QUARTERLY REPORT for the Quarter Ended 31 December 2010

Magnetic Resources NL
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Issued Capital:
Shares - Quoted:
67,517,636 fully paid shares
17,418,862 contributing shares
Options - Unquoted:
2,295,000 options exercisable at $0.2709 by 23.12.2014
1,800,000 options exercisable at $0.4607 by 21.12.2015

Cash: $4.5 million

Directors:
Peter Thomas
Non Executive Chairman
George Sakalidis
Managing Director
Roger Thomson
Executive Director

HIGHLIGHTS

IRON ORE

- **Jubuk resource drilling imminent.**
- **DTR testwork indicates Jubuk weathered BIF is likely to generate saleable product.**
- **First pass reverse circulation drilling completed at Wubin with some encouraging results.**
- **Mt Vernon RC drilling of goethite-hematite and magnetite targets to commence in February New Year.**
- **Rock Dam Hill RC drilling of a magnetite target to commence in February.**

URANIUM

- **Definition of 6km-long uranium anomaly in calcareous soils at Mouroubra, maximum value 139ppm uranium.**

GOLD

- **Air core drilling of gold targets planned at Tampia North, Lake Grace and Holland Rocks.**

IRON ORE

JUBUK

Following the previously reported encouraging drilling and test work results, Magnetic is about to commence a 34-hole reverse circulation (RC) drilling program (as foreshadowed in the September quarterly report) totalling approximately 4,000m aimed at defining an initial Inferred Resource and testing strike extensions of the prospective coarse-grained magnetite BIF horizons.

Magnetic has now completed 134 Davis Tube Recovery (DTR) determinations on RC drill samples from the earlier drilling programs. The test results continue to show the potential for the project to produce a high-grade concentrate.

Of these samples, 14 have been sourced from the weathered profile and 120 from fresh rock. Most samples represent 4m composites samples. Table 1 summarises the weighted averages of the feed and concentrate grades and apparent recovery rates.

Table 1
DTR Testwork Summary

	Feed Grades %				**Concentrate Grades %**				
	Fe	SiO_2	Al_2O_3	P	Fe	SiO_2	Al_2O_3	P	Wt Rec% Fe
Weathered	22.2	53.1	7.07	0.03	68.6	1.4	1.2	0.01	47.6
Fresh	25.3	48.6	6.1	0.3	69.7	1.1	1.0	0.00	77.7

Whilst the recovery rate is lower within the weathered profile, the material from this zone produces a concentrate of very similar quality to the concentrate derived from fresh rock.

The drilling programme will be undertaken in two stages commencing in late January. The first stage will test the eastern strike extensions where the magnetic response indicates the prospective sequence extends for a further 2 kilometres to the east of the previous drilling, as shown in Figure 1.

The second stage of the drilling will focus on the previously drilled north-trending zone with the intention of improving the definition of the previous drilling; testing the western side of the magnetite BIF for a continuation of the interpreted western fold limb identified to the south; and testing the southern strike extension. A section across the interpreted eastern limb of the folded BIF is shown in Figure 2. This drilling is anticipated to provide information for the estimation of an Inferred Resource over the 4.1km-long magnetic target zone at Jubuk.

Magnetic has commenced discussions with several parties interested in the Jubuk iron project and other of Magnetic's iron projects in the south west. The aim of the discussions is to examine options for the acceleration of exploration and possible development of these strategically located assets.

