

ASX Release  
Thursday 19 April 2012

## Horseshoe Range Exploration Update

### Highlights:

- High resolution aero-magnetic survey completed with data & interpretation pending
- CSIRO structural study nearing completion
- New gold targets identified from re-assaying historic drill samples
- Newly acquired geophysical dataset integrated with existing database

Naracoota Resources Limited (“Naracoota” or “the Company”) (ASX:NRR) is pleased to provide an update on activities at the Company’s flagship Horseshoe Range Project. Ongoing work continues to highlight the prospectivity of the project area with new gold target areas identified, and existing gold targets being refined for follow-up drill testing.

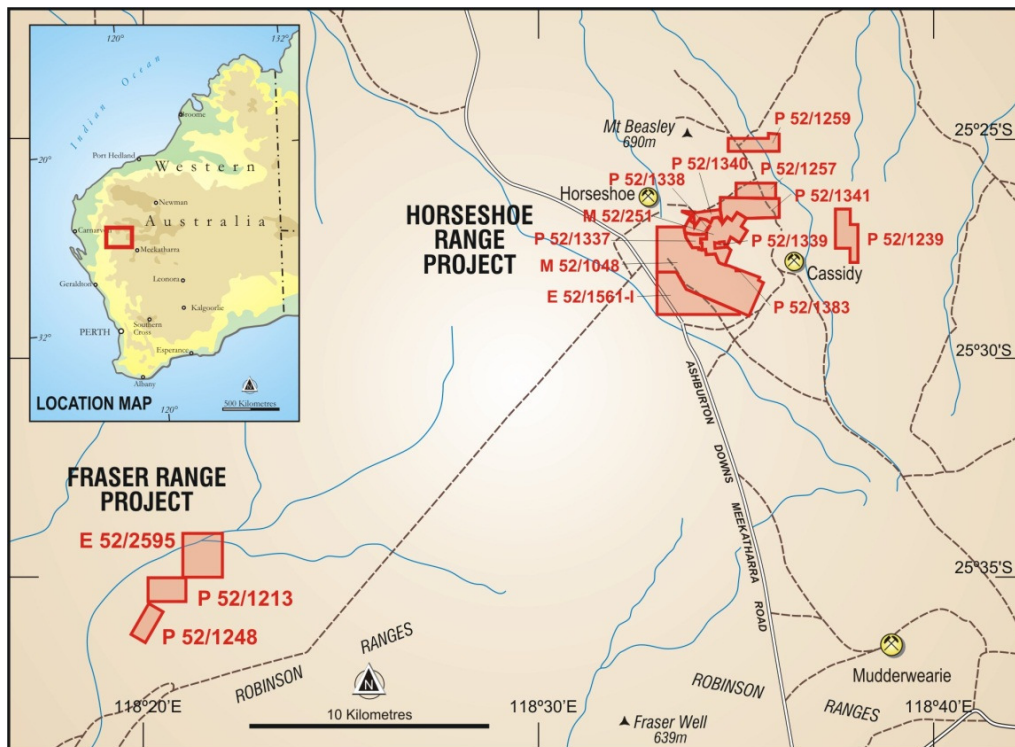


Figure 1: Project location map

The Horseshoe Project is located on the Horseshoe Range approximately 25km south-east of the Fortnum Gold plant/mine and 2km west of the Cassidy Pit (recently acquired by Resource and Investment NL ASX: RNI) and 125km north of Meekatharra.

