

DIAMOND DRILLING AT EMU AND SOUTHWARK DEPOSITS REVEALS GOLD AND SILVER CONTINUITY AT DEPTH

HIGHLIGHTS:

- Results from the 14 diamond drillholes at Emu and Southwark reveal gold and silver continuity at depth
- Significant intercepts include:
 - 16m @ 5.3 g/t Au, 25.1 g/t Ag from 61m
 - 15m @ 4.2 g/t Au, 11.2 g/t Ag from 53m
 - 4m @ 10.8 g/t Au, 5.9 g/t Ag from 43m
 - 6m @ 8.3 g/t Au, 9.2 g/t Ag from 86m
 - 4.6m @ 5.5 g/t Au, 7.9 g/t Ag from 101m
 - 6m @ 2.6 g/t Au, 4.8 g/t Ag from 54m
 - 4.3m @ 2.1 g/t Au, 26.4 g/t Ag from 193m
 - 4m @ 2.7 g/t Au, 30.3 g/t Ag from 86.5m
 - 13.7m @ 1.1 g/t Au, 14.6 g/t Ag from 137.3m
 - 6.3m @ 1.3 g/t Au, 72.8 g/t Ag from 81.7m
 - 4.5m @ 144.4 g/t Ag from 96.5m, including 2m @ 280 g/t Ag
 - 3m @ 4.2 g/t Au, 147 g/t Ag from 96.5m, including 1.3m @ 9.7 g/t Au, 340 g/t Ag from 96.5m
- Broad high grade gold intercepts extend downhole mineralisation encountered in previous RC holes
- Gold and silver mineralisation remains open at depth

Alt Resources Ltd (ASX: ARS, Alt or 'the Company') is pleased to announce the results from its recent diamond drilling program at the Southwark and Emu deposits, Bottle Creek Gold Project, WA. 14 diamond holes were drilled, for 1,222m. Of these 7 holes were diamond tails extending previously drilled RC holes, and 7 were new diamond holes drilled from surface. The diamond tails extended drilling into zones where previous RC drilling had ended in mineralisation, or where the RC hole was deemed to have not reached the mineralised target based on surrounding drillholes. This diamond program has confirmed that both gold and silver mineralisation continue at depth beneath that previously defined. These zones remain open and will be the subject of additional drilling at a later date.



Emu Deposit

At Emu, assays for drillholes EMDD001 to EMDD004, and diamond tails EMRCDD014, 080 and 092 give results up to **19.1 g/t Au¹** and **465 g/t Ag²**. Broad intercepts include **16m @ 5.3 g/t Au and 25 g/t Ag³**. Significant results are listed in Table 1. Mineralisation is dominantly hosted in the Emu Formation, comprising interbedded black shales, banded iron formations and carbonaceous cherts. The chemically reducing nature of this sedimentary package, in contrast to the surrounding mafic volcanics and felsic intrusives, is considered to be a key factor in the deposition of gold and other metals during the mineralisation event.

Gold + silver mineralisation at Emu occurs within a pyrite-dominated (+ pyrrhotite + arsenopyrite) assemblage. Silver mineralisation occurs in association with gold, however some zoning to mineralised zones is apparent, with elevated silver grades occurring on the margins of mineralised zones, and higher-grade gold occurring within the cores of these zones.

Significant intercepts from diamond drilling at Emu are listed in Table 1 and include:

- **EMDD001: 4.3m @ 2.1 g/t Au, 26.4 g/t Ag** from 193m
- **EMDD002_1: 15.05m @ 4.22 g/t Au, 11.17 g/t Ag** from 53.3m
 - **including: 1.35m @ 10.25 g/t Au, 3.0 g/t Ag** from 53.65
 - **and including: 1.8m @ 10.60 g/t Au, 18.9 g/t Ag** from 64.5m
- **EMDD003: 4m @ 10.82 g/t Au, 5.9 g/t Ag** from 43m
 - **and: 6m @ 2.66 g/t Au, 4.8 g/t Ag** from 54m
- **EMDD004: 16m @ 5.34 g/t Au, 25.12 g/t Ag** from 61m
 - **including: 4m @ 58.5 g/t Ag** from 61m
 - **and including: 3m @ 15.27 g/t Au, 17.63 g/t Ag** from 65m
- **EMRCDD014: 6m @ 8.3 g/t Au, 9.2 g/t Ag** from 86m
- **EMRCDD080: 4.6m @ 5.5 g/t Au, 7.9 g/t Ag** from 101m
- **EMRCDD092: 4.5m @ 144.4 g/t Ag** from 96.5m
 - **including: 2.1m @ 280 g/t Ag** from 97.5m
 - **and including: 1.1m @ 1.1 g/t Au, 112 g/t Ag** from 98.5m

EMDD002 was originally drilled to 171.9m, however encountered difficult drilling conditions within the mineralised zone between 50 and 70m downhole. To ensure this zone was tested properly, a twin hole, EMDD002_1, was drilled 0.5m southwest of the original hole, and successfully drilled through the mineralised zone with good recoveries. The location of EMDD001, 002 and 002_1 are shown in Figure 1.

