

SARACEN MINERAL HOLDINGS LIMITED

ACN: 009 215 347

Further drilling success for Saracen ahead of Resource and Reserve update

Impressive results across all operations highlight potential for growth in production and mine life with further strong growth anticipated in FY18

Key Points

• More strong drilling results generated at both Carosue Dam and Thunderbox, reflecting the success of Saracen's organic growth strategy

Carosue Dam

- Karari delivered the most impressive drill results to date, including the following thick, high-grade intercepts (outside of the FY16 Reserve):
 - 18.0m @ 12.9g/t (including 9.7m @ 23.4g/t)
 - 22.8m @ 9.2g/t
 - 20.2m @ 8.9g/t
 - 29.6m @ 5.6g/t
 - 31.9m @ 4.8g/t
 - 19.1m @ 7.6g/t
 - 25.2m @ 5.5g/t
 - 30.4m @ 4.0g/t
- At Deep South, drilling highlights (outside of the FY16 Reserve) included: **11.6m @ 4.8g/t** and **3.1m @ 13.2g/t**

Thunderbox

- Drilling has extended the consistently and persistently broad Thunderbox A Zone mineralisation down-dip, with results including:
 - 47.1m @ 2.2g/t, 45.6m @ 2.13g/t and 20.3m @ 2.4g/t
- The consistently strong results further support the potential for a multiyear bulk underground mining operation (completion of Feasibility Study on track for the September quarter 2017)

Butcher Well (AngloGold earning up to 70%)

- Excellent early drill results from the earn-in JV at Butcher Well
- Results include **20.7m** @ **6.1g/t** and **17.0m** @ **7.8g/t**, suggesting that the Enigmatic zone extends down-dip beyond 400m vertical
- New discovery at Old Camp, intersected 8m @ 5.4g/t

Saracen Managing Director Raleigh Finlayson said the Company's record investment in drilling over the past year was continuing to deliver outstanding results, highlighting the potential for further significant growth beyond the resource/reserve update due early next month.

"The deeper drilling at the Karari underground mine is particularly encouraging, with each additional hole not only growing the deposit, but also pointing to higher grades in the future. Given its location immediately adjacent to the Carosue Dam mill, there is no better place to find more highgrade ore," he said.

Corporate Details:

13th July 2017

ASX code: SAR

Corporate Structure:

Ordinary shares on issue: 810.5m

Unvested employee performance rights: 11.1m

Market Capitalisation: A\$916m (share price A\$1.13)

Cash & Bullion (31 March): A\$30.6m

Debt: Nil

Directors:

Mr Geoff Clifford Non-Executive Chairman

Mr Raleigh Finlayson Managing Director

Mr Mark Connelly Non-Executive

Mr Martin Reed Non-Executive

Dr Roric Smith Non-Executive

Ms Samantha Tough Non-Executive

Substantial Shareholders:

Van Eck Global 11.1%

Wroxby 7.0%

Registered Office:

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Carosue Dam Operations – Drilling Update

Karari Underground

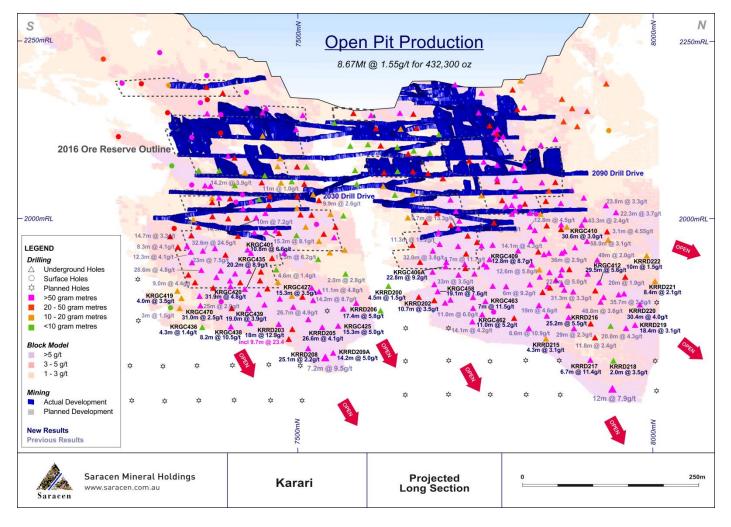
Drilling at Karari has progressed rapidly over the last two months, focused on extending and in-filling both the north and south ends of the mine.

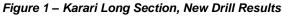
The drilling has delivered a large number of stand-out results including:

- 18m @ 12.9g/t (including 9.7m @ 23.4g/t)
- 22.8m @ 9.2g/t
- 20.2m @ 8.9g/t

Over the past 12 months, Saracen has made a substantial investment in drilling at Karari, completing 58,708m of underground diamond drilling.

This drilling points to significant mine life upside at Karari, already extending up to 270m below the 2016 Ore Reserve. Recent results confirm the continuity of the mineralisation.





The most recent batch of drill results at Karari are the most impressive seen to date. The results highlight the excellent widths and grades at both the north and south ends of the mine.

Below is a table of intercepts which returned +60 gram metres.

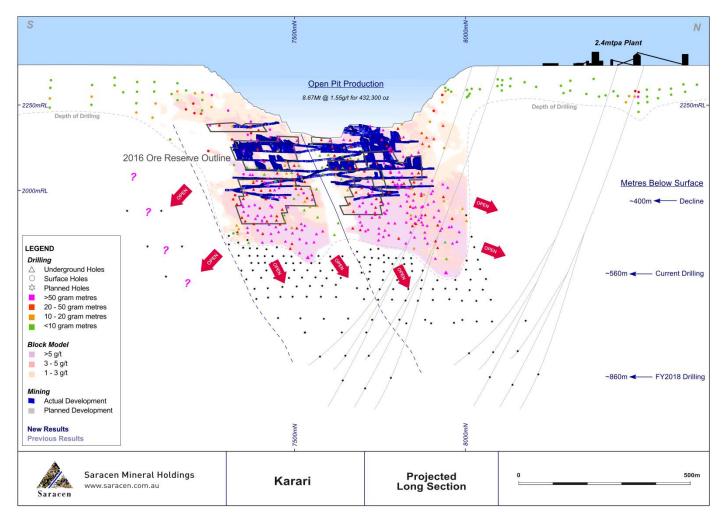
Significant drill resul	ts include:
Hole Id	Intercept
KRRD203	18.0m @ 12.9g/t
KRGC406A	22.8m @ 9.2g/t
KRGC435	20.2m @ 8.8g/t
KRGC412	29.6m @ 5.6g/t
KRGC420	31.9m @ 4.8g/t
KRGC458	19.1m @ 7.6g/t
KRRD216	25.2m @ 5.5g/t
KRGC440	36.1m @ 3.4g/t
KRRD220	30.4m @ 4.0g/t
KRGC409	12.9m @ 8.7g/t
KRRD206	17.5m @ 5.8g/t
KRGC457	25.3m @ 3.7g/t
KRGC410	30.6m @ 3.0g/t
KRGC408	17.0m @ 5.2g/t
KRGC426	17.7m @ 4.9g/t
KRGC438	8.2m @ 10.5g/t
KRGC407	20.3m @ 4.2g/t
KRGC463	7.0m @ 11.5g/t
KRGC425	15.3m @ 5.0g/t
KRGC470 KRGC439	31.0m @ 2.5g/t
KRGC439 KRGC431	19.0m @ 3.9g/t
KRRD209A	16.4m @ 4.4g/t 14.2m @ 5.0g/t
KRGC453	23.3m @ 3.0g/t
KRGC401	10.8m @ 6.6g/t
KRRD217	6.2m @ 11.4g/t
KRGC450	17.4m @ 3.9g/t
KRRD215	25.3m @ 2.6g/t
KRGC465	17.5m @ 3.6g/t
KRGC450	7.0m @ 8.8g/t
	- 0

The drilling results are currently being incorporated into an updated Mineral Resource estimate, due to be released in the September quarter 2017.

The mineralisation remains open in all directions and will be aggressively tested in FY2018. A row of deep framework holes will be drilled from the existing underground platforms in the coming months. This drilling will target the mineralisation ~560m below surface.

The results of the framework holes will allow a number of deep surface holes to be planned aimed at intersecting the projected mineralisation at ~860m below surface. This deep drilling has the potential to significantly enhance the longevity of the Karari mine.





Two new underground diamond drill platforms will also be established in first half of FY18. These platforms will facilitate further extensional and grade control in-fill drilling below what has been drilled in FY17.

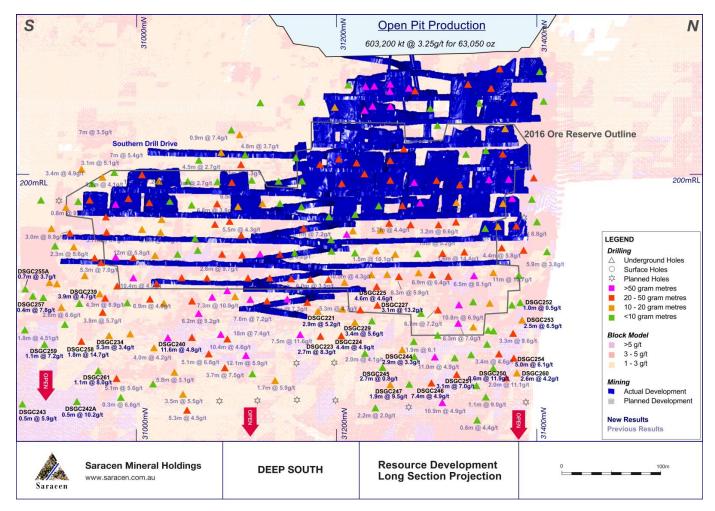
Deep South Underground

Recent drilling below the 2016 Ore Reserve has demonstrated that the mineralisation continues at depth.

Key results include 11m @ 4.8g/t and 3.1m @ 13.2g/t.

Significant drill re	Significant drill results include:								
Hole Id	Intercept								
DSGC258	1.8m @ 14.7g/t								
DSGC240	11.6m @ 4.8g/t								
DSGC227	3.1m @ 13.2g/t								
DSGC223	2.7m @ 8.3g/t								
DSGC254	5.0m @ 6.1g/t								

Figure 3 – Deep South Long Section, New Drill Results



The mine will now sustain a single rig, after completing a significant program of 53,554m during FY17.

During FY18, up to four dedicated drill positions will be established to complete additional drilling below the currently defined area. This drilling will systematically step down and test further potential mine life extensions.

Thunderbox Operations – Drilling Update

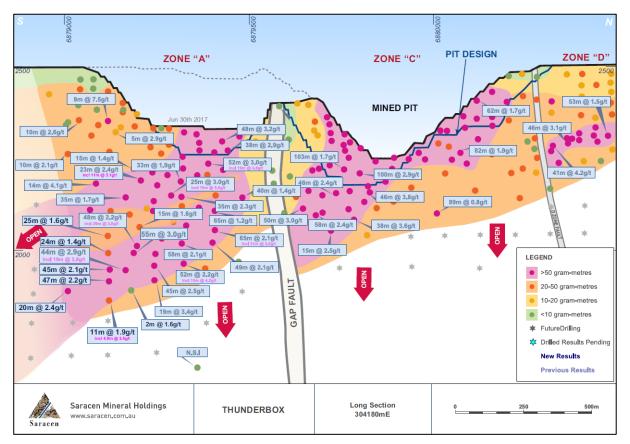
Thunderbox A Zone

The deep surface drilling program at Thunderbox has been completed and all results received.

