srk consulting

SRK Consulting (Australasia) Pty Ltd
Level 3, 18–32 Parliament Place
West Perth WA 6005
Australia

ABN: 56 074 271 720

+61 8 9288 2000

info@srk.com.au
www.srk.com

Technical Memorandum

To	John Byrne	**Client**	Pan Andean Capital Pty Ltd
From	Ben Jupp	**Project**	PDC001
Cc		**Date**	30 August 2022

Subject Phase 2 Exploration Drilling Assay Results EL6968

1 Summary

In April 2022, a second phase of aircore exploration drilling in Savic Minerals Pty Ltd's (Savic's) EL6968 within western Victoria, Australia was carried out under the site supervision of SRK Consulting (Australasia) Pty Ltd (SRK). This work was conducted on behalf of Savic's joint venture partner Pan Andean Capital Pty Ltd, an Australian subsidiary of Lion's Bay Capital Pty Ltd, a Toronto Stock Exchange listed company.

The second phase of drilling was conducted as part of an ongoing clay-hosted rare earth element (REE) exploration hosted within the Bookpurnong Formation within the southern Murray Basin. The Southern Murray Basin has become a significant REE exploration target area with several explorers now operating in the region including Australian Rare Earths Ltd (AR3), with leases on Savic's western licence margin, and Resource Base Ltd, with leases on Savic's eastern licence margin respectively (Figure 1). Savic's EL6968 is located in a strategically advantageous position on the immediate eastern edge of AR3's Koppamurra Project, which has recently released an updated Mineral Resource Estimate totalling 81.4 Mt at 785 ppm total rare earth oxide (TREO), including 45 Mt at 835 ppm Indicated and 36 Mt at 721 ppm Inferred (AR3, 2022) (Figure 1).

Savic's exploration drilling has been targeting the eastern extension of the Koppamurra Project mineralisation with two phases of wide spaced (1 km) drilling now completed. In October 2021, Savic completed an initial (Phase 1) aircore program that successfully identified clay hosted REE mineralisation across the western edge of EL6968. In April 2022 Savic completed a second phase (Phase 2) of aircore drilling, that aimed to extend the already defined extents of REE mineralisation. Phase 2 was conducted by The Drillers Pty Ltd (The Drillers) totalling 20 holes for 340 m (Figure 1). From these holes, 204 samples were submitted to ALS Global (ALS) for assay. An additional 55 samples from Phase 1 were also assayed to evaluate potential beyond already sampled intervals. Furthermore, 18 regional geological samples from historical Geological Survey of Victoria (GSV) waterbores, mostly located on Savic's exploration licence areas, were submitted for analysis.

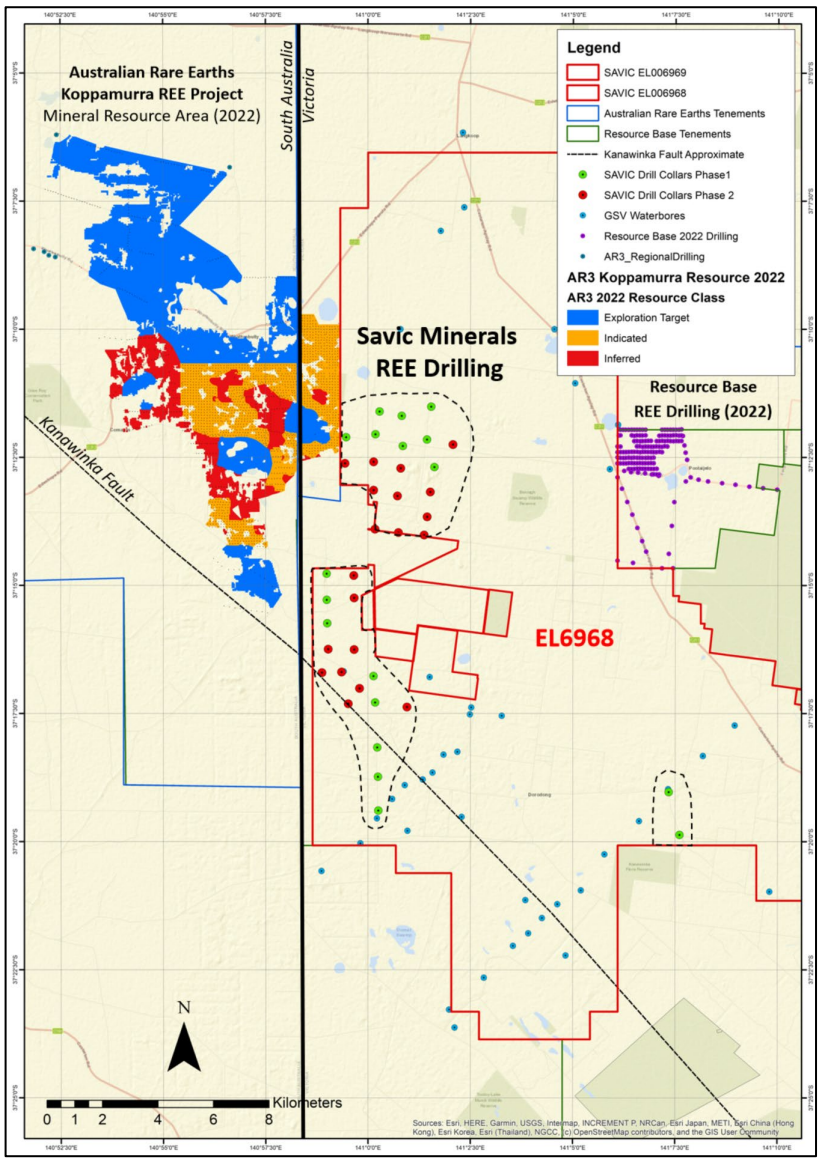
On 25 August 2022 assay results were released by ALS with results successfully confirming continuity of shallow REE mineralisation (2–22 m depth) within the west of EL6968. Results included maximum TREO values per hole ranging between 154 ppm and 3,909 ppm. The mineralised intervals are summarised in Attachment 1. The most significant results were from the regional GSV waterbore samples, which included assayed results of 6,747 ppm and 22,375 ppm (2.2%) TREO. Based on these results REE mineralisation is interpreted to remain open to the

north, east and southeast along strike of the Kanawinka Fault, with broader regional potential highlighted from assayed regional waterbore samples.

Savic's assay results highlight that mineralised intervals contain a high proportion (~22%) of REEs critical for the manufacture of high-powered permanent magnets used in electric vehicles, wind turbines and other green technologies. These elements include neodymium (Nd), praseodymium (Pr), dysprosium (Dy) and terbium (Tb).

Savic's next phases of work aims to define a maiden Mineral Resource with infill drilling and associated sampling programs planned. Regional drilling programs are additionally planned across the broader EL6968 area to extend the defined mineralisation footprint.

Figure 1: Savic Phase 1 and Phase 2 aircore drill hole collar and waterbore locations in EL6968



Source: SRK

1.1 Phase 2 drilling

A second phase of drilling (Phase 2) was completed in April 2022, which was designed to explore continuity of the identified REE mineralisation hosted within the Bookpurnong Formation along strike from the Phase 1 drill holes (SRK, 2022a). A total of 20 holes were completed, drilled on an approximate 1 km grid and extending the Phase 1 target area to the east and south (Figure 1). A total of 340 m was drilled with all holes terminating within what is interpreted as the Gambier Limestone. Holes were sampled on 1 m intervals and analysed using an Olympus Vanta pXRF to evaluate potential mineralisation (SRK, 2022b). From these analyses all holes except 22PD009, 22PD010 and 22PD019 showed preliminary evidence of REE enrichment. Based on pXRF results, 204 samples were selected for assay at ALS. An additional 55 samples from the Phase 1 program were also selected for assay to investigate the potential for additional mineralisation above currently sampled intervals.

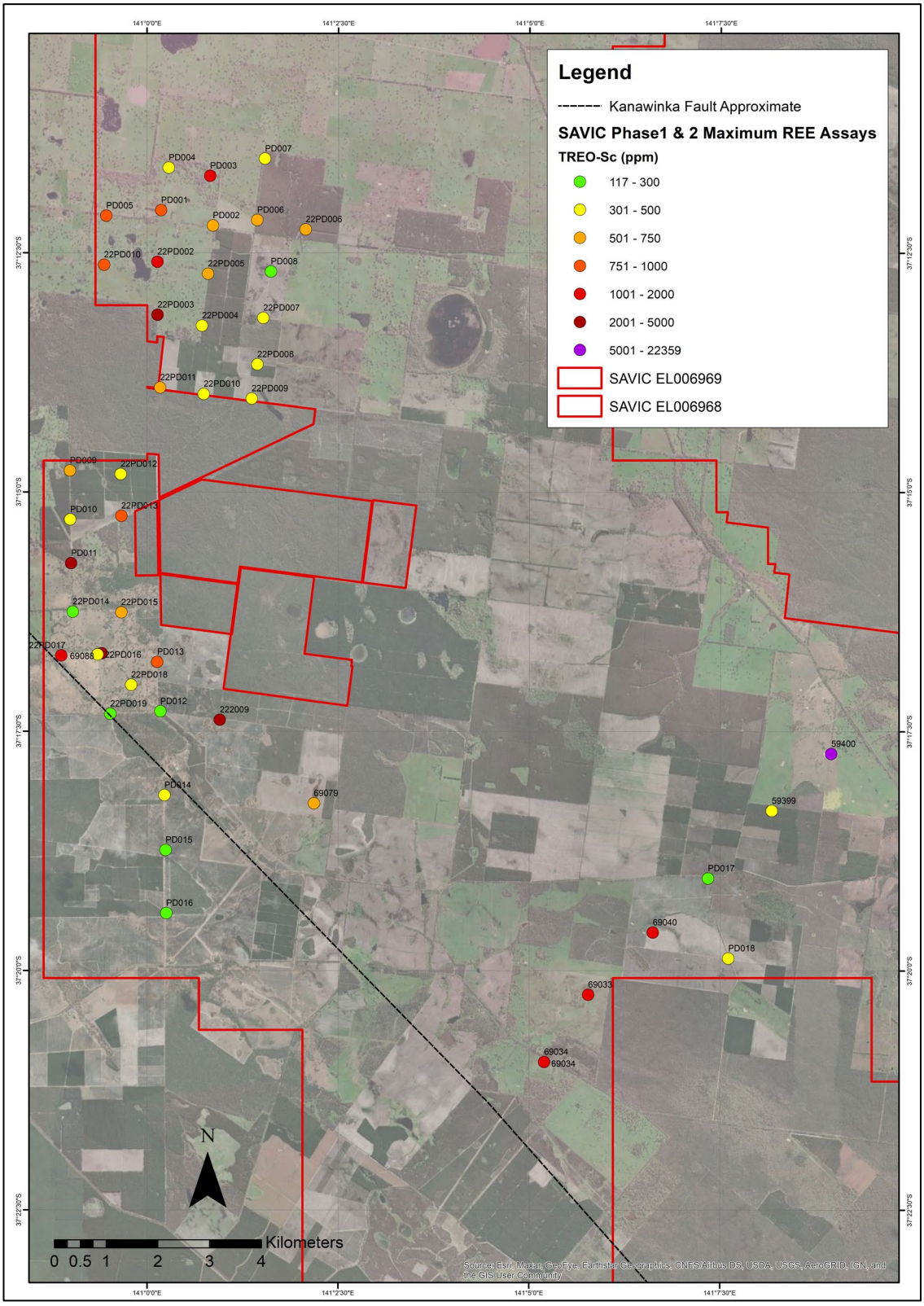
In August 2022, assay results were returned by ALS with results confirming continuity of shallow (2–22 m depth) REE mineralisation across the west of EL6968 (Figure 2; Attachment 1). This mineralisation has been interpreted as the eastern continuation of the REE mineralisation observed at AR3's Koppamurra Project. Phase 2 assays show REE mineralisation is evident within all Phase 2 holes, with TREO values ranging from 154 ppm (22PD019) to 3,909 ppm (22PD003) (Attachment 1). Widths of REE mineralisation greater than 350 ppm were observed to occur over intervals ranging in width from 1 m to 5 m.

