

## **ASX Announcement and Media Release**

1 July 2014

# Razorback Project and Exploration Update

#### **Key Points:**

- Geological mapping at Dragon's Head identifies significant iron mineralisation potential
- Re-examination of Iron Peak area identifies potential higher grade zones outside the Resource and close to the proposed beneficiation plant
- Geotechnical study strengthens the case for the application of semi-mobile IPCC (In Pit Crushing and Conveying) at Razorback
- Royal progressing the Razorback Premium Iron Project, in readiness for the commencement of a Feasibility study
- Braemar Infrastructure and Royal progress collaboration on the infrastructure agreement
- The Razorback Mining Lease Proposal study advances
- Field work underway on Royal's gold project
- A loan of \$221,562 made to Aldershot Resources Ltd, of which Royal owns about 41%, has been repaid in full

**Royal Resources Limited (Royal**; ASX: ROY) is progressing the Razorback Premium Iron Project, utilising both 'in house' and external expertise. Activities include continual validation of the work done to date; identification of areas where potential savings exist in either OPEX or CAPEX; and progressing the permitting process. This low cost work will put the company into a positive position going into the Feasibility Study stage once financing is obtained.

#### **Braemar Infrastructure**

During September 2013, Royal announced that it had entered into a Memorandum of Understanding Braemar infrastructure Pty Ltd (BIPL) to collaborate in the development of an iron concentrate transport and export solution for the Braemar Region of South Australia. BIPL is a private company that plans to supply infrastructure to the Braemar area.

BIPL's plan is to supply a multiuser infrastructure facility, which will provide Braemar iron ore miners with a slurry pipeline to the coast for the transport of magnetite concentrate. The corridor will also carry a return pipeline to supply water from the coast for ore beneficiation, as well as high voltage power transmission lines, high-speed communication cables and an access road. The need for a costly new conventional port is being avoided by delivering the slurry magnetite iron directly to a permanently moored Cape sized vessel approximately 4km off the coast. This vessel will dewater, store and transfer the iron ore to the transport vessel.

Since the September 2013, BIPL has been focused on the areas of design, community consultation, and dialog with South Australian government agencies regarding the permitting process. Royal is integrating its mine development plans with BIPL to identify potential synergies to accelerate the development process and further reduce costs.

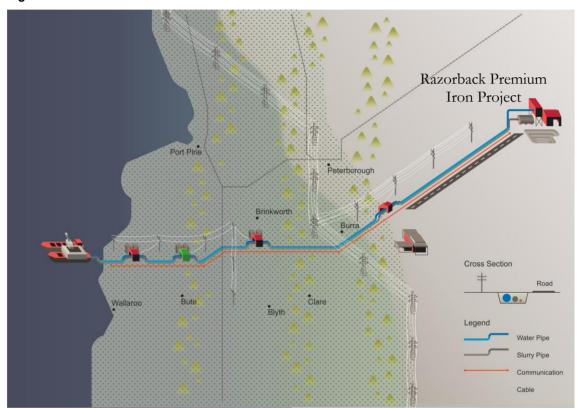


Figure 1: Braemar Infrastructure Solution

#### Target areas identified at Iron Peak

A geological study of the Iron Peak area within the Razorback Premium Iron Project has further delineated areas of potentially high grade magnetite mineralisation, outside the present Resource (Figure 2). The Iron Peak JORC 2004 Inferred plus Indicated Resource stands at 365Mt @ 16.3% eDTR, 18.7% Fe (announced on  $11^{th}$  June 2013; see Table 1 in Appendix 1).

The present study has included field mapping the Iron Peak Prospect area in greater detail, reevaluating the detailed aeromagnetic data and re-assessing previous drilling. This included examining diamond drillhole RRDD014, which currently is located outside the resource, but intersected high grade magnetite (Table 1) indicated from Davis Tube Recovery (DTR). Reexamination of the hole indicates the drilling didn't reach the targeted end of the Braemar Iron Formation, with the usually higher grade bands in Unit A at Iron Peak not intersected.