Significant drill results	include:
Hole Id	Intercept
TBDD0120	47.1m @ 2.2g/t
TBDD0120W1	4.8m @ 3.5g/t
TBDD0129	25.1m @ 1.55g/t
TBDD0129W1	23.7m @ 1.40g/t
TBDD0129W2	45.6m @ 2.13g/t
TBDD0130	20.3m @ 2.4g/t

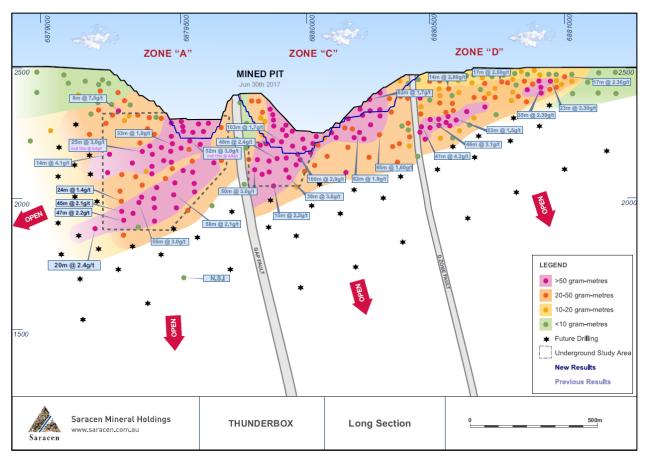
The new results continue to show that the consistent broad mineralisation seen in the upper Zone A extends at depth, both vertically and down-plunge. The mineralisation in the recent drilling continues to display consistent and persistent widths and grades associated with the dacite host unit.

Figure 4 – Thunderbox Long Section



AMC Consultants have included the latest drill results in the underground Feasibility Study (completion anticipated in the September quarter 2017). The focus area of the study can be seen in Figure 5 (dashed-outline).





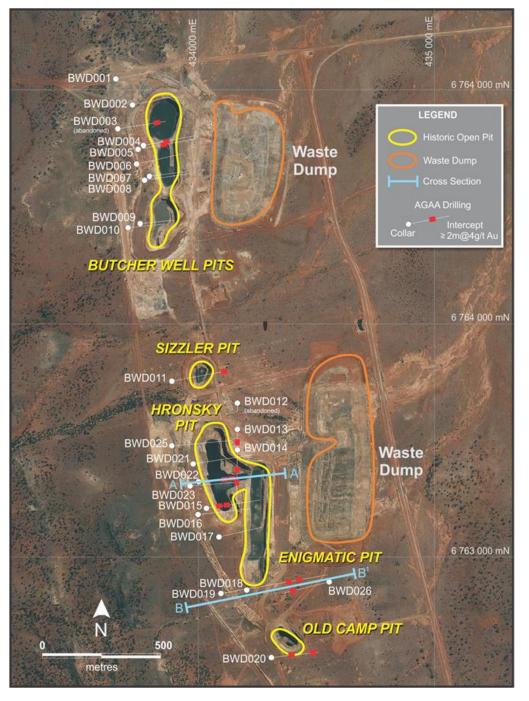
The mineralisation is amenable to bulk, low cost mining methods. This has the potential to add significant mine life to the Thunderbox operations.

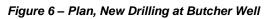
Ongoing geological assessment will determine the most prospective areas proximal to the current Mineral Resource. This will direct the location of future drill programs in FY18, to maximise further success and deliver additional mine life.

Butcher Well (AngloGold Ashanti Farm-in)

AngloGold Ashanti Australia Ltd (AGAA – ASX:AGG) is exploring Butcher Well under a Farm-in Agreement with Saracen Mineral Holdings Ltd (see press release dated 17 October 2016).

AGAA recently completed a diamond drilling program of 24 holes consisting of 9,865m at Butcher Well, which is located 20km west of its Sunrise Dam Gold Mine near Laverton (Figure 6). The program tested for gold mineralisation below the historical Butcher Well, Enigmatic and Hronsky pits, along a 3km north-south strike.





Source: AngloGold Ashanti News Release 13th July 2017

Recent drilling by AGAA below the adjoining Hronsky-Enigmatic pits suggests that the steeply west-dipping Enigmatic zone extends down-dip to a vertical depth of beyond 400m.

Intercepts of **5m** @ **4.2g/t** from 322m in BWD022 and **1m** @ **7.8g/t** from 375m in BWD023 define a thicker and higher-grade shoot within the zone (Figure 7). Drill hole BWD013 also intersected this shoot, although at a highly oblique angle, returning **20.7m** @ **6.1g/t** from 351m.

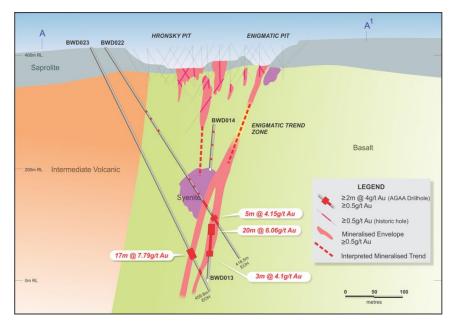


Figure 7 – Butcher Well Cross Section – A-A¹ geology and significant intercepts

Source: AngloGold Ashanti News Release 13th July 2017

A new mineralised zone has been identified 200m east of the southern part of the Enigmatic pit. Hole BWD018 intersected **14m @ 6.2g/t** from 394m, **10m @ 5.0g/t** from 459m and **12m @ 4.1g/t** from 475m; and hole BWD026 intersected **4m @ 5.90g/t** from 300m (Figure 8).

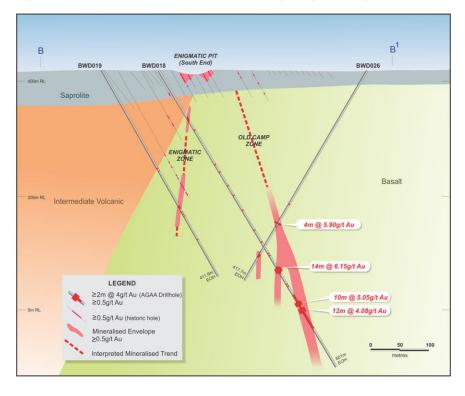


Figure 8 – Butcher Well Cross Section – B-B¹ geology and significant intercepts

Source: AngloGold Ashanti News Release 13th July 2017

Hole BWD020 drilled 300m to the south intersected **8m at 5.4g/t** from 342m. This discovery is named the Old Camp zone, and these intersections are open both laterally and vertically.

Significant drill	Significant drill results include:										
Hole Id	Intercept										
BWD013	20.7m @ 6.1g/t										
BWD023	17.0m @ 7.8g/t										
BWD018	14.0m @ 6.2g/t										
BWD018	10.0m @ 5.0g/t										
BWD018	12.0m @ 4.1g/t										

* Note – The use of "Reserve" in this document refers to information contained in the ASX announcement dated 12th October 2016 and titled "2016 Mineral Resources & Ore Reserves"

For further information please contact:

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Competent Person Statements

The information in the report to which this statement is attached that relates to Exploration Results and Mineral Resources related to Gold is based upon information compiled by Mr Daniel Howe, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Daniel Howe is a full-time employee of the company. Daniel Howe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Daniel Howe consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

Table 1 – Karari Drill Results

Karari Di	RILLING JU	LY 2017								Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
KRGC401	438660.5	6663297	34.08	164.33	218.099	-38.105		123.75	134.5	10.75	6.55
KRGC406	438616.6	6663640	71.784	186.06	201.12	-41.13		149	150	1	3.85
							and	150.8	151.15	0.35	3.08
							and	173.09	174.2	1.11	4.03
							and	176	177.7	1.7	2.92
KRGC406A	438616.7	6663640	71.86	258	201.12	-41.13		158.39	159.25	0.86	6.65
							and	178.02	184	5.98	2.68
							and	196.95	219.73	22.78	9.22
KRGC407	438617.3	6663640	71.751	249.04	208.36	-47.2		145.06	146	0.94	9.35
							and	165	166.8	1.8	6.52
							and	170.44	171.33	0.89	9.48
							and	186.73	207	20.27	4.16
KRGC408	438616.4	6663640	71.628	222.05	227.5	-47.13		124.77	131	6.23	3.05
							and	134.09	135	0.91	2.92
							and	135.6	136.11	0.51	3.09
							and	143	143.59	0.59	3.16
							and	157.69	158.1	0.41	11.20
							and	171	172.55	1.55	5.16
							and	177.22	178	0.78	2.74
							and	183	184	1	3.11
							and	190	207	17	5.19
KRGC409	438616.3	6663640	71.642	234	231.21	-43.49		123	131.54	8.54	4.23
							and	131.64	133.43	1.79	3.17
							and	135	136	1	3.92
							and	150.35	159.6	9.25	3.18
							and	168	169	1	3.24
							and	173.6	176.49	2.89	4.25
							and	182	183	1	3.03
							and	187	199.85	12.85	8.73
KRGC410	438599.7	6663706	68.52	236.8	264.15	-25.58		159.8	190.4	30.6	3.03
							and	193.75	196	2.25	3.00
							and	199	199.77	0.77	3.52
							and	204.41	206.53		4.33

	RILLING JUI									Downhole	
Hole		Northing		Depth	Azimuth	· ·		From (m)		Width (m)	Grade g/
KRGC411	438599.6	6663706	68.37	250.6	277.53	-30.75		157.8	159.65	1.85	5.7
							and	164	164.82	0.82	6.6
							and	172	175.15	3.15	5.0
							and	197	207	10	3.2
							and	218	219	1	5.72
KRGC412	438599.5	6663706	68.045	258	271.66	-45.67		201.4	202.2	0.8	3.52
							and	207.44	237	29.56	5.57
							and	243.32	243.7	0.38	7.13
KRGC418	438660.1	6663297	34.039	256	166.28	-39.46		194	196.5	2.5	4.39
KRGC419	438660.4	6663297	34.028	257.8	163.4	-40.24		205.07	208	2.93	3.26
							and	223.5	224.14	0.64	3.19
							and	229	233	4	3.4
KRGC420	438651.8	6663304	33.915	213	177.06	-49.56		136.61	136.95	0.34	3.82
							and	154.92	186.84	31.92	4.82
							incl	172.17	186.84	14.67	7.25
KRGC421	438651.7	6663305	34.004	171	214.04	-60.41		102.4	103	0.6	3.93
							and	109.3	109.8	0.5	10.10
							and	117.75	120	2.25	4.03
							and	125.16	126.71	1.55	7.94
							and	147.03	150.56	3.53	2.55
							and	153.6	159	5.4	3.34
KRGC422	438651.6	6663305	34.018	188	278.5	-38.61		160.4	161.04	0.64	4.69
							and	168.15	169.15	1	3.49
							and	183.5	185.45	1.95	8.65
KRGC423	438651.4	6663305	33.9	201	263.52	-75.91		155.55	155.9	0.35	4.44
							and	164	165	1	7.62
							and	171.77	193	21.23	2.8
KRGC424	438651.3	6663305	33.863	183	248.15	-61.93		144	145	1	3.49
							and	161.7	163.6	1.9	5.35
KRGC425	438652.6	6663305	33.665	219.1	292.51	-64.91		181	182	1	5.12
						0.001	and	196.62	211.9	15.28	5.04
KRGC426	438653	6663305	33.627	215.86	295.07	-54.72		135.92	136.42	0.5	2.60
	100000	0000000	55.627	210.00	200.07	51172	and	150.58	151.48	0.9	3.09
							and	181.7	182.27	0.57	3.73
							and	188.27	205.96	17.69	4.9
KRGC427	438651.1	6663305	33.809	191.82	270.11	-54.86		155.93	171.27	15.34	3.52
KRGC429	438666	6663294		290.8	157.35			215.8	219.5	3.7	7.65
11100-125	-130000	0003234	33.34	250.0	107.00	47.01	and	223	223.7	0.7	2.92
							and	225.6	226.6	1	2.60
							and	223.0	220.0	3	3.88
							and	257.5	258.5	1	5.39
KRGC430	438666.1	6663294	33.947	295	159.75	-40.31		199.3	200	0.7	3.70
		0003234	55.747	293	1.55.75	-40.31	and	242	200	0.7	14.4
							and	242	243	0.8	4.65
KBCC/21	120555	6662204	24 442)E7 6	165 4	-43.43		199			
KRGC431	438666	6663294	34.443	257.6	165.4	-43.43			215.38	16.38	4.39
VDCC422	120000	6662204	24 262	247	100.07	40.07	and	229.81	230.8	0.99	4.60
KRGC432	438666	6663294	34.262	247	169.07	-48.87		183.48	191	7.52	3.04
							and	196	200	4	2.82
							and	212	216	4	3.40

