

# Vector's Global Gold Resource Increases to 308,765 Oz Key Highlights

- Gwendolyn resource significantly increases to 214,500 Au ounces, a 544% increase since June 2011 and a 92% increase from the December 2011 update;
- Mineralisation continues to be open in all directions;
- 60 Phase 3 RC holes awaiting total hole sample results; and
- 49 completed RC holes awaiting partial hole sample results.

Vector Resources Limited (ASX: VEC) ("Vector" or "the Company") is pleased to announce that it is in a position to update the market on the current status of the Company's Gwendolyn resource.

The Company has carried out an internal review of the Gwendolyn East (M77/1263) resource based on the additional information obtained to-date from the drilling carried out as part of the Phase 3 drill program. The Phase 3 drill program consists of 147 reverse circulation (RC) holes totalling 17,294 metres and 8 diamond core (DD) PQ<sup>3</sup> sized holes totalling 1,210 metres.

This program was designed with three main aims, firstly to test the continued potential extensions of mineralisation beyond the current envelope. Secondly, to complete infill drilling within the unclassified exploration target and inferred resource to meet the required drill density for JORC classifications and thirdly to obtain suitable diamond core samples to conduct preliminary metallurgical and geotechnical analysis for the future feasibility study.

The resource has significantly increased in size by **92%** and classification as a result of the Phase 3 program which is a **544%** increase on resource since June 2011. The fully diluted indicated resource is now a combination of 2,619,990 tonnes at 1.81 g/t for 151,791 Au ounces of material and 238,000 tonnes at 0.7 g/t for 5,600 Au ounces of tails, totalling 2,857,990 tonnes at 1.72 g/t for 157,391 Au ounces. The fully diluted inferred resource is now 1,357,940 tonnes at 1.31 g/t for 57,109 Au ounces of material, giving a total of 4,215,930 tonnes at 1.58 g/t for 214,500 Au ounces.

Project	Measured Resource		Indicate	Indicated Resources			Inferred Resource			Total Resource		
M77/1263	Tonnes	g/t	Total		g/t	Total Toppes	Tonnes	g/t	Total	Tonnes	g/t	Total
11/1/1203	Tonnes	Au	Oz Au		Oz Au	Tonnes	Au	Oz Au	Tonnes	Au	Oz Au	
Gwendolyn				2,619,990	1.81	151,791	1,357,940	1.31	57,109	3,977,930	1.63	208,900
Gwendolyn Tails				238,000	0.70	5,600				238,000	0.70	5,600
Project Total				2,857,990	1.72	157,391	1,357,940	1.31	57,109	4,215,930	1.58	214,500

Chairman Damien O'Reilly said "The Board were extremely pleased with the results the Company has been able to achieve at Gwendolyn since June 2011. This resource upgrade is an increase of **92%** from the December 2011 upgrade and the mineralisation envelope continues to be open in all directions. A total of 181,200 Au ounces have been added to the historical resource of 33,300 Au ounces in less than a year and the Company is fast tracking activities towards potential near-term production. Having a large amount of material now in the indicated category gives the Board great confidence in the resource as it moves towards mine feasibility. There are still a large number of assay results pending and 38 holes remaining to be drilled in the Phase 3 program before Phase 4 commences. The Company now has a global resource of **308,765** Au ounces with significant upside potential on all tenements currently reporting JORC resources."

www.vectorresources.com.au



# Internal Resource Estimate of the Gwendolyn East Gold Project June 2012

The Company's Internal Global Resource Estimate for the Gwendolyn East Gold Project June 2012 was completed by the Company's Exploration Manager Mr Arnel Mendoza using IDW<sup>3</sup> analysis. Mr Arnel Mendoza is a competent person capable to perform the model and resource evaluation and he is a Member of the Australian Institute of Geoscientists ("AIG") and a Member of The Australasian Institute of Mining and Metallurgy. The resource estimate is based on a mineralization model and no geological controls at this stage; the geological model is currently in progress. SRK will complete a final Phase 3 resource upgrade once the remaining 109 complete or partial RC hole samples are received. The key elements of the Internal Mineral Resource study for the Gwendolyn project are:

- Assessment of quality and continuity of the lithological and grade data;
- Estimation of the Au Mineral Resource; and
- Classification and reporting of the estimate in accordance with the JORC Code (2004 Edition).

