

28 August 2023

Major New Rare Earths Prospect Area “Extending Over 3 Kms” Uncovered at Comet

Highlights

- Greenfields exploration drilling 25 kilometres east of the advanced Meteor and Artemis Rare Earth (REE) Prospects uncovers a new high-grade REE Prospect Area.
- Total Rare Earths Oxide (TREO) grades up to 2990 ppm recorded with significant concentrations of high value Magnet Rare Earth Minerals.
- Significant intercepts include:
 - 23ACCE017: 12m @ 1293 ppm TREO from 15m
Inc. 3m @ 2065 ppm TREO from 21m
 - 23ACCE021: 12m @ 1633 ppm TREO from 33m
Inc. 6m @ 2562 ppm TREO from 36m
Inc. 3m @ 2990 ppm TREO from 39m
- Rare Earths associated with a layered magnetic complex with mineralised intercepts recorded over a 3-kilometre trend and remains open both to the west and east.
- The Company is awaiting further drilling results from the Artemis Rare Earth Prospect area.
- A comprehensive Rare Earth beneficiation study of the Meteor Rare Earth Prospect mineralisation is close to completion with results expected in the coming weeks.

Petratherm Limited (ASX: PTR) (**PTR** or the **Company**) is pleased to report that the initial batch of drill results has uncovered a major new REE Prospect at the Comet REE Project, located in the Northern Gawler Craton of South Australia.

The high-grade results come from greenfield exploration drilling that was undertaken over a layered magnetic complex 25 kilometres east of the company's advanced Meteor and Artemis Rare Earth Prospect Areas (Figure 1). Further drill results are expected in approximately 2 to 3 weeks' time from the Artemis Rare Earth Prospect Area.

Petratherm Chief Executive Officer, Peter Reid commented:

“The green fields exploration has uncovered further significant clay hosted rare earths in the Comet Project Area highlighting the strong fertility of the region. The results demonstrate the company’s exploration models continue to be effective in locating new REE mineralised occurrences.

“Petratherm maintains a strong exploration focus going forward as we seek to uncover the best resources across our 100% owned holdings. These results are highly encouraging and I look forward to updating the market with further results from the program over the coming weeks.”

The latest exploration comprised broad-spaced drilling 200 metre hole spacing and lines mostly 800 metres apart over a layered intrusive complex identifiable from regional aeromagnetic data (Figure 2). Rare earth horizons, hosted in the overlying clay weathering profile were uncovered within the layered complex. Notable drill intercepts include:

- 23ACCE008 – 6m @ 1026 ppm TREO from 18m
- 23ACCE015 – 3m @ 1797 ppm TREO from 33m
- 23ACCE017 – 12m @ 1293 ppm TREO from 15m inc.
3m @ 2065 ppm TREO from 21m
- 23ACCE021 – 12m @ 1633 ppm TREO from 33m inc.
6m @ 2562 ppm TREO from 36m inc.
3m @ 2990 ppm TREO from 39m
- 23ACCE035 – 9m @ 1113 ppm TREO from 30m

