

## **NEW HIGH-GRADE RESULTS CONFIRM STRONG POTENTIAL TO EXPAND 643,000oz RESOURCE AT PILBARA GOLD PROJECT, WA**

### **Extensions, new target areas and emerging high-grade zones identified**

#### **Highlights**

- Recently completed 51-hole/6,710m RC drilling program at the Pilbara Gold Project confirms outstanding potential to expand the current 643,000oz Resource.
- New intercepts have in-filled and extended the mineralisation beyond the current 486,000oz Indicated and Inferred Resource at the Mt York deposit. Significant new assays include:
  - 8m @ 3.79g/t from 136m incl. 1m @ 5.53g/t from 140m (KMYC033)
  - 13m @ 1.45g/t from 57m incl. 1m @ 4.12g/t from 65m (KMYC060)
  - 8m @ 3.44g/t from 145m incl. 1m @ 12.70g/t from 146m (KMYC061)
  - 37m @ 1.30g/t from 62m incl. 8m @ 4.77g/t from 90m and 1m @ 17.02g/t from 96m (KMYC068)
  - 28m @ 1.15g/t from 160m incl. 3m @ 5.23g/t from 168m (KMYC070)
  - 15m @ 1.15g/t from 117m incl. 5m @ 2.50g/t from 125m and 1m @ 5.86g/t from 126m (KMYC071)
  - 72m @ 1.00g/t from 3m incl. 18m @ 1.06g/t from 18m and 16m @ 2.96g/t from 49m, including:
    - 3m @ 8.54g/t from 56m and 1m @ 15.93g/t from 57m (KMYC075)
- Mineralisation remains open along strike and down-dip of the current Resource.
- High-grade intervals identified within the wider mineralised envelope, supporting the interpreted existence of high-grade mineralised “shoots” within the deposit.
- Significant flattening of the mineralised sequence at Gossan Hill substantially increases tonnes per vertical metre and enhances the open pit mining potential in this area.
- Wide continuous mineralisation confirmed from the floor of the Breccia Hill East pit.
- New zone of high grade gold mineralisation identified within footwall mafics west of Main Hill.
- Significant gold mineralisation intersected within hangingwall sediments, including conglomerate, adjacent to Breccia Hill & Gossan Hill.
- New geological interpretation highlights the potential for a previously untested repetition of host BIF unit within the footwall of the Mount York deposit – priority target for future drilling.

Kairos Executive Chairman Terry Topping said: “The recent follow-up drilling program at the Pilbara Gold Project has been hugely successful, building on the landmark 643,000oz resource upgrade we delivered earlier this year and clearly showing that this project has considerable upside. Importantly, we have confirmed the potential for significant extensions of the 486,000oz Mt York deposit – which has now been extended to a strike length of over 3.8km.”

*“At the same time, we have successfully in-filled parts of the previously announced resource, and highlighted the potential for significantly higher grade shoots within the wider mineralised envelope – an important development for the future economics of the project.*

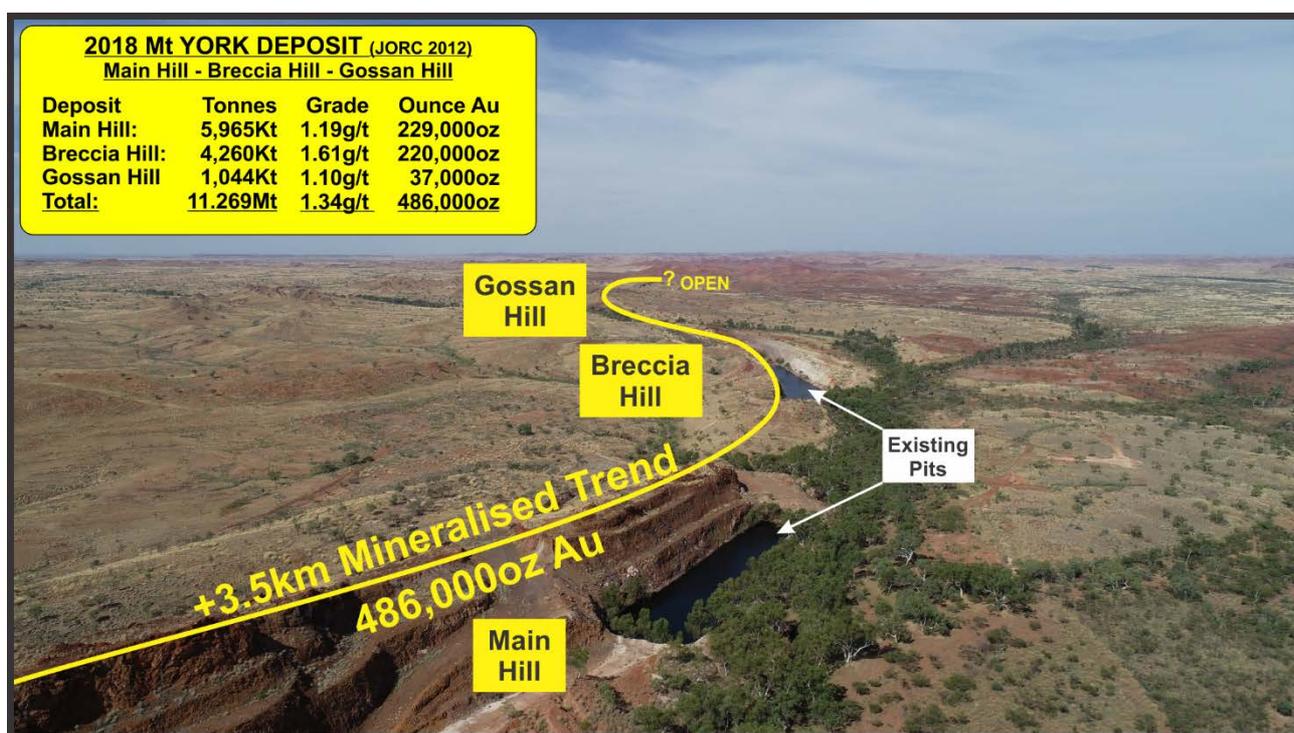
*“Other positive developments include a significant flattening of the mineralised sequence at Gossan Hill, which significantly increases the tonnes per vertical metre in this area and enhances the future open pit mining potential. Wide zones of continuous mineralisation have also been confirmed from the floor of the historical Breccia Hill East pit.*

*“All of these attributes bode well for the future economics of any mining development at Mt York, while our recent drill campaign has opened up a number of new target areas including a significant zone of conglomerate-hosted gold mineralisation adjacent to Gossan Hill and in wide-spaced drilling over a 500m strike length east of Golden Gully. This project is rapidly emerging as a significant asset for Kairos alongside our extensive conglomerate gold interests at the Croydon Project, where a major new phase of exploration is currently underway.”*

Kairos Minerals Ltd (ASX: KAI) is pleased to announce that recent drilling has confirmed the potential to expand the current Mineral Resource at its 100%-owned Pilbara Gold Project in the north-west of Western Australia, returning broad, high-grade intercepts of gold mineralisation from several different areas.

Kairos delivered an updated Indicated and Inferred Mineral Resource for the Mt York deposit in May 2018, comprising 11.3 million tonnes grading 1.34g/t gold for 486,000 ounces of contained gold (see ASX Announcement 23 May 2018). The Resource drilling program also confirmed that Main Hill, Breccia Hill and Gossan Hill are all part of a single continuous gold mineralised system rather than a series of separate “pods” as previously thought (see Plate 1).

