

25th February 2019

ASX RELEASE

Independent Expert Report indicates a large IOCG or ISCG mineral system at depth below the Mt Freda Complex

Independent Expert Emeritus Professor Kenneth D Collerson (PhD., FAusIMM) has presented findings validating the significance of a large IOCG (Iron Ore Copper Gold) or ISCG (Iron Sulphide Copper Gold) mineral source below the Little Duke Gold Mine, located within the Ausmex controlled Mt Freda Complex

Key Findings Include:

- ***The RC drilling data indicates that Little Duke, one of 9 parallel historical Gold mineralised systems (and the most eastern drilled to date), located within the Golden Mile Project which forms part the Mt Freda Complex, is proximal to a deeper and fertile IOCG or ISCG mineral system.***
- ***The Little Duke drilling data (LD18RC006) is highly significant, and it is recommended that diamond core drilling should continue in the RC holes (Pre-collars already drilled at the Little Duke), to target the deeper IOCG (Olympic Dam style) or ISCG (Eloise style) alkaline igneous source of the metal anomalism.***
- ***Little Duke drill hole LD18RC006 combined Gold and Copper down hole mineralisation : (Refer ASX Release 29th November 2018)***
 - 67 m @ 1.33 g/t Au and 0.47% Cu
 - Gold assays up to 8.00 g/t Gold, 1,100 ppm Cobalt and 1.43% Copper.
- ***Little Duke Drill Hole LD18RC006 was possibly drilled into the contact of a Tier 1 IOCG target that Ausmex shares with Newcrest Mining Limited (ASX:NCM) (Refer ASX 19th February 2019).***

Ausmex Mining Group (ASX: AMG) ("Ausmex" or "The Company") is pleased to announce the findings from Independent Expert Emeritus Professor Kenneth D Collerson who was engaged to evaluate and interpret multi-element assay results from recent drilling of the Little Duke breccia, and to better understand the origin of Mesoproterozoic Cu-Ni-Co-Au-PGE-REE mineral systems in Ausmex's tenure south of Cloncurry (The full report is available on the Ausmex website).

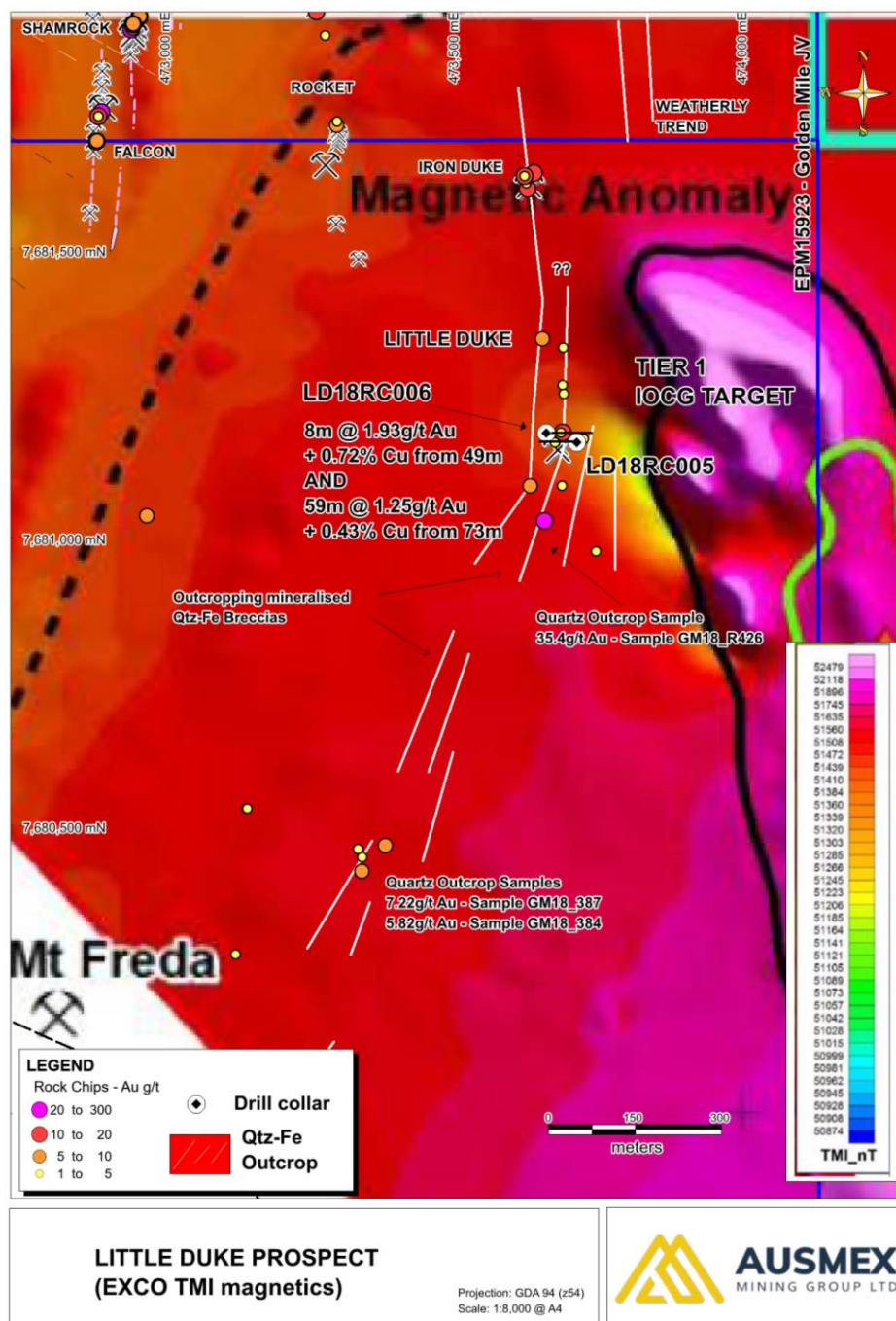


Figure 1. Drill Hole location plan at the Little Duke Gold prospect where drill hole LD18RC006 intersected significant gold and copper mineralisation as the hole was drilled into the contact of a Tier 1 IOCG prospect. **Data interpretation by Professor Kenneth D Collerson indicates the Little Duke may be in close proximity to an IOCG source.** (Refer ASX releases on the 14th June 2018 and the 29th November 2018 for additional results). Source: QLD Gov. Mt Isa TMI GSQ open file dataset Survey GSQ1029 & [Exco IOCG Roadshow release 2012](#)

