

Hyden REE Drilling Intersects Wide and Shallow Mineralisation

KEY HIGHLIGHTS

- Initial drilling on the eastern gravity anomaly at Hyden has intersected very wide and shallow significant clay hosted TREO mineralisation, extending 2km north-south and 1km east-west including:
 - **32m @ 1,480 ppm TREO** from 16m to EOH including **12m @ 1,899 ppm** in 23HYD032
 - **48m @ 1,086 ppm TREO** from 8m to EOH including **24m @ 1,197 ppm** in 23HYD065
 - **59m @ 904 ppm TREO** from 4m to EOH including **24m @ 1,052 ppm** in 23HYD028
 - **41m @ 1,073 ppm TREO** from 4m to EOH including **28m @ 1,203 ppm** in 23HYD034
 - **44m @ 1,068 ppm TREO** from surface to EOH including **32m @ 1,151 ppm** in 23HYD071
 - **35m @ 1,125 ppm TREO** from surface to EOH including **28m @ 1,233 ppm** in 23HYD072
 - **32m @ 1,015 ppm TREO** from 4m to EOH including **24m @ 1,148 ppm** in 23HYD057
 - **36m @ 1,014 ppm TREO** from 16m to EOH including **16m @ 1,225 ppm** in 23HYD059
 - **30m @ 1,019 ppm TREO** from 16m to EOH including **16m @ 1,274 ppm** in 23HYD060
 - **44m @ 900 ppm TREO** from 12m to EOH including **23m @ 1,089 ppm** in 23HYD062
 - **32m @ 1,084 ppm TREO** from 12m to EOH including **24m @ 1,198 ppm** in 23HYD063
 - **32m @ 1,092 ppm TREO** from 8m including **16m @ 1,425 ppm** in 23HYD066
 - **39m @ 995 ppm TREO** from 12m to EOH including **24m @ 1,127 ppm** in 23HYD077
 - **16m @ 1,970 ppm TREO** from 20m including **4m @ 3,360 ppm** in 23HYD074
- Of the 58 holes completed, 45 intersected significant (+500ppm TREO) mineralisation, with 26 holes ending in mineralisation
- High NdPr concentrations (average 23%) within the significant intervals
- Detailed external evaluation of the full multi element dataset is underway to better understand the source and mineralogy of the TREO mineralisation
- Metallurgical test work is underway on a number of the zones of mineralisation

Mamba Exploration Limited (ACN 644 571 826) ('Mamba', 'M24' or the 'Company') is pleased to report that the initial shallow aircore drilling completed over the eastern gravity anomaly at the Hyden REE project in the wheatbelt of Western Australia has intersected significant widths and grades of clay hosted TREO mineralisation (see Figure 1).

Managing Director, Mike Dunbar said:

“It is pleasing to intersect such significant widths and grades of clay REE mineralisation from the initial drilling at the gravity anomaly at Hyden.

The initial drilling was designed as a first pass test of the target, which extends for over 2km north south and around 1km east west. The drilling identified very significant widths and grades of regolith hosted mineralisation with TREO grades commonly over 1,000ppm with zones of mineralisation of up to 59m thick. Also surprising was that of the 58 holes completed, 45 intersected significant mineralisation and mineralisation extended to the end of 26 of the holes. This highlights not only that the mineralisation is very widespread, but it is also remarkably consistent within the mineralised intervals. While we have been surprised by the width and consistency of the mineralisation, it is also surprising that the mineralisation is so shallow, with little to no surficial cover.

The higher-grade mineralisation remains open to the north and south and can now be traced for over 2,000m north south and extends for over 800m east to west and the higher grade zones average 30m thick. While the bedrock source of the mineralisation has not yet been identified, the additional geochemical data collected will be used to identify and hopefully vector into the bedrock source and will assist in determining the mineralogy of the REE mineralisation.

While the geochemical evaluation continues, metallurgical leaching test work has also commenced on a number of the zones of mineralisation from both the clay target zone and also the eastern gravity target area. These preliminary tests are designed to get an initial understanding of the leachability of the REE mineralisation within the project.”

Of the 58 holes completed, 45 intersected significant mineralisation, with 26 holes ending in mineralisation (see Figures 2 & 3). The significant intersections can be broadly broken down into three categories, those with very wide and higher-grade zones (which have an interval x grade of greater than 30,000ppm TREO), those with wide zones of moderate grade mineralisation (interval x grade of 10,000 – 30,000 ppm TREO) and narrower or lower grade zones of mineralisation (interval x grade of <10,000 ppm TREO).

The better zones of mineralisation (interval x grade >30,000 ppm TREO) include:

- **32m @ 1,480 ppm TREO** from 16m to EOH including **12m @ 1,899 ppm** in 23HYD032
- **48m @ 1,086 ppm TREO** from 8m to EOH including **24m @ 1,197 ppm** in 23HYD065
- **59m @ 904 ppm TREO** from 4m to EOH including **24m @ 1,052 ppm** in 23HYD028
- **41m @ 1,073 ppm TREO** from 4m to EOH including **28m @ 1,203 ppm** in 23HYD034
- **44m @ 1,068 ppm TREO** from surface to EOH including **32m @ 1,151 ppm** in 23HYD071
- **35m @ 1,125 ppm TREO** from surface to EOH including **28m @ 1,233 ppm** in 23HYD072
- **32m @ 1,015 ppm TREO** from 4m to EOH including **24m @ 1,148 ppm** in 23HYD057
- **36m @ 1,014 ppm TREO** from 16m to EOH including **16m @ 1,225 ppm** in 23HYD059
- **30m @ 1,019 ppm TREO** from 16m to EOH including **16m @ 1,274 ppm** in 23HYD060
- **44m @ 900 ppm TREO** from 12m to EOH including **23m @ 1,089 ppm** in 23HYD062
- **32m @ 1,084 ppm TREO** from 12m to EOH including **24m @ 1,198 ppm** in 23HYD063
- **32m @ 1,092 ppm TREO** from 8m including **16m @ 1,425 ppm** in 23HYD066
- **39m @ 995 ppm TREO** from 12m to EOH including **24m @ 1,127 ppm** in 23HYD077
- **16m @ 1,970 ppm TREO** from 20m including **4m @ 3,360 ppm** in 23HYD074

Intervals of wide, moderate grade mineralisation (interval x grade between 10,000 and 30,000ppm TREO) include:

- **23m @ 1,229 ppm TREO** from 24m to EOH in 23HYD058
- **24m @ 1,109 ppm TREO** from 20m to EOH including **8m @ 1,621 ppm** in 23HYD079
- **32m @ 757 ppm TREO** from 12m including **8m @ 987 ppm** in 23HYD067
- **31m @ 743 ppm TREO** from 31m in 23HYD076
- **28m @ 799 ppm TREO** from 8m to EOH including **8m @ 1,200 ppm** in 23HYD073
- **20m @ 1,085 ppm TREO** from 24m to EOH including **12m @ 1,199 ppm** in 23HYD031
- **23m @ 921 ppm TREO** from 16m to EOH including **15m @ 985 ppm** in 23HYD078
- **22m @ 957 ppm TREO** from 12m to EOH including **4m @ 1,316 ppm** in 23HYD068
- **24m @ 834 ppm TREO** from 8m including **16m @ 950 ppm** in 23HYD037
- **18m @ 1,097 ppm TREO** from 24m to EOH including **4m @ 2,072 ppm** in 23HYD080
- **20m @ 977 ppm TREO** from 20m including **12m @ 1,068 ppm** in 23HYD069
- **20m @ 878 ppm TREO** from 16m including **8m @ 1,291 ppm** in 23HYD030
- **18m @ 968 ppm TREO** from surface to EOH including **8m @ 1,386 ppm** in 23HYD053
- **22m @ 758 ppm TREO** from surface to EOH in 23HYD061
- **20m @ 669 ppm TREO** from 8m including **8m @ 915 ppm** in 23HYD064
- **20m @ 669 ppm TREO** from 4m in 23HYD026
- **17m @ 600 ppm TREO** from 20m in 23HYD036

Narrower or lower grade zones of mineralisation are contained in Table 1 below, while collar details are included in Table 2 and for completeness, the full REE assay results along with uranium, thorium and phosphate results are included in Appendix 1.

Of particular interest is that the drilling over the gravity anomaly target area identified significantly higher grades and broader intervals of REE mineralisation compared to the intersections within the “clay target area”. Figure 7 shows both target areas with the significant interval x TREO grade using a consistent legend. The new drilling over the gravity target area has returned results (using interval x grade) that are 3 to 4 times more significant than the drilling completed over the clay target area.

Further evaluation is being undertaken of the full geochemical data set to better understand the source and mineralogy of the REE mineralisation within the project, to assist in the ongoing exploration efforts. The geochemical evaluation will be combined with the geophysical data, geological logs, and the previous SEM and petrology that has been completed over the project to assist in providing a vector towards the bedrock source of the mineralisation.

In addition to the ongoing geochemical evaluation, additional metallurgical samples have also been collected and submitted to ALS for initial leach test work to determine the preferred processing path for the regolith REE mineralisation.

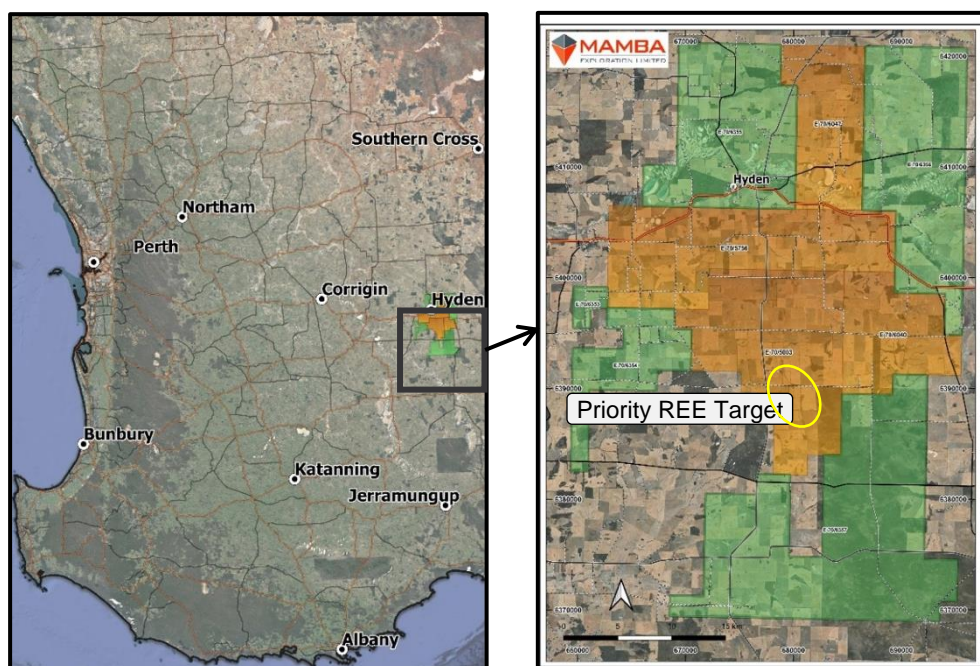


Figure 1: Location of Mamba Exploration’s Hyden Project (LHS) and the Hyden Option Tenements (orange) and recently granted Exploration Licences (green) (RHS).

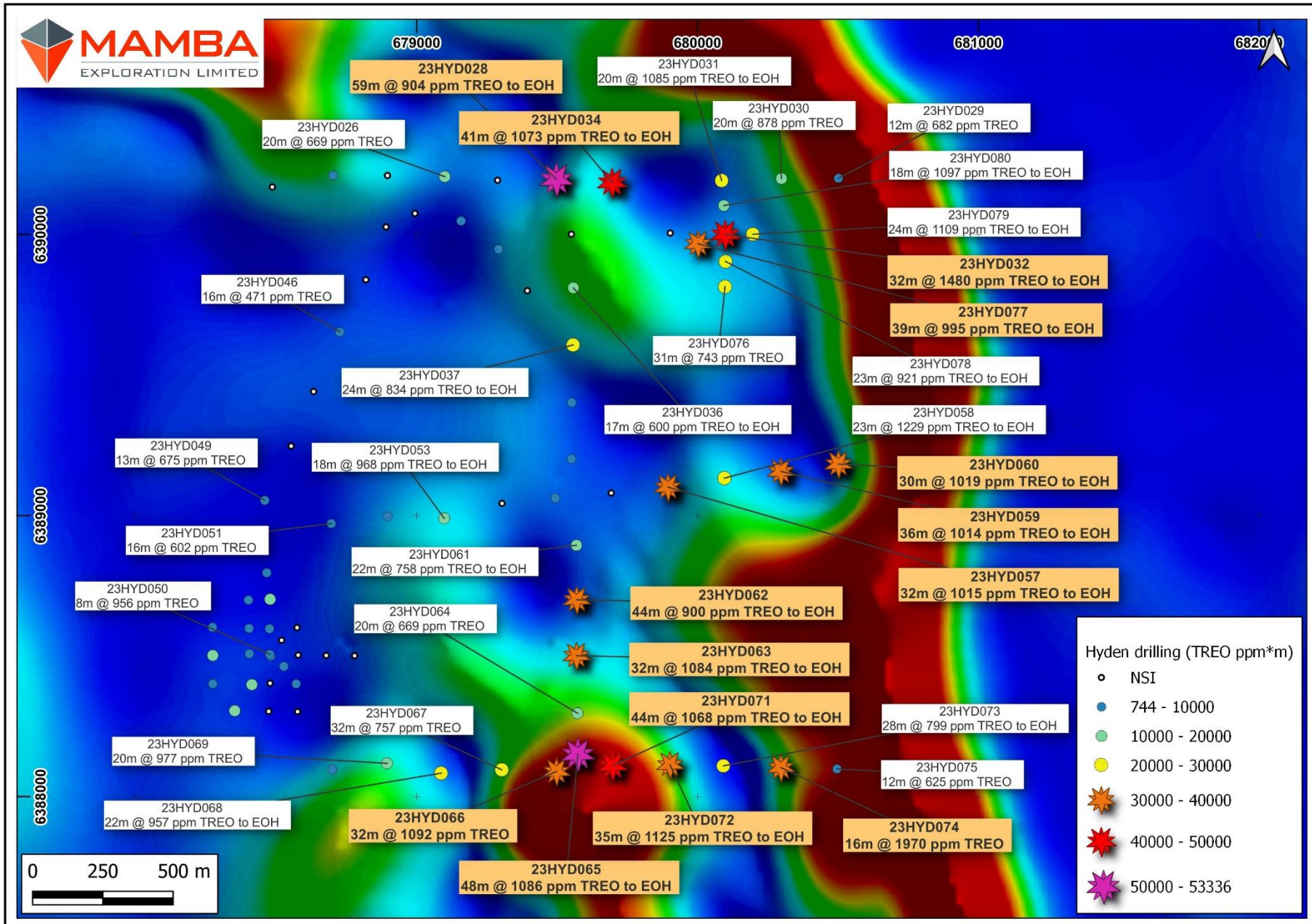


Figure 2: Hyden Project: Gravity Target Aircore Drilling - Significant (+500ppm) Intersections.

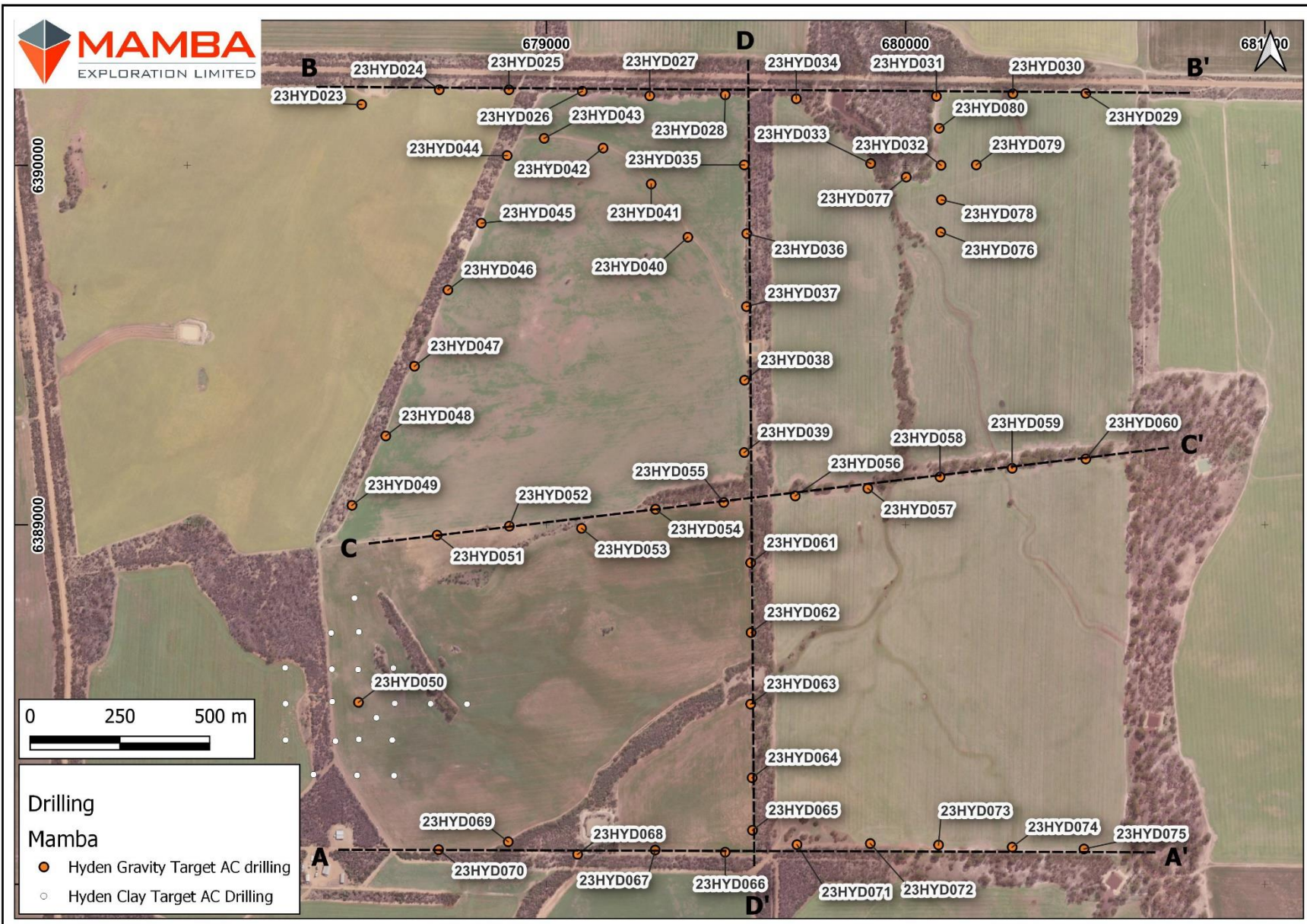


Figure 2: Hyden Project: Gravity Target Drilling -Collars and Cross Section Locations.

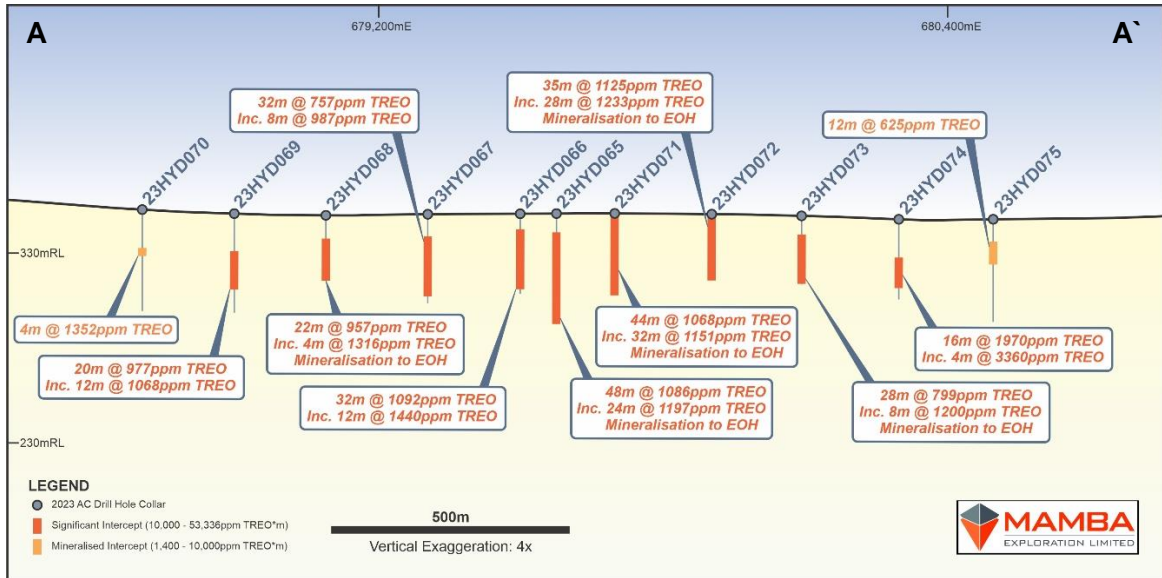


Figure 3: Hyden Project: Southern Cross Section (A – A').

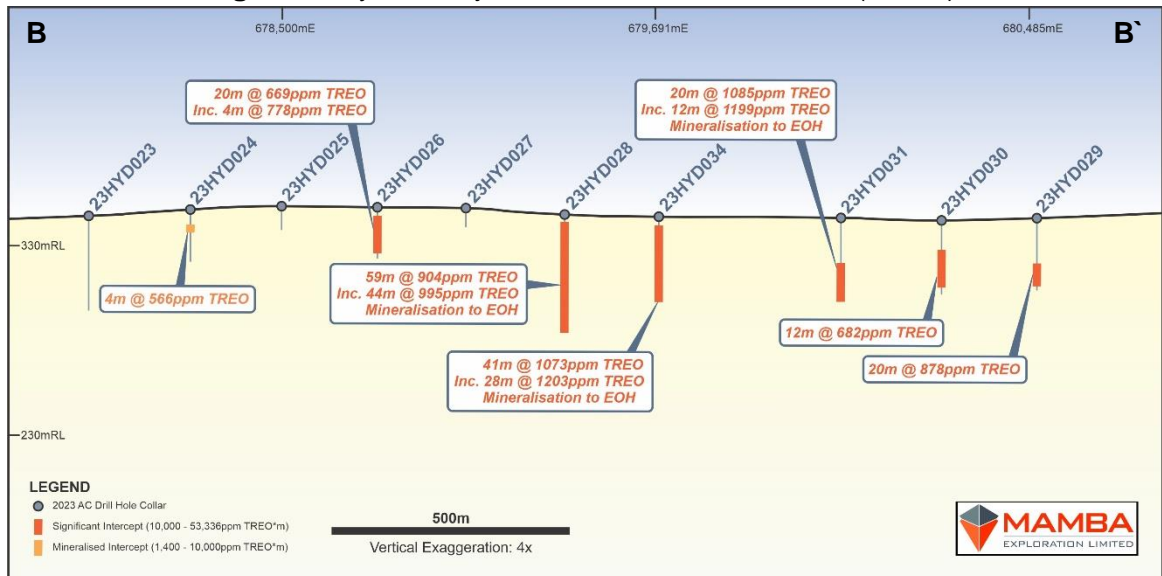


Figure 4: Hyden Project: Northern Cross Section (B – B').