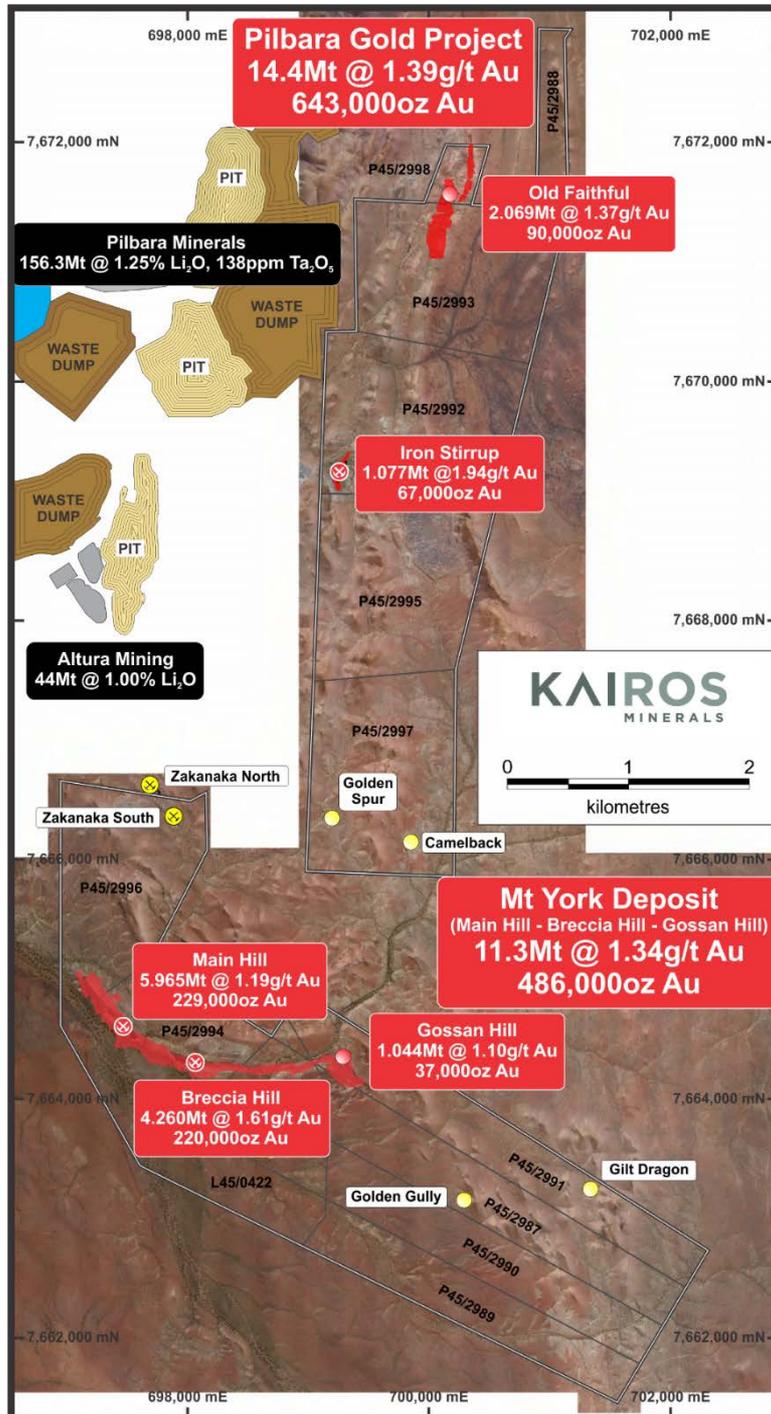
Following the completion of the May 2018 Mineral Resource, Kairos commenced a new round of RC drilling to in-fill the Resource area and test for further extensions to the mineralised zone. All results from that program have now been received and collated and are reported in this announcement.



**Plate 1. Aerial view of the Mt York Gold Deposit, looking east-northeast.**

**Pilbara Gold Project Overview**

The Pilbara Gold Project is located 90km south-east of Port Hedland in the West Pilbara of Western Australia (Figure 1).



**Figure 1. Pilbara Gold Project.**

Kairos’s 100%-owned project tenure is situated immediately east of Pilbara Minerals’ and Altura Mining’s lithium projects (Figure 1), which have recently commenced operations, and comprises 12 Prospecting Licences (P45/2987-2998 inclusive). The Mt York Gold deposit (Main Hill, Breccia Hill and Gossan Hill) is secured by tenements P45/2994 and P45/2991, which occur entirely within the Wallareenya Pastoral Lease.

The Mineral Resource for the Pilbara Gold Project is set out below:

### **Pilbara Gold Deposit Resources – Reported at a 0.5g/t Au Cut**

Deposit	Indicated			Inferred			Total		
	Tonnes (kt)	Au (g/t)	Ounces (koz)	Tonnes (kt)	Au (g/t)	Ounces (koz)	Tonnes (kt)	Au (g/t)	Ounces (koz)
Mt York <sup>(1,2)</sup>	5,296	1.23	210	5,973	1.44	276	11,269	1.34	486
Iron Stirrup <sup>(1)</sup>	612	1.84	36	465	2.07	31	1,077	1.94	67
Old Faithful <sup>(3)</sup>	934	1.33	39	1,135	1.40	51	2,069	1.37	90
<b>Total</b>	<b>6,842</b>	<b>1.30</b>	<b>285</b>	<b>7,573</b>	<b>1.47</b>	<b>358</b>	<b>14,415</b>	<b>1.39</b>	<b>643</b>

Note: Numbers may not total due to rounding

(1) Resources are constrained within a whittle shell that assumed basic economic parameters

(2) Mt York comprises of the Breccia Hill, Main Hill and Gossan Hill deposits

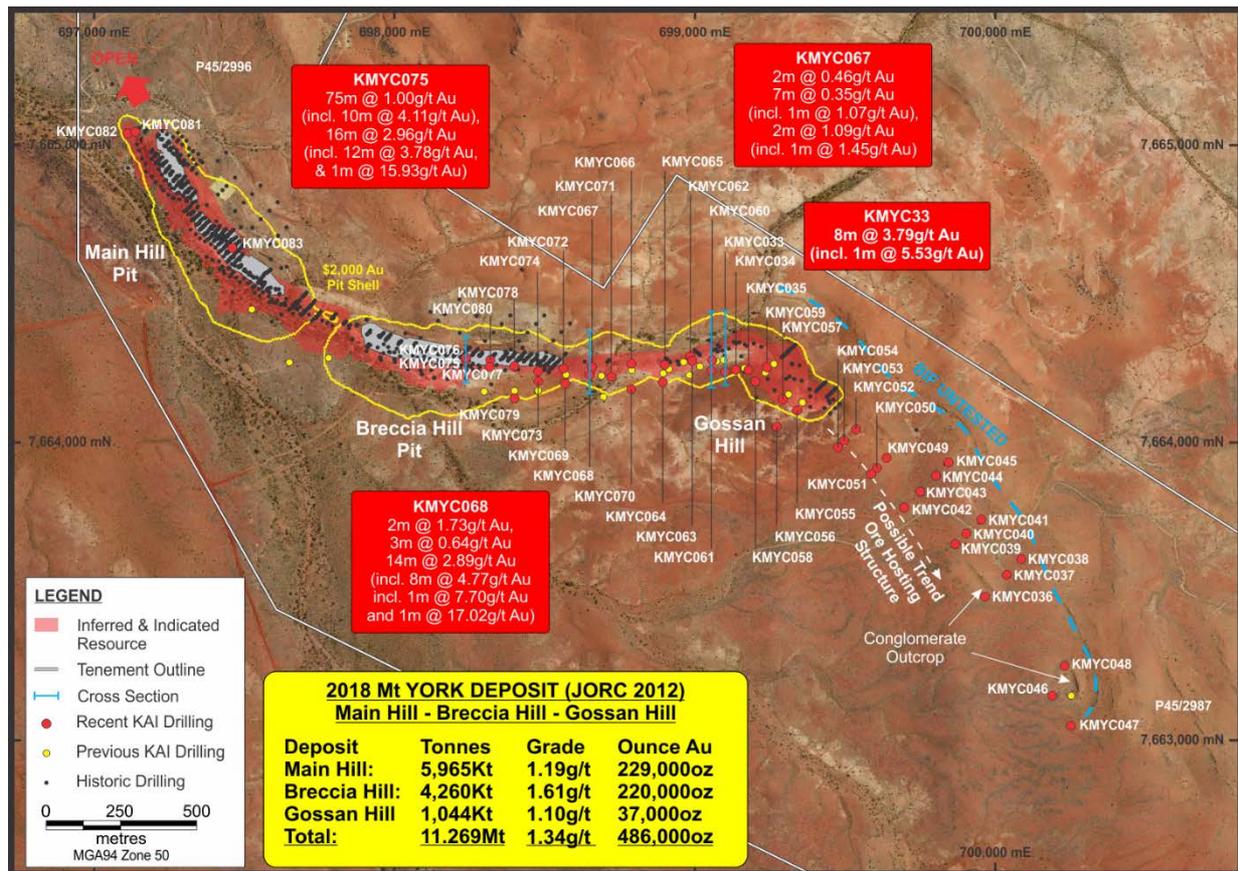
(3) Resource was previously released to the ASX 1 August 2016 -

