

**NEW GOLD AND IRON ORE TARGETS - WEST PILBARA**

**HIGHLIGHTS**

- Cullen Resources Limited (Cullen) holds E08/2145 (Three Corner Bore) on the southern limb of the Wyloo Dome, some 35km south east of the Paulsens gold mine
- Lag analyses up to **54.68% Fe** identify a new iron ore target on E08/2145 (Cullen 100%) with potential for a channel iron deposit (CID)
- Untested historic geochemical anomalies (Au-As-Sb) along a WNW structural trend within E08/2145 are considered by Cullen to be highly prospective for gold, and warrant drilling

Iron ore target

E08/2145 is located approximately 18-25km west of the “Western Mesas” and “Eastern Mesas” channel iron deposits, and 6-12km southwest of the Wyloo South and Metawandy bedded iron deposits around the Wyloo Dome (see Figure and satellite image below). Based on its geological setting and outcrops of Tertiary Robe Pisolite, E08/2145 is prospective for channel iron deposits (CID) both at outcrop and beneath alluvial covered plains.

Cullen has sampled ferruginous lag from two low rises of Robe Pisolite within E08/2145, approximately 1 km south of the Nanutarra road. XRF analyses of these samples (see Table 1, below) are highly encouraging and indicate potential for CID on this 100% Cullen-held tenement. The best of these analyses are similar in composition to some CID samples at Cullen’s (30% owned) Catho Well deposit (see Figure), although with higher alumina but some notably lower phosphorus.

The largest mapped area of Robe Pisolite (Wyloo 1:250,000 geol. sheet) on E08/2145 measures approximately 900x500m (samples 22 and 23) with potential for further CID material under soil and colluvium cover. Remote sensing images (GeoVIEW, GSWA: [www.geoview.com.au](http://www.geoview.com.au) ) appear to indicate channels over a larger area than the outcrops of Robe Pisolite (see Figure below).

**Table 1: Lag analyses from E08/2145 – Robe Pisolite**

Cullen sample	Easting	Northing	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	LOI %
22	451562	7478947	53.55	7.02	4.26	0.014	11.08
23	451686	7479012	54.68	5.01	4.37	0.022	11.61
24	450163	7480356	49.61	11.05	5.70	0.025	11.38
25	450265	7480280	53.66	8.72	1.83	0.530	10.69

## Gold targets

Recent field reconnaissance and a review of historic exploration data demonstrates significant exploration potential for structurally-controlled, quartz vein-related gold deposits in dominantly mafic terrain in the northern part of E08/2145. Historic exploration, most recently by Intrepid Mines, outlines an approximately 500m long, soil/rock chip anomaly with a gold-arsenic-antimony (Au-As-Sb) association. This geochemical anomaly lies within a structural corridor, interpreted by Cullen to be part of the Paraborrudo Hinge Zone (PHZ) – a complex, extensive zone of faulting which forms the boundary between the Ashburton and Hamersley Basins. The anomaly has not been drill tested and Cullen considers it a prime target for further investigation. Additionally, strong geochemical gold-arsenic (Au-As) anomalies from past exploration in the southern part of the tenement present possible targets for sediment hosted, micron gold (SHMG) mineralisation.

### **Notes:**

**Geological setting:** E08/2145 (Three Corner Bore) lies on the southern limb of the Wyloo Dome, some 35km south east of the Paulsens gold mine. The Wyloo Dome comprises Late Archaean to Early Proterozoic Mount Bruce Supergroup (Hamersley Basin), Early Proterozoic Wyloo Group (Ashburton Basin) rocks and is cored by late Archaean granite. The stratigraphy within E08/2145 comprises sediments and volcanics of the Fortescue Group, overlain by Wyloo Group Cheelah Springs basalt and tuff, Mt McGrath Formation sediments and Duck Creek Dolomite at the top. Dolerite dykes crosscut the stratigraphy; quartz veining is common. Areas of preserved Tertiary Robe Pisolite form low rises to approximately 5-7m in the eastern part of the tenement. Regolith varies, with basement exposed along ridges, and alluvium/colluvium filling valleys and depressions. A thin veneer of residual soil covers areas of subcrop.

