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ASX ANNOUNCEMENT **24/02/2023**

Drilling Identifies Major New Rare Earth Prospect

HIGHLIGHTS

- Drilling has confirmed the presence of a new, large Rare Earth Prospect (Artemis) with coherent grades >1000 ppm Total Rare Earth Oxide and over substantial thicknesses (up to 32 metres).
- Artemis covers an approximate 1.5 kilometre by 800 metre area and is open laterally in all directions.
- Importantly Artemis is located less than 15 kilometres southeast of Petratherm's well-defined Meteor REE Prospect.
- Excellent logistics for potential future development. Close to major rural/mining centre of Coober Pedy and situated on pastoral lease country, with only 1 lease holder. Adelaide to Darwin railway line runs through centre of Project. Good relations with the Traditional Owners.
- Significant new drill intercepts include:
    - 22ACCR341 - **24m @ 1,105 ppm TREO & 28 ppm Sc_2O_3 from 9m**
      inc. **6m @ 2,258 ppm TREO & 27 ppm Sc_2O_3 from 21m**
    - 22ACCR343 - **32m @ 942 ppm TREO & 22 ppm Sc_2O_3 from 24m**
      inc. **11m @ 1,287 ppm TREO & 15 ppm Sc_2O_3 from 45m**
    - 22ACCR334- **21m @ 1001 ppm TREO & 30 ppm Sc_2O_3 from 21m**
      inc. **9m @ 1,217 ppm TREO & 36 ppm Sc_2O_3 from 21m**
    - 22ACCR335 - **24m @ 947 ppm TREO & 29 ppm Sc_2O_3 from 21m**
      inc. **12m @ 1,178 ppm TREO & 14 ppm Sc_2O_3 from 30m**
    - 22ACCR336- **32m @ 906 ppm TREO & 24 ppm Sc_2O_3 from 15m**
      inc. **12m @ 1,139 ppm TREO & 22 ppm Sc_2O_3 from 27m**
- These results confirm and expand on previously reported high grade REE intercepts *(refer PTR ASX announcement 11 October 2022)*:
    - 22ACCR311 - **13m @ 1,523 ppm TREO & 26 ppm Sc_2O_3 from 15m**
      inc. **3m @ 2,155 ppm TREO & 25 ppm Sc_2O_3 from 21m**
    - 22ACCR312 - **24m @ 1,094 ppm TREO & 25 ppm Sc_2O_3 from 9m**
      inc. **6m @ 1,573 ppm TREO & 30 ppm Sc_2O_3 from 15m**
    - 22ACCR315 - **12m @ 1,037 ppm TREO & 26 ppm Sc_2O_3 from 12m**
      inc. **6m @ 1,437 ppm TREO & 29 ppm Sc_2O_3 from 15m**
    - 22ACCR317 - **27m @ 1,030 ppm TREO & 30 ppm Sc_2O_3 from 15m**
      inc. **12m @ 1,408 ppm TREO & 26 ppm Sc_2O_3 from 24m**
- 90% of the project area not yet explored for REE mineralisation.

INTRODUCTION

Petratherm Limited (ASX: **PTR**) is pleased to report exploration drill results from the Comet Rare Earth Project located in the Northern Gawler Craton of South Australia (Figures 1 & 2). Drilling has delineated a major rare earth (REE) occurrence named the Artemis Prospect, less than 15 kilometres southeast of Petratherm's well-defined Meteor REE Prospect (refer ASX announcement 15 February 2023).

The Artemis Prospect is characterised by a high-grade blanket of mineralisation over 1,000 ppm Total Rare Earth Oxide (TREO) hosted within the clay weathering profile, extending over a 1.5 km by 800 metre area. Mineralisation starts at shallow depths (typically 8 -15 metres) and high-grade drill intersections range from 12 to 32 metres in thickness (Figure 2). High-value magnet rare earth (MREO) intercepts up to 609 ppm are recorded and across the prospect the average MREO drill intercept grade is 242 ppm. The mineralised area remains open laterally in all directions (Figure 2).

