

## MAIDEN MINERAL RESOURCE

### Dulcie Far North – Split Rocks WA

#### Investment highlights

- Maiden Inferred Mineral Resource estimate for Dulcie Far North at a 0.5 g/t Au cut-off is:
  - **3.4 Million tonnes at 1.4 g/t Au for 150,000 ounces**
- Zenith acquired the granted Dulcie Far North Mining Lease (M77/1292) in January 2023 and owns 100% of the gold rights below 6 m and all other mineral rights, including lithium from surface.

Zenith Minerals (ASX:ZNC) ("**Zenith**", or the "**Company**") is pleased to advise that a maiden mineral resource has now been estimated at its Dulcie Far North Prospect, within the Company's 100% owned Split Rocks Gold Project, located in the Southern Cross-Forrestania Greenstone Belt of Western Australia.

The Mineral Resource has potential for expansion within identified drill section gaps, along strike to the north and at depth along with potential for parallel structures within Zenith's tenure.

#### Next Steps

Zenith is planning to expand the resource with further infill and step out reverse circulation drilling and is actively engaging with various parties to assist in pit optimisation studies plus Ore Reserves calculations within the granted Dulcie Far North Mining Lease.

#### Executive Chair David Ledger said:

*"We are excited to report this maiden Mineral Resource within our 100% owned land, in line with our expectations, scheduled timeline and budget that now allows us to look at monetising this strategic gold asset for the benefit of Zenith shareholders"*

## Split Rocks Gold Project – Dulcie Far North

The Split Rocks Gold Project is located 400 km east of Perth and around 80 km south of Southern Cross in the Western Australian Yilgarn Craton (Figure 1).

Zenith acquired the title and 100% of all the minerals rights to the Dulcie Far North tenement (M77/1292) from a private syndicate in January 2023. The syndicate retains a 2% NSR Royalty on any gold or lithium mined from the tenement below 6 m and a third party holds a 0.125% Net Profit Royalty on any gold mined below 6 m from surface.

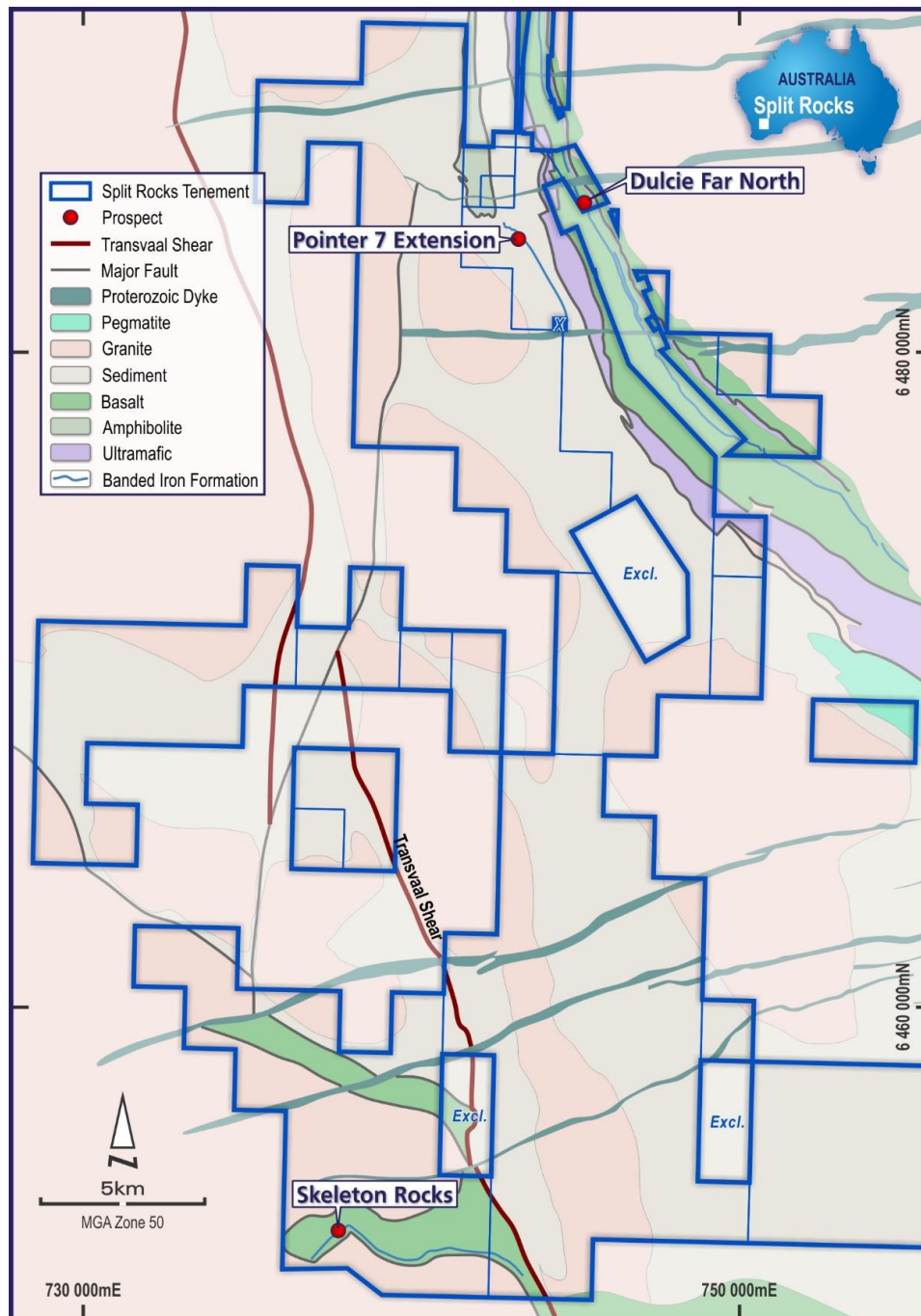


Figure 1: Split Rocks Gold Project and Dulcie Far North location and geology

## Geology

The geology at Dulcie Far North is dominated by a deeply weathered (30-40 m below surface) preserved Tertiary lateritic profile overprinting Archaean bedrock tholeiitic metabasalts (amphibolites) and a series of narrow (<10 m thick) interflow sedimentary banded iron formation (BIF) units. The stratigraphy dips consistently 30° to the west and strikes around 330°-345° north-westwards (Figure 1).

A late stage, undeformed, east-west trending gabbroic Proterozoic dyke intrudes the central portion of the tenement. Finer grained doleritic chilled margins are noted in contact with the amphibolites. The stratigraphy is also stopped by a series of late stage pegmatite sills (Lithium assays pending), running parallel to the foliation. Intrusive and faulted contacts are mapped within the pegmatites.

Structurally, Dulcie Far North lies along the regionally extensive (7 km strike) Dulcie Gold Trend. The shear zone where drilled is at least 100 m wide and the foliation parallels the 30° west dip of the stratigraphic sequence. Multiple stacked lodes are recorded within the shear zone. The shear zone is ductile and exhibits extensive boudinaging of the host amphibolites and BIF units.

Hydrothermal alteration including replacement of magnetite by pyrrhotite sees banded to wispy and massive pyrrhotite occupying the boudin necks and vein fractures in the amphibolites and BIF respectively as well as being more pervasively distributed on or near the amphibolite-BIF contacts. Extensive calc-silicate alteration is noted, with calcic green hornblende plus red almandine (garnet) dominating.

Feldspar phryic porphyries show rotation of the (plagioclase) porphyroblasts displaying consistent sinistral displacements, indicating (normal) top block west movement.

Limited late stage vertical sinistral faulting and broader carbonate healed breccia fault zones are occasionally noted but they are not dominant in the otherwise extremely competent (100% core recovery) west dipping host rocks.

## Exploration Drilling

Previous drilling and sampling at Dulcie Far North included several phases of drilling as summarised in Table 1. The historical drilling was restricted to three cross sections and is now replaced on two cross sections because of location accuracy concerns. The location accuracy concerns mean the historic drilling is excluded from the Mineral Resource estimate.

**Table 1 : Dulcie Far North historic drilling summary - not used for the Mineral Resource**

Company	Year (circa)	Drill Type	Drill Names	Holes	Total Depth m	Au Assays
Aztec	1991	AC	DAC001 - DAC019	19	773	158
		RAB	DL096 - DL250	24	696	175
		RC	DLP004 - DLP006	3	226	46
Sons of Gwalia	1996	RAB	PDS1055 - PDA1056, PSR70 - PSR094	14	608	208
		AC	PSA008 - PSA099	44	1863	700
Gascoyne Gold Mines	1998	RC	P7SRC1 - P7SRC8	8	716	359
Total				112	4882	1646

Zenith commenced exploration along the 7km striking Dulcie Gold Trend after signing a Mineral Rights Option to Purchase Agreement with the vendors in March 2019. Exploration extended to the Dulcie Far North tenement in 2020 with an initial RC program. The results indicated similar mineralising structures as encountered to the south, but the results cast doubt on the location of the historical drilling (described above). Follow-up drilling in 2021 used shallower Aircore drilling to assess the orientation the mineralisation structures. Subsequent RC drilling in 2022 and RC-diamond drilling in 2023 were used to follow the moderately dipping mineralisation structure down dip and along strike. The programs are summaries annually in Table 2 and a drill hole listing included in Appendix A.