The Gwendolyn East Project is at an exploration/resource definition stage. The existence of historical drilling and three new RC and diamond drilling programs allowed a geostatistical domain based on the Au grade continuity to be created. This geostatistical domain, named Mineralisation 0.2 g/t is based on a low cut-off grade envelope (shell) of 0.2 g/t.

#### Figure 1: Gwendolyn Primary JORC Resource >0.2 g/t Au cut-off grade

Within the 0.2 g/t Mineralisation Domain, the in-situ Gwendolyn indicated Mineral Resource is estimated to be 2,619,990 tonnes at an Au grade of 1.81 g/t with a gold content of 151,791 oz. Within the 0.2 g/t Mineralisation Domain, the in-situ Gwendolyn inferred Mineral Resource is estimated to be 1,357,940 tonnes at an Au grade of 1.31 g/t with a gold content of 57,109 oz.

#### Figure 2: Gwendolyn Tailings JORC Resource: 0.7 g/t Au cut-off grade

The Gwendolyn Tails Indicated Mineralisation Resource is estimated to be 238,000 tonnes at an Au grade of 0.7 g/t, containing 5,600 oz. as previously stated in the SRK report attached to the December 2011 resource upgrade announcement.

			-						
FROM	то	VOLUME	TONNES	SG	G Au	Cumulative		Au Grade	Au Troy
FROIVI	то	VOLUIVIE	TOININES	50		Volume	Tonnes	(g/t)	Ounces
10.0	999,999	23,200	49,880	2.15	33.63	23,200	49,880	33.63	53,576
5.0	10.0	49,800	107,070	2.15	7.05	73,000	156,950	15.50	77,697
1.0	5.0	329,800	709,070	2.15	2.05	402,800	866,020	4.49	124,152
0.8	1.0	88,400	190,060	2.15	0.90	491,200	1,056,080	3.84	129,622
0.6	0.8	138,400	297,560	2.15	0.69	629,600	1,353,640	3.15	136,218
0.4	0.6	259,000	556,850	2.15	0.49	888,600	1,910,490	2.38	145,020
0.2	0.4	330,000	709,500	2.15	0.30	1,218,600	2,619,990	1.81	151,791
-	0.2	155,600	334,540	2.15	0.11	1,374,200	2,954,530	1.62	153,009

 Table 2: Mineral Resource Estimate Statement for Vector Resources' Gwendolyn East Project as at 25 June 2012, reported as gold contained within a 0.4 g/t

