Jadar Resources

ASX RELEASE: 09 July 2021

Khartoum Tin-Silver-Tungsten Project Reaches Final Stage of Completion & Application for Additional Exploration Permits

Highlights

- **Jadar has moved into the final stage of completion of the Khartoum Tin-Silver-Tungsten Project in North Queensland Australia.**
- **All tenement transfers have been lodged and completion is expected to occur within 4 weeks.**
- **Reduction in cash consideration of the Khartoum Project from $300,000 to $165,000.**
- **Over 24 highly prospective targets identified from rock chip sampling at Khartoum.**
- **Targets also contain a large number of old Sn, Ag-Pb-Zn, Cu, Au and W mines and mineral occurrences within tenement area.**
- **Following completion of the acquisition Jadar will commence trenching and drill planning to test targets identified.**
- **Application made for an additional exploration tenement at Khartoum – EPM27892**
- **Previously completed mapping study and surface sampling has identified 6 highly prospective zones within EPM27892 which will be the focus of future exploration activity.**
- **Kitchener group of mines identified with historic shallow significant intersections of: [1]**
    - **15m at 0.52% Sn from 18m and 12m at 1.0% Sn from 44m – Hole WYM01**
    - **22m at 0.65% from 10m – Hole WYM05**
    - **11m at 0.62% Sn from 19m – Hole WYM06**
- **Multiple high priority drill targets identified with 1 target drilled. Targets identified through review of historical drilling with all 6 historical holes intersecting mineralisation. Best intercepts of 104m at 0.21% Sn from 12m and 34m at 0.26% Sn from 99m.[2]**
- **360 rock chip samples returned multiple high grade rock chip and historic mine mullock sample assays, which include peaks of 874g/t Ag, 15.25% W, 5.47% Sn and 3.39g/t Au. [2]**

Jadar Resources Limited (ASX:JDR) ("**Jadar**", the "**Company**") is pleased to announce that the Company is now in the final stage of completion for the Khartoum Tin-Silver-Tungsten project in North Queensland Australia. All tenement transfers have been lodged and completion is expected within 4 weeks. Once the tenements have been transferred successfully Jadar will make the revised cash consideration payment of $165,000 to Jervois Mining Limited (Jervois).

Both parties have agreed to reduce the Sale and Purchase Agreement cash consideration payable from $300,000 down to $165,000. The reduction in cash consideration is due to outstanding liabilities which have been caused by the tenements not meeting expenditure commitments in previous years and outstanding Native Title payments, these outstanding liabilities have delayed completion of the acquisition.

[1] ASX Announcement 30 March 2021 – Due Diligence Completed and Moving Towards Settlement of Khartoum Tin-Silver-Tungsten Project

[2] ASX Announcement 9 February 2021 – Acquisition of Khartoum Tin-Silver-Tungsten Project in North Queensland Australia

Jadar will take on this liability to expedite completion of the transaction and enable the Jadar team to quickly resolve the outstanding issues and move forward with its Australian tin strategy with the corresponding liability offsetting the cash consideration payable to Jervois.

Jadar has also applied for an additional exploration tenement in the Khartoum area. Applications have been lodged for EPM27892 and Jadar is awaiting assessment and granting. Information relating to this exploration tenement application can be seen below. EPM27892 will form a part of the Khartoum Tenement Portfolio being acquired from Jervois. Details of Khartoum Tenement Portfolio tenements are contained in the Company's ASX announcements dated 9 February 2021 and 30 March 2021.

EPM27892 (application) - Geology

The proposed new tenement (the tenement) is located in the Herberton – Irvinebank – Mt Garnet region. Prospectivity mapping that has included alteration patterns associated with mineralisation has confirmed the significance of the geology contained within the tenement.

The Herberton region contains a suite of rocks ranging from Paleoproterzoic gneiss to Tertiary cover. The rocks of primary interest are the numerous highly fractured I-type mid-late Carboniferous granitoids of the O'Briens Creek Supersuite and late Carboniferous Boonmoo Volcanic Subgroup felsic volcanics which dominate the tenement package and have intruded, or overlie, the extensive Devonian Hodgkinson Formation, a series of interbedded sedimentary units consisting primarily of arenite and mudstone with lesser chert, conglomerate, basalt and limestone.

