UPDATED CRAKE GOLD RESOURCE IMPROVES IN QUALITY

HIGHLIGHTS

- Successful infill drilling completed at the Crake gold project, part of the Binduli project area 9km west of Kalgoorlie-Boulder in the Western Australian goldfields
- A total of 51 RC holes and three diamond holes were completed for 5,043m to infill areas for improved classification and for structural, geotechnical and metallurgical assessment
- Significant results received included [1]:
    - **24m @ 4.9g/t Au from 32m including 1m @ 57.2g/t Au from 36m** (BRC20028)
    - **12m @ 6.7g/t Au from 6m** (BRC20018)
    - **2m @ 37.9g/t Au from 13m including 1m @ 67.9g/t Au** (BRC20020)
    - **4m @ 14.9g/t Au from 53m including 1m @ 56.2g/t Au** (BRC20045)
    - **6m @ 2.0g/t Au from 20m, 4m @ 6.7g/t Au from 44m including 1m @ 24.0g/t Au from 44m and 2m @ 2.3g/t Au from 91m** (BRC20049)
    - **6m @ 3.6g/t Au from 36m, 5m @ 2.9g/t Au from 69m and 3m @ 1.6g/t Au from 83m** (BRC20043)
    - **2m @ 2.2g/t Au from 46m, 2m @ 3.2g/t Au from 60m, 14m @ 1.8g/t Au from 71m and 11m @ 2.6g/t Au from 91m** (BRC20014)
- Results demonstrated excellent width and grade continuity across a 500m strike length with mineralisation remaining open along strike and at depth with further drilling planned
- Updated independent Mineral Resource estimate now compiled and stands at:
    - **1.42Mt grading 1.46g/t Au for 66,500oz at a 0.8g/t Au lower cut-off grade [2]**
- Importantly, 95% of the ounces are now in the Indicated Resource category with preliminary optimisation work indicating potential for high conversion to Ore Reserve [2]
- Metallurgical test work results demonstrate strong gold recoveries of 98.9% and 95.9% for the oxide and fresh composites respectively with high (>50%) gravity recoveries
- Mine optimisation and open pit design work is well advanced with a maiden Ore Reserve for Crake expected in the December Quarter 2021 [3]

Commenting on the Crake resource update, Horizon Managing Director Mr Jon Price said:

“Crake and the Binduli area in general are certainly shaping up to be significant contributors to our future production profile providing high grade satellite feed to complement the baseload Boorara project 25km to the east. We look forward to completing the maiden Ore Reserve for Crake and continuing the step out drilling at the Coote, Kestrel and Honeyeater prospects to the north.”

[1] As announced to the ASX on 31 March 2021 [2] See Tables 1-2 and Competent Persons Statement on pages 4 - 5 and JORC Tables on Page 17.[3] See Forward Looking and Cautionary Statements on Page 16.

163 Stirling Hwy
Nedlands WA 6009

PO Box 1104
Nedlands WA 6909

T: +61 8 9386 9534
F: +61 8 8389 1597
E: info@horizonminerals.com.au

horizonminerals.com.au
ACN 007 761 186
ABN 88 007 761 186

Overview

Horizon Minerals Limited (ASX: HRZ, Horizon or the Company) is pleased to announce an updated Mineral Resource Estimate (MRE) for the Crake project located within the 100% owned Binduli gold project, located 9km west of Kalgoorlie-Boulder in the heart of the Western Australian goldfields (Figure 1).

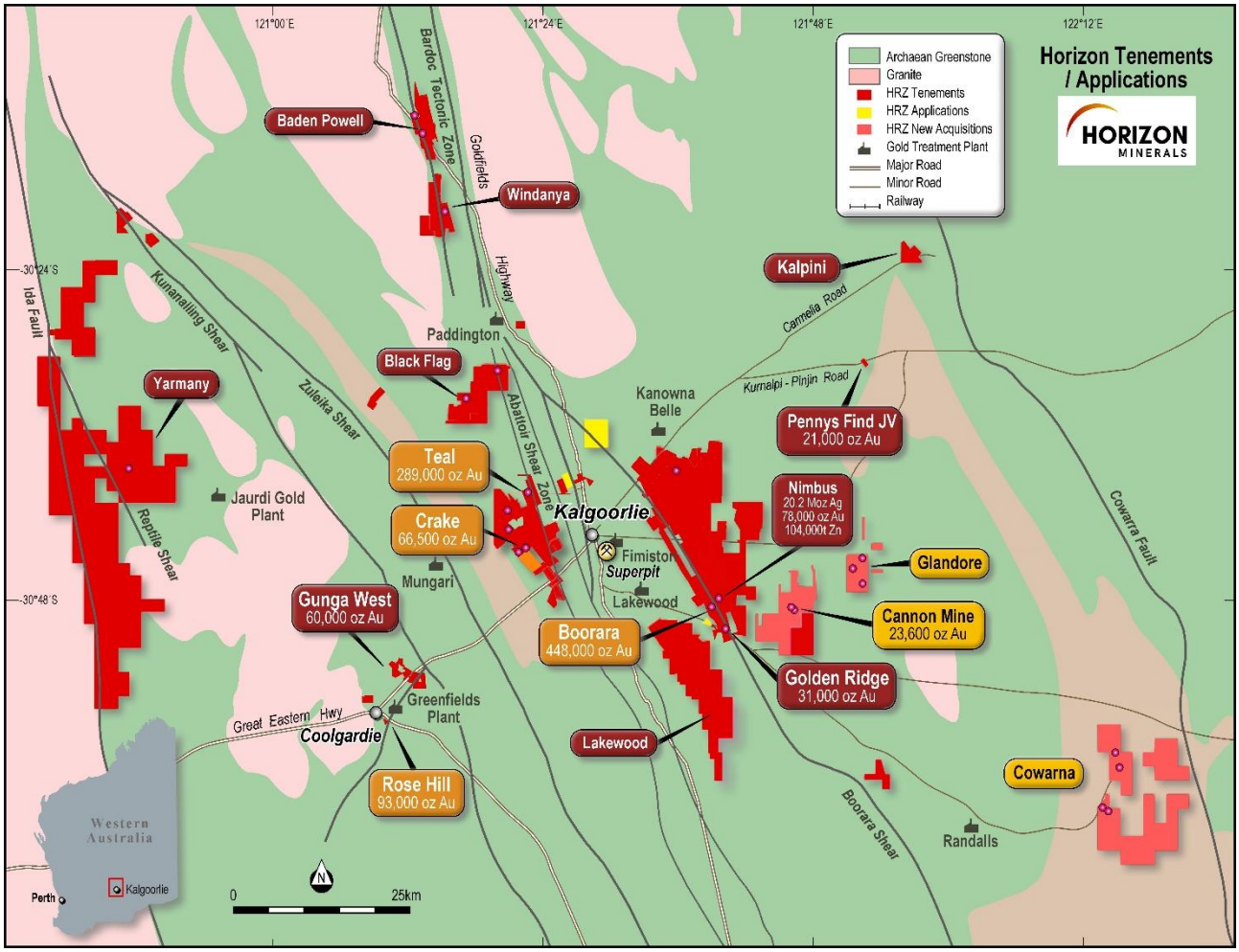


Figure 1: Kalgoorlie Regional Project area location and surrounding infrastructure

Crake is one of six core open pit and underground satellite gold projects being advanced to complement the baseload Boorara gold project as part of the consolidated Feasibility Study to deliver a minimum five-year initial mine plan and underpin the establishment of a stand-alone processing facility at the Boorara mine site.

RC and diamond infill and extensional drilling was completed in the December 2020 and March 2021 quarters with all data now incorporated into the geological model for the updated Mineral Resource Estimate. The new model will now be used to generate a maiden Ore Reserve for Crake and is expected for completion in the December Quarter 2021.[1]

[1] see Cautionary and Forward-Looking Statement on Page 16.

Project Geology

The geology at Crake is similar to the 390,000oz Janet Ivy open pit, located approximately 1,500m to the south, where the structurally controlled gold is hosted in a feldspar porphyry. At the nearby Fort William and Fort Scott open pits, where over 100,000oz have been produced to date, gold is hosted within sheared units of volcanics and clastic sediments.

At Crake, the gold mineralisation strikes NW and dips shallowly to the SW with a poorly developed southern plunge. The gold lodes are generally tabular shaped and 3m to 5m thick but can be stacked to 50m in thickness. High grade zones appear to result from intersecting structures. The Crake drilling focussed on a mineralised, variably altered pink porphyry with minor amounts of pyrite and magnetite. Higher grades usually coincide with stronger pyrite mineralisation (up to 3% by volume). There is little correlation between gold and magnetite.

Resource Update

As announced to the ASX on 4 and 24 November 2020 and 31 March 2021, a total of 51 RC holes for 5,043m were drilled at Crake in 2020/2021. RC drilling has been completed on an approximate 20m x 20m pattern, spanned 500m and covered mineralisation from 10m to 140m vertical depth.