¹ From drillhole EMRCDD014, 87-88m downhole

² From drillhole EMRCDD092, 97.5-98.5m downhole

³ From drillhole EMDD004, 61-77m downhole

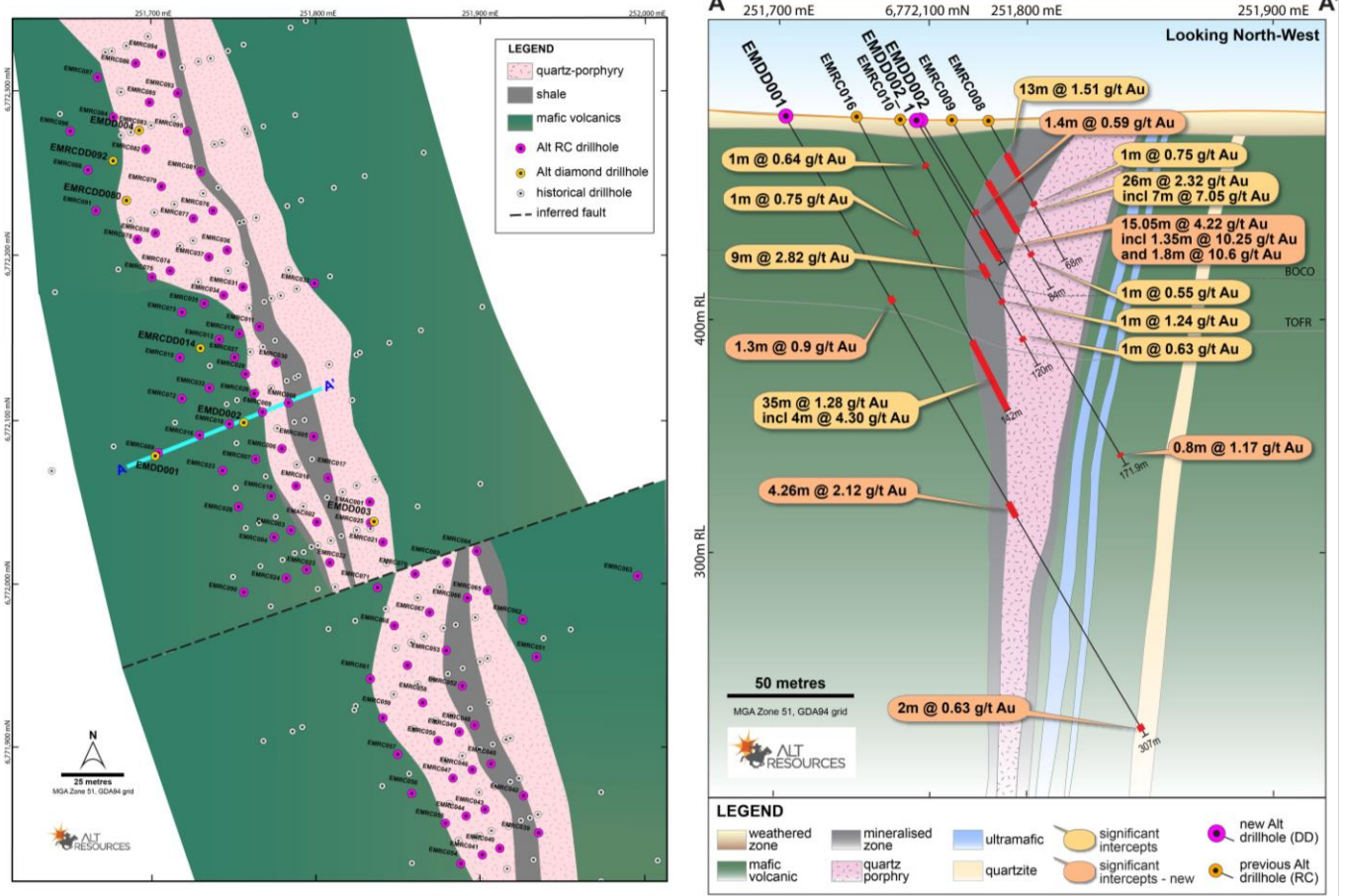


Figure 1. Plan map (left) showing new Alt drilling at the Emu deposit, as well as historical drilling. Alt's new diamond drilling described in this announcement is shown by the yellow collars, whilst new RC drilling is shown as pink collars. The location of cross-section AA' is shown as a blue line. Cross-section AA' is shown on the right, with Alt's new diamond drillholes highlighted with pink colours. This cross-section clearly demonstrates the continuity of gold mineralisation at depth in EMDD001, below the previous drilling.

Southwark Deposit

Diamond drilling at Southwark included drillholes SWKDD001 and 002, with diamond tails SWKRCDD014, 016, 018 and 034. Assays from these drillholes give results up to **9.66 g/t Au** and **493 g/t Ag**⁴. Broad intercepts include **13.7m @ 1.1 g/t Au** and **14.6 g/t Ag**⁵. Intercepts which extend previously drilled zones in RC holes include **17m @ 3.47 g/t Au**, **37.2 g/t Ag**⁶, which extends the original RC intercept by 8m downhole. Significant results are listed in Table 1.

⁴ Both assays from drillhole SWKDD002; 9.66 g/t Au from 96.5-97.75m downhole, and 493 g/t Ag from 105.2-106m downhole

⁵ From SWKRCDD034, 137.3-151m downhole

⁶ From SWKRCDD014, 70-88m downhole. Original RC intercept was 71-80m, 9m @ 5.6 g/t Au (RC/DD intercept has 1.7m of no sample return between RC and DD changeover). See ARS announcement, 1st May 2018: https://www.altresources.com.au/wp-content/uploads/2018/05/High_Grade_Gold_at_Southwark_1May18.pdf



Figure 2. Section of diamond core from SWKRCDD034 (148m downhole) showing an interval of massive sulphide. The core diameter is 63.5mm.

As at Emu, Southwark mineralisation is dominantly hosted in the Emu Formation, within the broad, high strain Mt Ida Shear Zone.

Mineralisation at Southwark is generally found to have the same style as at Emu; that of disseminated pyrite and arsenopyrite within the carbonaceous Emu Formation. However several intervals of massive sulphide were intersected, occurring on the boundary between the felsic porphyry intrusive and the Emu Formation sediments. These intervals are up to 10m thick. An example is shown in Figure 2. Assays from this zone returned up to **3.5 g/t Au, 13.6 g/t Ag and 0.2 % Zn⁷**.

The massive sulphide zone contains dominantly pyrite, with minor occurrences of sphalerite (ZnS), various Cu-bearing phases and galena (PbS). A description of petrographic analysis of a similar sample is given below, with photomicrographs in Figure 5.

Significant intercepts from diamond drilling at Southwark are listed in Table 1, and include:

- **SWKDD002: 3.1m @ 4.24 g/t Au, 146.76 g/t Ag** from 96.5m
 - **including: 1.25m @ 9.66 g/t Au, 340 g/t Ag** from 96.5m
 - **and: 5.5m @ 1.03 g/t Au, 124 g/t Ag** from 102.5m
 - **and: 1.3m @ 154 g/t Ag** from 110.4m
- **SWKRCDD014: 6.3m @ 1.3 g/t Au, 72.8 g/t Ag** from 81.7m
- **SWKRCDD018: 4m @ 2.7 g/t Au, 30.3 g/t Ag** from 86.5m
- **SWKRCDD034: 13.7m @ 1.12 g/t Au, 14.62 g/t Ag** from 137.3m

Intercepts for drillholes SWKRCDD014, 016 and 018 extended the previous RC drillholes which ended in mineralisation. Including the previously announced RC intercepts⁸, the full intercepts in these holes are as below, with details given in Table 2:

- **SWKRCDD014: 17m @ 3.47 g/t Au, 37.2 g/t Ag** from 71m
- **SWKRCDD016: 16.2m @ 8.98 g/t Au, 2.9 g/t Ag** from 53m
- **SWKRCDD018: 17.5m @ 5.36 g/t Au, 50.3 g/t Ag** from 73m

⁷ From SWKRCDD034, 148.5-149.4m downhole.

⁸ Results for SWKRC014, 016 and 018 were published on 1st May 2018: https://www.altresources.com.au/wp-content/uploads/2018/05/High_Grade_Gold_at_Southwark_1May18.pdf

