

ASX RELEASE: 9th August 2021

# Jadar Secures Largest Producing Tin Projects in the Northern Territory with Acquisition of Mt Wells & Maranboy Projects Portfolio

# Highlights:

- Jadar has signed a Term Sheet for the 100% acquisition of a portfolio of projects in the Northern Territory collectively referred to as the Mt Wells and Maranboy Projects Portfolio, these include namely:
  - Mt Wells Tin and Copper
  - Maranboy Tin
  - o Emerald Hill Tin
  - Mt Diamond Copper, Gold and Silver
  - Copperfield Copper, Gold and Silver
  - McKinlay Gold

- Speargrass Gold and Tin
- Rocks Ridge Project Gold
- Rosemary Tin
- Millers Iron-Manganese
- Millers Gold Gold
- Historically significant production and largest producing tin project in the Northern Territory:
  - Mt Wells historic production of 99,000t of ore for 1,000t of tin, 1.01% Sn recovered grade.
     Minor historic production of copper resources at Mt Wells with only 7t of handpicked ore from hanging wall grading 37% copper.¹
  - Maranboy historic production of 49,314 tons of ore for 800.57t of tin, 1.66% Sn recovered grade.<sup>2</sup>
  - No significant production since 1929 at Mt Wells and 1952 at Maranboy.
- Extensive drilling has been completed at the Mt Wells tin-copper deposit and Maranboy tin deposits in preparation for upgrading non-JORC compliant resources to maiden JORC compliant resources.
- Surface geochemical surveys completed which has identified target extensions ready for drilling.
- Existing infrastructure on site including processing plant, offices, accommodation and messing, large dams for water supply and tailings storage, communications system and weighbridge, access and haul roads, underground development and access, water bores and tanks.
- Development scoping study and preliminary desktop plant design study completed.
- Coarse-grained free-milling cassiterite tin ore; proven, simple processing methods.
- Significant tenement holding of 32 granted Mining Leases, 1 mining lease application, 2 granted exploration licenses and 1 exploration license application. Totaling 231.18 km² of exploration leases and 301.1 ha of mining leases.
- Limited modern exploration conducted to realise the full potential of the Projects.

Jadar Resources Limited (ASX:JDR) ("Jadar", the "Company") is pleased to announce that it has signed a Term Sheet with private mining company Outback Metals Pty Ltd ("Outback") for the purchase of a portfolio of Northern Territory projects collectively referred to as the Mt Wells and Maranboy Projects which contain several Tin, Copper, Silver, Gold, Tungsten and Iron-Manganese prospects. Total consideration for acquisition of the Mt Wells and Maranboy Projects is A\$6.5m cash (payable over 12 months) and 20 million options (at an issue price of \$nil). It is anticipated that the purchase price is partly funded through a \$3m Convertible Note and the use of the Mint Capital Advisors finance facility (refer announced 17 February 2021).

<sup>&</sup>lt;sup>2</sup> Maranboy Historic Production - <a href="https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/236">https://ecat.ga.gov.au/geonetwork/srv/eng/catalog.search#/metadata/236</a>



The Mt Wells and Maranboy group of projects are collectively comprised of 32 granted Mining leases, 1 mining lease application, 2 granted exploration licenses and 1 exploration license application. The acquisition includes 107 acres of freehold land underlying the processing plant, buildings, and other infrastructure.

Mt Wells has existing infrastructure already in place including:

- 20-50tph gravity concentration plant Mill building comprising crushers, rod mill, trommel, jigs, spirals and shaking tables
- Offices and three large stone buildings
- Accommodation and messing for 20 people
- Large dams for water supply and tailings storage
- Communications system and weighbridge
- Access and haul roads
- Underground workings including an adit and railway
- Water bores and water tanks
- Ore bins and conveyors

Jadar intends to quicky evaluate and convert the current known non-JORC compliant resources at Mt Wells into JORC-compliant resources to enable the Mt Wells tin-copper project to be brought back into production to capitalise on current commodity prices and further expand the Project's development and exploration.

Additional Mineral Resource Estimates (MRE) were completed by previous explorers at a number of deposits within the Mt Wells and Maranboy Projects including Mt Wells, Rosemary, Emerald Hill, Mt Diamond, Copperfield and Maranboy. These deposits will also be rapidly assessed for potential near-term mining opportunities.

Following execution of the Term Sheet Jadar will have 30 days to complete due diligence, with the option to extend for an additional 30 days. Completion of the transaction is subject to Jadar having completed and being satisfied with the results of due diligence.



Figure 1 – Mt Wells processing plant

#### Jadar Resources' Executive Director Adrian Paul commented:

The acquisition of the Mt Wells and Maranboy Projects Portfolio is another significant achievement for Jadar as we continue to build a clear strategy for our Australian group of assets and that is a focus on technology and precious metals. Having progressed Khartoum to final stages of acquisition completion we have now secured a historically significant group of previously producing assets. Tin prices have had an incredible run over the last 12 months with demand for electronic goods as a result of the global COVID-19 pandemic pushing prices higher. This shortage of tin in the global market is now clearly evident and we believe we have started to collate the right projects to help fill that gap.

## Mt Wells and Maranboy Projects Location

Mt Wells is located approximately 200km southeast of Darwin and 37km northeast of Pine Creek and is accessible by all-weather maintained roads from the Stuart Highway. Telephone services are installed at the site and a gas pipeline, powerline and train line are located approximately within 5km from the mine. There are multiple satellite deposits surrounding Mt Wells and collectively are referred to as the Mt Wells project.

Maranboy is located approximately 380km southeast of Darwin and is accessed via the Central Arnhem Road which intersects with the Stuart Highway.