 grade shell in situ mineralisation – Indicated Resources

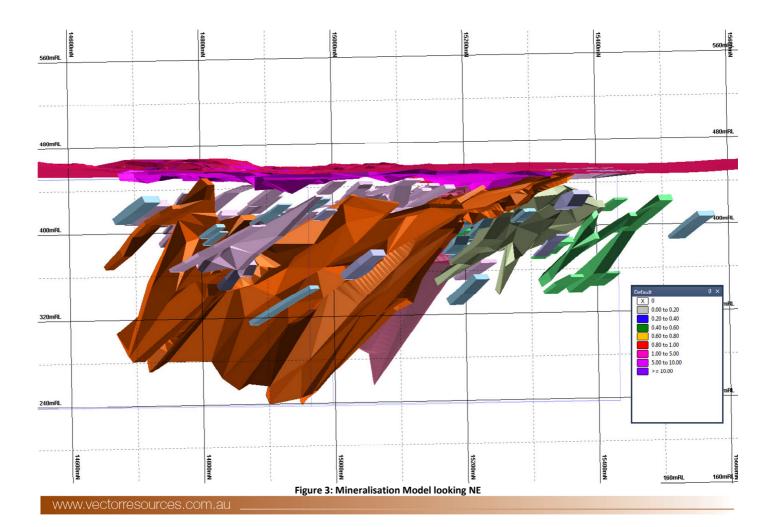


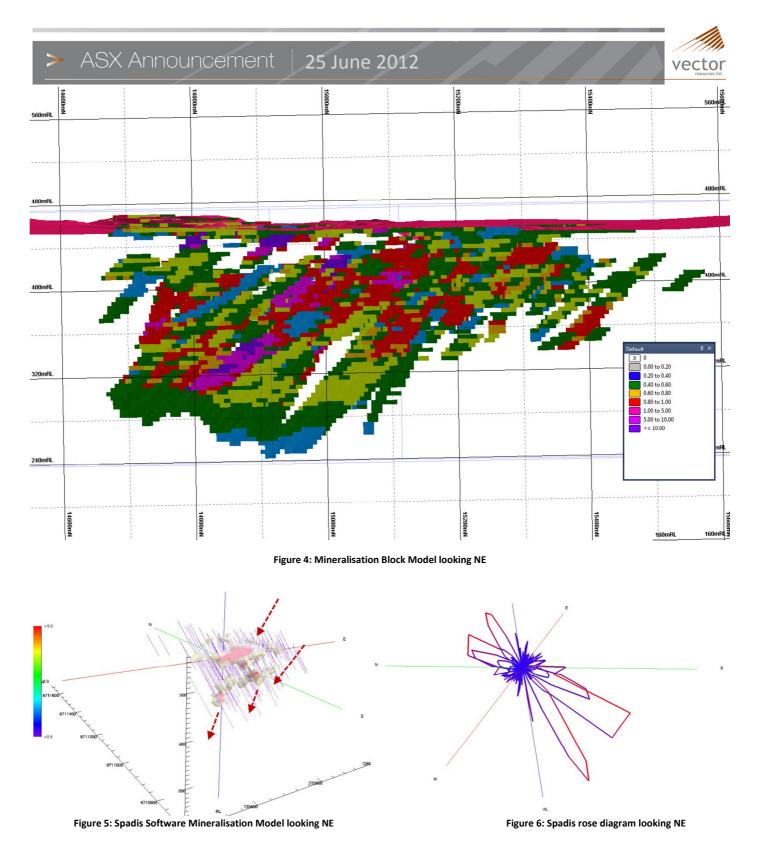
Table 3: Mineral Resource Estimate Statement for Vector Resources' Gwendolyn East Project as at 25 June 2012, reported as gold contained within a 0.4 g/t grade shell in situ mineralisation - Indicated and Inferred Resources

FROM	то	VOLUME	TONNES	SG	Au	Cumu	lative	Au Grade	Au Troy
FROIVI	10	VOLUIVIE	TOININES	30		Volume	Tonnes	(g/t)	Ounces
10.0	999,999	33,200	71,380	2.15	28.94	33,200	71,380	28.94	65,968
5.0	10.0	70,400	151,360	2.15	7.00	103,600	222,740	14.03	99,789
1.0	5.0	475,600	1,022,540	2.15	2.07	579,200	1,245,280	4.21	167,504
0.8	1.0	130,200	279,930	2.15	0.90	709,400	1,525,210	3.60	175,571
0.6	0.8	190,400	409,360	2.15	0.70	899,800	1,934,570	2.99	184,667
0.4	0.6	396,600	852,690	2.15	0.50	1,296,400	2,787,260	2.23	198,177
0.2	0.4	553,800	1,190,670	2.15	0.28	1,850,200	3,977,930	1.64	208,900
-	0.2	200,600	431,290	2.15	0.12	2,050,800	4,409,220	1.49	210,499

Table 4: Mineral Resource Estimate Statement for Vector Resources' Gwendolyn East Project as at 7 June 2012, reported as gold contained within open pit tailings storage facility, SRK December 2011 Report – Indicated Resources

Cut-off Grade (g/t)	TONNES	SG	Au	Au Troy Ounces
0.00	238,000	1.80	0.70	5600
0.20	238,000	1.80	0.70	5600
0.40	235,000	1.80	0.80	5600
0.60	185,000	1.80	0.80	4700
0.80	81,000	1.80	0.90	2400
1.00	14,000	1.80	1.10	500





# **Project Description**

Gwendolyn East Project is located in the Goldfields region of Western Australia, about 370 km east of Perth and 200 km north of Southern Cross.

