assays above 10g/t is 10 and the average grade of those samples is 41g/t. The maximum assay recorded in the entire data set is 243g/t.

Maintaining constant plant feed grade should be managed through grade control, and ore scheduling and blending.

1.8.6 Variability of Quartz Gold Bearing Veins

Three main occurrences of quartz have been observed in the ore zone stock work, ranging from veins up to 100mm wide, to grains and blebs up to 10mm within the host rock.

The vein spacing within the main ore zone varies from decimetres to less than 2m. Other more randomly oriented veins occur within the footwall and hanging wall schists.

Petrology has indicated that the gold is largely hosted in the grey pearly quartz and serrated white-grey veins, although gold associated with sericite in the fresher rock at depth has been described. Drill sampling and historical metallurgical test work indicates that quartz makes up between 10% and up to 30% of the deposit. There has been no quantitative study of the quartz types within the deposit.

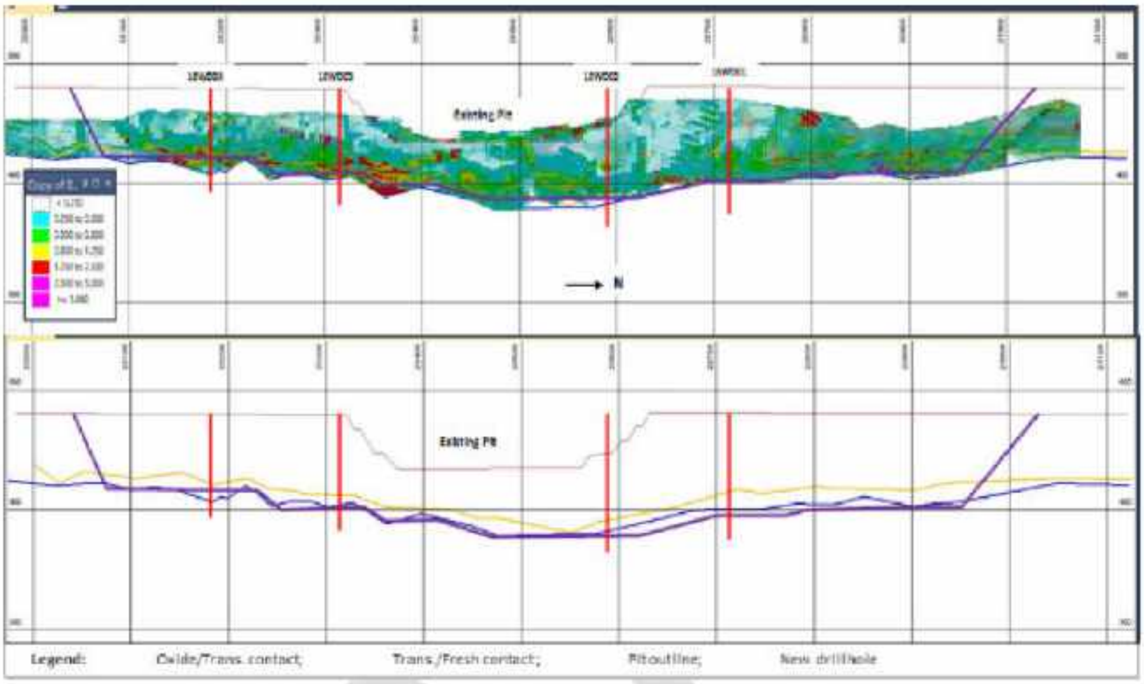
The risk associated with the variability of gold bearing quartz veins is perceived as low to moderate.

1.9 Exploration

1.9.1 Exploration History

- Exploration for both gold and base metals has been conducted throughout the Tuckabianna Greenstone Belt since the early 1900's.
- Modern exploration at White Well was conducted by Newcrest Mining and WestGold in 1980's and 1990's.
- A total of 1,520 holes (1,116 RAB, 370 RC, 14 AC and 20 DD).
- RC holes defined a resource, which was mined as a test pit in 1992.
- Mutiny conducted drilling programs in 2008, which validated the historic data.
- In 2012, Cobra Mining drilled 76 aircore holes for 5,326 metres.
- Four diamond drill holes were drilled by LAM in April 2016 to verify the oxide / transitional boundary and provide core samples of transitional ore for metallurgical test work.
- A total of 419m of drilling was completed, inclusive of RC pre-collars and diamond tails. All core samples were assayed and logging of all geological and geotechnical data has been completed.
- This confirms that approximately 19% of the total White Well mining inventory is located within the transitional zone.

Figure 4 – White Well Orebody - Longitudinal Section showing 2016 DD Holes

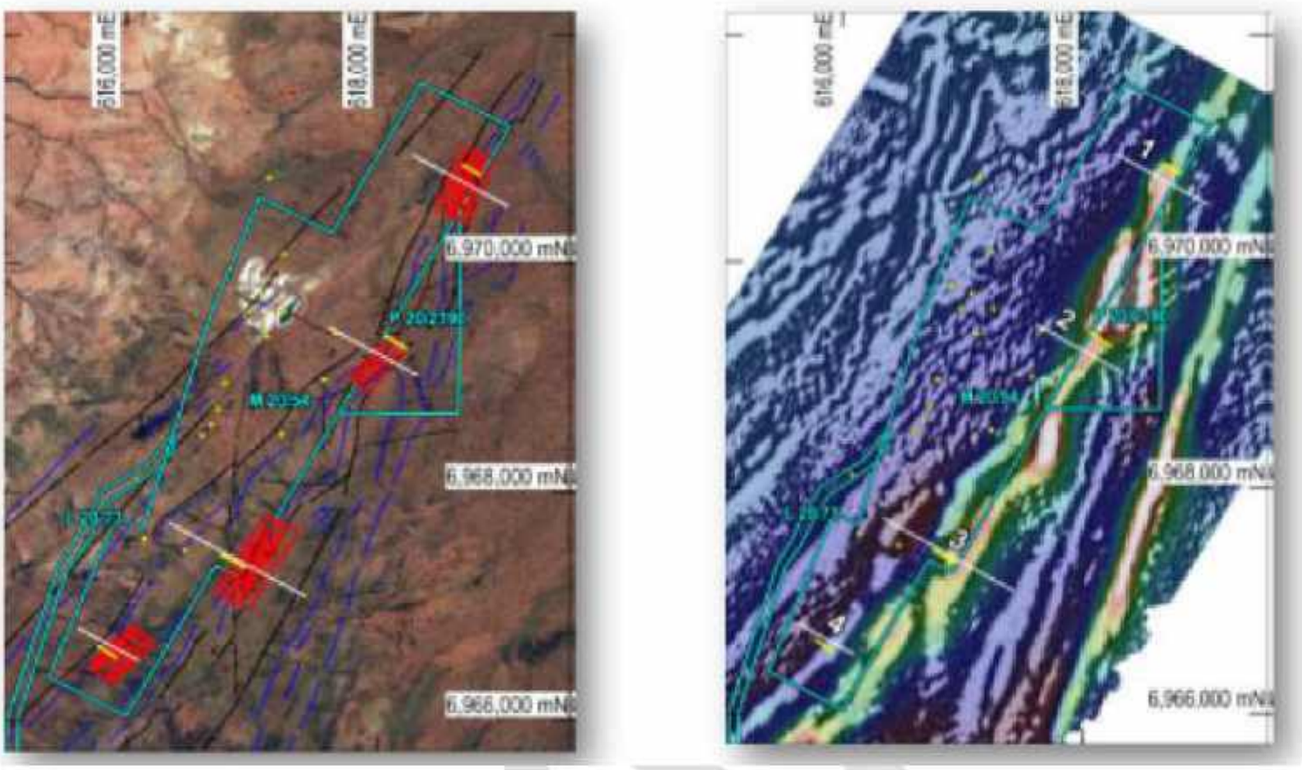


1.9.2 Exploration Opportunities

Referring to Figure 5:

- Tuckabianna-style BIF extensions M20/54 (east boundary) and P20/2190 (held by LAM).
- Aeromagnetic survey work completed.
- Preliminary drill targets identified – mineralised BIF zones (highlighted red below).

Figure 5 – White Well Exploration Opportunities



1.10 2016 JORC Resource

A full review of the geological resource and JORC compliant resource statement for the White Well deposit was completed by Continental Resource Management Pty Ltd (CRM) in October 2016.

Above a lower block-cut of 0.2g/t Au, the White Well Gold Deposit contains Measured Resources of 2.92Mt at 0.66g/t Au and Indicated Resources of 2.3Mt at 0.59g/t Au for a total of 105,000oz of gold; together with in-ground Inferred Resources of 1.0Mt at a grade of 0.5g/t Au and stockpiled Inferred Resources of 75,000t at a grade of 1.2g/t Au for total Inferred Resources of 1.1Mt 0.6g/t Au (20,000oz). The total resources contain 125,000oz of gold.