“**Paulsens** is a mesothermal, orogenic lodestyle gold deposit with mineralisation occurring within a structurally controlled, 40m thick, quartz vein, hosted by a folded, sedimentary sequence.” - [www.nsrltd.com](http://www.nsrltd.com).

**Possible farm-out:** Cullen may seek to farm-out this property to local gold and/or iron ore explorers.

**Dr Chris Ringrose, Managing Director**

**2 October, 2014**

### **ATTRIBUTION:**            Competent Person Statement

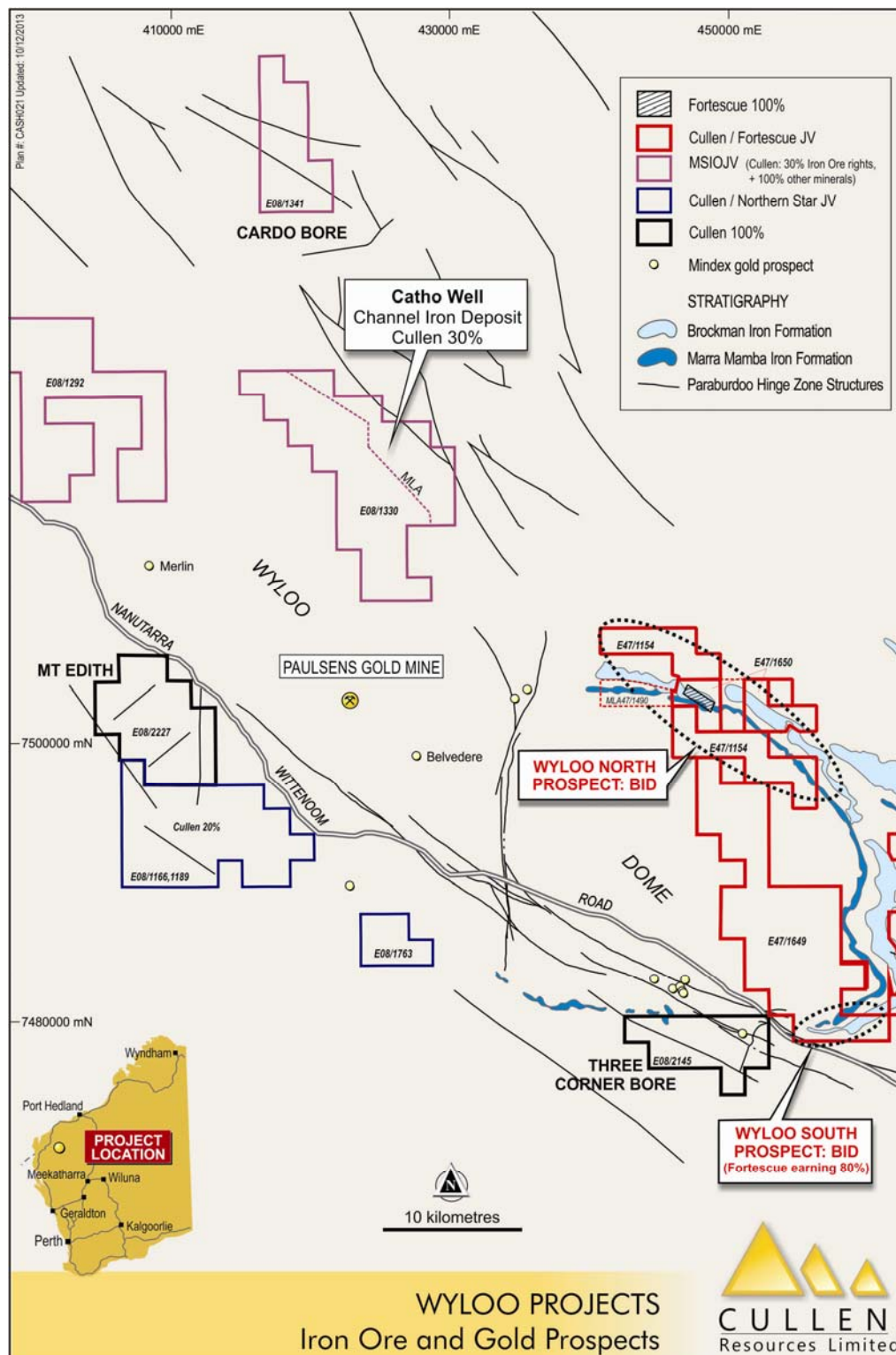
*The information in this report that relates to exploration activities is based on information compiled by Dr Chris Ringrose, Managing Director, Cullen Resources Limited who is a Member of the Australasian Institute of Mining and Metallurgy. Dr. Ringrose is a full-time employee of Cullen Resources Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined by the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr. Ringrose consents to the report being issued in the form and context in which it appears.*

