

## Corporate Details

### Ordinary Shares

424.47m

### Market Cap

\$8.1m

### ASX Code

HLX

## Board of Directors

### Mr Peter Lester

*Non-Executive Chairman*

### Mr Michael Wilson

*Managing Director*

### Mr Timothy Kennedy

*Non-Executive Director*

### Mr Jason Macdonald

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## RESOURCE UPGRADE TO JORC 2012 COBAR GOLD PROJECT – COBAR NSW

### Highlights

- Inferred resource estimate for the Cobar Gold Project of 3.75 million tonnes grading 1.0g/t Au containing 118,800 ounces of gold (0.4g/t Au cut off).
- At a 1.2g/t Au cut-off the Cobar Gold Project has 0.9 million tonnes grading 2.0g/t Au containing 54,300 ounces Gold.
- Resource estimation (Oxide and Transition material) brings the Cobar Gold Project Resource up to JORC2012 compliance.
- The new geological interpretation and resource modelling provides near deposit drill targets.

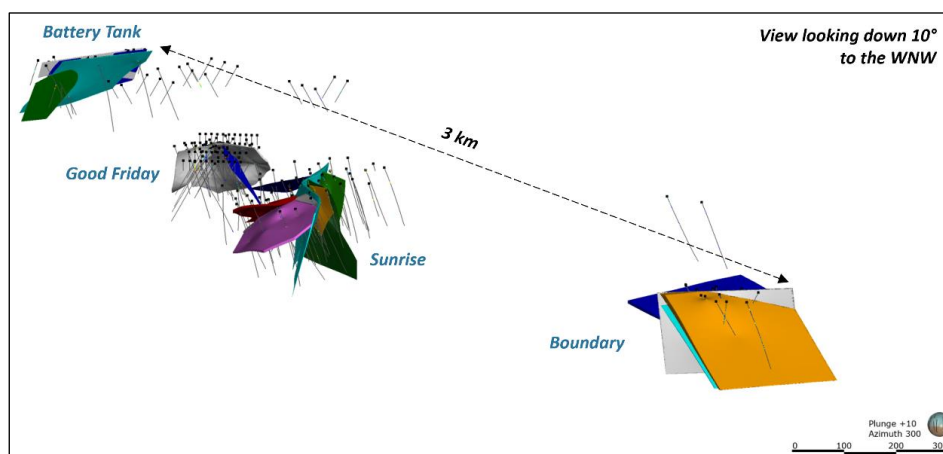


Figure 1: Cobar Gold Project: Drilling to date and resource shapes - looking northeast.

### Scalable Gold System

- The Cobar Gold Project covers the entire Battery Tank Goldfield. Only five of the nine known historic workings have been drill tested to date, and only to a maximum depth of 110m.
- Historic mine records reported very high grades (multiple ounces) mined from this goldfield.
- The resource modelling and resource update has provided a clearer understanding of prospect-scale gold distribution and the broader geological setting, which will focus future drill programs.
- The priority for future work is to drill test Reward, Lone Hand, Girl in Blue and Homeward Bound historic prospects.
- The prospects drill tested to date all remain open at depth and along strike, with potential stratigraphic repeats along regional-scale gold focussing structures. The modelling process and geological interpretation have identified further priority targets in the immediate vicinity of the deposits.
- The exploration model shows common geological features to Aurelia's nearby Peak Gold Trend (4Moz gold endowment). Being: short strike deposits with gold mineralisation associated with regional structures.
- From surface gold at the Cobar Gold project provides scope for potentially advantageous development optionality, and the Project is well located in a region with nearby operating plants and access to infrastructure.

Helix Resources Limited (ASX:HLX) (Helix or the Company) is pleased to report an JORC2012 compliant Mineral Resource estimate update for the Cobar gold Project, located in the Cobar Region of Central NSW. This replaces a previous Resource estimate for the project completed in 2011 that was compliant with the JORC 2004 standard.

Recognising the benefit of recent resource modelling techniques, including implicit modelling (radial based functions) and its ability to use more geological control in the modelling process, a resource update to better refine the geological model for the project was completed.

The updated Inferred JORC2012 Mineral Resource estimate for the Cobar Gold Project is **3.75 million tonnes grading 1.0g/t Au for 118,800 ounces at a 0.4 g/t Au cutoff** with a higher **cut-off grade of 1.2 g/t Au, returning 0.87Mt @ 2.0g/t Au for 54,300 ounces gold** (see tables below). The mineral resource data was prepared by Helix and the Resource Estimation completed by an independent resource consultant.

The new interpretation that evolved during modelling will greatly assist in planning future drilling to expand on this resource base. The resource review has also established a robust and refined interpretation of the broader goldfield, which provides clear geological controls and vectors to expand the known gold mineralisation, well beyond the historic workings.

The resource modelling seen at the Sunrise Prospect has identified a series of plunging fold noses interacting with axial plane parallel structures. These fold plunges may be important controls on higher grade gold and all remain open at depth.

### Significance

The Cobar Gold Project is 30km east-southeast of Aurelia's Peak Gold Operations and only 16km from the privately owned Mt Boppy Gold Mine (historic production 500,000oz at 10g/t average grade). The project shares similar geological and structural controls to the nearby Peak Trend deposits, being relatively short strike sediment hosted and structure related gold deposits. The Cobar Gold project resource estimate has been defined below historic prospects (Sunrise, Good Friday and Battery Tank) and an internally generated greenfield discovery (Boundary).

Whilst a high-level mining study assessment is yet to be conducted, the "from surface" nature of the gold mineralisation suggests the deposits may be amenable to initial open cut mining methods. There remains **significant potential for locating additional gold mineralisation throughout the broader goldfield.**

### Deposit Extensions

A series of structural and geological targets immediately surrounding the deposits in the goldfield, require further refining with surface auger soil sampling. These provide targets that could significantly add to the scale and potential resource inventory with further drilling.

#### Near deposit drill targets include:

- Anti-form fold nose plunges at the Good Friday and Sunrise Deposits
- Possible "blind" syn-form and fold nose thickening linkages - such as linking the Sunrise and Good Friday Deposits
- Repeated host stratigraphy targets (coarser sediments) along strike, on gold bearing regional structures (striking N, NW & NE).
- Direct depth extensions of the drill tested deposits on sub-vertical gold bearing regional structures (deepest intercept of gold system to date is 110m from surface).