Assay results from previously unassayed Phase 1 samples additionally showed enrichment, with the best results including 587 ppm (PD005) and 562 ppm (PD006) TREO. The results further extend the previously identified mineralisation evident within these holes as well as drill holes PD002, PD003 and PD008.

From further analysis of the assay results, Savic's REE mineralisation is observed to consist of a high proportion of REEs, that are critical for the manufacture of high-powered permanent magnets used in electric vehicles, wind turbines and other green technologies. These elements include Nd, Pr, Dy and Tb. From the Phase 2 assays, these REEs make up a combined total of approximately 22% of the contained REEs (Appendix 1).

Based on the drilling results from Phase 1 and Phase 2, mineralisation is interpreted to remain open to the north, east and southeast along strike of the Kanawinka Fault. To the south of the Kanawinka Fault, REE concentrations appear to diminish and the drilling depths to the target Bookpurnong Formation clay also increase.

Figure 2: Graduated colour map of maximum Phase 1, Phase 2 and waterbore assay results per drill hole



Source: SRK

1.2 Waterbore review

In April 2022, a review and pXRF analysis of waterbore samples at the GSV core facility in Werribee, Victoria was conducted of waterbores located within and surrounding EL6968 (SRK, 2022b). This review was conducted to evaluate the broader potential for REE mineralisation within the region. Available drillers' logs were reviewed to better understand the distribution of the Gambier Limestone and the distribution of overlying clay sequences with potential to host REE.

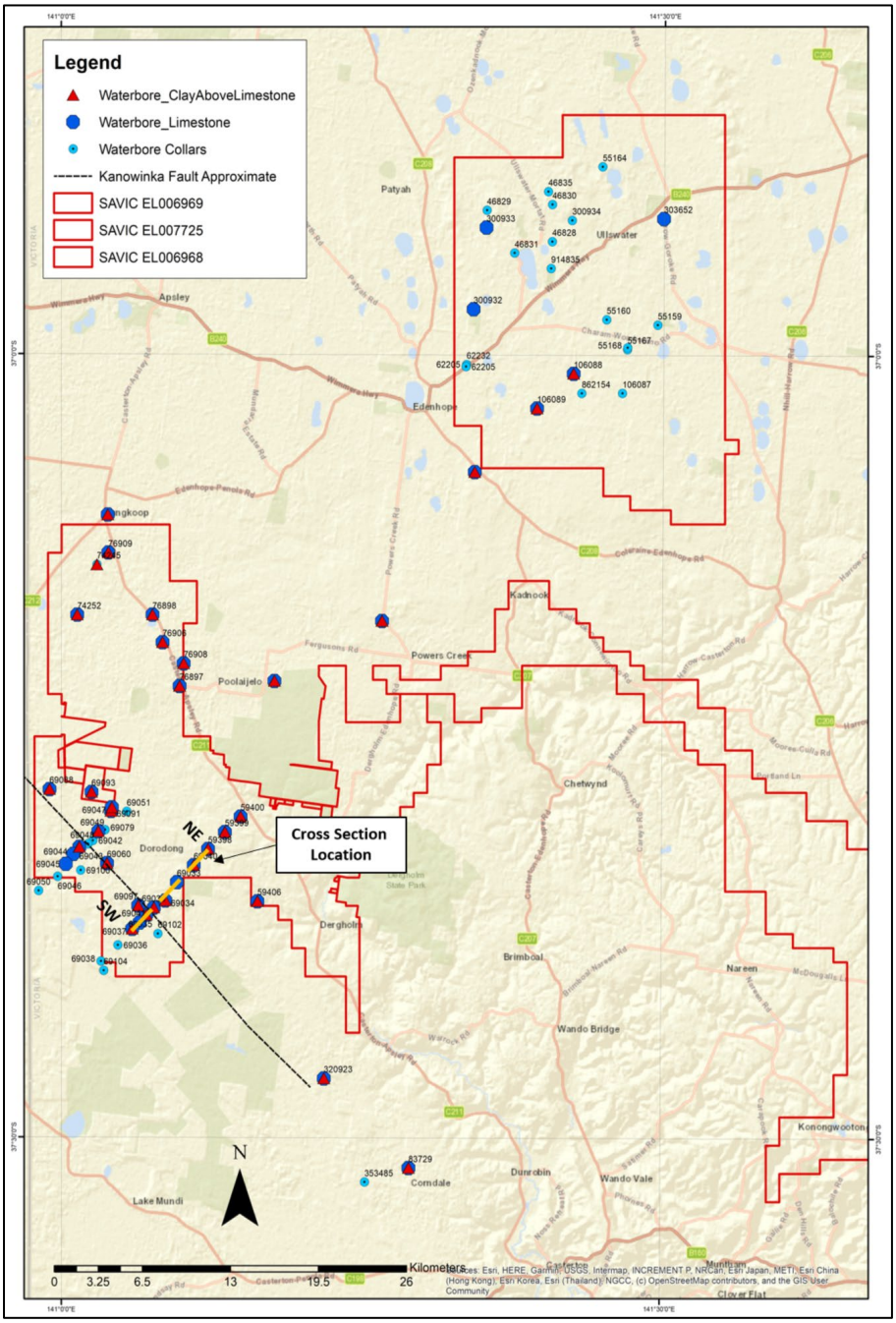
From the review, limestone is found to be widespread and generally flat lying across EL6968 and interpreted to likely correlate with the Gambier Limestone. Clay is observed immediately overlying this limestone throughout much of EL6968 and southeast along strike of the Kanawinka Fault as well as to the north of EL6968 (Figure 3). Logged clays overlying the limestone range in thickness from 0.3 m to 15 m, averaging 3.8 m. Depths ranged from 0.5 m to close to 30 m with depths observed to increase in depth across the Kanawinka Fault to the south of EL6968 (Figure 4).

Following preliminary lithological review, pXRF analysis of available waterbore samples was conducted targeting intervals of the Gambier Limestone and the overlying horizons. From the review and analysis, waterbore samples were found to have often not been retained from the initial drilling, missing or never sampled, or in some cases the sample interval widths were too large to be representative, diluting potential mineralisation.

From pXRF analysis, evidence for REE enrichment was observed over a broad area of EL6968, indicating potential for additional along-strike mineralisation within EL6968. A total of 18 samples that showed evidence for REE mineralisation potential were subsequently selected for assay. Due to limited sample material available at the GSV core facility, the permitted size of sample material for collection and assay was small (<50 g). Sampled intervals were additionally typically over short intervals of 0.3 m intervals (1 foot) in line with historical sampling intervals. Despite the small sample sizes, these samples provide valuable insight into the mineralisation potential at these waterbore locations.

Returned assays from the waterbore samples within EL6968 were highly encouraging with TREO results including 2,100 ppm (waterbore 69088), 6,747 ppm (waterbore 59400) and 22,375 ppm (waterbore 69034) with all samples returning evidence of REE enrichment (Figure 2; Attachment 1). These results highlight the extended REE mineralisation potential southeast along strike of Savic's current drilling up to 9 km away

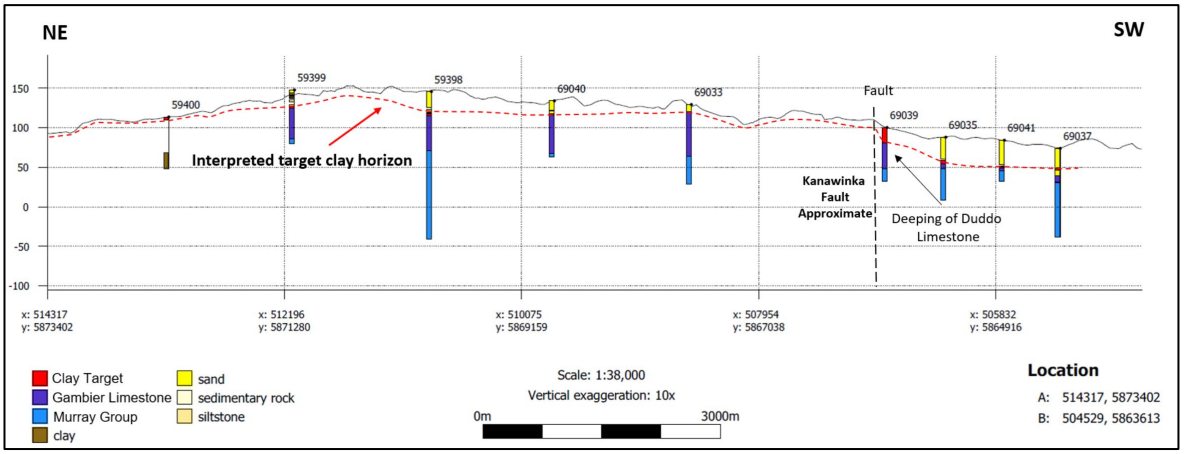
Figure 3: Waterbore locations illustrating locations of logged limestone and overlying clay units in and surrounding EL6968, EL6969 and ELA7725



Source: SRK (2022)

Notes: Sub-set of reviewed waterbores highlighting areas with observed limestone (blue) with overlying clay (red triangles).

