

# ASX ANNOUNCEMENT

## MT JOEL DRILLING HIGHLIGHTS SIGNIFICANT UPSIDE

- 148 aircore (AC) drill-holes for 8,181m completed at Mt Joel and reverse circulation (RC) drilling underway
- Recent results show further shallow, consistent mineralisation strongly suggests Mt Joel will yield further open pit oxide ounces
- Latest results returned from AC drilling include:
  - 20m @ 5.56 g/t Au from 33m, AND 4m @ 4.74 g/t Au from 10m (MJAC079)
  - 10m @ 3.86 g/t Au from 20m, AND 11m @ 2.61 g/t Au from 34m (MJAC090)
  - 15m @ 2.42 g/t Au from 26m (MJAC096)
  - 12m @ 2.62 g/t Au from 16m (MJAC091)
- New Resource Estimate for Mt Joel due in March Qtr 2019
- Ongoing RC drilling aims to add incremental, near surface ounces into the future mine plan for the Yandal Gold Project
- Updated Bankable Feasibility Study (BFS) for the Yandal Gold Project to be finalised in March Qtr 2019

Echo Resources Limited (ASX: EAR) ('Echo' or 'the Company') is pleased to announce the latest results from air core (AC) drilling at the Mt Joel (70% Echo) gold district within the Yandal Gold Project.

Drilling at Mt Joel is part of Echo's strategy to add incremental, near surface ounces to further enhance a planned restart of the Bronzewing processing facility in 2019.

### ASX ANNOUNCEMENT

21 December 2018

### ASX CODE

EAR

### KEY ASSETS

- Julius
- Orelia
- Bronzewing Hub

### DIRECTORS

**Victor Rajasooriar**  
CEO & Managing Director

**Barry Bolitho**  
Non-Executive Chairman

**Robin Dean**  
Non-Executive Director

**Mark Hanlon**  
Non-Executive Director

**Anthony McIntosh**  
Non-Executive Director

**Alan Thom**  
Non-Executive Director

**Kate Stoney**  
Company Secretary

### REGISTERED OFFICE

Level 1, 7 Rheola Street  
West Perth WA 6005

T +61 (8) 9389 8726

F +61 (8) 9467 2896

## Mt Joel Drilling Program

Echo is undertaking an aggressive drilling program in the Mt Joel district to delineate quality, near surface, oxide ounces. The AC program was designed to define and extend mineralisation observed in historical drill-hole data and ultimately delineate an updated JORC-2012 compliant resource for the project. RC resource definition drilling is currently being undertaken to in-fill gaps in the drilling database with the view to define 'Indicated' resources within the Mt Joel resource inventory.

Initial results from drilling have provided confidence that there exists potential to define significant, open-pit mineable resources over several satellite pits in the Mt Joel district. Concurrently, hydrogeological studies and geotechnical drilling are being undertaken to provide the option for Mt Joel to be brought into the life-of-mine plan as soon as possible.

