# **ASX ANNOUNCEMENT**



## 14 MARCH 2024



## **Crawford Maiden Ore Reserve Exceeds 29koz of Gold**

## **Corporate Highlights**

- The Crawford Gold Project Pre-Feasibility Study ('PFS') is now complete
- The PFS was constrained to the highly recoverable, low cost, oxidised portion of the Mineral Resource for application to heap leach processing
- The resulting Maiden Ore Reserve is 1,002,000t @ 0.9g/t for **29,300oz of gold** with a pre-CAPEX undiscounted cashflow of **A\$24.6M** and an IRR of **130%** using a gold price of A\$2,900/oz
- 18 month project life with payback within 13 months at a C1 AISC of A\$1,777/oz
- At A\$3,300/oz gold price the Project returns a pre-CAPEX undiscounted cashflow of A\$33.8M
- There remains significant potential upside in increased revenues and growth due to the Resource remaining open
- The Company will now progress with permitting work whilst seeking discussions with potential investment, mining and processing partners

#### Daniel Tuffin, Executive Technical Director, commented:

"The completion of the Crawford PFS marks a major milestone for both the project and Company, proving the viability of mining and processing of a gold deposit that until recently remained under explored and under developed.

The PFS focused on the oxidised portion of the Indicated Resource, which is highly recoverable and amenable to low-cost heap leach processing. This strategic approach has culminated in a Maiden Ore Reserve of 1Mt at 0.9g/t for 29,300oz of gold, underpinning a pre-CAPEX undiscounted cash flow of A\$24.6 million based on a conservative gold price of A\$2,900 per ounce.

The current upward trend in gold prices, coupled with the resource remaining open, positions the Company favorably for possible increase in revenue streams and sustained growth.

Our focus for Crawford now shifts to advancing with necessary application works and to actively seek out and engage with potential partners in investment, mining, and processing. Our commitment to becoming a self-funded explorer remains at the forefront of our endeavors, in line with our corporate strategy since listing 18 months ago."





Figure 1: Plan - Crawford Gold Oxidised Material Open Pit Operation

cavalierresources.com.au



## Summary:

Cavalier Resources Limited (ASX: CVR) ('Cavalier' or 'the Company') is pleased to announce the completion of the Crawford Pre-Feasibility Study ('PFS'), targeting the mining and extraction of gold from the oxidised portion of the current Mineral Resource.

The PFS resulted in a Maiden Ore Reserve of 1,002,000 tonnes at 0.9g/t for 29,300 ounces of gold, with a promising pre-CAPEX undiscounted cash flow of A\$24.6M based on a gold price of A\$2,900/oz.

The Company is now moving forward with permitting and approvals work whilst seeking partnerships for investment, mining, and processing.

It aims to establish the Crawford Gold Project as a new gold mining hub and to become a self-funded explorer to further develop its mature gold assets near Leonora and the burgeoning Ella's Rock greenfield lithium project located on the world class Forrestania lithium belt.

## **Crawford Gold Project Location:**

The Crawford Gold Project sits centrally within the Company's exploration and development projects and is situated just 20 kilometres east of the mining township of Leonora.



Figure 2: Cavalier's Leonora Projects

## **Cautionary Statement:**

The production target and forecast financial information referred to in this announcement comprise Indicated Mineral Resources (99.8%) and Inferred Mineral Resources (0.2%). 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.



## **Study Contributors:**

The following parties contributed to the Crawford PFS:

- Exploration Geology:
- Resource Estimation:
- Geotechnical:
- Groundwater
- Mining Engineering:
- Metallurgical:
- Environmental:

#### Auralia Mining Consulting Kappes, Cassidy & Associates Australia and ALS Metallurgy Native Vegetation Solutions and Terrestrial Ecosystems

Asgard Metals and Geomin Consulting

Auranmore Consulting

Geowater Consulting

Peter O'Bryan and Associates

### **Key PFS Highlights:**

- Project Life 18 Months
- Processing Life 15 Months
- Gross revenue A\$68M
- Gold production of 23,467 recovered ounces
- C1 AISC of A\$1,777/oz
- Pre-Production Capital expenditure of A\$5.6M
- Total undiscounted cash flow of A\$18.2M, inclusive of capital costs
- **D** NPV<sub>8</sub> of A\$15.7M
- IRR of 130%

#### **Key PFS Parameters:**

- Indicated Resources account for >99.5% of ore contained in the production target.
- Applied gold price of \$A2,900 per ounce
- 95% mining recovery factor and 10% mining dilution factor
- Base total mining cost applied \$5.05/bcm, with fixed increase of \$0.375/bcm per 5m in depth
- Contractor fixed costs of \$2.40/bcm
- Processing costs of \$20/t ore and recovery of 80%
- WA state gold royalty of 2.5%
- Discount rate of 8%

## Maiden Ore Reserve Estimate:

The Ore Reserve estimate relates specifically to the conversion of Indicated Resources to Probable Ore Reserves only within the Crawford pit design and includes consideration of the modifying factors.

Reserve Classification	Ore Tonnes	Gold (g/t)	Gold Produced (Oz)
Probable	1,002kt	0.91	29,300
Total	1,002kt	0.91	29,300

#### Table 1: Crawford Ore Reserve Estimate

Some errors may occur due to rounding. Mineral Resources are reported inclusive ore Ore Reserves. Ore Reserves are based on a gold price of \$2,900/oz. A cut-off grade of 0.3g/t was calculated based on the base case cost and processing recovery inputs and was used to generate the production schedule and calculate the Ore Reserve. Note that Ore Reserves are susceptible to geological, economic, geotechnical, permitting, metallurgical, mining, processing and other factors.

## Mineral Resource Estimate:

The Crawford Gold Project currently has a 117,800oz Au JORC compliant Mineral Resource Estimate (MRE) as set out below:

	Indicated		Inferred			TOTAL			
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
0.5g/t Au cut-off	1,154,000	1.0g/t	37,300	2,591,000	1.0g/t	80,600	3,745,000	1.0g/t	117,800
1.0g/t Au cut-off	412,000	1.5g/t	19,600	613,000	1.8g/t	36,300	1,025,000	1.7g/t	55,900

#### Table 2: Crawford Mineral Resource Estimate

Some errors may occur due to rounding

#### Table 3: Crawford Mineral Resource Estimate by Rock Type and Resource Classification

Cut-off			Oxide		Transitional			Fresh		
Classification	Grade (g/t)	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
Indicated	0.5	703,000	1.1	23,700	428,000	0.9	12,900	24,000	0.8	600
	1.0	284,000	1.5	13,600	124,000	1.5	5,900	4,000	1.2	100
Inferred	0.5	37,000	0.7	800	86,000	0.7	1,900	2,468,000	1.0	77,800
	1.0	0	0.0	0	1,000	1.0	0	613,000	1.8	36,200
TOTAL	0.5	740,000	1.0	24,600	513,000	0.9	14,900	2,492,000	1.0	78,400
	1.0	284,000	1.5	13,600	125,000	1.5	5,900	616,000	1.8	36,400

Some errors may occur due to rounding

For more information on the MRE refer to ASX announcement dated 5 December 2022.

## Metallurgical Studies:

Initial standard 2-day intermittent bottle roll cyanide leach tests on 6 x RC chip composites were conducted by the Company at the ALS Metallurgy ('ALS') Laboratory in Balcatta (Perth) in March 2023.

The results were as follows:

- Gold extractions ranged from 78% to 93%
- Average composite depths provided ranged from 9.5m to 55.5m down hole
- Head grades ranged from 0.32g/t to 3.05 g/t Au
- Drill interval lengths ranged from 7m to 18 metres including potential mining dilution
- Weathering from completely weathered to moderately weathered
- Oxidation from strongly oxidised to partially oxidised



For more information on this work, refer to ASX announcement dated 26 June 2023.

Kappes, Cassidy & Associates Australia (KCAA) oversaw the follow up metallurgical heap leach test work carried out after the initial bottle roll testing.

Six reverse circulation composite samples, weighing a total of 570 kilograms, were supplied to ALS representing various weathering, oxidation and rock types that occur within the oxidised portion of the Crawford gold resource.

