

Machinga REE + Nb Exploration Update

- *RC Drilling is progressing well at Machinga, with 7 holes for 840 metres drilled as part of a ~5,000m combined RC and DD program. The diamond drill rig is currently mobilising to site*
- *Machinga is enriched in heavy rare earths (Dysprosium (Dy) and Terbium (Tb)) and Niobium (Nb) (2010 trenching MATR003: inc.: 15m @ 0.45% with 0.75% Nb₂O₅ including 5m @ 0.54% TREO and 1.34% Nb₂O₅)¹*
- *Drilling aims to follow up 2010 drill results which included: 11m @ 1% TREO (including 330 ppm Dy₂O₃) from 12m (MARC005) and 5m @ 1.5% TREO from 26m (MARC015)²*
- *A 200m by 50m soil sampling program has been completed over and to the north of known mineralisation at the Machinga North prospect, with the aim to delineate extension of mineralisation for follow-up drill testing*
- *Soil samples have been despatched to ALS laboratories in Johannesburg for preparatory work prior to full suite analysis in Perth*
- *Drill samples from the RC/DD program will be despatched to Intertek in Kitwe, Zambia for preparatory work prior to analysis in Perth*

Heavy rare earths and niobium explorer DY6 Metals Ltd (ASX: DY6) (“**DY6**”, “the **Company**”) is pleased to provide an update on exploration activities at the Company’s flagship, Machinga heavy rare earths (HREE) and niobium project, Malawi.

As announced on 29 June 2023, the Company has commenced a combined reverse circulation (RC) and diamond drilling (DD) program at Machinga. The Company has so far completed 7 RC holes for 840 metres of the ~5,000 drill program (**Figure 1**). The diamond rig is due to be mobilised to site by the middle of July.

Drilling at the Machinga North target – one of six targets identified to date within the Machinga concession – in 2010/12 returned intercepts of **11m @ 1.0% TREO** with **330ppm dysprosium oxide (Dy₂O₃)** from 12m (MARC005), **5m @ 1.5% TREO** with **596ppm Dy₂O₃** from 26m (MARC015) and **3m @ 2.2% TREO** with **295ppm dysprosium oxide (Dy₂O₃)** from 66m (MARC033) including **1m @ 5.1% TREO** with **584ppm dysprosium oxide (Dy₂O₃)** from 67m.

¹ Refer Globe Metals & Mining ASX announcement dated 19 July 2010, “New Zones of HREE & Niobium Mineralisation – Machinga REE Project”

² Refer Globe Metals & Mining ASX announcement dated 22 November 2010, “Drilling Results Confirm Significant Heavy Rare Earth Discovery at Machinga”

Previous trenching in 2010 included: MATR001: 7m @ 1.26% TREO, MATR002: 33m @ 0.71% TREO (inc: 11m @ 1.00% TREO with 0.46% Nb₂O₅) and MATR003: inc: 15m @ 0.45% with 0.75% Nb₂O₅, incl: 5m @ 0.54% TREO and 1.34% Nb₂O₅.

Soil Sampling Program

The Company recently completed stage 1 of a phased soil sampling program at Machinga, to the north of known mineralisation (**Figure 2**). Sampling was undertaken on a 200m by 50m grid, with 256 samples collected.

The objective of the program is to define extensions of mineralisation along strike to the north, with the aim of proving up additional targets for drilling. Samples were despatched to ALS Laboratories in Johannesburg, South Africa for preparation, prior to a full suite analysis in Perth. Results are expected early August.



Figure 1: RC Drilling underway at Machinga HREO + Nb Project

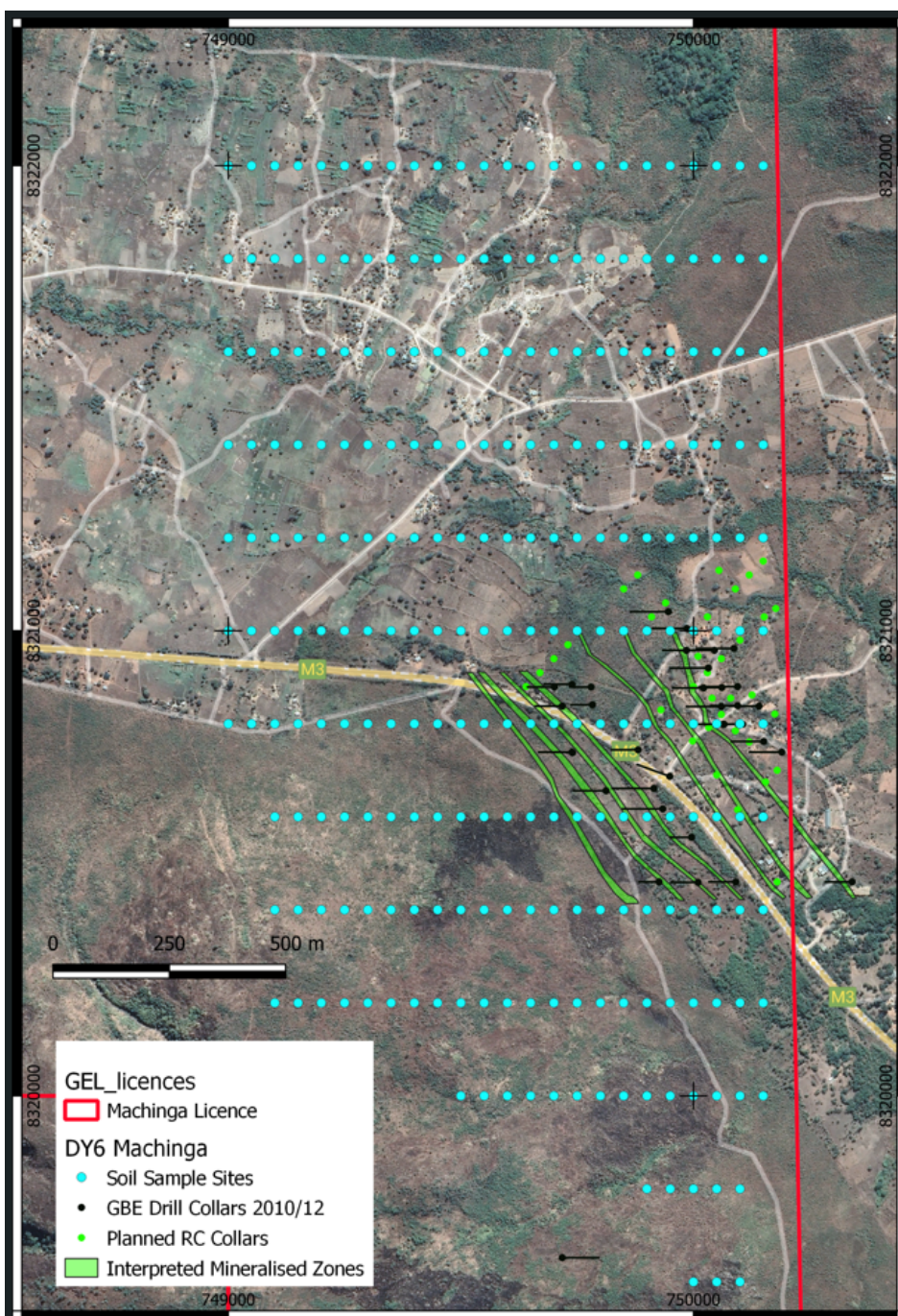


Figure 2: Soil Sample locations and Planned Collars for RC Drill Program at Machinga North.

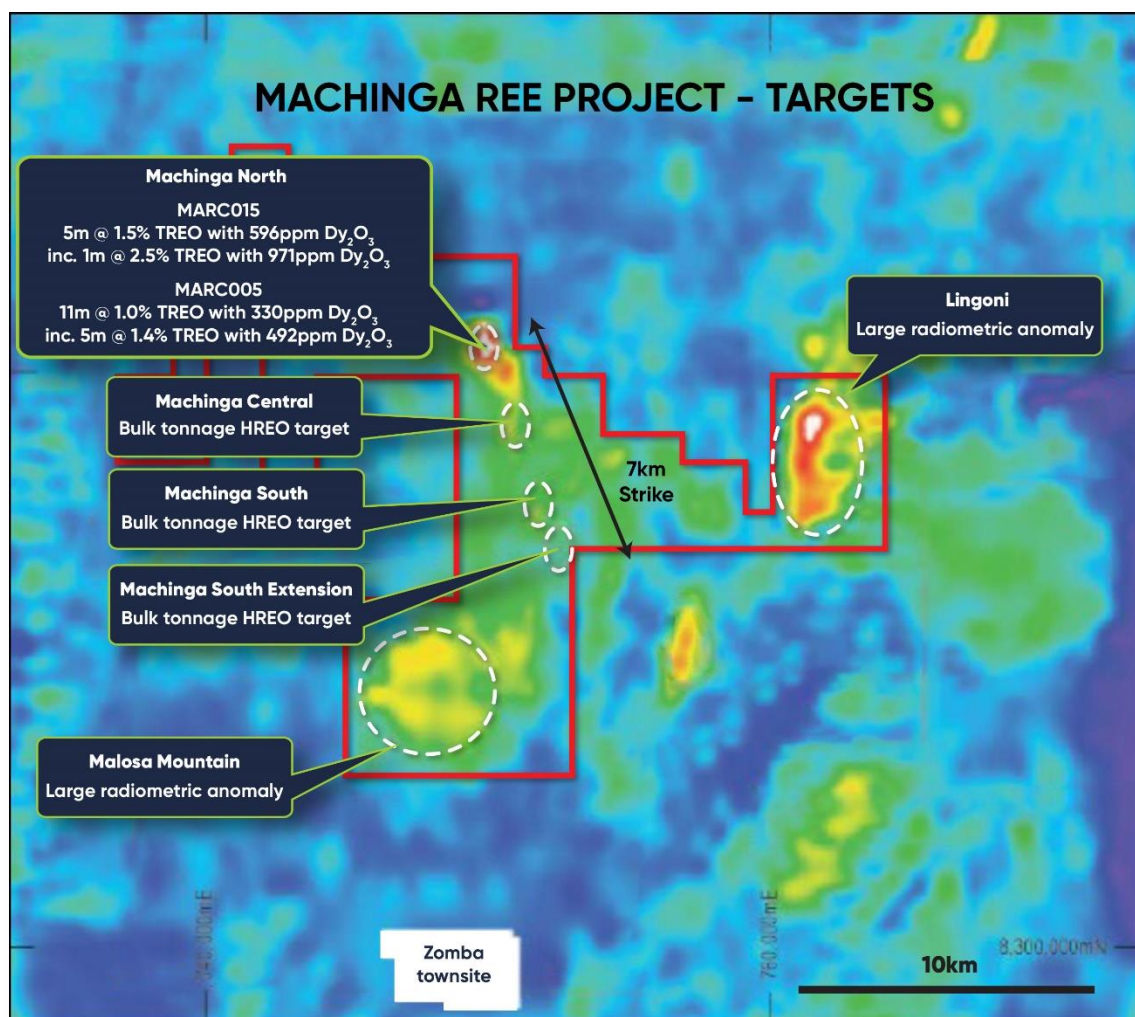


Figure 3: Machinga North (top left in the image) is just one of the six targets within the concession

-ENDS-

This announcement has been authorised by the Board of DY6.

More information

Mr Dan Smith	Mr John Kay	Mr Luke Forrestal
Chairman	Director & Company Secretary	Investor Relations
dan.smith@dy6metals.com	john.kay@dy6metals.com	+61 411 479 144

Competent Persons Statement

The information in this announcement that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Allan Younger, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Younger is a consultant of the Company. Mr Younger has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Younger consents to the inclusion of this information in the form and context in which it appears in this announcement. Mr Younger holds shares in the Company.

The exploration results contained in this announcement were first reported by the Company in its prospectus dated 3 April 2023 and announced to ASX on 27 June 2023. The results were reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus.

Table 1: Machinga Drill-Hole Details (MARC001 to MARC036)

Hole ID	Depth (m)	Easting (m)	Northing (m)	RL (m)	Dip	Azimuth
MARC001	88	749985	8320958	753	-55°	270°
MARC002	142	750045	8320958	751	-55°	270°
MARC003	85	750061	8320878	753	-55°	270°
MARC004	141	750095	8320880	750	-55°	270°
MARC005	102	750096	8320799	757	-55°	270°
MARC006	121	750151	8320762	760	-55°	270°
MARC007	100	750341	8320460	756	-55°	270°
MARC008	103	749739	8320885	754	-55°	270°
MARC009	86	750106	8320799	757	90	000°
MARC010	129	749949	8320687	769	-55°	270°
MARC011	80	749996	8320556	777	-55°	270°
MARC012	100	750091	8320460	770	-55°	270°
MARC013	136	749718	8320652	787	-55°	090°
MARC014	100	751146	8319592	763	-55°	270°
MARC015	100	750095	8320839	752	-55°	270°
MARC016	75	750066	8320799	758	-55°	090°
MARC017	75	749926	8320460	787	-55	270°
MARC018	102	750010	8320459	777	-55	270°
MARC019	150	749934	8320617	776	-55	270°
MARC020	156	749915	8320661	772	-55	270°
MARC021	120	749812	8320656	774	-55	270°
MARC022A	124	749740	8320738	770	-55	270°
MARC022	20	749740	8320738	770	-55	270°
MARC023	130	750060	8320837	755	-55	270°
MARC024	115	750022	8320877	756	-55	270°
MARC025	142	750032	8320920	754	-55	270°
MARC026	140	750087	8320962	748	-55	270°
MARC027	141	749946	8321041	745	-55	270°
MARC028	128	749986	8321005	748	-55	270°

MARC029	124	750064	8320799	758	-55	270°
MARC030	110	750141	8320838	754	-55	270°
MARC031	120	750190	8320739	762	-55	270°
MARC032	100	749701	8320879	760	-55	270°
MARC033	100	749718	8320838	763	-55	270°
MARC034	100	749881	8320744	767	-55	270°
MARC035	80	749783	8320841	755	-55	270°
MARC036	80	749780	8320879	754	-55	270°

*Grid is WGS 84, Zone 36S

Table 2: Significant Historical Drill Intersections at Machinga

Hole ID	From	To	Width	Dy ₂ O ₃ ppm	Nd ₂ O ₃ ppm	Pr ₆ O ₁₁ ppm	Tb ₂ O ₇ ppm	Nb ₂ O ₅ ppm	TREO ppm
MARC001	12	14	2	492.9	1710.2	543.1	74.7	6202.0	14835.0
MARC002	31	32	1	529.3	1470.4	488.3	77.4	5039.7	14108.7
MARC002	40	41	1	165.0	642.5	203.4	25.7	2191.5	5395.2
MARC002	85	86	1	212.2	652.5	207.7	30.0	4437.4	6357.4
MARC002	90	91	1	186.0	648.6	207.3	27.8	2515.2	5903.8
MARC003	24	30	6	184.9	577.0	180.7	29.4	1712.3	5849.0
MARC003	57	58	1	261.7	829.4	260.6	39.0	2836.7	7608.4
MARC004	36	37	4	228.2	780.8	247.9	34.5	2389.6	7153.3
MARC005	12	23	11	330.2	1064.7	1127.6	47.9	3107.3	9872.1
MARC006	29	30	1	142.3	656.6	199.1	22.1	1632.2	5325.7
MARC006	59	60	1	255.5	902.1	279.8	38.6	3328.8	7934.3
MARC007	53	59	6	204.1	733.0	220.0	30.2	1982.9	6479.5
MARC008	28	29	2	188.8	777.6	234.1	28.4	5138.4	6790.8
MARC008	29	30	1	211.1	838.2	254.6	31.6	5061.1	7326.3
MARC008	54	55	1	177.7	578.8	171.6	25.3	2610.7	5344.8
MARC008	76	77	1	84.0	287.4	91.8	11.0	5784.9	3012.2
MARC009	54	55	1	334.4	1293.0	386.3	49.6	4730.7	10871.9
MARC010	66	68	2	172.7	805.4	246.4	25.6	7947.9	6579.0
MARC010	124	125	1	276.1	1175.3	333.1	44.5	1902.6	8986.6
MARC011	11	14	3	91.5	433.9	140.4	11.9	8048.9	4000.6
MARC012	66	67	1	101.1	725.2	232.1	14.1	3968.2	5980.1
MARC013	108	109	1	160.1	4082.5	1505.6	39.1	52.9	40504.8
MARC014	11	12	1	169.1	740.3	229.5	22.4	2473.3	6543.2
MARC015	26	31	6	595.7	1765.5	509.0	83.6	5398.4	15692.1
MARC015	87	88	1	221.9	667.6	198.6	29.7	5312.9	6297.8
MARC016	19	24	5	354.1	1134.8	335.4	51.4	3259.3	9993.6
MARC016	69	70	1	243.2	832.8	240.7	34.9	2730.8	7174.1
MARC017	4	5	1	159.3	665.5	199.6	23.3	2504.8	5185.7
MARC018	12	15	3	68.9	326.9	115.0	8.5	6915.5	3282.9
MARC019	4	5	1	71.5	415.9	147.0	9.2	7563.1	3831.2
MARC019	104	105	1	29.4	337.6	122.2	4.6	9517.1	2750.8
MARC020	7	8	1	94.9	449.1	141.5	14.5	5049.7	3893.9
MARC020	45	46	1	77.5	403.7	134.8	11.4	7777.6	3740.2
MARC020	148	149	1	50.3	309.2	107.4	6.9	5626.2	2616.5
MARC021	16	18	2	128.4	771.0	214.5	21.4	4297.2	5589.1
MARC021	51	52	1	69.2	617.0	204.2	11.2	1004.2	5809.6
MARC021	108	110	2	216.6	1223.1	340.5	34.6	4375.2	9279.7
MARC022	42	44	2	182.3	1388.1	475.9	28.1	3932.4	11091.0

