7 December 2015

EXCHANGE RELEASE

MAIDEN INDICATED MINERAL RESOURCE AT BAOBAB PHOSPHATE PROJECT

Highlights

- **Maiden Indicated Mineral Resource estimate of 12.6 million tonnes @ 21.0% P_2O_5 at a 15% P_2O_5 cut-off grade within the Small Mine Permit at Gadde Bissik East, part of the wider Baobab Phosphate Project.**
- **Inferred Mineral Resource of 80 million tonnes @ 19% P_2O_5 estimated for the remainder of Gadde Bissik East prospect, including more broadly drilled portions of the SMP.**
- **Infill resource drilling program continuing within and adjacent to the SMP aimed at increasing estimated Indicated Mineral Resource tonnes.**
- **Exploration drilling programs to recommence in early December targeting prospective ground to the east of Gadde Bissik.**

Introduction

Avenira Limited ('Avenira' or 'the Company') is pleased to advise that the Baobab Phosphate Project has been further de-risked with the release of a maiden Indicated Mineral Resource estimate. The decision to commence mining was made in mid-November which allowed long lead time Items to be ordered and water drilling to commence.

The Indicated Mineral Resource estimate has been completed for much of the eastern half of the Small Mine Permit at Gadde Bissik East, and represents the first phase of the resource status upgrade planned to advance the project to mining status.

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The maiden Indicated Mineral Resource encloses the area that the Company has targeted for first production of rock phosphate. It is anticipated that ongoing drill programs and ancillary exploration work will provide sufficient data to allow conversion of a significant amount of the remaining Inferred Mineral Resource within the Small Mine Permit to Indicated Mineral Resource status during 2016.

Avenira's Managing Director and CEO Cliff Lawrenson commented ***"It is very pleasing to be able to announce the first phase of conversion of our resource base to the Indicated Mineral Resource category. This step is part of our continuing de-risking of the project as we move into mining. Our ongoing technical and marketing efforts will enable us to provide more detailed mining plans including Mineral Reserves and financial modelling in the first half of 2016."***

The Baobab Project area (Figure 1) covers a total of approximately 1,553km^2. Within the Baobab Project area, the Gadde Bissik prospect of approximately 90km^2 was identified during excavation of water wells in the 1950's. Avenira has managed the exploration of the Gadde Bissik area since early 2014, building up a comprehensive knowledge of the Baobab Project and its potential. A Small Mine Permit ("SMP") was granted in May 2015 over the area of thickest and highest grade mineralisation identified to date at the Gadde Bissik prospect and the focus of exploration has continued to be within this area since that time Figure 2). A maiden Inferred Mineral Resource estimate was announced by the Company in May this year.

Exploration opportunities to the east of Gadde Bissik provide the potential for further discoveries of phosphate mineralisation along a 30 kilometre broad linear trend. Avenira plans to commence broad-spaced air core exploration drilling in early December 2015 to follow up discoveries of phosphate mineralisation made in 2014.

The cut-off grade for this updated resource estimate has been reduced from 18% to 15% P_2O_5 based on positive results from ongoing beneficiation test work and marketing studies.

The following table summarises estimated resources at a P_2O_5 cut-off grade of 15%. The figures in this table are rounded to reflect the precision of estimates and include rounding errors.

GADDE BISSIK MINERAL RESOURCE TABLE – EFFECTIVE DATE 7/12/2015									
PROSPECT		CATEGORY	TONNES	P2O5	CaO	MgO	Al2O3	Fe2O3	SiO2
			(Million)	%	%	%	%	%	%
Gadde Bissik East	Within SMP area	Indicated	12.6	21.0	28.8	0.08	2.05	3.30	41.3
	Within SMP area	Inferred	16	20	28	0.13	2.2	3.9	42
	Outside SMP area	Inferred	64	19	26	0.12	2.8	4.0	43
	Combined	Inferred	80	19	26	0.12	2.7	4.0	43
Gadde Bissik West		Inferred	7	18	24	0.17	4.8	6.3	40
Total Gadde Bissik		Indicated	12.6	21.0	28.8	0.08	2.05	3.30	41.3
Total Gadde Bissik		Inferred	87	19	26	0.13	2.9	4.2	43