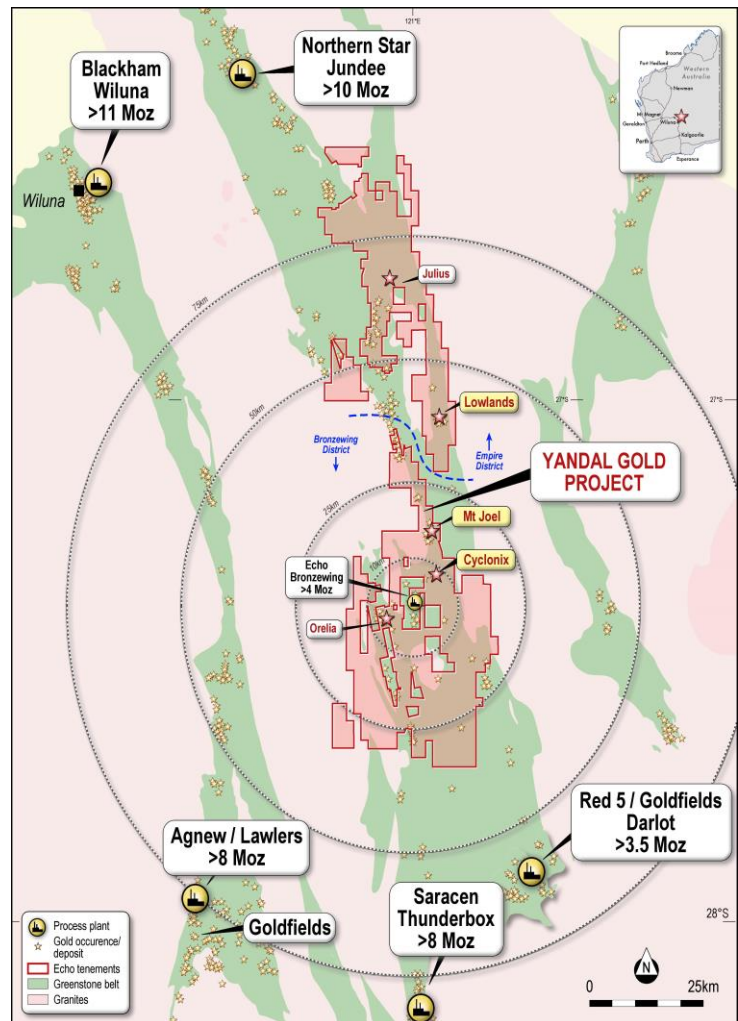


Figure 1: Location Map

Echo's CEO, Victor Rajasooriar, commented: *"The Mt Joel gold district continues to deliver consistent, excellent results and provides Echo with the opportunity to add incremental, quality oxide ounces to our resource base. The large amount of work that has been completed recently at Mt Joel highlights how serious we are at Echo to continue to strengthen the already robust initial four-year mine plan as we push towards production in 2019."*

*"We are following up the initial AC work with an extensive RC program in preparation for an updated Mt Joel JORC-2012 Resource estimate. Additionally, we are gathering a huge amount of geological data which will help us when we explore this extensively mineralised system at depth. The Yandal Gold Belt is a world class mining and exploration jurisdiction and the historical work at Mt Joel has only been conducted in the top 100m. With an exploration budget to be funded by production, we are excited about the deep exploration potential of the area."*

## Mt Joel Geology and Mineralisation

Mt Joel is located approximately 12 kilometers northeast of the Bronzewing Processing Hub (Fig 1) with discontinuous gold mineralisation extending over 8 kilometres. A significant amount of drilling has been completed over Mt Joel with near surface mineralisation spread over numerous prospects (Fig.2). Gold occurs in quartz veins and vein selvages associated with pyrite +/- chalcopyrite. Mineralisation occurs predominantly in the oxide-transition zone extending from the base of transported material to the base of weathering, a zone more than 100m deep in places.

Mt Joel has long been recognised as an area that has the potential for additional oxide resources required for the mine plan.

Following on from preliminary investigations, five areas were delineated where near surface mineralisation exists and which have the potential to add open-pittable (within 50m of surface) ounces to the resource inventory with further drilling (Figure. 2). Drilling during the AC campaign was designed to target and validate historical data in the oxidised zone, while testing the extents of the known mineralisation.