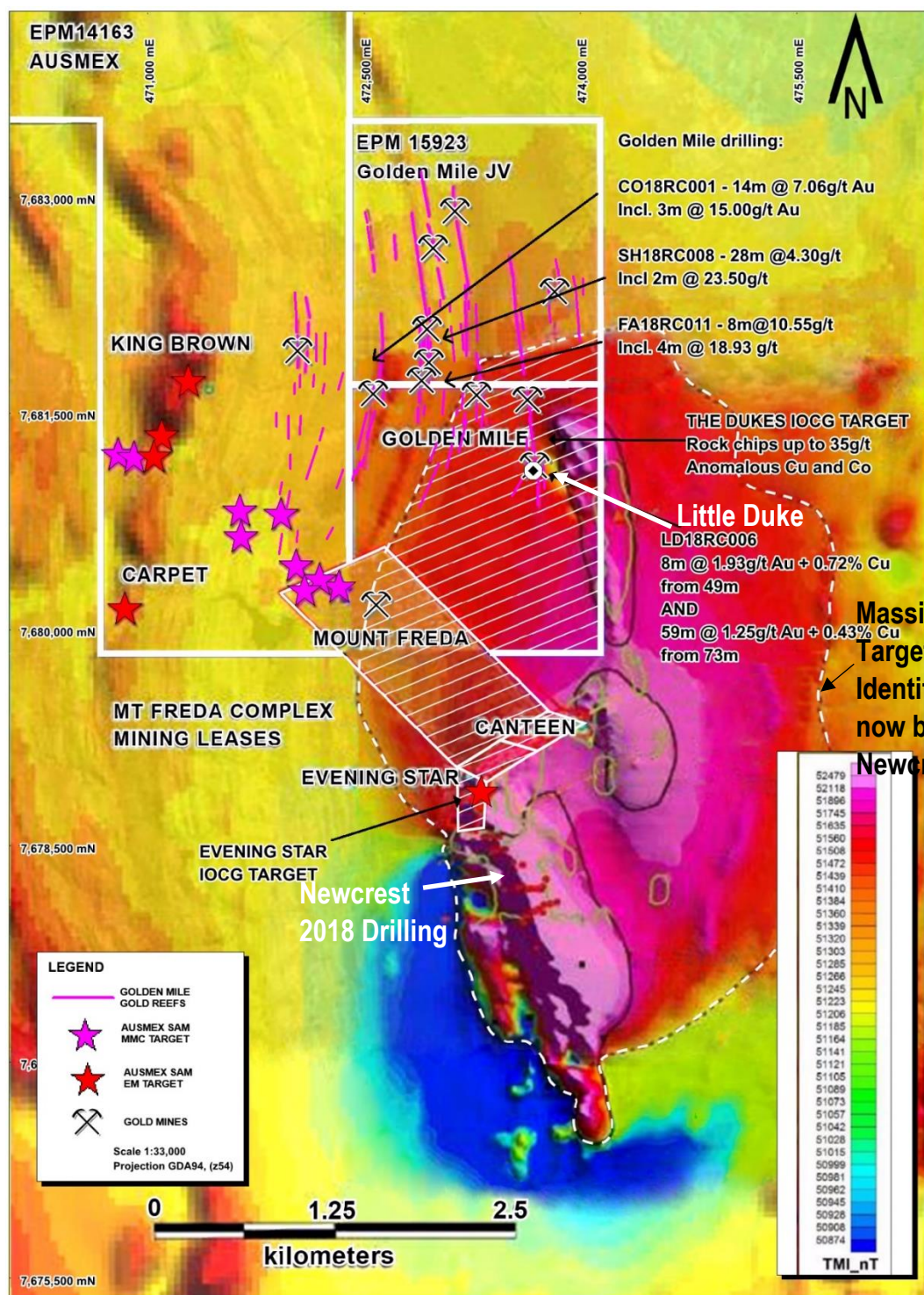
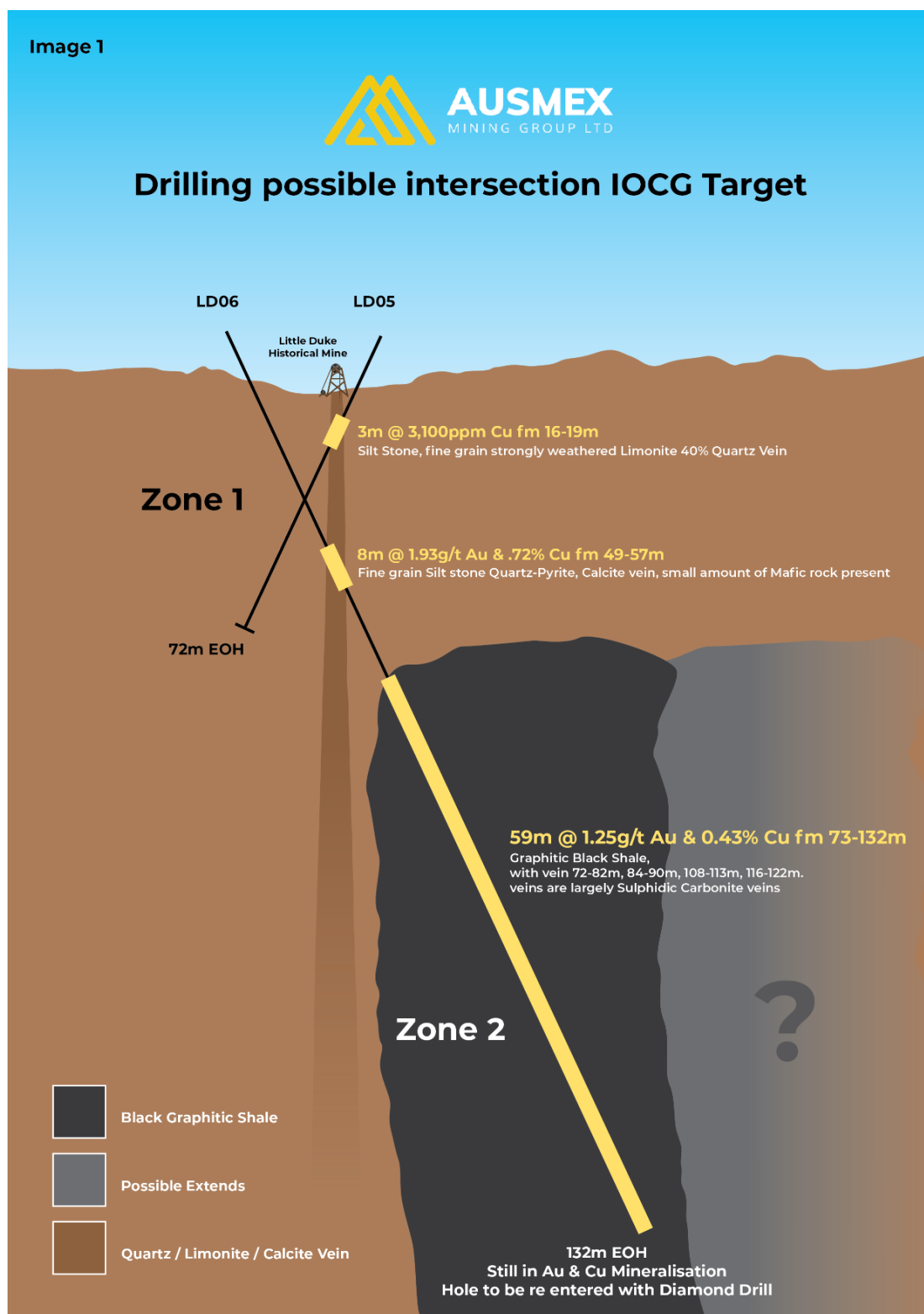


Figure 2. Location Plan for the Little Duke drilling. Note the close proximity of the Golden Mile and the Little Duke drilling to the massive 3 km x 5 km Tier 1 IOCG target that Ausmex shares with Newcrest Mining Limited.

Professor Ken Collerson states: "The Little Duke drilling data (LD18RC006) is highly significant, and it is recommended that diamond core drilling should continue in the RC holes (Pre-collars already drilled at the Little Duke), to target the deeper IOCG (Olympic Dam style) or ISCG (Eloise style) alkaline igneous source of the metal anomalism (Refer to ASX releases on 30th August 2018, 10th September 2018, 8th & 26th October 2018, 9th & 15th November 2018, for Mt Freda Complex Exploration drilling results).

Source: QLD Gov. Mt Isa TMI GSQ open file dataset Survey GSQ1029 & [Exco IOCG Roadshow release 2012](#)

Image 1



Cross Section 1. Geological interpretation and cross section through RC drill hole LD18RC006 & LD18RC005, describing the extensive gold and copper sulphide mineralisation within the large graphitic black shale shear zone, a potential host to significant copper, gold and cobalt mineralisation that may radiate out from the adjoining massive IOCG prospect. (Refer ASX Release 29th November for results). **Professor Kenneth D Collerson recommends that diamond core drilling should continue in the RC holes to target the deeper IOCG or ISCG alkaline igneous source of the metal anomalism.**

This report was commissioned to:

- (1) to evaluate and interpret multi-element assay results from recent RC drilling of the Little Duke breccia (Refer ASX Release 29th November 2018 for results); (2) to better understand the origin of Mesoproterozoic Cu-Ni-Co-Au-PGE-REE mineral systems in Ausmex's tenure south of Cloncurry; (3) to gain insight into possible IOCG (or ISCG) proximal and distal geochemical vectors, and (4) to comment on the metallogenic significance of electrical conductivity structures identified with magnetotelluric data below IOCG deposits in the Cloncurry area.

Key findings are as follows:

Principal conclusions of this review are as follows:

- **The Little Duke breccia system is a high-level epithermal system that is proximal to an ultramafic to mafic igneous source of halogen-rich fluids and metals that include Co, Ni, Cu, As, Au, Ag, PGEs.**
- Although earlier studies of the IOCG mineral system in the Cloncurry area suggested that Cu, Au, F, U, P and REEs, as well as S were derived from the Williams Naraku Granite via a magmatic-hydrothermal fluid (Williams et al., 2015), given the element association (Co, Ni, PGE's and Au), a more plausible explanation is that metals in the system were derived from an ultramafic to mafic alkaline igneous source.
- High levels of positively correlated Ni, Co and Cu confirm the role of olivine fraction in the igneous source of the Little Duke breccia. This metal association simply cannot be explained by a granitic source.
- Positively correlated S with Ni, Co, Cu and as also confirms the involvement of magmatic/hydrothermal processes below Little Duke.
- Correlations between Te, Bi and Sb with Au, indicates that the breccia system is proximal to the igneous source of the Little Duke mineral system.
- Halogen-rich fluids that form halogen complexes are conducive to fluid - metal transport. These fluids are interpreted to have existed at Little Duke, where dissociation of halogen complexes likely occurred in response to changes of the hydrothermal environment such as fluid-rock interaction, fluid mixing, cooling, and phase separation.
- Molar Cu/Au ratios are controlled initially by magma source chemistries and subsequently by the physical-chemical evolution of the ore forming hydrothermal fluids. Little Duke samples with molar Cu/Au ratios between ~30,000 and 100,000 are typical of alkaline igneous systems.
- La/Yb - HREE systematics also support an ultramafic to mafic igneous source and suggest the possible presence of HREE enriched alteration haloes proximal to the Little Duke breccia system.
- Sub-and super-chondritic Y/Ho ratios indicate the involvement of halogen-rich hydrothermal fluids in the Little Duke breccia system.