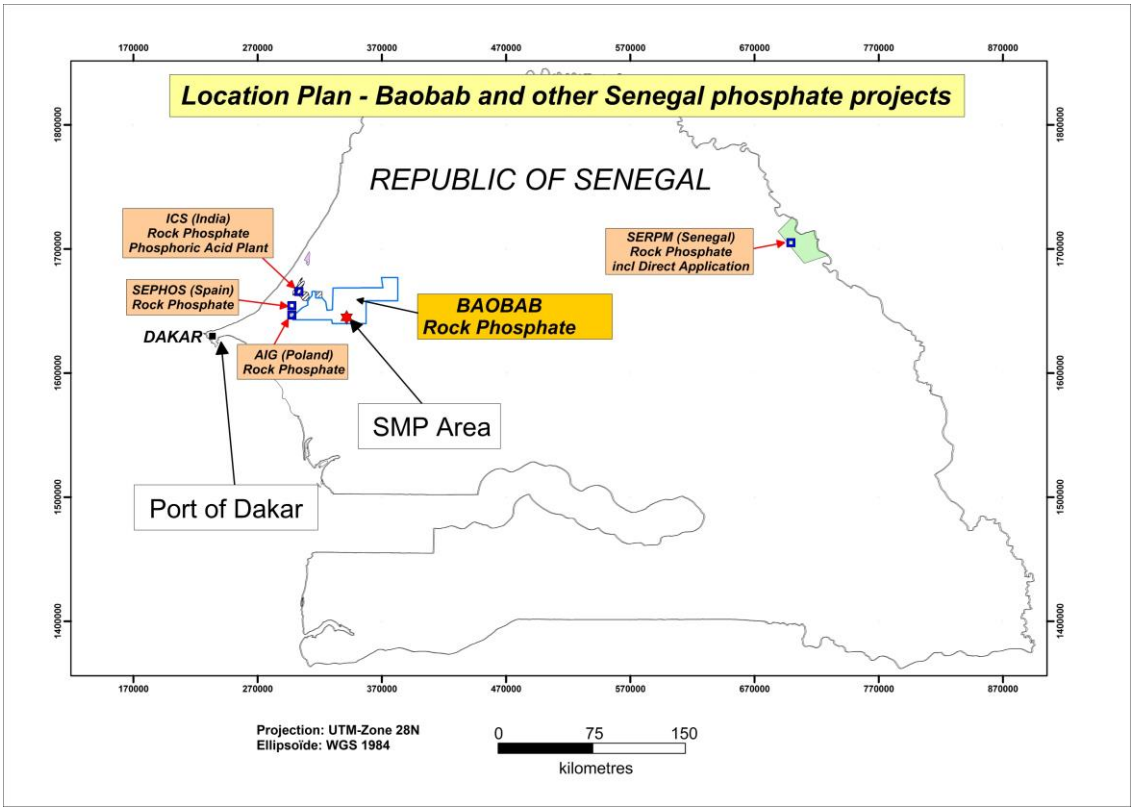

Figure 1 Baobab Project location plan

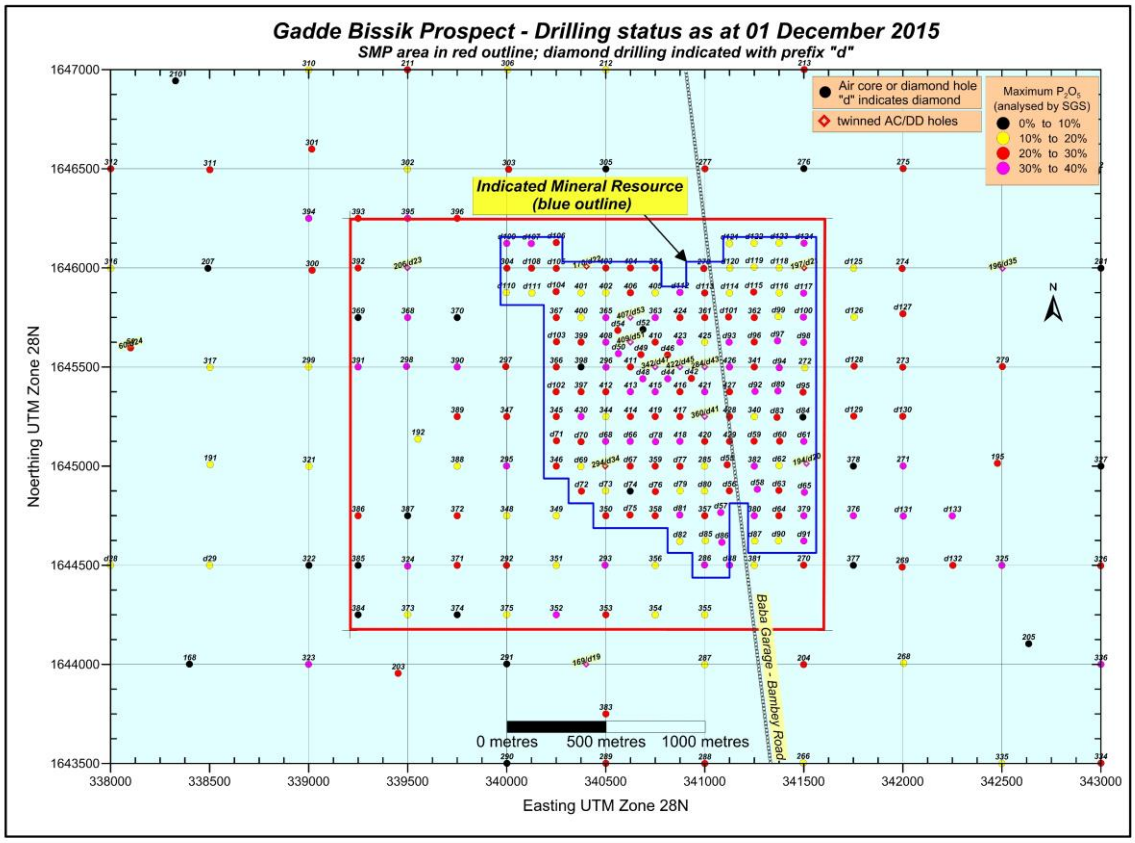

Figure 2 Gadde Bissik drill status plan – Indicated Mineral Resource

Mineral Resource and Exploration Potential

Drilling within the study area comprises 339 air core and 139 diamond holes for 17,906 metres of drilling. Drill hole spacing for assayed holes varies from around 125 by 125 metres and locally closer in central portions of the SMP area to around 1 by 2 kilometres in peripheral areas (Figures 2 and 4).

The current Mineral Resources represent two areas tested by generally 500 by 500 metre and closer spaced drilling designated as Gadde Bissik East and West respectively. Estimates for portions of the SMP at Gadde Bissik East tested by 250 by 250 and locally closer spaced drilling are classified as Indicated. Estimates for mineralisation tested by drill hole spacings of between 250 by 250 metres and 500 by 500 metres are classified as Inferred. Potential mineralisation in more broadly sampled areas is currently too poorly defined for estimation of Mineral Resources, and represents Exploration Targets.

Composites from air core drilling provide around 60% of the resource dataset with diamond holes contributing around 40%, including approximately 59% of the composites within the area of Indicated resources.

Mineralised drill hole intervals were generally sampled over one metre down-hole intervals and analysed by XRF for a suite of attributes including P_2O_5 with LOI determination by thermogravimetric analysis. All primary assaying was undertaken by SGS, with sample preparation in Dakar, Senegal and analysis at either Lakefield in Canada or Booysens in South Africa with these analytical laboratories contributing around 70% and 30% of the resource dataset respectively.

Information available to demonstrate the reliability of sampling and assaying includes field duplicates, recovered sample weights standards, coarse blanks and inter-laboratory repeat analyses. Additional confirmation of the general reliability of the air core sampling is provided by results of 16 twinned diamond holes drilled within 10 m of RC holes.

MPR considers that the sample quality information confirms the reliability of the sampling and assaying with sufficient confidence for the current estimates. There are, however some aspects of the sampling and assaying that warrant further investigation as assessment of the project continues.

Uncertainties over the reliability of the resource assaying include the MgO analyses by the Booysens laboratory. This assaying includes a detection limit of 0.05%, which is notably higher than the value of 0.01% for SGS Lakefield and is high relative to typical mineralisation grades, with many Booysens MgO assays of mineralised samples reported as below detection. Assay results for submitted reference standards and ALS repeat ICP analyses suggest later phases of Booysens analyses from around mid-April 2015 understate MgO grades of typical mineralisation by in the order of 50%. For the resource dataset, Booysens MgO results were replaced by ALS ICP assays where available and later apparently biased results were adjusted by a function developed from standards results and ALS repeats. Composites with adjusted MgO SGS Booysens assays provide around 12% of the resource composite dataset, including 8% of composites from the area of Indicated resources.

Although there is some uncertainty over the detailed reliability of estimated MgO grades, there is sufficient information to demonstrate that MgO grades of Gadde Bissik mineralisation are generally low relative to typical phosphate rock production and are unlikely to be of significantly impact potential economic exploitation.

The mineralised domain used for the current study captures one-metre down-hole composites of nominally greater than 10% P_2O_5. The domain is commonly bound by underlying marls and limestones, and overlying sands. It trends east-west over approximately 21 kilometres with an average width of around 4.4 kilometres.

Gadde Bissik East which includes the SMP area covers an area around 9 kilometres east-west by around 3 kilometres north-south with an average interpreted mineralised thickness of approximately 3.7 metres. Within the SMP, mineralisation is interpreted to average 4.8 metres thick. Gadde Bissik West covers an area around 4.5 kilometres east-west by around 2.3 kilometres north-south with mineralisation interpreted to average around 2.5 metres thick. For the combined resource areas, mineralisation is overlain by an average of 29 metres of overburden, and extends to a maximum depth of around 54 metres. Geological cross-sections are presented in Figure 3.