Identifying additional resource of similar or better quality to that currently defined at Iron Peak (Figure 2) will potentially provide benefits by reducing mine haulage costs. A drill program to investigate potential high grade zones at Iron Peak will be done during the Feasibility Study and integrated into the mining optimisation.

Table 1: Iron Peak Drillhole RRDD0114 magnetite intersect

Hole ID	Easting	Northing	End of Hole (m)	From (m)	To (m)	Intersection from 45µm grind
RRDD0114	384421	6355096	171	75	113	38m @ 23.1 % DTR Recovery, 66% Fe Concentrate
				154	166	12m @ 28.3 % DTR Recovery, 67% Fe Concentrate

Co-ordinate in MGA Zone 54 (GDA94); Hole inclined 60° to approximately 230° azimuth, RL of 302 metres ASL

RRDD0114:
38m @ 23.1% DTR Rec, 66% Fe Cons
12m @ 28.3% DTR Rec, 67% Fe Cons
High prospectivity
Magnetics - TMI
Drill Hole

Interzone

Iron Peak

Processing Plant

Figure 2: Iron Peak area within the Razorback Premium Iron Project.

## **Rock Strength Studies at RPIP**

As part of the optimisation work which followed the Prefeasibility Study, it was determined that improvements to the OPEX could be made by applying IPCC (In Pit Crushing and Conveying) and / or CSM (Continuous Surface Miners) to the mining operations. While initial geotechnical work associated with this study showed positive results, particularly relating to IPCC, the number of samples analysed were only suitable for scoping level studies. To bring this work to a PFS level, Royal has embarked on a rock strength study to characterise the entire RPIP Resource. This has included assessment of core from 21 diamond holes, consisting of 202 individual rock strength tests, including 31 UCS (Unconfined Compressional Strength) tests and 171 Point Load tests.

While further work is required on equipment specification, the rock strength tests suggest the application of a semi-mobile In-Pit Crusher is valid and that large portions of the RPIP ore body are amenable to mining by CSM.

#### **Progression of Mining Lease Application**

Work is underway on documentation required for a Mining Lease Application for the RPIP. Royal is utilising "in house" expertise for the collection of field data, data compilation, interpretation and documentation for those areas not requiring external consultants, which includes the majority of baseline studies.

#### Mapping at Dragon's Head Prospect

Detailed field and geophysical mapping has recently been completed at the Dragon's Head Prospect within the Red Dragon Venture, approximately 12 km northeast of the Razorback Premium Iron Project (Figure 3). The mapping of the Braemar Iron Formation indicates thick sections of iron mineralisation at surface, with the fold hinge area suggesting the iron rich and magnetic strata up to 1.6 kilometres thick.

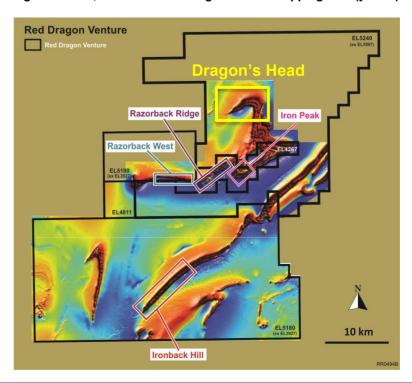
In addition, a recent ground magnetic profile across the Braemar Iron Formation and reassessment of 2012 exploration drilling at Dragon's Head indicates a significant thick section of strata has yet to be tested by drilling (Figure 4), in particular the typically magnetite-rich Units A, B, and D at the base of the sequence. Table 2 shows the magnetite intersections from the 2012 drilling, depicting similar grades to that observed at Razorback (in Braemar Iron Formation Unit G). Further DTR analysis at Dragon's Head is currently underway.