**Table 2 : Dulcie Far North Zenith drilling summary - used for the Mineral Resource**

Year	Drill Type	Holes	Total Drilled m	Down Hole Surveys	Core Sampled m	RC/AC Sampled m	Au Assays
2019	RC	1	150	3	0	150	71
2020	AC	8	381	8	0	381	194
2021	AC	36	1538	36	0	1537	843
	RC	66	3005	66	0	2771	1577
2022	RC	32	4104	118	0	4072	4072
2023	RC	4	431	19	0	427	289
	RCD	14	2189.3	417	299.8	1397	830
Total		161	11798.3	667	299.8	10735	7876

Drilling by Zenith has been undertaken on the previous drill lines at roughly 40 m to 80 m over the southern 800 m strike extent. The drilling is more broadly spaced over the northern 800 m strike extent of the mining lease (Figure 2).

Drilling is predominantly oriented at 60° to 70° towards the ENE to present an optimal intersection angle for the fresh and saprolite domains (Figure 3). The deepest areas have less optimal near vertical or partially down dip intersection angles due to restrictions from existing cut lines and clearance as well as the tenement boundary. Though the deep drilling intersection angle is less optimal it comprises diamond core sampling and is therefore considered suitable.

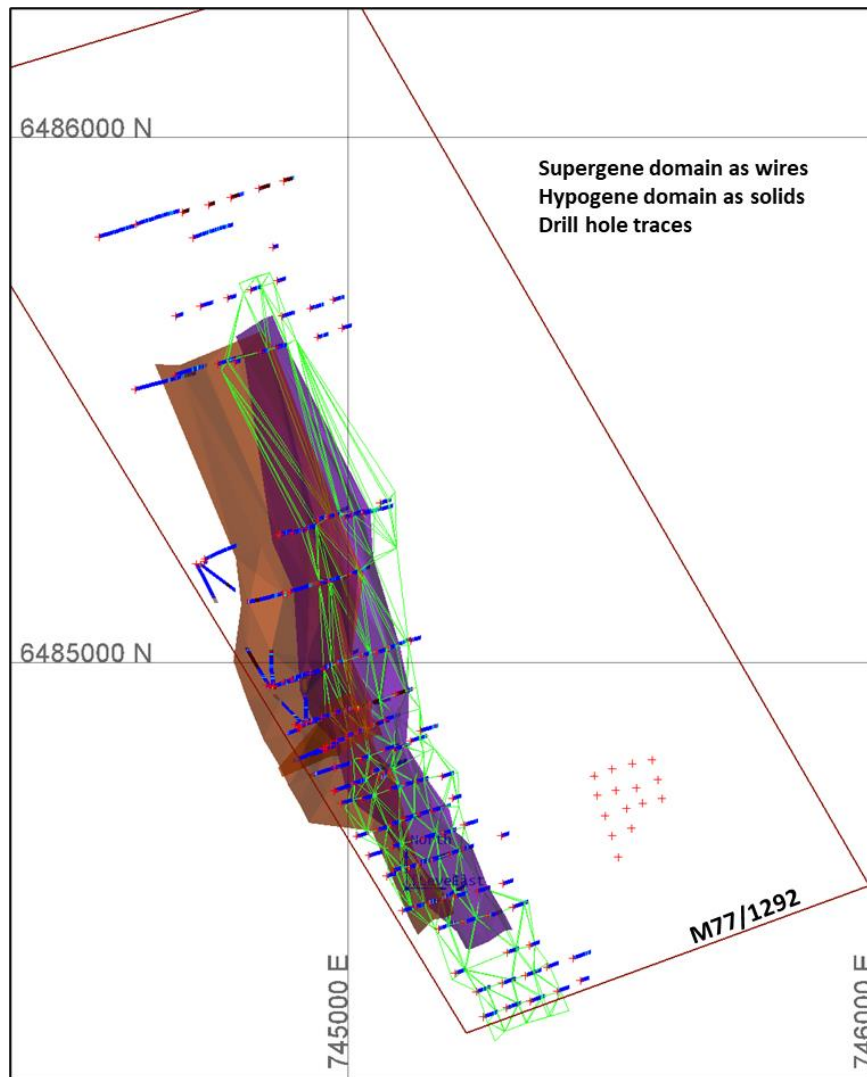


Figure 2: Dulcie Far North drill hole plan and mineralisation wireframes

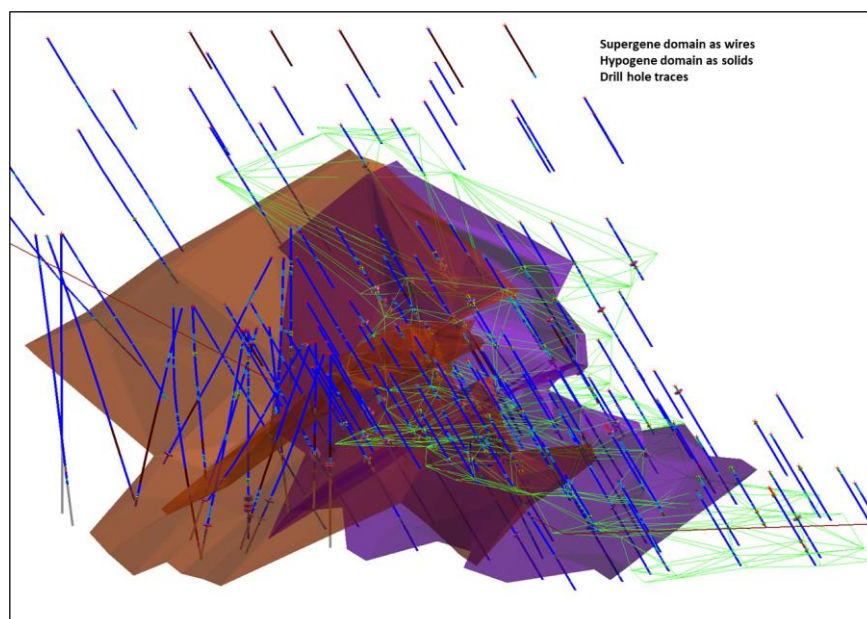


Figure 3: Dulcie Far North drill holes and mineralisation wireframe isometric viewed from SW



## Sampling/Sample Analysis

All single metre RC and/or Aircore samples were collected from 1 m riffle split or cone split intervals. The 1 m Aircore bulk residue samples were deposited on the ground in rows of 20 and the 1 m RC samples were deposited into plastic bags. Four metre Aircore composites were speared from the single metre spoils on the ground and the 4 m RC composite intervals were speared from the single metre plastic bags. The corresponding single metre cone or riffle split samples were collected for analysis when the 4m composite sample exceeded 0.25 g/t Au.

Diamond core holes in 2023 were oriented (bottom of hole), metre marked and geologically logged onsite. Core trays were despatched to Kalgoorlie for photographing and cutting. Core was half cut and samples were collected on 1m or less geological contacts.

All drill samples were despatched to commercial laboratories in Kalgoorlie or Perth for gold only determination using fire assay (50 gm charge) with an AAS finish.

During all the RC and diamond drilling programs duplicate samples were inserted every 25<sup>th</sup> sample, gold standards every 50<sup>th</sup> sample and controlled blanks were inserted every 100<sup>th</sup> sample. QAQC analysis was completed on these and on the laboratories' internal QAQC checks to ensure best practice sampling and assay determination was maintained throughout the drilling, sampling and analysis process.

Collar surveys were collected inhouse with an RTK-GPS unit prior to 2023. In March 2023 licenced surveyors were engaged to pick up the 2023 drilling collars using an RTK-GPS and establish survey controls over the prospect area for the earlier drilling. A drone DEM survey with aerial photography was employed to assist future drill hole planning and modelling. Drill collar surveys prior to 2023 were corrected to the DEM survey RL.

Downhole multi-shot camera surveys were undertaken upon completion of each RC hole by the drilling contractors during each program. The 2023 diamond holes were surveyed using continuous downhole gyro surveys on all diamond tails.

## Interpretation

Surface topography is based on a drone DEM survey and extended where necessary based on drill collar surveys.