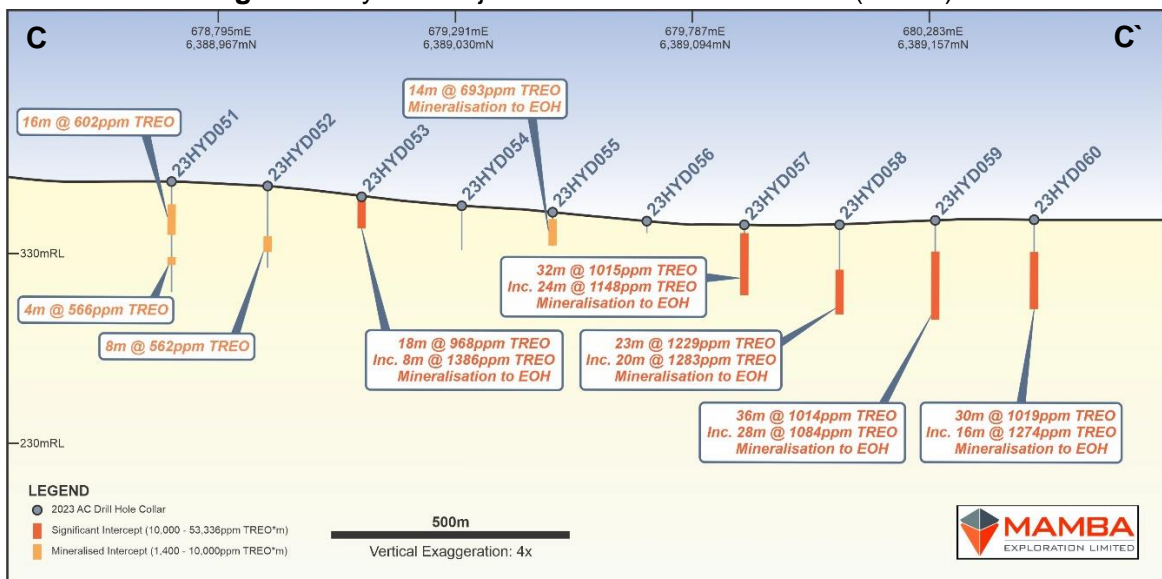


Figure 5: Hyden Project: Central Cross Section (C – C').

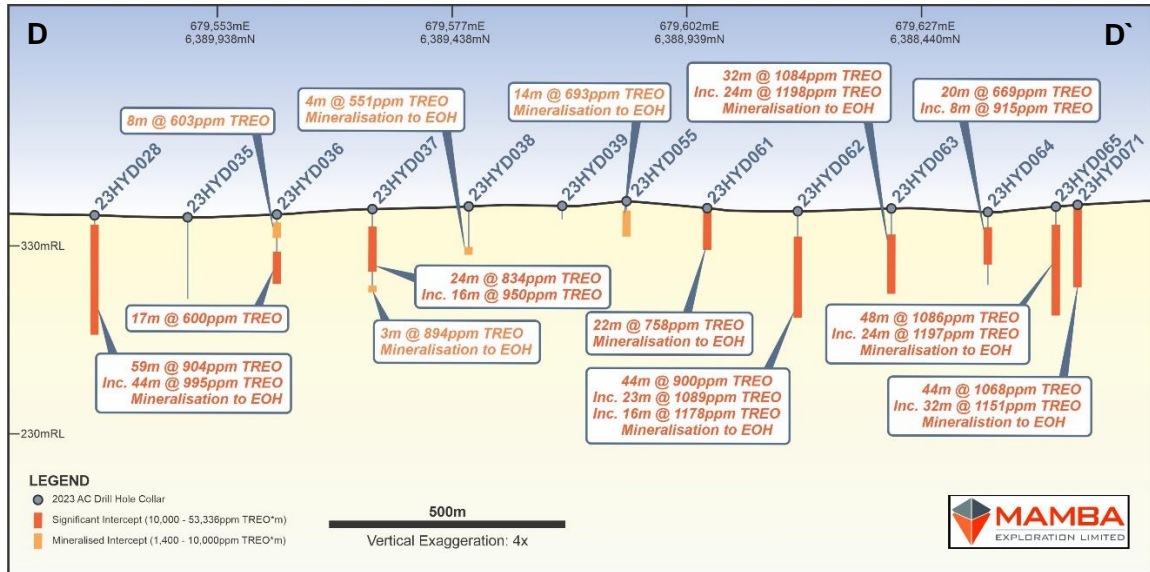


Figure 6: Hyden Project: Central North South Cross Section (D – D`).

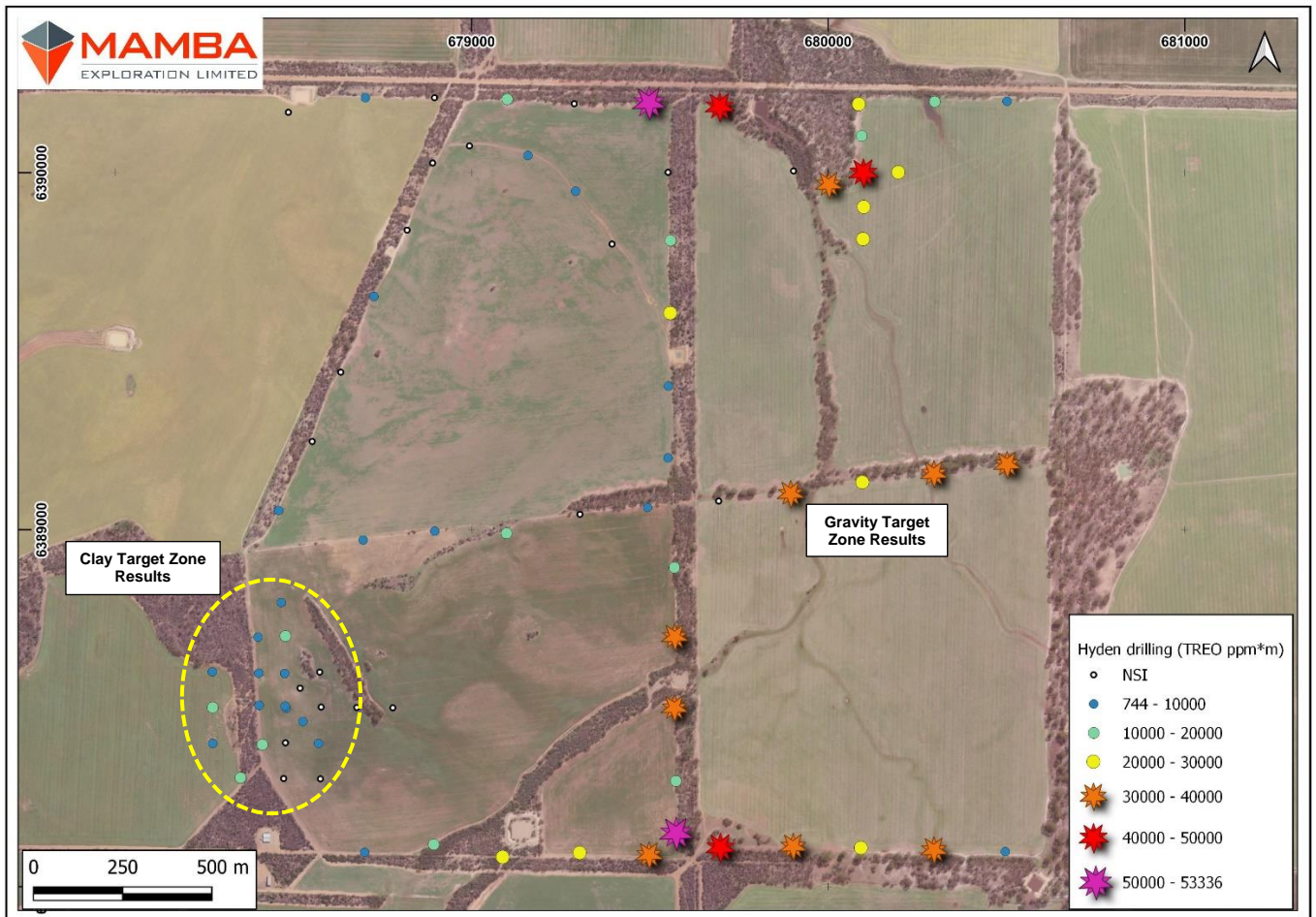


Figure 7: Hyden Project – showing relative difference between the Clay Zone Target results and the Gravity Target Zone results.

Table One: Significant (+500ppm) TREO Mineralisation Intersected from the Initial Drilling completed at the Gravity Anomaly Target.

Hole Number	From (m)	To (m)	Interval (m)	TREO+Y (ppm)	LREO %	HREO %	NdPr %	Comments
23HYD024	8	12	4	566	96%	4%	18%	
23HYD026	4	24	20	669	85%	15%	23%	
incl	16	20	4	778	78%	22%	22%	
23HYD028	4	63	59	904	83%	17%	23%	EOH
incl	12	56	44	995	83%	17%	23%	
23HYD029	24	36	12	682	80%	20%	22%	
23HYD030	16	36	20	878	86%	14%	23%	
23HYD031	24	44	20	1085	83%	19%	22%	EOH
incl	24	36	12	1199	84%	16%	22%	
23HYD032	16	48	32	1480	83%	17%	22%	EOH
23HYD034	4	45	41	1073	83%	17%	22%	EOH
incl	8	36	28	1203	83%	17%	22%	
23HYD036	4	12	8	603	88%	12%	22%	
23HYD036	20	37	17	600	78%	22%	20%	EOH
23HYD037	8	32	24	834	81%	19%	20%	
incl	8	24	16	950	79%	21%	20%	
23HYD037	40	43	3	894	81%	19%	18%	EOH
23HYD038	20	24	4	551	85%	15%	22%	EOH
23HYD039	4	6	2	668	85%	15%	23%	
23HYD041	20	24	4	564	67%	33%	20%	
23HYD042	4	6	2	737	77%	23%	22%	
23HYD046	12	16	4	706	94%	6%	18%	
23HYD046	24	40	16	471	85%	15%	22%	
23HYD049	8	21	13	675	91%	9%	22%	
23HYD050	12	20	8	956	78%	22%	15%	
23HYD050	60	64	4	604	34%	66%	11%	
23HYD051	12	28	16	602	87%	13%	25%	
23HYD051	40	44	4	566	67%	33%	19%	
23HYD052	24	32	8	562	82%	18%	21%	
23HYD053	0	18	18	968	88%	12%	20%	EOH
incl	8	16	8	1386	88%	12%	21%	
23HYD055	4	18	14	693	74%	26%	21%	EOH
23HYD057	4	36	32	1015	87%	13%	23%	EOH

Hole Number	From (m)	To (m)	Interval (m)	TREO+Y (ppm)	LREO %	HREO %	NdPr %	Comments
incl	12	36	24	1148	86%	14%	23%	EOH
23HYD058	24	47	23	1229	85%	15%	23%	EOH
incl	24	44	20	1283	85%	15%	23%	
23HYD059	16	52	36	1014	83%	17%	23%	EOH
incl	16	44	28	1084	83%	17%	23%	
23HYD060	16	46	30	1019	82%	18%	24%	EOH
incl	16	32	16	1274	87%	13%	25%	
23HYD061	0	22	22	758	80%	20%	24%	EOH
23HYD062	12	56	44	900	85%	15%	22%	EOH
incl	32	55	23	1089	81%	19%	22%	
incl	36	52	16	1178	79%	21%	22%	
23HYD063	12	44	32	1084	84%	16%	23%	EOH
incl	16	40	24	1198	84%	16%	23%	
23HYD064	8	28	20	669	65%	35%	20%	
incl	8	16	8	915	87%	13%	26%	
23HYD065	8	56	48	1086	82%	18%	22%	EOH
incl	20	44	24	1197	80%	20%	22%	
23HYD066	8	40	32	1092	78%	22%	21%	
incl	12	24	12	1440	72%	28%	27%	
23HYD067	12	44	32	757	84%	18%	22%	
incl	12	20	8	987	89%	11%	23%	
23HYD068	12	34	22	957	83%	17%	21%	EOH
incl	16	20	4	1316	89%	11%	22%	
23HYD069	20	40	20	977	82%	18%	20%	
incl	20	32	12	1068	86%	14%	19%	
23HYD070	20	24	4	1352	46%	54%	20%	
23HYD071	0	44	44	1068	83%	17%	22%	EOH
incl	4	36	32	1151	84%	16%	23%	
23HYD072	0	35	35	1125	83%	17%	23%	EOH
incl	4	32	28	1233	82%	18%	24%	
23HYD073	8	36	28	799	79%	21%	22%	EOH
incl	8	16	8	1200	81%	19%	23%	
23HYD074	20	36	16	1970	73%	27%	19%	
incl	32	36	4	3360	29%	71%	8%	

Hole Number	From (m)	To (m)	Interval (m)	TREO+Y (ppm)	LREO %	HREO %	NdPr %	Comments
23HYD075	12	24	12	625	91%	9%	22%	
23HYD076	12	43	31	743	85%	15%	22%	
23HYD077	12	51	39	995	86%	14%	22%	EOH
incl	16	44	28	1100	86%	14%	22%	
23HYD078	16	39	23	921	84%	16%	22%	EOH
incl	24	39	15	985	80%	20%	22%	EOH
23HYD079	20	44	24	1109	83%	17%	23%	EOH
incl	24	32	8	1621	81%	19%	23%	
23HYD080	24	42	18	1097	81%	19%	20%	EOH
incl	28	32	4	2072	69%	31%	19%	

Note: Significant intersections based on +500ppm TREO and includes a maximum of 4m of internal waste. EOH stands for end of hole.

Table Two: Collar Details of the initial holes drilled into the Clay REE target

HoleID	Easting	Northing	RL (m)	Azimuth (°)	Dip (°)	Depth (m)	Drill Type
23HYD023	678486	6390169	346	0	-90	51	AC
23HYD024	678702	6390210	349	0	-90	28	AC
23HYD025	678896	6390210	351	0	-90	13	AC
23HYD026	679100	6390206	350	0	-90	27	AC
23HYD027	679288	6390193	350	0	-90	10	AC
23HYD028	679498	6390196	346	0	-90	63	AC
23HYD029	680502	6390200	345	0	-90	39	AC
23HYD030	680299	6390199	343	0	-90	39	AC
23HYD031	680086	6390192	344	0	-90	44	AC
23HYD032	680099	6390000	345	0	-90	48	AC
23HYD033	679903	6390005	342	0	-90	66	AC
23HYD034	679696	6390185	345	0	-90	45	AC
23HYD035	679551	6390001	344	0	-90	42	AC
23HYD036	679558	6389810	347	0	-90	37	AC
23HYD037	679557	6389607	350	0	-90	43	AC
23HYD038	679552	6389402	351	0	-90	26	AC
23HYD039	679551	6389201	351	0	-90	7	AC
23HYD040	679394	6389800	351	0	-90	22	AC
23HYD041	679292	6389948	353	0	-90	33	AC
23HYD042	679158	6390048	352	0	-90	6	AC
23HYD043	678994	6390075	351	0	-90	5	AC
23HYD044	678891	6390027	355	0	-90	7	AC
23HYD045	678819	6389839	358	0	-90	37	AC
23HYD046	678726	6389653	362	0	-90	45	AC
23HYD047	678633	6389441	364	0	-90	30	AC

HoleID	Easting	Northing	RL (m)	Azimuth (°)	Dip (°)	Depth (m)	Drill Type
23HYD048	678553	6389247	367	0	-90	45	AC
23HYD049	678459	6389054	368	0	-90	22	AC
23HYD050	678477	6388506	368	0	-90	87	AC
23HYD051	678696	6388971	369	0	-90	59	AC
23HYD052	678897	6388996	367	0	-90	44	AC
23HYD053	679098	6388990	362	0	-90	18	AC
23HYD054	679304	6389043	355	0	-90	23	AC
23HYD055	679494	6389062	354	0	-90	19	AC
23HYD056	679693	6389080	347	0	-90	6	AC
23HYD057	679895	6389101	345	0	-90	36	AC
23HYD058	680096	6389133	345	0	-90	47	AC
23HYD059	680297	6389157	348	0	-90	52	AC
23HYD060	680502	6389183	348	0	-90	47	AC
23HYD061	679569	6388894	350	0	-90	22	AC
23HYD062	679570	6388700	348	0	-90	56	AC
23HYD063	679569	6388501	350	0	-90	45	AC
23HYD064	679573	6388296	347	0	-90	38	AC
23HYD065	679574	6388150	350	0	-90	57	AC
23HYD066	679498	6388089	352	0	-90	43	AC
23HYD067	679303	6388095	351	0	-90	47	AC
23HYD068	679087	6388083	350	0	-90	34	AC
23HYD069	678894	6388118	351	0	-90	52	AC
23HYD070	678700	6388096	352	0	-90	52	AC
23HYD071	679698	6388110	352	0	-90	44	AC
23HYD072	679902	6388113	351	0	-90	35	AC
23HYD073	680092	6388109	350	0	-90	36	AC
23HYD074	680297	6388103	348	0	-90	42	AC
23HYD075	680497	6388098	348	0	-90	54	AC
23HYD076	680098	6389814	341	0	-90	44	AC
23HYD077	680002	6389967	345	0	-90	51	AC
23HYD078	680100	6389904	340	0	-90	39	AC
23HYD079	680197	6390001	341	0	-90	44	AC
23HYD080	680094	6390103	342	0	-90	42	AC

Note: Coordinates are provided in GDA94 Zone 50

Additional information will be released as the programmes progress and as new data becomes available.

This announcement has been authorised for release by the Board.

CONTACTS

For more information, please visit our website, or contact:

Mr Mike Dunbar

Managing Director

info@mambaexploration.com.au

Mr Alex Cowie

Media & Investor Relations

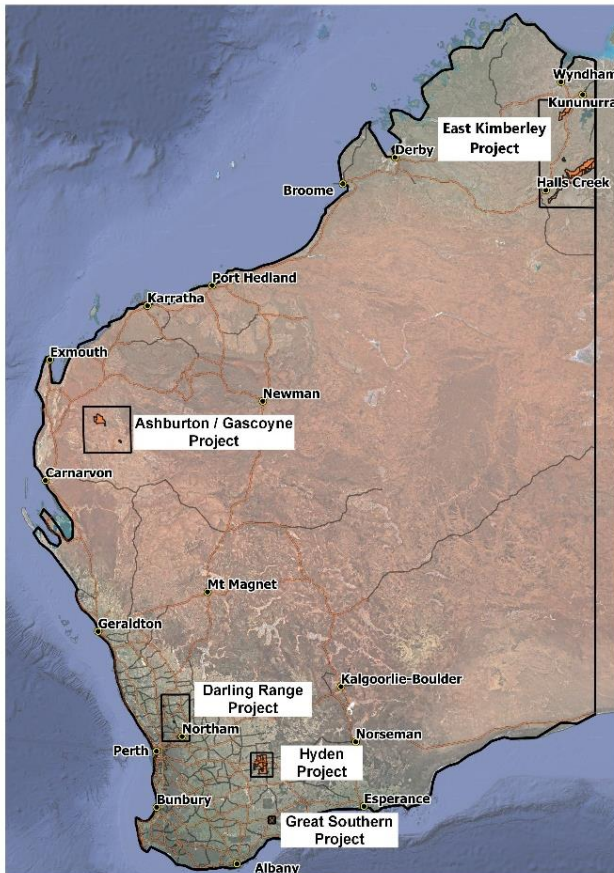
alex@nwrcommunications.com.au

Competent Person Statement

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Mr Mike Dunbar, a “Competent Person” who is a Member of Australasian Institute of Mining and Metallurgy (AusIMM). Mr Dunbar is the Managing Director and CEO of Mamba Exploration Limited. He is a full-time employee of Mamba Exploration Limited and holds shares and options in the company. Mr Dunbar has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a “Competent Person” as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Dunbar consents to the inclusion in this announcement of the matters based on his information and in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements.

ABOUT MAMBA EXPLORATION



Mamba Exploration is a Western Australian focused exploration Company, with four 100% owned geographically diverse projects which provide year-round access. The projects are highly prospective mineral exploration assets in the Ashburton / Gascoyne, Kimberley, Darling Range and Great Southern regions of Western Australia. The projects in the Ashburton / Gascoyne and Great Southern are prospective for gold and REE whilst those in the Kimberley and Darling Range are prospective for base metals such as copper, nickel, PGE's and manganese and REE's. The recent option over the Hyden Project represents a significant development, with high grade REO's identified from clay from the project.

Mamba's Board comprises of Directors who have significant experience across sectors including mineral exploration, resource discovery, mine development and corporate finance, commodities trading and mine operations.

The Company's objective is to add significant shareholder wealth through the exploration of its projects and the discovery of economic Mineral Resources.

Appendix 1: Assay results from the Initial Drilling at the Gravity Target at Hyden (Holes 23HYD0023 – 23HYD080)