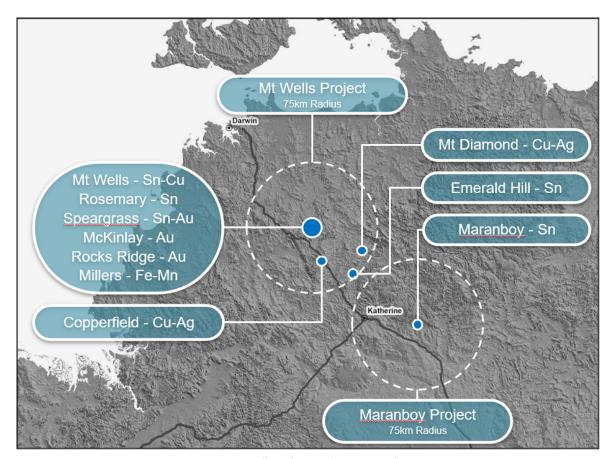


Figure 2 – Mt Wells and Maranboy Projects locations

# Mt Wells Tin Project

Mount Wells is a world-class tin project with a well-established non-JORC resource base and existing infrastructure. The geological and metallurgical characteristics of the mineralisation are receptive for the expansion of the resources and for a high rate of conversion of resource to mineable reserves.

The tenure at Mount Wells comprises granted Mining Leases and Exploration Licenses covering 163 square kilometres and additionally includes 107 acres of freehold land underlying the process plant, buildings and other infrastructure.

The majority of the Mt Wells tenements are covered by a pastoral station with station tracks providing access. The alignment of the Stuart Highway in the west provides access to the northern and eastern portion of the tenements.

Mount Wells has been a historically-significant tin producer but there has been no meaningful mining since 1929. (Companies associated with Outback Metals have held the tenements since 1989).

The Mt Wells tenements are located within the central portion of the Pine Creek Geosyncline, a Palaeo-Proterozoic structure containing fluvial and basal sediments. Mt Wells is dominated by structurally-controlled deposition of siltstone, sandy siltstones, phyllites, slate, greywacke and pebble conglomerates of the Burrell



Creek Formation (Finniss River Group). Rare carbonates and fine-grained felsic igneous rocks are also present. Structure is dominated by open north plunging folds with younger north-east trending cross folds and faults. The surface area around Mt Wells is predominately comprised of undulating flat Quaternary sands with minor clay pans in the northern portion of the Project.

Mount Wells itself is a prominent hill rising from the surrounding plains to form a peak. The known tin, copper and wolfram mineralisation occurs in linear lodes which trend north-south across the eastern flank of the hill. Adits have been driven into the hill along the line of-lode at several elevations and ore grade mineralisation is exposed in a number of locations within the workings and also at surface.

Six en-echelon lodes containing various levels of tin and copper mineralisation have been delineated at Mt Wells. The lodes are essentially tension-fill quartz veins, striking 015- 025°, dipping 75-85° east and have a strike length of up to 1km. The width of the individual lodes averages 2 metres (ranging from 0.5m - 5m). Contacts with the host rock are sharp and there is no evidence of displacement or movement. Lode occurring near the contact is brecciated.

The Mount Wells cassiterite mineralisation is relatively coarse and has traditionally been processed through conventional gravity circuits. Standard crushing, jigging and tabling achieves moderate to high recoveries and significant improvements could be anticipated from the application of modern design and process.

Available exploration and resource data consists of historic mining and production records, and the results of geological mapping, rock chip sampling and diamond and reverse circulation drilling by a number of previous tenement holders. The tenements have been 'owned by the same group' since 1989 and substantial exploration work was completed before and after this group's acquisition of the Projects.

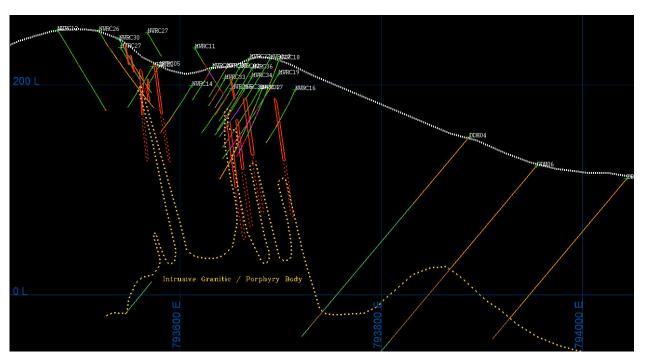


Figure 3 – Cross section of Mt Wells showing conceptual (deeper) porphyry target zones and significant undrilled areas



Approximately 80 drill holes have been completed at Mt Wells in addition to widespread surface sampling and mapping. The data has been compiled into a modern digital database. Geophysical data and topographic survey data are also available.

A number of Mineral Resource Estimates have been completed at various times during the exploration history of Mount Wells (RC Mookhey, 1971, and C Robinson, 1988) although no JORC-compliant resource has been completed for the project or satellite deposits.

Tin was found in the Mt Wells area in 1880, and in 1884 infrastructure construction commenced, including the linking of the 2 main ore bodies by a tunnel, an ore tramway, 2 dams and a 10 head stamp battery which was subsequently upgraded to a 20 head stamp battery by 1895. The area was worked mostly by Chinese from 1901 to 1929 when the mine was shut down due to a shortage of Labour. The Mine was the largest tin producer in the Northern Territory and largest underground mine in the Pine Creek district. Recorded production was 1000 tons of tin concentrates from 99,000 tons of ore at a recovered grade of 1.01% Sn.