- Primitive mantle normalized highly siderophile element abundance (Ni, PGE, Au and Cu) plots exhibit similar levels of enrichment and fractionation patterns to deposits in the Mary Kathleen Belt. This suggests that both Cloncurry belt and the adjacent Mary Kathleen Belt were influenced by the same metal fertile plume magmatic source. Given this similarity, it is considered highly improbable that any of the HSEs were derived from an alkaline granitic source as suggested by Kendrick et al., (2007) and Williams et al., (2015).
- The presence of a log normal Ag/Au distribution reflects precious metal transport in boiling solutions, confirming a high level epithermal depositional environment associated with hot springs (Cole and Drummond, 1986).
- The epithermal deposits along the Golden Mile, from Gilded Rose to Mount Freda are Au rich. Covariation of Au with Bi and Te indicates the close relationship to an igneous source (Marinova et al., 2013).
- The presence of these features indicates that hot springs occurred above IOCG source intrusions in the Cloncurry area and explains the occurrence of high concentrations of Au in the district.
- The presence of a large magnetotelluric conductive anomaly below the Ernest Henry IOCG deposit (Wang et al., 2018) is similar to the MT anomaly below Olympic Dam and likely reflects the lithospheric response of the metal migration regime associated with this plume generated world class IOCG system (Heinson et al., 2018).
- Thus, it is likely that the same fluorine-rich and oxidizing hydrothermal fluids that formed the Olympic Dam IOCG deposits remained active as the plume track migrated to the north east and generated the Cloncurry Belt IOCG mineralisation.
- **The data indicates that Little Duke is likely to be proximal to a deeper and fertile IOCG mineral system.**
- **Thus, Little Duke data is highly significant, and it is recommended that diamond core drilling should continue in the RC holes to target the deeper source IOCG or ISCG alkaline igneous of the metal anomalism.**

Managing Director Matt Morgan Stated:

"Ausmex Shareholders have previously been informed that they have significant exposure to a Tier One IOCG within the Mt Freda Complex that is being drilled by Newcrest Mining Limited (Refer ASX announcement 27th September 2018 & 19th February 2019). Now Independent Expert Emeritus Professor Kenneth D Collerson has validated the Companies interpretation that drilling data to date indicates the Little Duke gold prospect may be within close proximity to such an IOCG or ISCG source. Furthermore, Professor Kenneth D Collerson recommends further deeper drilling under the Little Duke project targeting IOCG mineralisation.

As recently announced (Refer ASX release 19th February 2018) Ausmex is now in final stages of completing 3D Geophysical modelling on the IOCG target, aimed at generating a target specific exploration drilling programme into the Tier 1 "Canteen" IOCG deposit targeting massive sulphide copper and gold mineralisation and geological criteria supporting an IOCG deposit style. These holes will be located adjacent to Newcrest's 2018 completed drill hole locations to date. Newcrest's assay results have not yet been reported to date.

Forward Looking Statements

The materials may include forward looking statements. Forward looking statements inherently involve subjective judgement, and analysis and are subject to significant uncertainties, risks, and contingencies, many of which are outside the control of, and may be unknown to, the company.

Actual results and developments may vary materially from that expressed in these materials. The types of uncertainties which are relevant to the company may include, but are not limited to, commodity prices, political uncertainty, changes to the regulatory framework which applies to the business of the company and general economic conditions. Given these uncertainties, readers are cautioned not to place undue reliance on forward looking statements.

Any forward-looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or relevant stock exchange listing rules, the company does not undertake any obligation to publicly update or revise any of the forward-looking statements, changes in events, conditions or circumstances on which any statement is based.

Competent Person Statement

Statements contained in this report relating to exploration results and potential are based on information compiled by Mr. Matthew Morgan, who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Morgan is the Managing Director of Ausmex Mining Group Limited and Geologist whom has sufficient relevant experience in relation to the mineralization styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral resources and Ore reserves (JORC Code 2012). Mr. Morgan consents to the use of this information in this report in the form and context in which it appears.

Competent Person Statement

Statements contained in this report relating to exploration results and potential are based on information compiled by Professor Ken Collerson, who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Professor Ken Collerson is an independent consultant to Ausmex Mining Group Limited and Geologist whom has sufficient relevant experience in relation to the mineralization styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral resources and Ore reserves (JORC Code 2012). Professor Ken Collerson consents to the use of this information in this report in the form and context in which it appears.

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Appendix 1:

1.1 Analytical Techniques

Assay data in this report are from Ausmex recently completed RC drilling campaign at Little Duke. Samples are from drill hole LD18RC006 and cover the depth interval from 48 m to 132 m. They were analysed by Australian Laboratory Services Pty Ltd. at Stafford in Brisbane.

Major and trace element data were obtained using the techniques listed in Table 1. Element detection limits are also reported in Table 1.

Table 1: Detection Limits for ALS Analytical Procedures

Element	Units	Det. Limit	Method	Element	Units	Det. Limit	Method
Au	ppm	0.001	PGM-ICP24	Nb	ppm	0.1	ME-MS61
Ag	ppm	0.01	ME-MS61	Nd	ppm	0.1	ME-MS61
Al	%	0.01	ME-MS61	Ni	ppm	0.2	ME-MS61
As	ppm	0.2	ME-MS61	P	ppm	10	ME-MS61
Ba	ppm	10	ME-MS61	Pb	ppm	0.5	ME-MS61
Be	ppm	0.05	ME-MS61	Pd	ppm	0.01	PGM-ICP24
Bi	ppm	0.01	ME-MS61	Pr	ppm	0.03	ME-MS61
Ca	%	0.01	ME-MS61	Pt	ppm	0.005	PGM-ICP24
Cd	ppm	0.02	ME-MS61	Rb	ppm	0.1	ME-MS61
Ce	ppm	0.01	ME-MS61	Re	ppm	0.002	ME-MS61
Co	ppm	0.1	ME-MS61	S	%	0.01	ME-MS61
Cr	ppm	1	ME-MS61	Sb	ppm	0.05	ME-MS61
Cs	ppm	0.05	ME-MS61	Sc	ppm	0.1	ME-MS61
Cu	ppm	0.2	ME-MS61	Se	ppm	1	ME-MS61
Dy	ppm	0.05	ME-MS61	Sm	ppm	0.03	ME-MS61
Er	ppm	0.03	ME-MS61	Sn	ppm	0.2	ME-MS61
Eu	ppm	0.03	ME-MS61	Sr	ppm	0.2	ME-MS61
Fe	%	0.01	ME-MS61	Ta	ppm	0.05	ME-MS61
Ga	ppm	0.05	ME-MS61	Tb	ppm	0.01	ME-MS61
Gd	ppm	0.05	ME-MS61	Te	ppm	0.05	ME-MS61
Ge	ppm	0.05	ME-MS61	Th	ppm	0.01	ME-MS61
Hf	ppm	0.1	ME-MS61	Ti	%	0.005	ME-MS61
Ho	ppm	0.01	ME-MS61	Tl	ppm	0.02	ME-MS61
In	ppm	0.005	ME-MS61	Tm	ppm	0.01	ME-MS61
K	%	0.01	ME-MS61	U	ppm	0.1	ME-MS61
La	ppm	0.5	ME-MS61	V	ppm	1	ME-MS61
Li	ppm	0.2	ME-MS61	W	ppm	0.1	ME-MS61
Lu	ppm	0.01	ME-MS61	Y	ppm	0.1	ME-MS61
Mg	%	0.01	ME-MS61	Yb	ppm	0.03	ME-MS61
Mn	ppm	5	ME-MS61	Zn	ppm	2	ME-MS61
Mo	ppm	0.05	ME-MS61	Zr	ppm	0.5	ME-MS61
Na	%	0.01	ME-MS61				

Table 2: Selected Trace Element Data for Iron Duke RC Samples

	Au	Pt	Pd	Ag	Sc	V	Cr	Co	Ni	Cu	Zn
	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LD18RC006_48_49	0.129		2	0.76	19	609	14	214	82	4630	27
LD18RC006_49_50	0.287		2	1.00	34	879	11	329	138	6260	18
LD18RC006_50_51	0.542		2	1.00	20	178	7	369	146	5450	19
LD18RC006_51_52	2.19		1	1.29	20	131	14	502	191	8640	30
LD18RC006_52_53	2.72		2	1.52	27	88	10	644	206	9420	33
LD18RC006_53_54	3.13		2	1.88	28	71	12	698	213	9290	34
LD18RC006_54_55	2.5		3	1.46	30	115	13	644	193	8200	45
LD18RC006_55_56	1.77		4	0.98	30	131	13	574	154	5430	44
LD18RC006_56_57	0.533		1	0.53	33	22	4	183	75	2880	24
LD18RC006_57_58	0.621		1	0.21	24	97	19	131	51	1320	23
LD18RC006_58_59	0.083		1	0.13	28	294	36	71	47	743	20
LD18RC006_59_60	0.073			0.10	30	316	36	61	47	634	23
LD18RC006_59_60B	0.088		1	0.11	30	288	34	58	47	768	22
LD18RC006_59_60C	0.002			0.01	0	4	5	3	4	36	<2
LD18RC006_60_61	0.043			0.07	26	272	34	35	38	380	38
LD18RC006_61_62	0.024			0.05	23	248	43	25	34	284	22
LD18RC006_62_63	0.008			0.03	12	156	41	15	20	150	19
LD18RC006_63_64	0.029		1	0.03	14	143	44	113	36	155	20
LD18RC006_64_65	0.076		2	0.03	11	113	42	21	32	124	19
LD18RC006_65_66	0.012		1	0.04	14	112	40	28	33	193	23
LD18RC006_66_67	0.016		1	0.04	12	120	46	30	24	133	38
LD18RC006_67_68	0.016		4	0.03	13	125	41	28	20	125	21
LD18RC006_68_69	0.146	112	160	0.03	12	127	41	21	14	115	17