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD023	0	4	4	30.2	2.54	1.68	0.53	1.84	0.56	10.8	0.23	11	2.57	2.19	0.38	0.24	14.3	1.7	0.05	2.88	21.1	98	70%	30%	16%	
23HYD023	4	8	4	7.4	0.85	0.7	0.1	0.55	0.19	2.8	0.14	2.7	0.61	0.5	0.12	0.09	3.6	0.85	0.03	2.62	10.7	26	66%	34%	15%	
23HYD023	8	12	4	87.8	2.67	1.52	0.61	2.2	0.49	13.1	0.24	15.3	3.89	3.53	0.41	0.2	9.2	1.45	0.005	4.43	7.35	173	87%	13%	13%	
23HYD023	12	16	4	30.3	1.62	0.96	0.32	1.54	0.31	17.3	0.16	11.6	3.37	2.23	0.23	0.12	7.2	0.96	0.01	3.38	8.35	94	83%	17%	19%	
23HYD023	16	20	4	22.1	1.2	0.71	0.35	0.91	0.18	20.8	0.1	6.7	2.12	1.27	0.16	0.08	5.4	0.68	0.04	3.59	13.5	75	84%	16%	14%	
23HYD023	20	24	4	143.5	3.79	1.5	1.68	5.5	0.6	90.5	0.21	49.6	15	7.35	0.71	0.21	16.3	1.44	0.07	5.36	16.75	406	90%	10%	19%	
23HYD023	24	28	4	141.5	3.72	1.82	2.56	4.38	0.71	98.1	0.21	47.7	13.25	7.54	0.66	0.22	16.2	1.43	0.08	4.02	11.35	408	91%	9%	18%	
23HYD023	28	32	4	137.5	5.16	2.47	3.1	6.96	0.9	74	0.22	56.6	14.75	9.4	0.94	0.31	24	1.76	0.05	3.35	6.26	406	86%	14%	21%	
23HYD023	32	36	4	141	8.71	4.71	3.48	11	1.72	73.2	0.52	67	16.4	11.95	1.48	0.61	49.2	3.47	0.12	5.08	7.36	474	78%	22%	21%	
23HYD023	36	40	4	107	6.82	3.65	2.56	7.61	1.32	58.2	0.45	51.5	12.65	9.78	1.14	0.42	38.6	2.76	0.09	3.13	6.4	366	78%	22%	21%	
23HYD023	40	44	4	134.5	6.33	3.36	2.13	8.4	1.26	76	0.38	59.8	16.55	10.45	1.15	0.4	32.5	2.34	0.11	3.47	8.45	427	83%	17%	21%	
23HYD023	44	48	4	132	5.92	2.96	2.27	8.17	1.19	74.1	0.33	58.2	16.15	11.05	1.12	0.37	30.3	2.45	0.16	2.66	9.15	416	84%	16%	21%	
23HYD023	48	51	3	142.5	6.16	3.36	2.37	8.44	1.24	80.3	0.38	62.9	17.3	11.35	1.19	0.41	32.8	2.53	0.22	2.72	7.68	448	84%	16%	21%	
23HYD024	0	4	4	20.2	0.86	0.5	0.18	0.97	0.22	10.3	0.12	6.4	1.78	1.22	0.14	0.08	4.6	0.67	0.01	2.83	65.7	58	83%	17%	17%	
23HYD024	4	8	4	109.5	1.03	0.49	0.45	1.76	0.23	81.5	0.09	25.8	9.66	3.76	0.2	0.08	4.3	0.45	0.04	1.44	28.7	287	96%	4%	15%	
23HYD024	8	12	4	212	2.35	0.93	0.81	4.31	0.45	145	0.16	66	22.2	8.89	0.54	0.12	7.4	0.87	0.1	2.32	24	566	96%	4%	18%	
23HYD024	12	16	4	151.5	3.04	1.29	1.26	5.13	0.43	93.1	0.11	54.3	15.45	7.95	0.63	0.15	8.8	1.06	0.02	1.68	9.51	413	94%	6%	20%	
23HYD024	16	20	4	159.5	4.75	1.81	2.01	8.22	0.79	87.7	0.17	74.1	20.5	12.8	0.98	0.24	14	1.36	0.04	1.68	7.27	466	91%	9%	24%	
23HYD024	20	24	4	169	5.73	2.38	1.99	7.82	0.94	84.1	0.23	74.5	19.65	12.15	1.1	0.33	21.9	1.86	0.03	3.25	44.4	485	89%	11%	23%	
23HYD024	24	28	4	89	2.57	1.32	1.04	3.92	0.51	56.3	0.16	33.8	10.1	5.85	0.52	0.16	11	1.1	0.01	2.11	14.65	261	90%	10%	20%	
23HYD025	0	4	4	68.9	2.15	1.12	0.78	2.87	0.32	35.8	0.13	30.5	7.68	5.17	0.38	0.11	8.7	0.84	0.05	1.54	11.05	199	89%	11%	23%	
23HYD025	4	8	4	135.5	4.95	2.17	2.17	6.99	0.79	66.8	0.21	69	16.35	11.15	0.83	0.27	18.4	1.8	0.09	2.1	7.37	405	88%	12%	25%	
23HYD025	8	12	4	121	6.06	3.02	2.41	7.17	1.1	62.5	0.37	57.9	14.2	10.65	1.01	0.38	30.4	2.74	0.25	2.35	11.8	385	83%	17%	22%	
23HYD025	12	13	1	109	6.12	3.46	2.45	6.83	1.12	57.1	0.48	49.4	12.6	7.66	1.07	0.4	33.4	2.68	0.21	2.08	6.27	353	80%	20%	21%	
23HYD026	0	4	4	114.5	6.3	2.99	1.64	7.6	1.1	55.9	0.37	56.5	14.05	10.05	1.11	0.43	26.5	2.49	0.13	3.7	12.4	362	83%	17%	23%	
23HYD026	4	8	4	237	8.76	2.99	3.97	15.05	1.25	114	0.28	122.5	29.2	22.9	1.7	0.35	24.5	2.41	0.18	1.82	7.6	703	90%	10%	25%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD026	8	12	4	231	6.91	2.85	2.99	10.8	1.06	111.5	0.39	102.5	27.1	17.2	1.38	0.38	24.1	2.62	0.16	2.09	10.6	651	90%	10%	23%	
23HYD026	12	16	4	209	12.85	4.99	4.21	17.25	2	95.3	0.69	111.5	26.9	21.5	2.29	0.71	43.2	4.62	0.15	3.05	10.35	668	83%	17%	24%	
23HYD026	16	20	4	232	15.9	8.32	3.6	19.15	2.98	111	1.02	115.5	28.6	22.1	2.47	1.12	76.5	6.97	0.23	3.32	9.88	778	78%	22%	22%	
23HYD026	20	24	4	170.5	8.89	4.62	2.79	13.25	1.74	85.6	0.49	82	21.1	15.85	1.79	0.51	40.9	3.56	0.23	3.15	9.08	545	83%	17%	22%	
23HYD026	24	27	3	146.5	9.09	4.54	2.26	11.7	1.69	70.6	0.51	71.8	17.8	12.45	1.57	0.57	44.3	3.7	0.3	2.25	6.21	480	80%	20%	22%	
23HYD027	0	4	4	65	4.03	1.89	1.39	4.17	0.73	36.5	0.28	28	7.5	4.87	0.6	0.26	17.6	1.82	0.02	2.28	10.3	210	81%	19%	20%	
23HYD027	4	8	4	128.5	7.38	3.22	2.53	7.94	1.21	68.8	0.43	54.7	14.15	9.51	1.15	0.42	31.9	2.97	0.15	1.77	6.57	402	82%	18%	20%	
23HYD027	8	10	2	142.5	11.2	5.4	2.84	11.85	2.05	71.2	0.67	68.6	16.95	13.5	1.78	0.79	56.7	4.52	0.27	2.25	7.27	494	76%	24%	20%	
23HYD028	0	4	4	169.5	9.55	2.94	2.85	13.35	1.44	83.6	0.28	63.2	17.55	11.05	1.79	0.38	24.2	2.4	0.1	4.41	33.7	485	85%	15%	20%	
23HYD028	4	8	4	246	12.95	4.19	4.56	16.5	1.88	115	0.32	119	31.8	19.15	2.44	0.47	31.9	2.64	0.12	1.58	10.85	730	87%	13%	24%	
23HYD028	8	12	4	230	14.95	5.13	4.86	20	2.31	112.5	0.33	130	31	24.1	2.68	0.54	41.4	2.65	0.16	1.46	9.97	746	85%	15%	25%	
23HYD028	12	16	4	348	16.15	5.93	4.55	23.2	2.65	173	0.51	168.5	42.6	29.7	2.93	0.66	51.3	3.52	0.3	2.3	9.27	1047	87%	13%	24%	
23HYD028	16	20	4	328	17.15	5.95	3.57	23.2	2.61	162	0.54	172	41.3	28.3	3.09	0.72	50.7	4.29	0.33	2.82	9.35	1011	87%	13%	25%	
23HYD028	20	24	4	340	20.9	8.43	3.31	28.4	3.74	165.5	0.7	179.5	41.6	34.4	3.93	0.94	70.3	5.52	0.44	2.71	10.75	1088	84%	16%	24%	
23HYD028	24	28	4	341	20.8	7.94	2.86	26.9	3.44	168.5	0.78	177	42.2	32.9	3.73	0.95	70.4	5.2	0.45	2.7	10.55	1085	84%	16%	24%	
23HYD028	28	32	4	312	14.2	7.14	2.33	22	2.81	154	0.71	154.5	37.6	27.8	3.19	0.84	62.8	5.18	0.42	2.65	9.72	969	85%	15%	23%	
23HYD028	32	36	4	345	22.3	9.74	3.46	28	3.94	166	1.01	170.5	40.4	33.5	3.9	1.26	92	7.6	0.55	2.84	11.6	1115	81%	19%	22%	
23HYD028	36	40	4	299	19.05	9.99	2.77	22.6	3.65	148	1.34	146	36.7	25.7	3.1	1.32	97.2	9.42	0.44	2.74	9.93	993	79%	21%	22%	
23HYD028	40	44	4	264	12.75	8.21	3.25	17.9	2.58	132.5	0.98	125	31.7	21.6	2.38	0.99	75.1	6.51	0.28	2.3	9.91	848	81%	19%	22%	
23HYD028	44	48	4	313	15.5	7.95	5.34	20.5	3	157	0.95	145.5	37.6	25	2.84	1.03	80.8	6.35	0.44	2.87	10.05	988	82%	18%	22%	
23HYD028	48	52	4	285	16.25	9.03	5.27	20.4	3.23	138	1.2	134.5	35	23.8	2.81	1.28	99.6	7.56	0.35	2.37	8.4	942	78%	22%	21%	
23HYD028	52	56	4	266	14.15	6.06	4.7	19.65	2.5	134.5	0.75	138	34	23.1	2.55	0.75	61	4.88	0.39	2.38	7.4	855	83%	17%	24%	
23HYD028	56	60	4	132.5	8	5.03	3	10.05	1.84	73.3	0.67	63.7	16.5	11.35	1.44	0.7	61.6	4.38	0.14	2.07	13.65	475	75%	25%	20%	
23HYD028	60	62	2	173.5	10.25	5.15	3.82	13.4	2.05	84.2	0.71	86.5	21.9	15.6	1.84	0.75	53.1	4.57	0.23	2.9	7.65	574	80%	20%	22%	
23HYD028	62	63	1	195	10.7	5.54	3.82	14.05	2.08	97.5	0.66	98	24.2	17.25	1.88	0.7	55.8	4.5	0.45	3.05	11.7	639	81%	19%	22%	
23HYD029	0	4	4	54.8	2.32	1.41	0.66	2.76	0.5	20.3	0.21	17.4	4.71	3.33	0.43	0.2	12.4	1.37	0.03	3.98	56.3	148	82%	18%	18%	
23HYD029	4	8	4	18.4	1.04	0.52	0.3	1.08	0.21	8.3	0.11	7.4	2.08	1.3	0.18	0.09	5.1	0.67	0.01	2.45	33.5	56	80%	20%	20%	
23HYD029	8	12	4	14.2	0.73	0.39	0.19	0.83	0.16	6.6	0.09	5.9	1.72	1.08	0.11	0.07	3.6	0.46	0.01	1.88	20.3	43	81%	19%	21%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD029	12	16	4	35.3	1.08	0.58	0.44	1.6	0.22	26.5	0.08	14.6	4.26	2.48	0.22	0.09	4.9	0.59	0.08	2.3	23.6	111	89%	11%	20%	
23HYD029	16	20	4	68	1.22	0.58	0.49	1.66	0.23	49.4	0.11	18.4	6.37	2.49	0.2	0.1	5.1	0.66	0.08	1.3	21.8	186	93%	7%	16%	
23HYD029	20	24	4	176	3.03	1.4	1.36	3.98	0.53	98.1	0.22	43.3	14.5	6.42	0.53	0.23	11.6	1.4	0.2	1.71	36.7	436	93%	7%	16%	
23HYD029	24	28	4	292	8.63	3.79	4.46	14.1	1.46	132	0.49	117	32.2	19.1	1.74	0.5	34.9	3.13	0.52	3.93	12.45	799	89%	11%	22%	
23HYD029	28	32	4	195	13.5	7.17	5.17	18.9	2.76	92.1	0.83	111	25.6	20.1	2.44	0.94	81.1	5.51	0.7	2.05	5.89	700	76%	24%	23%	
23HYD029	32	36	4	155.5	10.85	5.63	4.49	15.15	2.07	76.4	0.64	80.7	19.75	16.2	1.89	0.6	60.8	3.89	1.56	1.3	3.44	547	76%	24%	22%	
23HYD029	36	39	3	141	8.62	4.44	3.68	12.45	1.66	70.3	0.47	76	18.35	13	1.68	0.56	48.6	3.31	1.59	1.1	9.45	486	79%	21%	23%	
23HYD030	0	4	4	94.9	4.73	2.62	1.52	6.85	0.95	40.1	0.3	39.9	10.5	7.54	0.9	0.33	25.4	1.98	0.5	2.96	27.6	287	81%	19%	21%	
23HYD030	4	8	4	33	1.72	0.86	0.5	1.81	0.3	14.5	0.13	12.6	3.53	2.23	0.29	0.12	7.5	0.78	0.08	3.38	21	96	82%	18%	20%	
23HYD030	8	12	4	39.5	1.38	0.66	0.46	1.91	0.25	21.8	0.09	14.9	4.14	2.32	0.28	0.09	7	0.68	0.13	2.22	19.8	115	86%	14%	20%	
23HYD030	12	16	4	95.2	2.05	0.83	1.06	3.76	0.33	61.3	0.09	35.3	9.82	5.7	0.45	0.1	8.1	0.64	0.19	2.03	23.7	269	92%	8%	20%	
23HYD030	16	20	4	242	4.18	1.26	2.68	9.61	0.62	148	0.09	96.3	26.7	14.85	1.05	0.13	11.6	0.6	0.25	1.13	35.5	671	94%	6%	22%	
23HYD030	20	24	4	179	3.41	1.19	1.93	6.29	0.56	111	0.13	64.5	19	9.28	0.75	0.14	12.2	0.79	0.37	1.64	31.1	492	93%	7%	20%	
23HYD030	24	28	4	475	26.1	11.3	11.3	40.7	4.3	202	0.97	272	65.9	53.6	5.17	1.12	109	7.13	0.65	3.53	9.38	1542	83%	17%	26%	
23HYD030	28	32	4	293	19.85	9.14	7.9	29.6	3.89	131	0.95	177	40.9	32.6	3.69	1.2	107.5	6.56	1.18	1.96	6.53	1039	78%	22%	25%	
23HYD030	32	36	4	190.5	11.05	5.29	4.81	17.15	2.09	92.1	0.55	104.5	24.8	19	2.06	0.66	58.6	3.79	2.3	1.06	4.53	645	80%	20%	24%	
23HYD030	36	39	3	110	6.07	2.89	3.3	9.39	1.16	55.5	0.32	58.7	13.9	10.3	1.16	0.38	30.8	2.25	1.44	0.48	2.2	368	81%	19%	23%	
23HYD031	0	4	4	60.1	2.66	1.29	0.97	3.82	0.53	28	0.17	26.8	6.82	4.41	0.51	0.2	14.2	1.16	0.26	2.63	21.4	182	83%	17%	22%	
23HYD031	4	8	4	13.2	0.83	0.42	0.21	1.04	0.16	7.1	0.06	5.9	1.59	1.01	0.14	0.06	4	0.41	0.03	1	10.05	43	79%	21%	20%	
23HYD031	8	12	4	33.8	1.32	0.57	0.49	1.84	0.24	17.9	0.09	13.4	3.66	2.16	0.23	0.09	6.1	0.64	0.09	1.82	8.14	99	86%	14%	20%	
23HYD031	12	16	4	30.9	1.69	0.91	0.49	2.16	0.32	17	0.17	13.4	3.56	2.46	0.29	0.15	8.2	0.89	0.04	1.92	7.74	99	81%	19%	20%	
23HYD031	16	20	4	43.8	2.09	1.23	0.62	2.71	0.45	21.2	0.18	17.1	4.86	3.3	0.36	0.16	11	1.48	0.04	2.93	16.9	133	81%	19%	19%	
23HYD031	20	24	4	65	1.72	1.1	0.65	1.96	0.4	55	0.2	19.4	6.07	3.02	0.31	0.18	9.4	1.18	0.06	2.09	14.1	199	90%	10%	15%	
23HYD031	24	28	4	370	8.19	2.95	4.16	12.95	1.3	217	0.29	127.5	39.9	20.3	1.69	0.31	30.3	1.86	0.16	2.15	57.1	1007	92%	8%	20%	
23HYD031	28	32	4	360	15.1	6.31	6.69	22.7	2.44	166.5	0.6	178.5	43.7	32.5	2.73	0.77	59.5	5.1	0.32	2.78	21.9	1084	86%	14%	24%	
23HYD031	32	36	4	410	33.4	19.8	8.81	41.1	6.91	195.5	1.94	218	53.9	42.6	5.62	2.21	198.5	13.9	1.86	4.06	12.2	1507	73%	27%	21%	
23HYD031	36	40	4	304	16.85	9.15	5.82	23.7	3.18	148.5	1.06	151	37.2	29.5	3	1.04	88.9	6.98	2.11	1.79	7.84	997	81%	19%	22%	
23HYD031	40	44	4	261	13.05	7.02	4.88	19.65	2.49	122.5	0.79	128	31.6	22.3	2.67	0.89	69.6	5.41	2.11	1.12	6.18	831	82%	18%	23%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD032	0	4	4	39.2	1.97	1.07	0.56	2.82	0.4	24	0.12	18.6	5.05	3.43	0.36	0.15	10.2	0.92	0.06	1.87	20.8	131	83%	17%	21%	
23HYD032	4	8	4	24.2	1.8	0.92	0.42	1.88	0.36	12.1	0.14	11.7	2.83	2.06	0.27	0.14	9.4	0.97	0.04	1.37	11.7	83	76%	24%	21%	
23HYD032	8	12	4	17.5	1.12	0.68	0.22	1.19	0.19	10	0.12	7	2.1	1.52	0.16	0.12	5.3	0.68	0.03	1.18	7.19	58	79%	21%	19%	
23HYD032	12	16	4	52.8	2.29	1.08	0.67	2.48	0.36	22.7	0.14	19	5.23	3.28	0.34	0.15	8.3	1.2	0.03	1.42	6.47	144	86%	14%	20%	
23HYD032	16	20	4	806	21.3	7.85	9.4	32	3.31	357	0.47	271	75.2	47.3	4.15	0.75	67.2	4.15	0.14	3.79	9.12	2052	91%	9%	20%	
23HYD032	20	24	4	601	20.3	8.06	9.11	36.3	3.48	283	0.62	298	72	50.8	4.24	1.02	75.3	5.59	0.55	3.6	11.2	1761	89%	11%	25%	
23HYD032	24	28	4	587	30.7	17.25	11.65	40.4	5.66	287	1.79	289	71.9	51.4	5.42	1.9	153.5	12.6	1.14	3.62	18.95	1883	82%	18%	23%	
23HYD032	28	32	4	343	28.6	16.7	8.56	35.3	5.85	150	2	194	43.1	36.5	5.04	2.15	170.5	14.3	1.6	2.08	5.83	1271	72%	28%	22%	
23HYD032	32	36	4	361	21.3	10.8	6.53	30.3	4.14	165.5	1.13	188	44.7	35	3.97	1.33	119.5	8.04	2.85	1.24	5.95	1204	79%	21%	23%	
23HYD032	36	40	4	436	17.35	9.61	5.72	24.8	3.43	232	1.2	191	49.3	31.1	3.15	1	96.3	6.79	2.37	3.11	52.8	1332	85%	15%	21%	
23HYD032	40	44	4	413	17.6	9.77	6.15	25.3	3.25	212	1.02	185	48.1	32.7	3.11	1.06	93.5	6.79	1.9	2.76	31.5	1272	84%	16%	22%	
23HYD032	44	48	4	329	17.95	10.2	6.23	25.3	3.29	157	0.96	164	40.4	30.6	3.33	1.02	91.8	6.72	2.07	1.29	5.28	1067	81%	19%	23%	
23HYD033	0	4	4	56.2	2.41	1.3	0.73	2.93	0.46	26.6	0.17	22.1	5.95	3.98	0.44	0.2	11	1.19	0.05	3.46	24	163	85%	15%	20%	
23HYD033	4	8	4	50.6	2.56	1.13	0.93	2.91	0.42	26.3	0.11	23	6.16	4.54	0.44	0.15	9.3	0.89	0.02	2.05	15.45	155	85%	15%	22%	
23HYD033	8	12	4	31.4	1.2	0.66	0.59	2.07	0.21	20.3	0.09	15.8	4.5	2.95	0.25	0.09	4.6	0.46	0.11	0.52	3.03	102	88%	12%	23%	
23HYD033	12	16	4	35.2	1.32	0.56	0.57	1.7	0.26	27.1	0.06	18.6	5.51	2.71	0.22	0.06	4.6	0.51	0.15	0.87	3.02	118	90%	10%	24%	
23HYD033	16	20	4	16.6	1	0.71	0.31	0.94	0.19	9.3	0.13	7.1	2.01	1.34	0.17	0.09	3.9	0.83	0.26	1.73	1.4	54	81%	19%	20%	
23HYD033	20	24	4	7.9	1.74	1.26	0.37	1.15	0.38	2.2	0.21	3.2	0.65	0.87	0.24	0.19	8.4	1.65	0.29	1.64	1.15	37	49%	51%	12%	
23HYD033	24	28	4	15.9	1.58	1.33	0.35	1.22	0.35	3.1	0.22	3.5	0.76	1.25	0.23	0.16	7.4	1.58	0.26	1.26	0.95	47	63%	37%	11%	
23HYD033	28	32	4	18.6	2.18	1.55	0.54	1.53	0.44	3.1	0.31	5.8	1.16	1.32	0.32	0.22	11.5	1.87	0.27	1	1.03	61	59%	41%	13%	
23HYD033	32	36	4	27.1	5.22	4.01	1.22	3.36	1.12	2.8	0.65	9.6	1.51	3.16	0.65	0.58	30.6	4.01	0.32	1.15	1.25	116	46%	54%	11%	
23HYD033	36	40	4	46.4	6.92	4.3	2.03	6.02	1.28	6.3	0.67	20.8	4.17	6.33	1.05	0.63	27.7	4.31	0.41	1.16	1.53	167	60%	40%	17%	
23HYD033	40	44	4	42.2	4.27	2.57	0.99	3.28	0.88	3.9	0.46	8.2	1.56	2.8	0.62	0.44	16.9	3.04	0.3	0.6	1.32	112	64%	36%	10%	
23HYD033	44	48	4	37.3	3.52	2.28	0.83	2.6	0.74	9	0.49	10.1	2.26	2.77	0.51	0.35	17	2.6	0.22	0.69	1.71	112	66%	34%	13%	
23HYD033	48	52	4	35.9	8.18	4.44	1.92	7.48	1.63	12	0.59	23.8	4.65	6.86	1.28	0.7	42	4.09	0.35	0.71	1.28	188	53%	47%	18%	
23HYD033	52	56	4	32.7	8.56	5.34	2.12	8.3	1.75	14.2	0.7	25.3	5.09	6.82	1.27	0.67	49.3	4.36	0.46	0.68	0.93	201	50%	50%	18%	
23HYD033	56	60	4	27.3	6.45	3.93	2.04	7.09	1.37	10.8	0.51	21	4.1	5.41	1.12	0.57	37.1	3.73	0.53	0.61	1.05	160	51%	49%	18%	
23HYD033	60	64	4	30.5	6.78	4.04	2	6.71	1.34	11.8	0.5	22.3	4.41	5.6	1.09	0.54	35	3.88	0.4	0.64	1.21	164	54%	46%	19%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD033	64	65	1	26	6.06	3.65	1.77	5.95	1.12	11.5	0.45	18.4	3.74	5.46	0.88	0.47	30.9	3.36	0.34	0.87	0.96	144	54%	46%	18%	
23HYD034	0	4	4	135.5	4.66	2.16	1.68	6.02	0.87	65.8	0.29	46.9	12.65	8.46	0.82	0.33	18.4	2.07	0.09	7.7	46.7	369	88%	12%	19%	
23HYD034	4	8	4	213	7.9	3.11	3.58	12	1.35	119.5	0.28	103	25.2	18	1.61	0.37	25.2	1.79	0.23	2.91	17.85	642	89%	11%	23%	
23HYD034	8	12	4	450	8.76	2.71	5.68	15.7	1.19	196	0.18	185.5	48.4	29	1.81	0.26	24	1.5	0.35	1.65	7.95	1165	94%	6%	24%	
23HYD034	12	16	4	413	16.75	5.38	8.38	27	2.56	172.5	0.28	186.5	45.8	35	3.47	0.51	43.4	2.42	0.41	1.9	7.8	1155	89%	11%	24%	
23HYD034	16	20	4	464	22.3	7.99	8.61	30.8	3.74	209	0.55	214	54.6	39.1	4.17	0.91	68.5	4.19	0.66	3.2	9.11	1359	87%	13%	23%	
23HYD034	20	24	4	449	18.65	6.86	8.17	28.5	3.11	205	0.54	216	53.5	37.8	3.8	0.78	61.9	3.99	0.9	4.68	9.33	1317	88%	12%	24%	
23HYD034	24	28	4	326	33.2	25	7.37	30.7	7.8	153	3.75	150	38.1	29.5	5.05	3.74	276	23.1	0.69	3.4	9.03	1346	62%	38%	16%	
23HYD034	28	32	4	329	18	9.87	6.07	22.8	3.74	153	1.31	153.5	38.6	28.1	3.16	1.42	117	9.06	1.32	2.01	7.47	1077	78%	22%	21%	
23HYD034	32	36	4	320	16	8.43	5.79	20.9	3.23	149.5	1.02	146.5	37.7	26.5	2.95	1.1	89.1	6.48	1.65	2.39	7.93	1004	81%	19%	22%	
23HYD034	36	40	4	303	15.95	7.98	5.42	20.7	3	142	0.99	140	36.1	24.4	2.86	1.1	79.8	6.42	1.52	2.46	8.3	949	82%	18%	22%	
23HYD034	40	44	4	254	12.2	5.93	4.97	16.6	2.29	121	0.73	119.5	29.5	20.8	2.32	0.81	56.2	4.98	0.97	1.98	8.54	783	83%	17%	22%	
23HYD034	44	45	1	261	12.85	6.64	4.79	17.6	2.58	123	0.73	123	31	22.1	2.31	0.87	64.6	5.08	1.3	1.88	6.88	815	82%	18%	22%	
23HYD035	0	4	4	42.4	1.75	0.93	0.39	1.74	0.34	15.8	0.17	12.8	3.65	2.46	0.27	0.14	7.4	1.08	0.04	6.03	44.7	110	84%	16%	18%	
23HYD035	4	8	4	14.6	1.34	0.88	0.28	1.06	0.32	6	0.19	5.7	1.56	1.1	0.19	0.16	7	1.26	0.05	2.3	15	50	69%	31%	17%	
23HYD035	8	12	4	24.7	1.6	0.81	0.36	1.35	0.21	12.6	0.13	9.9	2.56	1.75	0.21	0.14	5.6	0.81	0.005	1.92	7.83	75	82%	18%	19%	
23HYD035	12	16	4	65.8	1.8	1.06	0.6	2.03	0.35	35.9	0.19	19	5.68	3.03	0.29	0.17	8.1	1.12	0.05	1.54	7.18	174	89%	11%	17%	
23HYD035	16	20	4	125	1.7	1.01	0.66	2.1	0.35	77.9	0.17	27.5	10.4	3.68	0.3	0.16	8.8	1.06	0.14	1.94	5.58	314	94%	6%	14%	
23HYD035	20	24	4	34.1	2.85	1.71	0.68	2.62	0.58	17.2	0.27	13.8	3.51	3.18	0.45	0.25	13.2	1.79	0.16	1.52	1.9	116	74%	26%	18%	
23HYD035	24	28	4	59.7	19.35	14.7	3.27	17.35	4.49	21.2	2.15	44.5	8.59	12.6	3.09	2.12	150	14	0.24	1.16	1.76	458	38%	62%	14%	
23HYD035	28	32	4	18.1	3.83	2.38	0.6	3.4	0.8	8.7	0.36	11.6	2.41	2.73	0.56	0.38	25.1	2.38	0.09	0.73	1.69	101	52%	48%	16%	
23HYD035	32	36	4	11.4	1.79	1.41	0.33	1.51	0.4	6.4	0.23	5.6	1.44	1.27	0.29	0.21	11.2	1.39	0.05	0.86	2.24	54	58%	42%	15%	
23HYD035	36	40	4	5.1	2.59	1.68	0.61	1.84	0.6	2.2	0.29	3.9	0.7	1.32	0.36	0.28	16.8	1.81	0.04	0.48	0.62	49	32%	68%	11%	
23HYD035	40	42	2	19.2	2.96	1.99	0.61	2.19	0.7	9.3	0.28	8.8	2.34	1.77	0.4	0.28	16	1.84	0.12	0.29	1.08	83	60%	40%	16%	
23HYD036	0	4	4	81	2.25	1.1	1.03	3.4	0.39	44.1	0.14	32	8.72	5.49	0.42	0.15	7.8	1.03	0.11	3.06	30.1	227	91%	9%	21%	
23HYD036	4	8	4	209	4.35	1.42	2.37	7.35	0.67	109.5	0.15	79.7	23	12.45	0.88	0.18	11.6	1.06	0.17	2.05	6.68	556	94%	6%	22%	
23HYD036	8	12	4	208	9.7	5.31	2.82	13	1.83	102	0.56	97.2	24.6	16.8	1.61	0.73	52.9	4.26	0.18	2.1	6.57	651	83%	17%	22%	
23HYD036	12	16	4	153	6.89	3.61	2.08	8.81	1.3	76.7	0.44	62.7	17.05	11.3	1.24	0.47	36.7	3.11	0.21	1.93	7.07	463	83%	17%	20%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD036	16	20	4	150	7.81	4.1	2.11	10.4	1.51	73.4	0.48	66.5	17.35	12.45	1.46	0.56	38.2	3.37	0.31	1.88	6.22	468	82%	18%	21%	
23HYD036	20	24	4	182.5	9.27	5.11	2.53	12.35	1.65	89.6	0.53	86.8	22.2	16	1.68	0.62	46.2	3.81	0.33	2.25	6.38	578	82%	18%	22%	
23HYD036	24	28	4	193	9.99	4.85	2.44	13.3	1.94	91.2	0.59	83.8	22	15	1.92	0.66	49.9	4.01	0.3	3.62	6.58	595	82%	18%	21%	
23HYD036	28	32	4	160	11.5	6.38	2.76	12.9	2.37	73.3	0.69	68.4	17.8	13	2	0.77	68.9	4.76	0.14	4.27	7.12	537	74%	26%	19%	
23HYD036	32	36	4	194.5	16.75	8.5	3.8	20.1	3.25	89.2	0.9	90.5	23.5	19.4	3.06	1.1	99.8	6.14	0.52	2.54	8.11	700	71%	29%	19%	
23HYD036	36	37	1	177.5	10.55	5.23	2.44	14.1	1.97	80.6	0.6	80.7	20.6	15.4	1.96	0.68	54.1	4.17	0.45	2.37	6.96	566	79%	21%	21%	
23HYD037	0	4	4	88.3	4.56	2.22	1.08	5.68	0.86	33.2	0.3	30.8	8.05	6.5	0.83	0.3	21.2	1.74	0.09	5.86	42.5	248	81%	19%	18%	
23HYD037	4	8	4	84.7	4.35	1.91	1.03	5.41	0.8	43.1	0.19	36	9.83	7	0.79	0.23	17.3	1.42	0.09	2.53	11.5	257	84%	16%	21%	
23HYD037	8	12	4	384	15.75	6.54	4.14	19	2.84	192.5	0.39	145	40.5	24.4	2.9	0.66	55.1	3.33	0.24	2.39	11.7	1078	88%	12%	20%	
23HYD037	12	16	4	301	14.85	6	3.85	19.35	2.75	147.5	0.42	128	34.6	23.8	2.76	0.68	54.5	3.17	0.33	3.62	11	893	85%	15%	21%	
23HYD037	16	20	4	253	16.45	7.97	3.63	19.65	3.27	119.5	0.66	118.5	30.8	22.2	2.83	0.96	78.3	5.26	0.38	7.74	12.6	821	79%	21%	21%	
23HYD037	20	24	4	244	20.7	17.8	3.09	19.45	5.18	121	3.33	117.5	29.1	21.3	2.87	2.93	204	19.75	0.34	7.74	14.35	1007	63%	37%	17%	
23HYD037	24	28	4	150	6.32	5.1	1.08	6.4	1.46	85	0.85	49.8	15.15	7.03	0.88	0.79	57.2	4.95	0.17	6.83	55.6	473	78%	22%	16%	
23HYD037	28	32	4	270	5.43	3.16	0.73	9.12	1.05	133	0.45	103	28.2	15.55	1.14	0.49	35.4	3.17	0.09	7.83	142.5	733	90%	10%	21%	
23HYD037	32	36	4	122.5	4.37	2.88	1.08	5.17	0.94	70.3	0.53	42.5	12.75	6.96	0.66	0.47	32.5	3.16	0.08	8.12	57	369	83%	17%	18%	
23HYD037	36	40	4	84.6	2.96	2.13	0.78	3.45	0.61	48.4	0.45	30	8.84	4.98	0.45	0.34	20.5	2.4	0.09	8.09	53.3	254	84%	16%	18%	
23HYD037	40	43	3	300	11.25	7.06	2.17	14.85	2.41	149	1	107.5	30.9	16.25	1.88	1.06	90.2	6.07	0.08	11	87.5	894	81%	19%	18%	
23HYD038	0	4	4	49.2	1.5	0.82	0.45	1.66	0.3	16.8	0.16	12.8	3.58	2.16	0.21	0.16	7.4	1.04	0.04	7.82	42.8	119	86%	14%	16%	
23HYD038	4	8	4	39.2	1.4	0.78	0.43	1.5	0.26	20	0.18	13.2	4.08	2.36	0.22	0.13	6.8	0.9	0.06	5.2	24.5	110	86%	14%	18%	
23HYD038	8	12	4	109.5	1.74	0.92	0.71	2.57	0.32	74.7	0.16	27	9.36	3.98	0.34	0.14	7.9	0.85	0.03	1.78	10.35	288	93%	7%	15%	
23HYD038	12	16	4	130	7.16	3.81	2.1	7.51	1.31	66.6	0.44	57.3	15.05	9.56	1.17	0.51	34.3	3.02	0.24	2.82	12.05	409	82%	18%	21%	
23HYD038	16	20	4	123.5	8.61	4.02	2.81	9.69	1.61	61	0.52	57.5	14.95	10.95	1.46	0.6	36.1	3.42	0.34	2.42	6.2	405	79%	21%	21%	
23HYD038	20	24	4	182.5	7.54	3.38	2.88	10.35	1.26	89.6	0.4	83	21.7	14.75	1.3	0.51	36.5	2.62	0.27	3.17	6.56	551	85%	15%	22%	
23HYD038	24	25	1	129	5.91	2.73	3.78	7.9	1.06	65.5	0.36	57.5	15.2	9.71	1.06	0.34	28.4	2.24	0.37	1.65	5.77	397	84%	16%	22%	
23HYD039	0	4	4	101.5	3.57	1.54	1.26	4.89	0.64	59.4	0.22	36.9	10.5	6	0.64	0.23	15.7	1.3	0.12	2.31	12	293	88%	12%	19%	
23HYD039	4	6	2	218	9.71	4.46	1.66	13.25	1.74	107	0.56	103	26.2	17.7	1.68	0.61	47.1	3.41	0.45	1.86	11.05	668	85%	15%	23%	
23HYD039	6	7	1	102.5	4.59	2.21	1.92	7.05	0.85	57.8	0.25	46.5	11.3	8.12	0.83	0.28	20.2	1.88	0.18	1.74	10.7	319	85%	15%	21%	
23HYD040	0	4	4	45.8	2.35	1.52	0.49	2.24	0.47	19.8	0.31	16.2	4.54	2.96	0.35	0.22	11.1	1.72	0.03	5.04	34.9	132	81%	19%	18%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD040	4	8	4	46.4	1	0.49	0.32	1.23	0.19	28.2	0.12	13.4	4.46	1.88	0.19	0.08	4.6	0.53	0.02	1.44	10.1	124	91%	9%	17%	
23HYD040	8	12	4	107.5	1.82	0.9	0.85	2.59	0.31	69.6	0.15	29.6	9.85	4.09	0.34	0.14	7.3	0.87	0.05	1.56	8.53	283	93%	7%	16%	
23HYD040	12	16	4	151.5	4.42	1.94	1.91	6.62	0.75	82.1	0.3	60.2	16.9	8.9	0.86	0.27	17.4	1.76	0.11	1.94	8.85	427	90%	10%	21%	
23HYD040	16	20	4	141	8.16	4.58	1.89	9.76	1.61	74	0.55	66.5	16.45	11.95	1.44	0.61	48.1	3.41	0.19	1.94	6.78	469	79%	21%	21%	
23HYD040	20	22	2	128	6.03	3.06	2.11	7.69	1.12	66.8	0.41	57.5	15.35	9.47	1.02	0.41	32.2	2.43	0.31	2.08	6.56	401	83%	17%	21%	
23HYD041	0	4	4	75.6	2.63	1.5	0.68	3.14	0.53	29.8	0.22	23.7	6.38	3.58	0.42	0.19	12.2	1.52	0.08	6.55	45.6	195	86%	14%	18%	
23HYD041	4	8	4	52.5	2.41	1.2	0.81	2.69	0.38	37.1	0.2	24.5	6.91	4	0.4	0.19	8.9	1.26	0.05	2.57	24	172	87%	13%	21%	
23HYD041	8	12	4	16.4	1.32	1.18	0.27	0.98	0.32	10.8	0.27	6.9	1.96	1.32	0.17	0.19	8.5	1.53	0.05	1.15	5.68	63	71%	29%	17%	
23HYD041	12	16	4	17.6	2.2	1.64	0.37	1.22	0.5	7.5	0.38	6.1	1.64	1.48	0.24	0.28	10.8	2.25	0.17	4.06	3.52	65	63%	37%	14%	
23HYD041	16	20	4	17.9	3	2.53	0.56	1.91	0.67	6.2	0.5	5.9	1.44	1.44	0.38	0.41	16.6	3.1	0.22	2.29	3.12	76	52%	48%	11%	
23HYD041	20	24	4	142	15.95	9.63	4.53	18.5	3.15	54.4	1.18	81.1	17.1	19.35	2.74	1.22	89.3	8.27	0.14	0.72	1.78	564	67%	33%	20%	
23HYD041	24	28	4	40.8	9.68	5.09	2.61	8.96	1.84	16.3	0.81	29.8	6.12	7.48	1.52	0.74	50.7	4.88	0.1	0.8	2.08	226	53%	47%	19%	
23HYD041	28	31	3	41.1	9.72	5.56	2.84	9.5	1.91	15.9	0.83	28.9	6.23	8.06	1.48	0.77	51.6	5.25	0.19	0.82	1.62	229	52%	48%	18%	
23HYD041	31	32	1	44.1	9.63	5.44	2.69	9.14	1.85	16.4	0.79	30	6.41	7.47	1.44	0.76	51.6	4.73	0.25	0.95	3.48	232	54%	46%	18%	
23HYD042	0	4	4	83.5	5.84	2.94	1.54	6.76	1.01	40.7	0.39	43.8	9.99	8.71	0.9	0.39	27.9	2.49	0.15	3.46	26	285	79%	21%	22%	
23HYD042	4	5	1	278	20.5	10.45	2.8	25	3.78	123	1.58	143.5	35.7	27.3	3.42	1.44	106	9.04	0.67	3.84	8.65	952	76%	24%	22%	
23HYD042	5	6	1	154	10.65	5.75	2.79	12.35	2.01	74	0.74	78	18.95	15.1	1.7	0.74	53.4	4.76	0.31	2.04	6.03	523	78%	22%	22%	
23HYD043	0	4	4	95.2	5.67	2.91	2.03	6.83	1.1	47.9	0.37	41.6	11.15	7.91	0.93	0.46	29.1	2.82	0.15	2.7	14.5	308	79%	21%	20%	
23HYD043	4	5	1	97.4	5.72	3.06	2.74	6.68	1.05	52.2	0.34	43.1	11.35	8.3	0.93	0.43	30.6	2.69	0.2	1.46	6.16	321	79%	21%	20%	
23HYD044	0	4	4	84.7	3.21	1.56	1.32	4.1	0.53	47.2	0.21	32.1	8.81	5.3	0.55	0.23	12.4	1.36	0.05	5.29	48.7	244	87%	13%	20%	
23HYD044	4	6	2	130.5	6.22	3.26	2.15	8.22	1.2	70.4	0.4	59.5	14.55	10.15	1.2	0.48	34.2	2.99	0.26	1.7	8.81	415	82%	18%	21%	
23HYD044	6	7	1	104.5	5.17	2.72	2.06	6.57	0.9	57.6	0.32	46.5	11.9	8.35	0.92	0.34	26.2	2.15	0.19	1.46	5.56	332	83%	17%	21%	
23HYD045	0	4	4	20.2	1.22	0.77	0.21	1.02	0.22	7.5	0.15	6.7	1.74	1.26	0.17	0.12	6.4	0.84	0.01	3.29	18.8	59	77%	23%	17%	
23HYD045	4	8	4	8.1	0.71	0.68	0.14	0.65	0.17	3.6	0.13	3.4	0.78	0.73	0.11	0.1	4.1	1.02	0.005	2.64	12.3	29	68%	32%	17%	
23HYD045	8	12	4	12.8	0.93	0.59	0.27	0.82	0.17	10	0.11	5.2	1.42	1.25	0.12	0.1	4.5	0.72	0.03	1.98	4.38	47	78%	22%	17%	
23HYD045	12	16	4	15.6	0.75	0.54	0.25	0.78	0.17	20.4	0.1	5.9	1.84	1.23	0.13	0.07	3.6	0.57	0.02	2.28	4.93	62	86%	14%	15%	
23HYD045	16	20	4	27.6	0.84	0.39	0.51	1.23	0.16	22.2	0.06	10.8	2.93	1.52	0.18	0.06	3.7	0.46	0.01	2.4	7.87	87	89%	11%	19%	
23HYD045	20	24	4	96.8	2	0.91	1.36	2.37	0.36	41.1	0.16	20.5	6.17	3.36	0.33	0.17	8.9	1.16	0.06	3.17	12.2	224	90%	10%	14%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD045	24	28	4	121	5.03	2.56	3.2	5.78	0.99	91.2	0.32	50	14	8.02	0.8	0.4	23.5	2.36	0.06	2.86	6.7	395	86%	14%	19%	
23HYD045	28	32	4	97.9	3.67	2.62	2.34	4.41	0.87	65.6	0.31	35.1	9.44	5.71	0.64	0.33	22.2	2.15	0.07	2.71	5.08	304	84%	16%	17%	
23HYD045	32	36	4	84.3	2.69	1.48	1.33	3.39	0.46	56.1	0.21	26.1	7.76	3.65	0.42	0.2	13.2	1.22	0.01	2.2	8.1	243	88%	12%	16%	
23HYD045	36	37	1	32.4	1.02	0.56	0.55	1.17	0.21	24.2	0.13	9.4	2.91	1.6	0.18	0.14	4.9	0.72	0.01	1.77	3.18	96	88%	12%	15%	
23HYD046	0	4	4	38.3	1.3	0.54	0.47	1.58	0.2	19.2	0.1	14.7	4.17	2.58	0.23	0.05	4	0.52	0.06	6.34	40.1	106	90%	10%	21%	
23HYD046	4	8	4	78.4	1.95	0.62	0.9	3.4	0.26	42.2	0.08	38	9.51	6.65	0.39	0.09	4.5	0.59	0.05	2.31	13.3	225	93%	7%	25%	
23HYD046	8	12	4	116	3.31	0.98	1.54	6.08	0.48	64.9	0.11	51.5	12.5	9.28	0.72	0.12	7	0.63	0.07	2	12.3	330	92%	8%	23%	
23HYD046	12	16	4	272	5.73	1.31	2.96	11.85	0.58	158	0.11	84.4	25.7	14.25	1.34	0.15	9.5	0.87	0.1	2.8	12.1	706	94%	6%	18%	
23HYD046	16	20	4	134.5	4.55	1.17	1.89	7.38	0.6	74	0.12	60.9	15.3	9.79	0.94	0.14	10.4	0.81	0.09	2.39	12.6	386	91%	9%	23%	
23HYD046	20	24	4	110	4.56	1.27	2.36	7.4	0.55	66	0.11	51	12.3	9.27	0.8	0.12	10.4	0.89	0.1	2.9	13.35	332	90%	10%	22%	
23HYD046	24	28	4	181.5	7.95	2.81	2.57	12	1.22	100	0.19	77.8	20.2	14	1.42	0.31	21.3	1.77	0.2	6.68	13.75	533	88%	12%	22%	
23HYD046	28	32	4	156.5	10.4	3.87	2.54	14.05	1.84	80.2	0.23	76	18.95	15.45	1.89	0.4	33.6	1.94	0.21	6.62	11.4	501	83%	17%	22%	
23HYD046	32	36	4	111	5.87	2.48	1.58	7.95	0.97	63.8	0.22	52.2	12.8	8.88	0.97	0.27	21.2	1.96	0.17	6.03	11.6	350	85%	15%	22%	
23HYD046	36	40	4	158.5	7.95	3.49	2	10.25	1.51	88.8	0.41	71.8	18.3	13.1	1.36	0.51	35.9	3.1	0.22	6.81	15.35	501	84%	16%	21%	
23HYD046	40	44	4	129	11.7	7.8	2.52	12.45	2.5	66.9	1.02	62.7	14.8	11.75	1.78	1.07	81.1	6.52	0.2	6.38	11.9	499	68%	32%	18%	
23HYD046	44	45	1	63.2	3.17	1.7	1.34	3.61	0.6	40.1	0.22	24.9	6.83	3.91	0.54	0.21	18.7	1.76	0.12	3.47	8.58	205	81%	19%	18%	
23HYD047	0	4	4	53.9	1.62	0.8	0.59	2.17	0.25	27.2	0.11	21.5	5.71	3.49	0.27	0.1	6.1	0.8	0.1	2.47	13.6	150	90%	10%	21%	
23HYD047	4	8	4	125	2.61	0.94	1.61	4.66	0.42	53.6	0.13	59.7	14.95	8.39	0.56	0.11	8.3	0.87	0.14	1.81	4.92	338	93%	7%	26%	
23HYD047	8	12	4	89.2	2.78	1.31	1.52	4.91	0.43	43	0.15	47.6	11.25	7.89	0.51	0.19	10	1.2	0.07	2.1	3.72	266	90%	10%	26%	
23HYD047	12	16	4	86.4	2.8	1.22	1.72	5.13	0.49	44.5	0.15	43.6	10.15	8.44	0.6	0.17	11.4	1.22	0.11	2.15	4.5	261	89%	11%	24%	
23HYD047	16	20	4	78.4	6.64	3	1.22	7.07	1.19	42	0.35	36.3	9.01	6.7	1.05	0.42	36	2.72	0.24	1.88	7.29	279	74%	26%	19%	
23HYD047	20	24	4	89.9	4.77	2.54	1.34	6.48	0.9	46.8	0.23	42.2	10.8	8.21	0.84	0.28	23.2	1.7	0.3	2.42	7.66	289	82%	18%	22%	
23HYD047	24	28	4	57.1	3.35	1.6	1.34	4.29	0.6	27.9	0.2	28.7	6.7	5.28	0.56	0.23	17	1.43	0.31	1.4	2.87	188	80%	20%	22%	
23HYD047	28	29	1	65.4	2.86	1.37	1.09	3.55	0.51	35.4	0.12	26	7.2	4.74	0.5	0.16	14.5	0.8	0.23	1.29	2.81	197	84%	16%	20%	
23HYD047	29	30	1	66.4	3	1.56	1.15	4	0.55	35.1	0.13	27.4	7.37	4.87	0.55	0.18	16.4	1.03	0.22	1.29	3.78	204	83%	17%	20%	
23HYD048	0	4	4	63.5	1.16	0.67	0.36	1.42	0.23	10.8	0.11	10	2.73	2.02	0.21	0.1	6	0.83	0.05	5.94	56.1	121	89%	11%	12%	
23HYD048	4	8	4	8.8	0.49	0.34	0.12	0.5	0.12	4.3	0.07	3.4	0.95	0.92	0.09	0.05	2.9	0.32	0.01	1.8	9.53	28	78%	22%	18%	
23HYD048	8	12	4	4.1	0.4	0.28	0.07	0.3	0.08	2.6	0.07	1.2	0.4	0.39	0.05	0.05	2.3	0.41	0.04	1.53	22.8	15	68%	32%	12%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD048	12	16	4	39.7	0.64	0.38	0.13	0.8	0.12	24.1	0.09	9.8	3.44	1.21	0.13	0.05	3.2	0.49	0.04	2.02	45.1	101	93%	7%	15%	
23HYD048	16	20	4	83.8	1.13	0.8	0.4	1.22	0.24	45.5	0.19	18	6.06	2.2	0.18	0.11	5.3	0.94	0.03	1.64	8.41	200	94%	6%	14%	
23HYD048	20	24	4	146	2.26	1.93	0.66	2.19	0.6	82.9	0.42	34.6	12.4	4.37	0.44	0.31	14.2	2.44	0.06	1.58	5.86	368	92%	8%	15%	
23HYD048	24	28	4	86.5	4.1	4.04	0.83	3.23	1.09	46.2	0.65	27.4	8.85	4.4	0.53	0.7	31.3	4.56	0.08	1.75	6.38	271	77%	23%	16%	
23HYD048	28	32	4	74.6	3.58	3.37	0.83	3	0.97	37.7	0.53	25.5	7.64	3.84	0.51	0.54	29.4	3.81	0.05	2.35	4.19	236	76%	24%	16%	
23HYD048	32	36	4	113	5.55	3.56	1.44	6.25	1.21	57.5	0.5	40.1	11.55	7.44	0.85	0.52	36.9	3.72	0.06	2.54	8.6	350	79%	21%	17%	
23HYD048	36	40	4	76.2	2.82	2.05	0.47	2.22	0.62	44.3	0.37	18.8	6.32	2.84	0.33	0.33	17.5	2.54	0.06	1.31	6.08	214	83%	17%	14%	
23HYD048	40	44	4	79.5	3.08	2.37	0.45	2.88	0.75	44.2	0.41	20	7.02	3.03	0.47	0.38	26.2	2.67	0.07	1.65	6.94	234	79%	21%	14%	
23HYD048	44	45	1	69.9	0.87	0.64	0.18	0.84	0.17	47.2	0.1	14.1	5.36	1.4	0.15	0.08	6	0.64	0.04	1.04	3.45	178	93%	7%	13%	
23HYD049	0	4	4	86.1	2.27	1.23	0.57	2.88	0.49	21.3	0.21	19.9	5.44	4.46	0.45	0.2	8.4	1.04	0.03	5.14	83.7	187	89%	11%	16%	
23HYD049	4	8	4	97.6	3.33	1.47	0.73	4.1	0.53	40.4	0.2	31.3	8.99	5.85	0.62	0.21	11.7	1.22	0.04	4.08	44.9	251	88%	12%	19%	
23HYD049	8	12	4	259	7.23	1.97	1.99	11.7	0.96	117.5	0.16	107.5	29.2	19.95	1.5	0.24	16.2	1.26	0.11	3.05	28.6	691	93%	7%	23%	
23HYD049	12	16	4	290	8	2.19	1.69	13	1.05	144.5	0.21	115	32.1	21.8	1.67	0.23	15.9	1.43	0.15	3.52	32.2	778	93%	7%	22%	
23HYD049	16	20	4	205	8.25	3.12	1.12	12	1.4	103.5	0.32	85.4	22.8	15.85	1.59	0.47	32.5	2.57	0.13	4.09	24.9	595	87%	13%	21%	
23HYD049	20	21	1	171	6.45	3.2	1.02	11	1.11	82.7	0.34	82.6	20.9	16.45	1.33	0.39	28.2	2.42	0.11	5.37	14.6	515	87%	13%	24%	
23HYD049	21	22	1	135	4.87	2.42	0.56	6.83	0.96	68.3	0.31	53	14.7	9.67	0.91	0.32	26.9	1.86	0.22	2.89	23.2	393	86%	14%	20%	
23HYD050	0	4	4	52.1	2.17	1.22	0.71	2.86	0.42	24.4	0.17	20.5	5.71	3.8	0.4	0.18	10.4	1.35	0.02	2.66	46.5	152	84%	16%	20%	
23HYD050	4	8	4	10.4	0.43	0.24	0.11	0.54	0.1	4.7	0.04	3.5	0.98	0.85	0.06	0.04	1.8	0.34	0.05	1.03	12.9	29	85%	15%	18%	
23HYD050	8	12	4	28.4	1.73	1.14	0.43	1.6	0.36	12.4	0.22	9.8	2.99	1.86	0.29	0.19	7.9	1.43	0.03	1.3	15.5	85	78%	22%	18%	
23HYD050	12	16	4	423	12.45	6.86	4.58	16.2	2.35	199.5	0.94	132	38.8	21.4	2.44	0.94	58.1	6.13	0.09	2.42	12.45	1114	88%	12%	18%	
23HYD050	16	20	4	260	15.8	11.3	3.47	13.4	3.33	90.7	1.55	69.1	18.35	13.7	2.3	1.68	141.5	10.95	0.08	1.71	7.59	797	68%	32%	13%	
23HYD050	20	24	4	68	4.09	2.46	1.32	4.44	0.86	34	0.39	26.2	7.34	5.31	0.66	0.37	27	2.21	0.09	0.94	13.5	223	76%	24%	18%	
23HYD050	24	28	4	56.3	4.12	2.53	1.44	4.51	0.83	27.8	0.29	24.3	6.78	5.34	0.74	0.36	24.1	2.17	0.15	1.02	8.8	195	74%	26%	19%	
23HYD050	28	32	4	62	4.98	2.91	1.65	5.52	1.06	30.8	0.4	27.8	7.11	6.14	0.79	0.42	29.7	2.61	0.1	1.39	5.45	222	72%	28%	19%	
23HYD050	32	36	4	76.9	3.98	2.15	1.16	5.1	0.81	38	0.29	32.6	8.41	6.01	0.82	0.33	21	2.09	0.1	1.8	16.85	240	81%	19%	20%	
23HYD050	36	40	4	52.6	6.85	4.35	1.44	6.23	1.35	24.7	0.55	24.9	5.73	5.64	0.92	0.62	42.4	3.54	0.16	2.04	7.79	220	62%	38%	16%	
23HYD050	40	44	4	73.7	3.2	1.49	1.01	4.28	0.59	32.5	0.23	32.8	8.49	6.2	0.55	0.25	13.8	1.4	0.08	1.96	17.1	217	85%	15%	22%	
23HYD050	44	48	4	56	16.05	12.5	2	10.9	4.13	27.3	1.58	27.5	6.87	6.37	2.13	1.66	148.5	9.91	0.07	1.35	5.76	407	37%	63%	10%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD050	48	52	4	61.5	8.64	5.49	1.8	8	1.84	30.1	0.72	29.5	7.48	6.85	1.32	0.72	57.2	4.42	0.05	2.39	8.86	273	59%	41%	16%	
23HYD050	52	56	4	41.2	2.49	1.24	1.18	3.18	0.43	20.4	0.19	19.7	4.78	3.83	0.38	0.16	11.2	1.06	0.03	1.04	6.23	134	81%	19%	21%	
23HYD050	56	60	4	60.2	4.66	2.22	1.89	4.67	0.88	27.5	0.34	27.6	7.32	5.92	0.79	0.34	23.2	2.27	0.03	1.61	7.36	204	75%	25%	20%	
23HYD050	60	64	4	70.4	32.6	20.3	5.16	24.3	6.88	31.2	2.87	45.2	9.63	14	4.59	2.78	209	18.25	0.45	1.24	2.61	604	34%	66%	11%	
23HYD050	64	68	4	98.1	8.02	4.07	2.4	8.35	1.64	46.8	0.68	47.6	11.6	9.57	1.26	0.7	42.1	4.26	0.32	1.36	12.1	346	74%	26%	20%	
23HYD050	68	72	4	54.5	6.37	3.67	1.98	6.68	1.31	26.1	0.52	28.3	6.96	6.27	0.92	0.49	32.2	3.39	0.09	1.01	4.24	216	68%	32%	19%	
23HYD050	72	76	4	71.5	7.72	4.88	2.27	7.67	1.6	33.5	0.75	37.9	8.78	7.82	1.22	0.65	45.1	4.69	0.21	2.03	6.97	284	67%	33%	19%	
23HYD050	76	80	4	70.8	8.3	5.07	2.26	8.7	1.82	32.7	0.78	39.3	8.95	9.26	1.39	0.74	48.3	5.09	0.25	1.32	6.31	293	66%	34%	19%	
23HYD050	80	84	4	57.6	8.41	4.98	2.65	9.2	1.76	25.6	0.73	35.4	7.5	7.81	1.34	0.73	49.5	5.27	0.38	0.96	3.28	263	61%	39%	19%	
23HYD050	84	86	2	54.6	8.3	5.03	2.47	8.21	1.72	25.5	0.69	30.8	7.08	7.28	1.27	0.7	45	4.54	0.36	1.08	3.52	245	61%	39%	18%	
23HYD050	86	87	1	56.1	9.5	6.22	2.08	8.7	1.99	26	1.06	33.1	7.35	7.45	1.43	0.92	52.9	5.07	0.38	1.3	3.72	265	59%	41%	18%	
23HYD051	0	4	4	27.7	1.4	0.8	0.37	1.62	0.25	10.6	0.1	10	2.6	1.98	0.23	0.11	5.2	0.71	0.02	3.68	53.5	77	83%	17%	19%	
23HYD051	4	8	4	124	4.68	1.7	1.29	5.97	0.73	58.6	0.12	52.8	13.5	9.79	0.85	0.18	13	1.28	0.07	2.67	18.5	346	90%	10%	23%	
23HYD051	8	12	4	163.5	4.29	1.44	1.36	6.62	0.66	80.8	0.11	71.6	18.6	11.65	0.88	0.16	10.3	0.97	0.09	4.03	22.3	447	93%	7%	24%	
23HYD051	12	16	4	214	9	3.15	2.79	13.8	1.41	102	0.27	107	25.5	20.7	1.76	0.39	26.9	2.04	0.16	5.81	21.7	636	88%	12%	24%	
23HYD051	16	20	4	181	8.9	3.35	3.17	12	1.31	82.4	0.22	88	21.7	16.3	1.64	0.35	25.1	1.99	0.12	5.1	17.25	537	87%	13%	24%	
23HYD051	20	24	4	230	11.5	4.3	3.35	15.6	1.72	100.5	0.33	115	29.1	21.1	1.98	0.47	32.2	2.52	0.16	6.66	17.5	683	87%	13%	25%	
23HYD051	24	28	4	181	8.57	3.06	2.71	12.7	1.37	83.5	0.25	94.4	23.1	17.55	1.66	0.33	28.3	2.06	0.15	6.28	16.5	552	87%	13%	25%	
23HYD051	28	32	4	126.5	5.27	2.41	2.2	7.55	0.95	61.2	0.22	58.7	14.5	10	0.97	0.29	22.3	1.71	0.13	4.85	17.2	378	86%	14%	23%	
23HYD051	32	36	4	85.6	4.16	2.07	1.87	5.44	0.72	45.1	0.29	40.5	10	7	0.71	0.24	18.7	1.79	0.1	3.94	12.95	269	84%	16%	22%	
23HYD051	36	40	4	89.8	8.23	5.89	2.72	9.71	1.81	44.8	0.89	49.7	11.9	11.1	1.41	0.86	54.4	5.9	0.1	4.79	14.65	360	69%	31%	20%	
23HYD051	40	44	4	144	12.65	8.32	2.76	14.1	2.76	67.4	1.16	72.6	17.55	14.85	1.82	1.18	99.5	7.75	0.21	7.05	19.5	566	67%	33%	19%	
23HYD051	44	48	4	107	5.9	3.23	2.05	7.84	1.04	51.9	0.37	52.1	13.15	9.23	1.07	0.39	29.5	2.81	0.19	4.73	12.7	346	81%	19%	22%	
23HYD051	48	52	4	139	9.76	5.43	2.03	10.65	1.68	63.7	0.55	73.6	17.15	14.05	1.52	0.63	51.2	4.4	0.39	5.24	13.55	475	77%	23%	22%	
23HYD051	52	56	4	135	8.38	4.42	1.98	9.71	1.59	61.3	0.52	63	16.05	11.9	1.25	0.64	44	3.61	0.39	4.89	11.15	437	79%	21%	21%	
23HYD051	56	58	2	141	8.33	4.12	1.74	9.26	1.51	64.7	0.51	69	16.8	12.85	1.42	0.67	46.7	4.3	0.43	4.08	11.8	461	79%	21%	22%	
23HYD051	58	59	1	131	6.76	3.8	1.75	8.17	1.31	59.2	0.44	60.4	15.2	11.4	1.11	0.57	38.5	3.32	0.38	3.3	7.96	413	81%	19%	22%	
23HYD052	0	4	4	22.3	1.41	0.88	0.28	1.29	0.27	9.2	0.15	8.8	2.25	1.52	0.19	0.15	6.8	0.96	0.02	6.01	43.6	68	78%	22%	19%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD052	4	8	4	9.9	0.72	0.57	0.15	0.85	0.16	6.6	0.08	3.6	0.91	0.67	0.13	0.09	4.4	0.7	0.01	2.03	9.61	36	73%	27%	15%	
23HYD052	8	12	4	18.3	0.84	0.64	0.36	0.95	0.18	13.3	0.09	6.8	1.78	1	0.11	0.09	4.7	0.49	0.02	2.03	11.55	60	83%	17%	17%	
23HYD052	12	16	4	9.1	0.47	0.36	0.2	0.45	0.11	5.8	0.08	2.6	0.86	0.59	0.07	0.06	2.5	0.4	0.005	2.36	19.95	28	80%	20%	14%	
23HYD052	16	20	4	18.6	0.82	0.62	0.78	0.69	0.2	12.3	0.09	5.1	1.48	0.96	0.1	0.09	5.2	0.72	0.01	2.44	17.6	57	80%	20%	13%	
23HYD052	20	24	4	44.5	2.12	1.21	2.08	2.13	0.36	24.6	0.14	16.1	4.67	2.81	0.34	0.16	10.3	1.02	0.01	2.17	13.4	135	82%	18%	18%	
23HYD052	24	28	4	171	8.01	4.34	3.29	10.1	1.55	76.3	0.46	71.2	18.6	12.9	1.43	0.62	37.6	3.8	0.13	7.17	8.17	506	83%	17%	21%	
23HYD052	28	32	4	197	10.55	5.21	3.68	11.85	1.94	98.6	0.58	84.4	21.9	14.3	1.73	0.72	55.9	4.39	0.04	6.67	13.6	617	81%	19%	20%	
23HYD052	32	36	4	104	5.46	2.6	2.43	6.18	0.92	52.2	0.33	46.7	12.05	7.64	0.82	0.38	28	2.4	0.05	4.68	9.31	327	82%	18%	21%	
23HYD052	36	40	4	121.5	5.69	3.36	2.27	7.43	1.17	60.9	0.44	53.8	14	9.34	0.95	0.41	31.7	2.74	0.05	5.45	10.45	380	82%	18%	21%	
23HYD052	40	42	2	137	7.36	4	2.56	8.54	1.46	68.3	0.49	63.2	16.05	10.95	1.13	0.54	40.3	3.14	0.07	5.63	10.95	439	81%	19%	21%	
23HYD052	42	43	1	135	7.25	3.86	2.41	8.32	1.33	65.7	0.42	61.2	15.55	11.25	1.21	0.56	38.6	3.24	0.05	6.06	17.1	428	81%	19%	21%	
23HYD052	43	44	1	88.4	4.46	2.47	1.88	5.81	0.84	44.4	0.27	39.3	9.84	7.16	0.76	0.32	24.2	2.16	0.19	6.24	9.84	279	81%	19%	21%	
23HYD053	0	4	4	223	7.66	3.51	2.65	10.15	1.39	122.5	0.24	84.7	23.5	13.3	1.41	0.4	30.2	2.03	0.14	3.61	44	632	89%	11%	20%	
23HYD053	4	8	4	237	4.6	2.28	1.85	6.67	0.83	153.5	0.28	66.7	21.4	9.76	0.88	0.3	17.6	1.66	0.12	4.41	30.1	631	93%	7%	16%	
23HYD053	8	12	4	639	11.95	4.75	6.26	17.15	1.85	350	0.45	204	63.6	31.2	2.32	0.62	40.4	3.6	0.15	6.01	15.05	1654	93%	7%	19%	