The weathering profile was interpreted from logged material types and wireframed (Figure 4). All material within 6 m of the surface is not available under the tenement agreement. Hence all near surface samples and were excluded and the near surface zone considered waste. This exclusion includes all laterite mineralisation. A wide Proterozoic dyke was interpreted and wireframed from geophysical data and confirmed by test drill holes. The dyke cross cuts the mineralisation at about 6485200 mN.

Mineral Resource domains were interpreted using a 0.3 g/t Au grade threshold guideline on cross sections and wireframed. Generally, on each section there are two dominant hypogene domains as 30<sup>0</sup> towards WNW (250<sup>0</sup>) dipping planar structures defined by drilling (Figure 4). In places there is evidence of a thin third hanging wall zone. Some sections indicate potential for a lower footwall mineralisation (Structure 3 – Figure 4), however there is currently insufficient drilling to interpret a consistent zone in the footwall.

A saprolite hosted sub-horizontal zone is evident and interpreted wherever mineralisation is potentially supergene enriched with respect to the interpreted oxidation surface (Figure 4). The supergene mineralisation is strongest under the up-dip projection of the hypogene domain and follows with the oxidation surface and in immediate footwall areas (i.e. eastern spread). Development of supergene

mineralisation between the two dominant hypogene structures is variable and patchy. At this stage the supergene blanket was carried through the weakly gold mineralised areas.

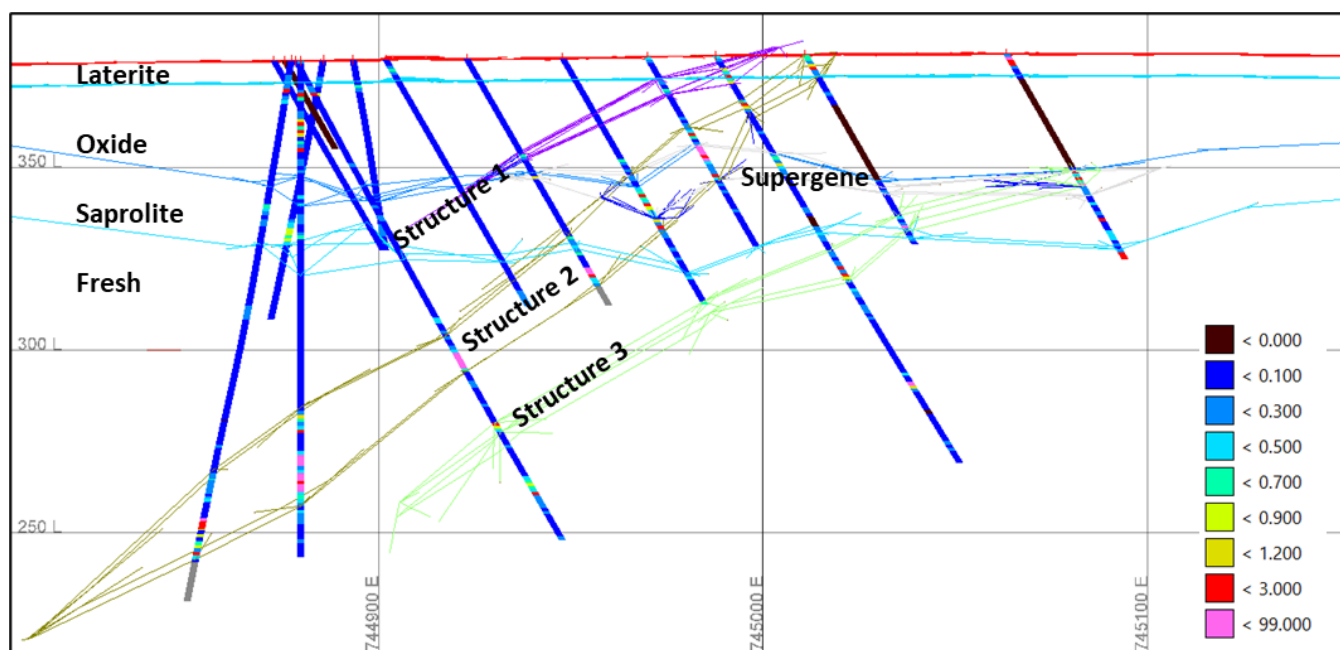


Figure 4: Dulcie Far North example cross section – weathering and resource domain wireframes

## Estimation

A sub-celled block model was constructed with parent size (maximum) block sizes of 10 by 10 by 8 m for waste but with a maximum of 5 by 10 by 2 m for Mineral Resource domains. Sub-celling down to 5 by 5 by 1 m was allowed to provide volume accuracy.

Block grades were estimated using inverse distance square method and an assumed anisotropy ratio of 1 by 0.6 by 0.2, using 2 m composite cut to a maximum of 10 g/t Au.

For the hypogene (fresh) domains the estimation was oriented at a plunge of 20° towards 305° within the overall plane that dips at 30° towards 250°. The plunge reflects observations by the exploration team.

For the supergene domain estimation was oriented as a flattening horizontal anisotropy with the plunge reflecting the intersection with the mineralising structures and a strike of 340°.

Estimation searches used two consecutive passes. The first pass for mineralisation domains targeted at estimating potentially Inferred mineralisation and the second pass to fill the model with extrapolated estimates for future exploration planning purposes. The initial search pass of 80 m by 60 m by 20 m and then 200 m by 100 m by 40 m if unestimated, or if <2 drill holes were used in the first pass. Additional estimated parameters included:

- 3 composites per drill hole
- maximum 15 composites.

Figure 5 displays the estimated gold grades for all blocks.

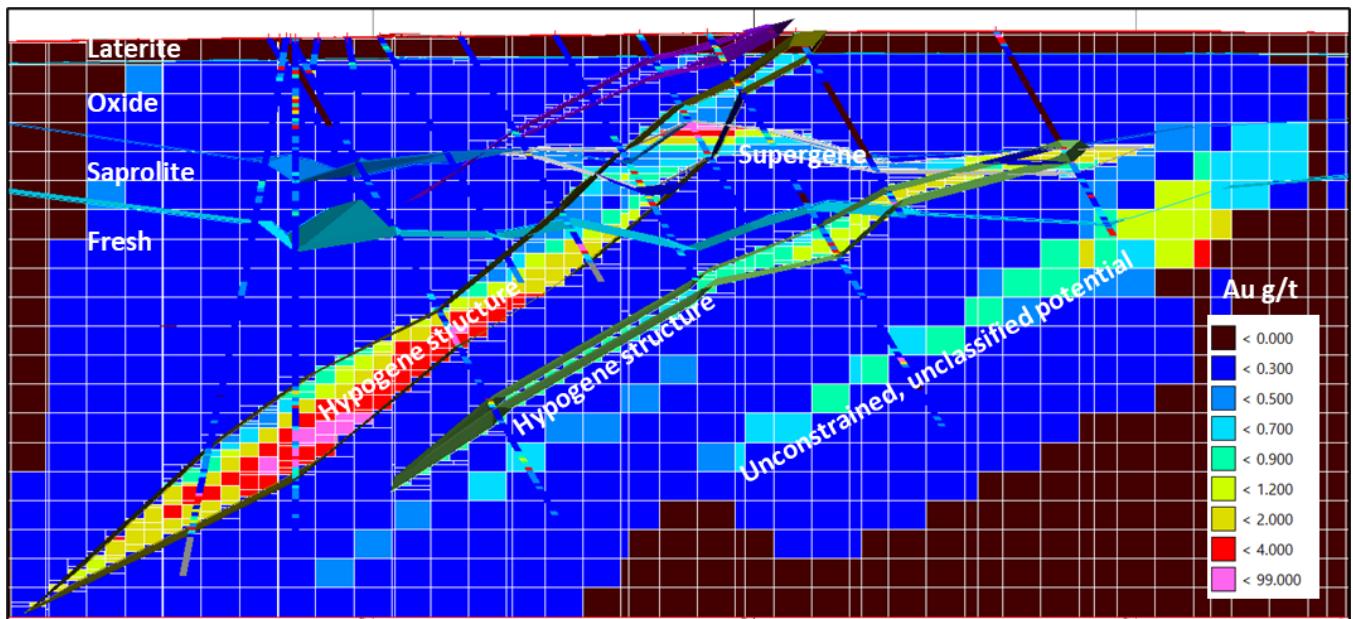


Figure 5: Dulcie Far North example cross section with estimate Au block grades

In 2023 Zenith determined 71 bulk density measurements for half and whole core samples using a water immersion method. All samples were from deeper fresh material and they included 15 measurements from within the Mineral Resource domains. Samples were dominantly amphibolite and average 3.0 to 3.1 t/m<sup>3</sup> for waste and mineralised samples. High density measurements is supported by the intensity of metamorphism and some occurrence of magnetite and pyrrhotite.

