

## **Maiden JORC Resource at Tuckanarra Gold Project, WA: 2.0Mt at 1.55 g/t Au for 100,700 ounces Au**

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### **Highlights: Maiden JORC Resource**

- **The maiden indicated and inferred JORC resource at Tuckanarra is 2,020,000 tonnes at a grade of 1.55 g/t Au for 100,700 ounces of gold, at a cut off grade of 0.25 g/t Au (See Resource breakdown details Section 2).**
- **Potentially low cost operation as mineralisation is shallow with high metallurgical recoveries.**
- **Bonanza grades at Cable West High Grade Zone (indicated resource 5,500 ounces at 53.98 g/t Au).**
- **Further drilling to commence Q1 2013 to test extension zones and increase the maiden resource.**
- **Fauna and Flora studies completed indicating mining would be low impact.**

### **1.0 Introduction**

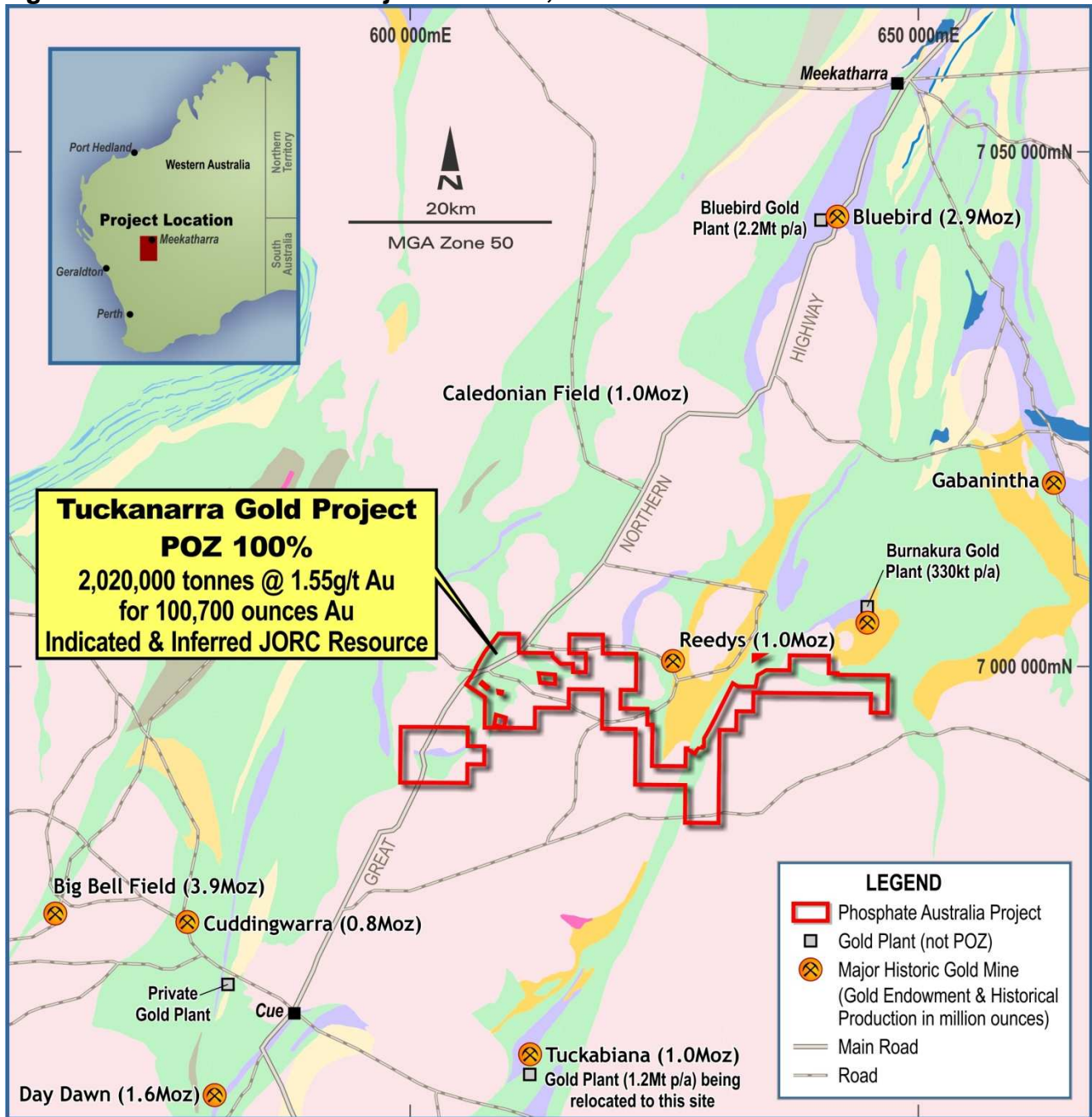
The Tuckanarra gold project lies within the prolific West Australian Murchison goldfield (Figure 1) and has historic production of ~125,000 ounces. It was last mined in 1993 when the gold price was around US\$330 an ounce.