LD18RC006_69_70	0.038		2	0.22	13	125	43	20	15	1750	22
LD18RC006_70_71	0.03		3	0.06	11	99	39	24	28	254	47
LD18RC006_71_72	0.014			0.04	12	93	39	31	34	193	88
LD18RC006_72_73	0.01			0.04	11	101	39	21	34	86	34
LD18RC006_73_74	0.683		2	0.54	13	87	33	164	54	2990	27
LD18RC006_74_75	1.29		1	1.25	16	25	10	393	76	7060	31
LD18RC006_75_76	0.461		1	0.42	13	39	16	149	40	1520	25
LD18RC006_76_77	1.01		2	0.64	13	59	19	215	46	2970	26
LD18RC006_77_78	4.73			1.17	15	19	7	982	121	6780	37
LD18RC006_78_79	2.67		1	0.96	17	16	5	251	47	4580	44
LD18RC006_79_80	0.475		1	0.42	16	8	2	177	21	2270	22
LD18RC006_79_80B	0.467			0.39	17	8	2	185	21	2290	21
LD18RC006_79_80C	0.016			0.04	1	3	15	9	3	132	3
LD18RC006_80_81	0.327			0.31	18	14	6	323	39	859	18
LD18RC006_81_82	0.712			0.41	20	9	3	464	45	1190	22
LD18RC006_82_83	0.64		2	0.72	15	53	17	419	58	2990	21
LD18RC006_83_84	2.23		3	0.81	13	41	12	366	59	3960	29
LD18RC006_84_85	1.425			0.44	17	13	6	763	72	2500	42
LD18RC006_85_86	0.665		1	0.90	13	12	10	720	71	4920	32
LD18RC006_86_87	1.675		1	0.69	17	6	4	211	40	4160	24
LD18RC006_87_88	0.652		1	1.64	6	10	12	941	104	10200	36
LD18RC006_88_89	1.46			2.17	6	21	10	464	108	13950	36
LD18RC006_89_90	2.03		2	1.12	9	8	6	403	148	6660	34
LD18RC006_90_91	1.315			0.81	14	35	10	362	88	4790	34
LD18RC006_91_92	0.864		2	0.31	30	306	24	62	32	2160	65
LD18RC006_92_93	0.024		1	0.08	40	436	26	43	36	469	50
LD18RC006_93_94	0.201		2	0.49	26	260	24	70	35	2820	31

LD18RC006_94_95	1.34		2	0.80	16	118	18	137	48	4590	48
LD18RC006_95_96	0.499		3	0.36	11	80	18	98	40	2340	24
LD18RC006_96_97	0.438	5		0.37	14	105	25	152	49	2040	50
LD18RC006_97_98	0.184			0.30	11	97	33	85	34	718	25
LD18RC006_98_99	0.075			0.20	8	88	29	45	17	886	27
LD18RC006_99_100	0.951		3	1.11	10	55	18	128	52	5450	36
LD18RC006_99_100B	1.06			1.25	10	49	19	167	55	6020	38
LD18RC006_99_100C	0.032			0.05	1	6	3	9	3	130	12
LD18RC006_100_101	3.42			3.09	13	37	10	362	109	11500	55
LD18RC006_101_102	4.27			1.91	16	64	16	317	95	10750	45
LD18RC006_102_103	7.28			1.06	18	88	15	212	90	4770	22
LD18RC006_103_104	8.14			1.41	20	110	13	285	100	5450	22
LD18RC006_104_105	5.31			1.58	20	134	14	315	95	8150	28
LD18RC006_105_106	2.67			1.68	18	113	20	239	72	8440	50
LD18RC006_106_107	1.455			1.05	21	168	32	161	53	5500	28
LD18RC006_107_108	0.218		3	0.57	13	118	43	116	29	1340	14
LD18RC006_108_109	0.161		2	0.18	10	63	15	53	20	1120	30
LD18RC006_109_110	0.094		1	0.24	7	16	13	52	30	1530	33
LD18RC006_110_111	0.136		1	0.57	6	4	11	35	37	3360	35
LD18RC006_111_112	0.688		1	0.68	4	8	15	21	27	4030	44
LD18RC006_112_113	0.272		1	0.85	3	7	13	25	29	5110	46
LD18RC006_113_114	0.041		3	0.40	9	86	37	65	22	2480	28
LD18RC006_114_115	0.055		3	0.12	8	85	35	102	26	624	16
LD18RC006_115_116	0.081		4	0.11	9	97	34	769	74	525	19
LD18RC006_116_117	0.016		3	0.23	7	55	22	125	38	1270	26
LD18RC006_117_118	0.27		2	0.22	16	90	18	546	81	1220	20
LD18RC006_118_119	1.415	5		0.92	18	25	8	564	113	4200	27

LD18RC006_119_120	2.25		3	1.63	22	22	8	590	96	9040	41
LD18RC006_119_120B	1.75			1.63	22	23	6	534	91	8630	39
LD18RC006_119_120C	0.508		1	0.17	4	7	3	97	21	894	7
LD18RC006_120_121	1.94			1.69	19	13	4	532	103	6910	36
LD18RC006_121_122	1.315			0.93	17	44	9	412	116	5010	28
LD18RC006_122_123	0.976			0.47	13	62	19	348	121	2600	20
LD18RC006_123_124	0.278		4	0.37	9	80	33	77	30	2140	21
LD18RC006_124_125	2.04		1	0.80	17	61	17	242	64	4200	23
LD18RC006_125_126	0.619			0.57	29	7	2	61	23	3720	37
LD18RC006_126_127	0.575		1	0.83	22	33	16	264	80	3680	39
LD18RC006_127_128	0.965		2	0.79	18	9	3	236	62	4360	30
LD18RC006_128_129	1.61		1	1.21	19	13	3	583	100	6190	28
LD18RC006_129_130	1.75		1	1.41	17	17	4	396	106	7410	22
LD18RC006_130_131	1.225		1	0.72	17	26	6	329	87	4340	20
LD18RC006_131_132	0.953			0.24	8	47	15	88	45	1530	20

	Bi	Sb	Tl	Te	Hf	Ta	W	Pb	Th	U
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LD18RC006_48_49	1.81	0.22	0.27	0.91	0.10	<0.05	3.80	7.40	1.70	3.00
LD18RC006_49_50	2.64	0.24	0.25	1.24	0.10	<0.05	4.70	6.90	0.47	2.60
LD18RC006_50_51	4.60	0.17	0.17	2.17	<0.1	<0.05	7.70	2.70	0.26	1.10
LD18RC006_51_52	8.28	0.22	0.15	3.97	0.40	<0.05	7.20	4.20	1.12	1.60
LD18RC006_52_53	20.50	0.33	0.19	11.85	0.60	0.05	11.50	4.80	2.14	2.50
LD18RC006_53_54	22.20	0.33	0.19	12.20	0.60	0.05	10.80	4.70	2.30	2.60
LD18RC006_54_55	18.15	0.33	0.22	9.79	0.80	0.06	7.60	4.60	2.74	2.80
LD18RC006_55_56	14.90	0.33	0.22	8.11	0.80	0.09	5.40	3.90	3.72	2.90
LD18RC006_56_57	4.50	0.15	0.05	2.37	0.30	<0.05	1.40	1.70	1.28	1.20
LD18RC006_57_58	2.24	0.20	0.15	1.19	1.40	0.13	4.80	2.00	3.59	2.50
LD18RC006_58_59	1.55	0.29	0.34	0.65	3.80	0.67	10.80	2.10	4.92	3.60
LD18RC006_59_60	1.13	0.27	0.48	0.42	3.70	0.63	10.30	2.10	3.69	2.50
LD18RC006_59_60B	1.38	0.24	0.44	0.58	3.40	0.60	9.90	2.10	3.98	2.70
LD18RC006_59_60C	0.06	0.10	<0.02	<0.05	<0.1	<0.05	0.20	0.50	0.12	0.10
LD18RC006_60_61	0.71	0.61	0.48	0.28	3.50	0.68	10.70	2.60	3.96	3.70
LD18RC006_61_62	0.61	0.33	0.48	0.17	3.90	0.67	8.30	2.70	6.62	5.80
LD18RC006_62_63	0.26	0.23	0.17	0.10	3.20	0.39	5.70	2.60	8.21	7.60
LD18RC006_63_64	0.41	0.27	0.26	0.23	4.30	0.66	9.10	3.40	13.35	9.90
LD18RC006_64_65	0.38	0.24	0.26	0.17	4.00	0.65	7.00	3.00	11.10	9.20
LD18RC006_65_66	0.56	0.23	0.25	0.29	4.20	0.62	6.60	3.50	11.20	9.90
LD18RC006_66_67	0.33	0.25	0.23	0.16	4.80	0.70	7.50	3.10	11.20	12.00
LD18RC006_67_68	0.20	0.23	0.20	0.13	4.90	0.73	6.60	2.80	12.00	11.30
LD18RC006_68_69	0.22	0.17	0.21	0.12	4.40	0.67	6.80	2.70	10.20	11.90