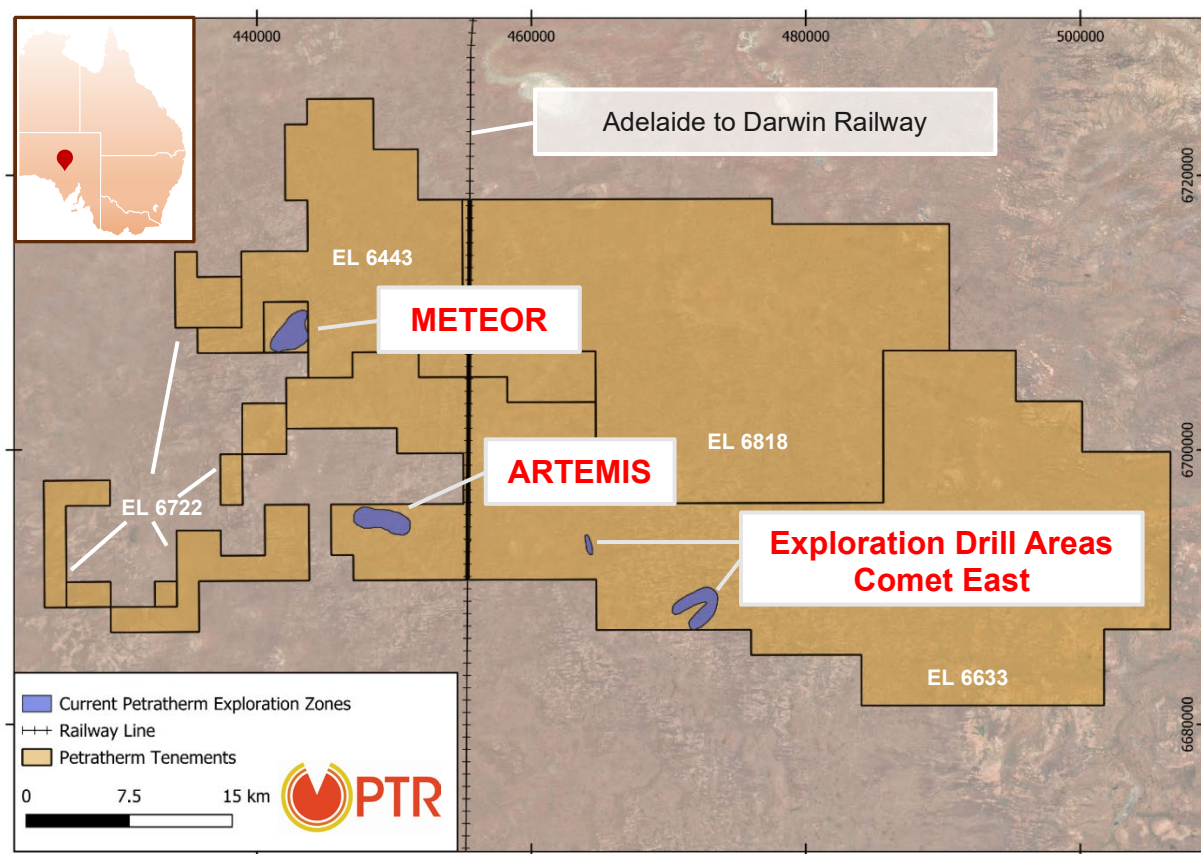


Figure 1 – Petratherm’s 100% owned Comet Project Tenement Holdings and Rare Earth Prospects.