Sample Designation	Composite Description	Depth Range (m)	Weight (kg)	Expected Gold Grade (g/t)
CRC01	Completely Weathered, Strongly Oxidised Colluvium, Calcrete & Clay	5 to 14	85	1.53
CRC02	Highly Weathered, Strongly Oxidised Saprolitic Clay w/ Clasts	21 to 31	68	0.75
CRC03	Highly Weathered, Partially Oxidised Saprolitic Clay w/ Clasts	52 to 59	78	0.48
CRC04	Highly Weathered, Strongly to Partially Oxidised Saprolitic Clays	39 to 47	83	2.76
CRC05	Medium Weathered, Partially Oxidised Saprolitic Clays	41 to 59	102	1.59
CRC06	Medium Weathered, Partially Oxidised Conglomerate	41 to 56	156	0.71

#### Table 4: Crawford RC Composite Sample Information

Some weight errors may occur due to rounding

The test program consisted of head assays, sizing analyses with fraction assays, coarse-crush intermittent bottle roll tests ('IBRT'), agglomeration/percolation testing and column leach testing.

Each of the six main composite samples was tested individually through the IBRT program, with three column tests conducted on composited material.

Based on the IBRT results and sample rock type and oxidation levels, three columns were set up at as-received size. Equal portions of CRC01, CRC02 and CRC03 were combined into a highly weathered ('HW') composite, while CRC04 and CRC05 were combined in a 40/60 ratio to form a partially oxidised saprolitic clay composite ('POx Sap'). CRC06 was leached separately as medium weathered, partially oxidised conglomerate ('MW POx').

The gold content was observed to be relatively consistent among the splits of each sample, indicating the absence of coarse or spotty gold.

Given the Company's intention to initially focus on the mining and processing of oxides, and that the resource contains significant "natural" fines due to extensive weathering, all composites supplied and tested were completely weathered to medium weathered and representative of the lithology.

The heap leach study returned the following results:

- High recoveries, ranging from 77.4% to 92.5% gold extraction
- Rapid extraction rates; field leach cycles are expected to be very short by industry standards
- Lower than usual heap leach operating costs are expected due to
- Very low cyanide consumptions
- Low doses of cement required for agglomeration and percolation
- The natural pH of the oxide material minimalises the requirement for the addition of lime
- Low contained Cu, Ag and Hg further reduces cyanide consumption and contamination of doré bullion
- Minimal crushing requirements expected given the targeting of oxide-only material for processing



KCAA commented: Given the good to excellent response exhibited by the ores in the heap leach testwork in this program, it is concluded that the Crawford oxidised ores offer the potential to be economically treated in a heap leaching operation if sufficient tonnages were available.

For more information, please refer to ASX announcement dated 9 October 2023.

### **Geotechnical:**

Peter O'Bryan and Associates carried out an investigation and produced a technical memorandum in March 2021.

The investigation considered:

- Regional and local geological conditions,
- Historical diamond core,
- Rock weathering profiles,
- Groundwater levels measured across the site, and
- Consideration of experience in assessment of the nearby Cardinia and Mertondale areas.

Rock strength at Crawford is highly dependent on rock weathering grades.

For the assessment it was assumed that weathered and therefore weak rock mass conditions persist to ≥35m and locally up to 45m. This approach enforces conservative assessment of stability conditions; however, it is important to note that local variations in strength (due to locally lesser rock weathering grades) will likely adversely impact excavation and productivity.

The depth of groundwater averages ~38m across the overall Resource area of the Project. There appears to be a distinction between the north-eastern edge of the drilled area, where average depth to water is ~28m and the south-western edge at ~47m.

The average Rock Mass Rating (RMR) for weathered ground at Crawford is estimated to be ~20 (lower bound poor quality). Transitional rock is estimated to have an average RMR of ~40, while fresh rock, anticipated to be exposed only in the floor of the planned pit has an estimated mean RMR  $\geq$ 60 (lower bound good quality).

The recommended pit wall design parameters were as follows:

- Face height 20m from surface (~382mRL to ~385mRL) to depth
- Face angle 45° throughout
- Berm width 5m at 365, 345 & 325mRL

These base case parameters are inferred to have an inherent contingency allowance to compensate for instability related to poorer than inferred ground conditions and/or unforeseen difficulties in mining.

## Mining (General):

For the purposes of the PFS, mining was planned to be undertaken via open pit by standard truck and excavator operations. Due to the size of the proposed pit, articulated trucks and 70-110t class excavators will be employed and based on drilling and studies it was expected that drill and blast would not be required. Where necessary, dozer ripping will be used to allow the excavator(s) to operate without undue delays.

This fleet will be used to transport the overburden from its in-situ location to the waste dumps and for transporting ore to the ROM pad. 70-110t class excavators (Komatsu PC750, Komatsu PC1250 or similar) and 55t articulated trucks (Volvo A60H or similar) are the major equipment types intended for use at the Project.

Primary mining operations will be supported by Dozers and Front-End Loaders (FELs). Caterpillar D10 dozers (or similar) will be used for cross-ripping, general clean-up work and contouring waste dumps. FELs will be used to assist ore handling both in the pit and around the crusher and heap leach pad.



## **Pit Optimisation Work – Oxidised Material Only:**

Given the use of heap leaching as the processing method, the Company was only looking at the potential of mining a pit where JORC-Indicated classified oxidised materials existed.

Thusly, the pit optimisations undertaken were constrained to the oxidised portion of the engineering Whittle block model.

A summary of the key optimisation parameters are as follows:

- An overall slope angle of 38°
- Applied gold price of \$A2,900 per ounce
- 95% mining recovery factor
- 10% mining dilution factor
- Base total mining cost applied \$5.05/bcm, with fixed increase of \$0.375/bcm per 5m in depth
- Contractor fixed costs of \$2.40/bcm
- Fixed rehabilitation cost of \$0.10/t waste
- Processing costs of \$20/t ore and recovery of 80%
- WA state gold royalty of 2.5%
- Discount rate of 8%
- Processing limit of 1Mtpa ore

The following tables and figures display the oxidised-only material outputs for the Crawford Project, the selected pit shell has been highlighted in both. The selected pit shell represents the revenue factor 1 (RF1) shell which has the highest discounted cashflow. The table has been truncated to pit shell 44 of 80. All DCF values reported from the optimisation work are exclusive of capital costs.



Figure 3: Crawford Oxidised Material Base Case Pit by Pit Graph



 Table 5: Crawford Oxidised Material Base Case Whittle Optimisation Outputs

	Revenue	DCF (best)	Ore Tonnes	Au Grade	Waste	Strip Ratio
Final Pit	Factor	A\$	(t)	(g/t)	Tonnes (t)	(t:t)
1	0.40	162,854	2,469	1.444	8,556	3.5
2	0.44	169,074	2,587	1.434	8,888	3.4
3	0.46	487,950	11,305	1.064	26,350	2.3
4	0.48	556,608	13,420	1.035	29,849	2.2
5	0.50	7,220,326	233,946	0.894	505,984	2.2
6	0.52	13,831,099	457,731	0.903	1,069,879	2.3
7	0.54	14,630,911	490,766	0.897	1,130,607	2.3
8	0.56	21,151,894	771,362	0.876	1,835,101	2.4
9	0.58	21,469,395	788,483	0.873	1,863,053	2.4
10	0.60	22,202,763	829,461	0.866	1,935,974	2.3
11	0.62	22,475,630	845,241	0.863	1,970,553	2.3
12	0.64	22,789,611	864,673	0.86	2,012,077	2.3
13	0.66	23,075,220	882,989	0.858	2,063,192	2.3
14	0.68	23,366,870	907,554	0.852	2,105,976	2.3
15	0.70	23,544,507	924,122	0.848	2,134,785	2.3
16	0.72	23,981,784	958,246	0.845	2,250,960	2.3
17	0.74	24,040,410	965,064	0.843	2,263,768	2.3
18	0.76	24,158,666	978,025	0.84	2,301,222	2.4
19	0.78	24,454,097	1,011,134	0.834	2,396,527	2.4
20	0.80	24,648,382	1,034,592	0.829	2,451,888	2.4
21	0.82	24,717,332	1,044,125	0.827	2,478,147	2.4
22	0.84	24,829,118	1,061,064	0.823	2,529,050	2.4
23	0.86	24,845,661	1,063,893	0.823	2,536,711	2.4
24	0.88	24,868,514	1,069,428	0.821	2,547,828	2.4
25	0.90	24,878,769	1,072,066	0.82	2,556,398	2.4
26	0.92	24,899,161	1,078,283	0.819	2,570,592	2.4
27	0.94	24,922,232	1,087,326	0.816	2,597,146	2.4
28	0.96	24,934,014	1,095,557	0.814	2,613,220	2.4
29	0.98	24,937,311	1,099,790	0.813	2,625,045	2.4
30	1.00	24,938,426	1,103,094	0.812	2,634,002	2.4
31	1.02	24,932,887	1,113,757	0.809	2,673,077	2.4
32	1.04	24,923,485	1,121,674	0.807	2,704,434	2.4
33	1.06	24,837,381	1,158,111	0.801	2,898,673	2.5
34	1.08	24,822,553	1,164,154	0.8	2,916,354	2.5
35	1.10	24,806,821	1,168,982	0.798	2,933,015	2.5
36	1.12	24,800,677	1,170,604	0.798	2,938,624	2.5
37	1.14	24,285,826	1,295,767	0.766	3,372,428	2.6
38	1.16	24,254,127	1,302,593	0.764	3,394,845	2.6
39	1.18	24,223,401	1,308,260	0.763	3,413,788	2.6
40	1.20	24,181,448	1,314,393	0.761	3,442,354	2.6
41	1.22	24,168,478	1,316,650	0.761	3,449,010	2.6
42	1.24	24,126,509	1,323,116	0.759	3,469,278	2.6
43	1.26	22,799,646	1,451,020	0.747	4,442,635	3.1
44	1.28	22,774,627	1,454,056	0.747	4,456,961	3.1