### **2018 Drilling Program**

The recently completed drilling program comprised 51 Reverse Circulation (RC) holes for 6,710m and was designed to in-fill portions of the Mt York gold deposit and target immediate extensions along strike.

The drilling was successful on both counts, in-filling and extending gold mineralisation beyond the current Resource areas, with the mineralisation remaining open along strike and down-dip. Significant results from the drilling program are summarised below and discussed in further detail in the body of this release:

- **KMYC033:**        **8m @ 3.79 g/t Au from 136m**, including:
  - **1m @ 5.53 g/t Au from 140m.**
- **KMYC034:**        **6m @ 1.18 g/t Au from 121m**, including:
  - **1m @ 3.23 g/t Au from 126m.**
- **KMYC060:**        **13m @ 1.45 g/t Au from 57m**, including:
  - **1m @ 4.12 g/t Au from 65m**
- **KMYC061:**        **8m @ 3.44 g/t Au from 145m**, including:
  - **1m @ 12.70 g/t Au from 146m.**
- **KMYC068:**        **37m @ 1.30 g/t Au from 62m**, including:
  - **8m @ 4.77 g/t Au from 90m and:**
  - **1m @ 17.02 g/t Au from 96m.**
- **KMYC070:**        **28m @ 1.15 g/t Au from 160m**, including:
  - **3m @ 5.23 g/t Au from 168m.**
- **KMYC071:**        **15m @ 1.15 g/t Au from 117m**, including:
  - **5m @ 2.50 g/t Au from 125m and:**
  - **1m @ 5.86 g/t Au from 126m.**
- **KMYC075:**        **75m @ 1.00 g/t Au from surface**, including:
  - **18m @ 1.06 g/t Au from 18m and:**
  - **16m @ 2.96 g/t Au from 49m**, including:
    - **3m @ 8.54 g/t Au from 56m and:**
    - **1m @ 15.93 g/t Au from 57m.**



**Figure 2. Pilbara Gold Project – 2018 Drilling Program showing drill-hole locations.**

Importantly, many of the holes have returned high-grade intervals from within the wider mineralised envelope at Mt York, as shown above (refer Table1, Figures 3-6), supporting the Company’s interpretation of the presence of high-grade “shoots” within the deposit.

Drill-hole spacing is currently too wide to confirm continuity of these high-grade intercepts, however the interpreted trends will be tested as priority targets during follow-up campaigns.

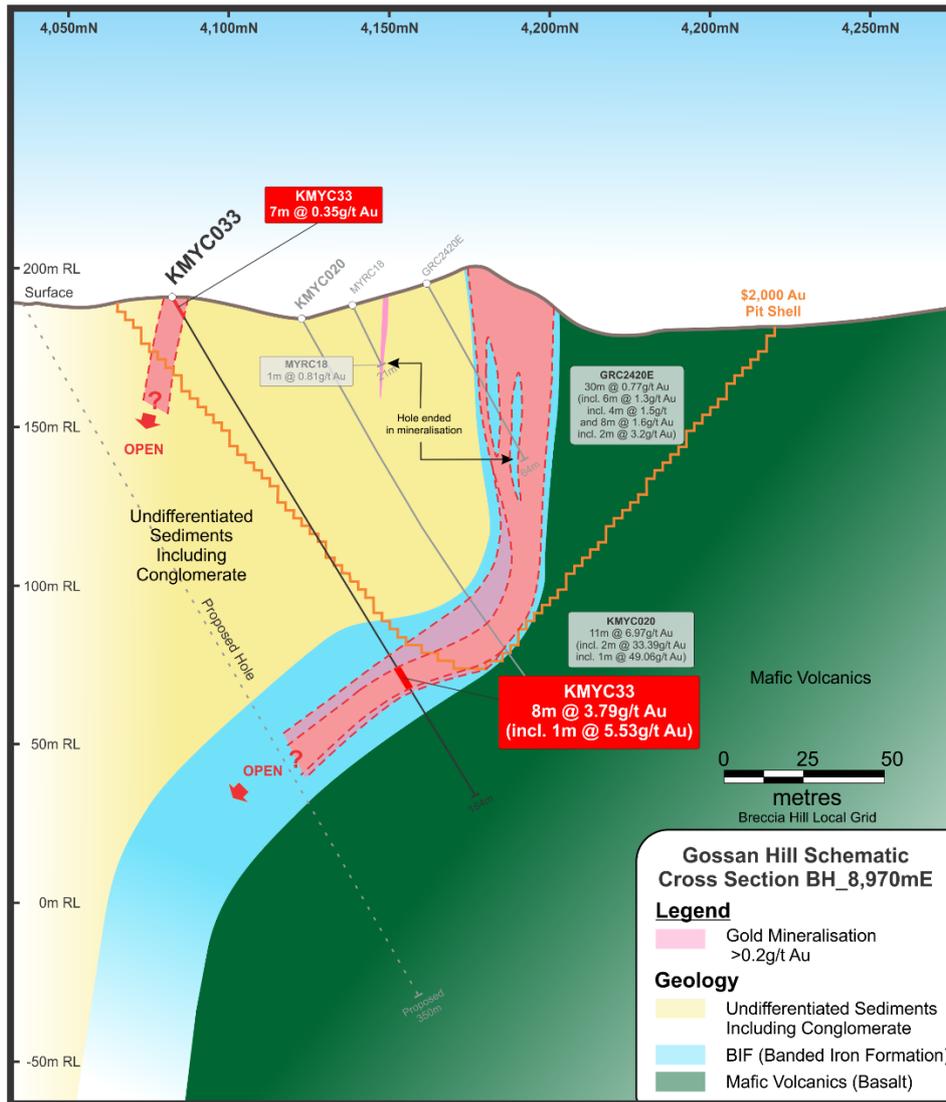
The drilling overall has successfully extended the main zone of mineralisation **some 200m to the south-east of Gossan Hill** and **100m to the north-west of Main Hill**.

At Gossan Hill, recent drilling indicates a significant flattening of the mineralised sequence, substantially increasing the tonnes per vertical metre and enhancing the potential for open pit mining within this section of the deposit (refer Figures 2 and 3).