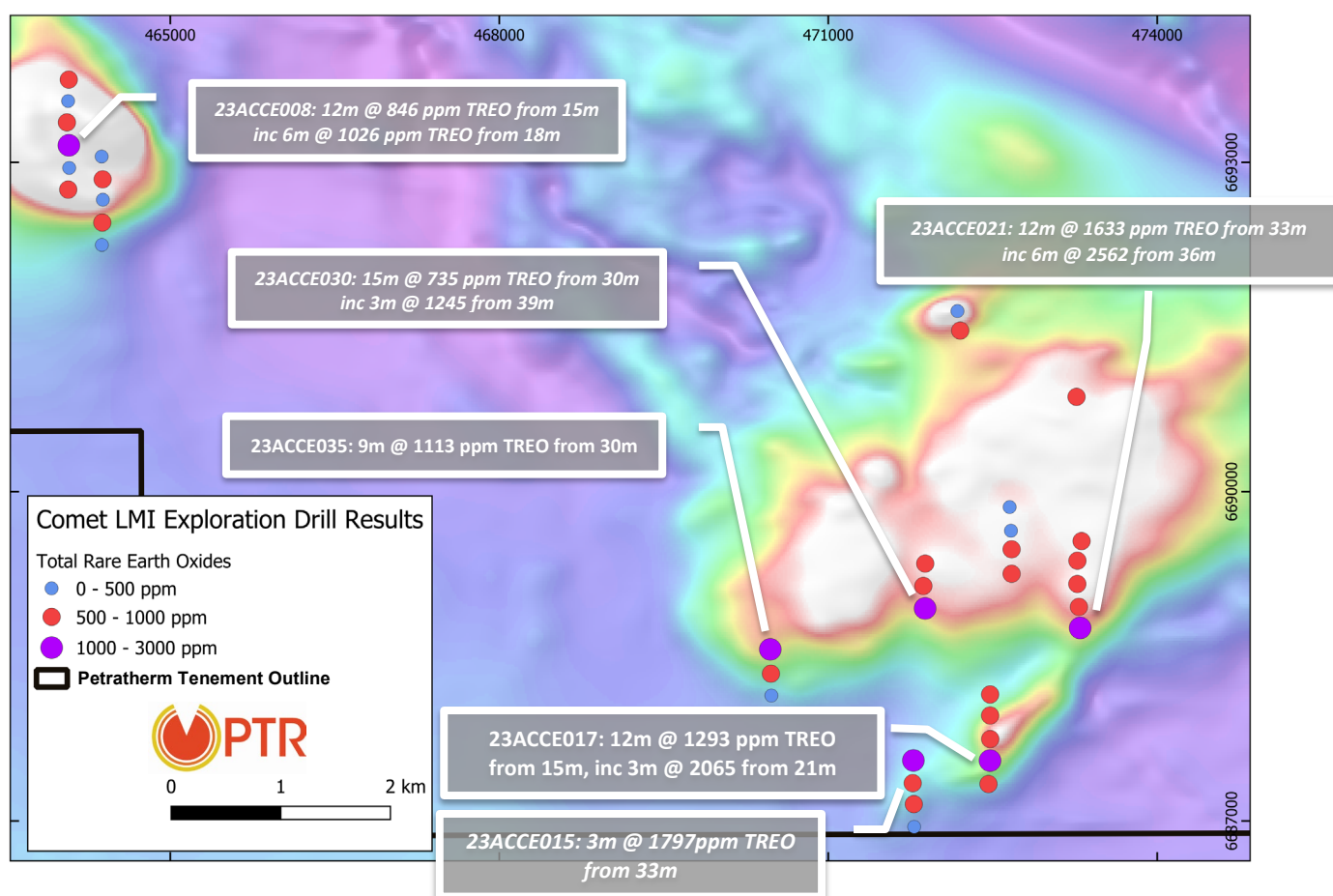


Figure 2 – Comet East – Plan view of drill collars key drill intercepts. REE's are associated with the magnetic complex. Mineralisation currently extends over an approximate 3 kilometre trend and remains open.

Comet Rare Earth Project – Next Steps

The Company is awaiting further drilling results from the Artemis Rare Earth Prospect area, where a widely spaced drill campaign has been undertaken out into surrounding areas. These results will be reported once they come to hand in approximately 2 to 3 weeks time.

A comprehensive Rare Earth beneficiation study of the Meteor Rare Earth Prospect mineralisation is close to completion with results expected in the coming weeks. The study undertaken by the Australian Nuclear Science and Technology Organisation (ANTSO) aims to significantly enrich rare earth concentrations using low-cost size fraction screening processes. Scanning electron microscope studies of mineralised intervals at Meteor indicate the majority of the REE's occur with the fine clays and therefore are likely highly amenable to size screening processes.

On completion of this study, recovery leach trials will be undertaken of the concentrated ores. The findings from these two critical ore processing steps will go a long way to identifying the costs to produce a saleable mixed rare earth product and aid guidance on the potential commerciality of the project.

In parallel to the above activities, PTR maintains a strong rare earth exploration focus with only approximately 10% of the project holding explored. There remains significant upside potential in 3 critical areas which the Company is advancing. That being the location of additional REE enriched areas to increase overall resource size potential, finding areas of high-grade REE mineralisation at shallow depths, which helps overall project economics, and finally determination of rare earth recoveries at different prospect sites in the region which may differ dependent on local geological conditions.