PTR's Comet REE Project has favourable logistics for any potential future mining development. The Project is located 80 kilometres south of the major rural and mining centre of Coober Pedy and is situated on Pastoral Lease land. The Adelaide to Darwin railway line runs through the centre of the Project offering low-cost access to infrastructure and markets (Artemis and Meteor Prospects are located approximately 10 kilometres from the railway siding). PTR has developed a good foundation with the Traditional Owners and looks forward to fostering this relationship as the project advances.

Commenting on the results Petratherm's CEO Peter Reid said:

> ***The Artemis REE Prospect shows good upside potential with high-grade clay hosted rare earths intercepted over a large area and vertical thickness. This new rare earth find highlights the fertility of the Company's Comet Project Area and compliments Petratherm's high quality and emerging Meteor Rare Earth Prospect nearby. Importantly the mineralisation is associated with specific rare earth enriched basement rock and further potential exists for new finds not only within the clay dominated weathering profile but also in the fresh basement rock below.***
>
> ***It is greatly encouraging to see that our exploration models are generating positive drill results and we will continue to apply these models to the remainder of the project area, 90% of which has not been explored for REE mineralisation. The potential for additional discoveries by the team at Petratherm puts The Company in an exciting and enviable position.***

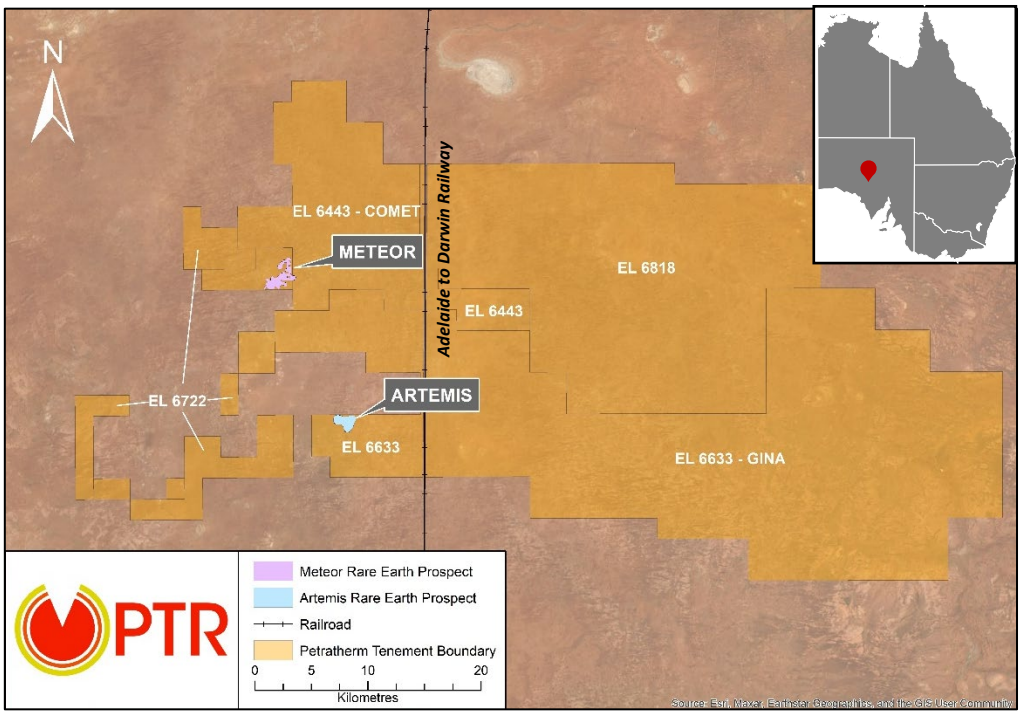


Figure 1 *Artemis and Meteor Rare Earth Prospects, Located on Pastoral Country close to a Major Railway*