Figure 4: Northeast–southwest cross section through EL6968 illustrating logged limestone and overlying clay target horizon from regional waterbores



Source: SRK (2022)

Notes: Cross section has been vertically exaggerated by 10x. The dashed red line illustrates interpreted target clay horizon overlying Gambier Limestone sequence.

2 Conclusions

Results from the Phase 2 drilling on EL6968 indicate the continuation of REE mineralisation east and south of the Phase 1 drilling locations. Drilling intersected shallow clay horizons (2–22 m) overlying the Gambier Limestone interpreted as the Bookpurnong Formation or equivalents. Preliminary pXRF analyses from the Phase 2 drill samples returned encouraging results indicating potential for mineralisation across all analysed holes (SRK, 2022b). Based on pXRF results a total of 204 samples from Phase 2 drill holes were selected for assay with an additional 55 samples from Phase 1 samples included to evaluate further mineralisation potential within these drill holes. Returned assay results confirmed mineralisation was continuous across the Phase 2 target area with assay results returning maximum assays per hole ranging from 154 ppm to 3,909 ppm TREO. Additional mineralisation was identified within Phase 1 holes PD002, PD003, PD006 and PD008, with maximum readings per hole ranging from 247 ppm to 587 ppm extending the already identified mineralisation within these holes. Results from the drilling to date illustrate a widespread area of REE mineralisation interpreted as the eastward continuation of AR3's Koppamurra Project, that is located immediately to the west of Savic's EL6968. Mineralisation within Savic's lease is interpreted to remain open to the north, east and southwest of its current drilling.

A phase of waterbore logging and pXRF analysis was conducted in April 2022, with a total of 12 waterbore samples selected for assay. Results from these assays have highlighted further zones of REE mineralisation over 9 km from Savic's current drilling in the west of the lease. Assay results from the waterbores were encouraging with all samples illustrating REE enrichment with best intervals including 2,100 ppm (69088), 6,747 ppm (59400) and 22,375 ppm (69034). These results highlight further REE mineralisation potential within the lease.

Savic's forward exploration program aims to conduct infill drilling (Phase 3) within the current target areas with the purpose of defining a maiden Mineral Resource within the lease area.

Recommendations

Savic's exploration work to date has yielded some highly encouraging clay-hosted REE mineralisation results. Recommendations for the next stages of exploration work to deliver a maiden JORC Mineral Resource and to assist with project development are summarised below:

- A review of infill drill spacing requirements for Resource estimation is recommended. This will provide guidance on the optimal distance between drill holes for Resource estimation purposes.
- LiDAR surveying encompassing the current target area. This will provide detailed topographic information to assist with exploration planning, future three-dimensional modelling and Resource estimation work.
- A limited program of push tube drilling is recommended to acquire consolidated clay material for density measurements. These data are a key component for the Mineral Resource estimate.
- Bulk sampling of REE mineralised clay from a shallow trench is recommend for metallurgical testwork. This will assist with better understanding the processing requirements for the REE mineralised clay.
- Re-drilling of waterbore locations that have shown evidence for REE mineralisation is recommended to confirm preliminary waterbore assay results.

Regards
SRK Consulting (Australasia) Pty Ltd

Ben Jupp
Senior Consultant

Chris Woodfull
Corporate Consultant

References

Australian Rare Earths, 2022, ASX announcement, Koppamurra emerges as a globally significant critical rare earths project with 104% increase in Mineral Resource, 4 July 2022.

SRK, 2022a. PDC001 Memorandum Phase 1 Drill Assay Results Summary.

SRK, 2022b. PDC001 Memorandum Phase 2 Drilling Program.

Attachment 1 Phase 2 aircore drilling and waterbore assay results

Table 1: Assay Results from Phase 2 aircore drilling and sampled waterbores

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	$Gd2O_3$ ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD001	0	1	220101	102.95	85.47	26.41	2.39	1.33	0.60	2.35	0.41	15.95	0.22	14.46	3.97	17.49	3.28	0.34	0.22	12.19	1.34
22PD001	1	2	220102	146.91	127.74	37.83	3.35	1.89	1.27	4.06	0.68	23.69	0.25	23.33	6.45	19.17	5.15	0.61	0.27	17.02	1.89
22PD001	2	3	220103	123.26	96.27	32.06	2.32	1.62	0.46	2.22	0.49	18.41	0.28	13.65	3.87	26.99	2.71	0.36	0.27	15.75	1.78
22PD001	3	4	220104	132.08	103.24	35.38	2.77	1.68	0.52	2.40	0.55	19.23	0.30	14.93	4.25	28.84	3.28	0.44	0.26	15.62	1.64
22PD001	4	5	220105	773.97	751.26	217.43	23.76	14.47	5.05	24.67	5.10	107.66	1.73	117.81	30.21	22.70	24.24	3.72	1.93	161.28	12.24
22PD001	5	6	220106	603.89	580.12	169.52	19.34	11.03	4.17	19.94	3.89	77.76	1.40	89.00	23.02	23.77	18.44	3.07	1.40	128.89	9.25
22PD001	6	7	220107	455.39	438.21	138.81	13.94	7.95	3.18	14.35	2.85	59.58	0.83	65.90	16.91	17.18	14.96	2.18	0.99	89.91	5.86
22PD001	7	8	220108	316.20	303.16	98.27	8.96	4.95	2.06	9.74	1.82	41.52	0.60	45.02	11.56	13.04	10.25	1.41	0.64	61.97	4.37
22PD001	8	9	220109	148.23	142.86	43.24	4.20	2.42	1.00	4.66	0.85	21.23	0.26	22.04	5.94	5.37	4.55	0.66	0.31	29.59	1.91
22PD001	9	10	220110	122.22	116.85	35.26	3.40	2.15	0.82	3.94	0.62	16.42	0.19	18.55	4.53	5.37	4.35	0.56	0.30	24.13	1.64
22PD002	0	1	220201	115.38	102.34	36.24	2.65	1.69	0.69	2.73	0.54	16.07	0.25	15.05	4.12	13.04	3.11	0.44	0.25	16.76	1.75
22PD002	1	2	220202	85.07	76.94	26.04	1.96	1.35	0.46	2.11	0.42	13.25	0.22	10.85	3.12	8.13	2.31	0.32	0.19	13.21	1.13
22PD002	3	4	220204	41.42	35.44	11.92	1.03	0.63	0.15	0.99	0.22	6.10	0.10	4.55	1.33	5.98	0.88	0.15	0.10	6.60	0.68
22PD002	4	5	220205	41.88	36.51	12.28	0.91	0.71	0.13	0.86	0.22	6.57	0.11	4.78	1.38	5.37	0.88	0.14	0.09	6.73	0.72
22PD002	5	6	220206	58.76	50.94	18.18	1.26	0.94	0.21	1.24	0.25	8.80	0.18	7.12	2.04	7.82	1.26	0.18	0.14	8.25	0.89
22PD002	6	7	220207	102.82	83.80	27.88	2.15	1.51	0.42	1.78	0.46	16.42	0.27	11.43	3.30	19.02	2.05	0.35	0.22	14.10	1.47
22PD002	7	8	220208	90.38	81.02	32.92	1.46	0.94	0.23	1.13	0.27	20.41	0.14	8.63	3.01	9.36	1.33	0.21	0.14	9.27	0.93
22PD002	8	9	220209	113.44	101.62	40.78	1.79	1.18	0.37	1.65	0.37	23.69	0.18	11.66	3.78	11.81	2.52	0.26	0.21	11.94	1.25
22PD002	9	10	220210	136.02	126.05	51.84	2.26	1.22	0.60	2.54	0.42	23.69	0.18	18.78	5.79	9.97	3.78	0.39	0.17	13.21	1.18
22PD002	10	11	220211	119.07	109.10	44.96	2.04	1.27	0.38	1.90	0.36	23.93	0.19	13.65	4.70	9.97	2.74	0.25	0.17	11.30	1.26
22PD002	12	13	220213	275.30	259.04	90.29	8.45	4.55	2.13	8.06	1.51	33.78	0.58	39.19	10.68	16.26	9.88	1.29	0.61	44.07	3.99
22PD002	14	15	220215	1,059.92	1,030.63	249.37	37.19	25.73	8.27	37.57	8.20	100.86	3.64	137.64	33.35	29.30	36.99	5.83	3.27	320.01	22.72
22PD002	15	16	220216	145.28	139.30	35.26	4.66	2.88	1.05	4.55	1.01	16.42	0.38	17.96	4.74	5.98	4.81	0.72	0.43	41.78	2.65
22PD002	16	17	220217	295.92	287.02	66.33	10.50	7.31	1.97	9.65	2.39	28.38	0.99	35.23	8.98	8.90	8.67	1.56	0.94	97.53	6.59
22PD002	17	18	220218	324.53	314.56	79.35	10.82	7.42	2.26	10.57	2.41	33.07	1.00	42.34	10.55	9.97	10.97	1.53	0.97	95.24	6.06
22PD002	19	20	220220	112.02	107.57	29.11	3.40	2.13	0.72	3.23	0.72	13.72	0.24	15.40	4.05	4.45	3.37	0.52	0.27	29.08	1.62
22PD003	7	8	220308	84.19	75.60	27.76	1.70	1.09	0.32	1.57	0.33	16.30	0.24	8.63	2.80	8.59	1.90	0.26	0.16	11.43	1.10
22PD003	8	9	220309	74.19	66.67	23.71	1.76	1.09	0.37	1.37	0.37	13.37	0.14	8.51	2.51	7.52	1.58	0.24	0.16	10.41	1.09
22PD003	9	10	220310	3,909.36	3,837.43	1,400.38	102.60	40.25	33.93	138.89	16.55	540.66	3.30	711.50	170.96	71.94	153.07	19.29	4.67	476.21	25.17