Open cut mining, shaft sinking, driving and stoping were carried out on at least six distinct lodes, although mining concentrated on three ore shoots, the Main Lode, East Lode and West Lode. Approximately 80% of past production was from the Main Lode, which was mined from four levels, the deepest being the Number 3 Adit Level, 115m below outcrop. This level provides access to four of the lode systems.

In the 1960's the Commonwealth Govt. constructed a battery and gravity treatment plant at the Mt Wells site to promote mining in the Pine Creek area. The battery is now closed. The asset, including processing equipment, dams, accommodation and storage buildings now form part of the Mt Wells granted mining tenements (MLN 546, 658, 672, 679 and MCN 723 and 2631) which are included with the Project.

Jingellic Minerals became interested in the Mt Wells site in the 1970s, opening the east lode underground workings and completing 100m of development. Further drilling was carried out by Jingellic (6 diamond holes) and the Northern Territory Mines Dept (2 diamond holes), between 1971 and 1977. Approximately 100t of ore was removed in 1978 by Millwood and Murray. Alluvial mining was carried out between 1978 and 1980 by Territory Mining. They excavated approximately 300,000m<sup>3</sup> of regolith from the watercourse between bottom dam and the McKinley River.

The battery and associated infrastructure were sold by the Northern Territory Government to Jingellic in 1981, with the company subsequently upgrading the battery and replaced the gravity stamp with a rod mill. The mill processed ore until 1983 when the mill was closed and was briefly reopened to process ore between 1985 and 1986.

Territory Resources then acquired the tenements and commenced a prefeasibility report. A drilling program was developed to assess mining the West Lode as an open cut prospect. Territory Resources further upgraded the mill with the installation of a plate feeder on the primary ore bin, a new primary crusher, and reconditioning of the secondary cone crusher, scrubber, trommel and primary and secondary jigs. During 1989, Territory Resources carried out substantial deep drilling, analysis, and sampling and extended the drive and tramway to the east lode. The records for 20 of the RC drill holes, including assay results, are available. Cross sections of the drill holes and maps of the site are also available.

In 1994 Territory resources sold the Mt Wells site to Softwood Plantations (a subsidiary of Outback Metals). Since acquisition, Outback Metals has carried out several drilling programs (34 RC holes) and surface mapping



and sampling within the lodes and along strike extensions. This has established that potential extensions to the known ore bodies exist, including the delineation of new outcropping mineralisation at surface.

Geophysical data has also been interpreted and a substantial new exploration target defined underneath the previous drilling. This target was identified by geophysics and confirmed by deep drilling and also by outcropping mineralisation several hundred metres east of Mount Wells.

Further, tin is known to outcrop approximately 3 km north of Mount Wells (within EL 22301). Another exploration target has been generated near Jimmys Nob (which is located within EL 28549 to the south), and at the Rosemary tin mine to the north.

Based on the extent of historic drilling and previous mineral resource estimates Jadar has estimated an Exploration Target of between 700,000 tonnes to 900,000 tonnes at between 0.92% Sn to 1.1% Sn. The potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Important Note: An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource and uncertainty whether future exploration will result in the estimation of a Mineral Resource.

Further infill RC and diamond core drilling and sample analysis including QA/QC, metallurgical testwork, specific gravity determinations and geological modelling will be required to fulfill the requirements of JORC Code (2012) reporting prior to undertaking a revised Mineral Resource Estimate. This work will be undertaken within 12 months of acquisition.

Potential exists to expand the resources at Mount Wells through (i) Extensions along strike where surface geochemistry surveys carried out using a Niton XRF analyser show continuing tin and copper results extend a substantial distance beyond the known lodes; (ii) The discovery of new lodes between the existing defined lodes. Surface exploration has shown mineralisation exists between the existing lodes and in areas where no drilling has been carried out, and (iii) Below the known lodes at Mt Wells.

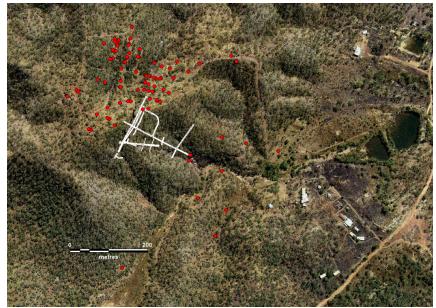


Figure 4 – Mt Wells Drill hole locations (red dots), known underground workings (white lines) and processing plant (bottom right)

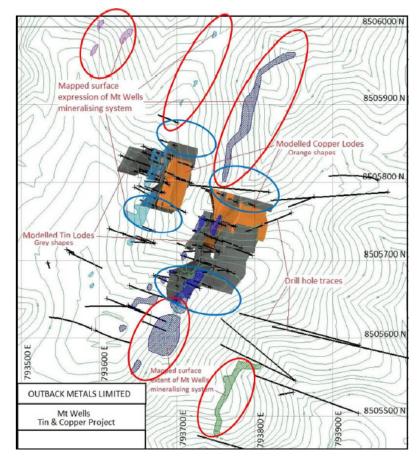


Figure 5 – Mt Wells Known mineralized zones and identified extensions



# Mt Wells - Millers Fe-Mn Deposit

At Millers Fe-Mn Prospect, goethite is the dominant ore mineral; minor constituents include pyrolusite and very fine to earthy hematite. Iron mineralisation occurs mainly in the lower Wildman Siltstone as haematite or haematite-goethite-manganese mineralisation. Haematite deposits are believed to have formed by low temperature hydrothermal replacement of brecciated Wildman Siltstone. Breccia zones, and hence usually haematite mineralisation, are frequently stratiform, with their distribution controlled by D3 folds and associated axial planar faults. Haematite-goethite-manganese deposits possibly have a similar hydrothermal origin but may have undergone extensive weathering related hydration or may have had a sulphide rich parent rock.