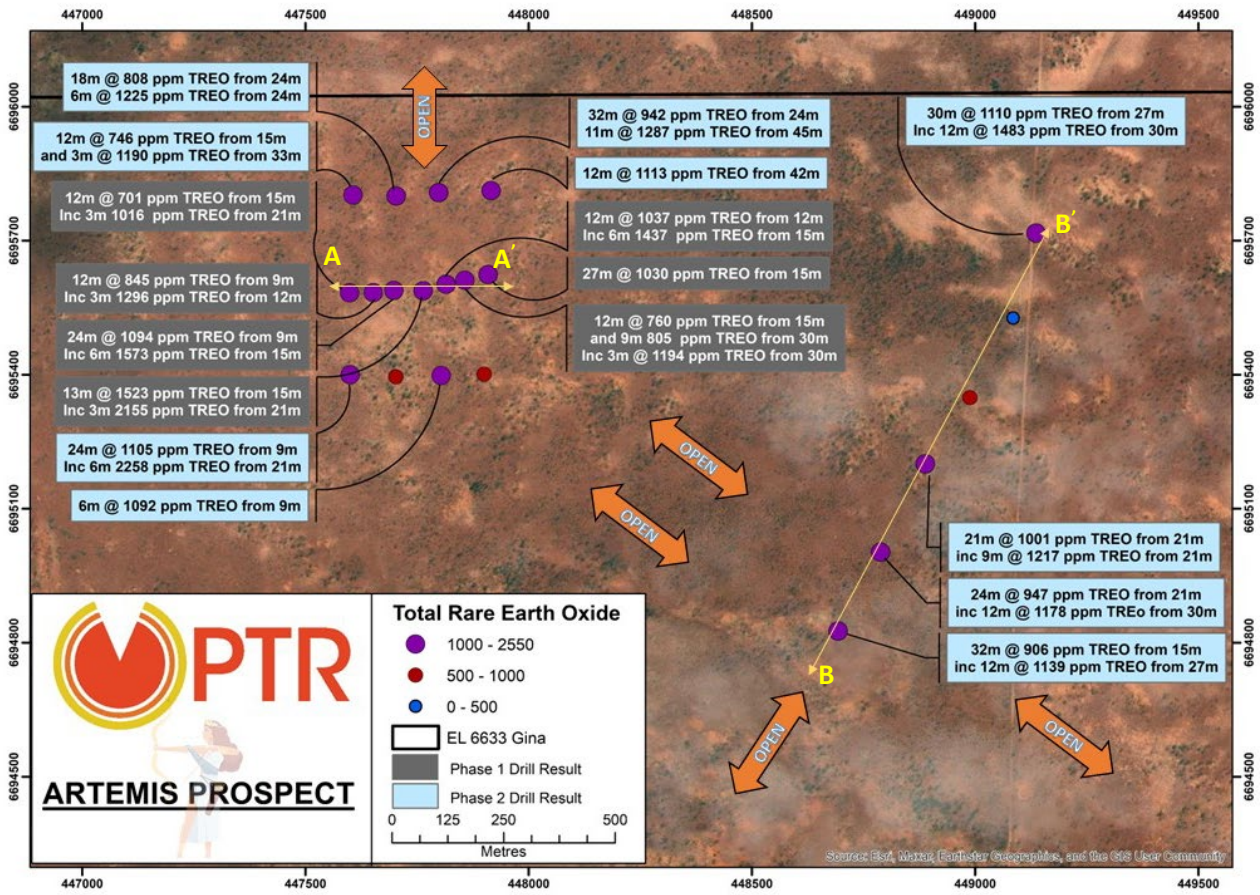


Figure 2 *Artemis Prospect - Overview map showing drilling results*

Artemis Results

In October 2022 Petratherm announced the results of a single air-core drilling traverse over a REE exploration target southeast of the Meteor Prospect. Results of follow-up drilling presented here, in three additional traverses along strike from the original target, confirm that high-grade REE mineralisation is laterally continuous and extensive.