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd2O_3 ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD003	10	11	220311	506.83	487.82	157.24	14.40	7.73	3.55	15.50	2.67	67.91	0.86	77.57	19.27	19.02	16.99	2.21	1.03	94.99	5.90
22PD003	11	12	220312	311.44	302.09	88.08	8.33	5.00	2.14	8.53	1.75	38.23	0.49	46.07	11.12	9.36	9.53	1.31	0.61	77.46	3.44
22PD003	12	13	220313	260.14	253.69	77.88	5.90	3.59	1.84	7.45	1.16	32.72	0.44	38.84	10.02	6.44	8.70	1.09	0.48	61.08	2.51
22PD003	13	14	220314	156.64	151.74	44.35	3.83	2.34	0.98	4.20	0.78	19.59	0.34	22.04	5.71	4.91	4.59	0.62	0.30	40.26	1.80
22PD003	14	15	220315	95.74	91.75	27.52	2.26	1.60	0.57	2.49	0.46	12.67	0.16	13.65	3.36	3.99	2.93	0.38	0.18	22.48	1.06
22PD003	15	16	220316	90.88	87.20	28.74	2.20	1.17	0.57	2.69	0.40	12.90	0.13	14.46	3.64	3.68	2.95	0.35	0.11	16.13	0.76
22PD004	0	1	220401	152.58	140.31	48.28	3.80	1.99	0.87	4.14	0.72	22.17	0.26	23.09	5.88	12.27	4.49	0.64	0.27	21.97	1.74
22PD004	1	2	220402	120.73	104.47	35.87	2.74	1.67	0.68	2.99	0.55	16.77	0.23	16.91	4.52	16.26	3.48	0.45	0.23	15.87	1.51
22PD004	2	3	220403	83.77	71.96	24.45	1.94	1.07	0.38	1.94	0.34	12.31	0.15	11.20	3.02	11.81	2.61	0.28	0.13	11.18	0.97
22PD004	3	4	220404	86.81	75.31	29.24	1.64	0.91	0.43	1.52	0.27	14.89	0.16	10.85	3.15	11.50	2.20	0.26	0.13	8.89	0.76
22PD004	4	5	220405	246.03	219.65	97.78	5.23	2.64	1.33	5.29	0.97	30.14	0.36	32.08	8.96	26.38	7.35	0.86	0.41	23.62	2.61
22PD004	5	6	220406	258.23	240.90	102.08	5.73	2.95	1.71	5.97	0.97	35.54	0.40	37.21	10.38	17.33	8.36	0.94	0.39	25.91	2.37
22PD004	6	7	220407	397.19	380.47	105.15	13.26	7.97	2.99	13.83	2.60	46.91	0.84	59.49	14.02	16.72	12.99	2.11	1.03	91.43	5.86
22PD004	7	8	220408	433.08	411.45	132.05	11.39	6.69	3.02	12.22	2.23	51.13	0.78	63.69	14.74	21.63	13.74	1.76	0.93	91.31	5.77
22PD004	8	9	220409	449.65	431.24	127.14	11.59	6.99	3.57	13.49	2.29	64.74	0.75	73.72	17.10	18.41	14.73	2.09	0.85	86.86	5.35
22PD004	9	10	220410	209.20	200.91	47.42	6.28	3.75	1.55	7.17	1.29	30.73	0.40	34.99	8.05	8.28	7.25	1.06	0.49	47.75	2.74
22PD004	10	11	220411	125.33	117.66	35.75	3.29	1.94	0.89	3.52	0.65	17.83	0.18	19.13	4.76	7.67	3.42	0.56	0.21	24.00	1.53
22PD005	0	1	220501	197.31	171.55	60.07	4.36	2.87	1.01	4.50	0.89	27.56	0.40	26.94	6.86	25.77	5.42	0.73	0.35	26.92	2.66
22PD005	1	2	220502	164.27	143.41	49.14	3.52	2.34	0.73	3.35	0.76	24.98	0.36	21.93	5.68	20.86	3.92	0.55	0.38	23.37	2.40
22PD005	2	3	220503	163.58	147.78	47.91	4.25	3.11	0.64	3.52	0.88	24.16	0.45	20.30	5.70	15.80	4.46	0.59	0.42	28.19	3.20
22PD005	3	4	220504	148.71	127.09	42.75	3.35	2.39	0.68	2.96	0.68	22.28	0.36	18.43	4.65	21.63	3.87	0.54	0.32	21.21	2.61
22PD005	4	5	220505	106.82	89.65	28.87	2.39	1.57	0.49	2.13	0.53	15.72	0.25	13.53	3.43	17.18	2.92	0.45	0.23	15.37	1.79
22PD005	5	6	220506	46.54	40.25	13.76	1.18	0.73	0.20	0.97	0.18	6.92	0.10	6.07	1.56	6.29	1.31	0.15	0.09	6.35	0.68
22PD005	6	7	220507	624.89	620.14	227.25	16.58	8.44	4.93	18.50	3.12	90.54	0.94	97.74	24.77	4.75	20.81	2.74	1.10	95.75	6.91
22PD005	7	8	220508	178.57	175.04	61.30	4.91	2.73	1.32	5.19	0.99	24.04	0.38	26.94	6.54	3.53	5.61	0.84	0.39	31.49	2.38
22PD005	8	9	220509	156.20	146.54	49.63	4.07	2.49	0.71	3.84	0.87	22.87	0.33	22.63	5.51	9.66	4.05	0.65	0.37	25.78	2.76
22PD006	0	1	220601	176.95	153.64	55.77	3.90	2.57	0.88	3.65	0.77	23.57	0.32	23.91	5.92	23.31	4.80	0.67	0.31	24.26	2.33
22PD006	1	2	220602	128.38	104.15	35.01	2.62	1.77	0.64	2.46	0.62	19.00	0.30	15.05	4.22	24.23	2.79	0.45	0.27	17.14	1.82
22PD006	2	3	220603	134.26	111.87	37.83	2.88	1.69	0.54	2.49	0.60	21.34	0.33	16.56	4.66	22.39	3.06	0.42	0.31	17.27	1.87
22PD006	3	4	220604	140.82	127.78	43.12	3.57	2.42	0.52	3.17	0.79	21.34	0.38	18.08	4.88	13.04	3.69	0.51	0.34	22.60	2.37
22PD006	4	5	220605	179.06	162.49	54.54	4.37	2.86	0.56	4.11	0.96	27.33	0.53	22.74	6.14	16.57	4.31	0.69	0.51	29.59	3.23
22PD006	5	6	220606	157.74	134.42	45.33	3.88	2.31	0.68	3.20	0.80	23.46	0.42	19.13	5.18	23.31	3.61	0.55	0.35	23.11	2.40

