SARACEN MINERAL HOLDINGS LIMITED

ACN: 009 215 347

Carosue Dam set for long life as Karari Resource grows 38% to 873,000oz

Further increases expected on back of imminent new drilling platforms

Key Points

- Resources at Carosue Dam's Karari deposit increase by 240,000oz to **873,000oz @ 2.8g/t**
- Reserves increase by 114,447oz to **212,447oz @ 3.0g/t**
- The new Resource and Reserve estimates represent **38% and 117% increases respectively**, relative to 30 June 2015 (after mining depletion of 30,708oz)
- The increases come on the back of strong drilling results, including:
  - **12.0m @ 5.1g/t**
  - **10.7m @ 4.8g/t**
  - **10.0m @ 7.2g/t**
  - **8.0m @ 7.4g/t**
  - **20.0m @ 5.4g/t**
- **83%** of the five-year production outlook now in Reserves, up from 75%
- Karari extended approximately 100m down dip with an intersection of **12.0m @ 5.1g/t** from 557m, highlighting strong potential for further Resource/Reserve growth
- New drill platforms about to be developed; these are aimed at further extending mine life well beyond the current Carosue Dam five-year plan (FY16-20)
- **$2.9m** of planned capital development (drill platforms) will facilitate an additional **$4.5m** of extensional drilling in FY17

Saracen Mineral Holdings **(ASX: SAR)** is pleased to advise that its strategy to grow the mine life at its Carosue Dam project in WA is delivering outstanding results, with a substantial increase in Resources and Reserves at the Karari underground mine.

Karari's Resources have increased by 38 per cent to 873,000oz and Reserves have grown by 117 per cent to 212,447oz. Both numbers are after mining depletion since 1 July 2015.

The increases mean that Carosue Dam's forecast production for the five years to June 30, 2020 is now 85 per cent covered by Reserves. In addition, Karari now has Indicated Resources of 630,000oz, highlighting the potential for further significant increases in mine life.

The latest drilling has also extended the known mineralisation at Karari a further 100m down dip.

Corporate Details:

13th April 2016

***ASX code*:** SAR

Corporate Structure:

Ordinary shares on issue: 792.8m

Unvested employee performance rights: 20.2m

Market Capitalisation: A$896m
(share price A$1.13)

Cash & Bullion (31 March): A$34.3m

Debt: Nil

Directors:

Mr Geoff Clifford
Non-Executive Chairman

Mr Raleigh Finlayson
Managing Director

Mr Mark Connelly
Non-Executive

Mr Martin Reed
Non-Executive

Ms Samantha Tough
Non-Executive

***Substantial Shareholders*:**

Wroxby 8.2%

Paradice Investment Management 7.9%

Karara Capital 6.2%

Van Eck 6.1%

***Group Resources and Reserves*:**

Resources 7.6Moz (30 June 2015)

Reserves 1.5Moz (30 June 2015)

***Registered Office*:**

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Karari Drilling Update

The $1.8m drill program approved in November 2015 has now been completed.

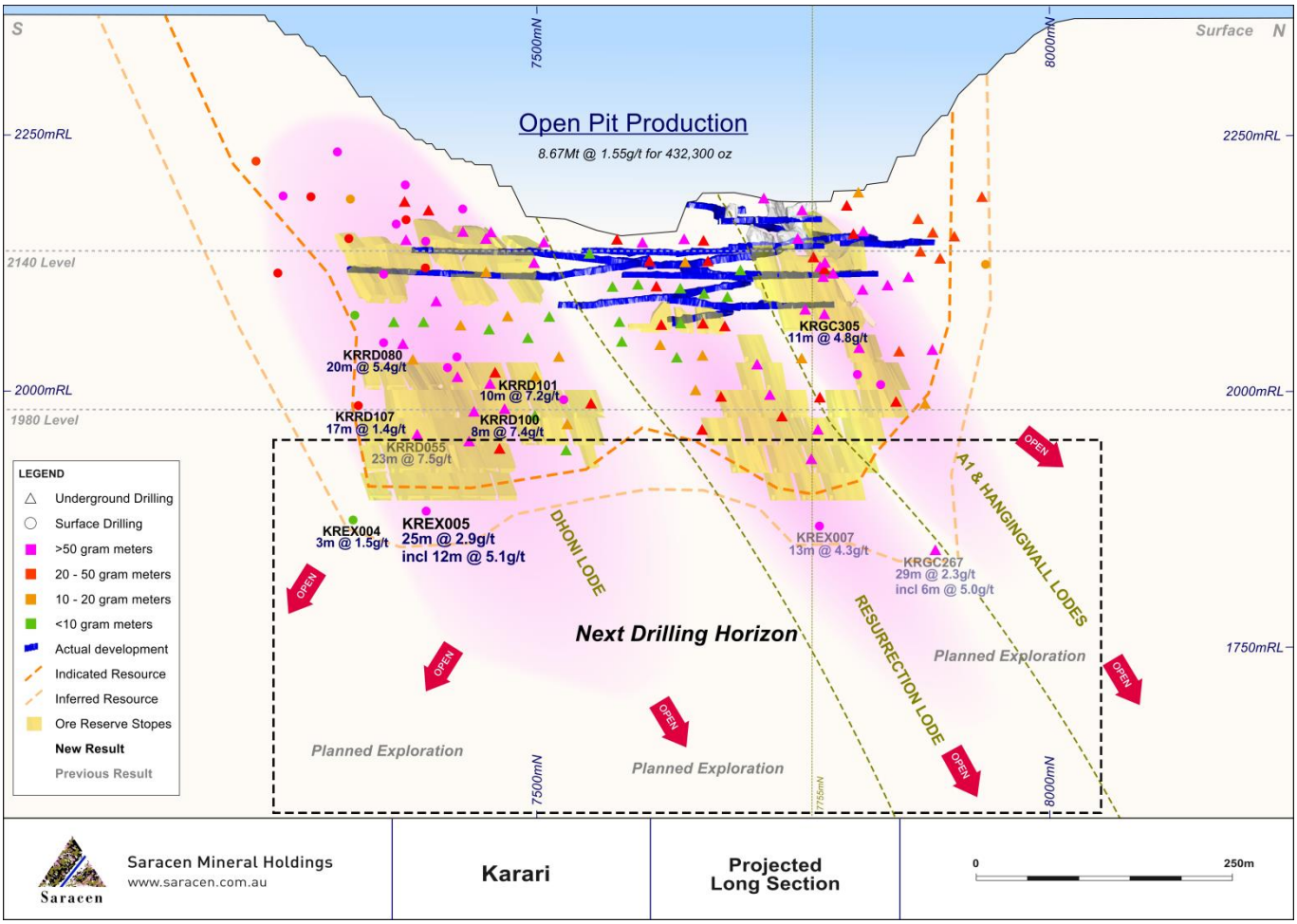
The program was predominately aimed at in-filling the Inferred areas of the Mineral Resource with a small proportion testing extensional opportunities. The program has been highly successful with large areas of the Inferred Resources converted into Indicated Resources and Ore Reserves.

