

## Drilling Yields More Outstanding Thick Gold Intersections at Highway Zone

*Stunning 60% of RC holes drilled at Highway Zone intersected over 25g/t Au*

Odyssey Gold Limited (ASX:ODY) (“Odyssey” or “Company”) is pleased to announce the remaining results from the recently completed reverse circulation (“RC”) drilling program at the Highway Zone within the Company’s Tuckanarra JV Project.

### HIGHLIGHTS

- Outstanding results from the last five holes at the Highway Zone, with more thick oxide gold mineralisation intersected, including:
  - **33m @ 3.4g/t Au** from 73m including **9m @ 6.4g/t Au from 74m** (CBRC0139)
  - **23m @ 1.0g/t Au** from 41m including **6m @ 2.2g/t Au from 42m** (CBRC0149)
- Oxide mineralisation remains open to the east with drilling planned to recommence early in the January quarter
- High grade results down plunge continue to demonstrate significant underground development potential including:
  - **2m @ 12.1g/t Au** from 103m (CBRC0139)
  - **4m @ 6.0g/t Au** from 122m (CBRC0149)
- Diamond drilling planned for early 2023 to test the scale of the underground potential down plunge of these results
- Clear expansion potential confirmed with a single hole testing a conceptual target intersecting high grade oxide mineralisation 80m in the hanging wall of the Highway Zone:
  - **13m @ 3.5g/t Au** from 45m including **6m @ 6.3g/t Au from 52m** (CBRC0150)
  - above intersection is associated with a structure parallel to the Highway Zone, or the extension of the Cable-Bollard trend
- Odyssey is undertaking a 7,800m multiphase resource infill and extension RC drilling program to prove up the thick oxide mineralisation and extend the existing 300m strike

### Commenting on the Highway Zone, Managing Director, Matt Briggs said:

*“The results of the recent RC program are exceptional. Drilling continues to deliver consistent thick shallow oxide mineralisation, with grade improving (>5g/t Au) at depth highlighting the potential for underground mining and a significantly larger scale project.*

*Additionally, a hole drilled 80m in the hanging wall has intersected high grade oxide mineralisation, opening up the potential of a parallel structure to the south of the Highway Zone which is very encouraging as we progress towards follow-up drilling early in 2023. These results provide us with a tremendous foundation and put us in a good position to rapidly define the mineralisation to the east and down plunge in the new year.”*

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**Matt Briggs**

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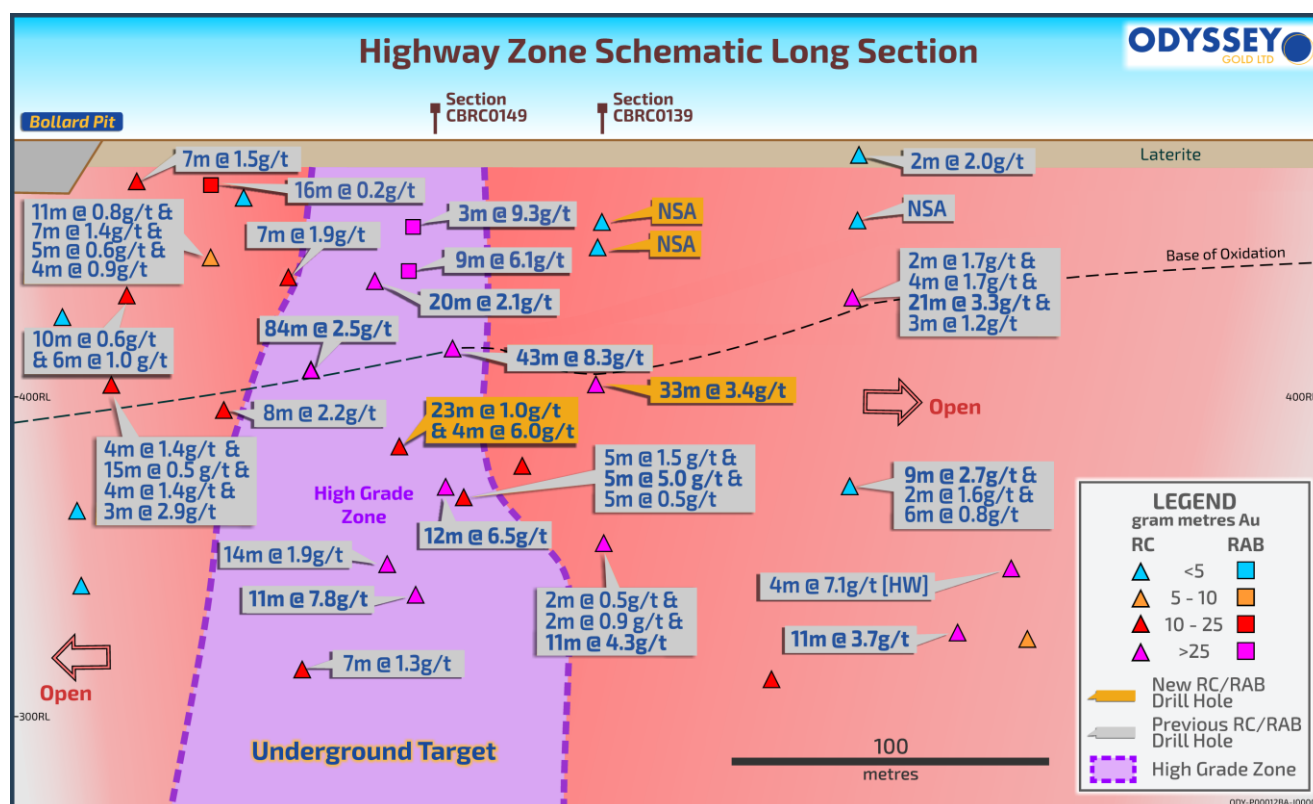


Figure 1 – Highway Zone Long Section displaying notable results. Intersections are often 3-7 intervals across 20-40m true width therefore only highlight results are displayed. RAB holes (squares) did not always drill the full width of mineralisation.

## Highway Zone

Odyssey's Tuckanarra Project is part of the prolific Murchison Goldfields (Figure 8). The Murchison Goldfields are host to a +35Moz gold endowment (historic production plus current resources) with 7.5Mtpa of processing capacity within 120km of the Tuckanarra Project.

Odyssey's 2022 RC drilling campaign has identified a mineralised shoot with significant scale potential. Drilling has defined a 10-20m true width structure with a 300m long mineralised shoot (Figure 1) open along strike.

A 21-hole, 2,232m RC program has been recently completed, drilling the structure at an 80m x 40m spacing. The first results from this drilling included **43m @ 8.3g/t Au<sup>i</sup>**, **21m @ 3.3g/t Au<sup>ii</sup>** and **20m @ 2.1g/t Au<sup>iii</sup>**.

Mineralisation is associated with significant quartz veining in ultramafic rock or iron rich sediments extending into oxide and an overprinting supergene gold enrichment.

The results for the remaining five RC holes of the 21-hole program have been returned. Supergene mineralisation was successfully intersected with results of:

- **33m @ 3.4g/t Au** from 73m including **9m @ 6.4g/t Au** from 74m (CBRC0139)
- **23m @ 1.0g/t Au** from 41m including **6m @ 2.2g/t Au** from 42m (CBRC0149)

The above holes are adjacent to recent results of **84m @ 2.5g/t Au<sup>iv</sup>**, **43m @ 8.3g/t Au**, and **20m @ 2.1g/t Au<sup>v</sup>**, demonstrating consistent thick oxide mineralisation for over 300m of strike. The oxide mineralisation is open to the east, with the most eastern line of drilling in the recent program including **21m @ 3.3g/t Au<sup>vi</sup>** from 65m.

Drill holes CBRC0139 and CBRC0149 both extend below the base of oxidation into fresh rock, with high-grade mineralisation also successfully intersected where targeted in fresh rock:

- **2m @ 12.1g/t Au** from 103m (CBRC0139 – part of the result above)
- **4m @ 6.0g/t Au** from 122m (CBRC0149)

Mineralised intervals of >5g/t are consistently intersected near the footwall of the Highway Zone structure. RC drilling at the Highway Zone has intersected over 20 intervals of over 5g/t Au in fresh rock.