The following figure illustrates the RF1 whittle pit shell selected from the oxidised material base case pit optimisation:



Figure 4: Selected Crawford Oxidised Material Whittle Optimisation Shell (with Domained Resources)

A number of sensitivity optimisation runs were performed, being constrained to the oxidised material base case sell price scenario; these were:

- Processing cost variations at -20%, -10%, +10% and +20%;
- Mining cost variations at -20%, -10%, +10% and +20%;
- Commodity sell price variations at -20%, -10%, +10% and +20%;
- Processing recovery adding or subtracting 5% and 10% from base case recovery.

In general, linear changes to inputs resulted in linear outputs for the discounted cashflow. Changes to the sell prices and processing recovery have the largest impact on the cashflows and physical characteristics of this project, which is a common occurrence.

Table 6: Crawford Oxidised Material Whittle Optimisation Sensitivity Runs Output Table

Sconario	RF1	Best Case Pit Tonr		ages (kt)	Recovered	Total Pit Tonnage (kt)	
Scenario	Shell	DCF (\$k)	Ore	Waste	Au Ounces	Total Fit Tolllage (kt)	
Base Case	30	24,938.4	1,103.1	2,634.0	23,029	3,737	
Processing Cost +20%	28	21,014.0	1,012.7	2,615.4	22,160	3,628	
Processing Cost +10%	29	22,936.2	1,061.3	2,631.7	22,653	3,693	
Processing Cost -10%	31	27,017.6	1,146.8	2,679.9	23,457	3,827	
Processing Cost -20%	32	29,216.7	1,231.5	2,880.6	24,408	4,112	
Mining Cost +20%	28	22,048.9	1,081.5	2,572.0	22,737	3,653	
Mining Cost +10%	29	23,483.7	1,096.3	2,613.9	22,939	3,710	
Mining Cost -10%	31	26,420.9	1,156.0	2,895.7	23,845	4,052	
Mining Cost -20%	32	28,005.0	1,168.9	2,934.9	24,002	4,104	
Commodity Price +20%	33	37,673.2	1,375.4	3,381.3	26,133	4,757	
Commodity Price +10%	32	31,087.3	1,193.2	2,908.8	24,163	4,102	
Commodity Price -10%	27	18,991.4	1,041.5	2,587.0	22,395	3,628	
Commodity Price -20%	24	13,266.0	967.6	2,518.9	21,525	3,486	
Processing Recovery 90%	32	32,662.9	1,202.2	2,912.8	27,267	4,115	
Processing Recovery 85%	31	28,738.4	1,172.1	2,884.6	25,460	4,057	
Processing Recovery 75%	28	21,202.5	1,070.8	2,613.7	21,293	3,684	
Processing Recovery 70%	26	17,532.2	1,028.2	2,583.3	19,479	3,612	

#### Table 7: Crawford Oxidised Material Whittle Sensitivity Parameter Variance Table

Paramotor	Discounted Cashflow (\$k)							
Parameter	-20%	-10%	0%	10%	20%			
Processing Cost	29,216.7	27,017.6	24,938.4	22,936.2	21,014.0			
Mining Cost	28,005.0	26,420.9	24,938.4	23,483.7	22,048.9			
Commodity Price	13,266.0	18,991.4	24,938.4	31,087.3	37,673.2			
Processing Recovery <sup>1</sup>	17,532.2	21,202.5	24,938.4	28,738.4	32,662.9			
			Variance					
Processing Cost	17.2%	8.3%	0.0%	-8.0%	-15.7%			
Mining Cost	12.3%	5.9%	0.0%	-5.8%	-11.6%			
Commodity Price	-46.8%	-23.8%	0.0%	24.7%	51.1%			
Processing Recovery <sup>1</sup>	-29.7%	-15.0%	0.0%	15.2%	31.0%			

Notes:

 $^{1}$  Inputs adjusted by approximately ±12.5% and ±6.25%



## Pit and Surface Designs:

The pit designs for the Project use the RF1 pit shell from the optimisations as discussed prior.

Haul ramps were designed for use of articulated trucks at a gradient of 1:8 with a dual lane ramp 15m wide from surface to the 355mRL and a single lane ramp 10m wide from 355mRL down to the 320mRL.

It is expected that the pit will be mined in two stages to limit waste stripping prior to ore mining. The first stage (1) will be the northern half of the pit, with the southern half mined as stage 2.



Figure 5: Crawford Oxidised Material Pit Design Stages 1 (left ) and 2 (right), Plan View

Adjacent to the Stage 1 oxidised pit will be a full infrastructure area containing topsoil stockpiles, waste dump, leach pad, processing plant and other infrastructure that may include, but not limited to offices/ablutions, contractor yards and water storage.

The waste dump has been designed to a height of 30m above the surrounding topography with the capacity to hold all waste mined during production.

See Figure 1 for the PFS site layout.

### **Production Schedule:**

A mining rate of 3.6Mtpa was used to generate the production schedule with a single 70-110t class excavator (Komatsu PC750/PC1250 or similar) will be used to mine all material.

The load and haul fleet may be supported by dozers, front-end loaders, graders and water carts to meet production targets and to maintain suitable operating conditions.



It is expected that pre-stripping will occur for approximately 4 months with crushing and heap leaching of ore to commence after that point.



Figure 6: PFS Monthly Mining Schedule

Ore mined is planned to be temporarily stockpiled on the ROM pad to be fed to a mobile, contractor crusher. Crushing is scheduled to commence in month 4 of the production schedule at a rate of ~50kt per month (140tph for 12hr shift), increasing to ~100kt per month (275tph) from month 8 as the proportion of ore mined to waste increases.

A crushed ore stockpile has been included in the PFS site layout to allow a buffer between mining, crushing and stacking ore on the leach pad if required. Future short to medium term scheduling and reconciliation of leaching operations will provide greater clarity over crushing, agglomeration and stacking rates and stockpile requirements.

The leach pad is proposed to consist of two cells, allowing processing operations (crushing, agglomeration, stacking and leaching) to run uninterrupted, with each cell nominally being operated for one month (i.e. one month to stack and one month to leach). The initial month of leaching is expected to recover approximately 70% of gold, leaching will continue with a further 5% of gold recovered in the second month and the final 5% (up to the expected total recovery of 80%) in the third month.

As the leach pad will be built up, further leaching of ore in the initial lifts may occur, increasing overall recovery, however this has not been included in the recovered gold or revenue calculations.





#### Figure 7: PFS Monthly Processing Schedule

The production schedule contains a very small amount of Inferred material (0.2%) that is reported in the ore mining and processing schedule but is not reported in the Crawford Ore Reserve. The total life of mine from commencement of mining operations to full recovery of all gold processed on the leach pads is currently expected to be 18 months.