23HYD053	12	16	4	353	19.05	8.14	6.37	24.6	3.43	168.5	0.77	176.5	43.7	32.4	3.44	1.1	83.8	5.92	0.36	2.95	7.84	1118	83%	17%	23%	
23HYD053	16	17	1	187.5	12.65	6.77	3.96	15.65	2.31	84.9	0.7	101	24.1	19.8	2.18	0.84	64.2	5.14	0.44	2.59	6.95	639	78%	22%	23%	
23HYD053	17	18	1	193.5	12.6	6.63	3.97	15.1	2.37	90	0.73	99.4	24.5	18.7	2.19	0.85	63.4	5.05	0.45	2.55	8.91	648	79%	21%	22%	
23HYD054	0	4	4	104	2.25	1.19	1.68	3.57	0.43	69.3	0.18	41.4	11.45	5.79	0.46	0.16	11.3	1.24	0.09	2.19	15.35	305	91%	9%	20%	
23HYD054	4	8	4	46.8	1.87	1.03	1	2.14	0.38	28.4	0.18	17	4.67	3.09	0.31	0.17	8.8	1.05	0.02	1.35	6.89	140	85%	15%	18%	
23HYD054	8	12	4	70.4	3.12	1.92	2.3	4	0.65	41.9	0.26	26.4	7.34	4.12	0.54	0.25	19.3	1.73	0.05	1	5.71	222	81%	19%	18%	
23HYD054	12	16	4	105.5	3.77	2	1.94	4.76	0.7	49	0.27	44.9	11.35	6.83	0.65	0.29	19.9	1.69	0.31	1.38	7.09	305	86%	14%	22%	
23HYD054	16	20	4	84.3	3.25	1.91	1.94	4.92	0.7	46.1	0.23	42.3	10.65	6.93	0.66	0.27	19	1.63	0.23	1.24	6.08	270	84%	16%	23%	
23HYD054	20	22	2	37.6	1.47	0.94	1.18	2	0.32	22.1	0.16	14.8	4.08	2.12	0.24	0.13	9.2	0.91	0.08	0.73	4.3	117	83%	17%	19%	
23HYD054	22	23	1	53.6	2.74	1.5	1.62	3.72	0.55	27.2	0.21	24.8	6.37	4.38	0.5	0.2	14.8	1.36	0.26	0.72	2.79	172	81%	19%	21%	
23HYD055	0	4	4	119.5	3.64	1.81	1.88	5.93	0.63	63.2	0.26	55.4	13.9	9.38	0.73	0.23	16.9	1.74	0.08	2.18	15.2	354	88%	12%	23%	
23HYD055	4	8	4	234	7.22	3.91	3.51	11.2	1.36	105	0.44	111.5	28.6	16.65	1.36	0.5	41.3	3.04	0.16	2.02	7.8	684	87%	13%	24%	
23HYD055	8	12	4	187	18.5	10.05	3.8	20.1	3.45	91.5	1	98.9	23.1	20.9	2.88	1.29	107	7.23	0.19	2.23	9.88	719	70%	30%	20%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD055	12	16	4	172.5	22	12.05	4.2	23	4.36	81.6	1.2	98.3	22	20.4	3.53	1.51	137	8.58	0.21	2.36	8.33	739	64%	36%	19%	
23HYD055	16	18	2	166.5	10.95	5.87	3.2	13.35	2.02	77.8	0.61	88	21	16.55	1.87	0.71	56.8	3.85	0.39	2.19	8.16	564	79%	21%	23%	
23HYD055	18	19	1	139.5	9.13	4.52	3.05	11.7	1.68	66.4	0.46	72.9	17.8	13.45	1.57	0.6	47.3	3.44	0.32	1.85	7	473	79%	21%	23%	
23HYD056	0	4	4	82.5	3.8	2	1.55	5.18	0.72	44.8	0.25	39.6	10.2	7.31	0.7	0.23	18.3	1.54	0.09	2.06	15.75	262	84%	16%	22%	
23HYD056	4	8	4	119	5.14	2.37	3.24	8.75	0.88	65.9	0.24	58.4	14.3	10.95	1.09	0.29	23.7	1.72	0.33	0.83	3.59	379	85%	15%	23%	
23HYD056	8	12	4	136	6.3	2.66	4.02	9.37	1.11	73	0.25	67.8	16.95	13.45	1.23	0.32	29.9	1.64	0.42	0.7	3.83	437	84%	16%	23%	
23HYD057	0	4	4	88.1	2.93	1.5	0.98	4.14	0.57	45.7	0.22	33.9	9.82	5.78	0.48	0.21	13.8	1.34	0.07	1.98	11.55	252	87%	13%	20%	
23HYD057	4	8	4	185.5	7.32	3.02	2.41	8.34	1.11	116.5	0.38	82.5	25.5	14.45	1.26	0.34	23.1	2.34	0.15	1.44	10.4	568	89%	11%	22%	
23HYD057	8	12	4	237	7.65	3.3	2.68	9.7	1.3	114	0.45	101	27.5	17.3	1.26	0.45	26.2	2.73	0.22	1.32	12.15	663	90%	10%	23%	
23HYD057	12	16	4	398	18.1	7.17	6.69	25.4	3.08	193.5	0.61	195.5	49.5	36.5	3.37	0.8	65.5	4.45	0.41	1.26	10.5	1209	86%	14%	24%	
23HYD057	16	20	4	326	11.45	5.57	3.98	16	2.1	185	0.61	146.5	41.2	25	2.12	0.65	49.8	4.13	0.44	1.36	12.45	984	88%	12%	22%	
23HYD057	20	24	4	350	9.62	4.21	3.62	14.25	1.82	170	0.66	137.5	38.9	24.3	1.82	0.6	40	4.01	0.49	1.72	10.85	962	90%	10%	22%	
23HYD057	24	28	4	503	17.75	6.66	8.34	28.9	2.8	229	0.71	236	58.9	46	3.52	0.85	62.7	4.93	0.63	1.92	10.95	1452	89%	11%	24%	
23HYD057	28	32	4	455	11.5	4.96	6.13	19.25	2	204	0.56	190	51	33.2	2.28	0.67	49.8	3.82	0.62	2.37	9.28	1242	90%	10%	23%	
23HYD057	32	35	3	267	22.3	13.25	5.41	23	4.76	126.5	1.77	140	34.7	27.6	3.64	1.9	147	11	0.76	2.42	8.39	1000	71%	29%	21%	
23HYD057	35	36	1	391	15	7.4	6.03	21.2	2.82	177.5	0.78	177	45.8	31.7	2.81	0.95	70.2	5.65	0.62	2.19	9.61	1148	86%	14%	23%	
23HYD058	0	4	4	49	2.41	1.21	0.77	2.98	0.46	25.2	0.17	22.8	6.04	4.4	0.4	0.17	12	1.1	0.07	2.95	20.6	155	83%	17%	22%	
23HYD058	4	8	4	27	1.54	0.99	0.38	1.72	0.33	14.6	0.14	13.8	3.34	2.56	0.2	0.13	7.5	0.93	0.04	1.82	19.6	90	81%	19%	22%	
23HYD058	8	12	4	25.2	1.68	1.41	0.47	1.66	0.4	11.4	0.25	12.2	3.08	2.43	0.25	0.18	9.8	1.26	0.05	1.93	12.8	86	76%	24%	21%	
23HYD058	12	16	4	67	2.81	1.6	1	2.9	0.49	20	0.24	22.6	6.22	4.77	0.45	0.25	9	1.6	0.02	3.88	13.8	170	86%	14%	20%	
23HYD058	16	20	4	97	4.16	1.99	1.61	5.05	0.71	38	0.33	38.3	10.15	6.82	0.7	0.32	14	2.07	0.06	3.3	16.3	266	86%	14%	21%	
23HYD058	20	24	4	163	5.89	2.54	3.01	9.22	1.03	75.3	0.35	89.2	21.3	16.2	1.13	0.33	20.5	2.07	0.13	2.05	12.8	493	89%	11%	26%	
23HYD058	24	28	4	509	19.35	6.12	9.54	33.5	2.99	231	0.41	275	65.1	51.1	3.96	0.62	59	3.24	0.54	2.29	22.5	1522	89%	11%	26%	
23HYD058	28	32	4	460	12.65	4.82	6.19	21.8	2.17	216	0.44	196.5	51.7	33.3	2.53	0.57	54.1	3.36	0.41	3.65	21	1280	90%	10%	23%	
23HYD058	32	36	4	370	16.4	8.8	5.64	20.3	3.17	168.5	1.05	166	43.3	31.1	2.85	1.19	97.1	7.02	0.3	4.34	17	1134	82%	18%	22%	
23HYD058	36	40	4	405	16.85	8.7	6.91	22.5	3.28	181.5	1.07	188.5	48.8	34.4	3.03	1.19	91	7.57	0.46	2.81	9.26	1226	84%	16%	23%	
23HYD058	40	44	4	397	19.9	10.55	7.79	25.9	3.84	180	1.28	190	48	36	3.44	1.46	110.5	8.55	1.37	2.18	8.3	1256	81%	19%	22%	
23HYD058	44	46	2	260	12.35	6.42	5.13	16	2.37	128	0.77	125.5	32.4	22.6	2.11	0.86	68	4.76	1.18	2.32	7.63	826	82%	18%	22%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD058	46	47	1	292	14.45	7.88	5.73	19.4	2.86	145	0.94	149	38.1	27.4	2.69	1	80.4	6.16	1.02	2.06	8.55	953	82%	18%	23%	
23HYD059	0	4	4	58	2.42	1.35	0.89	2.9	0.45	31.9	0.15	25.8	6.96	5.04	0.41	0.17	12.5	1.28	0.1	2.21	22.3	180	85%	15%	21%	
23HYD059	4	8	4	25.7	1.17	0.7	0.39	1.24	0.2	14	0.1	12.1	3.12	1.96	0.19	0.09	5.9	0.62	0.05	1.72	13.95	81	84%	16%	22%	
23HYD059	8	12	4	22.2	1.04	0.6	0.36	1.38	0.24	12.1	0.13	9.6	2.73	1.77	0.16	0.09	5.9	0.65	0.05	1.33	9.99	71	82%	18%	20%	
23HYD059	12	16	4	46.6	2.63	1.56	0.86	3.17	0.58	23.5	0.27	22.8	5.66	4.45	0.47	0.28	13.2	1.58	0.1	1.77	8.95	153	81%	19%	22%	
23HYD059	16	20	4	280	6.8	3.06	3.83	11.85	1.16	159.5	0.26	125.5	34.6	20.9	1.37	0.4	29.6	2.18	0.26	1.3	17.85	817	91%	9%	23%	
23HYD059	20	24	4	519	16.65	7.81	8.25	24.8	3.06	230	0.93	240	62.5	42	3.2	1.1	78	6.23	0.67	3.25	14.2	1493	88%	12%	24%	
23HYD059	24	28	4	419	22.1	11.95	8.57	27.7	4.25	191	1.75	206	51.6	38.6	3.76	1.69	123.5	11.7	0.55	2.82	6.49	1350	80%	20%	22%	
23HYD059	28	32	4	306	14	6.68	6.74	21.8	2.57	153	1.16	161.5	40	29.6	2.61	0.91	69.9	6.22	0.63	2.4	5.29	987	84%	16%	24%	
23HYD059	32	36	4	289	20.4	13.4	5.76	24.6	4.37	144	2.11	144	35	26.5	3.25	1.89	159	12.45	1.28	1.56	14.7	1068	72%	28%	20%	
23HYD059	36	40	4	298	14.5	7.53	6.1	19.95	2.93	148	0.95	155	36.4	25.5	2.64	1.02	80.7	5.84	1.77	1.46	5.39	967	82%	18%	23%	
23HYD059	40	44	4	282	13.55	6.56	5.49	18.4	2.6	138	0.82	147.5	34.3	24.3	2.53	0.87	69.9	5.24	1.28	1.45	7.86	903	83%	17%	24%	
23HYD059	44	48	4	231	10.6	5.7	4.96	15	2.16	113.5	0.71	118	27.7	19.15	2.01	0.72	55.5	4.29	1.33	1.35	6.04	734	83%	17%	23%	
23HYD059	48	51	3	262	12.25	6.25	5.36	16.7	2.36	127	0.7	134	32	22.2	2.21	0.78	60.2	4.53	1.47	1.05	4.65	827	84%	16%	24%	
23HYD059	51	52	1	230	11.1	5.79	5.17	15.05	2.16	111.5	0.74	118.5	27.3	19.05	2.04	0.75	57	4.44	1.3	1.3	4.77	733	83%	17%	23%	
23HYD060	0	4	4	57.2	2.09	1.17	0.65	2.42	0.41	22.7	0.18	20.5	5.05	3.73	0.36	0.19	10.4	1	0.04	2.06	25.8	154	85%	15%	19%	
23HYD060	4	8	4	25.6	1.4	0.8	0.44	1.45	0.3	11.1	0.13	11.3	2.89	2.35	0.26	0.12	6.5	0.93	0.04	3.71	22.2	79	81%	19%	21%	
23HYD060	8	12	4	19.8	0.96	0.51	0.3	0.96	0.18	10	0.08	8.5	2.14	1.34	0.16	0.09	4.7	0.63	0.06	2.88	22.5	61	83%	17%	21%	
23HYD060	12	16	4	58.1	1.4	0.65	0.51	1.85	0.28	32.5	0.13	19.7	5.75	2.93	0.29	0.12	6.3	0.86	0.09	3.05	30.9	158	90%	10%	19%	
23HYD060	16	20	4	465	7.9	2.71	3.91	15.25	1.21	222	0.32	193	50.4	25.7	1.65	0.33	29.6	2.08	0.46	2	37.6	1226	94%	6%	23%	
23HYD060	20	24	4	630	23.3	8.77	10.3	40.7	3.79	265	0.72	329	74.4	56.7	4.89	1	84.9	5.45	0.99	3.22	27.9	1846	88%	12%	26%	
23HYD060	24	28	4	322	15	6.97	5.09	20.6	2.72	141.5	0.81	170.5	40	27.5	2.85	0.93	63.3	5.74	1.08	3.08	5.64	991	85%	15%	25%	
23HYD060	28	32	4	306	19.5	10.2	6.01	25.1	3.77	137	1.2	173.5	39.3	32.2	3.53	1.37	94.6	8.11	1.18	1.12	5.07	1034	80%	20%	24%	
23HYD060	32	36	4	167.5	15.95	9.47	3.76	17.45	3.35	79	1.14	97.9	21.3	17.55	2.56	1.18	103	7.04	0.81	0.73	3.3	661	69%	31%	21%	
23HYD060	36	40	4	233	15.25	7.94	4.95	21	3	104	0.92	134	29.8	23.8	2.87	1.05	86.2	5.77	1.9	0.92	4.3	810	78%	22%	24%	
23HYD060	40	44	4	205	12.2	6.28	4.08	16.8	2.41	95	0.75	117.5	26.1	20.3	2.25	0.79	64.3	4.67	2.07	0.76	3.47	695	80%	20%	24%	
23HYD060	44	45	1	248	13.95	6.83	4.71	19.2	2.66	114.5	0.72	139.5	31.7	24.3	2.64	0.85	70.7	4.79	2.38	0.71	3.9	823	81%	19%	24%	
23HYD060	45	46	1	211	12.1	6.21	4.1	16.6	2.36	98.4	0.69	118	26.6	20.5	2.23	0.77	60.4	4.41	1.86	0.75	5	702	81%	19%	24%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD061	0	4	4	161.5	12.85	4.03	3.94	19.3	1.91	79.8	0.28	95	21.7	18.05	2.59	0.41	32.2	2.07	0.17	3.1	11.1	545	83%	17%	25%	
23HYD061	4	8	4	278	20.1	6.3	5.21	28.9	3.11	133.5	0.43	148.5	35	27.5	4.04	0.64	47.3	3.45	0.41	4.53	8.51	889	84%	16%	24%	
23HYD061	8	12	4	297	22	7.88	5.04	30.1	3.73	129	0.67	165.5	37.7	31.1	4.03	0.91	63.6	5.14	0.49	3.86	9.06	963	82%	18%	25%	
23HYD061	12	16	4	189	15.95	9.13	3.55	17.5	3.36	85.6	1.18	111.5	25.6	20.6	2.79	1.3	93.2	8.17	0.3	2.06	5.66	708	73%	27%	23%	
23HYD061	16	20	4	211	15.4	7.74	3.45	18.05	2.93	95.5	0.81	122	27.5	23.4	2.69	0.98	72.8	5.66	0.42	1.58	5.93	733	78%	22%	24%	
23HYD061	20	21	1	141.5	9.48	4.67	2.96	11.8	1.86	66.5	0.55	77.3	17.6	13.95	1.65	0.61	46.9	3.39	0.26	1.37	4.49	481	79%	21%	23%	
23HYD061	21	22	1	240	18.9	9.27	3.52	22.9	3.65	102.5	0.98	142.5	31.9	27.6	3.33	1.17	90.6	6.9	0.53	1.71	5.94	848	77%	23%	24%	
23HYD062	0	4	4	48	2.51	1.37	0.63	2.64	0.47	19.8	0.19	19.8	4.53	3.87	0.44	0.2	10	1.28	0.04	4.9	46.2	139	83%	17%	21%	
23HYD062	4	8	4	29.3	1.65	0.8	0.37	1.51	0.29	17.6	0.2	12.9	3.12	2.38	0.25	0.14	7.1	1.01	0.02	2.34	32.4	94	83%	17%	20%	
23HYD062	8	12	4	74.2	2.93	1.24	1.12	4.48	0.51	47	0.13	38.1	9.89	6.05	0.62	0.16	9.2	0.97	0.06	2.93	33.5	235	89%	11%	24%	
23HYD062	12	16	4	203	7.09	2.68	2.31	10.15	1.16	125.5	0.29	108	27.8	16.55	1.35	0.32	22.7	1.7	0.15	1.96	19.1	635	91%	9%	25%	
23HYD062	16	20	4	330	12.4	4.65	3.94	18.05	1.93	190.5	0.41	177.5	44.4	27.7	2.46	0.55	39.7	3.08	0.24	2.66	16.3	1027	90%	10%	25%	
23HYD062	20	24	4	220	6.98	3.02	1.96	9.18	1.3	150.5	0.38	103.5	29	14.3	1.26	0.4	27.2	2.37	0.24	3.03	14.8	685	90%	10%	23%	
23HYD062	24	28	4	172.5	4.67	2.67	1	5.4	0.89	113	0.41	61	18.9	8.18	0.83	0.39	21.2	2.49	0.24	3.18	13.85	496	90%	10%	19%	
23HYD062	28	32	4	228	7.29	3.46	1.36	8.94	1.35	119	0.43	83.1	22.5	12.65	1.26	0.45	29.6	2.69	0.33	3.52	14.1	627	89%	11%	20%	
23HYD062	32	36	4	309	9.61	4.36	2.09	12.4	1.78	170	0.48	119.5	33.8	17.3	1.77	0.54	38.6	3.58	0.4	3.75	15.05	870	90%	10%	21%	
23HYD062	36	40	4	361	9.33	4.74	2.57	12.15	1.8	185.5	0.67	146	39.7	20.1	1.64	0.64	43	4.43	0.37	3.82	13.5	1001	90%	10%	22%	
23HYD062	40	44	4	435	18.85	10.7	7.57	27.3	3.63	219	1.3	236	57.9	40.8	3.63	1.48	98.5	9.46	0.49	3.97	14.75	1405	84%	16%	25%	
23HYD062	44	48	4	304	20.6	11.05	6.83	26.3	3.9	150.5	1.5	175.5	38.5	34.6	3.63	1.47	110.5	9.46	0.42	3.9	12	1079	78%	22%	23%	
23HYD062	48	52	4	291	27.9	19.25	5.72	26.5	6.45	145	2.8	160	36.3	30	4.22	2.76	241	16.65	0.43	3.24	12.85	1228	65%	35%	19%	
23HYD062	52	55	3	268	14.15	7.76	4.71	18.7	2.84	135	1.04	139	31.8	24.4	2.62	1.06	93.1	6.01	0.43	3.21	11.2	902	79%	21%	22%	
23HYD062	55	56	1	198	11.4	5.6	3.47	13.15	2.11	101.5	0.8	102.5	23.6	18.15	1.91	0.8	66.8	4.65	0.34	2.5	9.71	667	80%	20%	22%	
23HYD063	0	4	4	79	3.84	2.05	1.31	4.83	0.74	37.9	0.32	38.5	9.35	7.2	0.69	0.28	19.6	1.76	0.09	2.76	15.85	249	83%	17%	23%	
23HYD063	4	8	4	30.6	1.67	1.03	0.53	2.1	0.34	16.2	0.16	15.4	3.67	2.58	0.3	0.16	8.8	1.1	0.04	2.27	13.85	102	81%	19%	22%	
23HYD063	8	12	4	82.2	3.22	1.57	0.93	3.66	0.63	40	0.24	31	7.72	5.45	0.53	0.23	16.8	1.38	0.05	2.27	9.35	235	85%	15%	19%	
23HYD063	12	16	4	243	8.51	3.29	3.28	12.35	1.36	144	0.36	121.5	31.1	18.6	1.53	0.39	31.3	2.42	0.14	2.44	7.73	747	90%	10%	24%	
23HYD063	16	20	4	432	13.65	4.47	5.89	23.9	2.15	189.5	0.43	201	49.1	35.6	2.91	0.46	43.4	2.95	0.31	2.2	10.75	1208	90%	10%	24%	
23HYD063	20	24	4	466	23.6	11.1	7.79	32.8	4.38	192	1.3	216	51.7	42.1	4.37	1.46	109.5	9.24	0.35	2.74	13.45	1410	82%	18%	22%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD063	24	28	4	421	18.75	8.32	6.07	25.5	3.47	182.5	0.98	200	47.5	34.3	3.44	1.15	83.5	6.7	0.32	2.71	13.5	1253	85%	15%	23%	
23HYD063	28	32	4	396	19	8.49	6.28	25.8	3.36	171.5	1.05	190	44.7	34.8	3.51	1.12	87.9	6.62	0.39	3.37	11.35	1202	84%	16%	23%	
23HYD063	32	36	4	333	18.25	9.58	5.82	23.7	3.5	153	1.14	161	39.1	28.8	3.13	1.31	95.5	7.95	0.31	4.3	11.25	1064	81%	19%	22%	
23HYD063	36	40	4	320	17.35	8.78	6.06	22.4	3.4	154.5	1	166	39.3	28.7	3.01	1.17	97.7	6.88	0.49	3.24	10.3	1053	81%	19%	23%	
23HYD063	40	43	3	223	11.1	5.81	4.18	14.2	2.25	108	0.72	114	27.7	19.65	1.97	0.85	63.5	4.76	0.53	2.37	7.55	723	82%	18%	23%	
23HYD063	43	44	1	242	12.75	6.32	4.38	15.8	2.41	114	0.82	125	29.9	21.7	2.26	0.85	70.1	5.35	0.58	2.42	8.01	786	81%	19%	23%	
23HYD064	0	4	4	102.5	4.09	1.73	1.53	5.22	0.73	45.8	0.24	41.6	10	7.65	0.76	0.26	16.7	1.63	0.06	6.73	35.5	289	86%	14%	21%	
23HYD064	4	8	4	113	4.22	1.63	1.8	6.17	0.74	64.1	0.2	56.1	13.5	9.02	0.84	0.21	14.6	1.22	0.1	2.95	25.9	344	89%	11%	24%	
23HYD064	8	12	4	278	16.1	4.21	6.42	24.7	2.21	132	0.31	155.5	34	29.1	3.25	0.41	31.4	2.31	0.21	1.93	8.27	861	87%	13%	26%	
23HYD064	12	16	4	294	15.55	5.48	5.84	23.1	2.47	161	0.55	169.5	39.3	30.2	3.05	0.63	54.3	3.74	0.37	5.38	11.65	969	86%	14%	25%	
23HYD064	16	20	4	148	18.65	7.13	6.58	26.7	3.11	79.2	0.7	96.5	21	21.8	3.6	0.82	59.3	5.36	0.41	8.13	5.83	597	73%	27%	23%	
23HYD064	20	24	4	31.8	7.92	5.64	1.19	5.56	1.78	15.2	0.85	18.2	3.85	4.17	1.12	0.82	51.9	5.44	0.36	5.94	1.79	188	47%	53%	14%	
23HYD064	24	28	4	65.8	31.5	22.2	5.6	27.1	7.85	25.8	3.19	64.9	11.05	19.1	4.59	3.11	289	18.4	0.27	5.84	1.55	731	30%	70%	12%	
23HYD064	28	32	4	29.6	6.47	3.79	1.83	5.98	1.43	11	0.53	23.1	4.26	5.89	1.01	0.58	42.8	3.73	0.29	4.23	1.02	172	51%	49%	19%	
23HYD064	32	36	4	25.7	5.34	2.95	1.62	5.21	1.15	10	0.44	19.4	3.82	5.49	0.86	0.43	29.7	2.71	0.27	3.52	0.95	138	56%	44%	20%	
23HYD064	36	37	1	29.3	5.4	3.25	1.62	5.38	1.14	13.2	0.5	21.2	4.05	5.35	0.88	0.45	31.9	3.09	0.23	1.38	2.41	153	57%	43%	19%	
23HYD064	37	38	1	26.1	6.28	3.47	1.64	5.54	1.25	10.8	0.5	20.9	3.71	5.3	0.95	0.47	34.4	3.12	0.22	0.87	1.47	150	53%	47%	19%	
23HYD065	0	4	4	120.5	5.23	2.33	1.98	6.79	0.96	59.6	0.28	53.9	13.4	9.69	0.99	0.31	21.4	1.94	0.09	6.17	52	359	86%	14%	22%	
23HYD065	4	8	4	227	4.54	1.93	1.67	5.52	0.83	65.8	0.28	50.6	13.4	8.18	0.88	0.25	15.4	1.64	0.13	2.77	13.15	480	92%	8%	16%	
23HYD065	8	12	4	417	10.75	3.96	4.02	14.15	1.82	138.5	0.55	130.5	32	21.8	2.02	0.51	32.7	3.13	0.41	7.15	11.2	979	91%	9%	19%	
23HYD065	12	16	4	318	16.65	6.35	6.78	23.7	2.93	162.5	0.65	151.5	36.9	28.1	3.02	0.74	49.3	4.81	0.55	13.75	15.8	973	86%	14%	23%	
23HYD065	16	20	4	335	14.5	5.63	6.01	17.85	2.57	152.5	0.61	137	34.2	24.8	2.71	0.79	49.7	4.43	0.43	10.35	16.5	947	87%	13%	21%	
23HYD065	20	24	4	370	20.2	8.35	7.97	29	3.45	181	0.9	180	44.2	34	3.73	1	71.6	6.39	0.6	11.15	14.5	1154	84%	16%	23%	
23HYD065	24	28	4	362	24.9	12.65	8.57	31.8	5.05	175	1.56	206	44.9	38.2	4.41	1.69	143.5	10.15	0.58	6.24	7.84	1287	77%	23%	23%	
23HYD065	28	32	4	346	20.9	13.4	7.14	25.8	4.54	170.5	1.88	180.5	41.5	32.7	3.58	1.94	147.5	12.1	0.56	6.26	8.64	1216	76%	24%	21%	
23HYD065	32	36	4	426	21.7	13.15	7.16	27.6	4.6	192.5	1.66	197	46	35.9	3.84	1.74	149.5	11.45	0.54	4.59	12.55	1373	78%	22%	21%	
23HYD065	36	40	4	357	18.1	9.42	6.39	24.7	3.56	172	1.1	180	41.4	32.6	3.39	1.21	95.2	7.64	0.66	3.15	10.95	1146	82%	18%	23%	
23HYD065	40	44	4	316	15.45	7.57	5.56	21.7	3.02	151.5	0.89	158	37	30.1	2.87	1.05	82.3	6.74	1.1	3.46	9.56	1009	82%	18%	23%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD065	44	48	4	300	15.1	7.33	5.55	20.5	2.91	145	0.96	149.5	35.1	27.5	2.72	1.03	81.8	6.7	1.01	3.35	12.2	963	82%	18%	23%	
23HYD065	48	52	4	285	15.5	8.32	5.36	20.8	3.15	140	0.98	146	33.9	27.4	2.96	1.1	85.1	6.91	0.98	3.08	8.65	940	81%	19%	22%	
23HYD065	52	55	3	302	15.75	8.41	5.95	21.5	3.23	148.5	0.98	153	35.7	28.3	2.86	1.02	83.6	7.2	0.91	2.41	7.47	983	81%	19%	23%	
23HYD065	55	56	1	401	15.3	7.14	8.39	25.4	2.73	197.5	0.83	196	43.2	37.2	3.12	0.96	72.8	6.35	0.84	2	7.77	1221	86%	14%	23%	
23HYD066	0	4	4	71.9	2.55	1.32	1.05	3.47	0.45	30.5	0.16	26.1	6.26	5	0.48	0.18	11.6	1.26	0.08	5.82	48.5	195	86%	14%	19%	
23HYD066	4	8	4	31.8	1.44	0.76	0.61	1.8	0.3	19.6	0.12	13.7	3.66	2.59	0.25	0.12	7.1	0.66	0.06	1.28	11.2	101	84%	16%	20%	
23HYD066	8	12	4	488	15.45	5.17	9.32	26.8	2.54	228	0.32	226	52.4	40	3.22	0.53	50.9	3.06	0.53	3.39	10.85	1381	90%	10%	24%	
23HYD066	12	16	4	406	16.55	6.08	7.06	28.1	2.81	166.5	0.48	191	43.1	37.3	3.52	0.72	53.8	4.11	0.63	7.16	12.55	1160	87%	13%	24%	
23HYD066	16	20	4	391	15.95	6.82	6.86	26.7	2.72	176.5	0.73	195	43.9	37.2	3.17	0.81	62.7	5.46	0.81	10.6	7.61	1170	86%	14%	24%	
23HYD066	20	24	4	318	48.5	52.9	7.14	36	14.65	151	9.49	165	38.1	31.3	6.1	8.62	683	60.5	0.67	9.23	9.49	1989	42%	58%	12%	
23HYD066	24	28	4	265	14.9	10.1	4.44	19.65	3.21	128.5	1.61	135	31.4	25.4	2.62	1.51	113.5	9.92	0.52	9.22	11.8	923	76%	24%	21%	
23HYD066	28	32	4	244	13.4	6.97	3.97	18.25	2.63	117.5	0.8	126.5	28.7	23	2.4	0.9	78.2	5.55	1.07	5.4	10.85	809	80%	20%	23%	
23HYD066	32	36	4	240	13.6	7.69	3.87	18.15	2.82	116	0.9	122.5	28.7	24.6	2.51	1.02	81.7	6.3	1.28	3.7	10.25	806	79%	21%	22%	
23HYD066	36	40	4	153.5	8.06	4.27	3.18	10.95	1.46	77.6	0.53	74.9	17.35	13.75	1.46	0.57	44.6	3.79	0.36	4.06	12.6	500	81%	19%	22%	
23HYD066	40	42	2	25.6	0.79	0.51	1.98	1.01	0.18	19.3	0.09	8.5	2.22	1.48	0.13	0.09	5.6	0.47	0.03	1.46	5.7	82	84%	16%	15%	
23HYD066	42	43	1	21.2	0.62	0.36	1.67	0.8	0.11	15.3	0.06	5.6	1.71	1.1	0.12	0.04	4	0.38	0.02	1.02	1.97	64	85%	15%	13%	
23HYD067	0	4	4	95.1	2.83	1.37	0.81	3.36	0.54	33.5	0.18	26.4	6.6	4.5	0.49	0.2	12.4	1.3	0.07	8.02	83.4	229	88%	12%	17%	
23HYD067	4	8	4	102	3.48	1.9	1.56	5.01	0.62	58.7	0.15	41.8	11.05	6.91	0.65	0.2	13.2	1.03	0.07	2.64	42.5	298	89%	11%	21%	
23HYD067	8	12	4	92.6	3.9	1.73	1.49	5.82	0.67	51.2	0.15	39.7	9.96	7.67	0.78	0.21	16.7	1.31	0.06	3.19	28.1	281	86%	14%	21%	
23HYD067	12	16	4	336	12.15	4.66	4.97	18.2	1.88	167.5	0.39	147	37.8	25.3	2.3	0.53	39.2	2.73	0.14	13.2	19.2	960	89%	11%	23%	
23HYD067	16	20	4	351	12.65	4.51	5.32	19.2	1.99	174.5	0.41	161.5	39.2	28.6	2.55	0.51	39.8	3.28	0.18	22.1	23.6	1013	89%	11%	23%	
23HYD067	20	24	4	133	6.53	2.93	1.87	8.79	1.14	74.8	0.22	61.2	15.2	11.55	1.22	0.33	24.2	2.01	0.1	9.49	15.9	414	86%	14%	22%	
23HYD067	24	28	4	186	10.2	4.9	2.84	13.4	2.02	96.3	0.53	89.8	21.4	17.25	1.9	0.63	48.9	4.26	0.13	11	21.9	601	82%	18%	22%	
23HYD067	28	32	4	247	15.4	8.5	4.66	19.6	3.17	121	1.06	131	30.1	24.9	2.8	1.2	94	7.99	0.15	16.95	20.8	857	77%	23%	22%	
23HYD067	32	36	4	253	15	7.88	4.32	18.95	2.94	124.5	0.83	124	29.4	23	2.64	1.05	91.4	6.4	0.13	15.1	11.85	849	78%	22%	21%	
23HYD067	36	40	4	170	8.19	3.87	2.21	11.4	1.55	86	0.42	81.6	19.55	15.4	1.48	0.49	43.9	3.01	0.22	5.76	19.85	540	83%	17%	22%	
23HYD067	40	44	4	266	11.45	5.51	1.9	16.85	2.15	131.5	0.62	126.5	30.1	23.5	2.15	0.7	60.1	4.07	0.61	7.49	57.5	821	84%	16%	22%	
23HYD067	44	46	2	60.9	1.64	0.82	1.03	2.64	0.32	37.7	0.1	23.2	5.99	3.38	0.32	0.11	9.3	0.72	0.08	3.1	15.35	178	88%	12%	19%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD067	46	47	1	125.5	3.84	1.91	1.24	5.28	0.71	66.7	0.23	54.3	13.8	8.68	0.73	0.26	20.6	1.68	0.22	4.85	30.8	367	88%	12%	22%	
23HYD068	0	4	4	27.8	1.39	0.85	0.38	1.79	0.31	14.6	0.15	11.7	2.88	2.5	0.25	0.12	8	0.87	0.03	2.96	20	88	81%	19%	19%	
23HYD068	4	8	4	14.1	0.74	0.4	0.18	0.89	0.16	8.2	0.08	6.3	1.66	1	0.13	0.07	4.3	0.57	0.02	2.69	14	47	80%	20%	20%	
23HYD068	8	12	4	185.5	3.81	1.53	1.38	5.31	0.7	109	0.17	58.9	17.85	8.81	0.66	0.18	12.7	1.1	0.12	4.94	35.8	489	93%	7%	18%	
23HYD068	12	16	4	310	8.38	3.37	3.53	12.65	1.38	185.5	0.32	114.5	32.3	18.8	1.54	0.41	28.8	2.18	0.22	7.13	27.8	868	91%	9%	20%	
23HYD068	16	20	4	462	16.3	6.49	4.95	23.1	2.64	237	0.61	191	51.7	32.8	2.98	0.72	59.3	4.61	0.24	10.6	36.7	1316	89%	11%	22%	
23HYD068	20	24	4	274	14.5	7.53	4.65	20.6	2.75	131	0.84	133.5	33.3	23.1	2.54	1.01	73	5.68	0.76	7.91	7.59	875	82%	18%	22%	
23HYD068	24	28	4	282	16.6	8.31	3.59	20.9	3.11	133	0.8	132	33.9	26.2	2.83	1.04	84.9	6.24	1.3	7.01	29.1	908	80%	20%	21%	
23HYD068	28	32	4	261	18.6	9.28	2.74	22.3	3.53	118.5	0.91	128.5	31.8	26.6	3.12	1.15	95.1	6.68	1.07	8.21	15.3	878	77%	23%	21%	
23HYD068	32	33	1	275	17.75	9.62	2.41	22.3	3.37	126	0.95	127	32.7	25.3	3.07	1.11	92.9	6.79	1.06	10.55	40	898	78%	22%	21%	
23HYD068	33	34	1	234	14.85	7.4	2.9	18.6	2.88	107.5	0.9	110.5	28.1	21.6	2.66	0.93	77.5	6.08	0.96	11	23	766	79%	21%	21%	
23HYD069	0	4	4	42.8	2.81	1.46	0.72	2.97	0.55	19.5	0.27	18.2	4.87	4.13	0.48	0.24	11.9	1.79	0.05	7.5	35.6	135	79%	21%	20%	
23HYD069	4	8	4	14.5	1.12	0.76	0.24	1.03	0.19	7.3	0.1	6	1.71	1.13	0.14	0.11	4.4	0.63	0.03	2.17	16.55	47	78%	22%	19%	
23HYD069	8	12	4	98.7	3.72	1.47	0.99	4.37	0.56	45	0.21	31.8	9.21	5.51	0.56	0.23	12.8	1.54	0.04	2.81	5.75	261	88%	12%	19%	
23HYD069	12	16	4	99.5	4.87	2.18	1.28	6.31	0.82	52.3	0.27	44.4	12	8.44	0.82	0.29	18.9	2.02	0.02	3.13	8.25	305	85%	15%	22%	
23HYD069	16	20	4	41	2.29	1.04	0.62	2.99	0.44	26.6	0.16	21.1	5.54	4.33	0.44	0.16	9	0.98	0.05	3.13	7.43	140	84%	16%	22%	
23HYD069	20	24	4	542	13.15	5.98	4.17	17.05	2.23	119	0.57	129.5	33.7	24.1	2.4	0.69	54.6	4.16	0.12	6.85	20.1	1152	89%	11%	17%	
23HYD069	24	28	4	365	13.75	6.68	4.1	17.35	2.44	186.5	0.71	136	36.9	23.1	2.42	0.87	69.4	5.08	0.13	6.77	24.4	1047	86%	14%	19%	
23HYD069	28	32	4	322	16	7.22	4.81	20	2.8	162	0.69	149	38.8	27.8	2.76	0.94	76.8	5.42	0.14	4.89	19.3	1006	83%	17%	22%	
23HYD069	32	36	4	287	14.8	8.32	4.35	18.3	2.83	140.5	0.93	129	33.3	22.8	2.54	1.1	86.1	6.82	0.12	3.46	19.65	913	80%	20%	21%	
23HYD069	36	40	4	209	15.6	9.98	3.75	17.55	3.36	110.5	1.26	100	24.6	19.5	2.49	1.42	108	8.2	0.13	3.91	13.7	766	73%	27%	19%	
23HYD069	40	44	4	132.5	8.97	5.47	2.56	10.05	1.8	68	0.65	64.1	15.8	11.55	1.38	0.71	54.8	4.49	0.1	4.02	10.3	461	76%	24%	20%	
23HYD069	44	48	4	112	6.49	3.49	2.04	8.15	1.23	56.4	0.35	51.3	13.2	10.15	1.12	0.46	31.9	2.5	0.24	4.2	9.89	361	81%	19%	21%	
23HYD069	48	51	3	152	9.69	4.89	2.25	11.65	1.81	73.4	0.53	74.3	18.15	14.1	1.76	0.61	46.9	3.9	0.4	5.03	7.92	500	80%	20%	22%	
23HYD069	51	52	1	112	6.24	3.32	1.97	7.77	1.22	57.5	0.4	48.8	13.3	9.24	1.17	0.43	33.6	2.89	0.25	4.12	7.52	361	80%	20%	20%	
23HYD070	0	4	4	26.9	1.82	1.38	0.41	2.1	0.38	11.3	0.2	10.3	2.81	2.11	0.28	0.19	8.8	1.24	0.02	9.27	39.5	85	76%	24%	18%	
23HYD070	4	8	4	6.3	0.71	0.46	0.13	0.58	0.13	2.8	0.09	2.6	0.77	0.73	0.1	0.1	3.5	0.65	0.01	3.34	13.6	24	67%	33%	17%	
23HYD070	8	12	4	11	0.87	0.56	0.11	0.69	0.19	7.3	0.11	4.9	1.35	0.84	0.1	0.08	4.6	0.74	0.02	1.18	4.07	40	76%	24%	18%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD070	12	16	4	87.2	2.5	1.25	0.85	2.89	0.43	77.2	0.24	29.9	9.37	4.76	0.45	0.22	8.9	1.48	0.03	1.76	8.38	273	92%	8%	17%	
23HYD070	16	20	4	55.5	9.46	3.71	4.51	12.9	1.54	95.2	0.4	90.3	23.5	17.35	1.69	0.48	30.5	2.9	0.07	1.38	5.58	416	80%	20%	32%	
23HYD070	20	24	4	95	66.6	40.2	15.85	55.4	13.35	149.5	4.95	189	44.6	47.4	9.77	5.44	352	35.4	0.08	0.49	0.71	1352	46%	54%	20%	
23HYD070	24	28	4	16.1	5.05	3.16	1.17	4.6	1.05	19.3	0.36	17.7	3.9	4.31	0.75	0.46	35.3	2.71	0.03	0.62	0.72	140	52%	48%	18%	
23HYD070	28	32	4	17.9	3.66	2.32	0.9	3.48	0.78	12.7	0.29	12.4	2.73	2.74	0.56	0.32	20.2	2	0.03	0.62	2.89	100	58%	42%	18%	
23HYD070	32	36	4	18.1	1.82	1.16	0.77	1.96	0.37	8.3	0.15	7.5	1.88	1.63	0.26	0.18	9.5	1.1	0.06	0.57	3.72	66	68%	32%	17%	
23HYD070	36	40	4	22.9	2.09	1.35	0.64	2.14	0.42	12.1	0.17	9.8	2.32	1.88	0.31	0.18	11	1.28	0.08	0.91	3.6	83	71%	29%	17%	
23HYD070	40	44	4	11.2	2.58	1.45	0.63	1.99	0.48	5.5	0.23	5.5	1.38	1.7	0.32	0.22	13.4	1.52	0.05	0.38	1.82	58	52%	48%	14%	
23HYD070	44	48	4	7	2.03	1.4	0.59	1.56	0.47	3.3	0.2	4.4	0.93	1.2	0.31	0.16	12.3	1.42	0.05	0.3	0.54	45	45%	55%	14%	
23HYD070	48	51	3	6.6	2.47	1.59	0.48	2.11	0.58	3.2	0.23	4.5	0.87	1.01	0.37	0.21	14.2	1.48	0.05	0.36	0.47	48	40%	60%	13%	
23HYD070	51	52	1	7	2.01	1.39	0.59	1.66	0.47	3.2	0.18	4.4	0.91	1.39	0.29	0.2	11.9	1.32	0.03	0.24	0.54	45	45%	55%	14%	
23HYD071	0	4	4	325	8.08	3.98	3.59	12.15	1.54	131	0.36	100.5	27.9	18.35	1.58	0.39	29.7	2.42	0.15	4.03	38.5	802	90%	10%	19%	
23HYD071	4	8	4	395	11.4	4.5	5.88	18.8	2.01	156.5	0.38	166.5	39.6	27.2	2.38	0.49	42.9	2.61	0.22	1.45	13.25	1053	90%	10%	23%	
23HYD071	8	12	4	373	19.75	7.92	7.48	30.8	3.51	180.5	0.59	178	43.5	30.6	4.13	1	75.2	5.01	0.53	2.48	10.2	1153	84%	16%	23%	
23HYD071	12	16	4	356	11.55	4.63	5.85	17.6	2.03	170.5	0.47	169	41.5	27	2.41	0.6	43.5	3.49	0.56	3.85	11.75	1027	89%	11%	24%	
23HYD071	16	20	4	344	14.3	6	6.4	22.2	2.61	159.5	0.55	180	40.8	30.2	2.98	0.75	55.6	4.03	0.58	4.49	10.55	1043	87%	13%	25%	
23HYD071	20	24	4	323	20.3	8.16	7.72	26.8	3.7	156.5	0.64	165	38.5	30.2	3.76	0.99	82.2	4.94	0.67	5.22	10.35	1047	82%	18%	23%	
23HYD071	24	28	4	344	16.8	8.47	6.72	22.5	3.28	166	0.74	176.5	41.7	29.2	2.95	1.02	88.1	5.71	0.62	5.12	10.6	1098	83%	17%	23%	
23HYD071	28	32	4	349	13.3	6.59	6.18	19.5	2.53	164.5	0.79	175.5	40.9	29	2.51	0.91	61	5.66	0.68	4.97	10.45	1054	86%	14%	24%	
23HYD071	32	36	4	464	27.9	23.9	8.87	33.3	7.2	206	4.47	241	55.5	42.6	4.68	4.01	284	26.9	1	4.75	10.15	1732	70%	30%	20%	
23HYD071	36	40	4	241	13.95	8.16	5.38	17.45	3.04	116.5	1.16	123.5	29	21	2.49	1.19	88.3	7.54	0.17	2.84	8.13	818	78%	22%	22%	
23HYD071	40	43	3	282	16.7	9.85	5.74	20.4	3.58	135	1.32	142.5	33.7	24.1	2.93	1.41	109.5	8.69	0.67	2.45	7.88	960	77%	23%	22%	
23HYD071	43	44	1	246	13.35	7.62	5.14	16.85	2.75	119.5	1.02	123	28.9	21.3	2.48	1.02	77.8	6.38	0.59	2.37	7.81	809	80%	20%	22%	
23HYD072	0	4	4	212	9.13	3.62	4.32	14.4	1.62	106.5	0.34	100.5	24.9	17.9	1.96	0.49	31	2.49	0.19	3.09	31.8	637	87%	13%	23%	
23HYD072	4	8	4	412	18.9	6.5	7.31	27.3	3.05	204	0.46	199	48.4	33.9	3.66	0.72	52.8	3.73	0.33	1.18	8.93	1225	88%	12%	24%	
23HYD072	8	12	4	408	17	6.74	7.72	25.4	2.88	201	0.59	233	53.8	38	3.52	0.88	61.4	4.62	0.59	2.62	11	1276	88%	12%	26%	
23HYD072	12	16	4	386	19.9	8.72	8.75	30.1	3.65	177.5	0.84	211	47	37.9	3.97	1.07	80.5	6.19	0.63	3.64	11.2	1227	84%	16%	25%	
23HYD072	16	20	4	362	20.7	9.92	7.75	29.4	3.82	173	1.02	186.5	43.5	34.7	3.93	1.27	93.3	7.29	0.62	4.25	12.05	1174	82%	18%	23%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD072	20	24	4	436	24.8	11.85	8.2	31.6	4.74	198.5	1.22	221	51.4	38.4	4.5	1.56	111	8.93	0.63	3.74	11.8	1386	82%	18%	23%	
23HYD072	24	28	4	357	20.2	11	7.41	26.3	4.04	170.5	1.4	182.5	42.9	31.2	3.68	1.53	107	9.63	0.64	3.51	10.7	1173	80%	20%	23%	
23HYD072	28	32	4	333	21	13.35	7.12	25.6	4.52	155	1.87	170	39.4	29.4	3.6	1.87	151	12.55	0.41	2.75	11	1168	75%	25%	21%	
23HYD072	32	34	2	242	13.15	6.95	5.41	18.5	2.64	116	0.9	123.5	29.1	21.6	2.51	1.01	70.3	5.79	0.64	2.05	7.11	792	80%	20%	23%	
23HYD072	34	35	1	227	12.65	6.51	5.46	16.1	2.39	111	0.79	114	27.2	20.2	2.35	0.92	69.1	5.45	0.52	1.84	8.38	747	80%	20%	22%	
23HYD073	0	4	4	69.2	3.09	1.78	1.03	3.8	0.6	30.7	0.23	27.1	6.78	4.65	0.59	0.22	15.1	1.64	0.02	2.96	21.9	200	83%	17%	20%	
23HYD073	4	8	4	161.5	5.58	2.46	2.36	7.33	0.98	87.8	0.26	72.6	18.65	10.9	1.02	0.33	22.7	2.03	0.19	1.7	14.25	476	89%	11%	23%	
23HYD073	8	12	4	471	23.6	9.07	11.3	33.3	4.01	199.5	0.65	230	52.3	40.1	4.56	1.03	79.8	5.74	0.53	2.31	8.5	1399	85%	15%	24%	
23HYD073	12	16	4	283	22	11.6	8.14	27.2	4.73	132.5	1.01	157	36.2	29.7	3.93	1.47	107	8.1	0.59	3.22	8.3	1002	76%	24%	23%	
23HYD073	16	20	4	253	19.85	11.05	6.32	21	4.13	121	1.18	134.5	30.9	24.2	3.37	1.49	94.2	8.79	0.65	3.65	8.43	883	76%	24%	22%	
23HYD073	20	24	4	209	9.69	5.62	4.84	13.15	1.97	105.5	0.74	107.5	24.8	18	1.68	0.8	51	5.32	0.34	2.33	6.34	672	83%	17%	23%	
23HYD073	24	28	4	163	12.15	7.81	4.6	13.45	2.6	81	1.13	83.6	19.8	14.85	2.1	1.17	84.4	7.41	0.36	1.95	5.78	601	72%	28%	20%	
23HYD073	28	32	4	128	6.13	3.16	4.13	7.97	1.08	66.9	0.44	57.2	14.35	9.71	1.12	0.46	32.3	2.86	0.34	1.71	7.64	403	82%	18%	21%	
23HYD073	32	35	3	191.5	9.68	4.86	5.33	13.2	1.91	97.3	0.64	92.2	22.1	14.95	1.78	0.68	52.8	4.35	1.04	1.96	5.5	617	81%	19%	22%	
23HYD073	35	36	1	213	10.05	5.18	5.45	14.35	2.01	106	0.65	103.5	24.9	17.35	1.93	0.75	56	4.83	1.05	2.22	5.07	680	82%	18%	22%	
23HYD074	0	4	4	39.7	1.61	0.74	0.51	1.9	0.29	19.7	0.1	14.7	4.12	3.06	0.27	0.13	7.7	0.8	0.04	1.62	19	115	85%	15%	19%	
23HYD074	4	8	4	19.8	0.88	0.62	0.21	0.93	0.21	10.5	0.08	7.9	2.06	1.18	0.14	0.08	5.5	0.54	0.03	1.84	14.6	61	82%	18%	19%	
23HYD074	8	12	4	12.6	0.97	0.58	0.16	0.75	0.19	6.7	0.15	5.3	1.47	0.81	0.15	0.11	4.8	0.8	0.01	2.34	11.85	43	75%	25%	19%	
23HYD074	12	16	4	12.4	0.79	0.65	0.18	0.56	0.19	5.9	0.15	5.3	1.5	1.18	0.13	0.13	4.2	0.81	0.02	2.06	11.45	41	77%	23%	20%	
23HYD074	16	20	4	142.5	6.16	2.35	2.51	8.13	0.96	66.7	0.24	62.1	15.3	11	1.12	0.28	15.5	1.72	0.1	1.46	12.35	404	88%	12%	23%	
23HYD074	20	24	4	436	25.2	8.61	8.73	33.4	4.14	210	0.48	201	49.3	37.8	4.49	0.96	58.9	4.45	0.39	2.33	20.5	1299	86%	14%	23%	
23HYD074	24	28	4	558	21	7.7	9.91	32.4	3.36	269	0.66	260	66.7	45.8	4.06	0.9	65	5.02	0.54	2.65	11.95	1618	89%	11%	24%	
23HYD074	28	32	4	541	24	9.25	9.73	33	3.9	256	0.87	255	64.4	45	4.36	1.06	80.7	6.59	0.65	2.82	13.25	1601	87%	13%	23%	
23HYD074	32	36	4	355	138	124.5	16.3	89.2	35.8	168	17.7	187.5	43.4	50	17.15	17.85	1370	117.5	0.72	2.24	7.38	3360	29%	71%	8%	
23HYD074	36	40	4	78.4	6.64	4.44	2.02	7.87	1.5	41.1	0.66	43.4	10.4	8.06	1.15	0.69	48	4.05	0.51	0.91	1.64	311	70%	30%	20%	
23HYD074	40	41	1	41	6.66	4.68	2.2	7.73	1.52	16.6	0.62	27.9	5.78	6.98	1.1	0.64	45.5	4.16	0.28	3.08	1.48	209	56%	44%	19%	
23HYD074	41	42	1	32.6	5.87	3.26	1.68	5.66	1.08	12.8	0.38	21.4	4.64	5.25	0.87	0.42	30.2	2.6	0.32	0.71	1.1	155	59%	41%	20%	
23HYD075	0	4	4	37.7	1.3	0.79	0.4	1.82	0.27	19.3	0.12	13	3.72	2.2	0.24	0.11	6.7	0.84	0.01	2.73	27.7	106	86%	14%	18%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD075	4	8	4	14	1.01	0.69	0.24	0.88	0.2	8.3	0.12	5.6	1.45	1.04	0.14	0.12	7.1	0.83	0.005	1.14	12.6	50	72%	28%	16%	
23HYD075	8	12	4	58.3	1.58	0.72	0.57	2.13	0.29	29.9	0.08	19.1	5.34	3.26	0.27	0.07	6.6	0.6	0.02	2.34	11.35	155	90%	10%	19%	
23HYD075	12	16	4	188	3.88	1.58	1.84	6.05	0.68	105	0.11	67.7	19.8	9.1	0.7	0.18	13.5	0.96	0.08	2.89	14.75	503	93%	7%	20%	
23HYD075	16	20	4	302	8.02	2.92	3.51	13.15	1.21	152	0.25	121	32.8	19.25	1.56	0.32	25.9	1.67	0.21	2.36	27.4	823	91%	9%	22%	
23HYD075	20	24	4	197.5	8.48	2.58	4.17	13.15	1.18	83.8	0.22	85.2	21.1	15.8	1.65	0.31	21.3	1.72	0.24	2.15	13.4	550	88%	12%	23%	
23HYD075	24	28	4	83.7	9.3	3.58	4.23	12.3	1.59	33.2	0.37	55.8	11.95	15.6	1.56	0.47	30.3	3.03	0.48	2.11	2.69	320	75%	25%	25%	
23HYD075	28	32	4	60.2	8.01	4.07	2.59	8.84	1.52	22.4	0.5	40.9	8.39	10.1	1.3	0.55	33.4	4.02	0.82	1.49	2.32	248	68%	32%	23%	
23HYD075	32	36	4	44.7	5.19	2.97	1.61	5.41	1	13.4	0.51	23.1	5.03	6.49	0.81	0.42	19.6	3.4	0.83	0.84	1.89	161	69%	31%	21%	
23HYD075	36	40	4	50.4	7.86	4.04	2.41	7.98	1.51	18.1	0.6	30.4	6.5	9.14	1.19	0.59	33	3.97	0.8	0.73	2.49	214	64%	36%	20%	
23HYD075	40	44	4	55.3	20.7	12.6	4.33	18.85	4.48	22.4	1.56	38.4	7.63	12.3	3.02	1.7	136	10.65	0.72	0.93	2.21	425	38%	62%	13%	
23HYD075	44	48	4	35.2	23.4	15.45	4.23	21.9	5.2	11.4	1.76	28.9	4.92	12.3	3.57	1.95	184.5	11.65	0.4	0.99	1.48	447	25%	75%	9%	
23HYD075	48	52	4	30.4	6.5	3.52	1.51	6.28	1.29	11.4	0.47	21.7	4.1	6.08	1.01	0.53	36.4	3.13	0.41	0.49	1.32	162	54%	46%	19%	
23HYD075	52	53	1	39.3	8.65	4.42	1.96	7.95	1.61	12.7	0.62	25.8	5.17	7.59	1.23	0.68	42.6	4.04	0.34	0.46	1.3	198	55%	45%	18%	
23HYD075	53	54	1	26.3	8.64	5.23	2.22	8.06	1.68	9.2	0.64	19.9	3.78	6.12	1.21	0.72	48.9	4.74	0.33	0.57	1.17	178	44%	56%	16%	
23HYD076	0	4	4	28.2	4.52	2.8	1.24	4.26	1.08	12.9	0.39	15.7	3.62	4.03	0.65	0.37	27.9	2.56	0.2	1.56	12.5	133	58%	42%	17%	
23HYD076	4	8	4	11.6	0.69	0.62	0.17	0.81	0.15	6.6	0.08	4.5	1.25	0.8	0.11	0.06	3.5	0.62	0.01	1.84	17.2	38	78%	22%	18%	
23HYD076	8	12	4	11.4	0.64	0.41	0.15	0.54	0.1	5.1	0.1	4.7	1.14	0.81	0.09	0.07	2.8	0.52	0.01	1.22	8.4	34	81%	19%	20%	
23HYD076	12	16	4	316	6.63	2.35	3.33	9.79	0.99	140	0.24	119	32.6	17.8	1.26	0.35	16.4	1.88	0.08	1.85	11	803	94%	6%	22%	
23HYD076	16	20	4	252	3.72	1.16	2.01	5.99	0.59	134.5	0.14	87.8	26.5	11.3	0.8	0.14	9.6	1	0.22	1.02	8.74	645	95%	5%	21%	
23HYD076	20	24	4	282	22.1	10.5	7.28	26	4.06	125	1.16	158	35.4	29.3	3.48	1.45	112	8.86	0.6	1.52	4.75	994	76%	24%	23%	
23HYD076	24	28	4	227	11.45	5.47	4.62	14.65	2.02	111	0.73	108.5	26.7	18.75	1.93	0.72	55.8	4.54	1.46	1.08	5.21	713	83%	17%	22%	
23HYD076	28	32	4	231	10.65	4.94	4.52	13.75	2	115.5	0.59	103.5	27.1	18.2	1.79	0.64	51	4.03	1.5	1.06	4.89	708	84%	16%	22%	
23HYD076	32	36	4	244	10.4	6.04	4.18	14.5	2.07	117.5	0.71	109.5	27.8	18.15	1.92	0.75	56	4.82	1.54	1.16	5.55	743	83%	17%	22%	
23HYD076	36	40	4	208	10.35	5.37	3.84	13.35	1.94	101	0.6	95.5	24.9	17.8	1.83	0.67	50.2	4.15	1.33	1.3	7.2	648	83%	17%	22%	
23HYD076	40	43	3	209	10.35	5.69	4.09	14.25	1.84	101.5	0.58	107	25.2	19.15	1.81	0.68	55	4.53	1.36	1.71	6.38	673	82%	18%	23%	
23HYD076	43	44	1	129.5	5.7	2.77	2.66	6.84	1.02	66.8	0.34	56.8	14.9	8.69	0.94	0.34	25.9	2.47	0.62	0.97	5.11	391	85%	15%	22%	
23HYD077	0	4	4	38.4	1.88	1.14	0.51	2.1	0.38	16.3	0.14	13.1	3.71	2.48	0.36	0.14	7.8	0.89	0.03	4.19	20.4	107	83%	17%	18%	
23HYD077	4	8	4	30.4	1.62	1.11	0.51	1.83	0.33	16.6	0.14	13.6	3.75	2.52	0.3	0.14	7.2	1.06	0.06	3.45	22.8	97	82%	18%	21%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD077	8	12	4	54.6	2.08	0.98	0.81	2.7	0.41	32.1	0.11	24.9	6.78	3.82	0.38	0.13	8.1	0.81	0.09	1	12	166	88%	12%	22%	
23HYD077	12	16	4	242	8.48	3.34	3.88	12.45	1.51	128.5	0.23	108	29.4	17.6	1.67	0.36	28.4	1.89	0.23	1.04	15.6	705	89%	11%	23%	
23HYD077	16	20	4	371	12.4	4.68	6.09	18.6	2.2	175.5	0.34	163	42.2	25.7	2.46	0.52	41.9	2.55	0.47	1.47	10.35	1043	89%	11%	23%	
23HYD077	20	24	4	372	16	5.56	7.77	25.1	2.78	174	0.39	173	44	29.5	3.43	0.67	52.7	3.28	0.62	2.12	8.51	1092	87%	13%	23%	
23HYD077	24	28	4	391	14.35	5.91	6.37	20.5	2.63	195	0.49	166.5	43.9	27.3	2.7	0.69	57.5	3.6	0.73	3.03	14.55	1127	88%	12%	22%	
23HYD077	28	32	4	420	19.2	9.55	7.74	27.4	3.83	204	0.89	190	48.9	31.5	3.6	1.22	93.5	6.73	0.99	4.36	10.2	1283	84%	16%	22%	
23HYD077	32	36	4	365	14	6.97	6.16	20.4	2.76	176.5	0.94	156.5	41.5	25.8	2.63	1.01	65.8	6.23	0.76	2.45	7.34	1072	86%	14%	22%	
23HYD077	36	40	4	379	15.15	7.72	6.94	20.4	3.06	189	1.12	164	43.4	26.5	2.84	1.14	83.3	6.82	1.7	2.33	5.59	1142	84%	16%	21%	
23HYD077	40	44	4	311	13	6.83	5.1	16.7	2.56	151.5	0.82	135	35.8	20.9	2.46	0.93	72.5	5.52	1.64	1.6	6.02	939	84%	16%	21%	
23HYD077	44	48	4	253	10.15	5.6	4.79	14	2.03	122.5	0.68	108.5	29.4	17.4	2.03	0.78	52.2	4.86	1.28	1.17	5.76	755	84%	16%	21%	
23HYD077	48	50	2	245	9.75	4.98	4.6	13.35	1.96	119.5	0.59	107	28.5	17.6	1.82	0.7	49.9	4.18	1.2	1.16	5.79	732	85%	15%	22%	
23HYD077	50	51	1	232	9.56	4.95	4.5	13.3	1.93	115	0.6	102	27.4	16.5	1.88	0.66	48.5	4.12	1.23	0.98	4.43	700	84%	16%	22%	
23HYD078	0	4	4	45.6	1.81	0.91	0.68	2.46	0.35	21.8	0.13	17.9	4.98	3.15	0.35	0.16	9	0.99	0.09	1.8	19	133	85%	15%	20%	
23HYD078	4	8	4	13.8	0.71	0.51	0.2	0.71	0.18	7.9	0.07	5.7	1.43	0.94	0.12	0.07	3.9	0.5	0.01	1.49	11.75	44	81%	19%	19%	
23HYD078	8	12	4	25.5	0.8	0.47	0.32	0.95	0.18	13.1	0.07	8.9	2.53	1.33	0.16	0.09	4	0.45	0.04	1.15	8.67	71	87%	13%	19%	
23HYD078	12	16	4	111.5	2.77	1.16	1.28	3.68	0.47	66.6	0.2	46	13.45	6.38	0.5	0.2	9.2	1.21	0.1	1.66	8.64	317	92%	8%	22%	
23HYD078	16	20	4	268	5.8	2.09	3.45	9.82	0.9	116	0.2	109.5	30.2	16.85	1.22	0.26	16	1.65	0.18	1.41	5.19	699	93%	7%	24%	
23HYD078	20	24	4	325	10.4	4.62	4.67	15.25	1.96	146.5	0.58	135	35.4	21.4	2.06	0.67	43.9	4.02	0.22	2.03	7.74	903	88%	12%	22%	
23HYD078	24	28	4	329	21.6	11.85	6.66	26.8	4.55	157	1.57	162.5	39.6	28.8	3.83	1.74	126.5	9.73	1.12	1.9	5.54	1121	77%	23%	21%	
23HYD078	28	32	4	287	15.05	7.45	5.36	20.7	2.91	135	0.94	144.5	35.6	24.9	2.79	1.07	76.3	5.98	1.52	1.7	6.48	920	82%	18%	23%	
23HYD078	32	36	4	297	14.55	7.62	5.7	20.5	2.96	136.5	0.95	146	35.7	25.2	2.75	0.99	77.6	6.14	1.64	1.95	6.48	938	82%	18%	23%	
23HYD078	36	38	2	294	14.3	7.26	5.23	19.05	2.81	136	0.94	137	34.9	23.8	2.64	1.08	75.5	6.45	1.6	1.62	4.96	915	82%	18%	22%	
23HYD078	38	39	1	330	16.35	8.47	5.73	22.1	3.15	152.5	1.05	156	39.5	26.3	3.04	1.11	83.1	6.96	1.78	1.37	4.3	1028	82%	18%	22%	
23HYD079	0	4	4	39.2	1.56	0.92	0.49	1.76	0.3	16.7	0.12	13.9	3.65	2.84	0.23	0.14	7.4	0.82	0.005	1.64	18.65	108	85%	15%	19%	
23HYD079	4	8	4	18.6	1.16	0.62	0.24	1.26	0.21	10	0.12	7.7	2.01	1.06	0.17	0.09	6.1	0.59	0.03	1.17	9.6	60	79%	21%	19%	
23HYD079	8	12	4	33	1.44	0.78	0.51	1.78	0.21	16.8	0.09	13.6	3.45	2.26	0.28	0.09	6.1	0.78	0.03	1.48	6.97	97	85%	15%	21%	
23HYD079	12	16	4	50.7	2.55	1.28	0.66	2.89	0.46	23.8	0.21	19.2	5.34	3.5	0.45	0.21	11.4	1.39	0.07	2.56	11.8	149	83%	17%	19%	
23HYD079	16	20	4	49	2.46	1.81	0.63	2.35	0.56	21.9	0.38	19.1	5.34	3.25	0.38	0.29	13.4	2.21	0.02	3.48	14.6	148	80%	20%	19%	