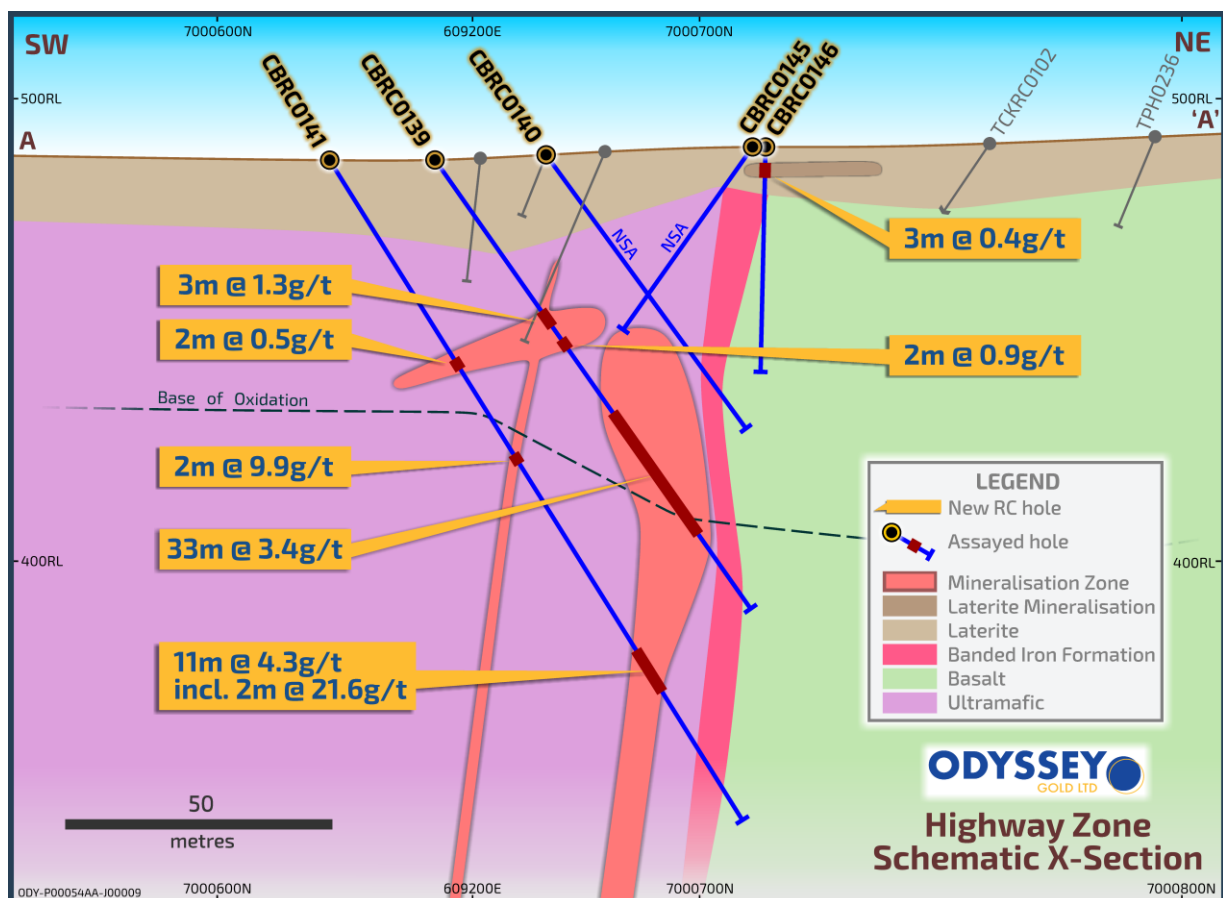


Figure 2 - Cross section through the Highway Zone hole CBRC0139 illustrating the continuity of the wide oxide mineralisation above high grades in fresh rock.

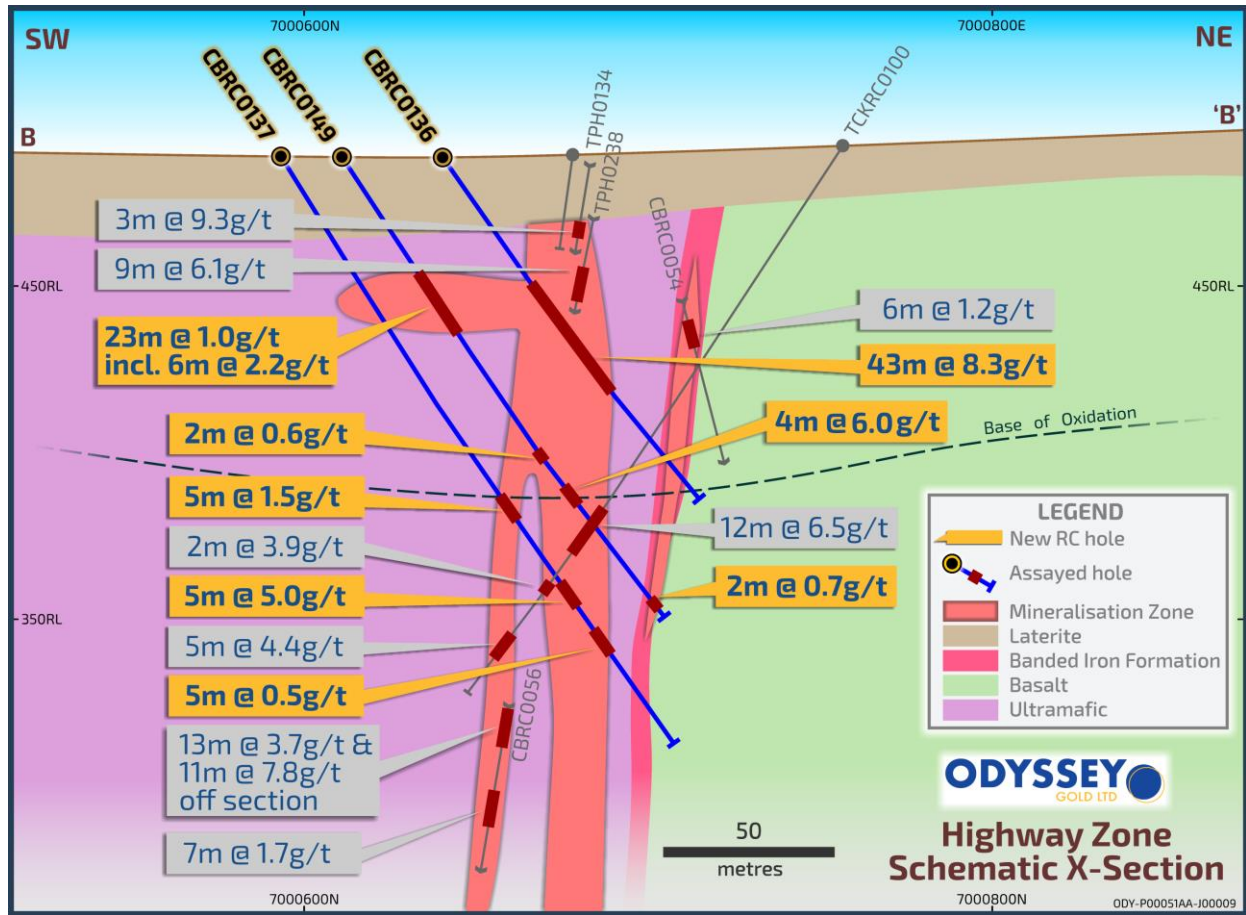


Figure 3 - Cross section displaying CBRC0149 results of 23m @ 1.0g/t Au and 4m @ 6.0g/t Au.

A single RC hole was drilled to intersect the strike extension of the Cable-Bollard Trend or mineralisation parallel to the Highway Zone. Hole CBRC0150 drilled 80m to the south of the Highway Zone intersected:

- **13m @ 3.5g/t Au** from 45m including **6m @ 6.3g/t Au** from 52m (CBRC0150)

The hole confirms mineralisation associated with quartz veining in ultramafic rocks. Additional drilling is required to confirm whether the structure is parallel to the Highway Zone or the extension of the Cable Bollard Trend. The recognition of additional structures increases the potential scale of mineralisation in this area. Additional drilling is planned to follow up the structure intersected in CBRC0150 in the new year.

