

## ANNOUNCEMENT

21 AUGUST 2023

### SYBELLA PROJECT

#### Drill Assays Confirm Exciting New Rare Earth Oxide Discovery

Red Metal has received the assay results from the proof-of-concept drilling of the unique rare earth oxide (REO) enriched granite intrusion on the Sybella project located just 20 kilometres southwest of Mt Isa in Northwest Queensland.

Assays from 19 percussion holes drilled across the granite highlight the grade and substantial widths of this exciting new REO discovery with many holes starting and ending in REO mineralisation.

Red Metal believe the results suggest that the granite intrusion has scope to host a vast tonnage of near surface REO mineralisation that should be recoverable by the application of a weak acid solution.

REO assays on the *Boundary Fence* traverse include:

**SBRC018 - 114 metres at 1,723 ppm TREO+Y with 336 ppm NdPr Oxide from 6 metres to EOH.**

**SBRC017 - 120 metres at 1,710 ppm TREO+Y with 335 ppm NdPr Oxide from surface to EOH.**

**SBRC016 - 120 metres at 1,724 ppm TREO+Y with 340 ppm NdPr Oxide from surface to EOH.**

**SBRC015 - 120 metres at 1,962 ppm TREO+Y with 336 ppm NdPr Oxide from surface to EOH.**

**SBRC014 - 120 metres at 1,655 ppm TREO+Y with 332 ppm NdPr Oxide from surface to EOH.**

**SBRC011 - 24 metres at 2,028 ppm TREO+Y with 380 ppm NdPr Oxide from 12 metres.**

**SBRC010 - 48 metres at 1,538 ppm TREO+Y with 312 ppm NdPr Oxide from surface.**

**SBRC009 - 66 metres at 1,685 ppm TREO+Y with 340 ppm NdPr Oxide from surface.**

**SBRC008 - 120 metres at 1,774 ppm TREO+Y with 340 ppm NdPr Oxide from surface to EOH.**

**SBRC007 - 108 metres at 1,820 ppm TREO+Y with 354 ppm NdPr Oxide from 12 metres to EOH.**

**SBRC006 - 96 metres at 1,745 ppm TREO+Y with 332 ppm NdPr Oxide from 24 metres to EOH.**

**SBRC005 - 54 metres at 1,592 ppm TREO+Y with 315 ppm NdPr Oxide from 66 metres to EOH.**

Applying a 300 ppm NdPr grade contour to the assay results along this traverse provides evidence for two mineralised zones each of about 1000 metres wide.

Widely spaced holes on the *Donkey Dam* profile, four kilometres north of the Boundary Fence traverse, highlight similar long intercepts of REO mineralisation with hole SBRC003 returning higher grades within a breccia zone. Results include:

**SBRC003 - 48 metres at 4,155 ppm TREO+Y with 798 ppm NdPr Oxide from surface.**

**SBRC002 - 30 metres at 1,781 ppm TREO+Y with 361 ppm NdPr Oxide from 6 metres.**

**SBRC001 - 120 metres at 1,728 ppm TREO+Y with 331 ppm NdPr Oxide from surface to EOH.**

The next exploration step will include bench-scale metallurgical tests and more drill profiles along the 14 kilometre strike of the REO-enriched granite intrusion. This work will seek an effective process for REO extraction and provide a more certain indication of the size and grade potential of this exciting new REO discovery.

Red Metal believe the new Sybella REO discovery is a “world first” and shows scope for vast tonnages of weak-acid soluble REO mineralisation hosted in a low-acid consuming granite rock.

### **Red Metal’s Proof-of-Concept Drill Program**

A proof-of-concept percussion drill program totaling 19 holes for 2,280 metres was recently completed across the REO-enriched granite to verify Red Metal’s new target concept (refer RDM: ASX Release 26 July 2023, Figure 1, Table 2). Each hole was drilled to 120 metres depth.

A total of 15 holes were drilled along the Boundary Fence traverse (Figure 1) to test the grade and extent of REO mineralisation across the total width of the granite. In addition, four widely spaced holes were drilled along the Donkey Dam traverse located about four kilometres further north (Figure 1).

Assays from the drilling reveal multiple, long intercepts of total rare earth oxide plus yttrium oxide (TREO+Y) mineralisation hosted within the granite intrusion with many starting at surface below a thin veneer of sand and ending in mineralisation at 120 metres (Figure 2, Table 1).

Results show consistent grades of TREO+Y and neodymium plus praseodymium (NdPr) oxide down-hole and over wide intervals highlighting the vast tonnage potential of this new REO discovery (Figure 2, Table 1, Appendix 2).

Applying a 300 ppm NdPr grade contour to assay results along the Boundary Fence traverse define two mineralised zones each about 1000 metres wide that remain open at depth and along strike north and south (Figures 1 to 3).

The four wide spaced holes on the Donkey Dam traverse highlight similar long intercepts of REO mineralisation within the granite with hole SBRC003 returning higher grades within a breccia zone (Figure 2, Table 1).

### **Sybella Target Concept**

Red Metal’s new Sybella project, comprising EPM 28001 and EPM 28003, follows in-house research that led to the identification of a unique REO-enriched granite exposed at surface over a 14 kilometre by 2 kilometre area and located just 20 kilometres southwest from the city of Mount Isa in Northwest Queensland (Figure 3).

Red Metal are testing the potential for a new granite-hosted, weak-acid soluble REO deposit style that can be broadly compared with other granite-hosted, weak-acid soluble mineral deposit types such as the giant Rossing and Husab soluble uranium deposits in Namibia and the Morenci soluble copper deposits in the USA.

These large tonnage deposit types are characterised by low-grades of soluble ore minerals hosted in low-acid consuming granite rock that can be bulk mined and then extracted using simple coarse grind and low-acid leach processing usually with very efficient economies of scale.

### **Rare Earth Minerals**

Most importantly, a preliminary mineralogical study, undertaken for Red Metal by ANSTO Minerals (ANSTO), shows most of the rare earth elements within a typical fresh surface sample of the granite occur within the highly soluble fluoro-carbonate minerals bastnasite and synchysite (Figure 4).

### **Preliminary Leach Tests on Surface Sample**

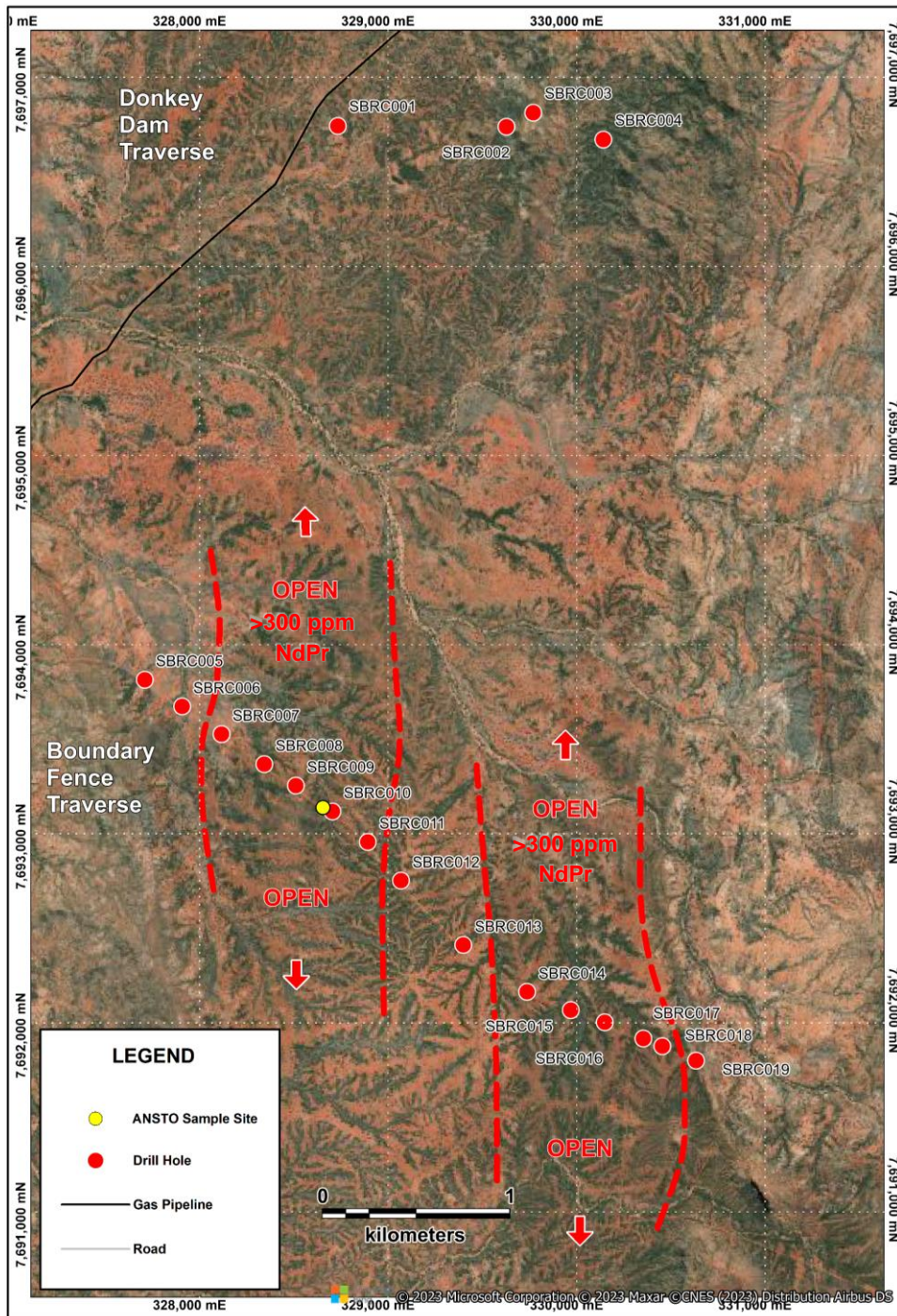
Although further detailed metallurgical studies are required, a single leach test by ANSTO on a finely pulverized surface sample of the fresh granite (Figure 1) showed 89% of the light REO dissolved from the granite rock within a short time period using a mild concentration of sulphuric acid (40kg/t at 70 degrees centigrade for 6 hours, Figure 5). The preliminary ANSTO work also shows a REO product could be rapidly precipitated from the leach solution using oxalate precipitant and the host granite and leach solution have favorably low thorium and low uranium contents.

**Future Work**

Results suggest that the Sybella granite intrusion has scope to host a vast tonnage of near surface REO mineralisation that should be recoverable by the application of a weak acid solution.

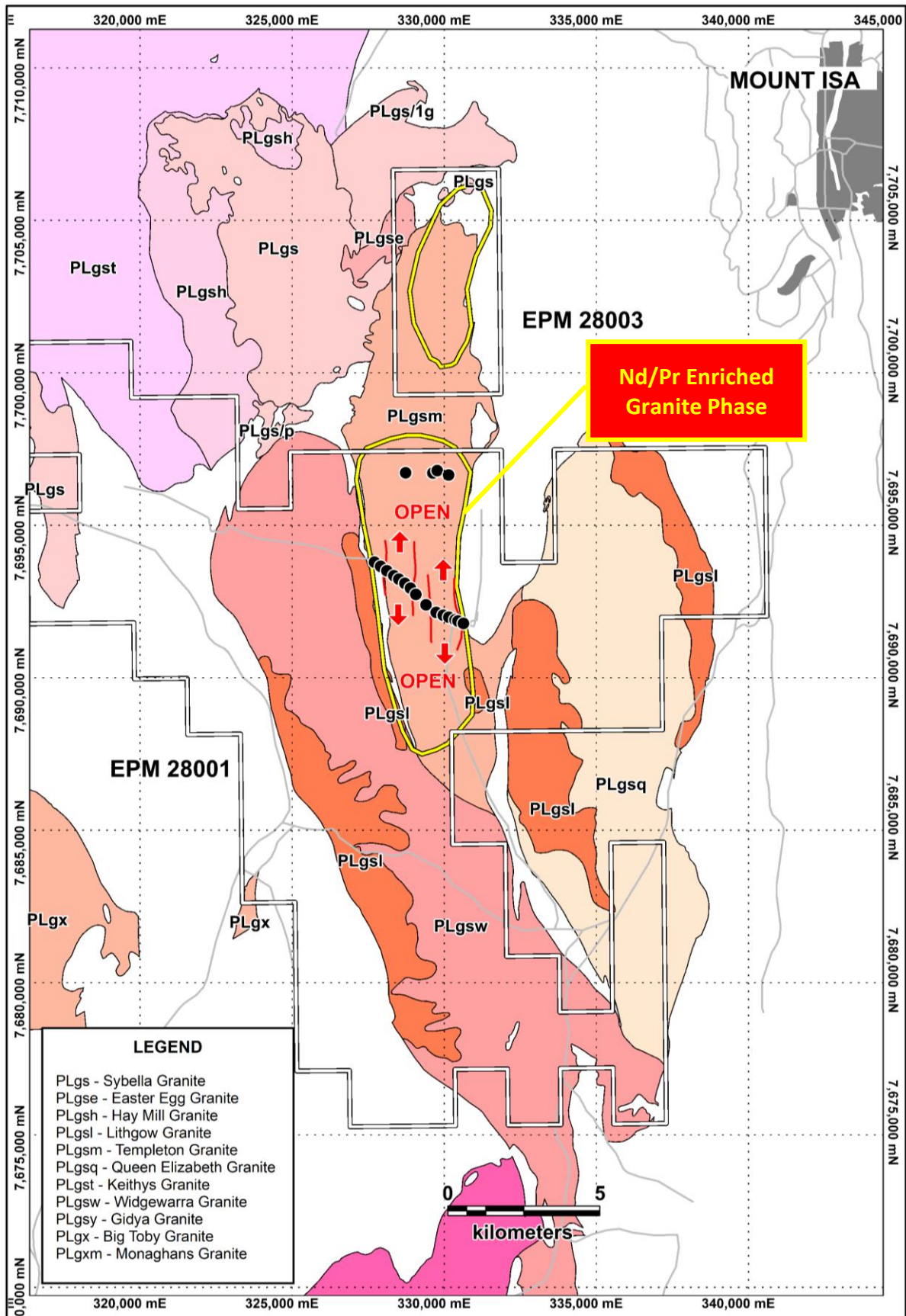
The next exploration step will include bench-scale metallurgical tests and more drill profiles along the 14 kilometre strike of the REO-enriched granite intrusion. This work will seek an effective process for REO extraction and provide a more certain indication of the size and grade potential of this exciting new REO discovery.

