ASX Announcement
16 January 2017

Lithium anomaly extended to 2km - remains open for 5 kms to east

King Col Pegmatite Trend

- **King Col lithium anomaly now extended to over 2km strike length** (>108ppm Li_2O)
- Anomaly remains extensively open for 5 kms to the east on greenstone. Additional sampling planned to test pegmatite subcrop and quartz float across this anomaly.
- Three internal higher grade anomalies (>200ppm Li_2O) evident.

  Southern Zone **1200m long peak 943ppm Li_2O**

  Central Zone **1200m long peak 344ppm Li_2O**

  Eastern Zone **800m long peak 409ppm Li_2O**
- The King Col Pegmatite Trend is considered highly prospective for Lithium-Caesium-Tantalum (LCT) style pegmatite hosted mineralization similar to the Pilgangoora Lithium deposits located only 40km to the south and hosted in similar aged greenstone rocks.
- No historical sampling or drilling for lithium mineralisation is known to have been undertaken along this newly discovered pegmatite trend.

Comment by Geology Manager, Andy Beckwith

"De Grey's gold and lithium potential continues to unfold.

Further detailed sampling will now be undertaken to test the remaining 5km of subcropping pegmatite. This sampling is anticipated to be completed during February to define specific priority drill targets which will be followed by subsequent heritage surveys and drill testing."

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ASX Code DEG

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De Grey Mining Ltd (ASX: DEG, “De Grey”, “Company”) is pleased to advise that a program of detailed infill and extensional soil sampling has recently been completed over 2km of the 7km long newly discovered King Col Pegmatite Trend.

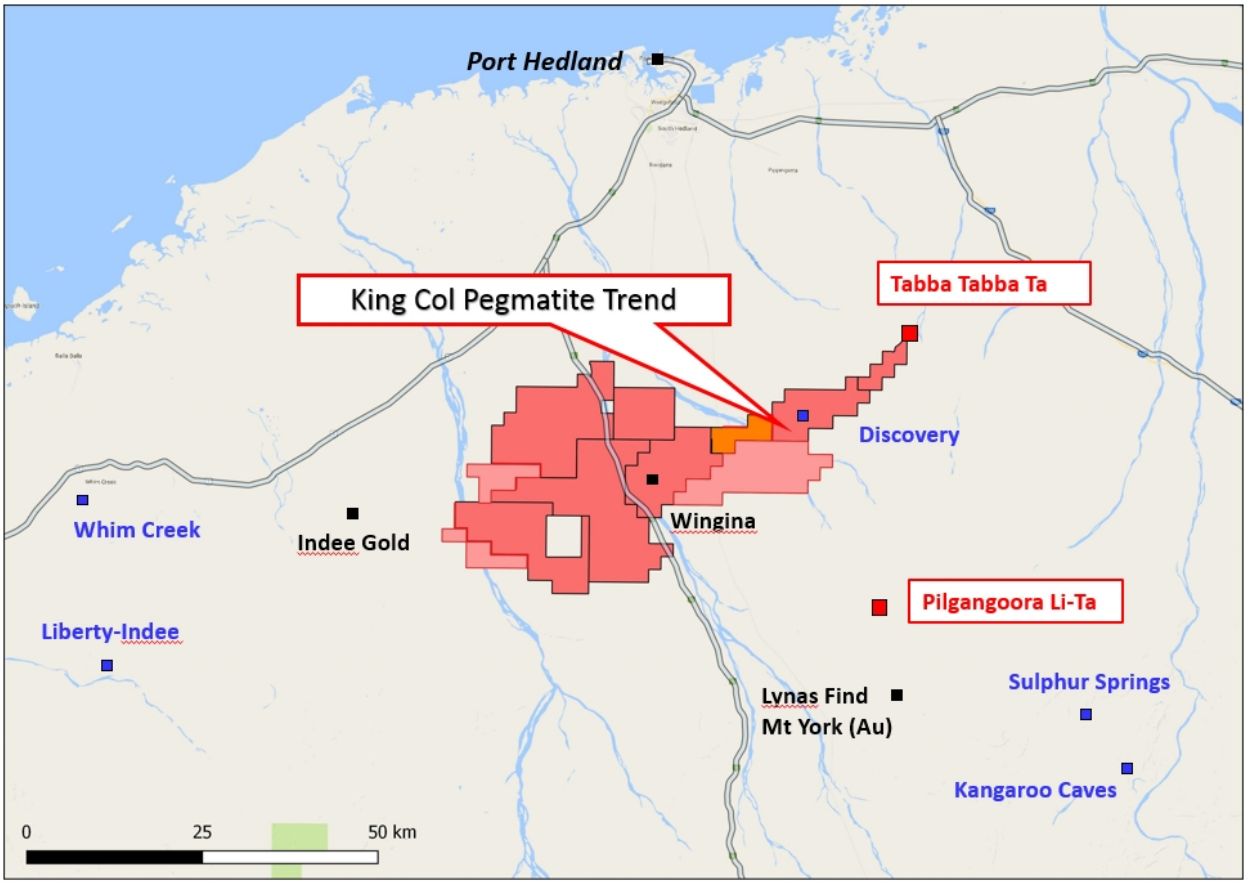
Results are very encouraging and have confirmed the previous anomalous zones with robust infill data defining a large and open 2km long anomaly based on >108ppm Li2O threshold. Three discrete higher grade priority zones occur within this broad anomaly.