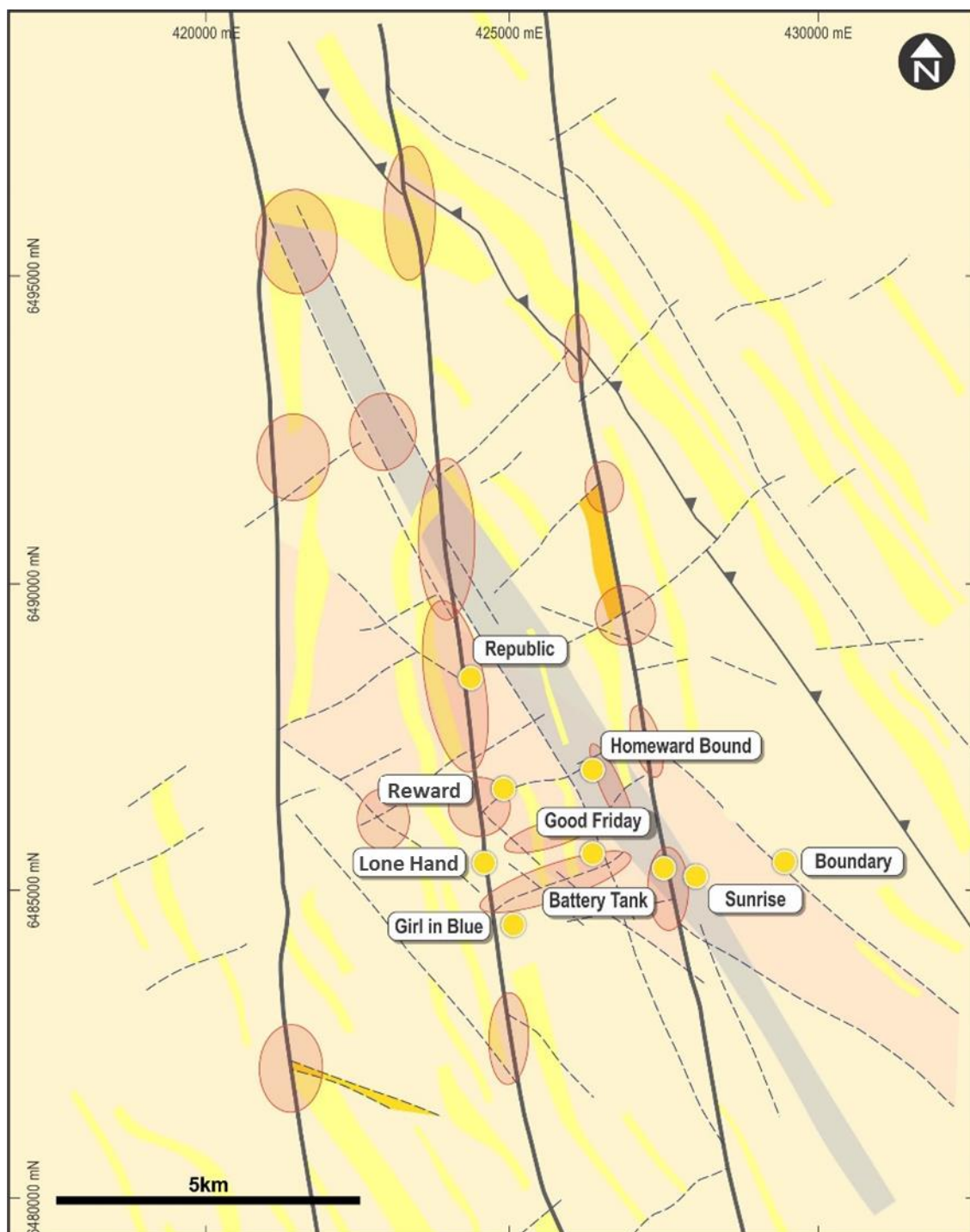


Figure 2: Battery Tank Goldfield: Known Prospects/Deposits and Regional Structural Targets (Red Zones) on Structural Interp

## Resource Modelling

The deposits show similarities to the structurally controlled hydrothermal gold (+/- base-metals at depth) mineralisation of Cobar/Peak style and Mt Boppy style epithermal gold mineralisation, being in proximity to the Siluro-Devonian rift basins and within the associated volcano-sedimentary basin fill.

The deposits were mostly delineated by Helix with RC and diamond drilling completed in drilling campaigns between 2011 and 2017. The Mineral Resource is defined by a **total of 135 RC and diamond drill holes for 15,390m** for a total discovery cost per ounce of approx A\$25 per oz.

The Mineral Resources have been classified as Inferred Mineral Resources in accordance with the JORC Code, 2012 Edition and are shown in Table A. This table represents the total resource from deposits and is reported using a cut-off grade of 0.4 g/t Au and a higher cut-off grade of 1.2g/t Au.

Resource interpretations and wireframes were prepared using a nominal 0.3g/t Au cut-off grade. The boundaries were generally modelled as sharp for this resource.

**Table A: Cobar Gold Project 2019 Mineral Resource Estimate (0.4 g/t Au Cut-off)**

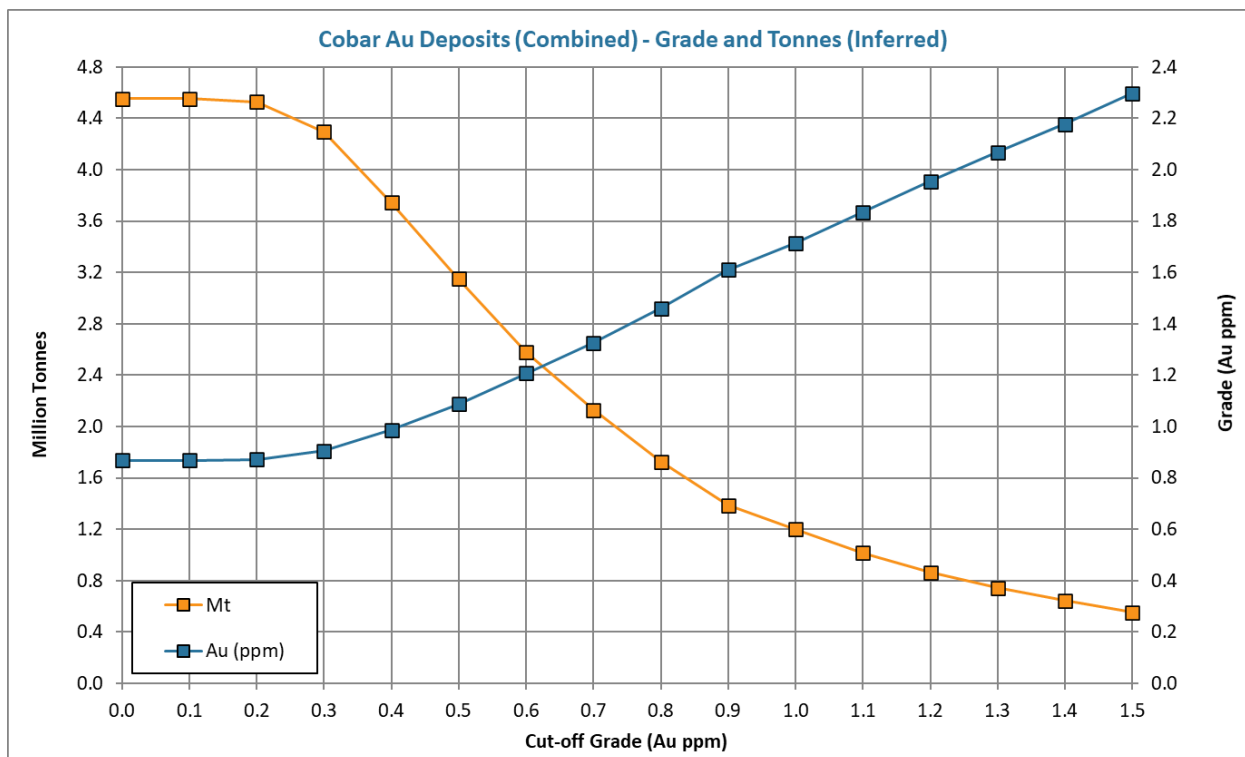
Deposit	Classification	Type	Million Tonnes	Au g/t	Au oz
Sunrise	Inferred	Oxide/Trans	1.58	1.1	56,400
Good Friday	Inferred	Oxide/Trans	0.45	0.9	13,700
Boundary	Inferred	Oxide/Trans	1.54	0.9	42,800
Battery Tank	Inferred	Oxide/Trans	0.18	1.0	5,900
<b>Total</b>			<b>3.75</b>	<b>1.0</b>	<b>118,800</b>

(Rounding discrepancies may occur in summary tables)

**Table B: Cobar Gold Project 2019 Mineral Resource Estimate (1.2g/t Au Cut-off)**

Deposit	Classification	Type	Million Tonnes	Au g/t	Au oz
Sunrise	Inferred	Oxide/Trans	0.50	2.1	33,100
Good Friday	Inferred	Oxide/Trans	0.10	1.7	5,300
Boundary	Inferred	Oxide/Trans	0.22	1.8	12,900
Battery Tank	Inferred	Oxide/Trans	0.05	1.9	3,000
<b>Total</b>			<b>0.87</b>	<b>2.0</b>	<b>54,300</b>

(Rounding discrepancies may occur in summary tables)



*Figure 3: Grade Tonnage curve for combined Cobar Gold Project deposits*

## SUMMARY OF RESOURCE ESTIMATE AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to Table 1, Sections 1 to 3 included below in Appendix 2).

## **Geology and geological interpretation**

The Cobar Gold Project deposits are structurally controlled hydrothermal gold (+/- base-metals at depth) mineralisation of Cobar/Peak style and Mt Boppy style epithermal gold mineralisation, being in proximity to the Siluro-Devonian rift basins and within the associated volcano-sedimentary basin fill.