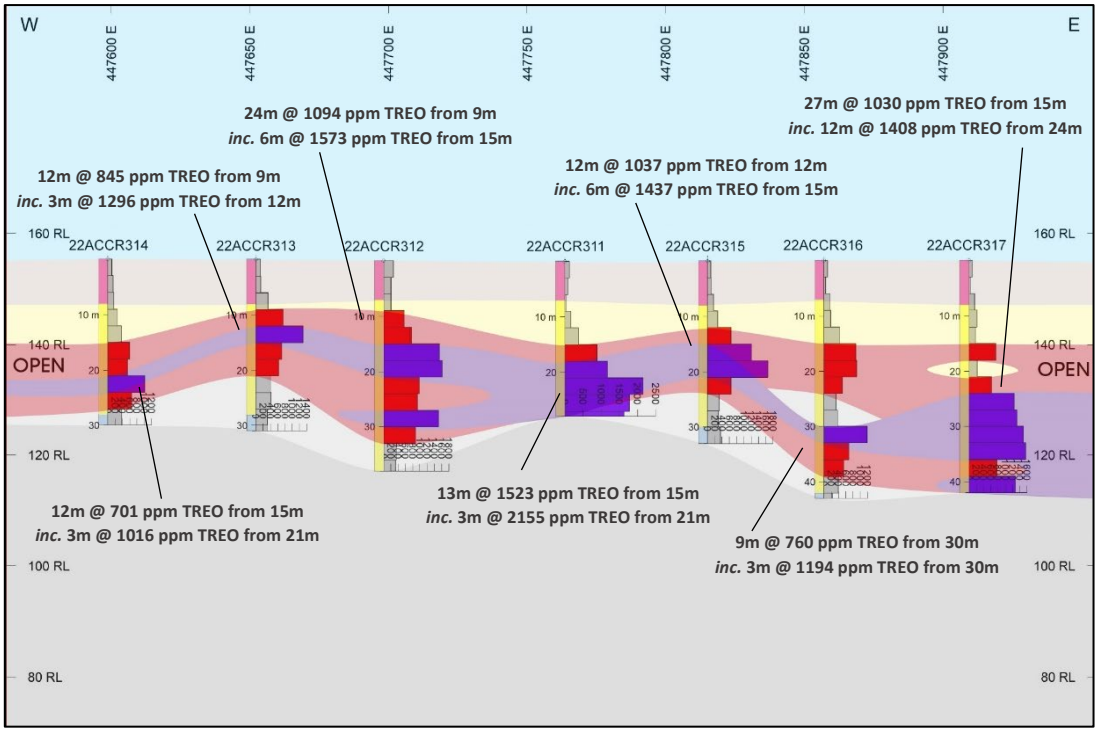
In all, 20 of the 21 drill holes at the Artemis Prospect (95% of holes drilled) returned significant mineralised REE intercepts. Three metre composite drill samples were assayed and grades up to 2,542 ppm TREO were reported. These results are presented in Table 1. Two cross sections (Figure 3) over the Artemis Prospect show high-grade (1,000 to 2,500 ppm TREO) zones of enrichment surrounded by a broader mineralised envelope ranging between 500 to 1000 ppm TREO.

At the western part of the prospect area, a 300-metre-long drill traverse (section A-A') demonstrates the presence of a continuous, open-ended mineralised zone with TREO intercepts greater than 1,000 ppm over thicknesses of between 12 and 27 metres and starting from 9 to 15 metres depth below surface. Drill traverses 200 metres north and south of this traverse confirm that mineralisation is laterally continuous in these directions, and that mineralisation remains open both to the north and south as well as to the east and west.

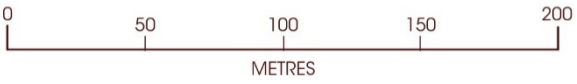
Cross-section B-B' over the eastern part of the Artemis Prospect area delineates two zones of high-grade rare-earth mineralisation, including an approximately 600-metre-long horizon which remains open to the southwest. Once again TREO intercepts here are encouragingly thick, with intercepts grading up to 1000 ppm for thicknesses of between 21 and 32 metres.