The project is centred approximately latitude 29^42'36" S, longitude 119^26'24"E or UTM coordinates 6711089N 735857E with a datum of MGA94 Zone 50.

The area is sparsely populated. The land is situated in an pastoral region. The climate is semi-arid. The topography is relatively flat, comprising numerous drainages. The plains are covered by sands while the laterite plateaus are densely covered by mulga vegetation. Few eucalyptus woodlands and cotton-bush vegetation develop where the surface has been eroded.



## Mineralisation

Gold mineralisation appears to be constrained to a highly altered boundary between the basalt and banded iron/banded chert horizons. This boundary exhibits semi-brittle and brittle structures which carry high grade Au. A study is underway to characterise the alteration styles adjacent to the mineralisation. Some petrographic work has been undertaken to better understand controls on mineralisation and a geological model is in the process of being developed. Surface mapping has revealed some tight folding in the banded iron and study continues to examine the extent of this folding – we wish to distinguish between folding related to compressional tectonics and folding related to a shearing of the rocks. Such study will help the Company to explore mineralisation down dip.

## **Drilling Programs**

The data relating to the Gwendolyn East project consists of historical data, AC drilling completed by Golden Iron Resources in 2009, Phase 1 and Phase 2 drilling completed in 2011 and partially complete Phase 3 drilling that is still currently ongoing.

### **Historical Drilling**

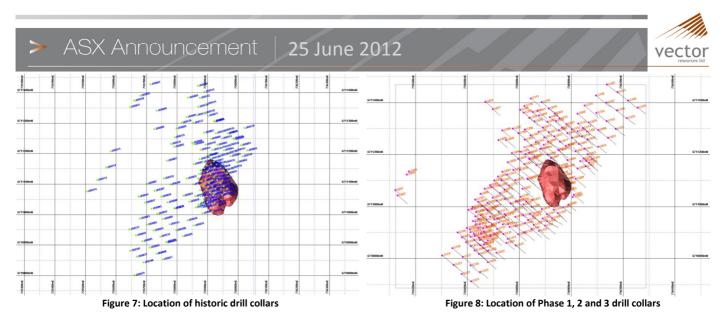
The Gwendolyn Project was first explored in the 1980's then in the late 1990's. The historical drilling programme combined RC, RAB and DD drilling. Only historical drilling data from this prospect were included in this study.

A total of 347 holes have collar and survey information. Of these 10 were diamond drill holes, 166 were RAB holes and 171 were RC drill holes. Of these, 90 holes have been provided with RLs estimated by the Vector geology team as this data was missing. All RAB and other holes with incomplete data were not used in the modelling. Historical drilling at the Gwendolyn East Project comprises several phases as tabulated in Table 5:

	Hole No#	Report No#	Date Drilled	Holes	<b>Metres Drilled</b>	Comments	Company
	JRR 1 - 12	A18297	10/85 - 04/86	12	899	E77/91 Zone C	St Joe Australia Pty Ltd; Bornite Pty Ltd
	JRR 32 - 81	A18297	10/85 - 04/86	50	3865	E77/91 Zone C	
RC	JRR 31, JRR 84 - 101, JRR 111 - 114, JRR 130 - 165, JRR 172 - 189, JRR 203 - 208	A21678	05/87 - 09/87	83	5842	E77/91 Zone C Reorted: 84 holes 5,919	Sons of Gwalia
	JRR 231 - 256	A32474	10/88 - 11/88	26	1145	Metres reported 1,095	Sons of Gwalia
	Total RC			171	11751		
0	JRD 1 - 3, 5, 6	A21678	03/87 - 05/87	5	357		Sons of Gwalia
D	JRD 7 - 11	A32483	05/89 - 06/89	5	171		Sons of Gwalia
	Total Diamond			10	525		

#### **RC Drilling**

The 2 metre composite RC samples were split / spear sampled and bagged on site, then sent to be analysed for Au by "aqua regia". For samples returning a grade above 0.02 ppm, 1 metre samples were collected and cone split on site. These samples were then sent to be assayed by Fire Assay Fusion (LLD 0.008ppm). The location of the historic and current RC drill hole collars used for the Mineral Resource estimation is shown in Figure 7-8.