Southern Zone 1200m long peak 943ppm Li_2O
Central Zone 1200m long peak 344ppm Li_2O
Eastern Zone 800m long peak 409ppm Li_2O

Importantly, a further 5km of sub-cropping pegmatite and quartz float from weathered pegmatite remains to be sampled immediately to the east. This additional soil sampling is now planned to be completed during February.

The King Col Pegmatite Trend is located on De Grey’s 100% owned exploration licence E45/2533 within the Turner River Project, located only 40km from the world class Pilgangoora Lithium-Tantalum Project, 20km from the Tabba Tabba Tantalum Mine and 50km south of Port Hedland in the Pilbara, Western Australia (Figure 1).

Figure 1 Turner River Project location plan



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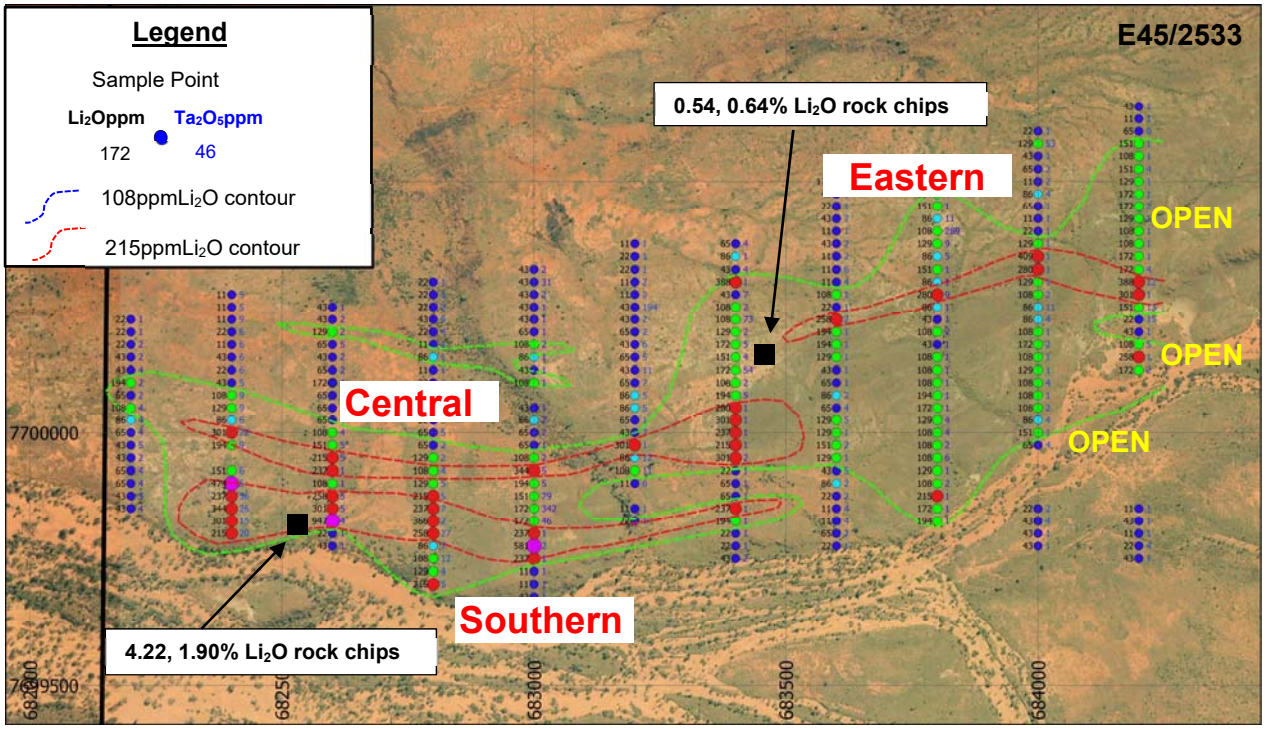
Soil Sampling Program

