

EL 5360 Callabonna

Rehabilitation and Core Library Sections Part Completed

PROJECT DPY9-10 REPORT

for
PACE
(Plan For Accelerated Exploration)
PIRSA Funded Project

By: Greg Kary, Red Metal Limited

For: Department of State Development, South Australia

May 30, 2017

TENEMENT REPORT INDEX

OPERATOR:	Red Metal Limited
TENEMENT:	EL 5360
REPORTING PERIOD:	PACE Discovery Drilling 2016
TENEMENT HOLDER:	Variscan Mines Limited
AUTHOR:	Greg Kary
STATE:	South Australia
LATITUDE (Min _ Max):	-29.815170 ° to -30.081835°
LONGITUDE (Min _ Max):	139.884613° to 140.417973°
GDA94_Z53 mN (Min _ Max):	6,672,004 to 6,701,173
GDA94_Z53 mE (Min _ Max):	392,221 to 443,910
1:250,000 SHEET:	Callabonna SH54-06
1:100,000 SHEET:	Moolawatana 6838 / Callabonna 6938
MINERAL PROVINCE:	Curnamona Province
COMMODITIES:	Cu Au Pb Zn Ag Mo Ni Sn
KEYWORDS:	Diamond drilling, PACE

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Report Digital File List

DIGITAL FILE NAME	SIZE (KB)
EL5360_2016_01_PACE_Main Report.pdf	1820
EL5360_2016_02_PACE_Appendix 1 PACE Proposal Callabonna.pdf	1424
EL5360_2016_03_PACE_Collar Data.txt	1
EL5360_2016_04_PACE_Mag Susc.txt	5
EL5360_2016_05_PACE_Lithology.txt	18
EL5360_2016_06_PACE_Structure.txt	7
EL5360_2016_07_PACE_Survey.txt	1
EL5360_2016_08_PACE_Core recovery.txt	2
EL5360_2016_09_PACE_Density.txt	2
EL5360_2016_10_PACE_Sample list.txt	5
EL5360_2016_11_PACE_Drill Log Dictionary.txt	30
EL5360_2016_12_PACE_Assay Results.txt	10
EL5360_2016_13_PACE_Costs.pdf	1201
EL5360_2016_14_PACE_File List.txt	1

SUMMARY

PACE proposal DPY9-10 aimed to discover a new copper-gold mineralised Iron Oxide Copper-Gold (IOCG) magmatic centre similar to the Olympic Dam setting within the northern margin of Curnamona Province.

Drill hole WO-17-01 targeted a significant structurally controlled magnetic anomaly associated with a moderate amplitude gravity response. The anomaly is referred to as “*Woolatchi*”.

Magnetic modelling indicated a basement depth of about 560 metres. Drilling confirmed this, with WO-17-01 intersecting basement at a depth of 570.0 metres. Basement comprised banded quartz, feldspar, biotite and quartz, feldspar, pyroxene gneissic metasediments with strong hydrothermal magnetite alteration and abundant magnetic iron sulphides (pyrrhotite) over a 59 metre downhole interval from 604 metres.

Visible copper sulphide mineralisation was minor. The iron and copper sulphides mostly occur as veins and disseminations along shears or vein stock works associated with strong biotite and magnetite alteration or local pyroxene alteration of the meta-sedimentary sequences.

The hole ended at 712.1 metres in banded quartz, feldspar and pyroxene altered metasediments with a reduced iron and copper sulphide content.

The strong silica-feldspar-magnetite-biotite alteration and silica-feldspar-pyroxene alteration in WO-17-01 is typical of the early regional Na-Fe-Ca-K alteration seen in other prospective Iron Oxide Copper-Gold (IOCG) terrains around the world.

The wide zone of strong pyrrhotite and minor chalcopyrite associated with the biotite and magnetite alteration in WO-17-01 highlights the regional IOCG and Iron Sulphide Copper-Gold (ISCG) potential of the northern Curnamona district.

Down-hole and surface electromagnetic trials across the deep sourced iron sulphide mineralisation in WO-17-01 are in progress.

Scope to use electromagnetic surveying to define large, potentially conductive, ISCG mineral systems under the thick, highly conductive, Mesozoic and Tertiary sedimentary cover sequences is being assessed.

1.0 INTRODUCTION

This report describes the results of drilling partially funded by the PIRSA PACE grant for Callabonna, DPY9-10. All other work on the licence will be covered in standard annual reporting. The original proposal relating to the grant is attached in Appendix 2.

A summary of work completed in conjunction with DPY9-10 is shown in Table 1.

Table 1 - Activity Summary

Activity	Volume	Details	Results
Bedrock Drilling	1 x DDH hole for 712.1m WO-17-01	0-583 m rotary mud 583-584.3m 4" core 584.3m-712.1m HQ coring Drilled by Watson Drilling	Great artesian basin sediments to 570m. Banded metasediment showing strong silica-feldspar - $\pm$ magnetite $\pm$ biotite or silica-feldspar-pyroxene metasomatism to end of hole. Zone of strong stringer and vein style pyrrhotite from 604 to 654m.
Physical Property Tests	26 x density samples 130 magnetic susceptibility readings	Density measurements were taken for each interval of assayed core. Magnetic susceptibility data collected for each metre of core from 583m to 712.1m	Elevated density and magnetic susceptibility readings are associated with the area of stringer sulphides. New modelling of the target will be completed incorporating this data.
Assaying	In progress 1 metre out of 5 selected from HQ core for assay	To be assayed for 52 element suite using ICP MS technique.	26 samples submitted for analysis