				Ce	Dy	Er	Eu	Gd	Ho	La	Lu	Nd	Pr	Sm	Tb	Tm	Y	Yb	P ₂ O ₅	U	Th	TREO+Y	LREO	HREO	NdPr	
OXIDE CONVERSION FACTOR				1.2284	1.1477	1.1435	1.1579	1.1526	1.1455	1.1728	1.1371	1.1664	1.2082	1.1596	1.1762	1.1421	1.2699	1.1387								
Hole ID	From	To	Interval	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
23HYD079	20	24	4	283	7.82	2.8	3.35	12.6	1.25	178	0.21	116.5	30.4	17.5	1.44	0.3	29	1.52	0.23	2.91	25.5	822	91%	9%	21%	
23HYD079	24	28	4	609	15.85	6.23	8.37	28.9	2.81	302	0.54	284	75.9	45.9	3.37	0.75	68.7	4.49	0.44	5.53	32.7	1748	90%	10%	24%	
23HYD079	28	32	4	400	35.8	18.7	10.3	43.6	7.42	169.5	2.11	232	51.8	47.2	6.47	2.57	200	14.5	0.54	8.18	8.56	1495	72%	28%	22%	
23HYD079	32	36	4	263	15.9	7.88	5.25	22	3.13	124	0.86	132.5	32.3	23.9	2.99	1.05	83.3	5.82	2.73	2.24	6	870	79%	21%	22%	
23HYD079	36	40	4	271	13.9	6.6	5	20.2	2.76	127	0.84	131.5	32.4	22.6	2.73	0.95	68.7	5.3	2.2	1.97	7.58	855	82%	18%	23%	
23HYD079	40	43	3	288	14.8	7.84	5.34	21.2	2.79	138.5	0.76	150.5	34.9	25.2	2.6	0.95	79.5	5.33	2.07	1.41	5	935	82%	18%	23%	
23HYD079	43	44	1	197	11.35	5.8	3.94	15.65	2.11	95.8	0.66	100	24.2	17.1	2.11	0.7	62.3	4.43	1	2.18	8.89	653	80%	20%	22%	
23HYD080	0	4	4	49.2	2.5	1.34	0.7	3.04	0.49	25	0.18	22.1	5.75	4	0.41	0.19	12.8	1.11	0.11	3.02	18.8	155	82%	18%	21%	
23HYD080	4	8	4	16.2	0.89	0.48	0.22	1.08	0.15	8.6	0.06	6.7	1.73	1.22	0.14	0.06	4.5	0.52	0.05	1.18	11.75	51	81%	19%	19%	
23HYD080	8	12	4	23.4	1.01	0.68	0.26	1.3	0.22	12	0.1	9.1	2.58	1.61	0.2	0.08	5.9	0.73	0.05	1.67	6.94	71	82%	18%	19%	
23HYD080	12	16	4	44.8	2.23	1.12	0.56	2.35	0.41	21.6	0.19	18.2	4.83	3.27	0.4	0.18	10.1	1.28	0.04	2.1	8.72	134	83%	17%	20%	
23HYD080	16	20	4	36.4	2.53	1.94	0.44	2.21	0.59	18.4	0.36	13.7	3.85	2.7	0.36	0.26	15	2.26	0.05	3.63	15.65	122	74%	26%	17%	
23HYD080	20	24	4	40.6	1.2	0.66	0.34	1.38	0.25	35	0.14	10.4	3.06	1.56	0.18	0.12	7	0.88	0.04	1.81	13.2	123	88%	12%	13%	
23HYD080	24	28	4	212	3.09	1.08	1.48	5.09	0.48	158	0.13	58	19.75	8.19	0.65	0.14	10.7	0.8	0.11	1.55	18.75	575	95%	5%	16%	
23HYD080	28	32	4	554	52.8	29.3	12.1	60.1	10.8	258	2.65	268	65.8	48.5	8.93	3.53	324	19.2	1.34	2.81	11.75	2072	69%	31%	19%	
23HYD080	32	36	4	292	15.9	8.9	6.22	23.7	3.12	137	1.06	151.5	36.4	27.4	3.16	1.08	90.9	6.95	1.74	1.2	4.53	968	80%	20%	23%	
23HYD080	36	40	4	268	14.55	7.95	5.66	21.1	2.9	127	0.78	140.5	32.9	23.4	2.7	0.97	81	5.63	1.66	1.07	4.55	883	80%	20%	23%	
23HYD080	40	41	1	269	14.7	8.21	5.97	21.1	2.95	128	0.93	139	32.5	23.3	2.71	0.99	80	6.14	1.53	1.07	4.89	884	80%	20%	23%	
23HYD080	41	42	1	263	13.95	7.53	5.92	20	2.81	125	0.91	135.5	32.2	23	2.57	0.99	77.1	5.75	1.4	0.81	3.99	861	81%	19%	23%	