### Financial Analysis:

Auralia Mining Consulting (Auralia) estimated the capital costs for the project based on projects of similar size and nature with the assistance of KCAA. Capital costs are considered to be +/-30%.

Item	CAPEX (A\$M)
Pioneering Earthworks and Site Clearing	0.15
Processing	3.75
Leach Pad	1.50
Processing Infrastructure	2.00
Site Offices	0.25
Mining Contractor	2.40
Mobilisation	0.39
Site Establishment	1.32
Demobilisation	0.30
Site Dismantle	0.39
Crushing Contractor	0.15
Grand Total	6.45

#### Table 8: Crawford Project Capital Costs (A\$M)



Operating costs inputs are detailed in the tables below.

Mining costs were provided by mining contractors in response to a request for quotation (RFQ) distributed by Auralia. Processing costs were based on costs provided by KCAA from projects of similar scale and nature. Operating costs are considered to be +/-20%.

Bench Floor RL	Waste \$/bcm	Ore \$/bcm
380	5.96	7.02
375	6.06	7.06
370	6.13	7.10
365	6.16	7.20
360	6.27	7.32
355	6.39	7.41
350	6.49	7.50
345	6.88	8.00
340	7.98	8.98
335	9.19	9.86
330	10.22	10.37
325	10.73	10.43
320	11.18	10.80
315	11.49	11.27
310	11.79	11.74

#### Table 9: Mining Unit Operating Costs (A\$M)

#### Table 10: Ancillary Mining Costs (A\$M)

Item	Unit	Value
Grade Control	\$/bcm	0.20
Ground Support	\$/bcm	0.00
Dewatering	\$/bcm	0.10
Fuel <sup>1</sup>	\$/L	0.15

<sup>1</sup> Incremental fuel cost, unit mining costs were provided inclusive of fuel at a rate of \$1.35/L, current expectation of fuel cost is \$1.50/L

Item	Unit	Value
Company Staff	\$/mth	50,000
Office/Equipment	\$/mth	10,000
Contractor Fixed Costs	\$/mth	250,000
Accommodation	\$/man day	120
Flights	\$/flight	400

#### Table 11: Mining Administration Costs (A\$M)



Processing Costs	Unit	Value
Crushing/Screening	\$/t	8.54
Agglomeration	\$/t	0.23
Leach Pad Stacking	\$/t	2.00
Reagents	\$/t	2.16
General Processing	\$/t	2.47
Desorption/Gold Room	\$/t	1.53
Utilities	\$/t	0.09

Table 12: Processing variable Operating Costs (A)
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#### Table 13: Processing Variable Operating Costs (A\$M)

Processing Costs	Unit	Value
Agglomeration	\$/mth	2,500
General Processing	\$/mth	5,000
Utilities	\$/mth	3,333
Labour and Miscellaneous	\$/mth	73,333

A cashflow analysis was undertaken - the majority of pre-production capital expenditure was expensed in the month preceding mining operations, mobilisation costs for a contract crusher were included in month 3 prior to commissioning and demobilisation costs applied at the end of production.

Tax, depreciation and amortisation have also not been included in this project specific cashflow analysis.

Month	1	1	2	2	Λ	Б	6	7	0	0
MOITUT	- 1	l.	2	3	4	5	0	1	0	9
Capital Costs	5.6	-	-	0.2	-	-	-	-	-	-
Mining Opex	0.2	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.9	1.9
Processing Opex	-	-	-	-	0.9	0.9	0.9	0.9	1.7	1.8
Gross Gold Sales	-	-	-	-	-	3.1	3.2	3.3	3.2	6.0
Royalties	-	-	-	-	-	0.1	0.1	0.1	0.1	0.2
Cashflow	-5.8	-1.6	-1.6	-1.8	-2.5	0.4	0.4	0.5	-0.5	2.2
Cumulative Cashflow	-5.8	-7.4	-8.9	-10.7	-13.2	-12.8	-12.4	-11.9	-12.4	-10.2
Month	10	11	12	13	14	15	16	17	18	Total
Capital Costs	-	-	-	-	0.7	-	-	-	-	6.4
Mining Opex	1.9	2.0	1.4	1.2	1.1	0.1	-	-	-	23.4
Processing Opex	1.8	1.8	1.8	1.8	1.8	1.9	0.3	0.1	0.1	18.4
Gross Gold Sales	7.1	6.8	6.8	6.7	6.3	6.7	7.4	0.9	0.5	68.1
Royalties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	1.7
Cashflow	3.2	2.9	3.5	3.5	2.6	4.5	7.0	0.8	0.4	18.2
Cumulative Cashflow	-7.1	-4.1	-0.7	2.8	5.5	10.0	17.0	17.8	18.2	18.2

Table 14: Monthly Project Cashflow (A\$M)

With a total pre-production capital expenditure of A\$5.6M, mining and processing this oxidised material from the current Ore Reserve at the Crawford project is expected to generate a cashflow of A\$18.2M over an 18-month life of mine.

Maximum negative cashflow is forecast to reach ~A\$13.2M in month 4, with a cashflow neutral period for a further 4 months before higher cashflows due to higher throughput rate is achieved, resulting in project payback after approximately 12 months.

A financial sensitivity analysis was completed on the production schedule where changes in gold price were tested with the results shown in the table below. At the current spot price of approximately A\$3,300/oz the analysis returns a pre-tax cashflow of A\$27.4M and a pre-tax NPV<sub>8</sub> of A\$24.3M.

Gold Price (A\$/oz)	2,500	2,700	2,900	3,100	3,300
NPV8 (A\$M)	\$7.2	\$11.5	\$15.7	\$20.0	\$24.3
IRR	67.0%	106.3%	149.0%	195.0%	244.3%
Payback (mths)	14.0	13.1	12.2	11.5	10.9
Cashflow (A\$M)	\$9.0	\$13.6	\$18.2	\$22.8	\$27.4

#### Table 15: Financial Sensitivity Analysis (A\$M)

## **Environmental:**

Native Vegetation Solutions conducted a Flora and Vegetation Survey in November 2020 which included broad-scale vegetation mapping and vegetation condition mapping of the survey area.

The scope of work for the reconnaissance flora and vegetation survey was to:

- conduct a desktop study that includes a literature review and search of the relevant databases;
- describe the vegetation associations in the survey area;
- prepare an inventory of species occurring in the survey area;
- identify any vegetation communities or flora species of conservation significance;
- Map broad-scale vegetation groups found within the survey area, including vegetation condition; and
- provide recommendations, including the management of perceived impacts to flora and vegetation within the survey area.

A total of 15 Families, 26 Genera and 64 Species were recorded within the survey area. Four major vegetation groups were recorded in the survey area.

The field assessment established that overall, the condition of the vegetation was determined to be "Very Good" with areas which were affected by historic disturbances in "Good" or "Degraded" condition. No areas of vegetation were assessed to be in "Pristine" condition.

No non-native species were recorded the survey area.

No Threatened Flora, Priority Flora, TECs or PECs were recorded in the survey area.

No unique or restricted vegetation communities were identified, and all vegetation types/communities are common, widespread and well represented in the Eastern Murchison subregion and adjoining subregions.

Terrestrial Ecosystems carried out a vertebrate fauna site survey and risk assessment in November 2020.

The total assessed area was ~1,000ha, but it was acknowledged that likely only a small portion of the total area surveyed would be disturbed.

There are three broad fauna habitats in the project area:

- Mulga woodland;
- Open Mulga woodland; and
- Shrubland.

The mulga woodland is associated with an ephemeral drainage line that runs north-south through the flat plains and there is a small rocky ridge on the eastern boundary that has a shrubland habitat. Some small areas are highly degraded through exploration activity, but these are not significant in the context of the available fauna habitat in the area.



It was determined that:

- Clearing native vegetation in the project area is likely to result in the loss of a small number vertebrate fauna on-site that are unable to move away during the vegetation clearing process or development. This loss is not likely to be significant when viewed in a bioregional context. There may be an on-going loss of small native fauna to vehicle strikes on access tracks, but overall, this impact will be very low.
- Impacts on vertebrate fauna associated with clearing vegetation in the project area in a landscape or bioregional context are likely to be very low due to the sparseness of the vegetation.

#### **Groundwater Review:**

In July 2021, Geowater Consulting Pty Ltd (Geowater) undertook a groundwater assessment of the Project site in relation to dewatering and associated groundwater abstraction approval requirements of the Department of Water and Environmental Regulation (DEWR).