This recent sampling program has focused on detailed infill sampling to 200m x 25m spacing within the previously announced 400m x 25m sampling area. An additional two lines, on a 200m x 25m basis, were also completed on the eastern end of the original discovery rock chip samples and subsequent soil anomaly.

A total of 153 additional samples were collected in this program with results presented in Figure 2 and Table 1. Overall, a broad and coherent 2km x 500m anomaly (green contour) and the three internal and more discrete higher grade zones (red contours) have now been defined.

Figure 2 King Col Pegmatite Trend - 2km long lithium rich anomaly (green) showing discrete higher priority zones (red)



Overall the King Col Pegmatite Trend is over 7km long based on previous mapping and limited rock chip sampling. This recent soil sampling program completes the western-most 2km of the overall pegmatite trend with a further 5km remaining open to the east, where large zones of sub-cropping weathered pegmatite and quartz rich float are evident. The anomaly is also bound to the south by a sand filled creek system where the surface soil sampling is restricted.

The soil anomaly is also supported by the previous coincident rock chip samples along the south-western end of the King Col Pegmatite Trend which returned best results of 4.22% Li2O associated with a small outcrop of the lithium bearing mineral – lepidolite, and an additional 8 samples ranging from 2.5% to 0.15% Li2O along the zone (refer to De Grey Mining Limited ASX release, dated 11 October 2016).

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Table 1 King Col Pegmatite Trend – infill soil results