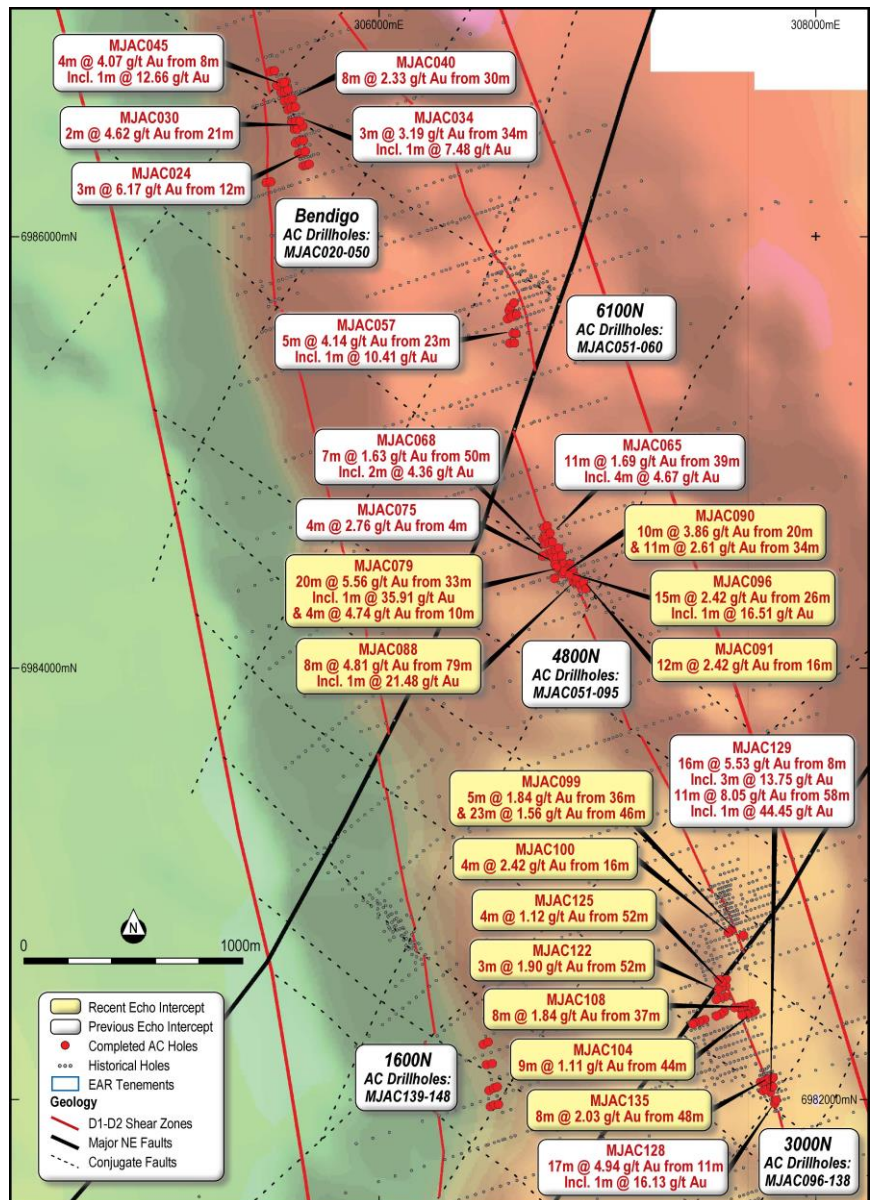


Figure 2: Mt Joel Prospect Map (Bouguer Gravity Image)

The latest batch of results has further enhanced the understanding of the Mt Joel mineralised system and provides Echo with confidence that significant additional oxide material from Mt Joel can be incorporated into the future mine plan. Consistent, high-grade results such as 20m @ 5.56 g/t Au from 33m (MJAC079) and 10m @ 3.86 g/t Au from 20m (MJAC090) highlight the high quality, near surface nature of the mineralisation. These results are in addition to previously released results such as 16m @ 5.53 g/t Au from 8m (MJAC129).

Following on from the success of the AC drilling campaign, an RC resource definition drilling campaign has commenced with the aim to delineate 'Indicated' resources in the Mt Joel block model. Results from the RC drilling will be available early in 2019 and an updated resource estimate is expected in the March quarter 2019.