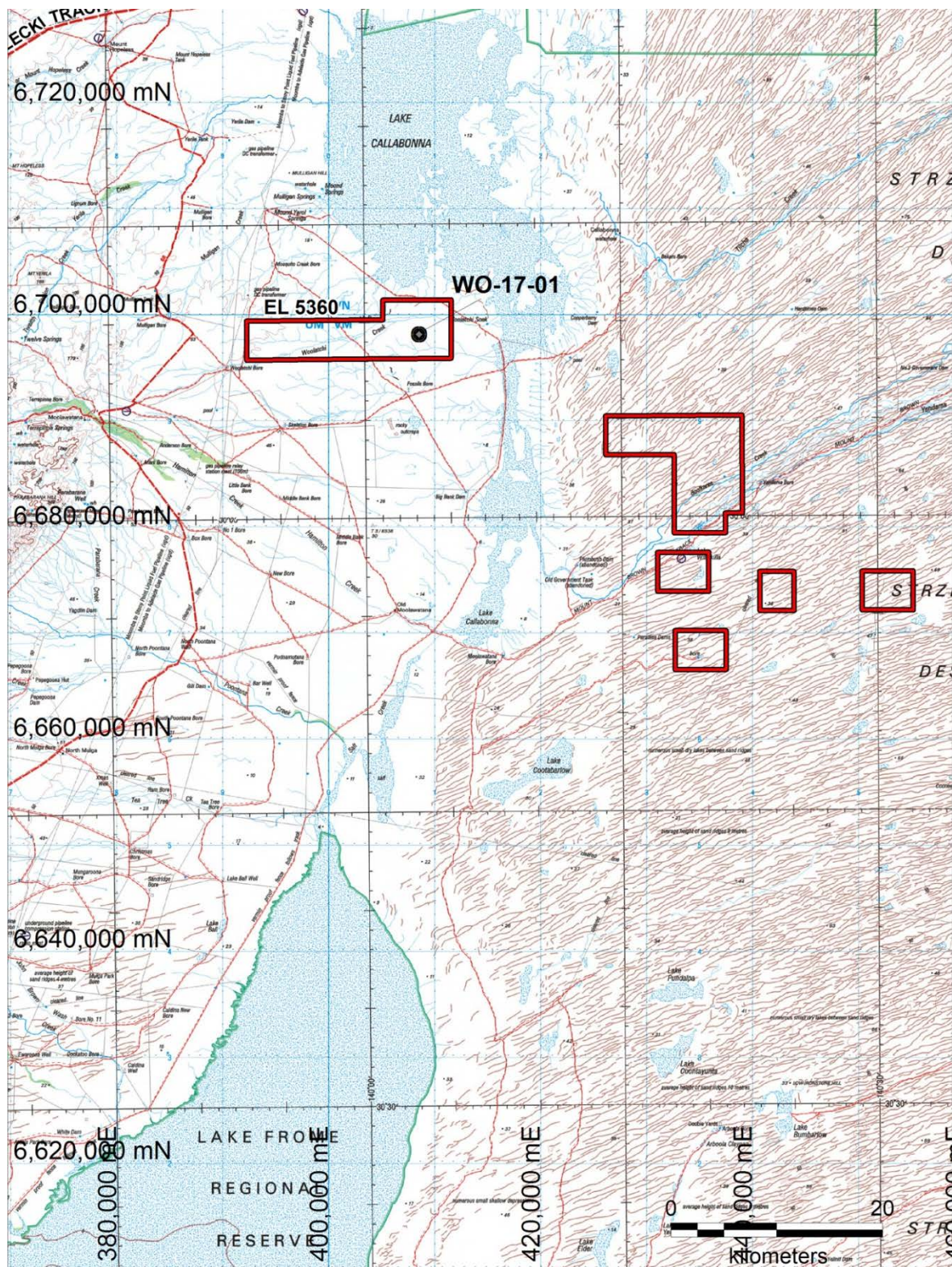
2.0 LOCATION and TENEMENT STATUS

EL 5360 Callabonna was granted to Variscan Mines Limited on December 6, 2013 and has been renewed on a yearly basis. Red Metal Limited signed a joint venture agreement in March 2004 and is acting operator.

EL 5360 is located mainly on Moolawatana Pastoral Station in the environs of Lake Callabonna, approximately 180km northeast of Leigh Creek. The tenement area is the subject of Native Title claims by the Kujani People (SC00/003) and Adnyamathanha (SC99/001). Details of the tenement are listed in Table 2 (see Figure 1).

Table 2 - Tenement Details

Name	EL No.	Grant Date	Area (km²)
Callabonna	EL 5360 formerly EL2886 formerly EL 2262	06/12/2013	241



[Figure1] Location EL 5360 Callabonna and drill hole WO-17-01.

3.0 TENEMENT GEOLOGY

The tenement is located on the northeast margin of the Curnamona Craton and covers a number of discrete high magnetic anomalies occurring in basement rocks (Figure 2) covered by approximately 400-600 metres of Mesozoic, Tertiary and Quaternary sedimentary rocks.

The outcrop geology of EL 5360 (see new Callabonna 1:250,000 map sheet) consists mostly of Quaternary fluvial and salt lake sediments covering Tertiary shale and sand sequences (Namba Formation, Eyre Formation) that are underlain by Cretaceous and Jurassic sediments of the Eromanga Basin. Within the eastern portion of the licence area, Holocene longitudinal sand dunes are dominant and constitute part of the Strzelecki Desert dune field.

To the west of the licence, basement rocks are exposed at surface within the Mount Painter Inlier, which rises sharply from the Lake Frome Plains along the bounding Paralana Fault. Basement comprises Paleoproterozoic and Mesoproterozoic crystalline gneisses and schists of the arenaceous Radium Creek Metamorphics intruded by various old and younger highly radiogenic granite suites. Late stage potassic metasomatism, granite breccias and hematite-quartz breccias and veins associated with uranium mineralisation crosscut the older metamorphic rocks and granite intrusions. The crystalline basement rocks are unconformably overlain by Adelaidean sedimentary sequences (see Mesa Journal, volume 38 for a review of geology of the Mt Painter region).

Historic drilling in EL 5360 has shown basement rocks to be unconformably overlain by a sequence of Jurassic and Cretaceous sand and silt units (Algebuckina and Cadna-owie equivalents - host rocks of the pressurised artesian aquifers) capped by a thick Cretaceous shale unit equivalent to the Bulldog Shale. Tertiary (Palaeocene-Miocene) sands and clays unconformably overlie the Mesozoic sequences and are unconformably overlain by Quaternary fluvial sands and silt and salt lakes sediments.

4.0 DRILL TARGET

Geophysically, EL 5360 covers a number of discrete high magnetic $\pm$ gravity anomalies sourced from basement rocks under approximately 400-600 metres of Mesozoic, Tertiary and Quaternary sedimentary rocks. Limited company drilling of these geophysical targets and some within the exposed Mount Painter Inlier have recognised wide spread sodic, calcic and iron alteration plus hematite and magnetite styles of hydrothermal breccia which compare favourably with the regional alteration and breccia systems observed in mineralised IOCG terrains such as the Gawler Craton and Mount Isa Inlier.

IOCG deposits are thought to have formed from the localisation into deep crustal faults of high temperature saline fluids above or adjacent to a deep-seated magmatic centre. The structural morphology and alteration styles of IOCG deposits vary significantly with host lithology and structural level (Figure 2). Using regional scale magnetic and gravity data sets, Red Metal maps the roof zones to prospective deep-seated magmatic systems and late-stage regional scale structures. At the project scale, Red Metal uses detailed magnetic and gravity data to map the late-stage structures and identify any geophysical targets along the structures for drill testing. This approach has been applied by Red Metal over the northern Curnamona Province.