SampleID	E_GDA94	N_GDA94	Li2O (ppm)	Cs (ppm)	Nb (ppm)	Rb (ppm)	Ta2O5 (ppm)
KL124	682400	7699800	215	11	30	89	20
KL125	682400	7699825	301	10	20	102	15
KL126	682400	7699850	344	19	35	244	26
KL127	682400	7699875	237	21	180	415	56
KL128	682400	7699900	474	27	5	376	5
KL129	682400	7699925	151	9	10	89	6
KL131	682400	7699975	194	33	15	452	9
KL132	682400	7700000	301	213	25	882	22
KL133	682400	7700025	86	29	10	447	6
KL134	682400	7700050	129	22	10	325	9
KL135	682400	7700075	108	15	10	338	9
KL136	682400	7700100	43	14	5	319	5
KL137	682400	7700125	22	9	10	171	6
KL138	682400	7700150	43	4	10	82	6
KL140	682400	7700175	11	7	10	164	6
KL141	682400	7700200	22	7	10	256	6
KL142	682400	7700225	11	4	10	159	9
KL143	682400	7700250	11	6	5	224	5
KL144	682400	7700275	11	4	10	86	5
KL146	682800	7699700	215	44	5	112	5
KL147	682800	7699725	129	6	<5	48	4
KL148	682800	7699750	108	6	10	35	12
KL149	682800	7699775	86	9	10	123	7
KL150	682800	7699800	258	8	20	58	27
KL151	682800	7699825	366	8	<5	35	2
KL152	682800	7699850	237	12	10	60	7
KL153	682800	7699875	215	13	5	97	5
KL154	682800	7699900	129	14	5	103	5
KL155	682800	7699925	108	17	10	161	4
KL156	682800	7699950	129	4	<5	29	2
KL157	682800	7699975	65	18	<5	227	2
KL158	682800	7700000	65	9	10	196	5
KL159	682800	7700025	22	12	5	288	5
KL160	682800	7700050	11	8	<5	275	2
KL161	682800	7700075	65	8	<5	281	2
KL162	682800	7700100	22	6	<5	274	2
KL163	682800	7700125	11	6	<5	241	1
KL164	682800	7700150	86	7	<5	288	1
KL165	682800	7700175	11	6	<5	241	1
KL166	682800	7700200	22	7	<5	277	4
KL167	682800	7700225	43	8	5	266	6
KL168	682800	7700250	22	6	<5	224	2
KL170	682800	7700275	22	6	<5	247	1
KL171	682800	7700300	22	7	<5	254	1
KL176	683200	7699825	22	5	<5	151	1
KL177	683200	7699850	11	6	<5	155	1

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SampleID	E_GDA94	N_GDA94	Li2O (ppm)	Cs (ppm)	Nb (ppm)	Rb (ppm)	Ta2O5 (ppm)
KL179	683200	7699900	11	6	5	171	6
KL180	683200	7699925	108	13	<5	325	11
KL181	683200	7699950	86	18	5	358	12
KL182	683200	7699975	301	11	<5	52	1
KL183	683200	7700000	43	15	10	193	7
KL184	683200	7700025	65	5	<5	41	1
KL185	683200	7700050	86	11	10	264	5
KL186	683200	7700075	86	15	5	327	5
KL187	683200	7700100	65	16	10	218	7
KL188	683200	7700125	43	10	<5	112	11
KL189	683200	7700150	65	40	5	441	5
KL190	683200	7700175	43	19	<5	197	6
KL191	683200	7700200	65	10	5	110	2
KL192	683200	7700225	43	15	5	114	2
KL193	683200	7700250	43	20	315	122	194
KL194	683200	7700275	11	5	5	50	2
KL195	683200	7700300	11	4	10	32	2
KL196	683200	7700325	22	5	<5	41	1
KL197	683200	7700350	22	9	5	65	1
KL198	683200	7700375	11	15	<5	95	1
KL200	683600	7699775	22	9	<5	201	1
KL201	683600	7699800	65	8	<5	226	2
KL202	683600	7699825	11	9	<5	207	4
KL203	683600	7699850	11	8	<5	212	4
KL204	683600	7699875	22	7	<5	190	2
KL205	683600	7699900	86	5	<5	83	2
KL206	683600	7699925	43	2	<5	17	5
KL207	683600	7699950	129	5	<5	40	1
KL208	683600	7699975	151	6	<5	29	2
KL209	683600	7700000	129	6	<5	38	1
KL210	683600	7700025	129	5	<5	28	5
KL211	683600	7700050	65	3	<5	24	4
KL212	683600	7700075	86	3	<5	16	2
KL213	683600	7700100	65	2	<5	11	1
KL214	683600	7700125	43	2	<5	8	1
KL215	683600	7700150	129	4	<5	21	1
KL216	683600	7700175	194	5	<5	28	1
KL217	683600	7700200	194	7	<5	27	1
KL218	683600	7700225	258	9	<5	51	2
KL219	683600	7700250	22	3	<5	16	1
KL220	683600	7700275	108	12	<5	57	1
KL221	683600	7700300	11	11	<5	52	4
KL222	683600	7700325	11	12	10	78	6
KL223	683600	7700350	11	4	5	29	2
KL224	683600	7700375	43	17	<5	117	2
KL225	683600	7700400	11	3	<5	20	1
KL226	683600	7700425	43	6	<5	41	2
KL227	683600	7700450	22	2	<5	23	1

