

29 November 2016

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## DISCOVERY OF THREE NEW COPPER-GOLD SYSTEMS AT ROSEBY SOUTH

- **Drill programme confirms major mineralised zones at Reaper, Harvest and Hobby**
- **Multiple intercepts in the majority of drillholes; best results from Harvest and Reaper**
- **34 metres at 0.83% copper and 0.14g/t gold in HA003 and**
- **13 metres at 1.13% copper and 0.13g/t gold in HA008 at Harvest**

Altona Mining Limited (“Altona” or “the Company” - [http://www.commodity-tv.net/c/search\\_adv/?v=296936](http://www.commodity-tv.net/c/search_adv/?v=296936)) is pleased to announce the results of a reconnaissance Reverse Circulation (“RC”) drilling programme at the Company’s 100% owned Roseby South Project (“Roseby South”) near Mt Isa in Queensland (Figure 1).

Roseby South adjoins the southern boundary of the Company’s Cloncurry Project and MMG’s major underground zinc mine development at Dugald River (Figure 1). The Cloncurry Project is the subject of a US\$235.5 million proposed joint venture (“JV”) with Sichuan Railway Investment Group (“SRIG”). Please refer to ASX release dated 2 June 2016 for further information regarding the SRIG JV.

Roseby South is 100% Altona-owned tenure. It does not form part of the arrangements with SRIG.

Three prospects were tested; Harvest, Reaper and Hobby (Figure 2). At each prospect, large copper-in-soil anomalies greater than 1,000ppm (0.1% copper) had been defined. The anomalism is of similar size and tenor to the Cloncurry Project’s Little Eva and Turkey Creek deposits (Figure 1 and Appendix 2). Outcrop and float rock samples returned up to 14.4% copper and 0.74g/t gold at Harvest; 23.3% copper and 2.9g/t gold at Hobby; and 0.8% copper and 1.54g/t gold at Reaper.

The targets were identified this year and were reported in ASX releases dated 1 August 2016 (Harvest and Hobby) and 5 September 2016 (Reaper).

### Harvest

At the Harvest Prospect, shallow reconnaissance RC drilling comprised 9 holes of 40 to 94 metres depth spaced at 100 to 200 metre intervals along a total strike length of 800 metres. High tenor copper-gold mineralisation was encountered over a strike length of some 250 metres within broader lower tenor mineralisation.

Better drill intercepts at a 0.3% copper cut-off grade include:

**34m @ 0.83% copper, 0.14g/t gold (HA003)**

*Including 5m @ 1.11 % copper and 5m @ 1.93% copper, 0.63 g/t gold*

**13m @ 0.83% copper, 0.42g/t gold**

*Including 5m @ 1.47 % copper, 0.92 g/t gold*

**13m @ 1.13% copper, 0.13g/t gold (HA008)**

*Including 5m @ 2.18 % copper, 0.19 g/t gold*

### **5m @ 1.31% copper, 0.28g/t gold (HA009)**

Mineralisation is continuously developed within a steep east-dipping veined structure along the 800 metres tested within a 1.25 kilometre long copper-in-soil anomaly. Mineralisation is chalcopyrite and pyrite hosted in strongly silicified quartzite and malachite and goethite in the oxide zone. Results were notable for their elevated gold grades.

Drilling confirmed poorly documented drilling results from the 1980's by Placer.

It is likely that high grade mineralisation is developed as discrete lodes and shoots. The mineralised structure is open along strike and at depth. Figure 3 provides a cross section at Harvest illustrating the steeply dipping high grade lodes at Harvest, the location of drill holes is in Figure 4 and detailed results are given in Tables 1 and 2.

### **Reaper Prospect**

At the Reaper prospect (Figure 2), drill results and regional geology suggest the discovery of a large, structurally controlled copper-gold system. Shallow reconnaissance drilling comprised two lines 100 metres apart, each line with 3 RC drill holes of 43 to 120 metres depth spaced 30 metres apart. The drilling targeted an area of high copper-in-soil anomalism within a major anomaly over some 2.5 kilometres in length.

All drill holes encountered multiple zones of mineralisation. The drilling indicates a 55 metre wide zone of sub vertical mineralisation with modest copper grades. Mineralisation is disseminated chalcopyrite and pyrite hosted in strongly altered metasediments and malachite and goethite in the oxide zone.

Better drill intercepts, at a 0.3% copper cut-off grade, include:

**20m @ 0.48% copper, 0.08g/t gold (RE006)**

**20m @ 0.48% copper, 0.04g/t gold (RE002)**

**19m @ 0.43% copper, 0.02g/t gold (RE001)**

The strike extent of mineralisation is unknown but copper-in-soil anomalism is semi continuous for 2.5 kilometres. The tenor of the broader copper-in-soil anomalism may not be a reflection of potential underlying mineralisation.

Figures 5, 6 and 7 provide a cross section and illustrate the wide zone of multiple intercepts encountered and relationship to the much larger copper-in-soils anomaly. Tables 1 and 2 provide significant intersections and drill hole locations.

### **Hobby Prospect**

At the Hobby Prospect (Figure 2), shallow reconnaissance RC drilling comprised 4 holes of 70 to 91 metres depth spaced at 160 metres. Three holes returned multiple modest grade copper intercepts in metasediment and that may be part of a broader continuous zone of mineralisation (Table 1 and 2, Figure 8).

Better drill intercepts at a 0.3% copper cut-off grade, include:

**16m @ 0.46% copper, 0.03g/t gold (HB001)**

**5m @ 0.51% copper, 0.04g/t gold (HB002)**

## 18m @ 0.31% copper, 0.03g/t gold (HB003)

Please refer to the JORC Table 1 in Appendix 1 for statutory disclosure of technical information.

### Next steps

Initial drilling is now complete with the wet season imminent and Altona will determine the best strategy for the next stage of exploration. The Company will determine the optimum commercial and technical strategy for testing of these major copper targets over the coming wet season and after the close of the SRIG transaction.

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### About Altona

Altona Mining Limited is an ASX listed company focussed on the Cloncurry Project in Queensland, Australia. The Project has Mineral Resources containing some 1.65 million tonnes of copper and 0.41 million ounces of gold. The first development envisaged is the 7 million tonnes per annum Little Eva open pit copper-gold mine and concentrator. Altona has completed a Framework Agreement with Sichuan Railway Investment Group to fully fund and develop Little Eva. Little Eva is permitted with proposed annual production<sup>(1)</sup> of 38,800 tonnes of copper and 17,200 ounces of gold for a minimum of 11 years. A Definitive Feasibility Study was published in March 2014.

<sup>1</sup>Refer to the ASX release 'Cost Review Delivers Major Upgrade to Little Eva' dated 13 March 2014 which outlines information in relation to this production target and forecast financial information derived from this production target. The release is available to be viewed at [www.altonamining.com](http://www.altonamining.com) or [www.asx.com.au](http://www.asx.com.au). The Company confirms that all the material assumptions underpinning the production target and the forecast financial information derived from the production target referred to in the above-mentioned release continue to apply and have not materially changed.

### Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Roland Bartsch, BSc (Hons), MSc, MAusIMM, and Mr George Ross, MSc, MAIG. Mr Bartsch and Mr Ross are full time employees of the Company and have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Bartsch and Mr Ross consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

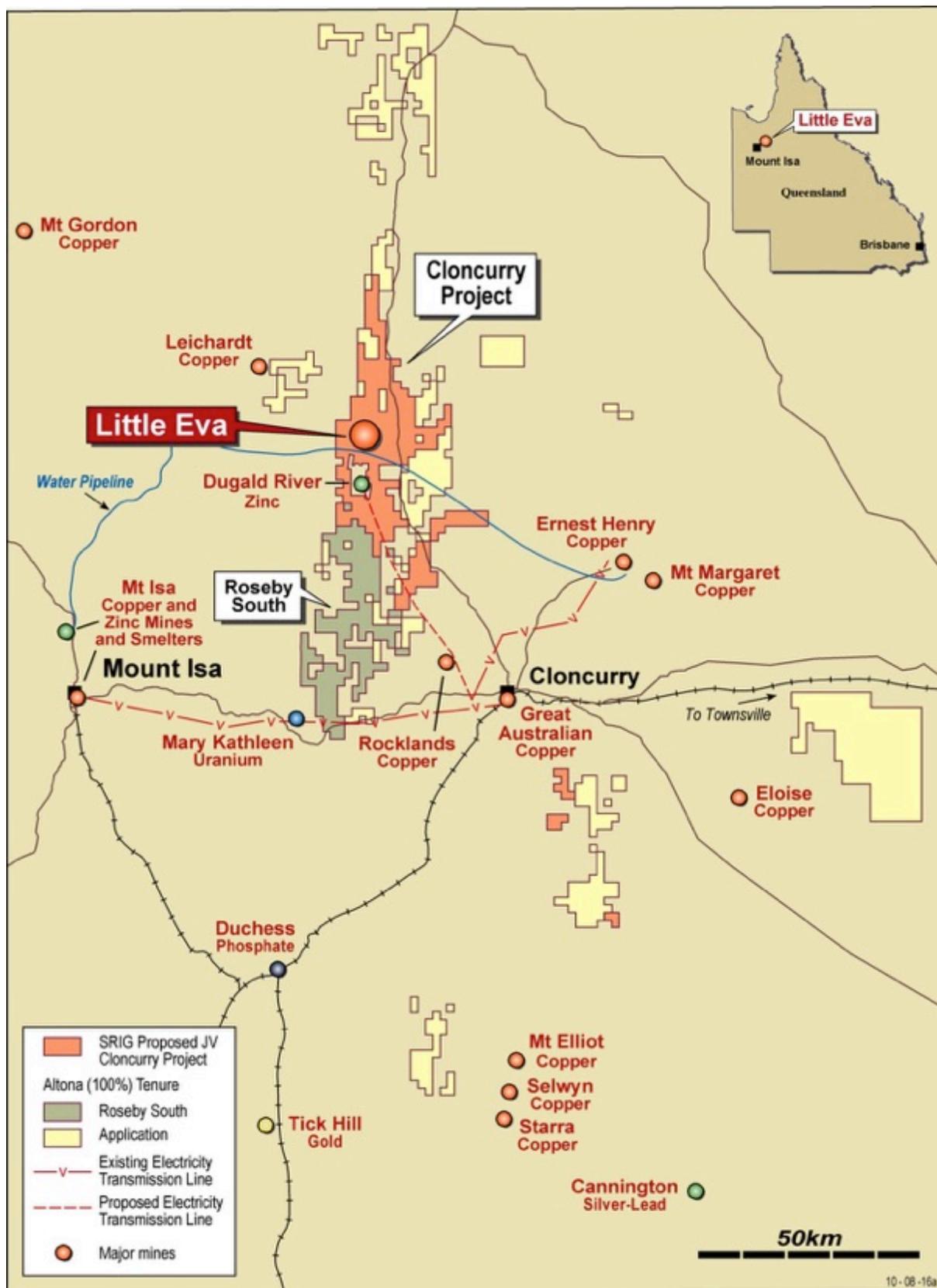


Figure 1: Roseby South Project location map.

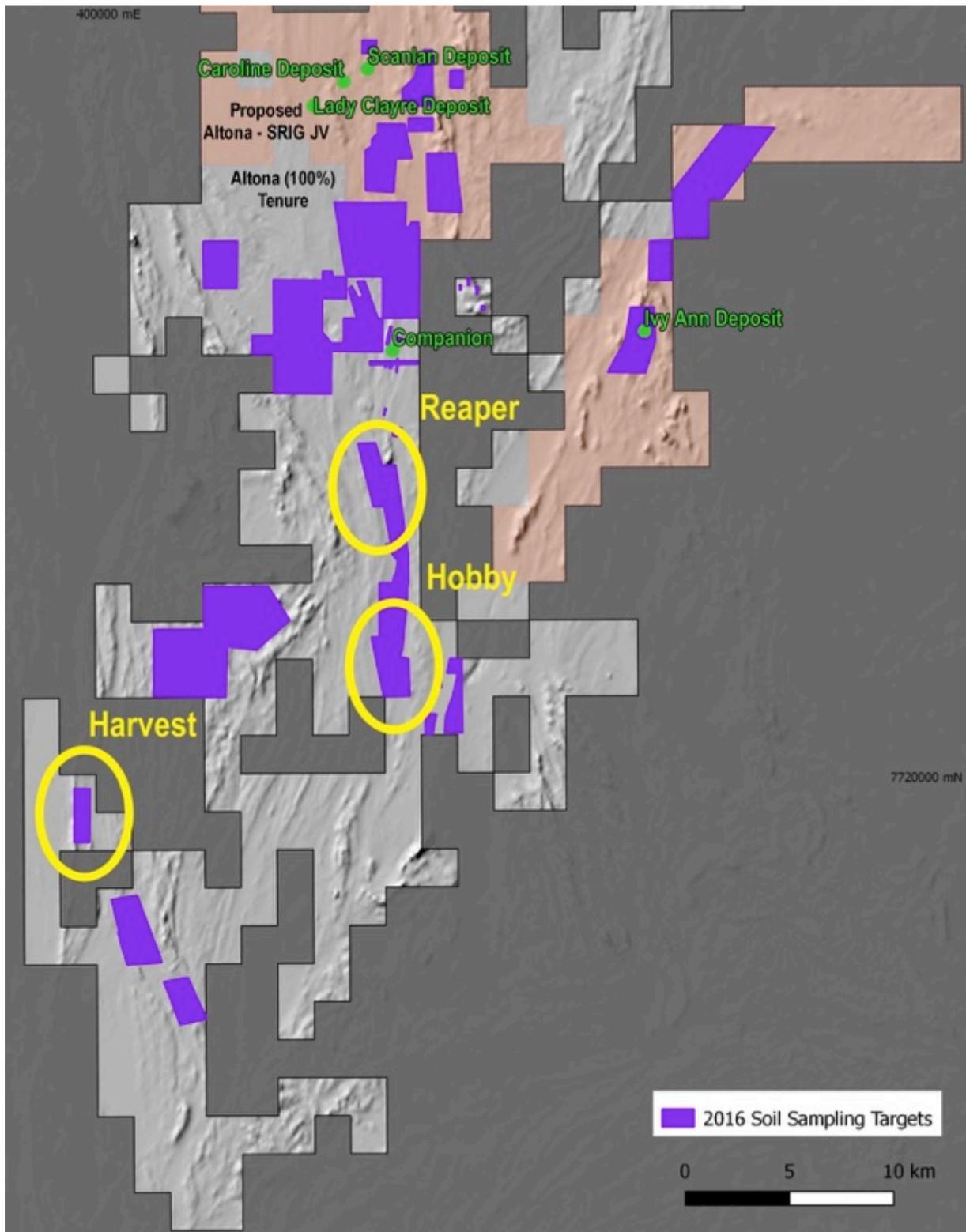
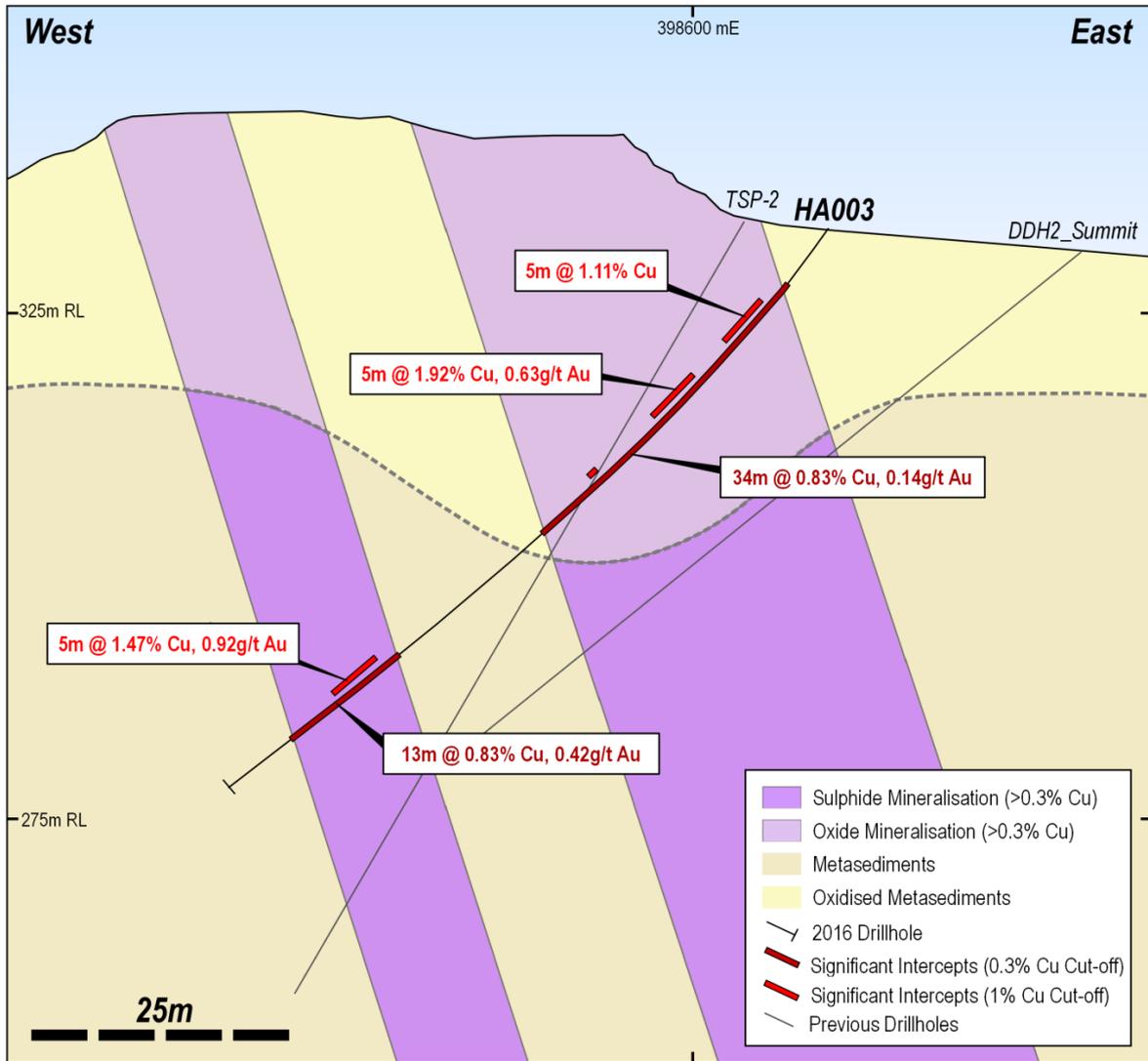