The Herberton area is a major tin-tungsten bearing district and contains numerous historic workings for tin, tungsten, copper, zinc, molybdenum, antimony, lead, silver and gold. In granite-related tin deposits the metals are commonly focused along the apical portions of the granite and metal bearing fluids may breach into the wall rocks resulting in vein systems and breccias with significant alteration footprints. Figure 1 below shows schematic representations of the Sn-W deposits of the region. Metal zonation is a key exploration tool in assessing the proximity to the source intrusions along with alteration style. Tin tungsten mineralization is focused immediately around the local granite cupola with greisenisation of the host intrusive and tourmaline, chlorite, and silica alteration of the wall rocks. At an intermediate distance copper is present, and in the distal cooler portions of the system lead-silver occurs. Faults and veins are vital parts of the system as they provide pathways for fluids. These veins can assist in tracing the mineralization back to source. Replacement deposits are also associated with the Sc-W systems and likewise have zonation. Alluvial tin is also prevalent and has been readily exploited in the past.

Other mineral systems may be present in the area and include intrusion related gold (IRG), W-Mo-Bi and Cu-dominant systems. Prospects within the tenement area show mineral association typical with IRG systems, although more work is required to further evaluate the potential for IRG systems in the Khartoum tenement package area.

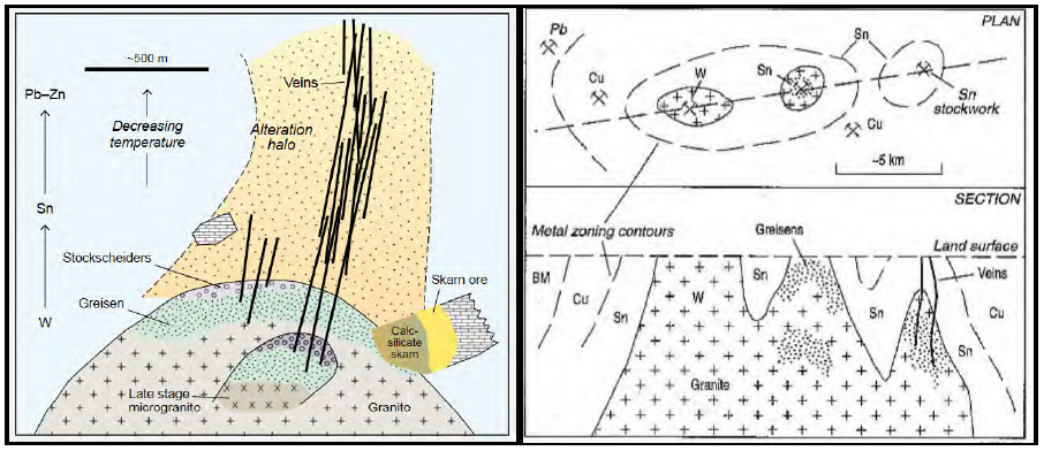

Figure 1 – Plan and section diagrams of the expected district zonation in Palaeozoic Sn-W deposits in eastern Australia (Blevin 1998)