Table 2: Dragon's Head RC Drillhole magnetite intersects

Hole ID	Easting	Northing	RL (m)	End of hole (m)	From (m)	To (m)	Intersection from 45μm grind
RRRC0286	386472	6364972	211	228	68	134	66m @ 15.3 % DTR Recovery, 71% Fe Concentrate
RRRD0287 <sup>#</sup>	386399	6365270	210	301	118	150	32m @ 17.2 % DTR Recovery, 65% Fe Concentrate
RRRC0288	386359	6365359	211	120	6	16	10m @ 16.4 % DTR Recovery, 64% Fe Concentrate
					44	72	28m @ 15.4 % DTR Recovery, 64% Fe Concentrate
					80	110	30m @ 16.3 % DTR Recovery, 64% Fe Concentrate

Co-ordinate in MGA Zone 54 (GDA94); Holes inclined 60° to approximately 350° azimuth

Figure 3: Red Dragon Venture, with outline of Dragon's Head mapping area (yellow)



<sup>\*</sup>Note that the results of drillhole RRDD0287 are taken from RC pre-collar, with approximately 150 metres of diamond core tail to a depth of 301 metres currently being analysed with DTR. SATMAGAN analysis of the assayed pulp from the diamond core suggests magnetite mineralisation continues down hole.

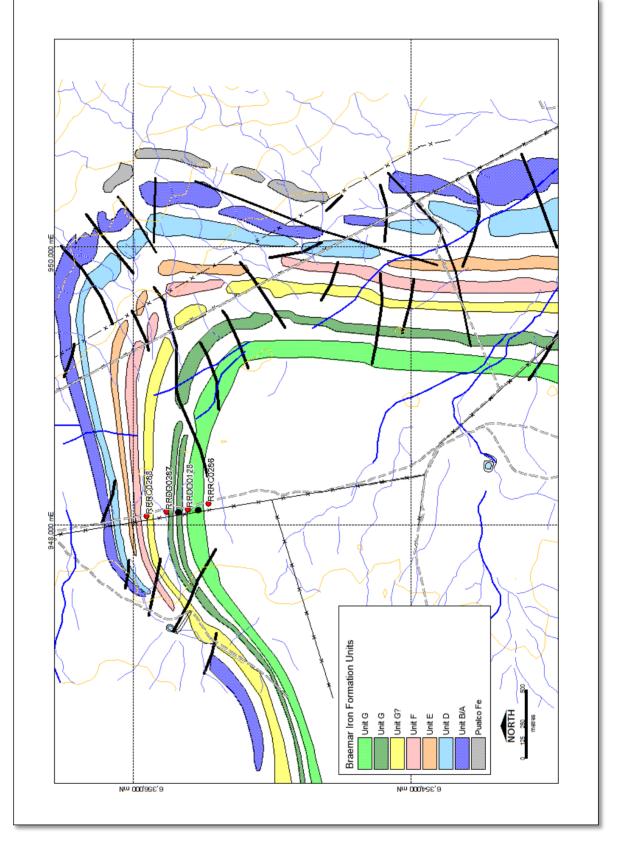


Figure 4: Mapping of the Braemar Iron Formation, Dragon's Head Prospect, containing drill collars (red points).

#### **Royal SA and NT Exploration Projects**

Royal maintains a watch on opportunities outside our flagship Razorback Premium Iron Project. This includes low cost exploration undertaken on the company's tenements in the Northern Territory, South Australia and Western Australia, as well as opportunistic pegging of what Royal's technical team consider highly prospective ground ignored or undervalued by other explorers. Whilst these activities are very low cost, they will provide avenues for potential discoveries once the RPIP is developed.

# George Au Project, NT

George Gold Project is located approximately 100 kilometres southeast of Darwin, in the Northern Territory (Figure 5). Close to the Adelaide River Township, the two granted tenements that make up the project cover 88 km<sup>2</sup>. An additional 137 km<sup>2</sup> of tenement is also under Application.

Historic exploration at George during the late 1980's to early-mid 1990's, targeting anticlinal hinges led to the discovery of a number of gold occurrences (Figure 6) in outcropping quartz veins, returning rock chips up to **170 g/t Au** (see ASX announcement 25<sup>th</sup> November 2013) and in soil anomalies where hinge areas are under transported cover. Historic drilling has been limited and ineffective in delineating the targets at the three main Prospects - Possum, Happy Valley and Arum; with low level gold mineralisation intersected.