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	$Gd2O_3$ ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD006	6	7	220607	128.82	107.04	36.24	3.06	1.90	0.51	2.69	0.69	18.30	0.32	15.51	4.17	21.78	3.06	0.49	0.31	17.78	2.02
22PD006	7	8	220608	98.07	85.80	28.74	2.34	1.60	0.42	2.05	0.52	14.31	0.24	12.48	3.27	12.27	2.55	0.36	0.27	15.11	1.53
22PD006	8	9	220609	147.35	127.72	43.73	3.45	2.04	0.60	3.16	0.68	22.28	0.33	19.01	5.22	19.63	4.05	0.61	0.34	20.06	2.15
22PD006	9	10	220610	171.19	150.94	50.98	4.20	2.49	0.81	3.82	0.86	25.22	0.43	22.28	6.33	20.25	4.88	0.68	0.37	24.89	2.71
22PD006	10	11	220611	207.72	189.62	76.04	4.34	2.30	1.13	4.39	0.79	30.14	0.41	30.21	7.89	18.10	5.74	0.73	0.37	22.60	2.54
22PD006	11	12	220612	379.35	357.87	135.74	8.36	4.68	2.50	9.75	1.74	55.59	0.68	58.67	15.59	21.47	12.12	1.54	0.69	45.84	4.40
22PD006	12	13	220613	689.61	668.45	248.14	15.84	7.72	4.74	19.48	2.97	109.54	1.00	113.26	28.76	21.17	21.74	3.01	1.08	84.58	6.60
22PD006	13	14	220614	206.72	197.67	69.77	4.99	2.78	1.38	5.51	0.96	31.67	0.36	33.71	8.61	9.05	6.63	0.91	0.40	27.68	2.30
22PD006	14	15	220615	243.52	236.16	82.30	6.14	3.30	1.64	7.35	1.17	36.59	0.38	38.84	9.77	7.36	7.27	1.04	0.40	37.46	2.49
22PD006	15	16	220616	147.81	142.75	46.19	3.97	2.23	0.86	4.45	0.77	21.81	0.27	21.46	5.47	5.06	4.49	0.62	0.27	28.32	1.56
22PD007	0	1	220701	242.81	231.92	83.65	5.89	3.40	1.46	6.75	1.16	35.89	0.36	36.97	9.40	10.89	7.32	1.00	0.41	35.56	2.70
22PD007	1	2	220702	130.40	116.44	38.08	3.25	1.97	0.83	3.34	0.68	18.18	0.26	17.61	4.58	13.96	3.72	0.52	0.27	21.46	1.69
22PD007	2	3	220703	139.63	115.39	36.97	3.32	2.01	0.75	3.23	0.68	18.53	0.35	17.15	4.72	24.23	3.73	0.54	0.29	21.08	2.04
22PD007	3	4	220704	82.26	68.92	21.74	1.95	1.12	0.42	1.87	0.42	10.91	0.20	10.15	2.73	13.34	2.21	0.32	0.17	13.59	1.12
22PD007	4	5	220705	140.76	126.19	43.85	3.21	2.00	0.65	3.23	0.63	22.05	0.28	18.66	4.89	14.57	3.40	0.54	0.27	20.70	1.81
22PD007	5	6	220706	178.53	158.59	53.68	4.49	2.87	0.94	4.30	1.01	24.86	0.43	23.33	6.23	19.94	4.88	0.68	0.42	27.81	2.65
22PD007	6	7	220707	259.32	235.39	92.50	5.57	3.64	1.32	5.74	1.21	37.76	0.52	33.36	9.21	23.93	6.13	0.96	0.55	33.40	3.52
22PD007	7	8	220708	283.83	259.75	89.67	6.67	3.91	1.55	6.77	1.34	44.45	0.58	41.87	11.06	24.08	8.16	1.07	0.56	38.22	3.86
22PD007	8	9	220709	346.53	321.37	127.75	8.37	4.60	1.90	7.91	1.67	45.15	0.71	46.07	12.38	25.15	9.69	1.31	0.73	48.51	4.62
22PD007	9	10	220710	320.67	296.44	115.96	7.55	4.07	1.77	7.66	1.56	44.21	0.66	43.16	11.45	24.23	8.84	1.25	0.66	43.30	4.33
22PD007	10	11	220711	295.97	273.57	107.12	6.45	3.84	1.53	6.92	1.28	43.16	0.55	39.89	10.61	22.39	8.18	1.08	0.62	38.48	3.88
22PD007	11	12	220712	252.41	230.94	87.95	5.76	3.52	1.37	5.97	1.19	37.65	0.49	32.54	8.53	21.47	7.29	1.02	0.58	33.65	3.42
22PD007	12	13	220713	263.32	243.84	74.20	7.57	4.28	1.96	8.16	1.55	38.23	0.57	39.77	9.87	19.48	8.99	1.28	0.57	43.18	3.67
22PD007	13	14	220714	201.54	186.81	66.21	4.89	2.98	1.24	5.36	1.02	27.56	0.43	28.81	7.38	14.72	5.91	0.89	0.42	30.86	2.84
22PD007	13	14	220714B	212.07	198.57	67.44	5.83	3.29	1.48	5.75	1.15	30.49	0.47	30.68	7.91	13.50	6.75	0.92	0.45	33.14	2.82
22PD007	14	15	220715	420.99	402.74	179.96	8.32	4.76	2.65	10.36	1.80	51.49	0.66	58.67	14.50	18.25	11.34	1.58	0.71	51.56	4.40
22PD007	15	16	220716	325.71	309.91	82.30	8.46	4.69	2.85	11.21	1.75	50.90	0.60	62.40	14.74	15.80	13.05	1.55	0.71	50.92	3.77
22PD007	16	17	220717	286.20	272.09	94.46	6.52	3.74	2.07	8.29	1.36	41.87	0.44	47.47	11.59	14.11	9.36	1.27	0.48	40.00	3.17
22PD007	17	18	220718	517.88	493.34	173.20	12.62	7.08	3.47	15.21	2.63	73.30	0.83	75.12	18.49	24.54	14.44	2.32	0.96	88.26	5.41
22PD007	18	19	220719	330.51	315.17	116.82	7.32	4.12	2.08	8.67	1.51	45.86	0.50	47.71	11.48	15.34	9.25	1.31	0.57	54.61	3.37
22PD008	5	6	220806	141.45	125.81	51.22	2.87	1.84	0.58	2.99	0.56	20.64	0.24	16.80	4.65	15.64	3.26	0.51	0.26	17.65	1.74
22PD008	6	7	220807	221.27	195.66	65.72	5.38	2.84	1.35	5.68	1.08	33.42	0.43	31.49	8.18	25.61	5.96	0.86	0.43	29.84	2.98

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	$Gd2O_3$ ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD008	7	8	220808	194.82	175.81	54.30	5.22	2.89	1.10	5.19	1.03	29.91	0.42	28.11	7.45	19.02	5.91	0.89	0.48	30.10	2.80
22PD008	8	9	220809	159.78	143.52	49.26	4.06	2.17	0.91	3.80	0.79	23.22	0.33	21.23	5.70	16.26	4.50	0.68	0.31	24.26	2.29
22PD008	9	10	220810	156.84	141.20	47.78	3.52	2.41	0.86	3.85	0.78	22.87	0.32	22.39	5.93	15.64	4.43	0.66	0.32	22.86	2.21
22PD008	10	11	220811	273.53	261.72	97.41	6.11	3.14	1.66	7.39	1.18	41.17	0.45	43.27	10.66	11.81	8.42	1.11	0.49	36.57	2.70
22PD008	11	12	220812	112.86	105.80	37.47	2.64	1.60	0.68	2.99	0.54	15.72	0.17	17.03	4.20	7.06	3.54	0.48	0.21	17.14	1.40
22PD008	12	13	220813	167.28	157.01	54.91	3.74	2.21	0.98	4.40	0.82	22.99	0.28	26.01	6.25	10.28	4.94	0.69	0.32	26.54	1.91
22PD008	13	14	220814	158.51	147.62	50.12	4.19	2.37	0.98	4.28	0.87	20.52	0.33	22.98	5.80	10.89	4.75	0.73	0.37	27.05	2.29
22PD008	14	15	220815	142.11	130.30	47.05	3.19	1.83	0.75	3.61	0.62	20.29	0.24	21.11	5.35	11.81	3.83	0.55	0.25	19.94	1.70
22PD008	15	16	220816	146.28	134.32	48.52	3.49	1.99	0.73	3.67	0.71	20.52	0.26	20.53	5.23	11.96	4.14	0.59	0.29	21.84	1.81
22PD008	16	17	220817	275.88	258.86	94.96	6.36	3.46	1.76	7.60	1.23	38.47	0.45	43.04	10.74	17.03	8.00	1.09	0.49	38.35	2.86
22PD008	17	18	220818	335.16	314.91	110.68	7.57	3.97	2.29	9.37	1.45	49.73	0.47	54.35	13.53	20.25	10.84	1.34	0.55	45.46	3.30
22PD009	13	14	220914	104.74	94.00	38.20	1.84	0.91	0.46	2.06	0.33	16.65	0.15	15.16	4.18	10.74	2.83	0.34	0.14	9.91	0.83
22PD009	14	15	220915	167.09	147.30	59.21	3.17	1.58	0.87	3.50	0.63	24.63	0.19	23.21	6.46	19.79	4.67	0.56	0.25	17.02	1.34
22PD009	15	16	220916	348.46	325.76	121.73	7.37	3.85	2.45	9.22	1.48	48.32	0.45	58.90	14.14	22.70	12.18	1.49	0.56	40.38	3.22
22PD009	16	17	220917	76.19	68.98	23.83	1.42	0.83	0.35	1.66	0.30	11.73	0.14	10.26	2.77	7.21	1.82	0.26	0.13	12.70	0.79
22PD010	13	14	221014	89.10	76.22	28.01	1.42	0.86	0.31	1.79	0.32	16.89	0.14	10.50	2.97	12.88	2.11	0.28	0.17	9.65	0.80
22PD010	14	15	221015	164.16	141.16	56.26	2.92	1.43	0.82	3.09	0.50	27.80	0.22	20.41	5.96	23.01	4.50	0.49	0.24	14.98	1.54
22PD010	15	16	221016	168.58	148.64	61.42	2.73	1.49	0.96	3.03	0.54	27.21	0.19	23.79	6.83	19.94	4.45	0.58	0.25	13.71	1.46
22PD010	16	17	221017	166.72	146.16	59.09	2.90	1.41	0.85	3.09	0.57	30.26	0.18	20.41	5.84	20.55	4.29	0.52	0.22	15.11	1.43
22PD010	17	18	221018	370.50	351.78	128.98	8.58	4.30	2.99	10.50	1.62	40.93	0.53	72.78	16.85	18.71	14.55	1.60	0.63	42.92	4.01
22PD010	18	19	221019	76.19	66.84	23.34	1.71	0.99	0.31	1.81	0.34	11.02	0.14	10.50	2.83	9.36	2.13	0.29	0.15	10.29	0.98
22PD010	19	20	221020	119.87	109.59	37.71	2.67	1.50	0.67	3.30	0.56	16.65	0.20	18.31	4.62	10.28	3.49	0.44	0.23	17.78	1.46
22PD011	1	2	221102	30.69	26.24	7.62	1.00	0.70	0.02	0.70	0.21	3.75	0.14	3.15	0.83	4.45	0.70	0.13	0.14	6.48	0.68
22PD011	2	3	221103	56.81	50.98	16.46	1.48	0.96	0.24	1.34	0.36	7.39	0.14	7.46	1.90	5.83	1.58	0.25	0.15	10.29	1.00
22PD011	3	4	221104	89.15	81.94	28.38	2.08	1.41	0.35	2.04	0.46	13.14	0.23	12.71	3.18	7.21	2.06	0.34	0.19	13.97	1.41
22PD011	4	5	221105	167.20	156.31	54.66	3.58	2.42	0.52	3.80	0.81	27.68	0.41	22.74	5.85	10.89	4.06	0.59	0.35	26.29	2.54
22PD011	5	6	221106	195.74	183.77	66.33	4.32	2.95	0.57	4.30	0.95	31.20	0.50	26.83	6.98	11.96	4.91	0.69	0.49	29.84	2.92
22PD011	6	7	221107	304.18	281.79	97.41	7.88	4.92	1.54	8.17	1.67	43.39	0.67	41.76	10.52	22.39	8.22	1.46	0.74	49.02	4.41
22PD011	7	8	221108	603.93	577.55	178.12	22.44	12.69	4.90	23.28	4.71	62.16	1.57	88.53	20.54	26.38	22.15	3.90	1.83	120.01	10.73
22PD011	8	9	221109	504.67	480.90	146.18	17.73	9.48	3.65	17.63	3.37	57.35	1.23	71.03	16.61	23.77	16.76	2.96	1.32	106.54	9.04
22PD011	9	10	221110	224.51	217.76	70.51	6.36	3.56	1.55	7.46	1.27	29.55	0.41	34.29	7.82	6.75	7.05	1.07	0.45	43.68	2.73
22PD012	3	4	221204	35.54	33.09	11.18	0.84	0.51	0.15	0.74	0.17	5.04	0.11	4.78	1.15	2.45	1.01	0.13	0.09	6.48	0.71

