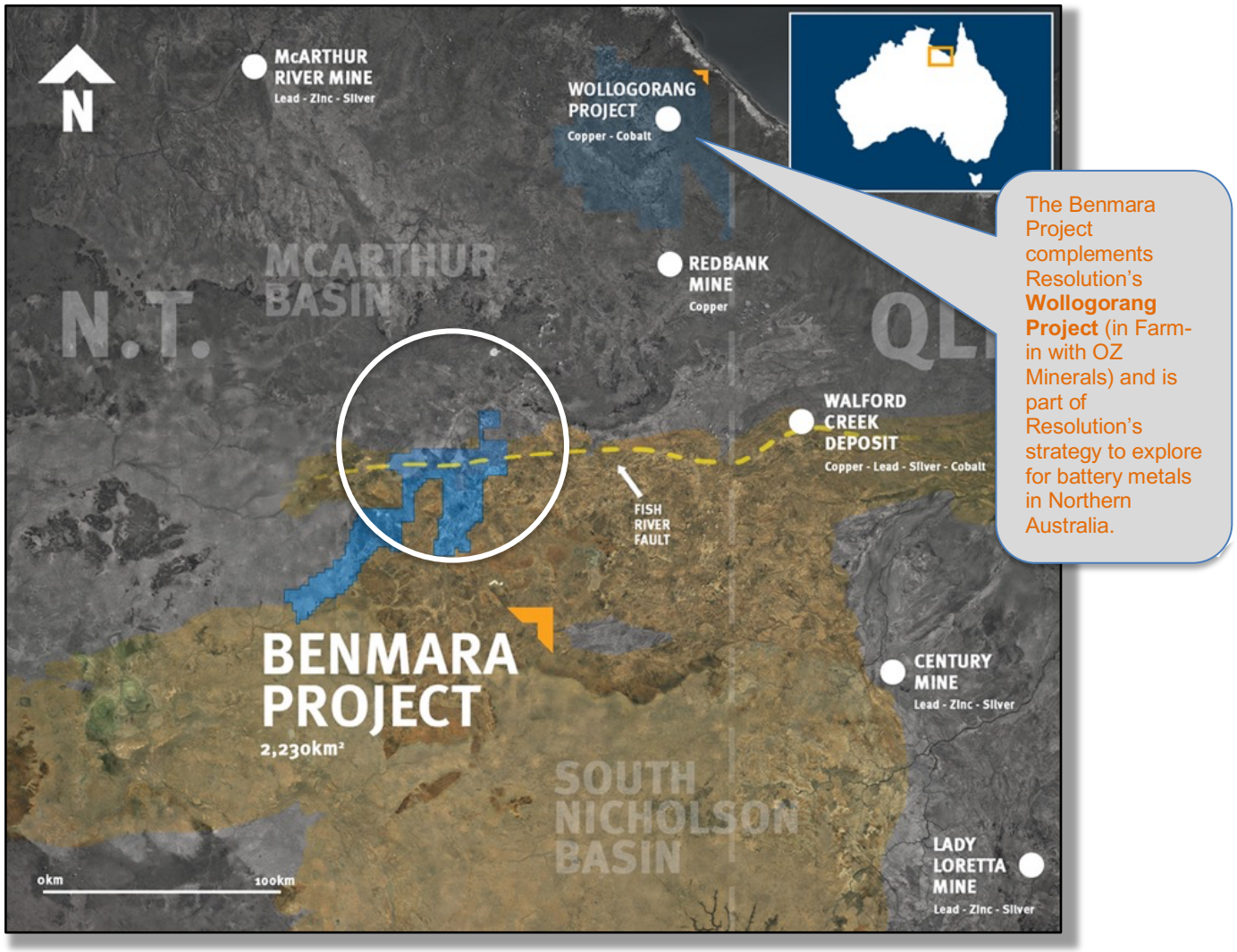
RESOLUTION MINERALS LTD
ASX: RML

3 December 2021

BENMARA PROJECT PROOF OF CONCEPT DRILLING SUCCESSFUL

- RML has completed a "proof of concept" 15-hole RC drilling program at the Benmara Project (NT), **successfully intersecting the target geological units that are equivalent to those that host the McArthur River, Lady Loretta, Walford Creek and Century Deposits**
- **Assay results also confirms anomalous Fe-Mn carbonate alteration and elevated thallium, both occur as a characteristic halo at the McArthur River, Lady Loretta and Century deposits.**
- **Trace elements indicate likely proximity to mineralisation at RML's Benmara Project**
- Resolution is excited to be early movers in the region and have received positive interest from several majors and mid-tiers regarding the project
- **Highlighting the potential of the region is the calibre of the neighbours - which includes BHP, Rio Tinto, FMG, South32, OZ Minerals and Teck**
- Resolution Minerals is very pleased with this "proof of concept" success and intends to conduct further geophysics and drilling programs in 2022



The Benmara Project complements Resolution's **Wollogorang Project** (in Farm-in with OZ Minerals) and is part of Resolution's strategy to explore for battery metals in Northern Australia.

CAPITAL STRUCTURE

Ordinary Shares
Issued 656 M

Options and rights
Listed options 6 M @ 10c
Listed options 74 M @ 12c
Unlisted options 13 M @ 8c
Unlisted options 59 M @ 4c
Unlisted options 42 M @ 3c
Unlisted rights 18 M

Performance Shares
Class A 9.6 M
Class B 3.6 M

Last Capital Raise
Oct/Nov 2021 – Placement & SPP
$3.7M @ 2c

BOARD

Craig Farrow - Chair
Duncan Chessell - MD
Andrew Shearer - NED
Jarek Kopias - Co Sec

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Adelaide SA 5000

Resolution Minerals Managing Director Duncan Chessell commented:

We are very pleased to have demonstrated "proof of concept", through the intersection of thick carbonaceous, pyritic and dolomitic siltstones and shales akin to the Barney Creek formation which hosts the well-known world class HYC / McArthur River lead zinc Mine owned by Glencore. The program has improved our understanding of the geology and takes us one step further on the journey to a potential major discovery in an underexplored prospective region.

The Benmara Project is an exciting large scale potential green-fields sediment hosted battery metals project in one of the last few sedimentary basins in Australia to be explored. We have successfully intersected thick target rock units derived from recent geochronology research as part of the Geoscience Australia's $225m Exploring-For-The-Future initiative. This initiative for the first time, identified the potential of and stratigraphically links the Benmara Group with the Lawn Hill Platform and Southern McArthur Basin, both of which are known to host large battery metal deposits, such as McArthur River, Lady Loretta, Walford Creek and Century Deposits.

The next step will be to follow up these units along strike and vector towards mineralisation, utilising alteration and trace element haloes defined by our maiden drilling program assay results and further geophysics surveys. 2022 will be a very busy and exciting time for RML.

*Figure 1 Photo of RC chip trays from HoleID: 21BM001 TD 210m depth, weathered profile to 0m - 42m (19m onwards likely to have been pyritic shales), 42m-199m interbedded carbonaceous shales and siltstones **(purple polygon)** with 159-199m showing increasing alteration, 199m-210m dolomite. Note 1m light green marker unit Tuff Layer at 187-188m (**green polygon**) used for correlating lithology laterally.*

Figure 2 Typical pyritic shale HoleID: 21BM001 from 144-146m (depth)

Figure 3 Galena (lead sulfide) HoleID: 21BM006 from 166-167m (depth)

Summary

Resolution Minerals Ltd (ASX: **RML**) (**Resolution** or **Company**) is pleased to announce that it has intersected thick, prospective, pyritic, carbonaceous and dolomitic siltstones and shales associated with flat lying VTEM anomalies, at shallow depths during the maiden RC Drilling program on the Benmara Project. Assay results returned elevated lead, zinc and silver (Pb-Zn-Ag) of up to 198.5 ppm Pb in HoleID: 21BM006; 357 ppm Zn in HoleID: 21BM007; 307ppm Cu in HoleID: 21BM013; and 0.65ppm Ag in HoleID: 21BM009. These values are in the order of 5 x background for an average shale (AusIMM Field Geologists Manual, 2011).