During the 2013 field season, Royal undertook field reconnaissance over the tenement, with the discovery of a new prospect at "Croc Paté", which consist of quartz veins with up to **7 g/t Au** and intermittently striking for approximately 1.6 km (ASX announcement 25<sup>th</sup> November 2013). Fieldwork is about to commence at George, focusing on mapping, rock chip and soil sampling at the Croc Paté and Happy Valley Prospects. This work will define targets to be effectively drilled when funding is available.



Figure 5: Location map of the George Project, NT

ARIM PROSPECT

HAPPY VALLEY PROSPECT

POSSUM PROSPECT

POSSUM PROSPECT

O Gold Prospects

Rock chip sample

Rock chip 0.2-15g/t Au

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Figure 6: George Project - Gold Prospects

## **Repayment of loan to Aldershot Resources Ltd**

Aldershot Resources Ltd is a Toronto Stock Exchange Venture listed company of which Royal owns about 41%. Aldershot held a loan of \$221,562 from Royal, including accrued interest, to undertake general exploration. Following the completion of the sale of Aldershot's Turee Ck tenement on the southern boundary of the Hamersley Basin to Fortescue Metals Group, that loan has now been repaid in full.

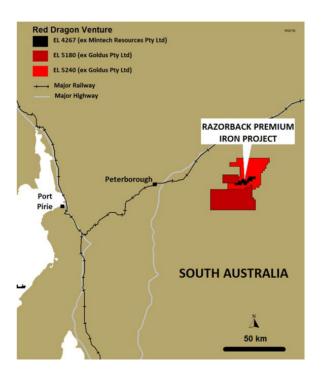
#### **About Royal Resources Limited**

Royal Resources Limited is a mineral exploration company exploring for iron ore in South Australia and for iron, gold and uranium in the Northern Territory. The Razorback Premium Iron Project (RPIP) is centred on the Razorback Ridge deposit within the Red Dragon Venture. It has a JORC (2004) Resource of 2.7 Billion tonnes at 15.3% recovery, including 1.04 Billion tonnes at 16.2% recovery in the Indicated Resource category.

The completed Pre-Feasibility Study shows it to be technically feasible and economically attractive. The Project is targeting production of 9.3Mtpa of premium grade magnetite concentrate by conventional open pit mining and beneficiation. The resulting low-contaminant 67.4% Fe product will attract premium pricing to haematite fines. The RPIP has a potential mine life in excess of 50 years and will employ a workforce of over 650.

The details contained in this report that pertains to ore and mineralisation is based upon information compiled by Mr Marcus Flis, BSc (Hons), MSc, a full-time employee of the Royal Resources Limited, Gavin England BSc (Hons), PhD, a full-time employee of the Royal Resources Limited and Mr Lynn Widenbar BSc(Hons), MSc, DIC, Principal Consultant Widenbar and Associates Pty Ltd. Mr Flis is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Widenbar is a Member of the AusIMM. Dr England is a member of Australian Institute of Geosciences (AIG). These three people have sufficient experience which is reversed to the style of mineralisation and type of deposit under "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC 2004 Code). Mr Flis, Dr England, and Mr Widenbar consent to the inclusion in this report of the matters based upon their information in the form and context in which it appears.

The information for the Razorback Premium Iron Project was prepared and first disclosed under the JORC Code 2004. The information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.



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## Appendix 1

The Mineral Resource information below for the project was prepared and first disclosed under the JORC Code 2004 and the information has not been updated since to comply with the JORC Code 2012 on the basis the information has not materially changed since it was last reported. The Resource was first announced on 11<sup>th</sup> June 2013.

Table 1: Total JORC<sub>(2004)</sub> Mineral Resource from the Razorback Premium Iron Project (11% <sub>e</sub>DTR cutoff).

Prospect	JORC Resource Classification	Million Tonnes*	eDTR%#	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Р%
Razorback	Indicated	833	16.0	21.7	45.2	7.3	0.20
	Inferred	1,532	14.6	16.1	50.2	8.5	0.17
Iron Peak	Indicated	203	16.8	20.0	45.0	7.67	0.18
	Inferred	163	15.6	17.1	46.7	8.0	0.16
Total	Mineral Resources	2,732	15.3	18.2	48.1	8.0	0.18
	ED CONCENTRATE	418		67.4	4.74	0.54	0.016

<sup>\*</sup> Tonnages rounded to significant values; total may not appear correct as a result. The resource has been estimated in accordance with the JORC (2004) Code.