The Dhoni Lode continues to impress with solid widths and grades (Figure 1) including:

- **10m @ 7.2g/t**
- **8m @ 7.4g/t**

The lode has also been extended at depth by another 100m. Extensional exploration hole KREX005 returned 25m @ 2.9g/t including **12m @ 5.1g/t** down dip from the previously reported 23m @ 7.5g/t.

Figure 1 – Drilling results at Karari (Long Section)



Karari Mineral Resource Upgrade

The drilling at Karari over the past three months has enabled a Mineral Resource update which includes all results to date.

The Mineral Resource has grown at depth to **9.8Mt @ 2.8g/t for 873,000 ounces** (30 June 2015: 7.2Mt @ 2.7g/t for 633,000 ounces). This represents an increase of **38% (+240koz**).

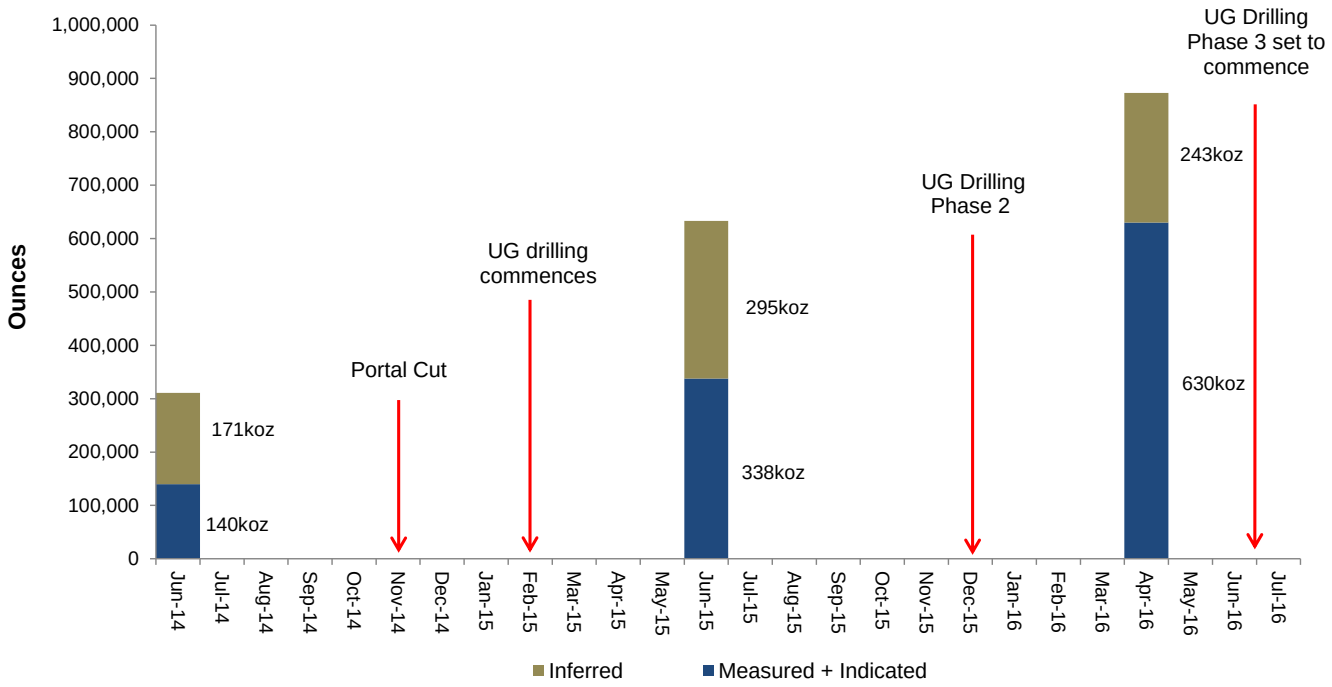
Table 1 – Karari Mineral Resource as at April 2016

Karari	Measured			Indicated			Inferred			Total		
	tonnes	g/t	oz	tonnes	g/t	oz	tonnes	g/t	oz	tonnes	g/t	oz
Karari O/P	-	-	-	136,000	1.2	5,000	191,000	1.5	9,000	327,000	1.3	14,000
Karari U/G	-	-	-	7,404,000	2.6	625,000	2,105,000	3.5	234,000	9,509,000	2.8	859,000
Karari -Total	***-***	***-***	***-***	***7,540,000***	***2.6***	***630,000***	***2,296,000***	***3.3***	***243,000***	***9,836,000***	***2.8***	***873,000***

Importantly, the drill program has converted a significant proportion from Inferred Resource to Indicated Resources resulting in an Indicated Resource of **7.5Mt @ 2.6g/t for 630,000 ounces** (30 June 2015: 4.4Mt @ 2.4g/t for 336,000 ounces). This is an increase of **87% (+294koz)**.

Since the commencement of the Karari underground mine in November 2014 (portal cut 16 months ago), the total Mineral Resource has grown by **180%,** with the Indicated resource increasing by **350% (+490koz)**.

Figure 2 – Mineral Resource growth timeline at Karari



Karari Ore Reserve Upgrade

The drilling has also enabled an increase in Ore Reserves.

The Ore Reserve has grown to 2.2Mt @ 3.0g/t for 212,447 ounces (30 June 2015: 1.0Mt @ 3.0g/t for 98,000 ounces). This represents an increase of 117% (+114koz) after mining depletion of 340kt @ 2.8g/t for 30,708 ounces.