Groundwater samples were collected in May 2021 by using a plastic bailer to collect water samples from close to the water table surface. EC values ranged from 3,640 – 8,220 uS/cm, which equate approximately to salinity levels of 2,200 – 4,900 mg/L.

The groundwater is near-neutral with pH levels of 7.1 - 7.6 recorded.

Groundwater quality at the deposit is consistent with expectations based on experience elsewhere across the Goldfields and the projects relative position within the regional catchment.

Groundwater abstraction for pit dewatering is expected to only have a limited spatial extent on surrounding groundwater levels given the relatively low permeability expected and the short mine life.

The following conclusions and recommendations were made in report regarding the groundwater setting at Crawford and the potential magnitude and effects of pit dewatering:

- Groundwater occurs at 12.4 13.2 m below ground level in the proposed open pit area, within the highly weathered saprolite zone of Archean conglomeratic and volcaniclastic sediments. With a planned maximum pit depth of 65 m, up to 53 m of vertical dewatering will be required within the pit confines.
- The saprolite and fresh bedrock zones within the pit are likely to be of very low permeability and unlikely to contribute any significant groundwater inflows during mining. The saprock interval is typically about 10 – 15 m thickness and is likely to contribute the most groundwater inflows in relative terms.
- Assuming a saprock permeability of 0.5 m/day and a specific yield of 0.04, the basic groundwater modelling undertaken indicates a total of about 88,000 kL (at maximum rates of about 1,000 kL/day) would be abstracted by dewatering over the 5 6 month mining period.
- The groundwater abstracted would be of suitable quality for dust suppression and raw water needs of the Project (about 2,200 – 4,900 mg/L TDS and near-neutral pH)
- There is likely to be no adverse groundwater-related impacts upon the surrounding environment or pastoral water users due to the required dewatering, however, the monitoring described in Section 5.3 (of the report) is recommended to be undertaken to ensure potential impacts can be detected and responded to.

#### Waste Rock Testing and Surface Water:

Waste rock testing was carried out by ALS in May 2021 (Project Number A22241). 20 samples were taken from across breadth of the 2021 RC drilling program.

Acid Mine Drainage (AMD), Particle Size Distribution (PSD) and head assays were taken. All assaying indicated that any waste stored on the WRL would not be acid generating.

Surface water, when present on site, has a general water flow direction from North to South. The main project infrastructure has been positioned to sit clear of known drainage channels, however diversion bunds will be constructed as required to direct all surface water flows away from the mining area.



## **Opportunities:**

- Significant financial upside exists. The PFS utilised an Australian gold price of A\$2,900/oz; the current gold spot price as of this release is circa A\$3,300/oz.
- The PFS was constrained to the Indicated-only oxidised supergene layer of the Resource. There exists significant Resource opportunity upside in further near mine drilling to convert several undomained near-mine mineralised saprolitic gold areas into Resource classification.
- The Resource is open along strike and depth. There exists a significant opportunity for further expansion of the Crawford resource, and potential conversion of the Miranda target into Resource classification, via additional exploration drilling programmes.
- Conversion/discovery of new Resource material also presents potential opportunity to mine additional cutbacks at Crawford and/or mine new nearby pits, such as the current Miranda fresh-rock target, lying 500m to the northeast of Crawford.
- Located ~20km east of Leonora and with many smaller prospecting parties and mining entities in the area, there exists potential opportunity to utilise the heap leach circuit for toll milling upon completion of the Crawford oxide mining campaign.
- The PFS applied a conservative top cut to the gold recovery of 80%. Metallurgical studies based on heap leach processing returned an average of 88% for four of the six samples, while bottle roll testing has returned recoveries peaking at ~98%.
- Metallurgical test work carried out in 2020 indicated a 28% gold recovery via intensive cyanidation of the Knelson concentrate. Pre-heap gravity recovery was not included in the PFS. There exists an opportunity to quickly recover gold from the higher-grade portions of the Reserve pre-heap.
- Various cost-beneficial partnership with miners and operators, such as joint ventures, mining alliances, were not considered as part of the PFS.
- There is opportunity to expedite monetisation and derisk mining the Reserve via sale, toll mining and/or toll treatment options.

## **Risks:**

- The PFS sensitivity studies indicated that Crawford is most susceptible to changes in commodity price and processing recovery. Any reduction in gold pricing or recovery rates could significantly decrease the Project's NPV.
- Mineral Resource and Ore Reserve estimates are expression of judgement based on knowledge, relevant experience and industry practise as at the time of the estimate. By their very nature therefore they can be inaccurate or imprecise based on interpretation or data available at the time.
- Estimates which were valid when originally calculated may alter significantly when new information or technology becomes available; in such cases any change in the Resource or Reserve may negatively impact the mining and recovery of gold at the Crawford project.
- There exists the potential for mining risks to negatively impact on the open pit operation, including, but not limited to, situations such as a complete ramp failure due to poor ground conditions, flooding due to an influx of ground or surface water, or wall collapse.
- Metallurgical studies have been carried out utilising representative drill samples, however no bulk processing test work has taken place.
- The Project, and Company, will be subject to various laws, regulation, rules and approvals. No assurance can be given that current approvals will be granted, or that future laws, regulation, rules and approvals be altered in a way that may negatively impact the Project and/or the Company.
- Uncertainty around operational risks include, but are not limited to:
  - Ore tonnes
  - Mined grades
  - Ground conditions
  - Metallurgical recovery
  - Unanticipated metallurgical issues
  - Resource drilling
  - Workforce experience
  - Operational environment
  - Regulatory changes



- Mechanical breakdown
- o Site accidents
- Supply chain impacts
- Labour shortages
- Natural disaster
- Capital costs and mine development costs have the potential to negatively impact the project due to any delays in construction or the pre-strip of in-pit waste (overburden)
- Financing has not been secured for development of the Project. There is no guarantee that funding will be obtained, or that it will be available on acceptable terms. Dependent upon the form, financing the Project may result in dilution of the Company's existing shareholders.

## Summary Information Required by Listing Rule 5.9.1

The following summary information is provided as follows:

#### Material Assumptions

The material assumptions and outcomes with the PFS which support the Ore Reserve Estimate, the production target and forecast financial information derived from the production target are disclosed in the body of this announcement.

#### Criteria Used for the Classification of Ore Reserves

Indicated Resources contained within the pit design above the calculate cut-off grade of 0.3g/t were reported as Probable Ore Reserves. No Measured Resources were stated in the MRE.

All Inferred Resources were treated as waste for the Ore Reserve Estimate, however were included in the production target and financial evaluation.

#### Mining Method and Assumptions

Mining will be undertaken by traditional truck and shovel operations as discussed in this document.

#### Processing Method and Assumptions

Processing will be undertaken via heap leaching as discussed in this document.

#### Cut-Off Grades

A cut-off grade of 0.3g/t was calculated based on the base case cost and processing recovery inputs and was used to generate the production schedule and calculate the Ore Reserve.

#### Estimation Methodology

The level of study carried out as part of this Crawford Gold Project JORC 2012 Ore Reserve is to a Pre-Feasibility Study level. The relative accuracy of the estimate is reflected in the reporting of the Ore Reserves as per the guidelines regarding modifying factors, study levels and Competent Persons within the 2012 JORC Code.

The Ore Reserve estimate has only utilised the Indicated portion of the Crawford MRE based on applicable cut-off grades and had modifying factors applied in order to generate the Ore Reserve.

#### Material Modifying Factors

Material modifying factors have been discussed previously in this document.



## **Forward Looking Statements:**

This document contains 'forward-looking statements' that are based on the Company's expectations, estimates and projections as of the date on which the statements were made. Forward-looking statements are statements about a future matter and are not just statements about the Company's present intention. Forward-looking statements in this document include, among other things, statements with respect to the Crawford Gold PFS and future actions on the back of the PFS, the Project's objectives, outlook, growth, cash flow, projections, targets and expectations, and mineral resources, as well as commodity prices, foreign exchange rates and results of exploration.

Generally, the forward-looking statements can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'will be', 'plan', 'forecast', 'evolve' and similar expressions.

Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. Forward-looking statements are developed based on assumptions about the risks, uncertainties and other factors identified in this document.