At this early stage of assessment a lower average is assumed for the fresh and general assumptions made for the weathered material types for which there is no data. Bulk density values used include:

- Laterite 2.0 t/m<sup>3</sup>
- Oxide and Saprolite 1.7 t/m<sup>3</sup>
- Fresh 3.0 t/m<sup>3</sup>

## Classification

The reported Mineral Resource is considered suitable for Inferred Mineral Resource classification under the JORC (2012) Code with JORC table 1 details provided in Appendix B. Due to some wide gaps between some northern cross sections Inferred is limited to extrapolation of 25 m from any hole or three drill holes within 90 m search radii.

Figure 6 provides an overview of the Inferred classification and block grades. Note that the lower grade supergene grades obscure higher grade hypogene in places. Figure 5 demonstrates only 60% of the interpreted domain volumes are classified as Inferred with the remaining 40% presenting additional potential between existing drilling that requires drill confirmation.



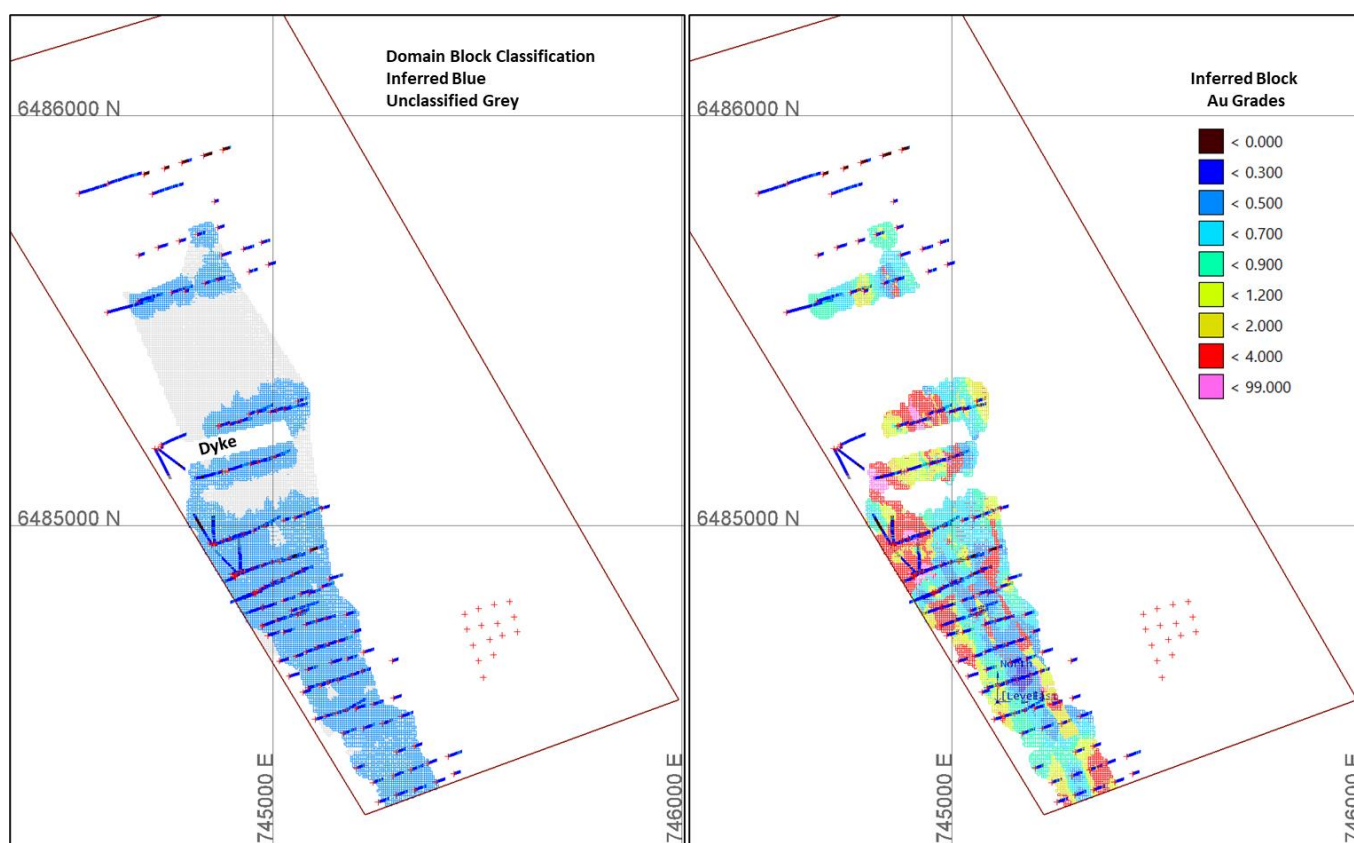


Figure 6: Dulcie Far North plan projection of Mineral Resource classification and Inferred Au grade

### Mining and cut-off grade

There are no available mining or geotechnical studies at this stage. Mining is assumed to be best suited to open pit methods. The shallow dip and grade profile would be unsuitable for underground mining.

The Mineral Resource is reported at a cut-off grade of 0.5 g/t Au is considered reasonable for a standalone open pit mining option.

An alternative higher grade 1.5 g/t Au cut-off is included as an indication of the material that may suit toll treatment at existing mills in the region. This would include additional haulage distances of greater than 70 km.

### Metallurgy

There is no metallurgical test work complete to date and no mining modifying factors or assumptions applied. The occurrence of pyrrhotite in drill core suggests that pressure oxidation or similar may be needed to obtain high recovery.

Zenith undertook some metallurgical test work on similar Dulcie mineralisation from the same mineralisation trend but ~3 km to the south of Dulcie Far North. Recoveries were >90% for laterite, saprolite and fresh mineralisation, see ASX-ZNC announcement dated 31 March 2021.

### Mineral Resource

The Dulcie Far North Mineral Resource is reported using a 0.5 g/t Au lower cut-off, which is assumed to be suitable for open pit mining and onsite processing.

The Mineral Resource for Dulcie Far North at a **0.5 g/t Au cut-off** includes:

- **Inferred Mineral Resource of 3.4 Mt at 1.4 g/t Au for 150 koz Au in-situ**

Table 3 provides a breakdown of the 0.5 g/t Au cut-off Inferred Mineral Resource by weathering type and indicates little oxide and dominantly fresh hypogene material.

**Table 3 : Dulcie Far North Inferred Mineral Resource at 0.5 g/t Au cut-off by weathering zone**

Weathering Zone	Tonnes kt	Gold Au g/t	Bulk Density t/m <sup>3</sup>	Metal Au koz
Oxide	0.16	0.95	1.70	5
Saprolite	0.80	1.31	1.70	34
Fresh	2.41	1.44	3.00	112
<b>Total</b>	<b>3.37</b>	<b>1.38</b>	<b>2.47</b>	<b>150</b>

All Mineral Resources reported are constrained by the M77/1292 tenement boundary. The intersection of the hypogene mineralisation with the tenement occurs at 110 to 150 m below surface. Approximately 20% of the Mineral Resource is below a depth of 70 to 100 m below surface and in a wedge that would require an open pit wall to extend beyond the existing tenement boundary. Access to this material would require a Mining Lease extension and agreement with neighbouring lease holders.

An alternative development approach could involve mining and toll treatment at existing regional processing facilities. The additional costs including ore haulage would require a higher cut-off grade of 1.5 to 2.0 g/t Au. The Inferred Mineral Resource reported at a **1.5 g/t Au cut-off** is:

- **Inferred Mineral Resource of 1.1 Mt at 2.4 g/t Au for 80 koz Au in-situ**

Due to the low threshold used for interpretation the higher grade cut-off Mineral Resource will include additional grade estimation smoothing and greater uncertainty.

Assessment of the Mineral Resource against the JORC Table 1 criteria are provided in Appendix B.

## Additional Potential

Dulcie Far North offers significant exploration potential and upside that includes:

- Saprolite bulk density maybe higher and is currently untested
- Areas interpreted but not classified due to wide spaced drill sections (see Figure 6)
- Extension of the hypogene zones both to the south, north and down-dip (see Figure 2)
- A third footwall structure is indicated by some drilling but not yet adequately drilled or modelled (see Figure 5).

**For further information, please contact:**

**Zenith Minerals Limited**

**David Ledger**

Executive Chairman

P: +61 8 9226 1110

E: [info@zenithminerals.com.au](mailto:info@zenithminerals.com.au)

**Media & Investor Enquiries**

**Jane Morgan Management**

Katrina Griffiths

E: [katrina@janemorganmanagement.com.au](mailto:katrina@janemorganmanagement.com.au)

**About Zenith Minerals**

Zenith Minerals Limited (ASX:ZNC) is an Australian-based minerals exploration company leveraged to the increasing global demand for metals critical to the production processes of new energy industrial sectors.

