De Grey Mining Ltd

ASX Announcement
12 September 2016

High Grade Zinc mineralisation defined at Tabba Tabba

Highlights

- **High grade zinc-lead-silver rich VMS mineralisation defined at Tabba Tabba prospect.**
- **Mineralisation occurs from surface and remains open at depth.**
- **Mineralisation coincident with IP anomaly which remains inadequately drill tested, with further parallel anomalies untested.**
- **Significant results from the 12-hole program include:**

HoleID	From (m)	Interval (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %	In Situ Grade ZnEq %**
TTRC027	24	9	0.27	**58.7**	0.22	1.08	**2.68**	**6.78**
including	24	2	**0.71**	**158.5**	0.27	**3.60**	**8.06**	**18.90**
TTRC028	56	9	0.34	**90.1**	0.17	1.57	**5.56**	**11.16**
including	56	3	**0.91**	**216.7**	0.31	**3.94**	**13.62**	**27.22**
TTRC029	29	7	0.13	**60.1**	0.10	1.03	**4.55**	**8.01**
including	31	4	0.18	**95.6**	0.13	1.60	**6.96**	**12.28**

- **Results from the Wingina Deeps diamond drilling are currently being analysed and expected shortly.**

De Grey Executive Chairman Simon Lill said:

"Tabba Tabba is yet another example of the VMS potential along the 25km of prospective Tabba Tabba Greenstone Belt. These deposits are known to cluster. With respect to the Discovery and Orchard Tank prospects, the company has commissioned resource upgrades. Our recent time on the ground has also highlighted several priority targets also requiring assessment along this extensive corridor."

ASX Code DEG

ABN 65 094 206 292

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Tabba Tabba

De Grey Mining Ltd (ASX: DEG, “De Grey”, “Company”) is pleased to advise that the final 1m sample results for Tabba Tabba (Au-Ag-Zn-Pb) prospect have now been received and assessed.

The Tabba Tabba VMS prospect is located along the Tabba Tabba Greenstone Belt in the eastern portion of the Turner River Project (Fig 1), approximately 40km northeast of the Wingina Gold Deposit. The prospect lies approximately 15km along strike from De Grey’s two 100% owned VMS deposits Orchard Tank (1.7Mt @ 0.5g/t Au, 78.6g/t Ag, 0.99% Pb, 2.38% Zn - JORC 2012) and Discovery (1.2Mt @ 0.8g/t Au, 87.0g/t Ag, 0.94% Pb, 2.34% Zn - JORC 2012) plus other encouraging VMS prospects Hakea and Cassia.

The RC drilling program at Tabba Tabba targeted infill drilling of the known VMS style mineralisation associated with a 1st priority IP anomaly (Figure 2) to a depth of approximately 50m depth on 40m spaced sections. Testing of this IP anomaly approximately 500m along strike to the southeast. A total of 12 holes were completed for an advance of 772m. Deeper previous drilling partial tests the mineralisation to 100m depth. Initial 4m composite samples were submitted to the laboratory and detailed 1m infill sampling subsequently completed over the anomalous 4m composite zones with significant results listed in Table 1.

The infill drilling programme has been successful in defining continuity of the Zn-Ag dominant VMS style mineralisation at depth. At surface, this mineralisation occurs as a series of small thin rubbly outcrops of gossan over approximately 200m strike length. In drilling, the mineralisation dips sub-vertical and is variably weathered to approximately 20m depth. Sections are provided in Figure 3

The strongest zone of VMS style mineralisation occurs as a northeast trending zone over approximately 200m strike length with thin extensions to the northeast. Mineralisation is defined at surface by limited outcropping gossan and by drilling to approximately 100m depth.

The defined bedrock mineralisation is also coincident with a 1.3km long moderate to strong northeast trending 1st priority chargeability IP anomaly and potentially a demagnetised zone (Figure 2). Modelling of this IP target suggests the target is sub-vertical with a steep potential plunge direction over approximately 300m strike length, which correlates well with the strongest mineralisation defined in drilling.

Two additional holes (Drill holes TTRC024 and 025) were drilled approximately 500m to the south west of the known gossan area where the IP target continues. No significant results were defined in this location.

Further assessment of the IP modelling will now be undertaken to better target mineralisation in the immediate vicinity along the prospective Tabba Tabba Greenstone Belt.

Figure 1 Turner River Project tenement plan showing main prospects over magnetic image

