

16 September 2016 ASX Announcement ASX Code: EAR

# Further high grade results boost resource outlook for Julius deposit

## HIGHLIGHTS

- Outstanding additional high grade gold intersected at the northern end of the proposed Stage 1 open pit, including:
  - 22 metres @ 10.75 g/t Au from 30 metres (JAC085)
  - o 17 metres @ 21.60 g/t Au from 32 metres (JAC089)
  - o 19 metres @ 20.98 g/t Au from 34 metres (JAC092).
- Further results from more than 8,400m of aircore, RC and Diamond drilling to be available in coming weeks.

Echo Resources Limited ("Echo" or "the Company") is pleased to announce it has increased the probability of a resource upgrade for the Julius Gold Project located in the Yandal Greenstone Belt of the north-eastern goldfields of Western Australia, following a series of outstanding high grade drill results.

The latest 20 aircore holes, following on from the first 10 holes which returned a number of high grade intersections (refer to ASX Announcement dated 22 August 2016), were drilled in the northern sector of the proposed Stage 1 open pit at Julius and confirmed and extended previous known high grade results.

Echo Chief Executive Officer Mr Simon Coxhell said the results will allow an updated Mineral Resource estimate to be completed, converting a significant proportion of existing Mineral Resources from Indicated to Measured.

"These are some of the best drill results from Julius to date and underscore the value of the Stage 1 open pit," Mr Coxhell said.

The additional high grade results in the northern sector of the proposed pit confirm a strong and consistent supergene, high grade gold zone.

"Based on information to date this zone extends over at least 100 metres of strike, is open to the south, extends to over 30 metres of width and up to 20 metres of vertical extent. The zone typically starts at 30 metres depth and is characterised by a strong shear fabric within highly oxidised ultramafic and granitic rocks, and contains appreciable quantities of free gold. This material is highly oxidised and from a processing perspective is very friable. Mining costs will be minimised due to the free digging nature of the mineralisation and this will also translate into attractive milling and processing costs."

Drilling was completed on a 10m x 10m pattern designed to accurately quantify the tonnes and grade of previously defined soft oxide gold mineralisation present between 24 and 60 metres vertical depth.



The programme of aircore drilling totalled 67 holes for 2,879 metres with an average depth of 42 metres extending throughout the surface footprint of the proposed Stage 1 pit. All aircore samples have now been submitted to the laboratory for analysis with results expected in the coming weeks.

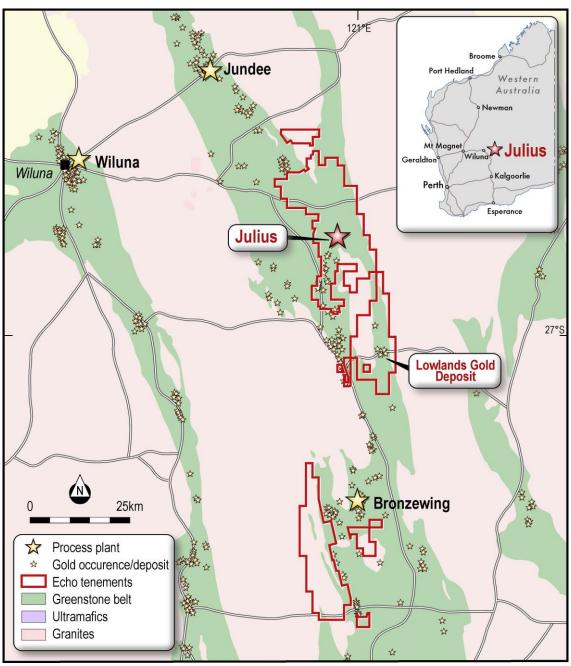
RC and Diamond drilling at Julius has also finished with a total of 53 reverse circulation holes for 5,113 metres and 9 HQ diamond holes for 481 metres completed. Results are due in coming weeks.