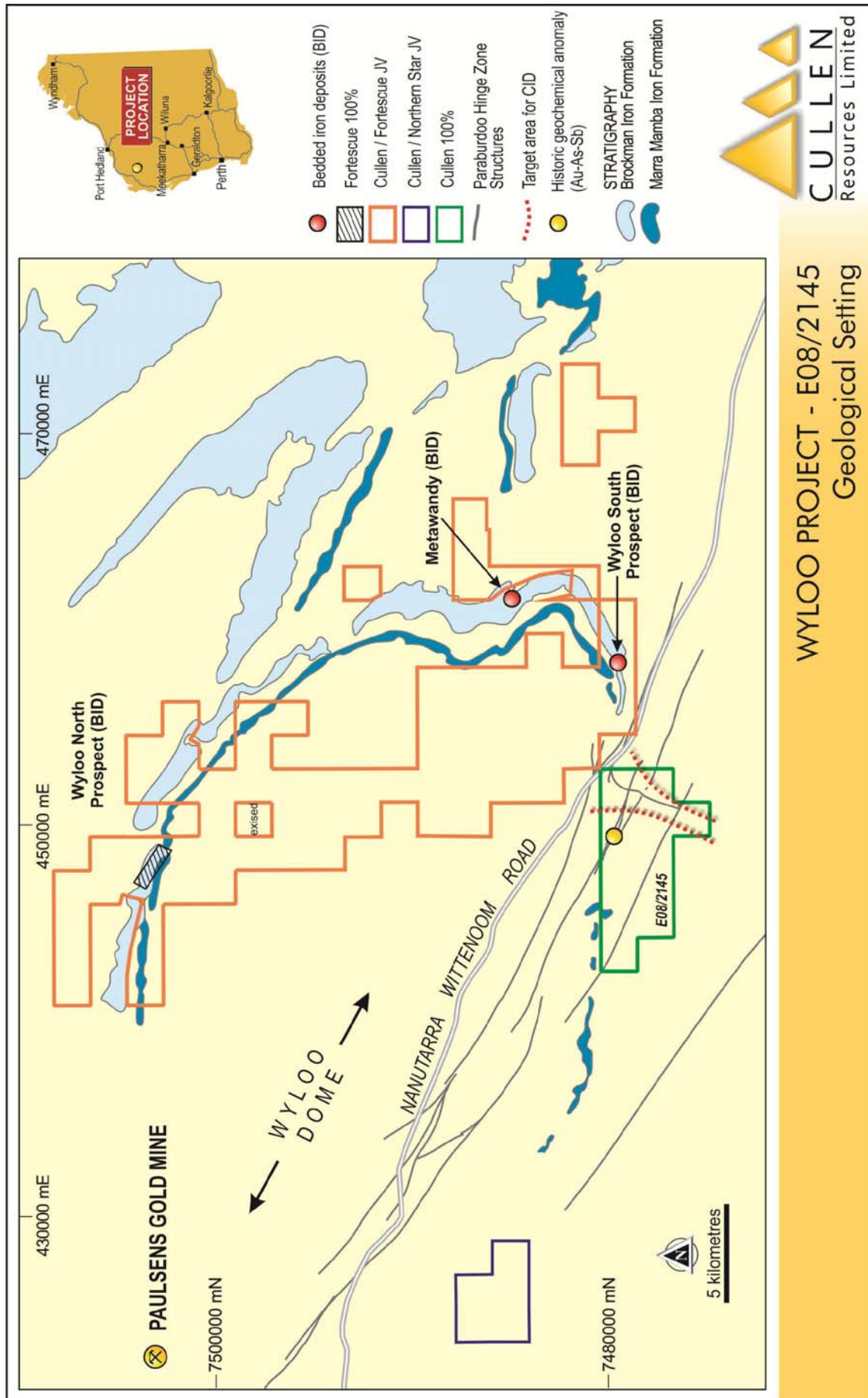
**REGISTERED OFFICE:** Unit 4, 7 Hardy Street, South Perth WA 6151.