The prospect has received a significant amount of previous exploration to delineate a resource, including RAB and RC drilling and associated sample analysis, lithological and structural mapping, ground geophysics and surface geochemistry. All work is documented in Annual Technical Tenement Reports for EL23824.

Although the historical estimate for Millers has previously been reported in accordance with the JORC Code reporting standards, a competent person for Jadar has not undertaken sufficient work to verify the historical estimates as mineral resources in accordance with the JORC Code.

# Mt Wells Project Copper-Silver-Gold and other Tin

The Mt Wells Project tenements also contain several other prospects at which various levels of exploration work has been conducted including the delineation of non-JORC Mineral Resource Estimates at some locations. The prospects include Mount Diamond (copper-silver), Copperfield Creek (copper-silver), Emerald Hill (Sn), Miller's Gold (Au), Rocks Ridge (Au) and Speargrass (Au and Sn).

The Mt. Diamond Project includes the Mt Diamond, Hamiltons and Waldens historical mining sites. Gold, copper, bismuth and arsenic have all historically been mined within this project area. Copper mineralisation was discovered at Mt Diamond during 1898 with mining commencing during 1900. Operations continued until 1920. During this period records indicate 681 tons of copper ore was extracted. The Waldens Copper Mine was intermittently mined between 1904 and 1919 with reported production amounting to 1,220 tons of ore at 8 to 10% copper (628 tons of 25% copper concentrate). Workings comprise eight shafts dug to a maximum depth of only 30 metres. These extend over a distance of 518 metres. Between 1907 and 1908 twenty tons of copper ore (12 tons of copper concentrate) were extracted from several shafts and pits at the Hamiltons Copper Mine. United Uranium NL resumed mining for a period of four years, ceasing operations in August 1973. During this four-year period 10.6 kilograms of gold was extracted. Historic production recovered grades were 4.74% copper and 2.34 ounces silver per ton (80.22 grams per tonne) from 50,979 tons of treated ore. Copper-silver mineralisation at Mt Diamond occurs within a concordant quartz vein having an average width of one metre and strike length of 2.6 kilometres of which at least 0.6 kilometres is mineralised. Within the mined area this vein strikes northwest and dips at 70 degrees to the southwest. A supergene enrichment zone occurs 18 metres in the subsurface where copper mineralisation consists of chalcocite and covellite. Primary mineralisation commences at a depth of 30 metres and is dominated by chalcopyrite. The Hamiltons Prospect comprises a mineralised lode 0.5 to 1.0 metre wide of brecciated veined silicified siltstone. Quartz contains gossanous boxworks after sulphide and more rarely malachite and scorodite. The main lode strikes at 300 degrees and dips steeply. It is subparallel to the nearby Mt Diamond Lode. During 1967, United Uranium NL completed diamond drilling at the Mt Diamond and Waldans Prospects. No JORC Code compliant resource calculations have been undertaken over the mineralised areas.



The **Copperfield Project** is located two kilometres from Pine Creek and comprises one granted mining lease, MLN21, having a gross area of 8.09 hectares. Between 1875 and 1917 the Copperfield Mine produced 3,450 tonnes of ore averaging 25% copper. Existing workings comprise at least 15 shafts dug to a maximum depth of 40 metres and an opencut mine. Commenced during 1915 a second phase of mining centred on the southern extension of the lode. Several hundred tonnes of ore averaging 12 to 26% copper are believed to have been won from a 50 metre deep shaft in this area. The main lode in this area is tabular, varying in width from 0.9 to 1.5 metres, and has a strike length of at least 220 metres. Pyrite and chalcopyrite with lesser chalcocite are the main minerals in the primary mineralised zone, which occurs as coarse-grained breccia fill. Within the supergene zone malachite and azurite are the dominant near surface minerals.

The **Speargrass Prospect** is located only several hundred metres east from the Mount Wells tin-coppertungsten deposit. Limited previous exploration (carried out in the 1980s when gold prices were very low) has shown persistent gold over an area of approximately 1.8 kilometres long x 1.6 kilometres wide. Mineralisation at the Speargrass Prospect is located within an anticlinal fold in a dominant north-south trending shear zone. Numerous gold and base metal mines and mineral occurrences are located within this shear zone and include the Spring Hill and Pine Creek gold mines, the Mount Wells polymetallic deposit and other major gold & base metal mines. The gold and base metal mineralisation is contained both within ferruginous gossans within the sediments and quartz veins in breccias. Limited drilling (7 drill holes for 354 metres).

The **Rocks Ridge Prospect** is located approximately 10 km east from the Mount Wells deposit. Rocks Ridge is contained within in a series of anticlinal structures with numerous historic gold and base metal mines and mineral occurrences located within this area. The gold mineralisation is contained both within ferruginous gossans within the sediments and in the quartz veins. Limited previous exploration has shown outcropping gold. The mineralised zone is exposed over several hundred metres.

The **Mt Emerald Tin Prospect** is located 75km southeast from Mt Wells and has potential to provide satellite ore feed. Workings comprise open cut mines, shafts and alluvial workings that were worked between 1908 and 1913. The majority of tin production which totaled 43t Sn concentrate came from alluvial deposits. Primary mineralisation is hosted group of small lodes, most of which are quartz reefs with cassiterite, iron oxides, and secondary lead minerals at the surface. The deepest workings are reported to be about 70 feet deep, possibly sunk on a pipe with dimensions of 22m x 2m visible at surface. The mineralisation originates from iron rich quartz reefs that have intruded Burrell Creek Formation metasediments. Sulfides are present in the primary ore shoots. Little work has been done below the water-table, and appreciable amounts of sulphides could be expected in the primary ore.

