QUARTERLY REPORT

For the period ending 31 March 2015

Bulk Metallurgical Sampling; Skyfall and Stromberg Magnetic End Use and Heavy Rare Earth Prospects – October 2014

ASX:SPX **ABN: 94 115 770 226** **29 APRIL 2015**

SUMMARY OF EXPLORATION & EVALUATION ACTIVITIES

During the March quarter the Company has continued the metallurgical test work on the clay hosted rare earth occurrences previously identified at Skyfall and Stromberg.

The aim is to complete a scoping study in the current (June 2015) quarter.

This process hopes to identify a simple flow sheet around which the company may design a modest capital cost project that will produce high value concentrates that contain the types of rare earths elements for which third party processors may still be looking.

The Spectrum clay hosted rare earths mineralisation is complex and preliminary evaluation suggests that any attempt to try and recover 'all' known rare earth elements in these clays would most likely substantially increase both capital and operating costs, and the technical risks.

Studies to date have indicated that a majority of the most valuable (heavy and magnetic) rare earths can be extracted efficiently from the clays in the flotation stages.

The hydrometallurgical work is now under way.

SKYFALL PROJECT:

Beneficiation Testwork

A summary of the beneficiation testwork program completed to date is as below.

- Flotation testwork program has been completed. This program consisted of:
  - Rougher flotation;
  - Rougher flotation with multiple cleaner stages;
  - Rougher flotation with multiple cleaner stages with regrind of intermediate concentrates.
  - Testing of typical flotation parameters:
    - Collectors
    - Depressants
    - pH modifiers
    - Slurry density
    - Slurry temperature
    - Conditioning and flotation time

Summary of the findings:

- Significant improvements in concentrate grade (6-8%TREO) were achieved through rougher flotation as reagent selection and addition rates were optimized.

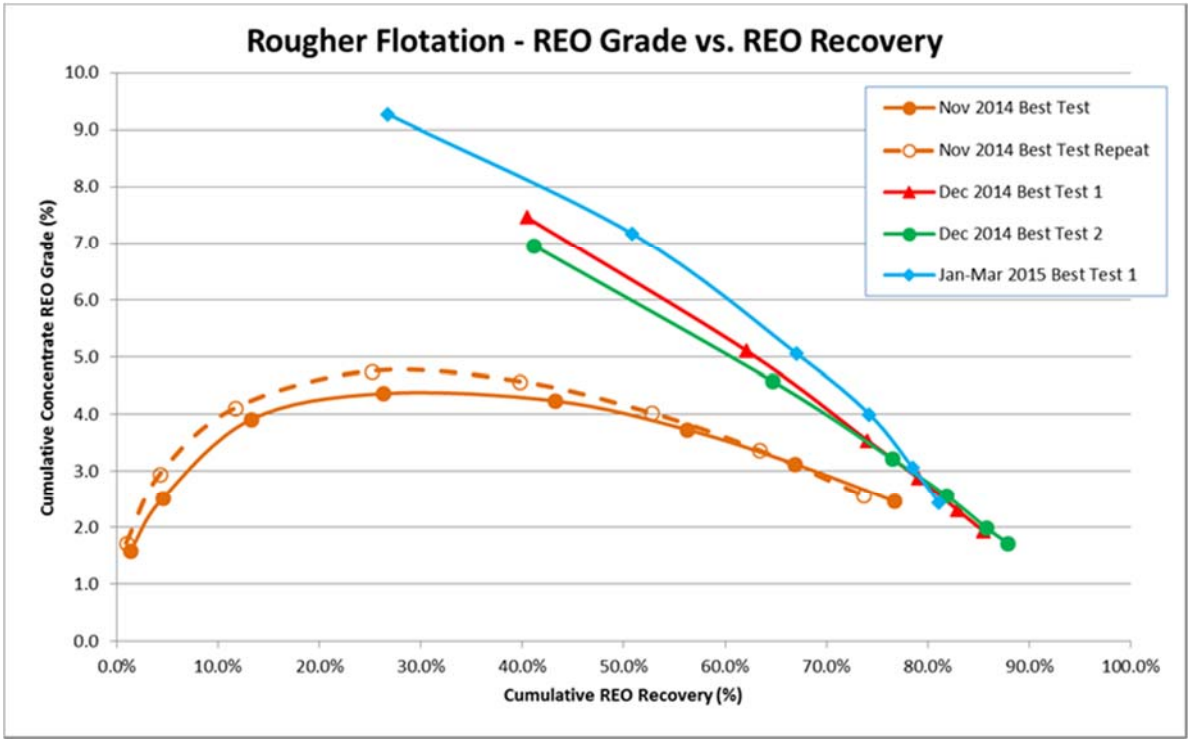
Glossary:
Total Rare Earth Oxides (TREO) = Ce, La, Pr, Nd, Gd, Eu, Sm, Dy, Er, Ho, Lu, Tb, Tm, Yb, Y;
Heavy Rare Earth Elements HREE's and Heavy Rare Earth Oxides (HREO) = Dy, Er, Ho, Lu, Tb, Tm, Yb, Y;
Magnetic End Use Rare Earths (MEUREO) classified by Spectrum as Dy, TB, Nd, Pr, Sm and Gd;
Medium Rare Earth Elements MREE's = Gd, Eu, Sm;
Light Rare Earths LREE's Ce, La, Pr, Nd.