Previous regional drilling in this frontier region has mainly targeted stand out magnetic or gravity anomalies with favourable alteration and hydrothermal breccia's intersected in holes directed towards the bulls-eye, large amplitude magnetic targets.

BHP with PlatSearch drilled two standout magnetic anomalies with holes CAL 1 and CAL 2 each intersecting large intervals of magnetite-calcsilicate-albite hydrothermal breccia with weak copper. CAL 1 intersected highly magnetic, multiply brecciated and altered quartz-albite laminates and lesser calcsilicates from 486metres to end of hole. Traces of fine to blebby disseminated chalcopyrite were noted throughout the core and in a number of thin sections. Maximum assay results were 2 metres @ 0.11% Cu. CAL 2 intersected a variably brecciated, calcsilicate-albite-magnetite metasomatic sequence with increasing dolerite towards end of hole. Pyrite was noted throughout with chalcopyrite occurring in minor amounts within carbonate veins. Hole locations on a regional magnetic image shown in Figure 3.

PlatSearch and Red Metal targeted a weak bulls-eye magnetic anomaly located along a craton-scale structure which defines the eastern faulted margin of the Benagerie Ridge with holes QBE 1 and QBE2 and intersected a large hydrothermal breccia hosted in volcanic rocks. The hydrothermal breccia comprises porphyritic felsic volcanic and mafic volcanic clasts. The breccia shows strong red feldspar (potassic/albitic) alteration as matrix fill and clast replacement with associated weak magnetite and variable calcsilicate alteration. Sericite-chlorite-calcite-hematite alteration locally overprints the earlier feldspar-magnetite-calcsilicate phases. The breccia averaged 600ppm copper and 230ppm zinc with local zones of high sulphide containing up to 1.16% copper over a one metre interval. Better copper appears to relate to the later sericite-hematite-chlorite overprint. Recent age dates confirm the volcanic age of the Benagerie Volcanics as 1581Ma (Fanning et al.) that correlates with the thermal event related to the formation of the Olympic Dam deposit at about 1592Ma. This high level volcanic environment is considered to be conducive for the formation of low magnetic, hematite associated deposits.

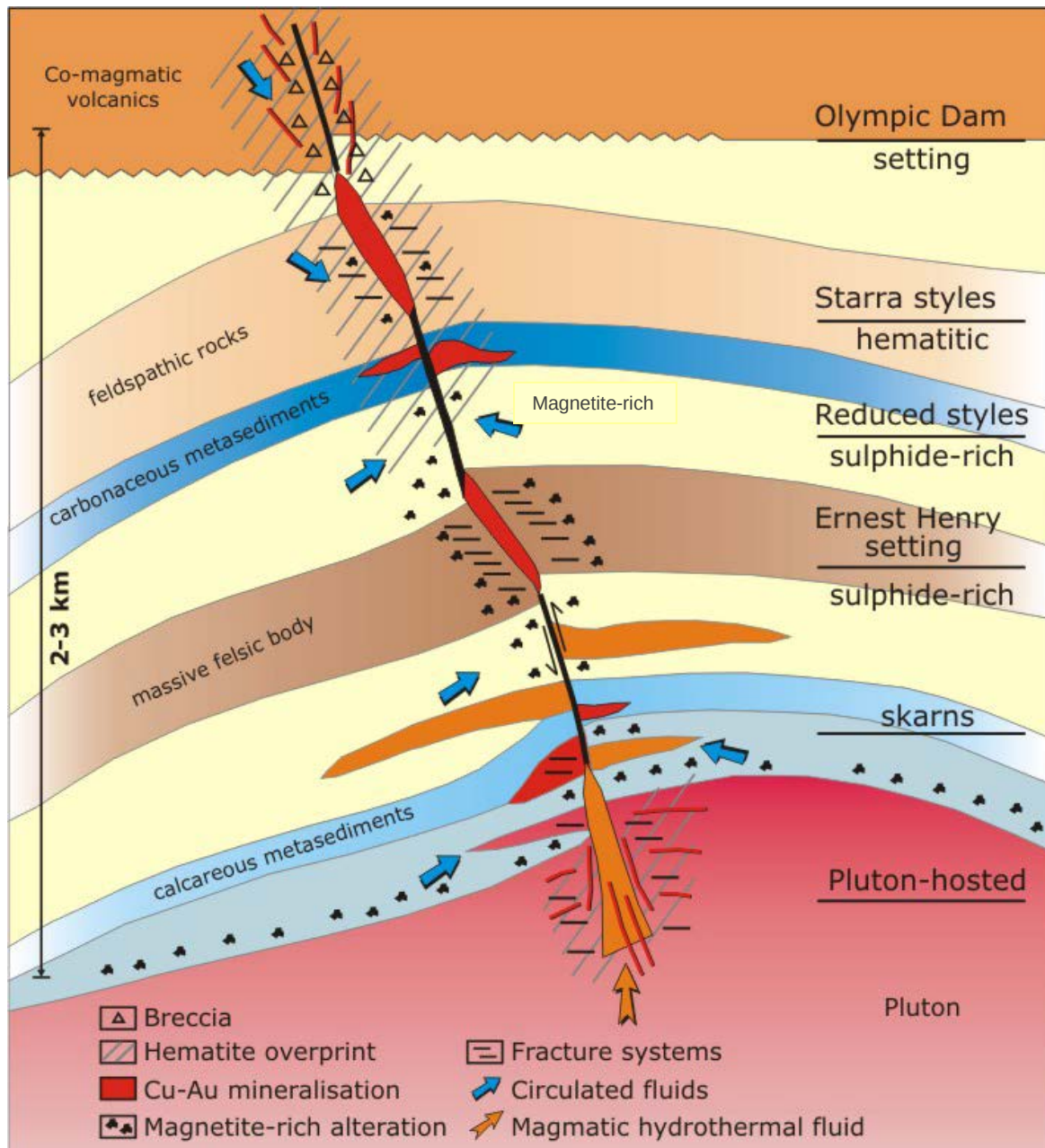
Red Metal previously drilled 3 holes which aimed to test standout regional gravity targets situated along the margin to the Curnamona Craton for hematite breccia phases. These holes intersected base highs of dense, banded calcsilicate-albite±magnetite rocks which clearly explained the source to the regionally significant gravity anomalies. The banded calcsilicates are typical of metasomatised sediments.

A recent review of the remaining potential for IOCG breccia systems along the northern margin of the Curnamona Craton recognised the standout “Woolatchi” magnetic anomaly and several second order, residual gravity and residual magnetic targets as prospective. Hole WO-17-01 was completed under a collaborative drilling proposal to drill test the “Woolatchi” target.