The Company currently has three lithium projects all located in Western Australia. Two projects, Split Rocks and Waratah Well, are being explored under the terms of a joint venture between Zenith and EV Metals Group (EVM). Split Rocks covers landholdings of approximately 660 km<sup>2</sup> in the Forrestania greenstone belt immediately north of the established Mt Holland lithium deposit. Waratah Well, located approximately 20km northwest of the regional town of Yalgoo in the Murchison Region holds a lithium pegmatite with ongoing exploration required.

In January 2022, Zenith entered into a joint venture with EV Metals Group (EVM), a global battery material and technology company with plans to develop an integrated Battery Chemicals Complex at Yanbu Industrial City on the western coast of Saudi Arabia. EVM can earn a 60% interest in the lithium rights on two lithium projects, Split Rocks and Waratah Well, with Zenith retaining a 40% project share. Under the terms of the agreement Zenith is fully funded by EVM through to a bankable feasibility on any project development, such a study must be completed by January 2024.

Zenith has an additional two lithium projects. In January 2023, Zenith secured an option to acquire 100% of the Hayes Hill lithium – nickel project, located in the Norseman – Widgiemooltha area of Western Australia. A further project Yilmia, covers an 8 km long lithium prospective area in the Coolgardie district, some 13 km southeast of the recent Kangaroo Hills lithium discovery by ASX:FBM. Zenith may earn up to a 100% interest in the lithium rights at the Yilmia project.

In addition to its battery metal assets Zenith owns a portfolio of gold and base metal projects. It retains a 25% free carried interest (to end bankable feasibility study) on the Earahedy Zinc discovery, in Western Australia, with Rumble Resources Limited (ASX:RTR) and two main gold projects – Red Mountain in Queensland and Split Rocks in Western Australia.

To learn more, please visit [www.zenithminerals.com.au](http://www.zenithminerals.com.au)

**This ASX announcement has been authorised by the Board of Zenith Minerals Limited.**

**Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Kevin Seymour, who is a Member of the Australian Institute of Geoscientists and full-time employee Principal Consulting Geologist to Seymour Rock Consulting Pty Ltd. Mr Seymour has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr

Seymour consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Mr John Horton, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a full time employee of ResEval Pty Ltd. Mr Horton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Horton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Material ASX Releases Previously Released**

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged.

## Appendix A: Dulcie Far North – Zenith Drilling Summary

Year	Drill Hole	Drill Type	Easting MGA mE	Northing MGA mN	Elevation mRL	Depth m	Down Hole Surveys	Core Au Samples m	RC/AC Au Samples m	Au Assays
2019	ZDRC021	RC	745046	6484792	383.0	150	3	0	150	71
2020	ZAC142	AC	745068	6484789	383.2	46	1	0	46	24
2020	ZAC143	AC	744976	6484756	381.9	49	1	0	49	12
2020	ZAC144	AC	745195	6484636	388.0	52	1	0	52	28
2020	ZAC145	AC	745159	6484623	387.0	43	1	0	43	17
2020	ZAC146	AC	745115	6484609	386.0	55	1	0	55	41
2020	ZAC147	AC	745346	6484461	389.0	42	1	0	42	14
2020	ZAC148	AC	745303	6484448	391.0	48	1	0	48	36
2020	ZAC149	AC	745204	6484408	389.0	46	1	0	46	22
2021	ZAC319	AC	744866	6485727	372.0	34	1	0	34	10
2021	ZAC320	AC	744815	6485710	371.0	45	1	0	45	30
2021	ZAC321	AC	744771	6485694	371.0	37	1	0	37	10
2021	ZAC322	AC	744719	6485679	371.0	51	1	0	51	18
2021	ZAC323	AC	744673	6485660	372.0	30	1	0	30	12
2021	ZAC324	AC	744943	6485620	372.0	42	1	0	42	21
2021	ZAC325	AC	744865	6485600	372.0	43	1	0	43	25
2021	ZAC326	AC	744785	6485572	372.0	21	1	0	21	6
2021	ZAC327	AC	745061	6485304	373.3	47	1	0	47	36
2021	ZAC328	AC	745009	6485282	373.1	49	1	0	49	22
2021	ZAC329	AC	744963	6485277	373.4	49	1	0	49	37
2021	ZAC330	AC	744920	6485255	373.3	51	1	0	51	42
2021	ZAC331	AC	744871	6485244	373.3	48	1	0	48	24
2021	ZAC332	AC	745119	6485042	379.3	42	1	0	42	20
2021	ZAC333	AC	745078	6485028	379.1	37	1	0	37	25
2021	ZAC334	AC	745026	6485013	379.2	39	1	0	39	27
2021	ZAC335	AC	744980	6484999	378.6	40	1	0	40	37
2021	ZAC336	AC	744928	6484979	378.2	42	1	0	42	11
2021	ZAC337	AC	744878	6484963	377.7	41	1	0	41	26
2021	ZAC338	AC	744999	6484861	380.9	28	1	0	28	10
2021	ZAC339	AC	744978	6484850	380.6	47	1	0	47	29
2021	ZAC340	AC	744955	6484835	380.5	45	1	0	45	21
2021	ZAC341	AC	745060	6484781	383.0	45	1	0	45	44
2021	ZAC342	AC	745199	6484741	390.0	36	1	0	36	12
2021	ZAC343	AC	745161	6484718	389.0	45	1	0	45	24
2021	ZAC344	AC	745108	6484703	389.0	50	1	0	50	22
2021	ZAC345	AC	745056	6484681	388.0	43	1	0	43	16
2021	ZAC346	AC	745017	6484669	388.0	45	1	0	45	18
2021	ZAC347	AC	745292	6484670	392.0	33	1	0	33	12
2021	ZAC348	AC	745219	6484645	391.0	45	1	0	45	27
2021	ZAC349	AC	745074	6484593	390.0	43	1	0	43	22
2021	ZAC350	AC	745295	6484579	393.0	42	1	0	42	15
2021	ZAC351	AC	745245	6484564	393.0	54	1	0	54	29
2021	ZAC352	AC	745203	6484554	392.0	50	1	0	50	29
2021	ZAC353	AC	745154	6484542	391.0	56	1	0	55	49
2021	ZAC354	AC	745104	6484527	391.0	43	1	0	43	25
2021	ZAC419A	RC	744878	6485918	371.0	40	1	0	4	4
2021	ZAC420	RC	744831	6485903	370.0	45	1	0	4	4
2021	ZAC421	RC	744777	6485886	370.0	51	1	0	19	19
2021	ZAC422	RC	744735	6485872	371.0	27	1	0	0	0
2021	ZAC423	RC	744685	6485858	371.0	28	1	0	0	0
2021	ZAC424	RC	745092	6484940	381.2	65	1	0	37	37
2021	ZAC425	RC	745040	6484922	380.9	60	1	0	36	36
2021	ZAC426	RC	744998	6484911	380.2	60	1	0	60	54
2021	ZAC427	RC	744976	6484904	380.0	78	1	0	78	57
2021	ZAC428	RC	744951	6484896	379.7	78	1	0	72	42
2021	ZAC429	RC	744930	6484889	379.5	78	1	0	78	30