Figure 2: Roseby South Project tenure overlaid on a magnetic image. Deposits within the Cloncurry Project and 2016 drill targets are highlighted.



**Figure 3: Harvest - Cross Section, drill hole HA003. Mineralisation outcrops at surface and dips steeply east. No assay data is available for DDH2 drilled by pervious explorers in the 1970's. TSP-2 drilled by Placer was collared in and intersected similar mineralisation.**

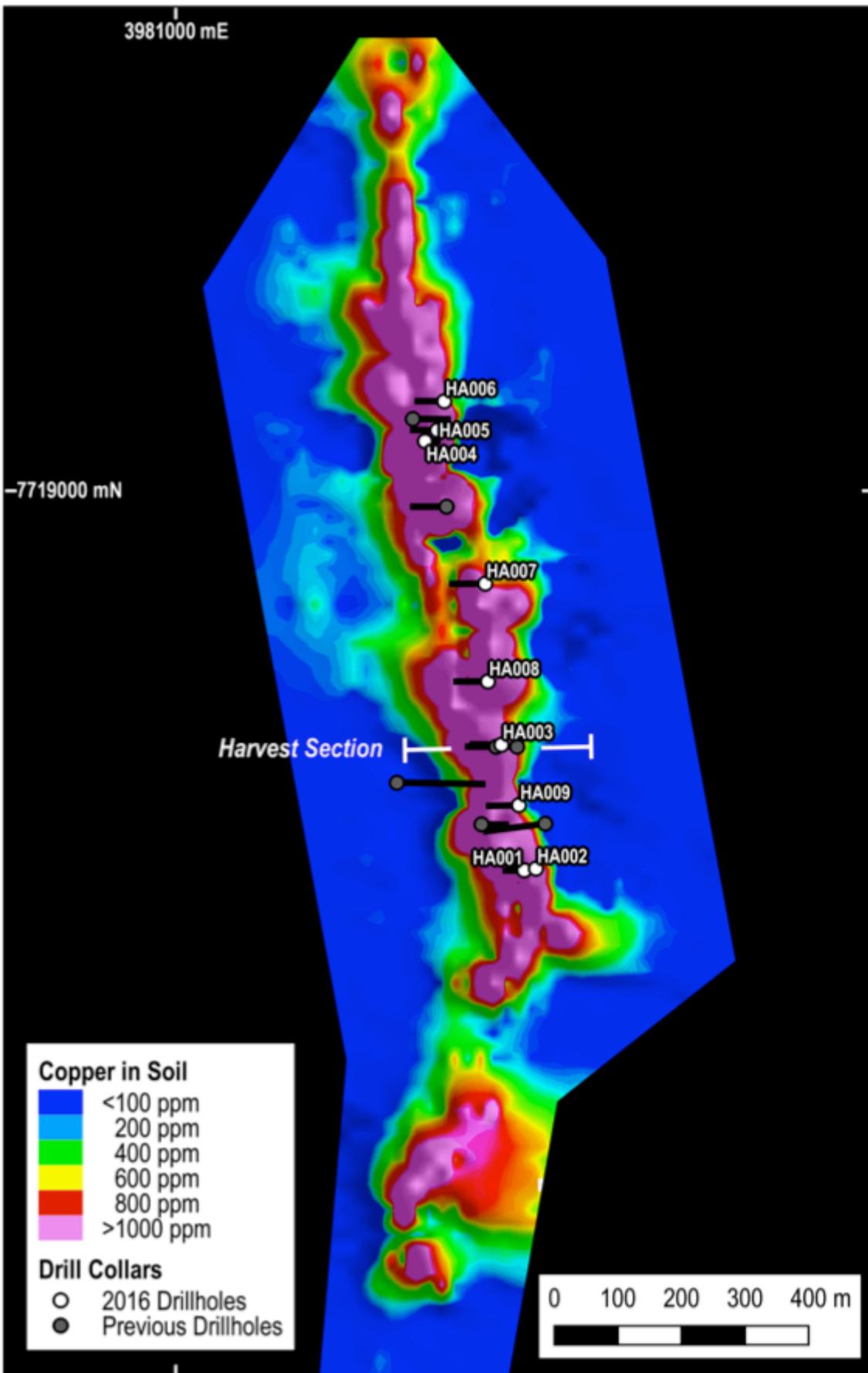
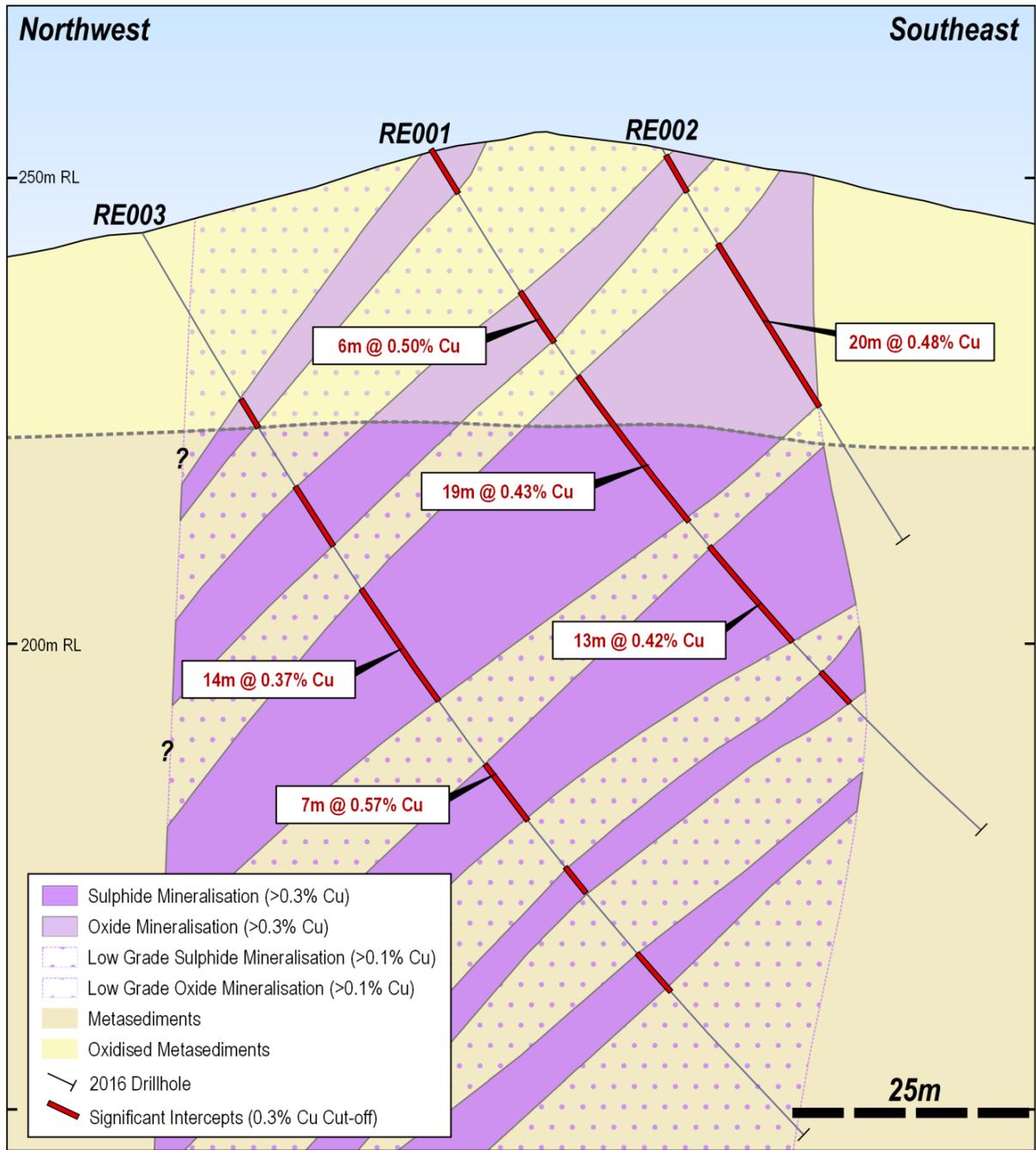