The mineralised zones are typically 10-20m at their thickest, but in a number of holes multiple positions of gold mineralisation occur, resulting in mineralised intersections of up to 45m (eg 45m @ 3.4g/t Au from 45m at Boundary, 39m @ 2.4g/t Au from 29m at Good Friday, 43m @ 2.3g/t Au from surface at Battery Tank and 28m @ 2.3g/t from 37m at Sunrise). Gold occurs as fine grains associated with quartz and iron-rich veins, stringer veins and disseminations. In Intervals with multiple positions, zones between comprise variably deformed sediments, often with stringer quartz veins and complex folding representing thickening from localised shearing and kink folding.

The mineralised zones and host rocks are weathered to a depth of approximately 80m below surface.

## **Drilling techniques and hole spacing**

All resource drill holes at the Cobar Gold Project were completed by Helix (or our Previous JV partner Isokind, between 2007 and 2017). The majority of holes were reverse circulation ("RC") with a number of diamond holes ("DD") and pre-collared diamond holes ("RCDD"). A total of 135 holes for 15,390m were included in the estimate. The majority of the Prospects have been drilled with 50m spaced holes on 50m to 100m spaced sections with holes drilled to the EW or NE-SW at -60°. Portions of the deposit have been infilled or twinned spacings and the deeper portions have variable drill hole spacing up to 150m apart.

Drill collar locations were surveyed in MGA grid using hand held GPS. A small number of holes were located with DGPS. Down hole surveys were collected by Camtech or Reflex electronic multi-shot equipment, at varying intervals typically 30m or 50m.

## **Sampling and sub-sampling techniques**

Samples from RC drilling were collected using rig mounted splitters at 1m intervals in the mineralised zones. Some intervals of 4m were also sampled. DD holes were sampled to geological boundaries and generally had a maximum length of 1m. Core was cut in half with a diamond saw and half core submitted for analysis.

## **Sample analysis method**

Samples were submitted for analysis dominantly by fire assay with AAS finish for Au, with a small portion of early sampling assayed using Aqua Regia collection method. Subsequent screen fire assay sampling was completed on selected samples, which illustrated that the gold was dominated by fine gold. Quality control procedures adopted by Helix include the use of standards which have provided support to the quality of the drill results.

## **Cut-off grades**

The Mineral Resource has been reported at a 0.4g/t Au and 1.2g/t Au cut-off grades. The lower grade reflects an appropriate cut-off to capture continuity of mineralisation between drill holes to date. The higher cut-off reflects zones to target higher grade material with future drilling

Based on the mineralisation being shallow and in areas high grade. With proximity to active mining operations and with significant regional prospectivity, following additional drilling, there are reasonable prospects for eventual economic extraction. It is therefore reasonable to report the Mineral Resource at a 0.4g/t Au cut-off and a higher grade cut-off of 1.2g/t Au.



## **Estimation methodology**

Resource interpretations and wireframes were prepared using a nominal 0.3g/t Au cut-off. The boundaries were generally sharp. The deposits were estimated by Inverse Distance Squared (ID<sup>2</sup>) using Geovia Surpac™ software for Au only.

Interpolation parameters were based on the geometry of each zone and top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population only some top cuts were applied, including Battery Tank domain D32 (5 ppm).

Sample data was composited into 1m intervals then block model grades estimated using Inverse Distance Squared (ID<sup>2</sup>) grade interpolation. Three estimation passes were used. For Sunrise, Good Friday and Boundary, the first pass had a limit of 75m, the second pass 150m - and for Battery Tank, the first pass had a limit of 90m, the second pass 180m. The third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples.

Drilling samples from representative rocks were measured for bulk density measurements. Samples showed consistent results with an average density averaging 2.5t/m<sup>3</sup> for 0-40m down to 2.8t/m<sup>3</sup> below 80m. These densities were applied to mineralisation in the estimate.

## **Mineral Resource classification**

The Mineral Resources was classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012) and classification was considered on the basis of available data, relatively broad drill hole spacing, understanding of the geology and continuity of mineralisation.

Within much of the Cobar Gold Deposits, drill hole spacings were at 50m by 50m but the spacing is variable in some of the deposits. The deposits were therefore classified as Inferred Mineral Resource.

## **Metallurgy**

A small number of samples have been subject to metallurgical test work at the project. Recoveries from these samples returned up to 98% recovery. Due to the similarities with the mineralisation at the adjacent operations and the simple mineralogy and geology observed at the Cobar Gold Project, it can be reasonably assumed that good recoveries will be achieved via conventional gold extraction methods.

## **Modifying Factors**

No modifying factors were applied to the reported Mineral Resource estimate. Parameters reflecting mining dilution, ore loss and detailed metallurgical recoveries will be considered during the any future mining and development evaluation of the project.