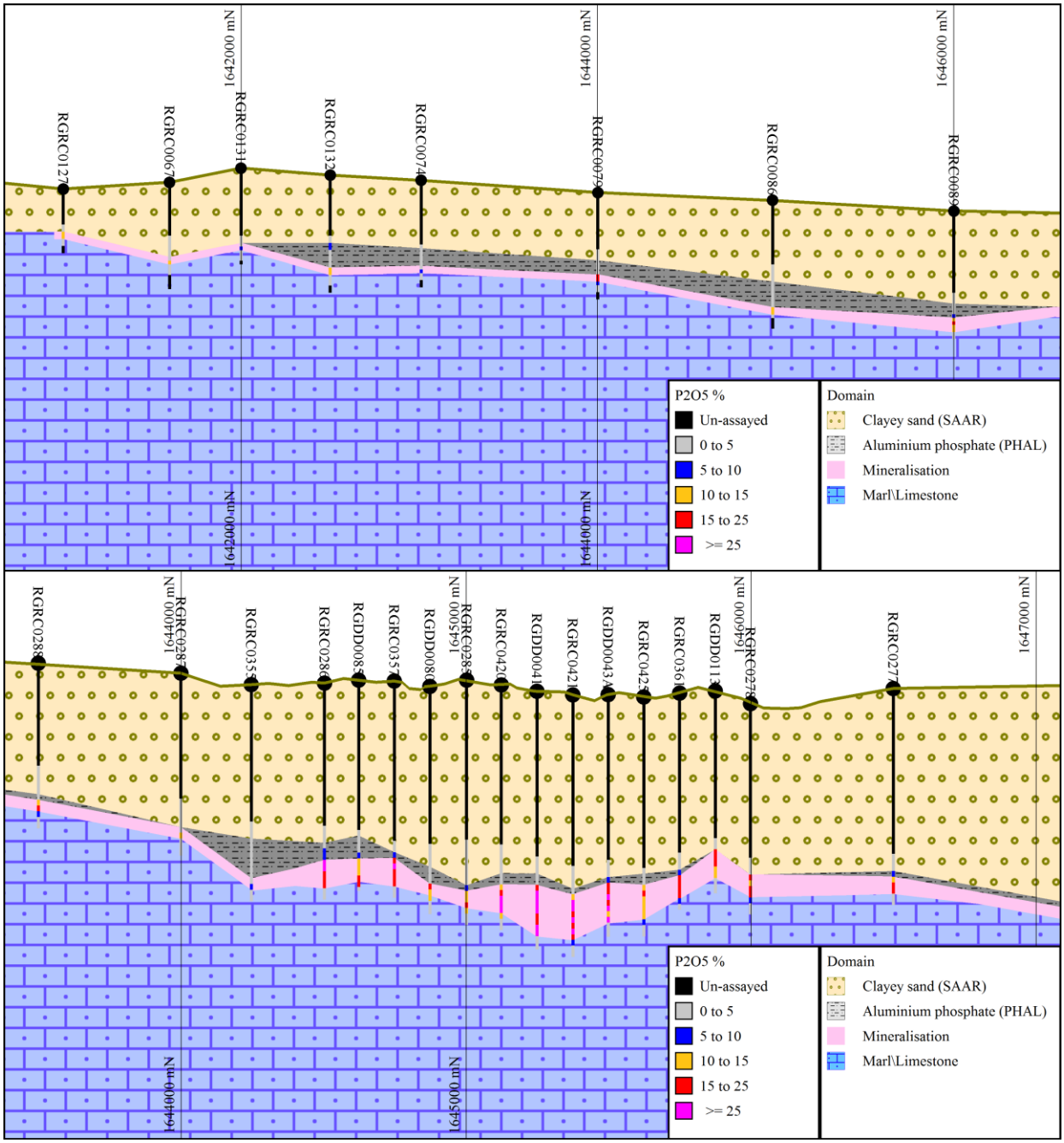

Figure 3 Gadde Bissik – geological cross sections at 332,400mE (top) and 341,000mE (below).

Immersion density measurements are available for 176 air-dried diamond core samples, including 111 mineralised samples. For 112 of these samples, the measurements were repeated with oven drying giving an average density around 15% lower than the initial air-dried measurements. Geometric density measurements derived from measured core weights, bit diameters and recovered lengths are also available for 960 core

intervals from 63 diamond holes. The current estimates include a density of 1.55 t/bcm on the basis of the full set of available density measurements including adjustment for moisture content where appropriate.

For the block model constructed for the current study, grades were estimated by Ordinary Kriging of one metre down-hole composites within the mineralised domain. Prior to variogram modelling and resource estimation, the mineralised domain composites were unfolded to remove the gentle undulations from the mineralised domain. The Kriged estimates were re-folded to their correct positions in the compiled block model.

Peripheral portions of the potential mineralised area tested by drill holes spaced at consistently greater than 500 by 500 metres have insufficient drilling for estimation of Mineral Resources. Broadly spaced drilling in these areas suggests the presence of an Exploration Target of around 100 Mt to 130 Mt at approximately 18 to 21 % P_2O_5.These estimates are based on broad spaced drilling. The potential quantities and grades are conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain that future exploration will result in estimation of a Mineral Resource.

The Exploration Target estimates are derived from portions of the Ordinary Kriged model based on approximately 1 by 1 kilometre to 2 by 1 kilometre spaced drilling reported at a P_2O_5 cut-off grade of 15% with appropriate factoring and rounding to generate a range of tonnages and grades.

Exploration drilling aimed at testing the Exploration Target east of Gadde Bissik and undrilled areas further to the east is planned to commence in early December 2015.

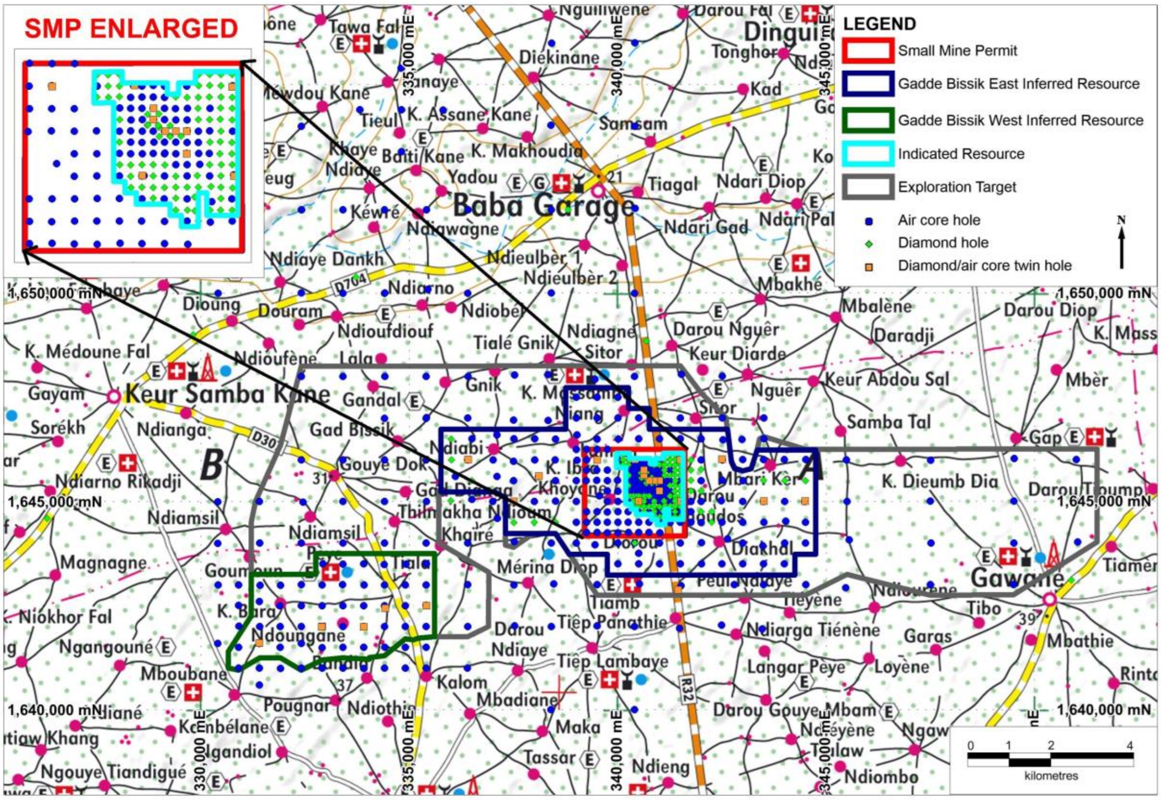

Figure 4 Gadde Bissik resource location and drilling plan

Detailed information in regard to the Mineral Resource and Exploration Target estimates are included in Appendix 2. A table of material drill data is included as Appendix 1. Additional material data are contained in Avenira's market releases dated 27 April 2015, 11 May 2015, 22 September 2015 and in the NI43-101 technical report entitled "Technical Report Mineral Resource Estimation for the Gadde Bissik Phosphate Deposit, Republic of Senegal" dated 9 June, 2015 and available on SEDAR at www.sedar.com.

An updated NI43-101 Technical Report describing the current estimates will be filed on SEDAR before the 20th January 2016.

Cliff Lawrenson

Managing Director

Competent Persons' and Qualified Person's Statement

The Mineral Resource estimates contained in this document are based on, and fairly represent, information and supporting documentation prepared by the competent persons named below.

The Qualified Person in relation to this document is Russell Fulton, who is the Geological Manager for Avenira Limited and a Member of the Australian Institute of Geoscientists, and who has reviewed and approved the information related to the current Mineral Resource estimates in this document. Mr Fulton has sufficient experience deemed relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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' and a 'Qualified Person' as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects. Mr Fulton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this document related to Mineral Resource estimates is based on information compiled by Jonathon Abbott who is a full time employee of MPR Geological Consultants Pty. Ltd. and is an independent consultant to Avenira Limited. Mr Abbott, a Member of the Australian Institute of Geoscientists, has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is reporting to qualify as a Competent Person as defined in the 2012 edition of the Australian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves" and a 'Qualified Person' as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects. Mr Abbott consents to the inclusion in this document of the matters based on the information compiled by him, in the form and context in which it appears.