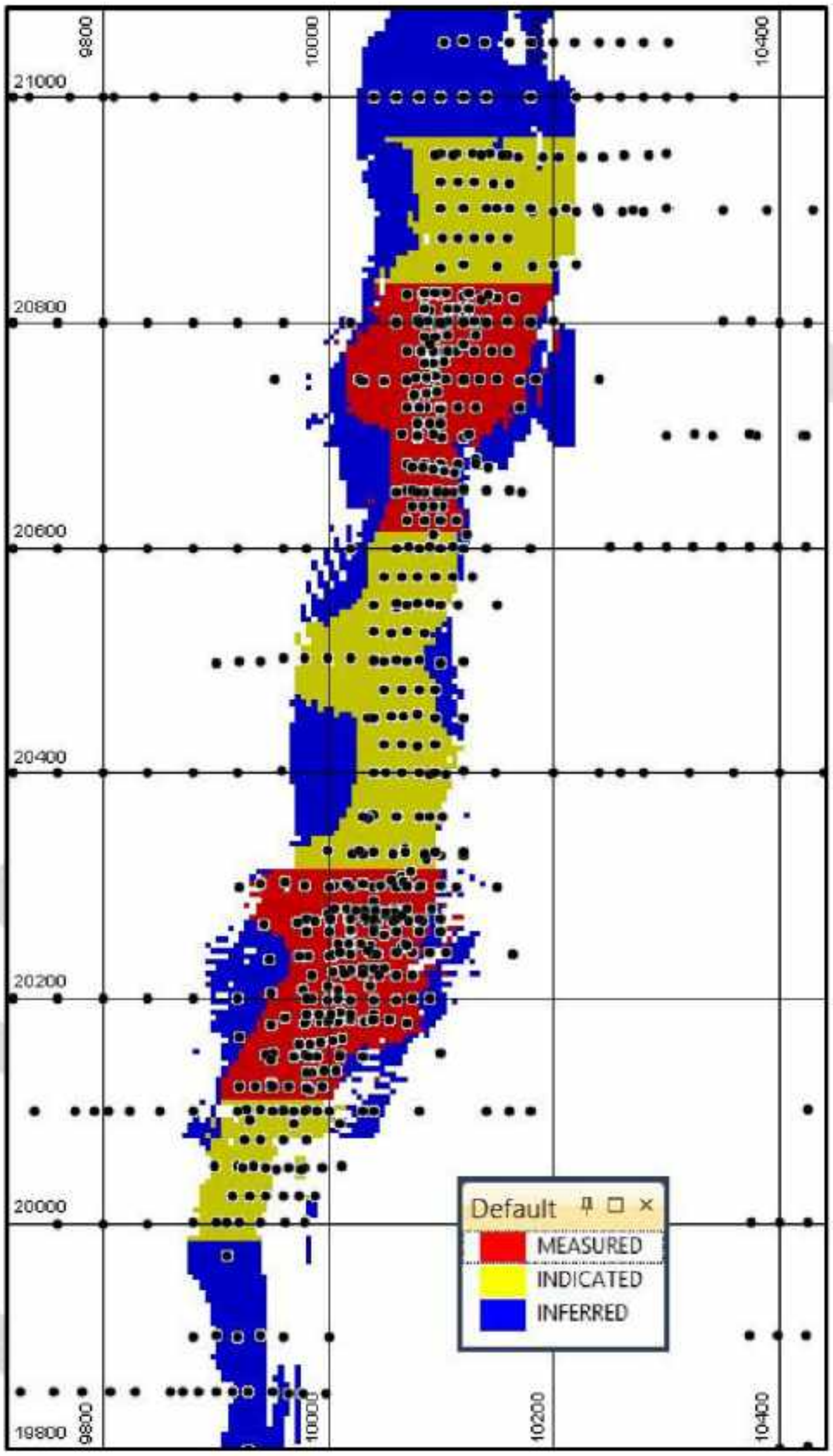
The resources are summarised in Table 5, above a lower block-cut of 0.2g/t Au.

Table 5 - Resource Summary – above lower block-cut of 0.2g/t Au

Resource	kt	Grade (g/t Au)	oz
Measured	2,900	0.66	62,000
Indicated	2,300	0.59	43,000
Measured + Indicated	***5,200***	***0.63***	***105,000***
Inferred (in-ground)	1,000	0.50	18,000
Inferred (Stockpile)	75	1.20	3,000
Total Inferred	***1,100***	***0.60***	***20,000***
Total Resources	**6,300**	**0.62**	**125,000**

The distribution of resource categories within the White Well orebody is illustrated in Figure 6.

Figure 6 – Resource Model



1.11 Resource Upside

There is a potential that the current resources estimate may be understated and that the grade could be circa 20% higher based on reconciling:

- the 1992 historic mining report, and
- recent test work data undertaken on samples from the stockpile located on site.

The comparative data is illustrated in Table 6, providing a summary of the under call factors..

Table 6 – Comparison of Resource with Measured / Testwork Data

Old Pit Reconciliation	"In-pit" Resource (Nov 2016)	Reported 1992
Ore Tonnes	165,000	165,000
Grade, g/t	1.36	1.69
Ounces, Au	7,214	8,970
Variance		+24%

Stockpile Reconciliation	"In-pit" Resource (Nov 2016)	Met Test work Data (2008 – 2016)
Ore Tonnes	75,000	81,000
Grade, g/t	1.20	1.31
Ounces, Au	2,893	3,411
Variance		+18%

Note: This under call factor has not been included in the base case project financial model.

1.12 Geotechnical

Work completed to date includes:

- Geotechnical evaluation of the White Well Pit by Dames and Moore in 1991.
- Desktop study line mapping on exposed walls in the existing pit in 2015 by Coffey Mining to assess the pit wall angle assumptions used in the pit optimisations and design.
- TSF geotechnical desktop study by 4D Geotechnics in 2012 (Cobra) and 2016 (LAM) with a final comprehensive TSF design in progress as part of this PFS.

Observation of the existing trial pit slopes (Figure 7) indicates that mined batter and overall slope angles were stable. The current batter failures on the lower batter have most likely been a result of softening of the toe at the pit lake level and allowed failure to occur.

Given that the pit has been exposed for 24 years, the slopes have performed very well. It is likely without the pit lake, occurrence of failures would have been much reduced.

Figure 7 - View of Pit Facing South

Discontinuity mapping indicates a number of domains exist and predicted failure modes yet to be identified following further analysis.

Conclusions from the geotechnical assessment are summarised below.

- Hydraulic conductivity of the deposit rocks is very low, and if mining should recommence ground water inflow should be minor. However it is anticipated that ground water levels behind the slope will be relatively high.
- Kinematic instability on a batter scale in the certain areas of the pit are likely to occur, however an overall inter-ramp pit wall steeper than the than the assumed 45º may be maintained at a factor of safety of 1.2.
- The risk associated with pit slope stability is considered low, but warrants further analysis of additional data to provide further confidence in pit wall design criteria.
- Risk associated with ground water is low, however slope dewatering may be required.

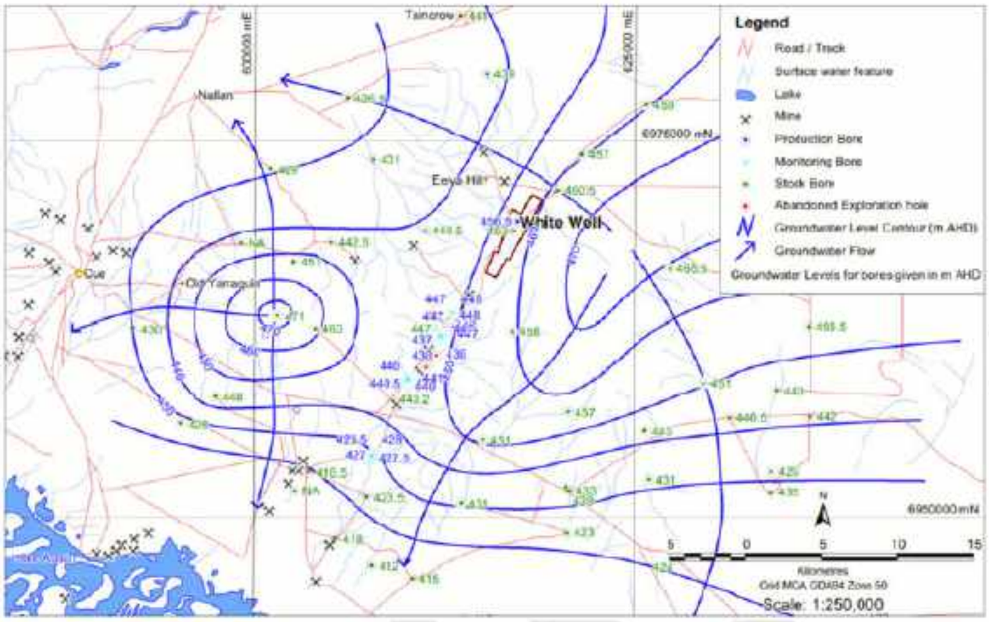
1.13 Hydrology

Work carried out to date includes:

- Evaluation of groundwater and hydrogeology by Global Groundwater in 2012 and
- Surface water management plan and conceptual design of water diversion infrastructure carried out by AQ2 in May 2016.

White Well area is a locally topographically elevated area creating localised watersheds running north, northwest and westwards towards the breakaway. The local surface drainage pattern (north to northwest) does not correlate with the regional groundwater drainage that is generally southwest wards towards the low laying Lake Austin (Fig.ure 8).

Figure 8 - Regional Groundwater Contour Line (GG Hydrogeology Report 2012)



Groundwater aquifers at White Well are located in the weathered clay rich saprolite zones, in fractures, joints and bedding planes (mainly in banded iron formations) and on contact planes with the fresher hard basement rocks.

The existing White Well pit lake contains an estimated 80 megalitres of water, which is currently licensed by LAM under GWL 181566 for a water abstraction rate of 150,000 kilolitres per annum. On 7 August 2019, LAM made application to Department of Water and Environment Regulation (DWER) for an amendment to increase the water abstraction rate to 2,000,000 kilolitres per annum.