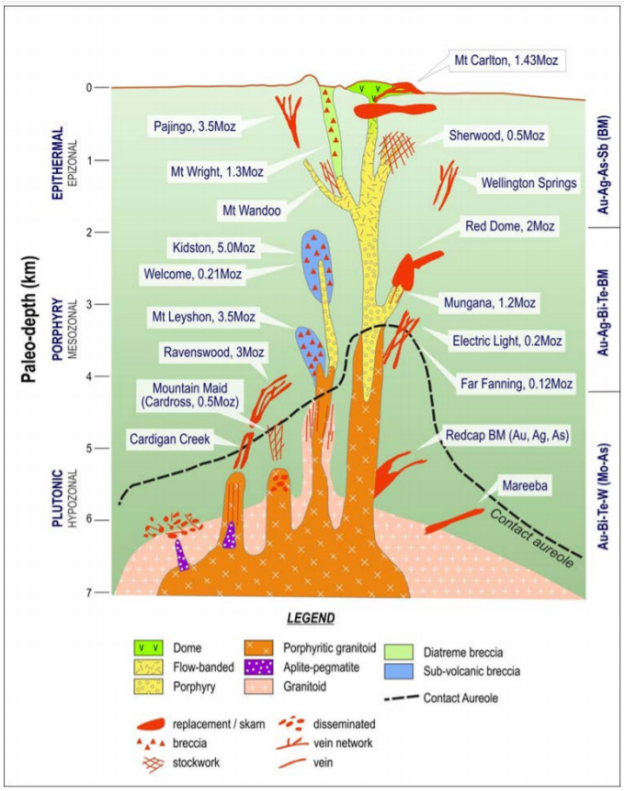

Figure 2 – Intrusion related gold systems of North Queensland, Charters Towers Province (Morrison and Beams, 2015)

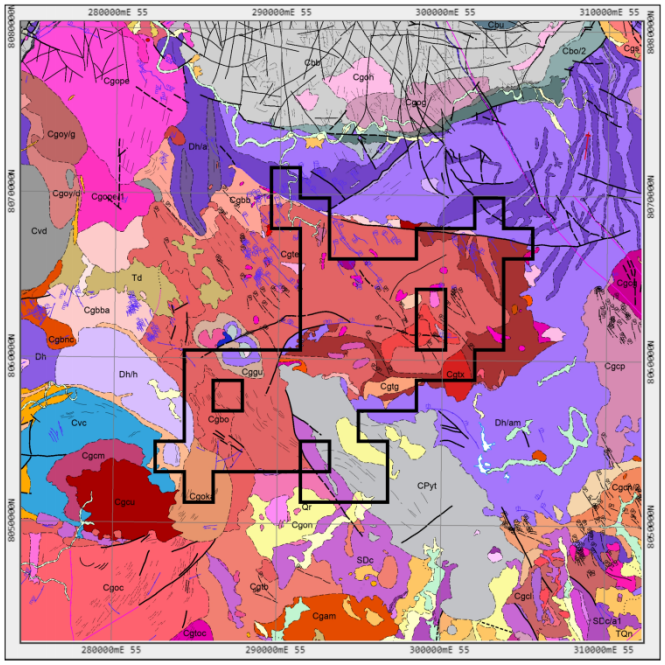

Figure 3 – Tenement application area geology – dominated by target granites

EPM27892 (application) Location and Area

The tenement is located approximately 100km south west of Cairns in North Queensland. The tenement location and sub-block plan are presented in Figure 4. A list of sub-blocks is tabulated below:

BIM	Block	Sub-Block
Townsville	1238	O, R, S, T, U, V, W, X, Y
Townsville	1237	G, M, N, S, X, Y, Z
Townsville	1310	A, C, D, F, H, J, L, M, N, Q
Townsville	1309	C, D, E, H, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z
Townsville	1308	O, P, T, Y, Z
Townsville	1381	A, B, D, E, H, J, K
Townsville	1380	C, D, E, J