KARARI DR										Downhole	
		Northing	RL	Depth	Azimuth	Dip		From (m)		Width (m)	Grade g/
KRGC433	438665.8	6663294	34.176	231.02	175.17	-42.97		160.97	162.46	1.49	6.70
							and	168.36	171.81	3.45	10.53
							and	184.81	193.45	8.64	4.13
							and	197.48	198	0.52	4.53
							and	201.13	202	0.87	5.78
KRGC435	438662.7	6663296	34.882	192	192.04	-57.66		148.78	169	20.22	8.8
							and	191	192	1	19.50
KRGC436	438663.1	6663295	34.256	274.1	160.09	-51.02		191.2	192.15	0.95	2.98
							and	201	204	3	3.78
							and	236	240.25	4.25	1.38
KRGC437	438663.1	6663295	34	259.13	162.42	-56.92		188.72	194.45	5.73	4.27
							and	206.76	213.99	7.23	2.72
							and	220.62	221.24	0.62	5.3
KRGC438	438663	6663296	34.271	239	165.74	-60.29		188.82	198.65	9.83	4.66
							and	209.92	218.1	8.18	10.54
KRGC439	438662.8	6663296	34.055	223.45	181.83	-64.25		142.48	143	0.52	4.83
							and	155.82	163.29	7.47	3.35
							and	170.7	189.74	19.04	3.87
							and	211	212	1	3.32
							and	213.1	213.8	0.7	3.64
KRGC440	438662.9	6663296	34.035	221.07	173.48	-66.94		174.15	174.54	0.39	13.80
							and	177.87	214	36.13	3.37
							incl	205	208.71	3.71	9.53
KRGC450	438604.4	6663696	67.774	258	236.38	-61.44		164.19	181.57	17.38	3.87
							and	232	239	7	8.58
KRGC451	438604.5	6663696	67.67	267.06	226.04	-64.86		176.88	191.02	14.14	3.19
							and	245	245.5	0.5	12.40
KRGC452A	438604.4	6663696	67.884	178.4	235	-66.09		174.3	178.4	4.1	5.93
KRGC453	438604.4	6663696	67.767	255	247.89	-64.2		169	192.33	23.33	3.02
							and	222.9	223.6	0.7	3.76
							and	224.5	225	0.5	3.14
							and	227.95	228.76	0.81	5.02
							and	240.93	244.92	3.99	3.96
KRGC454	438604.4	6663696	67.787	279	251.29	-70.08		194.5	216.22	21.72	2.3
							and	261.61	262	0.39	13.90
KRGC455	438662.9	6663295	35.085	254	180.02	-9.9		144.1	145.65	1.55	3.38
							and	159	159.92	0.92	2.84
							and	174.5	175	0.5	3.82
							and	205.11	206.02	0.91	3.17
KRGC456	438616.5	6663640	71.759	266.1	185.88	-48.96		192.16	193.1	0.94	5.82
							and	211.33	212	0.67	4.24
							and	216.8	218.1	1.3	6.22
							and	236	237	1	2.97
							and	242.96	243.3	0.34	3.33
							and	249	255	6	3.75
KRGC457	438616.6	6663640	71.985	282.2	186.45	-44.92		185.4	185.95	0.55	4.7
							and	188.5	189.45	0.95	2.94
							and	195.6	196	0.4	2.63
							and	212.6	213	0.4	3.94
							and	218.7	244	25.3	3.72

	RILLING JU									Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	-	1	From (m)	To (m)	Width (m	Grade g/
KRGC458	438616.7	6663640	71.737	254.1	190.08	-48.15		201.62	202.13	0.51	4.74
							and	209.63	210.3	0.67	4.3
							and	215.4	216.05	0.65	6.7
							and	224.18	243.3	19.12	7.5
KRGC459	438616.4	6663640	71.645	234	202.91	-48.71		152	159.4	7.4	2.92
							and	175.56	176	0.44	3.20
							and	186.81	187.29	0.48	5.0
							and	190.67	197	6.33	6.29
							and	212.08	215	2.92	16.5
KRGC460	438616.4	6663640	71.57	245.5	199.58	-54.47		189	190	1	2.60
							and	193.68	194.09	0.41	13.80
							and	222.2	224.38	2.18	8.24
							and	224.8	225.3	0.5	3.68
KRGC461	438616.3	6663640	71.648	258	198.01	-57.05		168.32	170.22	1.9	3.62
			/			0.100	and	199.17	200.48	1.31	9.24
							and	213.96	214.49	0.53	4.3
							and	229.3	230	0.55	8.7
							and	234.54	230	4.46	4.23
KRGC462	438616.5	6663640	71.609	255.1	208.18	-63.69		202	204	4.40	2.8
KNGC402	430010.3	0003040	71.009	255.1	200.10	-03.09	and	202	204	2	6.4
								221		11	5.2
VDCC462	129616.0	6662640		224	214 70	50.07	and		238		
KRGC463	438616.9	6663640	72	234	214.79	-59.07		154.6	155.3	0.7	2.5
							and	157.95	158.7	0.75	3.8
							and	164.55	165.6	1.05	3.59
							and	174.55	175.2	0.65	3.13
							and	179.8	180.3	0.5	14.10
							and	189.6	190	0.4	4.70
KROCACA	120552.0	66622206	24.00	407.0	407 75	42.00	and	216	223	7	
KRGC464	438662.9	6663296	34.06	197.8	187.75	-42.89		118.97	119.55	0.58	3.9
							and	154.79	155.7	0.91	2.78
							and	157.7	158.7	1	
							and	162.7	175.22	12.52	
							and	185.74	186.3	0.56	
KRGC465	438662.8	6663296	34.234	189.2	193.51	-49.23		127.7	128.2	0.5	5.0
							and	136.8	138.5	1.7	3.80
							and	144.4	145	0.6	
							and	151.55	169	17.45	3.6
KRGC467	438652.5	6663306	33.563	198				pending			
KRGC468	438665.9	6663294	35	257	167.42	-36.99		162	163	1	2.7
							and	190	191	1	2.72
							and	200	201	1	2.9
							and	214.1	214.45	0.35	3.6
							and	222.5	224.55	2.05	3.6
							and	227.4	227.8	0.4	6.60
KRGC469	438665.9	6663294	35	219	180.59	-34.22	results	pending			
KRGC470	438665.7	6663294	33.93	266.73	169.23			198	229	31	2.4
							incl	220	229	9	3.5
KRGC488	438599.7	6663706	68.543	237	247.66	-35.06		140	141.9	1.9	3.62
							and	145	150.1	5.1	3.34
							and	183.95	189.75	5.8	
							and	194.9	216.6	21.7	

KARARI DE	RILLING JU									Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m	Grade g/
KRRD179	438662.3	6663296	34.622	288	169.05	-25.985		211.6	215	3.4	9.6
KRRD199	438616.6	6663640	71.962	294.09	192.05	-29.79		257	257.69	0.69	5.70
KRRD200	438616.6	6663640	71.854	309	188.08	-35.43		277.37	278.25	0.88	2.73
							and	282	286.5	4.5	1.45
KRRD201	438616.9	6663639	71	351	186.25	-39.91		189	190	1	3.59
							and	292	292.7	0.7	3.40
							and	313.43	314.43	1	4.65
							and	331.65	332.65	1	3.88
							and	336.6	338.7	2.1	
							and	347.4	349	1.6	
KRRD202	438617.9	6663640	71.943	339	183.61	-44.74		226.6	227.24	0.64	
			, 110 10				and	252.38	263.04	10.66	
KRRD203	438652.6	6663306	33.566	213	192	-76.2	and	160.6	161.55	0.95	8.7
KIND205	430032.0	0005500	33.300	215	152	70.2	and	184	202	18	
							incl	184	193.7	9.7	
KRRD204	438652.3	6663306	33.582	213	227.34	-78.88	inci	141.3	142.05	0.75	
	430032.3	0003300	33.362	215	227.34	-70.00	and	169	142.05	0.75	
							and	184.05	184.5	0.45	2.5
							and	188.4	189	0.6	
							and	196.2	197.9	1.7	5.69
						=	and	201	202	1	
KRRD205	438652.9	6663304	34	227.53	287.58	-71.02		183.43	210	26.57	4.13
	438652.9	6663304	34	239.27	299.32	-49.29		192.2	209.64	17.44	5.83
KRRD207A	438652.9	6663304	34	232.4	187.73	-82.4		170.3	170.95	0.65	2.62
							and	174	175	1	
							and	195.7	198.5	2.8	
							and	207	208.5	1.5	2.5
							and	214	214.95	0.95	
							and	221	221.8	0.8	4.09
							and	228	229	1	2.62
KRRD208	438652.9	6663304	34	237.89	273.2	-85.24		188.7	191	2.3	3.73
							and	206.9	232	25.1	2.18
KRRD209A	438653	6663307	33.741	263.8	315.8	-78.74		206.7	207.5	0.8	9.76
							and	221.6	235.8	14.2	5.03
							and	248.7	250.3	1.6	13.42
KRRD210	438653	6663307	33.698	276	318.3	-62.86	results	pending			
KRRD211	438653.5	6663306	33.596	276.04	76.06	-87.37	results	pending			
KRRD212	438653	6663307	33.695	285	337.53	-76.81	results	pending			
KRRD213	442868.6	6659091	33.832	251.54	166.5	-65.09	results	pending			
KRRD214	442868.6	6659091	33.836	278	157.46			pending			
KRRD215	438604.9	6663696	67	273	234.76	-69.68		155.84	156.54	0.7	2.73
							and	177.25	178.32	1.07	
							and	179.79	180.45	0.66	
							and	185.26	210.46	25.2	
							and	253.16	210.40 257.5	4.34	
KRRD216	438605.2	6663696	67.679	314.46	252.16	-74.03	and	205.4	237.5	25.2	
	430003.2	0003090	07.079	514.40	232.10	-74.03	and	205.4	230.6	0.57	
	420500.0	6662707	~~	202 7	270.00	70 5	and				
KRRD217	438598.9	6663707	67	303.7	270.06	-72.5		214	214.88	0.88	
							and	223.1	226.68	3.58	
							and	230.06	231.63	1.57	
							and	276.92	283.1	6.18	11.37

KARARI DI	RILLING JU	LY 2017								Downhole	2
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
KRRD218	438598.9	6663707	68	313.4	289.65	-67.84		289	291	2	3.47
KRRD219	438598.9	6663707	68	314.96	297.56	-52.58		198.16	198.71	0.55	2.69
							and	201.1	202.1	1	3.96
							and	254.57	273	18.43	3.14
							and	283	284	1	3.31
KRRD220	438598.5	6663710	68.523	290.9	294.3	-44.93		249	279.4	30.4	3.96
KRRD221	438598.4	6663710	68.521	287.3	291.8	-36.96		192.4	193	0.6	2.71
							and	254	262.4	8.4	2.10
							and	262	262.4	0.4	6.74
							and	278	280.05	2.05	2.88
KRRD222	438598.4	6663710	68.529	285	289.7	-28.72		237	247	10	1.45
KRRD223	438616	6663640	71.594	321.09	207.6	-68.6	results pe	ending			