Table 2 – Karari Ore Reserve as at April 2016

Deposit	Mine Type	Proved Reserves			Probable Reserves			Total Ore Reserves		
		tonnes	g/t	oz	tonnes	g/t	oz	tonnes	g/t	oz
Karari	UG	-	-	-	2,213,014	3.0	212,447	**2,213,014**	**3.0**	**212,447**

83% of the five-year production outlook is now in Reserves, up from 75%.

Karari Drill Plan FY2017

To improve visibility beyond FY20, two additional drill drives will be committed to further extend and define the Karari Resource.

FY17 will see the execution of an extensive drill program ($4.5m) from the new platforms (Figure 3 and 4), the first of which will become available in the September Quarter 2016.

The investment in this capital development ($2.9m) will allow the resource to be tested some 300m down dip below the base of the current Inferred Resource.

Figure 3 – Plan view of planned drill drive positions

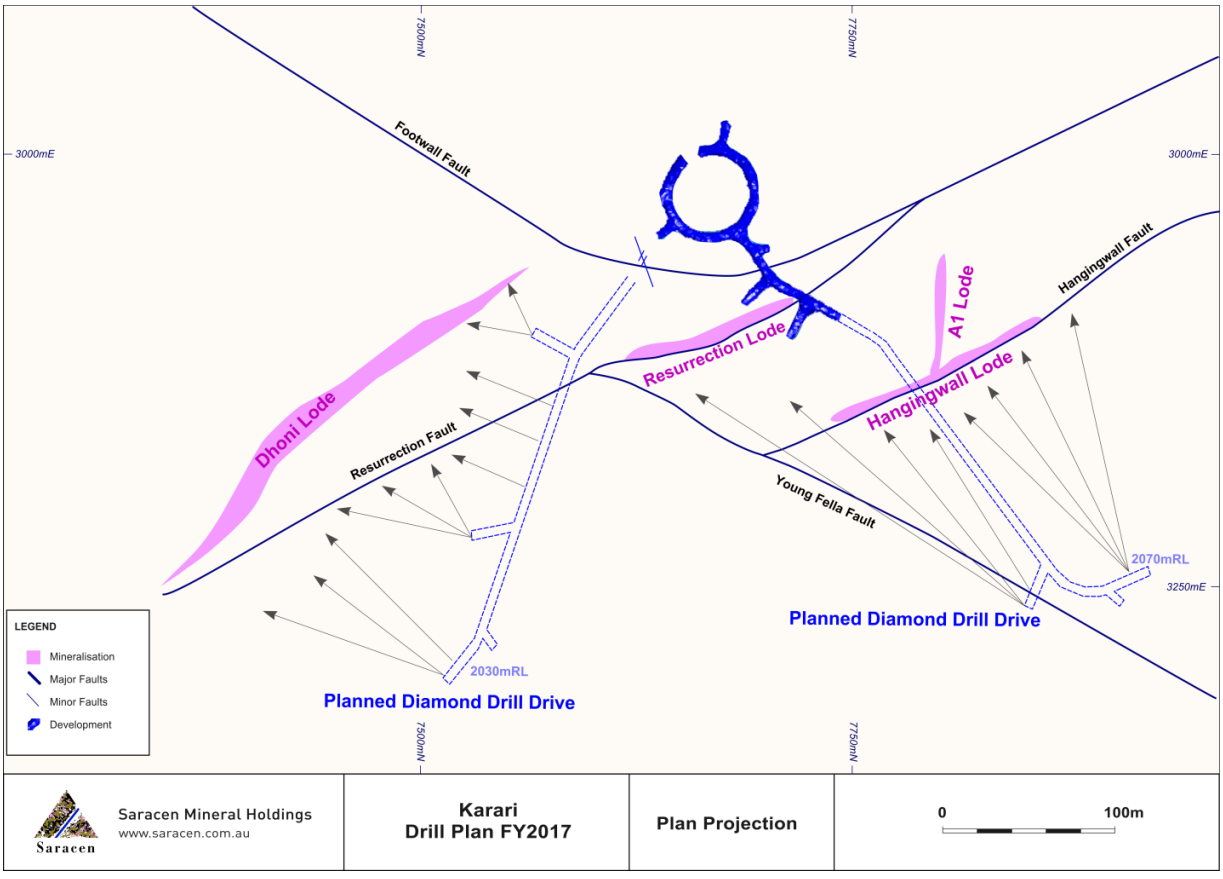
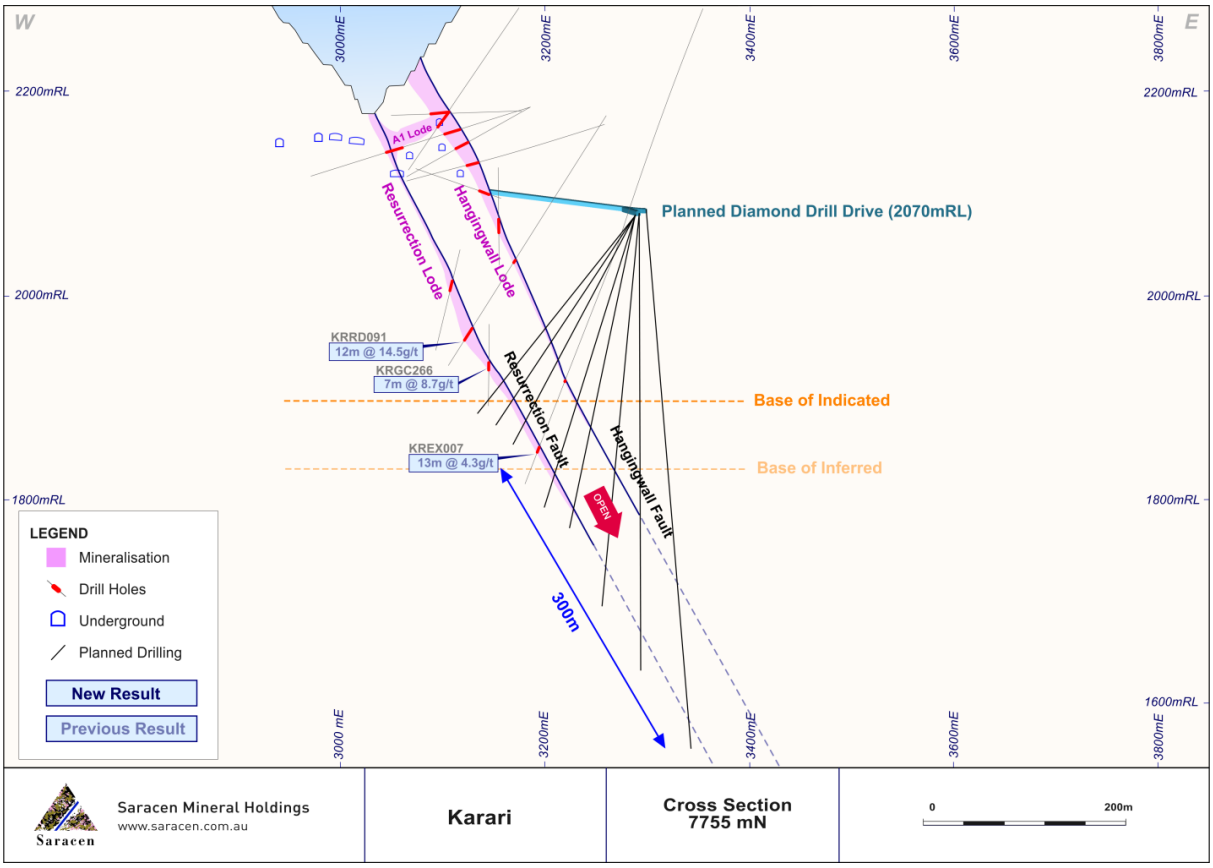