- Upgrade ratios of ~6 times feed REO grade were achieved at ~52% REO recovery.
- For initial concentrates there continues to be a bias of Heavy Rare Earths (Tb to Y) recovery being greater than Light Rare Earths (Ce to Nd) or Mid Rare Earths (Sm to Gd).

Future work consists of generating concentrate for hydrometallurgical bench scale testwork.

Test #	Grade	Recovery						REO
	%REO	%Mass	%P2O5	%SiO2	%Fe2O3	%Al2O3	%TREO	Upgrade
Nov 2014 Best	2.46	29.4%	72.9%	24.5%	37.4%	30.3%	76.7%	2.6
Nov 2014 Repeat	2.56	25.0%	70.8%	20.3%	33.7%	25.5%	73.6%	2.9
Average Dec 2014	1.95	40.4%	72.0%	33.9%	43.0%	46.8%	84.6%	2.1
-Mar 2015	5.84	8.8%	46.7%	5.2%	9.1%	10.5%	52.2%	5.9

The graph below shows the cumulative REO recovery against REO grade for the previous best 2 tests (Nov 2014) against the better performing tests (Dec 2014 to Mar 2015). It can be seen that higher REO grade products have been produced earlier which provides some potential for high REO grade products (concentrates 1 and 2) to be removed early in the beneficiation flowsheet/process for downstream processing which would decrease CAPEX and OPEX.



- At 50% recovery, the concentrate grades achieved were approximately:
  - 4% REO in November 2014
  - By the end of March 2015, concentrate grade achieved of 7.2% REO

Hydrometallurgy Testwork

Hydrometallurgical testwork commenced during the quarter on flotation concentrate generated from the Skyfall mineralized material. The concentrate REO grade was 6.24% with the breakdown of individual REO assays as follows:

La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Sc ppm	TREO+Y2O3 %
3123	13698	2236	10881	2938	682	3305	533	3170	594	1601	210	1225	175	295	6.25

The significant gangue element assays for the concentrate are tabled below:

P2O5 %	SiO2 %	Fe2O3 %	Al2O3 %	U3O8 ppm	ThO2 ppm	Ca0 %	LOI1000 %
9.24	31.01	6.07	27.23	239	26	1.84	13.74

At the time of writing, seven leach tests have been completed including:

- Two single stage sulphuric acid leach tests
- One two stage sulphuric acid leach test
- Three sulphuric acid bake and water leach tests
- One caustic crack and hydrochloric acid dissolution test