Further investigation of previously explored prospects in the immediate Mt Wells area is warranted to determine the potential for satellite deposits to the Mt Wells resource.



# **Maranboy Project**

The Maranboy Project is a significantly under-explored high quality tin project considered to have potential to contain both alluvial and hard rock deposits of tin.

Tenure comprises 14 Mining Leases and one Exploration Licence, located approximately 60 kilometres southeast of the township of Katherine and 160km southeast from Mt Wells.

The Maranboy Leases are located within the Maranboy Inlier on the northeast margin of the Daly River Basin. The Daly River Basin extends over an area of 240 square kilometers, stretching to the southeast. The Maranboy Inlier is only 30km from the Pine Creek Geosyncline and lies approximately south of this feature. Between the Pine Creek Geosyncline and the Maranboy Inlier, Mesozoic tablelands of terrestrial sediments and arenaceous strata cover the area. The area was first mapped by Walpole in 1958 and the stratigraphy was revised by Needham et al in 1984.

The regional stratigraphy in the Maranboy district is comprised of the rocks of the Pine Creek Geosyncline, which are not exposed in the tenement area, with overlying rocks of the El Sherana Group. The El Sherana group is a sequence of flyascoid and fluvial sediments with volcanics and is represented in the lease areas by the Tollis formation.

The platforms in the surrounding areas are made up of the Edith River Group, the Katherine River Group and the Mount Rigg Group. The Daly River Basin exhibits little folding and faulting and the strata dips gently towards the middle of the basin. The Maranboy Inlier is an area of exposed Proterozoic and Palaeozoic rocks. These areas are exposed through erosion of the surrounding Mesozoic table lands. Faults striking to the northeast transect the Maranboy Region and underlie the cretaceous cover. Other regional structures strike to the southeast and it is these liniments that tend to be mineralized.

The Maranboy Inlier is essentially an anticline of folded lower Proterozoic sediments of the Burrell Creek Formation. This anticline plunges to the southeast at 30°. Mineralisation is associated with cross cutting faults that strike mostly east northeast with the Main and Stannum King lodes occurring on the northerly side of this anticline.

Granitic intrusion occurred toward the end of orogenic disturbance that produced the Pine Creek Orogen. Tin mineralisation is believed to be associated with the late stages of the granite activity. Granitic rocks in the area include adamellite, quartz porphyry and adamellite porphyry. These rocks have been extensively altered mainly to quartz-mica greisen, tourmalite and topazite.

The high grade tin lodes, which have been established through substantial previous exploration (including drilling) occurs as Cassiterite (SnO2), within quartz-tourmaline fissure lodes which trend east-southeast or south-southeast of which the most important are the Stannum King and Main Lode.

The Main Lode and Stannum King Lode represents a complex set of hydrothermal veins infilling fractures and shear zones formed through faulting of Tollis Formation metasediments. The lodes are narrow and tabular to lenticular comprising mainly quartz and tourmaline with cassiterite occurring as finely disseminated crystals commonly as clusters of small stringers in joints and brecciated zones. Cassiterite also occurs in greisen in the northern part of the field. The Main Lode system (MLNs 664–668) trends northwest and is known to be at least 3.9 km long. It ranges from 2 metres to 7 metres wide and was the most important producer, particularly the 1.2km long central zone. The Stannum King Lode system (MLNs 661–663, 669–671), located 1



kilometre south of the Main Lode and parallel to it, was the next largest producer. Both lodes dip steeply south with payable ore-shoots up to 122 metres in length but separated by barren sections. The workings of both lode systems comprise numerous open cuts and shafts (maximum depth 42.6 metres but most do not exceed 36.5 metres vertical depth).

Discovered in 1901, mining from the Maranboy Tin Field commenced in 1913. The local battery, situated in the centre of the field, commenced crushing in 1916 and closed in 1952. No mining activities have been reported from the area since that time. Between 1915 and 1952 it is estimated that 49,314 tons of ore were mined from the Maranboy Tin Field for an estimated 800.57 tons of tin providing an average mined grade of 1.66% (Walpole, 1958).

Minerals Resources Australia Pty. Ltd. acquired an area which covered the Maranboy Tin Field in 1963. They also negotiated options over mineral leases which covered the most productive zones of the main vein. The property was assessed on their behalf by Hare and Associates in 1963. Previously the Bureau of Mineral Resources (BMR) between 1958-59 drilled 11 holes over the area with promising results. This drilling established that the main vein below the Anaconda lode extends at depth. Using the information provided through BMR, Minerals Resources Australia determined that mining of the Main Vein Lode would be economically viable and proposed an exploration program in 1964 that included two diamond drill holes to test for lodes at depth. The location of the two drill holes is unknown. BMR drilled 4 more holes at Ray lease in 1971.

United Uranium assessed the property in 1969 for secondary accumulations downstream from the Stannum King and Main Lodes. The results concluded that the potential was poor, and no further work was pursued.

Jingellic Minerals NL assessed the Maranboy Tin Field in 1973 and recommended diamond and percussion drilling with additional limited underground development.

Carpentaria Exploration Company (CEC) negotiated with the estate of the late H. Brennan, with an option to purchase 16 leases at Maranboy. In 1980, 5 diamond holes were completed by CEC. Initially CEC incorporated the earlier drilling by BMR, including 8 holes on the Anaconda lease and 3 holes on the Osman lease. CEC also noted that 2 diamond holes were drilled by Metals Exploration (1964-65), one of which did not intersect ore. Further percussion drilling by Carpentaria was designed to test for near-surface extensions of outcropping lode and for deeper extensions of the lode below the depth of previous mining. Both short, angled holes and deeper, vertical percussion holes were drilled. All holes except MAR9 intersected quartz-tourmaline lode material.