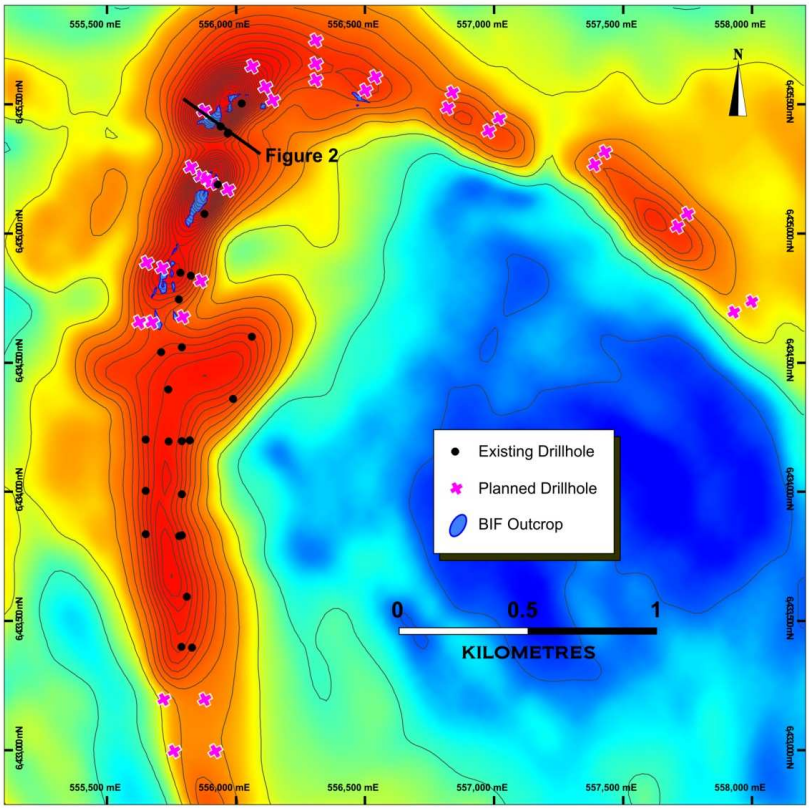

Figure 1
Jubuk Aeromagnetic Image Showing Proposed Drilling

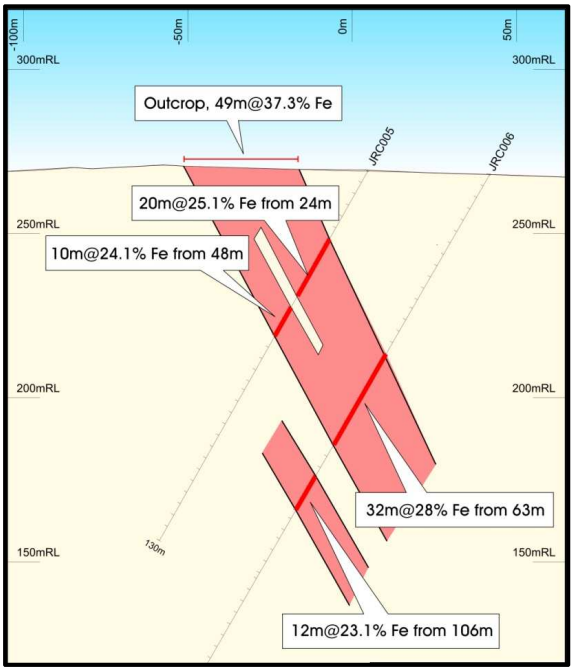

Figure 2
Jubuk Drill Section 6435420N

WUBIN

Following encouraging results from rock sampling of aeromagnetic targets, a 73-hole, 1,946m air-core program was completed during the quarter followed by a 25-hole, 2,172m reverse circulation (RC) program. The drilling programs were designed to test several of the outcrop areas hosting some of the 36 (13%) samples containing greater than 50%Fe.