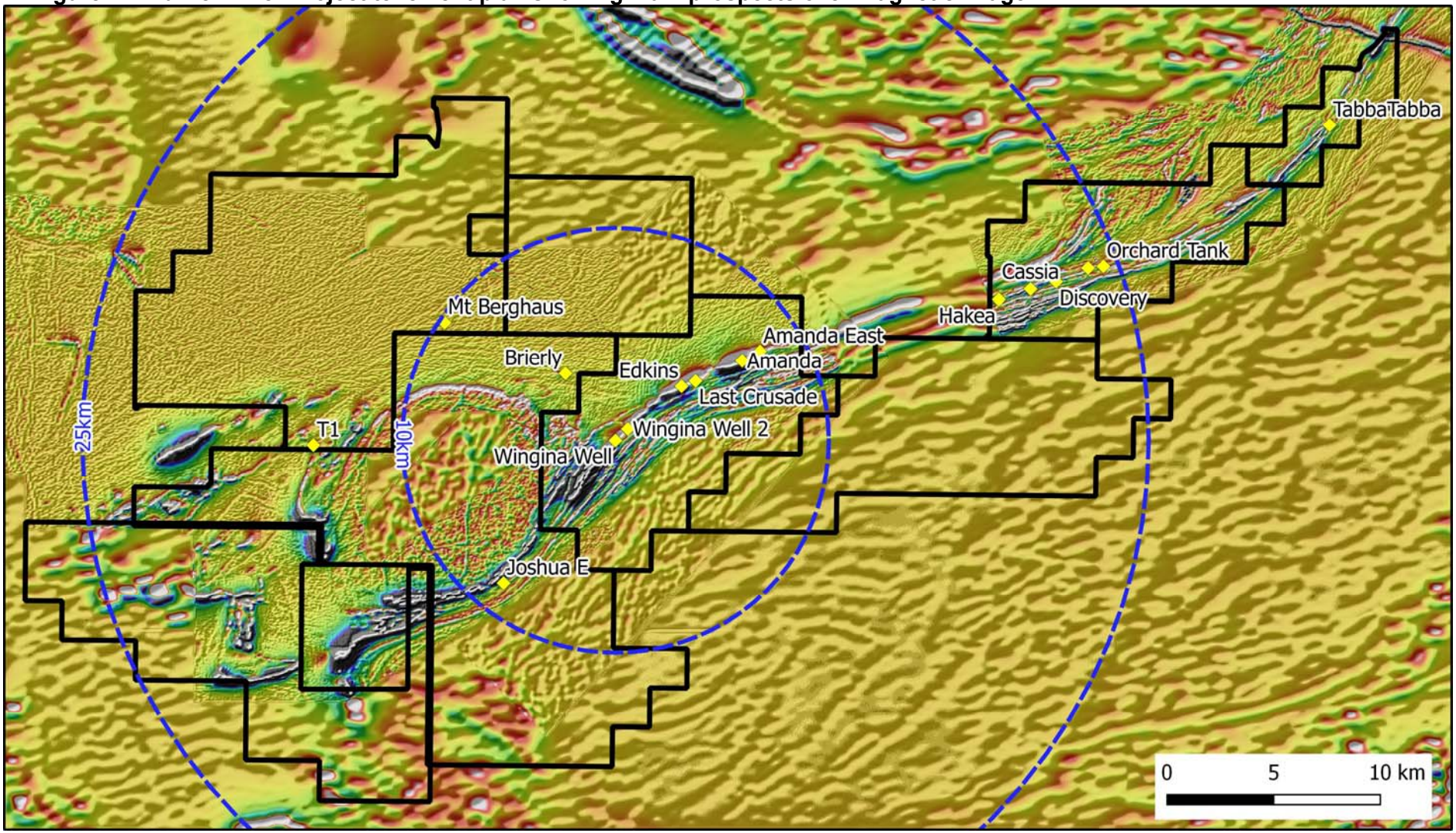


Table 1 Tabba Tabba Prospect - Significant Zn dominant lodes

(Lodes defined >0.5% Zn with internal higher grade intercepts >3.0% Zn with max 2m internal dilution)

HoleID	From (m)	Interval (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %	In Situ Grade ZnEq %**
TTRC026	14	6	0.04	4.8	0.04	0.11	0.60	1.06
	22	6	0.05	10.9	0.02	0.23	1.14	1.86
	53	1	0.06	9.4	0.01	0.23	0.54	1.21
TTRC027	19	1	0.03	29.6	0.03	0.28	0.76	2.12
	24	9	0.27	**58.7**	0.22	1.08	**2.68**	**6.78**
including	24	2	**0.71**	**158.5**	0.27	**3.60**	**8.06**	**18.90**
TTRC028	48	1	0.05	10.1	0.02	0.21	0.86	1.56
	56	9	0.34	**90.1**	0.17	1.57	**5.56**	**11.16**
including	56	3	**0.91**	**216.7**	0.31	**3.94**	**13.62**	**27.22**
TTRC028	69	2	0.34	38.0	0.95	0.29	1.39	**6.09**
TTRC029	29	7	0.13	**60.1**	0.10	1.03	**4.55**	**8.01**
including	31	4	0.18	**95.6**	0.13	1.60	**6.96**	**12.28**
TTRC030	30	3	0.25	29.1	0.15	0.40	1.25	3.51
TTRC035	53	7	0.04	28.3	0.06	0.32	1.57	3.02
including	56	1	0.03	20.2	0.06	0.83	**3.38**	5.04

HoleID	EAST (mE)	NORTH (mE)	RL (m)	Azimuth (Mag)	DIP (°)	EOH (m)
TTRC024	697938	7708573	107	133	-60	100
TTRC025	697915	7708602	113	133	-60	126
TTRC026	698373	7709023	111	113	-60	60
TTRC027	698347	7708973	112	113	-60	48
TTRC028	698330	7708979	113	113	-60	78
TTRC029	698337	7708930	113	113	-60	42
TTRC030	698301	7708897	111	113	-60	48
TTRC031	698278	7708863	111	113	-60	30
TTRC032	698206	7708791	111	113	-60	60
TTRC033	698176	7708801	113	113	-60	60
TTRC034	698155	7708810	112	113	-60	60
TTRC035	698347	7709031	112	113	-60	60