The drilling program was followed up with surveying and geophysics over the mineral leases. Ground magnetic and radiometric surveys were carried out to determine if the ore bodies could be delineated using these techniques. Correlation between mineralisation and the magnetic survey method was undetermined due to noise attributed to cultural features (iron remnants in old mines, etc). The greisenous zones could be depicted utilising the radiometric survey method. This was useful as the mineralisation was often associated with the greisenous zones, however it was determined that no consistent correlation between geophysics and mineralisation could be found.

Ongoing exploration by Carpentaria tested the Stannum King, Main Lode and Ray lease. Drilling defined the extent of mineralisation to the NW of the Main Lode and identified ore grade shoots at the Stannum King Mine and Main Lode on Ray Lease. In November 1982, Carpentaria determined to sell its interests in Maranboy and suspend any exploration because of a large gold discovery at Tom's Gully.



The Mineral leases were purchased by Territory Resources, then in turn by Denehurst Limited. No information could be located in relation to work carried out by Territory Resources.

During 1988 to 1990, surface exploration by Denehurst was carried out on MLN 671 (covering the Stannum King Lode) and MLN 680 in conjunction with EL's 2087 and 2148, which surrounded the Mining Leases. Rock chip sampling was used to define drilling targets located within EL 2087 and MLN 679. Drilling established that the lodes continued at depth although the grades were low. No drilling records from previous title holders could be located for Mineral Leases 671 and MLN680.

Denehurst planned to explore the Stannum King Lode within MLN 671 using various methods such as ground surveying, surface mapping/sampling, drilling, pitting, and geophysics, as part of a regional exploration programme to evaluate the tin resources. The remainder of the exploration program was carried out on exploration licences surrounding the Mineral Leases.

In 1997 Softwood Plantations enquired into the purchase of these Mineral Leases, and surrounding exploration licences.

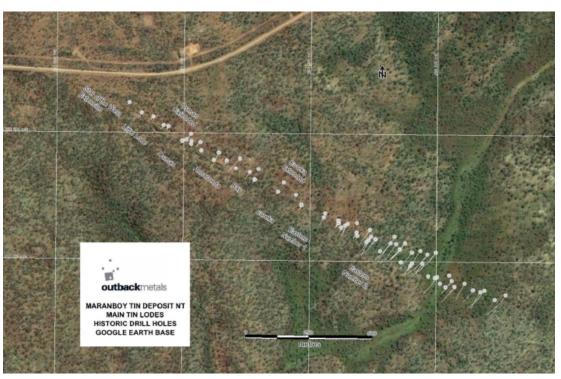


Figure 6 - Maranboy Project Drilling

The Maranboy Tin Field is located within an area that is well-known for high grade tin deposits. Numerous echelon tin-bearing lodes at surface have been recorded away from and between the Main and Stannum King Lodes. These lodes have not received significant investigation. The strike extent of delineated structures associated with known mineralisation have also not been tested.



# **Acquisition Terms**

Under the Term Sheet Jadar will have 30 days to complete due diligence on the Mt Wells and Maranboy Projects with an optional 30-day extension available at Jadar's discretion. Upon completion and acceptance of due diligence Jadar will enter into a Purchase Agreement (PA) with Outback.

Total consideration for acquisition of the Mt Wells and Maranboy Projects is A\$6.5m in cash and 20 million options (at an issue price of \$nil) in Jadar on the following terms:

- 10 million unlisted options at an exercise price of \$0.02 each and an expiry date 5 years from the date of issue; and
- 10 million unlisted options with an exercise price of \$0.10 each and an expiry date 5 years from the date of issue.

The second due diligence extension, if exercised, will add an additional A\$100,000 to the total consideration.

#### Further terms are as follows:

- The term sheet contemplates the acquisition of Mt Wells and Maranboy Projects including licences, freehold land, any Intellectual Property including mineralogy and geology knowledge, samples, cores and records including, but not limited to, mining information, maps, drilling reports, surveys, studies.
- Conditions Precedent:
  - Jadar shall have completed and be satisfied (in its sole discretion) with the results of its due diligence investigations;
  - Jadar shall have obtained from the ASX confirmation that ASX Listing Rule 11.1.3 does not apply to the transactions as contemplated by this term sheet, and if ASX determine that ASX Listing Rule 11.1.2 applies to the transactions, the shareholders of JDR approving the transactions for the purposes of ASX Listing Rule 11.1.2. ASX has confirmed that neither Listing Rule 11.1.3 or Listing Rule 11.1.2 apply to this transaction; and
  - An executed binding Purchase Agreement.
- Payments over option period:
  - On signing the Term Sheet which includes a 30-day due diligence period \$100,000;
  - On extension of due diligence period for an additional 30 days, if required \$100,000
  - On completion of due diligence investigations \$100,000
- Purchase Price in consideration of the acquisition:
  - On completion of the acquisition (Completion) \$2.3m, plus 20M options
  - o 3 months after execution of the Purchase Agreement \$1.0m
  - o 6 months after execution of the Purchase Agreement \$1.0m
  - o 9 months after execution of the Purchase Agreement \$1.0m
  - 12 months after execution of the Purchase Agreement \$1.0m
- The above payments do not incur interest, except if not paid when due. If a payment is not paid when due, Interest compounds daily from the date of Completion at the rate of 12% per annum on the whole unpaid balance. Interest will be due to be paid monthly.



