ASX ANNOUNCEMENT 9 OCTOBER 2023





Outstanding Heap Leach Study Results for Crawford Gold Oxides

Corporate Highlights

- Test work carried out by ALS Laboratories ('ALS') has returned outstanding results from column leaching the mineralised oxide portion of the Crawford Gold resource
- High recoveries, ranging from **77.4% to 92.5%** gold extraction
- Rapid extraction rates; field leach cycles are expected to be 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

Summary:

Cavalier Resources Limited (ASX: CVR) ('Cavalier' or 'the Company') is pleased to announce the return of outstanding results from the recent heap leach metallurgical test work.

Gold recoveries were high, **peaking at 92.5%**, and extraction rates were rapid compared to industry standard heap leach metrics.

With low consumption rates and minimal crushing requirements, the Company also anticipates relatively low heap leach operating costs.

The natural pH of the oxide material not only further reduces costs due to minimising lime requirements; it also mitigates any potential acid mine drainage issues.



Daniel Tuffin, Executive Technical Director, commented:

"These results far exceed all of our prior assumptions for heap leach recoveries, extraction rates and operating costs for the gold bearing oxides at the Crawford Gold project.

They confirm and validate the Company's decision to pause the Pre-Feasibility Study to review the potential of processing ore on site, removing the need to rely on third party mills in the greater Leonora area in order to enable the generation of future cash flows for further development and exploration activities."

Heap Leach Test Work Summary:

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. See **Table 1** below:

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 1: 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.

Item	Unit	нw	POx Sap	MW POx
Auı	g/t	1.60	1.76	0.25
Au ₂	g/t	1.46	1.76	0.29
Ag	ppm	<2.00	<2.00	<2.00
As	ppm	390	370	360
CTotal	%	0.30	0.06	0.54
COrganic	%	0.06	<0.03	<0.03
Cu	ppm	52	92	36
Fe	%	7.68	7.62	3.22
Hg	ppm	<0.10	<0.10	<0.10
Si	%	27.9	26.7	30.3
STotal	%	0.06	<0.02	0.02
SSulphide	%	0.02	<0.02	<0.02
Sb	ppm	1.30	0.80	1.20
Те	ppm	<0.20	<0.20	<0.20

Table 2: Composite Head Analyses – Key Components

This positively impacted on screening; all composites tested in this program passed screening at 100% weight at <8mm. This would likely preclude the need for a cone crusher. However additional testing is planned on future bulk samples to provide a better indication of expected feed material size distribution.

Due to the fine nature of the RC oxide samples, the as-received sizes were employed in the column tests. Outputs from the column tests are outlined in **Table 3** overleaf.

The gold extraction curves for the tests based on the ALS calculation of extraction are shown in **Figure 1** on page 5. Leaching was rapid for all composites, with >80% of the final extracted gold leached out after five days for the HW and POx Sap Composites.

The lower grade MW POx composite leached 66% of recovered values in 5 days. However, leaching continued very slowly through to the end of the leach cycle for the MW POx composite.

There was no indication of slumping or permeability issues during the tests.

Cyanide consumptions were low, ranging from 0.08 kg/t for the MW POx to 0.25 kg/t for the HW composite. Consumptions were kept low by the high solution pH provided by the cement in agglomeration and the relatively short leach times. Field consumptions would be expected to be slightly lower.

No lime was added with the exception of adjusting the initial pH of the makeup water. The cement in agglomeration assisted in maintaining off-flow solutions above pH 10. A slightly lower dose could have been employed for the HW and the POx Sap composites.



Table 3: Column Test Outputs

ltem	Unit	нw	POx Sap	MW POx
Crush Size P100	mm	6.30	8.00	8.00
Crush Size P80	mm	0.70	1.50	2.40
Leach Time	Days	39	39	29
Leach Solution Flux	kL/t	2.43	2.21	1.37
Wash Flux	kL/t	0.57	0.52	0.44
Calc'd Head	g/t Au	1.45	2.00	0.31
Bulk Tail	g/t Au	0.23	0.15	0.07
PSD Tail	g/t Au	0.24	0.15	0.07
Gold Extraction	%	84.0	92.5	77.4
Calc'd Head	g/t Ag	0.50	0.30	0.30
Silver Extraction	%	11.00	14.00	16.00
NaCN	kg/t	0.25	0.15	0.08
Cement	kg/t	6.00	6.00	5.00
Lime	kg/t	0	0	0
Slump	%	0.10	0.10	0.20
Final Percolation	L/h/m ²	75,300	72,600	25,600
Final Dry Bulk Density	t/m ³	1.22	1.36	1.62





Figure 1: Column Test Recovery Curves – Gold



Leonora Gold and Nickel Projects:



Figure 2: Cavalier's Leonora Projects

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

The Crawford Gold Project currently holds a 117,800oz Au JORC compliant Mineral Resource (see **Table 1**).

	lı	ndicated	k	lr	nferred		T	OTAL	
	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 4: Crawford Mineral Resource Estimate

Some errors may occur due to rounding



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 Qualified Person under National Instrument 43-101. Randall Pyper consents to the inclusion in this report of the information, in the form and context in which it appears.

The information in this report relating to geology and Exploration Results is based on information compiled, reviewed and assessed by Paddy Reidy, 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 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 Angela East M+C Partners angela.east@mcpartners.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	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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. 	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	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	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	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. 	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	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	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	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	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	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data 	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	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	The 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	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	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.
	 It the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	
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	 The results of any audits or reviews of sampling techniques and data. 	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	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	The Crawford Deposit lies on M37/1202 which is registered to Cavalier Resources Ltd.
land tenure status		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	 Acknowledgment and appraisal of exploration by other parties. 	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	 Deposit type, geological setting and style of mineralisation. 	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

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		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 • 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	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	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	 These relationships are particularly important when reporting exploration results If the geometry of the Mineralisation with respect to the drill hole angle is known, its nature should be reported If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	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	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate diagrams and figures are included in the report.





	Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	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.
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