Potential for alternative funding support utilising critical metal grants from state and federal governments are also being evaluated.

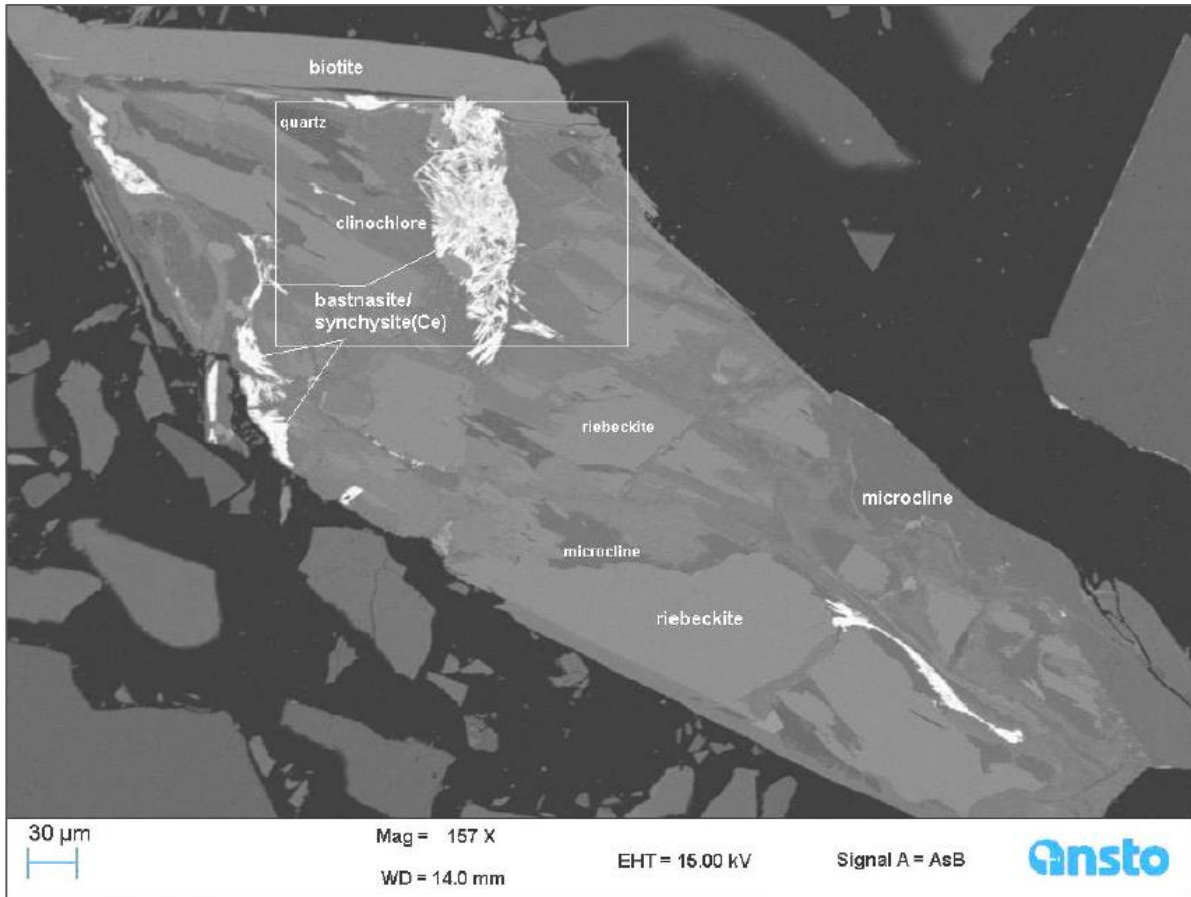


[Figure 1] Sybella Project: Recent Red Metal drill hole locations on satellite image highlighting wide zones of >300 ppm NdPr oxide. ANSTO surface sample site used for mineralogical and preliminary leach test highlighted as yellow circle.

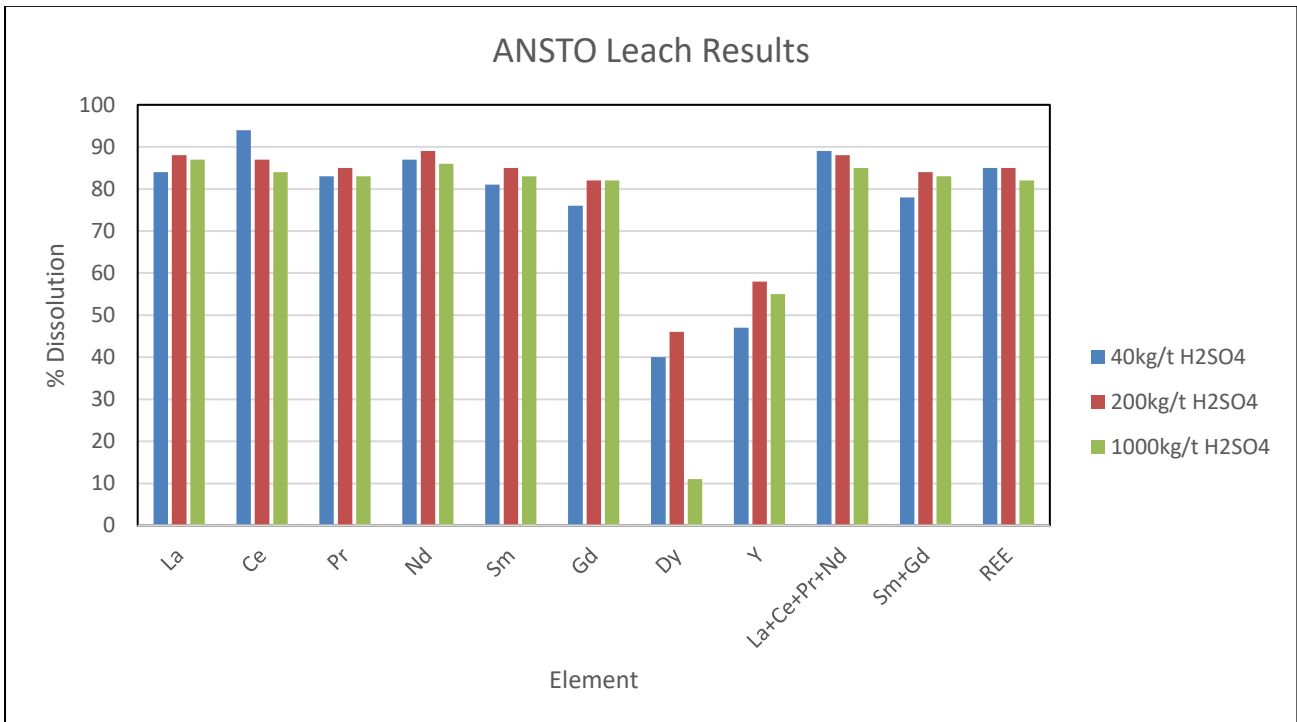




[Figure 3] Sybella Project: Red Metal 2023 percussion drill hole locations on a regional geological map highlighting multiple phases of granite intrusions. Note the interpreted extent of the REO enriched granite (yellow line) and wide zones of >300ppm NdPr (red).



[Figure 4] Sybella ANSTO Mineralogical Study: BSE micrograph showing bastnasite-synchysite(Ce) within a composite fragment showing bastnasite and synchysite(Ce) intergrown with hematite, thorite, rutile/anatase and biotite.



[Figure 5] Sybella ANSTO Preliminary Leach Results: Percentage dissolution of rare earth elements from preliminary leach tests on a fine pulverized sample of surface granite using variety of sulphuric acid strengths. Results highlight the acid soluble character of the rare earth elements in the granite and strong dissolution of light rare earth elements and partial dissolution of the dysprosium and yttrium.

[Table 1] Sybella Project: Summary of REO assay results applying a 300 ppm NdPr cut to the data (refer to Appendix 2 for TREO assays)

Hole ID	From	To	Intercept	TREO+Y ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	NdPr ppm
SBRC018	6	120 (EOH)	114	1,723	74	262	179	32	336
SBRC017	0	120 (EOH)	120	1,710	74	261	168	30	335
SBRC016	0	120 (EOH)	120	1,724	76	264	164	29	340
SBRC015	0	120 (EOH)	120	1,962	75	261	147	27	336
SBRC014	0	120 (EOH)	120	1,655	74	258	126	24	332
SBRC011	12	36	24	2,028	91	292	161	29	383
SBRC010	0	48	48	1,538	70	241	130	24	312
SBRC009	0	66	66	1,685	78	262	126	23	340
SBRC008	0	120 (EOH)	120	1,774	78	261	145	26	340
SBRC007	12	120 (EOH)	108	1,820	81	273	161	28	354
SBRC006	24	120 (EOH)	96	1,745	77	255	166	27	332
SBRC005	66	120 (EOH)	54	1,592	70	240	148	27	311
SBRC003	0	48	48	4,155	177	621	512	82	798
SBRC002	6	36	30	1,781	80	280	138	24	361
SBRC001	0	120 (EOH)	120	1,728	75	256	164	27	331

EOH = to the end of hole

[Table 2] Sybella Project: Red Metal 2023 drill hole collar summary.

HOLE ID	Easting	Northing	RL	Dip	Azim_True	Depth
SBRC001	328733	7696746	416	-60	95.3	120
SBRC002	329627	7696741	430	-60	85	120
SBRC003	329769	7696815	433	-60	242.3	120
SBRC004	330141	7696673	434	-60	151.3	120
SBRC005	327709	7693817	415	-60	95.3	120
SBRC006	327907	7693676	415	-60	95.3	120
SBRC007	328116	7693530	415	-60	95.3	120
SBRC008	328343	7693371	416	-60	95.3	120
SBRC009	328510	7693258	420	-60	95.3	120
SBRC010	328704	7693121	422	-60	95.3	120
SBRC011	328892	7692960	426	-60	95.3	120
SBRC012	329068	7692755	427	-60	95.3	120
SBRC013	329398	7692415	425	-60	95.3	120
SBRC014	329736	7692167	428	-60	95.3	120
SBRC015	329969	7692071	428	-60	95.3	120
SBRC016	330149	7692006	428	-60	95.3	120
SBRC017	330353	7691920	428	-60	95.3	120
SBRC018	330454	7691880	429	-60	95.3	120
SBRC019	330633	7691804	428	-60	95.3	120

This announcement was authorised by the Board of Red Metal. For further information concerning Red Metal's operations and plans for the future please refer to the recently updated web site or contact Rob Rutherford, Managing Director at:

Phone +61 (0)2 9281-1805  
www.redmetal.com.au



Rob Rutherford  
Managing Director



Russell Barwick  
Chairman

### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Robert Rutherford, who is a member of the Australian Institute of Geoscientists (AIG). Mr Rutherford is the Managing Director of the Company. Mr Rutherford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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" (the JORC Code). Mr Rutherford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



**Appendix 1: Table 1 Sybella Project - JORC 2012 sampling techniques and data**

<b>Criteria</b>	<b>JORC 2012 Explanation</b>	<b>Commentary</b>
<b>Sampling Techniques</b>	Nature and quality of sampling	<i>Wide spaced, reverse circulation percussion (RCP) holes designed to test the extent of shallow rare earth mineralisation in granite to about 100m below surface. A total of 19 wide spaced holes were drilled to assess REO grade and mineralogical variation across the granite. The method of drilling is considered to be of an acceptable quality for evaluating the REO mineralisation within the granite and reporting of exploration results.</i>
	Include reference to measures taken to ensure representativity samples and the appropriate calibration of any measurement tools or systems used.	<i>Sampling for geochemical analysis was continuous down the length of each hole with 1 sample collected every metre and composited over six metres for initial assay using a total acid digest.</i>
	Aspects of the determination of mineralisation that are Material to the Public Report.	<i>428 of the six metres composite samples were submitted for analyses. Significant results are summarised in Table 1 of this report and assay results are tabulated in Appendix 2.</i>
<b>Drilling Technique</b>	Drill type (eg 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.).	<i>A track mounted, conventional RCP rig with a face sampling bit was utilised from surface to end of hole.  The RC hole was surveyed using an Axis Champ north seeking gyro.</i>
<b>Drill Sample Recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	<i>Sample recoveries were visually estimated and recorded for each metre. Chip recovery overall was very good with most intervals logged as 100% recovery with local areas reduced to 60%.</i>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<i>Depths are checked against depths marked on the sample bags and rod counts are routinely performed by the drillers.</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>No sample recovery bias is observed due to homogenous distribution of the REO mineralisation in the granite.</i>
<b>Logging</b>	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.	<i>Qualitative codes and descriptions were used to record geological data such as lithology, weathering, hardness prior to sampling.</i>
	Whether logging is qualitative or quantitative in nature.	
	Core photography	<i>Chip trays are photographed.</i>
	The total length and percentage of the relevant intersections logged.	<i>The total lengths of all holes have been geologically logged.</i>
<b>Sub-sampling techniques and sample preparation</b>	If core, whether cut or sawn and whether quarter, half or all core taken.	<i>No core was collected.</i>
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<i>All six metre composite samples were prepared with standard crush/split/pulverisation techniques at ALS Mt Isa (methods SPL-21 / PUL-23).</i>
	Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.	<i>Once results from the 6 metres composites have been received, selected assaying of individual metre samples will be analysed to check representativity of the composite sampling method.</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>A total of 24 field duplicate samples were inserted through the assay batch at a rate of about 1 in 24 samples. The duplicates showed very good repeatability.</i>
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<i>6 metre composite sampling is considered appropriate for REE minerals &lt;2mm grainsize evenly distributed throughout the granite. Check sampling using the one metre samples is planned.</i>