 $<sup>^{\#}</sup>$  <sub>e</sub>DTR is determined by DTR and SATMAGAN magnetite estimated % data (see ASX announcement 11<sup>th</sup> June 2013)

# Appendix 2

Table 2A: Iron Peak Drillhole RRDD0114 Davis Tube Recovery (DTR) Results - 45 micron grind

	<b>-</b>		6	Head				Concent	rate Sam	ple Data		
Hole ID	From (m)	To (m)	Sample ID	Fe %	Mass Recovery	Fe %	SiO2 %	Al2O3 %	P %	\$ %	TiO2 %	LOI %
RRDD0114	75	80	D00461	26.52	27.4	68.22	5.16	0.2	0.003	0.006	0.04	-2.97
RRDD0114	80	85	D00462	29.93	26.3	69.29	3.93	0.14	0.001	0.002	0.03	-3.03
RRDD0114	85	91	D00463	28.79	25.2	68.01	4.62	0.14	0.001	0.004	0.02	-3.02
RRDD0114	91	97	D00464	26.73	22.8	66.43	6.72	0.35	0.004	0.013	0.05	-2.72
RRDD0114	97	103	D00465	20.07	13.0	59.28	14.35	0.77	0.008	0.006	0.12	-1.78
RRDD0114	103	108	D00466	31.64	35.9	67.78	4.22	0.18	0.004	0.004	0.03	-2.88
RRDD0114	108	113	D00467	22.2	14.0	66.91	6.04	0.48	0.009	0.005	0.06	-2.54
RRDD0114	154	162	D00468	27.56	27.8	67.96	4.53	0.26	0.004	0.001	0.04	-2.92
RRDD0114	162	166	D00469	27.71	31.1	68.49	4.04	0.22	0.005	0.007	0.04	-3.00

Table 2B: Dragon's Head RC drilling Davis Tube Recovery (DTR) Results – 45 micron grind

				Head		Concentrate Sample Data						
Hole ID	From (m)	To (m)	Sample ID	Fe	Mass Recovery	Fe	SiO2	Al203	Р	S	TiO2	LOI
	(,	(,		%	necovery	%	%	%	%	%	%	%
RRRC0286	48	68	D01353	15.36	11.0	70.16	2.65	0.15	0.006	<0.001	<0.01	-3.29
RRRC0286	68	96	D01354	16.48	14.9	71.04	1.66	0.11	0.004	<0.001	<0.01	-3.46
RRRC0286	96	106	D01355	15.46	16	70.89	1.98	0.13	0.004	0.002	0.01	-3.65
RRRC0286	106	134	D01356	19.36	15.5	71.01	1.77	0.13	0.003	0.005	0.01	-3.58
RRRC0286	134	160	D01357	18.35	13.1	70.35	2.54	0.19	0.006	0.005	0.03	-3.59
RRRC0286	160	194	D01358	11.18	9.7	69.23	3.56	0.45	0.023	0.005	0.02	-3.65
RRRC0286	220	228	D01359	12.19	8.7	68.44	4.5	0.24	0.004	0.014	0.28	-3.30
RRRC0287	118	134	D00109	14.44	16.5	65.5	8.24	0.33	0.008	<0.001	0.14	-2.90
RRRC0287	134	150	D00110	14.67	18.0	64.76	9.06	0.39	0.010	0.009	0.09	-2.79
RRRC0288	6	16	D00111	15.82	16.5	63.89	9.46	0.38	0.011	0.0005	0.06	-1.92
RRRC0288	28	44	D00112	11	8.9	60.66	13.2	0.73	0.012	0.015	0.16	-1.94
RRRC0288	44	60	D00113	14.88	15.8	63.57	10.05	0.44	0.017	0.003	0.1	-2.26
RRRC0288	60	72	D00114	13.52	14.8	64.4	9.38	0.43	0.014	0.004	0.11	-2.71
RRRC0288	72	80	D00115	8.45	5.9	NSS	NSS	NSS	NSS	NSS	NSS	NSS
RRRC0288	80	90	D00116	16.55	19.4	64.92	9.19	0.4	0.013	0.0005	0.09	-3.05
RRRC0288	90	100	D00117	17.34	16.4	64.39	9.68	0.45	0.014	0.016	0.1	297
RRRC0288	100	110	D00118	12.18	13.2	63.9	10.15	0.4	0.009	0.006	0.12	-2.68
RRRC0288	110	116	D00119	11.24	11.6	64.39	9.66	0.49	0.009	0.002	0.11	-3.01