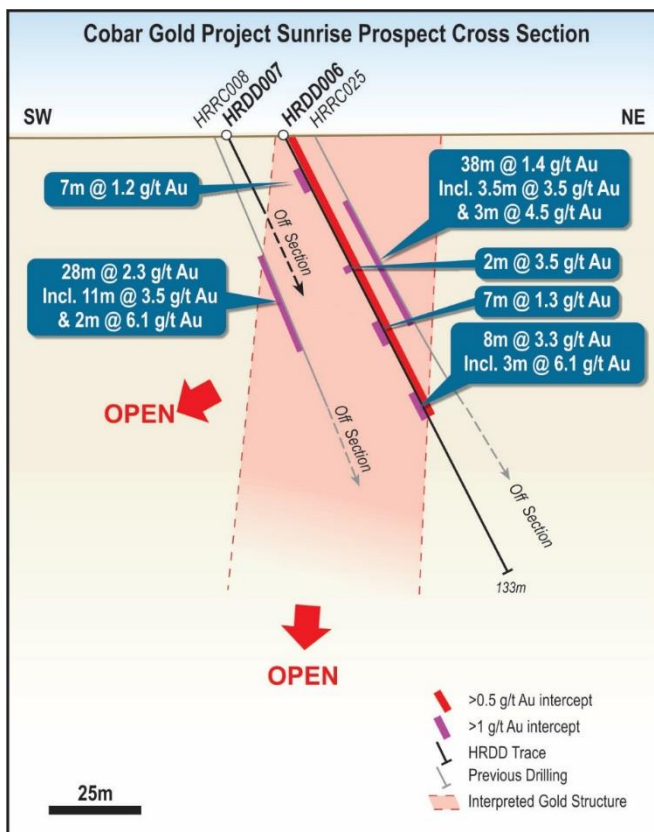


Figure 4: Sunrise Prospect schematic cross-section

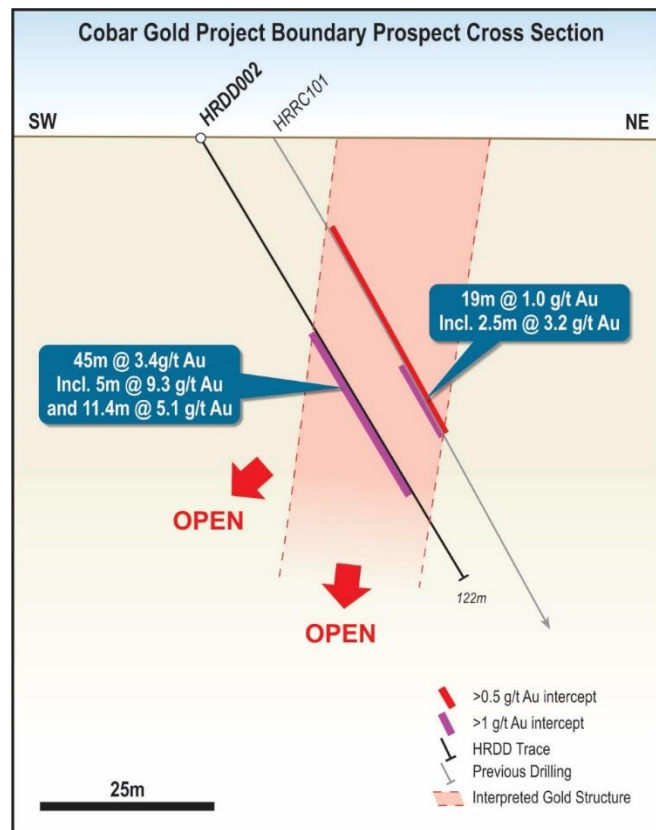


Figure 5: Boundary Prospect schematic cross-section

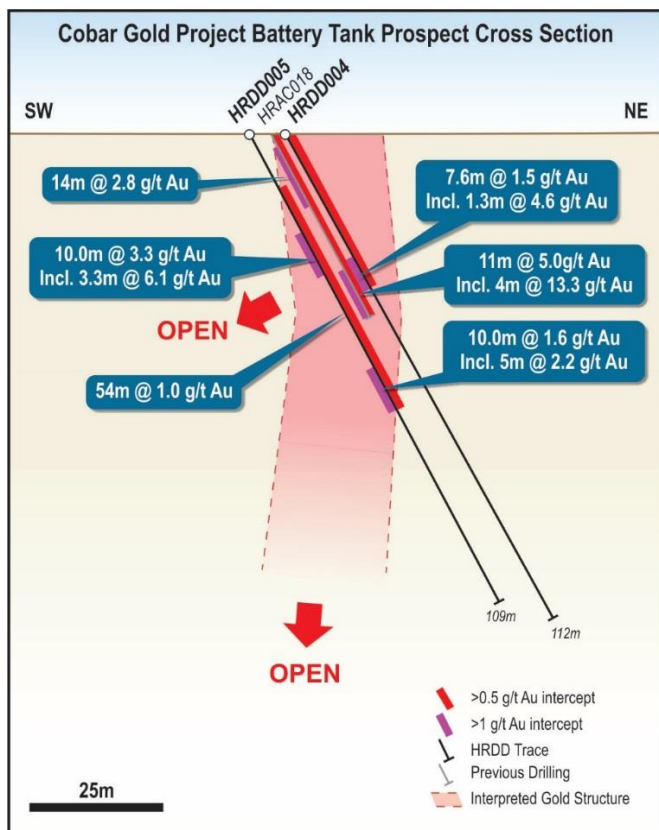


Figure 6: Battery Tank Prospect schematic cross-section

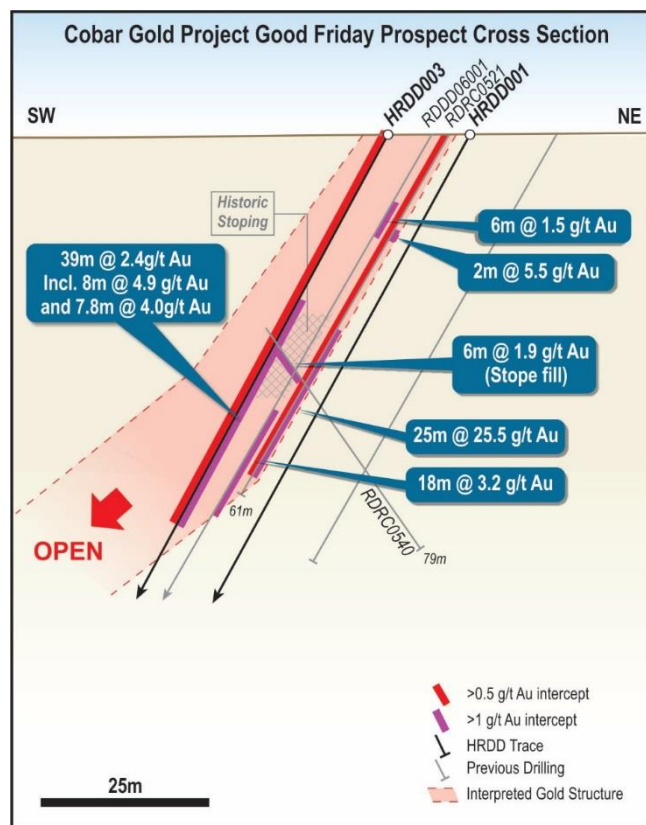


Figure 7: Good Friday Prospect schematic cross-section

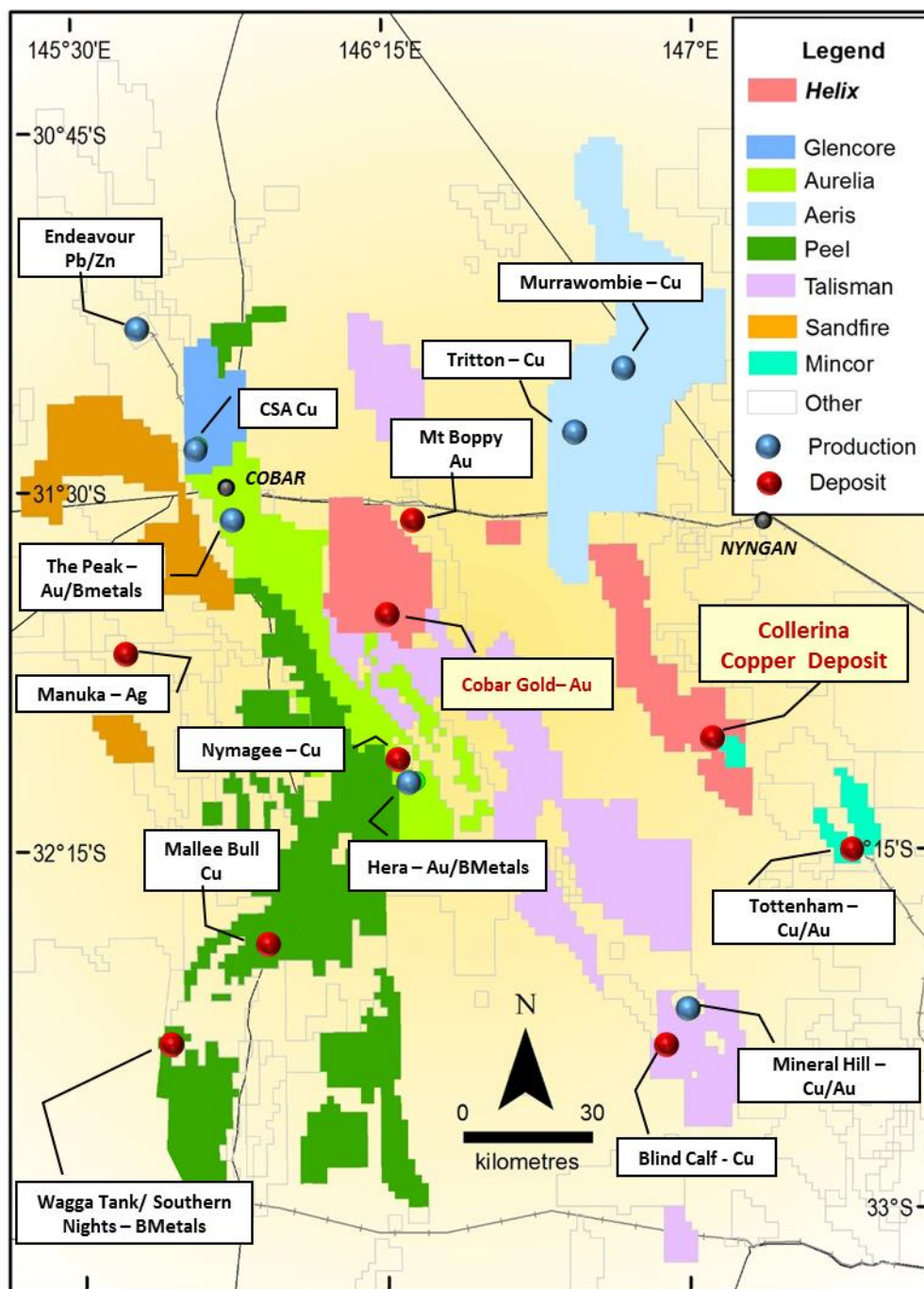


Figure 8: Location of Helix's Cobar Gold Project near mining operations in the Central West Region of NSW

- ENDS -

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Details of the assumptions underlying any Resource estimations are contained in previous ASX releases or at [www.helix.net.au](http://www.helix.net.au)



For full details of exploration results refer to previous ASX announcements on Helix's website. Helix Resources is not aware of any new information or data that materially effects the information in this announcement

<sup>1</sup> For full details of exploration results refer to the ASX announcements 25 Nov 2010, 22 Feb 2011, 24 May 2011, 13 July 2011, 17 Aug 2011, 4 Oct 2012, 24 Jan 2017, 26 Apr 2017, 17 Jul 2017 and 23 Aug 2017. Helix Resources is not aware of any new information or data that materially effects the information in these announcements.