#### **Diamond Drilling**

During the campaign of May 1989, 101.95 metres of diamond drilling was completed using an open pre-collar for metallurgical tests and then 68.85 metres using an HQ<sup>3</sup> diameter core. Core recovery was 90 to 95%. The location of historic and current Diamond drill hole collars used for the Mineral Resource estimation is shown in Figure 9.

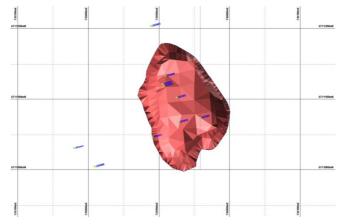
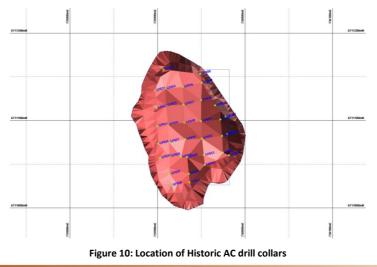


Figure 9: Location of Historic and partially completed Phase 3 diamond drill collars

#### **Air-core Drilling**

In 2009, Golden Iron Resources complete 56 AC drill holes totalling 964 metres. The location of these drill hole collars used for the Mineral Resource estimation is shown in Figure 9.





# QA/QC

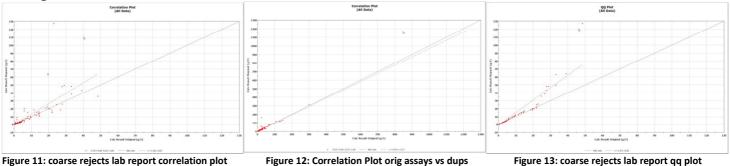
### **Sampling Procedures**

The 4 metre composite samples were spilt using a cone splitter and 1 metre RC samples were taken in Mineralised zones. These were analysed for Au by 50g fire assay at Aurum Laboratories. Any composite values over 0.8 ppm had their representative 1 metre samples submitted for analysis by the same procedure.

The current PQ<sup>3</sup> diamond core was logged for geological, structural and geotechnical properties. The core was cut in quarters where one quarter was then taken and submitted for analysis by fire assay at Aurum Laboratories. A quarter will remain as a permanent library and the remaining half will be utilised by METS for metallurgical testing.

#### **Field Duplicates**

Phase 1 and 2 drill programs had 2% of the RC samples duplicated and submitted for umpire sampling. On recommendations from SRK in December 2011 this was increased to 5% during the Phase 3 program. A total of 266 duplicate pairs were from composite samples and 1,222 from 1 metre samples Figure 11 show the correlation of their Au grades coarse rejects for composites, Figure 12 shows correlation of Duplicates and Figure 13 shows the correlation of their Au grades coarse rejects for singles.



#### **Gold Standard**

Vector purchases five gold standards. At the time of this study, standards were a combination of 2% from Phase 1 and 2 and 5% from Phase 3. Standards were submitted to the lab as part of the normal sampling quality control process. Standards are assessed by comparing their assayed values to the expected grade. If the value is outside a +/- 2 standard deviation interval about the mean, it needs to be investigated and if confirmed the entire corresponding batch should be re-assayed. The samples are assayed by Aurum Laboratories, who also use five internal lab gold standards to ensure accuracy and one bank to test for contamination of the equipment. The details of the standards used by are shown in Table 6.