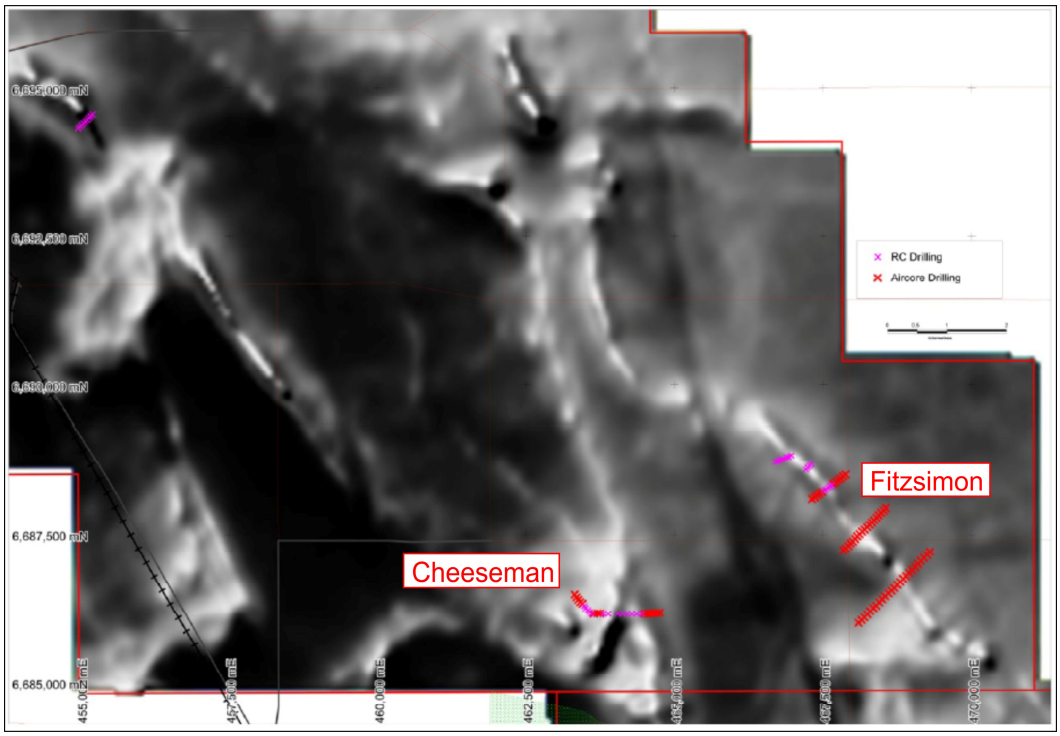

Figure 3
Wubin Greyscale Aeromagnetic Image Showing Drilling Locations

Significant results are summarised in Table 2:

Table 2
Wubin Aircore Drill Results

Hole	Collar Co-ordinates		Azimuth	Dip	From m	To m	Interval m	Fe %
	East	North						
BUNAC24	468066	6687448	225	-60	0	12	12	36.7
BUNAC46	463880	6686160	0	-90	16	22	6	28.3
BUNAC52	463563	6686169	0	-90	0	16	16	48.1
		Including			4	12	8	52.8
BUNAC72	468856	6686760	225	-60	4	12	8	34.1

4m composite samples. (Fe analysed by fused disc XRF method)

The results from BUNAC24 & 52 are considered significant as they appear to represent accumulations of lateritic iron oxides similar to channel iron deposits in the Pilbara region. Geomorphic studies have commenced to identify targets for further aircore drilling to determine the nature and extent of these occurrences.

The results from the RC drilling are twofold with both near surface goethite/hematite and deeper magnetite targets being tested. Significant near surface goethite/hematite results are shown in Table 3:

Table 3
Wubin RC Drill Results – Goethite/Hematite

Hole	Collar Co-ordinates		Azimuth	Dip	From m	To m	Interval m	Fe %
	East	North						
BRC01	463890	6686174	305	-60	4	24	20	32.8
BRC08	463562	6686163	90	-60	0	56	56	31.6
		including			0	16	16	39.0
BRC09	463521	6686165	295	-60	0	12	12	37.6

4m composite samples. (Fe analysed by fused disc XRF method)

Significant magnetite results are shown in Table 4 :

Table 4
Wubin RC Drill Results – Magnetite

Hole	Collar Co-ordinates		Azimuth	Dip	From m	To m	Interval m	Fe %
	East	North						
BRC01	463890	6686174	305	-60	52	64	12	30.31
BRC02	463940	6686172	270	-60	64	88	24	30.28
BRC25	455124	6694371	65	-55	32	44	12	31.35

4m composite samples. (Fe analysed by fused disc XRF method)

Drill hole locations and targets at the Cheeseman prospect are shown in Figure 4. RC drill hole BRC08, collared adjacent to air core hole BUNAC052 at this prospect, shows some variation to the iron grades intersected by the air core hole 16m @ 39.0%Fe compared to 16m @ 48.1%Fe.