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SampleID	E_GDA94	N_GDA94	Li2O (ppm)	Cs (ppm)	Nb (ppm)	Rb (ppm)	Ta2O5 (ppm)
KL228	683600	7700475	43	3	<5	29	1
KL229	683600	7700500	172	2	<5	19	2
KL230	684000	7699775	43	7	<5	228	1
KL231	684000	7699800	43	6	5	230	1
KL232	684000	7699825	43	5	15	147	4
KL233	684000	7699850	22	4	10	169	2
KL238	684000	7699975	65	10	<5	207	4
KL240	684000	7700000	151	5	<5	68	1
KL241	684000	7700025	86	3	<5	47	4
KL242	684000	7700050	108	4	<5	53	2
KL243	684000	7700075	108	2	<5	26	1
KL244	684000	7700100	108	2	<5	25	4
KL245	684000	7700125	129	1	<5	17	1
KL246	684000	7700150	108	3	<5	29	1
KL247	684000	7700175	172	4	5	48	2
KL248	684000	7700200	108	3	<5	33	1
KL249	684000	7700225	86	3	<5	20	4
KL250	684000	7700250	86	2	5	17	11
KL251	684000	7700275	108	3	<5	22	2
KL252	684000	7700300	129	2	<5	13	1
KL253	684000	7700325	280	5	<5	18	1
KL254	684000	7700350	409	3	<5	13	1
KL255	684000	7700375	129	5	<5	35	1
KL256	684000	7700400	22	2	<5	9	1
KL257	684000	7700425	11	2	5	21	1
KL258	684000	7700450	65	4	5	44	1
KL259	684000	7700475	86	6	5	53	4
KL260	684000	7700500	11	2	<5	16	2
KL261	684000	7700525	65	4	<5	38	2
KL262	684000	7700550	43	2	<5	22	1
KL263	684000	7700575	129	3	70	63	53
KL264	684000	7700600	22	2	<5	23	1
KL265	684200	7699750	43	12	<5	348	1
KL266	684200	7699775	22	13	<5	319	4
KL267	684200	7699800	11	12	<5	312	1
KL268	684200	7699825	43	11	<5	295	1
KL270	684200	7699850	11	11	<5	277	1
KL281	684200	7700125	172	10	5	173	2
KL282	684200	7700150	258	4	<5	58	1
KL283	684200	7700175	108	11	5	247	5
KL284	684200	7700200	43	7	<5	169	1
KL285	684200	7700225	22	84	10	842	15
KL286	684200	7700250	151	45	25	300	13
KL287	684200	7700275	301	3	<5	49	1
KL288	684200	7700300	388	3	<5	26	12
KL289	684200	7700325	172	2	<5	30	4
KL290	684200	7700350	172	3	<5	34	1
KL291	684200	7700375	108	5	<5	27	1