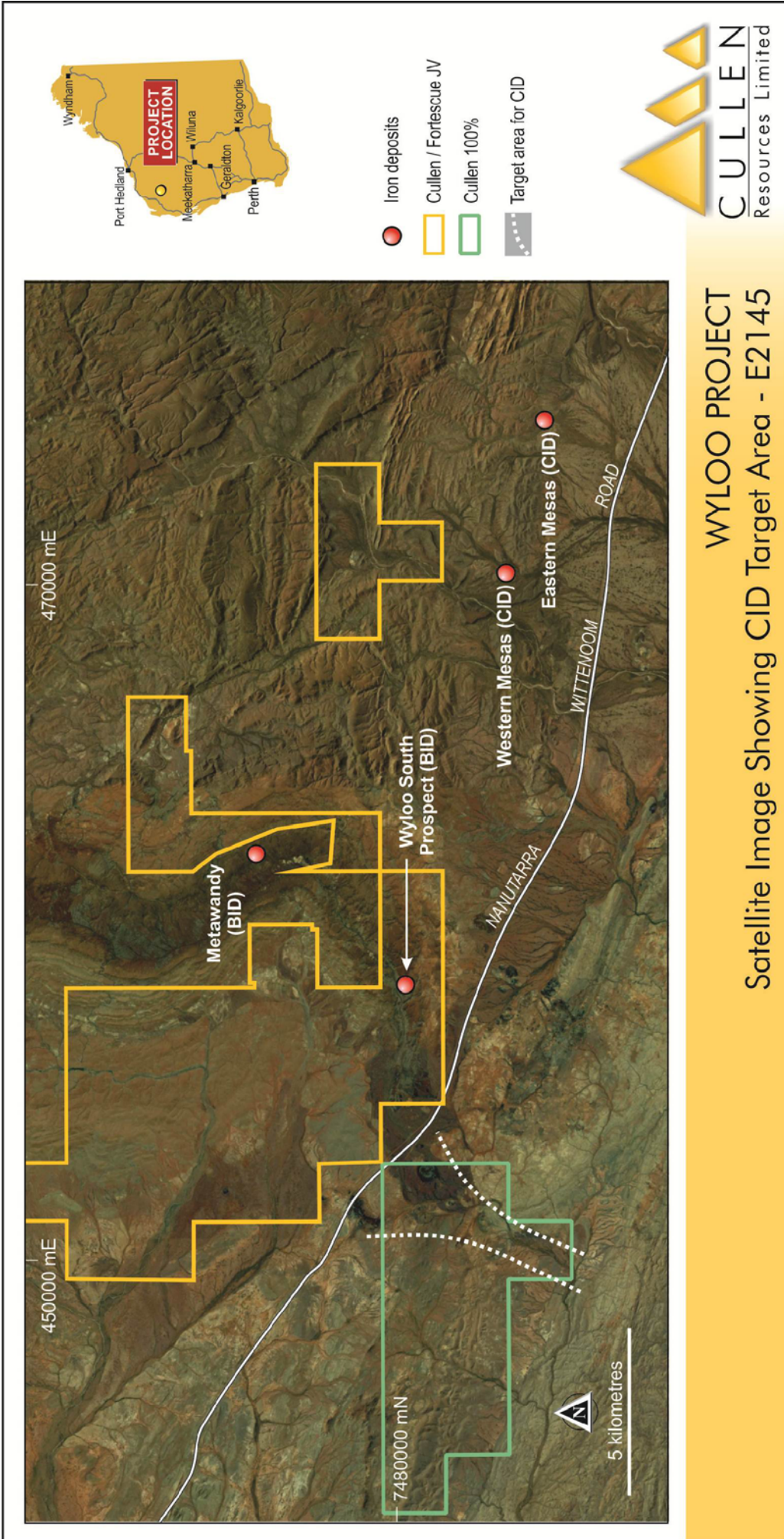
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**ABOUT CULLEN:** Cullen is a Perth-based minerals explorer with a multi-commodity portfolio including projects managed through a number of JVs with key partners (Fortescue, APIJV (Baosteel/Aurizon-AMCI), Hannans Reward, Northern Star, Matsa and Thundelarra/Lion One Metals), and a number of projects in its own right. The Company’s strategy is to identify and build targets based on data compilation, field reconnaissance and early-stage exploration (particularly geochemistry), and to pursue further testing of targets itself or farm-out opportunities to larger companies. Projects are sought for most commodities mainly in Australia but with selected consideration of overseas opportunities, currently in Scandinavia.