Year	Drill Hole	Drill Type	Easting MGA mE	Northing MGA mN	Elevation mRL	Depth m	Down Hole Surveys	Core Au Samples m	RC/AC Au Samples m	Au Assays
2021	ZAC430	RC	744900	6484882	379.2	60	1	0	60	15
2021	ZAC431	RC	745071	6484892	381.8	60	1	0	60	36
2021	ZAC432	RC	745048	6484881	381.6	66	1	0	54	36
2021	ZAC433	RC	745019	6484868	381.2	71	1	0	71	42
2021	ZAC434	RC	745138	6484870	382.5	72	1	0	72	45
2021	ZAC435	RC	745120	6484851	382.7	66	1	0	66	36
2021	ZAC436	RC	745088	6484835	382.9	60	1	0	60	39
2021	ZAC437	RC	745068	6484834	382.8	60	1	0	60	30
2021	ZAC438	RC	745026	6484817	381.9	60	1	0	60	33
2021	ZAC439	RC	744977	6484800	381.4	66	1	0	66	24
2021	ZAC440	RC	745179	6484783	383.0	48	1	0	48	24
2021	ZAC441	RC	745130	6484773	383.0	48	1	0	48	21
2021	ZAC442	RC	745107	6484767	383.0	54	1	0	54	28
2021	ZAC443	RC	745080	6484759	383.0	60	1	0	60	36
2021	ZAC444	RC	745027	6484740	383.0	60	1	0	60	33
2021	ZAC445	RC	744988	6484732	382.4	60	1	0	60	30
2021	ZAC446	RC	745222	6484691	391.0	54	1	0	54	23
2021	ZAC447	RC	745182	6484675	390.0	52	1	0	52	22
2021	ZAC448	RC	745144	6484666	390.0	55	1	0	55	17
2021	ZAC449	RC	745085	6484649	389.0	55	1	0	55	37
2021	ZAC450	RC	745040	6484632	389.0	55	1	0	55	20
2021	ZAC451	RC	745314	6484534	394.0	64	1	0	64	28
2021	ZAC452	RC	745269	6484517	394.0	52	1	0	52	37
2021	ZAC453	RC	745221	6484505	393.0	59	1	0	59	35
2021	ZAC454	RC	745173	6484493	392.0	69	1	0	69	53
2021	ZAC455	RC	745429	6484437	397.0	72	1	0	72	39
2021	ZAC456	RC	745379	6484420	397.0	48	1	0	48	24
2021	ZAC457	RC	745338	6484404	396.0	66	1	0	66	35
2021	ZAC458	RC	745294	6484389	395.0	54	1	0	54	23
2021	ZAC459	RC	745245	6484373	394.0	56	1	0	56	38
2021	ZAC460	RC	745443	6484394	397.0	36	1	0	36	15
2021	ZAC461	RC	745399	6484374	397.0	48	1	0	48	21
2021	ZAC462	RC	745347	6484355	396.0	60	1	0	60	30
2021	ZAC463	RC	745302	6484342	395.0	58	1	0	58	33
2021	ZAC464	RC	745258	6484325	394.0	59	1	0	59	33
2021	ZAC465	RC	744989	6485637	373.0	38	1	0	38	13
2021	ZAC466	RC	744973	6485691	372.0	42	1	0	42	17
2021	ZAC467	RC	744929	6485675	372.0	54	1	0	54	26
2021	ZAC468	RC	744875	6485660	372.0	52	1	0	52	19
2021	ZAC469	RC	744857	6485791	371.0	24	1	0	24	6
2021	ZAC470	RC	745469	6484784	392.0	11	1	0	11	11
2021	ZAC471	RC	745503	6484797	392.0	10	1	0	10	10
2021	ZAC472	RC	745541	6484807	392.0	10	1	0	10	10
2021	ZAC473	RC	745579	6484815	391.0	10	1	0	10	10
2021	ZAC474	RC	745591	6484777	392.0	9	1	0	9	9
2021	ZAC475	RC	745550	6484761	393.0	9	1	0	9	9
2021	ZAC476	RC	745510	6484756	393.0	10	1	0	10	10
2021	ZAC477	RC	745475	6484747	393.0	9	1	0	9	9
2021	ZAC478	RC	745490	6484708	394.0	9	1	0	9	9
2021	ZAC479	RC	745503	6484670	394.0	10	1	0	10	10
2021	ZAC480	RC	745515	6484630	395.0	9	1	0	9	9
2021	ZAC481	RC	745540	6484684	394.0	9	1	0	9	9
2021	ZAC482	RC	745530	6484722	394.0	9	1	0	9	9
2021	ZAC483	RC	745561	6484732	393.0	9	1	0	9	9
2021	ZAC484	RC	745598	6484741	393.0	9	1	0	9	9
2022	SRRC005	RC	745127	6484534	386.3	118	5	0	118	118
2022	SRRC006	RC	744973	6484755	381.8	140	5	0	140	140
2022	SRRC007	RC	744905	6484876	379.3	28	1	0	0	0
2022	SRRC008	RC	744728	6485197	372.1	130	5	0	130	130

Year	Drill Hole	Drill Type	Easting MGA mE	Northing MGA mN	Elevation mRL	Depth m	Down Hole Surveys	Core Au Samples m	RC/AC Au Samples m	Au Assays
2022	SRRC009	RC	744834	6485591	369.0	82	4	0	82	82
2022	SRRC010	RC	744753	6485569	368.4	105	4	0	105	105
2022	SRRC011	RC	744672	6485548	368.2	120	4	0	120	120
2022	SRRC012	RC	744595	6485520	368.2	196	7	0	196	196
2022	SRRC013	RC	744705	6485810	367.7	154	6	0	154	154
2022	SRRC014	RC	744597	6485835	368.5	166	7	0	166	166
2022	SRRC015	RC	744527	6485811	368.9	136	6	0	136	136
2022	SRRC016	RC	744868	6485243	373.3	106	1	0	106	106
2022	SRRC018	RC	744910	6484876	379.3	136	1	0	136	136
2022	SRRC019	RC	744953	6484836	380.5	118	5	0	118	118
2022	ZDRC087	RC	744964	6485156	375.3	138	1	0	138	138
2022	ZDRC088	RC	744891	6485135	375.0	150	5	0	150	150
2022	ZDRC089	RC	745017	6484912	380.6	130	5	0	126	126
2022	ZDRC090	RC	744907	6484879	379.2	150	6	0	150	150
2022	ZDRC091	RC	744967	6484843	380.5	140	4	0	140	140
2022	ZDRC092	RC	745029	6485284	373.2	120	5	0	120	120
2022	ZDRC093	RC	744994	6485277	373.1	100	3	0	100	100
2022	ZDRC094	RC	744943	6485272	373.4	120	5	0	120	120
2022	ZDRC095	RC	744895	6485248	373.3	108	4	0	108	108
2022	ZDRC096	RC	745055	6485019	379.3	141	5	0	141	141
2022	ZDRC097	RC	744954	6484988	378.4	132	3	0	132	132
2022	ZDRC098	RC	744859	6484955	377.5	170	1	0	170	170
2022	ZDRC099	RC	745011	6484770	382.2	150	1	0	150	150
2022	ZDRC100	RC	745136	6484711	389.0	126	1	0	126	126
2022	ZDRC101	RC	745082	6484692	387.0	120	1	0	120	120
2022	ZDRC102	RC	745136	6484618	386.0	130	1	0	130	130
2022	ZDRC103	RC	745087	6484604	388.0	130	1	0	130	130
2022	ZDRC115	RC	745179	6484550	390.0	114	5	0	114	114
2023	SRDD001	RCD	744977	6484801	381.4	126.7	13	13.0	59	32
2023	SRDD002	RCD	744974	6484800	381.3	138.6	27	17.8	100	50
2023	SRDD003	RCD	744960	6484839	380.5	108.53	21	21.0	60	46
2023	SRDD004	RCD	744958	6484835	380.6	140	27	24.0	69	47
2023	SRDD005	RCD	744908	6484874	379.3	150.64	30	39.6	100	79
2023	SRDD006	RCD	744914	6484883	379.3	170.1	34	21.6	118	69
2023	SRDD007	RCD	744921	6484887	379.4	169.78	33	24.8	90	56
2023	SRDD008	RCD	744852	6484954	377.4	170.2	33	20.2	82	46
2023	SRDD009	RCD	744858	6484956	377.5	144.7	29	16.4	111	54
2023	SRDD010	RCD	744728	6485192	372.1	180.7	33	0	130	33
2023	SRDD011	RCD	744720	6485187	372.1	180.25	36	30.3	130	66
2023	SRDD012	RCD	744712	6485188	371.9	192.5	38	22.8	142	61
2023	SRDD013	RCD	744876	6485132	374.9	150.8	30	32.8	100	61
2023	SRRC017D	RCD	744846	6484958	377.3	165.78	33	15.5	106	130
2023	SRRC020	RC	744884	6485131	375.0	125	5	0	125	89
2023	SRRC021	RC	744945	6485150	375.3	118	5	0	114	90
2023	SRRC022	RC	745006	6485168	375.5	76	4	0	76	52
2023	SRRC023	RC	744894	6484969	377.9	112	5	0	112	58
Total	161						667	299.8	10735	7876

## Appendix B: Dulcie Far North - JORC Table 1

### Part 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<p><i>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.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><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></p>	<p>Historic drilling includes 112 RC, Aircore and RAB drill holes. Locational and quality issues prevent their use for the Mineral Resource and they are not further described.</p> <p>Zenith completed RC and diamond drilling between 2019 and 2023</p> <p>Zenith RC intervals are systematically sampled using industry standard 1 m intervals. Outside of mineralisation 4m composites</p> <p>Reconnaissance Aircore traverses use 4 m composites.</p> <p>Surface and precollared Diamond holes may be sampled along sub 1m geological contacts, otherwise 1m intervals are the default.</p> <p>Drill hole locations were designed to allow for spatial spread across the interpreted mineralised zone.</p> <p>RC samples are collected, and cone split to 3-4 kg samples on 1m metre intervals, then 4m composites are speared from the bulk residue bags before despatching the laboratory.</p> <p>Aircore samples are speared from piles on the ground and are composited into 4 m intervals before despatching to the laboratory.</p> <p>Single metre bottom of hole Aircore samples are also collected for trace element determinations.</p> <p>Diamond core is half cut along downhole orientation lines. Half core is sent to the laboratory for analysis and the other half is retained for future reference.</p> <p>Zenith drill samples use standard fire assaying with a 50 gm charge with an OES finish. Trace element determination when undertaken uses a multi (4) acid digest and ICP- AES or MS finish.</p> <p>Drilling prior to 2020 includes 112 RAB, RC and Aircore drill holes by Aztec, Sons of Gwalia and Gascoyne Gold Mines in the 1990s. This covers three previous sections at Dulcie Far North (DFN). Drilling displays similar mineralisation tenor but with inconsistent results suggesting locational offsets. Due to location issues the data is not used and not further described. Two of the three sections are now entirely redrilled.</p>