LD18RC006_69_70	0.23	0.34	0.20	0.10	4.90	0.82	7.70	2.80	12.10	12.00
LD18RC006_70_71	0.35	0.26	0.17	0.22	3.90	0.72	6.00	2.60	10.10	9.50
LD18RC006_71_72	0.31	0.19	0.18	0.18	4.40	0.78	5.90	3.10	12.15	10.70
LD18RC006_72_73	0.31	0.25	0.16	0.20	4.50	0.74	5.90	3.10	12.30	10.90
LD18RC006_73_74	3.49	0.58	0.26	1.76	3.00	0.52	6.00	6.50	8.86	8.30
LD18RC006_74_75	6.94	0.33	0.19	4.09	0.60	0.05	3.60	5.80	1.32	1.40
LD18RC006_75_76	2.40	0.17	0.12	1.28	1.30	0.16	4.20	2.70	3.47	5.00
LD18RC006_76_77	2.58	0.30	0.27	1.22	1.90	0.23	6.60	4.60	5.04	4.80
LD18RC006_77_78	7.54	0.17	0.13	4.19	0.30	<0.05	2.60	3.50	0.97	1.80
LD18RC006_78_79	4.75	0.13	0.10	2.44	0.20	<0.05	1.70	2.40	1.34	0.90
LD18RC006_79_80	6.42	0.07	0.03	4.35	0.10	<0.05	1.10	1.30	0.39	0.90
LD18RC006_79_80B	5.20	0.08	0.03	3.22	0.10	<0.05	1.30	1.30	0.38	0.80
LD18RC006_79_80C	0.12	0.12	<0.02	0.06	0.10	<0.05	0.40	2.00	0.17	0.20
LD18RC006_80_81	1.60	0.22	0.05	0.87	0.30	<0.05	2.00	2.90	0.95	2.40
LD18RC006_81_82	2.57	0.16	0.03	1.55	0.20	<0.05	1.80	1.40	0.68	1.90
LD18RC006_82_83	3.55	0.23	0.16	1.99	1.50	0.15	5.50	2.30	4.08	4.40
LD18RC006_83_84	3.26	0.21	0.09	1.66	0.80	0.07	5.00	5.10	2.44	2.80
LD18RC006_84_85	2.93	0.10	0.03	1.72	0.10	<0.05	2.30	1.70	0.68	1.80
LD18RC006_85_86	2.24	0.13	0.03	1.39	<0.1	<0.05	4.00	3.60	0.24	0.30
LD18RC006_86_87	5.59	0.07	0.02	3.49	0.10	<0.05	2.00	1.90	0.21	0.20
LD18RC006_87_88	2.80	0.17	0.05	1.74	<0.1	<0.05	5.20	4.20	0.26	0.20
LD18RC006_88_89	4.29	0.33	0.08	2.70	0.10	<0.05	5.50	5.20	0.28	0.20
LD18RC006_89_90	7.44	0.21	0.05	4.38	0.10	<0.05	2.30	4.20	0.43	0.50
LD18RC006_90_91	4.49	0.26	0.10	2.35	0.60	0.07	4.20	3.50	2.59	2.80
LD18RC006_91_92	1.14	0.33	0.69	0.45	3.60	0.49	13.70	1.90	3.15	2.40
LD18RC006_92_93	0.54	0.18	1.33	0.19	4.30	0.70	14.40	1.10	2.35	1.00
LD18RC006_93_94	1.03	0.55	0.50	0.32	3.30	0.47	19.50	3.70	3.10	2.60

LD18RC006_94_95	2.43	0.40	0.38	1.00	1.90	0.21	10.00	8.90	3.25	3.70
LD18RC006_95_96	1.61	0.21	0.19	0.58	1.60	0.17	7.80	3.40	4.37	5.40
LD18RC006_96_97	2.13	0.46	0.25	0.85	2.30	0.24	11.70	30.80	6.82	13.20
LD18RC006_97_98	0.88	0.33	0.18	0.23	2.90	0.30	12.80	3.90	8.90	14.30
LD18RC006_98_99	0.60	0.36	0.20	0.16	2.70	0.30	11.40	6.40	7.52	10.10
LD18RC006_99_100	2.16	0.91	0.31	0.93	1.50	0.13	8.50	11.50	4.24	6.10
LD18RC006_99_100B	2.57	0.83	0.28	1.14	1.10	0.13	7.50	7.20	3.82	5.40
LD18RC006_99_100C	0.08	0.17	0.02	0.05	0.10	<0.05	0.40	<0.5	0.24	0.30
LD18RC006_100_101	7.86	0.98	0.52	3.96	0.90	0.08	4.70	12.50	2.99	4.30
LD18RC006_101_102	6.93	0.61	0.54	3.62	1.60	0.10	6.60	8.90	3.05	5.20
LD18RC006_102_103	10.85	0.43	0.30	6.08	1.70	0.09	7.70	5.70	3.34	3.50
LD18RC006_103_104	13.90	0.38	0.20	8.29	1.40	0.14	18.40	5.30	2.43	2.40
LD18RC006_104_105	8.08	0.32	0.18	5.09	1.40	0.14	18.20	4.20	2.05	2.60
LD18RC006_105_106	5.04	0.46	0.20	2.87	2.00	0.24	14.20	4.50	4.60	4.20
LD18RC006_106_107	3.35	0.53	0.24	1.96	3.20	0.40	18.70	4.00	5.68	5.80
LD18RC006_107_108	0.81	0.31	0.14	0.51	4.40	0.70	14.20	3.20	12.00	10.70
LD18RC006_108_109	0.63	0.20	0.09	0.31	1.40	0.18	9.20	2.60	2.54	2.10
LD18RC006_109_110	0.64	0.15	0.04	0.28	0.40	0.05	4.20	2.60	0.99	0.90
LD18RC006_110_111	0.54	0.11	0.02	0.24	0.10	<0.05	3.20	3.00	0.40	0.20
LD18RC006_111_112	0.25	0.17	0.04	0.11	0.20	<0.05	5.70	3.60	0.23	0.10
LD18RC006_112_113	0.35	0.15	0.04	0.19	0.10	<0.05	4.00	2.80	0.42	0.30
LD18RC006_113_114	0.38	0.21	0.10	0.22	3.70	0.60	11.70	2.90	9.47	8.20
LD18RC006_114_115	0.34	0.20	0.06	0.20	4.00	0.64	9.80	2.90	10.10	9.30
LD18RC006_115_116	0.41	0.25	0.07	0.28	3.30	0.56	12.50	2.50	8.26	7.00
LD18RC006_116_117	0.42	0.15	0.06	0.18	1.30	0.15	8.40	3.00	2.75	1.80
LD18RC006_117_118	2.37	0.13	0.07	1.33	1.80	0.22	15.10	2.30	3.17	1.60
LD18RC006_118_119	6.87	0.23	0.12	3.80	0.50	0.05	4.50	3.80	1.22	1.50

LD18RC006_119_120	5.52	0.26	0.11	2.57	0.60	<0.05	3.50	3.90	1.57	3.40
LD18RC006_119_120B	5.20	0.24	0.10	2.45	0.50	0.05	3.50	3.70	1.39	2.90
LD18RC006_119_120C	1.51	0.09	0.03	0.74	0.10	<0.05	1.00	0.90	0.59	0.40
LD18RC006_120_121	5.53	0.20	0.09	2.39	0.20	<0.05	1.70	4.20	0.83	3.40
LD18RC006_121_122	5.38	0.18	0.10	2.55	0.90	<0.05	4.20	3.60	1.20	2.50
LD18RC006_122_123	3.52	0.18	0.09	1.59	1.60	0.16	12.30	3.40	4.26	4.50
LD18RC006_123_124	0.89	0.17	0.09	0.36	3.40	0.41	18.10	2.70	8.40	7.70
LD18RC006_124_125	3.77	0.23	0.11	1.82	1.90	0.14	8.40	3.00	4.04	6.50
LD18RC006_125_126	0.82	0.08	0.04	0.39	0.10	<0.05	1.00	3.50	0.34	0.40
LD18RC006_126_127	2.95	0.18	0.08	1.41	0.50	<0.05	3.30	3.70	1.44	2.10
LD18RC006_127_128	3.33	0.11	0.04	1.83	0.10	<0.05	2.20	2.50	0.58	0.90
LD18RC006_128_129	4.72	0.15	0.07	2.55	0.30	<0.05	2.60	2.40	0.69	1.70
LD18RC006_129_130	5.38	0.21	0.09	2.78	0.30	<0.05	2.90	2.60	0.82	1.90
LD18RC006_130_131	3.76	0.17	0.07	1.87	0.50	<0.05	3.00	2.30	1.31	3.30
LD18RC006_131_132	1.78	0.20	0.09	0.72	1.20	0.14	5.30	2.70	2.65	3.40