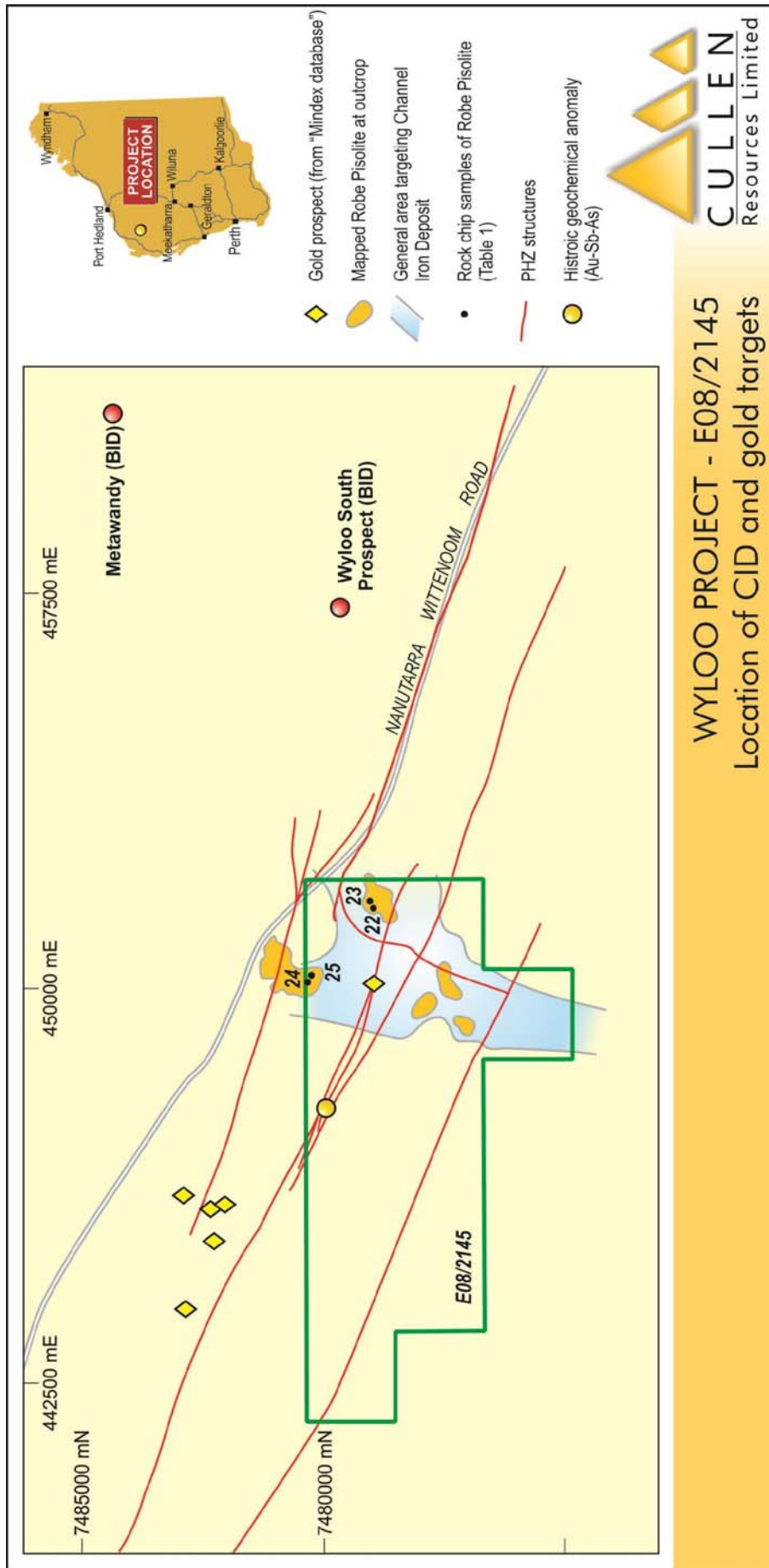




- Iron deposits
- Cullen / Fortescue JV
- Cullen 100%
- Target area for CID



**WYLOO PROJECT**  
**Satellite Image Showing CID Target Area - E2145**



**Table 1****JORC Code, 2012 Edition****Section 1: Sampling techniques and data**

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Comments</b>
Sampling techniques	<p>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 sonde, or XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</p> <p>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 1m samples from which 3kg was pulverised to produce a 30g 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.</p>	<p>Samples were taken of lag (Robe Pisolite) as part of a reconnaissance field programme. All samples and sample locations were photographed and described geologically and petrographically. Samples were placed in labeled calico bags and these inserted in large plastic bags that were sealed with cable ties.</p> <p>Gravels of Robe Pisolite (3-4kg) were collected by hand from surface over an area of approximately 100m<sup>2</sup> to ensure a representative sample.</p> <p>Samples of Robe Pisolite were taken on top of low rises representing old river beds now exposed due to relief inversion. The entire sample was crushed, split and pulverized in a fully automated system, and a fusion bead produced for XRF analysis.</p>
Drilling technique	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.).	No drilling has been undertaken.
Drill Sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed</p> <p>Measurements taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	<p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p>

Criteria	JORC Code explanation	Comments
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.</p> <p>The total length and percentage of the relevant intersections logged</p>	<p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p>
Sub-sampling techniques and sample preparation	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.</p> <p>For all sample types, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p> <p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p>	<p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p> <p>The ferruginous sample is dried, crushed to minus 3mm, then split and a 500-550g sub-sample pulverised in a Herzog grinding mill. A grind quality target is 85% passing 160µm. Low chrome steel bowls are used for pulverizing.</p> <p>Duplicate samples, certified reference materials and blanks are inserted by the laboratory and reported in the final assay report.</p> <p>No field duplicate samples have been collected as part of this reconnaissance programme.</p> <p>The sample size used for this programme is considered appropriate for the purpose of this reconnaissance, which is exploratory and primarily aimed at establishing the presence of mineralisation.</p> <p>For all iron ore samples, analysis is by fully automated, robotic preparation, fusion, loss on ignition (LOI) and XRF analytical system. As a rule, a tolerance limit of 100 ±1% on the sum of oxides (SOX) is allowed. Minanalytical Laboratories, Perth, is NATA (National Association of Testing Authorities, Australia) accredited.</p>