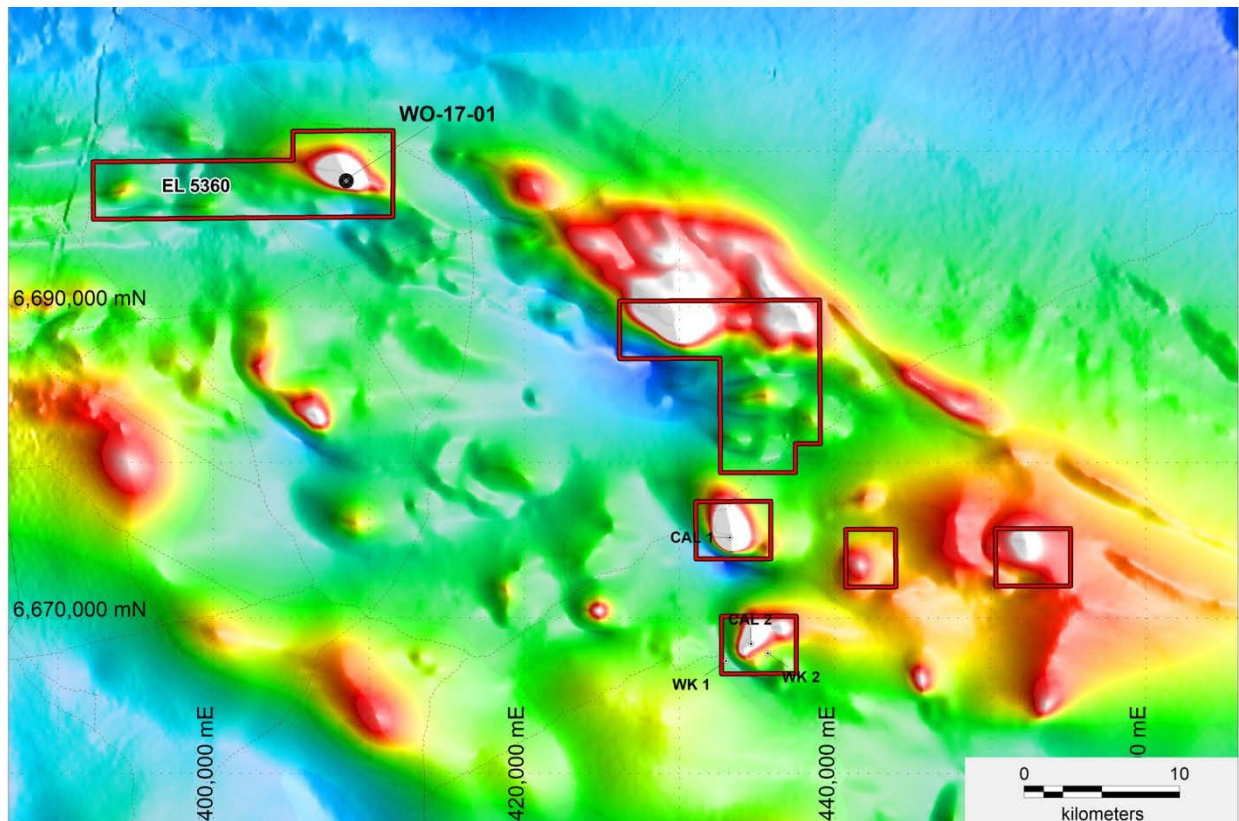
Modelling of the Woolatchi magnetic feature indicated the source was a wide, steeply south-west dipping, strongly magnetic body topping at approximately 560 meters below surface.

Detailed gravity down to 200 metre north by 200 metre east spacing was completed by Red Metal over the “Woolatchi” target as a potential aid to drill hole positioning (Figure 4).

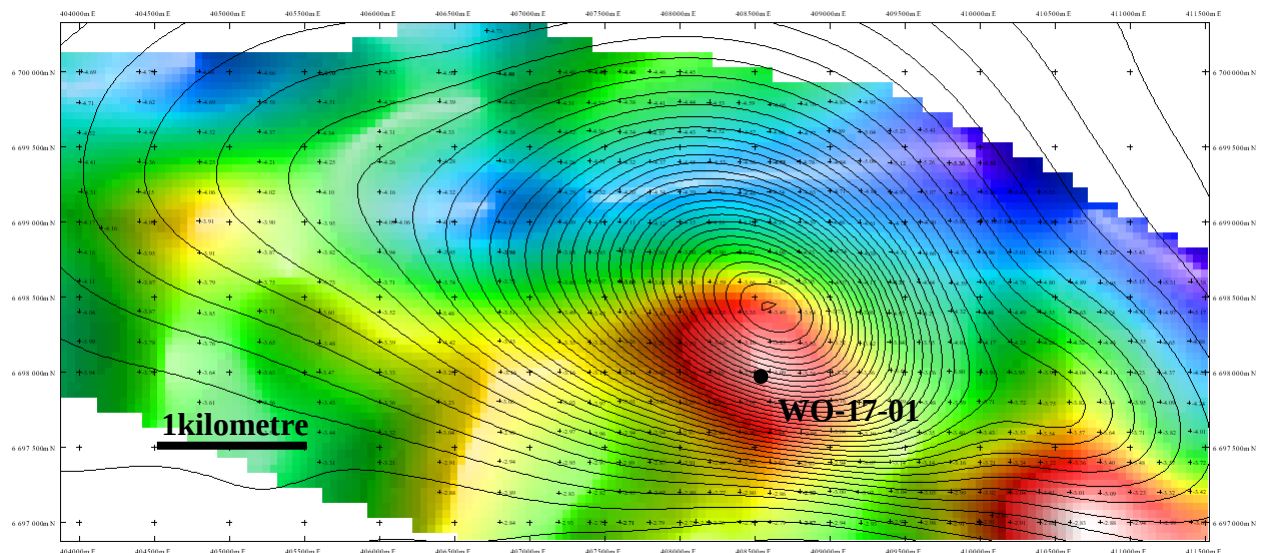
The final drill collar position was located based on the magnetics. WO-17-01 was collared in a position that would result in the vertical hole intersecting the hanging wall of the modelled magnetic source at 560 metres depth.



[Figure 2] Iron Oxide Cu-Au: Schematic geological model. Key elements are the coincidence of a deep-seated magmatic centre with deep penetrating crustal scale structures.



[Figure 3] Callabonna Project: Woolatchi drill hole location on target on TMI image. Historical holes on eastern magnetic targets.



[Figure 4] Callabonna Project: Total magnetic intensity contours with residual gravity image, gravity stations and values. Small density anomaly associated with the peak magnetic value. Modelling of gravity data has been complicated by a large regional gradient caused by a large volume basement high of calcsilicate rocks to the south which has effectively masked any density anomaly associated with the large Woolatchi magnetic target.