Highlights

- **RC Drilling confirms 3km long, 1km wide and up to 194m thick packages of highly prospective pyritic shales and siltstone rock units interpreted to be Benmara Group and equivalent to host rocks for world class deposits in the region. Regional examples are McArthur River, Lady Loretta, Walford Creek and Century Deposits**
- **RC drilling assays also reported anomalous Fe-Mn carbonate alteration and elevated thallium (Tl) trace element within the Benmara Group increasing to the east. There is a similar characteristic halo around the HYC, Lady Loretta and Century deposits and indicates likely proximity to mineralisation at RML's Benmara Project**

Drilling followed up conductive rock units identified by the Company's airborne VTEM geophysics survey in 2021. These conductive units can be excellent trap sites (reductive units) for base and battery metal mineralisation, encountered over more than a 3km strike length and 1km width and remain open in all directions. As seen at Walford Creek, the target stratigraphy includes fine-grained sandstones, siltstones and shales, including carbonate alteration and pyrite rich zones (Northwest Mineral Province Deposit Atlas, 2019). The target unit overlies a thick dolomite unit which is possibly equivalent to the Walford Dolomite (or the Tina Dolomite) and contains bright green, strongly altered tuff layers, which may be equivalent to tuffaceous marker horizons present at Walford Creek. We are targeting sub basins with the aid of tuff "marker" horizons to determine where we are in the stratigraphy. At Walford Creek a positive correlation has been noted between the degree of alteration of the tuff marker horizons and the grades of mineralisation present in the underlying unit (Northwest Mineral Province Deposit Atlas, 2019).

This is a fantastic outcome given the conductive sedimentary units lie beneath a blanket of black clay and aeolian cover negating the use of surface geochemical techniques, and it's only through modern geophysics that targets like this are identified.

RML submitted 3m composite multi-element samples for the entire program to allow for geochemical vectoring. Analysis of the geochemistry has revealed some excellent vectors known to be associated with halos present at Lady Loretta, HYC and Century base and battery metal deposits (Leach et al, 2005).

(1) The presence of Fe-Mn alteration associated with the prospective units
(2) The presence of anomalous trace element thallium (Tl) increasing from the WNW to ESE

Immediate follow up drill targets have been defined based on geochemical vectors combined with the position of prospective structures and interpreted units along strike and VTEM results.

RML is very positive about this project that in addition to planning further drilling, RML has signed a contract to undertake further VTEM in 2022 on their newly acquired ground. Final plans for these programs will be announced in the new year.

A full desktop review is planned over the wet season (summer months), including analysis of thin sections and geochronology to further enhance the Company's understanding of the host rocks and alteration ahead of next field season. Drilling approvals will be submitted well ahead of dry season.

Resolution is excited to be one of the first movers in South Nicholson Basin and has received significant positive interest from multiple parties regarding the project.

Detailed Geological Interpretation

Vectors to mineralisation

Alteration & Trace Element Haloes
Fe-Mn carbonate alteration halos are present at Lady Loretta, HYC and Century deposits and are thickest immediately surrounding the ore. The halo can extend for distances varying from the hundreds of metre through to the tens of kilometre scale (Leach et al, 2005). The RC drilling intersected values of 0.1-0.2% Mn and 3-5% Fe within a carbonaceous shales and siltstones.

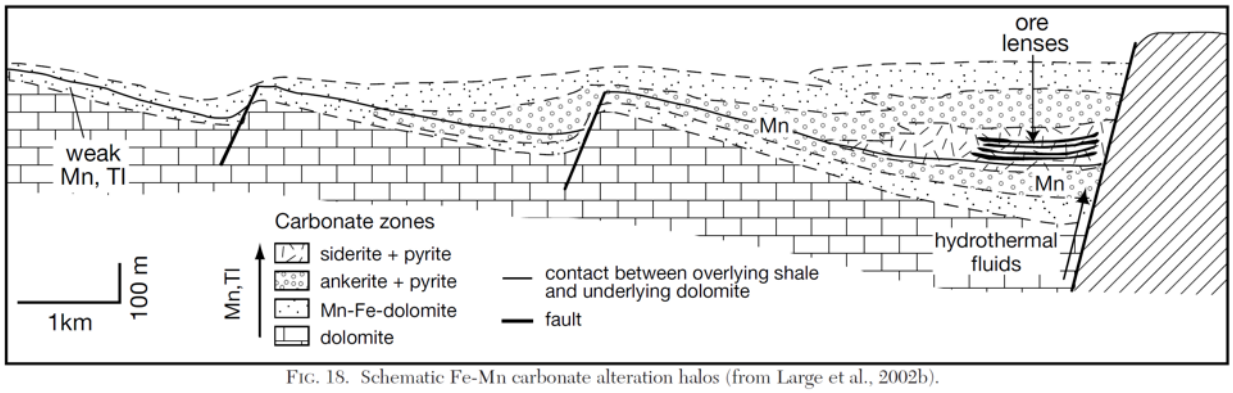


FIG. 18. Schematic Fe-Mn carbonate alteration halos (from Large et al., 2002b).

Figure 4 Schematic section of typical Fe-Mn carbonate alteration halos associated dolomitic siltstone-hosted deposits of northern Australia e.g. Lady Loretta, HYC and Century (Leach et al, 2005)

Thallium (Tl) is an important geochemical indicator (trace element) and vector to stratiform Zn-Pb-Ag mineralisation and occurs at values of 100 to 1,000 ppm through the Zn-Pb ores and decreases to values of less than 1 ppm at distances of 1 to 20 km along the favourable horizon (Leach et al, 2005). The **Company's Benmara drilling intersected a maximum value of 42ppm Tl, with multiple samples exceeding 1ppm Tl indicating these holes could be within kilometres of an ore zone** (Figure 5). There is an increase in Tl from west to east within the carbonaceous siltstones and shales.