Hole **KMYC033** targeted a position down-dip of hole **KMYC020**, drilled last year.

The hole entered strongly mineralised BIF well before the predicted target depth and confirmed a flattening of the ore zone from sub-vertical to about 40 degrees south at this location. The lateral extent of the “terrace” structure is currently unknown and the position represents a high-priority target for future drill testing.

- **KMYC033:**           **8m @ 3.79 g/t Au from 136m**, including:
  - **1m @ 5.53 g/t Au from 140m.**



**Figure 3. Gossan Hill Schematic Cross-Section, showing the interpreted flattening of the mineralisation as highlighted by hole KMYC033.**



**Plate 2. Strike Drilling KMYC033 – Gossan Hill.**

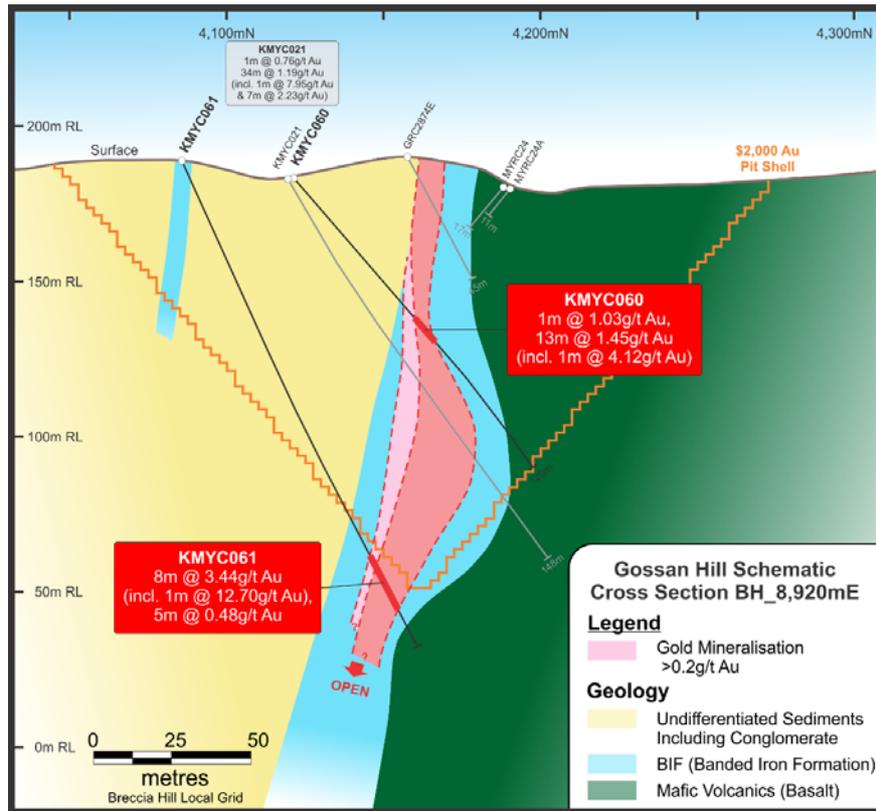


Figure 4. Gossan Hill Schematic Cross-Section, BH\_8,920mE.

At Breccia Hill, several holes were drilled to test for continuity of mineralisation beneath the existing historical shallow open pit (refer Figures 2, 5 and 6, Table 1).

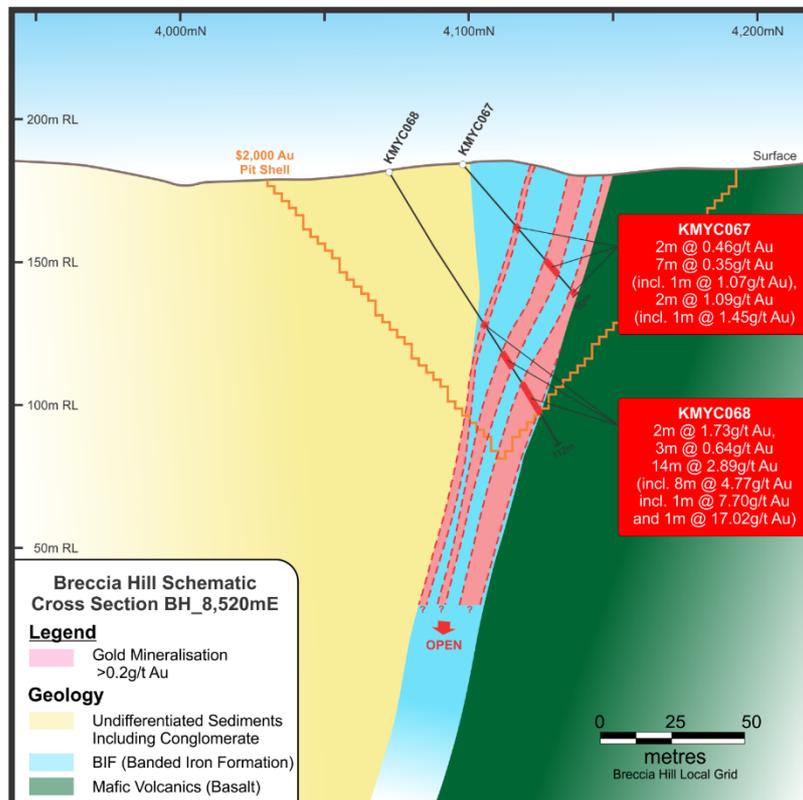


Figure 5. Breccia Hill Schematic Cross-Section, BH\_8,520mE.

Hole **KMYC075**, which was collared in the floor of the Breccia Hill East pit, was designed to test the footwall zone of the main lode (refer Figures 2 and 6). The hole immediately encountered strong mineralisation, returning the following intersection:

- **KMYC075**: 75m @ 1.00 g/t Au from 0m (note pit floor), including:
  - 18m @ 1.06 g/t Au from 16m, and
  - 10m @ 4.11 g/t Au from 18m
  - 16m @ 2.96 g/t Au from 49m, and
  - 1m @ 15.93 g/t Au from 57m