NSS - Not sufficient sample for XRF analysis

# Appendix 2

# JORC Code (2012)

# Section 1 - Sampling Techniques and Data (Razorback Premium Iron Project)

Criteria	JORC Code explanation	Commentary				
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>RRDD0114 is a single exploration diamond hole at Iron Peak and RRCC0286-288 were a fence line of RC holes at Dragon's Head Prospect</li> <li>All sampling is of industry standard</li> <li>Drill core samples – longitudinal half core cut via diamond saw, with further quarter core cut and sampled – mineralised intervals crushed and composited under laboratory conditions, before fine crushing and homogenisation</li> <li>Intervals of quarter core cut to 1m lengths.</li> <li>RC sampled over a 1 metre lengths, but composited to 2 metres for assay.</li> <li>Samples typically 2-3 kg before compositing. All samples submitted as dry.</li> <li>Drill hole depth as measured via core recovery and cumulative final drill hole length down hole.</li> <li>Samples submitted to ALS Adelaide for crushing, homogenisation and grinding, than forwarded to ALS Perth, whereby a 10g sample is utilised for XRF analysis. Samples included CRM standards and duplicate samples.</li> <li>DTR samples were composited from the coarse residues of the XRF and SATMAGAN samples. Sample intervals designed to relate to geologica / geochemical boundaries of similar character.</li> <li>The composited samples are homogenised at ALS Adelaide.</li> <li>A 150g sample is split and forwarded to ALS Perth for pulverisation to 45 um. A 20g subsample is utilised for DTR analysis with a 10g sample retained for XRF analysis of concentrate and head fractions.</li> </ul>				
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Drill type for RRDD0114 was via Diamond drill core. Standard industry drill rigs employed for drilling.</li> <li>Size: HQ -standard tube to end of hole (174m total).</li> <li>Core barrel recovered via wireline, drill runs no greater than 6m, typically 3m.</li> <li>Drilling azimuth was designed perpendicular to geological strike, measured by compassclinometer. Down hole inclination designed to strike strata perpendicular to rock dip within limitations of drill rig. Measured initially on drill rig via protractor with further down hole survey carried out via multishot, reflex or Camteq down hole camera systems at 30m intervals down hole.</li> <li>Core has been oriented via digital ori-tool</li> <li>Drill type for holes at the Dragon's Head was via Reverse Circulation (RC). Standard industry drill rigs employed for drilling.</li> <li>The RC drilling was carried out by truck mounter UDR600 rig, using 5.5 inch face bits.</li> </ul>				
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Core logging and geotechnical logging record core recovery, recovery +98%.</li> <li>Diamond drilling recovery is measured against driller marked runs and returns with core loss/gain noted for each drill run (typically 3m runs for HQ).</li> <li>Rock competency very high at RPIP, use of standard tube drilling methodology deemed</li> </ul>				

- suitable given high core return rates.

  Given the whole-rock sampling nature of
- Given the whole-rock sampling nature of diamond core, sampling bias to loss/gain of fine/coarse material is low to none.
- Core is representative of intersected lithologies.
- RC sampling done on 1 metre intervals into green plastic bags. Sample Recovery was good at Dragon's Head, thus relationship between sample size and grade is irrelevant.