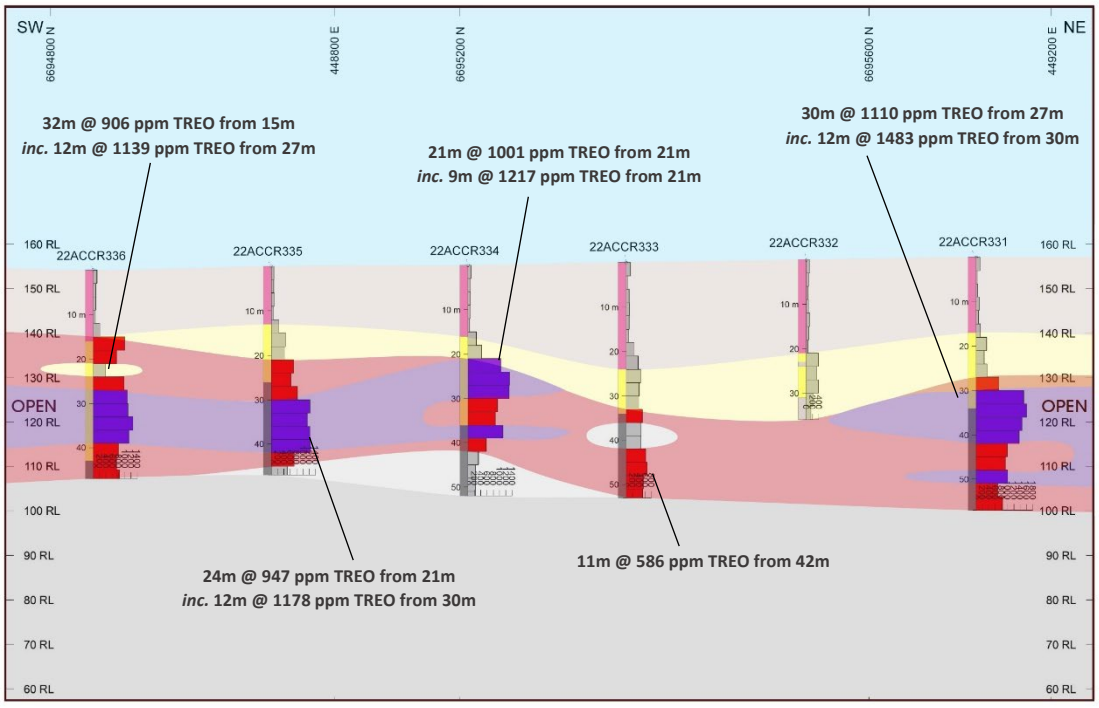
Artemis Prospect - 3 Metre Split Significant REE Intercepts Table (>500 ppm TREO)																
						High Value - Magnet Rare Earths (MREO)										
Drill Hole	From	To	Interval	TREO	Scandium Sc_2O_3	Praseodymium Pr_6O_{11}		Neodymium Nd_2O_3		Terbium Tb_4O_7		Dysprosium DyO_3		Total MREO	
	metres	*metres*	*metres*	*ppm*	*ppm*	*ppm*	*% TREO*	*ppm*	*% TREO*	*ppm*	*% TREO*	*ppm*	*% TREO*	*ppm*	*%TREO*
22ACCR311	15	28	13	**1523**	26	80	5	283	19	2.77	0.2	13.7	0.9	379	**25**
inc	21	24	3	**2155**	25	123	6	460	21	4.42	0.2	21.2	1.0	609	**28**
22ACCR312	9	33	24	**1094**	25	62	6	222	20	2.09	0.2	10.7	1.0	297	**27**
inc	15	21	6	**1573**	30	87	6	313	20	2.78	0.2	13.3	0.8	416	**26**
22ACCR313	9	21	12	845	27	54	6	199	24	1.97	0.2	9.9	1.2	265	**31**
inc	12	15	3	**1296**	29	100	8	376	29	2.89	0.2	13.4	1.0	492	**38**
22ACCR314	15	27	12	701	36	42	6	159	23	2.15	0.3	11.5	1.6	215	**31**
inc	21	24	3	**1016**	40	64	6	254	25	3.26	0.3	17.5	1.7	339	**33**
22ACCR315	12	24	12	**1037**	26	59	6	201	19	1.83	0.2	9.7	0.9	271	**26**
inc	15	21	6	**1437**	29	90	6	301	21	2.48	0.2	12.5	0.9	406	**28**
22ACCR316	15	27	12	760	30	45	6	159	21	1.66	0.2	8.8	1.2	214	**28**
and	30	39	9	805	23	34	4	121	15	1.38	0.2	7.3	0.9	164	20
inc	30	33	3	**1194**	9	48	4	166	14	1.42	0.1	6.9	0.6	222	19
22ACCR317	15	42	27	**1030**	30	50	5	155	15	1.63	0.2	8.7	0.8	215	21
inc	24	36	12	**1408**	26	68	5	211	15	1.98	0.1	10.4	0.7	291	21
22ACCR331	27	57	30	**1110**	23	47	4	163	15	1.37	0.1	7.1	0.6	218	20
inc	30	42	12	**1483**	28	63	4	212	14	1.41	0.1	7.1	0.5	284	19