Figure 4 – Cross Section illustrating the planned drill drive and conceptual holes



Saracen's Managing Director Raleigh Finlayson said the growth at Karari underground towards 1Moz in just 16 months was testament to the quality of the deposit and Saracen's project team.

"With multiple lodes and impressive grades, the latest drilling confirms we have a shallow, high-margin underground mine which will underwrite the future of Carosue Dam for many more years," he said.

"Saracen's aggressive growth campaign continues with an additional $4.5m of extensional drilling planned for Karari alone in the next financial year."

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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.

The information in the report to which this statement is attached that relates to underground Ore Reserves at Red October, Deep South, Karari and Whirling Dervish is based upon information compiled by Stephen King, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Stephen King is a full-time employee of the company. Stephen King 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'. Stephen King consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

Summary of Drilling Results – Karari

KARARI DRILLING APRIL 2016										Downhole	
Hole	Easting	Northing	RL	Depth	Azimuth	Dip		From (m)	To (m)	Width (m)	Grade g/t
KREX004	438944.269	6663216.136	358.623	570.5	248	-65.62		**540.00**	**543.00**	**3.00**	**1.49**
KREX005	438944.916	6663269.852	358.356	672	255	-65.385		**546.00**	**571.00**	**25.00**	**2.89**
							incl	**557.00**	**569.00**	**12.00**	**5.08**
KREX009	438673.456	6663767.554	357.933	495	240.1	-65.23		451.00	452.00	1.00	2.70
KRGC300	438632.066	6663469.051	172.9	213	251.5	-22.4		193.00	194.00	1.00	2.76
							and	197.00	198.00	1.00	2.93
KRGC301	438628.41	6663498.727	171.394	212.9	251.7	-37.3		201.00	202.00	1.00	4.71
KRGC302	438628.395	6663498.802	171.451	207	258	-36.5	no significant intercepts				
KRGC303	438626.993	6663512.098	171.654	225	263.1	-35.1		134.00	135.25	1.25	3.39
							and	200.40	206.00	5.60	3.59
KRGC304	438626.95	6663512.179	171.608	165	279.6	-40		144.00	147.00	3.00	4.12
KRGC305	438626.866	6663512.348	171.573	188.9	292.7	-33		**161.95**	**172.70**	**10.75**	**4.78**
KRGC306	438635.714	6663421.073	173.301	300.2	224.9	-14.2		267.00	268.00	1.00	3.40
							and	277.10	278.10	1.00	2.58
							and	284.00	285.00	1.00	2.73
							and	299.00	300.20	1.20	11.70
KRGC307	438635.746	6663421.01	173.054	300.2	222.6	-14		269.00	272.00	3.00	3.80
KRGC308	438635.746	6663421.151	173.159	303.2	218.2	-15.3		271.20	274.90	3.70	3.16
KRGC309	438635.817	6663420.951	173.129	276	228.9	-22.7		257.00	265.00	8.00	3.10
KRGC310	438635.812	6663421.015	173.461	296.9	225.3	-19.1		266.00	269.00	3.00	4.61
KRGC311	438512.391	6663498.841	118.615	96.8	239	-20.3	no significant intercepts				
KRGC312	438512.561	6663498.646	118.561	99.4	219.1	-19.9		54.00	57.10	3.10	4.15
							and	77.00	78.00	1.00	2.84
							and	81.30	83.05	1.75	7.44
							and	85.00	86.00	1.00	5.08
KRRD078	438729.296	6663197.925	360.03	400	240.5	-60.47		333.00	335.00	2.00	3.85
KRRD080	438777.714	6663224.305	359.75	450	238	-60.089		**366.00**	**386.00**	**20.00**	**5.37**
KRRD082	438828.742	6663247.93	359.112	500	234.8	-64.85		451.00	452.00	1.00	4.49
KRRD100	438636.733	6663420.964	172.816	414	202	-44.5		**267.70**	**275.25**	**7.55**	**7.43**
KRRD101	438636.803	6663420.909	172.959	299.9	206	-36.8		**265.00**	**275.00**	**10.00**	**7.20**
							and	282.30	283.30	1.00	2.70
KRRD105	438637.324	6663420.82	172.879	346.8	203.4	-23.6		268.00	269.13	1.13	5.75
KRRD106	438637.455	6663420.747	172.627	359.8	189.6	-31.6		281.00	283.10	2.10	7.23
KRRD107	438851.689	6663218.111	359.301	519	236.4	-60.26		436.30	438.00	1.70	3.37
							and	451.00	453.00	2.00	3.25
KRRD108	438686.35	6663223.224	360.25	460.1	249.3	-60.37	no significant intercepts				
KRRD109	438734.43	6663163.965	360.2	380	235	-60.15		300.00	301.00	1.00	5.25
KRRD110	438780.979	6663195.623	359.736	430.1	231	-61.245		342.00	343.37	1.37	5.96
KRRD111	438793.916	6663144.751	359.836	500	236.5	-59.635		321.00	323.00	2.00	8.98