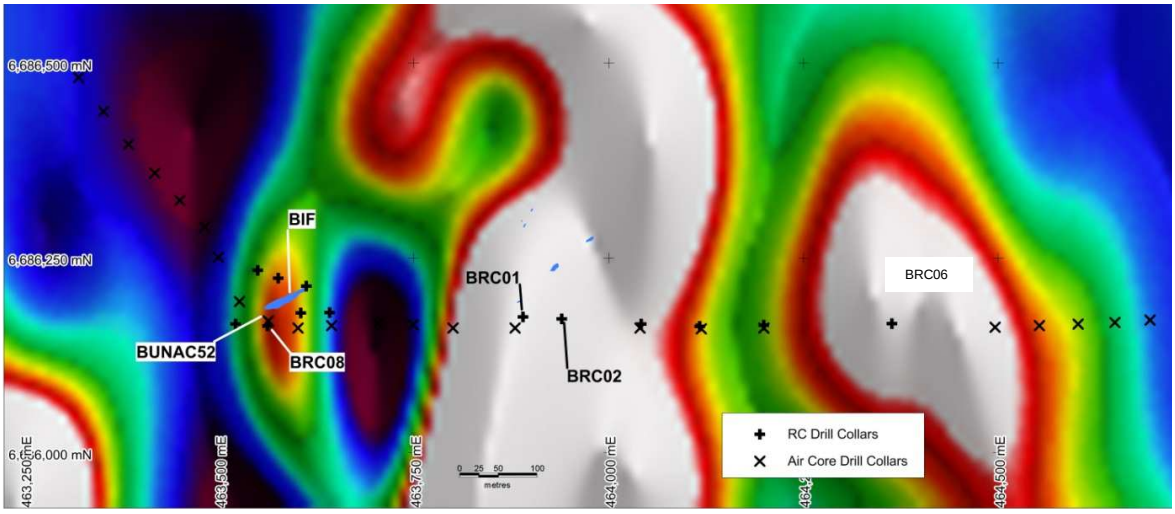

Figure 4
Cheeseman Prospect; Aeromagnetic Image Showing RC and Air Core Drilling Locations

The higher grade zone at the base of aircore drill hole BUNAC46 (6m @ 28.3%Fe) corresponds to the upper goethite/hematite zone in BRC01, as shown in Figure 5.

The magnetite rich intersections in BRC01 and BRC02 are hosted within fine grained amphibolite and coarser grained gabbroic gneiss. Drill hole BRC06, testing the eastern limb of the target magnetic anomaly, did not identify the source of the magnetic anomaly in that area. Interpretation and analysis of these drilling results is continuing.