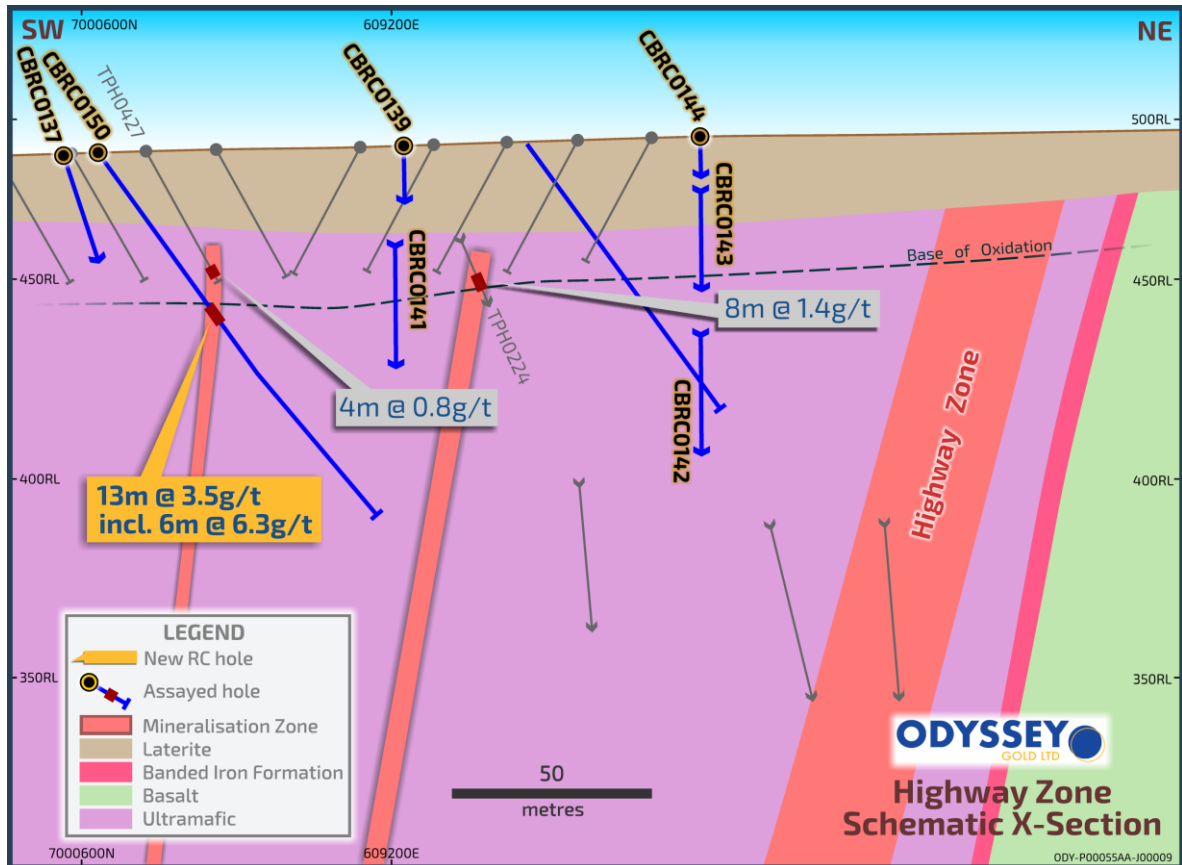


Figure 4 – Cross section illustrating CBRC0150 result of 13m @ 3.5g/t Au to the south.

Most holes intersected multiple zones of mineralisation and the full details of the results from the remaining five holes of the RC program are outlined in detail in Appendix 1. Holes CBRC0140 and CBRC0146 were drilled to the north of the structure mineralised trend, or the depleted oxide zone, and did not intersect significant mineralisation.



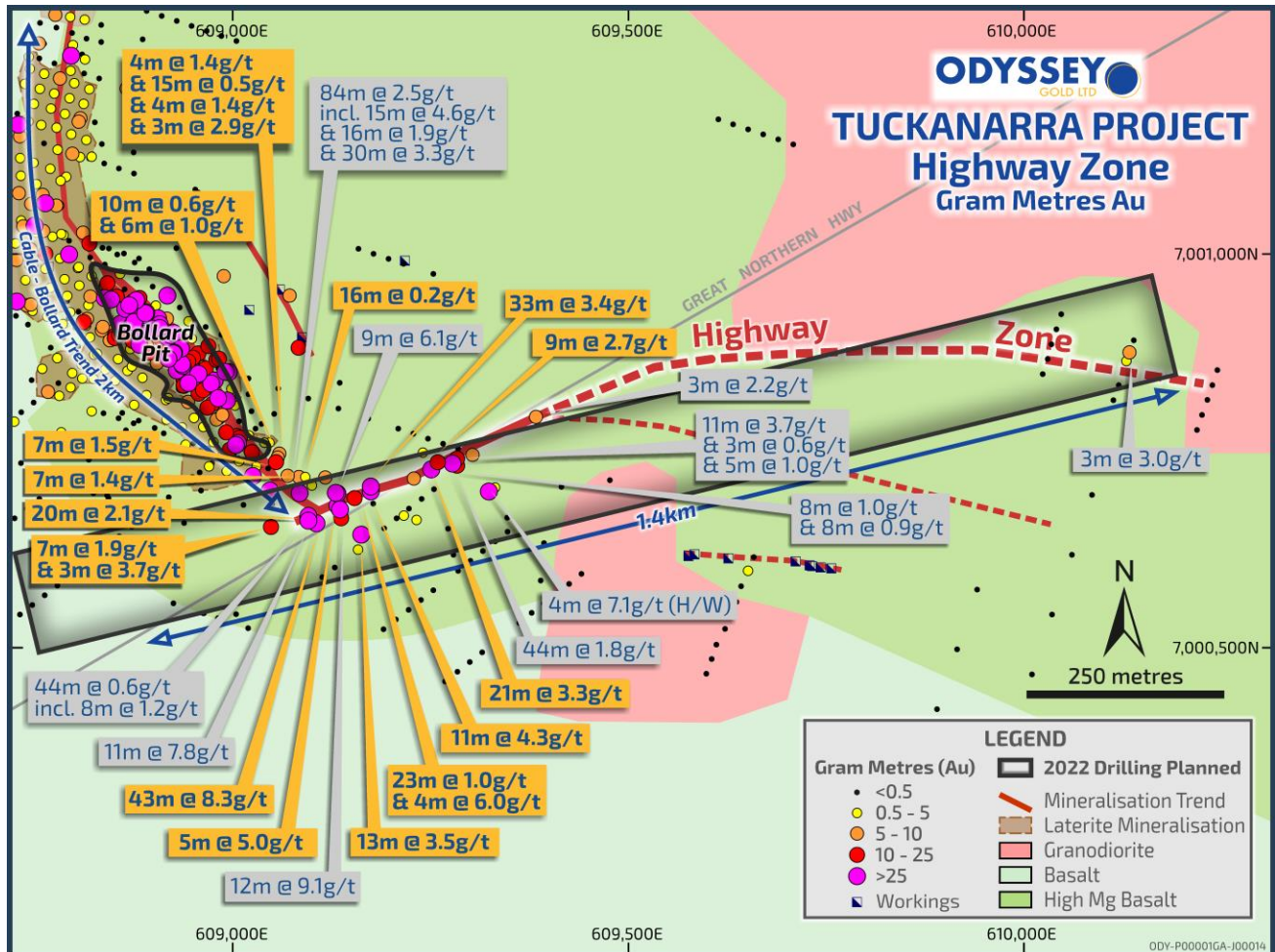


Figure 5 - Exceptional results from drilling at the Highway Zone Target. Results from the recent drilling program in yellow. Holes contain up to 7 intersections therefore highlights are labelled.

## Future Work

Three phases of drilling are planned at the Highway Zone:

- The recently completed 21-hole program targeting the structure in the oxide zone to add **shallow mineralisation** to support open pit evaluation;
- The second phase of drilling will test parallel structures and extend the Highway Zone **along strike**, in particular, to the northeast towards the encouraging rotary air blast ("RAB"), rock chip and soil samples; and
- The third phase of drilling will grow **>5g/t Au mineralisation down dip** to demonstrate the scale of underground mining potential. Underground mines in the area extend to over 1km depth. The deepest intersection at the Highway Zone intersected the structure ~180m below surface. The structure is open down dip.

The Company has a portfolio of advanced open pit and underground targets being actively explored.

## Highway Zone Summary

### ***A Wide Predictable Structure***

The Highway Zone structure is typically a 12-33m wide shear on an ENE-SSE trend. Internal to the structure are multiple zones of mineralisation, with the highest grades on the footwall (Figure 3).

The structure is consistently mineralised with 16 holes intersecting over 25 gram metres (width x grade), an exceptional success rate at this early stage of drilling.

The mineralisation is associated with quartz veining and sulphide in sheared ultramafic and sulphidic sediments. A tholeiitic basalt forms a predictable footwall to the mineralisation (Figure 3).