For further information on the Senegal Phosphate Project please refer to Avenira's market announcements dated 27 April 2015, 11 May 2015 and 22 September 2015 ("Prior Announcement") and the NI43-101 technical report entitled "Technical Report Mineral Resource Estimation for the Gadde Bissik Phosphate Deposit, Republic of Senegal" dated 9 June, 2015 and available on SEDAR at www.sedar.com. Avenira is not aware of any new information or data that materially affects the information included in any Prior Announcement or technical report other than the information or data presented in this updated resource estimate.

Cautionary Statement Regarding Forward-Looking Information

All statements, trend analysis and other information contained in this document relative to markets for Avenira's trends in resources, recoveries, production and anticipated expense levels, as well as other statements about anticipated future events or results constitute forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions. Forward-looking statements are subject to business and economic risks and uncertainties and other factors that could cause actual results of operations to differ materially from those contained in the forward-looking statements. Forward-looking statements are based on estimates and opinions of management at the date the statements are made. Avenira does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Investors should not place undue reliance on forward-looking statements.

Appendix 1. Table of material drill intercepts for resource drilling. Drill holes RGDD0102-0133. Measured units in metres. All drilling is vertical therefore no azimuth shown. Although the mineralised horizon is relatively flat-lying, down hole intervals do not necessarily represent true widths.

Hole ID	Easting	Northing	RL	Dip	Total depth	Mineralised intercept data (average grade over width)						
						From	To	Width	P_2O_5%	Fe_2O_3%	Al_2O_3%	MgO%
RGDD0103	340251	1645627	31.6	-90°	48.5	37.5	46.5	9.0	17.7	4.91	2.63	0.05
includes						38.5	40.5	2.0	28.8	4.34	1.43	<0.01
RGDD0128	341754.3	1645502.4	33.2	-90°	43.4	32.4	41.4	9.0	13.9	5.83	1.57	0.05
includes						34.4	35.4	1.0	21.5	4.41	1.81	0.05
RGDD0129	341751.7	1645250.0	33.0	-90°	44.4	33.9	41.9	8.0	15.5	1.76	1.07	0.03
includes						36.9	37.9	1.0	22.1	1.22	2.23	0.01
RGDD0131	341999.4	1644748.3	34.9	-90°	38.4	29.7	36.7	7.0	27.9	2.35	1.23	0.01
includes						30.7	34.7	4.0	34.5	1.83	0.66	0.01
						31.7	32.7	1.0	37.3	2.35	0.50	0.01
RGDD0124	341501.3	1646127.4	30.1	-90°	35.4	26.5	33.5	7.0	26.2	2.70	1.60	0.04
						28.5	29.5	1.0	33.4	2.38	0.89	0.01
includes	341998.2	1645768.4	31.9	-90°	41.5	32.3	39.3	7.0	16.1	3.35	2.22	0.06
						33.3	34.3	1.0	20.7	3.66	2.25	0.05
RGDD0112	340876.3	1645874.3	29.7	-90°	36.4	28.4	34.4	6.0	26.9	2.55	1.17	0.02
includes						29.4	32.4	3.0	30.4	2.49	0.90	0.02
						29.4	30.4	1.0	33.6	1.77	0.77	0.02
RGDD0109	340002.0	1646123.5	35.2	-90°	44.9	36.1	42.1	6.0	26.8	1.35	1.45	0.05
includes						40.1	41.1	1.0	31.8	1.58	1.12	0.05
RGDD0117A	341500.7	1645871.7	30.9	-90°	33.6	25.7	31.7	6.0	23.0	3.00	1.37	0.04
						25.7	26.7	1.0	30.4	1.89	0.81	0.02
RGDD0102	340251.1	1645376.9	32.4	-90°	44.9	31.2	33.2	2.0	21.6	1.23	5.84	0.04
includes						39.2	43.2	4.0	21.2	3.45	1.66	0.02
						39.2	40.2	1.0	29.1	3.28	1.21	0.02
RGDD0116	341376.7	1645874.8	32.1	-90°	34.7	26.7	32.7	6.0	13.3	11.21	2.82	0.07
includes						26.7	27.7	1.0	16.0	9.69	3.08	0.05
RGDD0107	340251	1645627	35.7	-90°	48.5	37.0	42.0	5.0	25.0	2.88	2.13	0.03
						39.0	40.0	1.0	31.2	1.03	1.30	<0.01
RGDD0106	340253.7	1646125.1	31.5	-90°	44.9	31.8	36.8	5.0	19.8	2.40	1.70	0.04
includes						32.8	33.8	1.0	23.0	1.67	1.12	<0.01
RGDD0104A	340252.2	1645877.8	34.4	-90°	44.9	34.3	39.3	5.0	18.6	4.01	3.25	0.04
includes						37.3	38.3	1.0	23.6	2.82	2.02	0.02
RGDD0132	342253.1	1644501.6	37.3	-90°	39.9	33.1	38.1	5.0	16.7	0.59	2.45	0.02
includes						35.1	36.1	1.0	22.3	0.47	1.92	0.01
RGDD0113	341000	1645874	32.1	-90°	35.5	27.8	32.8	5.0	16.4	2.03	2.58	0.05
includes						27.8	28.8	1.0	20.7	1.88	2.02	0.04
RGDD0126	341753.2	1645750.0	31.8	-90°	38.5	31.5	36.5	5.0	11.0	15.07	1.25	0.15
RGDD0133	342248.7	1644753.0	39.2	-90°	44.0	37.9	41.9	4.0	24.9	0.93	1.50	0.02
includes						37.9	40.9	3.0	30.7	0.66	1.18	0.01
						37.9	38.9	1.0	35.6	0.96	0.88	0.01
RGDD0105	340252.0	1645998.4	35	-90°	48.5	36.0	40.0	4.0	15.4	2.98	1.73	0.04
includes						37.0	38.0	1.0	23.1	3.39	1.38	0.01
RGDD0123	341376.5	1646124.2	32.5	-90°	36.9	31.3	35.3	4.0	9.8	7.72	3.27	3.46
includes						33.3	34.3	1.0	16.0	2.76	2.64	0.09

Intervals restricted to those with ≥ 10% P_2O_5 except for holes with a maximum grade ≤ 10% P_2O_5. Internal waste <10% P_2O_5 included.

Hole ID	Easting	Northing	RL	Dip	Total depth	Mineralised intercept data (average grade over width)						
						From	To	Width	P_2O_5%	Fe_2O_3%	Al_2O_3%	MgO%
RGDD0130	341996.9	1645250	34.1	-90°	46.0	41.4	44.4	3.0	18.4	8.55	3.57	0.14
includes						43.4	44.4	1.0	27.5	4.56	1.39	0.05
RGDD0125	341750.1	1645998.1	31.1	-90°	39.3	34.4	37.4	3.0	17.2	4.05	1.55	0.04
RGDD0108	340127.0	1645997.7	33.3	-90°	44.9	37.5	39.5	2.0	17.9	2.05	1.25	0.06
includes						37.5	38.5	1.0	24.6	1.75	1.00	0.03
RGDD0118	341377.3	1645997.4	31.4	-90°	35.0	30.5	32.5	2.0	13.8	5.34	2.66	0.07
RGDD0114	341126.2	1645873.6	33.2	-90°	36.3	30.8	32.8	2.0	13.5	2.39	2.63	0.07
RGDD0122	341249.1	1646125.3	31.7	-90°	35.4	29.6	31.6	2.0	10.4	2.84	2.89	0.08
RGDD0121	341123.1	1646119.7	30.7	-90°	35.5	30.4	32.4	2.0	10.4	4.13	3.42	0.11
RGDD0115	341248.1	1645874.7	32.3	-90°	36.9	26.5	28.4	1.9	17.8	3.39	2.53	0.06
RGDD0120	341128.1	1645996.3	32.9	-90°	37.0	33.2	34.2	1.0	16.9	2.45	2.60	0.07
RGDD0110	339999.4	1645874.9	33.9	-90°	43.0	39.6	40.6	1.0	16.5	1.33	2.82	0.06
RGDD0119	341247.9	1645999.4	33.1	-90°	37.5	31.4	32.4	1.0	14.3	3.18	3.05	0.05
RGDD0111	340127.5	1645877.1	36.8	-90°	44.5	41.9	42.9	1.0	11.9	1.93	1.36	0.06
Intervals restricted to those with ≥ 10% P_2O_5 except for holes with a maximum grade ≤ 10% P_2O_5. Internal waste <10% P_2O_5 included.												