JORC 2012 Table 1 Karari

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 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 problems. *Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information*	RC chips are cone or riffle split and sampled into 1m intervals, diamond core is NQ or HQ sized, sampled 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 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. Some grade control RC chips were analysed in the Saracen on site laboratory using a PAL (pulverise and 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. Analysis 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 ¼ ''bit size) and 25 surface unknown diameter diamond core holes. In the recent program 38 RC holes and 7 RC with Diamond tails were drilled using a 143mm diameter bit with a face sampling hammer, with NQ core to EOH. The rig was equipped with an external auxiliary booster. Saracen has previously completed 6 surface RC precollars with HQ and NQ diamond tail drill holes (precollars averaging 198m, diamond tails averaging 190m) , 43 RC holes from both surface and within the pit and 3052 grade control RC holes within the pit. 260 NQ diamond holes have been drilled underground. 395 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 estimate; 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	RC drilling daily rig inspections are carried out to check splitter condition, general site and address

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	ensure representative nature of the samples	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. 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 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 due to the competent nature of the ground 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. All faces are photographed and mapped. 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 intersections logged	All RC and diamond drillholes holes are logged in full and all faces are mapped. 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 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. 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 and grade control RC samples are cone or riffle split. Occasional wet samples are 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 appropriateness of the sample preparation technique.	The sample preparation of diamond core and RC and underground face chips adhere to industry best 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-sampling stages to maximise representivity of samples.	All subsampling activities are carried out by commercial 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. 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

Section 1: Sampling Techniques and Data		
Criteria	**JORC Code Explanation**	**Commentary**
	size of the material being sampled.	the material sampled.
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.*	Significant intercepts are verified by the Geology Manager and corporate personnel.
	The use of twinned holes.	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 survey point. 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.

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
		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. 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 distribution	*Data spacing for reporting of Exploration Results.*	The nominal spacing for drilling is 25m x 25m. The recent drilling has been completed on 40m spaced lines
	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. Underground diamond drilling is designed to intersect the orebody in the best possible orientation given the constraints of underground drill locations. 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 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 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 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	A*cknowledgment 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.* *If the exclusion of this information is justified on the basis that the information is not Material and this*	All material data is periodically released on the ASX: 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

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
	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 1ppm. 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 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.
	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.*	No Diagrams are referenced in this 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 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*	No substantive data acquisition has been completed in recent times.

Section 2: Reporting of Exploration Results		
Criteria	**JORC Code Explanation**	**Commentary**
	density, groundwater, geotechnical and rock 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*	Drilling is planned from two new drill drive positions to extend at depth.

Section 3: Estimation and Reporting of Mineral Resources		
Criteria	**JORC Code Explanation**	**Commentary**
Database Integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Saracen utilises AcQuire software on an SQL server database to securely store and manage all drillhole and sample information. Data integrity protocols are built into the system to ensure data validity and minimise errors are built into the data entry and import processes.
	Data validation procedures used.	Data that is captured in the field is entered into Excel templates which are checked on import into the database for errors. Assay jobs are dispatched electronically to the lab to minimise the chance of data entry errors. Assay results from the lab are received in CSV format and are checked for errors on import into the database. Data is regularly validated using the mining software. The data validation process is overseen by the Database Administrator.
Site Visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Person regularly visits site (monthly and more so when the geological work is more complex and demanding) to assess geological competency and ensure integrity across all geological disciplines.
	If no site visits have been undertaken indicate why this is the case.	
Geological Interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The resource categories assigned to the model directly reflect the confidence in the geological interpretation that is built using local, structural, mineral, and alteration geology obtained from mapping, logging, drill results and geophysics. Confidence in the interpretation improved with increased data density from close-spaced resource definition drilling, grade control drilling at 8m X 6m and in pit and underground mapping.
	Nature of the data used and any assumptions made.	The geological interpretation of Karari has considered all available geological information including local geology, structural deformation events, and its relationship to neighbouring mineralised deposits. Rock types, mineral, alteration and veining assemblages from diamond drill core and RC Chips were all used to help define the mineralised domains and regolith boundaries. Interpreted shears and faults obtained from in pit and underground mapping further constrained the domaining.
	The affect, if any, of alternative interpretations on Mineral Resource estimation.	The geological wireframes defining the mineralised zones are considered to be robust as they give a realistic representation of the mineralised structures. Alternative interpretations that were trialled earlier do not affect the current Mineral Resource Estimation.
	The use of geology in guiding and controlling the Mineral Resource estimation.	A combination of a hard and soft boundary approach was used during the Mineral Resource Estimation. They are constructed using all available geological information (as stated above) and terminate along known structures. Mineralisation styles, geological homogeneity, and grade distributions for each domain (used to

