

21 March 2016

## **ASX/MEDIA RELEASE**

# **Tantalum and Lithium Potential at Turner River**

# **Highlights**

- > Tantalum and Lithium potential highlighted at Turner River
- > Sampling programmes planned for April
- Clarification of tenement ownership

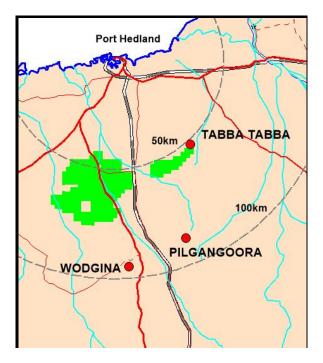
De Grey Mining Ltd (ASX: DEG, "De Grey", "Company") wishes to update shareholders on progress of the on-going technical review of the Turner River Project (TRP), located approximately 50km south of Port Hedland in the Pilbara, Western Australia.

The review has highlighted the potential for pegmatite related Tantalum and Lithium mineralisation to occur on De Grey's project area (Figure 1), with particular emphasis on the eastern most tenements, namely E45/2533 and E45/2364 (Figure 2). These two tenements are located immediately along strike of the previously mined Tabba Tantalum Mine to the north east.

De Grey Chairman Simon Lill commented, "The Turner River Project now has a further dimension to complement the existing gold and base metals resources and prospects. The opportunity to commence an assessment of the Tantalum and Lithium potential is currently being integrated into our upcoming exploration activities and planned April 2016 site visit. We are fortunate to have a large tenement footprint in what is considered a globally significant region for the production of lithium".



Figure 1 Turner River Project location



## **Tenure**

On the 17 March 2016, Sayona Mining Limited (ASX: SYA) made an announcement titled "Strategic Entry into the Western Australian Lithium Market" where it states "Sayona has entered into an agreement over E45/2364 with AttGold Pty Ltd (Attgold)."

De Grey would like to clarify that it is the owner of E45/2364.

Attgold retained the pegmatite related rights on this tenement only. The pegmatite rights give Attgold rights to explore on the tenement for pegmatite minerals, which in turn are defined as "tin, tantalum, niobium, lithium, cesium and non-gold bearing or base metal bearing aggregate."

This is as a result of the previous acquisition of this tenement by De Grey from Attgold, whereby Attgold retained the pegmatite rights, subject to various clauses of priority, access and normal statutory requirements.

Hence De Grey holds all other mineral rights in this tenement, most specifically gold and base metals which has been the focus of De Grey's past activities.

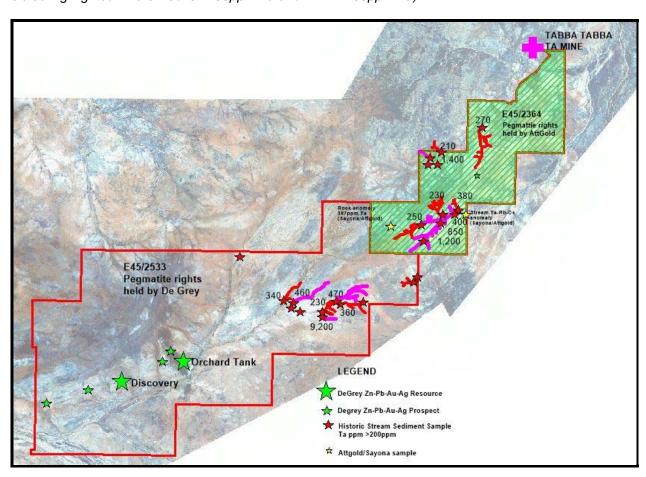
De Grey also wishes to clarify that it owns all mineral rights within the adjacent E45/2533 including all pegmatite related rights (Figure 2).

In De Grey's opinion, the rights are not yet assigned as Attgold has not yet provided De Grey with a covenant from the assignee (Sayona) to be bound by the terms of the agreement. De Grey expects that this will be forthcoming in the near future.