In addition, three large diameter HQ3 diamond drill holes were completed for structural geology, geotechnical assessment and metallurgical testwork for Ore Reserve generation.

Significant downhole RC intercepts reported in 2020/21 included[1]:

- **24m @ 4.9g/t Au from 32m** including **1m @ 57.2g/t Au from 36m** (BRC20028)
- **12m @ 6.7g/t Au from 6m** (BRC20018)
- **2m @ 37.9g/t Au from 13m** including **1m @ 67.9g/t Au** (BRC20020)
- **4m @ 14.9g/t Au from 53m** including **1m @ 56.2g/t Au** (BRC20045)
- **6m @ 2.0g/t Au from 20m, 4m @ 6.7g/t Au from 44m including 1m @ 24.0g/t Au from 44m and 2m @ 2.3g/t Au from 91m** (BRC20049)
- **6m @ 3.6g/t Au from 36m**, **5m @ 2.9g/t Au from 69m and 3m @ 1.6g/t Au from 83m** (BRC20043)
- **2m @ 2.2g/t Au from 46m, 2m @ 3.2g/t Au from 60m, 14m @ 1.8g/t Au from 71m and 11m @ 2.6g/t Au from 91m** (BRC20014)

The 2020/21 follow up drilling program was designed to extend the mineralised envelope along strike and at depth and to infill to improve geological confidence within the block model.

The results (Figure 2) had good alignment with the current mineralisation model with several eastern holes intersecting shallower, up dip, mineralisation largely outside the resource area. On the western side, several deeper holes returned encouraging levels of well-developed and consistent mineralisation that highlight the deeper resource growth potential.

[1] As announced to the ASX on 31 March 2021.

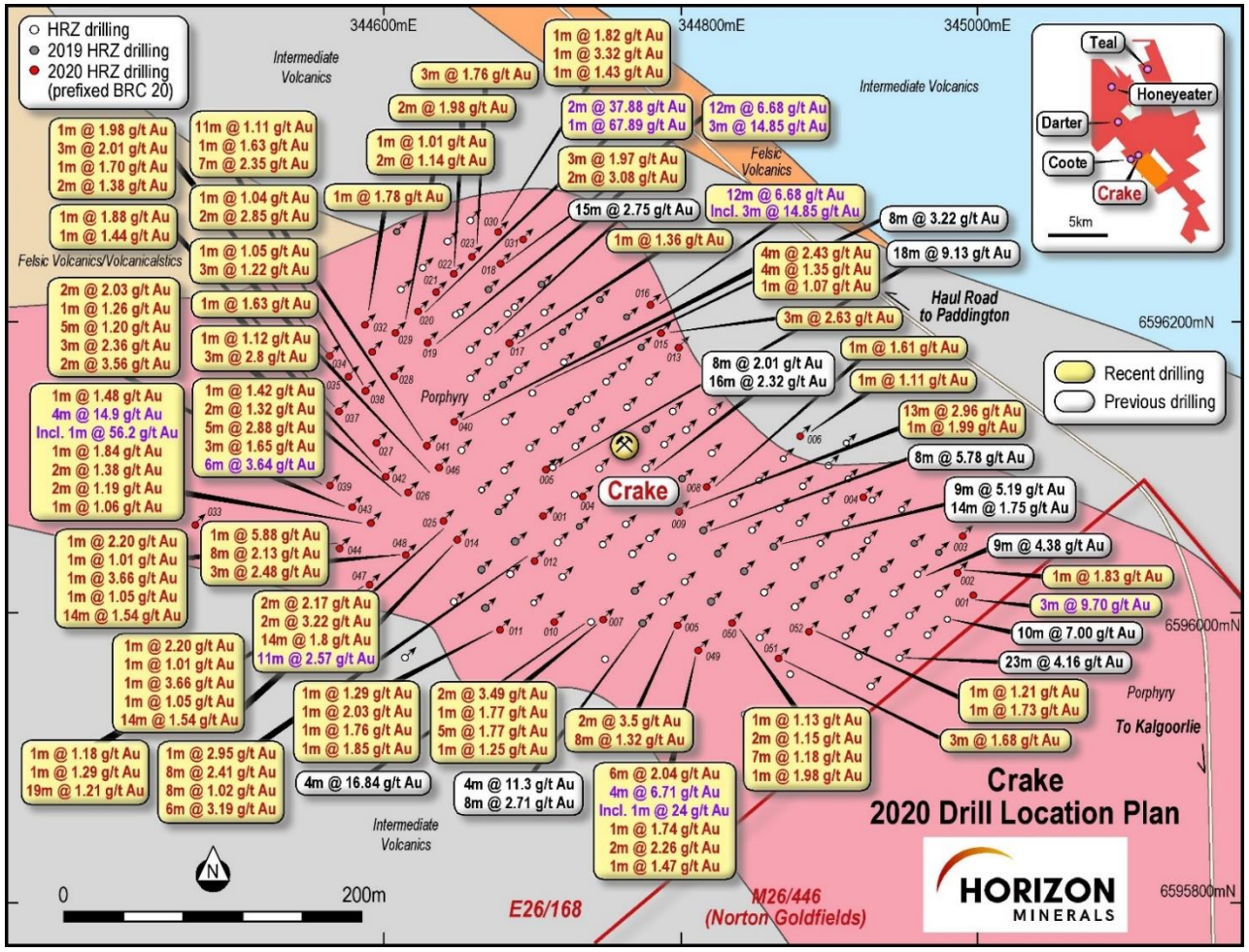


Figure 2: Crake project drilling results to date

The drilling data was compiled and used to generate an independent Mineral Resource estimate compliant with the 2012 JORC Code of 1.42Mt grading 1.46g/t Au for 66,500oz at a 0.8g/t Au lower grade cut-off [1].

Further breakdowns of ore types and categories are shown in Table 1 and 2.

Table 1: Crake Project – Indicated and Inferred Resource Summary Comparison at different cut-off grades *

Cut-off grade	Tonnes	Au g/t	Ounces
0.5	1,872,338	1.26	76,063
0.6	1,726,468	1.32	73,490
0.7	1,588,141	1.38	70,606
0.8	**1,416,783**	**1.46**	**66,460**
0.9	1,250,691	1.54	61,930
1.0	1,079,196	1.63	56,695
1.5	503,612	2.11	34,113

Table 2: Crake Project – by Classification and Material Type – 0.8 g/t Au Cut Off *

Material	Class	Tonnes	Au g/t	Ounces
Oxide	Indicated	69,244	1.45	3,223
Transition	Indicated	194,685	1.47	9,202
	Inferred	758	1.22	30
Fresh	Indicated	1,070,493	1.47	50,675
	Inferred	81,589	1.27	3,330
Grand Total		**1,416,783**	**1.46**	**66,450**

Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

* Information in this announcement that relates to Mineral Resource Estimation results is based on information compiled by Ms Jill Irvin B.Sc. who is Principal Geology Consultant with Entech Pty Ltd. Ms Irvin is a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Ms Irvin consents to the inclusion in the document of the information in the form and context in which it appears.

Preliminary internal optimisation work has delivered positive results and indicated the potential for a high conversion rate to Ore Reserve with 95% of the MRE now in the Indicated Category. The updated MRE is now considered more representative of the expected mining inventory when compared to the previous MRE. In addition, the initial optimisation work and model review has identified significant potential to extend the mineralisation beyond the current resource envelope with further drilling planned along strike and at depth.

Composite RC samples were submitted to Independent Metallurgical Operations for initial metallurgical testwork. Overall gold recoveries were 98.9% and 95.9% for the oxide and fresh composites respectively. Gravity recoveries were 48.8% for the oxide composite and 68.4% for the fresh composite with low reagent consumption observed for all gravity/leach tests.

Next Steps

The updated MRE will now be used for open pit mine optimisation, design and economic analysis for generation of a maiden Ore Reserve for Crake expected in the December Quarter 2021.

Significant mineralisation remains outside the current resource envelope with further drilling planned at Crake in 2021 testing the northern strike and dip extensions of the mineralisation. Drilling is also planned at the Coote prospect 500m west of Crake and the new Kestrel discovery 7km to the north.

Approved for release by the Board of Directors

For further information, please contact:

Jon Price
Managing Director
Tel: +61 8 9386 9534
jon.price@horizonminerals.com.au

Michael Vaughan
Media Relations – Fivemark Partners
Tel: +61 422 602 720
michael.vaughan@fivemark.com.au

Listing Rule 5.8.1 Disclosures

Mineral Resource Statement

The Mineral Resource Statement for the Crake Gold Mineral Resource Estimate (MRE) was prepared by Independent consultant Entech Pty Ltd during July 2021 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

This MRE update includes an additional 5,183.9m of drilling from 57 reverse circulation (RC) holes (including 5 with diamond tails) completed in 2020 by Horizon Minerals Ltd (HRZ). The depth from surface to the current vertical limit of the Mineral Resources is approximately 140m.