### **Airborne Magnetic Survey**

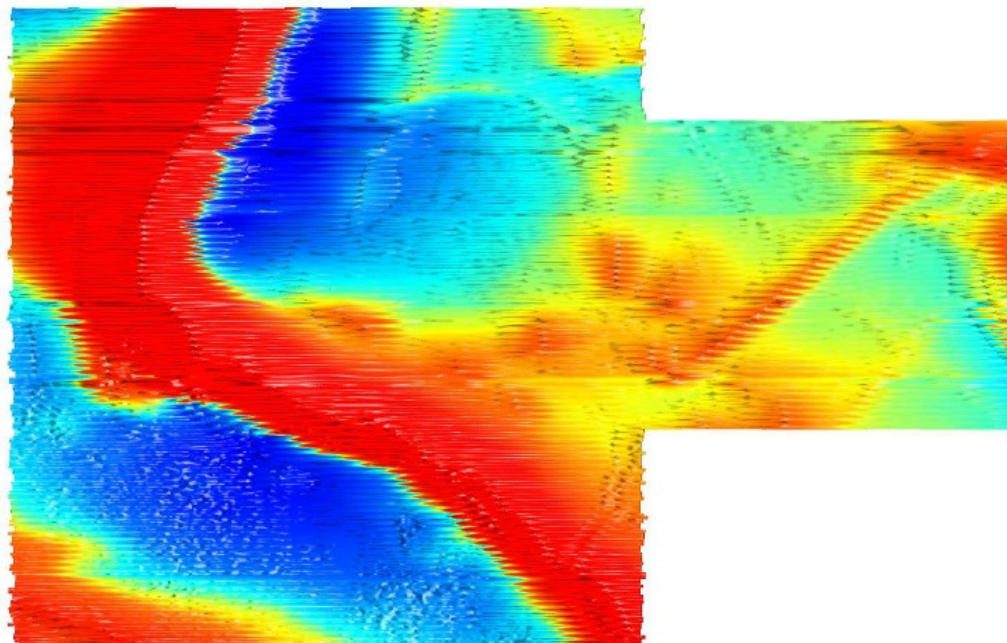
The Company has completed a detailed magnetic survey over the Horseshoe Project. Data processing and interpretation is pending from its consulting geophysicists at CSIRO.

Flights lines were spaced at 30m providing high resolution data which will help refine follow-up drilling on existing prospects as well as generate new targets within the project area.

An initial view of the raw unprocessed data is shown in Figure 2 where the Horseshoe Range BIF unit is clearly outlined by the bright red. No reference points or tenement outlines are available for Figure 2 as this is a simple image of the raw data as received from the contractor, once the data is received and processed updates will be provided as they become meaningful.

### MagRaw to Date

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**Figure 2: Unprocessed magnetic data from recently completed 30m line spaced airborne magnetic geophysical survey. Red is highly magnetic, and blue indicates a low magnetic response**

Final results from the processing and modelling of the magnetic data are anticipated to be available within the next 2 - 4 weeks.

### **CSIRO Structural Study**

Consultants at the CSIRO have combined all recent Naracoota drilling from the Hill 680 prospect with historical data to finalise a mineralisation model. The report is nearing completion and will assist in the design of the upcoming drilling program.

### **Hyperspectral Dataset**

Naracoota Resources recently acquired a HyVista hyperspectral survey dataset from a neighbouring company covering both the Horseshoe and Fraser Projects at negligible cost. This survey provides surface mineral and alteration mapping.

The survey data shows alteration geochemistry consistent with an orogenic gold mineralising system. The strongest portion of the alteration is coincident with known mineralisation covering a length in excess of 1.6km, and can be traced at lower levels over a total length of greater than 4km.

An example of the strength of alteration mineralogy that can be seen in the data is shown in Figure 3 below, where the aluminium poor white mica *phengite* is mapped. Phengite is a mineral that occurs in proximity to orogenic load gold systems and can be used as a vector to mineralisation.

The Company has recently completed a program of geochemical sampling and mapping following up this identified alteration halo with the intention of adding to, and refining, the Company's highest priority drill targets. The Company expects to receive the results from this geochemical sampling program within 4 weeks.

It should be noted that the hyperspectral survey method maps surface features with no sub-surface penetration. Vegetation and soil cover will mask the bedrock and thus the technique is most applicable to outcropping rock. Alteration and mineralisation may continue throughout the project areas and other techniques such as the magnetic and IP geophysical methods have been used for this purpose.