- Outback to have a first mortgage over the Mt Wells and Maranboy Projects to secure the payment of
  the Purchase Price (and interest and costs, if any). The cost of the preparation and lodgment of the
  required documents will be borne by Jadar. This mortgage may be discharged at any time by Jadar,
  providing full payment has been made for the Project.
- If payment for the Project has not been completely finalised within 15 months after the date of
  execution of the PA, Outback can exercise its rights to resell the Mt Wells and Maranboy Projects to
  recover outstanding amounts.

It is anticipated that the purchase price is partly funded through a \$3m Convertible Note and potentially through the use of the Mint Capital Advisors finance facility (refer announced 17 February 2021).

# La Fortuna Project Update

Jadar reported on 10 December 2020 the acquisition of an option to acquire the La Fortuna Project, a gold-copper project in Guerrero, Mexico. The Company has been unable to complete its due diligence on this project due to access issues, and has decided not to exercise the option to acquire this project.

## **Tenement Portfolio Summary**

	OUTBACK METALS LIMITED							
	Tenement Maintenance Schedule - JULY 2021							
Project	Tenement Number	Registered Holder	Area (blks)	Area sq km	Area hectares	Application/ Grant Date	Expiry Date	Renewal Date
Copperfield	MLN21	Outback Metals Pty Limited			8.09	19/03/1953	31/12/2024	31/12/2024
Emerald Hill	MLN29913 was MCN1366- 1369	Outback Metals Pty Limited			32	22/04/2013	21/04/2025	21/04/2025
Maranboy - new	ELA 31766	Outback Metals Pty Limited	61	195.71		1/12/2017		27/07/2018
Maranboy	MLN 32240 was MLN1137	Outback Metals Pty Limited			4.04	1/01/2025	31/12/2023	27/08/2029
Maranboy	MLN658	Outback Metals Pty Limited			4.05	28/03/1949	31/12/2021	31/12/2021
Maranboy	MLN661	Outback Metals Pty Limited			8.09	24/04/1964	31/12/2024	31/12/2024
Maranboy	MLN662	Outback Metals Pty Limited			8.09	24/04/1964	31/12/2024	31/12/2024
Maranboy	MLN663	Outback Metals Pty Limited			8.09 ha	24/04/1964	31/12/2024	31/12/2024
Maranboy	MLN664	Outback Metals Pty Limited			4.45 ha	1/07/1964	31/12/2024	31/12/2024
Maranboy	MLN665	Outback Metals Pty Limited			8.9 ha	1/07/1964	31/12/2024	31/12/2024



			ОИТВ	ACK METALS LI	MITED			
	Tenement Maintenance Schedule - JULY 2021							
Project	Tenement Number	Registered Holder	Area (blks)	Area sq km	Area hectares	Application/ Grant Date	Expiry Date	Renewal Date
Maranboy	MLN666	Outback Metals Pty Limited			4.45 ha	1/07/1964	31/12/2024	31/12/2024
Maranboy	MLN667	Outback Metals Pty Limited			8.09 ha	1/07/1964	31/12/2024	31/12/2024
Maranboy	MLN668	Outback Metals Pty Limited			8.09	1/07/1964	31/12/2024	31/12/2024
Maranboy	MLN669	Outback Metals Pty Limited			8.09	1/07/1964	31/12/2024	31/12/2024
Maranboy	MLN670	Outback Metals Pty Limited			8.09	1/07/1964	31/12/2024	31/12/2024
Maranboy	MLN671	Outback Metals Pty Limited			8.09	1/07/1964	31/12/2024	31/12/2024
Rocks Ridge/Millers Gold	MLA29987 was MCN5115	Outback Metals Pty Limited			30	20/09/1996		
Mt Diamond	MLN63	Outback Metals Pty Limited			16.18	8/11/1973	31/12/2013	31/12/2023
Mt Diamond	MLN64	Outback Metals Pty Limited			16.18	8/11/1973	31/12/2013	31/12/2023
Mt Diamond	MLN65	Outback Metals Pty Limited			16.18	8/11/1973	31/12/2013	31/12/2023
Mt Wells - Land	MLN546	Outback Metals Pty Limited			14	11/05/1981	1/01/1981	31/12/2021
Mt Wells	EL22301	Outback Metals Pty Limited	9	29.63		14/04/2003	13/04/2021	13/04/2023
Mt Wells	MLN29910 was MCN2631	Outback Metals Pty Limited			1	22/04/2013	21/04/2023	21/04/2023
Mt Wells	MLN29911 was MCN723	Outback Metals Pty Limited			20	22/04/2013	21/04/2025	21/04/2025
Mt Wells	MLN164	Outback Metals Pty Limited			4.04	28/02/1964	31/12/2024	31/12/2024
Mt Wells	MLN165	Outback Metals Pty Limited			13.7	28/02/1964	31/12/2024	31/12/2024
Mt Wells	MLN196	Outback Metals Pty Limited			2.9	21/03/1970	20/03/2028	19/03/2028
Mt Wells	MLN197	Outback Metals Pty Limited			6.8	21/03/1970	20/03/2028	19/03/2028
Mt Wells	MLN198	Outback Metals Pty Limited			7.2	21/03/1970	20/03/2028	19/03/2028



	OUTBACK METALS LIMITED							
	Tenement Maintenance Schedule - JULY 2021							
Project	Tenement Number	Registered Holder	Area (blks)	Area sq km	Area hectares	Application/ Grant Date	Expiry Date	Renewal Date
Mt Wells	MLN199	Outback Metals Pty Limited			12.1	21/03/1970	20/03/2028	19/03/2028
Mt Wells	MLN200	Outback Metals Pty Limited			12.1	23/03/1970	20/03/2028	19/03/2028
Mt Wells	MLN463	Outback Metals Pty Limited			6.29	18/07/1979	31/12/2024	31/12/2024
Mt Wells	MLN465	Outback Metals Pty Limited			6.51	13/06/1979	31/12/2024	31/12/2024
Mt Wells	MLN466	Outback Metals Pty Limited			6.12	13/06/1979	31/12/2024	31/12/2024
Mt Wells	MLN467	Outback Metals Pty Limited			13.08	13/06/1979	31/12/2024	31/12/2024
Mt Wells South	EL28549	Outback Metals Pty Limited	2	5.84		20/03/2012	19/03/2021	19/03/2023
	Totals		72	231.18	301.1			

# **ENDS**

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This ASX announcement was authorised for release by the Board of Jadar Resources Limited.

