



8 May 2019

ASX Announcement

## WOOMERA'S MUSGRAVE TENEMENTS REINSTATED AND RC DRILL PROGRAM INDICATES NI-CR AND CU-CO MINERALISATION

### Highlights

- Tenements granted that reinstate original Musgrave and Gawler Craton package
- Portable XRF analysis of RC drill samples shows high levels of Nickel and Chromium at Alcurra-Tieyon Project over 78m in Gallagher #2 drill hole
- Portable XRF also shows elevated levels of Copper and Chromium in three Healy drill holes exceeding 200m
- Drilling samples now for laboratory assaying

Woomera Mining Limited (ASX: WML, 'Woomera' or 'the Company') is pleased to announce that it has been granted two tenements in the Musgrave Province that restore its original tenement package, as well as the reporting of assay results from a November 2018 RC drilling program at the Musgrave Alcurra-Tieyon Project. This drilling program of 1728m was designed to test three geophysical anomalies previously identified from 3D modelling of ground and airborne magnetic and ground electromagnetic data.

### Tenements Granted

The tenements granted to Woomera are on E6342, E6343 and E6344, and cover the same area as tenements E6091 and E6092 in the Musgrave Province and E6133 in the Gawler Craton that were inadvertently allowed to lapse in October 2018. The granting of these tenements restores Woomera's Alcurra-Tieyon and Carulinia projects to their original foot print and enables Woomera to resume its exploration programs for the two projects. Woomera's South Australian tenement holding as of 8 May 2019 is shown in Figure 1.

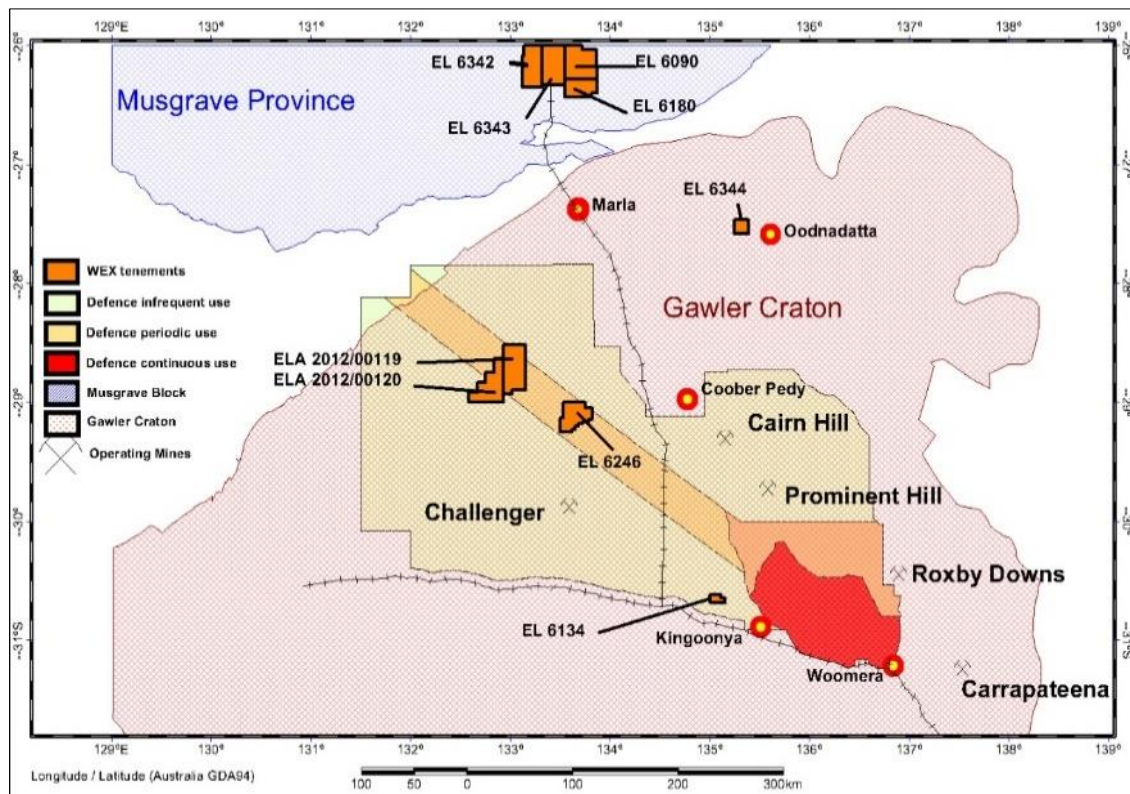


Figure 1 – Woomera’s South Australian Projects

## Musgrave Alcurra-Tieyon Project and interim drilling results

A 1728m RC drilling program was completed in November 2018 to test three geophysical anomalies previously identified from 3D modelling of ground and airborne magnetic and ground electromagnetic data. The drill hole details are summarised in Table 1 and the target areas are shown in Figure 2