Table 2 – Deep South Drill Results

DEEP SOU	TH DRILLIN	G JULY 20	17							Downhole	5
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m	Grade g/
DSGC251	456046.7	6731434	169.004	300	60.988	-65.28		181.52	182.35	0.83	3.3
							and	185.33	185.76	0.43	2.6
							and	192.43	195.48	3.05	6.9
DSGC252	456046.5	6731435	169.046	183	30.668	-38.77	no sign	ificant results	;		
DSGC253	456046.5	6731435	169.008	209.8	25.058	-45.43		168.9	171.4	2.5	6.54
DSGC254	456046.5	6731435	168.978	224.8	26.048	-53.76		190.2	195.2	5	6.14
DSGC255	456100.4	6731164	218.746	92.9	124.298	-30.4	hole ab	andoned			
DSGC255A	456100.6	6731164	218.417	347.5	121.218	-30.65		298.8	299.45	0.65	3.74
DSGC256	456100.4	6731164	218.623	329.6	121.038	-37.09		260.8	261.3	0.5	4.5
DSGC257	456100.5	6731164	218.729	335.6	123.658	-33.63		253.55	253.95	0.4	7.7
DSGC258	456100.4	6731164	218.419	299.7	110.668	-47.47		256.5	258.3	1.8	14.72
DSGC259	456100.3	6731164	218.414	350	118.608	-43.08		276	277.05	1.05	7.19
							and	280	280.4	0.4	4.24
DSGC260	456046.4	6731435	168.834	237	18.178	-57.7		201.15	203.7	2.55	4.1
DSGC261	456100.9	6731164	218.464	305.5	105.258	-53.32		255.7	256.3	0.6	2.8
							and	259.6	260	0.4	7.4
							and	260.4	261.5	1.1	8.02
							and	269.7	272.3	2.6	3.3
							and	294.5	295.1	0.6	4.10
DSGC262	456101	6731164	218.397	323.7	115.638	-49.35		275.2	280.65	5.45	9.70
DSGC263	456084.2	6731188	218.209	350.6	106.208	-64.09		307.2	308.5	1.3	4.18
DSGC264	456046.4	6731433	168.698	245.1	93.218	-68.93	results	pending			
DSGC265	456047	6731433	168.642	302	113.458	-71.33	results	pending			
DSGC267	456047.2	6731430	168.375	284.8	124.678	-60.7		270.3	270.8	0.5	8.4
							and	273	273.3	0.3	2.68
DSGC268	456047.2	6731430	168.37	320.6	134.348	-59.12		155.8	156.4	0.6	7.7
							and	291.4	291.8	0.4	3.74
							and	296.25	296.75	0.5	2.9
							and	298.4	300.2	1.8	6.14
DSGC269	456043.8	6731442	169.093	239.8	21.918	-49.04		178.85	179.85	1	3.32
DSGC270	456043.8	6731442	169.025	233.8	17.558	-55.88		193	201.7	8.7	3.12
DSGC271	456043.7	6731442	169.028	251.8	12.088	-59.54		213.4	215		
							and	221.05	222.9		
DSGC272	456121.1	6731342	69.452	117	116.088	-35.47	results	pending			
DSGC273	456121	6731343	69.506	108	95.888	-40.48		70.5	71	0.5	3.4
							and	91.25	93		
							and	101.15	101.75		
DSGC274	456120.5	6731352	69.524	102	93.088	-43.16		84.8	86.1	1.3	

		G JULY 201								Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
DSGC221	456126.5	6731346	94.313	150	94.648	-22.72		66.85	68.32	1.47	5.86
							and	84.58	85.13	0.55	6.86
							and	85.89	88.8	2.91	5.17
DSGC222	456126.5	6731346	94.421	150	75.858	-23.99		61.46	63.32	1.86	5.96
							and	75.85	79.07	3.22	3.82
							and	80.84	81.55		3.78
							and	82.25	83		2.66
DSGC223	456126.4	6731346	94.083	105	95.598	-41.12		71.06	71.56		4.04
0000220	450120.4	0/31340	54.005	105	55.550	71.12	and	87.92	90.65		8.25
							and	93.55	96.53		2.77
DSGC224	456126.4	6731346	94.128	98.6	75.458	-42.88		66.43	69.15		4.01
0300224	430120.4	0731340	54.120	58.0	73.430	-42.00	and	85.25	89.65		4.87
							and				
DECCORE	456122	(721200	02.045	00.0	58.858	C 24		95.2	95.83		3.83
DSGC225	456122	6731360	93.845	86.8	58.858	-6.24		60.1	60.8		4.93
							and	72.8	77.4		4.64
DSGC226	456122	6731360	93.845	100	71.848	-24.9		59	60.3		4.86
							and	73	74.35		24.12
							and	76.5	78.45		4.08
							and	78.75	79.1		14.50
DSGC227	456122	6731360	93.845	93	54.558	-22.51		62	62.4	0.4	4.02
							and	72.55	75.6	3.05	13.24
DSGC228	456122	6731360	93.845	99	51.068	-39.77		67.71	68.21	0.5	10.30
							and	81.25	81.71	0.46	11.10
DSGC229	456122	6731360	93.845	96	70.448	-43.04		65.7	66.7	1	13.70
							and	228	229	1	2.72
							and	241.3	244.7	3.4	5.64
							and	267.2	268.25		5.88
							and	272.7	273.1		3.61
DSGC234	456100.6	6731165	218.686	288	107.498	-49.3		245.4	250.65		3.44
DSGC236	456069.3	6731404	167.971	165	82.878			133.9	134.35		2.87
0000200	130003.5	0/01/01	107.371	105	02.070	13.11	and	144.5	146.2		4.48
DSGC238	456069.4	6731404	168.008	180	81.298	-53.32		144.4	144.8		3.52
0300230	430003.4	0731404	100.000	100	01.230	-33.32	and	156.45	156.75		2.50
050030	4E6100 6	6721166	210 402	260.9	106 109	20.15	and	159.75	160.35		30.13
DSGC239	456100.6	6731166	218.493	260.8	106.498	-38.15		221.65	222.2		7.49
							and	227.6	231.5		4.71
							and	236.5	237		3.65
							and	243.15	246.3		3.56
DSGC240	456100.5	6731166	218.516	258	80.808	-54.34		211.05	211.65		2.99
							and	224.25	235.85	11.6	4.77
DSGC241	456100.6	6731165	218.407	269.88	96.398	-51.56		232.2	235.94	3.74	3.42
							and	254.69	255.03	0.34	7.09
DSGC242A	456100.7	6731165	218.324	338.7	115.538	-57.16		275.5	275.95	0.45	10.20
							and	295	299.5	4.5	2.65
DSGC243	456100.3	6731164	218.592	392.8	125.208	-51.77		320.3	320.8	0.5	5.90
DSGC244	456047.5	6731431	168.781	198	87.768	-58.3		180.83	183.7	2.87	3.28
DSGC246	456046.2	6731436	169	219	77.198			196.45	203.8		4.85
DSGC247	456047.9	6731430	168.85		102.338	-60.27		205	205.45		3.61
				0			and	209.65	211.55		9.50
DSGC248	456046.2	6731436	169	300	44.798	-55.09		167.75	168.1		2.82
		0.01100	105	500	, 50	55.05	and	176.2	177.85		2.71
DSGC249	456046.2	6731436	169	198	65.798	-60.31		170.2	177.85		7.40
DSGC250	456046.2	6731436	169	227.7	35.408	-60.14		192.85	193.2		4.56
							and	194.95	195.55		11.86
							and	196.9	197.6		3.29
							and	201.3	201.9		4.04
							and	203.8	204.25	0.45	3.16

Table 3 – Thunderbox Drill Results

JNDERBOX DR	ILLING JULY 201	17								Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade (g/t
TBDD0118W1	303934.461	6879296.514	495.868	771.91	89.49	-61.65		700	702	2	1.88
							and	713	714	1	1.5
							and	731	733	2	1.5
TBDD0120	303981.785	6879259.791	494.615	740.13	90.46	-61.87		652.08	699.2	47.12	2.1
TBDD0120W1	303981.785	6879259.791	494.44	762.8	90.46	-61.87		697.32	697.76	0.44	3.
							and	719.56	724.31	4.75	3.52
TBDD0129	303979.988	6879264.95	494.772	646.13	90.01	-56.18		486.26	487	0.74	2.34
							and	595	620.09	25.09	1.5
TBDD0129W1	303979.988	6879264.95	494.772	645	90.01	-56.18		504	505	1	1.7
							and	508.45	508.9	0.45	2.5
							and	618	641.71	23.71	1.4
TBDD0129W2	303979.988	6879264.95	494.772	645	90.01	-56.18		634	679.56	45.56	2.1
TBDD0130	304004.312	6879096.021	493.856	745.04	91.73	-64		428	431.07	3.07	1.54
							and	695.71	716.01	20.3	2.3
							and	721.12	722.24	1.12	1.6

Table 4 – Butcher Well Drill Results

	DRILLING JULY									Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade (g/t
BWD001	433640	6765050	406	324.8	77	-60		No reportabl	e intercept		
BWD002	433712	6764938	405	369.7	77	-60		No reportabl	e intercept		
BWD003	433650	6764835	403	36	77	-60		Hole Abando	ned (excess	ive deviation)	
BWD004	433755	6764760	406	399.8	75	-55		176	178	2	4.39
BWD005	433736	6764750	406	369.8	75	-60		216.6	219.4	2.8	4.37
BWD006	433730	6764686	406	351.8	77	-60		No reportabl	e intercept		
BWD007	433780	6764630	406	288.9	77	-60		No reportabl	e intercept		
BWD008	433763	6764620	406	372.6	77	-60		No reportabl	e intercept		
BWD009	433740	6764425	409	297.6	77	-60		No reportabl	e intercept		
BWD010	433690	6764415	406	411.8	77	-60		No reportabl	e intercept		
BWD011	433880	6763760	410	531.6	75	-60		495	497	2	5.16
BWD012	434160	6763660	408	60	180	-60		No reportabl	e intercept		
BWD013	434160	6763550	409	519.4	181.2	-59.5		142	144	2	4.69
							and	351.3	372	20.7	6.06
							and	410	413	3	4.1
BWD014	434160	6763462	409	396.5	182.4	-57.9		No reportabl	e intercept		
BWD015	434028	6763207	408	341.4	75	-55		85	88	3	4.1
							and	132	135	3	4.02
BWD016	433995	6763197	408	389.7	77	-60		No reportabl	e intercept		
BWD017	434080	6763090	411	366.6	76	-60.4		No reportabl	e intercept		
BWD018	434195	6762863	411	601	78.5	-62.2		394	408	14	6.15
							and	459	469	10	5.05
							and	475	487	12	4.08
BWD019	434090	6762845	411	411.6	75	-60		No reportabl	e intercept		
BWD020	434305	6762570	413	450.9	75	-60		163	165	2	4.73
							and	342	350	8	5.4
BWD021	433970	6763400	408	450.5	76.3	-58.4		No reportabl	e intercept		
BWD022	433983	6763327	407	418.5	79.6	-61.5		332	337	5	4.15
BWD023	433959	6763321	407	459.8	78.5	-67.4		375	392	17	7.79
BWD024	433647	6764835	403	399.7	77	-60		304	307	3	4.43
BWD025	433880	6763480	410	523	77	-60		No reportabl	e intercept		
BWD026	434550	6762900	410	417.7	257	-60		300	304	4	5.9

Karari 2012 JORC Table 1

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Sampling methods undertaken by Saracen at Karari have included reverse circulation drillholes (RC), diamond drillholes (DD) and RC grade control drilling within the pit, and diamond drilling and face chip sampling underground. Historic sampling methods conducted since 1991 have included aircore (AC), rotary air blast (RAB), reverse circulation and diamond drillholes.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Sampling for diamond and RC drilling and face chip sampling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard. RC chips and diamond core provide high quality representative samples for analysis. RC, RAB, AC and DD core drilling was completed by previous holders to industry standard at that time (1991- 2004).
	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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling	RC chips are cone or riffle split and sampled into 1m intervals, diamond core is NQ or HQ sized, sample to 1m intervals or geological boundaries where necessary and cut into half core and underground faces are chip sampled to geological boundaries (0.2-1m). All methods are used to produce representative sample of less than 3 kg. Samples are selected to weigh less than 3 kg to ensure total sample inclusio at the pulverisation stage. Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g or 50 g sub sample for analysis by FA/AAS. Some grade control RC chips were analysed in the Saracen on site laboratory using a PAL (pulverise a
	problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	leach) method. Visible gold is sometimes encountered in underground drillcore and face samples. Historical AC, RAB, RC and diamond sampling was carried out to industry standard at that time. Analys methods include fire assay and unspecified methods.
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	The deposit was initially sampled by 11 AC holes, 452 RAB holes, 496 RC holes (assumed standard 5 "bit size) and 25 surface unknown diameter diamond core holes. Saracen has completed 13 surface RC precollars with HQ and NQ diamond tail drill holes (precollars averaging 287m, diamond tails averaging 168m), 73 RC holes from both surface and within the pit (recent drilling utilised a 143mm diameter bit with a face sampling hammer and an external auxiliary booster) and 3052 grade control RC holes within the pit. 298 NQ diamond holes have been drilled underground. 521 underground faces and walls have been chip sampled. Diamond tails were oriented using an Ezi-mark tool. Some historic surface diamond drill core appears to have been oriented by unknown methods.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed	RC sampling recoveries are recorded in the database as a percentage based on a visual weight estima no historic recoveries have been recorded. Diamond core recovery percentages calculated from measured core versus drilled intervals are logged and recorded in the database. Recoveries average >90%.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	RC drilling daily rig inspections are carried out to check splitter condition, general site and address generissues. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks.