5.0 CURRENT EXPLORATION PROGRAM

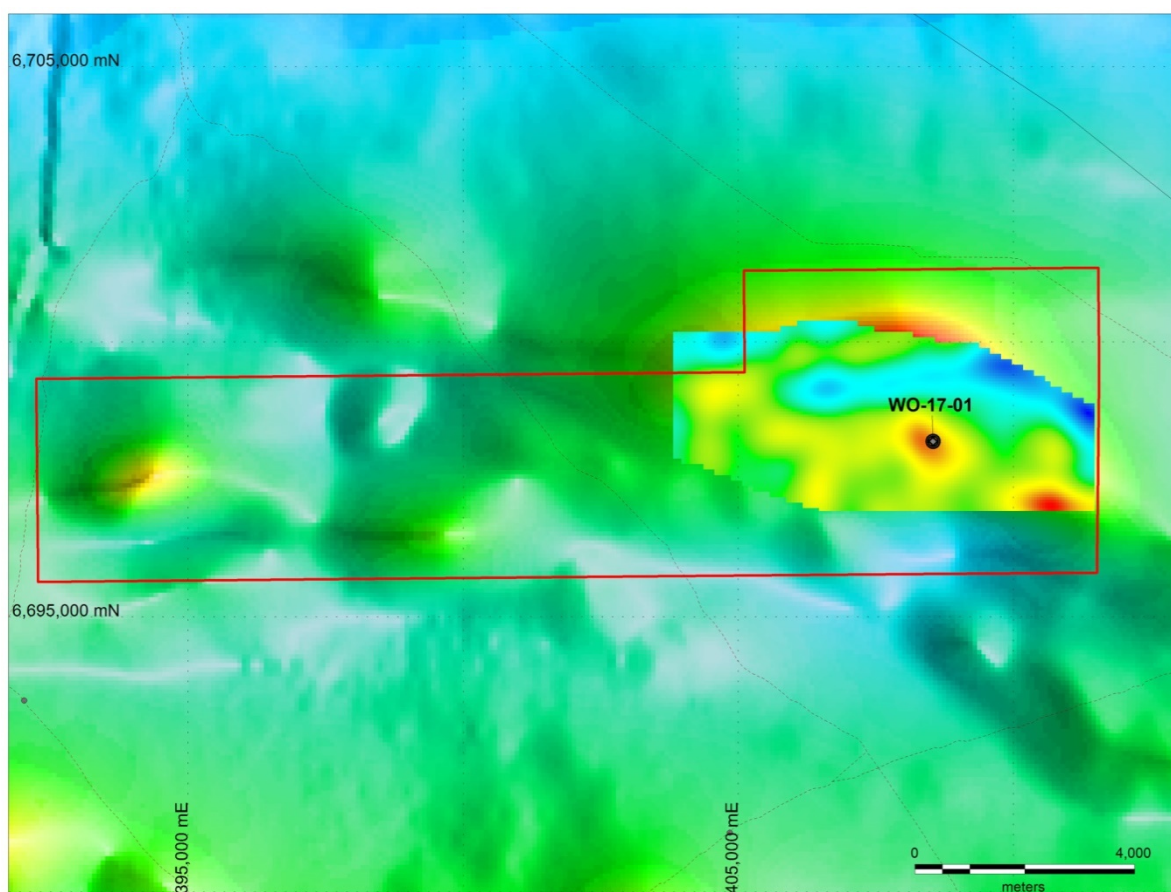
5.1 Drilling

Drilling testing of the *Woolatchi* target was completed by Watson Drilling in two phases. Drillhole WO-17-01 comprised a 583 metre pre-collar followed by a diamond core tail to a final depth of 712.1 metres. The pre-collar was drilled using rotary mud drilling to refusal at 583 metres. A short section of large diameter (4 inch) core was obtained to ensure the hole had reached basement. Casing was then cemented in the hole to contain artesian water flows and an HQ diamond tail was cored to 712.1 metres.

Location of the completed hole and gravity feature is shown on Figure 5. Collar details are included in Table 3. Geological logs are included as Appendix 1.

Table 3 - Drilling Details

	GDA94 Zone 54						
HOLE NAME	EASTING	NORTHING	RL (approx.)	DIP	AZ (AMG)	DEPTH (metre)	Target Name
WO-17-01	408546	6698222	21	-90	000	712.1	Woolatchi



[Figure 5] Woolatchi Target: residual gravity image on total magnetic background. Location of hole WO-17-01 shown.

5.2 Geology

The precollar hole passed through a typical thick sequence of fluvial and salt lake sediments covering Tertiary shale and sand sequences (Namba Formation, Eyre Formation), overlying Cretaceous and Jurassic sediments of the Eromanga Basin. The base of this sequence comprised a 45m interval of Cadna-owie artesian bearing sandstone.

Basement comprised banded quartz, feldspar, biotite and quartz, feldspar, pyroxene gneissic metasediments with strong hydrothermal magnetite alteration and abundant magnetic iron sulphides (pyrrhotite) over a 59 metre downhole interval from 604 metres.