1.13.1 Site Target Drilling Locations

In 2019, LAM appointed Global Groundwater (GC) to undertake a pilot hole drilling program (Figure 9) and 11 RC holes were drilled (WW1/19 to WW11/19, Fig. 4) along a 5km strike length, targeting only banded iron formations (BIF).

Figure 9 – White Well Bore Location Plan

1.13.2 Production Bore Drilling and Construction in 2020

Based on GC recommendations, Western Drilling was appointed to drill and construct production bores in 2020 with AEMCO Pty Ltd appointed to oversee and manage the drilling and aquifer pump testing of the production bores.

1.13.3 Production Bore Rates

Constant yield tests were conducted in each bore over a 24 hour period with recovery readings taken after 24 hours until at least 90% or more of the original drawdown had recovered. A typical test set up at a water bore is shown in Figure 10.

Figure 10 - Aquifer Pump Testing Being Conducted

A summary of the pump test results can be seen in Table 7 based on a sustainable yield after 365 days.

Table 7 - Sustainable Yield / Maximum Yield After 365days – No Boundary Conditions

Bore Number	Available drawdown – Saprolite Zone	Available drawdown – fractured BIF or main aquifer	Transmissivity Saprolite zone	Transmissivity of BIF or fractured zone	Yield Saprolite	Yield BIF or main fractured zone	Recommended abstraction rate
	m	m	m^2/day	m^2/day	L/s	L/s	L/s
WPB01	16	9	5.0	40	0.4	3.4	3.8
WPB02	26	12	4.0	14	1.1	1.7	2.8
WPB03	19	6	0.8	40	0.2	2.2	2.4
WPB04	14	8	2.6	24	0.4	1.8	2.2
WPB05	26	12	2.0	18	0.6	2.1	2.7
WPB06	28	7	0.5	30	0.1	1.0	1.1
WPB07	30	9	0.4	7	0.1	0.6	0.7
WPB08	11	15	1	34	0.1	4.5	4.6
WPB09	30	9	1.5	9	0.4	0.7	1.1
WPB10	23	12	0.4	60	0.1	6.2	6.3
WPB11	11	9	2	1	0.3	0.2	0.5
WPB13	21	7	2.5	40	0.5	2.5	3

1.13.4 Water Quality

Water samples were taken and sent to ALS Environmental Laboratory in Wangara, WA. The results showed there is limited difference between the water quality or measured parameters in the different bores. The water is potable and comply with Australian Drinking Water Quality Guideline 6 of August 2018.

The groundwater is fresh and slightly alkaline and has dominant sodium, potassium cation hydrochemical facies and dominant chloride anion facies.

1.13.5 AEMCO Conclusions and Recommendations

- The establishment of a new production well field for White Well was a success and a potential total abstraction yield of at least 30 L/s has been established.
- The White While hydrogeological environment is complex and long term available storativity and aquifer boundary limitation needs to be confirmed through ongoing monitoring when the wellfield is operational.

1.14 Open Pit Design

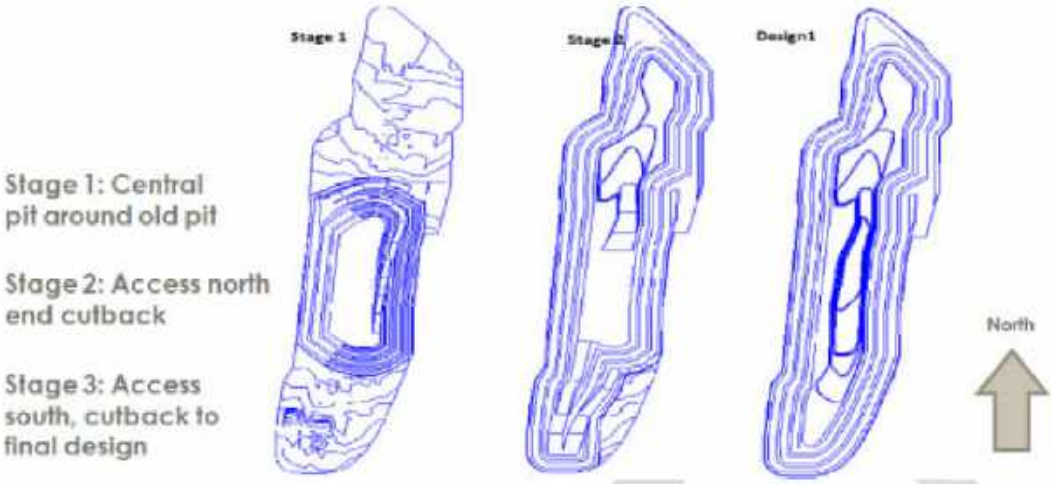
In 2016, LAM commissioned CRM to carry out pit optimisations on updated 2016 ore block model. The modelling contains the additional 2012 (Cobra) and 2016 (LAM) drilling data. Further work on mining fleet optimisation was completed in early 2017 with assistance from Alpha Mine 4U, followed by a complete review of the mining schedule and mining fleet in line with the revised processing strategy described in this study.

The open pit dimensions remain at 1,010m long, up to 250m wide and up to 90m deep, based on average 45° inter-ramp wall angles, 6m wide berms and a ramp gradient of 1 in 10.

As illustrated in Figure 11, open pit development is scheduled over three stages of mining, commencing with a central cutback around the existing old pit. Stage 2 commences four months after Stage 1, lagging by four benches (12 vertical metres). Stage 3 follows on from Stage 2 and results in extraction of the lower benches to final pit depth.

Figure 111– Open Pit shells

Staged Open Pit - Average Waste - Ore Ratio = 1.9



The staged approach to open pit mining is proposed to spread the impact of waste mining from the upper 15 metre depleted zone, and achieve staged mining of the more competent transitional ore at depth.

The final pit design results in a total mining inventory of 4.67Mt of ore at 0.65g/t. Transitional ore comprises 19% (0.89Mt) of the ore mined. The waste to ore ratio is 1.9 : 1, with a total of 5.05 million bank cubic metres (bcm) of waste to be mined. The existing stockpile comprising 81,000 tonnes of oxide ore at 1.31g/t is included in the mining inventory, resulting in total ROM ore feed of 4.75Mt at 0.66 g/t for 100,949 ounces.

White Well Mining Inventory	kt	g/t	Ounces
Oxide [1]	3,865	0.66	82,542
Transitional	890	0.64	18,407
Total Ore	**4,735**	**0.66**	**100,949**

[1] Includes existing pimple stockpile – 81kt @ 1.31g/t

It assumed that blasting of the cap rock will be required, with occasional, light blasting in the majority of the oxide zone to ensure good excavator productivity. Dozer ripping remains an option as a potentially more effective method to loosen the oxide material.

The mining plan is based on using conventional open pit mining equipment, with the primary fleet comprising a 130 tonne excavator and 100 tonne dump trucks, working dayshift only over the entire mine life. This is augmented by two scrapers during initial Stages 1 and 2 to compliment the tailings dam inner embankment construction equipment.

The design for a waste encapsulated TSF is complete, with the first cell scheduled in line with kaolin waste mining over the first 5 months. A final engineering analysis of the staged embankment walls is in progress with assistance from 4D Geotechnics to demonstrate a stable landform will be achieved.

Opportunities include:

- Dozer ripping of more competent material in place of drilling and blasting.
- Further refinements to staged scheduling and in-pit waste backfilling.

Potential risks include:

- Impact of pit wall deterioration below the water table due to slower mining rate, with the staged approach enabling the walls to be mapped, monitored and analysed prior to committing to the final pit design.

1.15 Tailings Storage Facility

4DGeotechnics Pty Ltd (4DG) was engaged by Cobra Mining Ltd in 2012 to conduct a geotechnical investigation and stability analysis for the concept design phase of their White Well tailings storage facility, 35km north east of Cue, Western Australia.

The TSF concept essentially comprises the following.

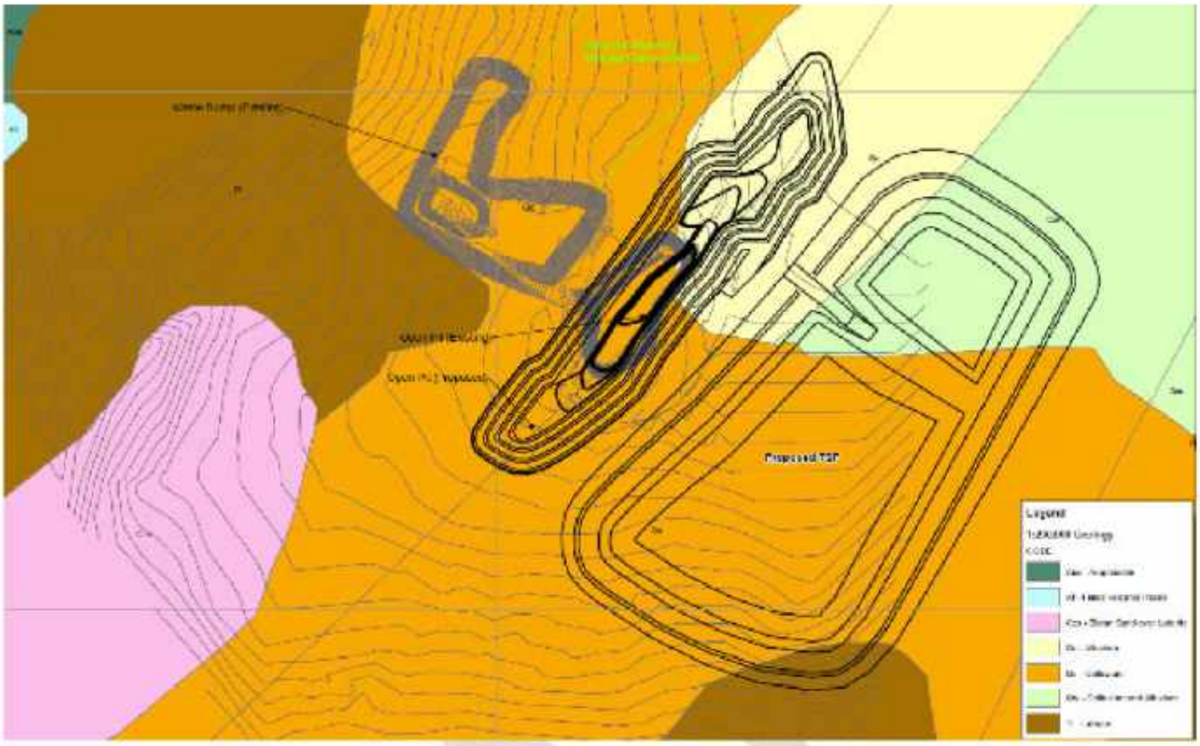
- Staged construction to keep pace with tailings deposition to a final height of 15m.
- Centreline or downstream embankment construction method.
- Earthfill embankment.
- Ferricrete scour protection on outside batter.
- Cut off trench.