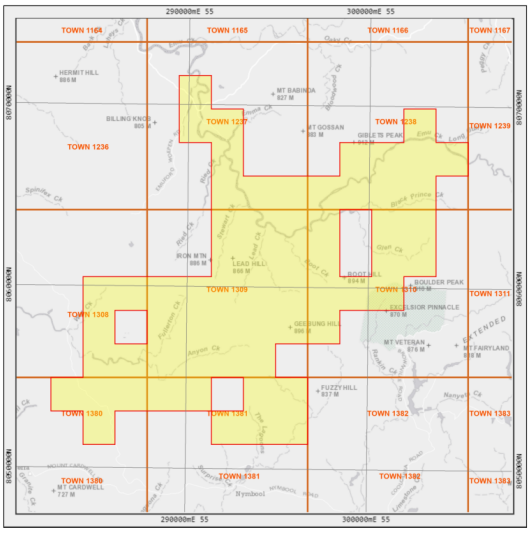

Figure 4 – Tenement application area

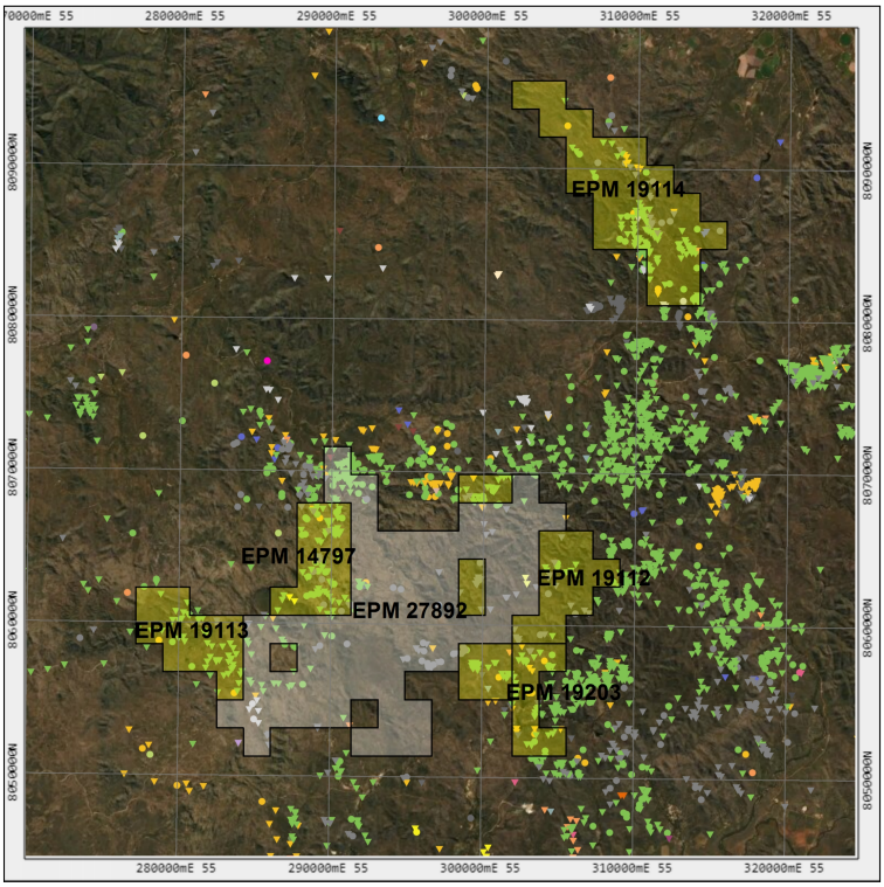

Figure 5 – EPM27892 Tenement application area and tenements currently being acquired by Jadar from Jervois Mining Limited – EPM14797, EPM19112, EPM19113, EPM19114 and EPM19203

EPM27892 (application) Mineralisation

Tin, zinc, tungsten, copper, lead, silver, and antimony are the high priority target minerals in the tenement application area.

Prospectivity mapping was previously completed by Kenex in 2013. The modelling incorporated lithologies, mineralisation chemistry, mineralisation styles, structural settings, and other various parameters. This prospectivity modelling covers the entire tenement application area.