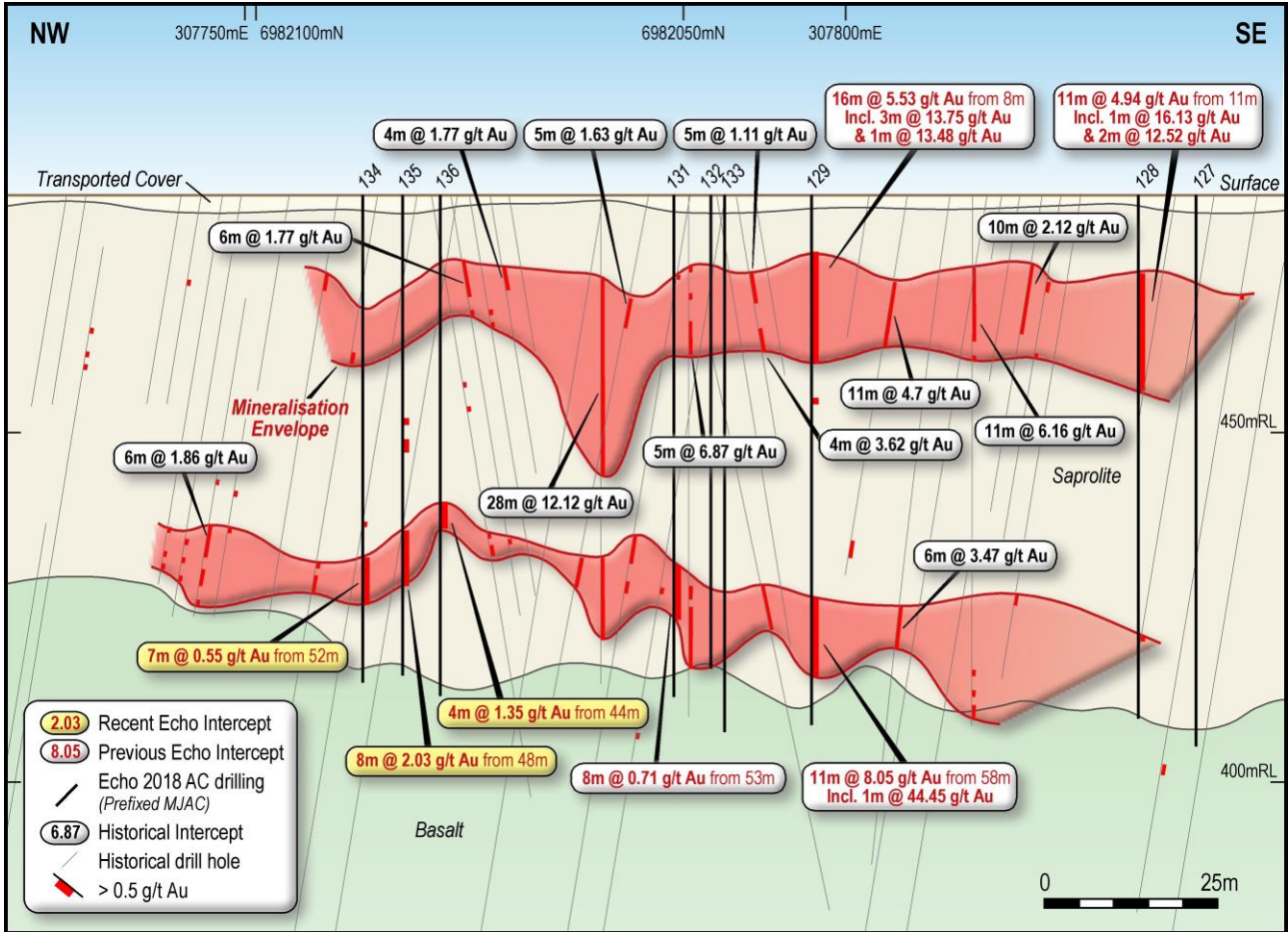


Figure 3: 3000N Long-Section

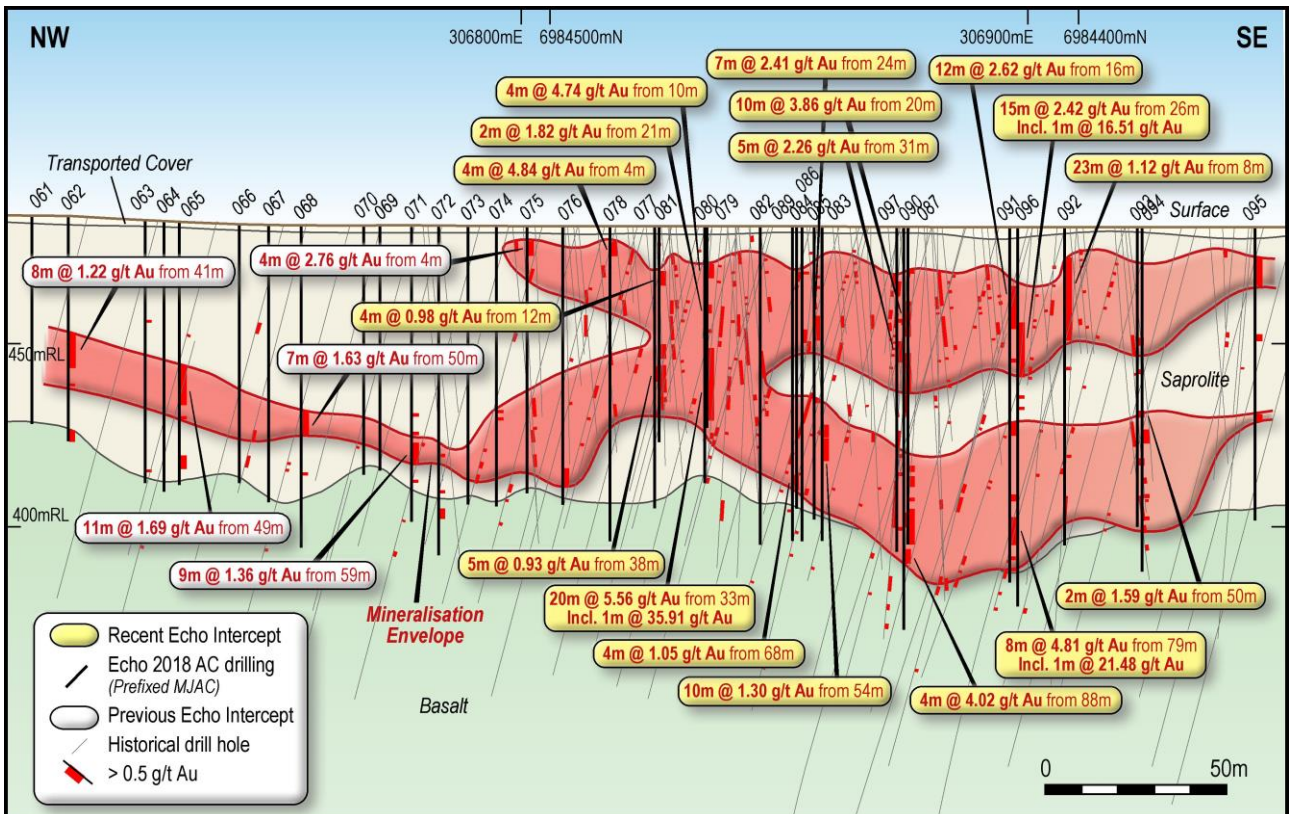


Figure 4: 4800N Long-Section

## ABOUT ECHO

### *The Yandal Strategy*

Echo controls the central Yandal greenstone belt through 100% ownership of over 1,600km<sup>2</sup> of highly prospective tenement holdings as well as the 2 Mtpa Bronzewing processing facility. The Company has embarked on exploration in two distinct districts – the Bronzewing district in the south and Empire district in the north – both of which are within trucking distance of the processing facility.

The Bronzewing district encompasses the southern part of Echo tenure and includes the Bronzewing, Orelia and Lotus open pits, the Mt Joel District and numerous highly prospective targets. Outside of the major deposits, drilling within the Bronzewing district is largely limited to within the top 100m from surface. The occurrence of these large mineralised systems in the Bronzewing district however, highlights that the region has the fundamental architecture to host world class ore bodies at depth. Recent target generation work Echo has completed highlights the structural complexity of these systems and it is Echo's opinion that there remains exciting exploration potential at depth in these areas.