Figure 2 **Tabba Tabba drilling location plan showing IP targets.**

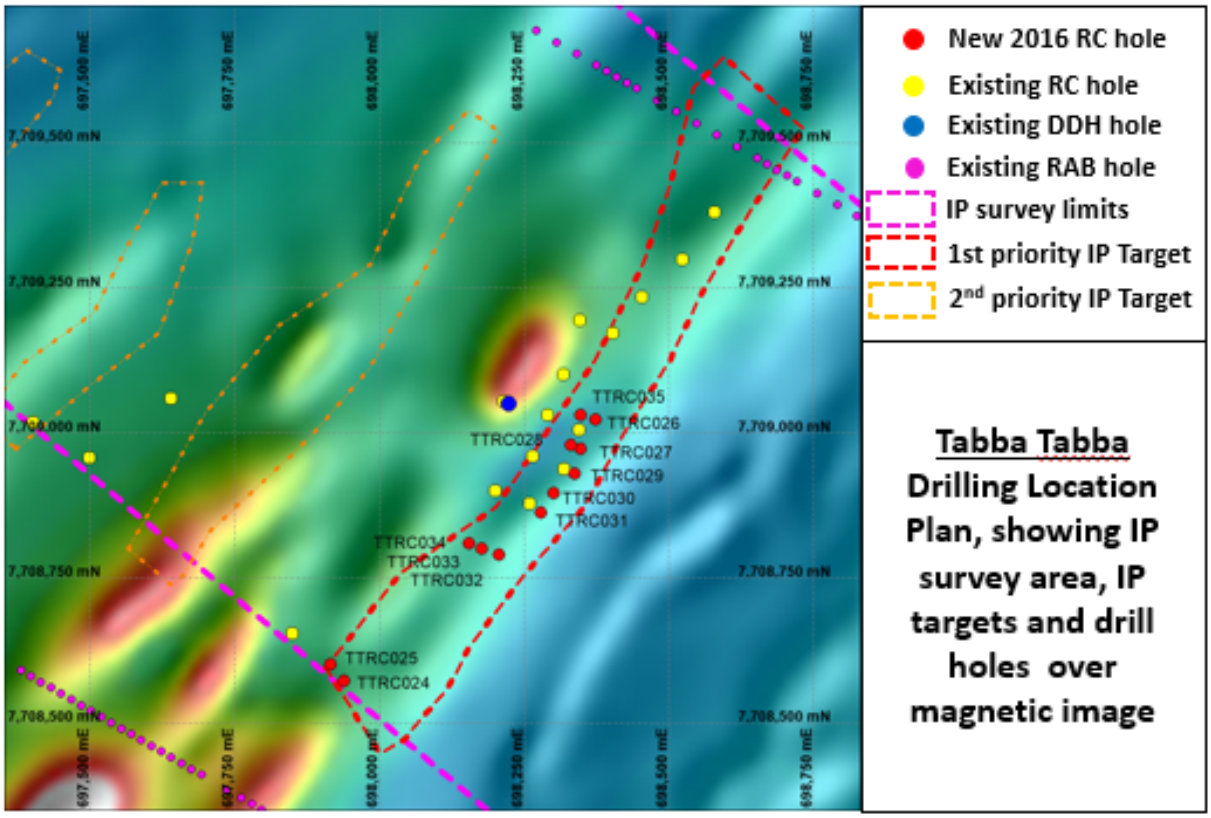