22ACCR333	33	36	3	512	44	24	5	90	18	1.34	0.3	7.5	1.5	123	24
and	42	53	11	586	21	24	4	89	15	1.20	0.2	6.4	1.1	121	21
22ACCR334	21	42	21	**1001**	30	49	5	172	17	2.21	0.2	10.3	1.0	234	23
inc	21	30	9	**1217**	36	64	5	226	19	2.74	0.2	12.5	1.0	305	**25**
22ACCR335	21	45	24	947	29	43	5	146	15	2.58	0.3	12.4	1.3	204	22
inc	30	42	12	**1178**	14	59	5	198	17	3.30	0.3	15.8	1.3	276	23
22ACCR336	15	47	32	906	24	42	5	136	15	2.09	0.2	9.3	1.0	189	21
inc	27	39	12	**1139**	22	57	5	183	16	2.66	0.2	11.6	1.0	254	22
22ACCR338	9	12	3	759	31	34	4	93	12	0.59	0.1	4.6	0.6	132	17
and	36	39	3	644	23	32	5	104	16	1.18	0.2	4.6	0.7	142	22
22ACCR339	9	15	6	**1092**	23	57	5	189	17	1.76	0.2	7.8	0.7	256	23
and	30	33	3	702	23	31	4	109	16	1.76	0.3	8.0	1.1	150	21
22ACCR340	12	21	9	717	28	42	6	145	20	1.76	0.2	9.6	1.3	198	**28**
and	30	33	3	534	23	24	4	80	15	1.76	0.3	9.2	1.7	115	22
22ACCR341	9	33	24	**1105**	28	61	6	191	17	2.50	0.2	13.1	1.2	268	24
inc	21	27	6	**2258**	27	122	5	377	17	4.41	0.2	22.1	1.0	526	23
22ACCR342	12	15	3	531	23	25	5	73	14	0.59	0.1	4.0	0.8	103	19
and	21	*24*	3	500	*38*	*28*	6	*92*	18	*1.76*	0.4	*9.8*	2.0	132	**26**
and	42	54	12	**1113**	17	54	5	160	14	1.32	0.1	6.6	0.6	222	20
22ACCR343	24	56	32	942	22	41	4	123	13	1.28	0.1	6.1	0.6	171	18
inc	45	56	11	**1287**	15	60	5	174	14	1.18	0.1	5.2	0.4	240	19
22ACCR344	24	42	18	808	23	37	5	120	15	2.45	0.3	13.1	1.6	173	21
inc	24	30	6	**1225**	23	66	5	206	17	2.35	0.2	10.6	0.9	285	23
22ACCR345	15	27	12	746	29	28	4	92	12	1.03	0.1	5.5	0.7	126	17
and	33	36	3	**1190**	15	58	5	185	16	1.76	0.1	8.6	0.7	253	21