Section 3: Estimation and Reporting of Mineral Resources		
Criteria	**JORC Code Explanation**	**Commentary**
		highlight any potential for bimodal populations) are all assessed to ensure effective estimation of the domains. The geological domains were also used as estimation domains.
	The factors affecting continuity both of grade and geology.	Cross cutting structures (NE - SW trending) grouped with flatter westerly dipping structures and intrusive rock types largely affect mineralisation continuity both along strike and down dip. Grade continuity is related intense haematite, silica and sericite alteration and quartz breccia zones adjacent to shears and intrusive contacts.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Mineralisation at Karari has continuity over 900m along strike, 600m down dip and 250m across strike. High grade mineralisation is controlled by 60° East dipping shear zones. Mineralisation is hosted within extensive quartz vein breccia zones adjacent to the shears. The high grade mineralisation is associated with intense haematite, silica and sericite alteration that occurs predominantly where flatter cross-linking structures intersect with the steeper dipping shears.
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points.*	The mineralised ore domains were wireframed based on geological homogeneity, grade populations, mineralisation styles and orientation of grade continuity. The domain wireframes were used as hard boundaries during the estimation process. An unfolding process was carried out prior to variography and interpolation to remove the variable dip and strike typically associated with some of the mineralised domains. However in some the domains there subdomains were created using the categorical indicator approach in order to segregate the high and low grade populations. The high grade subdomains were estimated using a soft boundary while the low grade subdomains were estimated using a hard boundary. RAB, Aircore and grab samples were excluded from the estimation process due to the unreliability of the sample types. Grade control drilling within the previous pit stage was also excluded from the estimation process to remove bias of the 8m x 6m spaced drilling. Negative gold grades were replaced with a grade of 0.001 g/t and null gold grades were excluded from the estimation process. Drillhole assays were composited to 1m intervals with a minimum length of 0.3m that best conformed to the sample length of the majority of the RC data. High grades within each domain were identified and top cuts were applied where necessary. Variograms were produced to determine the directional influence of each sample during the estimation process. The Mineral Resource Estimate was interpolated using Ordinary Kriging in Micromine 2014.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	The Mineral Resource Estimation is checked against the previous block model estimations and reconciled production numbers.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding the recovery of by-products for this Mineral Resource Estimation.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for acid mine drainage characterisation).	No estimation of deleterious elements or non-grade variables is required
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The model has been created using a parent cell size of 2.5m (East- West) x 10m (North-South) x 5m (vertical) which was optimised using kriging neighbourhood analysis and chosen as the Parent cell size. Subcells have been used to a resolution of 1m x 2m x1m to ensure high resolution at ore boundaries. The search distances are at 1.5x drill spacing but are also adjusted according to the directional ranges calculated from the variograms, and the geological understanding of Au and geometry continuity for each domain. Search ellipsoids are set from 10m X 15m X 5m to 75m X 130m X 24m and are extended in later search passes with a decreased number of minimum samples.

Section 3: Estimation and Reporting of Mineral Resources		
Criteria	**JORC Code Explanation**	**Commentary**
	Any assumptions behind modelling of selective mining units.	No assumptions have been made regarding the modelling of selective mining units for this Mineral Resource Estimation.
	Any assumptions about correlation between variables.	No assumptions have been made regarding the correlation between variables for this Mineral Resource Estimation.
	Description of how the geological interpretation was used to control the resource estimates.	Mineralised domains were wireframed within the context of the known local and structural geology was supported by the geological mapping within the pit and the geology logging of drillholes. Correlations between rock type, texture, alteration, and gold mineralisation were investigated.
	Discussion of basis for using or not using grade cutting or capping.	Samples with extreme high grades that bias the mean grade and positively skew the grade population within each mineralised domains are top cut to reduce the influence high grade outliers. Log probability plots and the coefficient of variation statistic were used to determine top-cuts.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	A number of statistical and visual measures are used to validate the accuracy of the estimation. The mean grade of the block model is compared to the mean grade of composites by domain. These are then further investigated by appropriate northing, easting and bench intervals in the form of swathe plots. The volume variance between the wireframe domains and block model domains are assessed. Kriging efficiency, and slope results give an indication of the quality of the estimate. A visual inspection of the drillhole assay results are compared to the estimated block model in section.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The adopted cut-off grades for Mineral Resource Estimation reporting are determined by the current mining cut-off grades. Open pit resources reported at +0.5g/t and underground reported at 1.3g/t.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	It is assumed that planned dilution is factored into the process at the stage of ore block design. Unplanned dilution incorporates Mining Dilution capped at 10%, and Mining Recovery at 99.5%. Minimum mining widths for underground are considered and appropriate domaining is based around grade and thickness, likely to be mined if determined economic.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment process and parameters made when reporting*	The prediction of the metallurgical performance of the Karari deposit is based on the geological foundation consisting of a free milling ore body contained within metamorphosed volcaniclastic sediments. Metallurgical testwork carried out by independent consultancies has indicated that there is moderate to high gravity recovery, with total cyanide soluble recoveries reporting 93-97%. Historical performance at the Carosue Dam processing plant has evaluated the gold contained within the ore body to be approximately 92% recoverable.

Section 3: Estimation and Reporting of Mineral Resources		
Criteria	**JORC Code Explanation**	**Commentary**
	Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Waste rock characterisation has been conducted on the deposit with no environmental issues identified except dispersive oxidised material and waste dump construction plan in place to manage. Tailings from the deposit are stored in an appropriate licensed tailings facility and closure plan in place.
Bulk Density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	The bulk densities for Karari were determined via testing of representative intervals from diamond drillholes, regular sampling via grab samples from the pit development. The sample size is generally between 0.5 and 1.5kg and the method of calculation is the water displacement technique. Measurements have been recorded in the acquire database and extraction schemes pair this data with the major lithology code for statistical analysis.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Ore zones predominantly exist in transitional to fresh non porous material, so additional measures to reduce moisture intake during the water displacement method is unnecessary at this stage. Coating more friable oxides and sediments (to reduce moisture loss or moisture gain during the process) is considered on a deposit by deposit basis.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	An average mean of densities collected for each lithological type has been uniformly applied to the modelled geological units. This includes the primary fresh lithologies as well as the weathered oxide and transitional zones.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	Resource classifications were defined by a combination of data; drill hole spacing, estimation quality (search pass, Kriging Effeciency and Slope results), geological confidence and Au continuity of domains. Based on these factors hard boundaries were wireframed for measured, indicated and inferred material. Measured material exhibits high confidence defined by grade control drilling, with estimates in the first search and KE and Slope results >80%. Indicated material is defined by close spaced drilling, having good geological continuity along strike and down dip and in such is reflected with good KE and Slope results. Inferred classification is given to the estimate outside the mineable area with more sparse drill intercepts (>25m X 25m) and having poorer estimation quality.