Appendix 2

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

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.*	• Exploration and resource drilling undertaken in 2014 and 2015 by BMCC (formerly Atlas Ressources), in association with Avenira (formerly Minemakers) planning and program management includes air core (AC), reverse circulation (RC), and diamond core drilling. • An earlier phase of exploration undertaken by BMCC in 2012 is not considered material to the current Public Reporting. • The database compiled for the current study comprises 578 AC, RC and diamond holes for 21,246 m of drilling, of which 339 AC and 139 diamond holes for 17,906 m lie within the Gadde Bissik area. • The current estimates are based on data from AC and diamond holes. Diamond holes provide 40% of the resource dataset, including 59% of resource composites within the area of Indicated Resources.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• All drilling and sampling was supervised by field geologists. • RC and AC holes were sampled over 1 m down hole intervals with sub-sampling generally by riffle splitting. Around 3% of AC resource composites were collected by spearing with these composites representing 0.3% of combined resource composites within the area of Indicated Resources. • Diamond core was halved or quartered for assaying using a diamond saw.
	• *Aspects of the determination of mineralisation that are Material to the Public Report.*	• Phosphate mineralisation is typically associated with elevated uranium grades. Hand-held radiation detection measurements were used to aid selection of intervals for assaying. These results were not used for resource estimation.
	• *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*	• All assaying was undertaken by SGS, with sample preparation in Dakar, Senegal and analysis at either Lakefield in Canada or Booysens in South Africa. Approximately 70% of samples

Criteria	JORC Code explanation	Commentary
	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.	from the resource area were analysed at Lakefield and around 30% analysed at Booysens. Samples assayed by Booysens provide 37% of the Indicated area resource dataset. • SGS's sample preparation comprised oven drying and crushing of the entire sample to 75% passing -2mm. A 1.5kg sub-sample collected by riffle splitting was pulverised to 85% passing -75 microns in a ring and puck pulveriser (SGS Method PRP89, PRP94). • 20g samples of pulverised material were air freighted to the analytical laboratory. A 0.2-0.5 gram sub-sample of the pulverised material was fused with lithium metaborate and analysed by XRF for P_2O_5, Al_2O_3, CaO, Fe_2O_3, K_2O, MgO, MnO, Na_2O, SiO_2 and TiO_2 (± Cr_2O_5 and V_2O_5). (SGS Method XRF76C,V). LOI was determined gravimetrically at 1000°C. • Several sets of selected samples were also assayed for the following additional attributes by a variety of methods with between 50 and 259 mineralised assays available for each attribute: Ag ,As,Ba,Be,Bi,Cd,Ce,Co,Cs,Cu,Ga,Ge,Hf,In,La,Li,Mo,Nb,Ni,Pb,Rb,Re,S,Sb,Sc,Se,Sn,Sr,Ta,Te,Th,Tl,U,W,Y,Zn,Zr,Cl,F,Hg,C,and Corg
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 RC drilling utilised face-sampling bits with diameters of 146 mm. • The AC drilling utilised bit diameters of 76 to 136mm. • All diamond drilling was triple tube, at 90 or 116mm diameters with rotary mud tri-cone pre-collars through un-mineralised overburden. Diamond core was not oriented. • All Gadde Bissik drilling was vertical.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• RC sample recovery was assessed by weighing total recovered sample material. RC recoveries for the first 30 holes showed significant variation between holes with significant problems caused by the sandy overburden. High pressure air is likely to have caused widening of the hole at depth thus reducing air pressure and sample return. RC drilling was abandoned in favor of AC, and no RC holes lie within the resource area. • Diamond core recovery measurements comprising recovered lengths for core runs are available for all holes and show an average recovery of 94% for mineralised intervals, which is consistent with good quality diamond drilling. • For areas of reasonably comparable coverage, mineralised samples from AC and diamond holes show comparable average grades for all resource attributes providing some confidence in the general reliability of AC sampling.

Criteria	JORC Code explanation	Commentary
		• Additional confirmation of the general reliability of AC sampling is provided by 16 twinned diamond holes which show similar average mineralisation thicknesses and phosphate grades to the paired AC holes. • AC sample recovery was assessed by weighing total recovered sample material, with an estimated average recovery of around 58% for mineralised samples. This value is less than expectations for high quality AC sampling. • There is an association between lower average AC sample weights and higher phosphate grades. Although reasons for this trend are unclear, and investigations are on-going, it appears likely to reflect mineralisation variability rather than selective sample loss leading to biased samples. • The consistency of results from AC and diamond drilling indicates that despite the relatively low average recovery the AC samples are representative and do not suffer from significant biases due to selective sample loss or gain. • For the resource dataset, twinned diamond holes were selected in preference to AC holes with diamond drilling providing 59% of the Indicated area resource dataset. • Available information suggests that the resource sampling is reasonably representative and does not include a systematic bias due to preferential sample loss or gain.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• AC, RC and diamond holes were routinely geologically logged by industry standard methods with logs available for around 98% of resource area drilling. • The geological logging is qualitative in nature, and of sufficient detail to support the current estimates. • Sub-samples of AC and RC chips were retained in chip trays. Diamond core and AC and RC chip trays were routinely photographed.

Criteria	JORC Code explanation	Commentary
Sub-sampling 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.*	• RC and AC samples were collected over 1 m down-hole intervals and generally sub-sampled with a three tier riffle splitter. Around 3% of AC resource composites were collected by spearing with these composites representing 0.3% of combined resource composites within the area of Indicated Resources. • The majority of RC and AC samples were dry, with very few samples logged as wet. • Diamond core was halved or quartered for assaying using a diamond saw. Measures taken to ensure the representivity of RC and diamond sub-sampling include close supervision by field geologists, use of appropriate sub-sampling methods, routine cleaning of splitter and cyclones. • Information available to demonstrate the representivity of AC sub-sampling includes field duplicates and paired diamond holes. • The available information demonstrates that the sub-sampling methods and sub-sample sizes are appropriate for the grain size of the material being sampled, and provide sufficiently representative sub-samples for resource estimation.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	• *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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Hand-held radiation detection measurements were used to aid selection of intervals for assaying. These results were not used for resource estimation. • Assay quality control procedures include coarse blanks, certified reference standards and check ICP analyses by ALS. • P_2O_5 assays for coarse blanks inserted within runs of mineralised samples average around 0.1% higher (absolute) than initial assays of source material. SGS attribute this apparent low-level contamination to deficiencies in cleaning of sample preparation equipment at the Dakar sample preparation facilities. Investigations of the apparent contamination are on-going. The level of apparent contamination is low relative to typical mineralisation grades, and it does not appear to have significantly affected the current estimates. • At 0.05%, the detection limit for MgO analyses by the Booysens laboratory is notably higher than the value of 0.01% for SGS Lakefield and is high relative to typical mineralisation grades, with many Booysens MgO assays of mineralised samples reported as below detection. • Assays of submitted reference standards and ALS repeats suggest Booysens analyses from around mid-April 2015 onwards understate MgO grades of typical mineralisation by in the order of 50%. For the resource dataset, Booysens MgO results were replaced by ALS ICP assays where available and apparently biased results from later batches were adjusted by a function developed from standards results and ALS repeats • Composites with adjusted MgO Booysens assays represent around 12% of the resource dataset, including 8% of composites from the area of Indicated resources. • Although there is some uncertainty over the detailed reliability of MgO assaying, there is sufficient information to demonstrate that average MgO grades of Gadde Bissik mineralisation are low relative to typical phosphate rock production and are unlikely to significantly impact potential economic exploitation of Gadde Bissik mineralisation. • The available QAQC information has established acceptable levels of precision and accuracy for the attributes included in resource estimates.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• MPR have independently verified calculated intercept grades for intervals reported in this announcement on the basis of the supplied data.
	• *The use of twinned holes.*	• Diamond drilling includes 16 holes drilled within 10 m of AC holes.