Figure 4: Harvest Prospect - Drill hole location plan and copper-in-soils anomalism.



**Figure 5: Reaper - Cross Section, drill holes HB004 - HB006. Bulk average grade within the mineralised low grade envelope is 0.3% copper over an average width of 55 metres (this section and section 100m north east).**

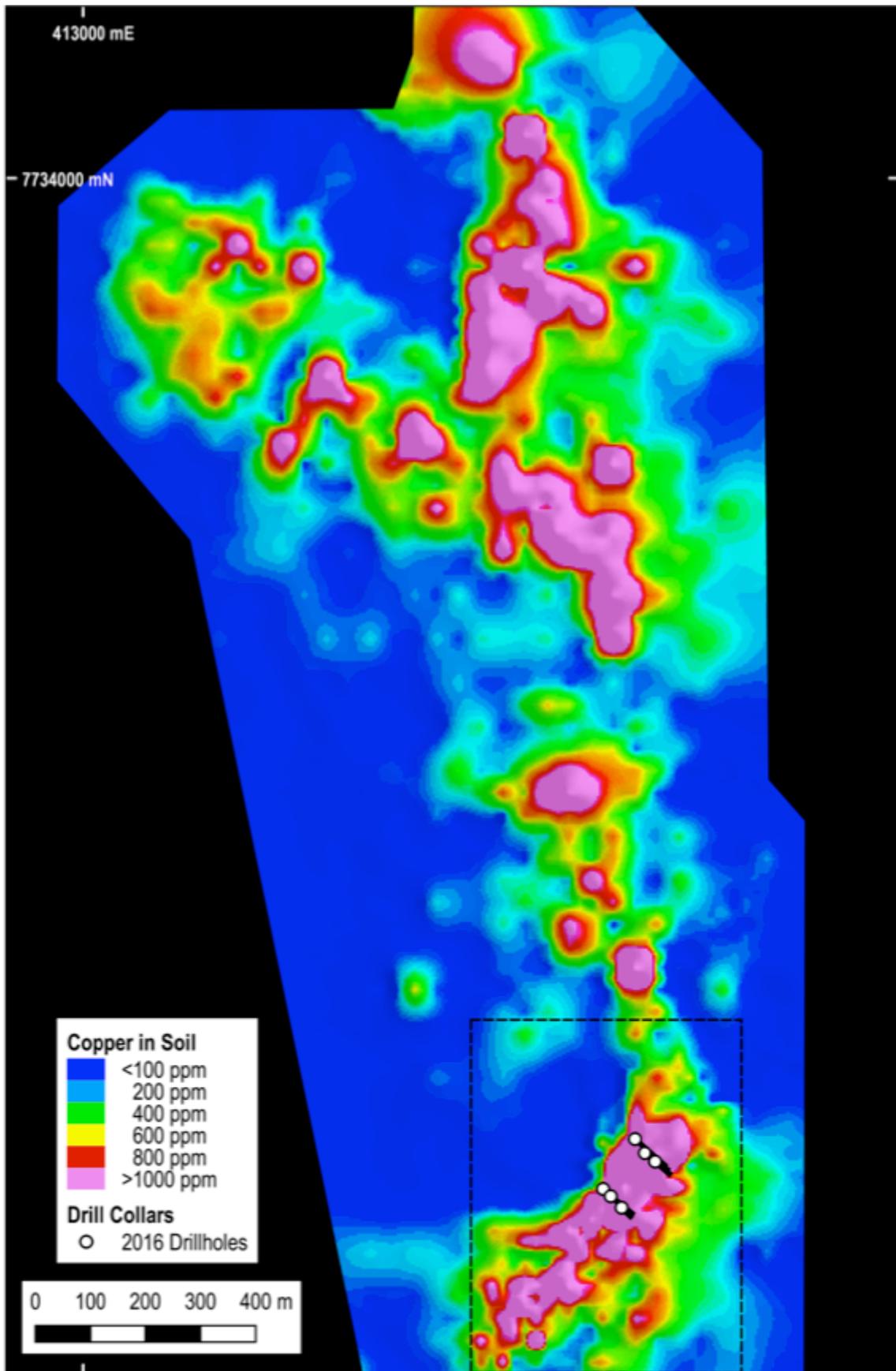


Figure 6: Reaper Prospect - A small area drill tested of a much larger copper-in-soils anomaly. Dashed box outlines the location and extent of Figure 7.