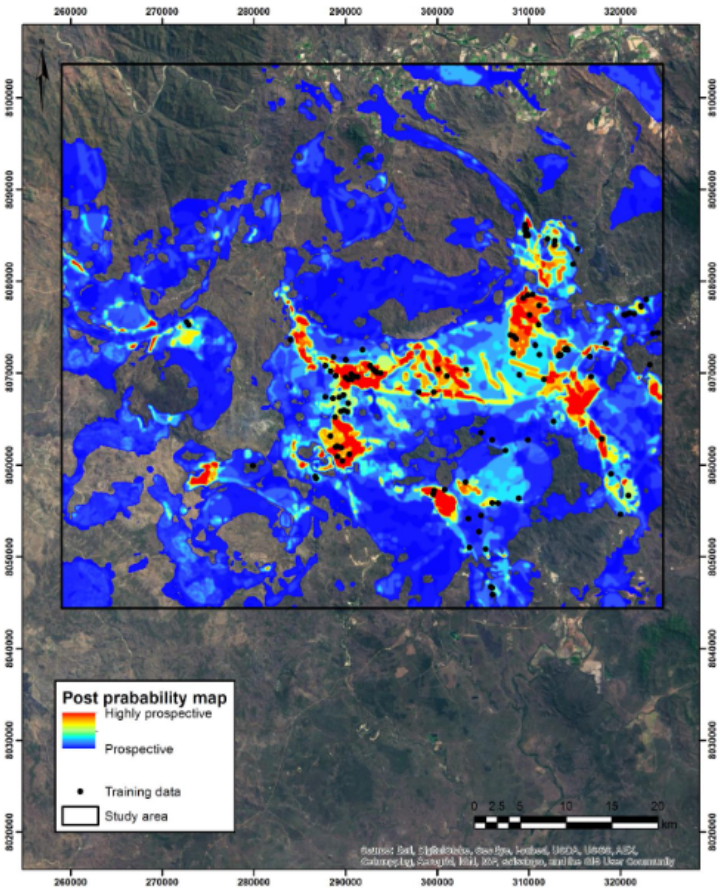

Figure 6 – Regional prospectivity modelling covering tenement application area

Across the tenement application area there are several historic mine workings and mineral occurrences. These can be seen below in table 1.

Commodity	Historic Workings	Mineral Occurrence
Tin (Sn)	59	18
Tungsten (W)	25	18
Copper (Cu)	4	2
Silver (Ag)	4	2
Lead (Pb)	0	1

Table 1 – Historic workings and mineral occurrences within tenement application area

In 2006 previous tenement area holders completed field reconnaissance work which involved the collection of rock chip and mulllock heap samples, from this work a total of 65 samples are within the tenement application area. These samples correspond with the highly prospective areas identified through the prospectivity mapping study. It is also noted that many of the historic workings fall outside of these areas and are yet to be further investigated. The location of the samples can be seen below in Figure 7.

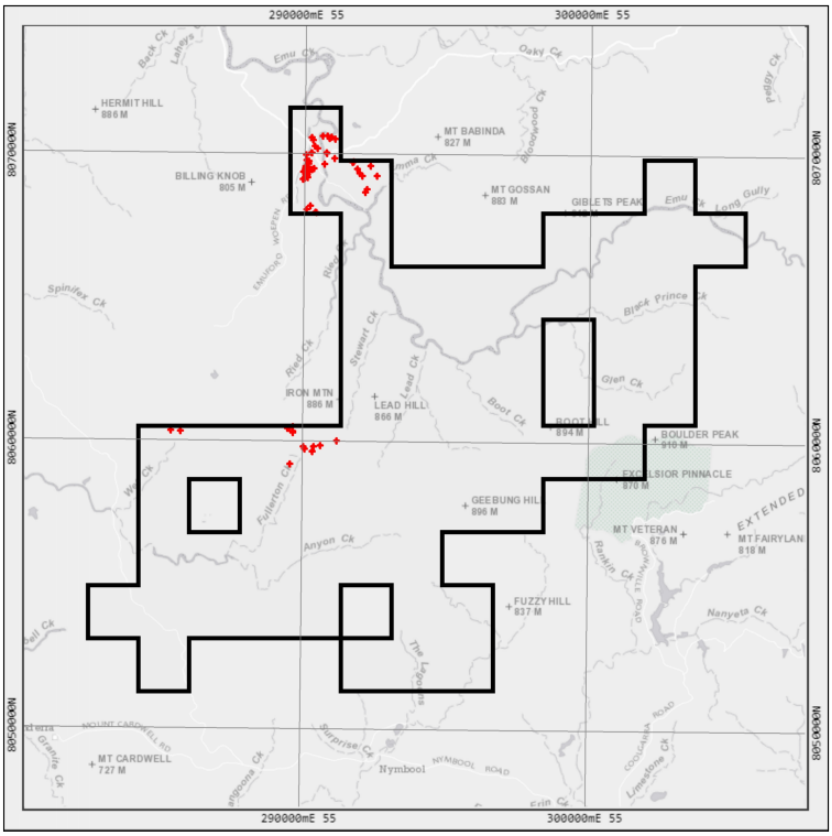

Figure 7 – 2006 Rock chip and mullock samples within tenement application area

EPM27892 (application) Proposed Work Program

The proposed work program will focus around areas that fall within the highly prospective zones, as well as commencement of study and field reconnaissance work around known mineral occurrences and workings. The proposed 5-year work program is outlined below.