#### 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 metalluraical studies.
- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.
- The total length and percentage of the relevant intersections logged.
- Diamond holes are geologically, photographically and geotechnically logged from SOH to EOH.
- RC holes are geologically logged from SOH to

  FOH
- RC chips are recovered into chip trays for each 1m drilled.
- Qualitative logging includes: lithology, colour, mineralogy, veining and structure, geological strata horizons, weathering, texture, degree of oxidation.
- Diamond core quantitative logging includes structure (Alpha and Beta measurements with nature of contacts/breaks recorded for diamond drill holes), magnetic susceptibility, specific gravity and geotechnical readings.
- Every drill hole is 100% logged.
- RC drilling at Dragon's Head showed good recovery
- Geological logging was of sufficient detail to allow the creation of a geological model.

#### Subsampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.
- 1m core lengths of HQ core were sawn longitudinally into halves by diamond core saw, followed by one half undergoing halving into quarters. Quarter samples were submitted for analysis with %'s of the core remaining on site for reference, QAQC or future test work
- All diamond core has been orientated and processed by trained technicians and geologists for a combination of logging, core orientation, meter marking, S.G. recovery and core tray marking.
- RC samples were riffle split to produce a 2-3kg geochemical sample, the rest to a green plastic bag...
- RC duplicates were taken from a second shoot on the splitter, in typical industry standard to produce a sample. In addition, spear sampling of the green bags were used as a field duplicate.
- QAQC methods include the use of frequent duplicates (6 per 100 samples) by the analysis of a further ¼ core samples and insertion of certified reference (5 per 100 samples) materials-standards into all sampling regimes. In addition, umpire samples and field resamples have been undertaken during all drilling regimes.
- Sample sizes and quality were deemed appropriated given the bulk commodity nature of iron-ore deposits.

#### Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc
- Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks)
- Certified and accredited laboratories utilised for all assays ( ALS Global and Bureau Veritas)
- Composited coarse residual material left after first pass XRF from diamond core is homogenised to produce a 150g sample for DTR and XRF.
- DTR and XRF is the suitable method of iron ore analysis.
- Magnetic susceptibility All pulp samples submitted undergo a magnetic susceptibility

and whether acceptable levels of accuracy (ie lack of bias) measurement via a SATMAGAN apparatus designed to determine magnetite component of and precision have been established. a given sample. Laboratory QAQC consisted of standards, blanks and lab duplicates. QAQC sample results display adequate levels of accuracy and precision. Verification The verification of significant intersections by either Dr Gavin England, a Royal Resources Employee of sampling independent or alternative company personnel. has the necessary qualifications to verify and assaying The use of twinned holes. intersections. Documentation of primary data, data entry procedures, Independent verification by resource geologists of Widenbar and Associates have been data verification, data storage (physical and electronic) undertaken during resource modelling of which assay data from RRDD0114 was included. Discuss any adjustment to assay data. Sampling and assay data was entered and compiled using LogChief point-of-capture software and Datashed database management for validation. The LogChief software was utilised in field and includes validation formatting during data entry. Data was uploaded to a web/cloud hosted file directory for input by a Royal Resources database administrator. RRDD0114 was not twinned, however twinned holes drilled during the drill program coinciding with RRDD0114 show excellent correlation of results. Location of Drill holes have been surveyed using a Accuracy and quality of surveys used to locate drill holes data points (collar and down-hole surveys), trenches, mine workings differential GPS, by Royal Resources +- 0.01m and other locations used in Mineral Resource estimation. error for easting and northing and +-0.02m for Specification of the grid system used. elevation. Quality and adequacy of topographic control. Grid System - MGA94 Zone 54 Downhole Surveys every 30m utilising a Reflex multishot tool. Note the inaccuracy of azimuth in magnetic rocks. High resolution DTM and satellite imagery datasets confirm elevation and drill hole placements Data spacing Data spacing for reporting of Exploration Results. RRDD0114 was a single exploration test hole and Whether the data spacing and distribution is sufficient to drilled into an exploration target at the Iron Peak distribution establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve The nearest hole RRDD0116, also an exploratory estimation procedure(s) and classifications applied. diamond hole was drilled 690m to the south Whether sample compositing has been applied. Drilling at Dragon's Head was 100m spaced. This is a sufficient spacing for the deposit type. Sample compositing for DTR samples has been applied for RRDD0114. 1m or 2m intervals which were first XRF and SATMAGN assayed have been than composited to 5 to 20m intervals for DTR analysis Orientation Whether the orientation of sampling achieves unbiased Drill hole placement was designed to intersect of data in sampling of possible structures and the extent to which mineralisation perpendicular to interpreted relation to this is known, considering the deposit type. mineralisation. geological If the relationship between the drilling orientation and RRDD0114 and Dragon's Head stratigraphy structure the orientation of key mineralised structures is considered averaged a -60 dip, intersecting mineralisation to have introduced a sampling bias, this should be approximately perpendicular to dip. The drilling assessed and reported if material. orientation is adequate for a non-biased assessment of the deposit with respect to interpreted structures and controls on mineralisation Sample Samples collected from the Razorback site were The measures taken to ensure sample security. security transported to Burra by Royal Resources, which were then forwarded by courier to ALS Adelaide. Upon delivery of marked samples a work order was issued and processing commenced at ALS. Royal has received all exploration data associated with this core. Audits or The results of any audits or reviews of sampling QAQC reporting which included the RRDD0114 reviews techniques and data. dataset was submitted to Widenbar and