In the opinion of Entech, the resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources within the Crake deposit, based on sampling data from RC and diamond (DD) drilling available as of 9 March 2021. The Indicated and Inferred Mineral Resources comprise oxidised, transitional and fresh rock. The Mineral Resource Statement is presented in Table 1.

Table 1: Crake Mineral Resource at a 0.8 g/t Au cut-off.

Deposit	Mineral Resource Category	Tonnes (kt)	Grade (g/t Au)	Ounces (koz)
Crake	Indicated	1,334	1.47	63.15
	Inferred	82	1.27	3.3
	Total	**1,417**	**1.46**	**66.45**

Tonnages are dry metric tonnes. Minor discrepancies may occur due to rounding.

A total of 21,340.1m of drilling from 234 drill holes was available for the MRE. Mineralisation interpretations were informed by RC (234 drill holes, of which 192 intersect the resource) and DD drilling (two drill holes, of which both intersect the resource), for 2,585.8m of drilling intersecting the resource.

This MRE comprises Inferred Mineral Resources, which are unable to have economic considerations applied to them, nor is there certainty that further sampling will enable them to be converted to Measured or Indicated Mineral Resources.

Competent Person's Statement

The information in the report to which this statement is attached that relates to the Estimation and Reporting of Gold Mineral Resources at the Crake deposit is based on information compiled by Ms Jill Irvin, BSc, a Competent Person who is a current Member of the Australian Institute of Geoscientists (MAIG 3035). Ms Irvin, Principal Geologist at Entech Pty Ltd, is an independent consultant to Horizon Minerals Ltd (HRZ) with sufficient experience relevant to the style of mineralisation and deposit type under consideration and to the activities 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. Ms Irvin consents to the inclusion in the report of matters based on her information in the form and context in which it appears.

Entech undertook a site visit to the Crake deposit on 2 October 2020 to inspect and review drilling and sampling processes in relation to the MRE. Areas visited included the SGS laboratory in Kalgoorlie and resource infill drilling operations. No material issues or risks pertaining to the MRE update were identified, observed, or documented during the visit.

Drilling Techniques

HRZ completed RC holes in 2020 using a 4.5-inch face sampling hammer bit. The HQ3 (2.406-inch core) DD holes used triple tube to help maximise core recovery.

All drill collar locations were initially pegged and surveyed using a hand-held Garmin GPS, accurate to ± 3m to 5m. The holes are normally accurately surveyed using an RTK-DGPS system later (±10mm). Holes were drilled on a regular spacing. All reported coordinates are referenced to a Grid MGA94 Zone 51. The topography is relatively flat at the location of the drilling. Down hole surveys were taken.

Historical Drilling

The historical drilling at the Crake deposit comprises RC and DD holes drilled from the 1990s through to 2019. Of the drill holes used in the MRE, 93% were drilled by HRZ in the period from 2009 to 2020.

Horizon Minerals Limited (formally Intermin Resources Ltd[1]) drilled 85 RC holes for 8,096m at the Crake deposit during 2018[2]. The first phase of drilling (~5,000 m) focused on areas where historical mineralisation had been delineated but appeared to have poor continuity.

Limited details of historical drilling techniques were available to HRZ; therefore, a key focus of the HRZ drilling (2020–2021) was to infill areas of the MRE informed by historical drill information. All areas included in the MRE are now considered sufficiently supported by HRZ drill information.

Pre-2018 drilling is reported as having been surveyed, mostly on a local grid.

[1] *HRZ. ASX announcement. Change of Company Name and ASX Code. 25 July 2019*

[2] *IRC. ASX announcement. Excellent Drill Results Continue from Binduli Gold Project. 14 November 2018*

Sampling and Sub-Sampling Techniques

The Crake deposit has been sampled using 227 RC holes, 3 DD holes, and 5 RC holes with diamond tails.

Recent drilling of 57 RC (including 5 with diamond tails) drill holes undertaken by HRZ comprised 4m composite samples taken with a 450mm × 50mm PVC spear thrust to the bottom of the sample bag. Using a riffle splitter, 1m single splits were taken if 4m results were above a nominal cut-off. Where analysis returned results above a nominal cut-off (0.2g/t Au), the single metre samples were submitted for analysis. RC sample weights were 1.5-2kg. Diamond HQ drill core was sawn in half lengthwise. Half-core was submitted for analysis.

The RC chips were geologically logged over 1m intervals. Drilling intersected oxide, transitional and primary ore to a maximum downhole depth of 204m. The RC sample recovery and metreage was assessed by comparing drill chip volumes (sample bags) for individual metres. Estimates of sample recoveries are recorded.

Routine checks for correct sample depths were undertaken every RC rod (6m). RC sample recoveries were visually checked for recovery, moisture and contamination at the time of sample discharge. Regular air and manual cleaning of cyclone was conducted to remove hung-up clays where present.

RC samples were collected from the drill rig by spearing each 1m collection bag and compiling a 4m composite sample. Prior to 2018 single splits were automatically taken by emptying the bulk sample bag into a riffle splitter.

Since 2018, 1m samples are taken from a splitter on the drill rig. 4m composite samples are scooped or speared from the remaining cuttings.

The RC samples collected were all predominantly dry. Exceptions were recorded on logs.

Historical Sampling

Historically, 14 RC and 2 DD holes drilled from 1996 to 2001 were used in the resource estimation. Historical sampling also included 5 air core (AC) and 104 rotary air blast (RAB) drill holes which were not used in the resource estimation.

A riffle splitter was used to take 1m single splits. The 4 m composite samples taken with a 450mm × 50mm PVC spear being thrust to the bottom of the sample bag were submitted for preliminary analysis. Where analysis returned results above a nominal cut-off (0.2g/t Au), the 1m single split samples were submitted for analysis.

No sampling issues were reported for the historical drilling.

Sample Analysis Method

The most recent RC and DD samples (drilling by HRZ) were submitted to SGS (Kalgoorlie) for analysis. The RC samples were dried, crushed and pulverised to 90% passing 75µm. They were then split to a 50g charge weight for fire assaying, with checks routinely undertaken.

The RC drilling was primarily used to obtain 1m samples from which approximately 1.5–2kg was submitted to the laboratory. Half-core was sampled nominally over 1m intervals adjusted for geological boundaries. All samples were pulverised to produce a 50 g charge for fire assay. Samples were assayed for gold only.

Field duplicates were routinely taken to monitor laboratory sample preparation precision. Horizon intermittently resubmitted samples to a referee laboratory and CRMs were submitted with all samples to monitor laboratory accuracy.

Once samples arrived in Kalgoorlie or Perth, further work including replicates and QC was undertaken at the laboratory. Grind size is routinely recorded and monitored.

Historical Analysis

The pre-2018 samples were analysed by aqua regia digest and ICP-MS or AAS. Amdel, SGS, AAL and Aurum laboratories were used.

Geology and Geological Interpretation

The Crake tenement area is in the Eastern Goldfields of Western Australia, approximately 8 km west of Kalgoorlie–Boulder. The deposit lies within the northwest trending Binduli/Mt Pleasant Domes that form part of the Ora Banda Domain within the Archaean Kalgoorlie Terrain. The geology is dominated by intermediate tuff and feldspathic ignimbrite with less extensive pyroclastics and dacitic to andesitic flows. The volcanic sequence also comprises interflow sedimentary units with a porphyry intrusion.