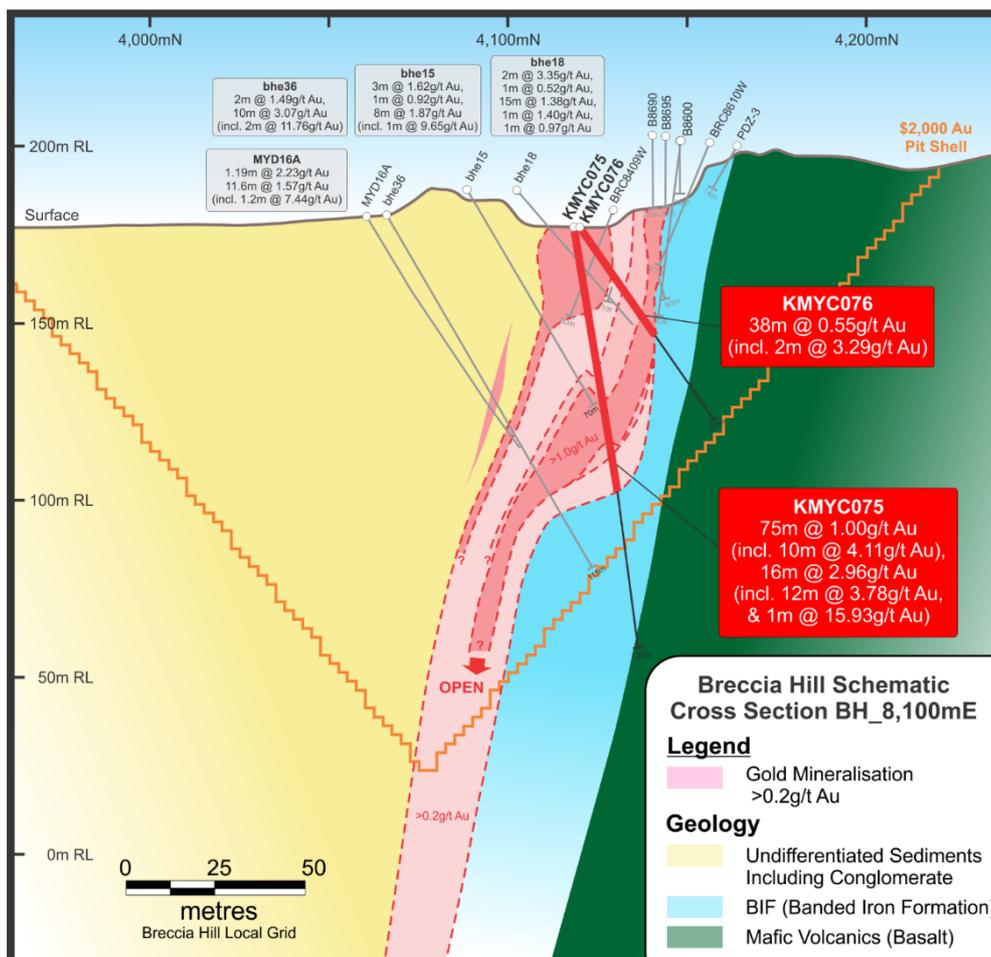


Figure 6. Breccia Hill Schematic Cross-Section, BH\_8,100mE.

Two holes (**KMYC081/82**) were drilled to test for a northern extension of mineralisation at Main Hill (refer Figure 2 and Table 1). Both holes reported well-developed mineralisation, successfully extending the known zone of mineralisation 100m further to the north.

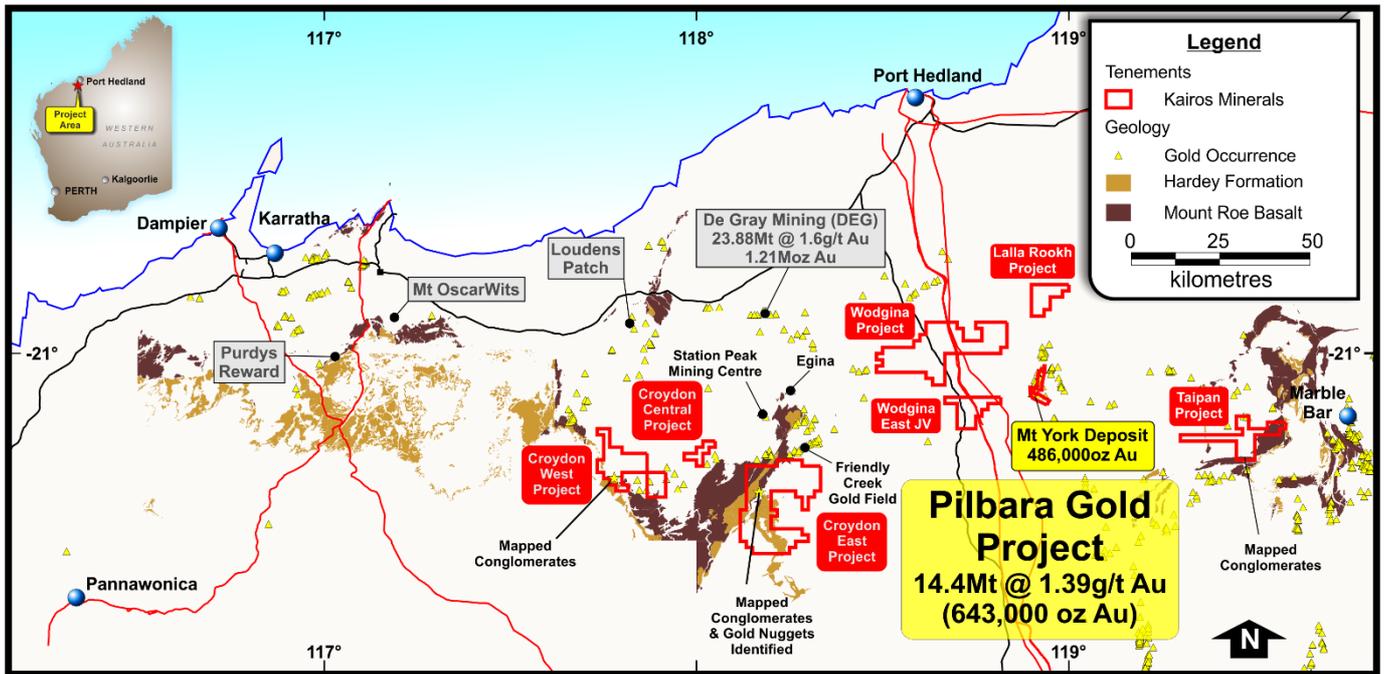
A single hole, **KMYC083**, was drilled from a position within the Main Hill historical open pit to test the footwall sequence and successfully intersected a previously unrecognised zone of gold mineralisation within footwall mafics (refer Figure 2 and Table 1):

- **KMYC083**: 1m @ 1.30 g/t Au from 45m, and
  - 7m @ 1.00 g/t Au from 86m, including:
  - 2m @ 2.02 g/t Au from 86m

Significant gold mineralisation has also been intersected within hangingwall sediments, including conglomerate, immediately overlying the main Mount York lode, adjacent to Gossan Hill, west towards Breccia Hill and indicated within wide spaced drilling over the 1.5km strike eastwards to Golden Gully.

**Project History**

Historic mining occurred at the Breccia Hill, Main Hill, Iron Stirrup, Zakanaka and McPhee’s deposits in the mid 1990’s. A total of 125,493oz of gold was recovered from 2.114 million tonnes of ore with an average grade of 1.85g/t gold during the 4-year period from 1994 to closure of the mines in 1998.