The results are tabled below:

Test No.	Test ID	Reagent Consumption kg/t	Reagent	P diss'n	Si diss'n	Fe diss'n	Al diss'n	Y diss'n	U diss'n	Th diss'n	Ca diss'n	Sc diss'n	Total REE+Y diss'n	HREE+Y diss'n
1	H_2SO_4 Leach 2	1159	H2SO4	30.3%	0.1%	76.2%	43.1%	41.6%	43.7%	16.9%	19.7%	49.9%	27.9%	40.0%
2	H_2SO_4 Leach 3	265	H2SO4	8.8%	1.1%	68.1%	13.6%	15.1%	24.6%	0.0%	11.6%	28.8%	8.8%	14.3%
3	H_2SO_4 Leach 1 + 4 (2 Stage)	*1698*	*H2SO4*	98.6%	0.1%	92.7%	96.8%	95.1%	95.7%	73.7%	26.2%	97.8%	91.4%	94.4%
4	Acid Bake Water Leach 1	845	H2SO4	1.7%	0.2%	5.4%	8.5%	75.1%	64.4%	0.0%	64.2%	0.0%	75.3%	74.1%
5	Acid Bake Water Leach 2	880	H2SO4	1.3%	0.2%	4.2%	5.7%	78.1%	66.7%	0.0%	85.1%	0.0%	83.6%	78.4%
6	Acid Bake Water Leach 3	970	H2SO4	1.7%	0.1%	4.2%	5.4%	72.7%	62.9%	0.0%	91.6%	2.5%	82.4%	73.6%
7	Caustic Crack & HCl Redissolution	399	NaOH / HCl	21.5%	0.6%	0.0%	6.5%	0.1%	29.0%	0.0%	0.0%	0.2%	0.0%	0.1%

The following points are noteworthy:

- Test 3 achieved the highest dissolution (recovery to solution) using a two stage acid leach in 50% acid for each stage. A total rare earth element (TREE) dissolution of 91% was achieved. Sulphuric acid consumption was high at 1.7 tonnes of acid per tonne of concentrate, most likely due to the high dissolution of the associated gangue minerals, particularly those containing aluminium and phosphorous. There is a slight positive bias towards leaching of the heavy rare earths (HREE) with a 94% recovery of these elements achieved.
- Tests 1 and 2 were single leach tests using 30% and 10% sulphuric acid strengths. The low TREE dissolution is most likely a result of poor kinetics for Test 1 and insufficient acid for the demand in Test 2.
- Acid baking followed by water leaching is showing promise with a best TREE dissolution of 84% at reduced acid consumptions of 0.88 t/tonne of concentrate for Test 5. HREE dissolution is slightly lower, at 78%. This route has very good selectivity against unwanted gangue elements, especially thorium, aluminium and iron.
- Caustic cracking followed by HCl leaching gave lower than expected dissolution results, with only 54% TREE dissolution. It is suspected that insufficient HCl was available in the dissolution stage, so this test will be repeated using stronger HCl solution.

Moving forward, the intent is to undertake more tests on each of the three routes in order to determine the preferred leach route. The determination will be made taking into account the following parameters of each route:

- Overall TREE recovery
- Combined value (basket price) of the TREE recovery
- Reagent cost (reagents are typically the largest operating cost)
- Operability of the flowsheet

It is expected that this will be complete in April allowing the flowsheet to progress to the precipitation, uranium removal and final product production during the next quarter.