Table 3: Rare Earth Element Data

	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Y	Er	Tm	Yb	Lu
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LD18RC006_48_49	20.30	33.10	3.41	14.80	4.45	1.01	8.92	1.86	14.95	3.34	100.50	11.20	1.63	10.80	1.35
LD18RC006_49_50	7.40	15.35	1.84	9.40	3.98	1.28	9.30	2.25	18.95	5.11	137.00	16.80	2.41	16.20	2.51
LD18RC006_50_51	4.60	8.41	1.04	4.90	1.89	0.50	4.01	0.99	9.18	2.11	59.00	7.20	1.98	8.65	1.16
LD18RC006_51_52	21.00	35.10	3.64	14.70	3.80	0.89	5.79	1.21	7.27	2.40	57.50	5.95	0.97	6.53	1.01
LD18RC006_52_53	38.40	62.20	6.49	27.20	6.07	1.22	6.84	1.27	13.40	2.31	62.70	6.51	1.07	8.02	1.28
LD18RC006_53_54	36.00	62.20	6.56	27.50	6.44	1.28	12.60	1.26	9.79	2.11	67.60	7.28	1.20	7.42	1.31
LD18RC006_54_55	45.10	76.70	7.95	32.70	7.03	1.35	6.42	1.65	12.15	2.48	53.50	5.53	0.97	7.70	1.05
LD18RC006_55_56	86.00	133.00	14.60	53.70	11.00	1.98	11.15	1.87	10.70	2.41	75.40	7.93	1.27	8.77	1.27
LD18RC006_56_57	37.10	60.60	6.31	27.50	7.49	1.49	11.60	2.26	16.25	3.98	115.00	12.55	2.04	13.55	2.05
LD18RC006_57_58	21.90	38.40	4.21	18.50	4.79	0.92	6.55	1.24	8.62	2.24	73.90	6.85	1.12	7.68	1.19
LD18RC006_58_59	35.40	65.10	7.19	30.20	6.33	1.08	5.00	0.69	3.58	0.70	23.00	2.09	0.46	2.41	0.41
LD18RC006_59_60	26.00	49.20	5.59	24.10	5.37	0.99	4.89	0.69	3.58	0.73	24.60	2.18	0.35	2.48	0.42
LD18RC006_59_60B	31.30	57.30	6.30	26.80	5.97	1.08	5.39	0.82	4.83	1.08	28.90	3.11	0.49	3.39	0.54
LD18RC006_59_60C		0.49	0.06	0.30	0.07	<0.03	0.15	0.03	0.19	0.05	1.30	0.16	0.03	0.22	0.03
LD18RC006_60_61	27.10	53.50	5.90	24.40	5.19	1.00	4.49	0.61	3.21	0.59	17.50	1.76	0.29	2.20	0.36
LD18RC006_61_62	34.80	67.10	7.33	29.50	5.69	1.00	4.35	0.56	2.66	0.49	14.40	1.42	0.24	1.59	0.29
LD18RC006_62_63	37.70	70.50	7.51	29.50	5.43	0.98	4.24	0.56	2.77	0.51	15.40	1.56	0.20	1.47	0.26
LD18RC006_63_64	59.50	112.00	13.35	46.10	8.23	1.33	5.86	0.79	3.56	0.70	21.30	2.01	0.30	2.15	0.33
LD18RC006_64_65	40.10	78.50	8.43	32.40	5.77	0.92	4.26	0.58	2.97	0.61	20.20	1.75	0.28	1.92	0.31
LD18RC006_65_66	48.40	90.50	9.67	37.90	6.74	1.17	5.29	0.73	3.67	0.73	22.70	2.15	0.35	2.38	0.41
LD18RC006_66_67	37.20	72.20	7.81	30.90	5.60	0.99	4.27	0.60	3.32	0.67	21.00	1.98	0.31	2.17	0.34
LD18RC006_67_68	39.50	74.80	7.95	30.40	5.61	0.98	4.12	0.59	3.05	0.65	20.00	1.96	0.30	2.02	0.35
LD18RC006_68_69	32.70	60.30	6.43	25.50	4.67	0.92	4.04	0.62	3.54	0.74	22.30	2.17	0.33	2.22	0.36

LD18RC006_69_70	41.50	76.90	7.89	30.50	5.50	1.02	4.15	0.61	3.39	0.80	21.80	2.10	0.33	2.28	0.37
LD18RC006_70_71	36.60	70.80	7.65	29.50	5.70	1.04	4.37	0.67	3.71	0.76	23.50	2.35	0.38	2.43	0.40
LD18RC006_71_72	51.30	100.00	11.20	40.20	7.10	1.27	5.76	0.81	4.19	0.82	26.70	2.52	0.39	2.74	0.41
LD18RC006_72_73	54.60	104.50	12.40	43.70	7.80	1.36	5.50	0.74	3.91	0.76	25.10	2.27	0.42	2.54	0.38
LD18RC006_73_74	49.00	86.70	9.10	35.20	7.14	1.28	6.65	1.04	6.64	1.55	39.60	4.46	0.66	3.88	0.75
LD18RC006_74_75	23.20	39.90	4.40	19.80	5.68	1.18	7.74	1.48	9.72	2.26	67.50	7.02	1.12	7.19	1.09
LD18RC006_75_76	27.60	49.40	5.79	27.40	8.49	1.79	12.55	2.59	16.75	3.76	112.50	11.05	1.79	11.50	1.69
LD18RC006_76_77	26.10	47.60	5.21	22.20	5.59	1.40	7.37	1.38	9.08	2.00	56.10	5.88	0.90	5.80	0.88
LD18RC006_77_78	24.00	40.80	4.50	19.90	5.44	1.28	7.27	1.33	8.77	2.00	60.10	5.96	0.97	6.27	0.97
LD18RC006_78_79	65.20	112.00	13.30	53.50	15.35	3.00	24.00	4.61	28.70	6.31	188.50	17.95	2.82	18.20	2.38
LD18RC006_79_80	22.10	47.50	6.36	37.70	16.35	3.83	30.30	5.99	40.50	8.84	257.00	25.10	3.97	25.40	3.22
LD18RC006_79_80B	24.40	51.80	6.95	39.40	16.70	3.94	31.50	6.07	45.60	10.55	258.00	26.10	3.97	24.50	3.18
LD18RC006_79_80C	0.90	1.72	0.21	0.90	0.26	0.06	0.42	0.08	0.56	0.13	5.60	0.37	0.06	0.37	0.05
LD18RC006_80_81	31.20	62.80	7.85	41.50	16.35	3.64	27.30	5.61	38.10	8.50	261.00	24.30	4.49	23.10	3.05
LD18RC006_81_82	45.10	85.00	10.60	53.40	18.70	3.85	31.30	5.81	37.00	8.29	236.00	24.00	3.83	25.00	3.21
LD18RC006_82_83	38.20	67.80	7.52	34.30	8.94	1.96	13.35	2.49	16.30	3.94	116.00	12.35	1.69	10.80	1.37
LD18RC006_83_84	40.70	70.30	7.88	36.70	9.06	1.73	9.41	1.57	10.75	2.48	73.10	7.35	1.12	7.81	1.16
LD18RC006_84_85	50.50	88.80	10.80	47.00	14.90	3.15	23.00	4.10	27.60	5.76	189.50	16.80	3.24	18.00	2.48
LD18RC006_85_86	13.00	24.00	2.98	15.40	5.21	1.15	8.18	1.67	12.50	2.77	81.40	9.06	1.56	9.70	1.69
LD18RC006_86_87	22.10	44.40	5.96	32.20	12.60	2.42	18.30	3.84	27.50	6.27	170.50	18.10	2.94	19.60	2.80
LD18RC006_87_88	13.40	24.50	2.85	13.80	4.10	0.98	4.38	0.79	5.28	1.19	31.50	3.56	0.76	3.74	0.55
LD18RC006_88_89	17.90	30.70	3.21	13.80	3.85	0.94	4.43	0.85	4.93	1.35	29.70	3.42	0.52	3.34	0.58
LD18RC006_89_90	31.70	56.60	6.25	29.40	8.51	1.81	10.60	1.78	11.10	2.42	76.00	8.10	1.38	9.28	1.33
LD18RC006_90_91	45.70	82.10	8.84	37.40	9.43	1.95	11.20	1.93	14.35	2.79	85.60	8.42	1.45	9.57	1.35
LD18RC006_91_92	28.70	55.20	6.21	27.00	6.20	1.18	6.60	0.92	4.99	0.94	27.80	4.04	0.42	2.81	0.45
LD18RC006_92_93	20.80	41.60	4.84	21.70	4.97	0.89	4.92	0.65	3.79	0.58	16.00	1.62	0.27	1.92	0.34
LD18RC006_93_94	35.10	63.20	6.69	28.10	6.08	1.27	5.66	0.77	3.91	0.74	21.00	2.01	0.33	2.14	0.36