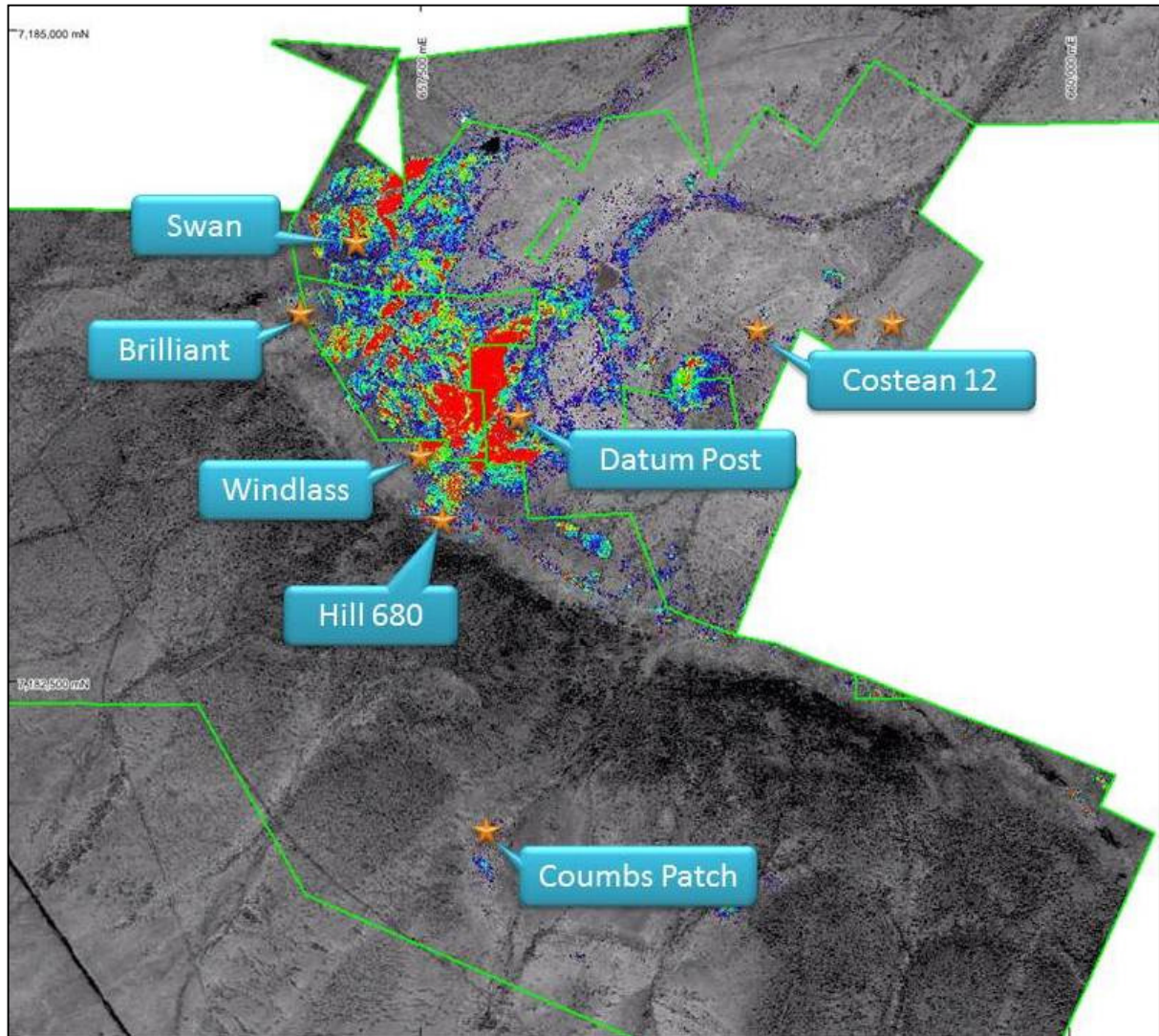


Figure 3: Hyperspectral survey mineral map of the white mica phengite. Note the strength of the mineral signature surrounding the areas of known mineralisation. Colour indicates relative abundance of the spectral feature where red indicates a high level and blue indicates a low level of abundance.

### Historic Drilling Resample Program

Naracoota Resources own 100% of the gold rights to the Horseshoe Range tenement M52/1048, while Auvex Horseshoe Pty Ltd (**Auvex**) own the rights to any other minerals. A subsidiary of Auvex conducted a RC drill program in 2010 on the south-west side of the Horseshoe Range testing outcropping manganese mineralisation. 207 RC holes were drilled to a range of depths (12m to 100m, average 41.5m) for a total of 8580m. The RC samples were selectively assayed by XRF for iron and manganese, but not assayed for gold.

Naracoota recently decided to assay some of the remnant samples from this drill program for gold. The closest to surface and the bottom of hole were sampled in every hole where available. In addition, several holes were sampled as completely as the available samples allowed. A total of 640 samples were collected and assayed.

Assay of these RC drill samples has returned **anomalous gold results**. Highlights from this include **1m @ 900ppb Au** from 55-56m, and **3m @ 263ppb** from 45m to end of hole. Appendix 1 details significant intercepts above 100ppb Au.

Importantly these anomalous results are relatively **near to surface**, appear to form an **entirely new and cohesive envelope of gold mineralisation**, and mineralisation remains **open at depth** as set out in the cross section below in Figure 4. Mineralisation is also **open along strike** and a surface geochemical sampling program has just been completed as a first step in delineating the extent of this new zone of mineralisation.