Criteria	JORC Code Explanation	Commentary
	·	UG faces are sampled from left to right across the face at the same height from the floor.
		During GC campaigns the sample bags weight versus bulk reject weight are compared to ensure
		adequate and even sample recovery.
		Historical AC, RAB, RC and diamond drilling to industry standard at that time.
	Whether a relationship exists between sample	There is no known relationship between sample recovery and grade for RC drilling.
	recovery and grade and whether sample bias may	Diamond drilling has high recoveries due to the competent nature of the ground meaning loss of material
	have occurred due to preferential loss/gain of	is minimal.
	fine/coarse material.	Any historical relationship is not known.
Logging	Whether core and chip samples have been	Logging of RC chips and diamond drill core records lithology, mineralogy, texture, mineralisation,
	geologically and geotechnically logged to a level of	weathering, alteration and veining.
	detail to support appropriate Mineral Resource	Geotechnical and structural logging is carried out on all diamond holes to record recovery, RQD, defect
	estimation, mining studies and metallurgical studies.	number, type, fill material, shape and roughness and alpha and beta angles.
	Whether logging is qualitative or quantitative in nature.	All faces are photographed and mapped.
	Core (or costean, channel, etc) photography.	Chips from all RC holes (exploration and GC) are stored in chip trays for future reference while remaining
		core is stored in core trays and archived on site.
		Core is photographed in both dry and wet state.
		Qualitative and quantitative logging of historic data varies in its completeness.
	The total length and percentage of the relevant	All RC and diamond drillholes holes are logged in full and all faces are mapped.
	intersections logged	Every second drill line is logged in grade control programs with infill logging carried out as deemed
		necessary.
		Historical logging is approximately 95% complete.
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half	All drill core is cut in half onsite using an automatic core saw. Samples are always collected from the sam
and sample preparation	or all core taken.	side.
	If non-core, whether riffled, tube sampled, rotary split,	All exploration and grade control RC samples are cone or riffle split. Occasional wet samples are
	etc and whether sampled wet or dry.	encountered.
		Underground faces are chip sampled using a hammer.
		AC, RAB and RC drilling has been sampled using riffle and unknown methods.
	For all sample types, the nature, quality and	The sample preparation of diamond core and RC and underground face chips adhere to industry best
	appropriateness of the sample preparation technique.	practice. It is conducted by a commercial laboratory and involves oven drying, coarse crushing then total
		grinding to a size of 90% passing 75 microns.
		Best practice is assumed at the time of historic sampling.
	Quality control procedures adopted for all sub-	All subsampling activities are carried out by commercial laboratory and are considered to be satisfactory.
	sampling stages to maximise representivity of	Sampling by previous holders assumed to be industry standard at the time.
	samples.	
	Measures taken to ensure that the sampling is	RC field duplicate samples are carried out at a rate of 1:20 and are sampled directly from the on-board
	representative of the in situ material collected,	splitter on the rig. These are submitted for the same assay process as the original samples and the
	including for instance results for field	laboratory are unaware of such submissions.
	duplicate/second half sampling.	No duplicates have been taken of underground core or face samples.
		Sampling by previous holders assumed to be industry standard at the time.
	Whether sample sizes are appropriate to the grain	Sample sizes of 3kg are considered to be appropriate given the grain size (90% passing 75 microns) of
	size of the material being sampled.	the material sampled.

Criteria .	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	RC chip samples, grade control chip samples, underground face chip samples and diamond core are analysed by external laboratories using a 40g or 50g fire assay with AAS finish. These methods are considered suitable for determining gold concentrations in rock and are total digest methods. Some GC samples were analysed in the Saracen onsite laboratory using pulverise and leach method. This method is a partial digest. Historic sampling includes fire assay and unknown methods.
	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.	No geophysical tools have been utilised for reporting gold mineralisation.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified reference material (standards and blanks) with a wide range of values are inserted into every drillhole at a rate of 1:25 for exploration RC and DD, and 1:40 for GC drilling. These are not identifiable to the laboratory. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly. Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns. The laboratory performs a number of internal processes including standards, blanks, repeats and checks. QAQC data analysis demonstrates sufficient accuracy and precision. Industry best practice is assumed for previous holders.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	Significant intercepts are verified by the Geology Manager and corporate personnel.
	The use of twinned noies.	No specific twinned holes have been drilled at Karari but grade control drilling and underground diamond drilling has confirmed the width and grade of previous exploration drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Primary data is collated in a set of excel templates utilising lookup codes. This data is forwarded to the Database Administrator for entry into a secure acQuire database with inbuilt validation functions. Data from previous owners was taken from a database compilation and validated as much as practicable before entry into the Saracen acQuire database.
	Discuss any adjustment to assay data.	No adjustments have been made to assay data. First gold assay is utilised for resource estimation.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	 Exploration drillholes are located using a Leica 1200 GPS with an accuracy of +/- 10mm. Drillhole collars within the pit and immediate surrounds are picked up by company surveyors using a Trimble R8 GNSS (GPS) with an expected accuracy of +/-8mm. All undergournd drillhole collars are picked up by company surveyors using a Leica TS15i (total station) with an expected accuracy of +/-2mm. Underground faces are located using a Leica D5 disto with and accuracy of +/- 1mm from a known surveyoint. Underground downhole surveys are carried out using a Reflex single shot camera at regular intervals (usually 30m) down the hole. A multishot survey is carried out every 3m upon completion of the drillhole. Surveys are carried out every 30m downhole during RC and surface diamond drilling using an Eastman single shot camera A number of drillholes have also been gyroscopically surveyed.

Criteria	JORC Code Explanation	Commentary
	•	Previous holders' survey accuracy and quality is unknown
	Specification of the grid system used.	A local grid system (Karari) is used.
		The two point conversion to MGA_GDA94 zone 51 is
		KAREast KARNorth RL MGAEast MGANorth RL
		Point 1 4000 8000 0 439359.94 6663787.79 0
		Point 2 3000 7400 0 438359.84 6663187.72 0
		Historic data is converted to the Karari local grid upon export from the database.
	Quality and adequacy of topographic control.	Topographic control originally used site based survey pickups in addition to Kevron aerial
		photogrammetric surveys with +/- 5m resolution.
		Pre mining, new and more detailed topography has since been captured and will be used in future
		updates and for subsequent planning purposes.
Data spacing and	Data spacing for reporting of Exploration Results.	The nominal spacing for drilling is 25m x 25m.
distribution	Whether the data spacing and distribution is sufficient	Data spacing and distribution are sufficient to establish the degree of geological and grade continuity
	to establish the degree of geological and grade	appropriate for JORC classifications applied.
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and	
	classifications applied.	
Orientation of data in	Whether sample compositing has been applied.	Sample compositing is not applied until the estimation stage.
relation to geological		Some historic RAB and RC sampling was composited into 3-4m samples with areas of interest re-sampled
structure		to 1m intervals. It is unknown at what threshold this occurred.
	Whether the orientation of sampling achieves	The majority of drillholes are positioned to achieve optimum intersection angles to the ore zone as are
	unbiased sampling of possible structures and the	practicable.
	extent to which this is known, considering the deposit	Underground diamond drilling is designed to intersect the orebody in the best possible orientation given
	type.	the constraints of underground drill locations.
	If the velotionabie between the dvilling evientation and	UG faces are sampled left to right across the face allowing a representative sample to be taken.
	If the relationship between the drilling orientation and	No significant sampling bias has been recognised due to orientation of drilling in regards to mineralised
	the orientation of key mineralised structures is considered to have introduced a sampling bias, this	structures.
	should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Samples are prepared on site under supervision of Saracen geological staff. Samples are selected,
campio ocounty		bagged into tied numbered calico bags then grouped into secured cages and collected by the laboratory
		personnel.
		Sample submissions are documented via laboratory tracking systems and assays are returned via email
Audits or reviews	The results of any audits or reviews of sampling	An internal review of companywide sampling methodologies was conducted to create the current sampling
	techniques and data.	and QAQC procedures. No external audits or reviews have been conducted.

Criteria	ng of Exploration Results	Commentary
Mineral tenement and land tenure status	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.	The Karari pit is located on M28/166 and M28/167 Mining Leases M28/166 and M28/167 are held 100% by Saracen Gold Mines Pty Ltd a wholly owned subsidiary of Saracen Mineral Holdings Limited. Mining Leases M28/166 and M28/167 have a 21 year life (held until 2020) and are renewable for a further 21 years on a continuing basis. There are no registered Aboriginal Heritage sites within Mining Leases M28/166 and M28/167. Mining Leases M28/166 and M28/167 are subject to two third party royalties payable on the tenements, a bank mortgage (Mortgage 41595) and two caveats (Caveat 51H/067 and 52H/067, respectively). All production is subject to a Western Australian state government NSR royalty of 2.5%. The tenements are subject to the Pinjin Pastoral Compensation Agreement.
	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.	The tenements are in good standing and the licence to operate already exists
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Carosue Dam project area in which the Karari deposit is located has been subjected to extensive gold exploration by numerous companies since 1991. Karari was highlighted as an area of interest following an aeromagnetic survey conducted by CRA Exploration. Auger sampling of the target defined a widespread gold anomaly with follow up RAB drilling intersecting significant gold mineralisation. RC and DD drilling further defined the mineralisation before Aberfoyle entered into a joint venture agreement with CRA. Further drilling by Aberfoyle defined mineralisation over a 600m strike length. Aberfoyle were subject to a hostile takeover by Western Metals with PacMin then purchasing the Carosue Dam project. An intensive resource definition program consisting of both RC and DD drilling was carried out before mining of Karari commenced in 2000.
Geology	Deposit type, geological setting and style of mineralisation.	The Karari deposit sits along the regional NNW-trending Keith-Kilkenny fault zone within the eastern edge of the Norseman-Wiluna greenstone belt. The deposit itself is lithologically and structurally controlled and sits within an altered volcaniclastic sandstone unit that has been offset along a series of major faults running NE-SW and NW-SE, as well as intruded by large lamprophyre units post mineralization. Mineralization is dominated by pyrite and hosted in broad hematite altered sandstone units with a central high grade siliceous core light-moderately dipping to the North.
Drillhole 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. 	All material data is periodically released on the ASX: 13/04/2016, 23/02/2016, 10/12/2015, 03/07/2015, 25/05/2015, 05/05/2015, 11/03/2015, 16/01/2014, 14/10/2013, 25/01/2013, 28/07/2011, 03/06/2011, 21/04/2011, 09/02/2011, 03/11/2008

Criteria	JORC Code Explanation	Commentary
	 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. 	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All underground diamond drillhole significant intercepts have been length weighted with a minimum Au grade of 2.5ppm. No high grade cut off has been applied.
	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.	Intercepts are aggregated with minimum width of 0.5m and maximum width of 3m for internal dilution. Where stand out higher grade zone exist with in the broader mineralised zone, the higher grade interval is reported also.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	There are no metal equivalents reported in this release.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Previous announcements included sufficient detail to clearly illustrate the geometry of the mineralisation and the recent drilling. All results are reported as downhole lengths.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate diagrams are provided in this release, relevant to the reported data.
Balanced Reporting	Where comprehensive reporting of all Exploration Results are not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results from previous campaigns have been reported, irrespective of success or not.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock	No substantive data acquisition has been completed in recent times.

Criteria	JORC Code Explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	A significant drill program is to be executed over the next 12 months. Regular updates will be provided.