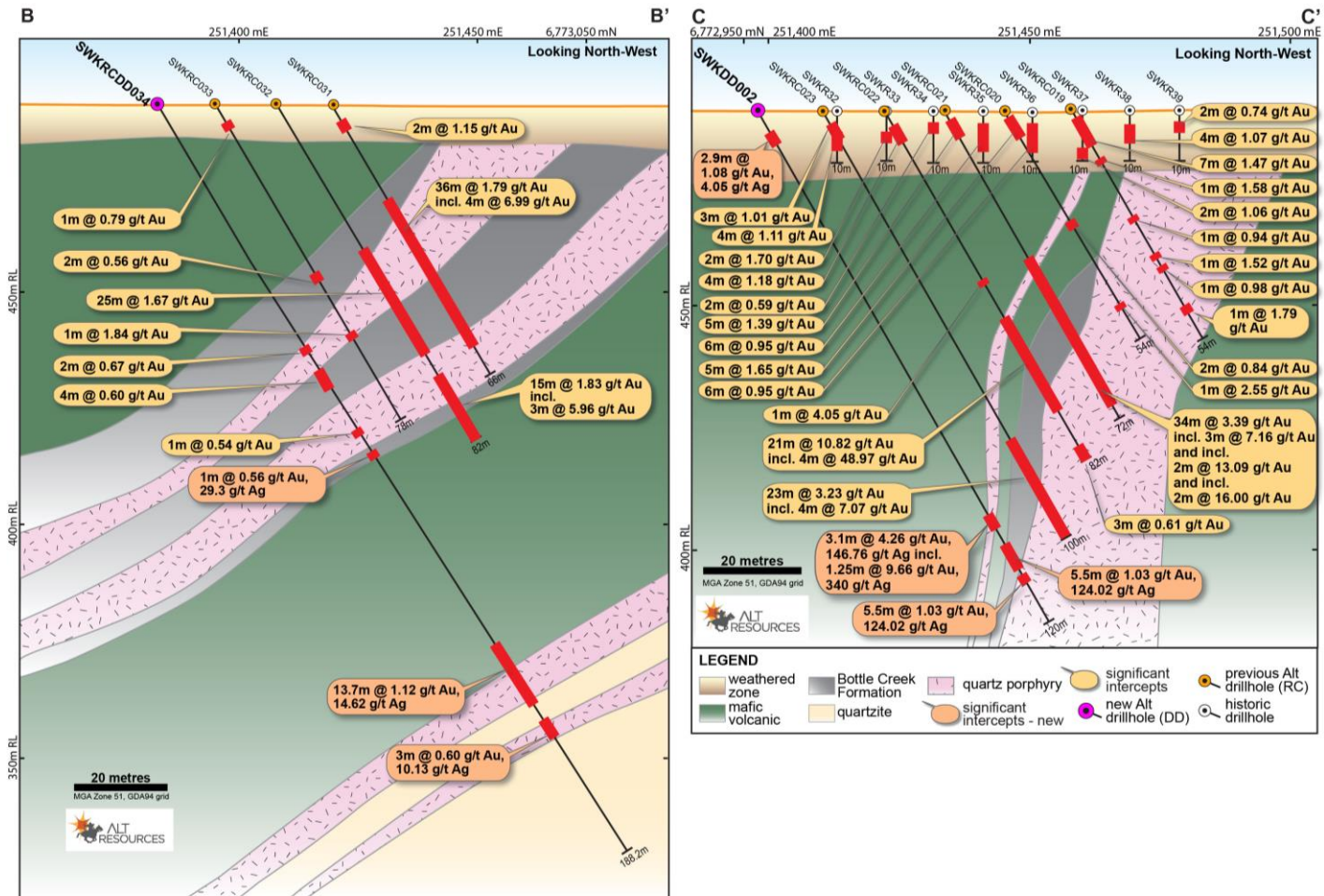


Figure 3. Cross-sections BB' and CC' showing new diamond drilling by Alt Resources through the Southwark deposit. The location of cross-sections is given in Figure 4. Drillhole SWKRCDD034 in section BB' (left) demonstrates the depth potential at Southwark, with an apparent shallowing of dips and mineralised structures in this area. A second zone of mineralisation is interpreted in this hole, previously un-described. Drillhole SWKDD002 (section CC', right) also demonstrates the continuity of gold (and silver) mineralisation at depth. Very high silver grades were encountered near the bottom of this drillhole.

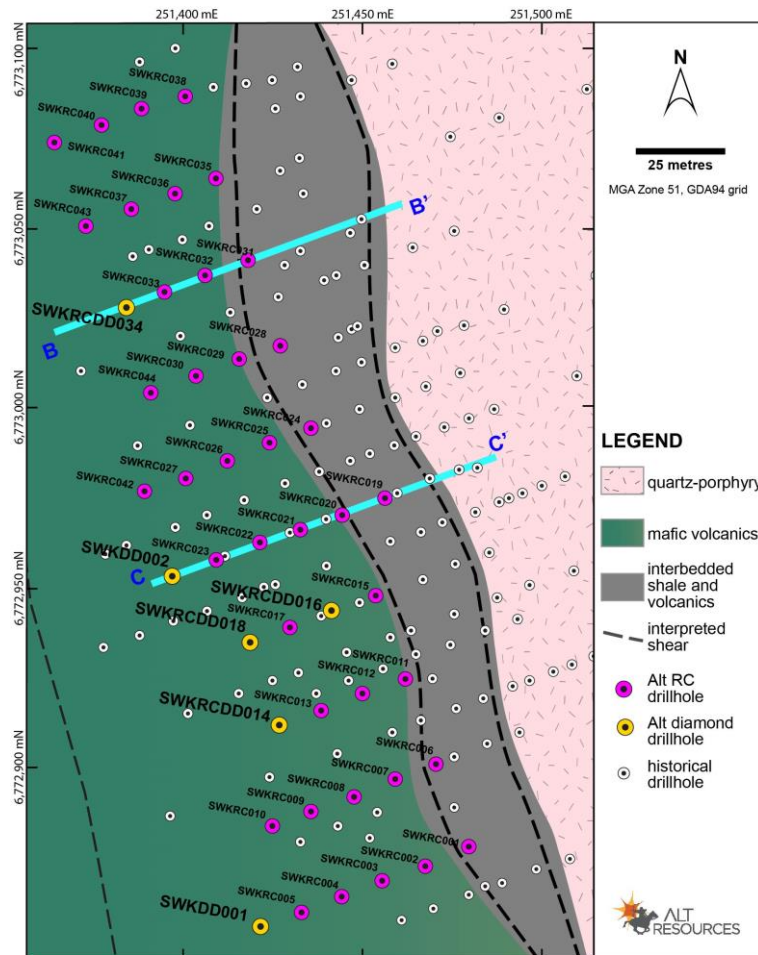


Figure 4. Plan map of the Southwark deposit showing the location of new drilling by Alt Resources. New diamond collar locations are given as yellow circles, whilst new RC collars are shown as pink circles. The location of historical drillholes is also shown. The location of cross-sections in Figure 3 are shown by the blue lines.

Geological Model for Bottle Creek

Based on Alt's new diamond drilling at Southwark and Emu, a greater understanding of the structural and lithological controls on mineralisation can be derived. Based on our observations and analysis of the new diamond core, mineralisation at Bottle Creek has been introduced into the Emu Formation sediments along the crustal-scale Mt Ida Shear Zone. The Shear Zone forms part of a ~500km long boundary between the Eastern Goldfields Terrane and the Southern Cross Terrane.

A key component of the mineralisation model for Bottle Creek is the presence of the carbonaceous black shale (interbedded with carbonaceous chert, banded iron formation and minor volcanic units), named locally the Emu Formation. With the high component of carbon (as graphite) in these rocks, the Emu Formation creates a distinct zone of very reducing geochemical conditions along the Mt Ida Shear Zone, which is different to the surrounding mafic volcanic package and felsic intrusives. Metal-bearing fluids being transported along the Mt Ida Shear Zone would have encountered the strong change in geochemical conditions at the point where the shear zone intersected the Emu Formation, causing the metals (predominantly gold and silver) to precipitate from the mineralising fluid, and be deposited where we now see the Bottle Creek deposits.