Note: TREO = elemental analysis* oxide conversion factor of rare earth elements plus Y.
TREO highlighted cells in red are +1000ppm TREO, in yellow are 750 to 1000ppm TREO and in green are 500 to 750ppm TREO

JORC Code (2012) Table 1 – Hyden REE Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	<ul style="list-style-type: none"> The sampling undertaken by aircore drilling. The samples were placed on the ground in rows of 10. Intervals were analysed using a portable XRF, to assist in detailed logging and selection of sampling intervals for laboratory analysis. pXRF used only test for two rare earth elements and are best used as a field tool, rather than for reporting of results, particularly for relatively low levels of elements. The pXRF reports an elemental result as well as an error for each element. Where the error is large relative to the result for the element, the result is not considered by the CP to be suitable for public reporting. As a result only the full laboratory assay results are reported.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> No duplicate samples were taken, however analysis was validated through the use of internal laboratory standards and duplicates.
	<ul style="list-style-type: none"> Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information 	<ul style="list-style-type: none"> Samples were collected in the field and transported to the ALS for analysis. The selected REE samples taken were analysed by Lithium Borate Fusion ICP-MS (ALS code ME-MS81). Only the REE (and REO) results are reported in this announcement.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> The sample recovery was logged on a metre by metre basis and the samples appeared of consistent size and no wet sampling was observed. No relationship between sample size or recovery and grade is evident from the data collected to date.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> The holes were fully geologically logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The sampling was undertaken on a single metre interval basis from aircore drilling. After the pXRF analysis was undertaken, composite samples were submitted to ALS for full "wet chemical" analysis The samples were collected using spear sampling from the dry sample piles. No field duplicates or standards have been reported, Laboratory standards, duplicates and QA/QC protocols have been used by ALS. Sample sizes are considered appropriate for the stage of exploration being reported.