Phosphate Australia Limited (POZ) acquired Tuckanarra in August 2011 and the Board is pleased with the rapid progress on the project to date. This includes the completion of three drilling programs, favourable initial metallurgical studies with excellent recoveries, a JORC compliant maiden resource and the completion of fauna and flora surveys.

The proximity of various third party gold processing mills, give the Company considerable confidence in this project.

The Company owns the Tuckanarra gold project 100% with no private royalties.

**Figure 1: Tuckanarra Gold Project Location, Tenements & Gold Plants**



**2.0 Maiden JORC Resource at Tuckanarra**

The maiden indicated and inferred JORC resource at Tuckanarra is 2,020,000 tonnes at a grade of 1.55 g/t Au for 100,700 ounces Au, at a cut off grade of 0.25 g/t Au. Table 1 summarises this resource and Table 2 gives a more detailed breakdown at higher cut off grades. The resource was calculated by Perth based independent mining industry consultants Ravensgate.

**Table 1: Summary of Total Mineral Resources**

Resource	Cut Off (g/t)	Tonnes	Grade (g/t)	Ounces
Indicated	0.25	1,091,000	1.60	56,000
Inferred	0.25	929,000	1.50	44,700
Total	0.25	2,020,000	1.55	100,700

NB: Rounding may cause minor discrepancies

The Board is pleased with these maiden resource figures and believes the Company is in a strong position to build upon this initial success. The shallow nature of the mineralisation, the high grades in part, the excellent initial metallurgical recoveries and the proximity of local gold treatment plants (Figure 1) bodes well for the future commercialisation of this project.

The Tuckanarra gold resource is mainly centered around the Cable-Drogue-Bollard line of workings (Figure 2) which accounts for 69,800 of the total 100,700 ounces. The surrounding resources are all within 2,500 metres of Cable Bollard. The resources are shallow in nature (Figures 4 and 5) and only relatively shallow mineralisation was targeted during the three POZ drilling campaigns to date

The bonanza grades at Cable West High Grade (5,500 ounces at 53.98 g/t Au) sit adjacent to the Cable West resource (10,200 ounces at 2.50 g/t Au) and Cable Central resource (3,700 ounces at 1.37 g/t Au) which underlies the current Cable pit ramp. Stacked next to Cable Central is Cable East (23,500 ounces @ 1.87 g/t Au) with the Drogue laterite overlying much of the aforementioned resources. The laterite resource outcrops in places and is also shallow. The close proximity of these resources makes for a concentrated mining centre within the Cable - Bollard line.

There is also flexibility within the resource with lower tonnages at higher grades having been modelled: 501,000 tonnes @ 3.25g/t for 52,300 ounces at a 1.75 g/t cut off (260,000 tonnes @ 3.63 g/t Indicated and 241,000 tonnes @ 2.84 g/t Inferred).

The Directors believe that the resource package at Tuckanarra is commercially attractive, the very high grades at Cable West High Grade and adjacent shallow resources could allow an early pay back on development, with other resources at Maybelle, Maybelle North, Lucknow and Miners Dream providing subsequent mill feed.