Hole ID	From	To	Width	Dy ₂ O ₃ ppm	Nd ₂ O ₃ ppm	Pr ₆ O ₁₁ ppm	Tb ₄ O ₇ ppm	Nb ₂ O ₅ ppm	TREO ppm
MARC022	85	86	1	19.7	253.3	90.7	2.6	6626.1	2039.9
MARC023	11	16	5	288.1	853.8	273.7	43.3	2667.9	8003.4
MARC023	100	101	1	54.3	241.4	84.5	6.8	5179.8	2492.7
MARC024	13	15	2	391.9	1519.4	484.6	62.6	4285.1	12243.6
MARC024	110	111	1	133.8	566.1	182.5	18.2	5890.8	5073.1
MARC025	26	29	3	217.9	549.7	163.7	29.4	2471.5	5652.7
MARC025	97	98	1	135.9	665.9	192.7	20.9	2726.5	5082.9
MARC025	126	127	1	49.1	292.4	95.1	6.8	5434.5	2513.5
MARC026	48	49	1	469.5	1483.5	451.9	68.4	5899.4	13280.4
MARC026	63	65	2	201.4	720.0	214.6	30.3	2441.9	5986.9
MARC027	0	1	1	341.2	781.6	239.2	41.3	5577.5	9845.8
MARC027	32	34	2	449.3	1321.1	379.7	61.3	9055.1	11828.1
MARC027	86	91	5	118.8	501.3	149.3	17.5	2345.4	4074.9
MARC027	134	135	1	153.8	718.6	217.3	23.2	1938.3	5685.8
MARC028	20	21	1	183.6	662.7	205.2	26.6	2514.8	5786.8
MARC028	29	30	1	314.6	1240.9	378.9	46.6	3413.2	10233.1
MARC029	0	2	2	156.0	395.4	122.9	20.5	4048.3	5496.1
MARC029	6	8	2	366.2	1415.0	422.0	55.5	4982.4	11165.5
MARC029	30	31	1	177.0	787.1	244.0	28.0	2230.1	6232.3
MARC030	48	51	3	181.8	591.9	182.9	26.6	1959.8	5359.5
MARC030	64	65	1	339.0	1035.9	313.8	49.3	4268.6	9565.0
MARC031	55	56	1	810.3	2420.0	732.9	113.3	8043.7	21679.8
MARC031	78	79	1	208.2	981.8	298.8	32.8	2593.5	7352.8
MARC032	33	34	1	127.3	618.8	194.8	20.5	2197.2	5031.9
MARC032	90	92	2	84.2	1020.9	312.4	14.6	4091.9	7098.2
MARC033	66	69	3	338.5	3286.1	9531.7	63.2	4896.1	22304.5
<i>Including</i>	67	68	1	670.4	7667.9	2219.2	128.9	5936.6	50949.5
MARC033	90	91	1	45.4	209.4	68.0	5.8	5677.7	2026.7
MARC034	27	29	2	228.4	808.8	248.9	34.0	2775.9	6922.8

Table 3: Combined Historical Drilling Results at Machinga (all values in ppm)

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₄ O ₇	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC001	8	9	193.7	4.9	4.9	2.4	9.3	1.7	101.2	0.6	22.0	65.9	20.1	11.2	1.5	0.6	54.4	3.9	31.47	479.67
MARC001	9	10	191.9	8.3	8.3	2.3	14.2	3.0	93.8	1.0	86.0	74.6	22.2	15.4	2.5	1.3	97.1	7.2	123.02	549.66
MARC001	10	11	464.2	23.2	23.2	3.8	31.9	8.1	214.3	2.3	210.0	161.9	50.0	32.7	5.8	3.3	259.4	19.4	300.41	1318.87
MARC001	11	12	969.9	36.8	36.8	8.1	57.1	13.7	465.5	3.4	736.0	335.5	103.5	64.4	10.8	4.9	421.5	29.0	1052.85	2589.53
MARC001	12	13	3882.4	315.5	315.5	18.6	285.0	104.5	2022.4	42.9	4140.0	1269.0	419.3	271.6	64.0	49.2	2713.9	325.1	5922.27	12220.23
MARC001	13	14	5998.0	343.7	343.7	28.9	413.6	121.5	3092.4	38.2	4531.0	2151.2	666.7	421.4	85.4	50.7	3185.0	302.8	6481.60	17448.84
MARC001	14	15	185.7	12.3	12.3	2.2	14.9	4.4	97.7	1.6	132.0	71.7	21.7	15.7	3.1	1.8	122.0	11.7	188.83	586.57
MARC001	15	16	133.5	12.2	12.2	2.1	13.1	4.2	66.7	1.8	78.0	53.2	15.7	11.9	2.6	1.7	115.4	11.6	111.58	463.37
MARC001	32	33	59.0	3.2	3.2	1.2	4.4	1.1	30.4	0.5	26.0	23.8	6.8	4.6	0.9	0.6	33.8	3.4	37.19	178.50
MARC001	33	34	57.2	3.2	3.2	1.2	4.4	1.1	30.0	0.5	32.0	22.7	6.8	4.5	0.8	0.6	35.6	3.4	45.78	177.04
MARC001	34	35	50.2	2.7	2.7	1.3	4.5	0.9	23.1	0.4	11.0	22.2	6.2	4.8	0.7	0.3	27.3	2.7	15.74	151.62
MARC001	35	36	789.7	61.7	61.7	4.2	52.2	19.4	351.8	11.2	1059.0	280.3	85.0	59.1	11.0	10.5	592.8	75.2	1514.90	2481.90
MARC001	36	37	82.2	5.5	5.5	1.3	7.0	1.8	39.3	0.9	48.0	34.5	9.6	7.4	1.4	0.8	56.5	5.5	68.66	261.84
MARC001	37	38	51.7	3.2	3.2	1.4	5.1	1.1	23.7	0.5	17.0	23.4	6.3	4.9	0.8	0.5	32.1	3.3	24.32	163.35
MARC001	54	55	69.7	3.2	3.2	1.5	5.9	1.3	33.2	0.4	21.0	32.3	8.5	6.6	1.0	0.6	35.0	3.0	30.04	207.87
MARC001	55	56	194.0	10.2	10.2	2.3	16.3	3.7	86.6	1.3	102.0	83.4	23.6	18.1	2.9	1.5	114.2	9.0	145.91	584.32
MARC001	56	57	180.8	7.7	7.7	2.2	13.5	2.6	76.3	1.1	63.0	77.2	21.7	16.1	2.3	1.1	83.3	7.3	90.12	506.63

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC001	57	58	157.7	6.7	6.7	2.5	12.1	2.4	70.0	0.8	53.0	68.8	18.8	14.0	2.1	0.9	68.4	5.7	75.82	443.27
MARC001	58	59	864.5	65.1	65.1	5.1	62.1	21.2	408.5	8.8	692.0	290.9	88.8	59.6	12.7	10.2	572.9	66.7	989.91	2625.48
MARC001	59	60	547.6	40.1	40.1	3.8	39.2	12.9	266.1	5.8	444.0	194.6	59.7	39.8	8.2	6.3	365.4	42.1	635.14	1686.45
MARC001	68	69	155.0	5.0	5.0	1.9	10.0	1.9	70.3	0.6	40.0	61.2	17.7	11.4	1.6	0.8	57.8	5.2	57.22	410.09
MARC001	69	70	264.1	10.1	10.1	3.6	16.4	3.6	128.8	1.2	128.0	97.7	29.0	18.4	2.9	1.5	110.1	9.6	183.10	713.60
MARC001	70	71	204.2	19.9	19.9	2.4	22.9	7.0	88.4	2.2	206.0	86.0	24.7	21.7	4.9	2.7	196.5	17.5	294.68	732.41
MARC001	71	72	161.9	14.1	14.1	2.2	12.3	4.1	72.1	2.6	174.0	62.5	18.9	13.6	2.4	2.6	131.1	18.3	248.91	535.91
MARC001	72	73	433.4	29.2	29.2	3.8	28.6	9.6	198.9	4.6	772.0	148.7	45.9	29.8	6.1	4.8	277.2	32.8	1104.35	1294.75
MARC001	73	74	907.2	67.6	67.6	5.4	63.3	22.3	437.8	10.4	768.0	301.5	94.7	64.9	13.5	10.8	653.0	77.1	1098.62	2820.78
MARC001	74	75	333.5	31.7	31.7	2.8	24.7	9.4	163.3	5.9	587.0	123.9	38.1	25.3	5.4	5.3	290.0	38.4	839.70	1135.32
MARC001	75	76	453.6	31.7	31.7	3.0	30.9	10.5	224.4	5.4	486.0	166.4	49.0	34.2	6.4	5.4	316.5	37.8	695.22	1419.47
MARC001	76	77	452.8	31.7	31.7	2.9	28.2	10.1	210.0	4.8	371.0	158.4	49.1	31.7	5.6	4.8	292.6	36.8	530.72	1360.94
MARC001	77	78	232.5	13.3	13.3	2.4	16.8	4.8	100.7	1.7	134.0	92.8	27.1	19.5	3.4	2.1	128.5	13.3	191.69	679.86
MARC001	78	79	116.9	4.5	4.5	2.0	9.2	1.8	57.8	0.7	17.0	50.3	13.6	9.9	1.4	0.7	50.7	4.8	24.32	332.38
MARC001	79	80	282.2	6.1	6.1	3.7	13.6	2.5	161.3	0.8	80.0	89.3	28.3	15.1	2.3	1.0	76.4	5.8	114.44	701.09
MARC001	80	81	147.7	9.7	9.7	2.1	12.6	3.3	67.9	1.1	84.0	61.5	17.5	13.2	2.3	1.5	97.5	8.9	120.16	461.14
MARC001	81	82	559.3	26.1	26.1	3.0	30.1	7.6	260.2	4.1	528.0	190.7	60.8	36.1	5.5	4.0	244.3	27.8	755.30	1493.50
MARC001	82	83	120.8	7.0	7.0	1.6	10.8	2.4	54.7	1.0	69.0	49.8	14.2	10.3	1.9	1.0	72.0	6.8	98.70	366.75
MARC001	83	84	117.3	10.9	10.9	2.1	13.1	3.9	44.6	1.3	105.0	54.9	15.0	13.5	2.7	1.6	102.9	10.2	150.20	411.38
MARC001	84	85	88.1	4.1	4.1	1.6	7.3	1.6	38.0	0.6	28.0	40.1	10.8	8.7	1.2	0.7	45.7	4.3	40.05	260.57
MARC001	85	86	407.5	44.6	44.6	3.0	32.3	13.3	202.3	8.7	471.0	149.9	45.2	32.5	6.7	7.9	406.6	57.7	673.77	1469.45
MARC001	86	87	719.5	14.4	14.4	4.7	25.2	5.4	384.9	2.0	180.0	199.6	65.8	29.7	4.2	2.3	160.6	15.3	257.49	1660.00
MARC001	87	88	234.4	8.0	8.0	2.1	10.9	2.7	108.0	1.2	89.0	69.1	20.9	12.8	2.2	1.3	80.4	8.4	127.31	575.17
MARC002	16	17	74.7	3.1	3.1	1.9	5.6	1.3	31.7	0.4	21.0	34.6	9.2	7.8	1.0	0.5	34.5	2.8	30.04	214.78
MARC002	17	18	77.4	3.9	3.9	1.7	8.0	1.4	30.5	0.5	16.0	38.4	10.0	8.2	1.2	0.6	41.0	3.3	22.89	232.72
MARC002	18	19	179.7	5.4	5.4	2.4	10.5	2.1	84.3	0.6	38.0	69.8	20.2	13.1	1.7	0.7	59.4	4.7	54.36	465.09
MARC002	19	20	938.5	46.0	46.0	6.4	69.3	16.8	388.7	4.4	746.0	336.0	100.9	74.3	13.3	6.6	534.6	36.8	1067.15	2652.41
MARC002	20	21	108.2	5.4	5.4	2.2	9.6	1.9	47.7	0.7	51.0	49.0	13.4	10.3	1.7	0.8	66.3	5.1	72.96	332.28
MARC002	21	22	174.9	11.3	11.3	2.4	14.9	4.1	76.8	1.7	141.0	73.7	20.8	17.2	2.9	1.7	133.0	11.4	201.70	565.00
MARC002	22	23	985.7	44.0	44.0	6.3	67.0	16.6	493.9	4.3	673.0	339.2	105.3	70.9	12.7	6.3	454.8	36.2	962.73	2721.67
MARC002	23	24	83.8	4.2	4.2	1.9	8.4	1.6	37.2	0.6	26.0	39.7	10.6	8.0	1.4	0.7	46.2	3.9	37.19	255.73
MARC002	24	25	79.7	3.8	3.8	2.0	7.7	1.6	35.4	0.5	28.0	39.8	10.4	8.2	1.3	0.6	43.8	4.2	40.05	245.76
MARC002	25	26	68.3	3.5	3.5	2.1	6.2	1.3	28.4	0.5	13.0	35.0	9.1	7.5	1.1	0.5	37.1	3.5	18.60	209.82
MARC002	26	27	139.7	4.1	4.1	2.4	9.0	1.6	67.3	0.5	5.0	59.5	16.8	11.1	1.4	0.5	43.9	3.5	7.15	369.52
MARC002	27	28	144.1	6.2	6.2	2.2	10.9	2.3	65.9	0.9	99.0	67.0	17.6	13.8	2.0	0.8	71.2	5.4	141.62	421.18
MARC002	28	29	105.2	5.3	5.3	2.3	9.3	1.8	44.2	0.7	34.0	52.7	13.8	11.4	1.4	0.8	55.9	5.0	48.64	318.60
MARC002	29	30	81.6	5.5	5.5	2.0	10.0	2.1	33.9	0.7	17.0	43.7	11.2	9.4	1.7	0.9	58.9	4.9	24.32	275.46
MARC002	30	31	1217.6	72.3	72.3	7.2	83.3	24.6	645.5	7.6	842.0	392.6	123.1	82.7	17.8	10.5	726.5	60.6	1204.48	3587.69
MARC002	31	32	4333.2	373.4	373.4	21.7	349.0	125.9	2338.3	48.4	3523.0	1470.4	488.3	328.9	77.4	58.6	3201.0	365.1	5039.65	14108.74
MARC002	32	33	753.9	45.7	45.7	5.3	52.9	16.3	351.5	5.4	555.0	262.7	80.5	55.4	11.3	6.7	438.5	40.7	793.93	2197.03
MARC002	33	34	256.2	14.8	14.8	3.0	21.7	5.4	119.7	1.8	153.0	102.6	28.6	20.5	3.7	2.1	146.8	13.8	218.87	764.57
MARC002	34	35	137.3	6.3	6.3	2.0	9.8	2.4	65.1	0.8	50.0	55.2	15.7	11.5	1.7	0.9	69.1	6.0	71.53	395.29
MARC002	35	36	271.2	11.9	11.9	2.5	19.2	4.5	129.6	1.5	154.0	109.1	31.4	21.2	3.7	1.7	137.3	10.9	220.30	776.65
MARC002	36	37	270.0	10.7	10.7	3.6	17.1	4.1	133.7	1.3	136.0	102.9	29.2	18.9	3.0	1.5	114.4	9.8	194.55	739.04
MARC002	37	38	97.2	5.8	5.8	2.1	10.7	2.2	42.7	0.8	24.0	49.5	12.6	11.4	1.7	0.9	66.8	5.4	34.33	320.04
MARC002	38	39	516.5	25.0	25.0	3.6	38.2	9.4	233.4	2.7	373.0	186.7	54.6	39.1	7.4	3.5	284.6	21.9	533.58	1470.59
MARC002	39	40	332.5	16.6	16.6	3.0	25.8	6.5	150.4	1.9	211.0	133.3	39.1	28.8	5.0	2.4	191.5	14.8	301.84	981.88
MARC002	40	41	1824.2	96.3	96.3	9.3	120.7	35.2	949.4	10.5	1532.0	642.5	203.4	132.2	25.7	14.2	1082.6	84.1	2191.53	5395.21
MARC002	41	42	1562.6	80.0	80.0	8.8	119.2	29.8	733.0	7.9	1113.0	594.2	178.3	127.7	22.9	11.3	912.3	67.3	1592.15	4596.72
MARC002	42	43	558.9	27.4	27.4	3.7	41.5	10.4	247.9	2.8	409.0	200.3	60.7	43.4	7.7	4.0	319.8	21.4	585.07	1600.14
MARC002	43	44	318.5	14.5	14.5	2.4	22.1	5.5	155.6	1.4	174.0	119.8	37.3	26.3	4.4	2.1	163.7	11.8	248.91	912.27
MARC002	44	45	108.6	4.9	4.9	1.7	7.7	1.8	52.3	0.6	45.0	45.3	12.9	9.2	1.4	0.7	51.8	5.1	64.37	311.89
MARC002	45	46	84.4	3.0	3.0	1.4	5.8	1.1	37.2	0.4	18.0	38.7	10.2	7.2	0.8	0.3	30.4	2.5	25.75	228.50
MARC002	46	47	662.8	45.7	45.7	3.6	42.0	14.8	333.0	6.7	412.0	220.9	69.8	44.1	9.2	7.0	398.2	47.5	589.37	1966.03