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd2O_3 ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD012	4	5	221205	111.88	102.52	37.71	2.39	1.38	0.49	2.56	0.58	17.71	0.26	14.23	3.96	9.36	2.64	0.39	0.26	16.38	1.57
22PD012	5	6	221206	161.21	140.20	53.31	3.01	2.12	0.69	3.19	0.69	24.75	0.35	18.78	5.32	21.01	3.46	0.51	0.34	21.33	2.36
22PD012	6	7	221207	268.90	238.84	75.18	9.59	5.10	2.06	9.08	1.78	28.15	0.71	36.28	8.78	30.06	8.94	1.51	0.81	45.34	5.55
22PD012	7	8	221208	356.87	336.62	108.71	11.99	7.06	2.87	12.56	2.51	37.41	0.98	55.17	13.23	20.25	13.34	2.01	0.98	60.96	6.84
22PD012	8	9	221209	515.00	494.60	170.75	12.17	6.96	3.47	16.31	2.60	65.09	0.88	84.68	19.57	20.40	17.74	2.23	0.94	85.21	6.00
22PD012	9	10	221210	164.25	158.89	54.30	3.59	2.18	0.93	4.86	0.74	20.41	0.27	23.91	6.03	5.37	5.01	0.60	0.29	34.03	1.73
22PD013	3	4	221304	80.31	71.41	24.69	1.87	1.14	0.34	1.71	0.44	12.43	0.18	9.10	2.85	8.90	1.99	0.31	0.17	12.83	1.37
22PD013	4	5	221305	161.97	151.54	55.28	3.50	2.28	0.41	3.41	0.70	26.39	0.39	22.74	6.11	10.43	4.10	0.56	0.37	23.11	2.19
22PD013	5	6	221306	198.47	180.68	61.91	4.91	3.20	1.00	5.67	1.00	27.68	0.44	26.24	6.69	17.79	5.71	0.82	0.41	31.87	3.12
22PD013	6	7	221307	800.43	774.81	246.91	22.95	11.95	5.92	29.51	4.55	107.78	1.46	127.14	31.17	25.61	27.13	4.18	1.60	142.86	9.71
22PD013	7	8	221308	371.46	363.33	80.83	9.20	5.43	2.23	12.74	2.06	47.15	0.57	53.07	12.26	8.13	10.54	1.55	0.65	121.40	3.63
22PD013	8	9	221309	218.17	208.66	54.54	5.75	3.25	1.37	6.79	1.18	26.62	0.39	31.61	7.33	9.51	6.15	0.89	0.42	59.69	2.69
22PD013	9	10	221310	144.37	137.31	37.59	3.45	2.12	0.89	4.70	0.80	17.01	0.28	20.65	5.07	7.06	4.50	0.58	0.24	37.59	1.84
22PD013	10	11	221311	98.01	92.03	26.41	2.15	1.41	0.63	2.87	0.53	12.55	0.20	13.88	3.47	5.98	2.74	0.36	0.16	23.49	1.18
22PD013	11	12	221312	132.05	124.68	35.62	3.23	1.89	0.93	3.84	0.72	16.07	0.20	20.18	4.60	7.36	4.21	0.52	0.23	30.86	1.59
22PD013	12	13	221313	114.16	107.11	31.57	2.95	1.62	0.80	3.42	0.61	14.07	0.19	16.80	3.97	7.06	3.54	0.53	0.22	25.65	1.16
22PD013	13	14	221314	95.70	88.18	28.25	2.13	1.05	0.72	2.95	0.42	12.55	0.15	15.05	3.67	7.52	2.99	0.35	0.13	16.64	1.13
22PD014	2	3	221403	102.58	90.47	27.76	2.48	1.37	0.58	2.70	0.50	15.01	0.19	14.58	3.54	12.12	2.89	0.39	0.23	16.76	1.48
22PD014	3	4	221404	167.27	147.02	50.00	3.86	2.32	1.00	4.73	0.77	22.40	0.32	23.56	6.09	20.25	5.00	0.71	0.34	23.87	2.07
22PD014	4	5	221405	190.53	175.96	66.33	4.68	2.29	1.26	5.60	0.85	24.51	0.28	28.11	7.12	14.57	5.81	0.79	0.34	25.91	2.07
22PD014	5	6	221406	169.05	152.17	55.16	3.49	1.89	1.02	4.37	0.66	25.92	0.24	24.96	6.60	16.87	4.84	0.64	0.27	20.45	1.69
22PD014	6	7	221407	251.10	237.14	81.93	5.60	3.37	1.71	7.58	1.07	36.24	0.40	42.34	10.52	13.96	8.21	1.06	0.41	34.03	2.65
22PD014	7	8	221408	154.83	144.25	51.59	3.42	1.84	1.01	4.32	0.65	21.46	0.26	23.33	5.69	10.58	4.59	0.56	0.27	23.62	1.62
22PD014	8	9	221409	175.62	160.74	53.80	3.84	2.40	1.20	4.77	0.79	21.46	0.31	25.54	6.33	14.88	5.43	0.67	0.31	31.62	2.25
22PD014	9	10	221410	112.88	106.29	33.04	2.63	1.32	0.68	3.15	0.52	15.60	0.19	18.78	4.78	6.60	3.64	0.44	0.17	20.06	1.29
22PD014	10	11	221411	129.66	120.61	41.77	2.70	1.43	0.75	3.30	0.50	17.83	0.23	20.76	5.35	9.05	3.79	0.56	0.22	20.06	1.36
22PD015	0	1	221501	111.48	95.84	32.31	2.25	1.43	0.53	2.40	0.55	16.07	0.24	14.35	3.95	15.64	2.86	0.44	0.26	16.64	1.57
22PD015	1	2	221502	409.20	377.91	200.84	8.24	5.00	2.05	7.93	1.56	39.41	0.64	46.77	13.05	31.29	10.95	1.47	0.66	34.92	4.43
22PD015	2	3	221503	641.47	633.80	197.16	16.30	7.47	5.04	20.98	2.96	101.92	0.75	123.06	30.45	7.67	24.70	3.26	0.98	93.59	5.20
22PD015	3	4	221504	81.86	78.03	24.81	2.43	1.17	0.66	2.80	0.52	10.56	0.14	12.01	2.72	3.83	2.45	0.40	0.16	16.13	1.08
22PD016	3	4	221604	152.46	125.92	45.57	3.25	1.90	0.75	3.41	0.70	19.59	0.31	18.66	4.94	26.53	3.50	0.54	0.34	20.32	2.14
22PD016	4	5	221605	201.64	179.09	72.72	5.96	2.90	1.40	5.39	1.25	18.30	0.39	25.43	6.48	22.55	6.47	0.94	0.48	27.81	3.18

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd2O_3 ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD016	5	6	221606	250.25	225.71	86.60	7.63	4.00	1.79	7.08	1.48	23.10	0.56	33.36	8.20	24.54	7.83	1.28	0.65	38.22	3.92
22PD016	5	6	221606B	280.89	250.67	88.32	8.44	4.88	2.23	8.46	1.71	24.51	0.56	39.19	9.11	30.22	9.71	1.39	0.67	46.99	4.51
22PD016	6	7	221607	503.09	475.32	151.09	11.37	6.46	3.32	13.37	2.43	71.78	0.78	79.67	19.51	27.76	14.78	1.94	0.87	92.07	5.88
22PD016	7	8	221608	172.76	160.80	55.89	3.96	2.10	1.34	4.16	0.80	22.40	0.30	27.41	6.23	11.96	5.51	0.73	0.34	27.43	2.19
22PD017	4	5	221705	52.17	42.51	14.00	1.04	0.80	0.22	1.13	0.26	6.57	0.15	5.48	1.51	9.66	0.97	0.18	0.18	8.89	1.12
22PD017	5	6	221706	307.37	290.04	165.22	6.96	4.55	1.42	6.66	1.51	18.53	0.65	26.48	6.03	17.33	6.62	1.15	0.77	38.60	4.89
22PD017	6	7	221707	1,141.57	1,104.91	714.93	25.48	15.49	5.33	22.13	5.41	44.45	2.12	81.76	18.30	36.66	22.21	4.08	2.38	124.45	16.40
22PD017	7	8	221708	634.35	610.88	276.39	19.17	11.95	4.16	18.27	4.34	40.93	1.50	65.55	14.44	23.47	16.12	3.06	1.61	121.78	11.61
22PD017	8	9	221709	449.40	431.76	148.64	13.14	7.75	2.93	13.20	2.83	45.15	0.97	58.44	12.75	17.64	13.22	2.14	1.08	102.35	7.17
22PD017	9	10	221710	485.93	465.53	214.97	13.20	8.20	3.08	12.85	2.91	35.42	1.01	52.95	11.80	20.40	12.47	2.16	1.24	85.46	7.79
22PD017	10	11	221711	214.08	201.65	75.92	5.21	3.45	1.51	5.56	1.16	23.46	0.43	29.39	6.54	12.42	6.12	0.93	0.50	38.60	2.88
22PD017	11	12	221712	212.68	200.56	80.71	5.33	3.03	1.37	5.24	1.09	21.81	0.41	28.69	6.68	12.12	6.42	0.94	0.50	35.30	3.03
22PD017	12	13	221713	170.91	162.16	65.23	4.10	2.60	1.20	4.41	0.86	17.47	0.36	23.79	5.32	8.74	4.79	0.73	0.34	28.70	2.25
22PD018	0	1	221801	111.74	96.25	32.80	2.64	1.51	0.67	2.71	0.56	14.43	0.20	15.40	3.83	15.49	3.27	0.40	0.23	15.87	1.73
22PD018	1	2	221802	202.50	181.64	62.53	5.51	2.84	1.29	5.51	1.07	24.39	0.33	29.39	7.59	20.86	6.00	0.82	0.43	31.37	2.58
22PD018	2	3	221803	457.06	401.38	120.01	14.86	8.88	3.75	15.79	3.17	47.26	1.21	67.07	15.65	55.68	15.42	2.61	1.31	74.92	9.45
22PD018	3	4	221804	325.30	300.45	85.01	8.85	5.26	2.26	10.40	1.84	46.21	0.63	51.90	11.91	24.85	10.12	1.61	0.75	59.05	4.65
22PD018	4	5	221805	217.78	207.96	42.38	6.76	4.70	1.42	6.81	1.64	26.39	0.52	30.56	7.07	9.82	6.54	1.01	0.61	67.43	4.12
22PD018	5	6	221806	238.11	221.70	53.19	7.66	4.68	1.64	8.07	1.64	29.91	0.44	36.04	8.49	16.41	7.98	1.22	0.61	56.13	4.01
22PD018	6	7	221807	191.52	180.17	42.63	6.14	3.40	1.48	6.28	1.36	26.51	0.36	29.63	6.75	11.35	5.89	1.00	0.49	45.21	3.04
22PD018	7	8	221808	158.18	150.36	36.73	4.63	2.96	1.09	5.42	1.05	21.93	0.34	26.36	5.98	7.82	5.07	0.80	0.38	35.05	2.57
22PD018	8	9	221809	162.51	149.78	44.10	4.74	2.52	1.32	4.68	0.93	21.34	0.24	26.83	6.09	12.73	5.53	0.75	0.32	28.19	2.20
22PD018	9	10	221810	141.28	134.07	37.59	3.55	2.18	0.93	4.02	0.84	20.05	0.22	24.38	5.17	7.21	4.30	0.68	0.26	28.19	1.71
22PD019	8	9	221909	141.89	127.16	59.58	2.97	1.85	0.76	2.95	0.58	15.83	0.27	16.45	4.19	14.72	3.48	0.48	0.29	15.37	2.11
22PD019	9	10	221910	119.42	107.45	43.61	2.41	1.61	0.59	2.67	0.55	15.36	0.19	15.75	4.22	11.96	3.63	0.41	0.24	14.48	1.73
22PD019	10	11	221911	129.37	117.71	42.13	2.71	1.69	0.68	3.33	0.57	18.88	0.26	19.48	5.33	11.66	3.71	0.46	0.25	16.51	1.71
22PD019	11	12	221912	165.08	154.96	57.00	3.50	1.86	0.90	4.00	0.68	26.51	0.31	25.89	7.03	10.12	4.84	0.61	0.30	19.30	2.23
22PD019	12	13	221913	154.96	144.99	54.66	2.97	1.67	0.72	3.34	0.62	24.86	0.28	24.61	6.20	9.97	4.23	0.54	0.32	17.91	2.05
22PD019	13	14	221914	145.44	137.01	46.92	3.29	1.83	0.82	3.55	0.72	22.28	0.24	22.86	5.76	8.44	4.58	0.58	0.31	21.08	2.17
22PD019	14	15	221915	136.12	127.53	44.10	2.88	1.65	0.83	3.50	0.62	22.40	0.19	21.35	5.57	8.59	3.93	0.58	0.23	18.29	1.41
22PD019	15	16	221916	113.02	106.27	36.36	2.66	1.20	0.63	2.97	0.53	18.53	0.19	17.15	4.70	6.75	3.88	0.47	0.22	15.62	1.16
22PD020	7	8	222008	90.40	82.27	31.69	1.60	1.11	0.31	1.75	0.32	16.07	0.16	11.78	3.40	8.13	2.10	0.27	0.15	10.67	0.90