The earthfill materials are proposed to be sourced from within the TSF footprint and from future mine waste excavations from the kaolin soils located in either the existing waste dump or mine waste from mining operations. The scour protection source is the laterised zone and ferricrete layer which can be sourced from the cut-off trench excavations, or from an extension of the mine pit.

In 2019, LAM engaged 4DG to update their report based on amendments to the location and construction approach and undertake a stability and seepage analysis.

The present conceptual designs have considered the construction of the TSF using downstream construction techniques. Due to an abundance of saprolitic waste material, this construction method allows for the creation of a stable and easily constructed TSF landform (Figure 12).

Figure 12– Proposed TSF Location



Sufficient suitable materials for the TSF construction are expected to be available from the open pit waste, including lateritic materials for erosion protection of the final TSF/waste landform.

1.16 Metallurgy

LAM has been given access to information and reports generated from a number of metallurgical test work programs conducted between 2007 and present, including those conducted by:

- Advanced Tenement Services (2007).
- Mutiny Gold Ltd (2008/2009).
- Cobra Mining Pty Ltd (2012).

This has subsequently been augmented by additional testwork carried out by LAM, co-ordinated by MSP. In summary, the work programmes were conducted with the aim of testing for the following.

Assess the amenability of the weathered ore to be scrubbed and washed to separate the fine kaolin fraction from the coarse quartz fraction.

- Determine the recovery of gold into a coarse quartz fraction.
- Determine the amenability of the gold to be recovered using conventional gravity and cyanide leach and adsorption techniques from the coarse and fine fractions.
- Determine the amenability of the transitional ore to scrubbing.

1.16.1 Previous Test Work

It is noted that the results from the Mutiny Gold test work program conducted by SGS Lakefield Oretest in 2008/09 and supervised by Mr Allan Brown has formed a significant part of the MSP process design, complemented by additional test work carried out by MSP in 2015 and 2016.

The Mutiny test work used a range of samples (RC chips, diamond core, bulk samples) and is the most comprehensive test work conducted to-date looking at washing out a low grade fines fraction and treating the coarser gold bearing quartz.

A summary of the Mutiny Gold test work results are as follows.

- The Bulk Ore Composite was amenable to a recovery process including scrubbing, screening, gravity concentration and CIL.
- Autogenous scrubbing was conducted on the bulk composites for four minutes, with a power input of 1kWh/t. It was concluded following this, that effective breakdown of the clay and liberation of the quartz had been achieved.
- Following scrubbing, approximately 15% of the mass and 68% of the gold was recovered to the +212µm screen oversize fraction, at a grade of 6.2g/t Au.
- The +212µm fraction was then subject to crushing and grinding to a P80 size of 150µm and gravity concentration using a falcon super bowl. The falcon produced a gravity concentrate containing 12% of the mass (stage), with a gold recovery of 87% grading

57g/t Au. It was anticipated that the gold recovery could be improved with further test optimisation.

- The -212µm fraction was subject to gravity concentration using a Knelson concentrator. The Knelson produced a fine gravity concentrate containing <5% of the mass, with a gold recovery of circa 80% grading 14g/t Au.
- Reground samples from the screen oversize were subject to CIL tests, which resulted in gold extractions of >95%. Tests were conducted at P80 grind sizes of 150, 106 and 75mm, with minor differences in gold recoveries recorded.
- Hydrocyclone classification of the fine fraction, aimed at concentrating the gold into a small mass fraction in the cyclone underflow achieved a mass split without any sizing or concentration. It is believed that this was due primarily to viscosity effects of the high clay content.

In summary, when the bulk ore composite was subject to scrubbing and screening, followed by gravity concentration of the coarse and fine fractions and CIL treatment of the reground coarse fraction, an overall gold recovery of 93.4% was achieved.

Further test work carried out by MSP in 2015 using samples from the existing stockpile show similar variation to the earlier Mutiny samples with:

- The %Wt +212 µm varying from 14% (292578) to 43% (292584).
- The low grade sample 292578 having 31% of the gold finer than 212 µm.
- The higher grade samples having from 3% to 13% of the gold finer than 212 µm.

The samples were screened at 38µm to give an indication of the fine gold content that may be difficult to recover by gravity separation. This ranged from 2% to 12% of the total gold across the samples, although the gold content of the ultrafine fraction was more or less constant.

1.17 2016 Test Work

MSP conducted scrubbing, cycloning and variability test work on a one tonne oxide ore sample taken from the existing oxide stockpile.

Good liberation of quartz was achieved from the scrubbing tests and gold was successfully concentrated to a cyclone underflow stream. Screening of the cyclone underflow to reject a -212µm fraction may provide a further upgrade with minimal gold loss. In summary:

- Following scrubbing and cycloning, a +53µm coarse concentrate was produced grading 3.8g/t Au for a recovery of 94% and mass yield of 32%.
- Following screening, a +212µm coarse concentrate was produced grading 6.3g/t Au at an overall recovery of 91% and mass yield of 19%.

Gravity concentration of the -212µm cyclone underflow fraction produced an upgraded concentrate. Following gravity concentration of the -212µm cyclone underflow fraction, a combined +212µm coarse concentrate and -212µm gravity concentrate was produced grading 6.3g/t Au at an overall recovery of 92% and mass yield of 19%.

MSP conducted test work on transitional ore samples taken from diamond drill core retrieved during LAM's April 2016 drilling program. In summary:

- Laboratory scale scrubber tests indicate mass yields comprising a mixture of quartz and host rock ranging from 21% to 68% for weathered and hard transitional ores, respectively.
- Leach cyanidation tests on the transitional ore product after scrubbing indicate final gold recoveries of 99.7% and 97.4% for weathered and hard transitional ore, respectively, after 48 hour retention time.
- Improved comminution and further reduction in mass yield may be achievable by crushing grizzly oversize and addition of grinding media in the scrubber.

1.17.1 Processing Consideration

Size-by analysis of samples of White Well kaolinite obtained from the weathered zone suggests a strong relationship between size fraction and gold deportment. This observation in turns suggests relatively low-cost beneficiation by classification as a potentially technically and commercially viable approach of processing low grade (average 0.66g/t) to producing a substantially lower volume of higher-grade material before grinding and CIP.

In practice, the impact of beneficiation on total required grinding capacity ahead of CIP is minimal as the selected beneficiation approach results in the recovery and grinding of all of the +212µm material present in the feedstock whilst grinding of the -212µm fraction would not be required whether whole-of-ore CIP processing or beneficiation-concentrate CIP processing were practiced.

Most of the metallurgical test work has been directed at beneficiating the quartz-kaolinite weathered material by rejecting the very fine kaolin fraction (tailings) ahead of conventional CIP processing of the non-kaolin fraction (concentrate).

Accordingly, the object of beneficiation is (an expected) reduction in the capacity of the CIP circuit, a reduction in cyanide and lime consumption (assuming fixed consumption per unit mass processed), avoidance of potential viscosity issues due to the presence of kaolin and avoidance of possible carbon-fouling by sub-micron kaolin.

Concerns with this approach is the proportion of gold reporting to the very fine (nominally -38µm) size fraction.
There is some evidence to suggest that these considerations are simplistic. There is data to suggest that:

- It is possible to recover a gravity concentrate from both the (reground) +212µm fraction and the natural -212µm fraction, with indicative recoveries (based on very limited test work) of circa 50% recovery of gold to high-grade gravity concentrates at very low mass pulls ("Gravity Gold").
- That removal of the Gravity Gold from these streams results in gravity tailings which respond exceedingly well to CIP, with very rapid leach kinetics (2 hours), low cyanide concentrations and low cyanide consumptions and very high (+95%) recoveries.

LAM also conducted a tails settling program using flocculant reagents, either via a thickener or direct dosing the tails prior to discharge into the TSF.

The testwork confirmed that every approach provided good settling characteristics and recovery of water.