### ***Oxide Mineralisation***

Historic RAB drilling intersected oxide mineralisation as shallow as 9m vertically below surface. Enrichment of gold in oxide is seen in several open pits mined at Tuckanarra. The Highway Zone displays the same enrichment of widths and gold grades in oxide.

Drillholes intersecting the structure in oxide include intervals of:

- **84m @ 2.5g/t Au from 25m including 15m @ 4.6g/t Au from 25m** (CBRC0055)<sup>vii</sup>
- **43m @ 8.3g/t Au from 41m including 3m @ 80.9g/t Au from 73m** (CBRC0136)<sup>viii</sup>
- **9m @ 6.1g/t Au from 41m** (TPH0238 - does not drill the full width of the structure)<sup>ix</sup>
- **20m @ 2.1g/t Au from 42m** (CBRC0148)<sup>x</sup>
- **33m @ 3.4g/t Au from 73m including 9m @ 6.4g/t Au from 74m** (CBRC0139)

Growing the shallow oxide mineralisation along strike to the east is a focus for future drilling programs.

### ***High-grade shoot extending to depth***

An emerging high-grade shoot currently drilled to ~180m vertically below surface and with seven holes including intervals of over 5g/t Au including:

- **7m @ 10g/t Au from 89m** (CBRC0055)<sup>xi</sup>
- **12m @ 6.5g/t Au from 132m** (TCKRC0100)<sup>xii</sup>
- **11m @ 7.8g/t Au from 199m** (CBRC0056)<sup>xiii</sup>
- **4m @ 7.1g/t Au from 176m** (CBRC0058)<sup>xiv</sup>
- **2m @ 12.1g/t Au from 103m** (CBRC0139)
- **3m @ 8.0g/t Au from 194m** (CBRC0057)<sup>xv</sup>
- **4m @ 6.0g/t Au from 122m** (CBRC0149)

The consistency of high grade gives strong encouragement of future underground mining potential. The structure is open down dip and future diamond drilling is targeted to define extensions to the high-grade shoot.

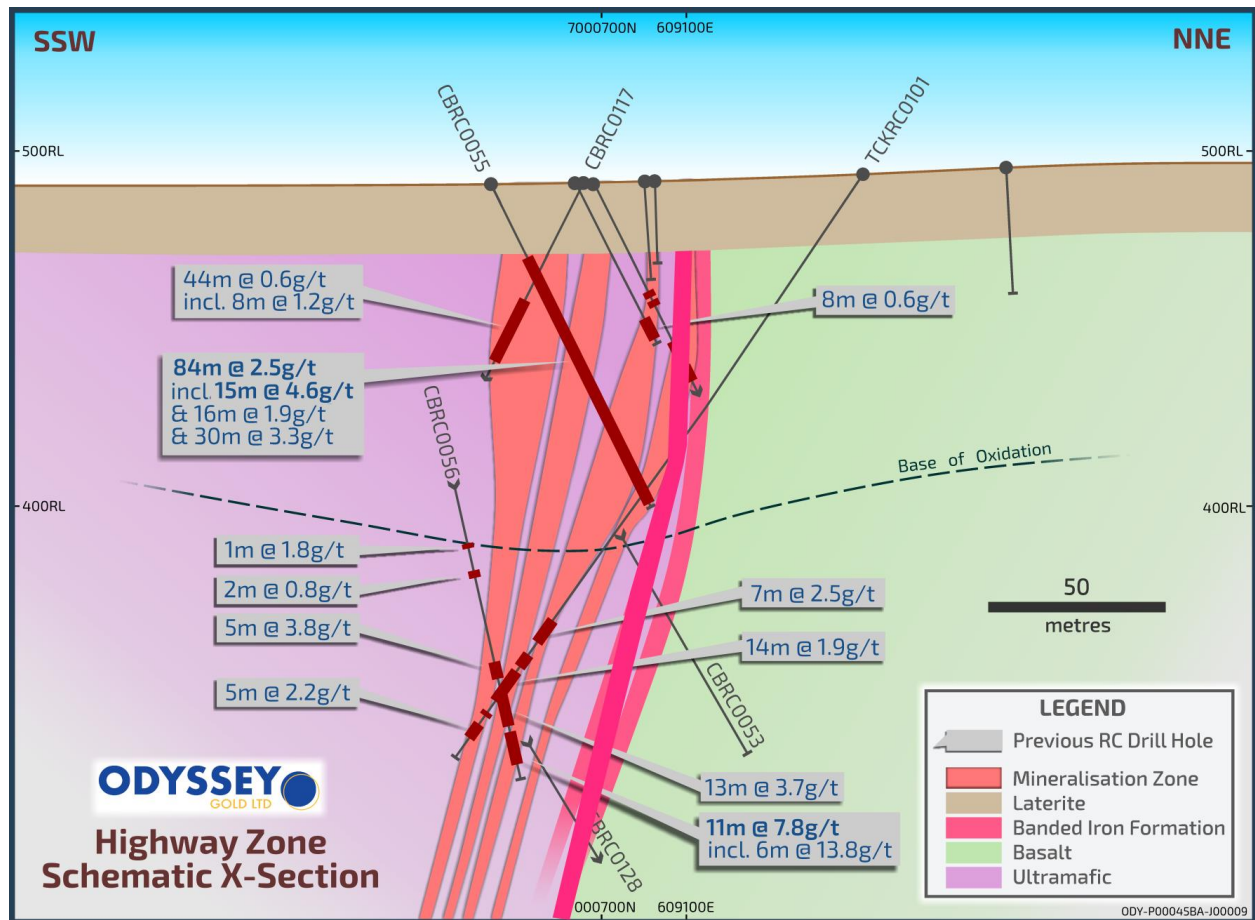


Figure 6 - Cross section through the Highway Zone displaying the wide mineralisation extending 180m below surface.

## Scale Potential

RC drilling has successfully intersected the structure along 300m of strike. The structure is open to the northeast, the southwest and down dip. Shallow cover masks the surface expression of the target, which is the reason why it has not been discovered previously.

The structure trends towards historic RAB holes of 3m @ 3.0g/t Au from 9m in hole (TPH0150)<sup>xvi</sup> and 3m @ 0.7g/t Au from 27m to end of hole ("EOH") in hole TPH0151<sup>xii</sup>, 800m to the northeast and undrilled >10ppb soil anomalies 500m to the east northeast.

Recent mapping and sampling has identified high-grade rock chips up to 18.5g/t Au 400m to the east of the Highway Zone Target. These confirm historic rock chip samples collected from prospector's test pits of up to 34.7g/t Au<sup>xvii</sup>.

Mapping with geochemistry confirms the presence of ultramafic adjacent to BIF. This is the same stratigraphic position as the Cable-Bollard Trend and likely represents the extension of the system to the east of the Highway Zone.

The intersection of oxide mineralisation in CBRC0150, 80m to the south of the Highway Zone, gives encouragement that additional structures may be defined in further drilling.