Table 1 *Artemis Prospect - Table of Significant Drill Results*

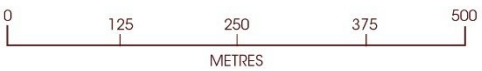


Artemis Cross-Section A - A'





Artemis Cross-Section B - B'



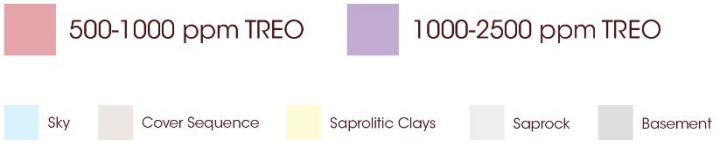


Figure 3 *Artemis Prospect – Cross-Sections*

Next Steps

The Company is greatly encouraged by this latest round of results which has confirmed the Artemis Prospect as an important new REE occurrence, with potential for the delineation of an extensive mineralised blanket with future infill drilling. These results compliment the advanced REE Meteor Prospect where Petratherm has defined a substantial and continuous horizon of high-grade (>1000 ppm TREO) mineralisation starting from shallow depths (3-6 metres below surface), and over substantial vertical thicknesses (PTR ASX release 29/08/2022 & 15/02/2023). Petrological work is underway to understand the nature of rare earth mineralisation hosted in the clays and additionally to determine the prospectivity of the underlying bedrock for primary REE mineralisation at depth.

The Artemis drill results also confirm that the new exploration models for discovering REE mineralisation currently being developed by Petratherm are proving to be highly successful and give the Company a competitive advantage in discovering new REE resources within the Gawler Craton. These cutting-edge models, along with a significant, under-explored land holding at the Comet Project (1,915 km^2) put the company in a strong position for further exploration success and further new exploration targets are expected to be identified in the coming months.

The Comet Project area is shaping up as an emerging REE province and Petratherm is well positioned to be a significant player in this region. Going forward, The Company's focus is two-fold, advancing a low-cost process to recover the REEs using simple heap leach methods and continuing greenfield exploration in order to identify the best REE mineralisation within the Project area.

This ASX announcement has been approved by Petratherm's Board of Directors and authorised for release by Petratherm's Chairman Derek Carter.

For further information contact :
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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 Ltd. 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.

Hole ID	Easting MGA94 Z53	Northing MGA94 Z53	RL metres	Dip Deg.	Azimuth Deg.	EOH Depth metres
22ACCR311	447764	6695588	155	-90	0	28
22ACCR312	447698	6695589	155	-90	0	38
22ACCR313	447652	6695584	155	-90	0	31
22ACCR314	447599	6695583	155	-90	0	30
22ACCR315	447815	6695603	155	-90	0	33
22ACCR316	447857	6695612	155	-90	0	43
22ACCR317	447909	6695624	155	-90	0	42
22ACCR331	449136	6695717	157	-90	0	57
22ACCR333	448988	6695348	156	-90	0	53
22ACCR334	448889	6695200	155	-90	0	52
22ACCR335	448788	6695003	155	-90	0	47
22ACCR336	448693	6694826	154	-90	0	47
22ACCR338	447901	6695401	155	-90	0	39
22ACCR339	447804	6695398	155	-90	0	32
22ACCR340	447703	6695395	155	-90	0	39
22ACCR341	447600	6695400	155	-90	0	38
22ACCR342	447916	6695812	156	-90	0	60
22ACCR343	447798	6695808	156	-90	0	56
22ACCR344	447703	6695800	156	-90	0	46
22ACCR345	447607	6695803	156	-90	0	36

Table 2 *– Artemis REE Prospect – Drill Hole Collars*

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
Sampling techniques	• *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.* • *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 (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.*	• A total of 21 drill holes have been drilled at the Artemis Prospect ranging in spacing from 50 metres to 200 metres. • 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 Differential GPS was used to record the location of each drill hole. The accuracy of this GPS is +/- 5cm.
Drilling techniques	• *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.).*	• Drill method consisted of Air core. Hole diameters are 78 mm.
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.*	• 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.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to*	• All samples were geologically logged by the on-site geologist.