The risks, uncertainties and other factors identified in this document are not exhaustive of the factors that may affect the forward-looking statements. They and other factors should be considered carefully and readers should not place undue reliance on any forward-looking statement.

Readers are therefore cautioned that the forward-looking statements are predictive only and that the actual results, level of activity, performance or achievements may be materially different.

The Company disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Under the Corporations Act 2001 (Cth), a company may only make forward-looking statements when it has a reasonable basis for doing so. The Company believes there is a reasonable basis for the production targets and the forecast financial information and income-based valuation derived from those production targets provided in this document based on the detailed reasons and material assumptions which are outlined throughout this document.

The material assumptions related to the Project's geology, mining, metallurgy, infrastructure, economics, marketing, social and government (JORC Modifying Factors) underlying the production targets and the forecast financial information and income-based valuation derived from the production targets are well understood and have been thoroughly assessed and examined by gualified technical personnel including independent specialists and subject matter experts.

Third party consultants utilised and the reports and studies they prepared for the PFS are listed in the 'Study Contributors' section of this document. These studies support and form the basis for a number of the material assumptions used in the PFS.

The forward-looking statements contained in this document are based on the Company's belief that it has reasonable grounds to expect that funding will be secured to advance the Project through to development and that the capital costs of the Project will be financed. The 'Project Financing and Sources of Capital' part of this document contains further detail on why the Company has a reasonable basis to believe the Project will be financed by the Company. There is no certainty, however, that sufficient funding will be raised by the Company when required.



### **Competent Persons Statements:**

The scientific or technical information in this report that relates to metallurgical test work and mineral processing for oxide mineralisation is based on information compiled or approved by Randall Pyper. Randall Pyper is an employee of Kappes, Cassiday & Associates Australia Pty Ltd and is considered to be independent of Cavalier Resources. Randall Pyper is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the commodity, style of mineralisation under consideration and activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves.

The information in this report relating to geology and Exploration Results is based on information compiled, reviewed and assessed by Paddy Reidy of Geomin Consulting, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Reidy is a consultant to the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves.

The information in this report that relates to Mineral Resources is based on information compiled by Richard Maddocks, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Richard Maddocks is employed by Auranmore Consulting, an independent consultant to Cavalier Resources Ltd. Richard Maddocks has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

The information in this report that relates to Ore Reserves is based on information compiled by Anthony Keers, a Competent Person who is a Member and Chartered Professional (CP Mining) of The Australasian Institute of Mining and Metallurgy. Anthony Keers is Managing Director of Auralia Mining Consulting and Non-Executive Director of Cavalier Resources Ltd. Anthony Keers has sufficient experience that is relevant to the type of deposit and proposed mining method under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Keers consents to the inclusion of the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### This announcement has been approved and authorised by the Board of Cavalier Resources.

#### For further information:

Investor Relations Daniel Tuffin Executive Technical Director daniel@cavalierresources.com.au Media Enquiries Stewart Walters Market Open Australia stewart@marketopen.com.au



#### **About Cavalier Resources**

The Company has interests in Tenements in Western Australia, collectively known as the Leonora Gold Project, Hidden Jewel Gold Project, and Ella's Rock Li-Ni-Au Project, prospective for lithium, gold and nickel mineralisation.



For more information on Cavalier Resources and to subscribe to our regular updates, please visit our website here and follow us on:



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## Appendix 1: JORC Table 1

## JORC Table 1 Section 1

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	Sampling of Reverse Circulation (RC) drill holes was comprised of one metre (1m) cone split samples, as drilled. Approximately 3.0kg of sample was collected over each sampled interval. Sampling techniques are considered to be in line with the standard industry practice and are considered to be representative. Cavalier Resources RC chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 50g sub sample for analysis by FA/AAS. All drill holes are accurately located and referenced with grid coordinates recorded in the standard MGA94 Zone51 grid system. Samples are collected using a standard face hammer, they are split/bagged/logged at the drill site. Samples were Fire Assayed (50-gram charge) for Au only. All samples and drilling procedures are carried out in accordance with Cavalier Resources sampling and QAQC procedures as per industry standard.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	Surface drilling was completed by standard RC drilling techniques. RC drilling used a face-sampling hammer over a 94mm diameter drill hole with samples collected using a cone splitter for 1m composites.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Sample recovery is measured and monitored by the drill contractor and Cavalier representatives, where bag volume is visually estimated and recorded as a percentage. Sample recovery was generally very good. The volume of sample collected for assay is considered to represent a composite sample. Sample recovery is maximized by using best-practice drill techniques, whereby the hammer is pulled back at the completion of each metre and the entire 1m sample is blown back through the rod string. Known standards are inserted at constant intervals at a rate of four per one hundred samples. Measures were taken to suppress groundwater and minimize moisture within samples. Samples were collected and stored in numbered calico bags and removed from the field daily. No relationship was observed between sample recovery and grade.

Criteria	JORC Code Explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature.</li> </ul>	Logging of RC chips records lithology, mineralogy, texture, mineralisation, weathering, alteration, veining, grid coordinates, sample interval and depth. Data is physically and electronically logged and stored. The level of logging detail is considered appropriate for exploration drilling. Logging of geology and colour are interpretative and qualitative, whereas logging of mineral percentage is quantitative. Chips from all RC holes are stored in chip trays for future reference.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	See Sampling techniques in the above section. The sample collection methodology is considered appropriate for RC drilling and is within today's standard industry practice. Split one metre sample (1m) results are regarded as reliable and representative. RC samples are split with cone splitter at one metre intervals as drilled. Analysis was conducted by ALS Minerals Laboratories in Kalgoorlie. At the laboratory samples are dried, crushed and pulverised until the sample is homogeneous. Analysis technique for gold (only) was a Fire Assay 50- gram charge AAS finish (Lab method Au-AA26). Most samples were collected dry; on occasion ground water was encountered and a minimal number of samples were collected wet. It was however not considered by Cavalier to be of sufficient concentration to affect the sampling process. Field standards were submitted with the sample batch, the assay laboratory (ALS) also included their own internal checks and balances consisting of repeats and standards; repeatability and standard results were within acceptable limits. No issues have been identified with sample representatively. The sample size is considered appropriate for this type of mineralisation style.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	Geochemical analysis of RC chip samples was conducted by ALS Minerals in Kalgoorlie. Sample preparation included drying the samples (105°C) and pulverising to 85% passing 75µm. Samples were then riffle split to secure a sample charge of 50 grams. Analysis was via Fire Assay with AAS finish. Only gold analysis was conducted (ppm detection). The analytical process and the level of detection are considered appropriate for this stage of exploration. Fire assay is regarded as a complete digest technique. No geophysical tools were used to determine any element concentrations. Internal laboratory quality control procedures have been adopted. Certified reference material in the form of standards and duplicates are periodically imbedded in the sample batch by Cavalier at a ratio of 1:15.



Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data</li> </ul>	The reported significant intersections have been verified by the Cavalier Geology Manager and corporate personnel. All the logged samples have been assayed; the assay data has been stored physically and electronically in the company database using Cavaliers protocols. The sampling and assay data has been compiled, verified, and interpreted by company geologists. No holes were twinned. No adjustments, averaging or calibrations are made to any of the assay data recorded in the database. QA/QC protocol is considered industry standard with standard reference material submitted on a routine basis.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control	Drill hole collars were located and recorded in the field using a handheld GPS with a three metre or better accuracy. The grid coordinate system utilised is GDA94 Zone51. Hole locations were visually checked on ground and against historic plans for spatial verification. No topographic control (i.e., RL) was required, a nominal field RL of 380 to 385m is assumed for the ground surface.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	The drill hole spacing is project specific; the RC drilling patterns employed were dependent on previous drilling and geological interpretation. The sample spacing is considered close enough to identify significant zones of gold mineralisation. The drill program is a follow up/ongoing exploration exercise that was designed to identify areas of geological interest and extensions to known mineralisation at the Crawford deposit. Closer spaced drilling on surrounding cross sections may be required to further delineate the extent, size and geometry of some areas within the identified zones of gold mineralisation.
		Drill spacing and drill technique is sufficient to establish the degree of geological and grade continuity appropriate for the mineral resources and ore reserve estimation procedures and classifications applied, however the mineralised system remains open and additional infill drilling is required to close off and confirm its full extent, particularly at depth. Samples were taken at 1m intervals, and no sample compositing was applied.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is</li> </ul>	Drilling within the central Crawford project area was vertical (-90 degrees), to intersect the generally flat lying mineralisation. No relationship between mineralised structure and drilling orientation has biased the sample.
	considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Samples are prepared on site under supervision of Cavalier geological staff. Samples are selected bagged



Criteria	JORC Code Explanation	Commentary
		into tied numbered calico bags then grouped securely and collected by a dedicated freight company directly to the laboratory. Sample submissions are documented via laboratory tracking systems and assays are returned via email.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Sampling methodologies and assay techniques used in this drilling program are considered to be mineral exploration industry standard and any audits or reviews are not considered necessary at this early exploration stage. No audits or reviews have been conducted at this stage apart from internal reviews and field quality control.