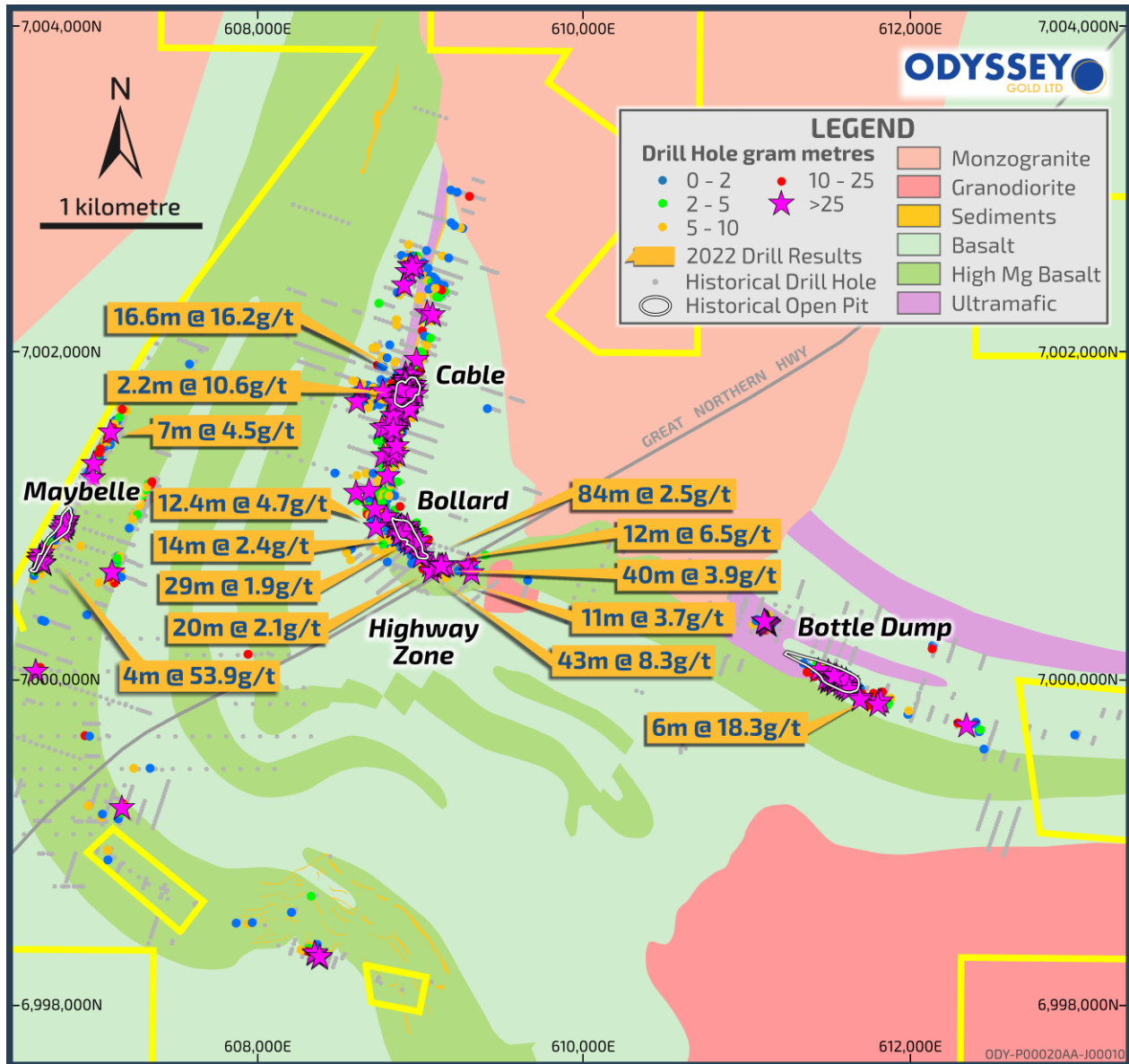


Figure 7 - Highlight drill results from 2022.

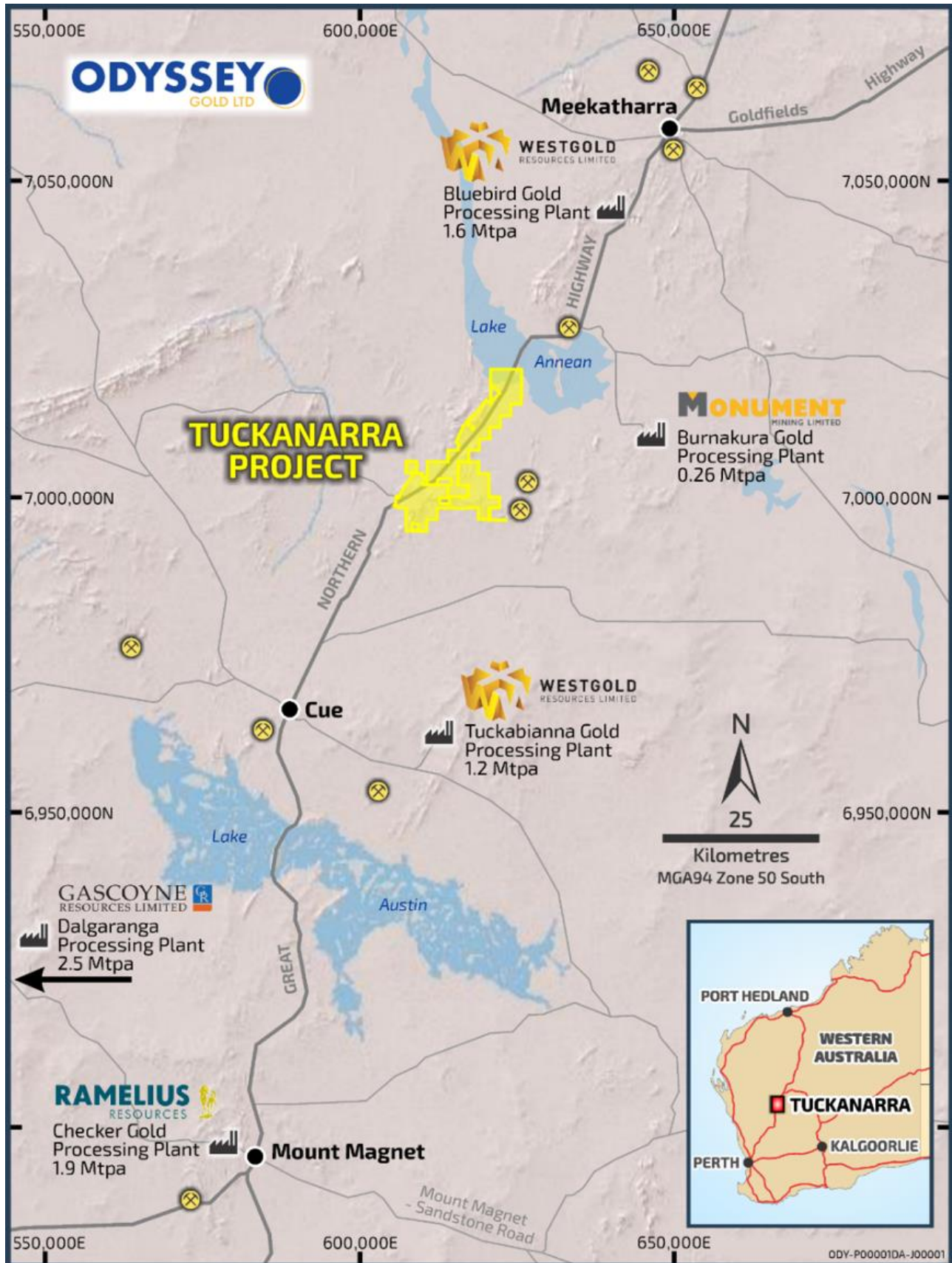


Figure 8 - Tuckanarra Project Location Map highlighting the multiple proximal gold processing plants (combined 7.5Mtpa capacity).

## APPENDIX 1 – Collar and Results Tables

Holes_id	East	North	RL	Depth	Dip	Azimuth	Comment
CBRC0130	609075	7000700	485	64	-55	45	
CBRC0131	609063	7000694	485	88	-55	45	
CBRC0132	609043	7000663	486	142	-55	45	
CBRC0133	609046	7000727	489	58	-55	45	
CBRC0134	609028	7000713	487	94	-55	45	
CBRC0135	609008	7000709	487	124	-55	50	
CBRC0136	609134	7000639	486	125	-55	3	
CBRC0137	609130	7000590	486	209	-60	5	
CBRC0138	609103	7000597	485	84	-55	7	Abandoned
CBRC0139	609208	7000648	487	128	-55	330	
CBRC0140	609194	7000677	487	77	-55	330	
CBRC0141	609216	7000630	487	179	-60	330	
CBRC0142	609288	7000668	488	154	-60	330	
CBRC0143	609280	7000685	488	107	-55	330	
CBRC0144	609265	7000713	489	45	-60	330	
CBRC0145	609170	7000717	491	52	-55	155	
CBRC0146	609171	7000719	491	52	-90	330	
CBRC0147	609240	7000751	492	52	-55	150	
CBRC0148	609089	7000662	488	106	-55	45	
CBRC0149	609137	7000607	486	167	-55	344	Replacement of CBRC0138
CBRC0150	609137	7000599	486	125	-55	52	

MGA94 Zone 50 Grid. Collars are handheld GPS measurements.

Hole ID	From (m)	To (m)	Length (m)	Au (g/t)	Structure	Wet Samples
CBRC0139	43	46	3	1.3	Oxide	
and	51	53	2	0.9	Oxide	
and	73	106	33	3.4	Highway	
including	74	83	9	6.4	"	
including	74	76	2	10	"	
and	81	83	2	15.6	"	
and	103	105	2	12.1	Fresh rock	
CBRC0140	53	55	2	NSA		
CBRC0146	3	6	3	0.4	Laterite	
CBRC0149	41	64	23	1.0	Highway	
including	42	48	6	2.2	Highway	
and	106	108	2	0.6	"	
and	122	126	4	6	Fresh rock	
and	159	161	2	0.7	"	
CBRC0150	45	58	13	3.5	Bollard/Highway HW	53-54
including	52	58	6	6.3	"	53-54

Results of over 2m at 0.5g/t or where geologically significant. No composites are included in reported intervals. Wet samples may be compromised and unrepresentative of in situ mineralisation. NSA = No significant assay.