Section 3: Estimation and Reporting of Mineral Resources		
Criteria	**JORC Code Explanation**	**Commentary**
	Whether appropriate account has been taken of all the relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	All relevant factors have been taken into account and are validated through thorough QAQC of the drill hole database and geological knowledge and interpretation of the Karari deposit. Thorough model validations and reviews ensure the integrity of the final estimation and the grade and tonnage numbers.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The geological model and the mineral resource estimate reflect the competent person's view of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	Saracen has adopted a process for geological modelling, estimation and reporting of mineral resources that meets high industry standards. At the completion of resource estimation Saracen Metals undertake an extensive review of the model that covers; • Model inventory and comparisons to previous and budget models if in existence • Geological interpretation, wireframing, domain selection, statisitics by domain, assay and metal evaluation, parent cell sizes, data compositing, variography, search strategy, estimation and KNA • Model validation – swathe plots, visual checks, volume comparisons, composite to model metal comparisons. In the final stages the model and resource categorisation are all discussed and scrutinized by the geological and mine planning teams.
Discussion of relative accuracy/confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The Mineral Resource has been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Saracen Gold Mine uses a standard approach to resource estimation and the procedure requires the systematic completion of the Saracen Resource Estimation Document that is thoroughly investigated and assessed in the Model review process, as stated above. It was identified that further work on QKNA for block size and search ellipses would help to further improve the optimisation of the block model.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The statement relates to global estimates.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Previous Mineral Resource estimates have had a positive reconciliation against mill figures.

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
Mineral Resource estimate for conversion to Ore Reserves	*Description of the Mineral resource Estimate used as a basis for the conversion to an Ore Reserve.*	The Mineral Resource estimate for the Karari gold deposit used as a basis for conversion to the Ore Reserve estimate was compiled by Saracen. The data included drilling and assay data, geological mapping and historical mining records to validate the model against and solid interpretation wireframes of the geology. This information was used to construct a model estimated by ordinary kriging. The model was depleted with the final pit survey completed in August 2013.
	Clear statement as to whether the Mineral Resources are reported additional to. Or inclusive of, the Ore Reserves.	The Mineral Resource reported is inclusive of the Ore Reserve.
Site Visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The competent person is based at the Carosue Dam Operations mine site, where the Karari deposit is located, on a regular commute roster. Consultant geotechnical engineers have visited Carosue Dam to gather data through inspections of both the open pit and underground and logging of drill core, used in the preparation of geotechnical reports to define parameters for underground mining. Hydrogeology consultants have visited Carosue Dam to gather data and inspect the inflow of groundwater into the open pit, used in the preparation of reports used to determine water management strategies.
	If no site visits have been undertaken indicate why this is the case.	N/A
Study status	*The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves*	The Karari deposit has been mined by Sons of Gwalia and Saracen as an open pit, and recently Saracen commenced the underground operation in November 2014. Ore from Karari continues to be treated at the Carosue Dam processing facility. Karari is an active underground operation with a detailed mine design and an economic analysis, to define the ore reserve.
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Modifying factors have been applied to the mine design, as well as a financial analysis completed, both of these have been the subject to peer review.
Cut-off parameters	*The basis of the cut-off grade(s) or quality parameters applied*	For the purpose of Ore Reserve Estimate a cut-off grade of 1.8g/t was calculated based upon an assumed gold price of AUD$1500/Oz and applicable processing, haulage and administration costs. A top cut has already been applied to the Mineral Resource Estimate eliminating the necessity for any further adjustment to the Ore

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
		Reserve estimate.
Mining factors or assumptions	*The method and assumptions used as reported in the Pre-feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	The Karari underground ore reserve has been estimated using detailed mine development and stope designs. Modifying factors for dilution and recovery have been applied to the economic analysis of the design to generate the ore reserve.
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	Underground mechanised mining for development, ground support, and open stoping have been selected for Karari. Mining and geotechnical studies have determined open stoping with remnant pillars is appropriate for the deposit. Similar methods are currently utilised at the Red October and Karari underground mines at Carosue Dam Operations.
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control, and pre-production drilling.	Assumptions are based upon actual mining conditions. A review of the previous analysis and assessment of the designed stopes was performed by Peter Andrews (geotechnical consultant – Andrews Rock Mechanics) and found to be acceptable. A grade control program with associated development for drilling platforms, grade control drilling designs, and sampling costs have been include in the mine design, mine schedule and economic analysis.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	N/A
	The mining dilution factors used.	An allowance for mining dilution has been incorporated into the mine designs. An additional dilution allowance of 10% has been applied for stoping.
	The mining recovery factors used.	A mining recovery factor of 95% has been assumed for all stopes.
	Any minimum mining widths used	A minimum stope width of 3m was applied in the design process.
	The manner in which inferred Mineral resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	A minor amount (<4% of ounces) of inferred resources are contained within underground mine design. An average grade of 0.8g/t has been assigned to all inferred resources within the design. Therefore inferred resources contribute <4% metal to the estimated reserve, and hence the reserve has a minor sensitivity to the inclusion of inferred resources.
	The infrastructure requirements of the selected mining methods.	Standard underground infrastructure is currently operational; this includes a decline for access and truck haulage, ventilation fans, escape-way ladders, electrical reticulation, mine services (air and water), and mine dewatering infrastructure. No specialised infrastructure is required to accommodate this method of mining.

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
Metallurgical factors or assumptions	*The metallurgical process proposed and the appropriateness of that process to the style of mineralisation*	The ore reserve will be treated at the established Carosue Dam processing facility. The Carosue Dam Process Plant is a CIL cyanide leach plant incorporating a gravity circuit which is appropriate for the extraction of gold from free milling gold ores. An average plant processing recovery of 93% has been assumed in the Ore Reserve Estimate which is consistent with historical plant recoveries for Karari ore.
	Whether the metallurgical process is well-tested technology or novel in nature.	The method of ore processing and extraction proposed utilises well tried and proven technology dating back to the 1960's and practiced extensively around the world.
	The nature, amount and representiveness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	In 2014 a review of the Karari open pit ore processing performance was conducted and metallurgical test work was carried out determine the continuity of processing performance from underground ore. No evidence was found to indicate any changes in the processing performance from underground ore to the historical performance from open pit ore.
	Any assumptions or allowances made for deleterious elements.	No deleterious elements have been identified during the processing of Karari ores since 2010.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.	Ore from the Karari open pit and underground has been treated at the Carosue Dam processing plant since 2010. Current underground ore is considered representative of the ongoing ore expected from underground.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications.	N/A
Environmental factors or assumptions	*The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	Karari is currently compliant with all legal and regulatory requirements. All approvals (clearing permit, works approval and Mining Proposals) have been granted for ongoing mining and processing at Carosue Dam. The site currently holds and Environmental Protection Act Licence 7465/1999/8 for processing, mine dewatering and power generation. The existing Carosue Dam mine, including the area of Karari underground mine, and the accommodation village all lay on granted mining leases. The following studies have been completed and provided to support for the required statutory approvals: Flora surveys of areas to be cleared, waste rock characterisation studies, surface water studies and tailings storage facility documentation.
Infrastructure	*The existence of appropriate infrastructure: availability of land for plant development, power,*	Carosue Dam Operations are well established, with mining activities being conducted by Saracen since 2009.