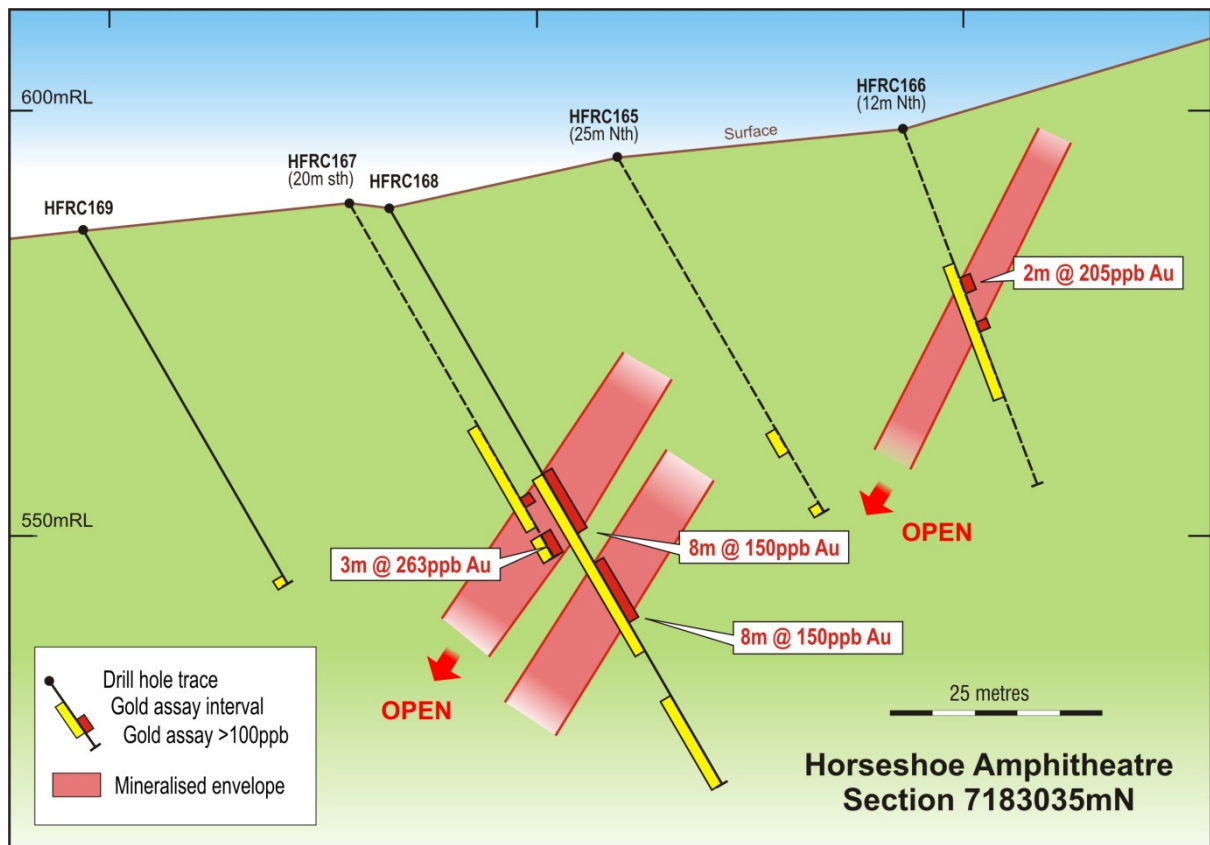


Figure 4: Cross-section through drill holes targeting manganese mineralisation that have been assayed for gold. Yellow bars along drill traces indicate gold assayed intervals, while red bars indicates results above 100ppb Au.

The assay results highlight two locations (Figure 5), being the Horseshoe Amphitheatre, and Horseshoe Saddle. The Horseshoe Saddle area is significant as it sits above an area of historical workings known as Adit 'O', and effectively **extends the drill defined anomalous gold mineralisation along the Horseshoe Range by 400m, to a total of 2km**.

Horseshoe Amphitheatre anomalous results are meaningful in that they are the **highest grade and longest intervals** of the results returned, form a relatively tight cluster, and are stratigraphically higher than neighbouring prospects Hill 680 and Brilliant. Significantly the mineralisation seen at the Amphitheatre target suggests that **the Horseshoe Range hosts multiple parallel mineralised horizons**.