Criteria	JORC 2012 Explanation	Commentary																																													
<b>Quality of assay data and laboratory tests</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<i>All 428 samples were sent to ALS for analysis of REE's and other traces Ba Ce Cr Cs Dy Er Eu Ga Gd Hf Ho La Lu Nb Nd Pr Rb Sm Sn Sr Ta Tb Th Tm U V W Y Yb Zr using Method ME-MS81d that utilises lithium borate fusion prior to acid dissolution and ICP-MS analysis. This method provides the most quantitative analytical approach for a broad suite of trace elements including REE. Whole rock elements from an ICP-AES analysis on the same fusion were also added.</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>No geophysical tools were used to report element concentrations at Sybella.</i>																																													
	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.	<i>A total of 8 blanks and 16 certified reference standards were inserted evenly throughout the assay batch. In addition to this, ALS has also included standard and blank materials to monitor the performance of the laboratory. The standards and blanks used displayed acceptable levels of accuracy and precision.</i>																																													
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel.	<i>Result reviewed by Exploration Manager and the Managing Director</i>																																													
	The use of twinned holes.	<i>No holes have been twinned</i>																																													
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<i>Primary data is stored both in its source electronic form, and, where applicable, on paper. Assay data is retained in both the original certificate (.pdf) form, where available, and the text files received from the laboratory. Primary data was entered in the field into a portable logging device using standard drop-down codes. At this early stage, text data files are exported and stored in an Excel/Access database. MapInfo software is used to check and validate drill-hole data.</i>																																													
	Discuss any adjustment to assay data.	<p><i>Rare earth oxides use the following conversions. TREO+Y equals the sum of the oxide values for the rare earth elements outlined below. NdPr is the sum of the oxide values for neodymium and praseodymium.</i></p> <table border="1"> <thead> <tr> <th>Element</th> <th>Element Oxide</th> <th>Factor</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>CeO<sub>2</sub></td><td>1.2284</td></tr> <tr><td>Dy</td><td>Dy<sub>2</sub>O<sub>3</sub></td><td>1.1477</td></tr> <tr><td>Er</td><td>Er<sub>2</sub>O<sub>3</sub></td><td>1.1579</td></tr> <tr><td>Eu</td><td>Eu<sub>2</sub>O<sub>3</sub></td><td>1.1579</td></tr> <tr><td>Gd</td><td>Gd<sub>2</sub>O<sub>3</sub></td><td>1.1526</td></tr> <tr><td>Ho</td><td>Ho<sub>2</sub>O<sub>3</sub></td><td>1.1455</td></tr> <tr><td>La</td><td>La<sub>2</sub>O<sub>3</sub></td><td>1.1728</td></tr> <tr><td>Lu</td><td>Lu<sub>2</sub>O<sub>3</sub></td><td>1.1371</td></tr> <tr><td>Nd</td><td>Nd<sub>2</sub>O<sub>3</sub></td><td>1.1664</td></tr> <tr><td>Pr</td><td>Pr<sub>6</sub>O<sub>11</sub></td><td>1.2082</td></tr> <tr><td>Tb</td><td>Tb<sub>4</sub>O<sub>7</sub></td><td>1.1762</td></tr> <tr><td>Tm</td><td>Tm<sub>2</sub>O<sub>3</sub></td><td>1.1421</td></tr> <tr><td>Y</td><td>Y<sub>2</sub>O<sub>3</sub></td><td>1.2699</td></tr> <tr><td>Yb</td><td>Yb<sub>2</sub>O<sub>3</sub></td><td>1.1387</td></tr> </tbody> </table>	Element	Element Oxide	Factor	Ce	CeO <sub>2</sub>	1.2284	Dy	Dy <sub>2</sub> O <sub>3</sub>	1.1477	Er	Er <sub>2</sub> O <sub>3</sub>	1.1579	Eu	Eu <sub>2</sub> O <sub>3</sub>	1.1579	Gd	Gd <sub>2</sub> O <sub>3</sub>	1.1526	Ho	Ho <sub>2</sub> O <sub>3</sub>	1.1455	La	La <sub>2</sub> O <sub>3</sub>	1.1728	Lu	Lu <sub>2</sub> O <sub>3</sub>	1.1371	Nd	Nd <sub>2</sub> O <sub>3</sub>	1.1664	Pr	Pr <sub>6</sub> O <sub>11</sub>	1.2082	Tb	Tb <sub>4</sub> O <sub>7</sub>	1.1762	Tm	Tm <sub>2</sub> O <sub>3</sub>	1.1421	Y	Y <sub>2</sub> O <sub>3</sub>	1.2699	Yb	Yb <sub>2</sub> O <sub>3</sub>	1.1387
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<b>Location of data points</b>	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>The collar positions were surveyed by Handheld GPS using GDA94, Zone54 datum. GPS locations are accurate to about 3m.</i>																																													
	Specification of the grid system used.	<i>GDA94_Zone54 datum.</i>																																													
	Quality and adequacy of topographic control.	<i>Topographic relief has been extracted using the ELVIS digital terrain information at Geoscience Australia.</i>																																													
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results.	<i>A total of 19 holes were drilled across the granite to assess REO grade and mineralogical variation and depth extent.</i>																																													

Criteria	JORC 2012 Explanation	Commentary
	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>The drill pierce point spacing is not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation</i>
	Whether sample compositing has been applied.	<i>RC chip bags were spear sampled every metre and composited every 6 metres for the initial REE analysis. Two separate cyclone split samples were collected for each metre and stored on site for subsequent use and analysis.</i>
<b>Orientation of data in relation to geological structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	<i>The granite displays a deformation foliation that varies from steep west dipping to sub-vertical. Where access permitted, the drilling was oriented 60 degrees to the east across the dominant fabric.</i>
	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.	<i>Insufficient data to determine bias at this point.</i>
<b>Sample security</b>	The measures taken to ensure sample security.	<i>Chips were logged and sampled in the field with chip tray records and two split one metre samples collected and stored at Red Metal's Cloncurry base for future reference. 6 metres composite samples were transported directly to ALS Mt Isa for preparation and analysis.</i>
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	<i>No external audits have been undertaken at this early stage.</i>

### Appendix 1: Table 2 Sybella Project - JORC 2012 reporting of exploration results

Criteria	JORC 2012 Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	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.	<i>The Sybella drilling is located within EPM 28001 situated in the Mount Isa region of north-west Queensland. EPM 28001 is owned 100% by Red Metal Limited. A landholder conduct and compensation agreement has been established with the pastoral lease holder at May Down and Ardmere Stations. An ancillary exploration access agreement has been established with the Kalkadoon native title party.</i>
	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.	<i>The tenement is in good standing.</i>
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	<i>No previous drilling by other parties has been directed towards REE, however the granite of interest was regularly drilled and sampled as part of a regional seismic traverse by Geoscience Australia in 1994 (line L138_94MTI_01). End of hole assays from this drill traverse provide regularly spaced REE analyses across the granite, highlighting its grade in fresh rock (refer RDM: ASX Release 26 July 2023). A total of 16 shallow holes intersected the targeted granite with many holes ending in greater than 300ppm neodymium plus praseodymium (NdPr) oxide.</i>
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<i>Red Metal's experienced exploration team speculate the potential for a new granite-hosted, weak-acid soluble REO deposit style that can be broadly compared with other granite-hosted, weak-acid soluble mineral deposit types such as the giant Rossing and Husab soluble uranium deposits or the Morenci soluble copper deposits. These large tonnage deposit types are characterised by low-grades of soluble ore minerals hosted in low-acid consuming granite rock and can be bulk mined and then extracted using simple coarse grind and low-acid leach processing.</i>
<b>Drill hole Information</b>	A summary of all information material to the understanding of the exploration results including a tabulation of survey information for all Material drill holes:	<i>Refer to Figures 1 to 3, Tables 1 and Table 2 in this announcement for a summary of Red Metal's 2023 drill hole collar data.</i>

Criteria	JORC 2012 Explanation	Commentary
<b>Data aggregation methods</b>	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.	<i>No data aggregation methods have been applied</i>
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	<i>No metal equivalent values have been applied</i>
<b>Relationship between mineralisation widths and intercept lengths</b>	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').	<i>At this stage of exploration insufficient data exists to confidently estimate true widths.</i>
<b>Diagrams</b>	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.	<i>Refer Figures 1 to 3, Table 1 and Table 2 to this announcement.</i>
<b>Balanced reporting</b>	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.	<i>See text to this announcement</i>
<b>Other substantive exploration data</b>	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.	<p><i>A preliminary mineralogical study undertaken for Red Metal by ANSTO Minerals (ANSTO), show most of the rare earth elements within a typical fresh surface sample of the granite occur within the highly soluble fluoro-carbonate minerals bastnasite and synchysite (Figure 4).</i></p> <p><i>Although subject to further detailed metallurgical studies, a single leach test by ANSTO on a finely pulverized surface sample of the fresh granite show 89% of the light rare earth oxide (REO) can be dissolved from the granite rock within a short time period using a mild concentration of sulphuric acid (40kg/tonne at 70 degrees for 6 hours, Figure 5). The preliminary ANSTO work also show a REO product can be rapidly precipitated from the leach solution using oxalate precipitant and the host granite and leach solution have low thorium and low uranium contents.</i></p>
<b>Further work</b>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	<i>The next exploration step will include bench-scale metallurgical tests and more drill profiles along the 14 kilometre strike of the REO-enriched granite intrusion. This work will seek an effective process for REO extraction and provide a more certain indication of the size and grade potential of this exciting new REO discovery.</i>

**Appendix 2: Sybella Project Rare Earth Oxide (REO) Assay Data.**

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC001	0	6	6 m Composite	RM220718	738	26.1	13.44	4.50	30.54	4.82	374	1.75	262	76	40.9	4.60	1.82	141.6	11.44
SBRC001	6	12	6 m Composite	RM220719	690	24.2	13.49	3.87	27.66	4.65	337	1.76	239	72	37.7	4.20	1.94	140.3	11.90
SBRC001	12	18	6 m Composite	RM220720	704	24.6	13.72	3.68	27.89	4.67	353	1.71	245	72	39.4	4.26	1.85	138.4	11.36
SBRC001	18	24	6 m Composite	RM220721	770	28.2	15.09	4.13	32.04	5.26	379	1.81	272	80	44.1	4.85	2.03	160.0	12.98
SBRC001	24	30	6 m Composite	RM220722	716	25.9	14.01	4.04	29.97	4.82	354	1.66	258	75	40.7	4.58	1.88	147.9	11.96
SBRC001	30	36	6 m Composite	RM220723	741	26.9	14.87	4.05	30.31	5.09	366	1.80	259	76	41.6	4.73	2.06	154.3	12.64
SBRC001	36	42	6 m Composite	RM220724	887	30.6	16.70	4.09	34.69	5.74	439	2.09	306	90	46.8	5.25	2.22	175.9	14.86
SBRC001	42	48	6 m Composite	RM220726	732	26.4	14.29	4.12	31.24	4.96	357	1.77	261	75	42.0	4.70	1.86	151.1	12.24
SBRC001	48	54	6 m Composite	RM220727	728	27.4	14.47	4.39	31.35	5.17	349	1.80	265	76	42.3	4.76	2.02	155.6	12.41
SBRC001	54	60	6 m Composite	RM220728	790	28.9	16.12	4.59	33.19	5.58	396	2.13	279	81	44.9	4.92	2.26	169.5	14.23
SBRC001	60	66	6 m Composite	RM220729	747	26.1	14.35	4.06	29.97	5.01	368	2.07	257	75	40.5	4.49	1.99	157.5	12.87
SBRC001	66	72	6 m Composite	RM220730	692	25.1	14.64	4.39	28.58	4.91	347	1.77	245	71	38.7	4.38	1.88	151.8	12.64
SBRC001	72	78	6 m Composite	RM220731	739	28.5	16.24	4.12	31.47	5.46	364	2.00	262	76	42.2	4.83	2.14	170.2	14.29
SBRC001	78	84	6 m Composite	RM220732	688	25.6	14.35	3.82	28.58	5.04	346	1.81	241	71	39.2	4.50	1.94	155.6	12.30
SBRC001	84	90	6 m Composite	RM220733	775	26.3	14.81	3.60	30.66	5.06	381	1.79	266	78	42.7	4.60	2.03	158.7	12.70
SBRC001	90	96	6 m Composite	RM220734	715	26.4	14.69	4.03	29.51	4.95	349	1.86	251	73	40.0	4.49	1.95	154.3	12.70
SBRC001	96	102	6 m Composite	RM220735	463	41.4	30.42	3.46	27.55	9.36	227	4.13	160	48	27.6	5.75	4.44	325.1	28.47
SBRC001	102	108	6 m Composite	RM220736	639	25.1	14.35	3.90	28.35	4.98	327	1.68	232	68	37.3	4.29	1.90	153.0	12.35
SBRC001	108	114	6 m Composite	RM220737	768	27.3	15.78	4.59	31.35	5.23	381	1.80	271	79	44.1	4.82	2.08	157.5	13.10
SBRC001	114	120	6 m Composite	RM220738	726	24.9	13.44	4.19	29.16	4.82	358	1.73	253	73	39.4	4.35	1.82	148.6	11.73
SBRC002	0	6	6 m Composite	RM220739	407	19.8	11.22	3.93	23.17	3.79	205	1.23	166	46	29.7	3.55	1.45	116.3	9.10
SBRC002	6	12	6 m Composite	RM220740	614	25.1	13.32	4.81	32.16	4.73	308	1.64	255	70	44.2	4.52	1.78	139.7	12.01
SBRC002	12	18	6 m Composite	RM220741	596	21.2	11.39	4.87	27.09	4.00	311	1.55	236	66	38.4	3.86	1.61	120.4	10.81
SBRC002	18	24	6 m Composite	RM220742	676	22.4	12.01	5.48	30.43	4.15	349	1.57	269	76	43.6	4.15	1.69	128.3	11.14
SBRC002	24	30	6 m Composite	RM220743	1128	30.6	16.35	5.87	40.00	5.51	611	2.05	385	114	59.3	5.50	2.18	179.1	14.18
SBRC002	30	36	6 m Composite	RM220744	717	21.3	11.49	4.63	28.93	3.93	385	1.55	257	75	40.7	3.95	1.58	124.1	10.29
SBRC002	36	42	6 m Composite	RM220745	312	14.0	8.07	3.57	16.94	2.69	155	1.02	127	34	22.4	2.48	1.07	85.5	7.41
SBRC002	42	48	6 m Composite	RM220746	279	10.4	5.76	3.22	12.51	2.02	145	0.83	104	29	16.5	1.86	0.79	61.5	5.39
SBRC002	48	54	6 m Composite	RM220747	375	19.6	11.16	3.72	21.21	3.70	179	1.55	155	42	28.2	3.26	1.54	114.8	10.44
SBRC002	54	60	6 m Composite	RM220748	393	16.5	8.79	4.18	19.94	3.13	194	1.16	156	43	26.6	2.91	1.20	95.5	7.62
SBRC002	60	66	6 m Composite	RM220749	318	15.0	8.26	4.11	17.35	2.85	154	1.06	129	36	22.6	2.68	1.13	89.0	7.20
SBRC002	66	72	6 m Composite	RM220751	262	11.2	6.50	3.82	13.77	2.22	130	0.82	104	29	18.4	2.01	0.87	67.6	5.57
SBRC002	72	78	6 m Composite	RM220752	348	16.9	9.17	4.15	18.44	3.20	171	1.16	141	40	24.1	2.83	1.28	93.7	8.07
SBRC002	78	84	6 m Composite	RM220753	459	17.8	10.06	3.73	20.23	3.46	242	1.34	171	50	26.9	3.18	1.44	107.8	9.28
SBRC002	84	90	6 m Composite	RM220754	380	16.0	8.28	3.94	18.73	3.01	198	1.09	148	42	24.4	2.74	1.20	89.0	7.53
SBRC002	90	96	6 m Composite	RM220755	477	18.1	9.65	3.60	21.73	3.41	244	1.25	179	52	30.3	3.18	1.38	102.6	8.49
SBRC002	96	102	6 m Composite	RM220756	436	17.1	9.50	3.93	20.34	3.29	229	1.32	164	47	26.1	2.89	1.36	102.2	8.86