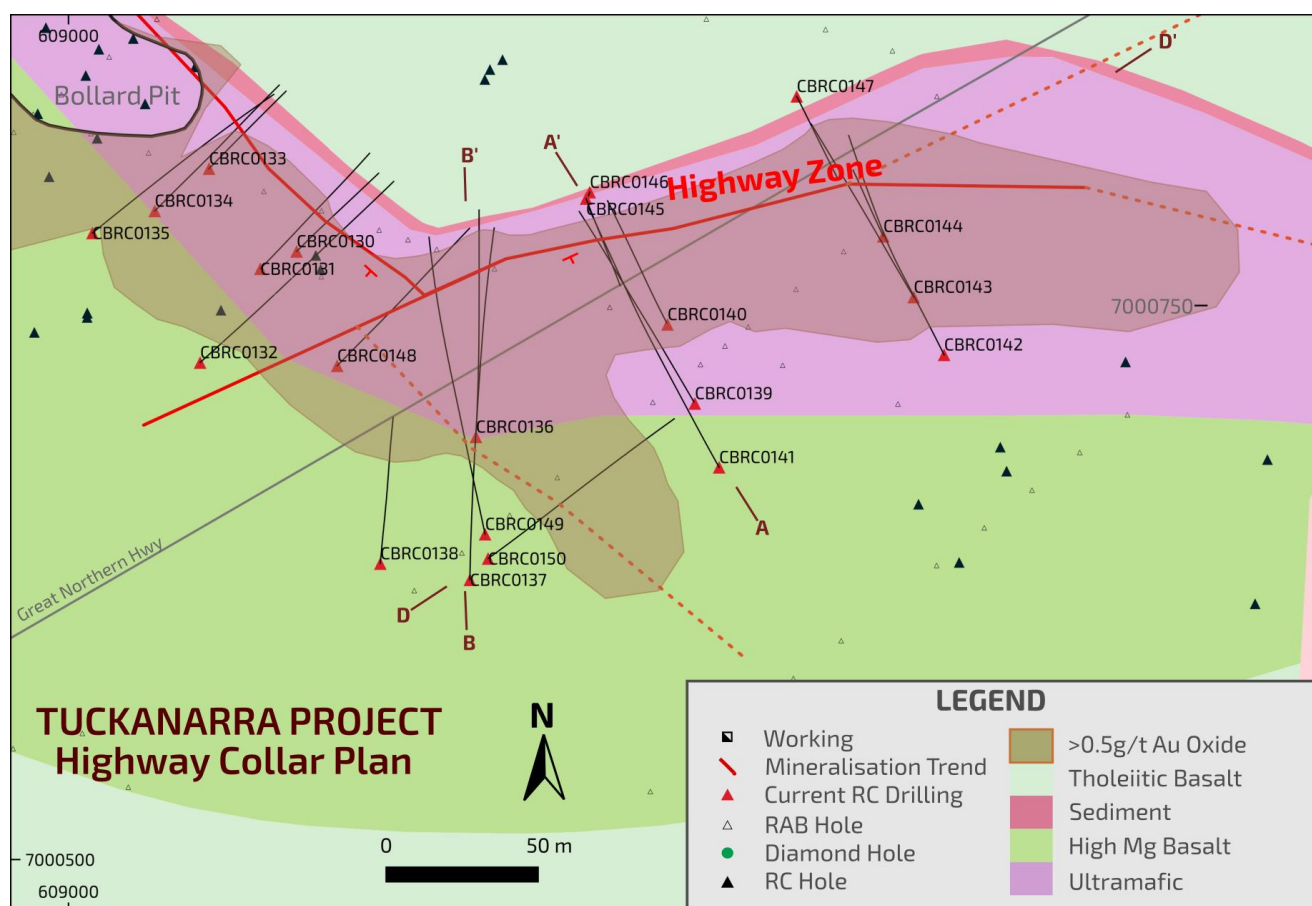


Figure 9 - Highway Zone Collar map.

## APPENDIX 2 - JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	RC samples are split using a cone splitter into calico bags representing the 1m interval. RC hole diameter starting at 5 ¾ inch diameter reducing as the hole progresses.  Individual samples weigh less than 5kg. The sample size is deemed appropriate for the grain size of the material being sampled. 1m intervals were selectively composited into 4m intervals as described below. 4m composites included in intersections are flagged in the results table.  All samples are routinely scanned with a portable XRF. The is initially used to identify the footway tholeiitic basalt. Samples a classified by semi-supervised machine learning using a training database and generally a random forest algorithm. Magnetic Susceptibility measurements are generally taken for each 1m interval.
	Include reference to measures taken to ensure sample representation and the appropriate calibration of any measurement tools or systems used.	Sampling was carried out under the ODY protocols and QAQC. See further details below. Sampling is supervised by a geologist and/or trained field technician. Rig inspections document chain markings of metre intervals, rig setup, splitter and cyclone cleanliness, consistency of sampling and adherence to company procedures. Sample recovery and moisture levels are estimated and recorded. Holes are terminated once two wet samples are generated to ensure sample quality. Certified standards and blanks were inserted into the assay batches.



Criteria	JORC Code explanation	Commentary
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	Mineralisation is generally associated with foliation, quartz veining and pyrrhotite in ultramafic rocks, and pyrrhotite in banded iron formation. The mineralisation in oxide is not visual unless associated with more iron rich clays. The presence of these indicators or gold assay grades above 0.5g/t are used to report mineralisation. The highway zone is a broad zone of mineralisation. To avoid including more than 2m of below 0.5g/t Au the intervals of mineralisation are subdivided.
	<i>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.</i>	Samples are sent to the NATA accredited ALS/Minanalytical Laboratory in Canning Vale, Perth and analysed via Photon Assay technique (method code PAAU2) along with quality control samples. Individual samples are assayed for gold after drying and crushing to nominally 85% passing 2mm and 450-500g split taken for PhotonAssay). The PhotonAssay technique was developed by CSIRO and Chrysos Corporation and is a fast, chemical free non-destructive, alternative using high-energy X-rays to traditional fire assay and uses a significantly larger sample size (500g v's 50g for fire assay). This technique is accredited by the National Association of Testing Authorities (NATA). Repeat assays are routinely taken of elevated gold samples.
<b>Drilling techniques</b>	<i>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).</i>	RC drilling has been undertaken by Strike Drilling with a track mounted X350 rig with booster compressor.  Downhole surveys for both RC drilling are recorded using a True North Seeking Gyro survey tool.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	The majority of the samples are reported to be dry. Ground water ingress occurred in some holes at the rod change but overall, the holes were kept dry. Typically, drilling operators ensured water was lifted from the face of the hole at each rod change to ensure water did not interfere with drilling and to make sure samples were collected dry.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Drilling is carried out orthogonal to the mineralisation to get representative samples of the mineralisation. Standard practices for RC drilling are used.
	<i>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.</i>	No relationship between recovery and grade have been identified. This is not seen to be a material risk with the drilling methods and approach to sampling being undertaken.
<b>Logging</b>	<i>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.</i>	All RC chips is logged onsite by geologists to a level of detail to support future mineral resource estimation, mining studies and metallurgical studies.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging is qualitative and records lithology, grain size, texture, weathering, structure, alteration, veining and sulphides. Chips are digitally photographed. Chip trays are routinely scanned with pXRF
	<i>The total length and percentage of the relevant intersections logged</i>	All holes are logged in full, including the reported intersections.
<b>Sub- sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core in this program yet.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	1m RC samples are split using a cone splitter. Unmineralised areas are composite RC samples collected by spear from the reject from the riffle splitter by spearing and combined into 4m composite samples. Most samples are dry. A wet samples was recorded in a mineralised interval in CBRC0150 at 53-54m. This is not seen to be material to the intersection reported. Drilling of a hole is terminated if dry samples cannot be produced.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	4m and 1m RC samples were submitted to ALS/Minanalytical Laboratory Perth where a 450-500g sample was assayed by Photon Assay.
		The sample preparation procedures carried out are considered acceptable. All photon tubs and coarse rejects are retained at the laboratory.