LD18RC006_94_95	37.20	62.90	6.56	28.30	6.01	1.61	6.87	0.97	5.52	1.22	32.60	3.72	0.46	3.09	0.47
LD18RC006_95_96	43.80	74.10	7.82	32.20	7.07	1.88	7.70	1.11	6.26	1.21	38.40	3.28	0.49	3.13	0.46
LD18RC006_96_97	42.70	75.30	7.73	32.10	6.59	1.46	6.33	0.95	8.95	1.13	30.40	2.97	0.49	3.07	0.47
LD18RC006_97_98	59.30	99.70	10.45	40.40	7.74	1.49	7.42	1.10	5.72	1.17	34.70	3.12	0.48	3.24	0.42
LD18RC006_98_99	42.50	73.60	7.57	31.30	6.84	1.90	7.72	1.20	6.74	1.30	40.50	3.51	0.50	3.09	0.44
LD18RC006_99_100	38.00	63.70	6.54	27.30	5.83	1.31	6.09	0.90	5.13	1.07	30.70	3.14	0.63	3.95	0.48
LD18RC006_99_100B	35.40	59.80	6.19	26.30	5.74	1.29	6.10	0.94	5.20	1.22	39.70	3.10	0.49	3.45	0.54
LD18RC006_99_100C	1.60	2.85	0.33	1.40	0.34	0.08	0.40	0.07	0.41	0.09	2.80	0.26	0.04	0.25	0.03
LD18RC006_100_101	34.10	59.60	6.20	26.80	6.04	1.28	6.28	0.87	5.40	1.44	33.30	3.33	0.52	3.87	0.59
LD18RC006_101_102	31.80	55.90	5.90	25.10	6.20	1.23	6.85	0.88	5.31	1.25	33.20	3.51	0.56	4.19	0.72
LD18RC006_102_103	25.70	44.60	4.78	20.30	4.82	1.02	5.25	0.82	5.19	1.39	31.20	3.47	0.60	4.35	0.69
LD18RC006_103_104	23.90	43.10	4.44	19.60	4.74	1.02	5.20	0.81	6.84	1.14	35.40	3.38	0.55	4.03	0.62
LD18RC006_104_105	23.80	42.40	4.59	20.30	4.78	0.97	5.15	0.82	5.17	1.03	30.60	3.07	0.48	3.14	0.49
LD18RC006_105_106	44.20	76.00	7.73	31.60	6.41	1.11	5.95	0.81	4.67	0.89	26.10	2.61	0.44	2.93	0.61
LD18RC006_106_107	39.40	68.90	7.40	31.00	6.26	1.12	5.71	0.78	4.24	0.86	27.40	2.46	0.40	2.67	0.44
LD18RC006_107_108	59.30	105.50	12.00	42.80	8.17	1.25	6.20	0.80	4.25	0.81	24.80	2.33	0.35	2.54	0.39
LD18RC006_108_109	13.70	26.00	2.61	11.00	2.25	0.44	3.06	0.35	2.08	0.44	14.00	1.38	0.24	1.70	0.53
LD18RC006_109_110	5.70	10.85	1.22	5.00	1.17	0.26	1.20	0.20	1.28	0.28	7.80	1.01	0.20	1.47	0.27
LD18RC006_110_111	2.90	5.33	0.60	2.70	0.73	0.22	0.94	0.17	1.35	0.33	7.90	1.09	0.19	1.86	0.33
LD18RC006_111_112	1.90	3.45	0.38	1.60	0.43	0.13	0.58	0.17	0.69	0.16	5.00	0.56	0.10	0.82	0.16
LD18RC006_112_113	4.50	8.30	0.89	3.80	0.80	0.21	1.01	0.15	0.88	0.22	5.70	0.67	0.11	1.19	0.20
LD18RC006_113_114	31.90	58.00	5.88	24.30	4.46	0.87	4.31	0.54	2.86	0.59	20.90	1.83	0.27	2.15	0.34
LD18RC006_114_115	31.20	60.90	6.11	23.50	4.39	0.81	3.69	0.54	3.04	0.61	18.70	1.86	0.29	2.13	0.31
LD18RC006_115_116	25.60	46.70	4.67	18.80	3.72	0.67	3.29	0.51	2.80	0.56	18.40	2.05	0.25	1.82	0.29
LD18RC006_116_117	5.20	9.64	1.09	4.50	1.04	0.26	1.56	0.26	1.25	0.26	8.20	0.93	0.15	1.22	0.22
LD18RC006_117_118	21.20	38.10	3.85	16.00	3.47	0.66	3.31	0.48	2.43	0.67	14.60	1.74	0.32	2.61	0.36
LD18RC006_118_119	22.50	39.30	4.00	17.70	4.18	0.94	4.40	0.62	3.83	0.84	23.60	2.69	0.67	3.85	0.64

LD18RC006_119_120	28.20	48.90	5.04	22.20	5.00	1.22	5.13	0.86	5.05	1.34	29.20	4.35	0.67	4.90	0.97
LD18RC006_119_120B	28.10	48.70	4.98	22.00	5.17	1.22	5.43	0.81	4.61	1.09	31.80	4.00	0.65	5.05	0.87
LD18RC006_119_120C	5.30	10.55	1.12	4.70	1.10	0.28	1.38	0.26	1.68	0.40	10.70	1.22	0.19	1.39	0.21
LD18RC006_120_121	15.70	27.50	2.78	12.70	3.31	0.90	4.22	0.67	4.05	0.97	28.80	2.92	0.51	4.79	0.91
LD18RC006_121_122	17.10	30.70	3.17	14.20	3.58	0.78	4.12	0.67	4.28	1.07	28.60	3.85	0.66	5.01	0.78
LD18RC006_122_123	34.20	59.40	5.96	24.90	5.20	0.97	4.87	0.72	4.13	0.91	25.00	3.22	0.41	3.24	0.54
LD18RC006_123_124	68.20	118.50	12.60	46.20	8.44	1.44	6.69	0.91	4.16	0.82	24.20	2.19	0.34	2.39	0.37
LD18RC006_124_125	20.00	37.00	3.85	17.10	4.61	0.98	5.26	0.82	5.34	1.21	34.80	4.00	0.63	5.09	0.79
LD18RC006_125_126	13.20	24.10	2.60	12.20	3.85	1.15	5.68	1.01	7.48	1.58	44.40	5.49	1.71	7.32	1.29
LD18RC006_126_127	16.90	30.40	3.18	14.30	3.87	0.95	4.76	0.81	5.22	1.27	34.30	3.78	0.63	5.04	0.78
LD18RC006_127_128	10.20	20.70	2.20	10.70	3.30	0.85	5.13	1.00	7.35	1.68	49.70	5.85	0.96	7.43	1.10
LD18RC006_128_129	16.90	31.10	3.20	14.40	3.89	1.04	4.30	1.00	5.10	1.64	35.40	4.31	0.64	5.62	0.98
LD18RC006_129_130	17.20	31.40	3.30	14.90	4.43	1.06	4.15	0.77	5.57	0.98	26.90	3.21	0.54	4.60	0.78
LD18RC006_130_131	28.70	50.40	5.08	21.50	4.73	0.96	4.79	0.84	4.49	1.00	54.10	3.95	0.55	4.43	0.72
LD18RC006_131_132	12.90	24.60	2.56	11.60	2.70	0.86	3.70	0.69	3.83	0.86	22.60	2.78	0.45	3.66	0.54

Table 4: Key Element Ratios

	Y/Ho	Zr/Hf	La/Yb	TREE	Molar Cu/Au	Ag/Au
LD18RC006_48_49	30.09	39.00	1.88	131.12	111244	5.89
LD18RC006_49_50	26.81	35.00	0.46	112.78	67605	3.48
LD18RC006_50_51	27.96		0.53	56.62	31166	1.85
LD18RC006_51_52	23.96	38.50	3.22	110.26	12228	0.59
LD18RC006_52_53	27.14	37.00	4.79	182.28	10734	0.56
LD18RC006_53_54	32.04	49.50	4.85	182.95	9199	0.60
LD18RC006_54_55	21.57	36.50	5.86	208.78	10166	0.58
LD18RC006_55_56	31.29	41.63	9.81	345.65	9508	0.55
LD18RC006_56_57	28.89	30.00	2.74	204.77	16747	0.99
LD18RC006_57_58	32.99	36.86	2.85	124.21	6588	0.34
LD18RC006_58_59	32.86	37.24	14.69	160.64	27746	1.57
LD18RC006_59_60	33.70	38.38	10.48	126.57	26919	1.37
LD18RC006_59_60B	26.76	38.82	9.23	148.40		1.25
LD18RC006_59_60C	26.00		0.00	1.78		5.00
LD18RC006_60_61	29.66	38.43	12.32	130.60	27390	1.63
LD18RC006_61_62	29.39	38.33	21.89	157.02	36677	2.08
LD18RC006_62_63	30.20	38.59	25.65	163.19	58115	3.75
LD18RC006_63_64	30.43	38.72	27.67	256.21	16513	1.03
LD18RC006_64_65	33.11	37.88	20.89	178.80	5057	0.39
LD18RC006_65_66	31.10	39.17	20.34	210.09	49849	3.33
LD18RC006_66_67	31.34	36.98	17.14	168.36	25667	2.50
LD18RC006_67_68	30.77	37.35	19.55	172.28	24214	1.88
LD18RC006_68_69	30.14	37.39	14.73	144.54	2441	0.21

LD18RC006_69_70	27.25	35.00	18.20	177.34	142738	5.79
LD18RC006_70_71	30.92	39.49	15.06	166.36	26242	2.00
LD18RC006_71_72	32.56	36.59	18.72	228.71	42728	2.86
LD18RC006_72_73	33.03	38.33	21.50	240.88	26500	4.00
LD18RC006_73_74	25.55	39.67	12.63	214.05	13569	0.79
LD18RC006_74_75	29.87	29.33	3.23	131.78	16963	0.97
LD18RC006_75_76	29.92	35.85	2.40	182.15	10219	0.91
LD18RC006_76_77	28.05	35.11	4.50	141.39	9114	0.63
LD18RC006_77_78	30.05	32.00	3.83	129.46	4443	0.25
LD18RC006_78_79	29.87	41.00	3.58	367.32	5317	0.36
LD18RC006_79_80	29.07	46.00	0.87	277.16	14812	0.88
LD18RC006_79_80B	24.45	53.00	1.00	294.66		0.84
LD18RC006_79_80C	43.08	25.00	2.43	6.09		2.50
LD18RC006_80_81	30.71	32.33	1.35	297.79	8142	0.95
LD18RC006_81_82	28.47	28.50	1.80	355.09	5180	0.58
LD18RC006_82_83	29.44	37.00	3.54	221.01	14480	1.13
LD18RC006_83_84	29.48	36.13	5.21	208.02	5504	0.36
LD18RC006_84_85	32.90	48.00	2.81	316.13	5438	0.31
LD18RC006_85_86	29.39		1.34	108.87	22931	1.35
LD18RC006_86_87	27.19	11.00	1.13	219.03	7698	0.41
LD18RC006_87_88	26.47		3.58	79.88	48488	2.52
LD18RC006_88_89	22.00	41.00	5.36	89.82	29615	1.49
LD18RC006_89_90	31.40	21.00	3.42	180.26	10169	0.55
LD18RC006_90_91	30.68	42.50	4.78	236.48	11290	0.62
LD18RC006_91_92	29.57	37.92	10.21	145.66	7749	0.36
LD18RC006_92_93	27.59	40.12	10.83	108.89	60568	3.33
LD18RC006_93_94	28.38	38.18	16.40	156.36	43485	2.44