Table 1 - Comet East Area - Table of Significant Drill Results

Comet East - 3 Metre Split Significant REE Intercepts Table (>500 ppm TREO)														
Drill Hole	From	To	Interval	TREO	High Value - Magnet Rare Earths (MREO)									
					Praseodymium		Neodymium		Terbium		Dysprosium		Total MREO	
					Pr ₆ O ₁₁		Nd ₂ O ₃		Tb ₄ O ₇		Dy ₂ O ₃			
	metres	metres	metres	ppm	ppm	% TREO	ppm	% TREO	ppm	% TREO	ppm	% TREO	ppm	% TREO
23ACCE02	15	18	3	532	29	5	99	19	1.93	0.4	10.1	1.9	140	26
23ACCE04	27	30	3	573	30	5	101	18	1.86	0.3	9.9	1.7	143	25
23ACCE06	18	21	3	658	34	5	114	17	1.22	0.2	5.9	0.9	155	24
and	24	27	3	551	29	5	102	19	2.66	0.5	14.6	2.6	148	27
and	30	33	3	641	32	5	120	19	2.61	0.4	14.2	2.2	169	26
23ACCE08	15	27	12	846	45	5	155	18	4.00	0.5	23.3	2.8	227	27
inc	18	24	6	1026	52	5	178	17	5.07	0.5	30.1	2.9	265	26
23ACCE09	24	27	3	739	35	5	129	18	2.87	0.4	16.0	2.2	184	25
and	30	33	3	794	36	4	135	17	4.00	0.5	23.8	3.0	199	25
23ACCE011	15	18	3	532	23	4	85	16	1.91	0.4	9.9	1.9	120	22
23ACCE013	21	60	39	568	26	5	86	15	1.68	0.3	9.0	1.6	123	22
inc	21	24	3	597	26	4	86	14	1.69	0.3	8.7	1.5	122	21
and	30	42	12	737	34	5	114	15	2.18	0.3	11.0	1.5	161	22
and	48	51	3	579	26	4	91	16	1.86	0.3	10.8	1.9	130	22
and	54	60	6	571	25	4	84	15	1.56	0.3	8.4	1.5	119	21
23ACCE014	30	36	6	650	29	4	100	15	1.60	0.2	8.5	1.3	139	21
23ACCE015	33	36	3	1797	83	5	289	16	4.26	0.2	20.4	1.1	397	22
and	39	42	3	516	23	5	83	16	1.53	0.3	7.6	1.5	116	22
23ACCE016	24	29	5	673	30	4	101	15	1.96	0.3	10.4	1.5	143	21
23ACCE017	15	27	12	1293	71	5	226	17	3.41	0.3	16.0	1.2	316	24
inc	21	24	3	2065	108	5	348	17	5.15	0.2	24.2	1.2	485	24
23ACCE018	24	33	9	644	34	5	132	20	2.79	0.4	13.6	2.1	182	28
23ACCE019	27	33	6	630	33	5	109	17	1.15	0.2	4.8	0.8	148	23
23ACCE020	27	30	3	620	27	4	82	13	1.15	0.2	5.1	0.8	115	19
and	48	51	3	544	29	5	98	18	1.04	0.2	4.6	0.8	133	24
23ACCE021	33	45	12	1633	69	4	268	16	9.46	0.6	59.2	3.6	406	25
inc	36	42	6	2562	112	4	427	17	14.58	0.6	91.9	3.6	645	25
inc	39	42	3	2990	141	5	542	18	16.11	0.5	94.5	3.2	794	27
23ACCE022	18	49	31	586	30	5	96	16	1.64	0.3	8.5	1.5	136	23
inc	18	30	12	643	35	5	116	18	2.06	0.3	10.6	1.6	164	25
23ACCE023	21	24	3	513	24	5	82	16	1.43	0.3	7.7	1.5	115	22
23ACCE024	27	33	6	553	27	5	78	14	1.11	0.2	5.9	1.1	112	20
23ACCE025	15	48	33	513	24	5	79	15	1.54	0.3	8.8	1.7	113	22
inc	36	45	9	736	33	4	113	15	2.23	0.3	13.2	1.8	161	22
23ACCE026	33	36	3	590	25	4	113	19	3.67	0.6	21.3	3.6	163	28
23ACCE027	27	30	3	591	42	7	122	21	1.91	0.3	10.2	1.7	176	30
23ACCE030	30	45	15	735	34	5	117	16	2.87	0.4	16.9	2.3	171	23
inc	39	42	3	1245	59	5	219	18	6.02	0.5	36.5	2.9	321	26
23ACCE031	27	48	21	542	24	4	80	15	1.62	0.3	8.8	1.6	114	21
inc	42	48	6	678	29	4	102	15	2.48	0.4	14.1	2.1	148	22
23ACCE032	36	48	12	609	28	5	94	15	2.06	0.3	11.1	1.8	135	22
inc	36	42	6	693	34	5	111	16	2.47	0.4	12.9	1.9	160	23
23ACCE034	27	42	15	731	35	5	142	19	3.63	0.5	19.1	2.6	200	27
inc	33	39	6	879	46	5	193	22	4.88	0.6	24.4	2.8	268	31
23ACCE035	30	39	9	1113	62	6	181	16	1.97	0.2	9.3	0.8	254	23
23ACCE036	36	39	3	774	39	5	150	19	4.38	0.6	23.5	3.0	217	28
23ACCE038	24	30	6	744	33	4	129	17	3.43	0.5	18.9	2.5	184	25