All holes intersected thick sequences of mantle derived mafic magmas with numerous zones of magnetite-rich gabbro and minor sulphides. Preliminary assays have been recorded using a portable X-ray Fluorescence (XRF) analyser. The portable XRF data will be supplemented with laboratory assays for an expanded range of elements and petrological analysis. Stand out XRF results were recorded in the Gallagher#2 hole over an interval of 78m from 23m to 101m with nickel averaging 719ppm, peaking at 1006ppm and chrome averaging 719ppm and peaking at 1140ppm.

Alcurra-Tieyon RC Drilling Summary (November 2018)							
Hole_ID	Name	East	North	RL	Depth	Dip	Azi
RC18HLY001	Healy1	348835	7098865	420	222	-70	35
RC18HLY002	Healy2	348880	7098960	425	234	-70	30
RC18HLY003	Healy3	348935	7099050	420	198	-70	30
RC18GAL001	GAL1	351150	7088555	400	300	-60	312
RC18GAL002	GAL2	351276	7088441	400	300	-60	312
RC18GAL003	GAL3	351407	7088324	400	300	-60	312
RC18WAL001	WAL1	379695	7088101	364	228	-60	90

Table 1 – RC Drilling program summary

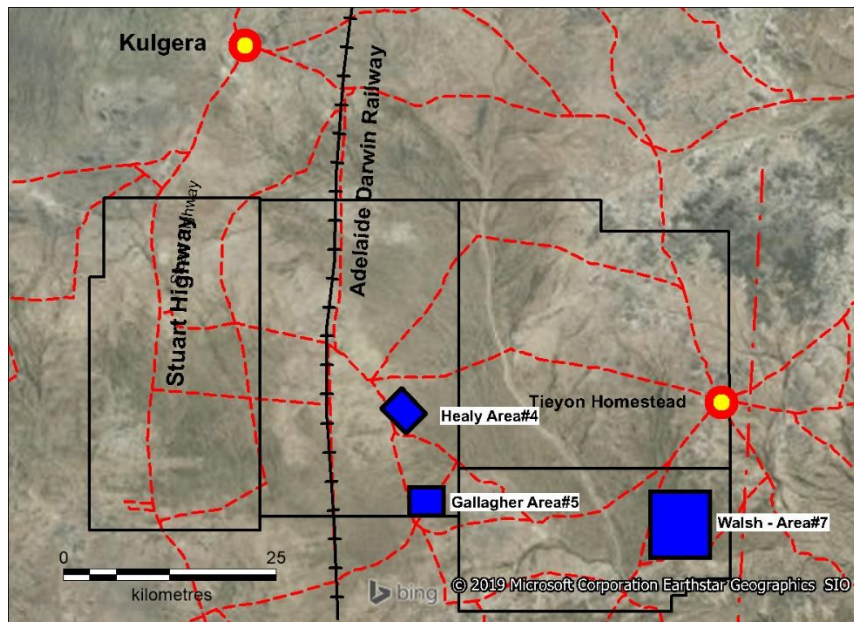


Figure 2 – Target areas tested during 2018 RC drilling program

## Gallagher

Three RC holes at Gallagher were designed to test a significant magnetic anomaly highlighted initially from Woomera's Vector Residual Magnetic Intensity (VRMI) modelling and corroborated by a follow up Moving Loop Electromagnetic (MLEM) survey. A sequence of granitic basement rocks, thickening to the north west, were intersected at around 30m underlain by magnetite-rich gabbro, explaining the cause of the geophysical anomaly. Minor sulphides were present as chalcopyrite and pyrite. The three holes were drilled to 300m dipping to the south west at 60 degrees. The centre hole, Gallagher#2, recorded elevated assays for nickel and chrome from 23m to 101m as shown in the Figure 3 and above average assays for cobalt as shown in Figure 4.