## **COMPETENT PERSONS STATEMENT**

The Information in this report that relates to Exploration Results is based on information compiled by Mr Michael Wilson, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Wilson is a director, shareholder and full-time employee of Helix Resources Limited. Mr Wilson 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". Mr Wilson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the new 2019 Sunrise, Good Friday, Boundary and Battery Tank Mineral Resources is based on information compiled by Mr Lauritz Barnes (consultant with Trepanier Pty Ltd) and Mr Michael Wilson (a director, shareholder and full-time employee of Helix Resources Limited). Mr Barnes and Mr Wilson are both members of the Australasian Institute of Mining and Metallurgy. Mr Barnes and Mr Wilson have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Wilson is the Competent Person for the database (including all drilling information), the geological and mineralisation models plus the site visits. Mr Barnes is the Competent Person for the construction of the 3-D geology / mineralisation model plus the estimation. Mr Barnes and Mr Wilson consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

## **Forward-Looking Statements**

This ASX release may include forward-looking statements. These forward-looking statements are not historical facts but rather are based on Helix Resources Ltd.'s current expectations, estimates and assumptions about the industry in which Helix Resources Ltd operates, and beliefs and assumptions regarding Helix Resources Ltd.'s future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Forward- looking statements are only predictions and are not guaranteed, and they are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of Helix Resources Ltd. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Actual values, results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward- looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Helix Resources Ltd does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward looking statement is based.

No new information that is considered material is included in this document. All information relating to exploration results has been previously released to the market and is appropriately referenced in this document. JORC tables are not considered necessary to accompany this document.

Prospect	Hole_ID	Hole Type	Easting	Northing	RL	TotalDepth	Domain	From	To	Interval	Au_ppm
Battery Tank	HRAC018	AC	426050	6486125	300	43	31	0	17	17	2.4
Battery Tank	HRAC018	AC	426050	6486125	300	43	32	30	43	13	3.8
Battery Tank	HRAC019	AC	426020	6486285	307	26	31	2	3	1	0.4
Battery Tank	HRAC019	AC	426020	6486285	307	26	32	12	13	1	0.1
Battery Tank	HRAC019	AC	426020	6486285	307	26	33	24	26	2	0.4
Good Friday	HRDD001	DD	427021	6485903	300	173.3	1	0	1	1	0.1
Boundary	HRDD002	DD	428940	6485913	300	122.4	52	40	45	5	0.1
Boundary	HRDD002	DD	428940	6485913	300	122.4	51	45	87	42	3.5
Boundary	HRDD002	DD	428940	6485913	300	122.4	55	87	93.4	6.4	0.7
Good Friday	HRDD003	DD	427013	6485894	300	137.8	1	4	60	56	1.7
Battery Tank	HRDD004	DD	426050	6486130	300	112	31	0	5	5	0.6
Battery Tank	HRDD004	DD	426050	6486130	300	112	32	9.6	14.1	4.5	0.3
Battery Tank	HRDD004	DD	426050	6486130	300	112	33	28	38	10	1.2
Battery Tank	HRDD004	DD	426050	6486130	300	112	34	63	66	3	6.1
Battery Tank	HRDD005	DD	426055	6486125	300	109	32	4	11.3	7.3	0.4
Battery Tank	HRDD005	DD	426055	6486125	300	109	33	23	33	10	3.3
Battery Tank	HRDD005	DD	426055	6486125	300	109	34	51	67	16	1.3
Sunrise	HRDD006	DD	427545	6485825	300	133	26	0	1	1	0.1
Sunrise	HRDD006	DD	427545	6485825	300	133	27	28	42	14	0.9
Sunrise	HRDD006	DD	427545	6485825	300	133	24	54	88	34	1.2
Sunrise	HRDD007	DD	427518	6485833	300	101.6	26	0	1	1	0.8
Sunrise	HRDD007	DD	427518	6485833	300	101.6	24	47.9	58	10.1	0.2
Good Friday	HRRC001	RC	426987	6485900	297	102	1	25	31	6	0.3
Good Friday	HRRC002	RC	427000	6485924	297	84	1	0	1	1	0.2
Good Friday	HRRC003	RC	426963	6485921	299	120	1	7	21	14	0.7
Good Friday	HRRC004	RC	426991	6485949	296	78	1	0	11	11	2.0
Good Friday	HRRC004	RC	426991	6485949	296	78	2	46	47	1	1.7
Good Friday	HRRC005	RC	426968	6485948	296	120	1	0	15	15	1.1
Sunrise	HRRC006	RC	427596	6485696	300	120	28	7	23	16	3.4
Sunrise	HRRC006	RC	427596	6485696	300	120	29	23	24	1	0.3
Sunrise	HRRC007	RC	427565	6485842	300	120	24	0	4	4	0.3
Sunrise	HRRC007	RC	427565	6485842	300	120	27	4	15	11	0.3
Sunrise	HRRC008	RC	427512	6485834	301	120	26	0	4	4	0.1
Sunrise	HRRC008	RC	427512	6485834	301	120	27	37	67	30	2.2
Sunrise	HRRC009	RC	427442	6485861	304	120	23	10	21	11	0.8
Sunrise	HRRC009	RC	427442	6485861	304	120	26	33	36	3	0.8
Sunrise	HRRC009	RC	427442	6485861	304	120	24	44	60	16	0.5
Sunrise	HRRC010	RC	427429	6485910	304	120	25	39	51	12	0.5
Sunrise	HRRC011	RC	427650	6485720	299	117	30	16	31	15	0.2
Sunrise	HRRC012	RC	427691	6485731	299	117	23	27	35	8	2.7
Sunrise	HRRC013	RC	427706	6485692	297	117	29	14	16	2	0.3
Sunrise	HRRC013	RC	427706	6485692	297	117	23	67	69	2	3.1
Sunrise	HRRC014	RC	427664	6485674	299	117	28	0	4	4	0.3
Sunrise	HRRC014	RC	427664	6485674	299	117	29	27	30	3	0.4
Sunrise	HRRC015	RC	427647	6485713	298	120	29	0	1	1	0.1
Sunrise	HRRC015	RC	427647	6485713	298	120	30	16	17	1	0.2
Sunrise	HRRC015	RC	427647	6485713	298	120	23	77	79	2	0.2
Sunrise	HRRC016	RC	427602	6485656	301	153	28	24	33	9	0.7
Sunrise	HRRC016	RC	427602	6485656	301	153	29	44	45	1	0.4
Sunrise	HRRC017	RC	427574	6485689	301	120	28	25	35	10	1.4
Sunrise	HRRC018	RC	427548	6485676	302	117	28	43	54	11	2.2
Sunrise	HRRC019	RC	427627	6485771	300	117	21	14	18	4	0.8
Sunrise	HRRC019	RC	427627	6485771	300	117	23	31	36	5	0.9
Sunrise	HRRC020	RC	427580	6485757	300	147	21	29	31	2	0.2
Sunrise	HRRC020	RC	427580	6485757	300	147	23	77	79	2	0.3
Sunrise	HRRC021	RC	427536	6485737	301	147	28	23	25	2	0.4
Sunrise	HRRC022	RC	427478	6485771	302	117	21	46	60	14	0.6
Sunrise	HRRC023	RC	427524	6485787	301	117	21	19	36	17	0.3
Sunrise	HRRC023	RC	427524	6485787	301	117	23	57	65	8	0.8
Sunrise	HRRC023	RC	427524	6485787	301	117	26	65	71	6	0.2
Sunrise	HRRC024	RC	427570	6485802	300	174	23	0	5	5	0.9
Sunrise	HRRC024	RC	427570	6485802	300	174	26	12	14	2	0.1
Sunrise	HRRC025	RC	427538	6485845	301	93	24	15	53	38	1.4
Sunrise	HRRC026	RC	427487	6485828	303	138	23	3	7	4	0.4
Sunrise	HRRC026	RC	427487	6485828	303	138	26	39	58	19	0.7
Sunrise	HRRC026	RC	427487	6485828	303	138	27	114	115	1	0.3
Sunrise	HRRC027	RC	427442	6485814	303	150	21	39	55	16	1.9
Sunrise	HRRC027	RC	427442	6485814	303	150	23	75	78	3	0.6
Sunrise	HRRC030	RC	427424	6485856	303	120	21	32	34	2	0.3
Sunrise	HRRC030	RC	427424	6485856	303	120	23	38	44	6	0.4
Sunrise	HRRC030	RC	427424	6485856	303	120	26	62	64	2	0.3
Sunrise	HRRC030	RC	427424	6485856	303	120	24	82	86	4	1.8
Sunrise	HRRC032	RC	427453	6485923	304	120	25	5	11	6	0.8
Sunrise	HRRC033	RC	427397	6485902	303	120	23	12	34	22	0.5
Sunrise	HRRC033	RC	427397	6485902	303	120	25	45	71	26	0.4
Sunrise	HRRC037	RC	427387	6485952	302	120	21	0	1	1	0.0
Sunrise	HRRC038	RC	427294	6485980	300	120	23	34	35	1	0.5
Good Friday	HRRC039	RC	427114	6485880	298	160	2	9	23	14	0.7
Good Friday	HRRC040	RC	427016	6485866	299	72	1	0	1	1	0.0
Good Friday	HRRC041	RC	427026	6485843	299	140	1	2	6	4	0.2
Good Friday	HRRC043	RC	426952	6485896	297	111	1	39	45	6	1.1
Good Friday	HRRC044	RC	427027	6485981	297	69	1	34	39	5	0.3
Good Friday	HRRC045	RC	426978	6485960	298	117	1	16	34	18	0.7