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC002	47	48	94.6	3.9	3.9	1.6	7.5	1.5	41.4	0.5	21.0	41.5	11.8	9.5	1.2	0.6	41.5	3.8	30.04	267.38
MARC002	80	81	99.0	4.8	4.8	1.3	6.8	1.7	47.9	0.6	74.0	38.4	10.8	7.5	1.2	0.7	54.0	4.4	105.86	286.86
MARC002	81	82	58.5	3.1	3.1	1.0	4.5	1.3	28.0	0.4	36.0	25.2	7.0	5.7	0.9	0.5	34.3	3.0	51.50	179.34
MARC002	82	83	345.8	17.3	17.3	2.3	22.6	6.1	167.2	2.2	294.0	127.4	38.2	25.0	4.4	2.7	186.2	17.2	420.57	991.24
MARC002	83	84	97.3	4.0	4.0	1.0	5.6	1.4	45.6	0.5	61.0	36.9	11.1	6.8	0.9	0.6	39.1	4.2	87.26	261.22
MARC002	84	85	41.3	1.1	1.1	0.8	2.3	0.5	21.1	0.2	15.0	14.8	4.6	2.6	0.4	0.2	14.3	1.3	21.46	107.74
MARC002	85	86	2094.8	159.6	159.6	9.0	137.9	49.9	1001.9	23.9	3102.0	652.5	207.7	133.7	30.0	26.3	1443.9	174.1	4437.41	6357.44
MARC002	86	87	132.1	7.0	7.0	2.2	10.8	2.5	63.4	0.9	70.0	51.4	15.0	11.1	1.8	1.0	74.9	6.1	100.14	391.86
MARC002	87	88	87.6	3.9	3.9	1.2	5.9	1.5	42.5	0.5	48.0	30.8	9.6	6.4	1.1	0.6	40.9	3.4	68.66	241.94
MARC002	88	89	72.8	3.5	3.5	1.2	5.3	1.3	37.4	0.4	47.0	26.7	7.9	5.5	1.0	0.6	41.3	3.2	67.23	213.84
MARC002	89	90	57.4	2.3	2.3	1.0	3.5	0.8	26.6	0.3	36.0	21.7	6.3	4.1	0.7	0.3	28.4	2.5	51.50	160.62
MARC002	90	91	2009.9	129.8	129.8	8.6	131.2	44.0	1033.4	16.9	2172.0	648.6	207.3	133.0	27.8	19.9	1174.5	132.9	3107.05	5903.76
MARC002	91	92	730.9	39.3	39.3	3.4	43.6	13.1	349.8	4.1	495.0	234.7	73.7	47.0	8.7	5.4	357.3	32.9	708.10	2005.70
MARC002	92	93	100.5	3.8	3.8	1.4	5.6	1.4	50.0	0.6	46.0	35.5	10.9	6.7	1.1	0.5	43.0	3.4	65.80	270.71
MARC002	93	94	55.9	2.7	2.7	1.0	5.2	0.9	25.9	0.3	29.0	23.8	6.8	5.8	0.9	0.5	31.1	2.5	41.48	168.15
MARC002	94	95	59.8	3.1	3.1	1.3	5.0	1.1	28.5	0.4	25.0	25.8	7.6	5.7	1.0	0.5	34.4	2.7	35.76	182.17
MARC002	95	96	247.2	10.2	10.2	2.3	16.6	4.0	121.6	1.5	117.0	85.0	26.1	18.0	3.0	1.4	123.1	9.0	167.37	687.82
MARC002	96	97	289.5	7.9	7.9	3.8	15.3	3.0	148.0	0.8	135.0	105.3	31.4	18.8	2.7	1.0	89.1	6.5	193.12	737.66
MARC002	97	98	568.3	21.5	21.5	6.7	34.5	8.1	275.6	2.4	375.0	207.0	61.8	39.8	6.0	3.0	233.9	18.0	536.44	1523.46
MARC002	98	99	517.6	15.0	15.0	4.4	24.8	5.8	259.8	1.5	160.0	155.9	50.1	29.7	4.5	2.1	179.2	12.5	228.88	1291.28
MARC002	99	100	543.6	14.9	14.9	3.6	26.5	5.5	265.2	1.5	174.0	167.8	53.3	28.9	4.6	2.1	162.5	12.3	248.91	1319.58
MARC002	100	101	321.3	14.2	14.2	3.1	22.4	4.8	157.6	1.5	177.0	120.4	37.1	26.6	4.1	2.1	147.1	11.7	253.20	897.74
MARC002	101	102	165.3	4.8	4.8	2.0	8.8	1.7	84.3	0.5	47.0	55.3	17.8	10.9	1.4	0.7	52.1	4.0	67.23	417.80
MARC002	102	103	258.9	8.1	8.1	3.0	13.5	3.0	148.8	1.0	77.0	79.4	26.5	13.9	2.4	1.3	100.4	7.7	110.15	683.19
MARC002	103	104	816.6	86.6	86.6	2.7	38.4	23.0	409.9	20.7	3102.0	234.4	79.9	39.1	9.6	16.6	768.7	136.0	4437.41	2758.69
MARC002	104	105	335.6	8.5	8.5	4.1	16.9	3.0	171.7	1.2	169.0	113.3	37.2	19.7	2.7	1.4	99.8	8.7	241.75	838.16
MARC002	105	106	649.2	9.1	9.1	3.9	17.4	3.2	384.8	1.2	165.0	179.3	63.9	25.2	2.8	1.4	98.0	9.2	236.03	1462.69
MARC002	106	107	202.4	23.7	23.7	2.8	29.2	8.1	84.2	2.6	293.0	89.3	25.5	27.3	5.8	3.7	254.1	21.7	419.14	818.04
MARC002	107	108	44.8	2.1	2.1	1.2	3.8	0.7	20.1	0.3	18.0	19.0	5.4	3.9	0.7	0.3	23.6	1.8	25.75	131.47
MARC002	108	109	126.6	2.4	2.4	1.6	4.7	0.8	67.2	0.4	19.0	39.2	12.4	5.9	0.9	0.3	29.3	2.3	27.18	298.66
MARC002	109	110	431.0	8.3	8.3	5.7	18.6	3.2	231.9	1.3	228.0	145.8	45.2	23.7	2.9	1.4	102.5	8.5	326.15	1045.92
MARC002	110	111	456.4	11.8	11.8	5.4	21.2	4.1	243.9	1.9	294.0	164.9	49.6	27.4	3.2	1.9	125.1	12.8	420.57	1148.29
MARC002	111	112	268.8	4.0	4.0	5.4	14.1	1.7	131.1	0.5	105.0	104.0	29.9	17.9	2.0	0.6	52.1	3.4	150.20	644.79
MARC002	128	129	411.6	13.2	13.2	3.0	21.0	5.2	199.4	1.5	273.0	132.5	42.3	24.6	4.0	2.1	148.1	12.1	390.53	1044.83
MARC002	129	130	609.5	16.8	16.8	4.3	28.6	6.3	312.0	2.0	461.0	180.4	60.1	32.0	5.0	2.7	204.8	15.7	659.46	1510.47
MARC002	130	131	262.6	5.5	5.5	2.4	9.1	2.1	136.4	0.9	224.0	74.4	25.8	12.5	1.7	0.9	66.2	6.5	320.43	616.53
MARC002	131	132	53.3	2.7	2.7	1.3	5.0	0.9	24.9	0.4	20.0	26.2	6.8	5.3	0.9	0.3	31.6	2.2	28.61	167.12
MARC002	132	133	239.8	14.1	14.1	2.4	19.0	5.3	116.1	1.6	149.0	87.2	26.5	20.5	4.0	2.2	164.6	11.4	213.14	738.65
MARC002	133	134	493.4	8.9	8.9	3.1	14.3	3.3	295.1	1.3	204.0	128.7	45.3	18.8	2.6	1.4	118.5	8.7	291.82	1158.33
MARC002	134	135	127.1	3.2	3.2	1.9	5.5	1.3	68.5	0.6	100.0	39.8	12.8	7.4	1.0	0.5	38.0	3.9	143.05	316.91
MARC002	135	136	1662.6	94.5	94.5	8.1	107.7	33.1	869.0	14.1	1899.0	522.4	167.2	111.9	22.0	16.0	989.0	99.8	2716.52	4864.38
MARC002	136	137	792.4	34.1	34.1	4.3	41.4	11.9	429.4	5.2	639.0	235.4	77.7	42.9	8.4	5.7	377.0	37.9	914.09	2158.55
MARC002	137	138	359.8	24.5	24.5	2.5	27.5	8.6	170.5	3.5	500.0	131.8	40.1	21.0	5.4	3.9	172.2	28.4	715.25	1035.01
MARC002	138	139	146.8	7.1	7.1	1.4	10.7	2.7	63.7	1.0	92.0	53.3	15.8	23.1	1.9	1.1	228.2	7.3	131.61	576.83
MARC002	139	140	46.2	1.7	1.7	1.2	4.0	0.8	19.4	0.2	15.0	20.6	5.1	11.6	0.5	0.2	89.0	1.5	21.46	205.74
MARC002	140	141	35.0	1.9	1.9	1.2	3.8	0.8	16.1	0.3	13.0	19.9	4.8	11.9	0.7	0.3	91.7	1.8	18.60	194.44
MARC002	141	142	135.9	7.5	7.5	1.9	12.6	3.2	57.8	0.8	77.0	60.4	16.1	12.5	2.2	1.1	98.4	6.7	110.15	431.10
MARC003	20	21	53.8	0.7	0.7	0.8	2.1	0.3	28.7	0.1	11.0	16.4	5.4	19.0	0.2	0.2	198.9	0.8	15.74	329.01
MARC003	21	22	50.0	3.2	3.2	1.5	4.7	1.1	24.3	0.5	31.0	21.3	6.0	4.9	0.8	0.5	11.4	3.3	44.35	139.31
MARC003	22	23	171.2	8.5	8.5	2.4	12.7	3.0	90.0	1.0	60.0	64.2	19.2	12.5	1.9	1.4	4.6	7.9	85.83	413.10
MARC003	23	24	226.4	16.9	16.9	1.7	17.8	5.8	119.5	2.5	150.0	85.1	25.8	17.2	3.5	2.7	178.7	18.9	214.58	746.48
MARC003	24	25	1515.2	138.2	138.2	7.5	119.1	44.7	780.1	23.2	1197.0	485.7	152.9	112.1	26.5	23.8	1434.0	158.7	1712.31	5206.64
MARC003	25	26	715.1	36.8	36.8	3.5	46.1	13.1	342.7	5.2	468.0	231.5	73.1	49.1	9.3	6.2	454.8	36.6	669.47	2083.84
MARC003	26	27	735.3	31.1	31.1	3.9	43.7	11.7	341.8	3.2	474.0	239.7	75.4	51.7	8.9	4.7	365.4	25.1	678.06	1995.28

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC003	27	28	2768.9	173.5	173.5	13.0	199.1	62.4	1483.6	22.0	2703.0	908.3	282.4	197.0	43.1	27.4	1757.8	167.5	3866.64	8396.91
MARC003	28	29	2213.9	236.1	236.1	10.3	173.8	75.6	1192.4	43.8	2495.0	692.3	217.5	153.3	40.8	43.2	2171.0	299.0	3569.10	7861.91
MARC003	29	30	2821.1	250.3	250.3	14.0	217.5	81.0	1573.4	42.2	2799.0	905.0	283.1	201.8	48.2	44.2	2386.5	285.4	4003.97	9494.81
MARC003	30	31	233.2	21.3	21.3	3.5	24.1	7.8	114.6	2.7	131.0	81.1	25.7	19.5	5.6	3.3	272.6	18.4	187.40	868.84
MARC003	31	32	273.3	14.6	14.6	2.0	20.2	5.5	141.0	1.7	173.0	94.7	30.2	20.8	4.0	2.3	167.2	14.6	247.48	817.38
MARC003	52	53	85.5	2.6	2.6	1.2	4.4	0.9	45.6	0.4	38.0	27.9	9.0	5.5	0.8	0.3	31.4	2.5	54.36	222.43
MARC003	53	54	145.9	5.7	5.7	1.5	9.0	2.2	71.8	0.7	115.0	49.2	14.9	10.2	1.6	0.9	67.9	5.1	164.51	397.03
MARC003	54	55	483.9	28.4	28.4	2.5	31.1	9.5	229.9	4.6	727.0	159.9	50.6	33.2	6.0	4.9	316.5	33.1	1039.97	1433.98
MARC003	55	56	57.2	2.3	2.3	0.9	3.3	0.6	28.9	0.3	21.0	18.7	6.1	4.1	0.5	0.3	24.4	2.2	30.04	153.35
MARC003	56	57	676.4	32.9	32.9	3.7	44.1	12.4	334.0	3.4	488.0	212.6	67.1	46.0	8.9	5.3	346.0	27.1	698.08	1875.38
MARC003	57	58	2524.7	157.2	157.2	12.5	185.3	56.6	1307.8	18.0	1983.0	829.4	260.6	188.6	39.0	24.4	1603.6	138.9	2836.68	7608.43
MARC003	58	59	92.6	3.9	3.9	1.0	5.5	1.5	49.7	0.5	60.0	31.0	9.3	5.8	1.1	0.6	46.6	3.2	85.83	258.80
MARC003	59	60	46.4	1.1	1.1	1.0	2.0	0.5	27.0	0.2	14.0	14.0	4.5	2.2	0.4	0.2	14.3	1.5	20.03	117.49
MARC003	60	61	47.4	1.4	1.4	0.9	2.0	0.6	27.8	0.3	24.0	14.7	4.6	2.4	0.4	0.3	17.8	1.7	34.33	124.67
MARC003	61	62	119.0	2.3	2.3	2.5	7.0	0.9	63.7	0.3	77.0	44.4	13.2	8.3	1.1	0.3	31.2	2.0	110.15	301.54
MARC003	62	63	77.1	1.5	1.5	2.0	4.5	0.7	39.3	0.2	40.0	28.5	8.1	4.9	0.6	0.2	18.2	1.3	57.22	190.16
MARC003	63	64	205.9	10.4	10.4	2.2	16.3	4.0	103.0	1.4	212.0	70.5	22.0	15.4	3.0	1.7	127.5	10.0	303.27	612.17
MARC003	64	65	63.0	1.6	1.6	1.2	3.0	0.6	34.4	0.2	13.0	22.0	6.8	3.8	0.5	0.2	20.3	1.7	18.60	162.65
MARC003	65	66	122.2	9.8	9.8	2.3	13.3	3.7	60.4	1.0	65.0	49.6	13.5	11.7	2.6	1.4	111.6	7.2	92.98	427.34
MARC003	66	67	677.1	38.5	38.5	4.2	49.3	14.1	340.9	4.2	479.0	215.7	66.9	48.6	9.9	5.8	395.2	33.7	685.21	1970.74
MARC003	67	68	136.6	7.7	7.7	2.1	10.4	2.6	67.9	1.1	142.0	48.2	14.6	10.3	2.0	1.1	81.5	7.4	203.13	405.39
MARC003	68	69	1042.4	98.7	98.7	4.3	63.9	28.2	563.5	21.1	1759.0	313.5	103.0	61.3	14.7	18.7	977.1	132.8	2516.25	3552.73
MARC003	69	70	161.8	7.3	7.3	1.7	9.8	2.4	86.8	1.3	144.0	54.2	16.5	11.7	1.8	1.1	81.1	8.7	205.99	457.95
MARC003	70	71	53.7	2.9	2.9	1.3	4.5	0.9	27.6	0.5	33.0	21.6	6.2	5.1	0.8	0.6	33.8	3.2	47.21	166.88
MARC003	71	72	175.4	5.6	5.6	2.0	9.3	2.1	90.7	0.9	94.0	58.6	18.7	11.5	1.8	0.9	69.1	5.8	134.47	462.70
MARC004	28	29	123.6	2.6	2.6	3.1	7.0	1.1	65.8	0.2	74.0	48.1	13.6	9.6	1.1	0.3	32.9	2.4	105.86	317.30
MARC004	29	30	58.3	1.0	1.0	1.5	2.9	0.5	33.2	0.2	25.0	20.1	6.1	3.4	0.4	0.2	14.1	1.0	35.76	145.33
MARC004	30	31	236.7	10.3	10.3	2.5	16.5	3.9	123.7	1.3	244.0	79.4	24.5	15.9	3.0	1.7	131.4	9.6	349.04	679.13
MARC004	31	32	61.3	2.1	2.1	1.2	3.2	0.7	32.7	0.3	13.0	21.9	6.6	3.9	0.6	0.3	21.7	1.9	18.60	161.36
MARC004	32	33	90.2	6.2	6.2	2.1	9.9	2.3	44.2	0.7	39.0	37.2	10.0	9.5	2.0	1.0	75.1	5.5	55.79	307.53
MARC004	33	34	361.5	22.1	22.1	3.2	28.4	7.9	197.3	2.5	246.0	126.6	38.3	28.6	5.8	3.2	236.7	19.0	351.90	1119.10
MARC004	34	35	315.8	13.0	13.0	2.9	24.3	5.3	139.3	1.5	212.0	123.9	35.7	27.4	4.4	1.9	178.3	11.3	303.27	909.96
MARC004	35	36	1254.7	72.8	72.8	7.1	90.6	26.1	658.5	8.8	998.0	409.5	128.7	91.3	18.3	11.2	781.2	65.6	1427.64	3744.83
MARC004	36	37	2024.0	124.5	124.5	10.4	143.4	44.0	1090.9	14.2	1510.0	641.4	206.8	144.0	30.3	19.0	1331.4	109.3	2160.06	6131.00
MARC004	37	38	1960.5	114.1	114.1	10.0	141.0	43.3	1011.8	13.3	1419.0	638.4	193.3	132.7	29.0	17.6	1222.7	103.3	2029.88	5829.16
MARC004	38	39	1522.1	72.3	72.3	7.8	99.1	26.8	819.3	8.2	1044.0	494.6	154.6	103.0	19.8	10.8	855.2	64.2	1493.44	4384.48
MARC004	39	40	4182.3	226.5	226.5	19.5	292.5	85.0	2278.5	25.0	2709.0	1348.8	436.9	287.0	58.9	34.4	2403.2	200.2	3875.22	12268.70
MARC004	40	41	1541.5	90.5	90.5	7.4	98.5	30.5	825.1	11.6	1045.0	470.2	151.6	103.8	21.3	14.5	931.5	83.2	1494.87	4520.06
MARC004	41	42	425.0	19.0	19.0	2.7	28.7	7.0	208.8	2.3	261.0	147.9	45.0	30.0	5.3	3.0	237.9	17.0	373.36	1212.86
MARC004	42	43	349.5	16.0	16.0	2.0	23.7	5.8	177.0	1.9	263.0	122.5	37.3	25.9	4.6	2.5	189.2	14.7	376.22	1000.31
MARC004	43	44	1264.5	99.7	99.7	5.8	93.5	33.7	663.6	15.6	1023.0	399.7	126.0	90.9	20.2	17.4	995.9	108.2	1463.40	4079.34
MARC004	44	45	96.7	4.2	4.2	1.2	7.3	1.8	50.4	0.6	52.0	33.7	10.2	7.2	1.3	0.7	48.9	4.6	74.39	276.12
MARC004	45	46	91.1	3.5	3.5	1.2	5.3	1.4	47.6	0.4	56.0	30.4	9.8	6.0	1.0	0.6	41.1	3.4	80.11	249.12
MARC004	70	71	104.2	4.3	4.3	1.4	6.6	1.6	53.9	0.7	88.0	35.2	10.9	6.8	1.1	0.7	51.0	4.6	125.88	290.36
MARC004	71	72	510.6	24.4	24.4	2.9	33.3	9.0	250.5	2.6	325.0	168.1	53.3	36.1	6.9	3.7	266.9	20.4	464.91	1431.10
MARC004	72	73	1426.7	77.5	77.5	6.5	94.5	27.7	834.4	8.2	1223.0	453.0	145.4	96.8	20.1	11.9	820.9	65.5	1749.50	4216.67
MARC004	73	74	148.0	4.6	4.6	1.4	6.6	1.6	86.9	0.8	123.0	42.5	14.1	7.7	1.3	0.8	55.7	5.2	175.95	384.34
MARC004	98	99	258.1	6.3	6.3	3.2	9.9	2.3	143.6	1.2	217.0	70.0	24.6	12.1	1.8	1.1	73.4	7.7	310.42	626.89
MARC004	99	100	226.4	7.3	7.3	3.0	11.4	2.6	121.2	1.3	216.0	71.0	22.8	12.3	1.9	1.3	79.5	7.6	308.99	581.60
MARC004	100	101	287.0	28.6	28.6	3.6	38.5	10.4	123.4	3.9	459.0	119.0	33.6	33.9	7.7	4.5	319.0	26.4	656.60	1089.30
MARC004	101	102	144.3	2.1	2.1	1.5	5.1	0.8	77.2	0.4	40.0	46.7	14.3	6.4	0.7	0.3	26.7	2.3	57.22	332.70
MARC004	102	103	220.5	3.3	3.3	2.2	6.6	1.1	127.6	0.8	127.0	60.8	21.1	8.9	0.9	0.7	41.1	4.7	181.67	505.80
MARC004	103	104	834.3	57.5	57.5	4.1	48.6	17.9	428.3	11.0	1358.0	252.1	82.5	50.6	10.1	10.5	580.6	71.1	1942.62	2533.07
MARC004	104	105	1004.0	80.3	80.3	5.1	56.5	24.1	556.7	15.2	1509.0	287.4	94.0	55.9	12.8	14.5	827.3	102.6	2158.62	3233.61