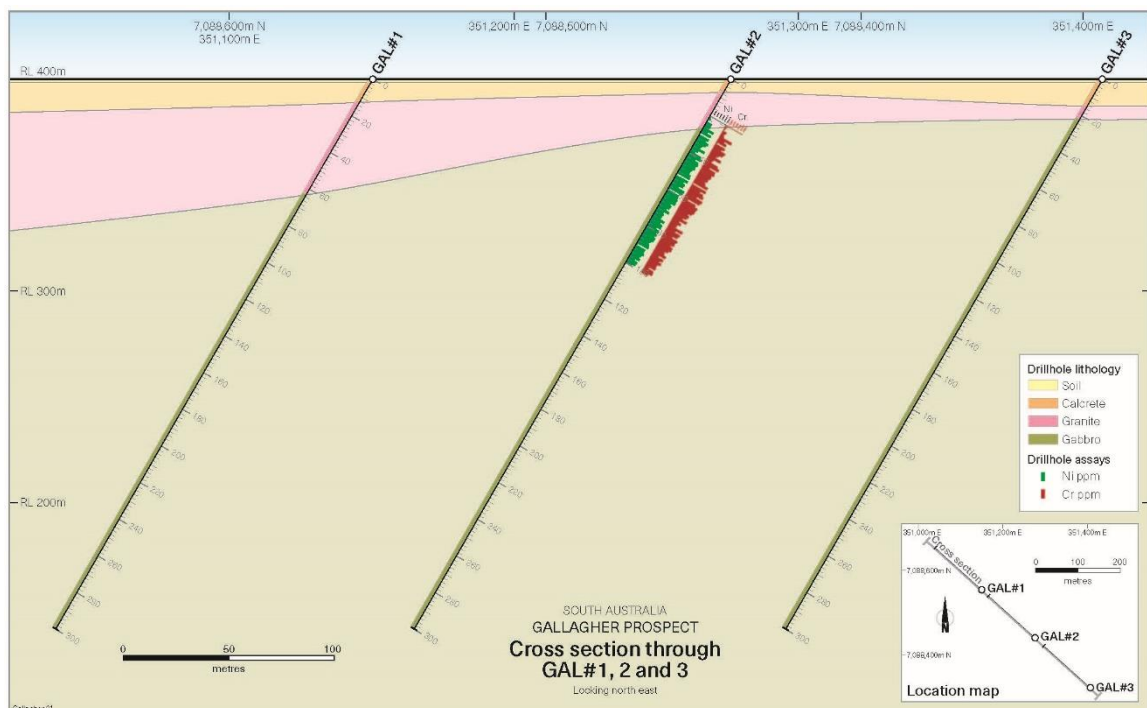


Figure 3 – Gallagher nickel (cut off 600 ppm, average 686ppm, peak 1006ppm) and chrome (cut off 600ppm, average 719ppm, peak 1140ppm)

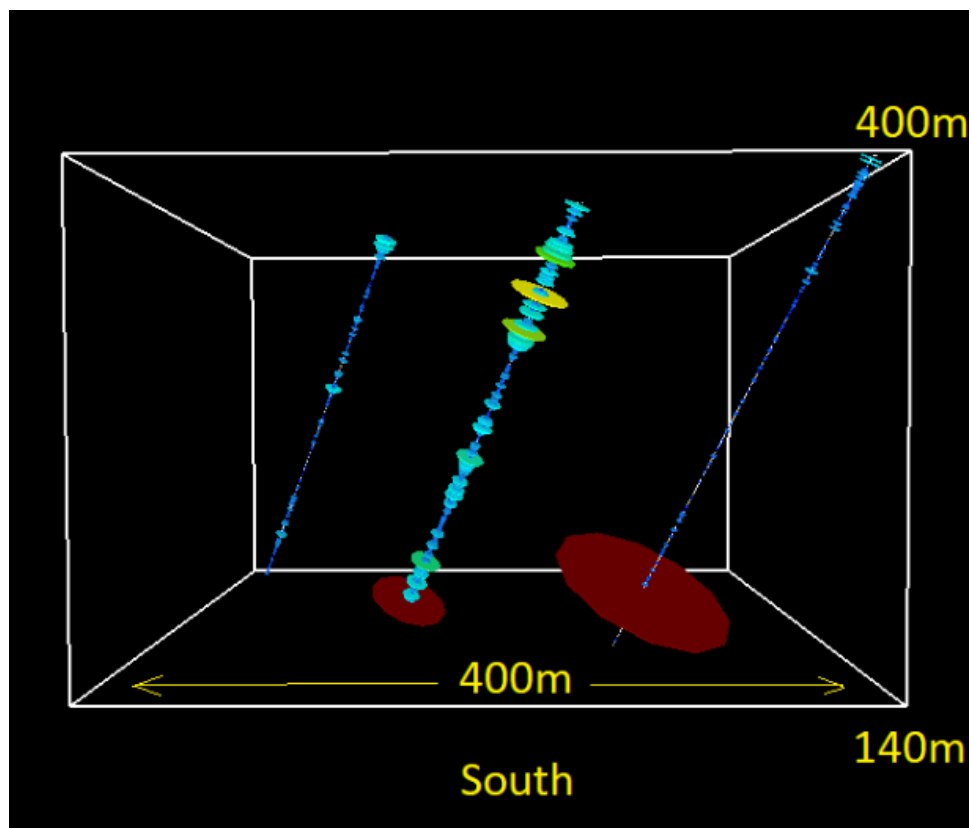


Figure 4 – *Gallagher#2 (centre) - cobalt (average 29 ppm, peak 271ppm)*

Table 1 lists the portable XRF assays for the elevated zone. Samples from the anomalous zone will now be submitted for petrological analysis and laboratory assaying.