A key exploration strategy for this area is to explore for carbonaceous shales along the Mt Ida Shear Zone. Carbon-rich shales show as a distinctive high in various electrical geophysical survey techniques. Alt is considering this option in its plans for regional exploration throughout the area.



Petrography

To further our understanding of the geology, mineralisation style and timing of geological events at Bottle Creek, 13 samples of diamond core from Alt's new drilling at Bottle Creek were sent to Dr. Paul Ashley for petrographic analysis. The samples reveal that mineralisation may have been introduced as part of an early hydrothermal alteration event (influx of metal-bearing fluids into the rock; Figure 5, left) that has subsequently been overprinted by regional metamorphism and deformation along the Mt Ida Shear Zone. Based on observations in the samples, Bottle Creek represents an orogenic gold system, with typical phyllic to propylitic alteration assemblages which have been overprinted and changed during high temperature metamorphism. Supergene processes have subsequently concentrated gold, and depleted silver, within the oxidised zone near surface.

Whilst mineralisation dominantly occurs as disseminated pyrite and arsenopyrite in the black shales and carbonaceous cherts of the Emu Formation, several zones of massive sulphide (up to 10m wide) have been recognised in logging. Where present, the massive sulphide zones occur on the boundary between the felsic porphyry intrusive and the carbonaceous sediments of the Emu Formation. Petrographic analysis of the massive sulphide reveals an assemblage dominated by pyrite, but with minor aggregates of copper minerals, enargite (Cu_3AsS_4) and covellite (CuS) (Figure 5, right). Elsewhere, microscopic occurrences of sphalerite (ZnS) and galena (PbS) have also been observed. Assays of samples through these zones do not return economic grades of copper, zinc or lead.

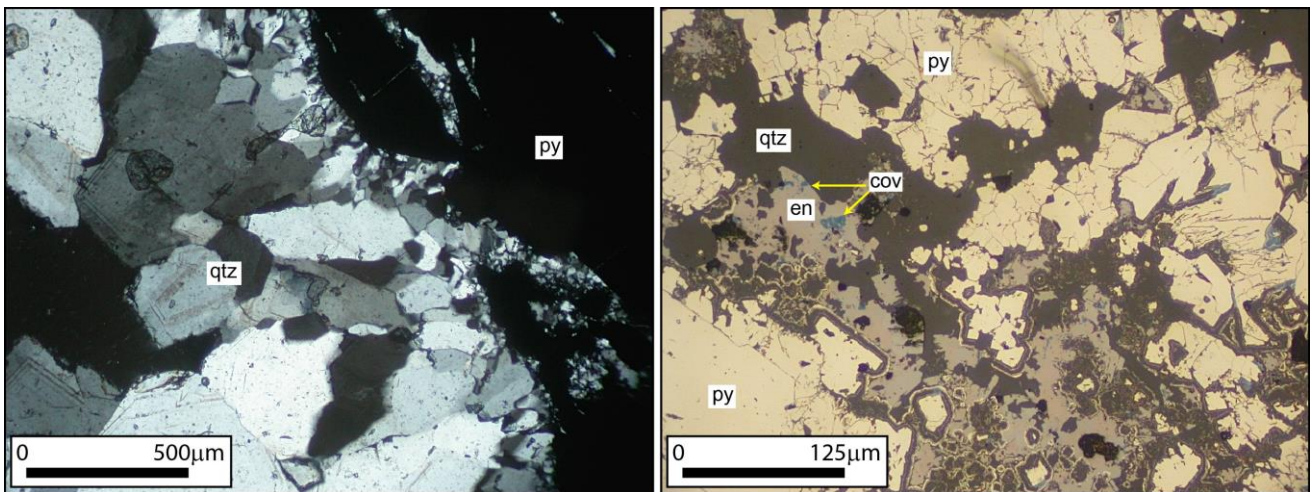


Figure 5. Photomicrographs of thin section sample from drillhole SWKDD001, 107.5m downhole. LEFT: a pyrite-rich domain at right (black) bordering on to quartz-rich hydrothermal infill (grey tones to left). The quartz hydrothermal infill displays textures typical of formation under epithermal conditions. Image is transmitted light, crossed polars. RIGHT: zone of semi-massive pyrite, with an irregular interstitial aggregate of quartz (dark grey) and enargite (pinkish grey). A few tiny aggregates of blue covellite are associated with enargite. Plane polarised reflected light.

Regional Setting and Exploration History

The Bottle Creek gold mine lies 100 km north east of Menzies in the Mt Ida gold belt (Figure 6). The gold mine is located on the northern extremity of the Mt Ida-Ularring greenstone belt extending from Davyhurst to Mt Alexander (Figure 6). The Ularring greenstone belt forms the western part of the Norseman-Wiluna Province of the Yilgarn Craton. The location of mineralisation and local geology, is shown in Figure 7.

During historical operation from 1988-1989, 90,000 oz Au was produced from two open pits (Boags and VB; Figure 8). Significant historical drilling along a 9.8 km strike outlined the Emu, Southwark and XXXX⁹ deposits.

⁹ Note that the XXXX deposit is now named 'Cascade'



However these were never mined. The historical RC drill fences were spaced at 100m, with infill drill line spacing at 50m and 25m at various locations. The majority of drilling targeted oxide mineralisation and reached no deeper than 80m vertically below surface.

Alt's new drilling results continue to provide confirmation of historical intercepts, improve confidence in historical data, and proves the continuity and grade of mineralisation in key parts of the Emu deposit. Further, gold mineralisation appears to continue at depth, with several drillholes ending in mineralisation. Additional drillholes are being planned at Emu and other areas of the Bottle Creek Project to test the continuity of gold mineralisation at depth. RC drilling for resource definition is ongoing to advance updates to Alt's Bottle Creek resource of 109,500 oz Au, announced on the 16th August 2018.