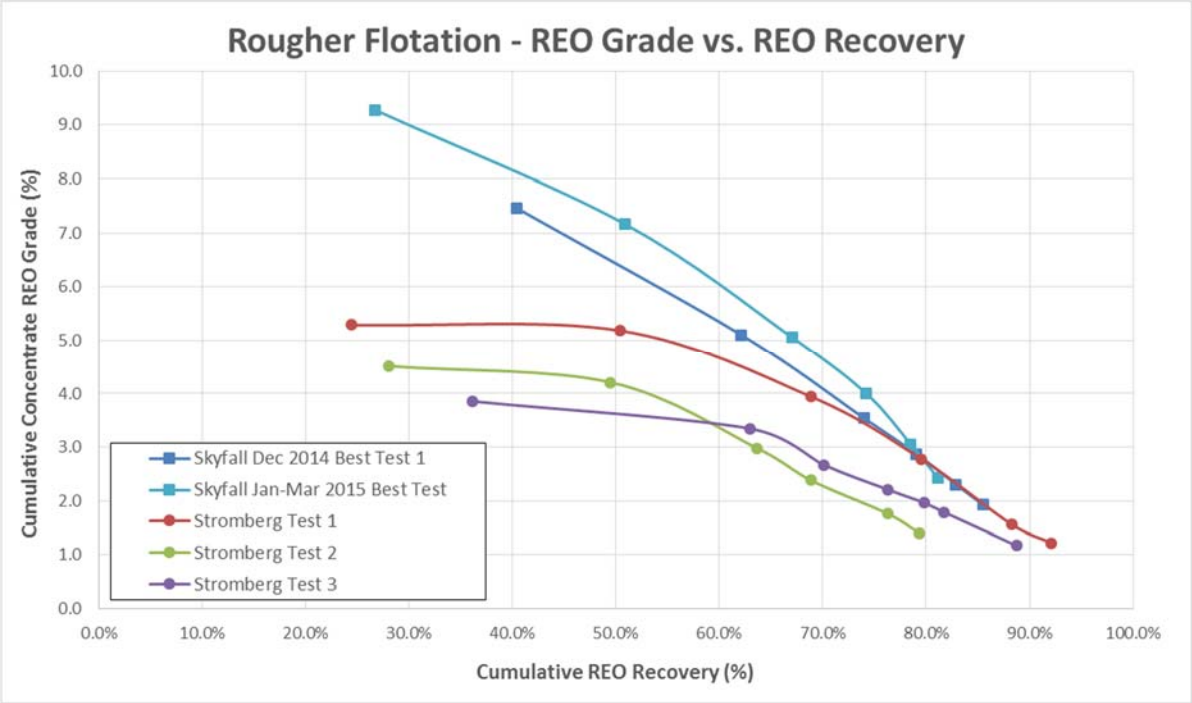
STROMBERG PROJECT:

A summary of the testwork program completed to date is as below.

- Flotation testwork program has been completed. This program consisted of:
  - Rougher flotation (utilizing flotation conditions form Skyfall program);
  - Rougher flotation with regrind and cleaner flotation.

Summary of the findings:

- Flotation concentrate of 4.5-5.0%TREO grade) was produced (from head grade of ~0.6%TREO) through rougher flotation, at low recoveries (see below graph).



- As recovery increased, concentrate upgrade decreased although good REO upgrades were still achieved at ~65%REO recovery (see below table of average of results of 3 tests).

Grade	Concentrate Recovery						REO
%REO	%Mass	%P2O5	%SiO2	%Fe2O3	%Al2O3	%TREO	Upgrade
3.4	12.7	55.8	8.6	15.1	15.8	**65.2**	**5.1**

Future work consists of generating concentrate for hydrometallurgical bench scale testwork.

PLANNED ACTIVITIES: NEXT QUARTER

Activities for the June quarter will include items outlined above, namely:

Skyfall Project:

- generating concentrate for hydrometallurgical bench scale testwork
- determination of preferred leaching route
- development of precipitation, uranium removal and final product flowsheet

Stromberg Project:

- generating concentrate for hydrometallurgical bench scale testwork

Completion of our Scoping Study

CORPORATE

Finance

The 31st March 2015 cash position of the Company was $293k compared with a 31st December 2014 cash position of $474k.