Depth From (m)	Depth To (m)	Ni (ppm)	Cr (ppm)	Co (ppm)	Cu (ppm)		Depth From (m)	Depth To (m)	Ni (ppm)	Cr (ppm)	Co (ppm)	Cu (ppm)
23	24	369	252	36	17		63	64	878	1047	1	68
24	25	364	162	76	8		64	65	900	958	*	42
25	26	315	235	19	18		65	66	631	746	26	39
26	27	752	886	82	36		66	67	747	874	77	55
27	28	398	421	92	12		67	68	715	795	*	50
28	29	718	641	32	44		68	69	581	569	5	29
29	30	*	31	7	*		69	70	834	935	19	49
30	31	701	700	97	38		70	71	522	463	*	31
31	32	561	525	93	38		71	72	597	659	82	45
32	33	827	872	24	34		72	73	562	480	71	26
33	34	725	794	132	32		73	74	544	437	*	34
34	35	545	580	127	28		74	75	870	1024	*	72
35	36	473	455	49	24		75	76	669	578	*	58
36	37	879	871	9	52		76	77	875	976	27	52
37	38	464	409	23	27		77	78	875	906	*	53
38	39	331	335	12	18		78	79	603	583	30	51
39	40	813	865	40	48		79	80	870	1027	29	70
40	41	926	1052	20	43		80	81	761	940	79	48
41	42	587	462	13	31		81	82	862	962	9	78
42	43	869	904	*	50		82	83	775	781	*	58
43	44	919	951	61	51		83	84	888	970	148	52
44	45	838	819	38	29		84	85	866	981	103	57
45	46	868	849	25	260		85	86	750	844	27	56
46	47	753	758	50	50		86	87	660	647	73	37
47	48	693	766	23	27		87	88	750	687	45	46
48	49	693	619	47	37		88	89	819	876	*	68
49	50	832	747	15	44		89	90	63	424	90	109
50	51	878	998	60	61		90	91	701	828	*	52
52	53	881	1027	*	57		91	92	677	648	83	51
53	54	657	686	*	35		92	93	775	833	33	69
54	55	818	960	5	63		93	94	658	650	41	54
55	56	793	1068	6	42		94	95	595	637	66	49
56	57	528	654	41	37		95	96	708	680	56	67
57	58	1006	1140	53	66		96	97	418	257	*	39
58	59	966	1068	190	58		97	98	665	636	14	83
59	60	70	246	31	559		98	99	623	688	9	74
60	61	842	876	71	61		99	100	386	414	15	35
61	62	853	1092	*	61		100	101	48	90	6	*
62	63	905	1038	*	72							

**Table 2 – Gallagher#2 XRF Assays from 23m to 101m**

**(\* indicates probable faulty XRF reading)**

## Healy

Healy holes 1, 2 and 3 were drilled to depths of 222m, 234m and 198m respectively. As with Gallagher, the rock unit intersected was logged primarily as magnetite-rich gabbro with minor pyrite and chalcopyrite. The magnetite explains the source of the geophysical anomaly at this location. The distribution of copper and cobalt assays are shown in Figure 5, Figure 6 and Table 2. Both the copper and cobalt levels increase northwards.