Figure 2: Tenement E45/2533 and E45/2364 showing pegmatite rights, Tabba Tabba Mine location, anomalous historical Ta stream sediment results and De Grey's Zn-Pb-Au-Ag resources and prospects

(Note Tantalum results greater than 200ppm are highlighted in text and the associated anomalous drainage is also highlighted where Red is >200ppm Ta and Pink > 400ppm Ta)



## **Lithium and Tantalum Potential**

The Tabba Mine, located immediately adjacent to E45/2364, is currently being redeveloped by Pilbara Minerals Limited and is a tantalum deposit hosted in fractionated pegmatite rocks. The potential for these prospective pegmatites to occur along strike to the south east into the Company's two tenements is considered high.

Regionally, the pegmatites of the Northern Pilbara are variable, highly fractionated and host significant tantalum and/or lithium resources (eg Tabba Tabba and Pilgangoora) and are also considered highly prospective for Niobium, Tin and other Rare Earth Elements (REE).



Review of past third party exploration results over the project area has highlighted a number of anomalous stream sediment samples completed by CSR Limited during the early 1980's. This sampling targeted stream sediment trap sites which were assessed to be the best locations to collect potential heavy minerals associated with pegmatite mineralisation.

The anomalous Sayona sample sites and anomalous CSR drainage samples within E45/2533 and E45/2364 are shown in Figure 2.

Other indicator elements in the sampling results, including Niobium, are considered elevated. Lithium results are considered generally of a low order nature, however the method of sampling the stream sediment trap sites is not expected to recover Lithium efficiently.

The assays depicted in Figure 2 are of a panned concentrate so the values for each sample are inherently concentrated by the sampling method and therefore care should be taken in evaluating the actual assays levels quoted. However, the sampling results from this programme clearly shows a central corridor of anomalous streams that occur to the north east of the company's Orchard Tank Zn-Pb-Au-Ag deposit and provides an immediate focus for further work to assess in more detail.

## Planned work programme

De Grey is currently preparing for a programme of works at Turner River and this will include mapping to locate any outcropping pegmatites, rock chip sampling and further stream sediment sampling throughout E45/2533. This programme is planned to commence in early April.

The Company will provide further updates as results of this planned programme and the ongoing review come to hand.

### For further information:

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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 engaged by 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 JORC 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 information in the form and context in which it appears.

### Table JORC Code, 2012 Edition – Surface sampling details

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>The stream sediment sampling referred to in this report are historical stream sediment samples completed by CSR Limited and reported to the Western Australian Mines Department in 1982.</li> <li>The sampling comprised of bulk samples of 7-10kg collected from stream sediment trap sites where a panned concentrate was obtained from a ¾ split of the overall sample and weighed and analysed for resistate elements. The -425 +75 micron size fraction of the remaining ¼ of the sample was analysed for pathfinder elements.</li> <li>Sample density is described as approximately one sample per square kilometre.</li> <li>Tantalum, tungsten and niobium – digestion by sulphuric acid and hydrofluoric acid and analysis by ICP.</li> <li>Tin – digest of ammonium iodide sublimation and analysis by ICP.</li> <li>Copper, lead, zinc, silver and lithium digest by mixed HF/HNO<sub>3</sub>/HCIO<sub>4</sub> acid and analysis by AAS.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	No drilling undertaken
Drill sample recovery	<ul> <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</li> </ul>	No drilling undertaken