Government Grant

Spectrum was previously awarded a grant of $20,000 through the Northern Territory Government's "bringing forward discovery" initiative and "Drilling Collaborations" program. The balance $10k of this grant was received during the quarter.

Capital Structure

Share Price (SPX): **$0.015;** Issued Shares: **176.7M**; Market Cap: **$2.65M** (as at 23rd April 2015).

Strategic Alliance Progress | Strategic Initiative

The Company is continuing its strategy to attract a rare earth industry partner into Spectrum at either a project or equity level. Ongoing metallurgical and exploration work may be a catalyst to re-invigorate discussions with interested parties.

LAND ACCESS and GENERAL TENEMENT STATUS

Tenement Changes

During the quarter, the following changes to the Company's tenement holdings took place:

- Full relinquishment of EL25397 on 5 February 2015.

Mining Tenements held at the end of the quarter

Tenement	Project Name	Company	Area (km²)	Status	Date of Grant
EL30136	HREE District	Spectrum	125.35	Grant, 2 year extended term	19/12/2014
EL28970	HREE District	Spectrum	126.27	Grant	05/03/2012
EL27151	HREE District	Spectrum	252.25	Grant	08/11/2013
ELA28448	HREE District	Spectrum	703.7	Verbal Consent and PEP Agreement Executed	
ELA29240	HREE District	Spectrum	201.03	Agreement Executed	
ELA29241	HREE District	Spectrum	132.74	Agreement Executed	
EL25229	Quantum REE	Spectrum	36.7	Grant, 2 year extended term	09/11/2006
ELA25221	Litchfield	Spectrum	256.3	Moratorium	
ELA25472	Litchfield	Spectrum	526.9	Application	
EL27154	Calvert	Carpentaria*	32.94	Grant	14/10/2009
ELA25383	McArthur	Carpentaria*	1,662.8	Verbal Consent	
ELA25388	McArthur	Carpentaria*	1,666.7	Verbal Consent	
ELA25390	McArthur	Carpentaria*	1,638.6	Verbal Consent	
ELA25392	McArthur	Carpentaria*	1,429	Verbal Consent	
ELA25394	McArthur	Carpentaria*	714.5	Verbal Consent	
	TOTAL AREA		9,505.78km²		

*Table 1: Spectrum Rare Earths Limited Tenement Holdings.*Carpentaria Minerals Pty Ltd is a 100% owned subsidiary of Spectrum Rare Earths Limited. No tenements are subject to farm in or farm out agreements.*

For further information please contact:

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NON-EXECUTIVE CHAIRMAN
Spectrum Rare Earths Limited
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Glossary:

Total Rare Earth Oxides (TREO) = Ce, La, Pr, Nd, Gd, Eu, Sm, Dy, Er, Ho, Lu, Tb, Tm, Yb, Y;
Magnetic End Use Rare Earths classified by Spectrum as Dy, Tb, Nd, Pr, Sm and Gd;
Heavy Rare Earth Elements HREE's and Heavy Rare Earth Oxides (HREO) = Dy, Er, Ho, Lu, Tb, Tm, Yb, Y;
Medium Rare Earth Elements MREE's = Gd, Eu, Sm;
Light Rare Earths LREE's Ce, La, Pr, Nd.

Spectrum Rare Earths Limited holds approximately 9,500km² of prospective land package across 15 (5 granted, 10 under application) tenements making it a significant ground holder in the Northern Territory of Australia. The business holds multiple consolidated project areas across several key geological and metallogenic terrains, affording it some opportunity to diversify exploration into many

commodities. Spectrum's main focus is its Skyfall Heavy and Magnetic End Use Rare Earth District where it retains approximately 1,500km^2 of tenements. The Rare Earth District is located approximately 4 hours' drive south of Darwin.