Recent work has delivered positive results from work beneath the existing Orelia open pit as well as the potential that Orelia and the nearby Calista and Cumberland gold zones are developing into a large mineralised gold system, which points to the opportunity for a larger pit. The nearby Lotus deposit extends to a depth of 500 vertical metres where 387 koz at 5.5 g/t Au was historically produced. Lotus represents an opportunity to delineate further high-grade, underground resources on the back of detailed geological interpretation and deep drilling.

The Empire district contains the Julius Gold Deposit which supports a two-stage open pit development with low striping ratios. The district also contains the 13 km long Hadrian trend which is a lightly explored, 13 km long interpreted gold corridor which links Julius with Northern Star Resources' Ramone gold discovery approximately 5 km north of Echo's tenement boundary.

Echo's vision is to build a sufficient resource and reserve base to support a transition into production via the Bronzewing processing facility in 2019. The company is currently completing a revised BFS relating to the refurbishment of the Bronzewing mill and the treatment of ore from the Julius and Orelia gold deposits.

In conjunction with its development activities, Echo continues to apply cutting edge geophysical and geochemical datasets to identify and test genuine greenfields targets to uncover new significant gold discoveries and expand existing high-grade resources. With an exploration budget funded by production, Echo will be in an excellent position to reinvigorate deep exploration in the search for the next million-ounce, underground ore body.