#### **JORC Table 1 Section 2**

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status • Type, reference nar ownership including agre with third parties su partnerships, overriding interests, historical site	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues</li> </ul>	The Crawford Deposit lies on M37/1202 which is registered to Cavalier Resources Ltd.
	with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The tenement has been granted and there are no known encumbrances or impediments associated with the tenement.
	• 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.	Other associated tenements include P37/8901, P37/9475, P37/9476, P37/9447, P37/9448 and P37/9449.
		A miscellaneous licence L37/251 has been applied for, to provide direct access to the Laverton-Leonora Road.
		No known impediment exists to obtaining a license to operate and the tenements are all in good standing.
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Previous exploration was completed by Goldfields Exploration, Newcrest, Golden State Resources, Roman Kings, Kingwest Resources and Specrez Resources.
		Drilling by previous explorers resulted in the identification and delineation of gold mineralisation associated with broad zones of intense alteration.
		Historic work is of a generally good standard and has been used in the Mineral Resource Estimate for Crawford.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The Crawford Deposit is hosted in an intensely altered (sericite-fuchsite-silica-carbonate-sulphide) shear zone within the eastern boundary of the Keith-Kilkenny Tectonic Zone (KKTZ).
		Gold mineralisation is disseminated in the vicinity of the shears and localized within them. Quartz is present as fine veins, associated with pyrite, gold, silver, arsenopyrite and minor scheelite in the shear zone.
		Within the weathered zone there has been remobilisation and depletion of gold resulting in the formation of horizontal supergene zones of elevated gold



		mineralisation. This zone is focussed close to the boundary between fresh and oxidised rock.
Drillhole 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 intercept depth • hole length • hole length • lf 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.	The location of all drillholes is presented as part of the significant intersection table in the body of the report. Significant down hole gold intersections were reported in the table of intersections. All hole depths referred to down hole depth in metres. All hole collars are GDA94 Zone51 positioned. Elevation is a nominal estimate. Drill holes are measured from the collar of the hole to the bottom of the hole.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	All significant intercepts have been length weighted with a minimum Au grade of 0.5ppm. No high grade cut off has been applied. Intercepts are aggregated with minimum width of 1m and maximum width of 2m for internal dilution. There are no metal equivalents reported in this release.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important when reporting exploration results</li> <li>If the geometry of the Mineralisation with respect to the drill hole angle is known, its nature should be reported</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Generally, the mineralised intervals are close to the true width, especially so for vertical holes within the oxide zone. Oxide mineralisation at Crawford is modelled as horizontal.

Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Appropriate diagrams and figures are included in the report.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	The exploration results have been reported in a manner that presents them in a balanced context without bias.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances</li> </ul>	<ul> <li>Historic activities have included drilling to obtain samples for metallurgical test work, bulk density analyses and geotechnical analyses. Regarding the results received from the drilling program, no other substantive data is currently considered necessary. All meaningful data is or has been previously reported.</li> <li>Drone Magnetic device details: <ul> <li>a DJI multi-rotor UAV (Matrice 600 Pro)</li> <li>GEM Systems Inc, Potassium Vapour Magnetometer (GSMP-35UB)</li> <li>Gradient tolerance of 50,000 nT/m and 0.0002 nT sensitivity @1 Hz</li> <li>+/- 0.1 nT absolute accuracy with a 15,000-120,000 nT dynamic range</li> <li>Program reading intervals: 1 every metre.</li> <li>Heading error +/-0.005 nT between 10-80deg and 360deg full rotation around axis</li> <li>Laser altimeter, Inertial measurement unit (IMU), and GPS (0.7 metre resolution)</li> <li>Base station is a GSM19 Overhauser with a resolution of 0.01 nT, sensitivity of 0.022nT @1 Hz, and absolute accuracy of +/-0.1 nT</li> </ul> </li> <li>Standard 2-stage 10-day intermittent bottle roll cyanide leach tests on 6 x RC chip composites were conducted at ALS Metallurgy Lab in Balcatta (Perth). Results: <ul> <li>Gold extractions from 78% to 93%</li> <li>Average composite depths ranged from 9.5m to 55.5m downhole</li> </ul> </li> </ul>



		<ul> <li>Head grades ranged from 0.32g/t Au to 3.05 g/t Au</li> <li>Drill interval lengths ranged from 7m to 18m including potential mining dilution</li> <li>Weathering from completely weathered to moderately weathered</li> <li>Oxidation from strongly oxidised to partially oxidized</li> <li>Column leach tests were conducted on 3 composites of the above RC chip samples at ALS Metallurgy Lab in Balcatta (Perth). Results:         <ul> <li>Gold extractions from 77.4% to 92.5%</li> <li>Rapid leach kinetics (35 to 45 day leach cycle)</li> <li>Low cyanide consumptions</li> <li>Cement in agglomeration at 5 to 6 kg/t</li> <li>No issues related to Cu, Hg or Ag</li> </ul> </li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Cavalier intends on establishing exploration opportunities which will extend the known mineralisation at depth at the Crawford deposit. This will primarily focus on understanding the key geological relationships and critical continuity directions to target depth extensions.

#### **JORC Table 1 Section 3**

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul> <li>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</li> </ul>	Following importation, the data goes through a series of digital and visual checks for duplication and non- conformity, followed by manual validation by the competent person
	<ul><li>purposes.</li><li>Data validation procedures used.</li></ul>	The database has been systematically audited by the CP. Original drilling records were compared to the equivalent records in the database. No major discrepancies were found.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	The competent person visited the site several times between 2018 and 2020. He supervised the drilling programs completed by KWR and SPZ.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect if any of alternative interpretations</li> </ul>	The confidence in the geological interpretation in the oxide zone is considered to be high. There is less confidence in the interpretation within the primary zone Geological logging has been used to assist identification of lithology and mineralisation.
	<ul> <li>The enect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	A model of the lithology and weathering was generated prior to the mineralisation domain interpretation commencing. The mineralisation geometry has a very strong relationship with the lithological interpretation and structure in both the oxide/fresh mineralisation. For the oxide/fresh mineralisation the weathered zones become important factors in mineralisation controls and have been applied to guide the mineralisation zone

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Criteria	JORC Code Explanation	Commentary
		interpretation.
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 approximate dimensions of the deposit are 1,000m along strike (N-S), 240m across (W-E). The oxide/fresh mineralisation has been drilled up to 180m below surface.
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Grade estimation using Ordinary Kriging (OK) was undertaken using Vulcan software. Detailed statistical and geostatistical investigations have been completed on the captured estimation data set (1m composites).</li> <li>One element, Au g/t was estimated using parent cell estimation, with density being assigned by lithology and oxidation state. Drill hole data was coded using three dimensional domains reflecting the geological interpretation based on the structural, lithological, alteration and oxidation characteristics of the Mineral Resource. One metre composited data was used to estimate the domains. The domains were treated as hard boundaries and only informed by data from the domain. The impact of outliers in the sample distributions used to inform each domain was reduced by the use of grade capping. Grade capping was applied on a domain scale and a combination of analytical tools such as histograms of grade, Coefficient of Variation (COV) analysis and log probability plots were used to determine the grade caps for each domain.</li> <li>A top cut of 10 g/t was used</li> <li>A Parent block size was selected at 5mE x 10mN x 2.5mRL, with sub-blocking down to 1.25 x 1.25 x 1.25.</li> <li>Search Pass 1 used a minimum of 10 samples and a maximum of 30 samples in the first pass with an ellipsoid search.</li> <li>A dynamic search strategy was used with the search ellipse oriented to the semi-variogram model. The first pass was at the variogram range, with pass 2 expanding the ellipse by factors of 2. The majority of the Mineral Resource was informed by the first pass.</li> <li>A previously JORC compliant Mineral Resource Estimates was estimated in 2020. This new MRE corresponds to the previous model.</li> <li>Auranmore completed check estimates for the latest model using the inverse distance squared (ID2) interpolation method. The global results are comparable with the reported OK models with localised differences as expected.</li> <li>No assumption of mining selectivity has been incorporated into the esti</li></ul>