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
	water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The operation comprises at 2.4mtpa CIL ore processing facility, associated tailings storage facilities, Power station, water supply, workshops, and administration offices. Karari underground mine is located within 500m of the CDO plant. A modern accommodation camp is sited within a few kilometres of the administration offices and processing facility. A 70km gravel access road links Carosue Dam Operations to the gravel section of Yarri Road. Both the Saracen and Shire of Kalgoorlie gravel roads are well maintained. The mine site is ~120km from the sealed section or Yarri Road leading to Kalgoorlie.
Costs	*The derivation of, or assumptions made, regarding projected capital costs in the study.*	Actual mine operating and capital costs used.
	The methodology used to estimate operating costs.	Operating costs for underground mining have been derived from a combination of actual costs from Karari and tendered contract costs supplied by independent mining contractors. Operating costs for ore processing have been derived from known parameters at Carosue Dam, with additional costs such as labour sourced from current operational data.
	Allowances made for the content of deleterious elements	Previous operational experience on the Karari deposit at Carouse Dam did not reveal any deleterious elements within the ore or waste that required any additional cost allowances.
	The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products	An assumed gold price of AUD$1,500/oz has been adopted for financial modelling.
	The source of exchange rates used in study	All revenue and cost calculations have been made in AUD, so no exchange rate usage or assumptions have been necessary.
	Derivation of transportation charges	Costs associated with bullion transportation have been derived from existing contractual arrangements at Carouse Dam Operations.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	Costs associated with refining have been derived from existing contractual arrangements at Carouse Dam Operations.
	The allowances made for royalties payable, both Government and private.	Royalty costs are a 2.5% royalty payable to the Western Australian state government, and a 1.5% royalty payable to IRC.

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
Revenue Factors	*The derivation of, or assumptions made, regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*	N/A
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products	An assumed gold price of AUD$1,500/oz has been adopted for financial modelling.
Market Assessment	*The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*	There is a transparent quoted market for the sale of gold.
	A customer and competitor analysis along with the identification of likely market windows for the product.	There is a transparent quoted market for the sale of gold.
	Price and volume forecasts and the basis for these forecasts.	There is a transparent quoted market for the sale of gold.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	N/A
Economic	*The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.*	All costs assumptions are made based on a combination of historical performance at Carosue Dam and Karari mine. The economic analysis is viewed as representative of the current market conditions.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Sensitivities were not assessed
Social	*The status of agreements with key stakeholders and matters leading to social licence to operate*	Carosue Dam is currently operating and has good relationships with neighbouring stakeholders, including engagement with the local pastoralists and the traditional owners. The mine is located on leasehold pastoral land with compensation agreements in place with the local pastoralist. Granted mining leases cover all of the proposed mining and processing assets and there are no Native title claims pending.
Other	*To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*	
	Any identified material naturally occurring risks	Water inrush is the only naturally occurring risk identified. Inrush from regional surface water flows has been addressed by the construction of appropriate water diversion bunds as part of previous open pit mining

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
		operations. A containment pond and dewatering infrastructure has provided for in the mine design and capital costs to mitigate water inrush from rainfall captured within the existing open pit.
	The status of material legal agreements and marketing arrangements	Contracts are in place for all critical goods and services to operate Carosue Dam Operations.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	Carosue Dam Operations is in production with all required government statutory permits and approvals in place for the three operating mines and processing plant. The required statutory approvals for Karari have been granted.
Classification	*The basis for the classification of the Ore Reserve into varying confidence categories*	The Ore Reserve Estimate classification for Karari underground has been in accordance with the JORC code 2012. The estimated Ore Reserve is classified as being Probable with the majority of the reserve being derived from that portion of the Mineral Resource classified as indicated. Minor volumes (<4% ounces) of the underground ore is designed in Mineral Resource classified as inferred. The average grade of this material is 0.8g/t, therefore inferred resources contribute <4% metal to the estimated reserve. No material in the estimated Ore Reserve is classified as Proven, as no material is derived from that portion of the Mineral Resource classified as measured.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Cost assumptions and inputs factors applied to the underground project were derived from a combination of historical site data, current operational data relating to Carouse Dam Operations, actual mining costs, and recommendations from industry consultants. Results of the detailed design and analysis reflect the views of Competent Person regarding the Karari deposit.
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any)	There were no Measured Mineral Resources within the underground mine design that formed the physical extent of the estimated Ore Reserve.
Audits or reviews	*The results of any audits or reviews of Ore Reserve estimates*	There have been no external reviews of this Ore reserve estimate.

Section 4: Estimation and Reporting of Ore Reserves		
Criteria	**JORC Code Explanation**	**Commentary**
Discussion of relative accuracy/confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geo-statistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* *The statement should specify whether it relates to global or local estimates, and if local, state the relevant tonnages which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *Accuracy and confidence discussions should extend to specific discussions of any applied modifying factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* *It is recognised that this may not be possible or appropriate in all circumstances. These statements or relative accuracy and confidence of the estimate should be compared with production data, where available.*	The Ore Reserve estimate has been prepared within the guidelines of the 2012 JORC Code. The relative confidence of the estimate complies with the criteria of Probable Ore Reserves. Based upon the resource model, and current mine and reconciliation performance, the Ore Reserve Estimate is considered reasonable. Estimates are global but will be reasonably accurate on a local scale. The complete mine design with all of the modifying factors assumed and adopted, and financial analysis used in the estimated Ore Reserve have been the subject to peer review internally, and the Competent Person is confident that it is an accurate estimation of the current Karari reserve. Reconciliation results from past and current mining at Karari have been considered and factored into the reserve assumptions where appropriate.