The information in this report that relates to Metallurgical Test Work Results based on information compiled and / or reviewed by Gavin Beer who is a Member of The Australasian Institute of Mining and Metallurgy and a Chartered Professional. Gavin Beer is a Consulting Metallurgist with sufficient experience relevant to the activity which he is undertaking to be recognized as competent to compile and report such information. Gavin Beer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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Company Management
Anthony Barton: Non-Executive Chairman
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Leon Charuckyj: Non-Executive Director
Graeme Boden: Company Secretary

JORC Code, 2012 Edition – 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 (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.*	• HQ and NQ Diamond Core Samples – Sampling of core occurred after geological logging and digital core photography. The core was marked up for cutting with nominal 1m sampling intervals or to geological boundaries and in some instances based on readings received from Spectrum's hand held Olympus XRF machine. Minimum sample size was 0.3m and maximum sample size was 1.4m. The core was cut using an automatic core saw. The left hand side of the core was sampled consistently to avoid sample bias. A quarter core duplicate sample was taken every twentieth sample. At the commencement of the diamond hole, samples were taken of open hole PCD samples (similar in quality to RAB samples); usually to no greater than 1m depth. •
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.).*	• Diamond Drilling – HQ Triple Tube in surface weathered material then NQ; hole collared to ~1m with PCD bit. Core was orientated where possible – an attempt was made to orientate despite soft friable ground. The maximum depth drilled was 306mm and the average hole depth (4 holes) was 100mm. Down-hole surveys were taken at the collar and approximately every 10m. •
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• All core was logged according to lithology and regolith weathering profile typically the day after it was drilled. Recovery percentage was recorded and Rock Quality Designation (RQD) measurements taken. Core loss was recorded by the driller, with blocks indicating the core loss total inserted in the core tray in the appropriate place within the sample. In areas of soft ground a combination of triple tube drilling with careful bit selection, mud mix and water pressure control was used to minimise core loss. All sample lengths and core loss was verified by Spectrum staff. Sample bias may have occurred due to clay washing away during coring. •
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 costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Diamond Core Samples – a detailed account of lithology, structure, veining, alteration, mineral occurrences, and geotechnical characteristics were recorded in a tailored logging database (Datashed) for drill core. The logging was qualitative and quantitative and to the nearest 10cm. The core itself was marked up with blue core paint recording metre intervals and red core paint showing where samples would be taken from and to. A digital photograph of each core tray was taken under constant light and position, post marking, for Spectrum's records. The right hand side of each core sample was kept for any future analysis and testing if required. •
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.*	• See notes on sampling of diamond core earlier in this table for details of core cutting and duplicate sampling – one side of the core was sampled consistently to avoid sample bias. A quarter core duplicate sample was taken every twentieth sample. •

Criteria	JORC Code explanation	Commentary
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.*	• Samples are assayed for rare earths generally with ICP Mass Spectrometry and Lithium Meta Borate Fusion Finish to at least 1 ppm detection levels to ensure a fuller and more accurate analysis is obtained. In addition, the samples are assayed for a number of indicator, rare earth associated elements and base metals to at least 0.5 ppm levels (not reported or significant in this announcement) with ICP Mass Spectrometry and ICP Atomic Emission Spectrometry. All samples are assayed for precious metals using Fire Assay Analysis to ppb detection limits (not reported or relevant for this announcement). Samples are assayed by Bureau Veritas in Adelaide. • Total Rare Earth Oxides (TREO's) have been calculated by addition of common oxide values for Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Tm, Yb, Y. REO values have been calculated from rare earth element (REE) ppm grades after analysis by lithium-metaborate fusion and ICPMS, where possible, or by HF/multi acid digest and ICPMS. The total REO is calculated as the sum of all REE as REE_2O_3, with the exception of Pr and Tb; which are calculated as Pr_6O_{11} and Tb_4O_7 respectively, in accordance with geochemical conventions. • Appropriately graded mineralised and geochemical standards are run by the laboratory on all elements at 5% of a sample batch. • Blanks are run on sample batches by the laboratory randomly at a rate of approximately 5%. • A nominal one in twenty (5%) of all samples are analysed in duplicate. Samples returning anomalous results will be re-assayed by techniques considered appropriate for the level of analysis encountered. •
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.*	• All data is manually checked for accuracy and error, verified and then loaded into Spectrum's Datashed Database by the Database Administrator. • Quality Control data for drilling (standards) are checked against previous sample runs to ensure within reasonable limits and no drift has occurred with time. • Where significant variation is noted between assay methods no conclusions have been made in this announcement. •
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill locations located with a standard GPS. • Grid GDA 94 Zone 52 • Relative Topographic control provided by detailed 3D aerial photography and Digital Elevation Model in October 2013; **Accuracy** — **30cm pixel resolution** — **15cm pixel resolution** Horizontal (Ortho) — +/- 0.60m RMSE — +/-0.30m RMSE Horizontal (Point) — +/- 0.30m RMSE — +/-0.15m RMSE Vertical (With Ground Control) — +/- 0.25m (68% c.i., 1σ); +/- 0.50m (95% c.i., 2σ); suitable for 1m contours with ground control.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Diamond holes are spaced nominally at 36m – this is considered sufficient for interpretation between holes at a cross sectional scale. Work at Spectrum's nearby Stromberg deposit (similar geology) has shown that this drill spacing is adequate to rely on continuity between drill holes.