Section 2 - Reporting of Exploration Results (Razorback Premium Iron Project)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Razorback Premium Iron Project Tenement EL4267 is 100% Royal owned and operated. Dragon Head is in EL5180 is owned by Goldus Pty Ltd and Royal has a 100% Fe option. A 1.25% net based royalty exists to be paid to the previous owner.</li> <li>EL4267 tenement is currently under renewal.EL5180 is an active licence</li> <li>The project area covers a combination of Perpetual and Pastoral Lease. The Iron Peak and Dragons Head prospect lies on a Pastoral</li> <li>Perpetual leases are not subject to Native Title however Pastoral leases are.</li> <li>The tenements are in good standing</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration for Iron Ore on the Braemar Iron Fm has been undertaken by the South Australian Chamber of Mines . Minor drilling (3 diamond drill holes) and an Adit excavated to test iron mineralisation in the 1960's     Previous RC and DDH drilling by Royal JORC 2004 Resources to define the Razorback Premium Iron project adjacent to the Iron Peak Prospect undertaken as of April 2010.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Meta-Sedimentary Fe precipitate within the Braemar Iron Formation, Sturtian Neoproterozoic - Adelaide Geosyncline.</li> <li>Classified as 'Raptian-type' iron formation. Interbedded to interlaminated ironstone with tillitic and massive ironstone subunits within interstitial to sub-economic siltstone subunits.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	All relevant information is expressed in the tables within the main text
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Weighted averages of DTR recovery and head grades were utilised to accurately define total intersection values. Assay data is relatively homogenous with variances weighted by interval length with respect to grade.</li> <li>Assays are rounded to either 2 or 3 significant figures.</li> <li>No metal equivalent reporting is used or applied.</li> </ul>
Relationship between mineralisatio n widths and intercept	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect</li> </ul>	Intersection width is measured down the hole trace and is an approximate to true width of mineralisation.

lengths		(eg 'down hole length, true width not known').		
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 diagrams are to scale, contain MGA94 Zone 54 co-ordinates and display a North Arrow and scale bar for reference.
Balanced reporting	•	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	•	All significant assay results are presented in Table 2A and 2B All samples are deemed appropriate and representative of mineralisation. Samples were selected using XRF head grade and SATMAGAN results. Core not assayed were deemed either low grade or no grade. Note a diamond tail on RRDD0287 is currently being analysed using DTR
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.	•	The Iron Peak and Razorback Ridge resources adjacent to RRDD0114 represent significant proven mineralisation to JORC2004 Indicated level, nearby.  Both head and concentrate fractions of assay results display very low deleterious elements such as phosphorus and titanium, representing a clean ROM and Concentrate product.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout 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.	•	To delineate further mineralisation at the Iron Peak Prospect drilling is proposed. Further drilling will help to define known structure, folding and faulting in this area Figure 2. Displays areas or possible resource extension. At Dragon's Head, DTR analysis underway for diamond tail at RRDD0287 and an additional diamond RRDD0128 (as seen in Figure 4).