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC004	105	106	106.7	7.5	7.5	2.7	9.9	2.5	51.1	1.1	87.0	42.9	12.1	10.4	1.9	1.1	80.4	7.5	124.45	349.78
MARC004	106	107	168.3	5.1	5.1	2.7	10.1	1.8	94.2	0.6	34.0	60.2	17.9	11.7	1.6	0.8	63.6	4.9	48.64	453.16
MARC004	107	108	133.6	6.7	6.7	3.2	12.7	2.5	59.3	0.8	52.0	58.0	15.5	13.0	2.2	1.0	80.4	5.6	74.39	407.11
MARC004	108	109	186.6	15.2	15.2	4.1	23.6	6.1	85.6	1.9	155.0	79.5	21.6	20.6	4.6	2.5	185.5	15.0	221.73	681.71
MARC004	109	110	142.9	7.9	7.9	3.0	15.3	3.0	66.4	1.0	64.0	60.7	16.8	14.7	2.6	1.1	99.2	7.7	91.55	457.38
MARC004	110	111	121.5	8.9	8.9	3.2	14.6	3.4	51.0	1.0	66.0	57.0	15.2	14.5	2.7	1.1	104.8	7.3	94.41	423.28
MARC004	111	112	99.6	6.7	6.7	3.2	13.5	2.7	40.6	0.9	32.0	50.6	13.1	12.8	2.3	1.1	88.1	6.3	45.78	355.50
MARC004	112	113	238.4	14.1	14.1	3.1	21.2	5.4	108.4	1.8	152.0	97.2	26.8	21.1	4.1	1.9	157.8	13.0	217.44	740.14
MARC004	113	114	415.2	35.0	35.0	3.8	28.8	10.7	209.0	6.3	619.0	142.0	44.1	30.7	6.3	6.3	333.6	40.3	885.48	1357.34
MARC004	114	115	916.4	66.1	66.1	4.6	55.0	20.5	465.4	12.1	1254.0	276.3	88.7	56.4	12.0	11.6	644.9	81.0	1793.85	2794.39
MARC004	115	116	155.0	16.4	16.4	2.8	19.8	5.8	64.6	2.1	137.0	68.7	19.5	17.5	4.0	2.5	180.3	15.7	195.98	600.40
MARC004	132	133	600.1	31.7	31.7	2.2	33.8	10.0	288.7	6.3	1113.0	179.6	58.5	35.9	6.5	5.6	346.8	40.3	1592.15	1691.56
MARC004	133	134	990.1	57.7	57.7	3.5	42.9	17.9	485.7	12.8	2842.0	268.3	92.8	45.3	9.1	11.2	630.1	83.0	4065.48	2817.91
MARC004	134	135	215.1	8.5	8.5	2.1	11.6	3.2	112.8	1.0	202.0	67.5	21.5	12.8	2.4	1.4	106.9	8.2	288.96	589.47
MARC004	135	136	558.7	34.2	34.2	3.2	43.6	12.5	257.4	3.6	441.0	197.5	59.3	42.8	8.8	5.1	423.3	29.9	630.85	1737.75
MARC004	136	137	262.8	11.9	11.9	2.2	19.8	4.6	124.1	1.2	135.0	100.7	28.9	21.2	3.7	1.8	153.0	10.1	193.12	768.77
MARC004	137	138	263.0	11.8	11.8	1.7	15.1	4.1	130.5	2.0	438.0	91.3	28.4	16.9	2.7	1.9	140.1	13.1	626.56	741.11
MARC004	138	139	622.8	23.7	23.7	2.5	30.7	8.5	297.7	3.7	1215.0	191.6	62.4	35.7	5.7	4.0	284.2	25.7	1738.06	1637.04
MARC004	139	140	240.5	13.6	13.6	2.1	22.1	5.3	112.7	1.2	172.0	90.5	26.3	22.1	4.3	1.9	177.8	10.2	246.05	756.84
MARC004	140	141	252.9	12.9	12.9	2.1	19.0	4.8	135.9	1.3	127.0	86.5	26.7	19.2	3.6	1.9	158.0	11.3	181.67	760.00
MARC005	8	9	1423.5	75.9	75.9	7.2	100.3	26.7	795.9	7.6	1133.0	497.8	152.9	103.1	19.2	10.8	744.2	59.0	1620.76	4145.76
MARC005	9	10	254.8	13.5	13.5	1.9	20.2	4.9	143.7	1.4	160.0	100.9	31.6	20.8	3.5	2.1	173.2	10.2	228.88	804.16
MARC005	10	11	1709.2	75.0	75.0	7.6	99.4	26.5	840.0	8.3	1038.0	503.9	156.9	107.1	18.8	11.3	708.6	65.4	1484.86	4460.37
MARC005	11	12	819.8	45.6	45.6	4.6	59.9	16.8	386.6	4.9	467.0	271.0	83.2	60.4	11.4	7.2	461.1	39.3	668.04	2348.58
MARC005	12	13	3235.2	170.8	170.8	14.7	223.4	60.7	1582.9	18.0	2082.0	1064.7	331.1	229.7	42.2	25.4	1724.7	140.9	2978.30	9146.53
MARC005	13	14	921.2	48.5	48.5	4.4	58.0	16.6	404.5	5.1	549.0	294.5	91.0	64.6	11.4	7.4	511.0	39.9	785.34	2554.07
MARC005	14	15	5427.7	335.3	335.3	23.2	381.4	118.4	2715.5	35.6	3154.0	1726.3	555.4	374.7	76.3	50.5	2962.4	281.1	4511.80	15588.42
MARC005	15	16	1708.7	118.7	118.7	8.8	134.2	42.2	847.6	11.6	1062.0	583.4	179.0	130.9	26.5	16.8	1275.1	92.2	1519.19	5364.46
MARC005	16	17	1257.9	85.4	85.4	6.6	99.2	31.0	626.9	8.4	810.0	430.2	130.1	95.7	19.9	12.7	911.0	67.9	1158.71	3921.01
MARC005	17	18	3057.4	185.4	185.4	13.9	220.3	66.7	1564.4	19.3	2064.0	1000.8	307.0	220.6	44.2	27.3	1819.3	154.4	2952.55	9000.42
MARC005	18	19	1778.7	93.5	93.5	8.1	118.8	33.1	887.9	9.7	1171.0	583.7	178.9	126.6	22.5	13.6	992.3	76.4	1675.12	5078.29
MARC005	19	20	5476.3	315.5	315.5	23.6	380.7	109.7	2841.8	35.0	3614.0	1736.7	542.3	378.6	74.7	47.9	2890.4	274.9	5169.83	15633.19
MARC005	20	21	4734.7	324.6	324.6	21.7	342.4	111.5	2476.6	36.6	3149.0	1524.8	474.8	335.9	70.7	49.7	3004.8	284.7	4504.64	14291.63
MARC005	21	22	5273.0	354.1	354.1	23.3	379.7	122.7	2786.2	40.1	3459.0	1647.7	515.1	361.0	76.7	53.5	3209.3	307.4	4948.10	15691.07
MARC005	22	23	4202.8	268.6	268.6	19.2	312.9	94.0	2105.2	29.1	2780.0	1381.8	424.2	309.4	62.1	40.5	2421.8	228.8	3976.79	12324.21
MARC005	23	24	373.9	22.0	22.0	2.4	27.1	8.0	185.7	3.0	442.0	126.4	39.0	27.3	5.4	3.1	201.9	18.9	632.28	1080.44
MARC005	44	45	98.0	7.7	7.7	2.1	10.7	2.9	46.1	1.2	61.0	38.8	10.9	10.0	1.8	1.3	76.8	6.6	87.26	327.27
MARC005	45	46	133.8	7.3	7.3	2.1	11.2	2.7	63.6	1.0	70.0	52.6	15.1	12.6	2.1	1.0	77.3	6.6	100.14	402.76
MARC005	46	47	1007.0	54.3	54.3	5.3	74.2	20.4	488.7	5.5	695.0	328.9	102.8	72.7	13.6	7.9	533.9	42.7	994.20	2851.66
MARC005	47	48	1163.0	61.7	61.7	5.8	78.0	21.9	554.9	6.3	729.0	371.0	115.3	81.4	15.0	9.1	581.1	50.8	1042.83	3216.34
MARC005	48	49	1395.2	76.3	76.3	5.8	90.1	26.6	720.8	9.0	1910.0	420.8	134.5	85.9	17.5	12.1	681.2	66.6	2732.26	3861.36
MARC005	49	50	308.8	14.8	14.8	2.2	21.7	5.4	151.8	1.8	207.0	105.7	33.1	20.6	3.9	2.4	150.5	13.4	296.11	861.89
MARC005	50	51	168.9	8.2	8.2	1.4	8.8	2.7	83.6	1.1	141.0	55.4	17.4	11.2	1.8	1.3	76.6	7.3	201.70	458.59
MARC005	51	52	307.6	10.5	10.5	3.0	17.5	3.8	137.6	1.4	195.0	116.5	34.6	21.1	3.0	1.5	106.4	9.0	278.95	791.08
MARC005	52	53	450.7	10.5	10.5	4.3	22.4	4.0	196.6	1.4	198.0	164.8	50.6	29.0	3.4	1.4	106.4	8.7	283.24	1074.86
MARC005	53	54	640.9	40.0	40.0	5.2	34.9	11.7	285.2	7.9	813.0	218.1	68.9	42.0	6.7	6.9	354.8	49.1	1163.00	1820.79
MARC005	54	55	116.9	8.6	8.6	2.0	9.3	2.9	54.7	1.7	141.0	45.0	13.1	10.3	1.7	1.5	87.4	9.8	201.70	376.50
MARC005	55	56	98.6	3.1	3.1	1.0	4.6	1.0	48.8	0.5	35.0	34.3	10.5	5.7	0.7	0.5	32.8	2.8	50.07	249.43
MARC005	76	77	108.0	2.6	2.6	1.9	6.1	1.1	51.0	0.4	36.0	39.7	11.4	7.5	0.9	0.5	33.5	2.3	51.50	271.95
MARC005	77	78	719.0	45.2	45.2	3.0	41.4	14.5	331.4	8.2	1026.0	220.1	69.8	42.8	8.2	7.8	422.7	50.6	1467.69	2041.57
MARC005	78	79	1116.1	96.4	96.4	3.7	58.8	28.0	522.5	19.9	2999.0	316.8	104.4	57.9	13.0	18.2	824.5	129.0	4290.07	3411.19
MARC005	79	80	220.9	5.7	5.7	3.0	12.9	2.2	105.9	0.8	93.0	84.6	23.9	16.8	2.0	0.9	70.0	5.1	133.04	565.29
MARC006	24	25	386.9	11.3	11.3	2.3	19.2	4.2	167.1	1.4	210.0	131.1	41.1	26.2	3.4	1.8	135.8	9.7	300.41	961.81
MARC006	25	26	471.2	20.9	20.9	3.2	30.3	7.1	219.0	2.6	277.0	157.8	48.9	32.6	5.2	3.3	218.9	17.4	396.25	1273.32

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC006	26	27	132.9	3.4	3.4	1.5	6.6	1.4	64.2	0.5	94.0	43.5	13.7	8.2	1.1	0.6	41.9	3.0	134.47	328.96
MARC006	27	28	432.9	19.9	19.9	2.9	27.9	7.2	207.1	2.6	259.0	144.6	44.4	29.3	5.3	3.1	203.7	17.2	370.50	1182.09
MARC006	28	29	539.3	24.8	24.8	3.2	35.7	9.0	258.5	2.6	340.0	182.4	56.5	38.8	6.1	3.7	226.2	20.2	486.37	1448.78
MARC006	29	30	2002.5	83.6	83.6	11.1	121.6	29.9	893.9	9.2	1141.0	656.6	199.1	136.5	22.1	12.9	932.0	72.3	1632.20	5325.65
MARC006	30	31	351.2	13.0	13.0	5.4	26.2	4.8	167.5	1.5	180.0	138.3	40.7	29.8	4.4	1.9	154.8	11.0	257.49	976.11
MARC006	31	32	271.4	5.4	5.4	5.3	17.1	2.3	122.0	0.8	51.0	112.8	31.6	21.8	2.2	0.8	64.3	4.2	72.96	673.05
MARC006	56	57	244.1	6.6	6.6	1.9	11.9	2.5	123.0	0.9	121.0	79.3	24.9	15.2	2.2	1.0	73.7	5.9	173.09	606.09
MARC006	57	58	93.2	4.3	4.3	1.7	6.9	1.4	47.6	0.7	31.0	30.1	9.2	5.2	1.0	0.7	44.3	3.6	44.35	257.25
MARC006	58	59	60.2	4.1	4.1	1.4	4.7	1.4	28.5	0.6	50.0	20.9	6.2	5.1	0.9	0.6	39.4	3.3	71.53	184.12
MARC006	59	60	2793.5	154.0	154.0	11.8	197.9	55.4	1355.6	15.6	2327.0	902.1	279.8	192.7	38.6	22.3	1537.3	122.1	3328.77	7934.26
MARC006	60	61	1419.8	95.5	95.5	6.4	98.5	32.3	710.5	11.6	1462.0	451.5	139.4	97.6	20.5	14.2	885.1	84.1	2091.39	4206.23
MARC006	61	62	912.7	50.5	50.5	4.7	64.2	18.4	418.5	5.4	494.0	296.0	90.3	64.9	12.4	7.5	484.8	43.0	706.67	2556.70
MARC006	62	63	585.8	20.9	20.9	3.0	31.7	7.8	278.5	2.6	345.0	196.5	61.0	36.8	5.6	3.2	215.1	17.5	493.52	1501.86
MARC006	63	64	215.3	6.7	6.7	1.5	9.7	2.3	105.4	0.9	100.0	72.7	22.9	12.6	1.8	1.0	62.7	5.6	143.05	531.74
MARC006	88	89	143.2	4.5	4.5	2.1	8.9	1.6	69.3	0.8	37.0	52.8	15.3	10.1	1.4	0.7	49.7	4.8	52.93	373.24
MARC006	89	90	137.9	5.6	5.6	1.4	7.8	2.1	67.4	0.9	52.0	47.5	14.6	10.1	1.5	0.9	59.2	5.9	74.39	372.56
MARC006	90	91	1170.8	91.6	91.6	5.1	79.8	28.6	528.9	15.9	1254.0	380.4	117.2	82.7	15.9	16.1	927.5	106.4	1793.85	3683.29
MARC006	91	92	661.4	51.1	51.1	3.6	42.3	15.6	330.1	9.8	926.0	210.8	66.5	44.9	8.9	9.1	476.1	58.6	1324.64	2054.20
MARC007	4	5	1619.3	110.9	110.9	7.3	99.1	35.6	647.2	15.9	1195.0	440.8	134.7	100.2	21.1	18.5	1032.7	111.8	1709.45	4548.94
MARC007	5	6	1265.9	60.9	60.9	6.1	69.0	20.6	515.4	8.1	1142.0	364.3	112.6	75.6	13.6	9.5	532.0	59.6	1633.63	3205.99
MARC007	6	7	905.8	48.5	48.5	5.3	61.5	16.4	405.1	5.2	519.0	291.1	88.4	64.9	11.5	7.1	436.3	39.5	742.43	2465.64
MARC007	7	8	195.7	9.4	9.4	1.9	13.9	3.9	89.4	1.6	124.0	66.6	20.3	14.1	2.6	1.5	114.2	8.7	177.38	560.65
MARC007	52	53	64.9	3.9	3.9	1.7	6.7	1.4	27.8	0.6	35.0	30.4	7.6	6.5	1.1	0.7	42.0	3.8	50.07	206.14
MARC007	53	54	1902.1	73.5	73.5	9.8	132.3	28.0	841.0	7.5	1357.0	738.4	214.4	157.6	22.2	10.6	766.5	58.2	1941.19	5101.02
MARC007	54	55	3329.6	262.0	262.0	15.7	260.7	89.8	1701.6	31.0	2468.0	1066.3	328.4	244.6	54.9	40.1	2272.7	232.2	3530.47	10322.00
MARC007	55	56	421.5	24.9	24.9	3.8	36.2	8.9	196.3	2.8	313.0	170.9	46.4	39.5	6.5	3.4	259.3	20.5	447.75	1281.89
MARC007	56	57	2527.3	153.1	153.1	11.3	177.2	55.3	1489.1	16.4	1282.0	858.7	254.3	182.3	36.9	22.3	1494.9	126.1	1833.90	7646.44
MARC007	57	58	2163.2	127.7	127.7	10.0	150.5	46.3	1250.6	12.8	1207.0	733.5	214.2	156.3	30.8	18.4	1221.1	102.5	1726.61	6442.68
MARC007	58	59	2856.5	144.9	144.9	10.0	145.8	48.0	1856.5	19.3	1690.0	829.9	262.7	149.4	30.2	22.8	1358.2	142.8	2417.55	8083.12
MARC007	59	60	1566.0	78.9	78.9	6.5	93.1	27.6	912.3	8.8	892.0	512.2	152.1	98.1	18.9	11.2	743.3	65.8	1276.01	4420.71
MARC007	60	61	291.5	19.3	19.3	2.3	22.6	6.8	172.9	2.3	182.0	110.6	32.6	24.2	4.6	3.0	192.4	16.1	260.35	931.45
MARC007	61	62	452.5	18.6	18.6	2.9	28.8	6.9	263.5	2.0	215.0	151.0	46.3	30.5	5.2	2.5	184.1	15.1	307.56	1243.61
MARC007	62	63	957.0	121.0	121.0	4.6	73.0	34.8	502.0	21.6	690.0	306.2	91.6	65.6	17.0	21.0	1062.7	137.8	987.05	3549.10
MARC007	63	64	1194.4	18.6	18.6	4.6	31.7	6.8	654.5	2.4	185.0	327.9	108.5	46.5	5.3	2.6	195.3	15.9	264.64	2646.12
MARC007	88	89	41.9	3.4	3.4	1.2	5.6	1.1	19.4	0.5	17.0	22.6	5.5	5.0	0.8	0.6	37.0	3.4	24.32	153.51
MARC007	89	90	1027.3	91.0	91.0	4.6	66.9	27.1	526.6	15.7	963.0	334.6	97.9	66.3	15.2	15.5	819.8	105.2	1377.57	3321.74
MARC007	90	91	1093.5	59.6	59.6	4.4	54.1	19.6	733.5	9.0	449.0	299.8	97.0	54.3	12.0	9.8	520.9	59.4	642.29	3107.23
MARC007	91	92	119.8	7.0	7.0	1.5	10.0	2.5	57.6	1.1	63.0	50.4	13.8	11.4	2.2	1.1	81.0	6.7	90.12	378.76
MARC008	20	21	130.8	4.2	4.2	1.5	6.5	1.5	68.3	0.5	84.0	48.9	13.9	9.0	1.2	0.6	49.7	3.6	120.16	347.69
MARC008	21	22	1315.9	55.6	55.6	5.9	68.0	18.9	643.4	6.8	2158.0	426.8	127.9	78.3	12.8	8.2	519.0	50.6	3087.02	3425.03
MARC008	22	23	334.4	16.0	16.0	2.2	22.1	5.7	167.1	2.0	257.0	125.0	36.1	26.8	4.4	2.3	162.0	13.7	367.64	945.73
MARC008	23	24	838.4	37.8	37.8	4.2	52.3	13.9	410.5	4.9	851.0	288.6	84.7	57.2	9.8	5.7	404.8	34.0	1217.36	2308.45
MARC008	24	25	221.7	4.8	4.8	1.3	9.6	1.9	120.7	0.7	105.0	75.0	22.9	13.0	1.4	0.8	64.1	4.6	150.20	552.18
MARC008	25	26	151.5	4.0	4.0	1.4	7.1	1.4	88.7	0.5	54.0	52.1	15.6	9.0	1.1	0.5	48.4	3.4	77.25	391.29
MARC008	26	27	634.0	27.1	27.1	3.5	36.7	9.7	318.4	3.6	926.0	224.1	66.6	43.1	7.2	4.3	286.1	24.9	1324.64	1732.92
MARC008	27	28	610.0	32.0	32.0	3.6	42.6	11.6	315.7	3.8	620.0	224.5	65.9	47.2	8.2	4.8	335.3	28.8	886.91	1788.91
MARC008	28	29	2390.5	122.5	122.5	9.8	143.5	43.0	1282.6	14.8	3592.0	777.6	234.1	152.0	28.4	18.7	1272.6	111.9	5138.36	6790.80
MARC008	29	30	2576.6	140.4	140.4	10.7	155.1	47.5	1387.3	17.1	3538.0	838.2	254.6	162.3	31.6	20.9	1350.4	122.4	5061.11	7326.29
MARC008	30	31	1309.4	76.7	76.7	5.3	77.9	25.4	678.8	10.2	1628.0	419.4	126.5	78.0	16.3	11.5	663.1	73.1	2328.85	3679.84
MARC008	31	32	239.2	9.1	9.1	2.2	14.1	3.3	125.0	1.3	164.0	87.1	25.1	16.7	2.5	1.3	98.8	8.3	234.60	648.58
MARC008	32	33	379.5	18.1	18.1	2.3	22.8	5.4	210.4	2.6	245.0	140.7	40.2	27.3	3.8	2.6	162.5	18.3	350.47	1061.91
MARC008	33	34	1628.5	60.0	60.0	6.4	81.0	20.2	802.4	9.6	3116.0	520.6	160.1	94.7	14.8	10.3	654.0	66.8	4457.44	4221.62
MARC008	34	35	387.9	15.4	15.4	2.5	21.9	5.2	200.3	2.5	324.0	141.5	41.1	25.2	3.6	2.6	157.3	16.7	463.48	1046.84
MARC008	35	36	148.4	7.4	7.4	1.6	10.4	2.5	72.4	1.0	125.0	58.9	16.9	11.7	1.8	1.0	69.3	6.6	178.81	421.18