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	$Gd2O_3$ ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
22PD020	8	9	222009	2,547.60	2,519.99	1,216.12	29.73	9.08	19.22	45.64	4.08	293.20	0.83	552.87	156.46	27.61	111.55	6.74	1.22	66.29	6.96
22PD020	9	10	222010	1,332.66	1,308.28	573.66	23.18	11.84	9.66	29.05	4.60	141.32	1.40	246.11	67.90	24.39	51.83	4.59	1.63	131.43	10.07
22PD020	10	11	222011	673.33	650.94	256.74	12.74	6.98	4.60	16.02	2.62	81.28	0.75	115.71	30.69	22.39	24.70	2.19	0.93	89.53	5.49
22PD020	11	12	222012	388.79	376.67	160.92	6.32	3.11	2.73	8.34	1.19	45.62	0.43	73.60	19.94	12.12	14.50	1.31	0.46	35.56	2.64
22PD020	13	14	222014	472.89	457.85	186.10	9.16	4.71	3.25	11.31	1.74	55.24	0.64	82.81	22.53	15.03	16.99	1.68	0.66	56.89	4.13
320923		6.096	320923-20	851.85	833.60	289.90	21.29	14.24	2.27	20.98	4.80	133.11	2.51	125.39	34.07	18.25	25.74	3.66	2.31	137.78	15.54
320923	6.096	6.58368	320923-21.6	1,005.56	983.78	364.83	26.28	14.24	7.76	29.62	5.26	126.66	2.40	184.29	47.00	21.78	41.51	4.82	2.34	111.50	15.26
320923	6.58368	7.3152	320923-24	661.83	647.56	126.53	21.00	12.86	4.57	25.24	4.78	101.80	1.67	116.41	28.88	14.26	25.28	3.80	1.71	163.18	9.85
320923	7.3152	8.2296	320923-27	554.30	543.10	212.51	13.14	7.96	3.15	14.12	2.73	70.72	1.15	89.00	23.08	11.20	18.61	2.40	1.18	75.81	7.55
69079		6.7056	69079-22	586.37	575.33	262.88	12.22	6.28	3.72	14.52	2.39	73.18	0.99	89.23	22.96	11.04	18.55	2.27	0.97	58.92	6.24
69079	6.7056	9.7536	69079-32	466.53	452.42	138.20	11.06	6.82	3.15	13.43	2.47	71.42	0.82	77.22	19.75	14.11	14.73	2.02	0.96	84.96	5.42
69034		7.0104	69034-23	175.65	162.76	66.95	4.41	2.37	1.16	4.64	0.93	19.70	0.41	22.98	5.99	12.88	6.05	0.79	0.42	23.37	2.60
69034	7.0104	7.3152	69034-24	22,375.97	22,359.09	10,515.10	188.80	66.32	180.05	360.76	28.87	2392.51	5.63	5587.06	1208.20	16.87	1084.23	44.81	8.55	640.03	48.17
59400		6.7056	59400-22	3,057.17	3,036.16	1,983.87	55.43	25.84	16.91	58.44	10.05	188.23	3.39	281.10	71.40	21.01	74.79	10.10	3.93	229.22	23.46
59400	6.7056	7.3152	59400-24	6,747.77	6,722.92	2,997.30	62.55	24.36	52.11	114.91	10.14	798.68	2.24	1621.30	427.70	24.85	317.73	14.47	3.03	259.06	17.37
69040		12.4968	69040-41	1,032.59	1,002.53	217.43	56.01	34.08	11.53	53.71	12.03	36.83	4.54	133.55	23.32	30.06	44.76	9.28	5.03	328.90	31.54
69040	12.4968	15.24	69040-50	1,072.69	1,063.64	474.16	12.57	5.77	7.78	19.19	2.33	126.66	0.65	236.78	61.62	9.05	46.96	2.65	0.80	61.08	4.63
69040	15.24	16.1544	69040-53	455.02	443.67	146.79	14.23	8.58	2.86	14.70	2.90	52.42	1.16	62.17	15.28	11.35	13.68	2.42	1.16	98.16	7.14
69033		7.9248	69033-26	533.05	523.23	216.81	9.77	4.77	4.05	12.62	1.80	62.16	0.49	106.61	27.18	9.82	21.63	1.89	0.65	49.02	3.78
69033	7.9248	8.8392	69033-29	1,027.15	1,010.58	324.30	29.38	15.15	7.97	34.58	5.75	146.60	1.66	149.88	36.37	16.57	35.02	5.36	1.93	205.72	10.91
69034		8.8392	69034-29	1,310.10	1,293.68	572.43	24.22	11.95	9.67	29.28	4.38	145.43	1.65	246.11	63.31	16.41	53.46	4.53	1.75	114.54	10.99
59399		18.288	59399-60	441.07	423.59	151.09	11.03	6.39	2.78	12.62	2.34	59.58	0.91	64.85	17.10	17.49	14.38	2.05	0.96	71.88	5.64
69088		6.096	69088-20	2,100.41	2,074.03	734.58	49.35	22.70	14.94	66.85	9.55	344.80	2.21	387.24	98.35	26.38	73.29	9.73	2.87	241.92	15.66
PD001	7	8	pd108	160.78	140.38	52.33	3.26	1.82	0.82	3.53	0.68	22.75	0.28	22.63	6.42	20.40	5.10	0.55	0.29	18.03	1.89
PD001	8	9	pd109	185.53	164.05	55.89	4.51	2.60	0.89	3.80	0.96	28.15	0.43	24.14	7.01	21.47	5.30	0.69	0.41	26.54	2.72
PD001	9	10	pd110	180.87	175.81	87.34	3.39	1.64	1.25	3.67	0.54	22.17	0.19	26.59	6.79	5.06	5.81	0.61	0.23	14.10	1.50
PD002	0	1	pd201	256.93	242.51	92.01	5.52	3.17	1.41	5.69	1.02	43.39	0.32	36.74	9.63	14.42	6.99	0.95	0.40	32.89	2.37
PD002	1	2	pd202	104.44	90.18	32.06	2.41	1.32	0.56	2.26	0.44	14.89	0.22	13.18	3.58	14.26	2.79	0.38	0.21	14.48	1.42
PD002	2	3	pd203	131.24	108.23	35.38	3.23	1.97	0.67	3.17	0.58	16.77	0.25	18.66	4.65	23.01	4.39	0.51	0.26	15.87	1.87