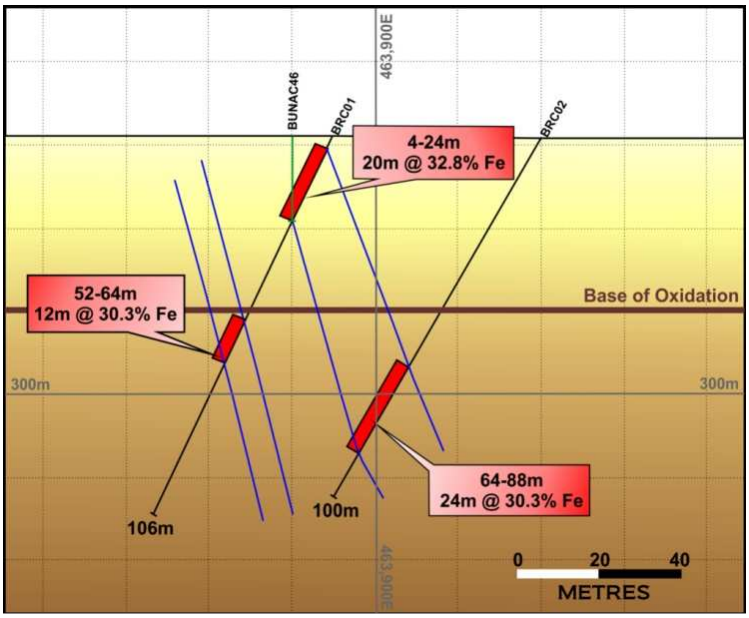

Figure 5

Cheeseman Prospect; BRC01 and BRC02 Drill Section

MT VERNON

Ten magnetic anomalies have been identified and modeled based on the ground magnetic survey completed over the regional aeromagnetic anomaly, shown in Figure 6. Ground reconnaissance shows seven of the targets are covered by aeolian sand. Seven samples, mostly of surface lateritic detritus, collected from the target sites and surrounding area have iron contents ranging from 22.8%Fe to 50.6%Fe, including a sample of outcropping coarse-grained magnetite-bearing granite gneiss which contained 49.1%Fe.

An RC drilling program to complete first pass testing of the magnetic targets is expected to commence in February. This drilling will test the shallower of the modeled targets and the coarse-grained magnetite-bearing granite gneiss. This program has received $100,000 of funding from the WA Government's Exploration Incentive Scheme.

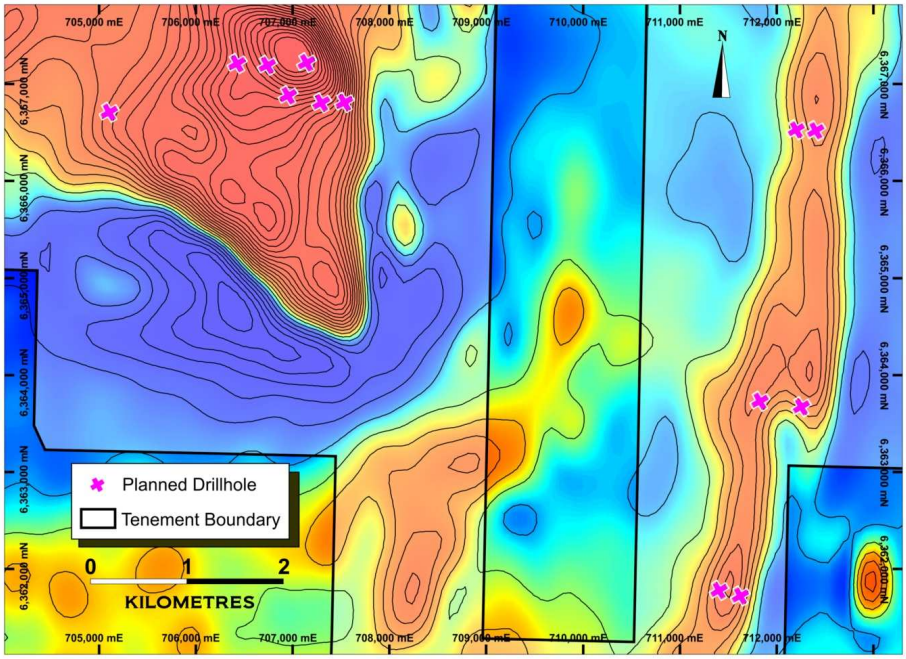

Figure 6

Mt Vernon Regional Aeromagnetic Image Showing Proposed Drilling

ROCK DAM HILL

A 5-hole RC drilling programme will test a strong magnetic anomaly and a combined copper and magnetic anomaly target, some 40km south of Lake Grace. Both targets are obscured by sand cover. The strong magnetic anomaly shown in Figure 7 has been modelled indicating a significant magnetic character, interpreted to be caused by magnetite.