Criteria	JORC Code explanation	Commentary
	of fine/coarse material.	
Logging	<ul> <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>	No logging of the samples was described in the CSR Limited report
Sub-sampling	If core, whether cut or sawn and	The sampling comprised of bulk samples of 7-10kg
techniques	whether quarter, half or all core	collected from stream sediment trap sites where a
and sample	taken.	panned concentrate was obtained from a ¾ split of the overall sample and weighed and analysed for
preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and</li> </ul>	resistate elements. The -425 +75 micron size fraction
	whether sampled wet or dry.	of the remaining 1/4 of the sample was analysed for
	<ul> <li>For all sample types, the nature,</li> </ul>	pathfinder elements.
	quality and appropriateness of the	No quality control parameters are described in the  CSD Limited report.
	sample preparation technique.	CSR Limited report  The CSR Limited report provide a technical
	Quality control procedures adopted for all sub-sampling stages to	reasoning why each sample was collected and in the
	maximise representivity of samples.	manner collected.
	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	
0 111	material being sampled.	
Quality of	The nature, quality and appropriateness of the assaying and	<ul> <li>Unknown as historic results from 1982 third party reporting</li> </ul>
assay data and	laboratory procedures used and	reporting
laboratory	whether the technique is considered	
tests	partial or total.	
10010	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,	
	<ul><li>etc.</li><li>Nature of quality control procedures</li></ul>	
	adopted (eg standards, blanks,	
	duplicates, external laboratory	
	checks) and whether acceptable	
	levels of accuracy (ie lack of bias)	
Verification of	<ul> <li>and precision have been established.</li> <li>The verification of significant</li> </ul>	Unknown as historic results from 1982 third party
sampling and	intersections by either independent	reporting.
Jamping and	or alternative company personnel.	The newly acquired results reported by Sayona
	or anomative company personner.	- The newly acquired results reported by Sayona

Criteria	JORC Code explanation	Commentary
assaying	<ul> <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>	Mining Limited within E45/2364 supports the historic results to the style of mineralisation being possible within the Company tenure.  • Further sampling by De Grey is planned to verify the anomalous nature.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole 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>	<ul> <li>All sample locations are derived from the maps provided by CSR Limited report.</li> <li>Locations have been plotted on to georeferenced imagery and match well with defined streams and are therefore considered accurate (within reason)</li> </ul>
Data spacing and distribution	<ul> <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>	<ul> <li>Sample density is described as approximately one sample per square kilometre.</li> <li>Sampling is of insufficient density to determine a resource estimate. Additional detailed follow-up sampling is recommended to qualify and quantity the anomalous areas in greater detail prior to drill testing if warranted.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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>	Unknown at this stage.
Sample security	The measures taken to ensure sample security.	Unknown due to historical nature of data
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Unknown due to historical nature of data

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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures,</li> </ul>	<ul> <li>Tenements are owned by De Grey mining and include:</li> <li>E45/2533 (De Grey owns all minerals rights including the pegmatite rights)</li> <li>E45/2364 (De Grey owns all non-pegmatite mineral</li> </ul>

Criteria	JORC Code explanation	Commentary
status	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 licence to operate in the area.	rights, Attgold own the pegmatite rights)
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Pegmatite related results reported in this report is based on historic third party sampling reported by CRS Limited and reported to the Western Australian Mines Department in 1982.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The mineralisation targeted is rare metal pegmatite hosted mineralisation including Tantalum and Lithium similar to the Tabba Tabba Tantalum Mine located immediately to the north of E45/2364 and the Lithium rich Pilgangoora deposit located approximately 50km to the south.
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	No drilling undertaken on pegmatite targets
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any</li> </ul>	<ul> <li>All assay data is historic information reported in 1982.</li> <li>Samples relate to point source stream sediment sampling</li> </ul>

Criteria	JORC Code explanation	Commentary
	reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisa- tion widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Unknown at this stage
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Plans of sample locations are provide and also the general anomalous drainage areas are provided in report.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The report includes defined levels of anomalous results however further sampling is required to validate the tenor of result. Further sampling is planned by</li> <li>De Grey on E45/2533.</li> </ul>
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.	De Grey has acquired an extensive gold and base metal dataset including geochemical, geophysical and drilling data over the tenement areas however this data has not specifically targeted pegmatite style mineralisation. Further work is required to test of this style of mineralisation although it is noted the region host a number of pegmatite hosted deposits.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	De Grey is planning field reconnaissance investigations to validate the pegmatite related mineralisation potential. Refer to report above