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**Figure 1: Echo Tenement Holdings** 



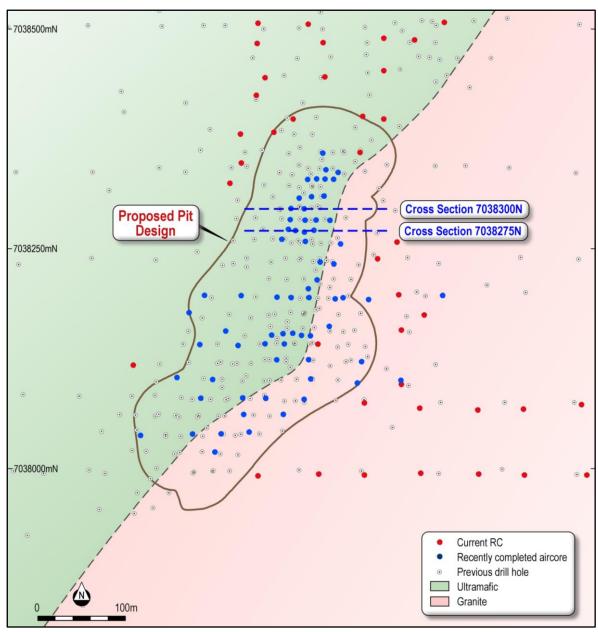


Figure 2: Julius Drilling



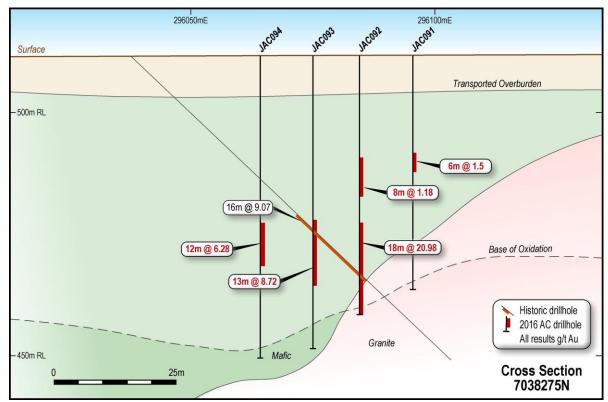


Figure 3: Julius Cross Section 7038275N

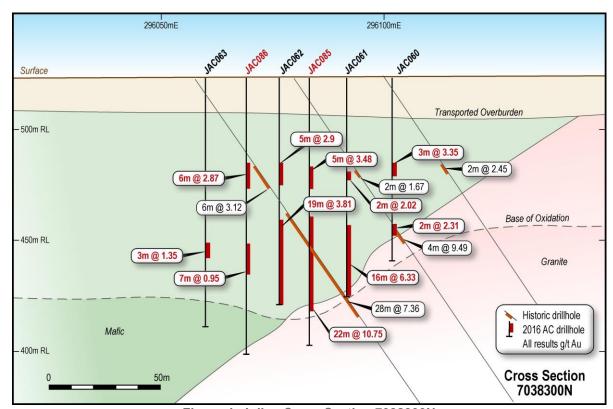


Figure 4: Julius Cross Section 7038300N



Hole ID	From	То	Width	Gold (g/t Au)	Dip	Total Depth	Easting	Northing
JAC085	20	25	5	3.48	-90	60	296083	7038298
JAC085	30	52	22	10.75	-90	60	296083	7038298
JAC086	21	25	4	3.90	-90	63	296069	7038299
JAC086	38	42	4	1.19	-90	63	296069	7038299
JAC087	18	26	8	1.63	-90	32	296115	7038286
JAC088	19	25	6	1.43	-90	60	296099	7038286
JAC089	19	26	7	2.60	-90	40	296085	7038285
JAC089	32	49	17	21.60	-90	40	296085	7038285
JAC090	18	25	7	2.92	-90	65	296069	7038286
JAC090	36	46	10	2.81	-90	65	296069	7038286
JAC091	20	24	4	1.50	-90	48	296096	7038274
JAC092	21	29	8	1.18	-90	53	296085	7038273
JAC092	34	53	19	20.98	-90	53	296085	7038273
JAC093	22	25	3	1.01	-90	60	296075	7038275
JAC093	34	47	13	8.72	-90	60	296075	7038275
JAC094	34	46	12	6.28	-90	62	296064	7038273
JAC095	10	12	2	2.14	-90	30	296127	7038255
JAC095	19	24	5	5.42	-90	30	296127	7038255
JAC096	18	25	7	1.43	-90	60	296086	7038261
JAC096	32	51	19	3.91	-90	60	296086	7038261
JAC097	TBR					65		
JAC098	10	12	2	1.62	-90	32	296120	7038235
JAC099	10	12	2	2.57	-90	50	296102	7038238
JAC099	32	34	2	2.76	-90	50	296102	7038238
JAC100	9	12	3	2.39	-90	40	296099	7038217
JAC101	9	12	3	2.10	-90	60	296090	7038208
JAC102	TBR					16		
JAC103	TBR					16		
JAC104	TBR					20		
JAC105	TBR					25		
JAC106	9	12	3	3.37	-90	48	296089	7038196
JAC107	48	55	7	2.66	-90	66	296070	7038197
JAC108	9	13	4	1.72	-90	20	296054	7038198
JAC109	10	15	5	1.35	-90	20	296012	7038199