LD18RC006_94_95	26.72	38.53	12.04	164.90	10617	0.60
LD18RC006_95_96	31.74	40.56	13.99	190.51	14534	0.72
LD18RC006_96_97	26.90	37.04	13.91	190.24	14436	0.84
LD18RC006_97_98	29.66	36.55	18.30	241.75	12095	1.63
LD18RC006_98_99	31.15	38.89	13.75	188.21	36615	2.67
LD18RC006_99_100	28.69	34.53	9.62	164.07	17762	1.17
LD18RC006_99_100B	32.54	39.36	10.26	155.76		1.18
LD18RC006_99_100C	31.11	41.00	6.40	8.15		1.56
LD18RC006_100_101	23.13	35.44	8.81	156.32	10422	0.90
LD18RC006_101_102	26.56	36.06	7.59	149.40	7803	0.45
LD18RC006_102_103	22.45	37.12	5.91	122.98	2031	0.15
LD18RC006_103_104	31.05	36.07	5.93	119.37	2075	0.17
LD18RC006_104_105	29.71	38.14	7.58	116.19	4757	0.30
LD18RC006_105_106	29.33	37.15	15.09	185.96	9798	0.63
LD18RC006_106_107	31.86	37.50	14.76	171.64	11716	0.72
LD18RC006_107_108	30.62	39.20	23.35	246.69	19052	2.61
LD18RC006_108_109	31.82	35.71	8.06	65.78	21561	1.12
LD18RC006_109_110	27.86	37.25	3.88	30.11	50448	2.55
LD18RC006_110_111	23.94	34.00	1.56	18.74	76575	4.19
LD18RC006_111_112	31.25	26.00	2.32	11.13	18155	0.99
LD18RC006_112_113	25.91	47.00	3.78	22.93	58229	3.13
LD18RC006_113_114	35.42	36.76	14.84	138.30	187479	9.76
LD18RC006_114_115	30.66	37.75	14.65	139.38	35165	2.18
LD18RC006_115_116	32.86	35.76	14.07	111.73	20089	1.36
LD18RC006_116_117	31.54	37.46	4.26	27.58	246019	14.38
LD18RC006_117_118	21.79	38.94	8.12	95.20	14005	0.81
LD18RC006_118_119	28.10	40.00	5.84	106.16	9200	0.65

LD18RC006_119_120	21.79	34.33	5.76	133.83	12453	0.72
LD18RC006_119_120B	29.17	39.20	5.56	132.68		0.93
LD18RC006_119_120C	26.75	55.00	3.81	29.78		0.33
LD18RC006_120_121	29.69	39.50	3.28	81.93	11040	0.87
LD18RC006_121_122	26.73	37.22	3.41	89.97	11809	0.71
LD18RC006_122_123	27.47	39.13	10.56	148.67	8257	0.48
LD18RC006_123_124	29.51	36.32	28.54	273.25	23859	1.33
LD18RC006_124_125	28.76	36.89	3.93	106.68	6381	0.39
LD18RC006_125_126	28.10	40.00	1.80	88.66	18627	0.92
LD18RC006_126_127	27.01	37.80	3.35	91.89	19836	1.44
LD18RC006_127_128	29.58	50.00	1.37	78.45	14004	0.82
LD18RC006_128_129	21.59	27.33	3.01	94.12	11917	0.75
LD18RC006_129_130	27.45	38.00	3.74	92.89	13124	0.81
LD18RC006_130_131	54.10	38.60	6.48	132.14	10981	0.59
LD18RC006_131_132	26.28	35.92	3.52	71.73	4976	0.25

PROJECT	Hole_ID	Drill_Type	GDA_E	BEST_N	Dip	Azim_Mag	RL	Tot_Depth
LITTLE DUKE	LD18RC006	RC	473681.00	7681167.00	60.00	90.00	245.00	132.00
	LD18RC005	RC	473694.00	7681152.00	70.00	276.00	250.00	72.00

Table 3.Drill Hole collar location table.

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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"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	<ul style="list-style-type: none"> RC Drilling chip samples recovered via cyclone and splitter Samples were ~2-3kg in weight reverse circulation drilling was used to obtain 1 m samples for targeted ore zones, and 4 m cumulative samples between ore zones from which ~3 kg was pulverised to produce a 30 g charge for ICP analysis for Copper and Cobalt plus Fire Assay for Gold. Samples analysis completed at ALS laboratory QLD
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Reverse Circulation drilling with cyclone and splitter.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure 	<ul style="list-style-type: none"> Samples recovered via cyclone and spitter, sample weights indicate representative for 1m.

Criteria	JORC Code explanation	Commentary
	<p><i>representative nature of the samples.</i></p> <ul style="list-style-type: none"> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	
Logging	<ul style="list-style-type: none"> • <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • RC chips were geologically logged every 1 m. •
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • No sub sampling taken from 1 metre RC chips. • Field duplicates and standards were entered for analysis with the results indicating that representative sampling and subsequent analysis were completed.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks,</i> 	<ul style="list-style-type: none"> • Industry standard ICP analysis was completed for Copper and Cobalt plus Fire Assay for Gold samples and subsequent assays • Repeat and checks were conducted by ALS laboratories whilst completing the analysis. • Standard and duplicates entered by Ausmex • The level of accuracy of analysis is considered

Criteria	JORC Code explanation	Commentary
	<i>duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	adequate with no bias samples reported.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Significant intersections inspected and verified by JORC competent personnel • No assays were adjusted • There were no twinned holes drilled • All drill hole logging was completed on site by Geologists, with data entered into field laptop and verified as entered into a geological database • Significant intersections for gold was reported as a combined down hole interval average received assay grade and are not down hole weighted averages. • As all significant intersections reported for gold were average down hole assays, with no internal waste has been calculated or assumed.
<i>Location of data points</i>	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • The drill collars have been surveyed by handheld GPS. (accuracy +/- 3m) • The drill collars will be surveyed by a permanent base station (accuracy +/- 150mm) and recorded in MGA94, Zone 54 datum
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Data spacing, and distribution is NOT sufficient for Mineral Resource estimation • No sample compositing has been applied.
<i>Orientation of data in relation to</i>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation</i> 	<ul style="list-style-type: none"> • The orientation of samples is not likely to bias the assay results.

Criteria	JORC Code explanation	Commentary
<i>geological structure</i>	<i>of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Samples were taken to Cloncurry by company personnel and despatched by courier to the ALS Laboratory in Townsville
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No audits or reviews have been undertaken at this stage.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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"> ML2718, ML2709, ML2713, ML2719, ML2741 & EPM14163 are owned 100% by Spinifex Mines Pty Ltd. Ausmex Mining Group Limited owns 80% of Spinifex Mines Pty Ltd. Queensland Mining Corporation Limited own 20% of Spinifex Mines. Exploration is completed under an incorporated Joint Venture. 80% beneficial interest in sub blocks CLON825U & CLON825P from EPM15923 & 80/20 JV with CopperChem EPM14475, EPM15858, & EPM18286 are held by QMC Exploration Pty Limited. Ausmex Mining Group Limited owns 80% of QMC Exploration Pty Limited. Queensland Mining Corporation Limited own 20% of Spinifex Mines. Exploration is completed under an incorporated Joint Venture. ML2549, ML2541, ML2517 are 100% owned by Ausmex.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> All exploration programs conducted by Ausmex Mining Group Limited. Reference to historical mining



Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • ML2718, ML2709, ML2713, ML2719 hosts the Gilded Rose sheer hosted quartz reef. There are several golds mineralised hydrothermal quartz reefs within the deposit. • ML2741 hosts the shear hosted quartz rich Mt Freda Gold deposit containing Au, Cu, & Co. • ML2549, ML2541, ML2517 host copper mineralisation associated with carbonate intrusions into altered mafic host rocks • EPM14163 & EPM 15858 contain There are several gold mineralised hydrothermal quartz reefs within the deposit containing Au, Cu, & Co
Drill hole Information	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> • Details within tables within the release



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<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> Significant average combined down hole assay intersections have been reported as part of this release for Cu & Au. These average intersections are not weighted averages. No weighted down hole averages were reported. Where Au is <LD, 50% of LD was used for data aggregation i.e. if LD=0.01 then <LD = 0.005 Significant intersections for all minerals were reported are an average received assay grade for that down hole significant intersection. The average combined down hole significant intersection did not have an internal Cut-off grade for gold, therefore there was no minimum individual sample cut off, yet only a combined down hole intersection average > 2.0g/t Au. Within these reported Cu intersections there were individual assays < 0.1 G/t Au. Significant intersections for copper and gold were based on the average grade for the same intersection, as it may be assumed they represent a combined potential mining unit in the future. As all significant intersections reported for Copper were a combined total average down hole grade, no internal waste has been calculated or assumed.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> No material information is excluded. intersections have been displayed reported as part of this release. Interpreted X sections attached to the announcement displaying the geometry of mineralisation
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts</i> 	<ul style="list-style-type: none"> Maps showing the location of the EPMs and MLs are presented in the announcement



Criteria	JORC Code explanation	Commentary
	<i>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.</i>	<ul style="list-style-type: none"> • Appropriate relevant and labelled X sections attached
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • All comprehensive ICP and Fire Assay analytical results for Copper, cobalt, REE Gold were reported.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Reference to Historical QLD Mines Dept. reports from 1936. • References to previous ASX announcements.
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Additional mapping, costeans, geophysical surveys, RC and Core drilling