**Figure 7. Pilbara Gold Project tenement locations.**

**Table 1. Mt York -Significant Assays**

Collar Location & Orientation											Intersection Summary				
Prospect	Hole	Type	MGAE	MGAN	Local E	Local N	RL	Dip	Az	Total Depth (m)	From (m)	To (m)	Length (m)	Au (g/t)	
Gossan Hill	KMYC033	RC	699100	7664237	7154	3755	192	-60	3	184		0	7	7	0.35
												132	134	2	0.33
												135	136	1	0.32
												136	144	8	3.79
												<i>including</i>	140	141	1
												152	153	1	0.36
Gossan Hill	KMYC034	RC	699140	7664246	7176	3789	193	-60	355	154		0	6	6	0.88
											<i>including</i>	0	3	3	1.14
												107	109	2	0.26
												116	117	1	0.23
												121	127	6	1.18
											<i>including</i>	121	122	1	1.52
											<i>and</i>	126	127	1	3.23
Gossan Hill	KMYC035	RC	699180	7664244	7206	3816	195	-60	356	124		88	90	2	0.32
												92	93	1	0.23
												94	95	1	0.21
												103	105	2	0.35
												109	112	3	1.48
												115	118	2	0.23
Gossan Hill	KMYC036	RC	699967	7663484	8300	3825	197	-55.43	43.03	178		43	64	21	0.35
												43	45	2	0.90
											<i>including</i>	43	44	1	1.39
												53	64	11	0.43
												<i>including</i>	57	64	7
											<i>including</i>	58	59	1	1.35
Gossan Hill	KMYC037	RC	700037	7663556	8299	3925	197.5	-55.67	41.8	148		71	74	3	0.32
Gossan Hill	KMYC038	RC	700090	7663609	8300	4000	198	-55.76	45.23	124		10	13	3	0.04
Gossan Hill	KMYC039	RC	699863	7663655	8106	3874	194	-60	42	190		31	32	1	1.63
Gossan Hill	KMYC040	RC	699903	7663694	8107	3930	192.5	-60.56	45.38	166		135	136	1	0.05
Gossan Hill	KMYC041	RC	699951	7663740	8109	3996	195.06	-60.05	45.06	118		44	45	1	0.05
Gossan Hill	KMYC042	RC	699699	7663782	7900	3850	193.11	-60.36	41.42	148		26	27	1	0.18
Gossan Hill	KMYC043	RC	699752	7663836	7900	3925	193.86	-60.33	42.38	148		67	69	1	0.10
Gossan Hill	KMYC044	RC	699804	7663889	7900	4000	196.05	-60.57	41.3	160		159	160	1	0.06
Gossan Hill	KMYC045	RC	699852	7663932	7904	4064	198.69	-60.6	41.86	130		99	100	1	0.05
Golden Gully	KMYC046	RC	700190	7663150			198	-60	90	120		95	101	6	0.12
												95	96	1	0.16
												99	100	1	0.16
Golden Gully	KMYC047	RC	700250	7663050			199	-60	90	100		100	101	1	0.29
												72	73	1	0.16
												73	74	1	0.24
Golden Gully	KMYC048	RC	700230	7663250			199	-70	90	90		96	97	1	0.16
Gossan Hill	KMYC049	RC	699640	7663950	7740	3928	198.41	-60.35	50.1	100		80	81	1	0.08
Gossan Hill	KMYC050	RC	699606	7663915	7740	3880	193.94	-60.11	46.56	130		62	68	6	0.1
											<i>including</i>	66	67	1	0.2
												119	123	4	0.17
											<i>including</i>	122	123	1	0.26
Gossan Hill	KMYC051	RC	699585	7663894	7740	3850	193	-60	45	160		82	88	6	0.68
											<i>including</i>	84	85	1	1.38
Gossan Hill	KMYC052	RC	699539	7664045	7601	3925	200.39	-60.05	44.23	100		6	8	2	0.07
Gossan Hill	KMYC053	RC	699500	7664008	7599	3872	195.96	-55.76	44.5	150		94	95	1	0.26
Gossan Hill	KMYC054	RC	699477	7663984	7600	3838	194.83	-69.99	44.01	180		58	59	1	0.12
Gossan Hill	KMYC055	RC	699340	7664108	7415	3831	189.5	-60	45	136		69	75	6	0.21
											<i>including</i>	74	75	1	0.61

Gossan Hill	KMYC055	RC	699340	7664108	7415	3831	189.5	-60	45	136		69	75	6	0.21
											<i>including</i>	74	75	1	0.61
Gossan Hill	KMYC056	RC	699278	7664055	7408	3750	191.3	-60	45	180		46	47	1	0.30
Gossan Hill	KMYC057	RC	699293	7664143	7357	3823	196.5	-70	45	120		75	81	6	0.23
											<i>including</i>	75	76	1	0.82
												85	93	8	0.40
											<i>including</i>	92	93	1	1.05
Gossan Hill												98	99	1	0.26
	KMYC058	RC	699205	7664203	7252	3804	190.5	-60	45	160		2	3	1	0.20
												41	42	1	0.26
												71	72	1	0.94
												82	97	15	0.28
										<i>including</i>	105	112	7	1.09	
										<i>including</i>	106	108	2	2.56	
Gossan Hill	KMYC059	RC	699240	7664255	7241	3866	201	-50	22	110		64	72	8	0.63
											<i>including</i>	64	65	1	1.29
											<i>and</i>	68	69	1	1.12
												78	79	1	0.55
											<i>including</i>	98	100	2	0.96
Breccia Hill											<i>including</i>	98	99	1	1.61
	KMYC060	RC	699060	7664277	8920	4121	183	-65	0	120		53	54	1	1.03
												57	70	13	1.45
											<i>including</i>	65	66	1	4.12
												75	76	1	0.20
Breccia Hill												79	83	4	0.24
												87	88	1	0.23
	KMYC061	RC	699054	7664242	8914	4086	188	-60	0	200		132	133	1	0.26
												141	142	1	0.31
											<i>including</i>	145	153	8	3.44
Breccia Hill											<i>including</i>	146	147	1	12.70
												156	161	5	0.48
	KMYC062	RC	698990	7664296	8850	4140	185.85	-61.8	1.25	60		1	21	21	0.44
											<i>including</i>	1	3	2	1.09
Breccia Hill											<i>and</i>	11	12	1	1.67
	KMYC063	RC	698990	7664271	8850	4115	185.21	-60.61	2.25	90		45	47	2	0.47
												71	73	2	0.69
Breccia Hill	KMYC064	RC	698900	7664206	8760	4050	185.84	-60.13	1.04	150		98	110	12	0.49
											<i>including</i>	98	99	1	1.15
											<i>and</i>	103	104	1	1.64
												109	110	1	0.56
											<i>including</i>	116	118	2	0.87
Breccia Hill											<i>including</i>	116	117	1	1.30
	KMYC065	RC	698900	7664261	8760	4105	184	-60	0	80		16	27	11	0.84
											<i>including</i>	24	26	2	2.93
												32	35	3	2.03
											<i>including</i>	32	33	1	3.58
Breccia Hill												43	45	2	1.02
	KMYC066	RC	698790	7664265	8650	4109	181	-50	0	64		9	10	1	0.57
												49	51	2	0.35
												28	30	2	0.46
Breccia Hill	KMYC067	RC	698661	7664251	8521	4095	184	-50	357.2	60		44	51	7	0.35
												44	45	1	1.07
												48	51	3	0.33
												58	60	2	1.09
											<i>including</i>	59	60	1	1.45
Breccia Hill	KMYC068	RC	698653	7664227	8513	4071	181	-60	4	112		62	64	2	1.73
												74	77	3	0.64
												85	99	14	2.89
											<i>including</i>	90	98	8	4.77
											<i>including</i>	91	92	1	7.70
Breccia Hill											<i>and</i>	96	97	1	17.02
	KMYC069	RC	698570	7664200	8430	4044	182	-60	0	166		112	133	21	0.51
											<i>including</i>	119	120	1	1.06
Breccia Hill											<i>and</i>	125	126	1	1.25
	KMYC070	RC	698790	7664180	8650	4024	188	-70	355	220		144	146	2	0.33
												160	188	28	1.15
											<i>including</i>	163	165	2	1.41
											<i>and</i>	168	171	3	5.23
											<i>and</i>	172	173	1	1.43
										<i>and</i>	176	177	1	3.32	
										<i>and</i>	179	180	1	1.85	