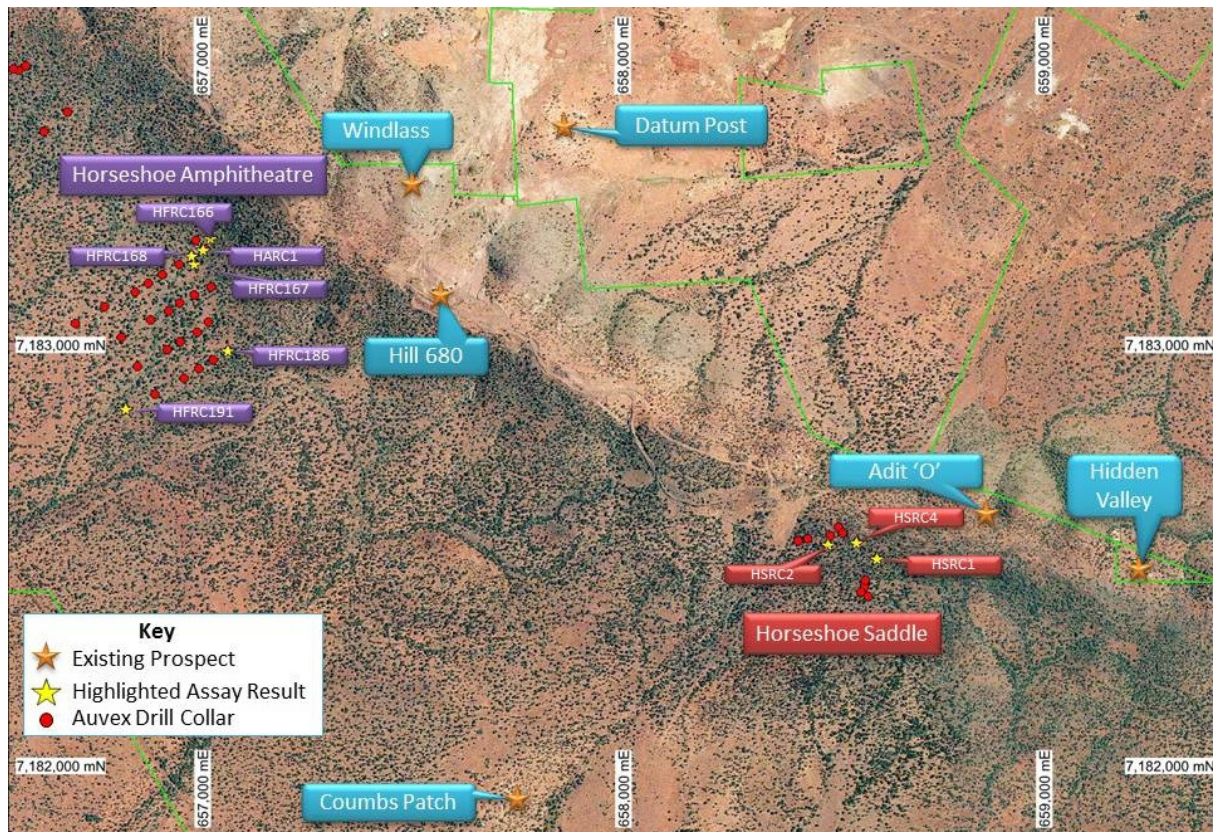


Figure 5: Location of manganese drill holes and highlighted assay results

Given that many samples were not available for re-assay from the Perth storage facility the Company is highly encouraged by these assay results as it indicates that gold mineralisation is present both on the southern side of and further along the Horseshoe Range. To further evaluate the anomalous results additional sampling of the RC bags remaining on site is being conducted along with surface geochemical sampling and mapping to assist in determining the orientation of the mineralisation. The detailed magnetic survey discussed above will also constitute an important element of the follow-up work to these new targets.

### Next Steps

Naracoota is preparing for an active field season covering the remainder of the year.

In combining the structural review with the detailed magnetic data the Company will confidently position additional drill holes at the Hill 680 prospect. Further drilling at Hill 680 will be aimed at extending the known mineralisation with the potential of generating a JORC compliant report on this mineralisation.

Outcropping and historically mined quartz veins at the Datum Post prospect will become a focus for additional work over the coming year. Historical drill testing can be infilled and additional lines drilled with the potential of defining shallow open-pit mineable resources.