### **For further information:**

Victor Rajasooriar  
**CEO & Managing Director**  
Echo Resources Ltd

**Media inquiries**  
Michael Vaughan  
0422 602 720

## APPENDIX 1: Detailed Results

Hole	From	To	Width	Grade	Easting	Northing	RL	Total Depth	Dip	Azimuth
				(g/t Au)						
MJAC077	38	43	5	0.93	306821	6984474	479	77	-90	0
MJAC078	4	8	4	4.84	306807	6984477	479	86	-90	0
MJAC079	10	14	4	4.74	306826	6984458	479	55	-90	0
inc.	12	13	1	10.25						
MJAC079	33	53	20	5.56						
inc.	40	41	1	35.91						
inc.	49	50	1	13.88						
MJAC080	21	23	2	1.82	306847	6984482	479	70	-90	0
MJAC080	28	29	1	3.50						
MJAC081	12	16	4	0.98	306813	6984465	479	59	-90	0
MJAC082	NSR				306802	6984412	479	87	-90	0
MJAC083	54	64	10	1.30	306836	6984424	479	86	-90	0
MJAC084	67	68	1	0.78	306877	6984477	479	77	-90	0
MJAC085	24	31	7	2.41	306869	6984461	479	80	-90	0
MJAC085	47	48	1	2.98						
MJAC086	12	13	1	2.04	306860	6984456	479	86	-90	0
MJAC087	31	37	5	2.26	306888	6984448	482	89	-90	0
MJAC088	79	87	8	4.81	306888	6984403	479	95	-90	0
inc.	81	82	1	21.48						
MJAC088	36	37	1	3.05						
MJAC089	68	72	4	1.05	306847	6984447	479	86	-90	0
MJAC090	20	30	10	3.86	306878	6984435	479	110	-90	0
inc.	24	25	1	9.94						
MJAC090	34	45	11	2.61						
inc.	39	40	1	13.39						
MJAC090	78	82	4	1.13						
MJAC090	88	92	4	4.02						
MJAC091	16	28	12	2.62	306896	6984412	479	97	-90	0
MJAC091	83	86	3	2.66						
MJAC092	8	31	23	1.12	306907	6984402	479	87	-90	0
MJAC093	50	51	2	1.59	306918	6984384	479	82	-90	0
MJAC094	79	80	1	1.99	306931	6984396	479	94	-90	0
MJAC095	29	31	2	1.85	306947	6984368	479	80	-90	0
MJAC095	51	53	2	3.67						
MJAC096	26	41	15	2.42	306906	6984419	479	104	-90	0
inc.	38	39	1	16.51						
MJAC097	65	71	6	1.48	306872	6984427	479	87	-90	0
MJAC097	74	87	12	1.24						
MJAC098	NSR				307667	6982764	480	86	-90	0
MJAC099	36	41	5	1.84	307616	6982784	479	88	-90	0

Hole	From	To	Width	Grade	Easting	Northing	RL	Total Depth	Dip	Azimuth
				(g/t Au)						
MJAC099	46	69	23	1.56						
MJAC099	81	83	2	2.41						
MJAC100	0	4	4	1.92	307598	6982773	480	87	-90	0
MJAC101	NSR				307717	6982407	480	54	-90	0
MJAC102	44	48	4	0.56	307706	6982401	480	78	-90	0
MJAC103	NSR				307688	6982398	480	75	-90	0
MJAC104	44	53	9	1.11	307676	6982392	480	75	-90	0
MJAC105	46	47	1	0.76	307662	6982387	480	90	-90	0
MJAC106	NSR				307706	6982441	480	68	-90	0
MJAC107	NSR				307689	6982436	480	67	-90	0
MJAC108	37	45	8	1.84	307671	6982430	480	62	-90	0
inc.	37	38	1	10.29						
MJAC109	NSR				307650	6982423	480	78	-90	0
MJAC110	NSR				307630	6982415	480	99	-90	0
MJAC111	NSR				307580	6982404	480	77	-90	0
MJAC112	61	62	1	2.18	307565	6982393	480	83	-90	0
MJAC113	NSR				307543	6982384	480	90	-90	0
MJAC114	NSR				307485	6982369	481	82	-90	0
MJAC115	NSR				307467	6982363	481	105	-90	0
MJAC116	NSR				307444	6982358	481	107	-90	0
MJAC117	NSR				307436	6982349	481	104	-90	0
MJAC118	62	63	1	0.62	307588	6982477	480	80	-90	0
MJAC119	NSR				307567	6982470	480	89	-90	0
MJAC120	63	65	2	1.03	307549	6982462	480	82	-90	0
MJAC121	72	77	5	0.52	307591	6982525	480	80	-90	0
MJAC122	52	53	3	1.90	307571	6982516	480	77	-90	0
MJAC123	NSR				307553	6982510	480	98	-90	0
MJAC124	66	67	1	1.53	307592	6982553	480	102	-90	0
MJAC125	52	56	4	1.12	307573	6982547	480	106	-90	0
MJAC126	NSR				307552	6982541	480	98	-90	0
MJAC127	NSR				307810	6981976	480	79	-90	0
MJAC134	52	59	7	0.55	307747	6982078	481	70	-90	0
MJAC135	48	56	8	2.03	307765	6982085	481	69	-90	0
MJAC136	44	48	4	1.35	307786	6982092	480	72	-90	0
MJAC137	NSR				307804	6982098	480	82	-90	0