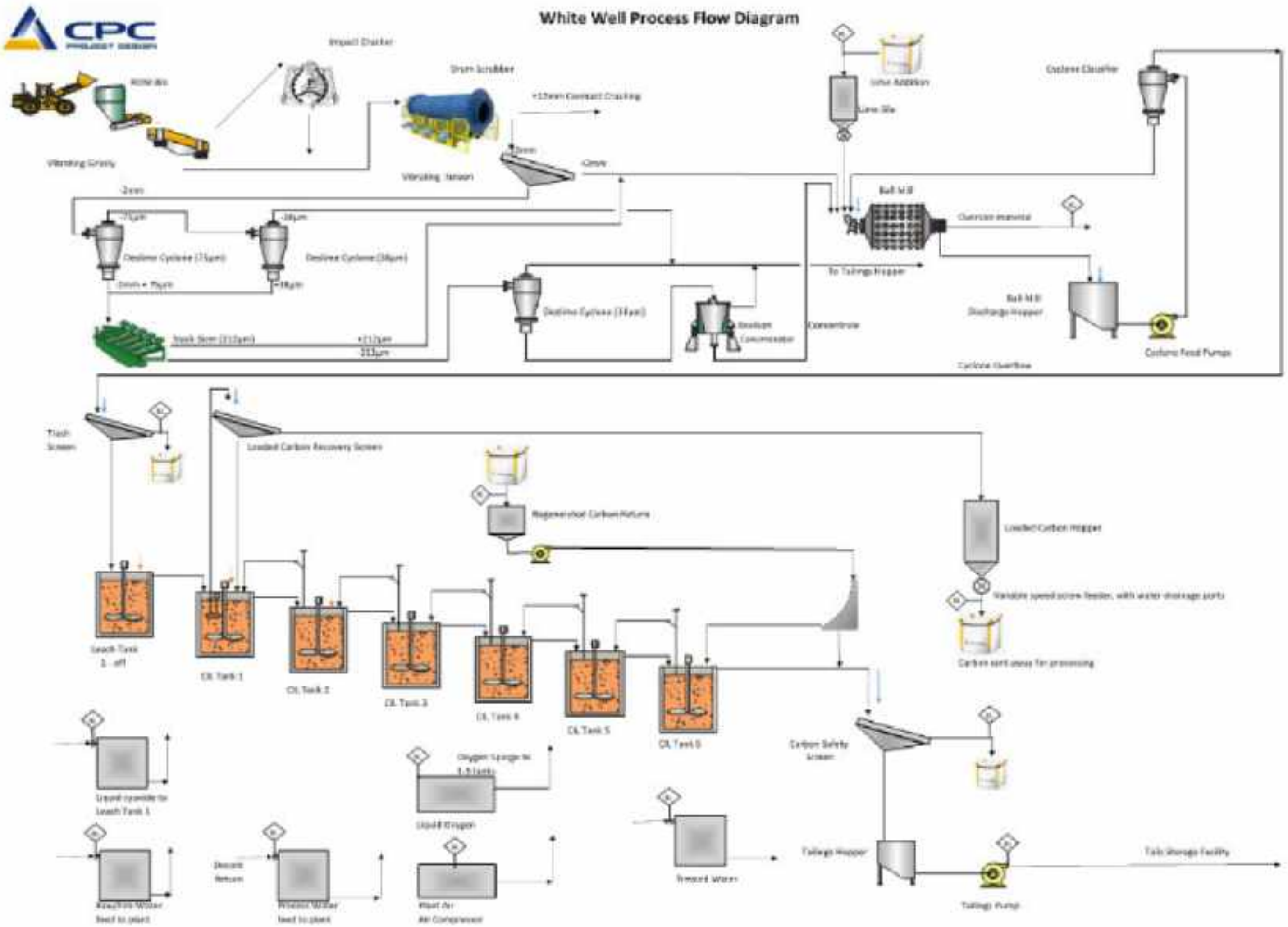
1.18 Processing

The processing plant will consist of a drum scrubbing, desliming (kaolin clay removal) via screening, hydrocyclones and gravity concentration to recover a quartz concentrate containing the gold fraction.

The quartz concentrate will then be processed through a ball milling and CIP circuit.

The proposed Process Flow Diagram for these facilities is shown in. Figure 13

Figure 1313– Block Flow Diagram for the White Well Process Plant



1.18.1 Process Design Criteria

The key Process Design Criteria that forms the basis of the processing is summarised in Table 8.

Table 86 – Key Design Criteria

White Well Process Plant		
Description	**Units**	**Values**
Mining Inventory and Grade		
Tonnes ore mined to ROM	t	4,654,000
Existing stockpile	t	81,000
Total ROM Ore	t	4,755,000
Mined ore grade	g/t	0.66
Scrubber Plant Operating Schedule		
Processing duration	Months	36
Hours per day	Hrs	24
Days per week	Days	7
Plant utilisation and availability	%	93
Plant operating hours	Hrs / yr	8,147
ROM Ore Plant feed rate	tph	300
Concentrates Mass Yield	%	15
CIP tonnes processed	kt	713
Grade	g/t	4.13
CIP Plant Operating Schedule		
Processing Duration	Months	70
Hours per Day	Hrs	24
Days per Week	Days	7
Plant Utilisation and Availability	%	93
Plant Operating Hours	hr	8,147
Plant Feed Rate	tphr	30
Ball Mill Bond Work	kW hr/t	18
Leach Residence Time	hrs	12
Cyanide Consumption	kg / tonne	0.4
Lime Consumption	kg / tonne	2.0
Total Gold Recovery	%	92
Life of mine production	oz	90,977

1.18.2 Scrubbing / Screening Circuit

In 2016 / 2017, LAM purchased the MU05 (Iluka – Eneabba Mining Field Unit) from Iluka in Western Australia (Figure 14). The plant is specifically designed for washing clay out of minerals sands bearing deposits and has a capacity of up to 600tphr.

Figure 1414 – Scrubber Trommel Plant (Owned by LAM)

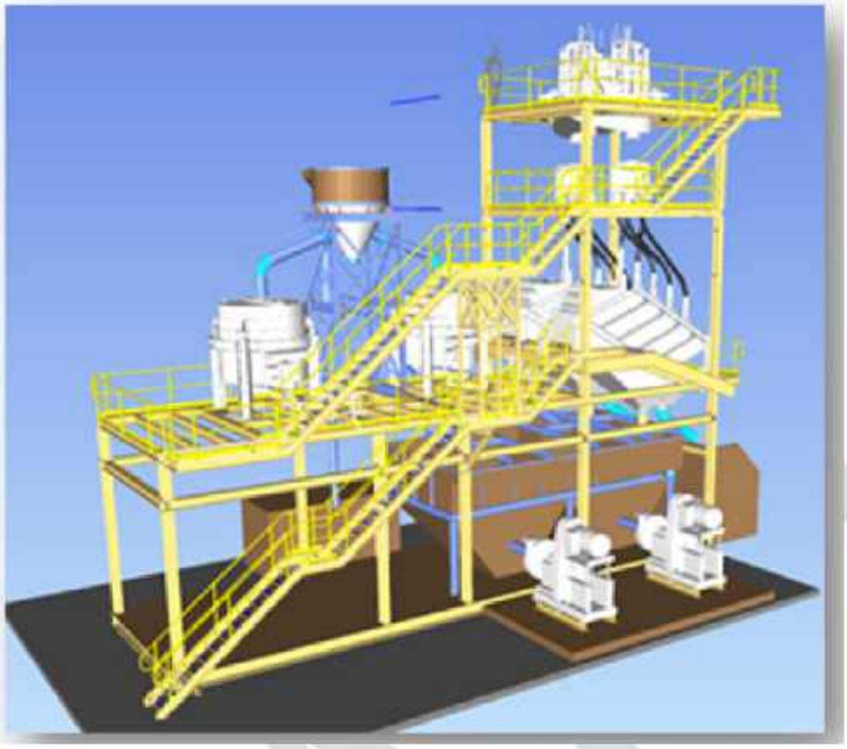
LAM specifically chose a robust, high capacity modular scrubbing circuit to ensure high efficiency liberation of the quartz from the fine kaolonite and intends to de-rate the throughput capacity from circa 600tpa to 100tpa to increase the residence time and to enhance the washing efficiency and recovery of quartz concentrate.

The circuit comes complete with a grizzly feed bin, coarse oversize screen, heavy duty trommel, followed by a high capacity autogenous scrubber along with associated pumps and mechanical equipment.

During normal operation, the trommel and scrubber oversize material will contain the quartz fraction, which will report directly to a fine ore stockpile.

The fines from the trommel screen undersize will be pumped to a modular fines screening circuit to recover the -2mm +212µm quartz fraction, whilst the screen undersize fraction will report to two concentrators, which scalp the fines +38µm – 212 quartz and fine gold from the kaolin fines. A schematic diagram of the fines circuit is illustrated in Figure 15.

Figure 1515 – Fines Recovery Circuit



The quartz concentrates are stockpiles beside the washing plant on the Fire Ore Stockpile.

Following the purchase of the scrubbing plant, LAM relocated it to Geraldton and commenced major refurbishment of the circuit and it is currently stored at Geraldton.

In additional, LAM procured two ultra fine Derrick screen from the USA for the fines plant circuit and completed the design of the fines plant. The Derrick screens are currently stored in a facility in Welshpool.

1.18.3 CIP Plant

For the purpose of the study, LAM engaged CPC Engineering to provide an indicative design and costing for a new 30 tonnes / hr CIP plant.

The grinding circuit consists of a ball mill in closed circuit with hydrocyclones . Cyclone overflow gravitates to a trash vibrating screen prior to reporting the leach/CIL circuit. Cyclone U/F gravitates back to the ball mill feed chute.