TBR = Results yet to be received Table 1: All AC Results (1.0g/t cut-off)



#### Competent Persons Statement

The information in this report relating to exploration activities and exploration potential is based on information compiled by Mr Simon Coxhell, a Director of Echo Resources Limited, who is a member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that 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 Coxhell consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

#### **Forward Looking and Cautionary Statements**

Some statements in this report regarding estimates or future events are forward looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results to differ from estimated results, and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward looking statements. These risks and uncertainties include but are not limited to liabilities inherent in mine development and production, geological, mining and processing technical problems, the inability to obtain any additional mine licenses, permits and other regulatory approvals required in connection with mining and third party processing operations, competition for among other things, capital, acquisition of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of acquisitions, changes in commodity prices and exchange rate, currency and interest fluctuations, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks. There can be no assurance that forward looking statements will prove

Statements regarding plans with respect to the Company's mineral properties may contain forward looking statements in relation to future matters that can only be made where the Company has a reasonable basis for making those statements.

This announcement has been prepared in compliance with the JORC Code (2012) and the current ASX Listing Rules.

The Company believes that it has a reasonable basis for making the forward looking statements in the announcement, including with respect to any production targets and financial estimates, based on the information contained in this announcement.

## **JORC Code, 2012 Edition**

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</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.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Recent exploration at the Julius Gold Deposit comprised aircore drilling of 67 holes for 2,879 metres. Approximately 2kg of sample was collected from each metre for analysis by riffle splitting of the sample interval collected via the rig cyclone.</li> <li>Samples were 2 kilogram samples from the drill spoils collected. Drill hole collar locations were recorded by handheld GPS survey with accuracy +/-2 metres.</li> <li>Analysis was conducted by submitting the 2kg sample whole for preparation by crushing, drying and pulverising at Nagrom Laboratories for gold analysis via Fire Assay/ICP.</li> <li>A number of 4 metre composites were also collected in areas outside of the interpreted mineralised intervals.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul> <li>Aircore drilling (4 inch), predominantly blade bit with hammer at the bottom of a number of holes, as required below the base of oxidation (&gt;50 metres vertical depth).</li> </ul>

Criteria	JORC Code explanation	Commentary
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> <li>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.</li> </ul>	<ul> <li>Drill sample returns as recorded were considered excellent.</li> <li>There is insufficient data available at the present stage to evaluate potential sampling bias.</li> </ul>
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 nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Drill chip logging is a qualitative activity with pertinent relevant features recorded: lithology, mineralogy, mineralisation, structural, weathering, alteration, colour and other features of the samples.</li> <li>Rock chip boxes of all sample intervals were collected. All samples were 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 sub-sampling 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>	<ul> <li>No core was sampled-Aircore drilling only.</li> <li>Sample preparation for all samples follows industry best practice and was undertaken by Nagrom Laboratories in Perth where they were crushed, dried and pulverised to produce a sub sample for analysis.</li> <li>Sample preparation involving oven drying, fine crushing to 95% passing 4mm, followed by rotary splitting and pulverisation to 85% passing 75 microns.</li> <li>QC for sub sampling follows Nagrom procedures.</li> <li>Field duplicates were taken at a rate of 1:30.</li> <li>Blanks were inserted at a rate of 1:30.</li> <li>Standards were inserted at a rate of 1:30.</li> <li>Sample sizes are considered appropriate to the grain size of the material being sampled.</li> </ul>
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>The methods are considered appropriate to the style of mineralisation. Extractions are considered near total.</li> <li>No geophysical tools were used to determine any element concentrations at this stage.</li> <li>Laboratory QA/QC involves the use of internal lab standards using certified reference material, blanks, splits and duplicates as part of the in house procedures. Repeat and duplicate analysis for samples shows that the precision of analytical methods is within acceptable limits.</li> </ul>
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>	<ul> <li>The Company's Geologist has visually reviewed the samples collected.</li> <li>No twin holes drilled</li> <li>Data and related information is stored in a validated Mapinfo or Micromine database. Data has been visually checked for import errors.</li> <li>No adjustments to assay data have been made.</li> </ul>
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>	<ul> <li>All drillholes have been located by handheld GPS with precision of sample locations considered +/-5m.</li> <li>Location grid of plans and cross sections and coordinates in this release 2016 samples use MGA94, Z51 datum.</li> <li>Topographic data was assigned based on a DTM of the Julius opening surface</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The holes are nominally spaced on a 10 metre (E-W spacing) with hole spacing along each section ranging from 10-20 metres spacing along each section line.</li> <li>Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation procedures.</li> <li>Sample compositing has occurred on a small number of samples (4 metre composite samples) outside of the interpreted main mineralized zone.</li> </ul>
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</li> </ul>	<ul> <li>The orientation of sampling is considered adequate and there is not enough data to determine bias if any.</li> <li>Mineralised outcrop strikes north-north-east. Drilling was orthogonal to this apparent strike and comprised vertical drill holes The flat lying laterite also trends in this</li> </ul>