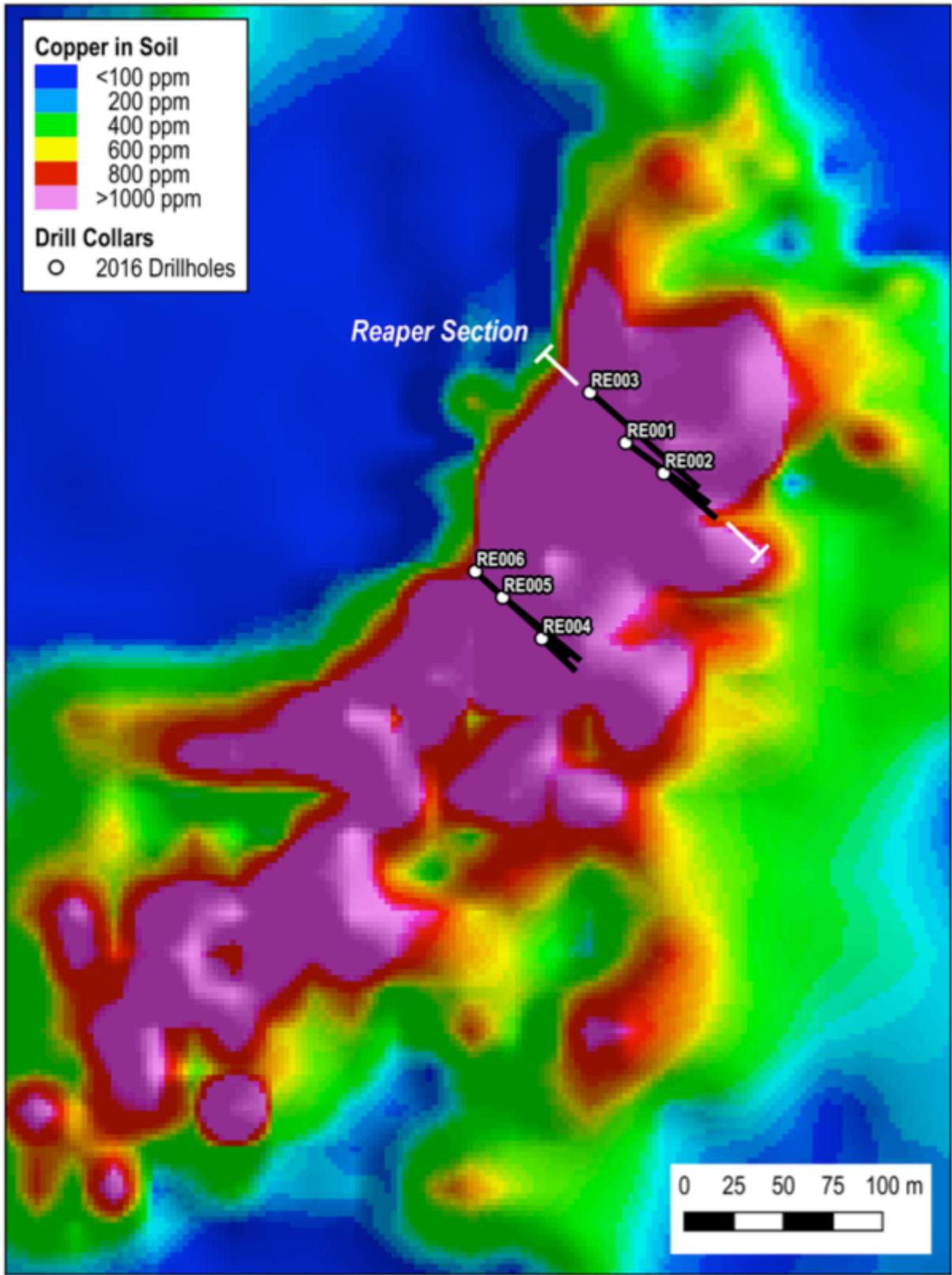


Figure 7: Reaper Prospect - Drill hole location plan and copper-in-soils anomalism in detail.

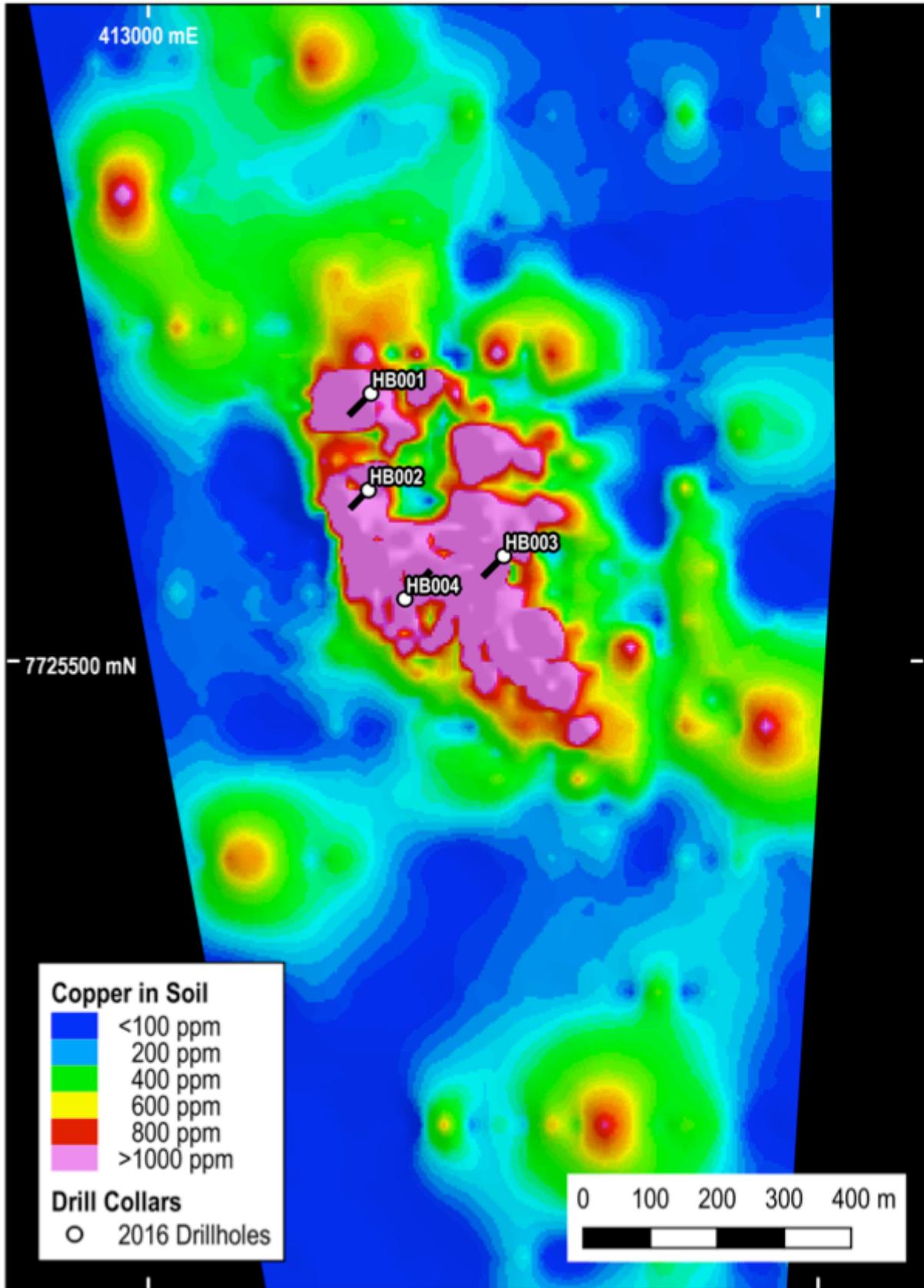


Figure 8: Hobby Prospect - Drill hole location plan and copper-in-soils anomalism.