**Figure 2: Tuckanarra JORC Gold Resource Locations and Grade**

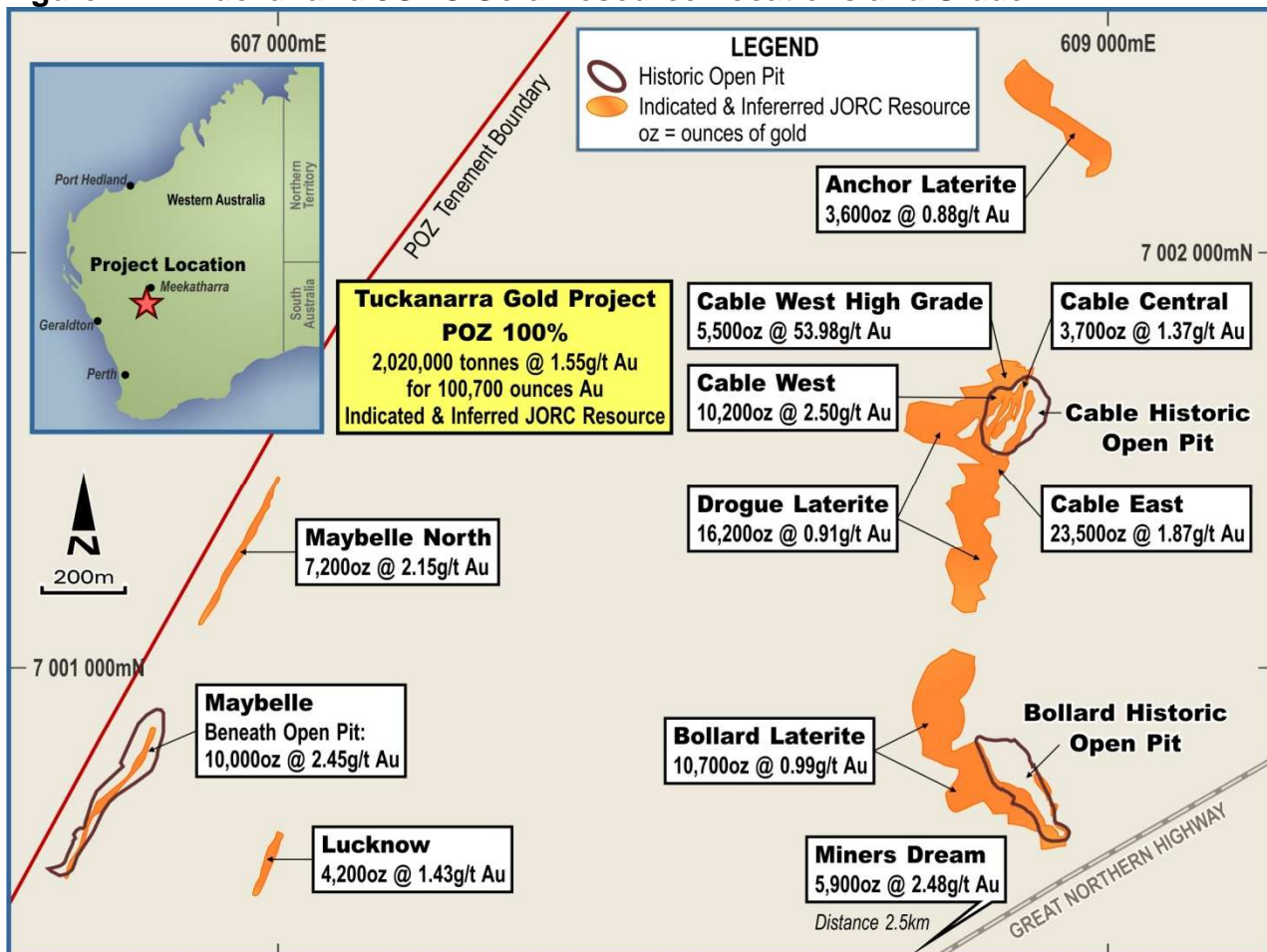


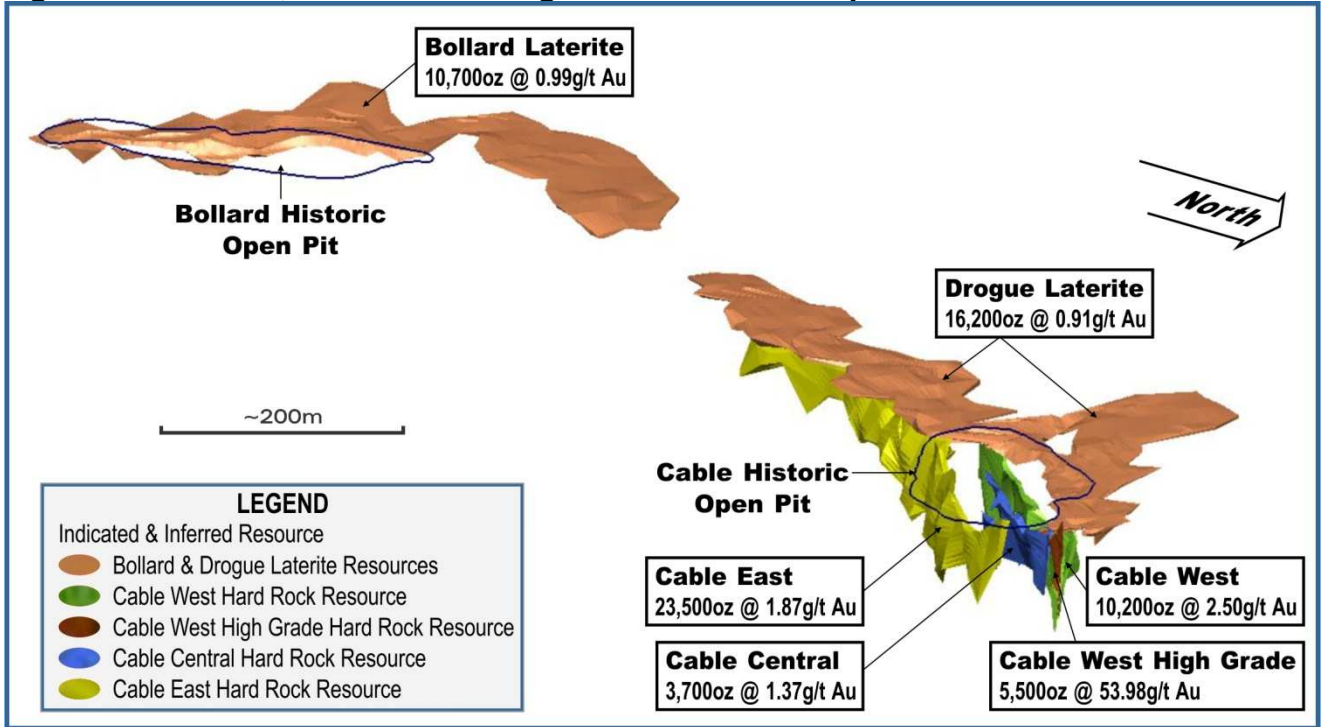
Table 2: Total Mineral Resources, Indicated &amp; Inferred

All Material	Category	Cut-Off	Volume ('000)	Tonnes ('000)	Grade (g/t)	Ounces ('000)
	Indicated	-	467	1,095	1.59	56,000
		<b>0.25</b>	<b>465</b>	<b>1,091</b>	<b>1.60</b>	<b>56,000</b>
		0.50	442	1,040	1.65	55,300
		0.75	339	813	1.94	50,600
		<b>1.00</b>	243	597	2.32	44,600
		1.25	179	449	2.72	39,300
		1.50	133	338	3.17	34,400
		1.75	101	260	3.63	30,300
		2.00	81	209	4.06	27,300
		2.25	65	169	4.52	24,500
		2.50	53	138	5.00	22,200
	Inferred	-	408	931	1.49	44,700
<b>0.25</b>		<b>407</b>	<b>929</b>	<b>1.50</b>	<b>44,700</b>	
0.50		403	921	1.51	44,600	
0.75		341	792	1.65	41,900	
<b>1.00</b>		236	566	1.96	35,600	
1.25		169	417	2.26	30,300	
1.50		125	315	2.55	25,800	
1.75		94	241	2.84	22,000	
2.00		74	190	3.10	18,900	
2.25		62	157	3.30	16,700	
2.50		51	129	3.50	14,500	
Total	-	874	2,026	1.55	100,700	
	<b>0.25</b>	<b>872</b>	<b>2,020</b>	<b>1.55</b>	<b>100,700</b>	
	0.50	845	1,961	1.58	99,900	
	0.75	680	1,605	1.79	92,500	
	<b>1.00</b>	<b>479</b>	<b>1,163</b>	<b>2.15</b>	<b>80,200</b>	
	1.25	348	865	2.50	69,600	
	1.50	258	653	2.87	60,200	
	1.75	196	501	3.25	52,300	
	2.00	155	399	3.60	46,100	
	2.25	127	326	3.93	41,200	
	2.50	104	267	4.27	36,700	