Breccia Hill	KMYC071	RC	698723	7664221	8583	4065	178.3	-70	355	144		81	88	7	0.57	
												including	81	82	1	1.55
												and	83	84	1	1.06
													92	108	16	0.29
												including	102	103	1	1.76
													117	132	15	1.15
												including	122	123	1	1.33
Breccia Hill	KMYC072	RC	698563	7664251	8423	4095	185.6	-50	360	90		125	130	5	2.50	
											including	126	127	1	5.86	
												30	33	3	0.62	
												37	40	3	0.38	
												44	55	11	0.93	
Breccia Hill	KMYC073	RC	698480	7664206	8340	4050	182	-60	357	140	including	47	48	1	1.01	
											and	51	55	4	1.82	
											including	53	54	1	3.03	
Breccia Hill	KMYC074	RC	698480	7664240	8340	4084	187	-60	360	90		79	80	1	1.18	
												93	111	18	0.70	
											including	99	101	2	1.20	
											and	107	108	1	1.03	
Breccia Hill	KMYC075	RC	698240	7664274	8100	4118	177.8	-80	360	120		26	27	1	0.65	
											including	38	49	11	0.62	
												39	41	2	1.00	
												55	58	3	0.40	
												61	74	13	0.81	
											including	68	73	5	1.40	
											including	72	73	1	4.13	
Breccia Hill	KMYC076	RC	698240	7664275	8100	4119	177.8	-55	360	66		0	75	75	1.00	
												6	24	18	1.06	
											including	6	7	1	1.97	
												18	28	10	4.11	
											and	18	24	6	2.52	
											including	18	19	1	10.25	
												49	65	16	2.96	
												49	61	12	3.78	
											including	49	51	2	5.64	
											and	56	59	3	8.54	
including	57	58	1	15.93												
Breccia Hill	KMYC077	RC	698318	7664253	8178	4097	184.4	-55	360	84		0	38	38	0.55	
												0	17	17	0.75	
											including	9	11	2	3.29	
												27	38	11	0.65	
											including	29	30	1	2.11	
											and	34	35	1	1.10	
and	36	37	1	1.21												
Breccia Hill	KMYC078	RC	698397	7664259	8257	4103	187	-50	360	72		27	35	8	0.36	
Breccia Hill	KMYC079	RC	698400	7664148	8260	3992	178.8	-60	358	240		50	57	7	0.20	
												7	8	1	0.57	
												23	25	2	0.98	
												32	35	3	0.51	
Breccia Hill	KMYC080	RC	698319	7664277	8179	4121	184.4	-50.18	359.35	60	including	40	52	12	0.49	
											including	50	52	2	1.27	
												180	201	21	0.40	
Breccia Hill	KMYC081	RC	697138	7665046	5187	2959	192	-60	45	114	including	182	187	5	0.71	
											including	185	186	1	1.18	
												9	23	14	0.71	
Main Hill	KMYC082	RC	697111	7665040	5172	2935	190	-60	45	240	including	18	22	4	1.19	
												26	28	2	0.42	
												15	26	11	0.41	
											including	22	23	1	1.22	
												23	24	1	0.54	
												44	55	11	0.48	
											including	44	45	1	1.35	
											and	49	50	1	1.00	
												98	102	4	0.35	
											including	98	99	1	0.57	
	161	162	1	2.42												
	191	199	8	0.78												
including	191	192	1	2.31												
and	196	199	3	1.11												
	209	210	1	1.04												
	238	240	2	0.47												
Main Hill	KMYC083	RC	697459	7664652	5692	2902	192	-60	45	120		42	47	5	0.63	
											including	45	46	1	1.30	
												86	93	7	0.95	
	including	86	88	2	2.02											

## **About Kairos Minerals**

Kairos Minerals (ASX: KAI) is a diversified West Australian-based exploration company which is focused on the exploration and development of two key project hubs located in WA's premier mining districts.

The Company's 100%-owned Pilbara Gold-Project has its central "hub" located ~100km south of Port Hedland in the world-class Pilgangoora district immediately adjacent to the major lithium-tantalum projects owned by Pilbara Minerals and Altura Mining which are both currently in advanced stages of construction and development.

Since acquiring the project in early 2016, Kairos has rapidly established a 643,000oz JORC 2012 compliant Gold Mineral Resource by re-evaluating the previously known resources from the historical Lynas Find gold project, which produced over 125,000oz of gold between 1994 and 1998 and by executing highly focussed, cost effective exploration in its own right.

Kairos's 100%-owned Roe Hills Project, located 120km east of Kalgoorlie in WA's Eastern Goldfields, comprises an extensive tenement portfolio where the Company's recent exploration work has confirmed the potential for significant discoveries of high grade gold, nickel and cobalt mineralisation. Kairos' tenure adjoins the emerging Lake Roe gold discovery, owned by Breaker Resources (ASX: BRB).

In the Pilbara, Kairos also holds 1,158 square kilometres of tenure which is highly prospective for conglomerate-hosted gold discoveries. The Company's portfolio includes ~100 strike kilometres of prospective lower Fortescue Group rocks including both the base of the Hardey Formation and the basal sequence of the Mount Roe Basalt. Major exploration programs are underway targeting these highly prospective stratigraphic horizons, which have been associated with a number of recent high-profile gold discoveries in the Pilbara. The Company has recently announced the discovery of a large number of gold nuggets (256) including both "watermelon" shaped and irregular from the targeted basement unconformity with Mount Roe Basalt-Conglomerate at its 100%-owned Croydon Project. (Refer ASX Announcement: 13<sup>th</sup> September 2018)

Kairos has been well recognised for its industry leading technical team that includes its Chairman Terry Topping (Taipan Resources NL, Cauldron Energy Ltd and Orinoco Gold Ltd), Technical Director Neil Hutchison (Poseidon Nickel, Jubilee Mines), Technical Manager Steve Vallance (WMC, ACM, Jubilee Mines, Xstrata, Kagara, LionOre), and consulting specialists

## **For further information, please contact:**

### **Investors:**

Mr Terry Topping  
Chairman  
Kairos Minerals Limited

### **Media:**

Nicholas Read/Paul Armstrong  
Read Corporate  
Ph: 08 9388 1474

### **COMPETENT PERSON STATEMENT:**

*Competent Person: The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled and reviewed by Mr Steve Vallance, who is the Technical Manager for Kairos Minerals Ltd and who is a Member of The Australian Institute of Geoscientists. Mr Vallance holds shares and options in, and is a full time employee of, Kairos Minerals Ltd. The information was also reviewed by Mr Terry Topping, who is a Director of Kairos Minerals Ltd and who is also a Member of AusIMM. Mr Topping holds shares in, and is a director and full time employee of, Kairos Minerals Ltd. Both Mr Vallance and Mr Topping have sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' (the JORC Code 2012). Mr Vallance and Mr Topping have consented to the inclusion in the report of the matters based on their information in the form and context in which it appears.*