Hole ID	From	To	Sample Type	Sample No	Ce <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC002	102	108	6 m Composite	RM220757	408	16.5	9.21	3.58	20.23	3.24	205	1.18	164	46	26.7	2.87	1.22	94.2	8.11
SBRC002	108	114	6 m Composite	RM220758	409	16.5	8.70	3.86	18.90	2.99	209	1.11	156	45	24.6	2.71	1.16	89.3	7.94
SBRC002	114	120	6 m Composite	RM220759	378	16.1	8.98	3.87	18.56	3.06	196	1.10	145	42	24.4	2.78	1.19	90.2	7.34
SBRC003	0	6	6 m Composite	RM220760	644	31.9	18.75	3.75	32.16	6.19	344	2.44	247	72	41.7	5.10	2.67	187.3	17.54
SBRC003	6	12	6 m Composite	RM220761	866	42.8	26.41	4.93	39.76	8.91	442	3.54	314	92	51.1	6.72	3.75	259.1	24.25
SBRC003	12	18	6 m Composite	RM220762	1026	47.4	28.59	5.63	49.45	9.63	525	3.67	394	112	65.3	7.87	4.09	285.7	26.65
SBRC003	18	24	6 m Composite	RM220763	897	35.6	19.27	4.46	43.57	6.91	446	2.58	359	101	59.3	6.32	2.80	196.2	18.56
SBRC003	24	30	6 m Composite	RM220764	314	24.9	17.15	2.28	19.77	5.49	162	2.46	126	36	22.6	3.65	2.42	165.1	16.68
SBRC003	30	36	6 m Composite	RM220765	2021	82.6	44.94	8.27	96.24	15.12	1031	5.80	772	220	128.7	14.47	6.20	506.7	39.97
SBRC003	36	42	6 m Composite	RM220766	5859	324.8	191.54	27.09	323.88	63.58	2955	22.97	2274	648	396.6	52.22	26.84	2069.9	177.07
SBRC003	42	48	6 m Composite	RM220767	1278	68.1	40.82	7.38	67.43	13.52	617	5.09	481	137	85.5	11.09	5.74	424.1	37.69
SBRC003	48	54	6 m Composite	RM220768	493	18.9	9.69	4.48	23.63	3.54	254	1.24	196	56	32.0	3.43	1.37	104.4	8.77
SBRC003	54	60	6 m Composite	RM220769	455	21.5	11.49	4.47	24.44	4.09	236	1.42	184	52	31.7	3.68	1.56	119.0	9.96
SBRC003	60	66	6 m Composite	RM220770	394	19.8	10.42	4.23	21.21	3.79	198	1.25	161	45	27.6	3.34	1.45	108.1	8.63
SBRC003	66	72	6 m Composite	RM220771	566	19.4	10.18	3.75	22.82	3.69	294	1.27	210	62	32.5	3.31	1.36	107.2	8.56
SBRC003	72	78	6 m Composite	RM220772	409	19.7	11.00	3.89	21.21	3.83	207	1.30	164	47	27.9	3.32	1.52	112.8	9.90
SBRC003	78	84	6 m Composite	RM220773	383	16.6	8.91	3.93	18.61	3.04	199	1.21	148	42	25.0	2.69	1.23	94.0	7.79
SBRC003	84	90	6 m Composite	RM220774	416	20.2	10.39	4.06	22.13	3.69	206	1.27	169	48	28.9	3.31	1.38	107.6	8.72
SBRC003	90	96	6 m Composite	RM220776	391	19.7	12.01	4.06	21.61	3.88	199	1.80	159	44	26.1	3.22	1.78	116.4	12.18
SBRC003	96	102	6 m Composite	RM220777	431	17.9	9.71	3.60	19.59	3.37	220	1.34	168	48	26.6	2.94	1.34	101.7	9.08
SBRC003	102	108	6 m Composite	RM220778	380	16.5	8.71	3.81	18.85	3.04	192	1.16	152	43	24.1	2.72	1.14	90.8	7.61
SBRC003	108	114	6 m Composite	RM220779	354	17.4	9.00	3.90	19.88	3.22	179	1.07	145	40	24.4	2.91	1.19	93.3	7.90
SBRC003	114	120	6 m Composite	RM220780	366	15.7	8.30	3.88	18.96	2.99	186	1.05	147	41	24.2	2.83	1.14	89.5	7.00
SBRC004	0	6	6 m Composite	RM220781	574	27.5	16.01	3.86	26.16	5.21	304	1.98	201	59	32.5	4.30	2.11	172.1	13.15
SBRC004	6	12	6 m Composite	RM220782	588	30.8	18.30	4.13	29.51	6.12	351	2.30	233	69	35.7	4.70	2.49	205.7	15.88
SBRC004	12	18	6 m Composite	RM220783	405	16.8	10.22	2.57	17.17	3.36	229	1.32	148	44	23.9	2.71	1.38	103.2	9.85
SBRC004	18	24	6 m Composite	RM220784	398	16.9	9.51	3.21	18.61	3.28	213	1.31	148	42	23.9	2.96	1.29	102.2	8.44
SBRC004	24	30	6 m Composite	RM220785	758	23.3	13.21	3.46	26.63	4.67	412	1.59	238	76	33.6	3.98	1.79	140.3	11.61
SBRC004	30	36	6 m Composite	RM220786	466	20.0	11.18	3.52	21.44	3.91	249	1.50	159	49	26.1	3.34	1.62	118.9	9.96
SBRC004	36	42	6 m Composite	RM220787	483	20.3	10.97	3.36	20.92	3.83	258	1.47	163	50	26.6	3.31	1.55	119.6	9.77
SBRC004	42	48	6 m Composite	RM220788	479	18.8	10.25	3.54	20.63	3.71	260	1.36	163	50	26.1	3.23	1.46	113.4	9.31
SBRC004	48	54	6 m Composite	RM220789	466	17.7	9.83	3.33	19.59	3.52	251	1.34	160	48	24.7	3.13	1.37	104.4	8.59
SBRC004	54	60	6 m Composite	RM220790	506	20.3	11.33	3.45	21.21	4.03	277	1.47	171	52	26.7	3.52	1.64	121.0	9.86
SBRC004	60	66	6 m Composite	RM220791	463	17.7	9.71	3.23	19.13	3.54	252	1.34	152	47	23.8	2.96	1.36	104.3	8.94
SBRC004	66	72	6 m Composite	RM220792	322	15.2	8.50	2.40	15.68	2.96	172	1.07	110	34	17.7	2.48	1.19	89.1	7.45
SBRC004	72	78	6 m Composite	RM220793	290	12.7	7.10	2.22	13.14	2.51	154	0.99	99	30	15.8	2.06	1.01	75.4	6.73
SBRC004	78	84	6 m Composite	RM220794	384	15.8	8.72	2.56	17.17	3.06	205	1.16	132	40	21.2	2.59	1.29	93.7	7.99
SBRC004	84	90	6 m Composite	RM220795	459	19.0	10.69	3.17	21.15	3.76	242	1.39	156	48	25.4	3.19	1.51	115.6	9.49

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC004	90	96	6 m Composite	RM220796	366	17.7	10.25	2.95	19.31	3.68	186	1.32	137	39	22.9	3.07	1.48	107.8	9.28
SBRC004	96	102	6 m Composite	RM220797	486	18.5	10.38	3.01	20.34	3.65	266	1.43	164	50	24.2	3.19	1.54	110.7	9.72
SBRC004	102	108	6 m Composite	RM220798	310	16.6	9.66	2.70	17.69	3.36	149	1.24	120	35	21.3	2.71	1.39	101.5	8.70
SBRC004	108	114	6 m Composite	RM220799	377	20.1	11.02	2.85	20.23	3.87	185	1.42	146	42	24.7	3.13	1.56	119.8	9.94
SBRC004	114	120	6 m Composite	RM220801	371	18.7	10.53	3.21	20.06	3.69	182	1.36	145	42	24.5	3.11	1.45	110.2	9.45
SBRC005	0	6	6 m Composite	RM220802	518	23.3	12.75	4.91	26.39	4.44	265	1.54	201	57	32.1	4.05	1.77	129.5	10.79
SBRC005	6	12	6 m Composite	RM220803	544	23.9	12.41	4.92	26.63	4.55	273	1.68	209	60	33.0	4.02	1.79	132.7	11.35
SBRC005	12	18	6 m Composite	RM220804	303	12.5	7.44	2.47	13.60	2.54	159	1.10	109	33	17.0	2.14	1.13	77.5	7.34
SBRC005	18	24	6 m Composite	RM220805	479	22.5	11.61	4.63	25.47	4.34	242	1.54	190	53	31.3	3.87	1.68	125.1	10.65
SBRC005	24	30	6 m Composite	RM220806	177	12.7	7.11	3.30	13.14	2.43	86	0.92	77	21	15.0	2.11	1.05	71.1	6.10
SBRC005	30	36	6 m Composite	RM220807	549	24.4	13.49	4.84	28.70	4.63	274	1.67	215	62	35.0	4.20	1.77	135.9	11.27
SBRC005	30	36	6 m Duplicate	RM233301	552	24.1	13.21	4.93	28.47	4.50	270	1.58	213	61	35.8	4.25	1.85	132.7	11.33
SBRC005	36	42	6 m Composite	RM220808	585	26.6	14.58	5.12	30.54	5.25	291	1.94	226	65	37.1	4.68	2.08	156.8	12.81
SBRC005	42	48	6 m Composite	RM220809	549	27.4	15.15	4.83	29.16	5.35	272	1.74	214	62	35.7	4.59	2.03	167.6	12.30
SBRC005	48	54	6 m Composite	RM220810	547	24.2	12.86	4.83	28.12	4.77	276	1.69	212	61	34.4	4.21	1.83	140.3	11.56
SBRC005	54	60	6 m Composite	RM220811	582	28.2	15.09	5.34	31.70	5.37	290	1.93	226	65	36.5	4.63	2.08	156.8	13.38
SBRC005	60	66	6 m Composite	RM220812	548	24.9	13.38	4.98	28.01	4.81	274	1.81	213	61	34.4	4.08	1.90	139.7	11.79
SBRC005	66	72	6 m Composite	RM220813	640	27.0	14.47	5.19	30.43	5.22	319	1.84	241	69	39.2	4.75	2.02	156.8	12.47
SBRC005	72	78	6 m Composite	RM220814	669	26.6	14.35	5.23	31.12	5.17	335	1.89	247	72	38.6	4.74	1.96	148.6	12.70
SBRC005	78	84	6 m Composite	RM220815	635	27.1	14.75	4.74	31.81	5.50	317	1.91	240	70	38.5	4.74	2.03	151.1	12.81
SBRC005	84	90	6 m Composite	RM220816	753	33.4	17.50	5.09	38.04	6.39	371	2.21	287	83	46.6	5.72	2.42	181.6	14.86
SBRC005	90	96	6 m Composite	RM220817	655	25.7	13.72	4.99	30.20	4.81	332	1.72	244	70	37.5	4.59	1.86	141.6	11.79
SBRC005	90	96	6 m Duplicate	RM233302	620	23.4	12.64	4.42	27.78	4.35	301	1.55	225	65	36.6	3.92	1.70	128.3	11.36
SBRC005	96	102	6 m Composite	RM220818	617	24.8	13.61	4.76	28.93	4.79	310	1.61	225	66	35.0	4.28	1.84	136.5	11.44
SBRC005	102	108	6 m Composite	RM220819	662	26.2	14.07	4.92	29.74	4.95	335	1.79	237	73	38.8	4.40	2.02	143.5	12.24
SBRC005	108	114	6 m Composite	RM220820	647	25.6	14.01	4.78	29.74	4.99	323	1.72	238	70	38.4	4.46	1.85	144.8	12.01
SBRC005	114	120	6 m Composite	RM220821	633	25.1	13.72	4.79	28.47	4.75	318	1.66	230	69	37.8	4.18	1.94	138.4	11.20
SBRC006	0	6	6 m Composite	RM220822	613	20.8	11.38	3.88	23.63	4.00	319	1.49	212	64	31.3	3.61	1.58	122.9	10.82
SBRC006	6	12	6 m Composite	RM220823	604	21.7	12.46	3.75	23.63	4.32	312	1.68	205	64	31.9	3.62	1.69	132.7	10.94
SBRC006	12	18	6 m Composite	RM220824	615	24.9	13.89	4.21	26.51	4.82	312	1.77	222	67	34.3	4.10	1.99	143.5	12.41
SBRC006	12	18	6 m Duplicate	RM233303	550	23.6	13.61	4.16	26.74	4.58	276	1.69	206	60	33.6	4.12	1.90	136.5	12.98
SBRC006	18	24	6 m Composite	RM220826	353	16.1	8.62	3.35	18.79	3.16	179	1.16	132	38	22.3	2.63	1.21	93.2	8.11
SBRC006	24	30	6 m Composite	RM220827	716	26.3	15.44	4.39	29.16	5.09	369	2.00	247	74	37.6	4.53	2.11	159.4	13.32
SBRC006	30	36	6 m Composite	RM220828	672	26.1	15.04	4.41	28.58	4.93	342	1.91	236	71	36.5	4.43	2.01	155.6	12.70
SBRC006	36	42	6 m Composite	RM220829	631	24.7	14.07	4.27	27.55	5.04	314	1.79	230	68	37.2	4.22	2.02	156.8	12.47
SBRC006	42	48	6 m Composite	RM220830	747	25.5	14.87	4.64	29.85	4.94	381	1.83	262	80	39.3	4.45	1.96	156.2	12.87
SBRC006	48	54	6 m Composite	RM220831	739	27.7	15.38	4.74	30.54	5.35	380	1.90	261	79	40.5	4.72	2.07	166.4	13.61
SBRC006	54	60	6 m Composite	RM220832	682	26.1	14.98	4.49	27.89	5.07	349	1.92	238	72	38.5	4.36	1.96	153.7	12.70