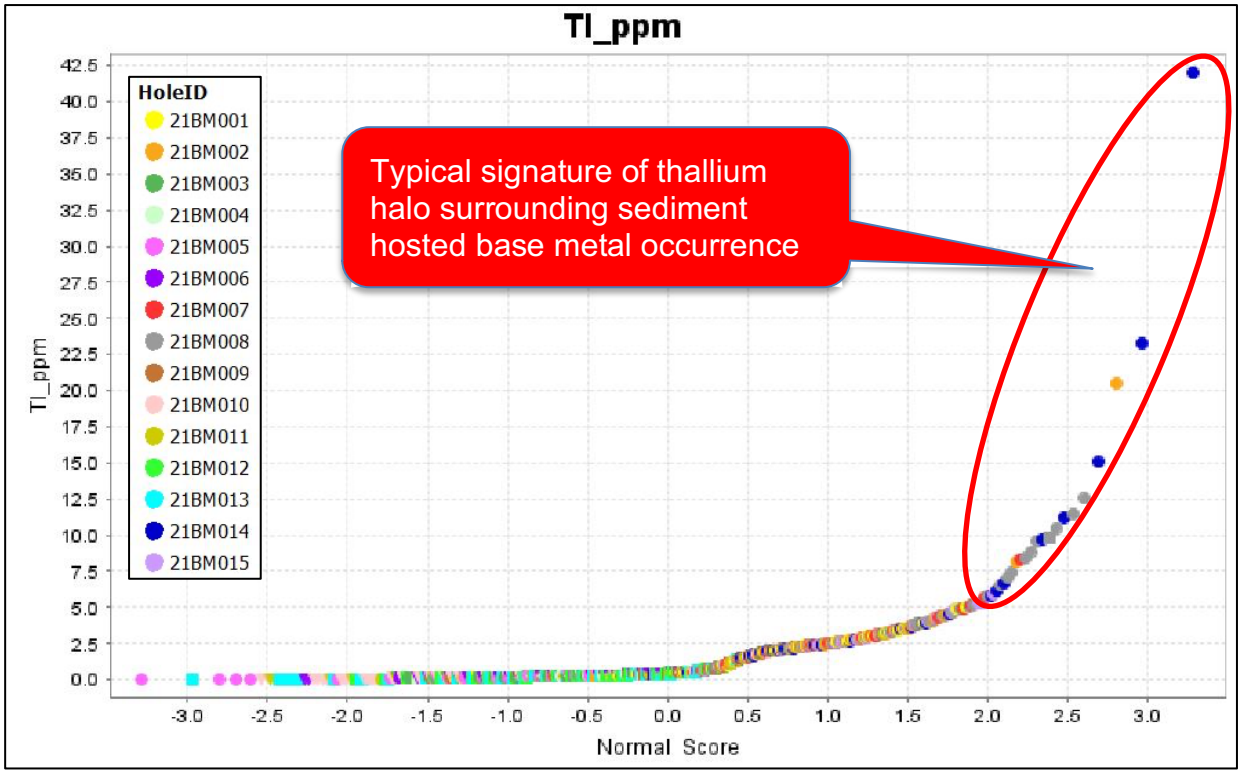


Figure 5 Thallium (Tl) results coloured by RC drillhole. Note holes 21BM001, 21BM002, 21BM007, 21BM008, 21BM014 and 21BM015 intersected thick carbonaceous siltstone and shale units.

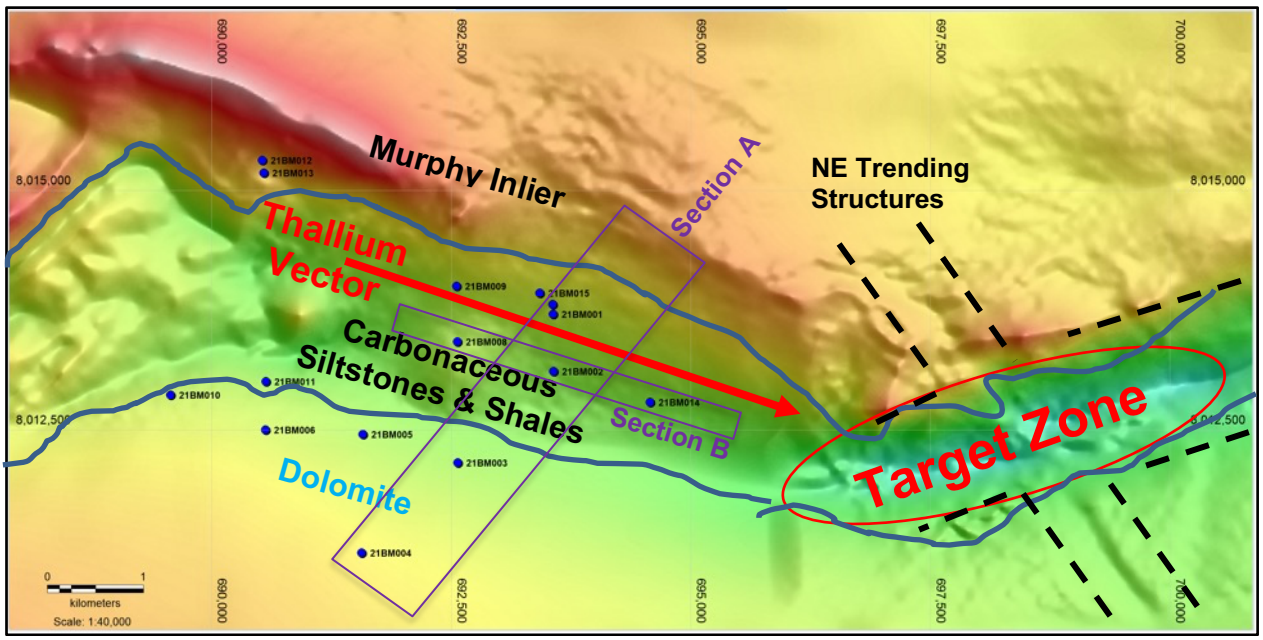


Figure 6 Drill collar locations of recently completed RC drilling program and cross sections A and B. Prospective host rocks overlying dolomite unit analogous to Walford Creek and HYC stratigraphy. The thallium values increase (vector) towards a Target Zone with intersecting NW and ENE trending structures. The NW structures trend towards the Batten Fault Zone associated with the formation of HYC. The ENE trending structures form part of the Fish River Fault System associated with the formation of Walford Creek. Background TMI magnetics.