**Table 1: Significant RC Drill Intersections (at 0.3% copper cut-off grade and sub-intervals at 1.0% copper cut-off grade).**

Hole ID	Depth		Drill Intercept >0.3% Cu			
	From (m)	To (m)	Width (m)	Copper (%)	Au (g/t)	CuEq (%)
<b>Harvest Prospect</b>						
HA001	16	22	6	0.45	0.02	0.46
HA002	No significant intercepts, hole terminated short of main structure					
HA003 <i>including</i>	7	41	34	0.83	0.14	0.91
	11	16	5	1.11	<i>BDL</i>	1.11
	21	26	5	1.92	0.63	2.27
HA003 <i>including</i>	34	35	1	1.46	0.43	1.7
	60	73	13	0.83	0.42	1.07
	63	68	5	1.47	0.92	1.98
HA004 <i>including</i>	18	27	9	0.52	0.28	0.68
	19	20	1	1.95	2.07	3.11
HA005 <i>including</i>	21	37	16	0.43	0.09	0.48
	25	26	1	2.11	0.27	2.26
HA005	48	58	10	0.53	0.19	0.64
HA006	27	32	5	0.30	0.10	0.36
HA007 <i>including</i>	13	19	6	0.62	0.11	0.68
	17	18	1	1.11	0.29	1.27
HA007	47	48	1	1.5	0.24	1.63
HA007	66	70	4	0.37	0.08	0.41
HA008 <i>including</i>	13	26	13	1.13	0.13	1.20
	16	21	5	2.18	0.19	2.29
HA008 <i>including</i>	48	58	10	0.68	0.18	0.78
	53	55	2	1.30	0.24	1.43
HA008	61	68	7	0.34	0.23	0.47
HA009	37	42	5	1.31	0.28	1.47
HA009	75	83	8	0.45	0.15	0.53
<b>Reaper Prospect</b>						
RE001	0	5	5	0.39	0.04	0.41
RE001	18	24	6	0.50	0.03	0.52
RE001	29	48	19	0.43	0.02	0.44
RE001	52	65	13	0.42	0.02	0.43
RE001	70	74	4	0.35	0.03	0.37
RE002	1	5	4	0.42	0.05	0.45
RE002 <i>including</i>	12	32	20	0.48	0.04	0.50
	30	31	1	1.04	0.03	1.05
RE003	21	24	3	0.34	0.02	0.35
RE003	45	59	14	0.37	0.02	0.38
RE003	68	75	7	0.57	0.04	0.59
RE003	82	85	3	0.37	0.01	0.31
RE003	94	99	5	0.30	0.01	0.30
RE004	0	6	6	0.61	0.13	0.68

Hole ID	Depth		Drill Intercept >0.3% Cu			
	From (m)	To (m)	Width (m)	Copper (%)	Au (g/t)	CuEq (%)
RE005	1	6	5	0.58	0.23	0.71
RE005	27	34	7	0.40	0.22	0.52
RE005	37	44	7	0.45	0.01	0.46
RE005	65	71	6	0.62	0.08	0.66
RE005	76	83	7	0.37	0.05	0.40
RE006	12	32	20	0.48	0.08	0.52
RE006	36	40	4	0.40	0.08	0.44
RE006	44	56	12	0.40	0.07	0.44
RE006	68	77	9	0.48	0.04	0.50
RE006	80	85	5	0.38	0.07	0.42
<b>Hobby Prospect</b>						
HB001	13	29	16	0.46	0.03	0.48
HB001	38	42	4	0.40	0.03	0.42
HB002	32	37	5	0.51	0.04	0.53
HB003	14	25	11	0.36	0.02	0.37
HB003	29	33	4	0.44	0.03	0.46
HB003	37	55	18	0.31	0.03	0.33
HB004	No significant intercepts					
<b>Camel Rock</b>						
CM001	26	30	4	0.54	0.06	0.57
CM002	No significant intercepts					

Note:

Copper-Equivalent (CuEq) values are calculated using copper price US\$6614/tonne (US\$3/lb) and gold price of US\$37/gram (US\$1,150/ounce).

Copper Equivalent (CuEq) grade is calculated by the following equation:  $Cu\ Eq. = Cu\% + (Au\ g/t \times 0.56)$ .

Copper-Equivalent values do not specifically take into account the recoverability of copper or gold, however, for standard copper gold concentrates such as those at the adjacent Little Eva Project, the differences in payability and recovery are small whereas the metal prices chose have a large impact on the copper equivalent vales.

**Table 2: RC Drill Hole Summary Table.**

Deposit	Hole ID	Location (MGA54)		Orientation			End of Hole Depth (m)
		Easting (m)	Northing (m)	RL (m)	Azimuth (°)	Dip (°)	
Harvest	HA001	398649	7718398	279	270	-55	46.0
	HA002	398667	7718401	276	270	-55	59.5
	HA003	398613	7718597	295	270	-55	81.0
	HA004	398493	7719079	333	90	-60	40.0
	HA005	398512	7719096	333	270	-60	73.0
	HA006	398523	7719142	325	270	-55	73.0
	HA007	398588	7718853	303	270	-55	94.0
	HA008	398592	7718698	300	270	-55	82.0
	HA009	398641	7718501	286	270	-55	88.0
Reaper	RE001	414019	7732221	253	135	-60	94.0
	RE002	414038	7732205	253	135	-60	49.0
	RE003	414001	7732246	244	135	-60	120.0
	RE004	413976	7732121	281	135	-60	43.0
	RE005	413957	7732142	283	135	-60	91.0
	RE006	413943	7732155	279	135	-60	85.0
Hobby	HB001	413333	7725902	295	225	-60	85.0
	HB002	413329	7725757	304	225	-60	70.0
	HB003	413531	7725658	310	225	-60	82.0
	HB004	413383	7725593	305	45	-60	91.0
Camel Rock	CM001	413477	7735385	270	315	-60	64.0
	CM002	413577	7735465	268	255	-50	97.0