*The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.*

## Appendix 1 – Kairos Minerals – Mt. York Project

### JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• All sampling relevant to the work completed by Kairos and referred to in this release is based on either RC drilling.</li> <li>• Samples were split on a 1 metre sample interval at the rig cyclone.</li> <li>• Sample selection is based on geological logging and sampled to geological contacts. Individual assay samples typically vary in length from 1m individual to 4m composites.</li> <li>• All samples were delivered by Kairos personnel to Toll Ipec Port Hedland for transport to Intertek Genalysis Perth WA laboratories for final analysis.</li> <li>• All samples were submitted for Four Acid Multi-Element Analysis (4A/OE33) and Fire Assay for Gold (FA/ICP-OES)</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• All RC drilling was carried out by Strike Drilling Pty Ltd using an KWL 700 truck mounted drill rig with a truck mounted support vehicle and booster compressor. 4-1/2” dia drill rods, 5-5/8” dia face sampling hammer.</li> <li>• All holes were surveyed by the Drilling Supervisor/Senior Driller at regular intervals downhole as the drilling progressed using a north seeking gyroscopic survey instrument.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether</i></li> </ul>	<ul style="list-style-type: none"> <li>• RC samples were logged in detail at the drill site by supervising geologists and recorded in the Company’s database.</li> <li>• Overall recoveries were excellent and there were no significant sample recovery</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p>problems.</p> <ul style="list-style-type: none"> <li>• Sample depths are continually checked against the rod string depth during the drilling process by the Senior Driller.</li> </ul>
<p><i>Logging</i></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Detailed geological logging of the entirety of each hole by Kairos geologists is carried out on the RC chips and recorded as qualitative description of colour, lithological type, grain size, structures, minerals, alteration and various other features.</li> <li>• Representative material is sieved and collected as 1m individual samples in number coded plastic chip trays and stored at the Company's site storage facility or in Perth.</li> <li>• Photography of chips is not routinely done.</li> <li>• Detailed petrological studies are planned for selected samples to assist ongoing evaluation.</li> </ul>
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The majority of RC samples were dry. Minor water ingress occurred during rod/bit changes however samples were generally dry once active drilling recommenced.</li> <li>• Samples were collected as 1m intervals via on-board cone splitters then collected in large numbered plastic bags .</li> <li>• Sample quality was ensured by monitoring sample volume and by regularly cleaning the rig cyclone &amp; sample splitters.</li> <li>• Sampling sheets were prepared and checked by Kairos' site geologists and field technicians to ensure correct sample representation.</li> <li>• QAQC samples were included at the rates of 1:25 as duplicates and 1:50 as industry standard (OREAS 192)</li> <li>• All samples were delivered by Kairos' field personnel to Toll Ipec Port Hedland for transport to Intertek Genalysis laboratories in Perth WA for sample preparation and analysis.</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were submitted to Intertek Genalysis in Perth for Four Acid Multi-Element Analysis ICP-OES finish (4A/OE33). Gold analyses were carried out via the FA 25/OE or MS technique being Fire Assay with 25g lead collection fire assay in new pots, analysed by Inductively Coupled Plasma Mass Spectrometry.</li> <li>• Standards, checks, blanks were introduced regularly throughout each sample batch.</li> <li>• IG Laboratories conduct rigorous internal QAQC programs within each sample batch which are reported with sample values in final reports.</li> <li>•</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Primary data was collected using Excel templates utilizing lookup codes on laptop computers by Senior Supervising Geologists.</li> <li>• No twin holes were drilled.</li> <li>• All data is received and stored securely in digital format in the Company's database.</li> <li>• Final data is rigorously interpreted by Kairos' geoscientific personnel.</li> <li>• Significant intersections are calculated by Kairos supervising geoscientists &amp; verified by senior management.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill collars surveyed by handheld GPS with an accuracy of +/- 5m.</li> <li>• All Mt. York hole collars are in MGA94 Zone 50 (GDA94).</li> <li>• All Kairos RC holes were surveyed down hole with north seeking gyroscopic survey instruments by the Supervising/Senior driller.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been</i></li> </ul>	<ul style="list-style-type: none"> <li>• At Mount York hole spacing of Kairos' drilling is approximately 40-80m along section lines spaced approximately 100m-200m apart.</li> <li>• Minimal sample spacing for assay samples is 1m and maximum composite sample</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>applied.</i></p>	<p>spacing is 4m.</p> <ul style="list-style-type: none"> <li>• Sample intervals are determined by Kairos geologists during the course of the logging process.</li> <li>• Sample width is dependent on lithological, structural or grade distribution boundaries.</li> <li>• 2-4m composites may be submitted as considered appropriate for initial phases of AC and RC drilling.</li> <li>• Exploratory drilling is of a wide spaced, preliminary nature.</li> <li>• The data will be used to update existing Mineral Resource Estimations relevant to the Main Hill – Breccia Hill gold inventory.</li> </ul>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• At Mt. York the targeted gold bearing BIF horizon is steep to shallow dipping.</li> <li>• The majority of RC holes were drilled at -60 deg to provide true width intersections of the targeted horizon.</li> <li>• The targeted gold bearing structures are interpreted to be moderately to steeply dipping at various orientations.</li> <li>• Holes testing gold targets were oriented local grid north in order to effectively test variable southerly dips.</li> <li>• Holes are designed to intersect the geological contacts/targets as close to perpendicular as possible in order to provide approximate true width intercepts at all times.</li> </ul>
<p><i>Sample security</i></p>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All samples were collected in the field at the project site in number coded calico bags/secure labelled polyweave sacks by Kairos' geological and field personnel.</li> <li>• All samples were delivered directly to Toll Ipec Port Hedland by Kairos personnel prior to being transported to IG laboratories in Perth WA for final analysis.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and</i></li> <li><i>ownership including</i></li> <li><i>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></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Kairos Limited owns 100% of the tenements that define the Mt. York Project.</li> <li>The project consists of 12 PL's</li> <li>P45/2987 – 2998 inclusive</li> <li>The Project is Located on Wallareenyra &amp; Strelley Pastoral Co Pastoral leases.</li> <li>Kairos is not aware of any existing impediments nor of any potential impediments which may impact ongoing exploration and development activities at the Project site.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by</i></li> <li><i>other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Significant past work has been carried out by other parties including open pit mining of previously defined gold resources.</li> <li>Significant historical Au exploration including, surface geochemical sampling, airborne and ground electromagnetic geophysical surveys, RAB, AC, RC and DD drilling. This is acknowledged in past ASX</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Targets are Archaean aged structurally controlled BIF sulphide replacement and shear zone hosted gold mineralisation</li> </ul>

**Drill hole Information**

- 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:
  - 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.
- The co ordinates and other attributes of all drillholes relevant to the work being described are included in summary tables within the body and appendices of the release.

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

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• <input type="checkbox"/> The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results as reported are length-weighted averages at nominal 0.5 g/t Au, 1.0 g/t Au and 5.0 g/t Au cut-off grades where applicable.</li> </ul>

<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• All intercepts reported are measured in down hole metres.</li> <li>• All holes are oriented to provide intersections which are orthogonal to the respective targeted horizon.</li> <li>• Holes designed to test potential gold bearing targets are generally angled and oriented towards local grid north</li> </ul>
<p><b>Diagrams</b></p>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should</i></li> <li>• <i>include, but not be limited to a plan view of drill hole collar</i></li> <li>• <i>locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Suitable summary plans, geological cross-sections and 3D Leapfrog computer images where available have been included in the body of the report.</li> </ul>
<p><b>Balanced reporting</b></p>	<ul style="list-style-type: none"> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• All relevant results have been reported</li> </ul>
<p><b>Other substantive Exploration data</b></p>	<ul style="list-style-type: none"> <li>• <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</i></li> <li>• <i>– size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Geophysical surveys are designed and managed by Newexco Services Pty Ltd. Interpretation of the aeromagnetics, gravity and electromagnetic data is being undertaken by Newexco Services Pty Ltd.</li> </ul> <p><b>Drill Sampling</b></p> <ul style="list-style-type: none"> <li>• Gold and multi-element analysis is being conducted routinely on all samples for a base metal suite and potentially deleterious elements including Al, As, Co, Cr, Cu, Fe, Mg, Ni, S, Ti, Zn plus Au, Pt, Pd &amp; Pd</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests</i></li> <li>• <i>for lateral extensions or depth extensions or large-scale</i></li> <li>• <i>step-out drilling).</i></li> <li>• <input type="checkbox"/> <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></li> </ul>	<ul style="list-style-type: none"> <li>• Data will be used to update existing Mineral Resource Estimates.</li> <li>• Further AC, RC and Diamond drilling is planned to continue assessment of the high priority gold trends at Main Hill, Breccia Hill , Gossan Hill and additional high priority targets identified throughout the Companys tenure.</li> <li>• Metallurgical testwork and petrographic studies are planned</li> <li>• Further geophysical surveys to assist ongoing exploration efforts in areas where the prospective basement rocks are buried under cover ,including IP and gravity, is proposed in conjunction with the already successful geochemical and geological modelling.</li> <li>• Further surface geochemical surveys are planned in areas where residual soils have been identified.</li> <li>• Interrogation of historical datasets is ongoing.</li> <li>• Refer to diagrams in the body of the release.</li> </ul>