Deep South 2012 JORC Table 1

Section 1: Sampling	Techniques and Data	
Criteria	JORC Code Explanation	Commentary
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Saracen has recently completed a biogeochemical sampling program at Deep South involving the sampling of new leaf growth on established <i>Acacia</i> trees on a 100m x 800m spacing. Other sampling methods undertaken by Saracen at Deep South previously have included reverse circulation drillholes (RC), diamond drillholes (DD) and RC grade control drilling within the pit. Historic sampling methods conducted since 1983 have included rotary air blast (RAB), reverse circulation and diamond drillholes.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Samples were collected from trees of a consistent species and height. Sampling for diamond and RC drilling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard. RC chips and diamond core provide high quality representative samples for analysis. RC, RAB and DD core drilling was completed by previous holders to industry standard at that time (1983-2004).
	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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems.	The biogeochemical program was an orientation survey only and results will not be used in any calculation of mineralisation. The leaves were washed, dried and pulverised followed by an aqua regia digest for multielement determination. RC chips are cone or riffle split and sampled into 1m intervals with total sample weights under 3kg Diamond core is NQ sized, sampled to 1m intervals or geological boundaries where necessary and cut into half core to give sample weights under 3 kg. Samples are selected to weigh less than 3 kg to ensure total sample inclusion at the pulverisation stage. Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g or 50 g sub sample for analysis by FA/AAS.

Criteria	JORC Code Explanation	Commentary
	Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	Some grade control RC chips were analysed in the Saracen on site laboratory using a PAL (pulverise and leach) method. Historical RAB, RC and diamond sampling was carried out to industry standard at that time. Analysis methods include fire assay, aqua regia, atomic absorption spectroscopy and unspecified methods.
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	The deposit was initially sampled by 114 RAB holes, 211 RC holes (assumed standard 5 ¼ 'bit size) and 29 surface HQ and unknown diameter diamond core holes. Saracen has previously completed 12 surface RC precollars with NQ diamond tail drill holes (precollars averaging 185m, diamond tails averaging 140m), 3 geotechnical surface diamond NQ drillholes, 57 RC holes from surface and 107 grade control RC holes within the pit. Diamond tails were oriented using an Ezi-mark tool. A limited amount of historic surface diamond drill core appears to have been oriented by unknown methods.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed	RC sampling recoveries are recorded in the database as a percentage based on a visual weight estimate; limited historic recoveries have been recorded. Diamond core recovery percentages calculated from measured core versus drilled intervals are logged and recorded in the database. Recoveries average >98%. Limited historic diamond recoveries have been recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples	During RC drilling daily rig inspections are carried out to check splitter condition, general site and address general issues. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks. During GC campaigns the sample bags weight versus bulk reject weight are compared to ensure adequate and even sample recovery. Historical RAB, RC and diamond drilling to industry standard at that time.
	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.	There is no known relationship between sample recovery and grade for RC drilling. Diamond drilling has high recoveries meaning loss of material is minimal. Any historical relationship is not known.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature.Core (or costean, channel, etc) photography.The total length and percentage of the relevant	Logging of RC chips and diamond drill core records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. Geotechnical and structural logging is carried out on all diamond holes to record recovery, RQD, defect number, type, fill material, shape and roughness and alpha and beta angles. Chips from all RC holes (exploration and GC) are stored in chip trays for future reference while remaining core is stored in core trays and archived on site. Core is photographed in both dry and wet state. Qualitative and quantitative logging of historic data varies in its completeness. All RC and diamond drillholes and grade control holes are logged in full.
Sub-sampling techniques and sample preparation	intersections logged If core, whether cut or sawn and whether quarter, half or all core taken.	All drill core is cut in half onsite using an automatic core saw. Samples are always collected from the same side. Some historic drillcore was half core sampled, or sampled via unknown methods.

Criteria	JORC Code Explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	All exploration and grade control RC samples are cone or riffle split. Occasional wet samples are encountered; increased air capacity is routinely used to aid in keeping the sample dry when water is encountered. Historic RAB and RC drilling was sampled using riffle and unknown methods.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of diamond core and RC chips adhere to industry best practice. It is conducted by a commercial laboratory or onsite laboratory and involves oven drying, coarse crushing then total grinding to a size of 90% passing 75 microns. Best practice is assumed at the time of historic sampling.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial laboratory or onsite laboratory and are considered to be satisfactory. Sampling by previous holders assumed to be industry standard at the time.
	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.	RC field duplicate samples are carried out at a rate of 1:20 and are sampled directly from the on-board splitter on the rig. These are submitted for the same assay process as the original samples and the laboratory are unaware of such submissions. Sampling by previous holders assumed to be industry standard at the time.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes of 3kg are considered to be appropriate given the grain size (90% passing 75 microns) of the material sampled.
Quality of assay data and laboratory testsThe nature, quality and app assaying and laboratory pro-	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	RC chip samples and diamond core are analysed by external laboratories using a 50g fire assay with AAS finish. This method is considered suitable for determining gold concentrations in rock and is a total digest method. GC samples were analysed in the Saracen onsite laboratory using a pulverise and leach method. This method is a partial digest. Historic sampling includes fire assay, aqua regia, atomic absorption spectroscopy and unspecified methods.
	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.	No geophysical tools have been utilised for reporting gold mineralisation.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified reference material (standards and blanks) with a wide range of values are inserted into every drillhole at a rate of 1:25 for exploration RC and DD, and 1:40 for GC drilling. These are not identifiable to the laboratory. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly. Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns.
		The laboratory performs a number of internal processes including standards, blanks, repeats and checks. QAQC data analysis demonstrates sufficient accuracy and precision. Industry best practice is assumed for previous holders.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intercepts are verified by the Geology Manager and corporate personnel.
	The use of twinned holes.	No specific twinned holes have been drilled at Deep South but grade control drilling has confirmed the width and grade of previous exploration drilling.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Primary data is collated in a set of excel templates utilising lookup codes. This data is forwarded to the Database Administrator for entry into a secure acQuire database with inbuilt validation functions. Data from previous owners was taken from a database compilation and validated as much as practicable before entry into the Saracen acQuire database.
	Discuss any adjustment to assay data.	No adjustments have been made to assay data. First gold assay is utilised for resource estimation.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Exploration drillholes are located using a Leica 1200 GPS with an accuracy of +/- 10mm. Drillhole collars within the pit and immediate surrounds are picked up by company surveyors using a Trimble R8 GNSS (GPS) with an expected accuracy of +/-8mm. Downhole surveys are carried out on RC and diamond drillholes using an Eastman single shot camera at regular intervals (usually 30m). A number of drillholes have also been gyroscopically surveyed. Grade control drilling was not downhole surveyed due to short hole lengths. Previous holders' survey accuracy and quality is unknown
	Specification of the grid system used.	A local grid system (Safari Bore) is used at Deep South. The two point conversion to MGA_GDA94 zone 51 is: SBEast SBNorth RL MGAEast MGANorth RL Point 1 51000 34000 0 451137.753 6734157.921 0 Point 2 51000 30000 0 451137.896 6730157.896 0 Historic data is converted to the Safari Bore local grid upon export from the database.
	Quality and adequacy of topographic control.	Topographic control originally used site based survey pickups in addition to Kevron aerial photogrammetric surveys with +/- 5m resolution. Pre mining, new and more detailed topography has since been captured and will be used in future updates and for subsequent planning purposes.
Data spacing and	Data spacing for reporting of Exploration Results.	The nominal spacing for drilling is 20m x 40m and 40m x 40m
distribution	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.	Data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for JORC classifications applied.
Orientation of data in relation to geological structure	Whether sample compositing has been applied.	Sample compositing is not applied until the estimation stage. Some historic RAB and RC sampling was composited into 3-4m samples with areas of interest re-sampled to 1m intervals. It is unknown at what threshold this occurred.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The majority of drillholes are positioned to achieve optimum intersection angles to the ore zone as are practicable.

Section 1: Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary
	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.	No significant sampling bias has been recognised due to orientation of drilling in regards to mineralised structures.
Sample security	The measures taken to ensure sample security.	Samples are prepared on site under supervision of Saracen geological staff. Samples are selected, bagged into tied numbered calico bags then grouped into secured cages and collected by the laboratory personnel. Sample submissions are documented via laboratory tracking systems and assays are returned via email
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	An internal review of companywide sampling methodologies was conducted to create the current sampling and QAQC procedures. No external audits or reviews have been conducted.

Section 2: Reporting	ection 2: Reporting of Exploration Results		
Criteria	JORC Code Explanation	Commentary	
Mineral tenement and land tenure status	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. The security of the tenure held at the time of	The Deep South pit is located on M39/740. The tenement is held 100% by Saracen Gold Mines Pty Ltd, a wholly owned subsidiary of Saracen Mineral Holdings Limited. Mining Lease M39/740 has a 21 year life (held until 2024) and is renewable for a further 21 years on a continuing basis. Mining Lease M39/740 is subject to one royalty agreement, one caveat (151H/067) and a bank mortgage (415495). All production is subject to a Western Australian state government NSR royalty of 2.5%. Mining Lease M39/740 is subject to the Edjudina Pastoral Compensation Agreement. There are no registered Aboriginal Heritage sites within Mining Lease M39/740.	
	reporting along with any known impediments to obtaining a licence to operate in the area.		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Exploration in the vicinity of Deep South commenced in the 1980's with drilling around the historic Deep Well workings 500m north of Deep South, as well as regional RC drilling carried out by Western Mining Corporation. Initial auger sampling carried out over Deep South by Pancontinental Mining in 1994 failed to detect mineralisation due to the transported material overlying the deposit. Wide spaced east angled RAB drilling carried out by Goldfields in 1999 intersected mineralisation, but results were not repeated in further drilling and the project area was sold to Sons of Gwalia. Sons of Gwalia completed extensive RC and diamond drilling to define the Deep South resource, with mining operations undertaken in 2004 before their collapse and takeover by St Barbara.	
Geology	Deposit type, geological setting and style of mineralisation.	Deep South lies on the eastern margin of the Norseman – Wiluna greenstone belt. This belt is differentiated into numerous structural-stratigraphic domains separated by major regional structures, with	

Criteria	JORC Code Explanation	Commentary
Drillhole 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. 	Deep South located within the narrow NNW trending Linden Domain. The lithology comprises metasedimentary and felsic volcaniclastic rocks with an ultramafic and high magnesium basalt layer. Mineralisation occurs in two loads concordant to geology, the Butler and Scarlett lodes, and is confined between layered metasedimentary and felsic volcaniclastic units on both the hangingwall and footwall. The two lodes are separated by a high magnesium basalt and an ultramafic unit. The Butler lode is located in the hangingwall and is strongly silica and pyrrhotite-pyrite altered, and well laminated (appearing like a BIF within the oxidise portion). The contrasting physical properties of this unit to the surrounding unit have created fluid pathways and traps, as well as the high iron content of the uni providing a chemical trap, for gold deposition The Scarlett lode is strongly weathered in the upper oxide portion to a gossanous material comprising hematite, goethite and quartz fragments. Weathering at Deep South has been preferential along Scarlett lode due to its high carbonate content. Where fresh, the lode is a fine grained banded carbonate unit witl variable pyrrhotite, pyrite and magnetite. It is weakly foliated in line with the regional foliation. All material data is periodically released on the ASX: 23/07/2013, 10/10/2012, 31/07/2012, 03/06/2011, 29/07/2010 Future drill hole data will be periodically released or when a results materially change the economic value of the project. Exclusion of the drilling information will not detract from the reader's view of the report.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All significant intercepts have been length weighted with a minimum Au grade of 1ppm. No high grade cu off has been applied.
	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.	Intercepts are aggregated with minimum width of 1m and maximum width of 3m for internal dilution. Where stand out higher grade zone exist with in the broader mineralised zone, the higher grade interval is reported also.