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC006	60	66	6 m Composite	RM220833	624	25.6	14.52	4.02	27.43	5.04	319	1.77	226	67	35.7	4.20	2.08	155.6	12.58
SBRC006	66	72	6 m Composite	RM220834	658	28.6	16.35	4.49	30.77	5.59	334	1.94	243	71	39.9	4.80	2.19	173.3	13.89
SBRC006	72	78	6 m Composite	RM220835	786	27.4	15.78	4.37	31.24	5.29	408	1.93	269	83	40.9	4.68	2.10	161.9	13.32
SBRC006	72	78	6 m Duplicate	RM233304	806	28.5	15.67	4.59	33.54	5.30	398	1.89	275	81	43.1	4.96	2.18	161.9	14.01
SBRC006	78	84	6 m Composite	RM220836	565	22.6	12.52	3.76	25.36	4.31	293	1.57	203	61	33.2	3.76	1.76	137.1	11.16
SBRC006	84	90	6 m Composite	RM220837	684	24.9	13.84	4.52	28.35	4.94	358	1.81	240	72	36.9	4.42	1.82	145.4	11.79
SBRC006	90	96	6 m Composite	RM220838	721	28.9	15.89	4.49	31.70	5.44	369	1.99	254	76	41.3	4.75	2.10	171.4	13.72
SBRC006	96	102	6 m Composite	RM220839	719	28.0	15.32	4.28	31.35	5.37	368	1.85	257	77	40.8	4.76	2.01	162.5	13.32
SBRC006	102	108	6 m Composite	RM220840	910	31.9	17.84	4.81	36.77	6.08	475	2.33	321	98	49.3	5.35	2.44	187.3	15.32
SBRC006	108	114	6 m Composite	RM220841	921	35.8	21.10	4.93	33.19	7.29	479	2.74	317	96	45.3	5.60	2.92	232.4	18.45
SBRC006	114	120	6 m Composite	RM220842	854	28.3	16.29	4.85	31.35	5.74	462	1.94	276	87	41.3	4.89	2.15	180.3	13.38
SBRC007	0	6	6 m Composite	RM220843	565	18.0	10.14	3.46	21.55	3.65	293	1.27	191	59	28.5	3.01	1.38	106.8	8.85
SBRC007	6	12	6 m Composite	RM220844	634	22.8	12.35	3.37	25.82	4.55	323	1.55	226	67	35.4	3.87	1.76	132.7	10.87
SBRC007	6	12	6 m Duplicate	RM233305	660	24.8	14.35	3.71	28.47	4.81	321	1.67	233	68	37.1	4.35	1.93	141.0	12.01
SBRC007	12	18	6 m Composite	RM220845	773	30.4	16.92	3.84	34.58	5.80	384	2.04	285	85	44.6	5.19	2.17	174.6	13.61
SBRC007	18	24	6 m Composite	RM220846	743	25.4	14.12	3.76	29.16	4.86	381	1.75	259	78	39.0	4.42	1.86	150.5	11.84
SBRC007	24	30	6 m Composite	RM220847	794	31.7	17.38	4.30	36.08	6.27	396	2.12	289	87	45.5	5.39	2.31	183.5	15.26
SBRC007	30	36	6 m Composite	RM220848	704	24.8	14.07	3.87	29.28	4.90	354	1.75	247	74	38.3	4.33	1.87	144.8	12.18
SBRC007	36	42	6 m Composite	RM220849	717	25.1	14.12	4.19	29.62	4.96	367	1.81	257	76	39.4	4.52	1.87	147.9	12.13
SBRC007	42	48	6 m Composite	RM220851	1013	43.8	24.01	4.25	49.68	8.59	496	2.96	395	115	65.7	7.68	3.08	250.2	19.70
SBRC007	48	54	6 m Composite	RM220852	981	40.3	21.78	4.55	45.41	7.63	463	2.77	360	104	59.3	6.93	2.95	224.8	18.11
SBRC007	54	60	6 m Composite	RM220853	768	25.0	13.95	3.97	29.28	4.79	380	1.80	255	78	39.4	4.46	1.78	146.0	11.84
SBRC007	60	66	6 m Composite	RM220854	779	28.3	15.84	4.26	32.85	5.45	387	2.02	272	81	44.1	5.07	2.15	163.8	13.55
SBRC007	66	72	6 m Composite	RM220855	780	25.0	13.44	4.13	29.05	4.77	394	1.75	259	79	41.2	4.50	1.83	137.8	11.61
SBRC007	72	78	6 m Composite	RM220856	513	18.0	9.54	3.36	21.50	3.26	260	1.24	182	54	28.6	3.06	1.37	97.9	8.62
SBRC007	78	84	6 m Composite	RM220857	741	27.7	15.44	4.13	30.54	5.18	367	1.86	252	76	40.5	4.70	2.04	157.5	12.98
SBRC007	84	90	6 m Composite	RM220858	846	32.3	17.61	4.27	35.85	6.19	414	2.14	299	88	49.2	5.55	2.36	179.1	15.09
SBRC007	90	96	6 m Composite	RM220859	700	24.9	13.44	3.81	28.01	4.71	349	1.83	240	73	38.6	4.43	1.85	144.8	11.96
SBRC007	96	102	6 m Composite	RM220860	753	26.2	14.29	4.20	29.97	4.94	375	1.67	258	77	41.7	4.47	1.93	146.0	11.96
SBRC007	102	108	6 m Composite	RM220861	752	26.2	13.84	4.10	30.08	4.91	378	1.75	257	77	40.2	4.48	1.94	146.0	12.24
SBRC007	108	114	6 m Composite	RM220862	742	27.0	14.35	4.26	30.43	4.99	368	1.84	255	77	42.1	4.83	1.92	147.9	12.07
SBRC007	114	120	6 m Composite	RM220863	715	25.6	14.01	3.87	29.28	4.82	353	1.72	245	73	38.7	4.42	1.94	142.9	11.56
SBRC007	114	120	6 m Duplicate	RM233306	717	26.3	14.41	4.09	30.20	4.75	351	1.72	248	73	39.8	4.52	1.99	144.1	12.24
SBRC008	0	6	6 m Composite	RM220864	689	24.0	12.64	3.11	26.63	4.46	342	1.56	234	71	36.8	4.10	1.72	132.1	10.65
SBRC008	6	12	6 m Composite	RM220865	735	26.1	14.35	3.72	29.39	4.95	361	1.80	251	75	40.7	4.60	1.96	147.9	11.84
SBRC008	12	18	6 m Composite	RM220866	832	27.7	15.27	3.87	31.70	5.29	410	1.92	274	85	44.6	4.89	2.08	158.7	12.70
SBRC008	18	24	6 m Composite	RM220867	781	27.1	14.29	3.76	31.12	5.05	386	1.83	265	80	42.0	4.59	2.02	150.5	12.13
SBRC008	24	30	6 m Composite	RM220868	765	26.5	14.41	3.67	30.66	4.96	379	1.80	258	78	41.3	4.67	1.85	147.9	12.07



Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC008	30	36	6 m Composite	RM220869	781	26.2	14.47	3.54	30.20	4.86	389	1.68	266	80	41.0	4.62	1.94	146.0	11.84
SBRC008	36	42	6 m Composite	RM220870	807	27.0	14.58	3.73	31.70	5.06	401	1.76	274	83	45.1	4.75	1.92	150.5	12.47
SBRC008	42	48	6 m Composite	RM220871	792	26.6	14.35	3.82	31.70	5.05	391	1.79	272	81	43.3	4.74	1.94	149.8	12.01
SBRC008	42	48	6 m Duplicate	RM233307	719	26.3	14.75	3.89	31.81	4.98	345	1.75	254	74	39.9	4.49	1.99	142.9	12.35
SBRC008	48	54	6 m Composite	RM220872	741	26.2	14.18	3.72	30.20	5.03	365	1.68	254	76	40.5	4.55	1.96	148.6	11.73
SBRC008	54	60	6 m Composite	RM220873	780	26.3	14.24	3.64	30.66	4.99	389	1.71	265	80	41.3	4.61	1.91	149.8	11.84
SBRC008	60	66	6 m Composite	RM220874	742	23.9	13.26	3.71	28.47	4.58	372	1.61	251	77	39.8	4.19	1.80	135.2	10.97
SBRC008	66	72	6 m Composite	RM220876	749	27.5	14.87	3.62	31.93	5.28	379	1.86	265	79	42.9	4.93	2.00	150.5	12.30
SBRC008	72	78	6 m Composite	RM220877	741	25.8	14.24	3.57	30.43	4.99	364	1.66	260	77	41.4	4.61	1.90	147.9	11.96
SBRC008	78	84	6 m Composite	RM220878	667	23.6	12.86	4.01	27.55	4.42	335	1.52	226	69	36.8	4.10	1.62	128.3	10.54
SBRC008	84	90	6 m Composite	RM220879	830	24.7	13.89	3.55	30.31	4.69	416	1.71	271	83	41.6	4.45	1.83	137.8	11.44
SBRC008	84	90	6 m Duplicate	RM233308	873	27.3	14.35	3.81	32.85	5.07	436	1.80	287	87	43.5	4.74	1.98	149.8	12.47
SBRC008	90	96	6 m Composite	RM220880	838	27.1	14.41	3.55	31.24	4.94	416	1.68	278	85	43.5	4.78	1.99	149.8	12.24
SBRC008	96	102	6 m Composite	RM220881	732	24.2	12.98	3.46	28.35	4.46	367	1.57	246	75	38.4	4.19	1.79	132.7	10.93
SBRC008	102	108	6 m Composite	RM220882	792	26.7	14.01	3.66	31.35	5.02	389	1.61	268	81	42.6	4.67	1.86	146.0	11.96
SBRC008	108	114	6 m Composite	RM220883	732	23.3	12.06	3.53	27.89	4.26	371	1.46	247	75	38.0	4.00	1.64	123.4	10.37
SBRC008	114	120	6 m Composite	RM220884	774	25.6	13.84	3.38	29.51	4.80	386	1.71	259	79	41.0	4.43	1.90	142.9	11.56
SBRC009	0	6	6 m Composite	RM220885	838	26.4	13.78	3.84	33.08	4.94	450	1.81	317	94	46.5	4.70	1.82	145.4	11.50
SBRC009	6	12	6 m Composite	RM220886	794	25.2	12.98	4.12	30.89	4.62	386	1.68	279	83	43.3	4.53	1.76	138.4	10.84
SBRC009	12	18	6 m Composite	RM220887	647	21.5	11.34	3.37	25.47	4.17	323	1.50	230	68	34.4	3.73	1.56	119.2	9.55
SBRC009	18	24	6 m Composite	RM220888	662	20.3	11.14	3.73	24.09	3.80	331	1.52	230	69	33.9	3.66	1.44	112.1	8.72
SBRC009	24	30	6 m Composite	RM220889	749	22.8	11.72	3.67	28.01	4.18	372	1.66	267	79	39.4	4.12	1.53	122.7	10.31
SBRC009	24	30	6 m Duplicate	RM233309	797	23.1	12.64	3.74	29.16	4.27	392	1.48	268	80	39.3	4.10	1.64	119.0	10.73
SBRC009	30	36	6 m Composite	RM220890	585	19.7	10.77	3.65	23.74	3.87	283	1.46	217	63	32.1	3.54	1.42	108.3	8.31
SBRC009	36	42	6 m Composite	RM220891	688	21.9	11.16	3.77	27.55	4.16	342	1.50	250	72	37.7	3.88	1.47	121.5	9.59
SBRC009	42	48	6 m Composite	RM220892	587	17.2	8.76	3.33	22.42	3.16	293	1.14	214	63	32.2	3.02	1.13	91.4	6.83
SBRC009	48	54	6 m Composite	RM220893	689	19.9	10.21	3.88	26.39	3.68	341	1.41	247	73	35.9	3.76	1.39	112.5	8.78
SBRC009	54	60	6 m Composite	RM220894	818	23.4	11.84	3.39	29.05	4.31	405	1.69	279	84	41.6	4.00	1.60	123.2	10.10
SBRC009	54	60	6 m Duplicate	RM233310	816	22.0	11.72	3.31	28.12	3.96	408	1.46	265	80	39.0	3.92	1.59	113.1	10.42
SBRC009	60	66	6 m Composite	RM220895	884	32.0	16.81	4.62	38.27	5.92	416	2.19	324	92	50.3	5.49	2.16	174.0	13.27
SBRC009	66	72	6 m Composite	RM220896	590	18.9	10.09	3.65	23.17	3.61	289	1.31	212	62	30.5	3.40	1.35	103.5	8.75
SBRC009	72	78	6 m Composite	RM220897	650	20.1	10.61	3.81	24.44	3.64	324	1.48	230	69	32.8	3.36	1.39	112.1	8.86
SBRC009	78	84	6 m Composite	RM220898	597	18.2	9.73	3.43	22.13	3.57	294	1.47	212	63	31.0	3.19	1.37	103.0	8.31
SBRC009	84	90	6 m Composite	RM220899	542	20.1	10.57	3.22	23.86	3.79	267	1.48	198	59	31.2	3.49	1.46	115.1	9.11
SBRC009	90	96	6 m Composite	RM220901	694	25.0	13.21	3.87	29.51	4.66	340	1.69	254	75	39.0	4.35	1.91	137.1	11.06
SBRC009	96	102	6 m Composite	RM220902	690	24.2	12.29	3.99	29.51	4.42	339	1.55	252	74	38.3	4.12	1.59	128.3	9.85
SBRC009	102	108	6 m Composite	RM220903	577	21.6	10.87	3.95	25.70	4.00	281	1.35	219	63	34.3	3.67	1.37	115.1	8.79
SBRC009	108	114	6 m Composite	RM220904	613	19.3	10.25	3.77	24.20	3.72	304	1.54	224	66	33.3	3.32	1.45	109.6	9.37