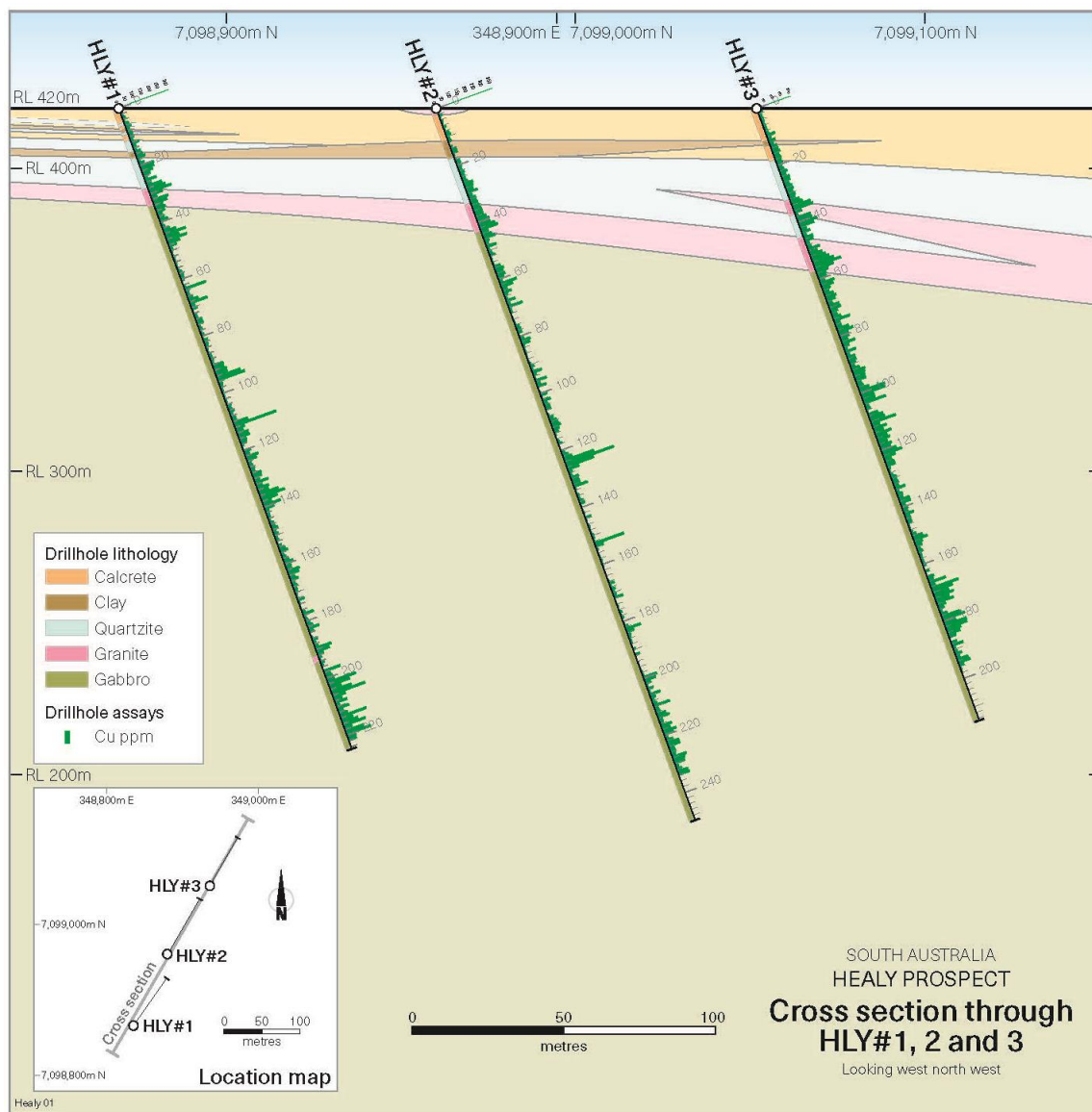


Figure 5 – Healy RC drill section

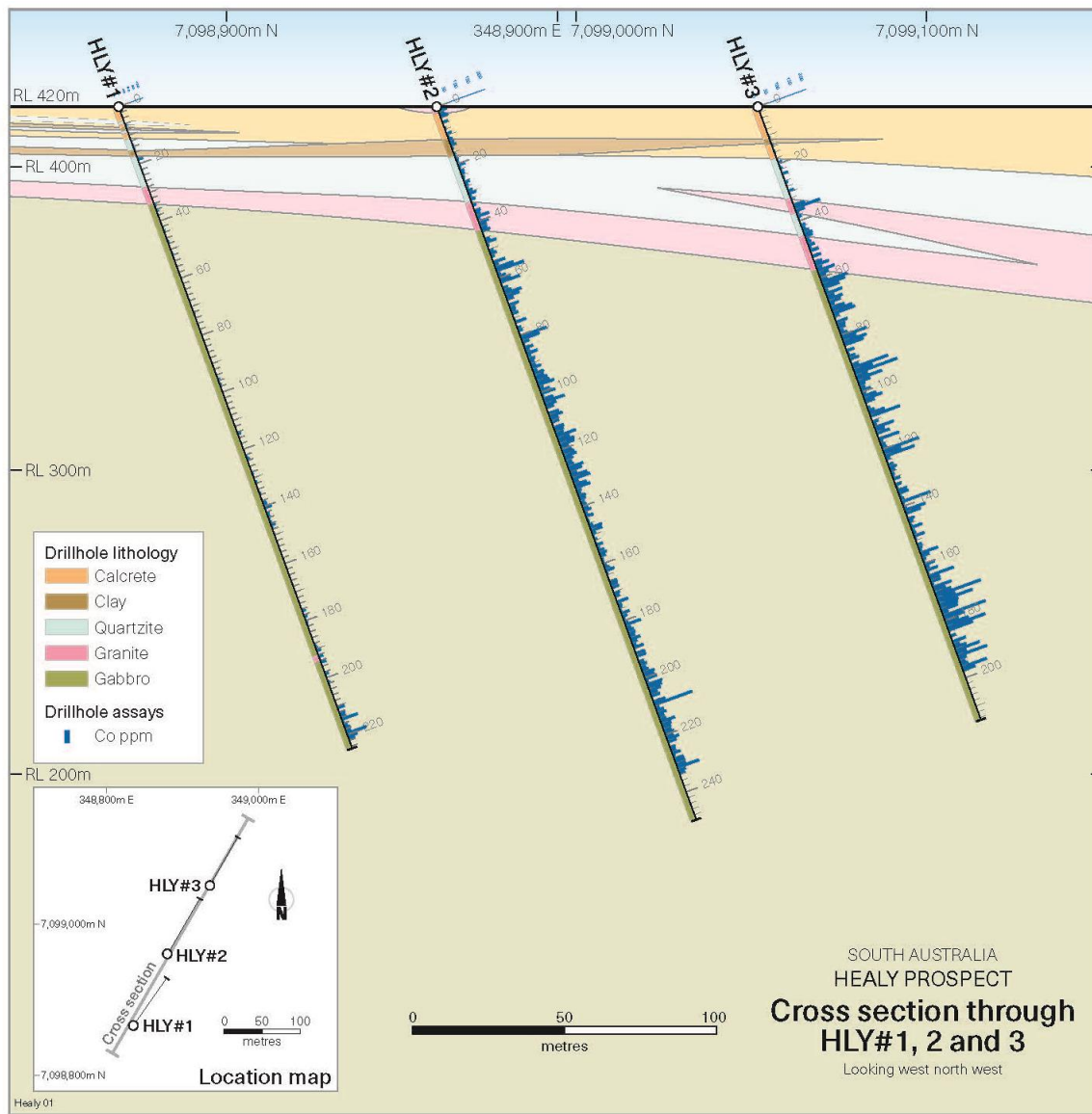


Figure 6 – Healy#1, 2 and 3 (left to right) cobalt XRF assays

Hole Name	Average Copper (ppm)	Maximum Copper (ppm)	Average Cobalt (ppm)	Maximum Cobalt (ppm)
Healy#1	42	252	11	82
Healy#2	34	304	30	154
Healy#3	51	160	43	186

Table 2 - Summary of copper and cobalt assays at Healy

## Walsh

A single hole was drilled at Walsh to test a target which was selected over a magnetic anomaly associated with elevated geochemical results from a shallow RC program conducted by the Geological Survey of South Australia. The hole passed through approximately 130m of granite followed by magnetite-rich gabbro which explains the geophysical anomaly. No visible sulphides were observed in the drill cuttings. Narrow bands of elevated nickel, copper and chrome assays were recorded and shown in tables 3, 4 and 5.

Depth from (m)	Depth to (m)	Ni (ppm)
132	133	186
130	131	176
131	132	156
133	134	119
57	58	84
89	90	71
129	130	67
27	28	55
134	135	31

**Table 3 – Walsh nickel assays**

Depth from (m)	Depth to (m)	Cu (ppm)
89	90	605
57	58	596
46	47	183
48	49	177
27	28	95
47	48	92
45	46	69
49	50	69
50	51	62

**Table 4 – Walsh copper assays**

Depth from (m)	Depth to (m)	Cr (ppm)
27	28	408
130	131	390
132	133	311
131	132	277
133	134	247
89	90	235
57	58	228
46	47	145
8	9	127

**Table 5 – Walsh chrome assays**

## Conclusions and forward program

It has been well documented by Naldrett (Fundamentals of Magmatic Sulphide Deposits 2011) and others, that a common feature of major magmatic sulphide deposits, such as Voisey Bay, Norilsk and Jinchuan is that sulphides tend to accumulate within magma feeder channels of magmatic complexes. Initial observations from Woomera's drilling program reveals voluminous intrusions of mafic magmas under cover that are likely to incorporate feeder systems conducive to the formation of magmatic sulphides. Gallagher#2 intersected significantly elevated concentrations of nickel, chrome and cobalt while Gallagher#1 and Gallagher#3, each less than 200m away, returned significantly different results. Similarly, Healy#2 and Healy#3 show an increasing elevation in copper and cobalt concentrations from south to north but are almost void of nickel.