	The twinned diamond and AC holes show similar mineralisation grades and thicknesses providing some confidence in the general reliability of the AC sampling.
• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Sample intervals and geological logs were recorded on logging sheets and subsequently entered into desk-top or lap-top computers. These logs and laboratory assay files were merged directly into a central Micromine database. • Database and geological staff routinely validate database entries with reference to original data. • The Competent Person's independent checks of database validity included: Comparison of assay values with geological logging, comparison of assay values between nearby holes, checking for internal consistency between, and within database tables, comparisons between assay results from different sampling phases. • Additional checking included comparing all database assay entries with laboratory source files and spot check comparison of depths and sample numbers between original field sampling sheets and database entries for 1,705 intervals from 4 diamond holes and 157 AC holes.

Criteria	JORC Code explanation	Commentary
		• These checks showed no significant discrepancies in the database used for resource estimation.
	• *Discuss any adjustment to assay data.*	• MgO assays from later phases of assaying by the SGS Booysens laboratory were adjusted to compensate for an apparent negative bias shown by submitted reference standards and ALS repeats. Composites with adjusted MgO assays represent around 12% of the resource dataset, including 8% of composites from the area of Indicated resources.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• The surface topography of the SMP and adjacent areas has been surveyed by RPAS (remotely piloted aircraft system) photogrammetry using known points surveyed by differential GPS (DGPS) as a reference base. Collar locations for holes RGDD0048 to RGDD0133 were accurately measured from the RPAS survey with collars identified by markers or ground inspection. • The majority of resource composites (58%) are from holes with high accuracy DGPS or RPAS collar surveys (26%). The remaining composites are from holes with collar locations measured by hand-held GPS. Within the area of Indicated resources 5% of composites have only hand-held GPS collar surveys. • For the resource dataset, all drill hole collar elevations were derived from a triangulated surface based on the RPAS topographic survey and DGPS collar surveys outside coverage of the RPAS survey. For collars surveyed by RPAS or DGPS the elevation change was generally minor. This approach was undertaken to ensure consistency between drill holes and the topographic surface. • Drill holes were not routinely down-hole surveyed. • For the comparatively widely spaced and shallow vertical holes the lack of comprehensive DGPS or RPAS collar surveys and down-hole surveys and does not affect confidence in resource estimates.
	• *Specification of the grid system used.*	• All surveying was undertaken in World Geodetic System (WGS84) Zone 28 coordinates.
	• *Quality and adequacy of topographic control.*	• A triangulation representing topography was generated from the RPAS topographic survey and DGPS collar surveys outside coverage of the RPAS survey. • The mineralisation does not outcrop and accuracy of the topographic triangulation does not affect resource estimates. • Topographic control is adequate for the current estimates.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drill hole spacing across the broader Gadde Bissik prospect varies from more than two km by two km in peripheral portions of the tenement to 125 m by 125 m in the SMP area, with a small number (8) of closer spaced infill holes. • Resource estimates for mineralisation tested by drilling spaced at 125 m by 125 m and closer are classified as Indicated. Estimates based on holes spaced at between 125 m by 125 and 500 by 500 m are classified as Inferred. • Potential mineralisation tested by drilling spaced at more than 500 m by 500 m to around 2 km by 1 km is too poorly defined for estimation of Mineral Resources, and represents Exploration Targets.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• The data spacing has established geological and grade continuity sufficiently for the current Mineral Resource Estimates.
	• *Whether sample compositing has been applied.*	• Drill hole samples were composited to 1 metre down-hole intervals for resource modeling.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The mineralisation is flat lying to gently undulating, and perpendicular to the generally vertical drill holes. • The drilling orientation achieves un-biased sampling of the mineralisation.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• Sample collection for BMCC drilling was supervised by BMCC geologists using protocols established by Avenira. • The project is in a largely rural area with easy access to the general public. Samples selected for assaying were collected in heavy-duty polyweave plastic bags that were immediately sealed and placed inside a BMCC vehicle. The bagged samples were then taken by BMCC employees directly to the BMCC site office in the regional town of Tivaouane where they were kept under lock and key. Samples were transferred to the BMCC office in Dakar weekly where paperwork was prepared and samples then delivered directly to SGS in Dakar by BMCC personnel. No contractors or third parties were permitted unsupervised access to samples before delivery to SGS. • Results of field duplicates and twinned holes along with the general consistency of assay results between sampling phases and drilling methods provide confidence in the general reliability of the resource
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Data reviews have included comparisons between various sampling phases and methods which provide some confidence in the general reliability of the data. • The Competent Person independently reviewed the quality and reliability of the exploration data. These reviews included observation of drilling and sampling, review of database consistency, spot check comparisons between original sampling sheets and database entries and comparison of laboratory source files with database entries, and review of QAQC information. • The Competent Person considers that the sample preparation, security and analytical procedures adopted for the BMCC drilling provide an adequate basis for the Mineral Resource estimates.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Gadde Bissik project lies within BMCC' 1553km^2 Research Permit "Cherif-LO Ngakham" in the region of Thies. The licence was renewed on 28 July 2014 for three years. BMCC is a wholly owned subsidiary of Avenira Limited. • A Small Mine Permit has been granted to BMCC and covers a 5km^2 higher grade, more closely drilled portion.. The permit allows unlimited production from within the permit area, subject to environmental approval. Avenira has entered into an agreement with Agrifos to wholly acquire BMCC and certain fees and royalties apply in relation to future mine production, the nature of which are subject to confidentiality. The obligations in regard to fees and future royalties are not considered by the company to be commercially onerous. There are no known impediments to obtaining a licence to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Data from an earlier phase of exploration by BMCC is not considered material to this Public Reporting.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Gadde Bissik phosphate mineralisation is part of the widespread marine phosphate phase within the in the Middle Eocene (48.6 to 40.4 million years) Senegalese sedimentary basin. Phosphate mineralisation in the Gadde Bissik area is predominantly a product of dismantling and reworking of primary high grade "residual" phosphate deposits and subsequent deposition under palaeo-morphological control. The "reworked" deposits at Gadde Bissik are thicker and higher grade than typically recorded in the broader area and may indicate a more proximal source resulting in a lower degree of dilution through mixing with non-phosphatic material. • The Gadde Bissik stratigraphic succession comprises a footwall of marl and marly clays, with locally overlying nummulitic limestone, discordantly overlain by the phosphatic sequences. The contact is typically marked by elevated iron levels within the marly clay. The main phosphatic unit comprises phosphate sands with hard and soft phosphate pebbles, phosphatic conglomerates and varying degrees

Criteria	JORC Code explanation	Commentary
		of ferruginous gravels. The unit varies from 1 to 12 m thick with the thicker areas interpreted as lenticular or pod-like bodies. Grades vary from around 5 to 37% P_2O_5. Above the main phosphate unit a discontinuous layer of white gravelly aluminum phosphate is locally developed with grades typically in the range of 1-5% P_2O_5 locally ranging up to 10%. Where present the layer varies from 1 to 5 m thick. The lower part of this unit grades into the main phosphatic unit in some places. The phosphatic units are overlain by clayey sands ranging from around 10 to 50 m thick.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Appropriate information is included in the body of the announcement.

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.* • *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.*	• Appropriate information is included in the body of the announcement
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Estimated resources do not include equivalent values.
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 (e.g. 'down hole length, true width not known').*	• The mineralisation is flat lying to gently undulating, and perpendicular to the generally vertical drill holes, with down-hole lengths closely reflecting true thicknesses.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of*	• Included in body of announcement.