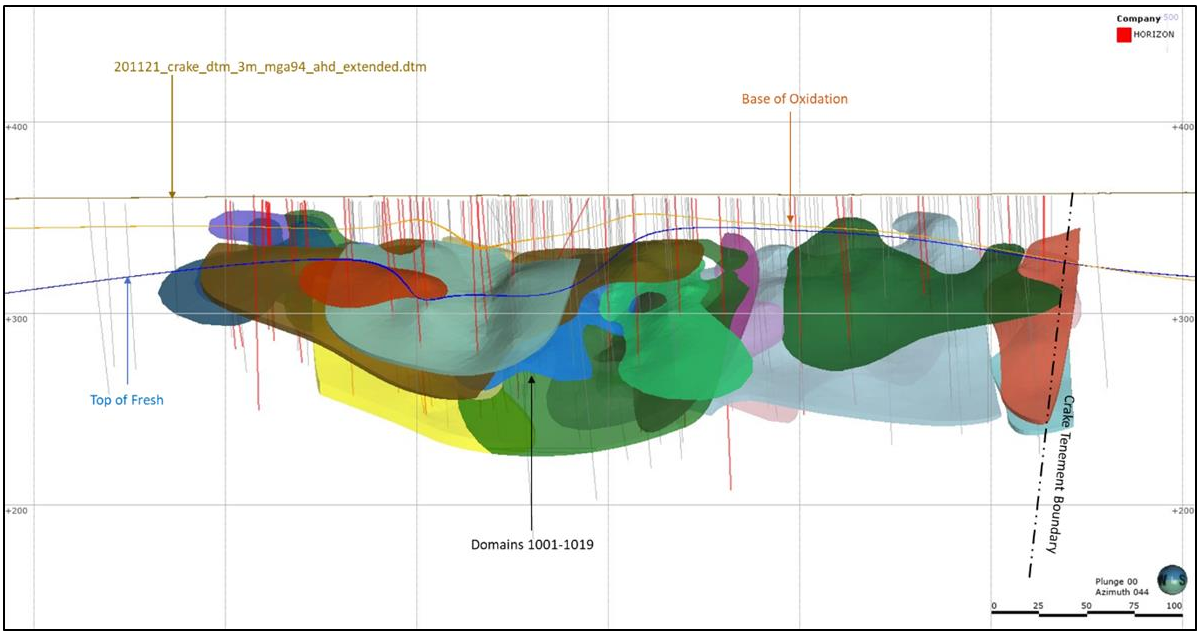
Mineralisation occurs primarily within subparallel, structurally controlled lodes in a porphyry host unit. Prior to domain interpretations, host lithology modelling was completed to define the contact between the porphyry and volcaniclastic sediments. This contact orientation underpinned the mineralisation package and guided subsequent mineralisation modelling.

Entech understands that the porphyry-hosted lodes are structurally controlled and at the time of this MRE, modelling of the structural framework at Crake was limited, however the available drilling density supports the continuity implied by the interpreted mineralisation domains, both along strike and down dip.

Following this, a total of 19 mineralisation domains were interpreted at the Crake deposit (Figures 3 and 4). The mineralisation package at Crake extends over a 470m strike length. Lode widths are highly variable and range from 0.5m to 12m. The depth below surface to the upper limits of the MRE is approximately 30m (335mRL) and the MRE extends 110m to a lower limit of 140m (225 mRL).

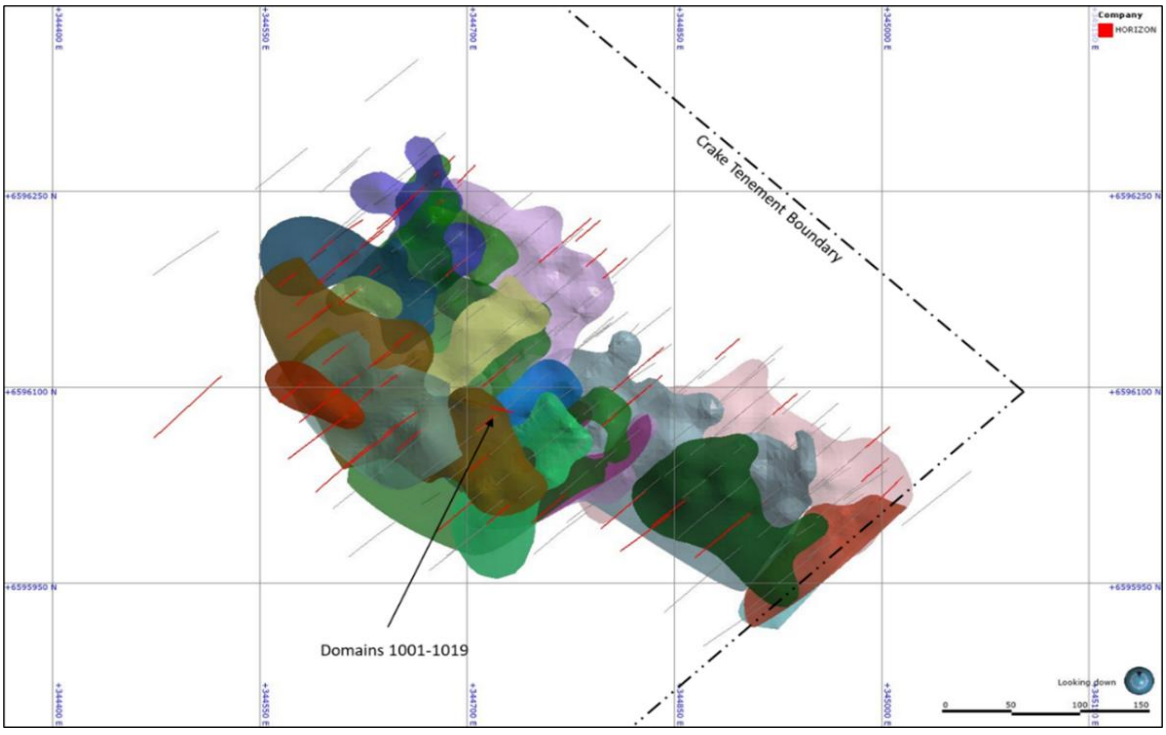
A nominal cut-off grade of 0.5g/t Au was utilised to guide the geological continuity of the interpreted mineralisation. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit.

Figure 3: Oblique section of Crake deposit (azimuth 044˚) showing drill hole traces, mineralised domains, weathering, topography extents, and tenement boundary.



Note: Red=HRZ's 2020 drilling

Figure 4: Plan section of Crake deposit showing drill hole traces, mineralisation domains and tenement boundary.



Note: Red=HRZ's 2020 drilling

Estimation Methodology

Sample data within mineralisation domains were composited to 1m downhole lengths using a best fit methodology and 0.5m minimum threshold on inclusions. There were no residuals within the composite data.

Exploratory Data Analysis (EDA) of the declustered (10mN, 10mE, 10mZ) composited gold variable within the mineralised domain groups was undertaken using Supervisor™ software. Analysis for sample bias, domain homogeneity and top-capping was undertaken. Evidence for further sub-domaining of composite data by weathering or lithology boundaries, for the purposes of interpolation, was not supported by statistical and spatial analysis.

Initial assessment and application of top-capping for the estimate was undertaken on the gold variable within individual domains. Following further spatial and statistical validation of the composite data, domains were grouped for the purposes of applying top-caps as outlined below:

- Four primary domains (1005, 1016-17, 1019): Top-cap = 12g/t Au and 7.4% metal reduction
- Remaining minor domains to the north and south (1001-1004, 1006-1015 and 1018): Top-cap = 7g/t Au and 12.6% metal reduction.

Visual analysis indicated the presence of a high-grade (+3g/t Au) plunge component associated with a thickening of the mineralised domains. This plunge and its relationship to vein width was confirmed during EDA and underpinned the orientation of metal during estimation.

Variography was undertaken on the capped, declustered gold variable within grouped mineralisation domains. Robust variogram models with a moderate nugget (43%) were delineated and utilised in Qualitative Kriging Neighbourhood Analysis (QKNA) to determine parent cell estimation size and optimise search neighbourhoods. It should be noted that although the maximum continuity modelled within the variogram was 110m, the bulk of spatial variability (92.9%) and subsequent kriging weights was applied within the first 26m.

Interpolation was undertaken using Ordinary Kriging (OK) in GEOVIA Surpac™ within parent cell blocks. Dimensions for the interpolation were Y: 10mN, X: 5mE, Z: 5mRL, with sub-celling of Y: 1.25mN, X: 1.25mE, Z: 0.625mRL. The model was rotated 315° to provide adequate domain volume definition and honour wireframe geometry. Considerations relating to appropriate block size include drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisations (QKNA).

Given that the deposit is well drilled (nominal 20m drill spacing), a one-pass estimation search strategy was employed, with all domains estimated within a maximum distance of 50m and the neighbourhood composites ranging from a minimum of 6 to a maximum of 12 samples.

Domain boundaries represented hard boundaries, whereby composite samples within that domain were used to estimate blocks within the domain. Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long sections) against input data. The 3D block model was coded with density, weathering and Mineral Resource classification prior to evaluation for Mineral Resource reporting.

Classification Criteria

Mineral Resources were classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, amount of RC drilling and current understanding of mineralisation controls. In Entech's opinion, the drilling, surveying and sampling undertaken, and the analytical methods and quality controls used are appropriate for the style of deposit under consideration.

Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

- Blocks were well supported by drill hole data with the distance to the nearest sample being within 20 m or less or where drilling was within 20m of the block estimate.
- Blocks were interpolated with a neighbourhood informed by the maximum number of sample criteria.
- Estimation quality was considered reasonable, as delineated by a conditional bias slope nominally above 0.5.

Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:

- Drill spacing was averaging a nominal 40m or less, or where drilling was within 40m of the block estimate.
- Estimation quality was considered low, as delineated by a conditional bias slope between 0.2 and 0.5.

The reported Mineral Resource for was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 140m below surface topography. All classified Mineral Resources were reported inside the tenement boundary, as provided by HRZ to Entech.