Further evidence of variation is seen in the 27m RC hole previously drilled at the Cavanagh prospect by CRA in 1995 where fresh, unaltered mafic rocks with pyrite, chalcopyrite and possible pentlandite, normally associated with large layered mafic complexes, were encountered. Assays recorded in this hole for nickel, chrome, magnesium and iron peaked at 3,300ppm, 3,300ppm, 17.7% and 10.6% respectively.

RC drilling conducted to date on magnetic susceptibility targets has intersected extensive zones of magnetite-rich gabbro which explains the magnetic anomalies. The drill cuttings from these zones will be analysed for Platinum Group Elements as these have been found to be associated with magnetite bearing gabbro of the Echo Lake Intrusion in Northern Michigan, USA (Alexander James Koerber and Joyashish Thakurta, Minerals Open Access Journal, 1918).

Woomera recognises the need to build an understanding of the geometry and time lines of the mafic/ultramafic intrusions to help locate the feeder systems that have the potential to host magmatic sulphides. To this end Woomera intends to conduct analytical, petrological and chronological investigations on existing rock chips and will relocate some of the drill holes in the current drilling program based on new EM modelling of conductors. Diamond drilling will also replace RC drilling at the Cavanagh prospect.

Prospects at Cavanagh and O'Mahony (Figure 7) are considered to be the company's best targets in the project area and will be drilled as soon as Government and Native Title consents are finalised.

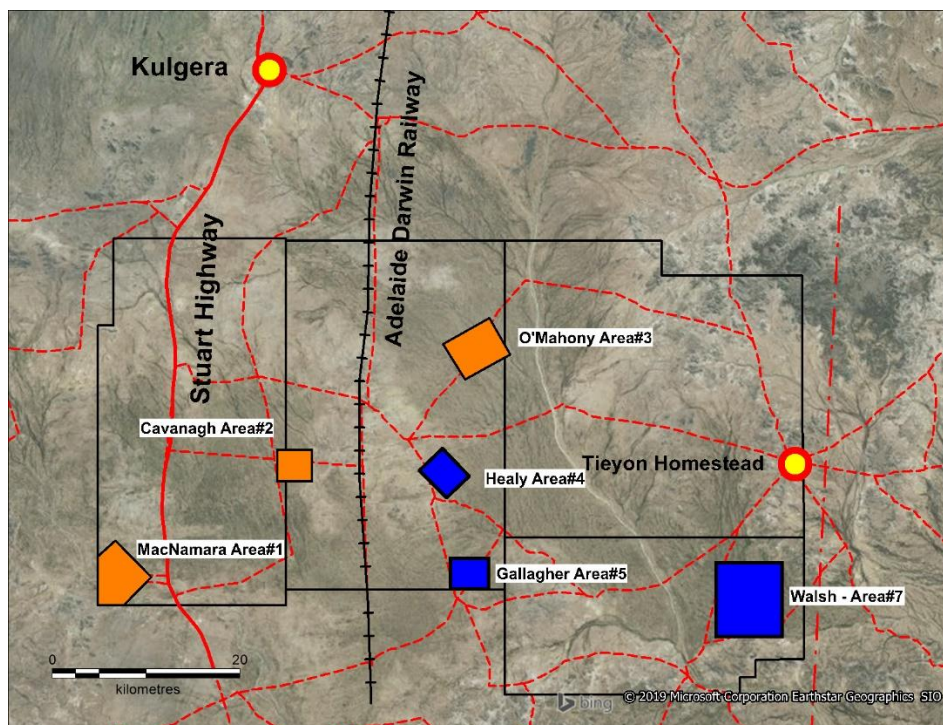


Figure 7 – Target areas to be drilled (orange)

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### About Woomera Mining Limited

Woomera Mining Limited (Woomera) is an ASX listed exploration company based in Adelaide, South Australia with an extensive minerals tenement portfolio prospective for Copper, Lithium, Gold, Uranium, Iron Ore, Nickel and Cobalt. The Woomera tenement package includes tenements in the Musgrave Province of South Australia (**Musgrave Alcurra-Teyon Project**). The Company also has tenements in the Gawler Craton which are considered prospective for IOCGU deposits, Cu-Ni-Co deposits, REE and Precious Metals. Woomera's tenement portfolio also includes nine granted tenements and three tenement applications in Western Australia including two tenements and one tenement application in the Pilbara region of WA (**Pilgangoora Lithium Project**), three lithium tenements near Ravensthorpe (**Mt Cattlin Lithium Project**), one lithium tenement and one tenement application at Binneringie near Lake Cowan and several WA lithium brine prospects over Lakes Tay, Sharpe, Dundas and Dumbleyung (**Lakes Lithium Projects**).