Prospect	Hole_ID	Hole Type	Easting	Northing	RL	TotalDepth	Domain	From	To	Interval	Au_ppm
Good Friday	HRRC046	RC	426935	6485945	297	117	1	17	22	5	1.0
Good Friday	HRRC047	RC	426965	6486009	296	123	1	49	51	2	0.6
Good Friday	HRRC048	RC	426914	6485992	297	123	1	94	95	1	0.4
Good Friday	HRRC049	RC	426970	6485847	298	99	1	75	78	3	0.9
Battery Tank	HRRC051	RC	426023	6486300	307	140	32	9	10	1	0.2
Battery Tank	HRRC051	RC	426023	6486300	307	140	33	22	24	2	0.9
Battery Tank	HRRC052	RC	426043	6486204	304	159	33	12	16	4	0.4
Sunrise	HRRC056	RC	427615	6485614	301	150	28	11	19	8	0.2
Sunrise	HRRC056	RC	427615	6485614	301	150	29	78	81	3	0.3
Sunrise	HRRC058	RC	427716	6485653	298	153	29	32	39	7	1.1
Sunrise	HRRC058	RC	427716	6485653	298	153	23	129	130	1	0.3
Sunrise	HRRC059	RC	427661	6485625	300	117	28	0	1	1	0.0
Sunrise	HRRC059	RC	427661	6485625	300	117	29	53	54	1	0.2
Sunrise	HRRC062	RC	427463	6485818	300	100	21	34	40	6	0.8
Sunrise	HRRC063	RC	427393	6485792	300	118	21	78	79	1	0.2
Sunrise	HRRC064	RC	427338	6485825	300	142	22	26	28	2	0.3
Sunrise	HRRC065	RC	427311	6485869	300	138	22	34	35	1	1.2
Sunrise	HRRC065	RC	427311	6485869	300	138	21	66	69	3	2.4
Sunrise	HRRC066	RC	427341	6485933	300	100	22	16	17	1	0.4
Sunrise	HRRC066	RC	427341	6485933	300	100	21	39	44	5	0.5
Sunrise	HRRC066	RC	427341	6485933	300	100	23	64	78	14	0.5
Sunrise	HRRC066	RC	427341	6485933	300	100	25	78	81	3	0.2
Sunrise	HRRC067	RC	427249	6485953	300	120	22	47	52	5	1.8
Sunrise	HRRC067	RC	427249	6485953	300	120	21	74	77	3	0.4
Boundary	HRRC091	RC	428940	6485910	300	140	52	31	34	3	0.2
Boundary	HRRC091	RC	428940	6485910	300	140	51	34	68	34	1.3
Boundary	HRRC091	RC	428940	6485910	300	140	54	70	74	4	1.8
Boundary	HRRC091	RC	428940	6485910	300	140	55	81	100	19	1.4
Boundary	HRRC092	RC	428840	6485905	300	108	52	23	30	7	0.5
Boundary	HRRC094	RC	428935	6485975	300	157	52	30	40	10	0.3
Boundary	HRRC095	RC	428895	6485941	300	136	52	16	21	5	2.7
Boundary	HRRC096	RC	428935	6485875	300	140	51	12	16	4	0.5
Boundary	HRRC096	RC	428935	6485875	300	140	53	40	44	4	0.6
Boundary	HRRC096	RC	428935	6485875	300	140	54	71	72	1	0.2
Boundary	HRRC097	RC	429050	6485875	300	144	59	23	30	7	1.1
Boundary	HRRC097	RC	429050	6485875	300	144	57	56	64	8	0.4
Boundary	HRRC097	RC	429050	6485875	300	144	53	78	79	1	0.4
Boundary	HRRC097	RC	429050	6485875	300	144	55	101	103	2	0.9
Boundary	HRRC101	RCDD	428955	6485920	300	136	51	0	12	12	0.2
Boundary	HRRC101	RCDD	428955	6485920	300	136	57	12	24	12	0.2
Boundary	HRRC101	RCDD	428955	6485920	300	136	53	60	64	4	0.4
Boundary	HRRC101	RCDD	428955	6485920	300	136	54	76	80	4	1.5
Boundary	HRRC101	RCDD	428955	6485920	300	136	55	92	94.5	2.5	3.2
Boundary	HRRC102	RC	428910	6485925	300	100	52	24	40	16	0.4
Boundary	HRRC103	RCDD	428970	6485905	300	152.4	57	8	32	24	1.0
Boundary	HRRC103	RCDD	428970	6485905	300	152.4	53	72	76	4	0.1
Boundary	HRRC103	RCDD	428970	6485905	300	152.4	55	96	101	5	0.3
Boundary	HRRC104	SLRC	428960	6485870	300	120	57	8	21	13	0.2
Boundary	HRRC104	SLRC	428960	6485870	300	120	53	49	55	6	0.2
Boundary	HRRC104	SLRC	428960	6485870	300	120	54	66	67	1	0.1
Boundary	HRRC104	SLRC	428960	6485870	300	120	51	67	85	18	0.6
Boundary	HRRC105	SLRC	428975	6485870	300	103	57	7	27	20	0.8
Boundary	HRRC105	SLRC	428975	6485870	300	103	53	63	66	3	0.2
Boundary	HRRC105	SLRC	428975	6485870	300	103	54	79	84	5	1.6
Boundary	HRRC105	SLRC	428975	6485870	300	103	55	89	100	11	0.9
Boundary	HRRC106	SLRC	428990	6485980	300	119	57	23	33	10	0.7
Boundary	HRRC106	SLRC	428990	6485980	300	119	53	66	68	2	1.2
Boundary	HRRC106	SLRC	428990	6485980	300	119	54	76	80	4	0.3
Boundary	HRRC106	SLRC	428990	6485980	300	119	51	108	119	11	1.1
Boundary	HRRC107	SLRC	428850	6485900	300	118	52	24	29	5	0.3
Boundary	HRRC108	SLRC	429035	6485860	300	104	59	31	37	6	0.2
Boundary	HRRC108	SLRC	429035	6485860	300	104	57	80	84	4	0.7
Boundary	HRRC108	SLRC	429035	6485860	300	104	53	97	99	2	0.8
Boundary	HRRC109	SLRC	428898	6485896	300	115	52	19	36	17	1.2
Boundary	HRRC110	SLRC	428940	6485890	300	120	52	27	53	26	0.9
Good Friday	HRRC118	SLRC	427018	6485910	300	100	1	0	1	1	0.0
Sunrise	HRRC119	RC	427655	6485678	300	178	28	0	6	6	0.4
Sunrise	HRRC119	RC	427655	6485678	300	178	29	12	25	13	0.6
Sunrise	HRRC119	RC	427655	6485678	300	178	30	51	55	4	0.9
Sunrise	HRRC119	RC	427655	6485678	300	178	23	96	100	4	0.3
Sunrise	HRRC120	RC	427604	6485686	300	118	28	8	23	15	1.9
Sunrise	HRRC120	RC	427604	6485686	300	118	30	38	40	2	0.3
Sunrise	HRRC121	RC	427571	6485810	300	118	26	0	5	5	0.6
Sunrise	HRRC121	RC	427571	6485810	300	118	24	90	91	1	1.9
Sunrise	HRRC122	RC	427524	6485785	300	156	21	21	41	20	0.5
Sunrise	HRRC122	RC	427524	6485785	300	156	23	43	58	15	0.6
Sunrise	HRRC122	RC	427524	6485785	300	156	26	63	77	14	1.0
Sunrise	HRRC123	RC	427462	6485814	300	178	23	30	35	5	0.3
Sunrise	HRRC123	RC	427462	6485814	300	178	26	69	71	2	0.7
Sunrise	HRRC123	RC	427462	6485814	300	178	24	96	99	3	4.7
Sunrise	HRRC124	RC	427442	6485860	300	178	23	10	16	6	0.6
Sunrise	HRRC124	RC	427442	6485860	300	178	24	16	21	5	0.3
Sunrise	HRRC124	RC	427442	6485860	300	178	25	93	103	10	0.3