Criteria	JORC Code explanation	Commentary
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.		
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.*	• Appropriate information is included in the body of the announcement
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.*	• Immersion density measurements are available for 176 air-dried diamond core samples, including 111 mineralised samples. For 112 of these samples, the measurements were repeated with oven drying giving an average density around 15% lower than the initial air-dried measurements. • Geometric density measurements derived from measured core weights, core diameters and recovered lengths are available for 960 core intervals from 63 diamond holes. • An initial metallurgical composite of 56 kg taken from 9 AC holes was tested at the University of Adelaide in September 2014. Results indicated that a simple wet screening process rejecting the <212 micron fraction could upgrade material from a feed grade of ~22% to a product of ~33% P_2O_5. Approximately 55% of the P_2O_5 was recovered and 60% of the feed weight was rejected. The composite had a cadmium level of <30ppm and uranium levels <100ppm. • A second round of metallurgical test work undertaken at the University of Adelaide on 5 separate composites, comprised of approximately 300kg from 19 diamond drill holes confirmed the results of the first round of test work. Composite feed grades of 21-29.5% P_2O_5 were able to be beneficiated to product grades of 31.4-36.6% P_2O_5. Other product grades ranged from 0.01-0.03% MgO, 0.5-1.1% Al_2O_3, 1.6-4.1% Fe_2O_3 and from 7.3-16.6% SiO_2. Cadmium and uranium levels in the second round of test work were higher that levels measured in the first round of test work and the combined results indicated cadmium levels in the 30-40ppm range and uranium levels in the 120-140ppm range for the >212 micron fraction. • A third round of metallurgical test work was carried out core from 14 diamond drill holes within the SMP area. The base of the mineralised horizon was identified with increased rigor to exclude a marly clay horizon high in MgO and Fe_2O_3. This surface is readily identifiable visually. The entire potentially mineable width above the marly clay at a 10% P_2O_5 cut-off was used for the metallurgical test work. Assaying was done on a ¼ PQ3 core split and the remainder sent to Mintek

Criteria	JORC Code explanation	Commentary

		Laboratory in Johannesburg, South Africa for initial testing with follow-up testing conducted at the Ian Wark Institute Laboratory at the University of South Australia.
		• One 300 Kg composite was made up from 5 individual top-to-bottom mineralised horizon intercepts for screen design parameter testing and generation of clay fines/rejects for settling characterisation testing. Individual testing was carried out on 8 of the remaining top-to-bottom mineralised horizon intercepts.
		• Each sample was subjected to the following test work:
		• An uncrushed head sample was put through a screen size and assay program.
		• For Composite 1, the resultant <212µ fraction was subjected to settling characteristic testing conducted by VIETTI Slurrytec.
		• The uncrushed screen size fractions were assayed for the following suite: P_2O_5, Al_2O_3, Fe_2O_3, CaO, MgO, K_2O, Na_2O, MnO, TiO_2, SiO_2, F, Cl, As, Bi, Cd, Co, Cr, Cu Hg, Nb, Ni, Pb, Sb, Se Th, U, V, Zn and C_{org}.
		• Following receipt of the size fraction assays, the results were combined with previous testing size-assay data.
		• The results of the test work showed similar results to the previous two test work programs and have demonstrated that the behavior of the mineralisation when subjected to the proposed method of beneficiation, wet screening, is relatively consistent across the deposit and at cut-off grades above 10% P_2O_5.
		• The test work indicates that at the 15% cut-off grade chosen for the current resource estimate, a 38% mass recovery of product from a feed grade of 21.0% P_2O_5 will recover 56% of the contained P_2O_5. This is the same recovery as previously estimated at 18% cut-off, although at a slightly lower product P_2O_5 grade. Further work is required to determine the final product grade but it is likely to be >31% P_2O_5 based on the current test work. Other important metallurgical parameters determined by the test work are:
		  • Cd 22-44 ppm
		  • U 100-120 ppm
		  • Hg <0.02 pm
		  • Cl <0.02%
		  • C_{org} <0.2%
		  • Fe_2O_3 ~2.5% (r = 1.0-4.39%)
		  • Al_2O_3 ~0.9% (r = 0.5-1.4%)
		  • MgO ~0.03% (r = 0.01-0.05%)

Criteria	JORC Code explanation	Commentary
		• Ca:P <1.5
	•	• In addition to P_2O_5 the resource model includes estimates for Al_2O_3, CaO, Fe_2O_3, MgO, and SiO_2. Although not included in mineral resources, the model includes estimates for the other routinely assayed attributes (K_2O, MnO, Na_2O, TiO_2, Cr_2O_5, V_2O_5 and LOI). • Several sets of selected samples were also assayed for the following additional attributes by a variety of methods with between 50 and 259 mineralised assays available for each attribute: Ag ,As,Ba,Be,Bi,Cd,Ce,Co,Cs,Cu,Ga,Ge,Hf,In,La,Li,Mo,Nb,Ni,Pb,Rb,Re,S,Sb,Sc,Se,Sn,Sr,Ta,Te,Th,Tl,U,W,Y,Zn,Zr,Cl,F,Hg,C,C organic. • For all secondary, and additional attributes average estimated grades (where available) or average grades for mineralised samples are below Avenira's expectations of critical thresholds for potential production and marketing options, and demonstrate that deleterious attributes appear are unlikely to prevent potential economic extraction.
Further work	• *The nature and scale of planned further work (e.g. 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.*	• Further infill drilling is being carried out within and around the SMP area, as well as drilling to recover samples for metallurgical and geotechnical test work prior to any proposed mining. • Future exploration work is planned at a regional scale, starting at 4 km by 4 km grid spacing. Information regarding regional targeting is commercially sensitive.

Section 3 Estimation and Reporting of Mineral Resources

- (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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.* • *Data validation procedures used.*	• Database and geological staff routinely validate database entries with reference to original data. • The Competent Person's independent checks of database validity included: Comparison of assay values with geological logging, comparison of assay values between nearby holes, checking for internal consistency between, and within database tables, and comparisons between assay results from different sampling phases. • Additional checking included comparing all database assay entries with laboratory source files and spot check comparison of depths and sample numbers between original field sampling sheets and database entries for 1,705 intervals from 4 diamond holes and 157 AC holes. • These checks showed no significant discrepancies in the database used for resource estimation.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Mr. Abbott visited Gadde Bissik on the 22nd and 23rd of April 2015, and viewed drill core at BMCC's Dakar office on the 24th of April 2015. The site visit included inspection of drilling and sampling activities, and discussions of details of the project's geology and drilling and sampling with field geologists and Mr. Abbott gained an improved understanding of the geological setting and mineralisation controls, and the resource sampling activities.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Geological setting and mineralisation controls of the Gadde Bissik mineralisation have been established from with sufficient confidence for the current estimates. • Resources were estimated within wireframes representing mineralised domains interpreted on the basis of geological logging and P_2O_5 assay grades with a nominal P_2O_5 cut-off grade of 10%.The domain is commonly bound by underlying marls and limestones, and overlying sands.
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.*	• The mineralised domain interpreted for the current study trends around 21 km east-west by around 4.4 km north south and includes areas tested by assayed drill holes at patterns varying from around 250 by 250 m to 2 km by 1 km. Only areas tested by generally 500 by 500 m and closer spaced drilling are included in estimated Mineral

