



Drilling Update – Resource Extension

Trouser Legs Joint Venture

(Hawthorn Resources 70%, Gel Resources 30%)

Hawthorn Resources Limited (ASX: HAW) as Manager of the Trouser Legs Joint Venture (TLJV) is pleased to advise that assays have been received from the Stage 3 step out drilling, 200m south of the existing Trouser Legs Resource¹. The results confirm the extension of the mineral system and the presence of high-grade vein intercepts at shallow depths with best results including **TLDD-017: 0.4m at 25.4g/t Au from 118.7 metres, 0.55m at 46.9g/t Au from 131.45 metres and 0.35m at 51.3g/t Au from 146.3 metres.**



Figure 1: Best intervals from TLDD_017.

¹ Refer to ASX release 14th April 2020 Trouser Legs Gold Project - Maiden Underground Resource.

Encouragingly, the best intercepts were all encountered along strike and at depths consistent with the highest-grade lodes within the existing Mineral Resource Estimate. If continuity can be demonstrated, then it is likely that additional low-cost ounces can be added to the mine inventory when mining studies are completed following infill drilling and updates to the Mineral Resource Estimate.

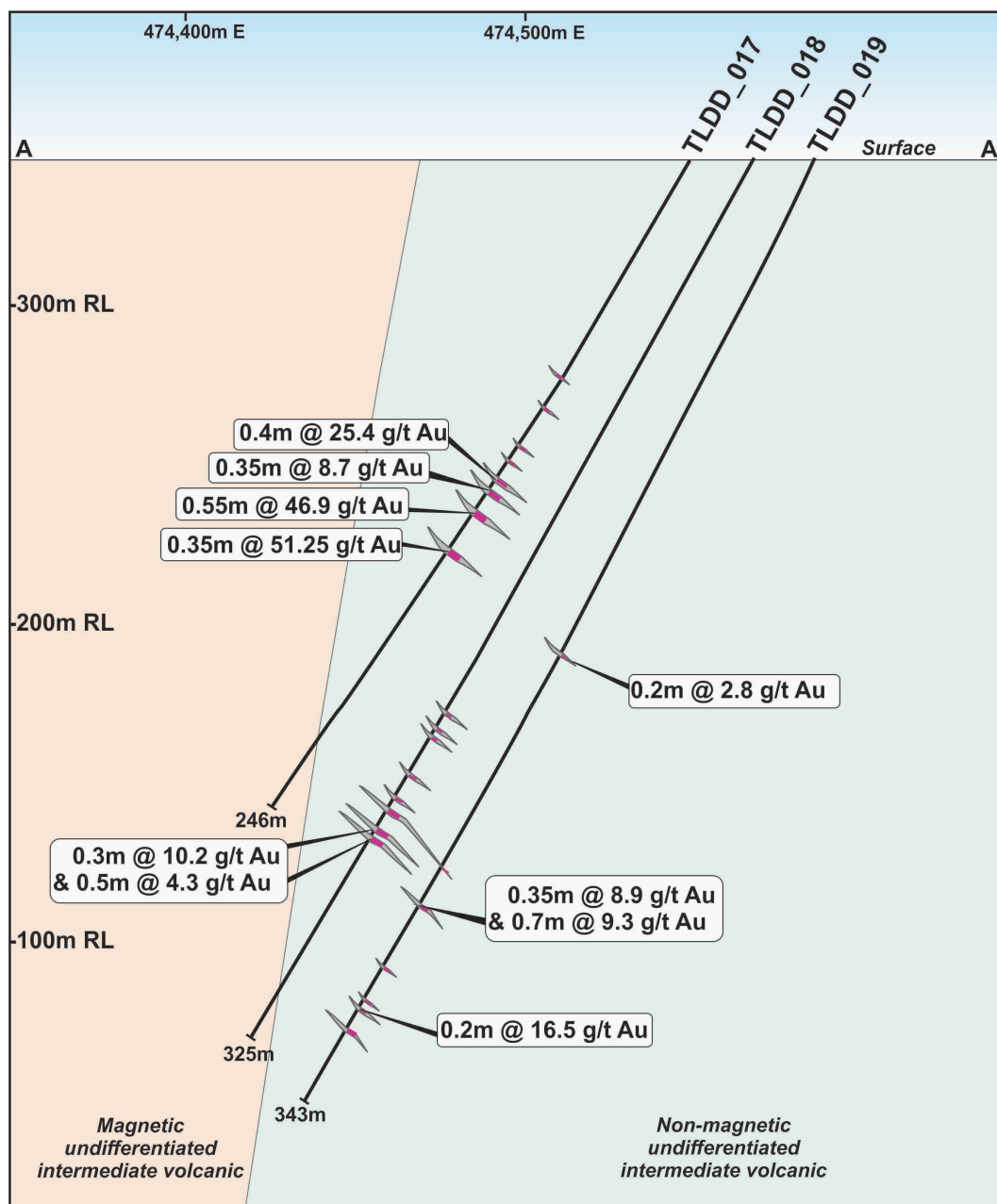


Figure 2: Cross section of the Stage 3 drilling showing significant intercepts. The shallower portions of the package will be tested in future drilling campaigns.

The results confirm the shallow southerly plunge of the package and the use of tight spaced aeromagnetic surveys as a targeting tool. As a result of the successful Stage 3 step out the TLJV has immediately commenced drilling of Stage 4, an initial two-hole program targeting the magnetic trend a further 200m south.

Reassessment of historical drill data at the Oaks project, a further 1000m south of the Stage 4 program confirms the presence of Anglo-Saxon style mineralisation, as does field mapping of historical shafts along this corridor.

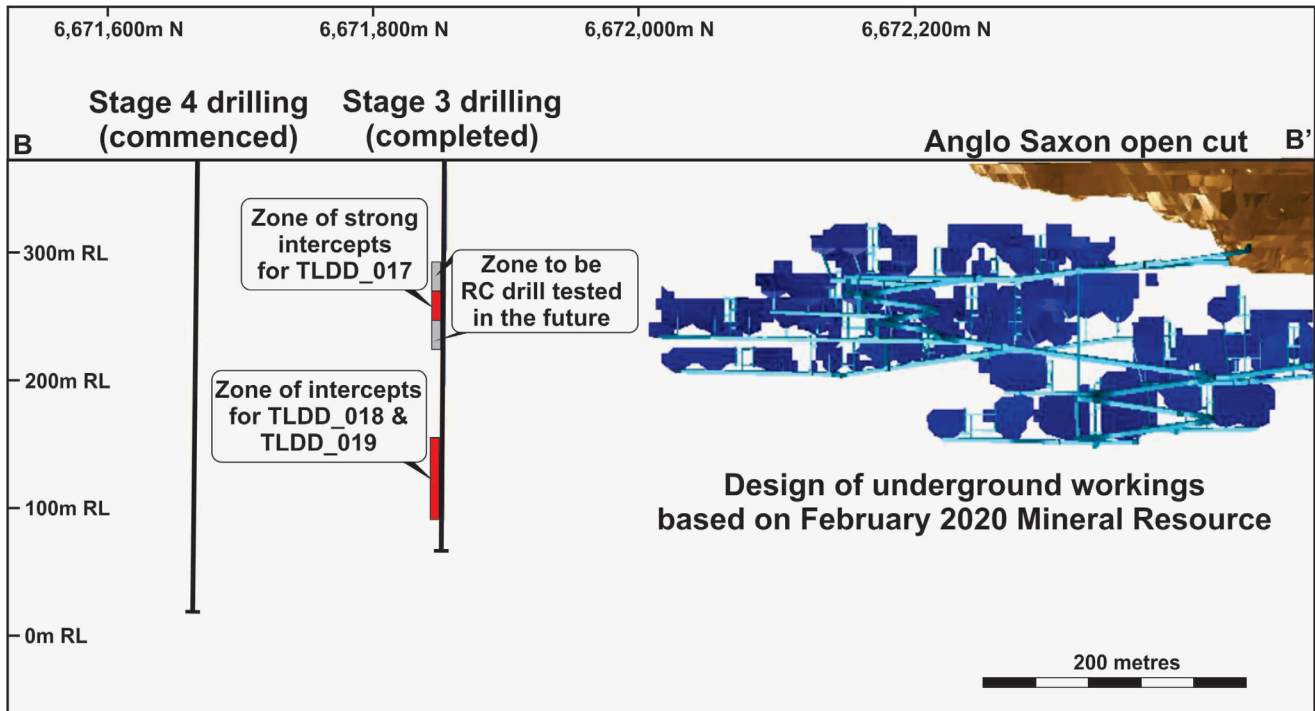


Figure 3: Long section showing the intersected mineralisation in relation to the preliminary underground mine design.