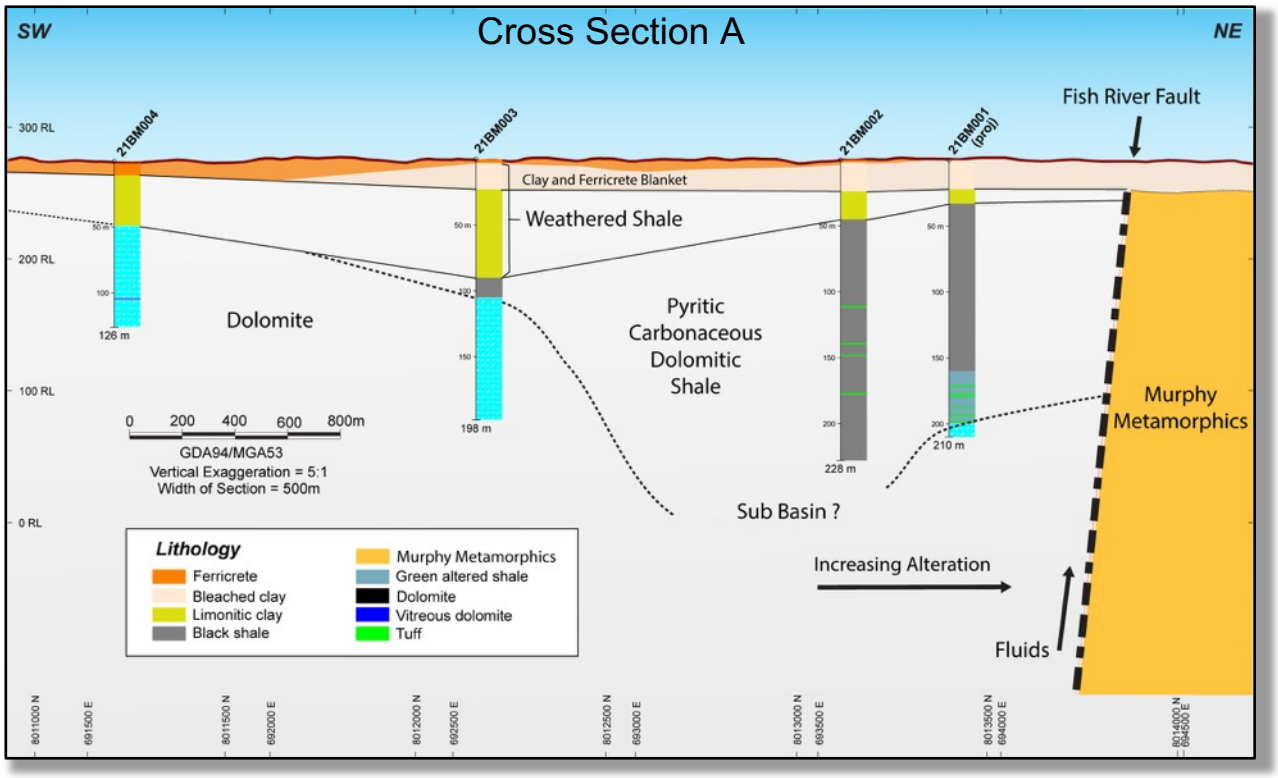


Figure 7 Cross Section A

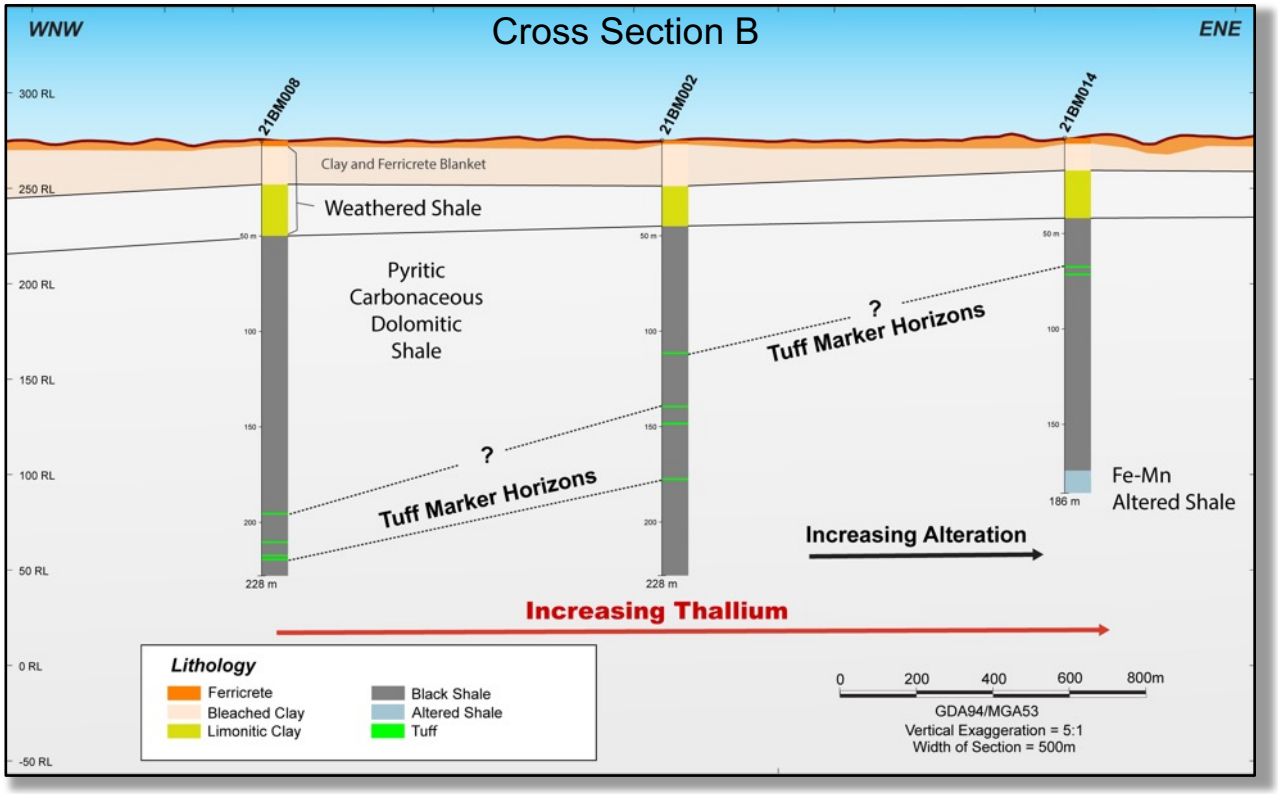


Figure 8 Cross Section B – with increasing thallium trace element to the east indicating a vector towards mineralisation

RML previously reported results from a VTEM Max survey (RML ASX Announcement 9/7/2021) which was utilised for RC drill targeting. VTEM is a geophysical technique which can directly detect massive sulfides and/or identify conductive formations and thus could also detect reductant carbonaceous or pyritic shales in certain conditions, which are an excellent trap site for copper or base metal mineralisation.

2.5D Inversion of Resolution's Airborne VTEM geophysics survey data

Resolution Minerals is a small but innovative exploration company and is always seeking to deploy the latest cutting edge exploration techniques with the aim of better exploration outcomes. Recently RML engaged Intrepid Geophysics to undertake a 2.5D Airborne Electromagnetic inversion on the Benmara VTEM Max data, which was received from Geotech with typical industry standard CDI and 1D inversions.

The 2.5D AEM inversion technology was developed in-house by Intrepid Geophysics and produces very clean and spatially accurate images of subsurface conductivity in both cross section and plan and can model topography and irregular subsurface structures. The software was developed to facilitate accurate targeting of ore bodies, mapping of geology and geological structures and is much more cost effective than alternatives such as follow up ground EM surveys.

The exploration team was very pleased with the correlation of forward modelling to actual drilling results and this gives the Company confidence to explore in the region using this technique.

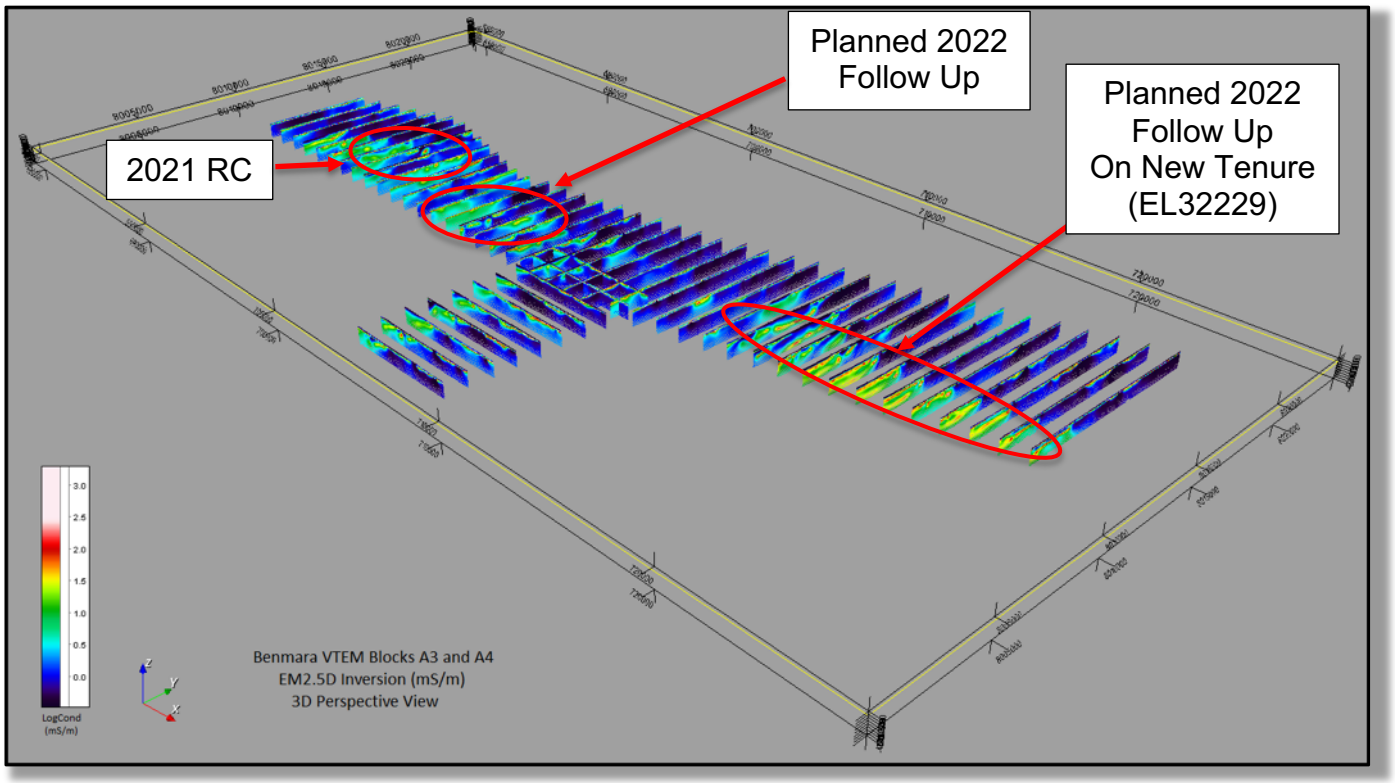


Figure 9 - 3D perspective view looking north-west on the Benmara 2.5D Inversion. 2021 RC location relative to planned 2022 drilling areas