ENDS

This announcement has been authorised for release on the ASX by the Company's Board of Directors.

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Competent Persons Statement:

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Peter Reid, who is a Competent Person, and a Member of the Australian Institute of Geoscientists. Mr Reid is not aware of any new information or data that materially affects the historical exploration results included in this report. Mr Reid is an employee of Petratherm Limited. Mr Reid 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 Resources and Ore Reserves'. Mr Reid consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Table 2 – Comet East Area – Drill Hole Collars

Hole ID	Easting MGA94 Z53	Northing MGA94 Z53	RL metres	Dip Deg.	Azimuth Deg.	EOH Depth metres
23ACCE001	464376	6692247	165	-60	180	75
23ACCE002	464380	6692451	165	-60	180	58
23ACCE003	464385	6692659	165	-60	180	58
23ACCE004	464383	6692844	160	-60	180	74
23ACCE005	464374	6693052	166	-60	180	63
23ACCE006	464069	6692751	166	-60	180	53
23ACCE007	464078	6692948	169	-60	180	53
23ACCE008	464075	6693154	163	-60	180	52
23ACCE009	464057	6693363	173	-60	180	33
23ACCE010	464068	6693558	172	-60	180	47
23ACCE011	464074	6693753	168	-60	180	59
23ACCE012	471784	6686945	163	-60	180	35
23ACCE013	471781	6687152	169	-60	180	64
23ACCE014	471771	6687343	175	-60	180	38
23ACCE015	471777	6687550	176	-60	180	58
23ACCE016	472462	6687335	172	-60	180	30
23ACCE017	472476	6687549	175	-60	180	36
23ACCE018	472478	6687745	175	-60	180	45
23ACCE019	472477	6687960	167	-60	180	51
23ACCE020	472477	6688151	171	-60	180	59
23ACCE021	473298	6688757	175	-60	180	71
23ACCE022	473287	6688949	176	-60	180	50
23ACCE023	473272	6689158	172	-60	180	48
23ACCE024	473273	6689370	173	-60	180	56
23ACCE025	473311	6689549	169	-60	180	52
23ACCE026	472673	6689251	182	-60	180	42
23ACCE027	472673	6689474	180	-65	180	49
23ACCE028	472667	6689643	168	-60	180	41
23ACCE029	472655	6689858	173	-60	180	12
23ACCE030	471884	6688935	177	-60	180	65
23ACCE031	471868	6689140	178	-60	180	53
23ACCE032	471885	6689344	171	-60	180	72
23ACCE033	470482	6688141	173	-90	0	10
23ACCE034	470478	6688340	180	-60	180	70
23ACCE035	470472	6688562	170	-60	180	39
23ACCE036	472204	6691466	168	-60	180	41
23ACCE037	472179	6691644	180	-60	180	52
23ACCE038	473265	6690863	170	-90	0	60

About Petratherm Limited

Petratherm Limited (ASX: PTR) is a critical minerals explorer focused on the discovery of world-class copper-gold and rare earth deposits. The Company has several advanced drill ready projects in the Olympic Copper-Gold Domain of South Australia. PTR recently announced the discovery of significant concentrations of rare earths hosted in clays in the Northern Gawler Craton of South Australia which are undergoing further drill testing.

Exploration drilling at the Comet Project Area has delineated two major REE occurrences. The Meteor and Artemis REE prospects both occur at very shallow depths, include high-grade blankets of mineralisation showing good lateral extent and ore thickness. Less than 10% of the project area has been explored for REE's and a systematic program of advancement of current prospects, testing of new areas and metallurgical recovery test work is ongoing.