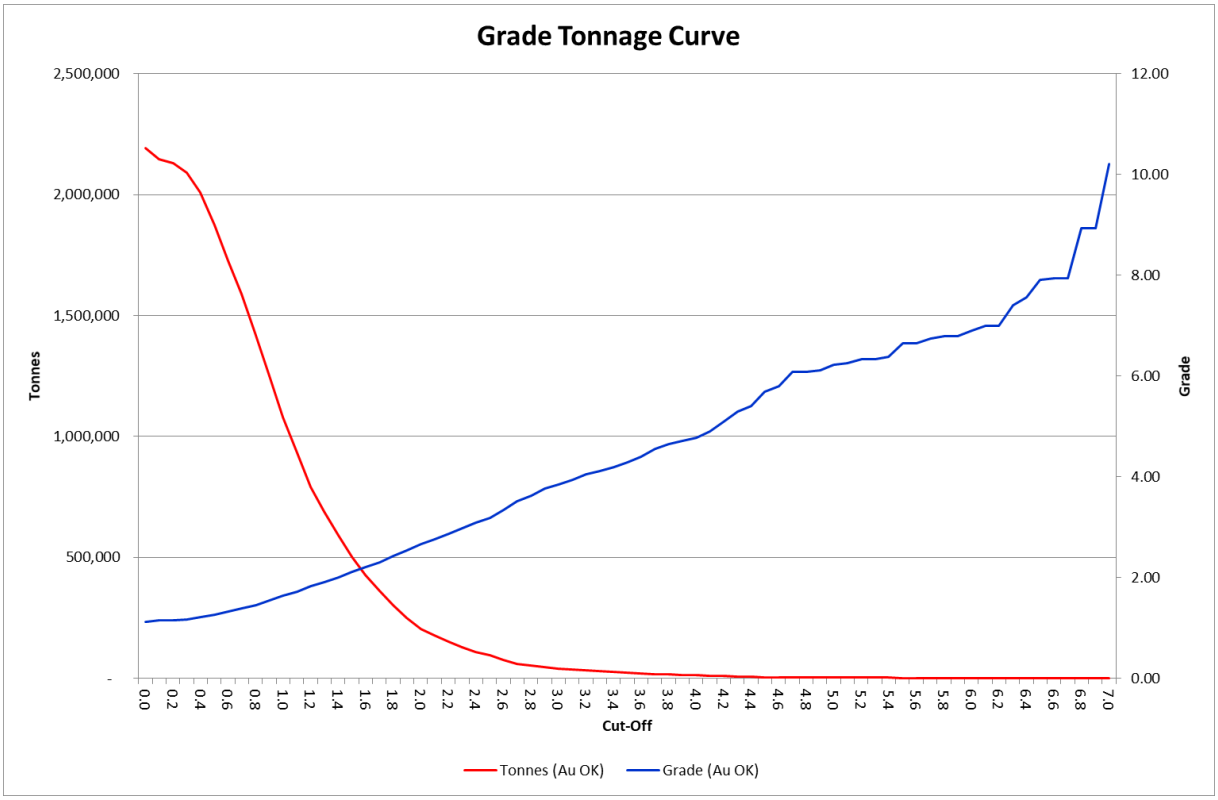
Mineralisation within the model which did not satisfy the criteria for Mineral Resources remained unclassified.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The MRE does not account for selectivity, mining loss and dilution. This MRE update includes Inferred Mineral Resources which are unable to have economic considerations applied to them, nor is there certainty that further sampling will enable them to be converted to Measured or Indicated Mineral Resources.

Cut-off Grade

The Mineral Resource cut-off grade for reporting of global gold resources at the Crake deposit was 0.8g/t. This was based on consideration of grade-tonnage data (Figure 5), selectivity and benchmarking against comparable sized deposits of similar mineralisation style and tenor. Tonnages were estimated on a dry basis.

Figure 5: Grade-tonnage curve for the Crake deposit – Indicated and Inferred Mineral Resources.



Bulk Density

Bulk density values at the Crake deposit were derived from 117 measurements collected by HRZ during 2014. Archimedes density measurements were undertaken on transitional (12) and fresh (105) drill core during the on-site sampling process.

The samples were located between 6,596,060mN and 6,596,100mN and nominally 8m to 188m downhole, providing a representative density profile between mineralised domains, and depth profile within a centralised portion of the MRE.

HRZ analysis of the bulk density data indicated values between 2.43 – 2.73 SG but typically values increased incrementally at depth into the fresh rock profile at Crake. For verification purposes, sample values were compared to bulk density data obtained from deposits to the north and south of Crake within HRZ tenements with similar lithological characteristics. The following bulk density mean values were supplied by HRZ to Entech and applied in the block model, following independent verification of raw data by Entech:

- Cover and oxide: 1.8 t/m^3
- Transitional: 2.20 t/m^3
- Fresh: 2.60 t/m^3.

Project History and Historical Mineral Resources

In March 2018, the Binduli joint venture tenements were returned to Intermin Resources Limited[3] (now Horizon Minerals) on a 100% basis and an initial 5,000 m of RC drilling was commenced at the Crake prospect shortly thereafter. A follow-up drill program for approximately 3,000 m completed in the September 2018 quarter[4] expanded the potential resource by infilling between the northern and southern drill areas. The total mineralised strike length was subsequently extended to 420 m.

A maiden Mineral Resource for the Crake Project was declared in Q1 2019[5] with total MRE reported as follows:

- Intermin Resources Limited, March 2019: 1.12Mt at 1.59g/t Au for 57,700oz (reported at a 1.0g/t cut-off grade).

Following further infill and extensional drilling at Crake in Q2 and Q3 2019 (43 RC holes for 3,354m), an updated MRE was reported as follows:

- Horizon Minerals Limited, December 2019: 1.27Mt at 1.81g/t Au for 74,000 oz (reported at a 1.0g/t cut-off grade)[6].

Assessment of Reasonable Prospects for Eventual Economic Extraction

Entech assessed the Crake MRE, as reported, as meeting the criteria for *reasonable prospects for eventual economic extraction* based on mining and metallurgical considerations outlined below.

Mining

The Crake MRE extends from the topographic surface to approximately 140m below surface. This depth is supported by conceptual pit optimisations undertaken by Entech on this MRE and following review of HRZ derived conceptual pit optimisations on historical MRE's. The reported Mineral Resource was constrained both laterally to tenement boundary, and at depth, by the

[3] *IRC. ASX announcement. Joint Venture and Royalty Update. 10 April 2018*

[4] *IRC. ASX announcement. Excellent Drill Results Continue from Binduli Gold Project. 14 November 2018*

[5] *IRC. ASX announcement. Intermin's Resources Grow to Over 667,000 Ounces. 12 March 2019*

[6] *HRZ. ASX announcement. Crake Gold Project Continues to Grow. 10 December 2019*

available drill hole spacing outlined for Inferred Mineral Resource classification. It should be noted that Entech have excluded material (from Mineral Resource inventory) from the tenement boundary on a 45 degree angle to a depth of 140m, this slope angle was guided by the Entech conceptual pit optimisation slope.

Entech considers the 110 vertical metres of Mineral Resources (335mRL to 225mRL) would fall within the definition of reasonable prospects for eventual economic extraction within an open pit mining framework.

No dilution or cost factors were applied to the estimate.

Metallurgy

Independent metallurgical testwork undertaken in July 2019 on oxide and one fresh composite by gravity and cyanide leaching indicated overall gold recoveries of 98.6% and 96.5% for the oxide and fresh composites, respectively. The proportion of the gravity component of recoverable gold was >50% for the oxide and fresh composites, respectively, with low reagent consumption observed. Average feed grades of 1.47g/t Au and 1.88g/t Au for the oxide and fresh composites, respectively, were recorded.

Additional testwork completed by HRZ in August 2021 on oxide and fresh composites by gravity and cyanide leaching indicated overall gold recoveries of 98.9% and 95.9% respectively. Most of the gold was leached (90.1%) after two hours during the oxide leach testing. The proportion of the gravity component of recoverable gold was 48.8% and 68.4% for the oxide and fresh composites respectively. Average feed grades of 1.63g/t Au and 1.59g/t Au for the oxide and fresh composites, respectively, were recorded.

Entech understands that the Crake material would be processed via a conventional gravity and carbon-in-leach (CIL) processing circuit, with a high proportion of recovery being achieved in the gravity circuit.

Given existing testwork data, Entech does not consider metallurgical amenability poses a material risk to the eventual extraction of the MRE under consideration in this Report. Therefore, no metallurgical recovery factors were applied to the Mineral Resources or Mineral Resource tabulations.

Forward Looking and Cautionary Statements

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as “planned”, “expected”, “projected”, “estimated”, “may”, “scheduled”, “intends”, “anticipates”, “believes”, “potential”, “could”, “nominal”, “conceptual” and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company’s actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management’s ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove to be correct.