The leach/CIL circuit consists of 1 leach and 6 CIL tanks with the CIL tanks fitted with interstage screens. Loaded carbon will be removed daily and carbon advance through the tanks will be via airlifts. Loaded carbon (in bulka-bags) will be transported to a custom stripping facility for the recovery of gold, with the barren carbon reactivated before returning to site.

1.19 Site Infrastructure and Services

General site layout for the White Well project is shown in Figure 16, with the Plant and Mineyard Layouts illustrated in Figure 17.

Basic infrastructure at White Well is proposed to support the mining operation and processing plant, including the following

- Diesel fuelled power station.
- Fuel storage / dispensing.
- Explosives storage including detonator magazine and emulsion tank.
- Mineyard and plant workshop / stores.
- Raw water and process water storage ponds.
- Office, crib and ablution facilities.
- First aid facility.
- Waste dump encapsulated tailings storage facility and associated pump and pipeline systems.
- Raw water supply (borefield, including pipeline).
- Fresh water supply and storage.
- Limited re-conditioning of site roads that are currently in reasonable condition. The Cue - Wondinong gravel road is in excellent condition and maintained by the Cue Shire.
- Accommodation camp (on or off-site) allowing for initial average personnel numbers up to 80 during construction, reducing to 48 maximum for on-going operations. Consideration will be given to overflow accommodation in existing (but limited) accommodation facilities in Cue.
- A fully equipped borefield serving both the operations and camp requirements.

Figure 1616 – General Site Layout Plan

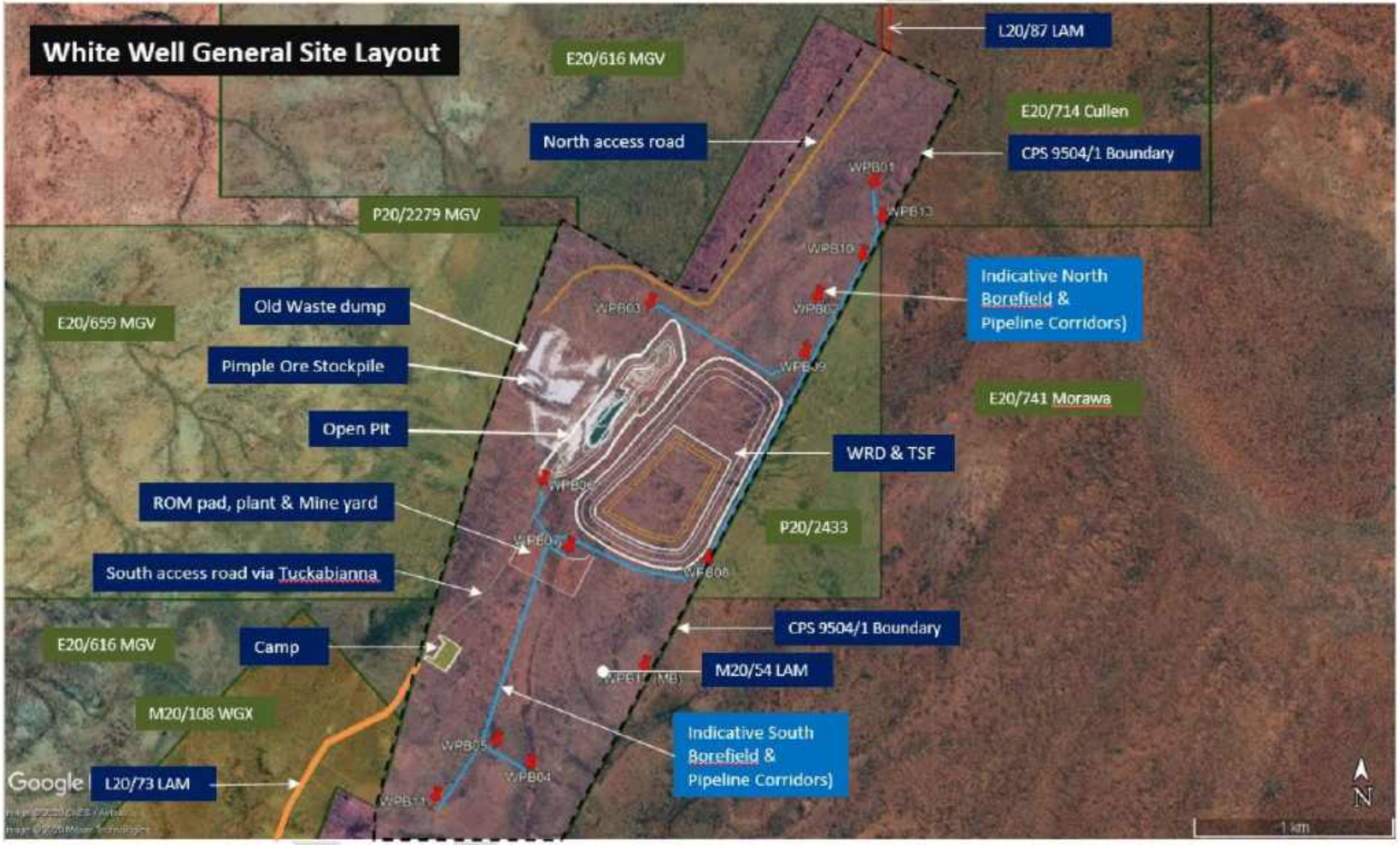


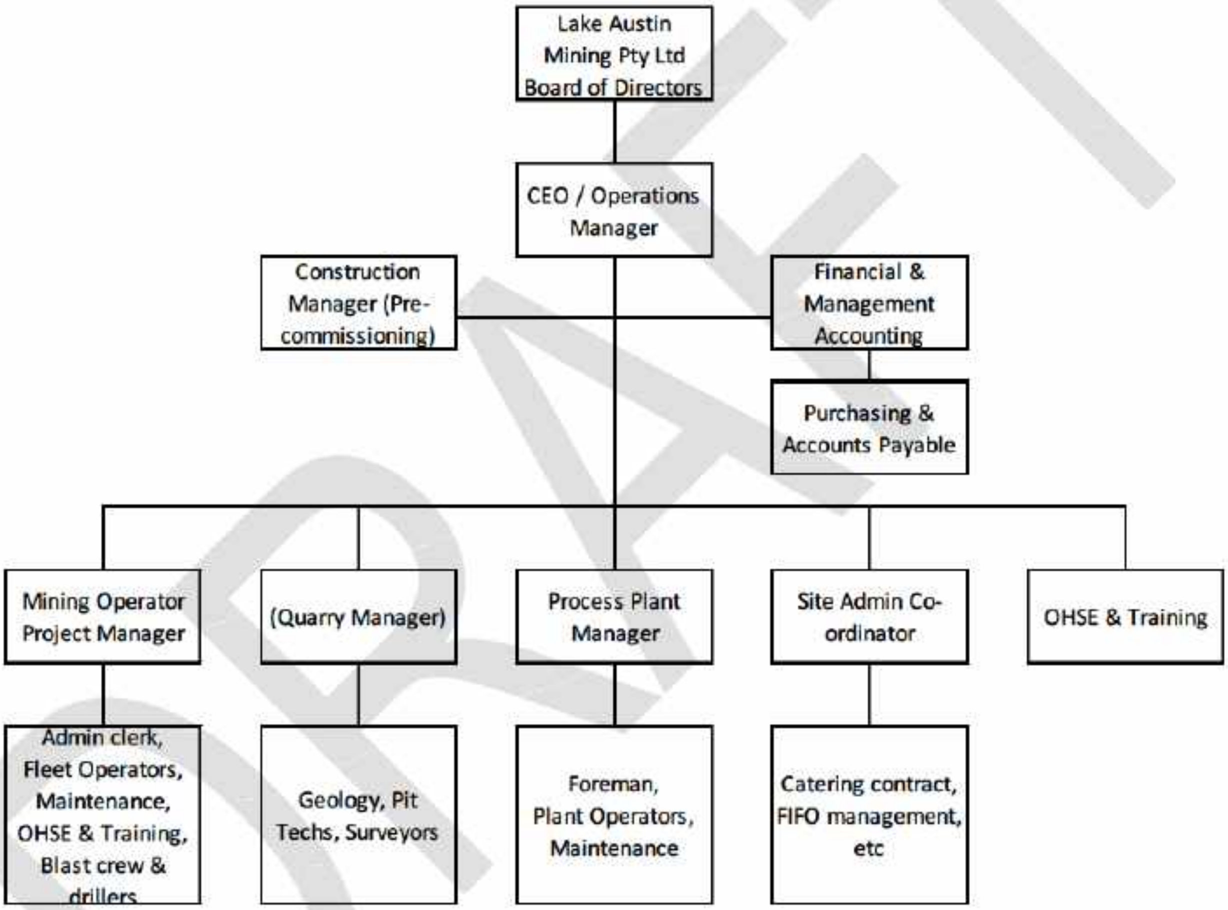
Figure 17179 – Plant, Mineyard & Administration Areas

1.20 Site Administration

The main assumptions assigned to the project administration function include:

- Establishment of a full accommodation village on site.
- Fly-in and fly-out commuting for the majority of personnel using an air charter service between the Cue airstrip and Perth.

1.20.1 LAM Organisation Structure



1.21 Project Schedule

The key project milestones summarised in Table 9 Table 97.

Table 97 - White Well Project Milestone Dates

Milestone	Month
Project Development Declaration	0
Site Access Date	0
Commencement of Mining	6
Commissioning of Plant	9
First Ore Processing	10
First Gold Pour	11

1.22 Capital Costs

The basis for the capital cost estimate is described in detail in Section **Error! Reference source not found.** with a summary of the total project capital cost is presented in Table 10 Table 108. This includes pre-development capital (mine predevelopment, mine working capital / pre-strip, and plant working capital).