Regional Setting and Equivalence

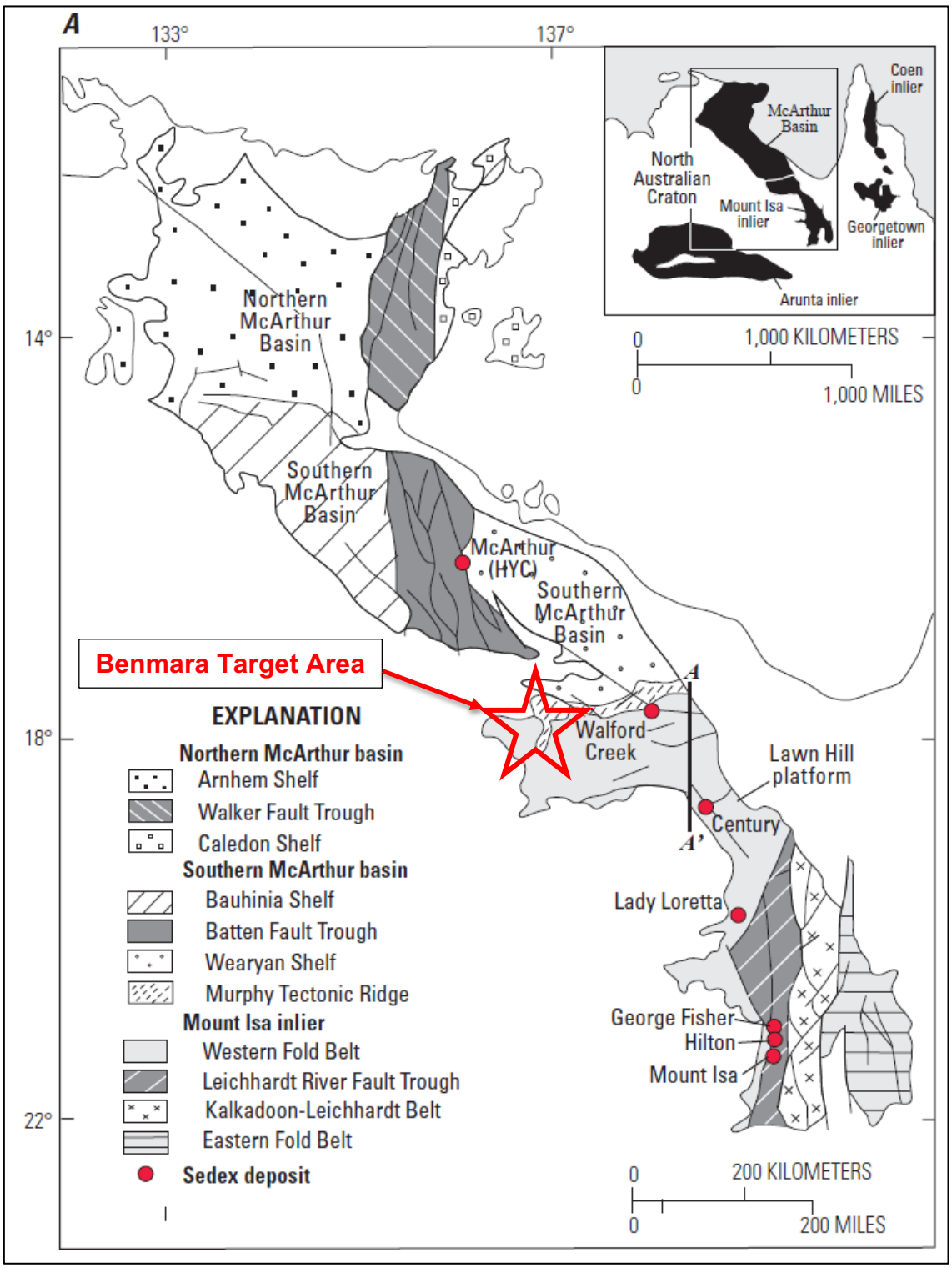
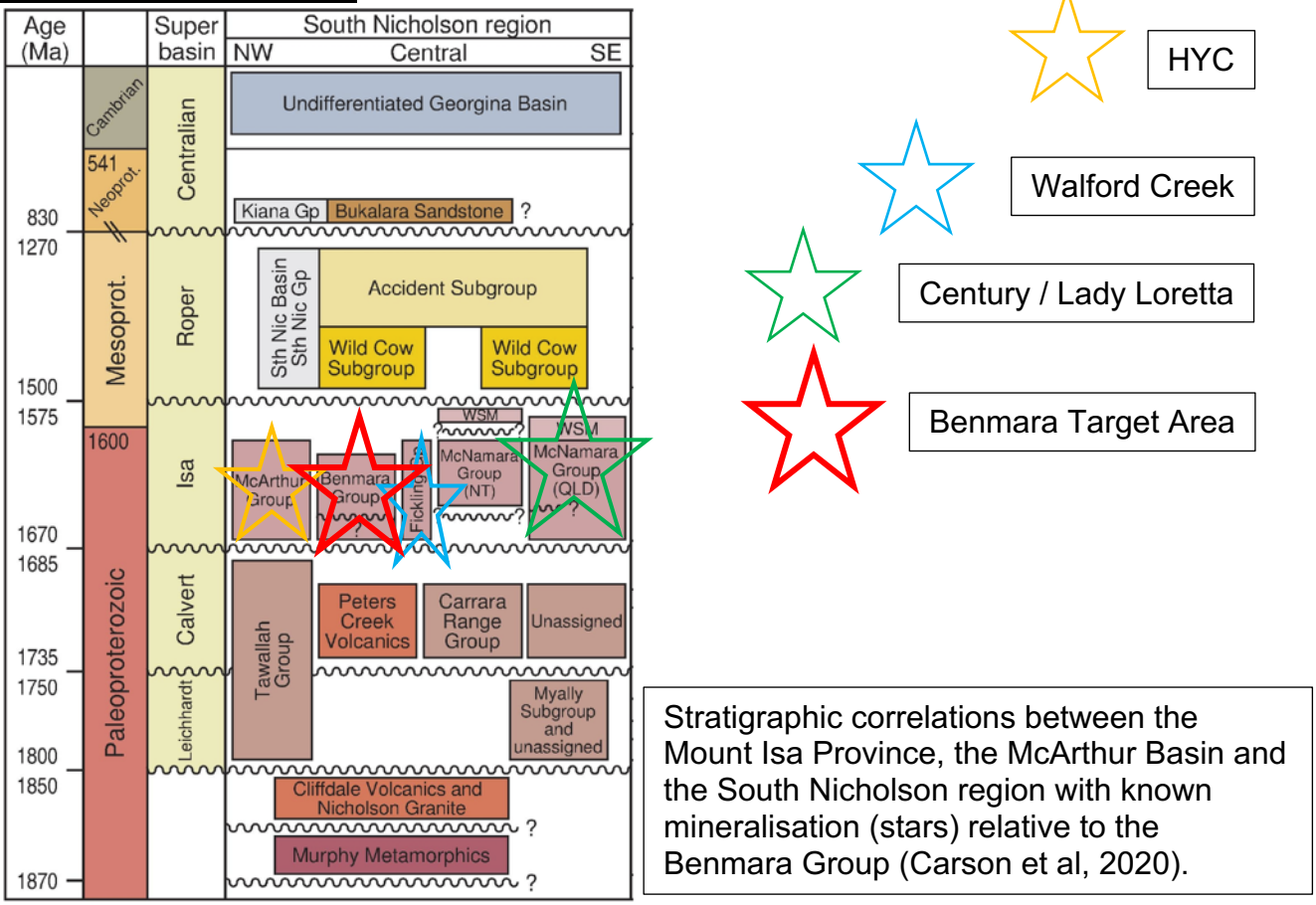


Figure 10: Geology of the Mt. Isa-McArthur basins of northern Australia showing the location of major tectonic elements and the position of SEDEX deposits (Emsbo et al, 2016).