## APPENDIX 1: TABLE 1 OF THE 2012 EDITION OF THE JORC CODE

The table below is a description of the assessment and reporting criteria used in reporting the Exploration Results that reflects those presented in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### Section 1: Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<p>Sampling was via a reverse circulation (RC) drilling rig to obtain 1 metre samples weighing an average 3-4kg. Samples were produced using a rig mounted cyclone and cone splitter. The majority of the samples were recorded dry. All samples were sent to be analysed at ALS laboratories in Townsville.</p> <p>Soil samples are surface samples (top 20cm) sieved to -2mm to obtain a ~100g sample size. Sampling is conducted only when dry.</p> <p>Rockchip samples were collected from patchy surface rock subcrop or outcrops and are typically chip samples across exposed rock faces over an area &lt;math&gt;&lt;1\text{m}^2&lt;/math&gt; and are commonly selective targeting mineralised or altered rock exposures.</p> <p>All rockchip and duplicate (referee) soil analyses were analysed at ALS laboratories in Townsville.</p>
Drilling techniques	<p>Reverse circulation using 4.5" face sampling hammer. Drilling was conducted by Chief Drilling Pty Ltd using Bor-Mor drill rig mounted on six-wheel Toyota Landcruiser supported by Isuzu 4 x 4 truck mounted 900/350 fully-silenced Sullair compressor.</p>
Drill sample recovery	<p>Recovery was visually estimated and recorded. Recoveries are considered to be excellent averaging well over 90%, generally 100%. Occasionally lower recoveries were recorded within the top few meters prior to the casing of the hole.</p> <p>Every individual sample was collected into the cyclone prior to cone splitting. Cyclone and sampling equipment was checked and cleaned after each rod.</p> <p>No significant changes in recoveries through the mineralised zones hence no subsequent bias to the grade.</p>
Logging	<p>Logging was completed by Altona Mining geologists at the rig from wet rock chip samples using Altona logging procedures.</p> <p>Logging is qualitative and quantitative including, colour, lithology, mineralisation, alteration, sulphide and oxide mineralogy, sulphide and oxide amount, texture, grain size and structure.</p> <p>All holes were logged in full.</p>
Sub-sampling techniques and sample preparation	<p>No drill core.</p> <p>The RC samples were split to 3-4kg sample weight using a cyclone and cone splitter. Vast majority of the samples were recorded dry, only few individual wet samples were encountered.</p> <p>The samples were sent to ALS Laboratories in Townsville for sample preparation and analysis. ALS Laboratories use best industry standard sample preparation including drying, crushing and pulverisation.</p>

Criteria	Commentary
	<p>Sample size is considered representative for typical copper mineralisation in the Roseby area. No new sub-sampled data reported.</p>
<p>Quality of assay data and laboratory tests</p>	<p><i>Drill Samples</i></p> <p>Samples were analysed using a four acid digest using ICPAES +/- ICP-MS (method code: ME-MS61) for 48 elements. This included copper, with a detection limit of 0.2 ppm. Four acid digestion is considered a “near-total” digestion.</p> <p>On return of copper values &gt;1% a second series of analyses were undertaken using an ore grade Aqua Regia digestion, followed by ICPAES analysis optimised for accuracy and precision at high concentrations (method code ME-OG46).Gold was analysed using a 50g fire assay and AAS finish (method code: AU-AA26).</p> <p>Quality Control included: standards (certified reference materials) from Geostats Ltd. Standards were inserted into the sampling sequence at 1:20 ratio and included representative material for copper, gold and blanks; and field duplicates taken using a riffle splitter on site for every 20<sup>th</sup> sample. Laboratory checks were also carried out on sample pulps. The standards were inserted into each sample batch to test the accuracy of the laboratory analysis.</p> <p>All duplicate and reference data display acceptable accuracy and precision.</p> <p>No samples were analysed by an umpire laboratory.</p> <p>No geophysical tools were used to determine the results reported here.</p> <p><i>Soil Samples</i></p> <p>Soil samples were routinely analysed for copper (and a suite of other elements) using a Niton XL3tGOLDD+ hand-held XRF instrument. Analyses are conducted routinely under controlled conditions in the site office.</p> <p>Quality Control included: standards (certified reference materials) from Geostats Ltd. Standards were inserted into the sampling sequence at 1:20 ratio and included representative material for copper. Whenever a bias has been detected it has been found to be consistent against the reference data and therefore no corrections have been made.</p> <p>Umpire soil samples were submitted to ALS laboratories in Townsville for analysis using Trace Level method by four acid “near total” digest (method code ME-ICP61; copper range 1 -10,000ppm) for 33 elements; and; gold using Super Trace Level method by aqua regia digestion with 50g sample weight (method code: Au-ST44; gold range 0.1ppb – 1ppm). The umpire samples were selected from traverses across each anomaly; these displayed no bias and an acceptable level of precision for the purpose.</p> <p><i>Rock Samples</i></p> <p>All rock samples were analysed at ALS laboratories in Townsville for a standard suite of elements.</p> <p>Samples were analysed by Aqua Regia or a four acid digest (HF-HNO<sub>3</sub> -HClO<sub>4</sub> acid digestion, HCl leach) digest using ICP-AES and ICP-MS (method code: ME-MS41 or ME-MS61; copper range 0.2 - 10,000ppm)) for 51 elements. This included copper, with a detection limit of 0.2ppm. Data reported from Aqua Regia</p>

Criteria	Commentary
	<p>digestion should be considered as representing only the leachable portion of a particular analyte while the four acid digestion is a “near-total” digestion.</p> <p>On return of copper values of greater than 1% a second series of analyses were undertaken. This involved an ore grade Aqua Regia digestion (method code: ASY-AR01) followed by ICP-AES analysis optimised for accuracy and precision at high concentrations (method code: ME-OG46).</p> <p>Gold was analysed via a fire assay (30g) with an AAS finish, with a lower detection limit of 0.01ppm and upper detection limit of 100ppm.</p>
Verification of sampling and assaying	<p>Results were checked by several Altona personnel.</p> <p>No twinned holes. HA0003 was drilled to verify hole TSP-2 drilled by Placer in 1992. The collar was offset from TSP-2 which was collared in the main mineralised zone. HA003 intersected mineralisation consistent with that reported from the prior drill hole TSP-2 (Refer to ASX release dated 1 August 2016) Downhole survey data is not available for the 1992 Placer drill hole consequently the spatial relationship of the previous drill results is unreliable and are not displayed on the cross section accompanying this report.</p> <p>All field logging or field sampling data was done using a laptop and uploaded into the company Datashed database and validated by company database personnel.</p> <p>All assay files were received in digital format from ALS Laboratories. All Niton handheld XRF soil data was downloaded from the instrument in digital format. Data was uploaded into the Altona Datashed database and validated by company database personnel. No manual data inserts took place.</p> <p>No adjustments have been applied to the results.</p>
Location of data points	<p>Collar locations have been surveyed using the companies own DGPS with approximately 0.1 metre accuracy.</p> <p>End of hole surveys were completed during drilling on holes &gt;80 metres depth using an Eastman downhole single shot camera. Surveys were also completed at 5 metre intervals in open holes, by Altona personnel using non-magnetic Gyro tool for azimuth and dip. Several holes at Harvest were inaccessible due to hole collapse for survey via Gyro.</p> <p>The Grid is GDA94 MGA Zone 54.</p> <p>Elevation accuracy of DGPS survey is considered to be less than 0.5m and has been verified against detailed ground survey previously completed in the area.</p> <p>Soil and rockchip sample locations are surveyed using handheld GPS's (Garmin GSMAP78s) with an approximate 5 metre horizontal accuracy.</p> <p>The Grid is GDA94 MGA Zone 54.</p>
Data spacing and distribution	<p>Drill spacing is generally: at Harvest on 100 - 200 metre section spacing along strike with one to three hole per section to 40-94 metres; at Reaper two 100 metre spaced sections of 3 RC drill holes of 43-120 metres depth spaced 30 metres apart; and at Hobby holes were distributed generally 160 metres apart and drilled to 70-91 metres depth.</p>