Plan of Works documentation has been lodged with the Department of Mines, Industrial Relations and Safety to allow for further step out drilling along the corridor. An initial program of infill drilling is being planned for soon after the conclusion of drilling of the Stage 4 program, with subsequent step out programs extending further south to be considered once results have been received and interpreted.

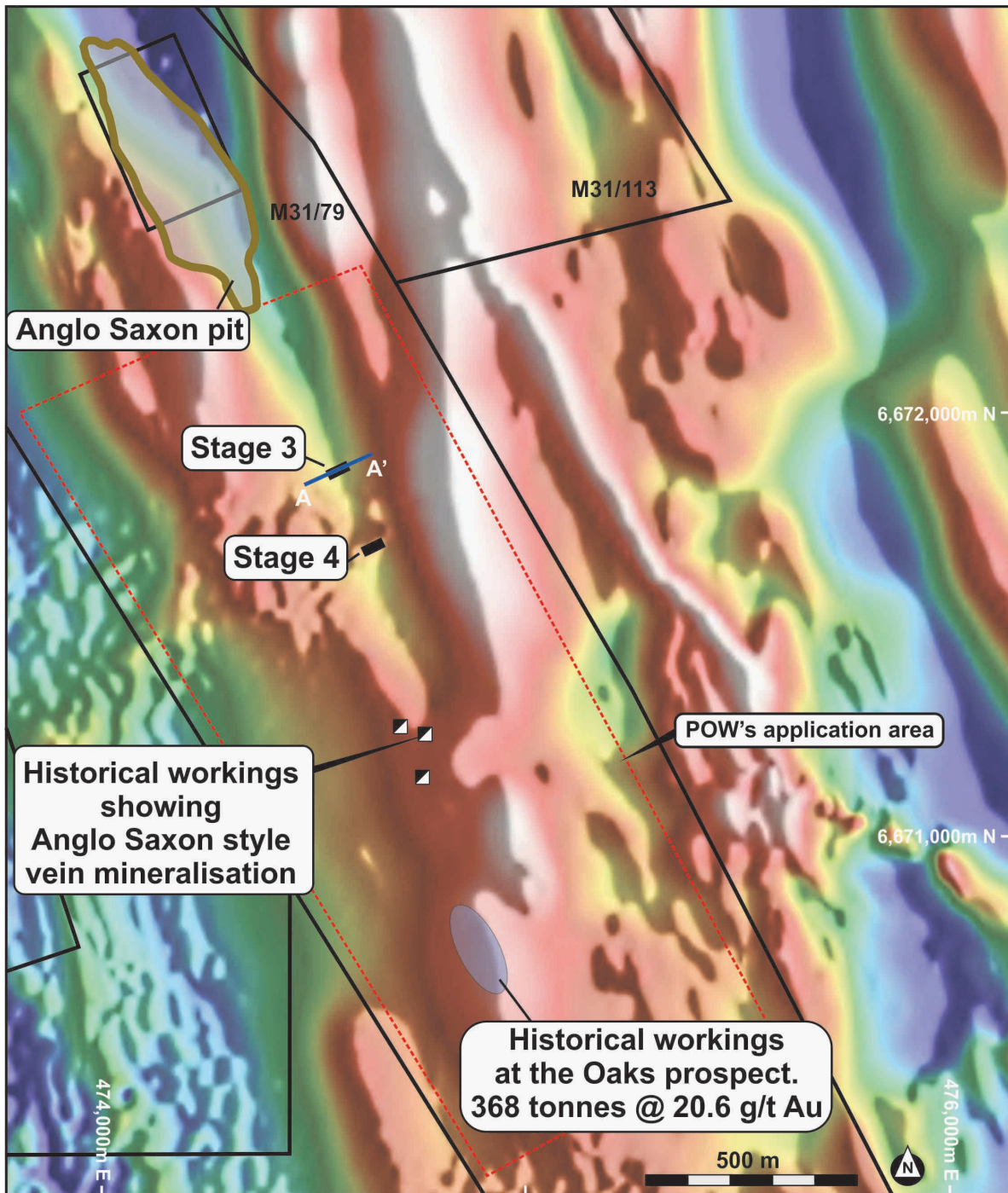


Figure 4: Magnetic image of M31/79 showing the Stage 4 target area. Note that the signature adjacent to the Stage 4 drilling is partially obscured by magnetic sediments at surface.



Figure 5: Image looking north showing Stage 3 drilling in the foreground and open pit in the background.