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd2O_3 ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
PD002	3	4	pd204	83.86	66.38	21.87	1.82	1.37	0.34	1.71	0.36	11.85	0.19	9.91	2.61	17.49	1.75	0.28	0.15	10.92	1.25
PD002	4	5	pd205	111.97	91.72	29.60	2.58	1.75	0.47	2.10	0.58	15.25	0.26	13.53	3.52	20.25	2.62	0.38	0.27	16.89	1.91
PD002	5	6	pd206	167.67	143.74	46.92	4.14	2.46	0.67	3.27	0.71	26.74	0.38	21.00	5.79	23.93	3.92	0.58	0.38	24.13	2.66
PD002	6	7	pd207	175.28	157.80	52.33	4.17	2.85	0.72	3.93	0.92	28.62	0.41	21.35	5.98	17.49	4.49	0.68	0.41	27.94	3.02
PD002	7	8	pd208	197.22	174.21	57.73	4.72	3.16	0.83	4.20	0.96	30.49	0.50	26.36	6.91	23.01	5.18	0.72	0.49	28.70	3.26
PD002	8	9	pd209	133.67	119.40	39.06	3.44	2.24	0.46	2.64	0.72	20.29	0.39	17.03	4.76	14.26	3.85	0.46	0.33	21.21	2.52
PD002	9	10	pd210	223.68	210.64	58.47	7.13	3.67	1.90	7.33	1.26	30.84	0.59	38.02	9.62	13.04	9.23	1.16	0.54	37.21	3.67
PD002	10	11	pd211	191.97	169.58	42.38	5.95	3.29	1.32	5.35	1.07	28.50	0.51	31.26	7.72	22.39	6.23	0.92	0.53	31.24	3.33
PD002	11	12	pd212	293.55	280.67	159.08	6.48	4.01	1.55	5.88	1.35	21.93	0.59	28.69	6.96	12.88	6.63	1.01	0.57	32.00	3.92
PD002	12	13	pd213	318.55	305.05	121.98	8.38	4.59	2.21	8.74	1.70	35.65	0.61	45.14	11.18	13.50	9.61	1.39	0.70	49.02	4.17
PD002	13	14	pd214	338.47	316.69	107.24	7.22	4.30	2.08	8.18	1.47	58.05	0.60	53.07	13.71	21.78	9.64	1.21	0.62	45.34	3.96
PD002	14	15	pd215	158.88	145.23	47.29	3.90	2.78	1.12	4.26	0.85	23.22	0.38	22.16	5.39	13.65	4.89	0.75	0.34	25.52	2.36
PD002	15	16	pd216	587.70	572.82	130.82	19.57	13.95	4.05	20.52	4.65	55.71	1.90	76.05	17.64	14.88	17.10	3.15	1.96	194.29	11.44
PD003	5	6	pd306	129.69	105.15	32.80	3.10	1.92	0.46	2.47	0.61	19.23	0.34	14.46	4.02	24.54	2.70	0.49	0.33	20.19	2.02
PD003	6	7	pd307	126.96	104.41	31.69	3.24	2.06	0.39	2.37	0.69	18.18	0.39	13.76	3.59	22.55	2.99	0.45	0.35	22.10	2.16
PD003	7	8	pd308	151.02	128.01	37.83	4.12	2.96	0.57	3.55	0.85	21.11	0.49	15.63	4.63	23.01	3.33	0.62	0.46	28.83	3.04
PD003	8	9	pd309	226.81	201.04	89.30	5.60	3.52	1.01	4.56	1.23	24.51	0.59	22.74	6.23	25.77	5.18	0.91	0.55	31.24	3.86
PD003	9	10	pd310	341.41	317.79	159.08	7.18	4.44	1.64	6.26	1.51	37.76	0.78	36.39	10.38	23.62	8.02	1.20	0.69	37.59	4.86
PD003	10	11	pd311	336.96	315.18	80.09	7.83	4.60	1.91	8.70	1.49	70.95	0.65	61.24	16.73	21.78	10.48	1.48	0.70	43.68	4.65
PD003	11	12	pd312	123.61	113.02	36.48	2.72	1.80	0.63	3.01	0.60	21.46	0.23	17.15	4.62	10.58	2.93	0.46	0.24	19.18	1.54
PD003	12	13	pd313	226.78	213.44	68.91	4.73	2.53	1.53	5.82	0.89	38.70	0.38	41.99	11.09	13.34	8.12	0.91	0.35	25.27	2.22
PD006	1	2	pd602	136.66	119.48	41.27	3.45	2.06	0.78	3.49	0.71	18.30	0.25	17.96	4.72	17.18	3.69	0.55	0.33	20.06	1.84
PD006	2	3	pd603	122.99	109.49	37.47	3.20	1.94	0.63	2.87	0.63	17.71	0.28	15.75	4.29	13.50	3.07	0.47	0.29	19.05	1.84
PD006	3	4	pd604	95.97	86.15	30.22	2.48	1.42	0.49	2.19	0.50	12.43	0.22	12.48	3.35	9.82	2.99	0.42	0.24	15.11	1.62
PD006	4	5	pd605	81.96	69.85	23.59	2.00	1.34	0.31	1.71	0.45	11.49	0.20	10.15	2.83	12.12	2.04	0.29	0.21	11.94	1.31
PD006	5	6	pd606	73.07	61.41	20.88	1.58	1.10	0.27	1.41	0.33	10.32	0.18	8.75	2.25	11.66	2.02	0.29	0.19	10.54	1.30
PD006	7	8	pd608	39.31	33.95	15.97	0.73	0.54	0.12	0.70	0.15	5.16	0.20	3.73	1.08	5.37	0.83	0.13	0.07	4.06	0.47
PD006	8	9	pd609	167.29	152.26	80.21	2.51	1.75	0.52	2.84	0.57	18.76	0.26	16.10	4.54	15.03	3.66	0.49	0.27	18.03	1.72
PD006	9	10	pd610	184.39	162.15	61.67	3.90	2.44	0.90	3.57	0.80	27.68	0.31	21.70	6.14	22.24	4.56	0.65	0.37	25.14	2.33
PD006	10	11	pd611	214.44	188.98	64.61	4.38	2.81	1.04	4.54	1.00	35.65	0.38	28.58	7.80	25.46	4.95	0.81	0.42	29.46	2.53
PD006	11	12	pd612	205.68	183.90	67.32	4.38	2.50	0.91	4.30	0.99	32.13	0.39	26.71	7.24	21.78	4.88	0.74	0.41	28.45	2.55
PD006	12	13	pd613	238.75	214.82	76.16	4.73	3.10	1.11	5.05	1.03	42.57	0.44	29.63	8.57	23.93	6.18	0.89	0.53	31.87	2.96

Hole ID	From	To	Sample ID	TREO ppm	TREO-Sc ppm	CeO_2 ppm	Dy_2O_3 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	$Gd2O_3$ ppm	HO_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Nd_2O_3 ppm	Pr_2O_3 ppm	Sc_2O_3 ppm	Sm_2O_3 ppm	Tb_2O_3 ppm	Tm_2O_3 ppm	Y_2O_3 ppm	Yb_2O_3 ppm
PD006	13	14	pd614	158.57	143.69	53.07	3.31	1.96	0.57	3.28	0.66	28.62	0.27	19.25	5.91	14.88	3.92	0.62	0.27	20.19	1.80
PD006	14	15	pd615	159.45	141.66	51.47	3.34	2.32	0.71	3.11	0.57	27.91	0.28	18.66	5.68	17.79	3.97	0.51	0.32	20.83	1.98
PD006	15	16	pd616	166.01	144.84	51.22	3.44	1.99	0.72	3.19	0.70	26.74	0.35	20.76	5.82	21.17	4.02	0.65	0.35	22.60	2.27
PD006	16	17	pd617	166.12	145.26	51.72	3.39	2.60	0.73	3.52	0.71	28.26	0.36	18.66	6.03	20.86	3.77	0.54	0.39	22.22	2.37
PD006	17	18	pd618	206.08	181.08	66.21	4.52	3.01	0.78	3.64	0.86	32.37	0.41	25.66	7.10	25.00	5.21	0.73	0.40	27.43	2.76
PD006	18	19	pd619	177.58	161.63	61.91	3.74	1.83	0.88	3.69	0.63	30.61	0.35	22.39	6.61	15.95	4.85	0.64	0.27	21.33	1.89
PD006	19	20	pd620	232.92	213.90	80.71	4.79	2.74	1.27	4.81	0.93	37.53	0.36	34.53	9.16	19.02	6.39	0.81	0.45	26.67	2.77
PD006	20	21	pd621	257.30	238.58	91.02	5.39	3.32	1.78	5.97	1.01	36.71	0.42	39.89	10.38	18.71	8.78	0.94	0.48	29.33	3.15
PD006	21	22	pd622	562.82	543.19	200.84	13.03	7.22	4.09	16.25	2.52	77.64	0.92	92.61	23.02	19.63	19.25	2.40	1.02	76.57	5.82
PD008	5	6	pd806	193.08	167.92	57.37	4.17	2.71	0.80	3.90	0.84	32.13	0.45	23.91	6.66	25.15	4.77	0.65	0.48	26.29	2.81
PD008	7	8	pd808	165.51	159.07	57.24	4.13	2.62	0.81	3.92	0.76	25.22	0.44	23.33	6.48	6.44	4.59	0.65	0.43	25.78	2.68
PD008	8	9	pd809	201.64	185.23	59.45	5.10	3.17	1.30	5.21	1.02	30.14	0.49	28.93	7.64	16.41	6.45	0.84	0.50	31.87	3.13
PD008	9	10	pd810	247.04	230.17	93.73	6.44	3.62	1.69	6.12	1.26	28.15	0.47	32.54	8.36	16.87	7.92	1.04	0.55	34.67	3.62
PD008	10	11	pd811	182.60	169.25	60.68	4.52	2.66	1.11	4.85	0.84	24.04	0.36	27.29	6.66	13.34	5.59	0.73	0.41	27.05	2.45
PD008	11	12	pd812	169.93	157.36	49.38	4.30	2.55	1.23	4.55	0.79	25.57	0.36	27.06	6.72	12.58	5.57	0.68	0.39	25.78	2.43
PD008	12	13	pd813	213.52	202.79	71.25	5.74	3.29	1.69	6.90	1.11	25.92	0.36	33.59	8.06	10.74	7.72	1.00	0.50	32.64	3.01
PD008	13	14	pd814	252.46	240.65	98.15	6.07	3.49	1.75	7.11	1.24	31.43	0.42	35.11	8.82	11.81	7.50	1.06	0.53	34.92	3.05

Sources: ALS, SRK

Notes: Assay results converted to oxide values and totalled rare earth oxide values (TREO). TREO-Sc is totalled REE values excluding Scandium (Sc_2O_3).