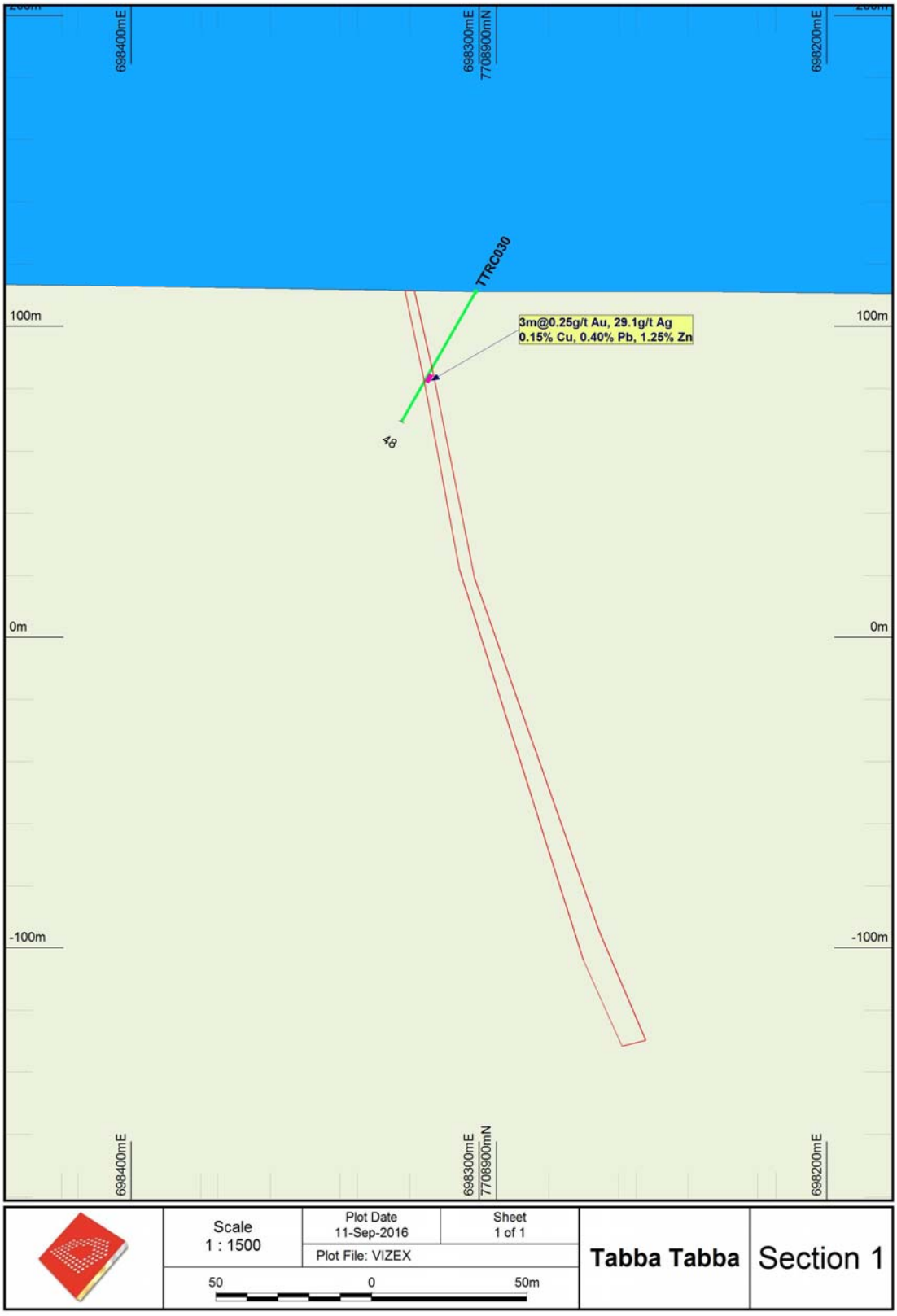
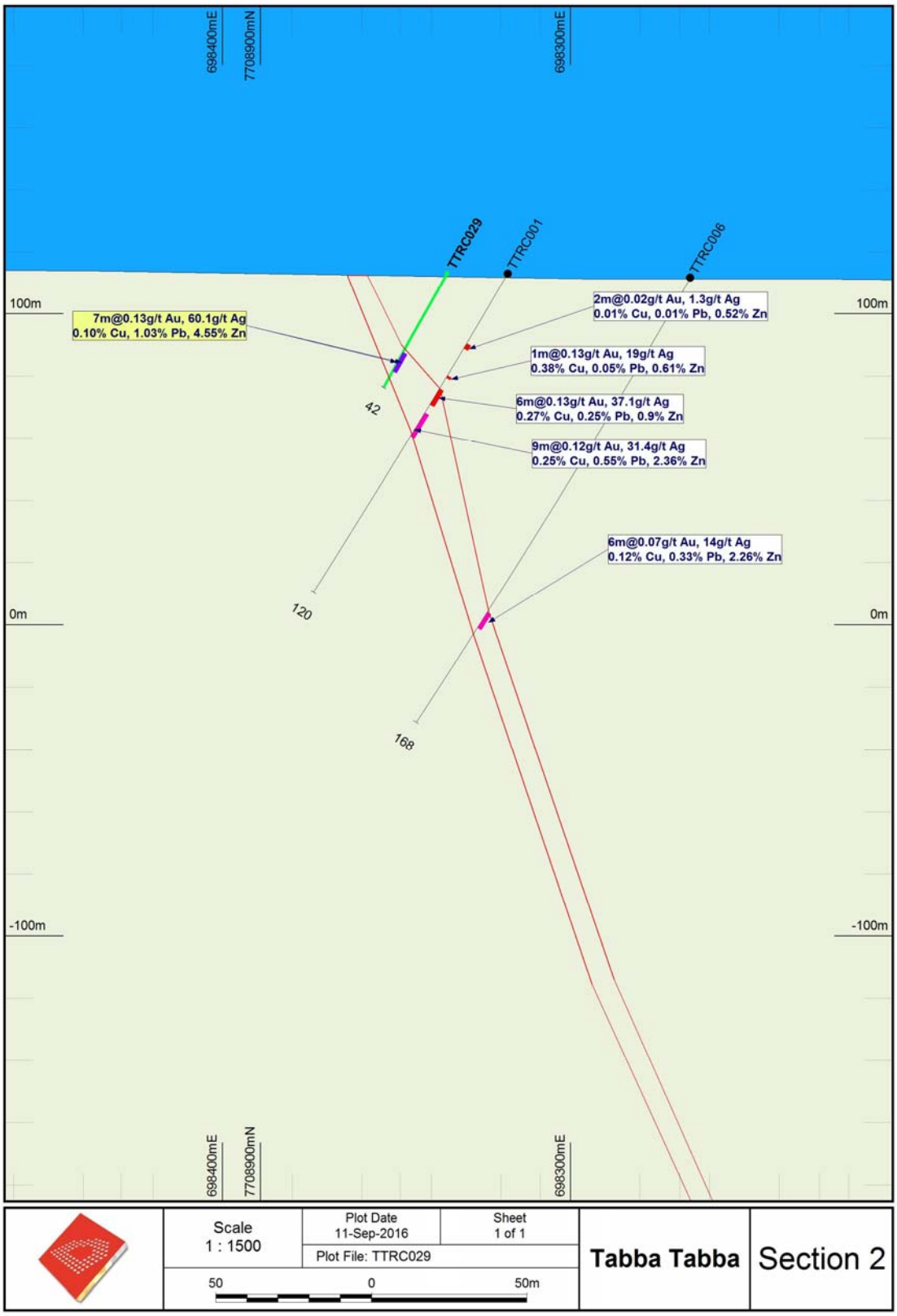