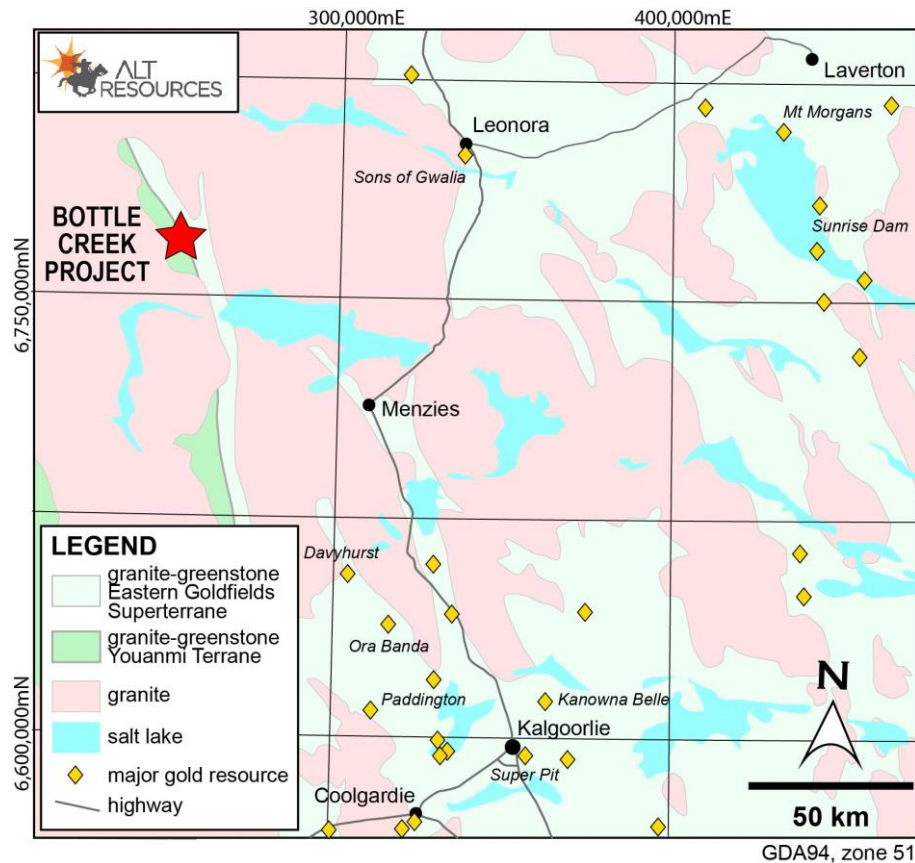


Figure 6. Location of the Bottle Creek Gold Mine, 100 km NE of Menzies. Bottle Creek lies on the boundary between the Youanmi Terrane and the Eastern Goldfields Superterrane, within the Mt Ida-Ularring greenstone belt.

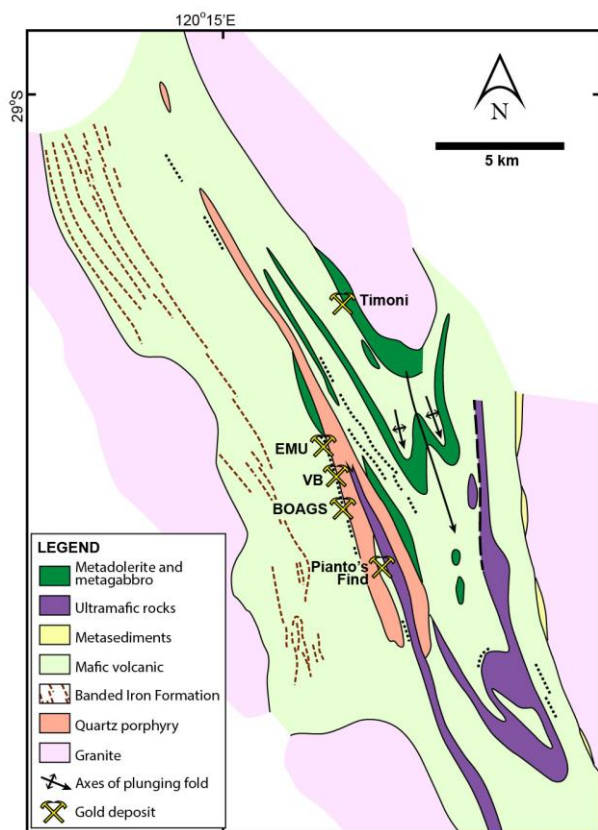


Figure 7. Geological setting of the Bottle Creek project.
Modified from Legge et al. (1990).

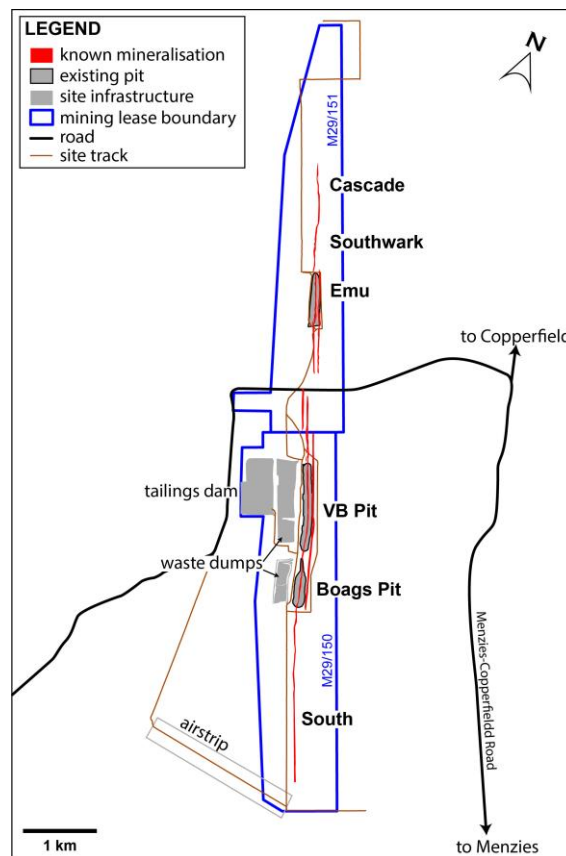


Figure 8. Site layout at Bottle Creek, showing historical VB and Boags open pits as well as the location of un-mined mineralisation at Emu, Southwark and Cascade.

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About Alt Resources

Alt Resources is an Australian based mineral exploration company that aims to become a gold producer by exploiting historical and new gold prospects across quality assets and to build value for shareholders. The Company's portfolio of assets includes the newly acquired Bottle Creek gold mine located in the Mt Ida gold belt, the Paupong IRG Au-Cu-Ag mineral system in the Lachlan Orogen NSW, Myalla polymetallic Au-Cu-Zn project east of Dalgety in NSW and the Mt Roberts gold project located near the town of Leinster in WA.

Alt Resources, having acquired historical and under-explored tenements in the Mt Ida Gold Belt, aims to consolidate the historical resources, mines and new gold targets identified within the region. Potential at Mt Ida exists for a centralised production facility to service multiple mines and to grow the Mt Ida Gold Belt project to be a sustainable and profitable mining operation.



References

Legge P.J., Mill J. H. A., Ringrose C. R & McDonald I. R. (1990). Bottle Creek gold deposit. In: Geology of the Mineral Deposits of Australia and Papua New Guinea. F.E Hughes (ed). The Australasian Institute of Mining and Metallurgy, Melbourne pp 357-361.

Competent Persons Statement

The information in this report that relates to mineral exploration and exploration potential is based on work compiled under the supervision of Dr Helen Degeling, a Competent Person and member of the AusIMM. Dr Degeling is an employee of Alt Resources and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that she 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'. Dr Degeling consents to the inclusion in this report of the information in the form and context in which it appears.

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Table 1. Drillhole collar table with significant gold (Au) and silver (Ag) intercepts for new diamond drilling by Alt Resources at the Bottle Creek project, described in this announcement.