## Appendix 2: Mineral Resource & Ore Reserve Estimates

### Echo Mineral Resource Estimates<sup>7</sup>

(Ownership, Cut-off)	Measured			Indicated			Inferred			Total		
	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)
Julius <sup>4</sup> (100%, 0.8)	1.8	2.1	124,227	1.6	1.3	67,789	1.8	2.5	142,991	5.2	2.0	335,007
Regional <sup>5</sup> (100%, 0.5)							2.8	1.5	134,925	2.8	1.5	134,925
Corboys <sup>3</sup> (100%, 1.0)				1.7	1.8	96,992	0.5	1.8	28,739	2.2	1.8	125,731
Orelia <sup>4</sup> (100%, 1.0)				14.1	2.2	980,000	1.8	1.7	100,000	15.9	2.1	1,080,000
Woorana North <sup>2</sup> (100%, 0.5)				0.3	1.4	13,811				0.3	1.4	13,811
Woorana South <sup>2</sup> (100%, 0.5)				0.1	1.0	3,129				0.1	1.0	3,129
Fat Lady <sup>1,2</sup> (70%, 0.5)				0.7	0.9	19,669				0.7	0.9	19,669
Mt Joel 4800N <sup>1,2</sup> (70%, 0.5)				0.2	1.7	10,643				0.2	1.7	10,643
<b>Total Mineral Resources</b>	<b>1.8</b>	<b>2.1</b>	<b>124,227</b>	<b>18.7</b>	<b>2.0</b>	<b>1,192,033</b>	<b>6.9</b>	<b>1.8</b>	<b>406,655</b>	<b>27.4</b>	<b>2.0</b>	<b>1,722,915</b>

### Echo Ore Reserves

(Ownership, Cut-off)	Proved			Probable			Total		
	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)	Tonnes (Mt)	Grade (g/t Au)	Ounces (Au)
Orelia <sup>6</sup> (100%, 0.6)				14.1	1.7	753,000	14.1	1.7	753,000
Julius <sup>6</sup> (100%, 0.8)	1.4	2.2	95,000	0.1	1.8	8,000	1.5	2.1	103,000
<b>Total Ore Reserves</b>	<b>1.4</b>	<b>2.2</b>	<b>95,000</b>	<b>14.2</b>	<b>1.7</b>	<b>761,000</b>	<b>15.6</b>	<b>1.7</b>	<b>856,000</b>

1. Resources are adjusted for Echo's 70% ownership interest

2. Resources estimated by CoxsRocks (refer to Competent Persons Statements) in accordance with JORC Code 2012. For full Mineral Resource estimate details refer to the Metaliko Resources Limited announcement to ASX on 1 September 2016. Echo is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

3. Resources estimated by HGS (refer to Competent Persons Statements) in accordance with JORC Code 2012, for full details of the Mineral Resource estimate refer to the Metaliko Resources Limited announcement to ASX on 23 August 2016. Echo is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

4. Resources estimated by Mr Lynn Widenbar (refer to Competent Persons Statements) in accordance with JORC Code 2012, for full details of the Mineral Resource estimate refer to the Echo Resources Limited announcement to ASX on 23 November 2016 & 7 September 2017. Echo Resources Limited is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning mineral resource estimates in the previous announcement continue to apply and have not materially changed.

5. Resource estimates include Bills Find, Shady Well, Orpheus, Empire & Tipperary Well and were estimated by Golders (refer to Competent Persons Statements) in accordance with JORC Code 2004, for full details of the Mineral Resource estimates refer to the Echo Resources Limited prospectus released to ASX on 10 April 2006.

6. Reserve estimated by Mr Stuart Cruickshanks (refer to Competent Persons Statements) in accordance with JORC Code 2012, for full details of the Ore Reserve estimate refer to the Echo Resources Limited announcement to ASX on 27 November 2017. Echo Resources Limited is not aware of any new information or data that materially affects the information included the previous announcement, and all material assumptions and technical parameters underpinning Ore Reserve estimate in the previous announcement continue to apply and have not materially changed.