Figure 3 Tabba Tabba drilling sections

New holes shown with a green hole trace




698400mE
7708900mN
698300mE
TTRC029
TTRC001
TTRC006
100m
0m
-100m
7m@0.13g/t Au, 60.1g/t Ag
0.10% Cu, 1.03% Pb, 4.55% Zn
2m@0.02g/t Au, 1.3g/t Ag
0.01% Cu, 0.01% Pb, 0.52% Zn
1m@0.13g/t Au, 19g/t Ag
0.38% Cu, 0.05% Pb, 0.61% Zn
6m@0.13g/t Au, 37.1g/t Ag
0.27% Cu, 0.25% Pb, 0.9% Zn
9m@0.12g/t Au, 31.4g/t Ag
0.25% Cu, 0.55% Pb, 2.36% Zn
6m@0.07g/t Au, 14g/t Ag
0.12% Cu, 0.33% Pb, 2.26% Zn
42
120
168
Scale
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Plot Date
11-Sep-2016
Sheet
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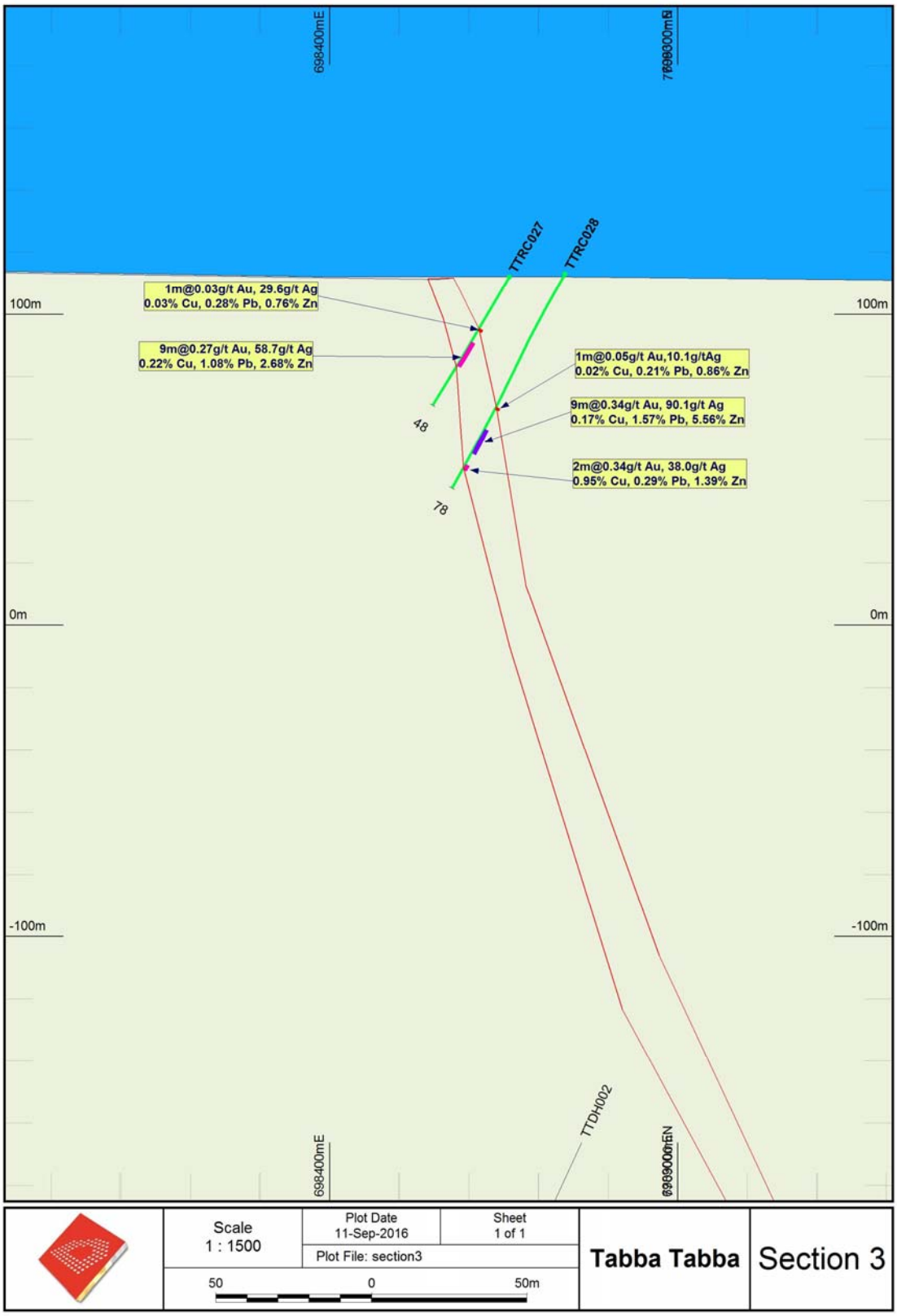
0
50m
Tabba Tabba
Section 2