Hole ID	m from	m to	Interval (m)	Au (g/t)	Ag (g/t)	Hole Type	Prospect	Easting*	Northing	RL	Dip	Azi*	Total Depth
EMDD001	89	90.30	1.3	0.9	6.5	DD	Emu	251,702	6,772,080	487.1	-60	069	307
<i>and</i>	193	197.26	4.26	2.12	26.4								
<i>and</i>	303	305	2	0.63	17.3								
EMDD002	45	46.4	1.4	0.59	11.5	DD	Emu	251,756	6,772,100	485.4	-60	068	171.9
<i>and</i>	166.6	167.4	0.8	1.17	1.5								
EMDD002_1	53.3	68.35	15.05	4.22	11.17	DD	Emu	251,756	6,772,100	485.4	-60	068	69.7
<i>including</i>	53.65	55	1.35	10.25	3.0								
<i>and including</i>	64.5	66.3	1.8	10.60	18.9								
EMDD003	34	38	4	1.08	6.53	DD	Emu	251,834	6,772,037	482.4	-60	248	72.7
<i>and</i>	43	47	4	10.82	5.9								
<i>and</i>	54	60	6	2.66	4.8								
<i>and</i>	62	63	1	0.63	5.5								
EMDD004	61	77	16	5.34	25.12	DD	Emu	251,692	6,772,276	481.2	-60	070	93.7
<i>including</i>	61	65	4	2.48	58.5								
<i>and including</i>	65	68	3	15.27	17.63								
<i>and</i>	81	82	1	0.55	38.1								
EMRCDD014	86	93	6	8.27	9.2	RC/DD	Emu	251,730	6,772,143	485.9	-60	069	114.6
EMRCDD080	101	105.6	4.6	5.51	7.9	RC/DD	Emu	251,685	6,772,234	481.2	-60	069	126.1
<i>and</i>	115.6	116.32	0.72	1.10	9.1								
EMRCDD092	96.5	100	4.5		144.4	RC/DD	Emu	251,757	6,771,995	484.2	-60	069	124.4
<i>including</i>	97.5	98.5	2.1		280.1								
<i>and including</i>	98.5	99.6	1.1	1.06	112.0								
<i>and</i>	105	108.1	3.1	1.62	3.4								
SWKDD001	6	8	2	0.82	0.5	DD	Southwark	251,420	6,772,855	489.2	-60	069	131.3
<i>and</i>	99.7	104.8	5.1	0.69	7.88								
<i>including</i>	103.7	104.8	1.1	1.16	8.0								
<i>and</i>	107.2	110.2	3	0.61	18.92								
SWKDD002	4	6.9	2.9	1.08	4.05	DD	Southwark	251,397	6,772,953	489.5	-60	068	120.2
<i>and</i>	96.5	99.6	3.1	4.24	146.76								
<i>including</i>	96.5	97.75	1.25	9.66	340								
<i>and</i>	102.5	108	5.5	1.03	124.02								
<i>and</i>	110.4	111.7	1.3	0.61	154								
SWKRCDD014	81.7	88	6.3	1.34	72.8	RC/DD	Southwark	251,427	6,772,911	489.4	-60	069	98.6
SWKRCDD016	68	69.2	1.2	0.77	8.6	RC/DD	Southwark	251,442	6,772,943	489.7	-60	069	89.8
SWKRCDD018	86.5	90.5	4.0	2.71	30.3	RC/DD	Southwark	251,419	6,772,934	489.5	-60	069	105.7
SWKRCDD034	86.4	87.4	1	0.56	29.3	RC/DD	Southwark	251,384	6,773,028	489.8	-60	069	188.2
<i>and</i>	137.3	151	13.7	1.12	14.62								
<i>and</i>	154	157	3	0.60	10.13								

*All coordinates in GDA94, zone 51



Table 2. Full intercepts incorporating previously announced RC results, with new extensions into diamond tails (for new diamond-only results see Table 1).

Hole ID	m from	m to	Interval (m)	Au (g/t)	Ag (g/t)	Hole Type	Prospect	Easting*	Northing	RL	Dip	Azi*	RC collar depth	Total Depth
SWKRCDD014	71	88	17	3.47	37.2	RC/DD	Southwark	251,427	6,772,911	489.4	-60	069	80	98.6
SWKRCDD016	53	69.2	16.2	8.98	2.9	RC/DD	Southwark	251,442	6,772,943	489.7	-60	069	66	89.8
SWKRCDD018	73	90.5	17.5	5.36	50.3	RC/DD	Southwark	251,419	6,772,934	489.5	-60	069	86	105.7

JORC Code, 2012 Edition – Table 1 report

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"> <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"> Diamond drillhole (DD) samples for drillholes described in this announcement (see Table 1) were collected by quarter cutting HQ and NQ diamond core from numbered and depth-labelled trays, and placing the samples into pre-numbered calico bags. Sample intervals vary, depending on the geological nature of the material being sampled (uniform zones were sampled at broader intervals, up to 2.5m, whilst variable zones and minor marker horizons were sampled as low as 0.16cm). The average sample interval was 1.18m During core cutting and sampling, the cut line was 5mm clockwise from the orientation line and the right-hand side of the core was routinely chosen for sampling, to avoid sample bias. Observations of core recovery and quality are made whilst logging. Core recovery averaged 89 %. However broken ground and poor recovery were experienced in EMDD002 (recovery of 36% % from 53.3m to 68.4m). This zone of poor recovery was through the expected mineralised zone, therefore the hole was twinned by EMDD002_1 which successfully sampled the mineralised zone, with recoveries of 67 % from 50.4m to 69.7m. Certified reference materials were inserted into the sample series at set intervals in sample submissions of 200 samples. Every 100 samples includes 3 blank samples, 2 duplicate samples and 7 certified reference standards. No umpire assays have been undertaken to date. The entire drillhole length for each hole has been geologically logged in detail to determine visually the location of mineralised zones. Mineralisation (Au) is then determined quantitatively using a 30 g fire assay, and atomic absorption spectroscopy technique with reportable ranges between 0.01 and 100 ppm.
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</i> 	<ul style="list-style-type: none"> Drilling contractor DDH1 Drilling completed all diamond holes for this program.



type, whether core is oriented and if so, by what method, etc).

- DD drilling techniques have been completed using a standard bit, appropriate for sampling the degree and extent of mineralisation.
- The drill rig used was a Sandvik Track Mounted DE710 producing HQ and NQ core.
- A Reflex Act III tool was used every core run (maximum 6m intervals) to orientate drill core
- An Axis Mining Technology north seeking gyroscope was used every ~30m by DDH1 to determine hole orientation. The drilling was supervised by experienced Alt geological personnel.

Drill sample recovery

- *Method of recording and assessing core and chip sample recoveries and results assessed.*
- *Measures taken to maximise sample recovery and ensure representative nature of the samples.*
- *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.*
- Drill core recovery was determined by measuring the length of core returned to surface against the distance drilled by the drilling contractor. Core recovery averaged 89%.
- In general, recovery throughout the drilling program has been good (as in point above), however where poor recovery was experienced, this was through the carbonaceous shale which is the host to mineralisation. Therefore, a minor relationship does exist between recovery and grade, however through repetition of holes (e.g. EMDD002 and EMDD002_1) and diamond twinning of RC holes, no sample bias appears to have occurred in preferential loss or gain of coarse or fine material.

Logging

- *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.*
- *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*
- *The total length and percentage of the relevant intersections logged.*
- All holes have been geologically logged on geological intervals with recording of lithology, grain size, alteration, mineralisation, veining, structure, oxidation state, colour and geotechnical data noted and stored in the database. All holes were logged to a level of detail sufficient to support mineral resource estimation, scoping studies, and metallurgical investigations.
- Veins and mineralisation are logged quantitatively as percentage, all other variables are logged qualitatively. All core trays have been photographed, and these photos stored in a database.
- All holes have been logged over their entire length (100%) including any mineralised intersections.