Further drilling at Costean 12, and the geophysical target Costean 12 Deeps, will be contemplated pending examination of the detailed magnetic data. As with Datum Post the outcropping nature of the mineralisation at Costean 12 lends itself to shallow open-pit mineable mineralisation. Deeper drilling at Costean 12 will also be contemplated to both extend known mineralisation, and to intersect mineralisation in fresh rock as all drill holes reported to date have ended in saprolite.

Historically the Brilliant and Windlass areas have seen the most prolific mining of bonanza grade quartz veins, yet only limited historic drilling has taken place over this area. Assessment of the mineralisation at both Brilliant and Windlass via drilling is in advanced stages of planning, and will be finalised with receipt of the background geological programs that are nearing completion.

With such a large number of quality targets the Company is awaiting the results of the magnetic and structural survey to prioritise future drilling. Preliminary drilling plans are in place and the appropriate statutory approvals are being sought so that drilling can commence soon after completion of the target prioritisation.

For further information, see [www.naracoota.com.au](http://www.naracoota.com.au) or contact:

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**Competent Persons Statement**

Information in this release relating to exploration results is based on information compiled by Naracoota Resources' Exploration Manager, Mr Chris Shaw, who is a member of the Australian Institute of Geoscientists. Mr Shaw 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 under the 2004 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Shaw consents to the inclusion of such information in this release and the context in which it appears.

**Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statement concerning Naracoota Resources Ltd's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may," "potential," "should," and similar expressions are forward-looking statements. Although Naracoota Resources Ltd believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

### **About Naracoota Resources Ltd (ASX: NRR)**

Naracoota Resources Ltd is an exploration company which listed on the ASX in June 2011 in a strongly supported IPO. The Company has a highly experienced team which has assembled for the first time a tenement package in excess of 2,500 Ha in the premier copper and gold region of Peak Hill – Horseshoe Lights – Fortnum, near Meekatharra in WA. Naracoota will continue to assess opportunities to expand its mineral assets in this sought after region.

The tenement package includes Naracoota's two flagship projects at Horseshoe Range and Fraser Range. Historic exploration indicates excellent prospectivity and walk up drill targets for copper and gold in the area. Importantly, no modern exploration has been performed since the early 1990s, and no deep drilling or land based geophysics has ever been conducted over either project. Naracoota will target significant near surface gold deposits and deeper VMS copper and gold deposits which are typical of the region. The prospectivity of the area is evidenced by the Horseshoe Lights VMS discovery which is 7kilometres to the North of Naracoota's tenements and the DeGrussa VMS discovery which is located 65kilometres to the East.

## Appendix 1: Assay results above 100ppb cut-off

Hole ID	From	To	Interval	ppb Au	Comment
HARC1	26	27	1	220	
HFRC16	10	11	1	100	
HFRC166	20	22	2	205	
and	26	27	1	160	
HFRC167	40	41	1	160	
and	<b>45</b>	<b>48</b>	<b>3</b>	<b>263</b>	<b>EOH</b>
<b>HFRC168</b>	<b>36</b>	<b>44</b>	<b>8</b>	<b>311</b>	
<b>HFRC168</b>	<b>48</b>	<b>56</b>	<b>8</b>	<b>150</b>	
<b>incl</b>	<b>55</b>	<b>56</b>	<b>1</b>	<b>900</b>	
HFRC186	38	39	1	140	
HFRC191	18	19	1	150	
and	<b>45</b>	<b>48</b>	<b>3</b>	<b>80</b>	<b>EOH</b>
HSRC1	32	33	1	210	
HSRC2	63	64	1	220	
HSRC4	36	39	3	115	

## Appendix 2: Drill collar locations for highlighted assay results

HOLEID	PROSPECT	MGAE	MGAN	DIP	AZIMUTH	DEPTH
HARC1	AMPHI	657,006	7,183,218	-60	130	30
HFRC16	FLATS	656,569	7,183,646	-60	50	30
HFRC166	AMPHI	657,025	7,183,246	-60	10	48
HFRC167	AMPHI	656,986	7,183,185	-60	60	48
HFRC168	AMPHI	656,980	7,183,204	-60	60	78
HFRC186	AMPHI	657,066	7,182,980	-60	60	48
HFRC191	AMPHI	656,824	7,182,841	-90	0	48
HSRC1	SADDLE	658,607	7,182,486	-50	20	100
HSRC2	SADDLE	658,493	7,182,519	-50	20	100
HSRC4	SADDLE	658,560	7,182,524	-45	20	48