Stratigraphic Correlations



Stratigraphic correlations between the Mount Isa Province, the McArthur Basin and the South Nicholson region with known mineralisation (stars) relative to the Benmara Group (Carson et al, 2020).

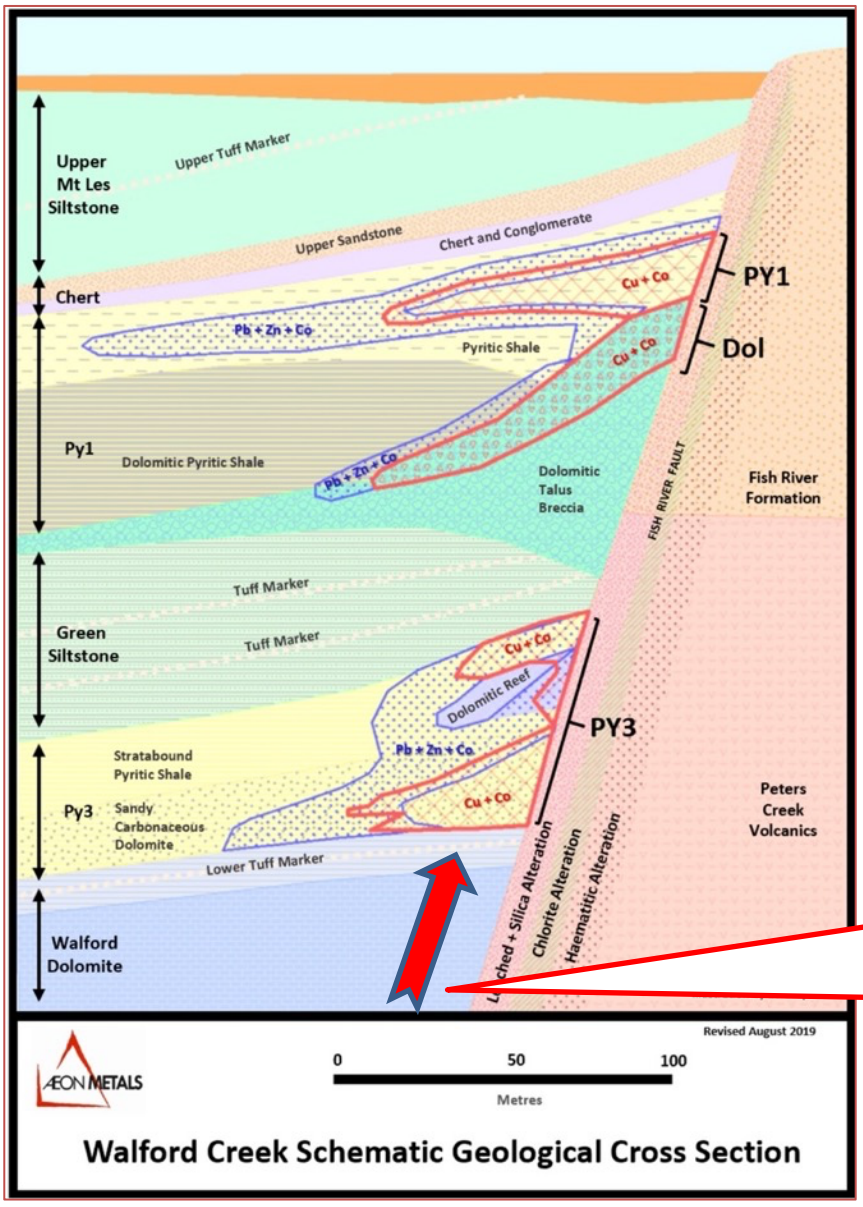
Table: Summary of analogous mineralisation in the region (Betts et al, 2003)

State	NT	NT	QLD	QLD	QLD
Region	Southern McArthur Basin	South Nicholson Basin	Lawn Hill Platform	Lawn Hill Platform	Lawn Hill Platform
Group	McArthur Group	Benmara Group	Fickling Group	McNamara Group	McNamara Group
Formation	Barney Creek Formation	Crow Formation	Mt Les Siltstone	Lawn Hill Formation	Lady Loretta Formation
Age (Ma)	1639+/- 3	~1640	1640+/-7	1595+/-6	1647+/-4
Deposit Example	**HYC (McArthur River)**	**RML Targets**	**Walford Creek**	**Century**	**Lady Loretta**
Deposit Style	Stratiform Zn-Pb-Ag	Stratiform Zn-Pb-Ag & Sediment Hosted Cu	Stratiform Cu-Pb-Zn-Ag-Co	Sediment Hosted Zn-Pb-Ag	Stratiform Zn-Pb-Ag
Host Rock	Dolomitic siltstone, coarse sedimentary breccias, tuffaceous horizons, organic rich pyritic shale.	Carbonaceous, dolomitic and pyritic siltstone and shale (organic rich) with tuffaceous horizons.	Carbonaceous, dolomitic and pyritic shales and local talus breccias.	Siliciclastic, carbonaceous, sideritic, shale and siltstone with tuffaceous horizons.	Carbonaceous pyritic, dolomitic and sideritic siltstone and shale.
Structure	Batten Fault Zone	Fish River Fault	Fish River Fault	Termite Range Fault	NA

Benmara potentially analogous to the Walford Creek Deposit

The Walford Creek Deposit has the following characteristics (www.aeonmetals.com.au/walford-creek)

- Sediment hosted stratiform Cu-Co-Ag-Pb-Zn mineralisation style
- Metalliferous basement fluids travel upwards against the Fish River Fault (extends to Benmara Project) on the boundary of the Mt Les Formation and Peters Creek Volcanics (Equivalent to Crow Formation and Murphy Inlier – Jarrett et al AGES 2020)
- Peters Creek Volcanics "wall" forcing fluids upwards to contact overlying conductive shale units
- Deposit of 40.9 Mt @ 2.03% CuEq (including 50,300t of contained cobalt metal)