Sub-sampling techniques and sample preparation

- *If core, whether cut or sawn and whether quarter, half or all core taken.*
- *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*
- Diamond core samples were cut using an industry standard automatic core saw. HQ and NQ core was cut to a quarter length for sampling. Sample lengths vary depending on the geological nature of the rocks. The maximum sample length in homogeneous material was 2.5m, whilst in variable zones,



- *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
- *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
- *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.*
- *Whether sample sizes are appropriate to the grain size of the material being sampled.*

particularly through mineralisation, smaller lengths were sampled to a minimum of 0.16m to ensure representivity of sampling through different lithologies.

- Detailed logging of the drillcore was conducted to sufficient detail to maximise the representivity of the samples when deciding on cutting intervals.
- In general, recovery throughout the drilling program has been good (averaging 89%), however where poor recovery was experienced, this was through the carbonaceous shale which is the host to mineralisation. To be assured that samples were representative, even in areas of lower recovery, duplicated holes (e.g. EMDD002 and EMDD002_1) and diamond twinning of RC holes was conducted, and the results are reliably comparable. Therefore samples are considered to be representative.
- Duplicate samples from the drillcore were included at a rate of 1 duplicate per 50 samples throughout the diamond drilling program. Half HQ or NQ core intervals selected for duplication were halved again with quarter HQ core submitted as the primary sample, and the associated quarter HQ core section submitted as the duplicate.
- The sample size is judged appropriate for the type, style and thickness of the mineralisation being tested, and the repeatability of the field duplicates further supports this.

Quality of assay data and laboratory tests

- *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
- *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. Ba, Mo*
- *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.*

- Assays are completed by ALS Kalgoorlie where the delivered sample is pulverised to -75µm, and then a 30g subsample analysed by AAS fire assay technique. Analyses were for Au only with a detection limit of 0.01 ppm.
- Samples are collected whilst drilling with 200 samples collected per submission and then transported by Alt personnel directly to the laboratory.
- Additionally multi-element analysis has been carried out on all Au mineralised samples using method MEICP-61 four acid digest.
- Certified reference materials were inserted into the sample series at set intervals in sample submissions of 200 samples. Every 100 samples includes 3 blank samples, 2 duplicate samples and 7 certified reference standards. A total of 3,196 assays is included in this release, including QAQC. No umpire assays have been undertaken to date. To date an acceptable level of precision and accuracy have been observed.



Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • Significant intersections have been verified by the Competent Person for Alt Resources. Further verification can be inferred from historical results in adjacent holes. • EMDD001, 003 and 004 at Emu were drilled as full-length diamond twins to RC drillholes EMRC089, EMRC025 and EMRC083, respectively. • EMDD002_1 was drilled as a twin/repeat of EMDD002 due to poor recovery through the mineralised zone in EMDD002. • All geological, sampling, and spatial data that is generated and captured in the field is immediately entered into a field notebook on standard Excel templates. These templates are then validated each night in Micromine. This information is then sent to a database manager for further validation. If corrections need to be made they are corrected the following day by the person responsible for generating the data. Once complete and validated the data is then compiled in database server. • No adjustment of assay data is required
Location of data points	<ul style="list-style-type: none"> • 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. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • Hole locations are surveyed prior to drilling using a Leica RTK GPS and GOLA standard survey marks, once the hole is completed it is resurveyed using the same techniques to mark the actual collar location. The expected accuracy is 0.15m in three dimensions. • The drill rig was orientated at surface using an Axis Mining Technology north seeking gyroscope and then at 12m (base of laterite), 30m and 30m increments thereafter. An EOH survey was taken if more than 10m downhole from the last survey. • The grid system used is MGA94 Zone 51 • The topographic control is judged as adequate and of high quality.
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • Alt Resources drilling is spaced at approximately 25m, along 50m lines, which infill the historical drilling to an approximately 25 x 25m pattern. • Data spacing within mineralised zones is judge as adequate to establish and support a Mineral Resource. • No sampling compositing has been applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation 	<ul style="list-style-type: none"> • The true widths of intercepts are expected to be 65-75% less than the reported widths depending on both the orientation (dip) of both the mineralised zone, and drill hole. Holes are drilled near perpendicular to strike and no significant bias is expected due to azimuth.



of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.

- The interpreted mineralised zone trends approximately towards 340 degrees, and dips steeply (>70°) to the west. Drilling inclined holes at -60 degrees will introduce a slight bias to true widths but not to sample assay results.

Sample security • *The measures taken to ensure sample security.*

- Alt Resources keeps all samples within its custody, and within its lease boundaries until delivery to the laboratory for assay. Samples are typically collected while drilling to minimise possible contamination, and ensure unbroken sample chain of custody.

Audits or reviews • *The results of any audits or reviews of sampling techniques and data.*

- No external reviews of the sampling techniques have yet been undertaken. Internal reviews and audits are ongoing with each sample submission being analysed and reported on to ensure issues are quickly noted and rectified.



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"><i>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.</i><i>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.</i>	<ul style="list-style-type: none">The information in this release relates to the Bottle Creek Project, on mining leases M29/150 and M29/151, which is the subject of a purchase agreement between Alt Resources and a private vendor. The details of this purchase arrangement are outlined in the announcement made to the market on the 8th November, 2017 (https://www.altresources.com.au/wp-content/uploads/2017/11/ARS-ASX-Announcement-Bottle-Creek-acquisition-8Nov17.pdf)There are no existing impediments to M29/150 or M29/151.																								
Exploration done by other parties	<ul style="list-style-type: none"><i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none">The Bottle Creek Gold Project has seen little or no exploration prior to 1983. Modern gold exploration over the project has been conducted by Electrolytic Zinc (EZ) and Norgold, as described below. <table><tr><th>Activity</th><th>Year conducted</th><th>Company</th><th>Result</th></tr><tr><td>Stream Sediment sampling</td><td>1983-1987</td><td>Electrolytic Zinc</td><td>Defined 15km long Au-As-Sb anomaly associated with Bottle Creek mineralisation</td></tr><tr><td>Ironstone sampling</td><td></td><td></td><td>Definition of linear Au, As, Sb, B and Pb anomalies</td></tr><tr><td>Laterite sampling</td><td></td><td></td><td>Definition of 20km long As-Pb anomaly</td></tr><tr><td>Aerial photography</td><td></td><td></td><td></td></tr><tr><td>Aerial magnetic survey</td><td></td><td></td><td>Positive magnetic anomaly associated with mineralised zone, from magnetite alteration.</td></tr></table>	Activity	Year conducted	Company	Result	Stream Sediment sampling	1983-1987	Electrolytic Zinc	Defined 15km long Au-As-Sb anomaly associated with Bottle Creek mineralisation	Ironstone sampling			Definition of linear Au, As, Sb, B and Pb anomalies	Laterite sampling			Definition of 20km long As-Pb anomaly	Aerial photography				Aerial magnetic survey			Positive magnetic anomaly associated with mineralised zone, from magnetite alteration.
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				The highest magnetic anomalies overlie mineralised shoots
	Costeaining			Significant gold intersections defined in areas of poor outcrop, but poor penetration due to hard sub-surface layers
	RAB drilling			Defined major mineralised zone (Bottle Creek, including Emu, VB and XXXX) beneath lateritic cover
	RC drilling			Definition of oxide gold resources at VB, Boags, Emu
	DD drilling			Testing sulphide gold mineralisation beneath Emu and VB
	Magnetometric resistivity (MMR) and Very Low Frequency electromagnetic (VLF-E) surveys			Neither technique defined the mineralised zone
	Geological mapping	1986-1989	Norgold	Project-scale mapping at 1:25,000 scale, defined new prospective zone SE of Boags
	RAB drilling			Exploration drilling of extensions to known mineralisation, defined parallel zone east of VB and south of Anchor.