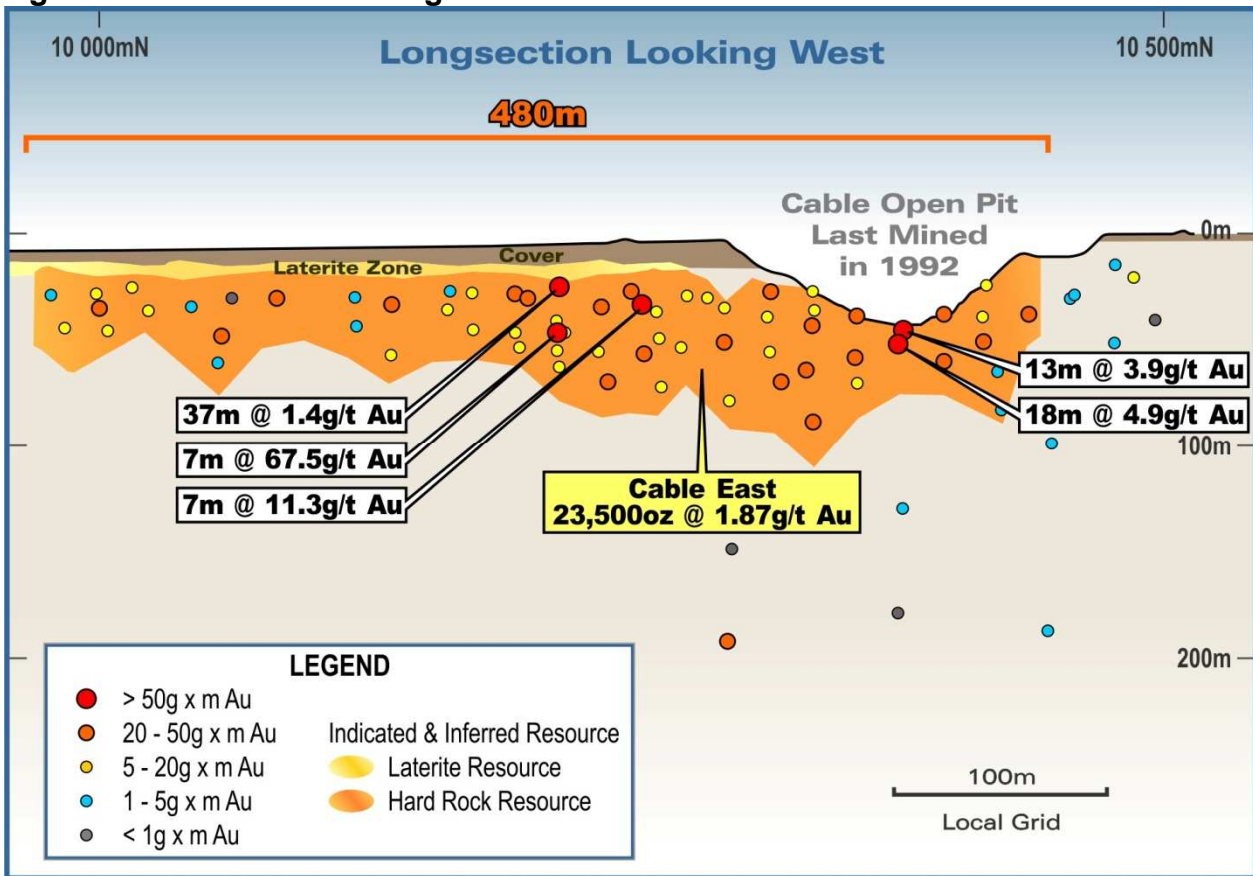
Both RC and aircore drilling from POZ and historical drilling data from previous explorers was incorporated into the resource model.