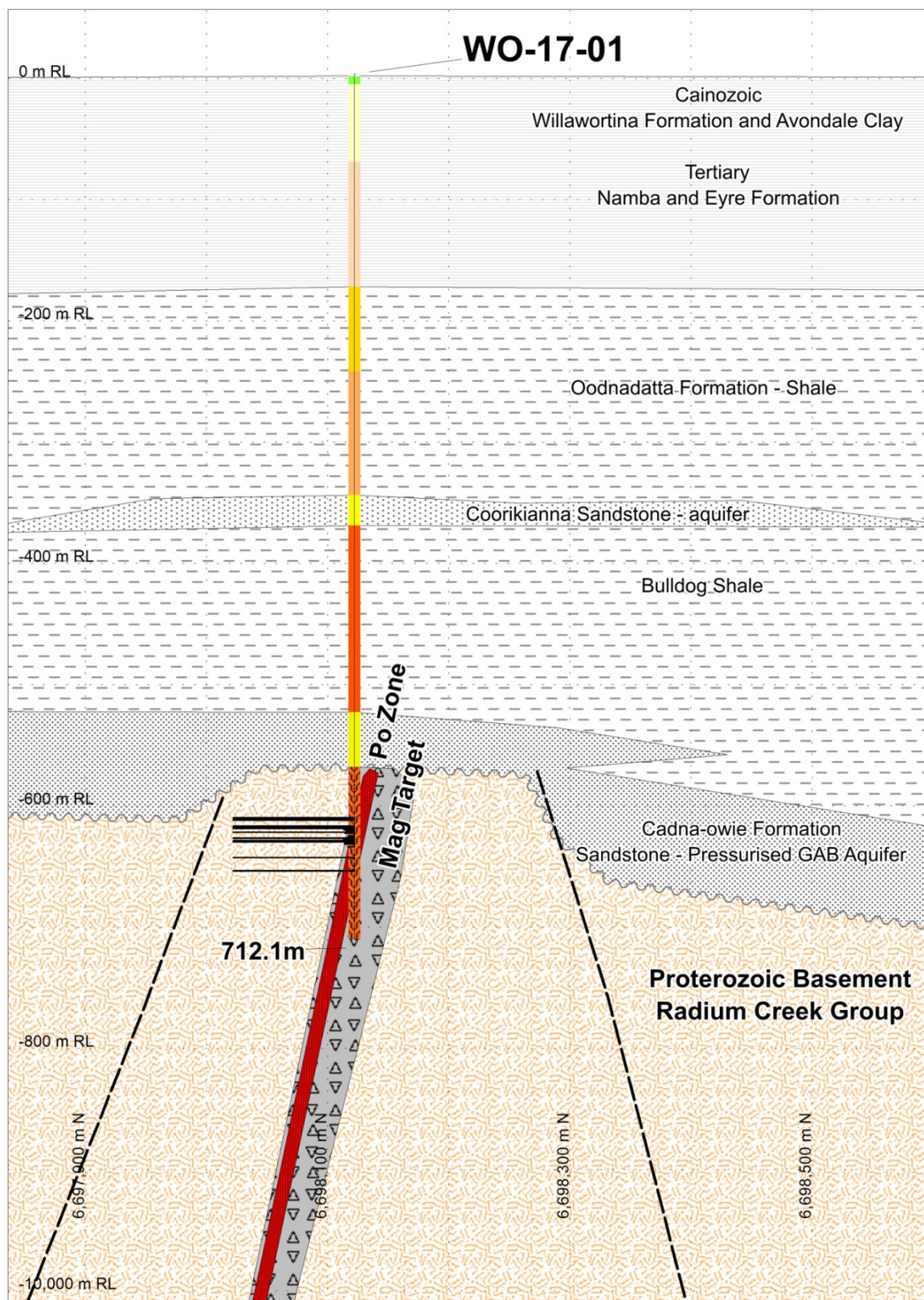
Visible copper sulphide mineralisation was minor. The iron and copper sulphides mostly occur as veins and disseminations along shears or vein stock works associated with strong biotite and magnetite alteration (Plate 1) and local pyroxene alteration of the meta-sedimentary sequences

The hole ended at 712.1 metres in strong hydrothermally altered metasediments with reduced sulphide content. A summary log is presented in Table 4.

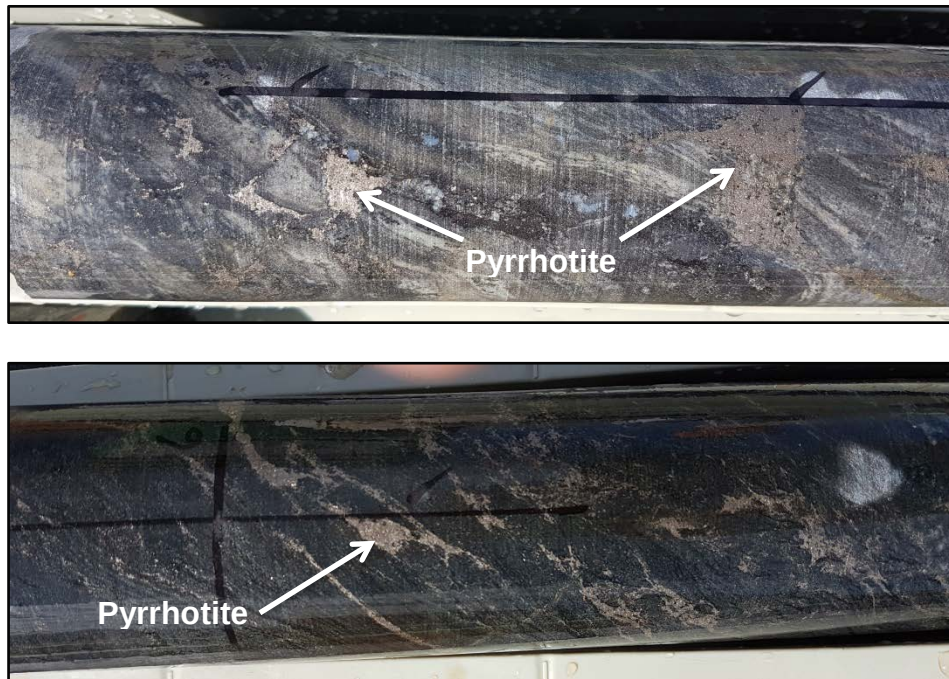
Table 4 - WO-17-01 summary geological log

WO-17-01 SUMMARY GEOLOGY				
FROM	TO	UNIT	AGE	LITHOLOGY
0	7		Cainozoic	Aeolian silt & sand, lag, gravel
7	71	Namba	Tertiary	Clays, fine clayey sands, common FeOx staining at top
71	174	Eyre	Tertiary	Organic rich sands, minor shale & lignite
174	346	Oodnadatta	Cretaceous	Grey clay/shale
346	371	Coorikiana	Cretaceous	Clayey fine quartz sandstone
371	525	Bulldog	Cretaceous	Monotonous grey shale
525	570	Cadna-owie	Cretaceous	Pale grey silty/clayey fine quartz sandstone. Locally coarse. Trace fine pyrite.
570	604.55	Radium Creek Group Curnamona Province	Paleoproterozoic	Finely banded fine grained quartz/feldspar/(biotite) schist, grades to gneiss. Local garnet
604.55	656.5	Radium Creek Group Curnamona Province	Paleoproterozoic	As above with moderate to strong sulphide (pyrrhotite dominant). Occurs as veins and disseminations. Local minor chalcopyrite
656.5	712.1	Radium Creek Group Curnamona Province	Paleoproterozoic	Mixed silica dominant metasediment with strong calc-silicate dominant intervals.

A cross section of the hole is included as Figure 6.



[Figure 6] Woolatchi Target: cross section of drill hole WO-17-01. Black bars on lower left of drill trace are magnetic susceptibility readings. Uniformly longer bars are intervals where magnetic susceptibility was greater than sensitivity of meter used to record the data ("Above meter limit" data in Table 6).