Criteria	JORC Code Explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	There are no metal equivalents reported in this release.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Previous announcement included sufficient detail to clearly illustrate the geometry of the mineralisation and the recent drilling. All results are reported as downhole lengths. This remains consistent with other announcements.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	All significant exploration results released by Saracen are accompanied by the appropriate diagrams and maps at the time of the release.
Balanced Reporting	Where comprehensive reporting of all Exploration Results are not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results from the recent campaign have been reported, irrespective of success or not.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	A small geochemical program was undertaken in 2013 to determine the key features associated with mineralisation. The program gave some insight into the local characteristics of the Scarlett and Butler lodes. More work is needed to fully appreciate the geochemical signature associated with the mineralisation. A detailed gravity survey was recently completed at Deep South on a 400m x 100m grid to assist in the interpretation of the basement geology. The data is currently being processed and interpreted.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	The initial results from the biogeochemical sampling were encouraging and further expansion of the survey area is currently being planned. Currently there are no immediate plans for drilling at Deep South. The most recent drill program carried out in 2013 was suspended until further work had been completed on the underground feasibility.

Thunderbox 2012 JORC Table 1

Section 1: Sampling	Section 1: Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary	
Sampling Techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Sampling methods undertaken by Saracen at Thunderbox include diamond drilling (DD) and reverse circulation (RC) drilling. Sampling methods undertaken by previous owners have included rotary air blast (RAB), DD and RC drilling and blast hole sampling within the pit. Limited historical data has been provided by previous owners.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Sampling for diamond and RC drilling is carried out as specified within Saracen sampling and QAQC procedures as per industry standard. RC chips and diamond core provide high quality representative samples for analysis Historic RC, RAB, and DD core drilling is assumed to have been completed by previous holders to industry standard at that time (1999- 2007).	
	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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	RC chips are cone split and sampled into 4m or 1m intervals with total sample weights under 3kg Diamond core is NQ or HQ sized, sampled to 1m intervals or geological boundaries where necessary and cut into half core to give sample weights under 3 kg. Samples are selected to weigh less than 3 kg to ensure total sample inclusion at the pulverisation stage. Saracen core and chip samples are crushed, dried and pulverised to a nominal 90% passing 75µm to produce a 40g sub sample for analysis by FA/AAS. All historic RAB, RC and DD and sampling is assumed to have been carried out to industry standard at that time. RC grade control drilling was used to obtain 1m samples or 2m composite samples from which 3 kg was pulverised to create a 50g charge for fire assay, while blast hole samples were composited into 2.5m before a 3kg sample was obtained for pulverising to a final 50g charge for fire assay.	
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	The deposit was initially sampled by 470 RAB holes. Further drilling included 306 RC holes (assumed standard 5 ¼ 'bit size), 216 HQ, NQ and PQ diamond drillholes, approximately 15,400 blast holes and 2,400 RC grade control holes. Some diamond drilling carried out for geotechnical studies was oriented (the method is unknown), it is unknown if other core was oriented. Saracen completed 21RC drillholes, 8 diamond geotechnical holes, 17 RC precollar diamond tail drillholes (precollars averaging 277m, diamond tails averaging 200m) and 689 RC grade control holes. The RC	

Criteria	JORC Code Explanation	Commentary
		drilling was completed with a 5.5 inch diameter bit with a face sampling hammer. The rig was equipped with an external auxiliary booster. Diamond drilling was HQ or NQ diameter. Drill core was oriented utilising an ACT II core orientation tool.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Recoveries for RC drillholes and precollars are recorded as a percentage based on a visual weight estimate. Recoveries for some grade control drilling and blast hole sampling have been recorded based on a visual weight estimate. No other recoveries have been provided, it is unknown if they were recorded
	Measures taken to maximise sample recovery andensure representative nature of the samples	During RC drilling daily rig inspections are carried out to check splitter condition, general site and address general issues. Measures were taken to supress groundwater. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against depth given on the core blocks. Historical drilling is assumed completed to industry standard at that time
	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.	There is no known relationship between sample recovery and grade for RC drilling. Diamond drilling has high recoveries meaning loss of material is minimal. Any historical relationship is not known.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of RC chips and diamond drill core records lithology, mineralogy, texture, mineralisation, weathering, alteration and veining. Geotechnical and structural logging is carried out on all diamond holes to record recovery, RQD, defect number, type, fill material, shape and roughness and alpha and beta angles. Chips from all RC holes are stored in chip trays for future reference while remaining core is stored in core trays and archived on site. Core is photographed in both dry and wet state. Qualitative and quantitative logging of historic data varies in its completeness.
	The total length and percentage of the relevant intersections logged	All drillholes completed by Saracen have been logged in full.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All drill core is cut in half onsite using an automatic core saw. Duplicate core samples are quarter cored. Samples are always collected from the same side.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	All exploration RC samples are cone split. Occasional wet samples are encountered. The sampling method for historic RAB and RC drilling is unknown. Grade control RC drilling has been cone split while blast hole sampling has been riffle split. Wet drilling was rarely encountered, and extra care was taken to clean the splitter after encountering wet samples. Drillholes in puggy, wet clays were abandoned and redrilled once dewatering of the pit had commenced. Care was taken to adjust the splitter orifice for grade control drilling to ensure the sample weight did not exceed 3kg, meaning no subsampling was needed at the preparation stage.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of diamond core and RC chips adhere to industry best practice. It is conducted to a commercial laboratory and involves oven drying, coarse crushing then total grinding to a size of 90% passing 75 microns. The sampling techniques for historic exploration RAB, RC and DD drilling are unknown, best practice is assumed. The sample preparation of RC grade control drilling and blast hole sampling involved oven drying, coarse crushing and total grinding in an LM5.

Criteria	JORC Code Explanation	Commentary
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial laboratory and are considered to be satisfactory. Best practice is assumed at the time of historic RAB, DD and RC sampling. Procedures adopted to ensure sample representivity for RC grade control and blast hole sampling included weight analysis to determine split ratio (at least 2 holes per program) and sizing analysis of every 25 th sample, with an expected return of 90% passing 75um.
	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.	RC field duplicate samples are carried out at a rate of 1:20 and are sampled directly from the on-board splitter on the rig. These are submitted for the same assay process as the original samples and the laboratory are unaware of such submissions. It is unknown if duplicate sampling was performed on historic exploration RAB, RC and DD drilling. Field duplicates were carried out on RC grade control drilling at a rate of one per hole, collected from the second sample port on the cone splitter. Duplicates were carried out at a rate of 1 in 20 for blast hole sampling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Analysis of data determined sample sizes were considered to be appropriate.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	RC chip samples and diamond core are analysed by an external laboratory using a 40g fire assay with AAS finish. This method is considered suitable for determining gold concentrations in rock and is a total digest method. A 50 gram fire assay with AAS finish was used to determine the gold concentration for all grade control samples. This method is considered suitable for determining gold concentrations in rock and is a total digest method. Methods for exploration RC, RAB and DD drilling included fire assay with AAS finish, BAAS and unknown methods.
	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.	The clay mineralogy of the deposit was investigated using PIMA (Portable Infra-red Microscopic Analyser) analysis to assist with geological interpretation. This data was not used in the estimation process.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified reference material (standards and blanks) with a wide range of values are inserted into every drillhole at a rate of 1:25 for exploration RC and DD. These are not identifiable to the laboratory. QAQC data returned are checked against pass/fail limits with the SQL database and are passed or failed on import. A report is generated and reviewed by the geologist as necessary upon failure to determine further action. QAQC data is reported monthly. Sample preparation checks for fineness are carried out to ensure a grindsize of 90% passing 75 microns.
		The laboratory performs a number of internal processes including standards, blanks, repeats and checks. QAQC data analysis demonstrates sufficient accuracy and precision. Industry best practice is assumed for previous holders.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intercepts are verified by the Geology Manager and corporate personnel
	The use of twinned holes.	A number of exploration RC holes were drilled to twin original RAB holes and verify results.

Criteria	JORC Code Explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols	Primary data is collated in a set of excel templates utilising lookup codes. This data is forwarded to the Database Administrator for entry into a secure acQuire database with inbuilt validation functions. Data from previous owners was taken from a database compilation and validated as much as practicable before entry into the Saracen acQuire database
	Discuss any adjustment to assay data.	No adjustments have been made to assay data. First gold assay is utilised for resource estimation.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Exploration drillholes are located using a Leica 1200 GPS with an accuracy of +/- 10mm. Downhole surveys are carried out using a hired Reflex EZ-gyro by the respective drilling companies on a regular basis, between 10-30m.
	Specification of the grid system used.	MGA Zone 51 grid coordinate system is used
	Quality and adequacy of topographic control.	Kevron Geomatic Services flew and processed aerial photography and provided ortho images at 1:5000 scale over the Thunderbox deposit and environs.
Data spacing and	Data spacing for reporting of Exploration Results.	The nominal spacing for drilling is varied from 20mx20m to 40mx40m
distribution	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.	The drilling is distributed and spaced such that geological and grade continuity can be established to estimate the mineral resource and ore reserve appropriately. The mineralisation is continuous over a 2km strike length, therefore the 80m x 80m exploration drill spacing effectively defines the continuity.
Orientation of data in relation to geological structure	Whether sample compositing has been applied.	RC precollar sampling was composted into 4m samples. Historic RAB drilling was sampled with 4m composite samples. Grade control RC drilling was carried out on 2m composite samples, while blast hole sampling was carried out on 2.5m composites.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The bulk of the drilling has been oriented to the east in order to provide the best intersection angles possible for the steeply west dipping orebody.
	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.	All drilling from surface has been drilled as close to perpendicular as possible. This has reduced the risk of introducing a sampling bias as far as possible.
Sample security	The measures taken to ensure sample security.	Samples are prepared on site under supervision of Saracen geological staff. Samples are selected, bagged into tied numbered calico bags then grouped into secured cages and collected by the laboratory personnel. Sample submissions are documented via laboratory tracking systems and assays are returned via email
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	An internal review of companywide sampling methodologies was conducted to create the current sampling and QAQC procedures. No external audits or reviews have been conducted

Criteria	of Exploration Results JORC Code Explanation	Commontory
Mineral tenement and land tenure status	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. 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.	Commentary M36/504, M36/512 and M36/542 form part of the Thunderbox project and are in good standing. There are no native title claims over the Thunderbox deposit. A number of heritage surveys have been undertaken with Aboriginal groups with no sites of significance identified. In addition a detailed archaeological survey has been conducted with no sites of significance identified The tenements are in good standing and the license to operate already exists.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Extensive nickel exploration was undertaken in the area during the 1960s and 1970s. Grassroots gold and PGE exploration was undertaken during and since the 1980s by BHP, Dominion, Dalrymple Resources and Forrestania Gold. Thunderbox was discovered in 1999.
Geology	Deposit type, geological setting and style of mineralisation.	Thunderbox is a mesothermal lode gold deposit located at the southern end of the Yandal greenstone belt in an area where several major shear zones converge and join with the Perseverance Fault. The shear zone dips at 30° to 60° WSW, with the exception in the vicinity of the mineralisation, where the shear is vertical to steeply dipping. Mineralisation is hosted by strongly deformed, silicified and carbonate altered albite-quartz porphyry in the hangingwall of the shear zone. The shear juxtaposes foliated basalts and intrusive porphyries in the hangingwall against sedimentary rocks in the footwall. The zone of shearing is over 200m wide. An ultramafic unit occurs within the shear, in the footwall of the deposit and is attenuated along the shear. The main gold related hydrothermal alteration assemblage comprises quartz-ankerite-arsenopyrite- pyrrhotite-galena and gold. This assemblage has been overprinted by a retrograde chlorite-epidote-white mica-biotite-quartz and pyrite assemblage. Syn-mineralisation veins have a continuum of vein textures ranging from laminated to pseudo-breccias.
Drillhole 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. 	A total of 458 holes have been used in the mineral resource and are deemed to be material. It is not practical to summarise all of the holes here in this release. Exclusion of the drilling information will not detract from the reader's view of the report. All material data is periodically released on the ASX: 25/11/2015, 29/04/2015, 23/03/2015