Criteria	Commentary
	<p>The soil sample grid spacings are 20 x 20. In the areas surrounding the anomalies spacing steps out typically to 40 x 80 metres and 20 x 200 metres.</p>
<p>Orientation of data in relation to geological structure</p>	<p>The strike of mineralisation at Harvest is N-S with interpreted steep easterly dips. The holes at Harvest were drilled to the west to intersect the mineralised zone perpendicular to the main structures. No bias is considered to result from drilling direction.</p> <p>The strike of mineralisation in the area where the Reaper anomaly was tested is interpreted to be SW-NE cutting across N-S striking 'bedding' with steep westerly dips; mineralisation is interpreted to be in part disseminated along bedding. The holes at Reaper were drilled to intersect the mineralised zone perpendicular to the main structures (drilled to the SE); holes were drilled at close spacing to constrain the dip of the mineralised zone which has an interpreted overall sub-vertical dip.</p> <p>The strike of mineralisation in the area where the Hobby anomaly was tested is interpreted to be NW-SE cutting across N-S striking 'bedding' with both steep easterly and westerly dips; mineralisation is interpreted to be in part disseminated along bedding. Holes were drilled to the SW and NE; holes HB001 -3 intersected mineralisation which reflect the targeted copper-in-soil anomalies, hole HB004 did not intersect mineralisation reflecting the degree of surface anomalism which may reflect mineralisation dipping away from the hole.</p>
<p>Sample security</p>	<p>Drill samples were collected into pre-numbered calico bags, packed directly and shipped by a courier to ALS as they were collected. Unique sample number was retained during the whole process. Samples were stored in Altona facilities in Cloncurry prior to the transport to Townsville. Assays pulps and representative RC rock chips for each interval are retained and stored in Altona's facilities in Cloncurry.</p> <p>Soil samples are collected and bagged into pre-numbered plastic clip-lock bags. Unique sample numbers were retained during the whole process.</p> <p>Samples were collected and delivered to the Altona field office daily as they were collected.</p> <p>Soil samples were retained for reference and stored in Altona facilities in Cloncurry.</p> <p>All rock and umpire soil samples were then catalogued and sealed prior to dispatch to the laboratory by Altona staff.</p>
<p>Audits or reviews</p>	<p>Internal audits and reviews of key datasets collected by Altona have been undertaken. Past exploration data by other explorers has only been validated against the source references.</p> <p>The results from QA/QC samples are routinely analysed by the database manager and geologist on a batch and campaign basis.</p> <p>For laboratory analyses, the accuracy of key elements such as copper and gold was acceptable and the field duplicate assay data was unbiased and shows an acceptable level of precision.</p> <p>For handheld Niton XRF analyses the data may display a consistent bias against the reference data. In contrast laboratory umpire samples from the reported soil</p>

Criteria	Commentary
	<p>anomalies displayed no bias and an acceptable level of precision for the purpose.</p> <p>No external audits or reviews have been undertaken.</p>

## Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	<p>Harvest and Reaper sit within EPM 25761. Hobby is within EPM 25759 and EPM 212939. All EPM's 100% owned by Altona Mining Ltd.</p> <p>No joint ventures apply.</p> <p>There are agreements in place with the native title holders, the Kalkadoon people and with landholders.</p> <p>No significant historic sites or national parks are located within the reported exploration sites.</p> <p>The EPM's were granted in late 2015 and are in good standing.</p>
Exploration done by other parties	<p>Very small historical surface workings (slots and shallow shafts) on narrow high grade copper oxide veins/gossans exist at Harvest Reaper and Hobby. These are more extensive at Harvest.</p> <p>Previous exploration has been undertaken by several parties at Harvest since the 1970's. Early exploration was by Australian Copper Mines N.L. and Aquitane Australia Minerals Pty Ltd in the 1970's, and CRA and Placer in the 1990's. The majority of this work was surface mapping and sampling. Four shallow diamond drill holes were drilled by Australian Copper Mines (1971, CR4696) in the southern portion of the main anomaly. No assay data is reported for these holes although graphic logs show mineralised copper intercepts consistent with subsequent nearby drill holes conducted by Placer. It is unclear from the report whether the diamond holes were submitted for analysis or the graphic logs reflect visual estimates for copper. Placer (1995) drilled 4 RC holes in the northern portion of the main anomaly. The holes drilled parts of the mapped copper anomaly and recorded copper and gold mineralisation over broad widths.</p> <p>At the Reaper anomaly a small number of rockchip samples had been collected by previous explorers; the tenor of copper assays from these samples are similar to those collected by Altona no gold assays are available; these are not reported as their locations could not be verified and may be incorrect with assays anomalous in copper from rocks outside the strongly anomalous areas. No systematic soil sampling, ground geophysics or drilling has been undertaken.</p> <p>Rockchip sampling has been undertaken around the historical workings at Hobby anomalies by previous explorers. No systematic soil sampling, ground geophysics or drilling has been undertaken.</p>
Geology	<p>Mineralisation is considered to be similar to other IOCG deposits in the area Mineralisation is hydrothermal, varying from stratabound and structurally controlled following internal competency, chemical and permeability contrast.</p> <p>At Reaper and Hobby observed mineralisation is dominated by sulphide, predominantly finely disseminated chalcopyrite within metasedimentary rocks and</p>

Criteria	Commentary
	<p>generally exhibiting feldspar-quartz-amphibole-hematite alteration. Surficial oxidation is thin and low intensity, with sulphide observed at surface.</p> <p>At Harvest mineralisation comprises disseminated coarse chalcopyrite and pyrite within strong to intensely quartz-feldspar-magnetite altered and quartz veined fault contact between quartzite and calc-silicate metasedimentary rocks.</p>
Drill hole Information	<p>Collar locations, elevations, azimuth, dip and lengths are presented in Table 2 of this release.</p> <p>Down hole widths of the mineralisation are presented in Table 1 of this release.</p>
Data aggregation methods	<p>Standard intercepts were calculated using a 0.3% copper cut-off typical to the Roseby area mineralisation. A minimum of 4m intercepts are reported here (and narrower intercepts equivalent or better than 4m at 0.3% copper) and a maximum of consecutive 2 metres of below 0.3% samples were allowed within each intercepts.</p> <p>Exploration results are not being reported for the Mineral Resource area.</p> <p>Copper Equivalent values (CuEq) are provided in drill intercept summary in Table 1 for comparative reference only. Copper Equivalent (CuEq) values are calculated using copper price US\$6614/tonne (US\$3/lb) and gold price of US\$37/gram (US\$1,150/ounce). Copper Equivalent (CuEq) grade is calculated by the following equation: <math>Cu Eq. = Cu\% + (Au\ g/t \times 0.56)</math>. Copper Equivalent values do not take into account the recoverability of gold.</p>
Relationship between mineralisation widths and intercept lengths	<p>At Harvest drilling orientation is considered to be approximately perpendicular to the orientation of the mineralisation resulting in unbiased widths.</p> <p>At Reaper drilling orientation is considered to be approximately perpendicular to the orientation of the broader mineralised structure but oblique to possible disseminated mineralisation along bedding.</p> <p>At Hobby drilling orientation is considered to be approximately perpendicular to the strike of the mineralised zone, dip of the mineralisation is not well constrained.</p>
Diagrams	Figures 1 to 8 and Tables 1 and 2.
Balanced reporting	<p>Best results for each hole have been reported in Table 1 including all significant results using the criteria described above.</p> <p>Exploration results are not being reported for the Mineral Resource area.</p> <p>A full compilation of available data collected by Altona and compiled from previous explorers has been published in Altona ASX releases dated 1 August 2016 and 6 September 2016.</p>
Other substantive exploration data	<p>Exploration results are not being reported for the Mineral Resource area.</p> <p>Heritage clearance surveys have been completed ahead of drilling.</p>
Further work	Additional work in the future will consist of RC and diamond exploration drilling, prospect scale mapping, further surface sampling and ground based geophysics such as IP.