Criteria	JORC Code explanation	Commentary
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.*	• Diamond Drilling – Drill holes were planned to intersect through and not along modelled mineralisation. All holes drilled were kept on the same line of section to provide reliability to information retrieved. Drilling was angled (60 degrees dip) to target dipping structures at the best possible angle to determine true thickness. • The sampling lines and grids run across and not parallel to the interpreted geological structures and target mineral zones. •
Sample security	• *The measures taken to ensure sample security.*	• All samples stored on Spectrum's premises until transport to the Sample Preparation Laboratory in Darwin.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audit or review taken. Samples taken in the same manner as nearby rare earth prospects in the same geological and weathering terrain where this exploration technique has successfully identified mineralisation. • Drill holes – These are diamond holes 5-8 or a total of 8 holes and first 13 short RAB hammer holes drilled at this prospect. •

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.*	• All drilling is taken on EL27151 a granted tenement in year one of its Standard six year and extendable tenure. EL27151 is 100% owned by Spectrum Rare Earths Limited. • Spectrum Rare Earths has executed an Aboriginal Land Rights Exploration and Mining Deed with Traditional Aboriginal Land Owners through the Northern Land Council. This Deed secures the right to work, explore, develop and mine minerals on this lease. • Spectrum has an approved work program for 2014 with the Traditional Owners and Land Council. This work program includes drilling and trial pitting activities.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Not applicable. Spectrum is the first known company to explore for Rare Earths at this location.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Rare Earth; Primary (hydrothermal), Secondary (Placer and Weathering) mineralisation targets.
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.*	• All results and diagrams have been previously reported in ASX announcements. • New diamond drill hole details are presented in Tables 1 and 2 of this announcement.

Criteria	JORC Code explanation	Commentary
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.*	• Rare Earth rock chip and Trial Pit sample results are generally reported as significant above a mineralised envelope cut off of 0.05%TREO or 500ppm TREO. Rare Earth soil sample results are reported as significant above a 200-250ppm TREE level. Rare Earth diamond drill hole, trial pit and RAB drill hole results are reported as significant above a 0.1%TREO cut off. These cut offs have been used successfully to define mineralised envelopes from drilling at the nearby (12km away) Spectrum owned Stromberg Heavy Rare Earth Prospect. Mineralised zones are modelled from drilling and trial pit intersects using a 500ppm or 0.05% TREO cut off.
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').*	• Trial pitting and drilling has been designed and implemented to intersect the mineralisation at the maximum possible angle so as to define intersects as close as possible to true width.
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.*	• Included in body of text in this report. • Included in ASX announcements dated 23 June 2014 and 1 September 2014.
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.*	• All results noted have been reported in previous ASX announcements in a more comprehensive manner..
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.*	• Potentially deleterious elements include Thorium and Uranium. Uranium is also a potential payable metal. Average grades returned from trial pits and drill holes have been discussed in previous announcements.
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.*	• Metallurgical (beneficiation and leaching) and mineralogical testing on diamond core and trial pit samples.