Criteria	JORC Code explanation	Commentary
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representation of samples.</i>	Sampling is supervised by a geologist and sample recovery and moisture content noted. A checklist to ensure ongoing checking for sample quality and to avoid contamination has been implemented.
	<i>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.</i>	Samples are inspected for contamination. The RC cyclone is routinely cleaned. RC field duplicates are collected on intervals that have been identified as geologically prospective by the field geologist at the time of drilling. The duplicate samples are collected directly from the second chute from the on-rig cone splitter.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate to give an indication of mineralisation. Once a meaningful population of samples is collected per sample domain an assessment will be made of the appropriate weight and number of samples to allow the classification of mineral resources.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	All samples were submitted to ALS/Minanalytical Laboratory Perth where a 450-500g sample was assayed by Photon Assay for gold. The Photon Assay technique was developed by CSIRO and Chrysos Corporation and is a fast, chemical free non-destructive, alternative using high-energy X-rays to traditional fire assay and uses a significantly larger sample size (500g v's 50g for fire assay). This technique is accredited by the National Association of Testing Authorities (NATA). Repeat assays are routinely taken of elevated gold samples.
	<i>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.</i>	No geophysical surveys reported in this release.
	<i>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.</i>	Certified reference material (CRM) samples sourced from Geostats and were inserted every 20. External lab check assays have not been completed for the current program.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	All assays are reviewed by Odyssey Gold and significant intercepts are calculated as composites and reported using a nominal 0.5g/t Au cut-off grade; however, intercepts may be reported within sub-grade mineralisation if dictated by a geological domain. A maximum of 3m consecutive internal waste is nominally allowed in composites. All significant intercepts are checked by the Competent Person. Previous announced intersections may vary with a change in interpretation. A reannouncement of previous results will not occur unless the Competent Person decides the change is material. The competent person routinely inspects drilling, chips, and the geologists logging to ensure correlation with assay results.
	<i>The use of twinned holes.</i>	Dedicated twin holes have not been drilled. No holes at the Highway zone have been twinned yet.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All drill hole logging is completed on digital logging templates with built-in validation. Logging spreadsheets are uploaded and validated in a central MS Access database. All original logging spreadsheets are also kept in archive. Duplicated copies of the database and drillhole data is routinely backed up through cloud server backups. Logging of key intersections has been reviewed by the Geology Manager / Managing Director.  IT access is administered by the Apollo Group. The Apollo Group are a related party.
	<i>Discuss any adjustment to assay data.</i>	No assay data was adjusted.
<b>Location of data points</b>	<i>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.</i>	Drill hole collars are located using handheld GPS with 3-5m accuracy. Downhole surveys for both RC and DDH drilling are recorded using a True North seeking GYRO survey tool. Subsequent to drilling, collars are surveyed by a licensed surveyor using a Topcon Hyper VR GNSS with expected accuracy of +/- 0.03m horizontal and +/- 0.05m vertical relative to the base station.
	<i>Specification of the grid system used.</i>	The project currently uses the MGA94, Zone 50 grid system.

Criteria	JORC Code explanation	Commentary
	<i>Quality and adequacy of topographic control.</i>	The site topographic surveys including the pit surveys match well with the drill hole collars. Detailed aerial photography over the region has aided on locating historic drillhole collars. An updated digital terrain model has been generated from a recent UAV drone survey to validate GPS RL surveys.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Drill hole spacing for the 2022 drill program is variable as most drilling to date is either first pass drilling of new exploration targets or step-out brownfields exploration targeting along strike from existing Resources. In general, drill hole collar spacing for the reported drillholes is 80x40m.
	<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>	Drilling is on a spacing which is sufficient to test the grade continuity of mineralisation for this style of mineralisation. The current data set is considered potentially appropriate for use in a future Mineral Resource. A non JORC 2012 resource has previously been declared for the Bollard Pit. No resource has been prepared for mineralisation to the east of the Bollard Pit.
	<i>Whether sample compositing has been applied.</i>	4m sample composites are used. Where reported intervals are composites this is disclosed in the announcement Table 2. All significant 4m composites are subsequently replaced with the intersections from 1m samples.
<b>Orientation of data in relation to geological structure</b>	<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>	Drilling is designed to be perpendicular to the strike of mineralisation on a hole by hole or section by section basis. The current program has successfully achieved this. Drilling is aiming for an initial resource with geological and/or grade continuity. Subsequent infill programs will better define the continuity of grade and appropriate drill spacing.
	<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>	The bulk of the intercepts appear to be orthogonal to the mineralisation +/- 25 degrees unless otherwise stated in the intercepts table. Further work will be undertaken to analyse this in the future as exploration works progress. Assay intercepts are stated as down-hole lengths. Previous resource modelled work has highlighted grade bias in holes drilled down the mineralisation.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	RC samples are collected in prenumbered calico bags. Samples are delivered to the lab directly by Odyssey personnel or freighted via an independent freight provider.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	All QAQC data is reviewed to ensure quality of assays; batches containing standards that report greater than 2 standard deviations from expected values are re-assayed.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	Odyssey's subsidiary, Tuckanarra Resources Pty Ltd, owns an 80% interest in the Tuckanarra Project, comprising two Exploration Licences (E20/782 and EL20/783), one Mining Licence (M20/527), and seven Prospecting Licences. A royalty may be payable if Monument Mining dilutes its interest in the project. Open pit mining of the Highway Zone will require relocation of the Great Northern Hwy. Road relocations for mining are not uncommon in Western Australia. Underground mining would not be impacted by the presence of the road.
	<i>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.</i>	The tenement package is understood to be in good standing with the WA DMIRS.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Refer to the body of the report and to previous announcements.  Exploration History Gold was discovered at Tuckanarra in the late 1890s by prospectors searching further afield from Cue and Mt Magnet, with the first mine (Nemesis) discovered and developed in 1900. Subsequent exploration and development located additional deposits in the general area with the majority of deposits being developed as small underground mines exploiting narrow, highly mineralised quartz veins associated with Banded Iron Formation

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		<p>lithologies. In general, these historic gold mines were mined down to the water table, which is approximately 20m deep at Tuckanarra.</p> <p>1980 to 1987: Tuckanarra Minerals By the mid-1980s Tuckanarra Minerals had completed in excess of 64 RAB holes, defining gold mineralisation at the Maybelle prospect and identifying numerous additional areas which were prospective for gold resources. They concluded that the area hosted excellent potential for the delineation of small-to-medium gold mines and noted that little drilling had been completed at depth. Following the 1987 stock market crash, Metana Minerals purchased the Tuckanarra group of tenements.</p> <p>1988 to 1996: Metana Minerals (Gold Mines of Australia) Between 1988 and 1990 Metana Minerals (renamed Gold Mines of Australia ("GMA")) completed a systematic 200m x 40m soil geochemistry program over a large portion of their tenement holding, including Tuckanarra. Between 1990 and 1995 GMA undertook numerous drilling programs encompassing Rotary Air Blast ("RAB"), Reverse Circulation ("RC") and Diamond Drilling ("DD") over the defined gold anomalies and historic workings. This resulted in the delineation of gold mineral resources at the Maybelle, Bollard, Bottle Dump and Cable Prospects, which were mined between 1990-1994.</p> <p>1996 to 2003: St Barbara Mines Limited In 1996 St Barbara Gold Mines ("St Barbara") purchased the Reedys plant and tenements from GMA. Minimal exploration was undertaken until Anglo Gold Australia ("Anglo") became managing joint venture partner in late 2000. Anglo focused on the central Tuckanarra tenement area and completed detailed GIS compilation, soil sampling, rock chip sampling and the drilling of a total of 21 RC holes for 3512 metres and the drilling of 109 aircore and RAB holes for 5127 metres.</p> <p>2003 to 2006: Mercator Gold Pty Ltd Following the withdrawal of Anglo from the joint venture, St Barbara entered into a joint venture with Mercator Gold Australia Pty Ltd ("Mercator"). Mercator completed GIS compilation work, mapped the existing pits and completed a number of lines of geophysical induced polarisation to test for the presence of chargeable zones that may have a gold-sulphide association.</p> <p>2006 to 2011: No field work was carried out on the Tuckanarra gold project post 2006. The Tuckanarra tenement package was acquired by Phosphate Australia in late 2011. Phosphate Australia focused on drilling laterite and oxide resources on the Cable-Bollard Trend, and Anchor with aircore drilling before selling the project to Monument mining in 2015. Odyssey Gold acquired the project in late 2020.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Project area is located within the Meekatharra-Wyldgee Greenstone belt within the north-eastern Murchison Domain. The majority of greenstones within the Meekatharra-Wyldgee belt have been stratigraphically placed within the Polelle Group and the Norie Group of the Murchison Supergroup.</p> <p>The Project area covers Archean basement rocks assigned to the 2815-2805 Ma basal Norie group of the Murchison Supergroup, which covers the eastern margin of the Meekatharra-Wyldgee greenstone belt. The Norie group comprises a thick succession of pillowed and massive tholeiitic basalts of the Muroulli Basalt, and conformably overlying and mafic schist and felsic volcanoclastics with interbedded BIF and felsic volcanic rocks of the Yaloginda Formation (Van Kranendonk et al, 2013). These rocks are folded around the south-plunging Besley Anticline. Adjacent to these rocks are the mafic sequences of the Meekatharra Formation (Polelle Group).</p> <p>Granitoids in the Project area comprise of the Jungar Suite and Annean Supersuite to the east and the Munarra Monzogranite of the Tuckanarra Suite to the west. The Jungar Suite comprises of foliated to strongly sheared K-feldspar-porphyritic monzogranites. These rocks are characterized by strong shear fabrics that suggest they may have been emplaced during, or just before, shearing. The Annean</p>