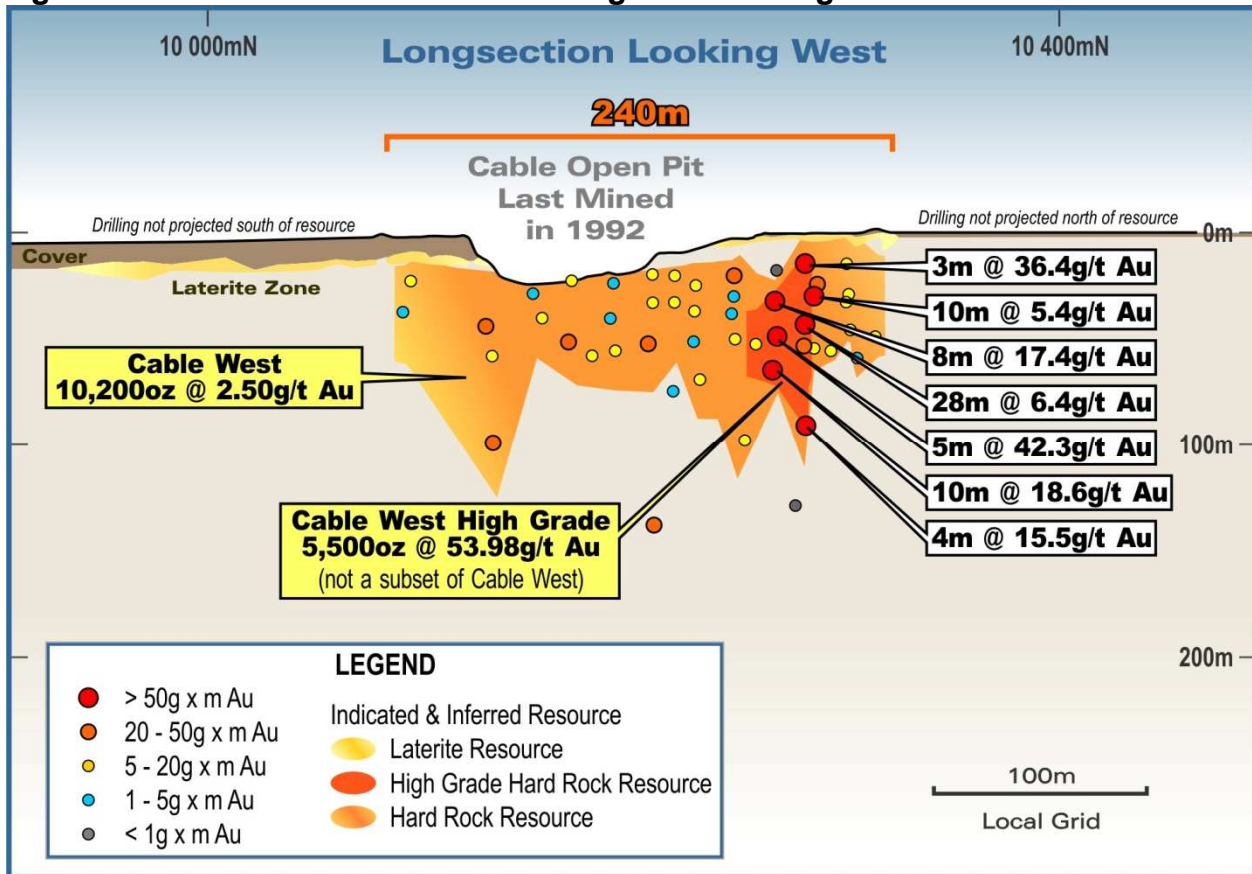
**Figure 3: Cable, Bollard and Droque Resources Oblique View**



**Figure 4: Cable East Longsection**



**Figure 5: Cable West and Cable West High Grade Longsection**



## 2.1 Assays QA/QC

Information on sampling and assay techniques together with information on Quality Assurance and Quality Control data was reviewed by Ravensgate for obvious discrepancies with none being found.

## 2.2 Bulk Densities

A table containing the bulk densities supplied by POZ to Ravensgate and used for the resource model is attached as Appendix A. Bulk densities for the hard rock were calculated by POZ in part from using material from pit wall mapping in the Cable and Bollard open pits.

Bulk densities for the laterites were measured by collecting the pisolites from each prospect and measuring their weight in a container in air. This method will result in a lower bulk density being reported than in-situ as the filling of the pore space cannot be replicated. The bulk density values reported and used for the laterite models are deemed to be low as a result of this.

## 3.0 Geology and Mineralisation

The Tuckanarra area has four large open pits, extensive minor gold workings, and prospecting pits principally associated with mafic lithologies and Altered Ferruginous material which were originally iron rich formations.