Rule 5.3

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/01, 1/6/10, 17/12/10

Name of entity

SPECTRUM RARE EARTHS LIMITED

ABN	Quarter ended ("current quarter")
94 115 770 226	**31st MARCH 2015**

Consolidated statement of cash flows

	Cash flows related to operating activities	Current quarter $A'000	Year to date (9 mths) $A'000
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for:		
	(a) exploration & evaluation	(179)	(787)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(17)	(599)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	2	9
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes (paid) / R&D credit received	-	173
1.7	Other	13	31
	Net Operating Cash Flows	(181)	(1,173)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
	(a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	(8)
1.9	Proceeds from sale of:		
	(a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	73
1.10	Loans to other entities	-	-
1.12	Other – tenement security bonds	-	-
	Net investing cash flows	-	65
1.13	Total operating and investing cash flows (carried forward)	(181)	(1,108)

+ See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(181)	(1,108)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	800
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other - Costs associated with capital raising	-	(31)
	Net financing cash flows	-	769
	Net increase (decrease) in cash held	**(181)**	**(339)**
1.20	Cash at beginning of quarter/year to date	474	632
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	**Cash at end of quarter**	**293**	**293**

Payments to directors of the entity and associates of the directors
Payments to related entities of the entity and associates of the related entities

		Current quarter $A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	-
1.24	Aggregate amount of loans to the parties included in item 1.10	-
1.25	Explanation necessary for an understanding of the transactions	
	All payments to Directors and Associates are on normal commercial terms	

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

N/A

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

N/A

Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available $A'000	Amount used $A'000
3.1	Loan facilities	-	-
3.2	Credit standby arrangements	-	-

Estimated cash outflows for next quarter

		$A'000
4.1	Exploration and evaluation	100
4.2	Development	-
4.3	Production	-
4.4	Administration	50
	Total	**150**

+ See chapter 19 for defined terms.

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.		Current quarter $A'000	Previous quarter $A'000
5.1	Cash on hand and at bank	293	474
5.2	Deposits at call	-	-
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	293	474

Changes in interests in mining tenements

		Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	EL25397	Full Relinquishment (05/02/15)	100%	0%
6.2	Interests in mining tenements acquired or increased				

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	**Preference** +**securities** *(description)*	0	0	n/a	n/a
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	0	0	n/a	n/a
7.3	+**Ordinary securities Total Issued and Quoted** Issued, but not quoted (subject to ASX escrow)	176,717,198	**176,717,198**	n/a	Fully Paid
7.4	Changes during quarter (a) Increases through issues/exercised options (b) Decreases through returns of capital, buy-backs	0	0	n/a	n/a
7.5	+**Convertible debt securities** (*description)*	0	0	n/a	n/a

+ See chapter 19 for defined terms.

7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	0	0	n/a	n/a
7.7	**Options**	*Options* 0	*Listed Options* 0	*Exercise Price* n/a	*Expiry Date* n/a
7.8	Issued during quarter	0	0	n/a	n/a
7.9	Exercised during quarter	0	0	n/a	n/a
7.10	Expired during quarter	0	0	n/a	n/a
7.11	**Debentures** *(totals only)*	0	0		
7.12	**Unsecured notes** *(totals only)*	0	0		

Compliance statement

1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).

2 This statement does give a true and fair view of the matters disclosed.

Sign here: .....……. Date: 29th April 2015
Company Secretary

Print name: Graeme Boden

Notes

1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.

3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.

4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.

5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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+ See chapter 19 for defined terms.