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC009	114	120	6 m Composite	RM220905	629	20.5	11.33	3.02	23.97	3.93	318	1.77	214	66	32.7	3.51	1.50	117.5	10.33
SBRC010	0	6	6 m Composite	RM220906	754	26.7	13.89	3.61	32.96	4.97	386	1.68	285	84	43.9	4.74	1.77	142.9	10.86
SBRC010	6	12	6 m Composite	RM220907	721	26.3	13.44	3.46	32.04	4.87	354	1.66	264	77	42.2	4.61	1.74	137.1	10.38
SBRC010	12	18	6 m Composite	RM220908	472	14.1	7.08	2.10	17.17	2.65	236	0.98	162	49	24.2	2.40	0.99	75.2	6.07
SBRC010	18	24	6 m Composite	RM220909	496	16.2	8.58	2.67	20.92	3.04	249	1.11	180	52	27.9	2.91	1.10	90.0	6.92
SBRC010	24	30	6 m Composite	RM220910	678	27.3	14.12	2.62	31.81	5.21	324	1.69	259	74	41.4	4.76	1.80	147.9	11.02
SBRC010	30	36	6 m Composite	RM220911	694	25.5	12.46	3.07	30.89	4.62	333	1.55	260	75	40.2	4.36	1.60	135.2	9.98
SBRC010	36	42	6 m Composite	RM220912	735	29.3	15.61	3.53	34.69	5.52	352	1.71	280	80	44.2	5.06	1.88	155.6	11.56
SBRC010	42	48	6 m Composite	RM220913	641	28.9	14.87	4.13	32.85	5.49	312	1.96	243	70	38.8	4.79	2.00	157.5	12.13
SBRC010	48	54	6 m Composite	RM220914	579	23.9	13.26	4.40	26.86	4.60	285	1.67	213	62	34.0	4.02	1.72	143.5	10.93
SBRC010	54	60	6 m Composite	RM220915	580	23.6	12.86	4.50	26.28	4.40	281	1.73	212	62	32.2	4.05	1.72	136.5	10.52
SBRC010	60	66	6 m Composite	RM220916	568	22.7	12.64	4.35	25.93	4.38	280	1.64	208	61	33.0	3.81	1.76	134.0	10.29
SBRC010	66	72	6 m Composite	RM220917	554	22.0	11.84	4.19	24.67	4.01	273	1.57	202	59	32.5	3.54	1.58	126.7	10.00
SBRC010	66	72	6 m Duplicate	RM233311	581	21.5	12.29	4.30	25.13	3.97	291	1.52	208	61	33.9	3.81	1.63	121.5	10.26
SBRC010	72	78	6 m Composite	RM220918	593	21.9	11.66	4.42	25.13	4.12	296	1.52	212	64	33.2	3.69	1.59	126.6	10.02
SBRC010	78	84	6 m Composite	RM220919	565	21.6	11.55	4.43	24.20	4.08	277	1.46	201	60	31.3	3.49	1.53	123.2	9.71
SBRC010	84	90	6 m Composite	RM220920	539	18.2	9.99	3.77	21.84	3.52	276	1.30	183	57	29.0	3.08	1.34	101.8	8.02
SBRC010	90	96	6 m Composite	RM220921	398	12.2	6.80	2.42	14.47	2.23	196	0.94	129	41	20.4	2.13	0.91	70.0	5.78
SBRC010	96	102	6 m Composite	RM220922	543	20.3	11.30	4.21	23.97	3.99	271	1.55	190	57	29.7	3.49	1.58	120.9	9.90
SBRC010	102	108	6 m Composite	RM220923	539	19.8	10.85	4.13	22.53	3.69	273	1.47	195	56	30.4	3.35	1.51	112.3	9.51
SBRC010	108	114	6 m Composite	RM220924	552	20.5	11.42	4.60	23.17	4.00	270	1.36	197	61	31.9	3.55	1.48	121.9	9.53
SBRC010	108	114	6 m Duplicate	RM233312	536	20.0	11.03	4.48	23.51	3.81	274	1.43	191	56	30.8	3.47	1.48	112.5	9.77
SBRC010	114	120	6 m Composite	RM220926	563	21.0	11.22	4.50	23.63	4.00	279	1.46	202	61	32.8	3.63	1.50	116.6	9.54
SBRC011	0	6	6 m Composite	RM220927	619	21.6	11.49	4.27	26.16	4.08	303	1.30	227	69	35.3	3.78	1.48	118.6	9.00
SBRC011	0	6	6 m Duplicate	RM233313	576	21.9	11.42	4.20	25.93	3.97	293	1.38	223	64	34.8	3.86	1.53	116.3	9.63
SBRC011	6	12	6 m Composite	RM220928	654	23.5	12.35	3.72	28.01	4.42	339	1.50	232	72	36.6	3.94	1.69	128.3	10.33
SBRC011	12	18	6 m Composite	RM220929	945	32.1	17.55	3.97	36.42	6.01	477	2.24	310	96	47.9	5.43	2.35	181.0	14.46
SBRC011	18	24	6 m Composite	RM220930	871	25.2	13.09	3.36	29.74	4.75	444	1.66	275	87	41.6	4.50	1.83	146.0	11.20
SBRC011	24	30	6 m Composite	RM220931	1106	33.2	17.90	4.06	40.00	6.21	562	2.34	350	110	52.6	5.83	2.40	190.5	15.66
SBRC011	30	36	6 m Composite	RM220932	860	26.4	13.49	3.11	30.77	4.89	441	1.77	281	88	42.6	4.55	1.84	141.0	11.96
SBRC011	36	42	6 m Composite	RM220933	646	20.8	11.42	4.40	23.63	3.94	332	1.56	208	65	31.2	3.59	1.56	118.5	9.83
SBRC011	42	48	6 m Composite	RM220934	587	18.8	9.99	4.04	21.84	3.56	301	1.31	195	61	30.3	3.28	1.39	108.2	8.85
SBRC011	48	54	6 m Composite	RM220935	814	22.2	11.89	4.30	28.24	4.27	405	1.64	269	84	39.4	4.15	1.61	126.0	10.11
SBRC011	54	60	6 m Composite	RM220936	565	23.8	12.58	4.50	27.09	4.49	274	1.58	204	61	34.8	4.05	1.68	134.6	10.92
SBRC011	60	66	6 m Composite	RM220937	571	19.5	10.54	3.97	23.17	3.69	285	1.26	197	60	30.4	3.38	1.44	106.7	9.10
SBRC011	66	72	6 m Composite	RM220938	555	19.5	10.63	4.27	23.63	3.84	274	1.43	194	59	31.4	3.59	1.48	114.2	9.51
SBRC011	72	78	6 m Composite	RM220939	536	19.6	11.07	4.16	21.78	3.75	269	1.32	185	56	29.1	3.38	1.51	113.1	9.06
SBRC011	78	84	6 m Composite	RM220940	564	22.5	12.46	4.74	26.16	4.35	272	1.59	200	61	32.8	3.83	1.60	126.4	10.46

Hole ID	From	To	Sample Type	Sample No	Ce <sub>2</sub> O <sub>3</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC011	84	90	6 m Composite	RM220941	563	20.5	11.21	4.38	24.09	3.97	278	1.39	195	60	31.4	3.58	1.54	120.4	9.51
SBRC011	90	96	6 m Composite	RM220942	538	19.7	10.51	4.49	22.48	3.75	266	1.38	185	57	30.7	3.43	1.42	110.5	9.11
SBRC011	90	96	6 m Duplicate	RM233314	587	20.0	10.67	4.52	24.09	3.70	301	1.41	213	61	32.5	3.51	1.46	113.7	9.66
SBRC011	96	102	6 m Composite	RM220943	574	21.9	12.01	4.68	25.47	4.23	281	1.50	201	60	32.4	3.88	1.54	125.1	10.01
SBRC011	102	108	6 m Composite	RM220944	517	21.2	11.37	4.53	24.44	4.09	247	1.41	189	57	31.5	3.72	1.60	122.4	9.79
SBRC011	108	114	6 m Composite	RM220945	560	20.7	11.16	4.42	24.20	3.86	273	1.50	198	60	31.2	3.51	1.52	119.4	9.46
SBRC011	114	120	6 m Composite	RM220946	549	20.6	11.07	4.56	23.17	3.80	271	1.35	196	59	30.6	3.59	1.40	112.6	9.59
SBRC012	0	6	6 m Composite	RM220947	445	17.8	10.10	4.08	20.69	3.39	231	1.27	166	50	26.3	3.13	1.28	99.8	8.16
SBRC012	6	12	6 m Composite	RM220948	545	20.0	10.78	4.25	23.40	4.10	273	1.48	194	59	31.3	3.52	1.47	115.1	9.31
SBRC012	12	18	6 m Composite	RM220949	620	20.9	11.44	4.61	23.97	3.93	318	1.43	205	64	32.6	3.56	1.56	122.0	9.82
SBRC012	18	24	6 m Composite	RM220951	553	19.7	10.65	4.20	22.25	3.79	277	1.40	198	58	30.4	3.49	1.44	112.4	9.23
SBRC012	24	30	6 m Composite	RM220952	479	17.0	9.86	4.62	21.03	3.37	238	1.21	180	53	26.7	3.05	1.29	100.3	8.39
SBRC012	30	36	6 m Composite	RM220953	526	16.8	9.23	4.68	19.88	3.21	271	1.22	185	55	28.4	2.95	1.23	96.4	8.31
SBRC012	36	42	6 m Composite	RM220954	494	19.0	10.31	4.13	20.57	3.60	250	1.23	180	54	27.1	3.14	1.37	105.1	8.37
SBRC012	36	42	6 m Duplicate	RM233315	480	17.6	9.98	3.65	20.46	3.53	243	1.21	174	51	27.9	3.08	1.31	102.4	8.70
SBRC012	42	48	6 m Composite	RM220955	529	18.8	10.04	3.95	21.84	3.61	265	1.31	194	57	29.7	3.35	1.48	113.7	9.06
SBRC012	48	54	6 m Composite	RM220956	564	21.7	11.78	4.41	23.74	4.09	284	1.52	206	61	31.0	3.62	1.59	125.3	9.58
SBRC012	54	60	6 m Composite	RM220957	568	21.0	11.44	4.40	24.32	3.91	284	1.50	206	61	31.1	3.54	1.55	121.0	9.66
SBRC012	60	66	6 m Composite	RM220958	478	18.2	10.01	3.75	20.69	3.60	239	1.34	175	52	25.7	3.08	1.32	105.5	9.02
SBRC012	66	72	6 m Composite	RM220959	423	14.7	8.12	3.05	17.52	2.89	213	1.08	152	45	22.9	2.62	1.12	88.1	7.39
SBRC012	72	78	6 m Composite	RM220960	603	21.4	11.61	4.52	24.32	3.87	306	1.34	215	65	31.9	3.69	1.61	121.0	9.84
SBRC012	78	84	6 m Composite	RM220961	494	20.1	11.27	4.08	22.36	3.68	245	1.31	184	55	28.5	3.51	1.40	115.3	9.28
SBRC012	84	90	6 m Composite	RM220962	565	20.5	11.49	4.12	23.40	3.78	284	1.54	204	62	31.1	3.46	1.52	121.1	9.43
SBRC012	84	90	6 m Duplicate	RM233316	564	20.4	11.05	4.39	24.20	3.84	286	1.36	207	60	32.6	3.54	1.58	116.8	9.86
SBRC012	90	96	6 m Composite	RM220963	525	21.2	11.49	4.56	23.74	3.88	263	1.48	196	57	30.6	3.48	1.47	122.4	9.95
SBRC012	96	102	6 m Composite	RM220964	525	20.9	11.44	4.46	24.20	4.07	263	1.38	197	58	29.8	3.65	1.51	114.4	9.50
SBRC012	102	108	6 m Composite	RM220965	515	18.5	10.34	4.31	22.53	3.61	254	1.34	188	57	27.8	3.22	1.34	111.6	8.63
SBRC012	108	114	6 m Composite	RM220966	569	20.7	11.23	4.60	24.32	3.97	285	1.36	210	62	31.5	3.59	1.51	117.5	9.64
SBRC012	114	120	6 m Composite	RM220967	561	20.8	11.29	4.64	24.67	3.95	284	1.39	210	61	31.0	3.71	1.59	122.8	9.82
SBRC013	0	6	6 m Composite	RM220968	598	19.0	9.99	4.17	23.51	3.59	312	1.24	222	68	33.4	3.42	1.26	108.3	8.19
SBRC013	6	12	6 m Composite	RM220969	607	22.1	11.66	4.23	25.93	4.09	298	1.46	224	67	34.9	3.80	1.52	123.9	9.72
SBRC013	12	18	6 m Composite	RM220970	650	21.3	11.49	4.41	25.82	4.08	325	1.34	233	70	34.3	3.85	1.52	120.3	9.19
SBRC013	12	18	6 m Duplicate	RM233317	603	20.1	10.75	3.93	24.90	3.77	307	1.38	223	65	34.7	3.67	1.45	113.5	9.12
SBRC013	18	24	6 m Composite	RM220971	626	22.4	11.89	4.35	25.47	4.12	315	1.46	226	68	34.2	3.86	1.53	126.0	9.77
SBRC013	24	30	6 m Composite	RM220972	641	22.1	11.61	4.42	26.86	4.22	323	1.44	236	70	34.2	3.83	1.50	122.0	9.67
SBRC013	30	36	6 m Composite	RM220973	629	21.4	11.13	4.06	24.78	3.93	313	1.39	225	68	34.3	3.58	1.48	118.0	9.34
SBRC013	36	42	6 m Composite	RM220974	613	20.6	11.95	3.82	23.97	3.89	308	1.44	219	66	32.1	3.60	1.54	116.8	9.83
SBRC013	42	48	6 m Composite	RM220976	576	17.9	9.70	3.74	21.21	3.43	286	1.21	204	63	28.6	3.14	1.36	102.2	8.64