## JORC TABLE 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Reverse Circulation (RC) drilling in this release has been carried out at the Gallagher, Healy and Walsh prospects at WML's Alcurra-Tieyon project in the eastern Musgrave Province. Seven RC holes were drilled to depths of approximately 300m by TopDrill Pty Ltd using a Schram 685 drill rig. Drill samples were collected at 1m intervals downhole. These samples were riffle split to produce a 2-3 kg sub-sample that were sent to the Euro Exploration Services office in Adelaide for preliminary geochemical analysis using an Olympus Delta X (serial number 510450) portable XRF analyser. Duplicate standards were inserted at regular intervals and instrument calibration was conducted regular intervals.</li> </ul> <p>All coordinates are in UTM grid (GDA94 Z53) and drill collars were located using Garmin 64st GPS and cross checked with multiple GPS units.</p> <p>The Geological Survey of South Australia (GSSA) have completed significant work programs over tenure including, geological mapping, rock chip sampling, detailed gravity survey lines and RAB/RC drilling. The GSSA also completed the Abminga bedrock drilling program which was initiated as part of the Targeted Exploration Initiative of South Australia (TEISA) strategy. The program consisted of 140 RC and aircore drill holes totalling 5,123 m with all but a few drill holes intersecting fresh basement.</p>
Drilling techniques	<ul style="list-style-type: none"> <li><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>The current Alcurra-Tieyon RC drilling program was undertaken by TopDrill Pty Ltd using a Schram 685 rig with booster.</li> <li>Historic RC air-core drilling by GSSA in 2001 generally spaced 2–5km along station tracks and drilled to blade refusal.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Drill samples were collected at 1m intervals downhole. These samples were riffle split to produce a 2-3 kg sub-sample and subsequently assayed with a portable XRF analyser. No sample bias due to sample recovery techniques has been observed.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Chip samples were collected and qualitatively logged at one metre intervals for each drill hole. A representative sample was placed in core trays and photographed. The magnetic susceptibility of each sample segment was recorded by Euro Exploration Services</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No coring has been completed.</li> <li>Drill cuttings were riffle split to produce 2-3 kg samples every metre. The remaining sample, approximately 20Kg, was stores in plastic bags at a temporary bad farm.</li> <li>Samples have been assayed using a portable XRF analyser. Standards were inserted at regular intervals and the instrument was calibrated at regular intervals. Selected samples will be despatched to ALS for laboratory analysis</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their</li> </ul>	<ul style="list-style-type: none"> <li>Assays were read using an Olympus Delta X (serial number 510450) portable XRF analyser. Elapsed reading times were approximately 14.73, 14.61 and 14.93 for a total of 44.5 seconds. The machine mode was the factory default of soil and elements assayed were:</li> </ul>

Criteria	JORC Code explanation	Commentary									
	<i>derivation, etc.</i> <ul style="list-style-type: none"><li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li></ul>	P	S	Cl	K	Ca	Ti	V	Cr		
		Mn	Fe	Co	Ni	Cu	Zn	As	Se	Rb	
		Sr	Zr	Mo	Ag	Cd	Sn	Sb	W	Hg	
		Pb	Bi	Th	U						
Verification of sampling and assaying	<ul style="list-style-type: none"><li>The verification of significant intersections by either independent or alternative company personnel.</li><li>The use of twinned holes.</li><li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li><li>Discuss any adjustment to assay data.</li></ul>	<ul style="list-style-type: none"><li>Geological logging of drill cuttings has been verified by internal and external geologists</li><li>Selected samples will be subject to laboratory analysis and petrological analysis</li></ul>									
Location of data points	<ul style="list-style-type: none"><li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	All coordinates are in UTM grid (GDA94 Z53) and drill collars were located using Garmin 64st GPS and cross checked with multiple GPS units.									
Data spacing and distribution	<ul style="list-style-type: none"><li>Data spacing for reporting of Exploration Results.</li><li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li><li>Whether sample compositing has been applied.</li></ul>	N/A									
Orientation of data in relation to geological structure	<ul style="list-style-type: none"><li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li><li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li></ul>	.N/A									
Sample security	<ul style="list-style-type: none"><li>The measures taken to ensure sample security.</li></ul>	Samples are stored at a secured warehouse of Euro Exploration Pty Ltd									

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	N/A