Standard ID	Grade	SD	Analysis (composite + 1m samples)
G307-1	3.37	0.1	15
G901-1	2.58	0.13	2
G901-2	1.76	0.14	1
G901-4	12.66	0.51	1
G901-8	47.24	1.55	107
G901-9	0.69	0.73	87
G905-1	1.16	0.05	1
G905-9	1.86	0.07	82
G906-2	2.46	0.11	59
GLG-307-1	2.86	1.7	5

Table 6: Expected grades of Gold Standard samples



# **Data Input and Review**

#### Summary of Methodology

Resource Holes Total 379 bore holes 5 diamond holes 188 RC - recent G holes 186 JRR historical holes Samples 1metre samples 75% of total samples 4 metre composites 25% of total samples

#### **Quick Statistics of Sample Population**

Mean 1.46 g/t Max Grade = 607 Min Value 0.00 Variance: 220.04 SD: 14.83

#### Compositing

2 metre down-hole composites Total samples of 2m composites =1826

Figure 14: Mineralisation Model looking NW

# **Geological Modelling**

#### Search Direction on Local Grid

180 strike15 degrees plunge to the South30 degrees dip to the west

### Search Ellipse

- 30 North
- 25 East
- 5 RL

Runs 1 1x the search ellipse Run 2 2x the search ellipse Run 3 3x the search ellipse

Runs 4 5x the search ellipse

Runs 5 10x the search ellipse

No of Sectors = 8

Maximum Points Per sector = 8

Minimum points per sector =2

# > ASX Announcement 25 June 2012



0.2 g/t minimum with internal dilution Wireframe model based on mineralization model generated by Spadis Software No Top cut applied Used global SG of 2.15g/cm<sup>3</sup> vec

Method of Estimation

Inverse Distance to the power of 3 (IDW<sup>3</sup>)

#### **Ore Block Model**

10m North x 10m East X 4m RL

#### **OBM Statistics**

No of Blocks 7156 Mean 1.489 Max grade 302.54 Min value 0.005 Variance: 55.86 SD: 7.47

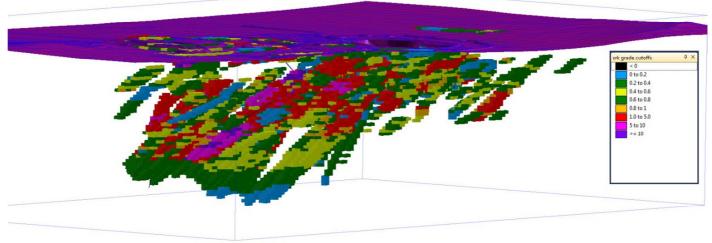


Figure 15: Mineralisation Ore Block Mode looking NW

#### **Topography Surface**

The Gwendolyn pit is half filled with tails the base of the tailings has been derived from the AC logs drilled in 2009. The surface elevation of the waste dump has been created from differential GPS (DGPS) measurements. These measurements were provided by third party surveying consultants "Southern Cross Surveys". The Company combined these surfaces with the newly acquired DGPS data to create a new topographic surface.

#### **Modelling Method**

The assay data was filtered by drilling type in order to select only RC and DD samples. The selected data was then composited using a 2m length while the missing values, below detection or blank intervals were assigned to the background value of 0.005 g/t. Using IDW<sup>3</sup> modelling, this chose results in conservative wireframes as no extrapolation to areas of unknown grade are allowed during the modelling.

#### **Geological model results**

The current RC chip and diamond logging is near completion which will allow the Company's geologists to model the known alteration zones in both 2D and 3D and understand the geological controls related to the known mineralisation.



#### **Grade Estimation**

Inverse distance cubed was used for the grade estimation using a 10E X 10N X4RL block size. The search ellipse directions were based on the Spadis directions with a shallow plunge to the SW and dipping 30 degrees to the WNW. Search radius of 30mN x 25mE x 5mRL was run to fill the block models.

#### Classification

Classification of the Mineral Resource Estimate is linked to the degree of confidence in the model. It depends on various aspects of the modelling process. The classification is defined by the Australian Joint Ore Reserves Committee (JORC) and documented in the Code for Reporting Mineral Resources and Ore Reserves (2004 edition), commonly called the JORC code.