[Plate 1] Woolatchi WO-17-01, Callabonna Project: Core photographs showing iron sulphide (pyrrhotite) and minor copper sulphides as veins and disseminations along shears or vein stock works associated with strong biotite and magnetite alteration

5.3 Physical Property Test

Drill core from WO-17-01 was submitted to Challenger Geological Services in Adelaide to determine physical properties for selected intervals of the hole. Twenty six samples were selected to be assayed for a 52 multi-element suite. One meter in five was selected and 1/3 cut off using a core saw. Samples were submitted to Intertek Laboratories for analysis. Results show weakly elevated metal geochemistry associated with the logged zone of moderate to strong sulphide between 604.55 metres and 656.5 metres. Copper assays were strongest in areas of observed chalcopyrite. Maximum value was 819.7ppm copper. A slight increase in zinc, tin, cobalt and silver is also associated with the elevated sulphide zone. Full assays are included as Appendix 13.

These same samples were also measured using the “weight wet” vs. “weight dry” method to determine density. Density data for the twenty six samples is shown in Table 5. The area of elevated sulphide shows a marked increase in density against background levels.

Magnetic susceptibility measurements were taken on each meter of core. Results are included as Table 6. The zone of elevated sulphide and magnetite has a significant increase in magnetic susceptibility.

Density and magnetic susceptibility data will be used to remodel the Woolatchi geophysical anomaly to determine if it was adequately tested by drill hole WO-17-01.

Table 5 - Core Density Measurements

Hole ID	SG From	SG To	core size	Weight Dry	Weight Wet	Density	Comments
WO_17_01	584.87	584.98	4"	749	480	2.78	
WO_17_01	589.93	590.03	HQ	412	264	2.78	
WO_17_01	594.96	595.1	HQ	704	455	2.83	
WO_17_01	599.93	600.13	HQ	1535	994	2.84	
WO_17_01	604.97	605.07	HQ	482	306	2.74	
WO_17_01	609.99	610.19	HQ	1802	1198	2.98	
WO_17_01	614.97	615.09	HQ	1142	793	3.27	
WO_17_01	619.93	620.08	HQ	1661	1212	3.7	High mag sus
WO_17_01	624.93	625.02	HQ	880	612	3.28	
WO_17_01	629.85	629.97	HQ	567	402	3.44	923 mag sus
WO_17_01	634.94	635.04	HQ	910	613	3.06	
WO_17_01	639.95	640.13	HQ	1623	1033	2.75	
WO_17_01	644.96	645.14	HQ	1845	1278	3.25	High mag sus
WO_17_01	649.94	650.1	HQ	1438	923	2.79	
WO_17_01	654.97	655.11	HQ	1477	1016	3.2	
WO_17_01	659.89	660	HQ	983	651	2.96	
WO_17_01	664.93	665.17	HQ	2041	1352	2.96	
WO_17_01	669.89	670.03	HQ	1433	995	3.27	
WO_17_01	674.97	675.16	HQ	1565	986	2.7	
WO_17_01	679.96	680.11	HQ	1273	820	2.81	
WO_17_01	684.89	685.08	HQ	1668	1061	2.75	
WO_17_01	689.93	690.13	HQ	1673	1070	2.77	
WO_17_01	694.88	695.09	HQ	2050	1368	3.01	
WO_17_01	699.96	700.1	HQ	1346	853	2.73	
WO_17_01	704.95	705.03	HQ	651	413	2.74	
WO_17_01	709.84	710.03	HQ	1699	1084	2.76	

Table 6 - Core Magnetic Susceptibility Measurements

Hole ID	From	To	Mag_susc x_10-5	Comments	Instrument
WO_17_01	582.9	583	298		KT9
WO_17_01	583.9	584	426		KT9
WO_17_01	584.9	585	352		KT9
WO_17_01	585.9	586	469		KT9

Hole ID	From	To	Mag_susc x_10-5	Comments	Instrument
WO_17_01	586.9	587	393		KT9
WO_17_01	587.9	588	391		KT9
WO_17_01	588.9	589	330		KT9
WO_17_01	589.9	590	282		KT9
WO_17_01	590.9	591	250		KT9
WO_17_01	591.9	592	324		KT9
WO_17_01	592.9	593	222		KT9
WO_17_01	593.9	594	561		KT9
WO_17_01	594.9	595	264		KT9
WO_17_01	595.9	596	138		KT9
WO_17_01	596.9	597	160		KT9
WO_17_01	597.9	598	184		KT9
WO_17_01	598.9	599	162		KT9
WO_17_01	599.9	600	177		KT9
WO_17_01	600.9	601	244		KT9
WO_17_01	601.9	602	215		KT9
WO_17_01	602.9	603	350		KT9
WO_17_01	603.9	604	139		KT9
WO_17_01	604.9	605	600		KT9
WO_17_01	605.9	606	1010		KT9
WO_17_01	606.9	607	492		KT9
WO_17_01	607.9	608	1370		KT9
WO_17_01	608.9	609	2000		KT9
WO_17_01	609.9	610	1240		KT9
WO_17_01	610.9	611	35200		KT9
WO_17_01	611.9	612	999999		KT9
WO_17_01	612.9	613	999999		KT9
WO_17_01	613.9	614	999999		KT9
WO_17_01	614.9	615	43900		KT9
WO_17_01	615.9	616	44800		KT9
WO_17_01	616.9	617	7650		KT9
WO_17_01	617.9	618	578		KT9
WO_17_01	618.9	619	999999	Above meter limit	KT9
WO_17_01	619.9	620	999999	Above meter limit	KT9
WO_17_01	620.9	621	999999	Above meter limit	KT9
WO_17_01	621.9	622	89500		KT9
WO_17_01	622.9	623	70500		KT9
WO_17_01	623.9	624	999999	Above meter limit	KT9
WO_17_01	624.9	625	78800		KT9
WO_17_01	625.9	626	20800		KT9
WO_17_01	626.9	627	53300		KT9
WO_17_01	627.9	628	56000		KT9
WO_17_01	628.9	629	999999	Above meter limit	KT9