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC008	44	45	128.0	5.1	5.1	1.9	6.8	1.8	66.4	0.7	75.0	46.4	13.7	8.9	1.2	0.6	53.6	4.7	107.29	347.86
MARC008	45	46	67.7	3.2	3.2	1.0	5.5	1.1	32.7	0.4	45.0	27.6	7.5	6.1	1.0	0.5	38.6	3.1	64.37	202.04
MARC008	46	47	479.0	24.8	24.8	2.5	20.7	7.6	252.6	5.3	1476.0	140.4	45.5	22.6	4.1	4.2	234.7	32.7	2111.42	1307.49
MARC008	47	48	658.1	31.4	31.4	4.9	37.3	11.0	370.7	4.0	425.0	213.3	64.8	38.5	7.5	4.5	313.3	28.7	607.96	1836.74
MARC008	48	49	160.2	7.4	7.4	2.0	12.6	2.5	74.2	1.0	125.0	67.0	17.6	13.9	2.0	0.9	81.0	6.6	178.81	460.80
MARC008	49	50	469.0	28.9	28.9	4.5	33.5	10.2	239.4	3.9	275.0	170.4	49.9	35.5	6.9	4.3	298.0	26.4	393.39	1424.96
MARC008	50	51	152.3	6.6	6.6	1.7	11.3	2.4	72.4	0.9	143.0	60.9	17.1	13.1	1.7	0.9	79.0	5.2	204.56	437.44
MARC008	51	52	109.3	5.9	5.9	2.4	11.9	2.3	49.0	0.8	61.0	53.1	13.6	11.9	1.7	0.9	71.7	5.8	87.26	351.59
MARC008	52	53	1367.9	79.9	79.9	7.5	99.6	28.0	650.6	11.4	1122.0	466.6	138.0	98.0	20.9	13.1	840.4	85.2	1605.02	4040.10
MARC008	53	54	948.1	43.3	43.3	4.9	62.0	16.0	462.6	4.8	607.0	327.9	95.7	66.2	12.0	6.2	451.8	37.3	868.31	2612.63
MARC008	54	55	1713.0	128.2	128.2	8.7	117.8	41.8	893.9	16.6	1825.0	578.8	171.6	120.9	25.3	20.0	1206.3	124.2	2610.66	5344.82
MARC008	55	56	836.3	34.2	34.2	4.2	43.8	12.0	409.9	4.4	852.0	269.0	80.5	50.4	8.4	5.3	346.6	32.5	1218.79	2192.86
MARC008	56	57	505.1	16.1	16.1	2.7	26.7	5.7	248.2	2.0	845.0	188.4	54.6	34.3	4.8	2.3	177.4	15.4	1208.77	1312.45
MARC008	57	58	936.9	49.3	49.3	5.1	59.8	17.0	449.3	5.1	925.0	317.8	94.2	64.9	11.8	7.1	533.0	38.5	1323.21	2667.92
MARC008	58	59	61.5	2.9	2.9	0.9	5.1	1.0	30.5	0.3	37.0	26.1	6.8	5.3	0.7	0.3	32.3	2.7	52.93	181.54
MARC008	59	60	172.7	5.1	5.1	1.6	8.0	1.7	86.1	1.2	85.0	65.0	18.6	11.7	1.3	0.6	55.0	5.1	121.59	442.00
MARC008	72	73	339.2	16.4	16.4	2.3	20.9	5.4	180.4	2.1	156.0	122.8	36.0	24.1	3.8	2.2	191.8	14.8	223.16	987.06
MARC008	73	74	1059.7	58.8	58.8	4.9	66.9	20.8	515.3	9.4	1218.0	349.8	104.3	72.9	13.8	9.8	596.3	62.7	1742.35	3035.04
MARC008	74	75	554.9	36.8	36.8	3.6	42.0	12.9	280.3	5.5	429.0	208.8	59.9	43.5	8.8	5.7	364.7	35.9	613.68	1721.41
MARC008	75	76	1229.1	85.8	85.8	5.1	73.8	26.7	616.7	16.7	2517.0	394.2	120.2	78.5	15.6	15.0	839.1	105.6	3600.57	3730.89
MARC008	76	77	997.2	82.1	82.1	3.6	47.9	22.5	464.5	19.8	4044.0	287.4	91.8	48.6	11.0	15.2	717.1	119.3	5784.94	3012.19
MARC008	77	78	982.4	59.7	59.7	4.4	62.5	19.8	487.3	9.8	1500.0	332.0	97.8	67.4	12.6	9.7	560.3	64.3	2145.75	2855.34
MARC008	78	79	482.9	17.4	17.4	3.9	26.5	6.4	263.5	2.6	346.0	177.6	52.3	32.7	5.0	2.6	191.1	16.2	494.95	1309.88
MARC008	79	80	235.1	9.7	9.7	2.2	15.9	3.6	123.1	1.2	164.0	86.9	25.1	16.7	2.8	1.5	111.1	8.4	234.60	660.45
MARC008	88	89	1755.9	74.9	74.9	8.5	95.7	25.2	885.9	11.4	2727.0	594.4	177.6	113.2	18.0	12.2	782.0	78.9	3900.97	4747.53
MARC008	89	90	1228.5	49.9	49.9	5.3	65.8	17.1	558.1	7.6	1732.0	395.5	122.2	78.5	12.2	7.9	550.4	51.2	2477.63	3228.89
MARC008	90	91	59.3	2.4	2.4	0.8	3.1	0.8	30.7	0.4	58.0	22.7	6.3	4.3	0.6	0.2	25.5	2.2	82.97	163.03
MARC008	91	92	77.1	3.0	3.0	2.0	3.8	1.4	41.3	1.0	22.0	32.5	9.2	6.0	1.2	0.9	23.6	2.7	31.47	209.74
MARC009	21	22	613.7	29.8	29.8	3.1	39.0	10.1	281.9	3.0	376.0	210.3	62.5	42.7	7.4	4.2	298.2	23.5	537.87	1677.92
MARC009	22	23	1836.2	77.0	77.0	8.8	120.4	26.5	767.8	7.0	1219.0	684.0	198.3	138.1	21.7	10.2	835.0	57.4	1743.78	4920.46
MARC009	23	24	91.0	2.7	2.7	0.8	4.3	1.0	41.2	0.3	39.0	32.5	9.6	5.9	0.7	0.3	32.0	2.3	55.79	229.29
MARC009	52	53	159.7	5.0	5.0	1.7	7.4	1.6	77.3	0.6	46.0	52.3	15.9	9.3	1.2	0.7	58.4	4.4	65.80	403.41
MARC009	53	54	529.8	21.4	21.4	4.6	27.0	6.9	262.1	2.6	234.0	174.0	52.3	31.3	5.0	3.1	221.6	18.6	334.74	1392.48
MARC009	54	55	3941.9	216.1	216.1	16.8	247.7	71.1	1831.2	24.9	3307.0	1293.0	386.3	266.5	49.6	31.1	1973.9	187.3	4730.66	10871.91
MARC009	55	56	327.0	11.0	11.0	2.9	13.1	3.6	173.5	1.5	262.0	97.3	31.3	16.0	2.4	1.7	111.2	10.5	374.79	819.88
MARC010	36	37	108.8	7.4	7.4	2.2	11.4	2.4	41.6	0.9	77.0	52.4	13.1	12.5	1.9	1.0	78.7	6.5	110.15	353.64
MARC010	37	38	56.5	3.8	3.8	2.0	6.3	1.4	22.8	0.4	17.0	29.5	7.1	6.6	1.0	0.5	37.6	3.2	24.32	185.31
MARC010	38	39	335.4	23.8	23.8	2.7	27.9	7.7	153.2	3.8	288.0	132.0	37.5	28.3	5.4	3.5	235.9	23.0	411.98	1055.62
MARC010	39	40	1395.7	106.5	106.5	5.3	74.6	28.5	587.3	23.0	3305.0	464.6	142.1	85.1	15.7	18.6	941.2	140.4	4727.80	4144.21
MARC010	40	41	310.9	11.8	11.8	2.1	18.9	4.1	136.3	1.4	223.0	121.1	33.6	23.0	3.3	1.7	124.3	10.5	319.00	824.17
MARC010	41	42	213.0	8.5	8.5	1.7	12.1	2.9	92.4	1.0	159.0	79.4	22.6	15.8	2.1	1.1	87.1	7.3	227.45	560.59
MARC010	42	43	224.9	10.3	10.3	1.6	13.5	3.4	107.9	1.2	133.0	83.9	24.4	15.4	2.5	1.5	96.1	8.7	190.26	611.47
MARC010	43	44	553.3	26.3	26.3	3.2	32.7	8.7	259.2	2.9	402.0	195.4	58.1	37.5	6.4	3.7	257.4	22.7	575.06	1509.71
MARC010	44	45	164.2	8.1	8.1	1.9	12.6	2.9	70.0	0.9	108.0	67.1	18.5	14.1	2.4	1.1	80.9	7.3	154.49	466.64
MARC010	45	46	191.1	6.2	6.2	1.7	9.5	1.9	92.1	0.8	82.0	66.5	20.0	11.5	1.6	0.8	59.3	5.4	117.30	479.00
MARC010	46	47	71.4	2.7	2.7	1.0	4.3	0.8	34.4	0.3	33.0	28.5	7.9	5.0	0.7	0.3	27.9	2.5	47.21	192.42
MARC010	47	48	281.8	11.1	11.1	1.7	16.8	3.9	126.2	1.2	376.0	106.6	30.9	20.1	3.0	1.6	118.6	9.6	537.87	751.79
MARC010	48	49	502.7	19.6	19.6	2.7	28.9	6.5	221.9	2.8	609.0	191.9	55.4	37.2	6.7	3.0	208.0	19.6	871.17	1338.90
MARC010	49	50	749.0	43.9	43.9	3.8	46.1	13.6	331.7	7.1	1041.0	267.9	79.4	51.6	8.8	7.0	433.7	47.5	1489.15	2152.04
MARC010	50	51	405.6	18.6	18.6	2.5	25.9	6.0	185.8	2.3	366.0	155.8	44.7	29.7	4.6	2.7	182.4	16.7	523.56	1113.50
MARC010	51	52	317.8	13.0	13.0	2.1	18.2	4.2	144.6	1.7	243.0	119.0	34.5	21.8	3.3	1.9	127.8	12.3	347.61	843.30
MARC010	64	65	99.4	4.3	4.3	1.2	5.9	1.5	47.7	0.5	69.0	36.0	10.5	7.0	1.0	0.6	44.4	3.6	98.70	270.82
MARC010	65	66	82.5	2.7	2.7	1.2	4.1	1.0	38.8	0.4	46.0	31.0	8.7	5.6	0.8	0.3	31.0	2.4	65.80	215.34
MARC010	66	67	1689.4	77.3	77.3	6.8	91.1	24.9	751.6	10.5	3869.0	570.3	174.9	106.0	17.6	11.4	792.2	72.3	5534.60	4513.26