PTR has several exciting copper-gold targets at its Mabel Creek and Woomera Projects located within the Olympic Copper-Gold Trend. Targeting work has defined several compelling Tier 1 Copper-Gold targets and PTR anticipates drill testing of targets will begin from late in 2023 calendar period.



PTR's Project Locations in South Australia

EL 6443 & EL 6633 (Comet Project) JORC Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse Au that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> A total of 38 drill holes have been drilled in the Comet East Area along a series of widely spaced drill traverses (300 metres to 800 metres) with holes spacing of 200 metres along traverses. During the program, samples were collected as three metre composite intervals from one metre drill samples stored individually in green bags. Composite samples were collected using a “spear” tool to collect representative samples from green bags. Composite samples were an average weight of 1.6 kg. A handheld GPS was used to record the location of each drill hole. The accuracy of this GPS is +/- 5 metres.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i> 	<ul style="list-style-type: none"> Drill method consisted of Air core. Hole diameters are 78 mm.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> Air core drilling methods were utilised throughout the duration of the program. Hole diameters are 78mm. A Geologist was on site for every drill hole to ensure that sample recoveries were appropriate.
<i>Logging</i>	<ul style="list-style-type: none"> <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,</i> 	<ul style="list-style-type: none"> All samples were geologically logged by the on-site geologist.

Criteria	JORC Code explanation	Commentary
	<p><i>mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> Geological logging is qualitative. Representative chip trays containing 1 m geological sub-samples were collected. All drillholes were geologically logged.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> Samples averaging 1.6 kg were collected for laboratory assay. It is considered representative samples were collected. Laboratory sample preparation includes drying and pulverizing of submitted sample to target of p80 at 75 um. Duplicate samples have been introduced into the sample stream by the Company. Standard samples were introduced into the sample stream by the Company, and the laboratory also completed standard assays. Laboratory analytical charge sizes are standard sizes and considered adequate for the material being assayed.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> Assayed for REE elements by Bureau Veritas in Adelaide using laboratory methods MA101 & MA102. The samples have been digested and refluxed with a mixture of Acids, including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. Previous studies have shown MA101 & MA102 perform a near complete digestion of rare earths, with results reported herein generally recording <5 % below an absolute REE total digest concentration. Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Tm, Y & Yb have been determined by Inductively Coupled Plasma (ICP) Mass Spectrometry For laboratory samples, the Company has introduced

Criteria	JORC Code explanation	Commentary																																													
		QA/QC samples at a ratio of one QA/QC sample for every 20 drill samples. The laboratory introduces additional QA/QC samples (blanks, standards, checks).																																													
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> The Company has queried the results with Bureau Veritas to verify the accuracy of the results. No twinned holes were drilled in the program. Rare earth element analyses were originally reported in elemental form but have been converted to relevant oxide concentrations as in the industry standard. TREO = La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Lu₂O₃ + Y₂O₃ MREO = Pr₆O₁₁ + Nd₂O₃ + Dy₂O₃ + Tb₄O₇ <table border="1"> <thead> <tr> <th>Element Name</th><th>Element Oxide</th><th>Oxide Factor</th></tr> </thead> <tbody> <tr><td>Ce</td><td>CeO₂</td><td>1.2284</td></tr> <tr><td>Dy</td><td>Dy₂O₃</td><td>1.1477</td></tr> <tr><td>Er</td><td>Er₂O₃</td><td>1.1435</td></tr> <tr><td>Eu</td><td>Eu₂O₃</td><td>1.1579</td></tr> <tr><td>Gd</td><td>Gd₂O₃</td><td>1.1526</td></tr> <tr><td>Ho</td><td>Ho₂O₃</td><td>1.1455</td></tr> <tr><td>La</td><td>La₂O₃</td><td>1.1728</td></tr> <tr><td>Lu</td><td>Lu₂O₃</td><td>1.1371</td></tr> <tr><td>Nd</td><td>Nd₂O₃</td><td>1.1664</td></tr> <tr><td>Pr</td><td>Pr₆O₁₁</td><td>1.2082</td></tr> <tr><td>Sm</td><td>Sm₂O₃</td><td>1.1596</td></tr> <tr><td>Tb</td><td>Tb₄O₇</td><td>1.1762</td></tr> <tr><td>Tm</td><td>Tm₂O₃</td><td>1.1421</td></tr> <tr><td>Y</td><td>Y₂O₃</td><td>1.2699</td></tr> </tbody> </table>	Element Name	Element Oxide	Oxide Factor	Ce	CeO ₂	1.2284	Dy	Dy ₂ O ₃	1.1477	Er	Er ₂ O ₃	1.1435	Eu	Eu ₂ O ₃	1.1579	Gd	Gd ₂ O ₃	1.1526	Ho	Ho ₂ O ₃	1.1455	La	La ₂ O ₃	1.1728	Lu	Lu ₂ O ₃	1.1371	Nd	Nd ₂ O ₃	1.1664	Pr	Pr ₆ O ₁₁	1.2082	Sm	Sm ₂ O ₃	1.1596	Tb	Tb ₄ O ₇	1.1762	Tm	Tm ₂ O ₃	1.1421	Y	Y ₂ O ₃	1.2699
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Y	Y ₂ O ₃	1.2699																																													
<i>Location of data points</i>	<ul style="list-style-type: none"> <i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> All maps and locations are in UTM grid (GDA94 Z53) and have been measured by a GPS with a lateral accuracy of ± 5 metres and a vertical accuracy ±5 metres. 																																													
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> 	<ul style="list-style-type: none"> Drill holes were completed on 200 metre spaced drill traverses. The data spacing and distribution is insufficient to establish the degree of geological and grade continuity appropriate for a 																																													