A number of styles of gold mineralisation have been identified in the area including:

Mineralised Altered Ferruginous Transitional (AFT) and Altered Ferruginous Fresh (AFF) material ± quartz veining (Cable East, Cable Central);

Quartz veins ± altered basalts (Cable West, Lucknow, Maybelle, Maybelle North, Miners' Dream);

Supergene gold mineralisation within laterite (Anchor, Bollard, Drogue).

Models for the discovery of additional gold deposits in the area are related to the intersection of shear zones with prospective lithologies.

#### 4.0 Metallurgical Studies

Previously reported metallurgical test results at Cable for 48 hour cyanide bottle rolls indicate extremely favourable extraction of between **94.7% and 99.3% gold** at a 75 micron grind.

Importantly, the two high grade Cable West vein samples gave **gravity recoveries of 53.4% and 75.6% gold** for the oxidised and fresh material respectively. This is significant as it may open up opportunities for a lower capital cost gravity recovery circuit at Tuckanarra which could greatly assist initial project economics.

Subsequent metallurgical testing (not previously reported) at Maybelle and Lucknow have returned 98.7% and 96.8% total gold extraction respectively using 48 hour cyanide bottle rolls at a 75 micron grind.

For information on metallurgy results at Tuckanarra refer to the POZ ASX release dated 17 May 2012. The full metallurgical report is now published on the POZ website.

#### 4.0 Flora and Fauna Studies

In order to progress Tuckanarra to mining, certain environmental studies need to be undertaken. The Level 1 Flora and Vegetation Assessment and the Level 1 Vertebrate Fauna Risk Assessment for the Tuckanarra Project have now both been completed and the potential impact of mining from these reports on both fauna and flora has been assessed as low:

*“The potential direct impact of the proposed mining project on the flora and vegetation values of the Survey Area was assessed as being very low, considering that all mining areas will be confined, (almost entirely) to existing areas of completely degraded vegetation; and proposed drilling lines will be confined to areas with no listed flora or listed vegetation of conservation significance.”*

From the Executive Summary of the Flora and Vegetation Assessment Report.

## 5.0 Follow Up Drilling

POZ is currently planning to commence a drilling campaign at Tuckanarra in the first quarter of 2013. This drilling will target extensions to known areas of mineralization with the intention of increasing the maiden resource.

## 6.0 Summary

The Board is pleased with the maiden resource at Tuckanarra

The shallow nature of the resource, the excellent initial metallurgical recoveries and a high grade zone within the resource at Cable West High Grade is attractive. The proximity of third party mills and the location of Tuckanarra next to the Great Northern Highway are also helpful.

There is flexibility within the resource with lower tonnages at higher grades having been modelled: 501,000 tonnes @ 3.25g/t for 52,300 ounces at a 1.75 g/t cut off (260,000 tonnes @ 3.63 g/t Indicated and 241,000 tonnes @ 2.84 g/t Inferred).

POZ looks forward to potentially increasing the resource at Tuckanarra with further drilling in the first quarter of 2013, advancing permits towards a mining lease and commercialisation of the project as soon as possible.

Jim Richards  
Executive Chairman

The information in this report that relates to Exploration Results, Mineral Resources or ore reserves is based on information compiled by Mr Jim Richards who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Richards is a Director of POZ. Mr Richards 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 Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Richards consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The new and updated resource estimations for the Tuckanarra Gold Project Area deposits, including the Anchor, Bollard, Cable, Drogue, Maybelle, Maybelle North and Miners Dream deposits, were also carried out by Mr Craig Harvey utilizing resource drilling data sets provided by Phosphate Australia Limited. Mr Harvey is a Principal Consultant with Ravensgate Mining Industry Consultants and is also a Member of the Geological Society of Southern Africa. Mr Harvey has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity undertaken to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Harvey also consents to the inclusion in the report of the resource estimation matters for these deposits based on the reporting information in the form and context in which it appears.



**Appendix A          Summary of Bulk Densities assigned to resource model**

<b>Type</b>	<b>Lode (Area)</b>	<b>Assigned Bulk Density (t/m<sup>3</sup>)</b>
Laterite	1 – Anchor	2.05
Laterite	2 – Bollard	2.00
Laterite	6 - Drogue	2.15
Oxide (In Domain)	All	2.40
Oxide (Gangue)	All	2.05
Transitional (In Domain)	All	2.60
Transitional (Gangue)	All	2.50
AFT (In Domain)	All	2.97