RC and DD drilling	Reserve drilling at VB, Boags and Emu
	Resource drilling at Anchor, XXXX, Southwark and surface laterite
	Sterilisation drilling for airstrip
Soil Sampling	Extensions to areas of previous sampling, analysed for Au, Ag, As, Sb
Airborne multi-spectral survey	Defined high density fracture patterns associated with mineralisation
Mining	Mining at VB and Boags, 1988-1989. Production at Boags: 382,000t @ 1.75 g/t Au (21.6koz Au)
	Production at VB: 730,000t @ 3.1 g/t Au (72koz Au)

Geology

- *Deposit type, geological setting and style of mineralisation.*
- The Bottle Creek gold project lies on the western edge of the Norseman-Wiluna Province in WA, within the Ularring greenstone belt. West of the project, the area is characterized by banded iron formations interbedded with mafic volcanics. In the central and eastern parts of the project, a dominantly mafic-ultramafic volcanic and intrusive suite occurs. Minor volcanoclastic sediments are interbedded with the greenstones. The entire central and eastern zone has been intruded by felsic quartz porphyries.
- Near Bottle Creek, the greenstone belt is folded into a tight, south-plunging anticline with a granite core
- The project is defined by epigenetic, hydrothermal, shear-hosted gold+silver mineralisation. Mineralisation is hosted within a steeply dipping, sheared, carbonaceous black shale unit (the Emu Formation), close to the contact with the interbedded mafic volcanics and banded ironstones.



		<ul style="list-style-type: none"> Sulphide mineralisation is characterised by pyrite, pyrrhotite and magnetite, with minor tetrahedrite, sphalerite, arsenopyrite and chalcopyrite. Native gold and electrum are also present as fine, <45µm grains. A strong regolith profile is developed in the mineralised zone, to a depth of approximately 85m in some areas. 5 mineralised zones have been defined by historical exploration, including from south to north, Boags, VB, Emu, Southwark and Cascade.
Drill hole Information	<ul style="list-style-type: none"> 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"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	<ul style="list-style-type: none"> See Table 1 and Figures 1, 3 and 4 above for drillhole information pertaining to significant intercepts presented here. No significant information has been excluded for drilling results reported in this document.
Data aggregation methods	<ul style="list-style-type: none"> 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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Reported drill intercepts are weighted averages, with samples of varied lengths being included in the intercepts. No cutting of high grade values has been undertaken. Significant intercepts (see Table 1 in the body of this release) are reported using a low-grade cut-off of 0.5 g/t Au and no more than 2m internal waste.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	<ul style="list-style-type: none"> Based on extensive drilling throughout the Emu and Southwark deposits, mineralisation is interpreted to be striking north 20° west, and with a dip close to vertical, or dipping steeply west, as portrayed in Figures 1 and 3 in the text. Drilling was oriented perpendicular to this trend. Holes have been drilled at a 60 degree angle to approximate (as close as practicably possible) a true width intercept through the steeply dipping mineralised zone. Reported intercepts are downhole lengths; the true width is estimated to



Diagrams

- *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.*

be approximately 65-75% of the downhole width, based on interpretations drilling.

- The location of new drillholes at Emu with significant intercepts described in the text is shown in Figure 1, also with cross-section and interpreted geology.
- The location of new diamond drillholes at Southwark with significant intercepts described in the text is shown in Figure 4, with cross-sections and interpreted geology in Figure 3.
- Coordinates in GDA94, zone 51.
- The layout of the Bottle Creek site is shown in Figure 8.
- Table 1 gives the details of significant intercepts discussed in this release, including drillhole collar information.

Balanced reporting

- *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.*

- All drillhole locations are reported and a table of significant intervals is provided in the text of this release, and are judged to be a balanced report of exploration results.

Other substantive exploration data

- *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*

Metallurgical Testing

- Metallurgical testwork was carried using selected composited RC intervals by EZ, as below:

Hole ID	Interval	Sample Number
EMU-32	54-58m	110721
EMU-12	24-28m	119717
EMU-31	90-99m	110720
EMU-38	33-60m	110722
EMU-14	69-90m	110718
EMU-17	34-44m	110719

- The six composite samples were submitted to Eltin Pty Ltd in Kalgoorlie for preliminary metallurgical. Cyanidation tests were carried out by Kalgoorlie Metallurgical Laboratories.
- Testwork used the following parameters:
- Nominal grind to 80% - 75 microns
- 24 hour cyanidation test
- pH of 9.5



- splitting of cyanide residue into +75 micron and -75 micron fractions for liberation tests
- production of rate curves for the test to establish recovery times
- assessment of reagent usage for the test
- Kalgoorlie Scheme water was used for the test
- The following results were determined:
- The samples are free milling
- For a head grade greater than 4 g/t Au, recoveries of the order of >90% can be expected at a grind of approximately 80% passing 75 microns
- Greater recoveries can be expected in a full size plant
- By cyaniding in the mill, the rate of gold dissolution can be significantly increased compared to the laboratory curves
- There is evidence of some soluble copper which will affect cyanide consumption
- Samples 110718, 110721 and 110722 require further work due to high cyanide resistant residues.

Specific Gravity

- Specific gravity analyses were performed by EZ using selected samples of PQ core
- Volume calculations were made with calipers and a complex programmable calculator programme to take in account uneven breaks
- The sections of core were weighed on a series of kitchen scales. The scales were recalibrated after every weighing using pieces of lead cut to size and weighed on a microbalance. The recalibration was undertaken over a range of weights each time.
- The quality of the core was noted for each block weighed. The complete mineralised zone was weighed along with representative sections of the wall rock.
- Principal results of the SG calculations are:

Mineralised Zone:

Surface ironstone	2.7-3.2
Ironstone	>2.1
Massive quartz	1.75-1.85



Sugary quartz 1.60-1.65

Wall rocks:

Laterite (clay) 1.9-2.0

Porphyry 2.2-2.3

- Open File report by Electrolytic Zinc (a18217) notes that there is a vertical density stratification within the ore zone.

Further work

- *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.*
- Further RC drilling will be conducted at the Bottle Creek Gold Project to test the extent of mineralisation between Emu and Southwark, along strike to the north and south from Emu and Southwark, and also to test sulphide mineralisation at depth beneath the VB and Boags pits.
- Auger drilling will be conducted to test mineralised laterite zones, low grade stockpiles abandoned by the previous operators, and also the material remaining in the historical tailings dams.