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	for a JORC mineral resource.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The mineralisation is horizontal in basic form. As such, no sampling bias is introduced by the drill hole orientation.
<i>Sample security</i>	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Company staff and contractors collected laboratory samples. Samples submitted were transported and delivered by Company staff or contractors to Bureau Veritas Adelaide.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No independent audit of data has been completed to date.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> EL 6443 Comet and EL 6633 Gina are located 80km south south-west of Coober Pedy overlapping Ingomar and Commonwealth Hill Pastoral Stations. The tenements are located within the Woomera Prohibited Area (Amber Zone) and the Far North Prescribed Wells Area. <u>Native Title Holder:</u> SCD2011/001 Antakirinja Matu-Yankunytjatjara. The tenement is in good standing and no known impediments exist.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous exploration work includes; Surface Geochemical Sampling: Calcrete Airborne Geophysics: Magnetics & Radiometrics. Ground Geophysics: Magnetics and Gravity. Exploration Drilling: 202

Criteria	JORC Code explanation	Commentary
		Mechanised Auger, 103 Air core, 9 Rotary Air, 27 Reverse Circulation & 3 Diamond.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The tenements are within the Northern Gawler Craton, South Australia Petratherm are exploring for gold and REE's. This release refers to REE mineralisation hosted in clays within the weathered saprolite profile.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> The type of drilling performed comprised dominantly -60 degree angled shallow holes to an approximate average down hole depth of 51 metres. All drillhole information pertaining to results within this release are tabulated in Table's 1 & 2 in the main body of the release.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> All reported drill results are true results as reported by Bureau Veritas. All results above 500 ppm TREO are reported in Table 1 of Significant Intercepts. A cut off value of 500 ppm TREO was used and values below 500pm are only included when said interval of no more than 3 metres is situated between a continuous run of samples with greater than 500 ppm + TREO. No assumptions of metal equivalent values were made or used.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> 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 (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> 36 Drill holes were drilled at -60 degrees angled to the south and 2 holes were drilled vertically at -90 degrees. Any relationship between mineralisation widths and intercepts lengths is not known. TREO values reported are down hole length.
<i>Diagrams</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See Figure 2 in main body of release attached. No cross-sections have been produced as the hole spacing is too broad. Results presented are from early-stage regional reconnaissance drilling.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All results from the 38 drill holes above a cut off 500 ppm TREO are reported in the Table 1 of Significant Intercepts. All sample locations where REE grades are below 500 ppm TREO are also shown in Figure 2 in the release. All collar locations are reported in Table 2 of the release
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See attached ASX Release. Geological observations are included in that report.
<i>Further work</i>	<ul style="list-style-type: none"> The nature and scale of planned further work (eg 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. 	<ul style="list-style-type: none"> See attached release.