698400mE
7699000mN
TTRC027
TTRC028
1m@0.03g/t Au, 29.6g/t Ag
0.03% Cu, 0.28% Pb, 0.76% Zn
9m@0.27g/t Au, 58.7g/t Ag
0.22% Cu, 1.08% Pb, 2.68% Zn
1m@0.05g/t Au,10.1g/tAg
0.02% Cu, 0.21% Pb, 0.86% Zn
9m@0.34g/t Au, 90.1g/t Ag
0.17% Cu, 1.57% Pb, 5.56% Zn
2m@0.34g/t Au, 38.0g/t Ag
0.95% Cu, 0.29% Pb, 1.39% Zn
48
78
100m
0m
-100m
TTDH002
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Plot Date
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Sheet
1 of 1
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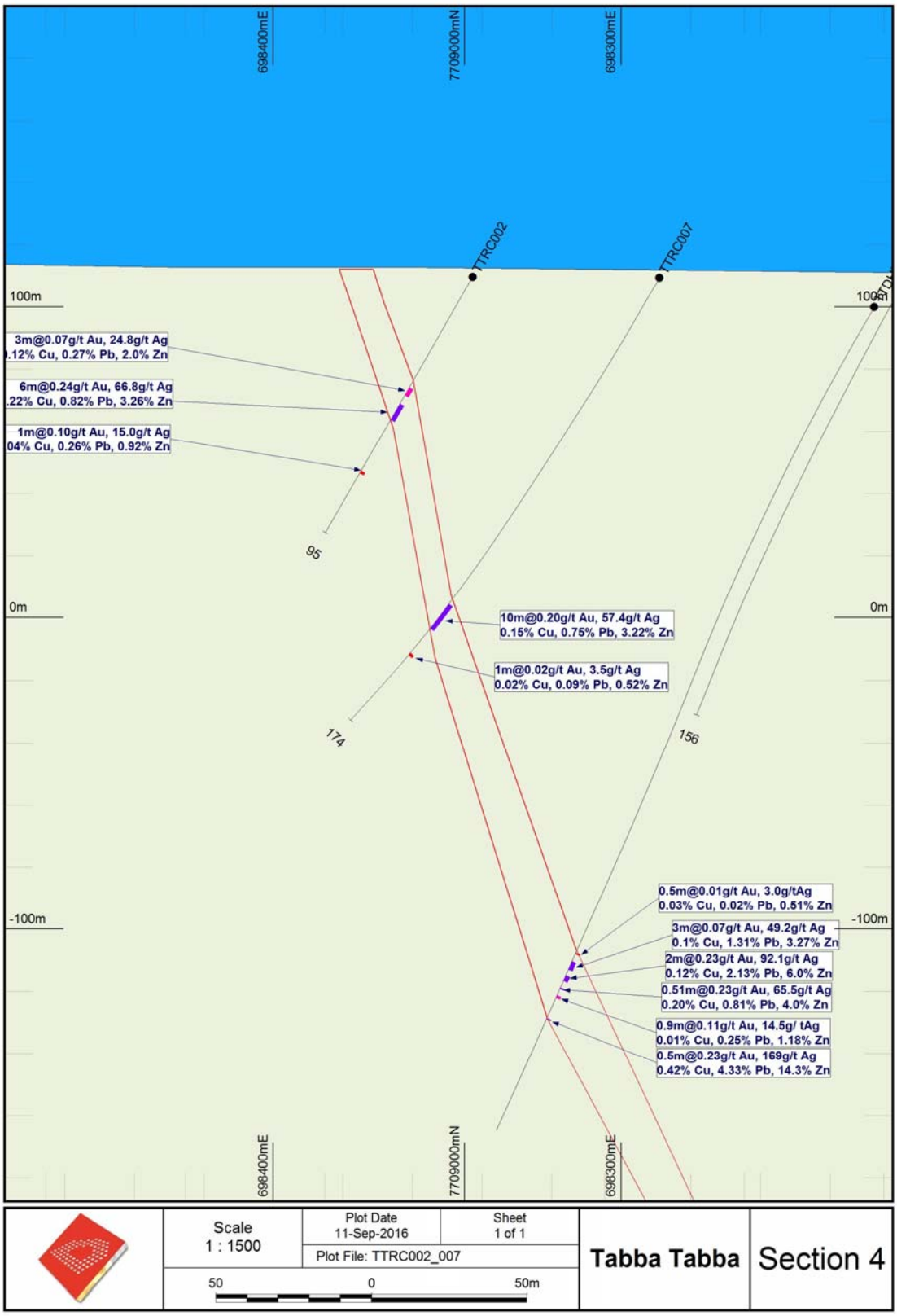
50m
Tabba Tabba
Section 3