Hole ID	From	To	Mag_susc x_10-5	Comments	Instrument
WO_17_01	629.9	630	92300		KT9
WO_17_01	630.9	631	999999	Above meter limit	KT9
WO_17_01	631.9	632	999999	Above meter limit	KT9
WO_17_01	632.9	633	80500		KT9
WO_17_01	633.9	634	84500		KT9
WO_17_01	634.9	635	29300		KT9
WO_17_01	635.9	636	55100		KT9
WO_17_01	636.9	637	46900		KT9
WO_17_01	637.9	638	16000		KT9
WO_17_01	638.9	639	37400		KT9
WO_17_01	639.9	640	4730		KT9
WO_17_01	640.9	641	4610		KT9
WO_17_01	641.9	642	1050		KT9
WO_17_01	642.9	643	3340		KT9
WO_17_01	643.9	644	13200		KT9
WO_17_01	644.9	645	999999	Above meter limit	KT9
WO_17_01	645.9	646	8970		KT9
WO_17_01	646.9	647	172		KT9
WO_17_01	647.9	648	156		KT9
WO_17_01	648.9	649	609		KT9
WO_17_01	649.9	650	848		KT9
WO_17_01	650.9	651	1060		KT9
WO_17_01	651.9	652	10800		KT9
WO_17_01	652.9	653	1170		KT9
WO_17_01	653.9	654	781		KT9
WO_17_01	654.9	655	14500		KT9
WO_17_01	655.9	656	999999	Above meter limit	KT9
WO_17_01	656.9	657	828		KT9
WO_17_01	657.9	658	14000		KT9
WO_17_01	658.9	659	976		KT9
WO_17_01	659.9	660	613		KT9
WO_17_01	660.9	661	386		KT9
WO_17_01	661.9	662	337		KT9
WO_17_01	662.9	663	1210		KT9
WO_17_01	663.9	664	635		KT9
WO_17_01	664.9	665	704		KT9
WO_17_01	665.9	666	368		KT9
WO_17_01	666.9	667	438		KT9
WO_17_01	667.9	668	332		KT9
WO_17_01	668.9	669	274		KT9
WO_17_01	669.9	670	474		KT9
WO_17_01	670.9	671	268		KT9
WO_17_01	671.9	672	219		KT9

Hole ID	From	To	Mag_susc x_10-5	Comments	Instrument
WO_17_01	672.9	673	124		KT9
WO_17_01	673.9	674	142		KT9
WO_17_01	674.9	675	180		KT9
WO_17_01	675.9	676	127		KT9
WO_17_01	676.9	677	4010		KT9
WO_17_01	677.9	678	196		KT9
WO_17_01	678.9	679	316		KT9
WO_17_01	679.9	680	269		KT9
WO_17_01	680.9	681	177		KT9
WO_17_01	681.9	682	208		KT9
WO_17_01	682.9	683	196		KT9
WO_17_01	683.9	684	197		KT9
WO_17_01	684.9	685	208		KT9
WO_17_01	685.9	686	90		KT9
WO_17_01	686.9	687	116		KT9
WO_17_01	687.9	688	153		KT9
WO_17_01	688.9	689	205		KT9
WO_17_01	689.9	690	156		KT9
WO_17_01	690.9	691	224		KT9
WO_17_01	691.9	692	169		KT9
WO_17_01	692.9	693	124		KT9
WO_17_01	693.9	694	203		KT9
WO_17_01	694.9	695	262		KT9
WO_17_01	695.9	696	237		KT9
WO_17_01	696.9	697	352		KT9
WO_17_01	697.9	698	162		KT9
WO_17_01	698.9	699	141		KT9
WO_17_01	699.9	700	302		KT9
WO_17_01	700.9	701	255		KT9
WO_17_01	701.9	702	173		KT9
WO_17_01	702.9	703	126		KT9
WO_17_01	703.9	704	148		KT9
WO_17_01	704.9	705	194		KT9
WO_17_01	705.9	706	107		KT9
WO_17_01	706.9	707	171		KT9
WO_17_01	707.9	708	224		KT9
WO_17_01	708.9	709	150		KT9
WO_17_01	709.9	710	165		KT9
WO_17_01	710.9	711	226		KT9
WO_17_01	711.9	712	375		KT9

6.0 ADDITIONAL WORK

Down-hole and surface electromagnetic trials across the deep sourced iron sulphide mineralisation in WO-17-01 are in planned.

Scope to use electromagnetic surveying to define large, potentially conductive, ISCG mineral systems under the thick, highly conductive, Mesozoic and Tertiary sedimentary cover sequences is being assessed.

7.0 CONCLUSIONS

PACE proposal DPY9-10 aimed to discover a new copper-gold mineralised Iron Oxide Copper-Gold (IOCG) magmatic centre similar to the Olympic Dam setting within the northern margin of Curnamona Province.

Drill hole WO-17-01 targeted a significant structurally controlled magnetic anomaly associated with a moderate amplitude gravity response. The anomaly is referred to as “*Woolatchi*”.

Magnetic modelling indicated a basement depth of about 560 metres. Drilling confirmed this, with WO-17-01 intersecting basement at a depth of 570.0 metres. Basement comprised banded quartz, feldspar, biotite and quartz, feldspar, pyroxene gneissic metasediments with strong hydrothermal magnetite alteration and abundant magnetic iron sulphides (pyrrhotite) over a 59 metre downhole interval from 604 metres.

Visible copper sulphide mineralisation was minor. The iron and copper sulphides mostly occur as veins and disseminations along shears or vein stock works associated with strong biotite and magnetite alteration or local pyroxene alteration of the meta-sedimentary sequences. Assay results from this area of elevated sulphide mineralisation returned weakly anomalous results. The maximum copper value was 819.7 ppm.

The hole ended at 712.1 metres in banded quartz, feldspar and pyroxene altered metasediments with a reduced iron and copper sulphide content.

The strong silica-feldspar-magnetite-biotite alteration and silica-feldspar-pyroxene alteration in WO-17-01 is typical of the early regional Na-Fe-Ca-K alteration seen in other prospective Iron Oxide Copper-Gold (IOCG) terrains around the world.

The wide zone of strong pyrrhotite and minor chalcopyrite associated with the biotite and magnetite alteration in WO-17-01 highlights the regional IOCG and Iron Sulphide Copper-Gold (ISCG) potential of the northern Curnamona district.

8.0 REHABILITATION - Interim Only – Still in Progress

As part of standard operating practice, all work was carried out in an environmentally sensitive manner. The drill site was located within an open paddock used for cattle grazing. Access to the drill site was obtained via existing tracks and fence line access routes with a short distance of cross-paddock navigating to the drill site. No track work or disturbance of vegetation was required.

A drill sump was dug for use as a settling pond for drill cuttings. At the completion of the program the sump was left to dry out. Once the site has dried out sufficiently, the local grazier from Moolawatana will backfill the sumps and level off the site.

9.0 Core Library Samples - Interim Only – Still in Progress

Core samples will be made available to the Core Library as soon as assaying has been completed.



[Plate 2] WO-17-01 Drill Site – Drill site prior to commencement of drilling. Location 408540E / 6698222N – looking southeast



[Plate 3] WO-17-01 Drill Site – Drill rig set up on site. Hole in progress. Location 4085000E / 6698222N – looking southeast



[Plate 4] WO-17-01 Drill Site – Pre-collar samples laid out on plastic sheet. Drill cuttings were placed in sump after collection of representative samples.