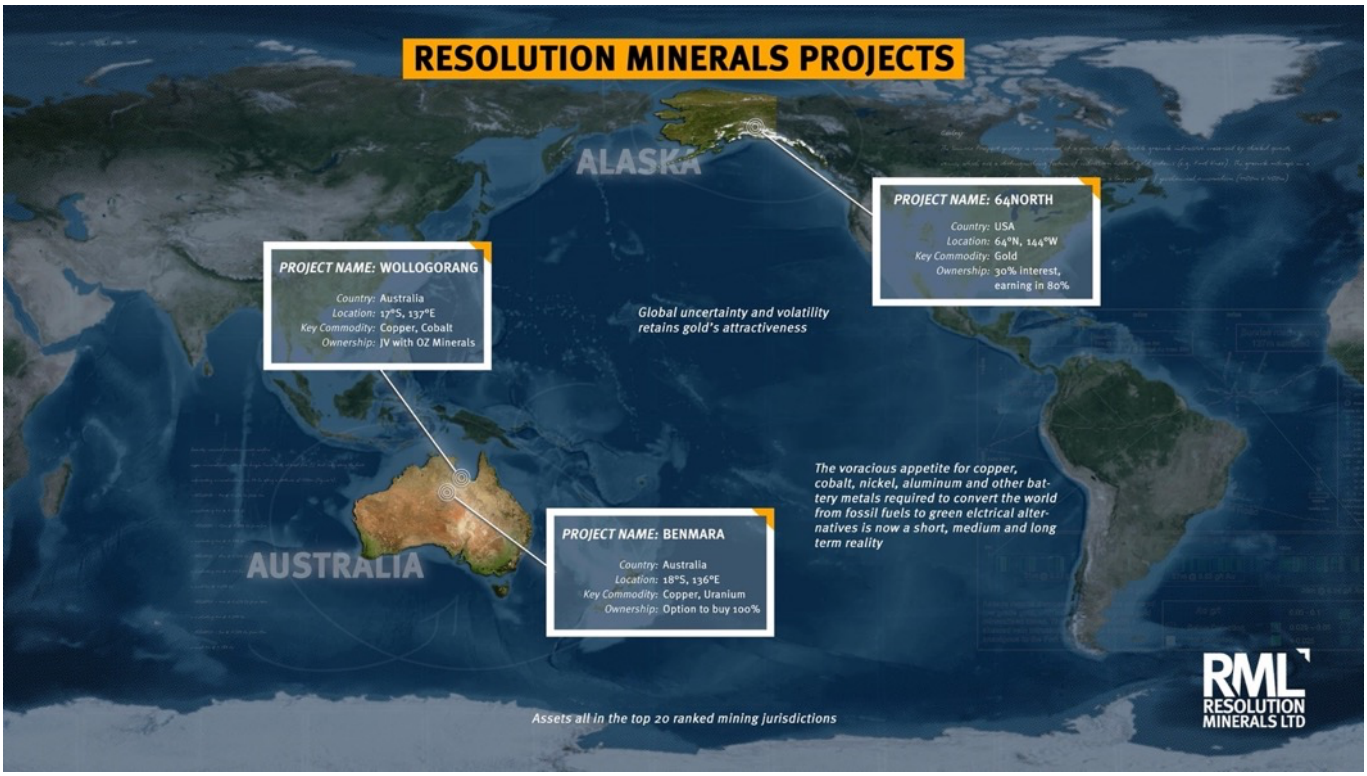


Base metal mineralisation at Walford Creek is predominantly hosted in pyritic sedimentary units and associated dolomite (Mt Les Siltstone), which abut the steeply dipping Fish River Fault Zone for a strike length of 10km. This same fault system extends west across the NT border onto Resolution Minerals' Benmara Project (**Figure 3**).

The **Mt Les Siltstone** of the Fickling Group is stratigraphically and temporally **equivalent** to the Riversleigh Siltstone of the McNamara Group (both part of the Lawn Hill Platform), and the Crow Formation of the Benmara Group (South Nicholson Basin), **which has been identified on Resolution Minerals' Benmara Project**. All three formations contain reduced, organic rich shales which make excellent depositional sites for base metal mineralisation (i.e. trigger metal precipitation).

Base metal rich fluids flow up along the contact of the Peter Creek Volcanic "wall" (akin to the Murphy Inlier at Benmara) bringing metalliferous fluids in contact with reductive sedimentary units PY1, PY3 of Mt Les Formation in QLD, equivalent to pyritic shales and siltstones present at Benmara

Figure 11 Walford Creek Schematic cross section showing the stylised relationship between the high-grade copper core (red) and the surrounding cobalt mineralisation (blue) from (Aeon Metals Website, August 2019) with annotations from Resolution.



The Benmara Project, Northern Territory; comprises of five (5) tenements total area 2,230km^2
EL32228 was recently purchased outright from Strategic Energy Resources Ltd (ASX:SER) with the transfer of tenement title currently underway. The tenement covers 663km^2 along-strike from the Walford Creek Cu-Ag-Pb-Zn-Co and Westmoreland U Deposits on the Fish River Fault in the Northern Territory.
EL32229 and **EL31287** is owned by Cedar Resources Pty Ltd outright. Resolution executed a binding term sheet with Cedar Resources Pty Ltd (Vendors) on 27 September 2021 to acquire a 100% interest in the tenements covering 542km^2 adjacent to the existing EL32228. RML has an exclusive Option to purchase the project outright within 12 months (26/9/2022) for the purchase cost of $250,000 in RML shares or cash, at Resolution's election (shares subject to shareholder approval) or RML can walk away. RML must keep the tenement in good standing and pay tenement rental.
EL32849 and **EL32850** are in application, 100% owned by Resolution Minerals, and cover the margin of the South Nicholson Basin to the south-west of the existing tenements. Upon grant this will add 1,026km^2 to the project area.

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Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Duncan Chessell who is a member of the Australasian Institute of Mining and Metallurgy Australian Institute of Geoscientists. Mr Duncan Chessell holds shares, options and performance rights in and is a full-time employee of the company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Duncan Chessell consents to the inclusion in the report of the matters based on his information in the form in which it is appears and confirms that the data reported as foreign estimates are an accurate representation of the available data and studies of the material mining project. This report includes results that have previously been released under JORC 2012 by the Company as "Copper Drill Targets Identified – Benmara Project" on 1 September 2021. The Company is not aware of any new information or data that materially affects the information included in this announcement.

*The **Walford Creek Resource estimate** has three components, namely a Vardy/Marley Copper Resource, a Vardy/Marley Cobalt Peripheral Resource and the Amy Copper Resource. These combined Resources of 40.9 Mt @ 2.03% CuEq (Copper Equivalent) (including 50,300t of cobalt metal content) shows Walford Creek to be one of the highest grades and largest tonnages copper/cobalt sulfide deposit in Australia. (Reference www.aeonmetals.com.au/walford-creek/ and *ASX Announcement 17 December 2019 "Substantial Walford Creek Resource Upgrade" , Aeon Metals Ltd ASX code AML*).

Appendix 1. Summary of drillhole details at the Benmara Project, Northern Territory, Australia.

Hole ID	Easting	Northing	SRTM RL (m)	Azi	Dip	EOH Depth (m)	Cu ppm	Zn ppm	Pb ppm	Ag ppm
21BM001	693567	8013704	274.87	-	-90	210	NSI	NSI	NSI	NSI
21BM002	693573	8013104	275.11	-	-90	228	NSI	NSI	NSI	NSI
21BM003	692571	8012152	275.7	-	-90	198	NSI	NSI	NSI	NSI
21BM004	691570	8011214	274.2	-	-90	126	NSI	NSI	NSI	NSI
21BM005	691580	8012449	273.74	-	-90	150	NSI	NSI	NSI	NSI
21BM006	690566	8012497	272.99	-	-90	210	NSI	NSI	NSI	NSI
21BM007	693562	8013806	274.69	-	-90	174	NSI	NSI	NSI	NSI
21BM008	692570	8013415	274.98	-	-90	228	NSI	NSI	NSI	NSI
21BM009	692561	8013994	275.62	-	-90	156	NSI	NSI	NSI	NSI
21BM010	689575	8012860	274.26	-	-90	264	NSI	NSI	NSI	NSI
21BM011	690571	8012998	273.15	-	-90	252	NSI	NSI	NSI	NSI
21BM012	690532	8015306	278.62	-	-90	180	NSI	NSI	NSI	NSI
21BM013	690550	8015174	279.55	-	-90	204	NSI	NSI	NSI	NSI
21BM014	694580	8012785	276.31	-	-90	186	NSI	NSI	NSI	NSI
21BM015	693429	8013924	274.36	-	-90	126	NSI	NSI	NSI	NSI

Table 1a: RML drill collar location and significant intervals for the Benmara Project, Northern Territory, Australia.

Notes for Tables 1a

1. An accurate dip and strike and the controls on mineralisation are yet to be determined and the true width of the intercepts is not yet known.
2. Coordinates are in MGA94, Zone 53
3. Drilling is conducted with 6m long drill rods intervals are rounded to one decimal place.
4. Elevation and Hole Depth are in metres
5. Azimuth is in Degrees Grid North
6. Dip is in degrees
7. All drilling is 5 & 3/4" diameter RC chip drilling, all of hole is sampled
8. Significant results are shown for intercepts >0.2% Cu, >0.3% Zn, >0.3% Pb and > 10ppm Ag with no more than 3m of internal dilution
9. NSI = No Significant Interval

Appendix 2. The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of the exploration results for the Benmara Project, Northern Territory, Australia.

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 (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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse Au that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Sampling was undertaken using standard industry practices and a standard operating procedure to ensure continuity of work practices between staff. • RC chip sample intervals were set at 3m intervals (1/2 rod length). • Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverisation stage to produce 30gram charge for fire assay and 0.25gram for multi-acid ICP-MS analysis. The sample size is deemed appropriate for the grain size of the material being sampled. • QAQC samples (standards, blanks and duplicates) are inserted into the sequences as per industry best practice the details of which are set out below in sub-sampling techniques section.
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.).*	• Reverse Circulation with a 5 3/4" hole diameter and a Sandvik face sampling "button" bit. • No downhole surveys were completed. • All holes were drilled vertical.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Chips were logged and sampled on site at Benmara Project for the full duration of the program by qualified geologists using the drillers recorded depth against the number of 3m samples recovered. No significant sample loss was observed. • Drillers monitored the shroud size to ensure quality recovery • No relationship between sample recovery and grade is identified.