# **Forward Looking Statement**

Forward Looking Statements regarding Jadar's plans with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that Jadar's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that Jadar will be able to confirm the presence of additional mineral resources, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Jadar's mineral properties. The performance of Jadar may be influenced by a number of factors which are outside the control of the Company and its Directors, staff, and contractors. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the company,



that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

## **Competent Person's Statement**

The information in this announcement that relates to the Mt Wells and Maranboy Projects, including Exploration Targets, is based on information compiled by Mr Erik Norum who is a Member of the Australian Institute of Geoscientists. Mr Norum is contracted to Jadar. Mr Norum 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 Norum consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.



# **JORC TABLE 1**

# Section 1 Sampling Techniques and Data

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

Criteria	Explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole.	RC hole samples were collected every one metre through a two tier riffle splitter. Samples were generally 2-3kg in weight.
	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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 (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</li> </ul>	There is no data for diamond core sampling
	types (eg submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Where noted, RC drilling was completed using a 130mm bit. No detail is provided as to drill rig type or specifications.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Drill sample recovery was not recorded.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in</li> </ul>	All holes have been geologically logged qualitatively. The logging is sufficient to support Mineral Resource estimation



Criteria	Explanation	Commentary
	<ul><li>photography.</li><li>The total length and percentage of the relevant intersections logged.</li></ul>	
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	All RC samples were riffle split from the rig down to a size of 2-3kg.  Sub-sampling is appropriate for the type of material and mineralisation being considered.  RC samples were pulverized to 75 micron and a 200g sub-sample split. From this sample a 30g sub-sample is taken for assay.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	RC samples were analaysed at:  Classic Comlabs, Berrimah, NT, with XRF analysis for tin.  ALS, Brisbane, Qld, with XRF analysis for Sn and W and ICPOEMS analysis for Ag, As, Au, Bi, Cd, Co, Cu, Fe, Mo, Pb, Pd, Pt, Sb, Ta, U and Zn.  The labs used internal standards, blanks and repeats.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Where available, historic data has been cross-checked against historic reports. Database has been checked for obvious errors. Validation of data is ongoing. No twinned holes have been drilled
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Some drill collars have been surveyed using a theodolite and nearby survey station. Some holes were down hole surveyed byEastmen camera. The holes were picked up using MGA94 zone 51 co-ordinates.
Data spacing	<ul><li>Data spacing for reporting of Exploration Results.</li><li>Whether the data spacing and distribution is</li></ul>	Drilling varies over the mineralised area, to a minimum 20 metre line spacing.



Criteria	Explanation	Commentary
and distribution	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.	Compilation of drill hole data at Mt Wells suggests 73 holes drilled for 4735m of RC drilling to a maximum down hole depth of 119m and 10 diamond core holes for 2550.35m to a maximum down hole depth of 460m. Drilling was undertaken in various campaigns during 1971, 1974, 1989 and 2008. Drilling identified tin mineralisation over a strike length of approximately 250m.  Additional infill drilling is most likely required to estimate a Mineral Resource.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Drilling has been oriented to intersect the dipping mineralisation in such a way as to attempt to achieve true thickness. There should be minimal bias based on the angle of drilling.
Sample security	The measures taken to ensure sample security.	There is no information regarding sample security.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	There is no information regarding audits.

# Section 2 Reporting of Exploration Results

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

Criteria	Explanation	
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	The Project is located on 32 granted Mining Leases, 1 mining lease application, 2 granted exploration licenses and 1 exploration license application.  Jadar Resources Limited is in the process of acquiring the tenements from Outback Metals Pty Ltd.  There are no identified issues with the security of the tenure.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	All previous exploration has been completed by other parties including BHP Minerals, Outback Resources, Territory Resources and Jingellic Minerals.
Geology	Deposit type, geological setting and style of mineralisation.	The Project covers the Pine Creek Inlier and northeast margin of the Daly River Basin. Lithologies comprise sediments intruded by various magmatic bodies. Mineralisation



Criteria	Explanation	
Citteria	Explanation	comprises tin, copper, iron and gold.
Drill hole	A summary of all information material to the	
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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</li> </ul>	No drilling results have been reported within this report, hence detail is not required.
	understanding of the report, the Competent	
	Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	N/A
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths</li> </ul>	N/A
	are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	<ul> <li>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.</li> </ul>	Historic drill hole locations relative to defined mineralisation are shown in Figure 2.
Balanced 	Where comprehensive reporting of all Exploration	Exploration results are not reported as part
reporting	Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading	of the Exploration Target potential.  An Exploration Target is not a Mineral Resource. The potential quantity and grade



Criteria	Explanation	
	reporting of Exploration Results.	of an Exploration Target is conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if future exploration will result in the estimation of a Mineral Resource.
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.	Any other relevant information is discussed in the main body of the report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Jadar intends to undertake infill drilling to better define mineralisation. Validation of historic data is currently being undertaken, therefore accurate locations of drill holes is not known at this time.