Project Area Location

The Trouser Legs Joint Venture Project Area referred to in this announcement is located in the Eastern Goldfields area 140 km north east of Kalgoorlie, Western Australia; the Trouser Legs Joint Venture comprises the following tenement areas:

G 31/4
L 31/32
L 31/65
L 31/66
L 31/68
L 31/69 (A)
M 31/78
M 31/79
M 31/88
M 31/113
M 31/284

For additional information about the TLJV underground please refer to the Company's December 2019 and March 2020 Quarterly Activities Reports to the ASX together with the market update as released on 14 April 2020.

The information in this report that relates to Exploration Results has been compiled by Mr Darryl Mapleson, a full-time employee of BM Geological Services. Mr Mapleson is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Mapleson have been engaged as a consultant by Hawthorn Resources. Mr Mapleson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Mapleson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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For further information: please contact Managing Director, Mark Kerr, or Company Secretary, Mourice Garbutt, on (03) 9605-5950 or via info@hawthornresources.com.

This announcement was authorised for release by the Board of Directors, Hawthorn Resources Limited and GEL Resources Pty Ltd.

APPENDIX 1 – DRILLING

Hole Coordinates

Hole ID	Easting	Northing	RL	Depth	Dip	Azimuth
TLDD_017	474549	6671862	370	245.8	-60	246
TLDD_018	474567	6671870	370	324.2	-60	246
TLDD_019	474585	6671878	370	343	-60	246

Significant Intercepts

Hole ID	From (m)	To (m)	Interval	Au
TLDD_017	118.70	119.10	0.40	25.4
TLDD_017	123.45	123.80	0.35	8.8
TLDD_017	131.45	132.00	0.55	46.9
TLDD_017	146.30	146.65	0.35	51.25
TLDD_018	244.30	244.60	0.30	10.2
TLDD_018	247.00	247.50	0.50	4.3
TLDD_019	158.35	158.55	0.20	2.8
TLDD_019	259.20	259.50	0.30	3.8
TLDD_019	268.25	268.60	0.35	8.9
TLDD_019	269.70	270.40	0.70	9.3
TLDD_019	304.60	304.80	0.20	3.3
TLDD_019	305.75	305.95	0.20	16.6
TLDD_019	315.80	316.30	0.50	2.1

APPENDIX 2 – JORC Code, 2012 Edition – TLGP Stage 3 Resource Extension Drilling

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <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> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <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> 	<ul style="list-style-type: none"> • Sampling was conducted using a diamond drilling rig (DD). Three holes of HQ diameter diamond core were drilled as part of this programme for 913 meters. • Diamond core was cut using an Almonte automated core saw on selected geological intervals. The core was cut in half and one half of the core was submitted for gold analysis. • Field duplicates were collected at a rate of twice per hole. • Samples were pulverised to produce a 40g charge for fire assay. • Sampling and QAQC procedures are carried out using Hawthorn protocols as per industry best practice.
Drilling techniques	<ul style="list-style-type: none"> • <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> 	<ul style="list-style-type: none"> • Diamond drilling core was HQ diameter
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> 	<ul style="list-style-type: none"> • Diamond core sample recovery was measured and calculated during the logging, using standard RQD logging procedures. • Drilling contractors adjust their drilling approach to

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Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <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>specific conditions to maximise sample recovery.</p> <ul style="list-style-type: none"> • No sample recovery issues have impacted on potential sample bias.
Logging	<ul style="list-style-type: none"> • <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> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • All drillholes are logged in full. • DD holes were logged geologically and structurally. • Data was recorded for regolith, lithology, veining, fabric (structure), grain size, colour, sulphide presence, alteration and oxidation state. • Logging is both qualitative and quantitative in nature depending on the field being logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <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> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • DD half core samples were collected at intervals of 1m or less if geologically relevant. • Field duplicate samples were collected twice per hole through mineralised zones and certified reference standards were inserted at a rate of 1 per every 50 samples. Blank samples were inserted every 50 samples directly after a standard and also after potential ore zones. • Sample preparation was conducted at Bureau Veritas Laboratory in Kalgoorlie using a fully automated sample preparation system. Preparation commences with sorting and drying. Oversized samples are crushed to <3mm and split down to 3kg using a rotary or riffle splitter. Samples are then pulverized and homogenized in LM5 Ring Mills and ground to ensure >90% passes 75µm. • 200g of pulverized sample is taken by spatula and used for a 40g charge for Fire Assay for gold analysis. A high-capacity vacuum cleaning system is used to clean sample preparation equipment between each sample. • The sample size is considered appropriate for this type