Figure 8 below shows the key areas of interest.

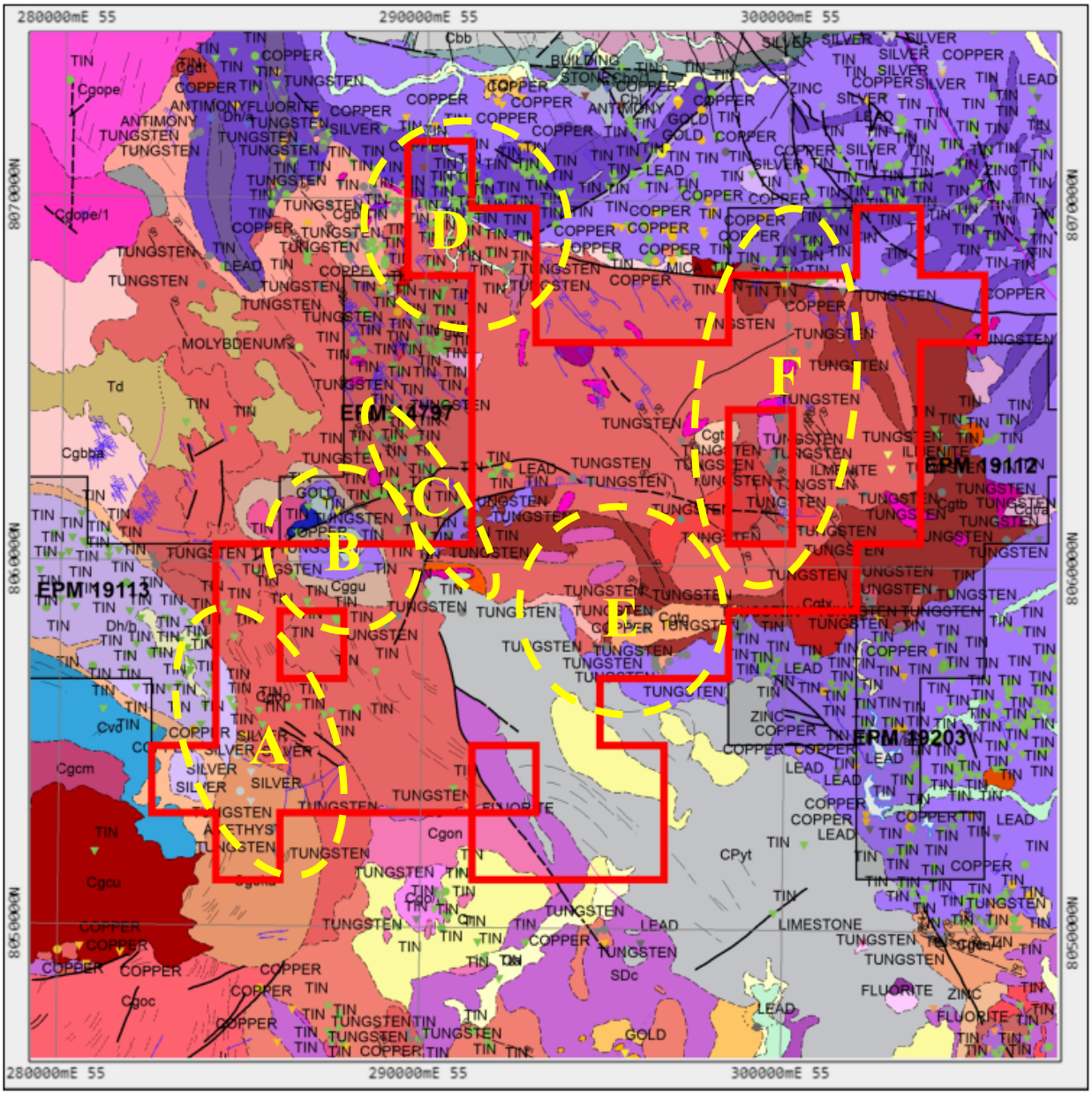

Figure 8 – Key focus areas within tenement application area

Area A

This area is adjacent to a large intrusive structure to the West where a caldera is present. There is several historic silver occurrences and workings in the target area which have not had any follow up. There is also tin mineralisation in the area. Mapping and field work will be completed in preparation for selection of appropriate geophysics to be completed in preparation for drilling.