Criteria	JORC Code explanation	Commentary
<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>	Zenith drilling is completed using best practice NQ diamond core, 5 ¾" face sampling RC drilling hammers for all RC drill holes at Split Rocks and 3" Aircore bits/RC hammers.
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><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></p>	<p>All Zenith diamond core is jig sawed to ensure any core loss, if present is fully accounted for. Bulk RC and Aircore drill holes samples are visually inspected by the supervising geologist to ensure adequate clean sample recoveries are achieved. Note Aircore drilling while clean is not preferred in any resource estimation work. Any wet, contaminated or poor sample returns are flagged and recorded in the database to ensure no sampling bias is introduced.</p> <p>Zones of poor sample return both in RC and Aircore are recorded in the database and cross checked once assay results are received from the laboratory to ensure no misrepresentation of sampling intervals has occurred. Zero sample recovery is achieved while navi drilling. The navi lengths are kept to a minimum and avoided when close to potentially mineralised units.</p>
<b>Logging</b>	<p><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></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>All drill samples are geologically logged on site by professional geologists. Details on the host lithologies, deformation, dominant minerals including sulphide species and alteration minerals plus veining are recorded relationally (separately) so the logging is interactive and not biased to lithology.</p> <p>Drill hole logging is qualitative on visual recordings of rock forming minerals and quantitative on estimates of mineral abundance.</p> <p>The entire length of each drill hole is geologically logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise</i></p>	<p>Duplicate samples are collected every 25<sup>th</sup> sample from the RC and Aircore chips as well as quarter core from the diamond holes. Further, with selected drill-outs additional duplicates will be planned by ensuring there is an adequate spread of duplicate samples (25%) taken from predicted ore positions when ore zones are projected from adjacent drill holes.</p> <p>Dry RC 1m samples are riffle split to 3-4 kg as drilled and dispatched to the laboratory. Any</p>

Criteria	JORC Code explanation	Commentary
	<p><i>representivity of samples.</i></p> <p><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></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>wet samples are recorded in the database as such and allowed to dry before splitting and dispatching to the laboratory.</p> <p>All core, RC and Aircore chips are pulverized prior to splitting in the laboratory to ensure homogenous samples with &gt;85% passing 75µm. 200 gm is extracted by spatula that is used for the 50 gm charge on standard fire assays.</p> <p>All samples submitted to the laboratory are sorted and reconciled against the submission documents. In addition to duplicates a high grade or low grade standard is included every 50<sup>th</sup> sample, a controlled blank is inserted every 100<sup>th</sup> sample. The laboratory uses barren flushes to clean their pulveriser and their own internal standards and duplicates to ensure industry best practice quality control is maintained.</p> <p>The sample size is considered appropriate for the type, style, thickness and consistency of mineralisation.</p>
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><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></p> <p><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></p>	<p>The fire assay method is designed to measure the total gold in the core, RC and Aircore samples. The technique involves standard fire assays using a 50 gm sample charge with a lead flux (decomposed in the furnace). The prill is totally digested by HCl and HNO<sub>3</sub> acids before measurement of the gold determination with ICP-OES finishes to give a lower limit of detection of 0.01 g/t Au. Aqua regia digest is considered adequate for surface soil sampling. Zenith included six different CRMS with a total 201 assays along with 285 blanks that provided acceptable results.</p> <p>Zenith undertook 155 field duplicates. These indicate an average variance of 15% which is greater than normally considered acceptable. However some appear to be field errors. High variance is not evident for laboratory duplicates and repeats (5%) . Further investigative work remains but considered acceptable for the current classification.</p> <p>No field analyses of gold grades are completed. Quantitative analysis of the gold content and trace elements is undertaken in a controlled laboratory environment.</p> <p>Industry best practice is employed with the inclusion of duplicates and standards as discussed above and used by Zenith as well as</p>



Criteria	JORC Code explanation	Commentary
		the laboratory. All Zenith standards and blanks are interrogated to ensure they lie within acceptable tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias.
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>As a review process alternative Zenith personnel must also inspect the diamond core, RC and Aircore chips in the field to verify the correlation of mineralised zones between assay results and lithology, alteration and mineralisation.</p> <p>All holes are digitally logged in the field and all primary data is forwarded to Zenith's Database Administrator (DBA) where it is imported into Expedio (a commercially database package). Assay data is electronically merged when received from the laboratory. The responsible project geologist reviews the data in the database to ensure that it is correct and has merged properly and that all the drill data collected in the field has been captured and entered into the database correctly.</p> <p>The responsible geologist makes the DBA aware of any errors and/or omissions to the database and the corrections (if required) are made in the database immediately.</p> <p>No adjustments or calibrations are made to any of the assay data recorded in the database.</p>
<b>Location of data points</b>	<p><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></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>All hole collars are surveyed in MGA94 – Zone 50 grid coordinates using accurate differential GPS. 2023 drilling is surveyed by a licenced surveyor and RLs of earlier drilling corrected to a drone DEM survey.</p> <p>All down hole surveys are collected using north seeking gyros survey tools.</p>
<b>Orientation of data in relation to geological structure</b>	<p><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></p> <p><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></p>	<p>The core drilling and RC drilling is generally completed orthogonal to the interpreted strike of the target horizon(s). Aircore drilling is completed on systematic MGA E-W or N-S traverses with holes nominally 50 m apart.</p>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Sample security is integral to Zenith's sampling procedures. All bagged samples are delivered directly from the field to the assay laboratory in

Criteria	JORC Code explanation	Commentary
		Perth or Kalgoorlie whereupon the laboratory checks the physically received samples against Zenith's sample submission/dispatch notes.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques and procedures are reviewed prior to the commencement of new work programmes to ensure adequate procedures are in place to maximize the sample collection and sample quality on new projects. No external audits have been completed.

## Part 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<p><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></p> <p><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></p>	<p>The DFN Tenement (M77/1292) is owned 100% by Zenith (excluding third party Nickel Sulphide rights and third-party rights to gold mineralisation down to 6 m from surface throughout the Tenement). The Tenement is in the process of transfer to Zenith.</p> <p>A 2% Net Smelter Return Royalty is payable on all gold or lithium mined below 6 m from surface and a 0.125% Net Profit Royalty is payable on any gold mined below 6 m from surface.</p> <p>Heritage surveys are completed as required prior to any ground disturbing activities in accordance with Zenith's responsibilities under the Aboriginal Heritage Act in Australia.</p> <p>Currently the Tenement is in good standing. There are no known impediments to obtaining licences to operate in the area.</p>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Exploration and mining by other parties has been reviewed and is used as a guide to Zenith's exploration activities.</p> <p>Previous parties completed shallow RAB, Aircore and RC drilling over parts of the project. The collar locations are uncertain and unverified and the data is not relied upon or used for the Mineral Resource.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The targeted mineralisation is typical of orogenic structurally controlled Archaean gold lode systems. In all instances the mineralisation is controlled by anastomosing shear zones/fault zones passing through competent rock units, brittle fracture and stockwork mineralisation is common within the basaltic host rock.
<b>Drill hole Information</b>	<i>A summary of all information material to the understanding of the exploration</i>	Exploration results are not reported.