7. Mineral Resources are inclusive of Ore Reserves.

### Forward Looking Statements

This announcement includes certain 'forward looking statements'. All statements, other than statements of historical fact, are forward looking statements that involve various risks and uncertainties. There can be no assurances that such statements will prove accurate, and actual results and future events could differ materially from those anticipated in such statements. Such information contained herein represents management's best judgement as of the date hereof based on information currently available. The Company does not assume any obligation to update any forward-looking statement.

### Competent Persons' Declarations

The information in this announcement that relates to Exploration Results is based on information compiled by Dr. James Warren. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are 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". Dr Warren consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.



## 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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>Recent exploration at Mt Joel has comprised aircore drilling of 148 holes for 8,181 metres.</li> <li>One metre samples were collected within mineralised zones as determined by rig-based geologists. For the 1m samples approximately 2kg of material collected from each metre by riffle splitting of the sample interval collected via the rig cyclone.</li> <li>4 metre composite samples were collected from sample intervals outside of the interpreted mineralised areas.</li> <li>4 metre composite samples consist of ~2 kilogram samples, collected via spear from the drill spoils.</li> <li>Follow-up 1m samples are collected if 4m composites return anomalous values greater than 0.2 ppm Au and sent to the laboratory for analysis.</li> <li>Drill hole collar locations were recorded by handheld GPS survey with accuracy +/-2 metres.</li> <li>Analysis was conducted by submitting the 2kg composite sample whole for preparation by crushing, drying and pulverising at Intertek/Genalysis Laboratories for gold analysis via aqua regia/ICP-MS</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Aircore drilling with a 4-inch blade bit. Drilling was conducted until blade refusal.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>No core was sampled-aircore drilling only.</li> <li>Sample preparation for all samples follows industry best practice and was undertaken by Genalysis/Intertek 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 Intertek 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 style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <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> </ul>

	<p>instrument make and model, reading times, calibrations factors applied and their derivation, etc.</p> <ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Company's geologists have visually reviewed the samples collected.</li> <li>No twin holes drilled</li> <li>Data and related information is stored in a validated Access 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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>All drillholes have been located by handheld GPS with precision of sample locations considered +/- 2m.</li> <li>Location grid of plans and cross sections and coordinates in this release use MGA94, Z51 datum.</li> <li>Topographic data was assigned based on a DTM of the Yandal district.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The holes have been variably spaced. A nominal hole spacing between 10 metres (E-W spacing) and a line spacing of 20-40 metres between each section line have been used.</li> <li>Sample compositing has occurred on a portion samples in this release (4 metre composite samples).</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>The orientation of sampling is considered adequate and there is not enough data to determine bias if any.</li> <li>Interpreted lithologies generally strike north-west. Drilling was approximately orthogonal to this apparent strike and comprised vertical drill holes as mineralisation is relatively flat lying.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Chain of custody is managed by the Company and samples are transported to the laboratory via Company staff with samples safely consigned to Intertek 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.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No review or audit of sampling techniques or data compilation has been undertaken at this stage.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Mt Joel gold prospect is located within the central Yandal Greenstone Belt. Mt Joel sits within mining licenses M 53/294, M 53/295, M 53/295, M 53/297 and M 53/939. The Mt Joel mining leases are 70% owned by Echo. A third-party net smelter royalty of 1.5% applies in respect of all minerals produced from the tenement.</li> <li>The tenements are in good standing</li> <li>No impediments to operating on the permit are known to exist.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration in the Yandal district has been completed by Great Central Mines, Normandy, Newmont and others. Anomalous RAB, aircore and RC drilling in the area by previous operators have been returned.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Highly oxidized/weathered greenstones, sediments and intrusive felsic rocks, with quartz veining with minor sulphides.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A total of 148 aircore drill-holes for 8,181 metres were drilled at Mt Joel which focused primarily on the oxide zone.</li> <li>Full drill-hole details for the results from 67 of the aircore holes are provided in this announcement.</li> <li>Appropriate maps and plans also accompany this announcement.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <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 aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <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>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The orientation or geometry of the mineralised zones; strikes NW, NE and WNW. Dips vary but are predominantly 50-60 degrees E</li> <li>True width is variable and further work to clarify is required.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Appropriate maps are included in main body of report with gold results and full details are in the tables reported.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All results for the target economic mineral being gold have been reported.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Previous work in the district by others has estimated total gold resources within the Mt Joel District to total ~200,00 ounces.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Future RC, diamond and aircore drilling is being considered to further evaluate the significant results returned.</li> <li>Refer to maps in main body of report for potential target areas.</li> </ul>