Area B

This area forms part of the Mount Luxton gold and silver workings, the workings are approximately 44km west-south-west of Herberton, 22km north-west of Mount Garnet. Gold was first discovered at Mount Luxton around 1896. The historic mine shaft is situated on a ridge to the east of Mount Luxton.

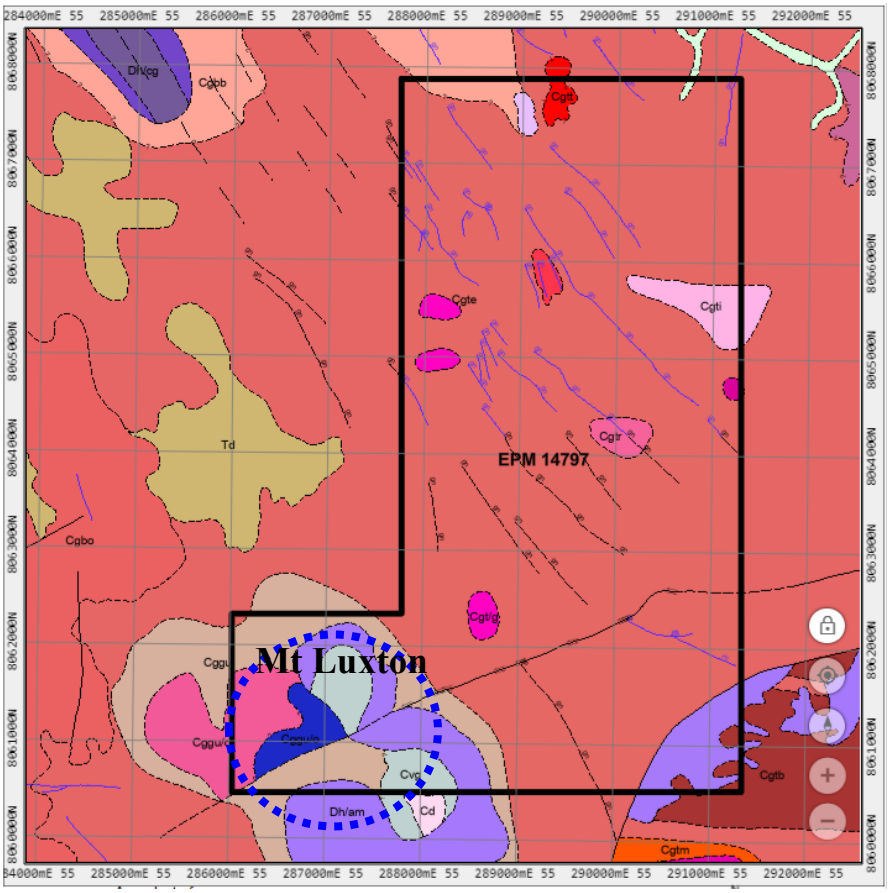

Figure 9 – Mt Luxton with major structural fault running through the area

In 2012 Fathom Geophysics completed intrusion detection to magnetic and radiometric data. The goal of the intrusion detection model was to develop the use of radial symmetry filter in a move towards automated interpretation of potential field and topographic data that would be most similar to an interpretation by a person. The filter highlights round features in the data, this allows location of areas that have a higher likelihood of being intrusive bodies or discrete alteration zones.

The filter looks for features with a radius between a base radius and two times that radius. It will not locate features that are significantly larger or smaller than the range used. The radial symmetry filter has been applied as follows:

- RTP VIAS magnetic data at two different base radii: 1km highs and 4km highs
- RTP magnetic data: 4km highs

The image below shows the results of vectorised version of the VIAS intrusion detection results shown over the VIAS magnetic data. This shows that the Mt Luxton is adjacent to a potentially significant intrusive body with Mt Luxton showing a large magnetic signature.