<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Laboratory standards, duplicates and QA/QC protocols have been used by ALS. No bias has been identified. Some XRF analysis has been undertaken on the sample pulps, however as the XRF is not a definitive tool for REE analysis, only laboratory assayed results are reported. Rare earth element analyses were originally reported in elemental form but has been converted to relevant oxide concentrations as in the industry standard to - TREO = La₂O₃ + CeO₂ + Pr₆O₁₁+Nd₂O₃ +Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Lu₂O₃ + Y₂O₃ Element to Oxide Conversion Factor are: <table border="1" data-bbox="1288 478 1809 1137"> <thead> <tr> <th>Element</th> <th>Conversion Factor (multiplier)</th> <th>Oxide</th> </tr> </thead> <tbody> <tr><td>La</td><td>1.1728</td><td>La₂O₃</td></tr> <tr><td>Ce</td><td>1.2284</td><td>CeO₂</td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr₆O₁₁</td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd₂O₃</td></tr> <tr><td>Sm</td><td>1.1596</td><td>Sm₂O₃</td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu₂O₃</td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd₂O₃</td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tb₄O₇</td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy₂O₃</td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho₂O₃</td></tr> <tr><td>Er</td><td>1.1435</td><td>Er₂O₃</td></tr> <tr><td>Tm</td><td>1.1421</td><td>Tm₂O₃</td></tr> <tr><td>Yb</td><td>1.1387</td><td>Yb₂O₃</td></tr> <tr><td>Lu</td><td>1.1371</td><td>Lu₂O₃</td></tr> <tr><td>Y</td><td>1.2699</td><td>Y₂O₃</td></tr> </tbody> </table>	Element	Conversion Factor (multiplier)	Oxide	La	1.1728	La ₂ O ₃	Ce	1.2284	CeO ₂	Pr	1.2082	Pr ₆ O ₁₁	Nd	1.1664	Nd ₂ O ₃	Sm	1.1596	Sm ₂ O ₃	Eu	1.1579	Eu ₂ O ₃	Gd	1.1526	Gd ₂ O ₃	Tb	1.1762	Tb ₄ O ₇	Dy	1.1477	Dy ₂ O ₃	Ho	1.1455	Ho ₂ O ₃	Er	1.1435	Er ₂ O ₃	Tm	1.1421	Tm ₂ O ₃	Yb	1.1387	Yb ₂ O ₃	Lu	1.1371	Lu ₂ O ₃	Y	1.2699	Y ₂ O ₃
Element	Conversion Factor (multiplier)	Oxide																																																
La	1.1728	La ₂ O ₃																																																
Ce	1.2284	CeO ₂																																																
Pr	1.2082	Pr ₆ O ₁₁																																																
Nd	1.1664	Nd ₂ O ₃																																																
Sm	1.1596	Sm ₂ O ₃																																																
Eu	1.1579	Eu ₂ O ₃																																																
Gd	1.1526	Gd ₂ O ₃																																																
Tb	1.1762	Tb ₄ O ₇																																																
Dy	1.1477	Dy ₂ O ₃																																																
Ho	1.1455	Ho ₂ O ₃																																																
Er	1.1435	Er ₂ O ₃																																																
Tm	1.1421	Tm ₂ O ₃																																																
Yb	1.1387	Yb ₂ O ₃																																																
Lu	1.1371	Lu ₂ O ₃																																																
Y	1.2699	Y ₂ O ₃																																																
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The results being reported are overall mineralized intervals, including a maximum of 4m of internal waste (material below 500ppm TREO). Intervals of more than 300ppm TREO are considered to be significant. For completeness all of the results from each individual sample has been included in Table 3 of the report. At least two Company personnel have verified the intersections. Hole 23HYD050 was drilled as a twin of hole 23HYD010 in order to reach basement lithology and further follow up the historical hole 22-18. Neither 23HYD050, nor 23HYD010 replicated the single high grade assay result reported from hole 22-18. Additional exploration is recommended to better understand the location and 																																																