Criteria	JORC Code Explanation	Commentary
		No reconciliation data is available as no mining has taken place.
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	Tonnages have been estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	<ul> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	The cut-off grade of 0.5g/t for the stated Mineral Resource estimate is determined from economic parameters and reflects the current and anticipated open cut mining practices.
Mining factors or assumptions	<ul> <li>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.</li> </ul>	No mining factors or assumptions have been incorporated into the model.
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.	Preliminary metallurgical analysis of oxide mineralisation indicates high gold recoveries with low reagent consumption.
Environmental factors or assumptions	<ul> <li>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.</li> </ul>	No assumptions have been made regarding environmental factors. Historical open-cut mining has occurred in the surrounding areas.
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	No bulk density measurements exist for the deposit Density values have been assumed based on similar deposits in the Western Australia Goldfields. Densities used are 1.8 for oxide, 2.3 for transitional and 2.7 for fresh.

Criteria	JORC Code Explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The resource was classified as an Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in- situ mineralisation. The definition of oxide mineralised zones is based on high level geological understanding producing a robust model of mineralised domains. This model has been confirmed by infill drilling which supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades
		view of the Competent Person.
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	No audits or review of the Mineral Resource estimate has been conducted.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	The mineralisation geometry and continuity has been adequately interpreted to reflect the level of Indicated and Inferred Mineral Resource. The data quality is good, and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses. The Mineral Resource statement relates to global estimates of tonnes and grade. The deposits have not, and are not, currently being mined.

#### **JORC Table 1 Section 4**

Criteria	JORC Code Explanation	Commentary	,								
Mineral Resource estimate for	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore</li> </ul>	The Mineral Resources of the Crawford Project were estimated by Mr Richard Maddocks of Auranmore Consulting. The following comprises the Mineral Resources as of November 2022:									
conversion to		Indicated		Inferred TOTAL			FOTAL				
Ole Reserves			Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
<ul> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	0.5g/t Au cut-off	1,154,000	1.0g/t	37,300	2,591,000	1.0g/t	80,600	3,745,000	1.0g/t	117,800	
	whether the Mineral	1.0g/t Au cut-off	412,000	1.5g/t	19,600	613,000	1.8g/t	36,300	1,025,000	1.7g/t	55,900
	The following Project as at I	table o March 1	verlea 1, 202	f comp 24:	ises the	Ore R	Reserve	s for the	Crawf	ford	

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Criteria	JORC Code Explanation	Commentary					
		Reserve Classification	Ore Tonnes	Gold (g/t)	Gold Produced (Oz)		
		Probable	1,002kt	0.91	29,300		
		Total	1,002kt	0.91	29,300		
		Notes: Figures in tables ma The Mineral Resour	iy not sum due to i ces are reported a	ounding. s wholly inclusive	of the Ore Reserves		
Site visits	<ul> <li>A site visit is to be carried out by the competent person(s) signing off on the Ore Reserve.</li> </ul>	Mr Anthony Keers h	as not been to the	Crawford Project	site.		
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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.</li> </ul>	This work was undertaken at Pre-Feasibility Study level, the Ore Reserve portion of which was carried out on supplied Mineral Resource models. Any material classified as an Inferred Mineral Resource was not included in the Ore Reserve calculations.					
Cut-off parameters	<ul> <li>The basis of the cut-off grade(s) or quality parameters applied.</li> </ul>	A cut-off grade of 0 processing recovery and calculate the Or	).3g/t was calcula inputs and was us re Reserve.	ted based on the sed to generate the	base case cost and production schedule		
Mining factors or assumptions	<ul> <li>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).</li> <li>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.</li> </ul>	Pit optimisations we Complete extraction Ore will be trucked surface. Waste material will b No drill and blast op required. Mining will be under An overall wall an geotechnical studies The pit design cont angle of 45° with a 5 Mining recovery of 9 and Ore Reserve. A mining dilution fac schedule and Ore R Inferred material wa scheduling. As heap leaching is facility will be require	re completed using of ore within pit de directly from its r be stockpiled on the erations will be re taken in two stage gle of 38° has a benches up to for wide berm at the 5% was applied to ctor of 10% was a eserve. as treated as wa the proposed me ed.	g Whittle software esigns is planned. nined location to e surface adjacen quired, cross rippi s to reduce pre-st been proposed to to a maximum of the 365, 345 and 32 o the optimisations applied to the opti ste during optimi thod of processin	the ROM pad on the at to the pit. ing by dozers may be ripping period. based on completed 20m high at a batter 25mRL. , production schedule misations, production sations, designs and g, no tailings storage		

Criteria	JORC Code Explanation	Commentary
	<ul> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered</li> </ul>	Ore material will be crushed and agglomerated before being stacked on a heap leach pad. Industry standard metallurgical processes and equipment are proposed for the Project. A representative sample taken from drill holes located in the mining area was used for test work. The sample was processed through a bench scale test work laboratory.



Criteria	JORC Code Explanation	Commentary
	<ul> <li>representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	
Environmental	<ul> <li>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.</li> </ul>	Flora and Fauna surveys have been undertaken and there is not expected to be any significant impact on the environment or conservation values. Waste material remaining on site are not considered to pose any environmental risk.
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.	The Project is located approximately 25km east of Leonora in Western Australia, a town that is well serviced by road, rail, power and water, and able to provide labour and accommodation. Additional infrastructure or upgrades may be required for the Project.
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and coproducts.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification. etc.</li> </ul>	Capital costs for processing infrastructure was completed by Auralia with the assistance of processing specialists KCAA based on projects similar scale. Processing operating costs were estimated by KCAA. Mining operating costs were determined by Auralia based on responses to a RFQ for contractor operations. No deleterious elements have been encountered. A state royalty of 2.5% of product revenue was applied to the Project.



Criteria	JORC Code Explanation	Commentary
	<ul> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	
Revenue factors	<ul> <li>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.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	A gold price of A\$2,900/oz was used for the base case optimisation and cashflow modelling.
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	Gold is a readily tradeable commodity and as such no detailed market assessment was undertaken. The base case gold price of A\$2,900/oz was selected as being at a small discount to the spot price at the time of commencement of this study.
Economic	<ul> <li>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.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs</li> </ul>	A discount rate of 8% was applied in the economic analysis, however given the short life of mine of the Crawford Project (~18 months), do not have a significant impact on the project. Inputs to the economic analysis include Modifying Factors as described above. Sensitivity studies were carried out. Standard linear deviations were observed for all tested variables.



Criteria	JORC Code Explanation	Commentary
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	Consultation with the community and regulatory agencies in relation to the Crawford Project has commenced, involving consultation activities with identified key stakeholders.
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <li>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 of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</li> </ul>	There are no known significant naturally occurring risks to the project.
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	Indicated Resources have been converted to Probable Reserves. The estimated Ore Reserves are, in the opinion of the Competent Person, appropriate for this style of deposit.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	Auralia Mining Consulting Pty Ltd has completed an internal review of the Ore Reserve estimate resulting from this study.
Discussion of relative	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve</li> </ul>	The level of study carried out as part of this Ore Reserve is to a Pre- Feasibility Study level. The relative accuracy of the estimate is reflected in the reporting of the Ore Reserves as per the guidelines re: modifying factors, study levels and Competent Persons contained in the JORC 2012 Code.

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Criteria	JORC Code Explanation	Commentary
Criteria accuracy/ confidence	<ul> <li>JORC Code Explanation</li> <li>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.</li> <li>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.</li> <li>Accuracy and confidence 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.</li> <li>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 relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	Commentary  This statement relates to global estimates of tonnes and grade.  Sensitivity studies were carried out. Standard linear deviations were observed.  Globally, the project is susceptible to fluctuations in commodity price.
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## cavalierresources.com.au PAGE 39 OF 39