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC010	67	68	3237.3	157.8	157.8	12.0	172.0	49.8	1444.5	21.5	7243.0	1040.4	317.8	194.3	33.7	23.6	1560.3	151.2	10361.11	8644.80
MARC010	104	105	54.0	5.1	5.1	1.9	0.1	1.7	25.2	0.7	66.0	24.6	6.3	6.3	1.2	0.7	49.0	4.4	94.41	189.28
MARC010	105	106	162.8	8.6	8.6	2.2	11.9	3.0	75.1	1.1	114.0	60.4	17.5	12.5	2.2	1.3	86.6	8.0	163.08	466.90
MARC010	106	107	228.9	7.1	7.1	2.1	9.7	2.3	103.1	1.2	375.0	78.7	23.6	12.8	1.7	1.1	70.9	7.6	536.44	561.74
MARC010	107	108	725.0	25.0	25.0	2.5	21.6	6.9	318.8	5.9	2229.0	215.0	69.2	31.3	4.0	4.5	232.3	34.6	3188.58	1725.17
MARC010	108	109	460.5	34.0	34.0	2.5	30.3	10.0	205.9	6.1	687.0	170.5	49.8	33.4	6.0	5.7	315.8	39.6	982.75	1412.95
MARC010	109	110	162.5	6.5	6.5	1.2	8.6	2.1	78.8	0.9	118.0	57.4	16.7	10.3	1.5	0.9	61.3	6.5	168.80	425.00
MARC010	110	111	779.4	31.2	31.2	3.6	39.1	10.2	379.0	3.9	576.0	249.3	76.0	45.8	7.2	4.6	308.3	28.4	823.97	2014.18
MARC010	111	112	123.6	3.5	3.5	1.4	5.9	1.3	64.7	0.5	44.0	42.1	12.8	7.3	1.0	0.6	38.9	3.6	62.94	313.49
MARC010	112	113	313.2	16.9	16.9	3.6	18.7	5.3	145.3	2.5	229.0	117.5	34.4	22.5	3.6	2.5	162.5	17.0	327.58	889.46
MARC010	113	114	458.3	22.4	22.4	3.9	23.3	6.8	224.7	3.5	343.0	142.8	43.7	26.4	4.4	3.4	217.2	23.1	490.66	1235.24
MARC010	114	115	268.9	12.8	12.8	2.5	13.9	4.1	125.7	2.0	195.0	87.4	25.9	16.2	2.7	2.1	127.6	13.4	278.95	724.06
MARC010	115	116	855.1	36.4	36.4	8.6	39.9	11.2	460.8	5.7	844.0	253.5	80.9	46.5	7.4	5.7	373.5	37.9	1207.34	2273.95
MARC010	116	117	158.3	8.0	8.0	1.6	9.6	2.5	77.1	1.3	104.0	58.4	16.8	11.1	1.7	1.3	83.2	8.0	148.77	451.15
MARC010	117	118	357.3	27.3	27.3	3.4	33.1	9.3	172.8	3.1	271.0	146.7	39.6	33.6	6.8	3.9	298.2	23.5	387.67	1203.36
MARC010	118	119	1345.8	79.4	79.4	6.0	85.2	24.3	691.8	12.4	1195.0	475.5	138.8	90.8	16.2	12.4	742.3	83.8	1709.45	3913.20
MARC010	119	120	442.7	55.2	55.2	2.5	33.5	14.5	214.7	10.8	480.0	166.4	47.7	33.5	7.5	9.5	495.3	68.1	686.64	1660.30
MARC010	120	121	1586.5	90.0	90.0	8.6	108.0	28.2	721.3	13.3	1877.0	583.3	168.3	121.1	20.6	13.9	949.9	93.4	2685.05	4641.35
MARC010	121	122	849.8	71.8	71.8	5.4	73.2	22.6	366.0	10.6	582.0	343.4	96.4	78.4	14.9	11.3	724.2	76.0	832.55	2844.84
MARC010	122	123	871.7	78.7	78.7	5.7	76.4	23.9	392.5	11.4	683.0	347.8	97.9	80.7	15.7	12.3	777.1	81.6	977.03	2983.29
MARC010	123	124	753.1	63.7	63.7	5.1	68.0	19.1	339.2	9.9	442.0	309.9	85.8	71.1	13.2	10.4	635.3	69.3	632.28	2541.16
MARC010	124	125	3220.3	146.5	146.5	17.6	232.9	53.7	1457.3	15.1	1330.0	1175.3	333.1	252.3	44.5	19.3	1628.0	114.4	1902.57	8986.57
MARC010	125	126	1303.1	75.2	75.2	6.7	91.2	24.6	617.0	9.6	1972.0	474.1	139.5	97.5	17.8	11.1	736.2	68.8	2820.95	3791.92
MARC010	126	127	736.2	33.8	33.8	3.5	45.3	11.5	345.5	4.4	1532.0	274.8	80.8	54.0	8.5	4.9	329.8	31.3	2191.53	2019.97
MARC010	127	128	467.7	24.8	24.8	2.7	30.2	8.0	209.0	3.0	875.0	180.2	50.9	35.4	5.7	3.5	231.4	21.9	1251.69	1313.38
MARC010	128	129	96.1	5.0	5.0	1.5	6.6	1.6	43.4	0.7	157.0	39.8	10.9	7.8	1.2	0.7	49.4	4.4	224.59	276.96
MARC010	129	130	160.6	7.2	7.2	1.7	10.0	2.4	79.9	0.8	111.0	62.3	17.7	12.1	1.9	0.9	78.4	6.0	158.79	454.03
MARC011	8	9	83.3	4.9	4.9	1.5	7.8	1.6	40.1	0.6	26.0	41.5	10.7	8.9	1.3	0.6	54.2	4.1	37.19	269.46
MARC011	9	10	180.9	8.6	8.6	1.5	13.4	3.1	85.0	0.9	104.0	77.7	21.0	15.5	2.4	1.1	92.2	6.8	148.77	525.20
MARC011	10	11	101.6	5.0	5.0	1.3	8.4	1.7	48.0	0.5	47.0	47.0	12.7	9.9	1.4	0.7	54.2	4.1	67.23	305.22
MARC011	11	12	1440.4	76.6	76.6	4.3	54.1	20.4	680.8	17.7	5555.0	443.8	142.2	68.6	10.9	13.7	652.6	105.0	7946.43	3812.20
MARC011	12	13	1619.2	87.7	87.7	7.2	99.1	28.6	809.1	10.8	1606.0	569.6	165.8	110.2	19.9	12.8	788.5	78.9	2297.38	4542.85
MARC011	13	14	112.2	9.6	9.6	2.4	13.6	3.3	52.8	1.2	77.0	56.9	14.5	13.8	2.3	1.4	99.9	8.3	110.15	408.15
MARC011	14	15	154.2	7.1	7.1	1.7	12.2	2.5	68.7	0.8	96.0	67.5	17.8	13.6	2.1	0.9	78.1	6.1	137.33	446.39
MARC011	15	16	97.3	7.1	7.1	2.3	12.0	2.4	43.5	0.8	46.0	50.7	12.5	12.2	2.0	0.9	72.6	6.0	65.80	334.76
MARC011	16	17	719.5	49.7	49.7	2.8	31.7	13.1	342.2	11.0	2754.0	231.5	73.3	38.4	6.7	8.9	435.2	67.0	3939.60	2081.65
MARC011	17	18	305.3	22.6	22.6	2.3	19.9	6.4	152.2	4.1	702.0	115.1	33.3	20.6	3.9	3.7	193.0	26.5	1004.21	936.64
MARC011	18	19	97.0	6.6	6.6	2.3	10.6	2.3	42.5	0.8	41.0	48.5	12.0	10.7	1.7	0.9	64.0	5.5	58.65	316.80
MARC011	19	20	81.7	3.7	3.7	1.5	6.2	1.3	39.4	0.5	25.0	37.3	9.7	7.2	1.0	0.5	37.3	3.0	35.76	236.43
MARC011	48	49	57.2	3.4	3.4	1.3	5.5	1.3	25.3	0.4	15.0	30.2	7.2	6.5	0.9	0.5	36.7	3.0	21.46	184.96
MARC011	49	50	53.2	4.3	4.3	1.5	6.1	1.5	23.2	0.6	14.0	31.0	7.2	6.8	1.0	0.6	49.0	3.8	20.03	197.26
MARC011	50	51	100.1	11.3	11.3	1.6	14.9	3.9	36.1	1.1	97.0	47.6	11.8	13.9	3.0	1.5	115.3	8.8	138.76	390.79
MARC011	51	52	126.4	18.5	18.5	2.0	23.2	6.5	49.5	1.6	132.0	63.0	15.9	19.4	5.0	2.4	206.2	13.7	188.83	586.70
MARC011	60	61	59.5	4.1	4.1	1.4	6.7	1.5	23.8	0.5	35.0	32.5	7.8	7.4	1.1	0.6	43.0	3.5	50.07	200.78
MARC011	61	62	49.6	3.3	3.3	1.4	5.6	1.1	19.6	0.5	19.0	28.7	6.7	6.3	0.9	0.5	33.4	3.2	27.18	166.38
MARC011	62	63	107.5	5.8	5.8	1.6	9.3	1.9	46.7	0.7	49.0	50.4	12.8	10.6	1.6	0.8	61.0	5.0	70.09	325.51
MARC011	63	64	50.7	3.7	3.7	1.6	6.6	1.3	20.3	0.6	10.0	29.9	6.9	7.1	1.0	0.5	38.5	3.4	14.31	178.30
MARC012	4	5	234.6	11.9	11.9	2.4	16.5	3.9	116.9	1.5	116.0	93.4	26.0	18.7	2.8	1.7	115.7	10.8	165.94	675.84
MARC012	5	6	85.7	5.9	5.9	1.9	8.9	1.9	40.9	0.8	31.0	42.8	10.9	9.4	1.4	0.9	60.1	5.7	44.35	286.68
MARC012	6	7	87.1	6.3	6.3	2.0	9.9	2.1	41.3	0.8	42.0	44.7	11.1	9.9	1.6	0.9	63.4	5.7	60.08	296.77
MARC012	7	8	445.9	31.9	31.9	3.4	29.6	9.3	234.6	5.5	460.0	164.6	48.4	31.3	5.9	5.1	275.6	36.2	658.03	1368.18
MARC012	8	9	403.4	19.3	19.3	2.8	19.8	5.7	209.0	3.4	527.0	131.8	40.2	22.8	3.7	3.1	173.5	22.0	753.87	1085.95
MARC012	9	10	136.4	6.7	6.7	2.0	10.1	2.2	69.4	1.0	87.0	54.8	15.3	11.1	1.7	1.0	67.8	6.6	124.45	397.15
MARC012	10	11	462.9	26.9	26.9	3.1	30.3	8.6	215.0	3.9	394.0	168.2	48.3	32.8	5.8	4.1	241.0	27.3	563.62	1317.23

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC012	11	12	1152.5	83.7	83.7	4.2	54.1	22.1	566.6	18.4	3218.0	373.0	114.9	61.9	11.6	14.6	703.1	112.0	4603.35	3378.39
MARC012	12	13	1261.2	106.1	106.1	3.2	47.5	25.8	638.7	27.0	5637.0	370.3	123.1	53.3	11.0	20.1	832.0	157.0	8063.73	3769.12
MARC012	13	14	1625.2	99.3	99.3	4.6	64.3	26.3	775.9	23.7	5688.0	487.7	156.0	75.5	13.6	18.2	808.5	141.2	8136.68	4420.51
MARC012	14	15	94.3	5.7	5.7	1.5	7.8	1.7	50.5	0.8	103.0	39.5	11.1	8.1	1.4	0.8	56.4	5.2	147.34	293.61
MARC012	15	16	411.1	14.4	14.4	2.5	21.8	5.2	205.5	1.7	280.0	144.8	42.8	25.6	3.9	1.9	160.1	12.6	400.54	1078.45
MARC012	32	33	771.1	85.3	85.3	4.9	64.8	23.9	392.2	14.2	649.0	287.6	82.6	60.8	13.9	13.9	761.2	94.5	928.39	2770.07
MARC012	33	34	527.0	24.9	24.9	3.4	37.3	8.9	246.3	2.2	298.0	194.2	54.5	40.4	7.0	3.2	270.9	18.6	426.29	1483.48
MARC012	34	35	246.3	12.8	12.8	2.2	17.4	4.2	120.7	1.7	160.0	94.2	26.7	19.9	3.2	1.9	128.5	12.2	228.88	712.96
MARC012	35	36	126.8	8.2	8.2	2.0	15.0	3.1	59.0	0.8	28.0	66.6	16.6	15.7	2.6	1.0	92.7	5.8	40.05	431.26
MARC012	60	61	198.0	15.2	15.2	1.9	18.3	5.0	95.9	1.8	199.0	80.2	22.1	18.1	3.6	2.1	151.5	13.1	284.67	651.18
MARC012	61	62	312.6	15.7	15.7	2.1	23.9	5.4	151.9	1.7	284.0	124.2	34.9	25.9	4.3	2.1	175.5	12.4	406.26	920.01
MARC012	62	63	554.7	32.6	32.6	3.8	42.4	10.8	266.8	4.1	563.0	214.6	60.6	45.5	7.9	4.7	325.0	29.4	805.37	1653.51
MARC012	63	64	544.7	25.7	25.7	3.4	37.6	8.9	263.8	2.7	342.0	199.5	58.7	40.5	6.8	3.4	272.3	20.6	489.23	1531.83
MARC012	64	65	1286.7	123.2	123.2	5.7	85.4	34.4	638.9	24.9	2472.0	447.5	132.7	87.3	18.3	21.5	1086.3	155.9	3536.20	4286.69
MARC012	65	66	1371.0	114.0	114.0	5.8	85.3	31.5	697.9	22.9	1752.0	476.4	143.3	89.5	18.2	20.0	993.7	144.5	2506.24	4343.97
MARC012	66	67	2376.1	98.3	98.3	5.8	79.4	25.8	1167.9	23.3	2774.0	725.2	232.1	108.3	14.1	18.0	863.4	141.3	3968.21	5980.09
MARC012	67	68	240.2	15.2	15.2	2.2	19.0	4.8	117.4	1.9	238.0	96.2	26.8	19.9	3.5	2.2	144.9	13.4	340.46	730.49
MARC012	68	69	206.9	12.9	12.9	2.2	16.8	4.1	90.8	1.9	131.0	92.0	24.4	19.1	3.0	1.9	134.2	13.0	187.40	642.91
MARC012	69	70	709.0	44.0	44.0	4.2	52.9	14.3	329.8	5.6	773.0	284.8	79.3	57.4	10.0	6.3	425.9	40.2	1105.78	2130.93
MARC012	70	71	49.8	4.9	4.9	1.0	6.6	1.6	19.1	0.6	35.0	26.9	6.5	6.3	1.1	0.7	46.5	4.4	50.07	183.54
MARC012	71	72	103.1	7.2	7.2	1.9	10.7	2.4	46.0	0.9	62.0	49.2	12.5	11.0	1.9	1.0	73.4	6.4	88.69	339.34
MARC013	16	17	40.3	1.6	1.6	1.0	2.4	0.5	24.5	0.2	5.0	16.4	4.6	2.7	0.4	0.2	17.1	1.3	7.15	115.80
MARC013	17	18	60.1	2.9	2.9	0.9	4.0	1.0	33.9	0.3	27.0	25.3	6.9	4.8	0.7	0.3	32.1	2.3	38.62	180.26
MARC013	18	19	1196.6	92.5	92.5	7.5	103.4	30.7	631.9	10.2	1138.0	459.6	131.4	101.2	21.1	13.1	838.3	78.7	1627.91	3859.07
MARC013	19	20	145.2	5.6	5.6	1.6	8.1	1.9	78.6	0.6	57.0	52.1	15.3	9.3	1.3	0.7	60.2	4.3	81.54	393.70
MARC013	20	21	171.1	7.5	7.5	1.7	9.2	2.5	109.7	0.9	69.0	53.9	16.4	10.0	1.7	1.1	82.4	7.2	98.70	487.33
MARC013	21	22	454.8	22.0	22.0	3.0	28.0	7.2	250.3	2.5	281.0	157.9	46.3	29.9	5.3	3.0	218.7	19.1	401.97	1282.82
MARC013	22	23	285.2	11.9	11.9	1.9	15.8	3.9	146.1	1.4	211.0	107.3	30.9	19.6	2.8	1.6	113.3	10.6	301.84	770.69
MARC013	23	24	87.2	2.1	2.1	1.4	4.5	0.8	46.3	0.3	17.0	34.5	9.8	5.7	0.7	0.3	25.3	2.4	24.32	225.36
MARC013	64	65	59.5	2.4	2.4	1.0	3.7	0.8	32.0	0.3	31.0	23.6	6.5	4.3	0.7	0.3	24.6	2.3	44.35	165.98
MARC013	65	66	82.1	3.8	3.8	1.0	5.1	1.3	43.5	0.5	56.0	31.7	8.9	6.1	0.9	0.5	35.3	3.3	80.11	229.79
MARC013	66	67	720.5	55.5	55.5	4.4	55.4	17.3	366.3	8.8	1125.0	268.3	77.3	56.1	11.1	8.8	521.0	58.3	1609.31	2306.73
MARC013	67	68	117.6	4.8	4.8	1.4	6.3	1.6	57.2	0.7	72.0	42.7	12.3	7.5	1.1	0.7	50.7	4.6	103.00	316.86
MARC013	68	69	112.9	8.2	8.2	1.3	9.2	2.7	55.1	1.2	112.0	44.3	12.3	9.6	1.8	1.3	85.5	8.1	160.22	365.92
MARC013	69	70	681.8	27.6	27.6	3.7	37.2	9.5	336.4	3.4	1041.0	234.4	70.6	43.7	7.0	4.0	295.4	25.3	1489.15	1825.96
MARC013	70	71	185.0	8.7	8.7	1.5	10.5	3.0	91.8	1.1	237.0	67.0	19.3	12.1	2.0	1.3	90.0	8.3	339.03	515.02
MARC013	71	72	1246.2	61.3	61.3	5.6	68.9	19.6	616.7	10.1	1890.0	419.3	128.5	76.9	13.2	10.1	603.7	68.1	2703.65	3438.14
MARC013	96	97	387.7	28.2	28.2	1.5	16.5	7.7	183.0	6.2	1345.0	124.0	38.8	19.6	3.5	5.4	264.3	38.9	1924.02	1153.99
MARC013	97	98	429.1	24.2	24.2	1.6	21.9	7.1	221.0	5.1	570.0	151.7	44.5	25.7	4.2	4.2	223.2	31.1	815.39	1224.19
MARC013	98	99	238.6	42.2	42.2	1.0	14.2	10.4	110.9	11.6	785.0	79.7	24.5	14.0	3.6	8.6	361.4	68.7	1122.94	1023.45
MARC013	99	100	804.5	44.1	44.1	3.1	36.4	12.9	403.7	8.8	1217.0	267.5	81.8	46.3	7.3	7.9	406.9	56.4	1740.92	2240.40
MARC013	108	109	19086.8	46.5	46.5	131.1	330.0	22.7	14029.0	4.4	37.0	4082.5	1505.6	456.2	39.1	5.6	573.4	31.9	52.93	40504.78
MARC013	109	110	555.6	6.3	6.3	4.6	13.8	2.3	391.4	0.7	16.0	140.1	47.5	18.0	2.1	0.9	75.7	5.2	22.89	1277.01
MARC013	110	111	986.3	18.9	18.9	8.1	33.2	6.9	638.5	2.2	22.0	274.3	89.7	39.5	5.6	2.5	208.4	15.9	31.47	2364.81
MARC013	111	112	267.7	6.6	6.6	4.5	12.2	2.4	145.8	0.9	48.0	95.9	27.6	15.2	1.8	0.9	74.8	5.8	68.66	673.98
MARC013	116	117	379.2	8.7	8.7	4.9	15.0	3.2	253.4	1.2	51.0	110.5	35.5	17.2	2.6	1.3	94.7	8.1	72.96	951.82
MARC013	117	118	178.0	7.4	7.4	1.9	9.8	2.7	96.3	1.4	482.0	62.8	18.5	10.8	1.7	1.3	74.2	8.7	689.50	487.07
MARC013	118	119	282.9	5.4	5.4	1.0	10.5	1.8	124.2	1.5	1470.0	102.2	30.9	16.8	1.6	0.9	52.6	7.5	2102.84	649.63
MARC013	119	120	189.9	11.0	11.0	3.1	15.8	3.8	88.0	1.6	569.0	90.3	22.9	18.7	2.7	1.6	102.9	10.8	813.95	581.08
MARC013	128	129	231.8	12.2	12.2	2.4	16.3	4.2	118.3	1.9	160.0	96.1	26.3	18.3	2.8	1.8	125.0	12.5	228.88	688.94
MARC013	129	130	937.8	73.2	73.2	3.9	49.1	20.3	455.5	15.9	2314.0	316.4	97.4	56.5	10.3	13.5	643.3	99.4	3310.18	2871.44
MARC013	130	131	1012.0	49.2	49.2	3.1	38.4	14.2	542.8	9.9	2934.0	313.1	99.4	47.1	7.7	8.8	434.7	63.0	4197.09	2699.45
MARC013	131	132	127.5	6.9	6.9	1.7	8.4	2.3	69.9	0.9	89.0	47.7	13.4	9.5	1.6	1.0	70.1	6.1	127.31	378.31
MARC013	132	133	886.2	51.6	51.6	4.4	51.3	16.3	464.8	7.9	1064.0	306.2	90.9	56.2	10.4	8.2	490.6	54.2	1522.05	2571.76