At the magnetic anomaly/copper target situated 8km further to the east, an anomalous result of 301ppm Cu was obtained in shallow geochemical drilling. This geochemical anomaly is coincident with a substantial west northwest trending magnetic feature. Drilling is expected to commence in February.

URANIUM

MOUROUBRA

A 500m x 500m soil sampling program was completed over E70/1614 Mouroubra to follow up on the regional radiometric signature and an anomalous reconnaissance water sampling result of 870ppb uranium.

The maximum uranium response in the soils was 139ppm which occurs in the central anomaly which is approximately 6km in length. Responses were highly variable as the calcareous horizon hosting the elevated uranium responses is only intermittently exposed.

Follow-up sampling will be completed to better define the anomalous zones for a targeted drilling program.

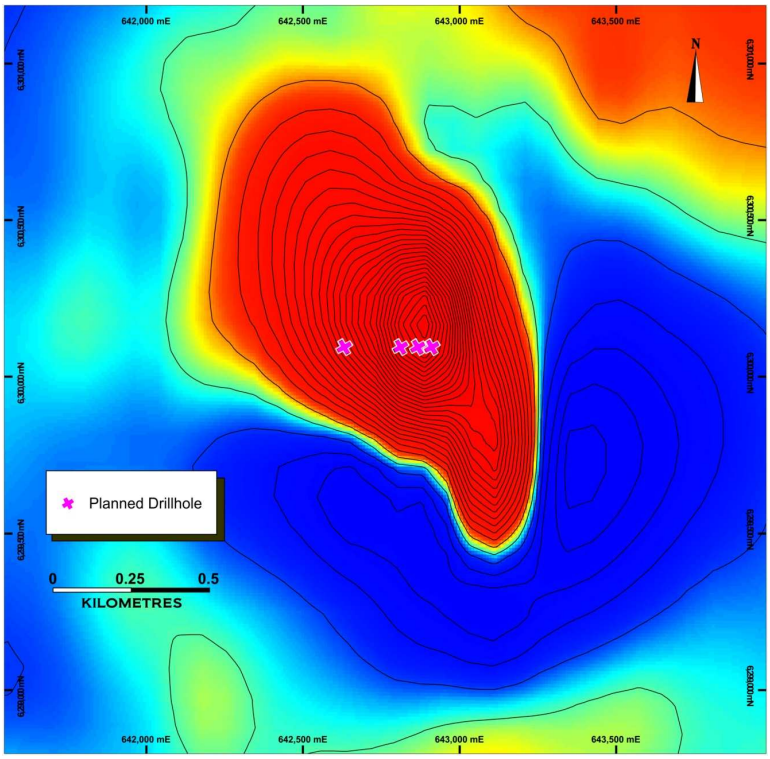

Figure 7
Rock Dam Hill Magnetic Target and Proposed Drilling

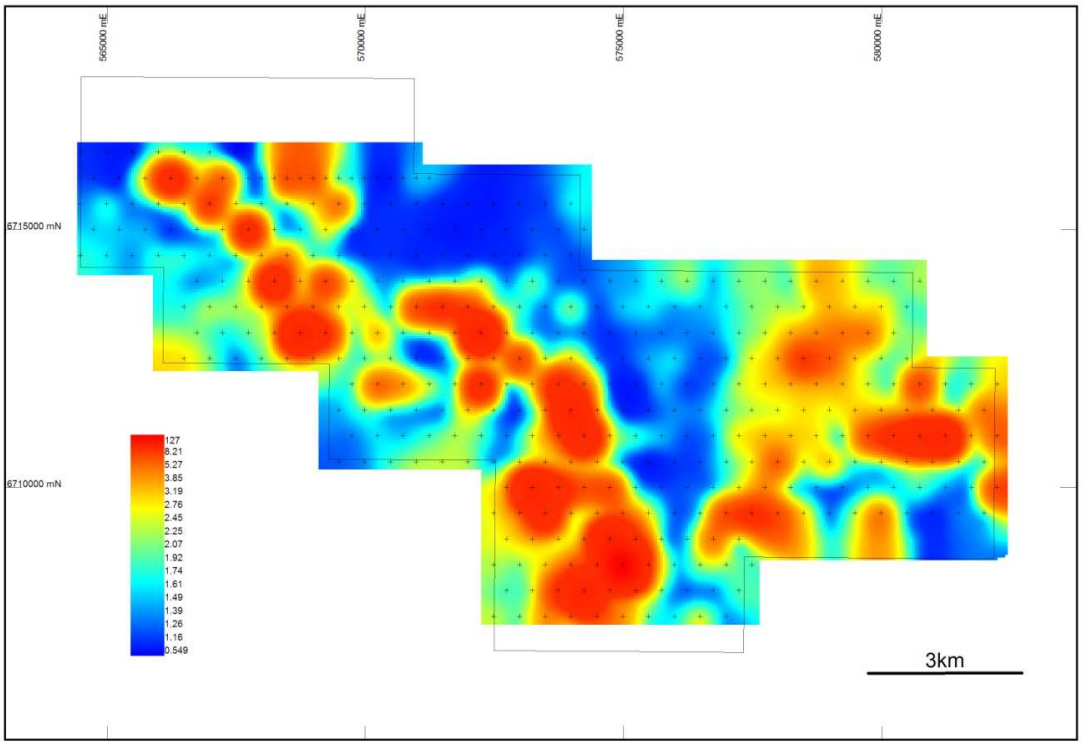

Figure 8

Mouroubra Uranium Soil Sampling Results

GOLD

TAMPIA NORTH (Magnetic 80%, diluting)

As previously reported, a 600m long gold anomaly (100 ppb Au threshold) has been defined in weathered bedrock. The bedrock anomaly is interpreted to be a supergene enrichment zone and remains open along strike. The source of this gold anomaly does not appear to have been tested by previous drilling. A second bedrock gold anomaly has been identified nearby and remains open to the south. Permitting applications for follow up air core drilling have been lodged. The proposed drilling is designed to define the extent of the bedrock anomalies and to assess the potential of the source of these anomalies.

LAKE GRACE (Magnetic 100%, diluting)

The Lake Grace tenement covers a 12km strike length of an interpreted shear zone where geochemical sampling has identified several gold-anomalous areas and where limited historical drilling reported a best intersection of 1m @ 34g/t Au from 94m.

A soil sampling program has been completed over the northern extension of the shear zone. The sampling has defined coherent responses up to 15ppb Au which appear to be associated with a discrete magnetic unit evident on regional aeromagnetic data.