Table 108 - White Well Capital Cost Summary

Sub-total Capitalised Operating Costs	[redacted]
Capitalised Operating Costs:	[redacted]
Mine predevelopment (incl. TSF), $k	[redacted]
Mine Working Capital - Prestrip, $k	[redacted]
Scrubbing & Crushing Working Capital, $k	[redacted]
CIP Process Plant Working Capital, $k	[redacted]
Administration Working Capital, $k	[redacted]
Sub-total Capitalised Operating Costs	[redacted]
Capital Costs:	[redacted]
Process Plant - Scrubber and Fines Circuit, $k	[redacted]
Infrastructure & Services, $k	[redacted]
Sub-total Capital Costs	[redacted]
Total Capital & Capitalised Operating Costs, $k	[redacted]
AU$/t	[redacted]
AU$/oz	[redacted]

[redacted]

- Excludes sunk costs.
- Excludes contingency.
- Camp is leased with ownership transferred to LAM after 36 months.
- Power is leased.
- Laboratory equipment leased with buildings purchased.
- Borefield based on 4 x fully equipped production bores.

1.23 Operating Costs

The basis for the operating cost estimate is summarised in Table 11Table 119.

[redacted]

Note: The above cost items exclude all predevelopment working capital and mining prestrip costs.

1.24 Financial Analysis

Table 12 provides a summary of the key project metrics.

Table 1210 - Physicals, Costs and Financial Summary

Physicals, Costs and Financial Parameters			
Geological Resource			
	Tonnes	**Grade, Au g/t**	**Ounces**
Measured	2,920,000	0.66	62,100

Physicals, Costs and Financial Parameters	[redacted]
Indicated	[redacted]
Total Measured & Indicated	[redacted]
Inferred (including stockpile)	[redacted]
Total Resource	[redacted]

Project Physicals (LOM)	[redacted]
Project Life (Total)	[redacted]
Gold Production Period (Total)	[redacted]
Ore Mined	[redacted]
Waste Mined	[redacted]
Total Mined	[redacted]
Strip Ratio (bcm basis)	[redacted]
Oxide Ore Mined	[redacted]
Transitional Ore Mined	[redacted]
Total Ore Mined	[redacted]
Mined Gold Grade	[redacted]
Gold Contained in Mined Ore	[redacted]
Scrubber Feed	[redacted]
Scrubber Gold Grade	[redacted]
Gold Contained in Scrubber Feed	[redacted]
Plant feed	[redacted]
Plant Gold Grade Fed	[redacted]
Gold Contained in Process Plant Feed	[redacted]
Gold Recovered from Process Plant	[redacted]
Mass Pull to Concentrate	[redacted]
Gold Recovery to Concentrate	[redacted]
Gold Recovery in Process Plant	[redacted]
Overall Gold Recovery	[redacted]

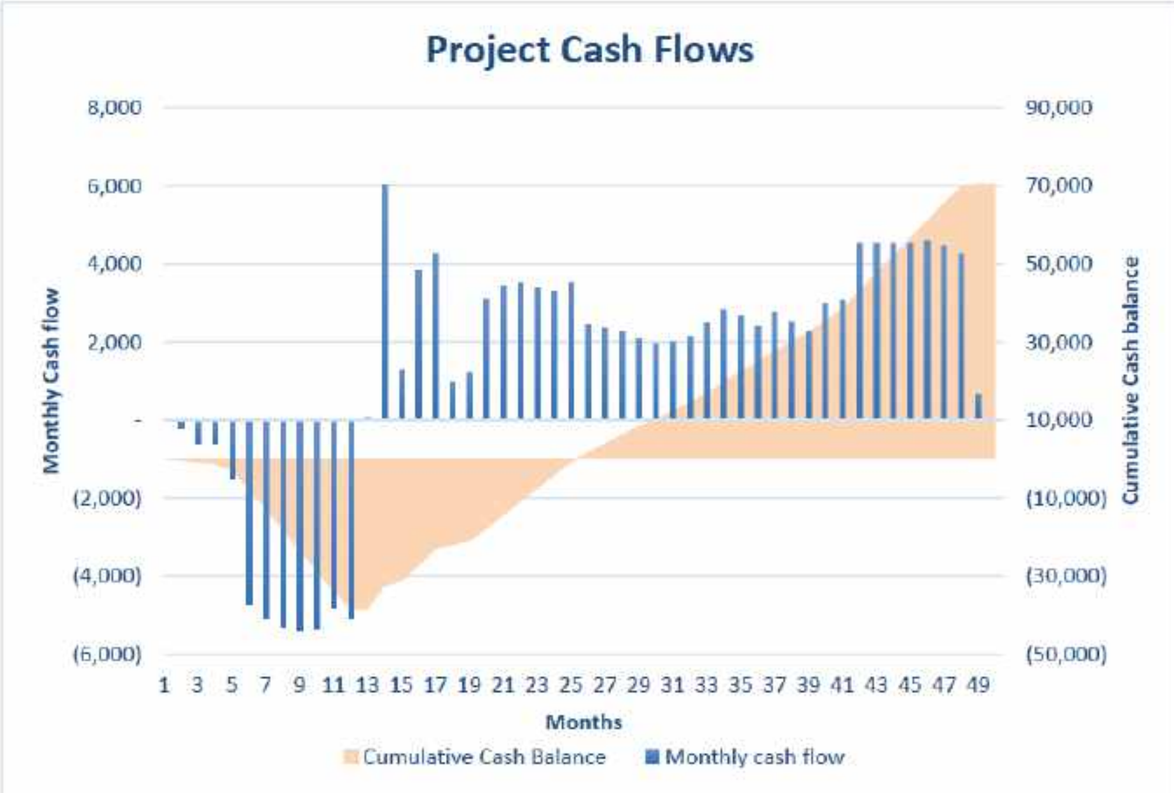
Project Financials (Ungeared)	[redacted]
Spot Gold Price	[redacted]
Gold Revenue, net of dore refining, transportation	[redacted]
Mining Operating Costs	[redacted]
Scrubber & Fines Plant Operating Costs	[redacted]
Crushing Coperating Costs	[redacted]
Ore Haulage Operating Costs	[redacted]

Project Financials (Ungeared)	[redacted]
CIP Plant: Lease Operating Costs	
CIP Plant Processing Operating Costs	
Administration Operating Costs	
Other (WA State Royalty) Operating Costs	
Total Operating Costs	
Scrubber & Fines Circuit Capital Costs	
CIP Plant Capital Costs	
Infrastructure Capital Cost	
Banderol	
Total Capital Costs	
Capitalised Operating Costs	
Total Capital & Capitalised Costs	
Undiscounted Pre-Tax Cashflow / EBIT	
Tax Payable	
Undiscounted Post-Tax Cashflow	
All-in-Sustaining-Cost (AISC) = opex during Au production	
All-in-Cost (AIC): opex + capitalised opex + capital	
Discount Rate Applied	
Project NPV (Pre-Tax)	
Project NPV (Post Tax)	
Project IRR (Pre-Tax)	
Project IRR (Post Tax)	
Project Payback Period from Construction Start	
Maximum Project Drawdown	
Profitability Index (NPV +ve CF: NPV -ve CF)	
EBITDA	

1.24.1 Cash Drawdown

The project cashflow model shows a maximum cash drawdown for the project of $38,657 million at month 13 following plant commissioning, with a project payback period of 25 months (Figure 18).

Figure 1818 – Cumulative Cashflow by Month



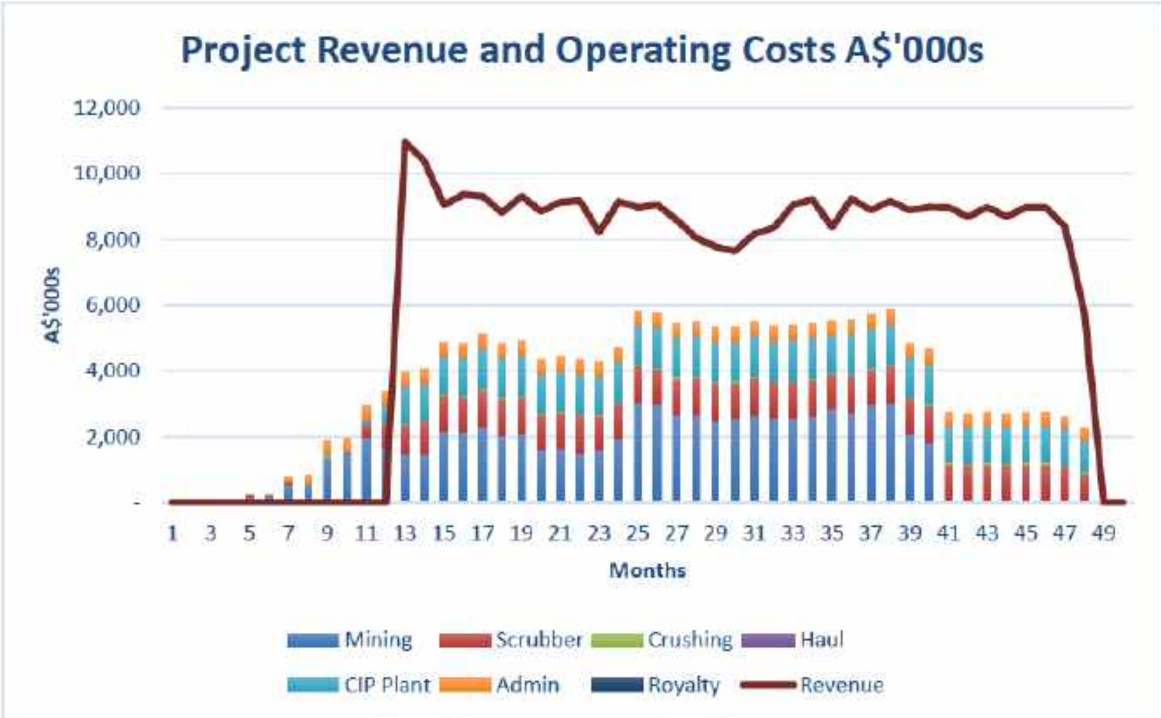
The cash drawdown is a direct function of the costs itemised in Table 13.