Statements regarding plans with respect to the Company’s mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward-looking statements in the announcement, including with respect to any production targets and financial estimates, based on the information contained in this and previous ASX announcements.

Appendix 1 – Kalgoorlie (Crake) Regional Gold Projects

JORC Code (2012) Table 1, Section 1, 2 and 3

Mr David O'Farrell, Exploration Manager of Horizon Minerals compiled the information in Section 1 and Section 2 of the following JORC Table 1 and is the Competent Person for those sections. Ms Jill Irvin, an independent consultant to Horizon compiled the information in Section 3 of the following JORC Table 1 and is the Competent Person for that section.

The following Table and Sections are provided to ensure compliance with the JORC Code (2012 edition) requirements for the reporting of Mineral Resources.

Section 1 Sampling Techniques and Data

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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Crake has been sampled using 227 Reverse Circulation (RC) drillholes, 2 Diamond Drilling (DDH), and 5 RC drillholes with Diamond Tails. 93% of all drill holes used in the resource estimation were drilled by Horizon Minerals (HRZ) from 2009 to 2020. Historically, 14 RC and 2 DD drilled from 1996 to 2001 were used in the resource estimation. Historical sampling also included 5 Air Core (AC) and 104 Rotary Air Blast (RAB) drill holes which were not used in the resource estimation. 1 m single splits taken using riffle ore cone splitter. 4 m composite samples taken with a 450mm x 50mm PVC spear being thrust to the bottom of the sample bag were submitted for preliminary analysis. Where analysis returned results above a nominal cut-off (0.2 g/t Au), the single metre samples were submitted for analysis. RC sample weights were 1.5-2 kg.

Criteria	*JORC Code explanation*	Commentary
		Diamond HQ diamond drill core was sawn in half lengthwise. Half core was submitted for analysis.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For RC drilling regular air and manual cleaning of the cyclone was undertaken to remove hung up sample where present. Duplicate field samples were submitted from the RC drilling to monitor sampling. Commercial standards were submitted with all samples sent for analysis to monitor laboratory accuracy. Based on analysis of these results, there is no evidence to suggest the samples are not representative. Standards, duplicates, and replicate samples are used by the laboratory to monitor their equipment performance.
	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.	Historical drilling was managed by qualified geologists. HRZ drilling and sampling was undertaken by qualified company geologists under the supervision of the exploration manager. RC was used to obtain 1 m samples from which approximately 1.5 kg – 2 kg was submitted to the laboratory. Half core was sampled nominally over 1 m intervals adjusted for geological boundaries. All samples were pulverised to produce a 50 g charge for fire assay. Samples were assayed for Au only RC chips were geologically logged over 1m intervals. Drilling intersected oxide, transitional and primary ore to a maximum downhole depth of 204 m. Drilling of

Criteria	*JORC Code explanation*	Commentary
		mainly oxide and primary felsic volcanogenic sediments with gold contained within sulphides and quartz.
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).*	Historical drilling was undertaken with unknown equipment. HRZ RC drilling was undertaken with a 4.5 inch face sampling hammer bit. HQ3 (2.406 inch core) Diamond drilling used triple tube to help maximise core recovery.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recovery and meterage was assessed by comparing drill chip volumes (sample bags) for individual meters. Estimates of sample recoveries were recorded. Routine checks for correct sample depths are undertaken every RC rod (6m). RC sample recoveries were visually checked for recovery, moisture, and contamination. The cyclone was routinely cleaned ensuring no material build up. Under normal drilling conditions Horizon believes a good, representative sample is being obtained. Good recoveries were noted in the Crake diamond drill holes. DDH recovery was logged over every core run (typically 3m), no significant losses were noted inside the ore zone. No sampling issues were reported for the historical drilling.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Some bias may occur where sample recovery is poor or very wet. These instances are recorded in the geological logging. At depth there were some wet samples,

Criteria	*JORC Code explanation*	Commentary
		and these were recorded on geological logs. Where significant samples were wet, they were recorded.
	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.	No sample bias has been identified to date.
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.*	RC drill chips are logged at 1 m intervals. Drill core is logged by geological interval. Logging is done on standard logging forms and transferred to a digital database once back at the office. Drill core was geotechnically logged.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging was qualitative in nature.
	The total length and percentage of the relevant intersections logged.	All RC chip samples and all DDH core intervals were logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	4 m composite and 1m RC samples were taken. Sawn diamond half core was sampled at a nominal 1 m downhole interval adjusted for geological intervals if required.

Criteria	JORC Code explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were collected from the drill rig by spearing each 1 m collection bag and compiling a 4 m composite sample. Prior to 2018 single splits were automatically taken by emptying the bulk sample bag into a riffle splitter. Since 2018 1 m samples are taken from a splitter on the drill rig. 4 m composite samples are scooped or speared from the remaining cuttings. The RC samples collected were all predominantly dry. Exceptions were recorded on logs.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Horizon considers the RC and DDH sampling and sample preparation appropriate for the type of mineralisation being investigated.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	For Horizon samples, no duplicate 4 m composites were taken in the field. I m duplicate samples were submitted at a nominal ration of 1:20. 4 m and 1m samples were analysed by SGS Mineral Services in Kalgoorlie. Samples were consistent and weighed approximately 1.5 - 2.0 kg.
	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.	Field duplicates were routinely taken to monitor laboratory sample preparation precision. Horizon intermittently resubmits samples to a referee laboratory and CRMs are submitted with all samples to monitor laboratory accuracy. Once samples arrived in Kalgoorlie or Perth, further work including replicates and QC was undertaken at the laboratory. Grind size is routinely recorded and monitored.

Criteria	*JORC Code explanation*	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Mineralisation is located in weathered and fresh porphyry. The sample size is standard practice in the WA Goldfields and is considered to provide good representivity in this type of material.
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.*	Pre-2018 samples were analysed by aqua regia digest and ICP-MS or AAS. Amdel, SGS, Aal and Aurum laboratories were used. Since 2018, the 1 m and 4 m RC samples were assayed by Fire Assay (FA50) with ICP-MS finish by SGS accredited Labs (Kalgoorlie) for gold only. A small number of overflow samples were analysed by Jinnings laboratory in Kalgoorlie using the same method. No geophysical assay tools were used. Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. QC results (blanks, duplicates, standards) were in line with commercial procedures, reproducibility and accuracy. These techniques are considered appropriate for this type of mineralisation and produce a near total metal content result.
	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.	No geophysical or alternate assay tools were used at Crake.

Criteria	*JORC Code explanation*	Commentary
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Horizon routinely use field duplicate, CRMs and blank samples in the QA process. The laboratory uses internal lab standards and replicate samples as part of their QA/QC. QC analysis indicated no bias and accurate results.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Analytical work was supervised by senior laboratory staff experienced in metals assaying. QC data reports confirming the sample quality are supplied by the laboratory. No independent sampling has been undertaken to date.
	The use of twinned holes.	No twin holes were intentionally drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	For recent drilling original Analysis Data is stored digitally as PDF and XLS files on the Horizon servers in Perth and Kalgoorlie. Drill hole logs are stored as XLS files on a per hole basis and compiled by project into an Access database. Pre-2018 drilling is maintained in a digital database. The data has been validated against historical records where available. File servers are routinely backed up off site.
	Discuss any adjustment to assay data.	No data were adjusted.

Criteria	*JORC Code explanation*	Commentary
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.*	All drill collar locations were initially pegged and surveyed using a hand-held Garmin GPS, accurate to ± 3 m to 5 m. The holes are normally accurately surveyed using a RTK-DGPS system at a later date (±10 mm). Holes were drilled on a regular spacing. All reported coordinates are referenced to a Grid MGA94 Zone 51. The topography is relatively flat at the location of the drilling. Down hole surveys were taken. Pre-2018 drilling is reported as having been surveyed, mostly on a local grid.
	Specification of the grid system used.	Grid - MGA94 Zone 51. The transformation coordinates from local to MGA grids are known form statutory reporting.
	Quality and adequacy of topographic control.	A high-resolution drone survey was flown in March 2019. This has been reduced to a 3 m resolution digital terrain model.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drilling is regularly spaced across the deposit at a nominal 20 m spacing.
	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.	The hole spacing was determined by Horizon to be sufficient to define the mineralisation. Data density is appropriate for the resource estimation and classification applied.
	Whether sample compositing has been applied.	Preliminary RC sampling is done on 4 m composites. For any composite returning Au grade above a threshold, the individual 1 m intervals are assayed and reported.