An air core drilling program has been lodged for statutory approval which will test the northern extent of the shear zone where coincident gold and arsenic anomalism occur.

The previous exploration identified supergene and primary bedrock mineralisation within a restricted area. The expression of this mineralisation was interpreted as being within shallowing dipping structures; however an alternative interpretation consists of multiple steep dipping zones. These interpretations are being reviewed in order to identify prospective areas for additional drill evaluation.

HOLLAND ROCKS (Magnetic 100%, diluting)

As previously reported, soil sampling has identified two gold and multi-element targets associated with an interpreted shear zone evident from regional magnetic data. A drilling programme has been lodged for statutory approval which will test three previously undrilled areas. One of the targets is situated in a previously unexplored area, where joint venture sampling shows coincident gold and arsenic anomalism.

For more information on the company visit www.magres.com.au

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The information in this report is based on information compiled or reviewed by Allan Younger (Dip Applied Geol), who is a member of the Australasian Institute of Mining and Metallurgy. Allan Younger is a consultant to Magnetic Resources NL. Allan Younger 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 for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Allan Younger consents to the inclusion of this information in the form and context in which it appears in this report.

Magnetic Resources is targeting iron ore deposits ranging in size from 220Mt to 1000Mt within its various project areas based on interpretation of geophysical data using an assumed specific gravity of 3.5 and projecting the targets to an average depth of 100m below surface. The potential quantity and grade is conceptual in nature as there has not yet been sufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the determination of a mineral resource.