Table 1311 - Physicals, Costs and Financial Summary

[redacted]

[redacted].

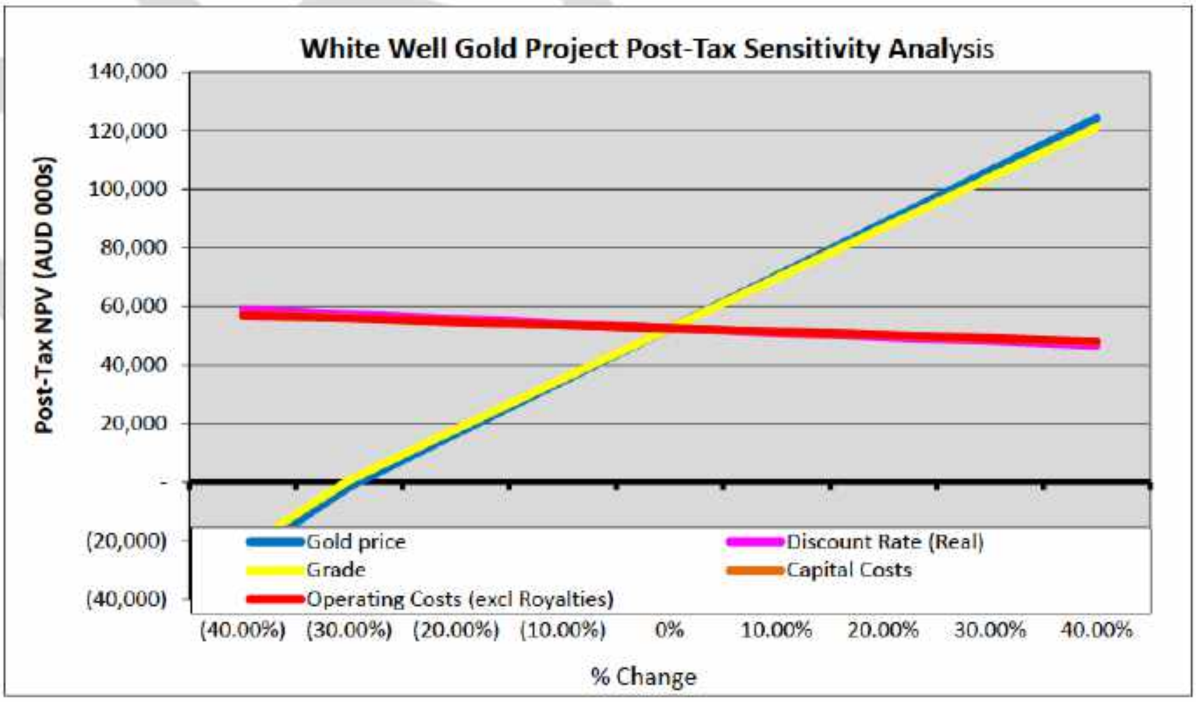
Figure 1919 – Sales Revenue vs Operating Costs



1.24.2 Sensitivity Analysis

Figure 20Figure 2020 illustrates the project sensitivity for the EBIT key drivers. The project economics are most sensitive to gold price, feed grade and wash plant recovery. The EBIT varies by $9.0 million for each 5% variation in the gold price, with a breakeven gold price of AU$2,420/oz.

Figure 2020 – Sensitivity Chart



Gold grade is equally as sensitive, with EBIT varying by [redacted]

EBIT varies by [redacted] for each [redacted] variation in the process plant recovery, with a breakeven gold recovery factor of [redacted] This is based on a breakeven EBIT and would result in extensive periods of negative cashflow. A more realistic cut-off to ensure viability would be approximately [redacted]. The mass yield and recovery for the transitional material is assumed to be the same as for oxide ore at 15%. The economic cut-off mass yield for total oxide and transitional ore product concentrates is [redacted] and approximately [redacted] for the transitional ore alone.

1.25 Risks

The high risk items, opportunities and items are itemised below with a summary matrix for the high risk items included in Table 9.

- Potential loss of gold in the -38µm fraction.
- Leach residence times in the presence of Gravity Gold
- Mass recovery to +212µm size fraction (higher than expected), hence mill capacity and CIP circuit capacity.
- Gold recovery to +212µm size fraction (lower than expected) together with poor gravity recovery of -212µm gold resulting in the inclusion of -212+38µm size fraction without gravity pre-concentration in CIP circuit feed, resulting in (potentially) significant increase in throughput.
- Transitional ore mass yield and associated wash plant gold recovery.

The project is sensitive to capital cost primarily as a result of the impact on initial cash drawdown. The project's operating costs are essentially fixed and therefore is highly sensitive to factors impacting revenue whether as a result of grade, recovery or gold price.

Due to the more competent nature of the transitional ore, mass yield and gold recovery at the wash plant processing stage are considered a potential risk for this ore. Staged mining of the open pit will enable further evaluation of the processing requirements for the transitional ore.

To assess a worst case scenario, excluding the transitional ore (0.89Mt at 0.64 g/t) and processing oxide ore only, results in a total oxide ore inventory of 3.87Mt @ 0.66 g/t. This yields 580kt at 4.16g/t concentrates for 77,488oz Au recovered. Based on a gold price of AU$3,500/oz, the resultant financial parameters are summarised in Table 14.

Table 14Table 12 – Processing Oxide Ore Only

[redacted]

Table 1513 – Key Project Risks

Risk	Issue	Impact	Remedial Actions	Recommendations
Water Supply	Unable to approve project on the basis of lack of process water supply. Current project timeframe assumes all water supply infrastructure will be located on M20/54. If bores and pipeline are required to be located on P20/2190, a miscellaneous licence will be required, resulting in a longer timeframe for approvals in the order of six months or more.	Deferral of project to seek alternative water supplies	Identify alternative water supplies	Undertake groundwater search on LAM leases. High level review of other water supply options in the region.
%fine gold in the -38µm fraction	The metallurgical test work data suggests high degree of variability. Drilling method may reduce reliability of results. Some data suggests significant loss to this fraction, particularly in low grade (0.5 to 0.8g/t) samples.	Gold recovery reduced for the -38µm fraction as it reports with the kaolin tails stream.	Provision has been made to include a Knelson gravity concentrator on the ultrafine product prior to disposal to tailings.	Extend additional cyclone deslime test work to include analysis of gravity concentration of ultrafine -38µm fractions.

Risk	Issue	Impact	Remedial Actions	Recommendations
Higher than Expected Mass Yield	Exceed mill and CIP circuit capacities.	Grinding efficiencies and gold recovery reduced.	Additional design allowance in ball mill and CIP circuit capacity.	Review assumptions in sizing ball mill and CIP circuit design.
Location of Transitional zone	More competent material may impact free digging or liberation by scrubbing.	Reduces total ore tonnage mined if the transition zone is sub-economic to mine.	Allowance made in mining costs for more routine blasting within the transitional zone. Consideration for addition of grinding media in the scrubber to improve comminution	Assess transitional ore during Stage 1 mining to provide guidance for the remaining stages.
Pit Wall Stability	Slower mining rate, potential wall instability below water table.	Loss of pit access, delay in accessing ore, increased waste:ore ratio if wall angles need to be reduced	Staging of pit mining to enable review of geotechnical conditions prior to committing to final design.	Detailed geotechnical mapping, monitoring and analysis during Stage 1 mining.
Gold Price	Substantial drop in price.	Project not viable.	Conducted sensitivity analysis.	Review gold price futures prior to project declaration.
Exchange Rate	Substantial increase AUD$.	Project not viable.	Conducted sensitivity analysis.	Review exchange rate forecasts at project declaration.
BNM Legal Proceedings	Potential for transfer of tenements back to BNM.	Loss of project ownership.	Continue legal action contesting the claim.	Strike out application by year end 2019.

1.26 Opportunities

The following opportunities may exist for the project.

- Resource undercall – opportunity to realise a higher grade from within the current resource.
- Lesser quantities of transitional ore-more weathered material due to gradational change below the expected oxide / transitional boundary.
- Dozer ripping of more competent material in place of drilling and blasting.
- The scrubber is designed at 30% capacity. The opportunity exists to increase plant capacity, with corresponding expansion of the CIP plant.
- Increase in gold price.

1.27 Recommendations

It is recommended that the following items should be pursued at the next stage of the project.

- Continue groundwater search drilling program.
- Test work to evaluate process flowsheet retro-fit options (in particular additional gravity concentration equipment).
- Review assumptions in sizing ball mill and CIP circuit design.
- Assess transitional ore during Stage 1 mining to provide guidance for the remaining stages.
- Detailed geotechnical mapping, monitoring and analysis during Stage 1 mining.
- Review gold price futures prior to project declaration.
- Review exchange rate forecasts at project declaration.