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC013	133	134	209.0	11.8	11.8	2.3	13.1	3.9	108.1	1.7	191.0	78.0	22.4	15.0	2.5	1.9	116.3	12.3	273.23	615.54
MARC013	134	135	302.8	13.2	13.2	3.0	20.4	4.7	157.4	1.4	146.0	117.9	33.4	23.4	3.6	1.8	141.3	10.7	208.85	857.59
MARC013	135	136	371.7	17.2	17.2	2.9	21.3	5.7	198.8	2.4	382.0	133.8	39.1	24.7	3.9	2.6	170.8	16.3	546.45	1038.25
MARC014	8	9	34.0	3.8	3.8	1.2	5.4	1.4	16.2	0.5	11.0	21.0	4.7	5.6	0.9	0.6	42.9	3.2	15.74	147.55
MARC014	9	10	36.7	3.4	3.4	1.3	5.6	1.3	16.2	0.5	12.0	22.9	5.1	5.1	0.9	0.5	39.0	3.0	17.17	147.84
MARC014	10	11	31.0	3.2	3.2	1.2	5.3	1.1	15.1	0.4	5.0	19.7	4.5	4.9	0.7	0.5	34.7	2.7	7.15	130.27
MARC014	11	12	2392.8	131.6	131.6	7.9	105.1	40.9	1256.7	17.4	1729.0	740.3	229.5	118.7	22.4	20.7	1160.7	129.5	2473.33	6543.22
MARC015	24	25	144.2	7.7	7.7	1.3	9.8	2.7	75.9	0.8	101.0	56.6	16.0	11.2	1.8	1.0	76.2	6.1	144.48	424.31
MARC015	25	26	243.6	10.4	10.4	1.6	13.0	3.6	129.7	1.3	178.0	86.7	25.8	14.7	2.4	1.5	100.2	9.3	254.63	660.71
MARC015	26	27	3731.8	275.4	275.4	20.4	303.1	106.5	1853.6	20.4	3808.0	1392.2	392.8	305.8	67.5	34.4	3203.1	176.6	5447.34	12376.83
MARC015	27	28	8370.1	597.5	597.5	42.4	648.8	208.5	4536.9	63.0	6021.0	2934.2	841.8	629.9	137.9	86.6	5224.1	500.6	8613.04	25793.02
MARC015	28	29	5151.2	384.3	384.3	26.4	398.3	131.6	2847.9	40.3	3593.0	1815.6	526.9	389.6	85.2	56.2	3234.6	322.5	5139.79	16013.27
MARC015	29	30	5938.0	462.4	462.4	29.1	457.9	159.0	3328.1	45.8	3939.0	2034.2	591.7	430.9	100.6	65.8	3861.9	372.9	5634.74	18595.84
MARC015	30	31	1906.6	121.3	121.3	9.0	130.2	42.5	1031.6	12.0	1508.0	651.2	192.1	132.1	27.2	17.2	1118.3	96.1	2157.19	5681.29
MARC015	31	32	132.1	8.8	8.8	1.5	10.5	3.1	70.1	0.9	90.0	51.0	14.4	10.7	2.0	1.3	85.8	6.7	128.75	412.79
MARC015	60	61	98.8	3.0	3.0	1.0	5.1	1.1	54.8	0.4	30.0	35.3	10.3	6.1	0.8	0.5	33.3	2.6	42.92	258.57
MARC015	61	62	64.6	2.4	2.4	0.8	3.7	0.8	35.9	0.3	26.0	24.4	7.0	4.3	0.6	0.3	25.3	2.0	37.19	176.37
MARC015	62	63	158.3	13.8	13.8	1.3	10.3	4.1	80.2	2.6	166.0	62.2	17.6	12.2	2.2	2.4	129.0	16.9	237.46	529.99
MARC015	63	64	525.5	51.3	51.3	3.2	40.5	15.9	284.1	7.7	548.0	192.5	55.5	39.4	8.8	8.2	430.2	53.5	783.91	1782.67
MARC015	84	85	87.8	5.4	5.4	1.7	8.2	1.9	42.5	0.7	44.0	41.3	10.5	9.3	1.5	0.8	56.3	4.9	62.94	282.39
MARC015	85	86	149.6	6.4	6.4	1.3	8.2	2.2	82.1	0.8	86.0	54.1	15.9	9.7	1.5	1.0	63.0	5.6	123.02	412.32
MARC015	86	87	89.2	7.1	7.1	1.2	7.1	2.3	49.3	0.9	67.0	34.6	9.6	7.4	1.5	1.0	67.8	6.3	95.84	295.88
MARC015	87	88	1952.5	170.3	170.3	8.7	133.9	52.9	1105.8	26.2	3714.0	667.6	198.6	128.8	29.7	27.4	1392.8	180.6	5312.88	6297.77
MARC015	88	89	1216.4	81.8	81.8	13.3	193.1	34.3	603.4	6.3	248.0	630.8	152.7	174.3	31.5	10.3	1317.5	53.3	354.76	4703.47
MARC015	89	90	80.0	4.9	4.9	1.3	7.7	1.8	39.5	0.7	33.0	35.8	9.2	7.9	1.3	0.7	58.2	4.2	47.21	262.36
MARC015	90	91	319.0	14.0	14.0	2.9	19.5	4.9	173.1	1.9	164.0	126.4	35.9	24.0	3.5	2.2	148.1	13.0	234.60	911.49
MARC015	91	92	83.9	4.0	4.0	1.3	5.6	1.5	51.6	0.5	38.0	35.8	9.9	6.3	0.9	0.6	49.4	3.3	54.36	261.26
MARC016	16	17	1310.1	102.1	102.1	7.8	107.2	35.1	754.2	10.7	872.0	476.0	138.3	101.9	22.5	14.7	852.7	85.4	1247.40	4179.67
MARC016	17	18	1414.5	103.9	103.9	8.2	110.3	35.6	791.1	11.0	916.0	512.0	148.4	106.3	23.3	15.0	855.7	87.0	1310.34	4386.98
MARC016	18	19	953.0	79.1	79.1	5.7	76.8	26.8	531.2	9.6	662.0	348.1	100.3	74.2	16.5	12.1	638.9	73.1	946.99	3064.15
MARC016	19	20	2740.3	178.8	178.8	12.5	185.9	59.8	1229.3	21.9	1681.0	885.6	264.0	185.7	39.0	26.8	1545.6	167.6	2404.67	7812.41
MARC016	20	21	946.0	44.8	44.8	6.3	69.5	16.4	369.5	4.8	577.0	350.5	99.7	75.3	12.6	6.4	492.5	37.5	825.40	2610.07
MARC016	21	22	4377.4	281.4	281.4	20.1	304.5	96.2	1983.4	27.9	3050.0	1454.9	428.0	300.8	64.2	40.0	2522.3	231.5	4363.03	12572.67
MARC016	22	23	7339.1	521.6	521.6	33.9	532.4	174.1	3483.7	53.9	4678.0	2399.5	709.4	516.3	113.7	74.4	4566.4	438.7	6691.88	21750.23
MARC016	23	24	1793.8	124.3	124.3	8.5	129.2	41.8	824.6	13.1	1406.0	583.3	176.0	123.3	27.4	18.0	1064.2	105.8	2011.28	5222.69
MARC016	24	25	135.2	8.0	8.0	1.5	8.8	2.7	66.8	0.9	60.0	48.8	14.1	9.2	1.7	1.1	73.4	6.8	85.83	390.80
MARC016	25	26	84.1	8.3	8.3	2.3	11.3	3.1	37.3	1.0	41.0	41.2	10.3	9.7	2.3	1.1	85.8	6.9	58.65	319.40
MARC016	26	27	127.6	9.0	9.0	2.8	13.9	3.4	60.5	1.1	72.0	62.1	16.1	13.8	2.6	1.3	93.0	7.7	103.00	430.66
MARC016	27	28	55.0	1.5	1.5	0.9	2.1	0.6	29.3	0.3	18.0	16.9	5.2	2.8	0.3	0.2	16.6	1.4	25.75	135.88
MARC016	68	69	821.3	46.4	46.4	4.5	59.5	16.8	414.9	4.2	688.0	311.8	88.7	62.9	12.1	6.5	442.2	35.4	984.18	2408.01
MARC016	69	70	2378.1	162.0	162.0	11.6	171.0	54.6	1225.9	19.1	1909.0	832.8	240.7	173.7	34.9	24.3	1455.3	146.7	2730.82	7174.06
MARC016	70	71	707.1	37.0	37.0	4.3	49.2	13.3	363.7	3.5	514.0	265.9	76.7	52.6	9.4	5.1	351.9	28.9	735.28	2030.89
MARC016	71	72	289.4	14.2	14.2	2.2	19.2	5.0	153.1	1.5	177.0	106.4	30.9	20.9	3.6	1.9	136.8	10.9	253.20	819.67
MARC017	0	1	773.0	65.0	65.0	2.9	37.8	15.1	233.3	18.0	346.0	209.4	66.7	40.9	8.0	13.1	513.7	105.6	494.95	2156.73
MARC017	1	2	702.6	65.0	65.0	2.2	37.0	16.8	271.4	12.7	1805.0	162.2	55.3	28.5	9.0	10.9	546.2	80.5	2582.05	2068.60
MARC017	2	3	651.3	41.7	41.7	1.7	27.7	11.9	196.8	7.1	561.0	127.6	39.7	23.1	7.0	6.7	359.1	45.4	802.51	1593.88
MARC017	3	4	1003.7	34.2	34.2	2.2	31.4	10.5	212.3	5.1	629.0	154.0	44.8	29.5	7.4	5.2	322.6	35.1	899.78	1943.69
MARC017	4	5	1955.4	97.3	97.3	8.5	123.7	31.8	813.0	10.3	1751.0	665.5	199.6	132.4	23.3	13.5	876.1	76.1	2504.81	5185.74
MARC017	5	6	356.0	15.8	15.8	5.6	43.7	5.6	325.7	1.6	196.0	262.0	74.7	49.6	6.2	1.9	163.2	11.2	280.38	1355.08
MARC017	6	7	112.4	6.2	6.2	2.5	16.8	2.3	106.1	0.7	37.0	91.7	24.3	16.9	2.5	0.9	70.7	4.7	52.93	471.93
MARC017	7	8	75.7	4.2	4.2	1.6	8.5	1.6	49.4	0.6	23.0	46.1	11.8	9.2	1.3	0.6	48.9	3.8	32.90	271.16
MARC017	8	12	88.0	5.7	5.7	1.4	8.5	1.8	40.8	0.7	70.0	40.9	11.6	9.0	1.3	0.9	51.9	5.4	100.14	277.54
MARC017	12	16	143.2	6.5	6.5	1.7	11.1	2.4	64.9	1.0	86.0	57.6	16.9	12.2	1.7	1.0	63.4	6.3	123.02	401.47
MARC017	16	20	77.1	4.7	4.7	1.7	7.7	1.7	34.9	0.6	38.0	34.5	9.2	7.7	1.2	0.7	44.7	3.8	54.36	238.20

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC017	20	24	158.0	6.3	6.3	2.2	11.3	2.3	68.3	0.9	63.0	67.8	18.1	13.5	1.9	0.9	59.1	5.2	90.12	427.14
MARC017	24	28	75.8	2.6	2.6	1.5	5.9	1.0	31.4	0.4	30.0	31.1	8.4	6.8	0.9	0.4	27.7	2.6	42.92	201.91
MARC017	28	32	298.0	11.8	11.8	2.2	19.0	3.9	137.8	1.4	200.0	107.0	33.4	20.9	3.1	1.6	110.9	9.7	286.10	780.63
MARC017	32	36	124.3	4.5	4.5	1.9	8.4	1.6	58.3	0.7	73.0	47.9	13.4	9.2	1.2	0.7	48.1	4.1	104.43	332.41
MARC017	36	40	205.0	9.7	9.7	2.2	14.6	3.0	92.3	1.4	202.0	82.7	23.8	16.8	2.3	1.5	90.9	8.8	288.96	570.28
MARC017	40	44	215.7	9.6	9.6	2.2	15.4	3.2	95.9	1.3	140.0	86.7	24.0	16.6	2.4	1.4	87.8	8.7	200.27	587.04
MARC017	44	48	184.3	7.1	7.1	1.9	10.1	2.3	81.3	1.2	105.0	62.9	18.9	12.4	1.6	1.1	67.6	7.1	150.20	470.81
MARC017	48	52	71.7	3.8	3.8	1.4	6.3	1.1	30.4	0.6	43.0	32.4	8.9	6.6	0.9	0.5	32.9	3.4	61.51	207.45
MARC017	52	56	158.1	6.3	6.3	2.7	10.4	2.1	71.8	0.8	34.0	63.8	18.1	11.5	1.6	0.8	55.5	4.8	48.64	418.76
MARC017	56	60	577.1	6.1	6.1	3.9	13.5	2.1	315.5	0.8	42.0	166.9	57.0	20.3	1.9	0.9	57.0	5.1	60.08	1239.16
MARC017	60	61	95.0	5.0	5.0	2.2	8.4	1.6	40.7	0.8	32.0	46.3	11.9	9.4	1.4	0.8	45.8	4.1	45.78	281.52
MARC017	61	62	107.1	3.8	3.8	1.6	6.0	1.1	49.5	0.5	133.0	39.2	11.7	7.4	1.0	0.5	30.5	3.3	190.26	268.81
MARC017	62	63	81.0	4.7	4.7	1.3	5.4	1.4	34.9	0.9	642.0	30.2	9.6	6.0	1.1	0.8	39.9	5.7	918.38	229.74
MARC017	63	64	90.2	4.6	4.6	1.4	5.4	1.4	34.1	0.9	646.0	29.6	8.4	5.8	0.9	0.7	38.4	5.0	924.10	233.26
MARC017	64	65	89.1	5.1	5.1	1.4	5.9	1.5	37.5	0.9	609.0	33.1	9.9	5.9	1.1	0.7	42.0	5.7	871.17	247.22
MARC017	65	66	90.5	5.1	5.1	1.3	6.2	1.7	38.6	0.9	900.0	33.7	10.6	6.5	1.1	0.8	44.7	5.4	1287.45	255.26
MARC017	66	67	71.9	3.9	3.9	1.4	4.3	1.3	31.8	0.8	708.0	25.5	8.1	4.6	0.8	0.7	31.5	4.6	1012.79	196.92
MARC017	67	68	151.3	6.1	6.1	1.9	7.8	1.9	71.0	1.1	828.0	52.6	16.3	9.5	1.3	0.9	50.5	6.1	1184.45	388.20
MARC017	68	69	444.1	5.7	5.7	2.7	11.5	1.9	252.4	1.0	372.0	124.5	42.8	16.2	1.7	0.9	57.1	5.7	532.15	978.21
MARC017	69	70	174.7	2.9	2.9	1.5	5.8	0.9	93.4	0.4	34.0	57.9	18.4	8.7	0.9	0.4	26.8	2.5	48.64	400.11
MARC017	70	71	66.8	5.3	5.3	2.2	7.5	1.7	28.9	0.8	26.0	34.2	8.4	7.1	1.3	0.8	48.6	5.0	37.19	227.23
MARC017	71	72	53.7	5.3	5.3	2.2	8.9	1.8	19.5	0.7	18.0	29.9	6.6	7.2	1.4	0.8	49.1	4.4	25.75	200.36
MARC017	72	75	75.8	3.1	3.1	1.5	6.2	1.1	35.5	0.4	44.0	33.6	9.1	6.8	0.9	0.5	31.0	2.8	62.94	214.28
MARC018	0	4	300.5	16.1	16.1	2.3	18.8	4.8	141.6	2.9	288.0	110.2	32.2	20.4	4.5	2.6	154.9	18.1	411.98	851.99
MARC018	4	5	775.9	29.0	29.0	5.8	50.9	10.1	357.7	3.7	516.0	279.2	82.1	55.2	8.5	4.1	297.2	25.7	738.14	2036.40
MARC018	5	6	208.1	8.6	8.6	3.5	16.7	3.1	98.6	1.0	104.0	86.9	24.3	17.0	2.6	1.2	99.6	7.1	148.77	593.98
MARC018	6	7	168.4	10.5	10.5	3.0	17.8	3.4	86.4	1.2	127.0	81.3	22.1	16.1	2.9	1.3	116.4	9.0	181.67	557.95
MARC018	7	8	741.7	30.8	30.8	4.3	50.5	10.4	390.1	4.7	521.0	296.8	89.4	55.5	8.5	4.8	319.9	31.5	745.29	2090.17
MARC018	8	9	400.9	22.0	22.0	2.7	26.4	6.5	186.0	3.9	440.0	146.8	44.3	28.3	4.5	3.5	214.6	25.4	629.42	1145.74
MARC018	9	10	125.5	7.3	7.3	2.3	12.4	2.5	60.3	0.9	60.0	61.4	16.8	13.6	2.1	1.0	75.4	6.4	85.83	400.56
MARC018	10	11	295.8	12.8	12.8	2.8	24.2	4.8	138.6	1.7	132.0	129.8	35.5	25.9	3.9	1.8	134.1	11.2	188.83	846.62
MARC018	11	12	936.3	49.3	49.3	3.7	47.9	14.2	463.4	9.5	2063.0	299.8	97.5	51.8	9.2	8.5	443.8	60.1	2951.12	2557.38
MARC018	12	13	1159.7	98.2	98.2	3.6	49.7	23.0	583.1	27.0	4032.0	362.5	121.2	56.7	10.3	19.5	795.0	159.4	5767.78	3553.16
MARC018	13	14	1312.8	91.6	91.6	2.5	36.3	21.3	656.5	27.9	6428.0	335.8	125.1	40.4	8.4	19.0	740.6	158.5	9195.25	3649.16
MARC018	14	15	1035.8	49.7	49.7	2.5	33.9	12.9	507.9	12.6	4043.0	282.6	98.8	39.2	6.6	9.4	431.5	73.0	5783.51	2646.31
MARC018	15	16	285.7	12.7	12.7	2.5	20.7	4.5	144.4	1.7	249.0	115.8	34.0	23.7	3.6	1.9	130.0	11.7	356.19	815.35
MARC018	16	20	326.4	13.6	13.6	2.7	24.4	4.9	158.2	1.6	243.0	123.1	37.9	25.2	4.0	1.9	161.0	12.4	347.61	922.40
MARC018	20	24	115.5	5.6	5.6	1.9	10.4	1.9	52.0	0.8	155.0	51.2	14.1	10.7	1.7	0.8	58.8	5.6	221.73	340.78
MARC018	24	28	143.8	6.6	6.6	1.9	11.3	2.2	70.4	1.0	99.0	58.3	16.8	12.4	1.9	0.9	71.7	5.7	141.62	416.28
MARC018	28	32	159.0	8.5	8.5	2.2	13.4	2.5	78.6	1.2	98.0	67.4	19.3	13.7	2.2	1.1	80.5	7.3	140.19	470.31
MARC018	32	36	159.2	7.7	7.7	2.5	12.7	2.5	80.8	1.0	75.0	64.2	18.3	13.0	2.2	1.1	81.1	7.4	107.29	466.64
MARC018	36	37	134.0	6.6	6.6	1.7	10.6	2.3	71.0	0.8	78.0	53.3	15.1	10.2	1.8	1.0	65.8	5.7	111.58	390.78
MARC018	37	38	475.5	19.7	19.7	3.4	29.2	6.4	259.8	2.8	388.0	162.6	49.7	31.8	5.2	2.8	187.6	18.3	555.03	1286.62
MARC018	38	39	178.7	5.7	5.7	1.9	8.5	1.7	103.7	1.1	150.0	58.7	18.7	9.9	1.4	0.9	55.9	6.4	214.58	462.33
MARC018	39	40	129.7	5.7	5.7	2.1	13.5	2.1	59.9	0.7	28.0	66.8	17.0	15.0	1.9	0.8	63.9	5.1	40.05	395.33
MARC018	40	44	84.6	4.2	4.2	1.5	7.8	1.4	40.3	0.6	31.0	38.3	10.2	7.7	1.2	0.6	43.0	3.8	44.35	252.15
MARC018	44	48	85.1	2.7	2.7	1.4	5.3	0.9	39.5	0.4	90.0	33.5	9.2	6.4	0.8	0.4	29.2	2.5	128.75	222.22
MARC018	48	49	255.0	15.3	15.3	2.4	18.7	5.2	122.9	1.3	39.0	80.5	25.3	16.0	3.8	1.9	168.9	11.3	55.79	754.48
MARC018	49	50	66.2	5.1	5.1	1.9	7.0	1.7	35.8	0.8	29.0	30.7	8.2	7.0	1.2	0.8	49.5	5.2	41.48	229.28
MARC018	50	51	623.3	25.3	25.3	3.2	33.3	8.0	324.0	4.0	574.0	222.0	69.3	39.4	5.6	3.9	229.0	26.6	821.11	1654.51
MARC018	51	52	256.2	4.8	4.8	2.4	10.3	1.6	168.4	0.6	33.0	83.0	26.5	12.2	1.4	0.7	51.4	4.0	47.21	631.90
MARC018	52	56	190.4	7.5	7.5	1.6	11.4	2.2	98.6	1.1	156.0	68.6	20.6	12.2	1.8	1.1	70.0	6.7	223.16	504.89
MARC018	56	60	210.1	8.0	8.0	2.5	13.6	2.7	112.5	1.1	134.0	76.2	23.3	13.7	2.2	1.2	88.9	7.9	191.69	577.78
MARC018	60	61	93.1	4.5	4.5	2.7	9.1	1.6	47.7	0.6	25.0	41.9	11.1	8.7	1.3	0.7	49.3	4.3	35.76	284.73