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Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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>and style of mineralisation.</p> <ul style="list-style-type: none"> Fire Assay is an industry standard analysis technique for determining the total gold content of a sample. The 40g charge is mixed with a lead based flux. The charge/flux mixture is 'fired' at 1100°C for 50mins fusing the sample. The gold is extracted from the fused sample using Nitric (HNO₃) and Hydrochloric (HCl) acids. The acid solution is then subjected to Atomic Absorption Spectrometry (AAS) to determine gold content. The detection level for the Fire Assay/AAS technique is 0.01ppm. Laboratory QA/QC controls during the analysis process include duplicates for reproducibility, blank samples for contamination and standards for bias.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> All drilling and significant intersections have been assessed by senior contract geologists from the independent geological group BM Geological Services (BMGS). No pre-determined twin holes were drilled during this program. Geological logging was captured digitally for each hole. No adjustments or calibrations were made to any assay data reported. Initial assays of >0.4 g/t Au are requested for duplicate assay.
Location of data points	<ul style="list-style-type: none"> <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> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The grid is GDA 94 Zone 51 Drill hole collar locations are surveyed before and after by a qualified surveyor using sophisticated DGPS with a nominal accuracy of +/- 0.05m for north, east and RL (elevation) Down-hole surveying was completed using a Li Hue north seeking gyroscope at the completion of each hole.

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Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Drill holes were located on a 20m spaced traverse. • Additional drilling will be required to update the Mineral Resource in this area and test the continuity of gold mineralisation. • The drill spacing is considered sufficient for the style of mineralisation. • No sample compositing has been applied to mineralised intervals.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <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> • <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> 	<ul style="list-style-type: none"> • Drilling was perpendicular to the strike of the main mineralised structure targeted for this program. All reported intervals are however reported as downhole intervals and not true width. • No drilling orientation and/or sampling bias have been recognized in the data at this time.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • During sampling of all drill holes, a staff member was always present. Samples were delivered to the laboratory in batches by staff.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • No audits or reviews have been conducted on sampling techniques and data at this stage.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The mineral tenements M31/79 and M31/284 with a PoW and Mining Approval in place. The tenement is in a 70:30 contributory JV with Gel Resources. The tenements are in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Significant exploration has been undertaken by other parties. The data has been reviewed for both location and grade distribution. To date the post 2011 and the pre 2011 data grade distribution is almost identical. A selection of pre 2011 drill holes have been surveyed in the current coordinate system and located correctly. Aurifex/Newmont/Amoco/Picon/Little River drilled 14,150 m RC, 438 m DD, 4,572 m percussion and 398.3 m of channel samples. Gutnick Resources NL drilled 23,566 m RC and 912.7 m DD.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Mineralization occurs in a broad shear bound alteration zone that dips west from 55 to 70 degrees and ranges from 20 to 100 m in width. The mineralisation is interpreted to dip from 38 to 75 degrees and occurs in a number of fairly discrete packages, stacked above each other, broadly similar to a ladder vein system. Gold mineralization is related to thin quartz veins which vary in thickness from 2 mm to 80 cm but occur in sub parallel groups. The geology was confirmed during the mining operation between December 2017 to December 2019. Many veins can be followed for 50 to 80 metres with more prominent veins being followed for up to 120m.

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Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <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> 	<ul style="list-style-type: none"> • Open pit mining of the deposit has taken place and vein orientation maps were produced. • Drill hole information for the drilling discussed in this report is listed in Appendix 1 in the context of this report.
Data aggregate on methods	<ul style="list-style-type: none"> • <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> • <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> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • There has been no aggregation, compositing or top capping applied.
Relationship between mineralisation widths and	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> 	<ul style="list-style-type: none"> • The majority of the holes were drilled perpendicular to the ore body and are believed to be representative of the true thickness of the mineralisation.

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Criteria	JORC Code explanation	Commentary
intercept lengths	<ul style="list-style-type: none"> 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'). 	
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Appropriate plans and sections have been included in the body of this report.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No misleading results have been reported in this program.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drill holes have all been surveyed using a Li Hue north seeking gyroscope at 5m intervals by Kalgoorlie based ABIM Solutions.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg 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, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> A single program of three surface diamond drill holes stepping out 200 meters from the last section of known mineralisation has been planned.