Criteria	JORC Code explanation	Comments
	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.	Not applicable
Quality of assay data and laboratory tests	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	International standards, blanks and duplicates were inserted by the laboratory.
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physically and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p> <p>All primary geological data were recorded manually on log sheets and transferred into digital format and imported into Cullen's database.</p> <p>No adjustments were made to assay data received from the laboratory.</p>
Location of data points	<p>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resources estimation.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>No drilling has been undertaken.</p> <p>The grid coordinates are in GDA94, MGA Zone 50.</p> <p>There is currently no topographic control.</p>
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Reserve and Ore Reserve estimation procedure(s) and classifications applied.</p> <p>Whether sample compositing has been applied.</p>	<p>The samples were taken at irregular spacing as part of a regional reconnaissance programme.</p> <p>No drilling has been undertaken.</p> <p>No sample compositing has been applied.</p>
Orientation of data in relation to geological structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<p>The sampling was exploratory and designed to test geological targets for the presence of mineralisation.</p> <p>No drilling has been undertaken.</p>
Sample security	The measures taken to ensure sample security.	All samples were handled, transported and delivered to the laboratory by Cullen staff or contractors. All samples were accounted for.
Audits or reviews	The results of and audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques and data have been conducted to date.

## Section 2: Reporting of exploration results

Criteria	JORC Code explanation	Comments
Mineral tenements 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 interest, historical sites, wilderness or national park and environmental settings. 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 samples are located on E08/2145 which is 100% owned by Cullen Resources Limited. Cullen has signed an agreement with the Yamatji Marlpa Aboriginal Corporation (YMAC) on behalf of the Puutu Kuntj Kurrma and Pinikura Claim group. There are no particular environmental settings. The tenure is secure and in good standing at the time of writing.
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	There has been substantial exploration by several other companies for gold in the area in the past. All historic data was compiled by Intrepid Mines Ltd and formed the background for Cullen's re-evaluation ((GeoVIEW.WA WAMEX Report A086783). To the best of our knowledge, no previous drilling has been done for CID-style iron ore on the tenement.
Geology	Deposit type, geological settings and style of mineralisation.	The targeted mineralisation is Paulsens-style gold mineralisation and iron mineralisation of the channel iron deposit (CID) type.
Drill hole information	A summary of all information material for the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <i>Easting and northing of the drill hole collar</i> <i>Elevation or RL (Reduced level-elevation above sea level in metres) and the drill hole collar</i> <i>Dip and azimuth of the hole</i> <i>Down hole length and interception depth</i> <i>Hole length</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.	No drilling has been undertaken.
Data aggregation methods	In reporting Exploration results, weighing 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.  Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	No data aggregation has been applied.  No data aggregation has been applied.  No metal equivalents have been used.

Criteria	JORC Code explanation	Comments
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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')</p>	<p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p> <p>No drilling has been undertaken.</p>
Diagrams	<p>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..</p>	<p>See attached figures.</p>
Balanced reporting	<p>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.</p>	<p>See attached table.</p>
Other substantive exploration data	<p>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 containing substances.</p>	<p>There are currently no other exploration data that appear meaningful or material in the context of the reported results.</p>
Further work	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, providing this information is not commercially sensitive.</p>	<p>Further geological mapping and sampling is planned.</p> <p>See attached figures.</p>