Criteria	JORC Code explanation	Commentary
	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.*	• Geological logging is qualitative. • Representative chip trays containing 1 m geological sub-samples were collected. • All drillholes were geologically 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.*	• 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.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Bureau Veritas in Adelaide was used for analytical work. Samples were analysed in the following manner: • Lithium Borate Fusion assayed by Inductively Coupled Plasma Atomic emission spectroscopy (ICP-AES) and Mass Spectrometry (ICP-MS) for 23 elements. • For laboratory samples, the Company has introduced 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).
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*	• The Company has queried the results with Bureau Veritas to verify the accuracy of the results. • No twinned holes were drilled in the program.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>and electronic) protocols.
• Discuss any adjustment to assay data.</td><td>• Rare earth element analyses were originally reported in elemental form but have been converted to relevant oxide concentrations as in the industry standard.
• TREO = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 +Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3
• MREO = Pr_6O_{11} + Nd_2O_3 + Dy_2O_3 + Tb_4O_7
<table>
<tr><th>Element Name</th><th>Element Oxide</th><th>Oxide Factor</th></tr>
<tr><td>Ce</td><td>CeO2</td><td>1.2284</td></tr>
<tr><td>Dy</td><td>Dy2O3</td><td>1.1477</td></tr>
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<tr><td>Tm</td><td>Tm2O3</td><td>1.1421</td></tr>
<tr><td>U</td><td>U3O8</td><td>1.1793</td></tr>
<tr><td>Y</td><td>Y2O3</td><td>1.2699</td></tr>
<tr><td>Yb</td><td>Yb2O3</td><td>1.1387</td></tr>
</table></td></tr>
<tr><td>Location of data points</td><td>• 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.</td><td>• All maps and locations are in UTM grid (GDA94 Z53) and have been measured by a differential GPS with a lateral accuracy of ± 5 cm and a vertical accuracy ±5 cm.</td></tr>
<tr><td>Data spacing and distribution</td><td>• 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.</td><td>• Drill holes were completed on 50 metre and 200 metre spaced drill traverses.
• The data spacing and distribution is insufficient to establish the degree of geological and grade continuity appropriate for a for a JORC mineral resource.</td></tr>
<tr><td>Orientation of data in relation to</td><td>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit</td><td>• The mineralisation is horizontal in basic form. As such, no sampling bias is introduced by the drill hole</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
geological structure	*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.*	orientation.
Sample security	• *The measures taken to ensure sample security.*	• Company staff and contractors collected laboratory samples. • Samples submitted were transported and delivered by Company staff or contractors to Bureau Veritas Adelaide.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• 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
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.*	• 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. • Native Title Holder: SCD2011/001 Antakirinja Matu-Yankunytjatjara. • The tenement is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration work includes; • **Surface Geochemical Sampling:** Calcrete **Airborne Geophysics:** Magnetics & Radiometrics. **Ground Geophysics:** Magnetics and Gravity. **Exploration Drilling:** 202 Mechanised Auger, 103 Air core, 9 Rotary Air, 27 Reverse Circulation & 3 Diamond.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• 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.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• The type of drilling performed comprised vertical shallow holes to an approximate average depth of 42 metres. • All drillhole information pertaining to results within this release are tabulated in Table's 1 & 2 in the main body of the release.
Data aggregation methods	• *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.* • *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.*	• 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.
Relationship between mineralisation widths and	• *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*	• 21 Drill holes were drilled vertically at -90 degrees. Any relationship between mineralisation widths and

Criteria	JORC Code explanation	Commentary
intercept lengths	*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').*	intercepts lengths is not known. • TREO values reported are down hole length.
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.*	• See figures in main body of release attached.
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.*	• Results from 21 drill holes were assayed. Samples were digested using Lithium Borate Fusion and were assayed by ICP-MS and ICP-AES. All results 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.
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.*	• See attached ASX Release. Geological observations are included in that report.
Further work	• *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.*	• See attached release.