Criteria	JO	JORC Code explanation		Commentary		
		have introduced a sampling bias, this should be assessed and reported if material.	•	orientation and the vertical drilling completed is considered entirely appropriate for this style of mineralization.		
Sample security	•	The measures taken to ensure sample security.	•	Chain of custody is managed by the Company and samples are transported to the laboratory via Company staff with samples safely consigned to Nagrom for preparation and analysis. Whilst in storage, they are kept in a locked yard. Tracking sheets are used track the progress of batches of samples.		
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No review or audit of sampling techniques or data compilation has been undertaken at this stage.		

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
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>	<ul> <li>The Julius Gold Deposit is located within E53/1042 located in the northern Yandal Greenstone Belt and is 100% owned by Echo Resources Ltd. The tenement is located in the Wiluna Native Title Claim Group (WC99/24). Newmont Yandal Operations has the right to buy back a 60% interest in any gold discovery containing aggregate Inferred Mineral Resources of at least 2 million ounces of gold. A third party net smelter royalty of 1.5% applies in respect of all minerals produced from the tenement.</li> <li>The tenement is in good standing</li> <li>No impediments to operating on the permit are known to exist.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The Julius deposit area was initially located by Newmont based on shallow results. Echo Resources subsequently completed RC drilling which defined the extent of the resource as understood today.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Julius Gold Deposit consists of a flat lying gold rich laterite zone which is located between 10-15 metres vertical depth and overlain by indurated barren transported sands and silts. This is underlain by clay rich supergene gold mineralisation and at depth primary gold mineralization associated with silica, quartz veining and sulphide development. The mineralisation is largely focused on a shallow west-northwest dipping granite/greenstone contact (principally ultramafic lithologies).</li> </ul>
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:</li></ul>	<ul> <li>A total of 67 drillholes for 2879 metres were drilled on nominal 10-20 metre centres, focused on the oxidized zone and laterite gold mineralized zone in the vicinity of the granite-greenstone contact. Full drillhole details for the results received to date are provided in this announcement. collected. Appropriate maps and plans also accompany this announcement.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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</li> </ul>	<ul> <li>No averaging or aggregation techniques have been applied.</li> <li>No top cuts have been applied to exploration results.</li> <li>No metal equivalent values are used in this report.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
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 are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>The orientation or geometry of the mineralised zones strikes in a north-northeastly direction and dips in a shallow manner to the west-northwest. The laterite is flat lying and overlies this contact zone, with the drilling largely interpreted to be orthogonal to strike.</li> </ul>
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>	<ul> <li>Appropriate maps are included in main body of report with gold results and full details are in the tables reported.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>All results for the target economic mineral being gold have been reported.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Previous work by Echo has highlighted a gold resource of 4Mt @ 1.69 g/t Au at Julius. Metallurgical work suggests excellent gold recoveries are likely through a conventional CIP/CIL gold plant. There are at least two of these in the district within trucking distance of Julius.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>	<ul> <li>Future RC, diamond and aircore drilling is being considered to further evaluate the Julius Gold Deposit.</li> <li>Refer to maps in main body of report for potential target areas.</li> </ul>