Criteria	JORC Code explanation	Commentary
	<p><i>results including a tabulation of the following information for all Material drill holes:</i></p> <p><i>easting and northing of the drill hole collar</i></p> <p><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></p> <p><i>dip and azimuth of the hole</i></p> <p><i>down hole length and interception depth</i></p> <p><i>hole length.</i></p> <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>Previous Zenith ASX-ZNC announcements report all significant intercepts and include announcement dated:</p> <ul style="list-style-type: none"> <li>• 24 June 2021</li> <li>• 31 July 2021</li> <li>• 30 Sep 2021</li> <li>• 4 October 2021</li> <li>• 18 January 2022</li> <li>• 1 March 2022</li> <li>• 14 June 2022</li> <li>• 25 January 2023</li> <li>• 13 June 2023</li> </ul> <p>A summary of the drill holes used for the Mineral Resource is provided in Appendix A.</p>
<b>Data aggregation methods</b>	<p><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></p> <p><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></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Exploration results are not reported and were previously announced.</p> <p>Resource estimates are spatially weighted and use length weighted drill hole composites.</p>
<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>Exploration results are not reported</p> <p>Most drilling is orientated to towards the east to provide an intersection that is close to perpendicular to the primary mineralization structural dip.</p> <p>The western most deep areas are drilled at less optimal vertical or partially down dip orientations due to clearance and tenement boundary restriction. These are general diamond core intersections.</p>
<b>Diagrams</b>	<p><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</i></p>	<p>Plans and examples cross sections are provided.</p>

Criteria	JORC Code explanation	Commentary
	<i>appropriate sectional views.</i>	
<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>	Exploration results are not reported.
<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>	Geophysical data, mapping and historic drilling was used to target the exploration drilling and follow-up but is not otherwise used or relied on for the Mineral Resource.  There are no relevant metallurgical, geotechnical or mining studies.  Zenith collected 71 density determinations for drill core as described below.
<b>Further work</b>	<i>The nature and scale of planned further work ( e.g. 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.</i>	Existing interpretations indicate a significant strike and dip extent with further northern and down dip extension potential.  Section spacing is too wide in places and excluded from the Mineral Resource. Infill drill sections should result in additional Mineral Resource.

### Part 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.  Data validation procedures used.</i>	Zenith collates and maintains the database in Expedito / MX Deposit – an industry specific data management solution. This imports assay and logging information and stores the data.  An independent specialist database consultant administers the database for Zenith.  For the Mineral Resource evaluation additional cross validation and drilling integrity checks were undertaken with only a few minor corrections required.  At this early stage a database audit and verification of assay certificates has not been completed.
<b>Site visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.  If no site visits have been undertaken indicate why this is the case.</i>	Kevin Seymour and other Zenith personnel (Competent Persons) managed the exploration programme and visited site on numerous occasions between 2020 and June 2023.
<b>Geological interpretation</b>	<i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i>	Two or more moderately dipping mineralised structural zones are interpreted over 17 cross sections and 1600 m strike extent.

Criteria	JORC Code explanation	Commentary
	<p><i>Nature of the data used and of any assumptions made.</i></p> <p><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></p> <p><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></p> <p><i>The factors affecting continuity both of grade and geology.</i></p>	<p>Mineralisation is typically depleted in the oxide zone with hypogene mineralisation becoming evident towards the base the saprolite and dipping at ~30° towards the WSW.</p> <p>An overprinting supergene zone of mineralisation is also evident at the base of the saprolite and strongest at or below the original hypogene structure.</p> <p>Some enrichment in the laterite is also evident near where the original mineralisation structures are projected to outcrop. Laterite is not modelled or reported since it is owned by a 3<sup>rd</sup> party.</p>
<i>Dimensions</i>	<p><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></p>	<p>Hypogene and supergene mineralisation has a strike extent of 1600 m and a plan projected width of generally 200 m and up to 250 m. This consists of horizontal supergene and two dominant 30° west dipping zones generally 4 to 12 m thick.</p> <p>Mineralisation rarely extends above 18 m below surface and down to 150 m below surface .</p>
<i>Estimation and modelling techniques</i>	<p><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p> <p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p> <p><i>The assumptions made regarding recovery of by-products.</i></p> <p><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></p> <p><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></p> <p><i>Any assumptions behind modelling of selective mining units.</i></p> <p><i>Any assumptions about correlation between variables.</i></p>	<p>Hypogene and supergene mineralisation domains are interpreted at a 0.3 g/t Au threshold and reported for block above a 0.5 g/t Au cut-off grade.</p> <p>Laterite was not estimated as it is not included in the tenure.</p> <p>Resource domains exclude a larger E-W Proterozoic dyke.</p> <p>Mineral resource blocks are 5 by 10 by 2 m blocks and sub-blocked down to 5 by 5 by 1 m on domain margins. Estimation uses 2 m composites cut to 10 g/t Au and inverse distance squared method with an assumed flattening anisotropy with a NW plunge (ratios 1 by 0.6 by 0.2).</p> <p>Parameters include up to 3 composites per drill holes and 15 composites in total, designed to limit smoothing issues.</p> <p>Other elements are not yet assessed or estimated.</p> <p>Model validation on visual inspection.</p> <p>There is no previous know mining.</p>



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	<p><i>Description of how the geological interpretation was used to control the resource estimates.</i></p> <p><i>Discussion of basis for using or not using grade cutting or capping.</i></p> <p><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></p>	
Moisture	<p><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></p>	<p>The Mineral Resource is reported on a dry basis. There is no available in-situ moisture content data.</p>
Cut-off parameters	<p><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></p>	<p>There are no available mining studies.</p> <p>The Mineral Resource is reported at a cut-off grade of 0.5 g/t Au considered reasonable for a standalone open pit mining option.</p> <p>An alternative higher grade 1.5 g/t Au cut-off is included as an indication of the material that may suit toll treatment at existing mills in the region.</p>
Mining factors or assumptions	<p><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	<p>Mining is assumed to be best suited to open pit methods. The shallow dip and grade profile would be unsuitable for underground mining.</p> <p>The resource domain has a hard estimation boundary and additional mining dilution and ore loss factors will be required for any mining assessment.</p>
Metallurgical factors or assumptions	<p><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></p>	<p>There is no metallurgical test work complete to date.</p> <p>The occurrence of pyrrhotite in drill core suggests that pressure oxidation or similar may be needed to obtain high recovery.</p> <p>Zenith undertook some metallurgical test work on similar Dulcie mineralisation from the same mineralisation trend but ~3 km to the south of Dulcie Far North. Recoveries were &gt;90% for laterite, saprolite and fresh mineralisation, see ASX-ZNC announcement dated 31 March 2021.</p>

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<i>Environmental factors or assumptions</i>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	<p>Zenith are not aware of any environmental or heritage impediments to eventual mining.</p> <p>Heritage and environmental surveys for drilling areas to date (including recently in May 2023) have not revealed any issues.</p> <p>Although there is no known previous mining on M77/1292, there is a historical heap leach pad mined by Thames Mining NL (circa 1990) within the lease. It is understood lateritic ore was sourced from elsewhere along the Dulcie Gold Trend.</p>
<i>Bulk density</i>	<p><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></p> <p><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<p>Zenith completed 71 whole and half core bulk density determinations in 2023, using a water immersion Archimedes method. These are all from deeper areas of fresh rock material. Core samples ranged to 0.3 to 1.5 kg and resulted in bulk density measurements between 2.6 and 3.8 t/m<sup>3</sup> and averaging 3.0 t/m<sup>3</sup>.</p> <p>15 samples were within the resource domains and averaged 3.1 t/m<sup>3</sup>. Though variable there is an indication that higher gold grade may be associated with higher bulk density indicating a range of 3.0 to 3.2 t/m<sup>3</sup></p> <p>At this early stage a conservative flat average density of 3.0 t/m<sup>3</sup> is assumed for fresh rock.</p> <p>With no data available a conservative 1.7 t/m<sup>3</sup> for oxide and saprolite is assumed, based on previous experience.</p>
<i>Classification</i>	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <p><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<p>Domain interpretation include sections up to 400 m apart. However most of the central area is drilled to on ~40 m cross sections.</p> <p>Widely spaced sections are not reported with extrapolation limited to 25 m. The unreported areas and gaps require additional drilling to confirm the structure continuity and grade.</p> <p>Classification of Inferred is based on the domain interpretation blocks within 25 m of a drill hole or if there are three drill holes within a 90 m search range. This restricts classification to only 60% of the domain interpretations that includes some wide spaced sections with gaps not classified.</p>

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<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The Mineral Resource is not reviewed or audited.
<i>Discussion of relative accuracy/ confidence</i>	<p><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<p>Zenith drilling indicates a consistent shallow dipping mineralisation with a potential NW plunge and capping supergene zone.</p> <p>Previous drilling is shallower and available on three sections but not consistent with Zenith drilling with indications of collar location issues. The Early drilling has been discarded due to data quality issues that remain unresolved. Two of the three sections are also essential redrilled, further reducing the benefit of including the previous sampling.</p> <p>The current work presents the first interpretation, though this is similar to the structure and occurrence of mineralisation previously drilled by Zenith to the south at Dulcie.</p> <p>Drilling remains widespread but indicates several continuous shallow dipping structures over a &gt;1 km strike length. The Mineral Resource is limited and excludes part of the widest gaps &gt;~40 m spacing. This removes any excessive inference with around 40% of the interpreted domain extent not reported at this stage.</p>