		<p>orientation of the high grades reported in historical hole 22-18.</p> <ul style="list-style-type: none"> Geological and sampling data is collected on paper, with data entry undertaken on a daily basis and entered into a validated spreadsheet for inclusion into a database
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All drill holes were located using a handheld GPS using MGA94 UTM zone 50S No downhole surveys have been undertaken and all holes are vertical
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Sample spacing is wide and not at a distribution that would allow estimation of a Mineral Resource. The individual metre samples have been composited, based on the pXRF tests conducted in the field. The samples ranged from single metre samples to 4m composite samples. The mineralized intervals have been length weighted to calculate the overall mineralized interval. A maximum of 4m of internal waste (material below 500ppm TREO+Y) has been included into the overall mineralized intervals. No edge dilution has been included into the mineralized intervals.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Given the aircore holes are vertical and unsurveyed and the sampling of an assumed sub horizontal clay horizon drill orientation would not have resulted in any sample bias. There is no known relationship between drill orientation and interval width at this stage.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were collected in the field and transported directly to ALS from the field by a Mamba employee.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> An internal audit and review of the multi element results, has been undertaken by the CP and other senior geological staff. The review has confirmed the intersections reported above and no discrepancies were identified. There have been no audits or reviews of the sampling techniques or field procedures used by Mamba Exploration.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Hyden Project (REE Option area) covers the REE rights for four granted exploration licences 70/5003, 5756, 6040 and 6047 which cover a total of 561km². In addition, Mamba holds an additional 5 granted exploration licenses (E70/6353, 6354, 6355, 6356, and 6357 which cover approximately 755km². The project is located in the Eastern portion of the Western Australian wheatbelt

Criteria	JORC Code explanation	Commentary
<i>and land tenure status</i>		<p>and surrounds the regional town of Hyden some 300km East of Perth. Mamba has entered into an option agreement to secure 100% of the REE rights and owns 100% of the new tenements.</p> <ul style="list-style-type: none"> • Access is by well-graded shire roads from Hyden. • The area is covered by the Ballardong People Indigenous Land Use Agreement native title area (WI2017/012)
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Exploration has been undertaken by several explorers, however most exploration has been focused on either gold, Ni PGE's or graphite, very little exploration has been undertaken for REE over the project.
<i>Geology</i>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The Hyden Project area is located in the Western Gneiss Terrane of the southwest Yilgarn Province. The tenements are covered by Palaeozoic, Mesozoic and Tertiary sediments that unconformably overlie or are faulted against Precambrian sequences of schists, gneisses, granites and sediments. The tenements cover a northerly striking aeromagnetic anomaly that appears to be related to a BIF/ultramafic sequence which is offset to the east in the central part of E70/5003 by a later eastwest Proterozoic dolerite dyke.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i> 	<ul style="list-style-type: none"> • Drilling data from the initial aircore drilling is included in Table 2 and Figure 2 in the body of the report. • No drill data has been excluded from the report.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • The mineralized intersections have been calculated using a cutoff of 500ppm TREO+Y, without top cutting of the grades and using a maximum internal dilution allowance of 4m. No edge dilution has been accounted for in the intervals and a minimum intersection width of two metres, although some individual samples have been reported to highlight that higher grades are present in the overall intervals, the overall intervals are reported in Table one of the report. For completeness the individual assays from the samples collected have been reported in Table 3 of the report. • No metal equivalents are reported, however elemental assay results have been converted via industry standard factors as outlined in Section 1 of this JORC table 1 above to allow reporting of total rare earth oxides (TREO). • Results for P₂O₅ were received from the laboratory (ALS Geochemistry) in oxide form and have not been modified. Uranium and thorium assays were received in elemental form and have not been modified.

Criteria	JORC Code explanation	Commentary
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>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> 	<ul style="list-style-type: none"> • There is no information available to comment on the geometry of the zones of interest at this stage, although the drilling is vertical and is testing an assumed flat lying clay horizon, • There is no known relationship between drill orientation and width of the zones of interest. The true width of the mineralisation is unknown at this stage.
<i>Diagrams</i>	<ul style="list-style-type: none"> • <i>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> 	<ul style="list-style-type: none"> • Appropriate plans are included in the body of the report.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>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> 	<ul style="list-style-type: none"> • All assay data from the 58 holes drilled for REE are included in this report.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • The regional DMIRS geophysical datasets have been assessed for the area of interest. The detailed gravity survey was undertaken on 8 east west lines and 2 north south lines at a station spacing of between 100 and 200m along the lines, with lines spaced between 600m and 5km apart (see Figure three). A total of 419 station readings were completed. This data was combined with the regional gravity data and a 3 D inversion model compiled. The model identified a north south trending dense unit (a greenstone belt) with granite bodies to the east and west. In the area of interest an intrusive feature was identified, which cross cuts the dense greenstone units and post dates the local geological trends including two Proterozoic dykes which have been identified from the regional magnetic dataset. This suggests that the intrusive feature is relatively young.
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Samples have been selected for metallurgical test work to determine the recoverability of contained REEs. ALS Metallurgy has been engaged to conduct the studies.