Section 2: Reporting of Exploration Results		
Criteria	JORC Code Explanation	Commentary
Data aggregation	In reporting Exploration Results, weighting averaging	All significant intercepts have been length weighted with a minimum Au grade of 0.5ppm. No high grade
methods	techniques, maximum and/or minimum grade	cut off has been applied.
	truncations (e.g. cutting of high grades) and cut-off	
	grades are usually Material and should be stated.	
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade	Intercepts are aggregated with minimum width of 1m and maximum width of 3m for internal dilution.
	results, the procedure used for such aggregation	
	should be stated and some typical examples of such	
	aggregations should be shown in detail.	
	The assumptions used for any reporting of metal	There are no metal equivalents reported in this release.
	equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the	This announcement includes sufficient detail to clearly illustrate the geometry of the mineralisation and
mineralisation widths and	reporting of Exploration Results.	the recent drilling. All results are reported as downhole lengths.
intercept lengths	If the geometry of the mineralisation with respect to	The geometry of the mineralisation is well known and true thickness can be calculated.
	the drill hole angle is known, its nature should be	
	reported.	Drilling intersects the mineralisation perpendicular and at an average intersection angle of 45 degrees.
	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').	
Diagrams	Appropriate maps and sections (with scales) and	Included in this release is an appropriately orientated longsection of the mineralisation, illustrating the
	tabulations of intercepts should be included for any	centroids of the intercept point projected to a plane.
	significant discovery being reported These should	Tradudad alas is this valuese and successfield views of the university which was identified the views
	include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Included also in this release are cross section views of the mineralisation which provides the visual perspective of the typical drilling angle.
Balanced Reporting	Where comprehensive reporting of all Exploration	All results from the recent campaign have been reported, irrespective of success or not.
balanced Reporting	Results are not practicable, representative reporting	
	of both low and high grades and/or widths should be	
	practiced to avoid misleading reporting of Exploration	
	Results.	
Other substantive	Other exploration data, if meaningful and material,	Historic activities have included drilling to obtain samples for metallurgical test work, bulk density analyses
exploration data	should be reported including (but not limited to):	and geotechnical analyses.
	geological observations; geophysical survey results;	A number of geophysical surveys including dipole-dipole IP, Gradient array IP and TEM were carried out
	geochemical survey results; bulk samples – size and	over known mineralisation to determine effectiveness in delineating mineralisation/alteration. None were
	method of treatment; metallurgical test results; bulk	deemed effective.
	density, groundwater, geotechnical and rock	An environmental survey investigated the erosional characteristics of the soil, surface hydrology and
	characteristics; potential deleterious or contaminating	groundwater and identified no issues.
	substances.	A partial leach soil sampling program carried out over the deposit was deemed effective in identifying
		anomalous gold values associated with the deposit.
		A detailed structural review of the mineralisation has been conducted by Model Earth

Section 2: Reporting of Exploration Results		
Criteria	JORC Code Explanation	Commentary
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Saracen is currently working on establishing exploration opportunities which will extend the known mineralisation at depth. This will primarily focus on understanding the key geological relationships and critical continuity directions to target depth extensions.

Butchers Well 2012 JORC Table 1 (Source: AngloGold Ashanti News Release 13th July 2017)

Criteria	Commentary
Sampling techniques	AGA has undertaken all sampling at the Butcher Well project since commencement of the Farm-in-Agreement with Saracen Mineral Holdings. Sampling has comprised reverse circulation drilling (RC), diamond drilling (DD) and rock-chips. Drilling sub-samples of 1 m or less were analysed for gold via 25 g fire assay. Rock chip samples were analysed for gold via 25 g fire assay. All samples were also analysed for a multielement suite.
Drilling techniques	All drilling was from surface, commencing with an RC precollar of 140 mm or 143 mm diameter to fresh rock (between 30-100 m), and thereon by HQ size diamond tails. Holes were collared at a dip of between -55° & -67° at an orientation considered optimal to intersect mineralisation as close to perpendicular as possible.
	Drill hole surveys for both RC and DD holes were carried out using the Reflex Ezy-Shot tool at 30 m intervals. Selected holes were also surveyed using an open-hole gyro. The drill core was oriented using the Reflex Ace Core Tool.
	RC holes were sampled using a face-sampling hammer and were collected via a cyclone, dust-suppression system and cone splitter. The cone splitter was levelled before commencement of each hole.
	HQ core was chosen to limit deviation and to provide enough volume for metallurgical test work on quarter-core. Diamond drill core was drilled in 3 m runs and placed in plastic core trays for processing and sub-sampling.

Criteria	Commentary
	All drill core was oriented as best as possible by reassembling the core between runs, and marked with a bottom-of-hole orientation line. A cut-line was then added 60° to the left hand side of the orientation line.
Drill sample recovery	Initially, RC and sample recovery was based on visual estimates. Mid-way through the drilling program recovery was quantified on 1 m interval every 25 m by recording the weights of lab sample, archive sample and reject. These weights were combined and then compared to a theoretical recovery of the interval based on the regolith and rock type of the interval being assessed. RC recovery was generally good.
	Diamond core recovery including core-loss was measured and recorded across core runs during the core mark-up process. Core was reassembled for mark-up and was measured with metre marks and down-hole depths placed on the core. Depths were checked against driller's core blocks and any discrepancies corrected after discussion with drillers. Diamond recovery was generally very good.
	At this stage in the project, there is no obvious relationship between recovery and grade, nor any indications of sample bias owing to misrepresentation of drilled material.
Logging	Logging was completed on the total length of all holes using standard logging digital data entry software and the AGA logging system, and was both qualitative and semi-quantitative. Data recorded for all RC chips and DD included lithology, regolith, alteration, veining, magnetic susceptibility, deformation, and colour.
	Additionally all drill core underwent geotechnical (RQD, rock strength and defect characterisation) and structural logging, specific gravity determination, and was photographed with the orientation line and cut line on top.
	The logging detail is comprehensive and sufficient for future Mineral Resource estimation.
Sub-sampling techniques and sample preparation	Both RC and DD holes were sampled in entirety at a maximum interval of 1 m, considered an appropriate resolution for future Mineral Resource estimation of orogenic gold deposits.
	During RC drilling, a lab sample and archive sample, each weighing about 3 kg, were taken at each 1 m interval using a cone splitter. Most samples were dry, with RC drilling stopped if samples became inundated with groundwater.
	Lab samples were dispatched for analysis. Archive samples were stored onsite for future reference and check work, or selected as field duplicates within expected mineralised zones (approximately one duplicate per 5 m) and submitted for analysis.
	HQ drill core was cut in half using an automated saw along the cut line. The half with the orientation line was retained in the core tray for check work or further analysis (by quarter core), whereas the other half was divided into 1m samples, or narrower niche

Criteria	Commentary
	samples based on geological observations. Crush duplicates of intervals selected by geologists within expected mineralised zones (approximately 1 duplicate per 5 m) were prepared at the lab.
	Unmarked blanks (unmineralised basalt) were inserted at the beginning of RC precollars and DD tails, and also in selected mineralised intervals. Certified gold standards were inserted at rate of approximately one in 20 samples before dispatch for assay.
	All lab samples, blanks and standards were placed into pre-numbered calico bags. Sample numbers and additional metadata were digitally captured in the logging platform.
Quality of assay data and laboratory tests	All samples were analysed at Intertek-Genalysis Laboratory Services in Perth. Samples were oven dried at 105°C and then crushed in a two-stage process to ~2 mm. Owing to a 3 kg upper limit requirement, overweight HQ half-core samples (up to 6 kg) were split at this stage to 3 kg sample with reject retained. Crush duplicates of pre-selected half-core intervals were also taken at this stage.
	Samples were then pulverised and to a nominal 85% passing 75 µm. Pulverised samples underwent near-infrared spectroscopy using the TerraSpec 4 Hi Res instrument.
	Gold, platinum and palladium were analysed by 25 g lead-collection fire assay with ICP-MS finish (Intertek-Genalysis method FA25/MS). Fire assay is considered a total extraction method for gold as industry standard.
	A suite of 46 additional elements, including gold-pathfinder elements, was determined via four-acid digest with ICP-MS detection (method 4A/MS937).
	Quartz washes were inserted between samples in some expected higher-grade mineralised zones to limit contamination between samples (on instruction by AGAA).
	QA/QC results were reviewed on a batch-by-batch and monthly basis. Any deviations from acceptable precision or indications of bias were acted on with repeat and check assays.
/erification of sampling and assaying	Assay data was received from the laboratory as digital files. Once QA/QC was verified by the database geologist, the data was imported into AGA's master database in Perth and merged with sample metadata. This SQL database was backed up daily.
	Significant gold intercepts were calculated by semi-automated scripts within the database. These intercepts were then qualitatively verified by geologist in comparison with logged geology.

Section 1: Sampling Techniques and Data		
Criteria	Commentary	
Location of data points	All proposed drillhole locations were pegged with RTK GPS. Once drilled, collar locations were surveyed with RTK GPS. The RTK GPS was referenced to existing survey control points within the historic mining area.	
Data spacing and distribution	Drill holes were planned by AGA to demonstrate continuity at depth of mineralised zones modelled principally below historic open pits; thus intersection spacing varies between 60-600 m along strike and 15-100 m across strike.	
	This drillhole spacing and distribution is not sufficient to establish geological and grade continuity for Mineral Resource estimation.	
	Data within each drillhole are sufficient resolution (assay interval 1 m or less) to be included in future Mineral Resource estimations. No compositing has been applied to the data.	
Orientation of data in relation to geological structure	The majority of drilling was orientated to intersect modelled mineralisation as close to normal as practically possible.	
Sample security	Samples were put into pre-numbered calico bags, and placed into large poly-weave bulka-bags for transport. Filled bulka-bags were secured on wooden crates and transported directly via road freight to the laboratory with a corresponding submission form and consignment note.	
	On receipt of the bulka-bags, Intertek-Genalysis checked the samples received against the submission form and notified AGAA of any missing or additional samples.	
	On completion of assays and check work, the pulp packets, pulp residues and coarse rejects were placed in storage at the laboratory's secure warehouse.	
	Routinely the pulp packets are returned to the AGAA warehouse on secure pallets where they are documented for long term storage and retrieval.	

QA/QC has been assessed on a daily, monthly and quarterly basis.

Audits or reviews

Section 2: Reporting of Exploration Results		
Criteria	Commentary	
Mineral tenement and land tenure status	AGA entered into a Farm-in-Agreement dated 17 October 2016 with Saracen Mineral Holdings, which solely holds the mineral tenements of the Butcher Well Project. There are no known heritage or environmental impediments over tenements. Tenure is secure at the time of reporting and no known impediments exist to obtain a licence to operate in the area.	
Exploration done by other parties	AGAA has carried out all the drilling and surface sampling at the Butcher Well project since the inception of the Farm-In- Agreement. All previous exploration data pursuant to the project is recorded in public access WAMEX reports.	
Geology	The host rocks to mineralisation at Butcher Well are basalt, syenite and sedimentary rocks of greenstone affiliation typical of the Eastern Goldfields of Western Australia.	
Drill hole Information	 Information purporting to drillhole tables included into this report includes: Easting and northing in metres MGA51 (GDA94) RL (Reduced Level elevation above sea level) in metres Dip in degrees from horizontal (negative is down) Azimuth in degrees from grid north MGA51 (GDA94) Downhole length in metres Intercepts reportable to the 2 m @ 4.0 g/t Au scheme Intercept from depth downhole in metres Intercept width in metres (downhole length, not true width) 	
Data aggregation methods	Intercepts were calculated using length-weighting above a 4.0 g/t Au cut-off with a minimum downhole length of 2 m and maximum of 2 m of internal dilution. No top-cuts have been applied.	
Relationship between mineralisation widths and intercept lengths	Intercept lengths reported are downhole lengths, true widths are unknown.	
Diagrams	A plan view of the drilling at Butcher Well is provided. Two cross sections (50 m slices) parallel to the preferred drilling azimuth (77° or 257°) looking northward are presented across the Hronsky and Enigmatic pits (A-A'), and southern end of the Enigmatic Pit (B-B'). Section A-A' includes holes oriented normal to the cross section and considered highly oblique to mineralisation.	
Balanced reporting	All intercepts provided report to the 2 m @ 4.0 g/t Au scheme. This was chosen to be the most appropriate metric for the depth, width and tenor of the results, favouring an underground mining scenario.	
Other substantive exploration data	Rock chips were taken within the historical pits. Grades are consistent with historical reporting of drill assays within the oxide zone.	
Further work	Follow up drilling is planned in the coming quarters to prove the continuity of the higher-grade mineralised zones, and to extend mineralisation at depth.	