Criteria	*JORC Code explanation*	Commentary
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.*	The drilling orientation intersects the oxide and primary mineralisation/structures at high angles providing representative intersections. The relationship between the drilling orientation and the orientation of mineralised structures is not considered to have introduced a sampling bias.
	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.	The relationship between the drilling orientation and the orientation of mineralised structures is not considered to have introduced a sampling bias.
The measures taken to ensure sample security	*The measures taken to ensure sample security.*	Samples were collected on site under the supervision of the responsible geologist. The work site is on a destocked pastoral station. Visitors need permission to visit site. Once collected samples were bagged and transported by Horizon personnel to Kalgoorlie for analysis. Dispatch and consignment notes were delivered and checked for discrepancies.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No Audits have been commissioned. Sample practices are monitored by senior Horizon geologists.

Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Crake is within exploration tenement E26/168 (MLA26/855) held by Black Mountain Gold Ltd, a fully owned subsidiary of Horizon Minerals Limited. No third-party JV partners are involved. The tenements are in good standing and no known impediments exist.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous work in the area has been undertaken by • Evolution Mining • Horizon Minerals (as Intermin Resources) • Delta Gold • Barrick Gold • Placer Dome Asia
Geology	Deposit type, geological setting and style of mineralisation.	The Crake deposit is hosted in an Archaean porphyry. Mineralisation occurs in the oxide supergene and transitional zones as gold with quartz, minor vein quartz, and shear hosted with varying amounts of sulphide mineralisation.

Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length.	Drill hole details are included in the main body of the resource report.
	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.	No information has been intentionally excluded.
Data aggregation methods	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.	No weighting or averaging calculations were made. Only Gold (Au) is being reported. No metal equivalent calculations were applied

	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.	No aggregate intercepts are being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent calculations were applied.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	With RC drilling, the minimum width, and assay, is 1 m. Drill intercepts and true widths appear, within reason, to be close to each other allowing for the minimum intercept width of 1 m. Horizon estimates that the true width is variable but probably 80% to 100% of most intercept widths.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but	Included in the main body of the resource report.

	not be limited to a plan view of drill hole collar locations and appropriate sectional views	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Exploration results are not being reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Exploration results are not being reported.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Pit optimisation studies will be undertaken to quantify the economic viability of the Crake deposit.
	Diagrams clearly highlighting the areas of possible extensions, including the main	Commercially sensitive.

	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Drill data are logged onto MS Excel spreadsheets in the field. The logging spreadsheets include some data validation checks. The spreadsheet entries are validated and merged into a relational database on a project basis. The database is validated for internal referential integrity. Drilling results are visually reviewed and validated in Micromine or Surpac. Drilling data are centrally stored in HRZ's Perth office on a project basis. The databases are updated as new information is acquired. All project databases and will be migrated to the Geobank database management system in 2021. Historical data are verified and checked by HRZ geologists and, along with HRZ's recent drilling, are cross checked by an external third party with expertise in database management.
	Data validation procedures used.	Entech's database checks included the following: • Checking for duplicate drill hole names and duplicate coordinates in the collar table. • Checking for missing drill holes in the collar, survey, assay, and geology tables based on drill hole names.

Criteria	JORC Code explanation	Commentary
		• Checking for survey inconsistencies including dips and azimuths <0˚, dips >90˚, azimuths >360˚, and negative depth values. • Checking for inconsistencies in the 'From' and 'To' fields of the assay and geology tables. The inconsistency checks included the identification of negative values, overlapping intervals, duplicate intervals, gaps and intervals where the 'From' value is greater than the 'To' value. Database checks were conducted in MS Excel, MS Access, Micromine, Leapfrog™ and Surpac™ Mining software. Drill hole data were validated against WAMEX data. HRZ has suitable processes and due diligence in place to ensure acceptable integrity of the drill hole data that underpin the Mineral Resource estimate. Entech used the drill hole data as supplied, and undertook independent checks for fatal flaws, data audits and visual verification. Entech undertook a site visit as part of its due diligence process. The drill hole data, as supplied by HRZ, were considered suitable for underpinning Mineral Resource estimation of global gold ounces and incorporated drilling results available up to and including 9 March 2021. HRZ's David O'Farrell was appointed Competent Person for Sampling Techniques, Exploration Results and Data Quality underpinning the Mineral Resource Estimate (MRE).
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Entech visited the Crake Project on 2 October 2020 to review drilling and sampling processes for reverse circulation (RC) and diamond (DD) drilling and inspect drill hole chips in relation to the upcoming MRE. No material issues or risks pertaining to the MRE were observed during the site visit.
	If no site visits have been undertaken indicate why this is the case.	N/A

Criteria	JORC Code explanation	Commentary
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Entech was supplied with an MS Access database 'Crake_20210309.accdb' comprising 234 collar records. These data, together with input from HRZ geologists, guided the initial approach to the interpretation of the mineralisation in the Crake deposit. Mineralisation occurs primarily within subparallel, structurally controlled lodes in a porphyry host unit. The mineralisation package is underpinned by the strike and dip of contact with the underlying volcaniclastic sediments. Entech undertook lithology modelling to define the basement contact between the porphyry and volcaniclastic sediments. Entech understands that the porphyry-hosted lodes are structurally controlled and at the time of this MRE, modelling of the structural framework at Crake was limited, however the available drilling density supports the continuity implied by the interpreted mineralisation domains, both along strike and down dip. The volcaniclastic and porphyry units are well defined by RC chip logging (227 holes) and drill core (7 holes) and supported by a nominal drill density of 20m × 20m. Factors which limited the confidence of the geological interpretation include: • high reliance on RC data for definition of discrete mineralisation boundaries • limited understanding of the structural framework underpinning mineralisation control within the porphyry lodes. • Factors which aided the confidence of the geological interpretation included: • clear and consistent basement contact (interbedded volcanics and clastic sediments) which underpins the geometry of the mineralisation package • grid drilled and perpendicular 20m × 20m drill data within the central core of the deposit. Entech considers confidence is high for the geological interpretation, geometry and continuity of the lithological modelling and basement contact that supports the MRE. Entech

Criteria	JORC Code explanation	Commentary
		considers confidence in mineralisation continuity and distribution, as implied within the MRE classification, is moderate given the regular and well oriented drilling undertaken by HRZ.
	Nature of the data used and of any assumptions made.	Mineralisation interpretations were informed by 232 RC (including 5 holes with diamond tails - RCD), and 2 DD holes. Mineralisation interpretations were largely based on host lithology modelling, with the lateral extent and orientation of these lithologies limited by logging data. A nominal cut-off grade of 0.5g/t Au was used to guide the geological continuity of the interpreted mineralisation. Within the mineralised wireframe, if an intercept fell below the nominal cut-off but continuity was supported by host lithologies, the intercept was retained for continuity purposes due to the commodity and the style of deposit. A total of 19 mineralisation domains were interpreted at Crake.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative mineralisation geometries were compared against indicator based numerical modelling (Leapfrog Indicator RBF Interpolants) at varying cut-offs and probability outcomes. All modelling was underpinned by statistical and spatial (variogram) analysis. These alternative models supported the metal distribution within the interpreted mineralised wireframes.
	The use of geology in guiding and controlling Mineral Resource estimation.	A lithological model of the porphyry, inter-volcanic and clay (sediments) host units was generated prior to the mineralisation domain interpretation commencing. The mineralisation geometry and tenor had a strong relationship with the lithology morphology. The orientation of the mineralised domains was broadly aligned, by Entech, to the contact between the porphyritic and volcaniclastic units and mineralisation continuity (as supported by indicator based numerical modelling) supported HRZ's current understanding of mineralisation controls.

Criteria	JORC Code explanation	Commentary
		Weathering surfaces were created by interpreting existing drill logging for regolith and oxidation state and were extended laterally beyond the limits of the Mineral Resource model. Entech reviewed the weathering contacts in relation to mineralisation controls but found no clear evidence of a relationship between weathering contacts and grade distribution.
	The factors affecting continuity both of grade and geology.	The potential for rheological contrasts between the porphyry unit and the volcaniclastic sediments is one feature that appears to control both mineralisation thickness and continuity. Further work is required by HRZ to increase understanding of the structural setting at Crake to improve confidence in the mineralisation continuity.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Mineralised domains at Crake (19 domains in total) extend over a 470 m strike length. Lode widths are highly variable and range from 0.5 m to 12 m. The depth below surface to the upper limits of the MRE is approximately 30 m (335 mRL). The MRE extends 110 m to a lower limit of 140 m (225 mRL) below the surface.
Estimation and modeling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	Interpretations of domain continuity were undertaken in GEOVIA Surpac™ software, with mineralisation intercepts correlating to individual domains manually selected prior to creation of a vein model using Leapfrog™ Geo implicit modelling software. Interpretation was a collaborative process with HRZ geologists to ensure modelling appropriately represented observations and the current understanding of geology and mineralisation controls. Domain interpretations used all available validated RC and DD data. Sample data were composited to a 1 m downhole length using a best fit method. Top-caps were applied prior to block grade estimation, with the maximum distance of possible extrapolation within each domain being based on variogram analysis. Exploratory Data Analysis (EDA) and variography analysis of the capped and declustered composited gold variable within domain groups whose relation similarities were underpinned

Criteria	JORC Code explanation	Commentary
		through observed spatial and statistical analysis. All EDA was completed within Supervisor™ software and exported for further visual and graphical review. An Ordinary Kriging (OK) interpolation approach in GEOVIA Surpac™ was selected for all interpreted domains. All estimates used domain boundaries as hard boundaries for grade estimation where only composite samples within that domain are used to estimate blocks coded as falling within that domain. Estimation parameters, including estimate block size and search neighbourhoods, were derived through Kriging Neighbourhood Analysis (KNA). Following variography analysis, a single normal scores variogram spherical, isotropic model was applied to all domain groups. A nugget of 0.27 was calculated with continuity ranges of 26 m in the major and 110 m in the major directions.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	A check estimate in 3D was undertaken for all domains using inverse distance squared and gold parts per million (ppm). The check estimate results were, on average, 3% lower in metal content, indicating a strong correlation in MRE outcomes based on whether the relationship of metal to mineralisation width is incorporated in, or excluded from, the interpolation approach.
	The assumptions made regarding recovery of by-products.	No assumptions with respect to by-products were made.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No estimation for deleterious elements or other non-grade variables was made.