698400mE
7709000mN
698300mE
TTRC002
TTRC007
100m
3m@0.07g/t Au, 24.8g/t Ag
.12% Cu, 0.27% Pb, 2.0% Zn
6m@0.24g/t Au, 66.8g/t Ag
.22% Cu, 0.82% Pb, 3.26% Zn
1m@0.10g/t Au, 15.0g/t Ag
04% Cu, 0.26% Pb, 0.92% Zn
95
0m
10m@0.20g/t Au, 57.4g/t Ag
0.15% Cu, 0.75% Pb, 3.22% Zn
1m@0.02g/t Au, 3.5g/t Ag
0.02% Cu, 0.09% Pb, 0.52% Zn
174
156
-100m
0.5m@0.01g/t Au, 3.0g/tAg
0.03% Cu, 0.02% Pb, 0.51% Zn
3m@0.07g/t Au, 49.2g/t Ag
0.1% Cu, 1.31% Pb, 3.27% Zn
2m@0.23g/t Au, 92.1g/t Ag
0.12% Cu, 2.13% Pb, 6.0% Zn
0.51m@0.23g/t Au, 65.5g/t Ag
0.20% Cu, 0.81% Pb, 4.0% Zn
0.9m@0.11g/t Au, 14.5g/ tAg
0.01% Cu, 0.25% Pb, 1.18% Zn
0.5m@0.23g/t Au, 169g/t Ag
0.42% Cu, 4.33% Pb, 14.3% Zn
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1 of 1
Plot File: TTRC002_007
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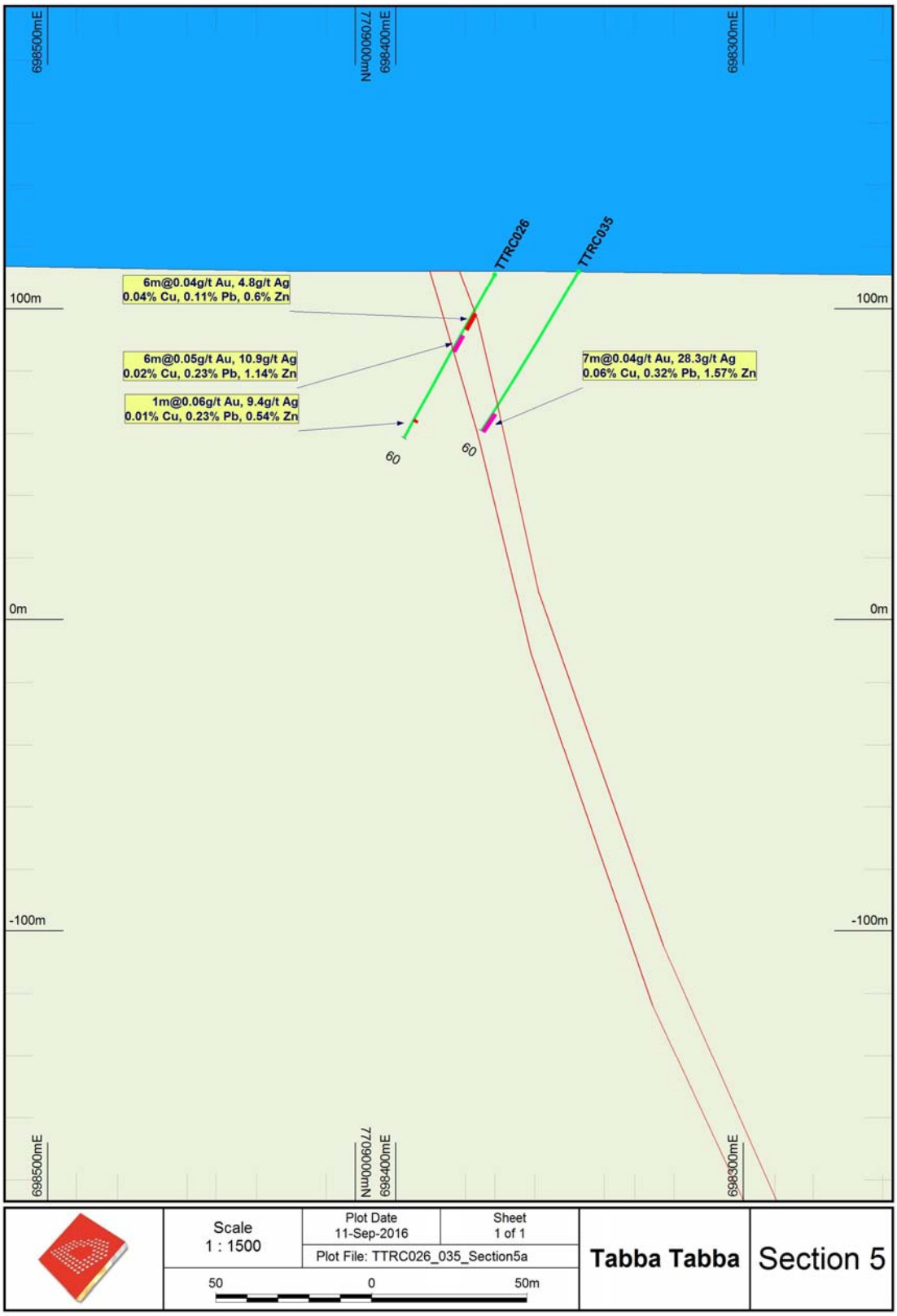
50m
Tabba Tabba
Section 4


698500mE
7709000mN
698400mE
698300mE
TTRC026
TTRC035
6m@0.04g/t Au, 4.8g/t Ag
0.04% Cu, 0.11% Pb, 0.6% Zn
6m@0.05g/t Au, 10.9g/t Ag
0.02% Cu, 0.23% Pb, 1.14% Zn
1m@0.06g/t Au, 9.4g/t Ag
0.01% Cu, 0.23% Pb, 0.54% Zn
7m@0.04g/t Au, 28.3g/t Ag
0.06% Cu, 0.32% Pb, 1.57% Zn
60
60
100m
0m
-100m
Scale
1 : 1500
Plot Date
11-Sep-2016
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1 of 1
Plot File: TTRC026_035_Section5a
50
0
50m
Tabba Tabba
Section 5