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Chip logging is carried out by contracted qualified geologists using a project specific logging procedure. Data recorded includes, but is not limited to, lithology, alteration and sulphide mineralogy. This is supervised by Resolution's Exploration Manager, who is familiar with the mineralisation style and nature. Rock codes have been set up specifically for the project. • Drill technique is RC, therefore can be used to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Drill logging is qualitative by geological features. • All drilled intervals (100%) are logged and recorded as standard operating practice.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Drill chips intervals were collected from a cyclone splitter (dry), then submitted for analysis at the ALS laboratory in Adelaide. • 100% of the samples were submitted for assay. • A 20% sample split is considered representative and appropriate for exploration stage. Appropriate high, medium and low gold and base metal standards (CRM's) are used on a 1:50 basis (2%). Blanks are inserted on a 1:50 basis (2%). Duplicate samples were taken on a 1:50 basis (2%). Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis. • Sample preparation is considered appropriate and was undertaken by ALS Adelaide (PUL-23) using 70% to <2mm Crush and Pulverize 85% to <75 um. Samples were split and were subsequently analysed at BV laboratory in Perth, Western Australia (multielement and gold). Gold was analysed by Fire Assay (Au-AA23) with an AAS finish using a 30gram nominal sample weight. 48 elements were analysed by multi-acid (ME-MS61) with an ICP-AES/MS finish using a 0.25gram sample weight. Gold analysis was completed on selective samples only. • Sample size as defined above is considered appropriate to the material sampled.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The sampling digest methods are considered appropriate and industry standard. ME-MS61 with ICP-AES/MS finish was applied to all samples. Au-AA23 with AAS finish was applied to selective samples. • No use of portal XRF is reported. • QAQC procedures included the insertion of appropriate high, medium and low gold and base metal Certified Reference Materials (CRM) on a 1:50 basis (2%), Blank material on a 1:50 basis (2%) and duplicates on a 1:50 basis (2%) for a total insertion rate of 6%, which is appropriate to the exploration stage. QC checks are conducted after results are received utilising Company QC and supplied internal laboratory QC information. Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• At least two geologists have reviewed the physical chips.. • Drilling information is digitally entered and stored following documented chip handling procedures and backed up electronically. • No adjustment has been made to the primary assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All maps and locations are in UTM grid (MGA94 Zone 53).and have been measured by handheld GPS with a lateral accuracy of ±4 metres and a vertical accuracy of ±10 metres. Collar RLs have been adjusted to the Shuttle Radar Topography Mission (SRTM) digital elevation model (DEM) of the Earth to obtain sub 5 metre vertical accuracy.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation. • Sample composting has not been applied to these exploration results.
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.* • *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 key mineralised structures has not been confirmed.
Sample security	• *The measures taken to ensure sample security.*	• A secure chain of custody protocol has been established with the site geologist transporting samples from site, directly to Northline in Alice Springs, who securely transport samples to the ALS laboratory in Adelaide.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No review has been undertaken at this time.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
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.* • *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.*	• Resolution Minerals Ltd has a 100% interest in EL32228 Mineral Exploration License. Resolution is in the process of transferring title from vendor Strategic Energy Resources Ltd (Vendors). The completion of the binding term sheet (ASX:RML Announcement 15/12/2020) conditions have been made by Resolution to hold a 100% interest in the tenement and consideration shares issued to vendors (ASX:RML Announcement 11/11/2021). • EL32228 consists of 663km^2 and falls entirely within Benmara

Criteria	JORC Code explanation	Commentary
		Station and Creswell Downs Station, Northern Territory. • The Benmara Project is centred approximately 340km ENE of Tenant Creek. • The tenure is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration work on the Benmara Project includes; **Surface Geochemical Sampling**: stream sediments, BCL, soils & rock chips. **Airborne Geophysics**: GeoTEM, Radiometric & Magnetics. **Ground Geophysics:** Gravity, Seismic (17GA-SN5), Magnetics, Alpha meter (Scintillometer). **Exploration Drilling:** 254 drill holes have been completed within EL32228. **1 Rotary Mud** drill hole BG04 (IMC, 1968). **7 AC** drill holes C02 – 10 (AAR, 1977). **133 RAB** CJ216 – 578, MD8, MD10 (Ashton Mining, 1985). **72 RC** BEN001 (BHP, 1997), BPH1 – 74 (Mines Admin, 1979), W5_H1, W5_H2, W6_H1 (Stockdale Prospecting, 1988) **40 Diamond** drill holes including BDH1 – 5 and BDH67 (Mines Admin, 1978), DDHCJ1 – 140 (Ashton Mining, 1985), **1 Non – recorded** method drill holes RN026815 (NTGS, unknown)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Resolution Minerals Ltd is primarily exploring for sediment-hosted base metal mineralisation (e.g. Walford Creek, HYC, Century) within the Benmara Group, Northern Territory. • In 2020 Geoscience Australia proposed the Benmara Group get re-assigned to a Paleoproterozoic age (formerly thought to be Mesoproterozoic) after publishing new geochronology data on historic drill holes making the Benmara Group stratigraphically equivalent to the Fickling Group (Walford

Criteria	JORC Code explanation	Commentary
		Creek), McNamara Group (Century, Lady Loretta) and McArthur Group (HYC). • The Benmara Group is bound to the north by the Fish River Fault, which is known to have structurally control fluid movement and mineralisation at Walford Creek. • Resolution are targeting reduced sedimentary facies of the Benmara Group, which includes carbonaceous shale and siltstone, dolomite and sandstone.
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.* • *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.*	• See Appendix 1 summary table of drill hole results. • An accurate dip and strike and the controls on mineralisation are yet to be determined and the true width of the intercepts is not yet known.
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.* • *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.*	• This release relates to results from a geophysical survey; • Resolution has not undertaken any drilling on EL32228. • The focus of historical drilling was for diamonds and uranium exploration using analysis methods which do not apply to base metal exploration. • Additional details from historic drilling are unknown. • There are no historic drilling intervals of significant mineralisation. No cut off, top cut or maximum interval of internal dilution has been applied. • No metal equivalents have been used. • Sample length weighted averaging was used to calculate the aggregated intervals of significant mineralisation. A cut off of 0.2%

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		Cu, 0.3% Zn and 0.3% Pb and 10g/t Ag (10ppm Ag) has been applied for significant intersections with a maximum dilution of 3m. • No top cut has been applied. • No metal equivalents have been used.
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').*	• Down hole length has been reported, as true width is not known, as insufficient work has been undertaken to understand the true width of intervals. • "Down hole length, true width not known" is stated in the notes to Table 1a.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Plan view of drill collar locations have been included in the body of this report. • A representative section has also been provided.
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.*	• The reporting is considered balanced. • Comprehensive reporting of all drilling and surface samples has occurred in historical reports and reported when appropriate here.
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.*	• Resolution Minerals flew a 351 line km VTEM survey from which the drill targets relating to this release were derived. Previous explorers drilling on EL32228 did not test the VTEM conductors identified (RML ASX Announcement 9/7/2021) • VTEM (Versatile Time-Domain Electromagnetic) helicopter borne system developed by Geotech Ltd with a 35 m diameter transmitter loop. The VTEM Max can generate up to 866,000 NIA peak dipole moment (230Amps). The EM receiver provides both dB/dt and B-field measurements for Z, X and optional Y axis. The revised data acquisition system (full waveform) provides a wider range of time gate windows (18 to 10 msec).
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).*	• A range of exploration techniques are being considered to progress exploration including drilling.

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Refer to figures in the body of this report.