Criteria	JORC Code explanation	Commentary
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Interpolation was undertaken using Ordinary Kriging (OK) in GEOVIA Surpac™ within parent cell blocks. Dimensions for the interpolation were Y: 10 mN, X: 5 mE, Z: 5 mRL, with sub-celling of Y: 1.25 mN, X: 1.25 mE, Z: 0.625 mRL. The model was rotated 315° to provide adequate domain volume definition and honour wireframe geometry. Considerations relating to appropriate block size include drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisations (QKNA). RCD, DD and RC data were used in the MRE. The average drill spacing ranges from 20 m to 30 m, with a nominal 20 m spacing maintained for all classified domains. Given that the deposit is well drilled (nominal 20 m drill spacing), a one-pass estimation search strategy was employed, with all domains estimated within a maximum distance of 50 m and the neighbourhood composites ranging from a minimum of 6 to a maximum of 12 samples.
	Any assumptions behind modelling of selective mining units.	No selective mining units were assumed.
	Any assumptions about correlation between variables.	No correlated variables have been investigated or estimated.
	Description of how the geological interpretation was used to control the resource estimates.	All domain estimates were based on mineralisation domain constraints underpinned by geological logging (lithology and veining) and a nominal cut-off grade of 0.5 g/t Au. The mineralisation constraints have been used as hard boundaries for grade estimation wherein only composite samples within that domain are used to estimate blocks coded as falling within that domain.

Criteria	JORC Code explanation	Commentary
	Discussion of basis for using or not using grade cutting or capping.	Assessment and application of top-capping for the estimate was undertaken on the gold variable within individual domains. Where appropriate, top-caps were applied on a grouped domain basis: • Group Domains 1005, 1016-1017 and 1019: Top-cap = 12 g/t Au and 7.4% metal reduction • Group Domains 1001-1004, 1006-1015 and 1018: Top-cap = 7 g/t Au and 12.6% metal reduction.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation of the estimation outcomes was completed by global and local bias analysis (swath plots), and statistical and visual comparison (cross and long sections) with input data.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The MRE cut-off grade for reporting of open pit global gold resources at Crake was 0.8 g/t Au. This was based on consideration of grade-tonnage data, selectivity and potential open pit mining method, and benchmarking against comparable-sized deposits of similar mineralisation style and tenor.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable,*	Open pit mining methods are assumed.

Criteria	JORC Code explanation	Commentary
	external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The MRE extends nominally 140 m below the topographic surface. Entech considers material at this depth would fall under the definition of 'reasonable prospects of eventual economic extraction' in an open pit mining framework. No dilution or cost factors were applied to the estimate.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Independent metallurgical testwork undertaken in July 2019 on one oxide and one fresh composite sample by gravity and cyanide leaching indicated overall gold recoveries of 98.6% and 96.5% for the oxide and fresh composites, respectively. The proportion of the gravity component of recoverable gold was 60.3% and 52.9% for the oxide and fresh composites, respectively, with low reagent consumption observed. Average feed grades of 1.47 g/t Au and 1.88 g/t Au for the oxide and fresh composites, respectively, were recorded. Additional testwork completed by HRZ in August 2021 on oxide and fresh composites by gravity and cyanide leaching indicated overall gold recoveries of 98.9% and 95.9% respectively. Most of the gold was leached (90.1%) after two hours during the oxide leach testing. The proportion of the gravity component of recoverable gold was 48.8% and 68.4% for the oxide and fresh composites respectively. Average feed grades of 1.63 g/t Au and 1.59 g/t Au for the oxide and fresh composites, respectively, were recorded. Based upon documentation reviews and discussions with HRZ personnel, Entech understands there are no metallurgical amenability risks which would be material to the MRE.

Criteria	JORC Code explanation	Commentary
		No metallurgical recovery factors were applied to the Mineral Resources or resource tabulations.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	No environmental factors were applied to the Mineral Resources or resource tabulations. The deposit is located on a pending mining licence.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density values at the Crake deposit were derived from 117 measurements collected by HRZ during 2014. . The samples were located between 6,596,060 mN and 6,596,100 mN and nominally 8 m to 188 m downhole, providing a representative density profile between mineralised domains, and depth profile within a centralised portion of the MRE.

Criteria	JORC Code explanation	Commentary
		HRZ analysis of the bulk density data indicated values between 2.43 – 2.73 SG but typically values increased incrementally at depth into the fresh rock profile at Crake. For verification purposes, sample values were compared to bulk density data obtained from deposits to the north and south of Crake within HRZ tenements with similar lithological characteristics. The following bulk density mean values were supplied by HRZ to Entech and applied in the block model, following independent verification of raw data by Entech: • Cover and oxide: 1.8 t/m3 • Transitional: 2.20 t/m3 • Fresh: 2.60 t/m3.
	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.	Archimedes density measurements were undertaken on transitional (12) and fresh (105) drill core during the on-site sampling process. This approach is adequate in accounting for void spaces and moisture within the deposit.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Due to the statistical variation in lithology, bulk densities were averaged in each weathering unit for oxide, transitional and fresh material. An average bulk density based on weathering coding has been assigned for tonnage reporting.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	Mineral Resources were classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity and mineralisation volumes. Additional considerations were the stage of project assessment, amount of RC drilling undertaken, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Criteria	JORC Code explanation	Commentary
		In Entech's opinion, the drilling, surveying and sampling undertaken, and analytical methods and quality controls used, are appropriate for the style of deposit under consideration. Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: • Blocks were well supported by drill hole data with the distance to the nearest sample being within 20 m or less or where drilling was within 20 m of the block estimate. • Blocks were interpolated with a neighbourhood informed by the maximum number of sample criterion • Estimation quality was considered reasonable, as delineated by a conditional bias slope nominally above 0.5. Inferred Mineral Resources were defined where a low to moderate level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: • Drill spacing averaged a nominal 40 m or less, or where drilling was within 40 m of the block estimate • Estimation quality was considered low, as delineated by a conditional bias slope between 0.2 and 0.5. The reported Mineral Resource for open pit studies was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 140 m below surface. All classified Mineral Resources were reported inside the tenement boundary, as provided by HRZ.

Criteria	JORC Code explanation	Commentary
		Mineralisation within the model which did not satisfy the criteria for Mineral Resources remained unclassified.
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	Consideration has been given to all factors that are material to the Mineral Resource outcomes, including but not limited to confidence in volume and grade delineation, quality of data underpinning Mineral Resources, mineralisation continuity and variability of alternate volume interpretations and grade interpolations (sensitivity analysis). In addition to the above factors, the classification process considered nominal drill hole spacing, estimation quality (conditional bias slope, number of samples, distance to informing samples) and reliability of input data, specifically.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The delineation of Indicated and Inferred Mineral Resources appropriately reflects the Competent Person's view on continuity and risk at the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	Internal audits and peer review were undertaken by Entech with a focus on independent resource tabulation, block model validation, verification of technical inputs, and peer review of approaches to domaining, interpolation and classification.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify*	Variances to the tonnage, grade, and metal tonnes of the MRE are expected with further definition drilling. It is the opinion of the Competent Person that the classification criteria for Indicated and Inferred Mineral Resources appropriately capture and communicate these variances and risks to all downstream users. The MRE is considered fit for the purpose of underpinning feasibility-level studies.

Criteria	JORC Code explanation	Commentary
	the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource Statement relates to global tonnage and grade estimates. No formal confidence intervals nor recoverable resources were undertaken or derived.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No relevant open pit or underground mining has been undertaken. The project is currently at feasibility stage.