For further information:

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Competent Person Statement

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Mr. Andrew Beckwith, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Beckwith is a consultant to De Grey Mining Limited. Mr. Beckwith has sufficient experience that 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 Resource and Ore Reserves". Mr. Beckwith consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Equivalence Calculations

Formula

**AuEq g/t*	=	*Au g/t + 0.0138 x Ag g/t*
***ZnEq %*	=	*2.322 x Au g/t + 0.032 x Ag g/t + 2.55 x Cu % + 0.94 x Pb % + Zn %*

Assumptions

Au	*1300*	*$US/oz*
Ag	*18*	*$US/oz*
Cu	*4600*	*$US/tonne*
Pb	*1700*	*$US/tonne*
Zn	*1800*	*$US/tonne*
	0.75	*$AUD exchange rate*

Table JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• All drilling and sampling was undertaken in an industry standard manner • All holes sampled on a nominal 4m basis over the entire length of the hole. The 4m composite samples were submitted for analyses. Upon receipt of the 4m composite sample results, 1m samples were submitted for the anomalous zones. • Both the 4m and 1m samples were taken from the drill rig cyclone. The cyclone was calibrated to provide a continuous sample volume accordingly to sample length • Each 4m and 1m sample ranges from a typical 3-4kg • The independent laboratory then takes the sample and pulverises the entire sample for analysis as described below
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	• All drill holes are Reverse Circulation(RC) with a 5 1/2-inch bit and face sampling.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• All samples were visually assessed for recovery. • Samples are considered representative with good recoveries. Only a small percentage of samples were considered low recovery primarily due to change of rods when a small amount of wet sample occurred. • No sample bias is observed
Logging	• *Whether core and chip samples have*	• Company geologist logged each hole and supervised

Criteria	JORC Code explanation	Commentary
	been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	all sampling. • The sample results are appropriate for a resource estimation. The 1m sample results are considered the preferred sample to use in the resource estimation for more accurate definition of lodes.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The sampling of the RC sample was rotary split via the rig cyclone and sampled on a 1m and 4m composite basis. • Duplicate samples were taken approximately every 40 samples and independent standards were inserted approximately every 20 samples • The samples are considered representative and appropriate for this type of drilling and for use in a future resource estimate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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 derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• The samples were submitted to a commercial independent laboratory in Perth, Australia. • Each sample was dried, crushed and pulverised. • Au was analysed by a 50gm charge Fire assay fusion technique with a AAs finish • Cu, Zn, Pb, Ag were analysed by a 4 acid digest with ICP-AES finish together with a suite of indicator elements • The techniques are considered quantitative in nature. • As discussed previously standards and duplicates samples were inserted by the Company and the laboratory also carries out internal standards in each individual batches • The standards and duplicates were considered satisfactory
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay*	• The assay results have been checked by two independent company geologists. • No adjustments have been made. • Results are on a length weighted basis • Au and Zn equivalence is based on assumption provided in the report. The intercepts are based on 100% recovery and represent an in situ result

Criteria	JORC Code explanation	Commentary
	data.	
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole locations are located by hand held GPS to an accuracy of +/-3m. • Locations are to GDA94 Zone 50 • Diagrams and location table are provided in the report
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The RC drilling is on a nominal 40m x 40m basis. • All holes have been geologically logged and provide a strong basis for geological control and continuity of mineralisation • Sample result and logging will provide strong support for the results to be used in a resource estimate
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The drilling is considered to be perpendicular to the mineralised trend and therefore the sampling is considered representative of the mineralised zone.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by company personnel, and transported to contract transport company and taken direct to the laboratory
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Two independent company geologist have reviewed the results • The database geologist has reviewed the standards and duplicates

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a*	• The drilling is on E45/2364 which is located approximately 50km south of Port Hedland and is 100% owned De Grey Mining (or its 100% owned subsidiaries)

Criteria	JORC Code explanation	Commentary
	license to operate in the area.	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Tabba Tabba prospect has had limited previous exploration and drilling undertaken over a period of 12 years. The large proportion of the holes were completed by De Grey Mining between 2003-2014.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation targeted is VMS style precious and base metals mineralisation and is similar in style to many other Western Australian deposits.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drill hole location and plan provided in the report.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Results are on a length weighted basis • No maximum cuts have been made • Intersections are based on a nominal 0.5% Zn interval with higher grade intervals based on a 3% Zn basis
Relationship between mineralisa-tion widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The drill holes are interpreted to be perpendicular to the mineralisation. • True width as interpreted to be approximately 60-70% of downhole intervals

Criteria	JORC Code explanation	Commentary
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Plans and section are provided in the report
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• This report provides the 1m samples of all the 12 holes drilled at the prospect. • The report is considered balanced and provided in context.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Drilling is located in the oxide, transition and upper portions of the fresh portion of the mineralised system • The report discusses previous IP survey and targets
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The company plans to complete detailed wireframes of geology and mineralisation and assess the correlation with the IP target.