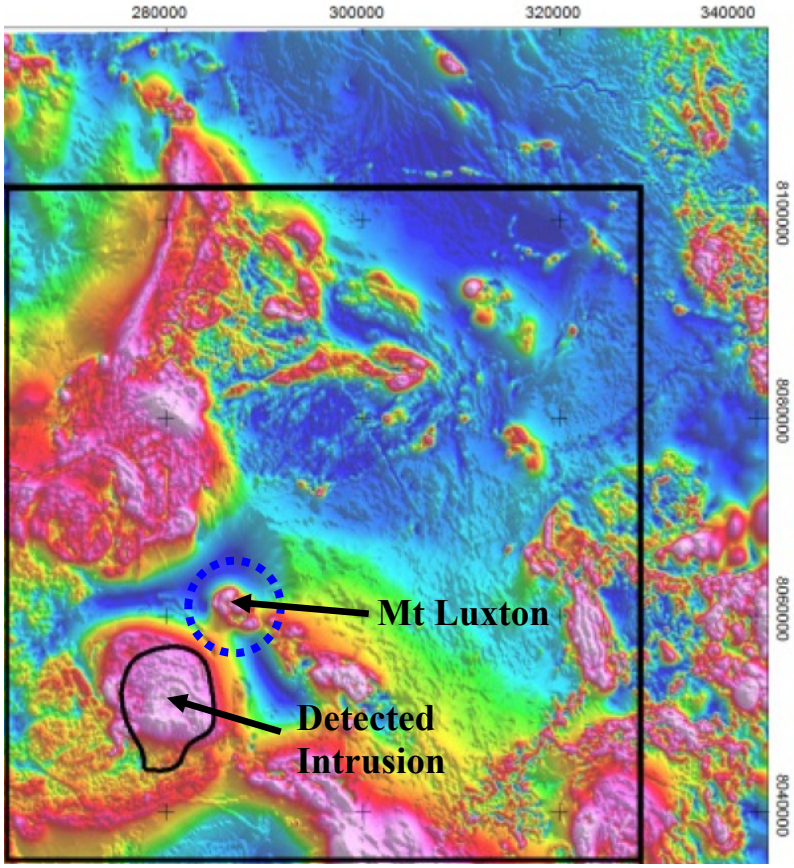

Figure 10 – Magnetic geophysics over the Mt Luxton area

Mapping and field work will be completed to test the area for mineralized extensions to the know Mt Luxton mineralization in preparation for drilling.

Area C

This area will test for extensions to known drilled mineralisation of the Boulder-Ahmets prospect which is located within EPM14797. The Boulder-Ahmets prospect is a 2,500m tin mineralised zone which had 6 holes drilled in 2008 with all holes' intersection mineralisation over wide intervals and depths of up to 134m. It is believed that this mineralisation extends further to the south-east into the tenement application area to Iron Mountain. Mapping and field work will be completed in preparation for selection of appropriate geophysics to be completed in preparation for drilling.

Area D
This area hosts multiple high grade rock chip and mullock samples already collected in 2006. No follow up field work or drilling has been completed to date with multiple target sites identified. Mapping and field work will be completed in preparation for selection of appropriate geophysics to be completed in preparation for drilling.

Area E
This area hosts multiple historic tungsten and copper mineral occurrences and workings. Mapping and field work will be completed in preparation for selection of appropriate geophysics to be completed in preparation for drilling.

Area F
This area hosts multiple historic tungsten and copper mineral occurrences and workings. Mapping and field work will be completed in preparation for selection of appropriate geophysics to be completed in preparation for drilling.

In addition to the identified target areas, in between the target areas there is significant structural geology which may form pathways for mineralised fluids, the likelihood exists that mineralisation has formed within these pathways and further work needs to be undertaken to understand their prospectivity.

ENDS

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

Compliance Statement

This announcement contains information relating to the Khartoum Project extracted from ASX market announcements dated 9 February 2021 and 30 March 2021 and reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("2012 JORC Code"). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

Forward Looking Statement

Forward Looking Statements 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.