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC013	48	54	6 m Composite	RM220977	689	21.7	11.72	3.99	26.16	4.17	346	1.54	246	74	35.4	3.93	1.58	121.1	10.07
SBRC013	54	60	6 m Composite	RM220978	615	20.6	11.13	3.74	24.44	3.85	311	1.41	221	67	32.1	3.68	1.45	113.3	8.79
SBRC013	60	66	6 m Composite	RM220979	638	22.3	12.01	4.06	26.05	4.25	324	1.61	234	69	35.3	3.94	1.58	128.3	10.35
SBRC013	66	72	6 m Composite	RM220980	595	20.0	10.84	3.84	22.36	3.81	294	1.47	212	64	31.9	3.40	1.47	117.0	9.03
SBRC013	72	78	6 m Composite	RM220981	647	23.4	12.35	4.32	26.97	4.26	323	1.49	232	70	34.9	3.89	1.60	128.9	9.98
SBRC013	72	78	6 m Duplicate	RM233318	657	22.6	12.29	4.43	28.01	4.18	333	1.52	240	70	38.0	4.06	1.67	127.6	10.66
SBRC013	78	84	6 m Composite	RM220982	630	20.9	11.55	4.02	24.90	4.06	312	1.43	229	69	35.3	3.65	1.51	123.6	9.22
SBRC013	84	90	6 m Composite	RM220983	537	18.8	10.58	3.50	21.84	3.60	266	1.36	191	58	29.6	3.23	1.46	110.7	9.28
SBRC013	90	96	6 m Composite	RM220984	638	22.1	11.89	4.11	25.24	4.09	318	1.50	233	69	34.7	3.85	1.55	123.8	10.27
SBRC013	96	102	6 m Composite	RM220985	699	24.9	15.15	4.64	28.93	4.79	335	1.86	240	71	37.9	4.23	2.03	146.0	12.58
SBRC013	102	108	6 m Composite	RM220986	579	21.3	12.01	3.95	25.24	4.04	289	1.50	206	61	32.7	3.73	1.64	124.5	10.37
SBRC013	108	114	6 m Composite	RM220987	699	24.1	13.55	4.69	28.12	4.47	335	1.68	244	71	37.9	4.09	1.85	135.9	11.96
SBRC013	114	120	6 m Composite	RM220988	413	18.2	11.02	3.37	20.57	3.57	206	1.34	150	44	24.7	3.13	1.50	107.4	9.49
SBRC014	0	6	6 m Composite	RM220989	668	22.2	12.35	4.74	27.55	4.09	321	1.81	239	69	36.5	3.90	1.76	118.0	11.84
SBRC014	6	12	6 m Composite	RM220990	677	23.0	12.69	4.90	29.39	4.23	335	1.75	253	72	38.3	4.10	1.71	124.8	11.79
SBRC014	12	18	6 m Composite	RM220991	570	21.3	11.55	4.71	26.28	3.92	286	1.58	217	62	34.6	3.71	1.59	109.7	10.46
SBRC014	18	24	6 m Composite	RM220992	556	19.5	10.94	4.32	25.36	3.56	279	1.39	211	60	31.9	3.43	1.51	102.9	9.92
SBRC014	24	30	6 m Composite	RM220993	769	23.3	13.04	4.64	28.93	4.34	376	1.73	265	78	39.8	4.15	1.77	128.3	11.61
SBRC014	30	36	6 m Composite	RM220994	805	25.9	14.01	4.82	31.12	4.65	401	1.88	275	81	41.9	4.45	1.93	137.1	12.70
SBRC014	36	42	6 m Composite	RM220995	797	22.6	12.69	4.86	29.05	4.22	395	1.68	272	80	39.2	4.07	1.77	122.8	11.23
SBRC014	42	48	6 m Composite	RM220996	778	24.1	13.38	5.05	29.97	4.50	393	1.75	266	79	38.6	4.18	1.84	127.0	12.53
SBRC014	42	48	6 m Duplicate	RM233319	731	24.2	13.66	4.99	28.93	4.52	373	1.64	258	75	38.4	4.28	1.83	130.2	12.13
SBRC014	48	54	6 m Composite	RM220997	816	24.7	13.38	4.99	31.24	4.52	403	1.68	276	82	42.1	4.42	1.85	127.6	11.84
SBRC014	54	60	6 m Composite	RM220998	744	24.0	13.26	5.01	29.97	4.51	364	1.77	261	76	39.5	4.32	1.78	128.3	11.90
SBRC014	60	66	6 m Composite	RM220999	801	24.4	13.61	4.99	30.66	4.51	391	1.65	275	81	42.0	4.33	1.85	127.0	12.13
SBRC014	66	72	6 m Composite	RM233501	732	24.7	12.81	5.04	30.20	4.57	362	1.73	272	77	40.1	4.33	1.74	131.4	11.84
SBRC014	72	78	6 m Composite	RM233502	801	26.1	14.35	5.35	33.19	4.85	395	1.89	297	84	45.7	4.52	1.99	141.0	12.87
SBRC014	78	84	6 m Composite	RM233503	728	24.3	12.75	5.33	29.62	4.40	358	1.77	272	77	40.7	4.26	1.83	124.3	12.07
SBRC014	84	90	6 m Composite	RM233504	586	19.9	10.50	5.09	24.90	3.62	298	1.66	223	63	33.7	3.49	1.44	105.3	10.23
SBRC014	90	96	6 m Composite	RM233505	727	25.5	14.01	5.14	32.04	4.80	360	1.96	276	78	42.6	4.60	1.94	141.6	13.15
SBRC014	96	102	6 m Composite	RM233506	673	25.4	13.32	5.38	29.97	4.59	335	1.91	259	73	40.5	4.43	1.85	132.7	12.30
SBRC014	102	108	6 m Composite	RM233507	641	24.2	13.32	4.94	29.16	4.54	320	1.85	246	70	38.0	4.18	1.78	129.5	12.35
SBRC014	108	114	6 m Composite	RM233508	683	25.0	13.55	4.91	31.00	4.75	342	1.90	259	74	40.9	4.48	1.84	136.5	12.64
SBRC014	114	120	6 m Composite	RM233509	642	24.8	13.61	4.90	29.85	4.63	321	1.84	248	70	38.8	4.40	1.90	132.7	12.47
SBRC015	0	6	6 m Composite	RM233510	698	27.5	14.29	4.91	31.35	4.95	384	1.96	269	78	42.2	4.52	1.96	142.2	12.92
SBRC015	6	12	6 m Composite	RM233511	658	24.1	13.15	4.38	29.39	4.52	342	1.86	248	70	38.8	4.14	1.78	130.8	11.90
SBRC015	12	18	6 m Composite	RM233512	550	21.5	11.61	3.88	25.36	3.96	279	1.71	207	59	33.3	3.72	1.66	113.4	10.73
SBRC015	18	24	6 m Composite	RM233513	727	25.4	13.72	4.45	31.47	4.88	358	1.82	262	75	41.2	4.48	1.92	137.8	12.64

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC015	24	30	6 m Composite	RM233514	769	26.6	14.35	4.40	32.62	4.91	380	1.84	274	79	43.3	4.68	1.99	144.8	12.87
SBRC015	30	36	6 m Composite	RM233515	719	27.5	14.87	4.54	32.04	5.14	367	1.94	262	76	41.3	4.69	1.93	148.6	13.10
SBRC015	36	42	6 m Composite	RM233516	724	27.5	14.87	4.46	33.31	5.21	359	1.91	260	75	41.5	4.70	2.09	150.5	12.81
SBRC015	42	48	6 m Composite	RM233517	655	28.0	15.89	4.49	31.93	5.28	331	1.86	244	70	40.2	4.89	2.12	153.7	13.55
SBRC015	48	54	6 m Composite	RM233518	784	28.8	15.61	4.63	33.19	5.35	382	1.98	279	79	43.7	4.93	2.08	156.2	13.95
SBRC015	54	60	6 m Composite	RM233519	736	29.5	16.07	4.91	34.00	5.51	361	2.09	264	76	40.9	4.99	2.15	158.7	13.89
SBRC015	60	66	6 m Composite	RM233520	673	26.7	14.47	4.45	32.04	4.96	337	2.04	255	72	41.0	4.68	1.98	146.7	13.15
SBRC015	66	72	6 m Composite	RM233521	614	22.6	11.89	4.38	27.55	4.27	315	1.67	232	65	36.6	3.94	1.68	121.5	11.67
SBRC015	72	78	6 m Composite	RM233522	733	27.8	15.32	5.20	31.70	5.51	372	2.12	273	79	41.3	4.56	2.17	152.4	13.84
SBRC015	78	84	6 m Composite	RM233523	710	27.0	15.61	4.89	31.12	5.42	366	1.99	267	76	39.8	4.68	2.10	151.1	13.89
SBRC015	84	90	6 m Composite	RM233524	759	28.0	15.78	5.15	31.58	5.59	385	2.16	286	82	42.9	4.66	2.20	156.2	13.84
SBRC015	90	96	6 m Composite	RM233526	742	28.5	16.24	4.87	31.24	5.68	379	2.09	276	80	41.6	4.74	2.10	160.0	14.12
SBRC015	96	102	6 m Composite	RM233527	628	24.9	13.78	5.19	27.78	5.02	318	1.98	233	67	36.3	4.09	1.88	139.7	12.64
SBRC015	102	108	6 m Composite	RM233528	732	27.9	15.44	4.94	32.62	5.57	375	2.01	274	78	43.3	4.87	1.96	147.3	13.27
SBRC015	108	114	6 m Composite	RM233529	716	28.9	16.41	4.65	33.19	5.86	360	2.18	271	78	42.8	4.83	2.17	157.5	14.01
SBRC015	114	120	6 m Composite	RM233530	789	31.6	17.55	4.97	34.92	6.20	400	2.27	292	85	46.4	5.29	2.26	167.6	14.92
SBRC015	114	120	6 m Duplicate	RM233320	784	28.7	15.04	4.68	34.12	5.44	380	2.00	279	81	45.3	5.02	2.10	156.2	13.95
SBRC016	0	6	6 m Composite	RM233531	728	30.3	17.15	5.19	33.54	5.77	378	2.21	278	78	42.0	4.98	2.30	167.0	15.09
SBRC016	6	12	6 m Composite	RM233532	703	28.5	16.01	4.71	31.12	5.59	362	1.96	264	76	40.6	4.76	2.08	151.8	13.32
SBRC016	12	18	6 m Composite	RM233533	694	29.4	16.70	4.91	32.50	5.82	355	2.18	259	75	41.0	4.99	2.22	163.8	14.86
SBRC016	18	24	6 m Composite	RM233534	821	32.5	19.61	5.38	36.54	6.76	421	2.65	306	88	48.6	5.59	2.60	196.8	17.54
SBRC016	24	30	6 m Composite	RM233535	747	30.6	16.81	4.96	33.89	5.81	380	2.07	276	80	43.0	5.13	2.33	167.0	14.97
SBRC016	24	30	6 m Duplicate	RM233321	742	28.3	15.32	4.72	33.31	5.32	368	2.05	274	79	43.7	4.85	2.19	155.6	14.06
SBRC016	30	36	6 m Composite	RM233536	697	27.7	16.18	4.91	31.35	5.60	354	2.14	259	75	40.8	4.63	2.16	157.5	13.84
SBRC016	36	42	6 m Composite	RM233537	705	28.9	16.24	5.25	32.50	5.95	362	2.04	264	75	41.6	4.96	2.28	156.8	14.29
SBRC016	42	48	6 m Composite	RM233538	730	29.6	16.92	4.67	32.04	5.91	372	2.29	268	79	41.3	4.96	2.19	167.0	14.92
SBRC016	48	54	6 m Composite	RM233539	623	24.9	13.95	4.42	27.55	4.81	318	1.86	237	66	36.9	4.22	1.94	135.9	12.41
SBRC016	54	60	6 m Composite	RM233540	721	32.1	17.55	5.11	33.43	6.16	362	2.25	272	77	42.2	5.20	2.40	179.7	15.43
SBRC016	60	66	6 m Composite	RM233541	727	29.0	16.58	4.40	31.93	5.76	355	2.25	262	76	42.0	4.89	2.24	159.4	14.58
SBRC016	66	72	6 m Composite	RM233542	695	29.2	17.55	4.52	32.27	5.89	351	2.18	264	74	41.3	5.10	2.24	167.6	15.37
SBRC016	72	78	6 m Composite	RM233543	747	31.2	17.55	4.75	33.89	6.01	378	2.02	276	79	43.9	4.94	2.30	168.9	15.43
SBRC016	78	84	6 m Composite	RM233544	725	29.2	16.92	4.86	33.08	5.95	368	2.16	271	78	42.3	4.99	2.26	166.4	15.20
SBRC016	84	90	6 m Composite	RM233545	701	28.3	16.12	4.54	31.12	5.59	354	2.08	264	75	42.3	4.63	2.22	156.2	14.29
SBRC016	90	96	6 m Composite	RM233546	703	27.7	16.01	4.63	30.89	5.80	357	2.18	261	75	41.4	4.65	2.24	161.9	14.58
SBRC016	96	102	6 m Composite	RM233547	660	29.6	16.75	4.94	32.39	5.86	332	2.13	252	71	42.1	4.80	2.34	165.7	15.14
SBRC016	102	108	6 m Composite	RM233548	625	28.3	16.18	4.46	30.77	5.56	318	2.07	236	67	37.7	4.69	2.19	160.6	14.29
SBRC016	108	114	6 m Composite	RM233549	672	28.8	16.75	4.35	31.35	5.68	334	2.25	252	72	41.4	4.78	2.32	167.6	14.75
SBRC016	114	120	6 m Composite	RM233551	721	31.4	17.67	4.91	33.54	6.05	351	2.39	262	76	43.3	5.27	2.43	171.4	16.23