Criteria	JORC Code explanation	Commentary
		<p>Supersuite includes hornblende tonalite and monzogranitic rocks. The Tuckanarra Suite consists of strongly foliated and locally magmatically layered granodiorite to monzogranitic rocks.</p> <p>The Project is situated within the 'Meekatharra structural zone', a major regional, NE-trending shear dominated zone, about 50 to 60km wide, stretching from Meekatharra through the Cue region as far south as Mount Magnet. This major shear zone is dominated by north and northeast-trending folds and shears (e.g. Kohinoor shear). The Mt Magnet fault is the major east- bounding structure of the Meekatharra structural zone.</p> <p>The mineralised zones of the Project are located in the Tuckanarra greenstone belt comprising a series of mafic and inter-banded mafic and iron formations, with a variable component of clastic sediments, (greywackes and minor shales). The sequence is folded into a south-westerly plunging anticline with a well-developed axial plane cleavage and numerous fractures, bedding parallel faults and shears. The belt extends northwards to Stake Well and east towards the Reedy's mining centre.</p> <p>The area has four small open pits, extensive minor gold workings, and prospecting pits principally associated with mafic lithologies and Altered Ferruginous Transitional (<b>AFT</b>) and Altered Ferruginous Fresh (<b>AFF</b>) material which were originally banded iron formations. The magnetite content within the AFT/AFF's has been destroyed and predominantly altered to an assemblage of hematite with the relic structure of the banded iron intact.</p> <p>Where mineralised veins intersect major competency contrasts such as high magnesium basalt or AFT/AFF, veining becomes layer parallel resulting in larger deposits such as the Bollard and Cable deposits.</p> <p>A number of styles of gold mineralisation have been identified in the area including:</p> <ul style="list-style-type: none"> <li>Mineralised AFT and AFF material <math>\pm</math> quartz veining (Cable East, Cable Central);</li> <li>Quartz veins <math>\pm</math> altered ultramafic and basalts (Cable West, Highway, Lucknow, Maybelle, Maybelle North, Miners' Dream); and</li> <li>Gold mineralisation within laterite (Anchor, Bollard, Drogue).</li> </ul> <p>Below the base of complete oxidation (~40m) gold mineralisation is commonly seen associated with quartz-pyrrhotite veins and pyrrhotite replacement of the host rocks. Prospective models for the discovery of additional gold deposits in the area are related to the intersection of shear zones with prospective lithologies.</p>
<b>Drill hole Information</b>	<p><i>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:</i></p> <ul style="list-style-type: none"> <li>■ easting and northing of the drill hole collar</li> <li>■ elevation or RL (Reduced Level – 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> <p><i>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.</i></p>	<p>Drill hole details are provided in Appendix 1. Results that are interpreted to be discontinuous, or outside the areas of interest may not be highlighted in the announcement.</p>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	Significant intercepts are reported as down-hole length-weighted averages of grades above a nominal 0.5 g/t Au; or according to geological/mineralised units in occasional cases where warranted. No top cuts have been applied to the reporting of the assay results.
	<i>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.</i>	Higher grade intervals are included in the reported grade intervals; and have also been split out on a case-by-case basis where relevant.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values are used.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	<p>The bulk of the exploration drilling was conducted so that results would be close to orthogonal to the mineralisation as understood at the time; however, the true relationship to the mineralisation is not accurately determined. Due to restrictions of access, such as from historic open pits, the drill angle may be compromised. Cross sections are included in the announcement to illustrate the interpreted orientation of the drillhole to the mineralisation.</p> <p>True widths of intersections in this announcement are interpreted to be 80-100% of the downhole width.</p>
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Refer to Figures in the body of this announcement and Appendix 1.
<b>Balanced reporting</b>	<i>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.</i>	<p>Balanced reporting has been used. The exploration results should be considered indicative of mineralisation styles in the region. Exploration results illustrated may be highlights of the drilling and are not meant to represent prospect scale mineralisation. As the projects are brownfields exploration targets, and there are large numbers of holes drilled over the region, it is considered appropriate to illustrate mineralised and non-mineralised drill holes using diagrams, with reference to the table of significant intercepts.</p> <p>RC grade control holes are not displayed within the open pit and off section RC and RAB holes may not be displayed for clarity. Removing the off section holes does not materially change the interpretation from the that displayed. Mineralisation widths and grades are very consistent within the oxide zone as shown on the long section in this position.</p>
<b>Other substantive exploration data</b>	<i>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.</i>	<p>No other meaningful data is required to be presented other than what has been presented in the body of this announcement. The reader is referred to the Independent Geologists Report in the Odyssey Gold Prospectus.</p> <p>Surveying of the depths of historic pits has identified that the mined volumes in JORC 2004 resources published by previous companies are incorrect.</p>

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<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Updates to the geological interpretation are currently underway to allow for future resource estimation. Three phases of drilling are planned at the Highway Zone. The 2,232m program recently completed is targeting the structure in the oxide zone to add shallow mineralisation to support open pit evaluation. The second phase of drilling will extend the structure along strike, in particular, to the northeast towards the encouraging rotary air blast ("RAB"), rock chip and soil samples; and the third phase of drilling will grow >5g/t Au mineralisation down dip to demonstrate the scale of underground mining potential. Underground mines in the area extend to over 1km depth. The deepest intersection at the Highway Zone intersected the structure ~180m below surface. The structure is open down dip. The Company has a portfolio of advanced open pit and underground targets being actively explored.

## COMPETENT PERSONS STATEMENT

*The information in this announcement that relates to Exploration Results and Targets is based on, and fairly represents, information compiled or reviewed by Matthew Briggs, who is a Competent Person. Mr Briggs is a Fellow of the Australasian Institute of Mining and Metallurgy, a full-time employee of Odyssey and is a holder of shares, options, and performance rights in Odyssey Gold Limited. Mr Briggs has sufficient experience that is relevant to exploration and the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Briggs consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.*

## FORWARD LOOKING STATEMENTS

*Statements regarding plans with respect to Odyssey's project are forward-looking statements. There can be no assurance that the Company's plans for development of its projects will proceed as currently expected. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.*

*This ASX Announcement has been approved in accordance with the Company's published continuous disclosure policy and authorised for release by the Managing Director.*

<sup>i</sup> Refer ASX announcement dated 28 November 2022

<sup>ii</sup> Refer ASX Announcement dated 8 December 2022

<sup>iii</sup> Refer ASX announcement dated 21 November 2022

<sup>iv</sup> Refer ASX announcement dated 4 August 2022

<sup>v</sup> Refer ASX announcement dated 21 November 2022

<sup>vi</sup> Refer ASX Announcement dated 8 December 2022

<sup>vii</sup> Refer ASX announcement dated 4 August 2022

<sup>viii</sup> Refer ASX announcement dated 28 November 2022

<sup>ix</sup> Refer ASX announcement dated 27 November 2020

<sup>x</sup> Refer ASX announcement dated 21 November 2022

<sup>xi</sup> Refer ASX announcement dated 4 August 2022

<sup>xii</sup> Refer ASX announcement dated 1 September 2022

<sup>xiii</sup> Refer ASX announcement dated 14 June 2022

<sup>xiv</sup> Refer ASX announcement dated 10 May 2022

<sup>xv</sup> Refer ASX announcement dated 10 May 2022

<sup>xvi</sup> Refer ASX announcement dated 27 November 2020

<sup>xvii</sup> Refer ASX announcement dated 27 September 2022