Prospect	Hole_ID	Hole Type	Easting	Northing	RL	TotalDepth	Domain	From	To	Interval	Au_ppm
Good Friday	HRRC127	RC	427043	6485922	300	118	2	17	36	19	1.6
Good Friday	HRRC128	RC	426994	6485900	300	118	1	12	27	15	1.0
Good Friday	HRRC129	RC	426960	6485875	300	200	1	48	53	5	0.4
Battery Tank	HRRC130	RC	426055	6486130	300	60	32	5	8	3	0.6
Battery Tank	HRRC130	RC	426055	6486130	300	60	33	25	49	24	1.9
Battery Tank	HRRC131	RC	425985	6486145	300	118	33	80	84	4	0.6
Battery Tank	HRRC132	RC	426027	6486110	300	118	32	35	36	1	1.0
Battery Tank	HRRC132	RC	426027	6486110	300	118	33	39	40	1	1.3
Battery Tank	HRRC132	RC	426027	6486110	300	118	34	44	45	1	0.1
Battery Tank	RDRC0514	RC	426030	6486321	307	61	32	12	17	5	0.7
Battery Tank	RDRC0515	RC	426026	6486287	307	61	31	14	17	3	0.2
Battery Tank	RDRC0516	RC	426038	6486190	304	61	31	0	4	4	0.4
Good Friday	RDRC0518	RC	427055	6485985	297	61	1	22	28	6	0.7
Good Friday	RDRC0519	RC	427044	6485957	297	60	1	0	4	4	0.8
Good Friday	RDRC0519	RC	427044	6485957	297	60	2	25	34	9	0.9
Good Friday	RDRC0520	RC	427043	6485922	297	61	2	2	6	4	0.2
Good Friday	RDRC0527	RC	426919	6485969	296	61	1	42	48	6	0.7
Good Friday	RDRC0528	RC	426937	6485995	294	80	1	62	68	6	0.9
Good Friday	RDRC0530	RC	426996	6485935	301	80	1	0	2	2	0.2
Good Friday	RDRC0531	RC	427012	6485886	300	50	1	5	21	16	0.8
Good Friday	RDRC0537	RC	427154	6485884	300	80	1	0	4	4	0.4
Good Friday	RDRC0537	RC	427154	6485884	300	80	2	24	28	4	0.8
Good Friday	RDRC0540	RC	426988	6485861	301	79	1	40	48	8	1.5



## JORC Code – Table 1

### JORC Table 1 Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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. In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Samples have been collected by reverse circulation drilling and diamond drilling.</li> <li>RC holes were generally sampled at 1m intervals. Portions of the holes were also sampled as 4m composite samples.</li> <li>Diamond holes were sampled at 1m intervals or at geological intervals.</li> <li>Each 1m sample generally weighs 2-4kg.</li> <li>The independent laboratory then takes the sample and crushes it before taking a split for pulverizing and analysis.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling used a face sampling bit;</li> <li>Diamond drilling was typically completed using HQ and NQ size core.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>All samples were visually assessed for recovery.</li> <li>Samples are considered representative with good recoveries.</li> <li>There is no known relationship between sample recovery and sample grades.</li> </ul>
Logging	<ul style="list-style-type: none"> <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. Core (or costean,</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes were logged in full by Company geologists.</li> <li>Logging was carried out in detail in anticipation of being used in subsequent Mineral Resource estimates.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <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 sub-sampling 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>	<ul style="list-style-type: none"> <li>Diamond core was cut using a core saw and half core taken for analysis.</li> <li>The sampling of the RC sample was rotary split via the rig cyclone and sampled at 1m intervals.</li> <li>A QAQC program of standards, and laboratory duplicates have been used to confirm assay integrity.</li> <li>The samples are considered representative and appropriate for this type of drilling and for use in future resource estimates.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The samples were submitted to an independent commercial laboratory in Perth, Western Australia.</li> <li>Au was analysed by 40g charge Fire Assay fusion technique with ICP-OES finish.</li> <li>Base metals were analysed by a 4 acid digest with ICP-MS finish.</li> <li>The techniques are considered quantitative in nature.</li> <li>No geophysical tools were used to determine any element concentrations.</li> <li>Certified standards were inserted by Helix and the laboratory carries out internal standards and repeats in each individual batch.</li> <li>The standards and repeats were considered satisfactory.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The assay results have been checked by company geologists.</li> <li>No adjustments have been made to the assay data.</li> <li>Results are reported on a length weighted basis.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole collars were located by either hand held GPS or in some cases by differential GPS (DGPS) surveys to a high degree of accuracy.</li> <li>Locations are to GDA94 Zone 55.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Resource estimation.</i></p> <ul style="list-style-type: none"> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Down hole surveys were recorded by Camtech or Reflex system at varying intervals from 30 to 50m.</li> <li>Topographic surface is based on drill collar positions and is adequate.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>At the Cobar Gold Project, hole spacing is nominally 50m by 100m although the spacing is irregular. from DDH and RC twins to more than 100m spacing.</li> <li>The drilling is considered at these Deposits to be sufficient for Mineral Resource estimation.</li> <li>Sample compositing was used to give equal support to data in the Mineral Resource estimate.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>Holes were angled to optimize the intersection angle with the interpreted structures. The drilling is considered to be generally perpendicular to the mineralised trend and therefore the sampling is considered representative of the mineralised zone.</li> <li>No orientation based sampling bias has been identified in the data.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Company representatives supervised the collection and submission of samples up to the point of transfer to the assay laboratory</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No external audit or review of the sampling techniques has been undertaken.</li> <li>Company geologists have reviewed the results.</li> </ul>