The following factors have been taken in account for the classification:

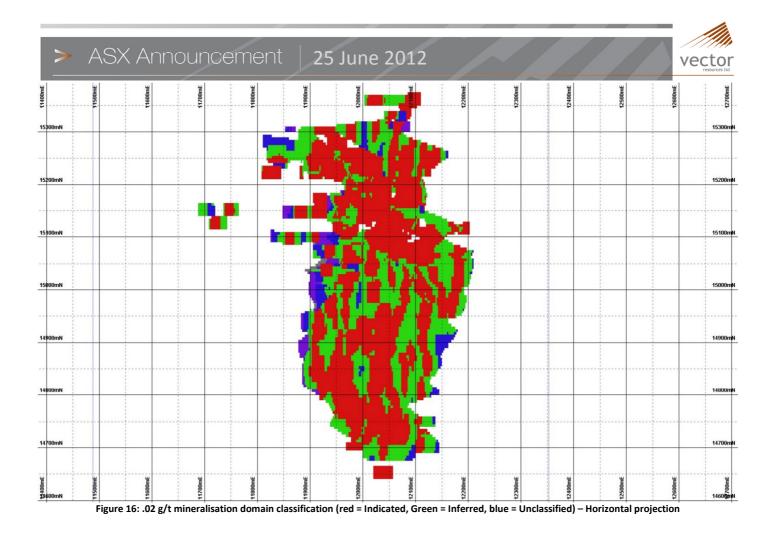
- Historical drilling QA/QC data is not to standard;
- > Drill spacing in the mineralisation caries, where it exceeds 25m, the modelling is poor;
- > Drill density in the domain tailings is good;
- The data variability in the domain Tailings is low;
- The geological information is currently being developed and current information provided was insufficient to develop a robust 3D geological model based on geological data at this time;
- Due to the drill density within the 0.2 g/t Au mineralisation domain, it was possible to create a reasonable well-constrained grade shell; and
- Substantial SG Density measurements were obtained during the course of logging the recent eight diamond drill holes. At this stage the average SG Density for the oxidised material was used which is considered conservative given that the resource now extends into the transition and fresh material.

Due to the significant increase in the drill density as a result of the activities of the Phase 3 drill program an Indicated and Inferred Resource could be defined within the 0.2 g/t mineralisation domain. As JORC resource classification, the indicated category is based on the initial search ellipse run. The inferred resource classification starts from second run. In order to fill the consecutive blank ore block models, the search ellipse was done at twice the distance of the search radius followed by 3X, 5X and 10 X the search radius, for runs 3, 4, and 5 respectively. The Indicated and Inferred Resource was defined as follows:

Select the blocks where the IDW<sup>3</sup> estimate is reasonable. The power of three was preferred as it gives less weighting to the samples that are further away making the estimate highly influenced by the closest sample.

The Tailings domain is classified as indicated, as it is much more homogeneous as reported in the SRK December 2011 report.

The projected classification within the 0.2 g/t Mineralisation domain is shown in Figure 16.



## ENDS

#### Competent Person's Statement:

#### \* Notes on sample intercept widths:

The metre intervals detailed in the table above are measured down-hole lengths and are unlikely to be indicative of true width.

\* Notes on Exploration Targets

In accordance with Clause 18 of the JORC Code, it is important to note that the 'Target Resource' referred to above remains subject to further exploration and evaluation to bring the 'unclassified material' to a JORC Compliant resource. The current interpretation is conceptual in nature and remains preliminary and is based on exploration, evaluation and resource definition work undertaken to date.

#### # Notes on Global Resource

Global resource is a combination of historical and new resource up-grades, refer to Golden Iron Resources prospectus "7 May 2010".

The information in this report that relates to Exploration Results or Mineral Resources of Vector Resources Ltd and its subsidiaries is based on information reviewed by Arnel Mendoza, who is a Member of the Australian Institute of Geoscientists ("AIG") and a Member of The Australasian Institute of Mining and Metallurgy. Mr Mendoza is a full-time employee of the Company.

Mr Mendoza has sufficient experience, which is 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 2004 Edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Arnel Mendoza consents to the inclusion in this announcement of the matter based on his information in the form and context it appears.