Criteria	JORC Code explanation	Commentary
Resources. Potential mineralisation in more broadly sampled areas is too poorly defined for estimation of Mineral Resources, and represents Exploration Targets.		• The areas of 500 by 500 m and closer spaced drilling included in Mineral Resources include two zones designated as Gadde Bissik East and West respectively. The Gadde Bissik East zone includes the SMP area. • In the Gadde Bissik East zone the interpreted mineralised domain extends around 9 km east-west by around 3 km north-south. It ranges from 2 to rarely 11 m thick and averages around 3.7 m thick, with an average depth to mineralisation of approximately 34 m. Within the SMP area the interpreted domain averages around 4.8 m thick. • In the Gadde Bissik West zone the interpreted mineralised domain extends around 4.5 km east-west by around 2.3 km north-south. It averages around 2.5 m thick, with an average depth to mineralisation of 21 m. • For the combined resource areas, the depth to the base of mineralisation ranges from 13 to 54 m and averages around 34 m.
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. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	• Resources were estimated by Ordinary Kriging of 1 m down hole composited assay grades within the mineralised domain. • The estimates include P_2O_5, Al_2O_3, CaO, Fe_2O_3, MgO and SiO_2 with variograms modeled for each attribute. • No upper cuts were applied to the estimates. This reflects the generally moderate variability of most attributes and ameliorates the risk of understating secondary attribute grades. • Estimates included in Mineral Resources were generally extrapolated to a maximum of around half the drill hole spacing beyond drilling, with a maximum extrapolation distance of generally around 250 m. • Grade estimation included un-folding of composite locations using the base of the mineralised domain as a reference surface. • Grade estimation included a six pass, octant based search strategy. Search ellipsoid radii (east-west, north-south, vertical) and minimum data requirements for these searches comprise: Search 1 200x200x1 m (8 data), Search 2 300x300x1.5 m (8 data), Search 3 600x600x1.5 m (4 data), Search 4 600x600x1.5 m (4 data), Search 5 1200x1200x3 m (2 data) and Search 6 1200x1200x3 m (2 data). • Indicated Mineral Resources include estimates from Search passes 1 to 4, with Search 1 and 2 providing 96% of these estimates.

Criteria	JORC Code explanation	Commentary
		Inferred Resources are primarily based on search 1 to 4, with search 5 contributing around 0.1% of the estimates. Search 6 was used only for estimation of exploration targets. • Micromine software was used for data compilation, domain wire-framing, and coding of composite values, and GS3M was used for resource estimation. • The estimation technique is appropriate for the mineralisation style.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	• There has been no production from the project. • The current resource model is reasonably consistent with the model reported in May 2015, with differences reflecting drilling and analyses completed since that time. • A comparative OK model estimated without un-folding gave similar estimates.
	• *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*	• Estimated resources make no assumptions about recovery of by-products. • In addition to P_2O_5, the resource model includes estimates for Al_2O_3, CaO, Fe_2O_3, MgO, and SiO_2. Although not included in mineral resources, the model includes estimates for the other routinely assayed attributes (K_2O, MnO, Na_2O, TiO_2, Cr_2O_5, V_2O_5 and LOI). • Several sets of selected samples were also assayed for the following additional attributes by a variety of methods with between 50 and 259 mineralised assays available for each attribute: Ag ,As,Ba,Be,Bi,Cd,Ce,Co,Cs,Cu,Ga,Ge,Hf,In,La,Li,Mo,Nb,Ni,Pb,Rb,Re,S,Sb,Sc,Se,Sn,Sr,Ta,Te,Th,Tl,U,W,Y,Zn,Zr,Cl,F,Hg,C,C organic. • For all secondary, and additional attributes average estimated grades (where available) or average grades for mineralised samples are below Avenira's expectations of critical thresholds for potential production and marketing options, and demonstrate that deleterious attributes appear are unlikely to prevent potential economic extraction.
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• Grades were Kriged into 62.5 by 62.5 by 1 m parent blocks (east, west, vertical). Plan-view dimensions of the parent blocks approximate half the drill hole spacing in the closest drilled portions of the deposit. For un-folding and precise representation of interpreted domain volumes the parent bocks were re-blocked to dimensions of 31.25 by 31.25 m by 0.25 m. • Grade estimation included a six pass, octant based search strategy.

Criteria	JORC Code explanation	Commentary
		Search ellipsoid radii (east-west, north-south, vertical) and minimum data requirements for these searches comprise: Search 1 200x200x1 m (8 data), Search 2 300x300x1.5 m (8 data), Search 3 600x600x1.5 m (4 data), Search 4 600x600x1.5 m (4 data), Search 5 1200x1200x3 m (2 data) and Search 6 1200x1200x3 m (2 data).
	• *Any assumptions behind modelling of selective mining units.*	• Details of potential mining parameters are unclear reflecting the early stage of project evaluations. • The estimates reflect conceptual development plans for the project which comprise a selective medium scale open pit operation feeding a beneficiation plant.
	• *Any assumptions about correlation between variables.*	• The modeling did not include specific assumptions about correlation between variables.
	• *Description of how the geological interpretation was used to control the resource estimates.*	• The mineralised domain used for resource estimation is consistent with geological interpretation of mineralisation controls.
	• *Discussion of basis for using or not using grade cutting or capping.*	• No upper cuts were applied to the estimates. This reflects the generally moderate variability of most grade attributes, and ameliorates risk of understating secondary attribute grades.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Model validation included visual comparison of model estimates and composite grades, and trend (swath) plots. • There has been no production from the project.
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 tonnage basis, with densities derived from sample results inclusive of allowance for oven-drying. .
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The cut-off grade used for resource reporting reflects Avenira interpretation of potential project economics for a medium scale operation feeding a beneficiation plant.
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.*	• The estimates are intended to reflect medium scale, selective open pit mining. Specific details of potential mining parameters are unclear reflecting the early stage of project evaluations. • With a maximum depth of 54 m, the resources appear amenable to open pit mining.
Metallurgical	• *The basis for assumptions or predictions regarding metallurgical*	• As outlined in Section 2 of this Table, three phases of metallurgical test

Criteria	JORC Code explanation	Commentary
factors or assumptions	*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 processes and parameters made when reporting 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.*	work have been undertaken on samples of Gadde Bissik mineralisation. • The test work suggests that for mineralisation selected at 15 P_2O_5 cut-off beneficiation by wet screening will recover around 56% of contained P_2O_5. Further work is required to determine the final product grade with current test work suggesting it is likely to be greater than 31% P_2O_5 with other key metallurgical parameters including deleterious attribute grades lying within the range expected for saleable product.
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.*	• Testing to date and analysis of the clay waste product from the simple physical sizing beneficiation process indicates no chemical environmental concern storing this product either in surface storage facilities or returning this material to completed open pit areas. • An Environmental Impact Study (EIS) and Community Support and Relocation Plan (CSRP) has been approved by the government. The EIS was outsourced to environmental consultant Transecor, and included an independently audited risk assessment study. The assessment identifies the key negative environmental impacts during a construction phase, as dust generation, noise levels generated from mining operations, surface water management and the potential for local aquifer water quality reduction. All of these elements are typically mitigated through standard management plans and systems of work. The risk assessment also identifies significant positive environmental and socio-economic impacts during any future operating phase of the project. • The CSRP involved extensive community and local government consultation and was signed off by all parties.
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 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.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	Immersion density measurements are available for 176 air-dried diamond core samples, including 111 mineralised samples. For 112 of these samples, the measurements were repeated with oven drying giving an average density around 15% lower than the initial air-dried measurements. Geometric density measurements derived from measured core weights, core diameters and recovered lengths are available for 960 core intervals from 63 diamond holes. The current estimates include a density of 1.55 t/bcm on the basis of the available density measurements including adjustment for moisture content where appropriate.

Criteria	JORC Code explanation	Commentary
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories*	The model estimates are classified by a set of plan-view polygons defining areas of relatively consistent drill spacing. Estimates for mineralisation tested by drilling spaced at 125 m by 125 m and rarely closer are classified as Indicated. Estimates based on holes spaced at between 125 m by 125 m and approximately 500 m by 500 m are classified as Inferred. Potential mineralisation tested by drilling spaced at more than 500 m by 500 m to around 2 km by 1 km is too poorly defined for estimation of Mineral Resources, and represents Exploration Targets.
	Whether appropriate account has been taken of all relevant factors (i.e. 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).	The resource classification accounts for all relevant factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The resource classifications reflect the competent person's views of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The resource estimates have been reviewed by Avenira geologists, and are considered to appropriately reflect the mineralisation and drilling data.
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 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.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Confidence in the relative accuracy of the estimates is reflected by the categorisation as Indicated and Inferred.