## JORC Table 1 Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource on the Cobar Gold Project is on EL6140 and EL8433.</li> <li>Helix secured the project via a Joint Venture on EL6140 with Isokind Pty Ltd. The Company has earned 90% and is currently finalising the full transfer of title and 1% NSR royalty agreement with the former JV partner. EL8433 is 100% Helix</li> <li>The tenements are in good standing, and were renewed in October 2019.</li> <li>There are no known impediments to operating in this area.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The deposit has had limited previous drilling undertaken.</li> <li>The majority of work completed at the project was carried out by Helix between 2011 and 2017.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The mineralisation targeted is structural and sediment hosted gold similar in style to many other gold deposits in the Cobar region.</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the under-standing of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A comprehensive listing of significant intersections from previous drilling at the Cobar Gold Project (Formally named Restdown) has been included in previous ASX releases.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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>	<ul style="list-style-type: none"> <li>No new exploration results are not being reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of 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>	<ul style="list-style-type: none"> <li>Drill holes are angled to grid east and west, and north east and southwest which are approximately perpendicular to the orientation of the mineralised trends at various deposits.</li> <li>True width as interpreted to be approximately equal to downhole intervals.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant Collerina being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Relevant diagrams have been included in this and previous ASX releases.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>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.</li> <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>	<ul style="list-style-type: none"> <li>Drill hole collars were located by hand held GPS or in some cases differential GPS (DGPS) surveys to a high degree of accuracy. .</li> <li>Locations are to GDA94 Zone 55.</li> <li>Down hole surveys were recorded by Camtech or Reflex system at varying intervals from 30m – 50m.</li> <li>Representative reporting of significant intersections from previous drilling has been included in previous Helix releases to the ASX. These reports are considered by Helix to be balanced and provided in context.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>A detailed structural and geological assessment has been completed by an independent geologist.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. 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>	<ul style="list-style-type: none"> <li>Mineralisation remains open in many directions at the Cobar Gold Project and planning is underway to drill test immediate and nearby priority targets with the aim of expanding the resource inventory to better reflect the scale and grade of the geological understanding of the gold mineralisation present.</li> </ul>

## JORC Table 1 Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <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 purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The database is created and validated by Helix Resources Limited.</li> <li>The CP's have performed data audits by way of all available drilling data being imported into 3D mining and modelling software packages (Surpac™ and Leapfrog™), which allow visual interrogation of the data integrity and continuity. All of the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.</li> <li>Data validation checks were completed on import to the SQL database.</li> <li>Data validation has been carried out by visually checking the positions and orientations of drill holes.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Michael Wilson has visited the Cobar Gold Project sites (Sunrise, Good Friday, Boundary and Battery Tank) on numerous occasions between 2011 and the present</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <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 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>	<ul style="list-style-type: none"> <li>The confidence in the geological interpretation at the Cobar Gold Project is considered to be satisfactory. Successive drill programs have increased the confidence in the geological interpretation of the deposits.</li> <li>Diamond core and RC drill chips have been used to interpret the geology.</li> <li>The interpretation of the mineralisation based on assay results, geological logging, and the well-known regional geological setting, makes the current interpretations robust. Alternative interpretations are not likely to have a significant effect on the Mineral Resource estimation.</li> <li>Geological logging has been used to define oxide and transition domains.</li> <li>On the broad drilling pattern, the key factors affecting continuity are the orientations of shear zones and the porosity of the metasediments where they intersect.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sunrise has a strike length of 600m by over 150m deep trending WNW-ESE with a number of splays and apparent isoclinal fold hinges coming off a main central shear.</li> <li>Good Friday has a strike length of up to 300m by over 200m deep around an anti-formal fold hinge plunging to the WNW at around 45°.</li> <li>Boundary has a strike length of 250m by over 150m deep trending NNE-SW with a number of splays coming off a main central shear. Two of the "splays" are up to 5-10m thick and extend up to 150m away from the central shear.</li> <li>Battery Tank has four narrow sub-parallel zones with a strike length of up to 250m by over 120m deep trending NNW-SSE.</li> </ul>
<b>Estimation and modeling techniques</b>	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>Grade estimation using Inverse Distance Squared (ID2) was completed using Geovia Surpac™ software for Au only.</li> <li>Drill hole samples were flagged with wire framed domain codes. Sample data were composited for Au to 1m using a best fit method. Most holes</li> </ul>

	<i>description of computer software and parameters used.</i>	
	<ul style="list-style-type: none"> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>were sampled on 1m intervals, however there were some wider composites in the raw assay data.</p> <ul style="list-style-type: none"> <li>Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population only some top cuts were applied, including Battery Tank domain D32 (5 ppm).</li> <li>Search ellipse orientations were defined to best follow the trends of the interpreted mineralised zones, breaking them into multiple estimation domains where orientation changes required.</li> <li>Block model for Sunrise was constructed with parent blocks of 2m (E) by 10m (N) by 10m (RL), Good Friday with 2m (E) by 10m (N) by 10m (RL), Boundary with 4m (E) by 5m (N) by 10m (RL) and Battery Tank with 2m (E) by 10m (N) by 10m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains.</li> <li>Three estimation passes were used. For Sunrise, Good Friday and Boundary, the first pass had a limit of 75m, the second pass 150m - and for Battery Tank, the first pass had a limit of 90m, the second pass 180m. The third pass searching a large distance to fill the blocks within the wire framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples.</li> <li>Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.</li> <li>Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been reported at a 0.4g/t Au cut-off grade based on comparable open cut mining operations in the region and a 1.2g/t cut-off grade to highlight zones of internal higher grade to assist in future drill targeting.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mining of the deposit is anticipated to be mineable by open pit and if continuity is proven and high grade geometry defined at depth by future drilling, underground mining methods involving mechanised mining techniques.</li> <li>The project deposits would be amenable to trucking to a mill with several milling options in a 75km radius of the Project.</li> <li>No other assumptions on mining methodology have been made.</li> </ul>

<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Three samples were collected from the Sunrise Deposit and were subject to grind and bottle roll tests by a local producer. No significant issues were highlighted through metallurgical testing. Recoveries obtained were high (up to 98%) and cyanide consumptions low (0.4 - 0.6kg/t). Further work is recommended to determine the suitability of the ore to be processed at nearby mills, or a stand alone mill, with key factors being expected feed size distribution and ore hardness.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The area is on cleared farm land or areas of remnant vegetation. It is not known to be environmentally sensitive and there is no reason to think that proposals for development including the dumping of waste would not be approved if planning and permitting guidelines are followed.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Bulk density measurements have been made on 198 drilling samples by pycnometry, of which 40 are specifically from interpreted mineralised zones at Sunrise and Good Friday.</li> <li>Density values assigned to the mineralisation was based on the average value within the mineralised lodes. Assumed values were used for unmineralised fresh rock and for oxide and transitional material.</li> <li>Information from nearby operations (Mt Boppy) were also considered.</li> <li>Bulk densities were assigned by oxidation zones as follows: <ul style="list-style-type: none"> <li>a. Oxide: 2.2</li> <li>b. Supergene: 2.5 (up to 40m)</li> <li>c. Transition: 2.7 (up to 80m)</li> <li>d. Fresh: 2.8</li> </ul> </li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Mineral Resources were classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012).</li> <li>The Mineral Resource at the Cobar Gold Project was classified as Inferred Mineral Resource on the basis of data quality, sample spacing, and lode continuity.</li> <li>The deposits were classified as Inferred Mineral Resource due to the sparse peripheral drilling and open nature of all the deposits.</li> <li>The input data adequately covers the mineralisation and does not favour or misrepresent in-situ mineralisation. Validation of the block models show good correlation of the input data to the estimated grades.</li> <li>The input data is considered reliable as Helix has implemented Quality Control measures which have confirmed the suitability of data for use in the Mineral Resource estimates.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>



<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Prior resources have been estimated for the Sunrise and Good Friday deposits with the current estimates believed to be more appropriate due to the more sophisticated geological modelling and improved understanding of the mineralisation controls.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The data quality at the deposit is good and the drill holes have detailed logs produced by qualified geologists. Recognised laboratories have been used routinely.</li> <li>The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>No substantial modern mining has taken place at the Project, so no production data is available. Historic mine records suggest very high grade material was recovered from the goldfield with a three head stamp battery active in the late 1800's and early 1900's before a severe drought resulted in the goldfield being abandoned.</li> </ul>