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC017	0	6	6 m Composite	RM233552	725	31.6	17.15	4.83	34.92	6.00	361	2.21	276	81	45.2	5.38	2.42	173.3	15.88
SBRC017	6	12	6 m Composite	RM233553	792	34.7	18.70	5.12	36.88	6.62	382	2.47	296	86	49.6	5.70	2.57	193.0	16.68
SBRC017	12	18	6 m Composite	RM233554	716	34.5	19.50	4.90	37.81	6.87	359	2.25	282	77	46.0	5.62	2.74	191.8	16.85
SBRC017	18	24	6 m Composite	RM233555	700	31.4	18.30	4.96	33.66	6.40	351	2.31	275	76	44.8	5.25	2.47	180.3	15.71
SBRC017	24	30	6 m Composite	RM233556	688	30.8	17.04	4.34	33.77	5.95	323	2.25	250	71	42.0	5.14	2.36	172.1	15.14
SBRC017	30	36	6 m Composite	RM233557	699	29.5	16.52	4.16	33.08	5.67	325	2.26	253	72	41.6	5.05	2.31	166.4	14.75
SBRC017	36	42	6 m Composite	RM233558	905	31.2	16.41	4.23	36.65	5.89	437	2.16	313	90	48.7	5.34	2.30	170.8	15.14
SBRC017	42	48	6 m Composite	RM233559	685	30.8	17.32	4.16	33.19	5.86	326	2.25	244	70	40.7	5.05	2.34	172.7	15.37
SBRC017	48	54	6 m Composite	RM233560	695	30.6	17.10	4.34	33.77	5.80	319	2.16	253	71	42.1	5.02	2.32	169.5	15.03
SBRC017	54	60	6 m Composite	RM233561	695	30.3	16.81	4.39	33.43	5.77	325	2.16	252	71	42.0	4.94	2.33	167.0	14.86
SBRC017	60	66	6 m Composite	RM233562	690	29.4	16.12	4.25	32.04	5.61	321	2.12	250	69	40.9	4.89	2.24	160.0	14.46
SBRC017	66	72	6 m Composite	RM233563	692	29.4	16.07	4.49	33.08	5.52	326	2.25	251	71	40.8	4.88	2.19	156.2	14.52
SBRC017	72	78	6 m Composite	RM233564	710	28.7	16.07	4.25	31.93	5.43	337	2.10	252	73	42.0	4.78	2.20	160.0	14.46
SBRC017	78	84	6 m Composite	RM233565	689	29.0	16.41	4.43	32.27	5.61	332	2.12	254	72	41.5	4.81	2.23	161.9	14.35
SBRC017	84	90	6 m Composite	RM233566	682	28.2	16.01	4.17	31.12	5.33	323	2.00	241	69	40.4	4.58	2.10	154.3	13.84
SBRC017	90	96	6 m Composite	RM233567	693	28.8	15.95	4.19	32.16	5.61	323	2.13	251	70	40.1	4.80	2.25	163.8	14.18
SBRC017	96	102	6 m Composite	RM233568	704	29.4	15.72	4.47	32.04	5.52	328	1.98	254	71	42.4	4.94	2.20	161.3	14.35
SBRC017	102	108	6 m Composite	RM233569	681	28.2	15.38	4.41	31.58	5.41	319	1.93	250	70	40.7	4.70	2.06	153.0	13.55
SBRC017	102	108	6 m Duplicate	RM233322	700	29.6	16.29	4.71	33.43	5.51	346	2.04	266	75	43.1	4.94	2.17	165.7	14.23
SBRC017	108	114	6 m Composite	RM233570	709	28.1	16.07	4.45	31.35	5.48	331	2.13	259	73	42.7	4.75	2.24	164.5	14.46
SBRC017	114	120	6 m Composite	RM233571	716	30.8	16.98	4.48	33.08	5.81	340	2.21	268	75	43.4	5.02	2.30	170.8	14.63
SBRC018	0	6	6 m Composite	RM233572	646	28.6	16.64	4.18	30.31	5.36	296	2.30	233	65	38.4	4.62	2.28	156.8	14.58
SBRC018	6	12	6 m Composite	RM233573	672	28.0	15.27	4.28	31.47	5.32	319	2.09	246	69	41.0	4.73	2.15	156.8	14.06
SBRC018	12	18	6 m Composite	RM233574	650	27.2	15.09	4.03	29.51	5.30	306	2.25	239	67	38.7	4.49	2.22	154.9	14.58
SBRC018	18	24	6 m Composite	RM233576	678	29.7	16.41	4.26	32.16	5.65	319	2.25	250	70	41.9	4.90	2.28	166.4	14.63
SBRC018	24	30	6 m Composite	RM233577	724	29.7	16.52	4.60	32.73	5.67	337	2.24	262	75	43.7	4.90	2.24	167.6	14.52
SBRC018	30	36	6 m Composite	RM233578	668	27.7	15.55	4.30	31.12	5.28	314	1.96	247	70	41.0	4.70	2.15	153.0	12.75
SBRC018	36	42	6 m Composite	RM233579	683	27.4	14.64	4.38	31.12	5.07	317	2.01	250	71	42.0	4.65	2.03	145.4	13.10
SBRC018	42	48	6 m Composite	RM233580	703	30.5	16.81	4.71	33.77	5.73	324	2.18	264	74	43.9	5.20	2.26	168.9	14.29
SBRC018	48	54	6 m Composite	RM233581	684	30.3	16.75	4.30	32.04	5.75	318	2.15	251	71	42.8	4.99	2.31	168.9	14.63
SBRC018	54	60	6 m Composite	RM233582	665	31.2	17.84	4.33	33.31	6.01	305	2.35	251	69	42.1	5.28	2.46	181.6	15.60
SBRC018	54	60	6 m Duplicate	RM233323	631	32.6	18.18	4.82	35.15	6.23	308	2.32	251	69	44.1	5.47	2.50	187.9	16.51
SBRC018	60	66	6 m Composite	RM233583	694	32.5	17.84	4.30	33.77	6.11	320	2.30	257	72	42.4	5.21	2.43	179.7	15.77
SBRC018	66	72	6 m Composite	RM233584	692	30.4	17.04	3.98	31.81	5.90	321	2.34	254	71	42.8	4.95	2.33	172.1	15.09
SBRC018	72	78	6 m Composite	RM233585	752	32.4	17.90	4.35	34.00	6.14	357	2.27	272	77	44.5	5.22	2.43	181.0	15.71
SBRC018	78	84	6 m Composite	RM233586	735	38.0	21.33	4.68	38.84	7.19	338	2.84	276	77	49.3	6.22	2.91	212.7	18.45
SBRC018	84	90	6 m Composite	RM233587	900	43.7	25.04	4.39	46.33	8.57	420	3.43	342	95	59.4	7.25	3.45	247.0	22.20
SBRC018	90	96	6 m Composite	RM233588	714	33.9	18.58	4.31	35.50	6.45	335	2.34	262	74	45.6	5.55	2.50	186.0	15.54

Hole ID	From	To	Sample Type	Sample No	CeO <sub>2</sub> ppm	Dy <sub>2</sub> O <sub>3</sub> ppm	Er <sub>2</sub> O <sub>3</sub> ppm	Eu <sub>2</sub> O <sub>3</sub> ppm	Gd <sub>2</sub> O <sub>3</sub> ppm	Ho <sub>2</sub> O <sub>3</sub> ppm	La <sub>2</sub> O <sub>3</sub> ppm	Lu <sub>2</sub> O <sub>3</sub> ppm	Nd <sub>2</sub> O <sub>3</sub> ppm	Pr <sub>6</sub> O <sub>11</sub> ppm	Sm <sub>2</sub> O <sub>3</sub> ppm	Tb <sub>4</sub> O <sub>7</sub> ppm	Tm <sub>2</sub> O <sub>3</sub> ppm	Y <sub>2</sub> O <sub>3</sub> ppm	Yb <sub>2</sub> O <sub>3</sub> ppm
SBRC018	96	102	6 m Composite	RM233589	690	26.5	15.09	4.55	30.08	5.06	333	2.05	246	71	38.7	4.32	2.10	156.2	13.95
SBRC018	102	108	6 m Composite	RM233590	663	32.4	18.24	4.45	33.08	6.29	313	2.24	252	71	44.4	5.40	2.51	187.3	15.83
SBRC018	108	114	6 m Composite	RM233591	746	36.7	20.47	4.50	38.15	7.13	355	2.50	279	79	48.2	6.08	2.68	210.2	17.82
SBRC018	114	120	6 m Composite	RM233592	781	37.4	20.24	4.46	39.19	7.07	374	2.34	286	82	49.2	6.18	2.71	209.5	17.42
SBRC019	0	6	6 m Composite	RM233593	126	10.1	5.88	1.75	9.42	1.88	65	0.86	57	15	11.4	1.54	0.86	64.4	5.77
SBRC019	6	12	6 m Composite	RM233594	81	5.7	3.76	1.11	5.72	1.09	41	0.42	35	10	6.6	0.92	0.48	37.6	3.50
SBRC019	12	18	6 m Composite	RM233595	123	13.1	8.70	1.17	10.71	2.74	57	1.02	52	14	11.0	2.00	1.24	89.0	7.96
SBRC019	18	24	6 m Composite	RM233596	563	33.7	18.75	3.00	33.89	6.54	267	2.12	216	61	40.5	5.46	2.46	193.7	15.43
SBRC019	24	30	6 m Composite	RM233597	142	14.2	8.87	1.69	12.56	2.85	68	1.06	61	16	13.0	2.19	1.23	86.9	8.22
SBRC019	30	36	6 m Composite	RM233598	72	7.9	4.71	1.66	7.46	1.58	34	0.60	33	8	7.6	1.29	0.67	49.3	4.46
SBRC019	36	42	6 m Composite	RM233599	60	6.9	3.96	1.52	6.49	1.34	28	0.52	28	7	6.5	1.09	0.58	43.3	3.93
SBRC019	42	48	6 m Composite	RM233601	46	5.7	3.61	1.38	5.36	1.24	21	0.48	24	6	5.5	0.89	0.51	37.6	3.31
SBRC019	48	54	6 m Composite	RM233602	89	9.3	5.73	1.91	9.07	1.90	41	0.73	42	11	9.1	1.51	0.82	59.8	5.14
SBRC019	54	60	6 m Composite	RM233603	74	8.5	5.41	1.59	7.86	1.74	34	0.68	35	9	7.6	1.33	0.74	56.5	4.79
SBRC019	60	66	6 m Composite	RM233604	82	10.3	6.40	1.63	8.49	2.11	38	0.77	37	9	8.5	1.60	0.90	66.8	5.68
SBRC019	66	72	6 m Composite	RM233605	95	9.1	5.58	1.49	8.24	1.80	42	0.71	41	11	9.2	1.46	0.79	53.6	5.01
SBRC019	66	72	6 m Duplicate	RM233324	100	9.7	6.03	1.76	9.31	1.90	45	0.69	44	11	9.9	1.58	0.90	58.4	5.69
SBRC019	72	78	6 m Composite	RM233606	68	4.6	2.81	1.08	4.51	0.89	33	0.42	29	8	5.6	0.75	0.43	31.0	3.05
SBRC019	78	84	6 m Composite	RM233607	62	4.4	2.55	1.13	4.55	0.82	29	0.35	26	7	5.5	0.74	0.39	27.6	2.38
SBRC019	84	90	6 m Composite	RM233608	81	4.4	2.53	1.19	5.07	0.88	39	0.42	33	9	6.2	0.72	0.37	27.9	2.65
SBRC019	90	96	6 m Composite	RM233609	79	4.2	2.38	1.01	4.68	0.80	38	0.32	32	9	6.0	0.66	0.34	27.2	2.40
SBRC019	96	102	6 m Composite	RM233610	85	5.2	2.98	1.16	5.22	0.97	41	0.41	35	9	6.0	0.81	0.42	32.5	2.93
SBRC019	102	108	6 m Composite	RM233611	43	2.3	1.22	0.68	2.69	0.45	21	0.18	18	5	3.5	0.38	0.18	14.1	1.32
SBRC019	108	114	6 m Composite	RM233612	91	4.6	2.58	1.34	5.33	0.93	44	0.33	38	10	7.0	0.82	0.35	28.4	2.28
SBRC019	114	120	6 m Composite	RM233613	125	6.9	3.52	1.67	7.55	1.29	60	0.45	52	14	9.9	1.20	0.50	39.4	3.18