SampleID	E_GDA94	N_GDA94	Li2O (ppm)	Cs (ppm)	Nb (ppm)	Rb (ppm)	Ta2O5 (ppm)
KL292	684200	7700400	108	2	<5	25	1
KL293	684200	7700425	129	2	<5	14	13
KL294	684200	7700450	172	3	<5	33	2
KL295	684200	7700475	172	3	<5	30	1
KL296	684200	7700500	129	3	<5	45	1
KL297	684200	7700525	151	3	<5	28	4
KL298	684200	7700550	108	2	<5	24	1
KL300	684200	7700575	151	2	<5	17	1
KL301	684200	7700600	65	2	<5	16	6
KL302	684200	7700625	11	2	<5	13	1
KL303	684200	7700650	43	2	<5	21	1

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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. Philip Tornatora, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr. Tornatora is a consultant to De Grey Mining Limited. Mr. Tornatora 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. Tornatora consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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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.*	• Results in this report relate to reconnaissance lag (soil) sampling undertaken over the King Col pegmatite trend by De Grey Mining. • The samples comprised a sieved soil sample of a fraction >1.7mm and <7mm. • Samples were taken at a point location on a 200m x 25m grid pattern. • Assays were undertaken at an industry standard independent laboratory
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.).*	• No drilling undertaken
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.*	• No drilling undertaken
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or*	• A brief description of soil characteristics was recorded

Criteria	JORC Code explanation	Commentary
	costean, channel, etc.) photography. • *The total length and percentage of the relevant intersections logged.*	
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 samples comprised a sieved soil sample of a fraction >1.7mm and <7mm, weighing around 200g • Samples were bagged and sent to the independent laboratory for assay where they were pulverised and assayed. • The samples are considered appropriate for first pass reconnaissance assessment of the area for this style of mineralisation. • No QAQC samples were collected in this case • Further detailed sampling along strike is planned
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 analysed by an independent industry laboratory and are considered appropriate for this style of mineralisation • 8 duplicates and 15 standards were inserted by the laboratory. No Li standards were inserted by DeGrey
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 data.*	• Sampling was carried out by DeGrey personnel and was checked by the CP in the field. • The analytical data has been reviewed by De Grey staff (CP) • Further detailed sampling is planned along strike
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.*	• All sample locations are derived from handheld GPS and are accurate +/- 5m. • GDA94 Zone 50
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish*	• Samples were collected on a spacing of 200 x 25m • Total of 153 samples were taken along an approximately 2.0km trend dominantly as infill

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Criteria	JORC Code explanation	Commentary
	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.*	to previous 400 x 25m sampling • 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.
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.*	• Samples were collected on lines at approximately 90 degrees to the strike of lithological contacts. • Orientation of sample lines is not expected to contribute to sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Samples were collected by DeGrey personnel and contractors and the sampling was checked by the CP in the field. • Samples were then sent via transport contractor direct to the laboratory
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been completed • The CP has reviewed the data and considers the data is appropriate for this style of mineralisation and sampling type.

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 licence to operate in the area.*	• Sampling carried out on Tenement E45/2533 which is owned 100% by De Grey Mining or its wholly owned subsidiaries
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Pegmatite related results reported in this report are based on work completed by De Grey. • De Grey has also undertaken a considerable amount of sampling and drilling on other portions of this tenement including the definition of two base metal resources and numerous other gold and base metal targets requiring additional follow-up • Historic stream sediment sampling has been undertaken on the tenement however this sampling did not cover this portion of the tenement
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation targeted is rare metal pegmatite hosted mineralisation including

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Criteria	JORC Code explanation	Commentary
		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 40km to the south.
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.*	• No drilling undertaken on pegmatite targets
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.*	• Samples relate to a point lag sample from which material is generally expected to be sourced from the immediate vicinity. • No lower or upper cuts, aggregate intervals or metal equivalents are reported.
Relationship between mineralisation 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').*	• Unknown at this stage
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 of sample locations and table are provided in report.

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Criteria	JORC Code explanation	Commentary
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.*	• The report includes defined levels of anomalous results however further sampling is required to validate the tenor of results.
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	• *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.*	• De Grey is planning further detailed field reconnaissance investigations to validate the pegmatite related mineralisation potential.

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