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC018	61	62	156.0	6.6	6.6	3.5	14.8	2.4	78.3	0.9	18.0	75.2	19.8	16.0	2.1	1.0	76.1	5.6	25.75	470.54
MARC018	62	63	1181.4	67.0	67.0	7.6	95.8	22.7	618.3	7.6	1174.0	430.2	132.5	92.5	17.9	9.5	736.2	58.9	1679.41	3591.83
MARC018	63	64	824.5	47.5	47.5	5.1	62.6	15.3	415.4	6.6	784.0	306.6	91.3	63.7	11.6	7.0	489.8	47.0	1121.51	2469.73
MARC018	64	65	102.4	6.5	6.5	1.6	9.5	2.3	52.4	0.9	115.0	41.5	11.9	9.2	1.8	0.9	68.7	5.4	164.51	326.15
MARC018	65	66	35.0	4.0	4.0	1.4	5.5	1.3	16.8	0.5	21.0	17.4	4.2	4.6	1.0	0.6	38.4	3.5	30.04	140.36
MARC018	66	67	42.0	6.4	6.4	1.4	8.2	2.1	19.1	1.0	25.0	25.3	6.1	6.8	1.5	1.0	65.8	5.6	35.76	202.11
MARC018	67	68	44.3	5.3	5.3	1.9	7.3	1.6	18.2	0.7	16.0	25.1	6.0	6.5	1.3	0.8	50.7	4.4	22.89	182.13
MARC018	68	72	79.7	4.3	4.3	1.9	7.1	1.5	39.9	0.7	48.0	32.4	9.4	7.2	1.2	0.7	45.7	4.2	68.66	243.71
MARC018	72	76	36.5	4.8	4.8	2.0	7.5	1.7	15.0	0.7	168.0	22.3	5.1	6.1	1.3	0.7	53.5	4.8	240.32	170.18
MARC018	76	77	29.2	4.0	4.0	2.0	6.1	1.4	12.2	0.6	10.0	18.1	4.3	5.2	1.1	0.6	40.8	3.8	14.31	135.99
MARC018	77	78	31.2	3.5	3.5	1.6	5.8	1.3	14.8	0.5	11.0	18.3	4.2	5.1	1.0	0.6	37.2	3.4	15.74	134.83
MARC018	78	79	463.2	19.8	19.8	3.1	29.5	6.3	236.2	3.0	594.0	170.1	52.5	33.4	5.2	3.0	193.8	19.6	849.72	1270.48
MARC018	79	80	299.7	11.1	11.1	1.9	19.7	3.7	123.3	1.6	782.0	123.4	36.1	25.4	3.3	1.5	112.6	10.4	1118.65	792.97
MARC018	80	81	773.6	27.4	27.4	4.3	41.0	9.3	439.6	4.3	721.0	270.6	85.4	47.1	7.2	4.6	280.9	28.8	1031.39	2067.59
MARC018	81	82	321.5	16.1	16.1	2.5	25.0	5.5	145.4	2.3	573.0	130.3	38.1	28.6	4.3	2.4	166.1	16.4	819.68	931.86
MARC018	82	83	280.6	10.2	10.2	1.7	19.8	3.4	116.5	1.5	732.0	115.5	33.5	23.3	3.1	1.5	107.2	9.7	1047.13	745.60
MARC018	83	84	749.6	30.9	30.9	4.1	47.7	10.2	344.9	3.6	484.0	274.8	81.7	55.2	8.5	4.4	306.8	27.1	692.36	2001.03
MARC018	84	88	75.4	4.1	4.1	1.2	6.9	1.4	36.2	0.5	61.0	32.5	9.0	6.5	1.1	0.6	46.5	3.5	87.26	232.50
MARC018	88	89	111.8	12.2	12.2	4.4	17.2	4.2	56.2	1.3	47.0	57.7	14.8	16.2	3.2	1.7	153.5	9.7	67.23	484.38
MARC018	89	90	239.7	13.0	13.0	5.2	21.8	4.5	119.6	1.6	77.0	105.1	29.8	23.4	3.6	1.9	147.9	11.6	110.15	750.46
MARC018	90	91	223.9	17.0	17.0	6.1	27.3	5.7	96.8	2.0	83.0	104.4	27.9	26.2	4.6	2.3	195.7	14.6	118.73	784.14
MARC018	91	92	246.2	22.8	22.8	3.0	31.2	7.9	118.7	2.1	187.0	108.0	30.3	26.8	5.8	3.1	265.4	17.4	267.50	927.72
MARC018	92	93	957.9	52.7	52.7	5.8	71.2	18.1	488.1	6.9	810.0	359.0	107.2	74.0	13.8	8.1	615.3	48.4	1158.71	2915.42
MARC018	93	94	245.7	14.8	14.8	2.3	20.7	4.7	123.7	1.7	203.0	96.3	28.1	20.2	3.7	2.1	163.9	13.1	290.39	764.16
MARC018	94	95	304.2	15.9	15.9	2.4	22.9	5.4	148.8	2.0	263.0	117.0	35.0	22.7	4.2	2.3	151.1	14.9	376.22	875.15
MARC018	95	96	37.7	2.4	2.4	1.2	4.0	0.8	16.7	0.4	16.0	19.4	4.9	4.4	0.6	0.3	24.9	2.3	22.89	123.97
MARC018	96	100	52.7	3.2	3.2	1.3	6.2	1.0	21.3	0.5	28.0	28.5	6.9	6.1	0.9	0.4	33.9	3.0	40.05	171.33
MARC018	100	102	70.9	6.1	6.1	1.9	8.9	2.1	31.9	0.9	59.0	33.0	8.6	8.0	1.6	0.8	58.4	5.5	84.40	247.92
MARC019	0	1	761.7	71.7	71.7	3.1	47.3	19.2	260.4	13.2	1830.0	197.2	62.3	39.5	11.1	11.6	581.6	85.1	2617.82	2245.52
MARC019	1	2	1229.5	132.5	132.5	5.1	83.0	36.1	325.9	25.6	2616.0	270.6	85.1	61.2	19.2	22.3	1122.7	161.7	3742.19	3729.84
MARC019	2	3	1125.6	72.3	72.3	5.7	75.8	22.1	418.9	9.1	1648.0	380.7	110.5	77.6	15.5	10.6	649.9	67.0	2357.46	3143.43
MARC019	3	4	1124.7	57.5	57.5	8.9	89.3	18.8	748.6	7.2	1032.0	570.5	167.9	106.6	15.8	8.5	558.4	52.6	1476.28	3628.12
MARC019	4	5	1471.1	74.0	74.0	4.1	48.3	19.0	725.0	19.2	5287.0	415.9	147.0	56.4	9.2	14.5	643.2	112.7	7563.05	3831.19
MARC019	5	6	160.3	8.1	8.1	2.1	15.6	2.7	96.6	0.9	227.0	74.1	21.1	14.7	2.3	1.1	93.2	6.8	324.72	512.80
MARC019	6	7	81.3	6.6	6.6	1.9	10.7	2.2	42.1	0.7	98.0	40.9	10.8	8.7	1.6	0.9	76.1	5.7	140.19	300.36
MARC019	7	8	134.4	9.1	9.1	2.0	15.9	3.2	55.8	1.0	166.0	66.1	17.3	15.8	2.7	1.3	95.9	7.6	237.46	444.07
MARC019	8	12	113.7	6.3	6.3	1.7	10.5	2.1	50.7	0.6	92.0	50.7	13.6	11.0	1.7	0.9	67.8	5.1	131.61	346.84
MARC019	12	16	255.3	11.2	11.2	2.4	21.3	3.8	113.5	1.2	152.0	107.0	30.2	21.2	3.3	1.6	119.0	9.6	217.44	719.27
MARC019	16	20	128.0	5.6	5.6	2.0	10.4	1.7	57.9	0.5	49.0	56.1	15.5	11.1	1.6	0.7	57.9	4.3	70.09	362.51
MARC019	20	24	156.3	7.1	7.1	2.2	12.7	2.2	73.9	0.8	94.0	64.7	18.4	13.0	1.9	1.0	70.6	5.9	134.47	441.87
MARC019	24	25	237.6	4.5	4.5	1.6	9.5	1.5	111.9	0.3	81.0	78.5	24.3	11.7	1.4	0.6	50.2	3.5	115.87	544.94
MARC019	25	26	261.9	4.6	4.6	2.0	10.7	1.6	116.9	0.4	56.0	87.4	27.2	13.3	1.4	0.6	47.9	3.2	80.11	587.03
MARC019	26	27	173.9	5.8	5.8	1.9	10.9	2.1	81.3	0.6	82.0	67.3	19.5	12.8	1.8	0.8	65.1	4.8	117.30	458.44
MARC019	27	28	686.9	27.4	27.4	2.9	30.3	7.9	339.8	5.9	2110.0	217.4	72.1	33.7	5.2	4.6	269.3	35.2	3018.36	1771.73
MARC019	28	29	218.9	7.2	7.2	1.7	13.8	2.5	91.0	0.7	115.0	77.2	22.9	15.4	2.2	0.9	76.8	5.6	164.51	549.51
MARC019	29	30	102.4	6.2	6.2	1.6	9.8	2.1	46.1	0.6	68.0	43.4	12.0	9.3	1.6	0.8	61.2	5.2	97.27	312.21
MARC019	30	31	41.3	3.7	3.7	1.2	6.2	1.3	21.0	0.3	25.0	21.3	5.4	4.8	1.0	0.5	39.6	3.2	35.76	156.70
MARC019	31	32	150.1	4.9	4.9	1.9	10.3	1.7	66.4	0.5	59.0	61.6	17.2	11.7	1.5	0.7	51.8	4.2	84.40	393.04
MARC019	32	33	153.3	4.1	4.1	2.0	9.0	1.5	61.7	0.4	34.0	55.9	15.7	10.4	1.2	0.6	48.3	3.6	48.64	374.87
MARC019	33	34	132.9	3.1	3.1	1.7	6.6	0.9	63.1	0.3	65.0	50.5	14.9	7.9	0.9	0.5	33.5	3.1	92.98	325.10
MARC019	34	35	117.8	4.8	4.8	1.6	8.9	1.6	53.4	0.4	51.0	49.6	14.0	9.7	1.4	0.6	48.6	4.0	72.96	324.64
MARC019	35	36	129.4	5.6	5.6	1.5	9.9	1.8	59.0	0.5	49.0	51.7	14.5	10.0	1.5	0.7	57.3	4.6	70.09	357.17
MARC019	36	37	77.6	4.6	4.6	1.3	8.1	1.5	32.0	0.4	33.0	36.5	9.7	7.7	1.2	0.6	44.2	3.6	47.21	236.22
MARC019	37	38	72.2	3.2	3.2	0.9	5.5	1.0	30.3	0.2	19.0	32.5	8.8	6.7	0.9	0.4	31.0	2.7	27.18	201.88

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC019	38	39	172.2	5.9	5.9	1.3	10.3	2.1	81.2	0.6	94.0	60.7	18.5	11.0	1.8	0.8	60.1	5.0	134.47	441.55
MARC019	39	40	98.9	4.7	4.7	1.3	6.9	1.5	44.6	0.5	62.0	38.5	11.4	7.1	1.1	0.7	47.0	4.1	88.69	275.02
MARC019	40	41	116.7	3.0	3.0	1.0	5.1	0.9	61.1	0.2	29.0	39.1	12.2	6.0	0.8	0.4	30.5	2.5	41.48	284.03
MARC019	41	42	134.4	3.4	3.4	1.2	6.9	1.1	73.7	0.3	53.0	44.4	14.1	8.0	1.0	0.5	38.9	2.8	75.82	336.76
MARC019	42	43	141.4	5.5	5.5	1.3	9.7	1.7	70.6	0.6	66.0	53.9	16.0	10.4	1.5	0.8	54.9	4.8	94.41	381.85
MARC019	43	44	361.5	20.6	20.6	2.0	20.6	6.2	151.3	3.1	513.0	114.5	35.5	21.6	4.0	3.2	192.6	20.8	733.85	984.77
MARC019	44	45	159.9	11.3	11.3	1.5	12.0	3.3	62.9	1.8	250.0	55.3	16.1	11.2	2.1	1.8	101.2	11.8	357.63	467.02
MARC019	45	46	78.4	5.3	5.3	1.4	7.5	1.6	31.4	0.7	78.0	36.0	9.6	7.3	1.2	0.8	48.5	4.7	111.58	241.58
MARC019	46	47	126.6	4.3	4.3	1.2	7.5	1.4	63.3	0.5	83.0	46.2	14.0	8.1	1.1	0.7	44.7	4.1	118.73	330.59
MARC019	47	48	71.9	4.5	4.5	1.2	7.8	1.4	29.4	0.4	30.0	36.4	9.5	8.2	1.2	0.6	44.3	4.1	42.92	228.18
MARC019	48	52	164.6	5.6	5.6	2.1	10.3	1.8	78.1	0.5	64.0	67.8	18.9	12.3	1.6	0.7	59.7	5.0	91.55	438.48
MARC019	52	53	227.7	9.6	9.6	2.2	17.1	3.3	97.6	1.0	116.0	94.8	26.2	18.6	2.8	1.4	103.1	8.3	165.94	630.02
MARC019	53	54	104.4	7.9	7.9	1.5	11.4	2.6	50.4	0.7	63.0	43.0	12.2	10.1	2.0	1.1	80.1	6.4	90.12	346.61
MARC019	54	55	811.4	27.6	27.6	3.6	44.1	8.6	377.4	3.6	574.0	287.9	87.4	50.8	7.3	3.8	266.3	24.6	821.11	2047.56
MARC019	55	56	113.3	7.5	7.5	1.5	11.4	2.5	52.5	0.8	95.0	44.3	12.8	10.3	1.9	1.1	75.9	6.8	135.90	355.05
MARC019	56	57	439.4	19.9	19.9	2.7	30.1	6.4	208.9	2.4	313.0	164.1	48.8	31.4	5.2	2.8	191.9	17.9	447.75	1202.94
MARC019	57	58	243.7	4.1	4.1	1.6	8.5	1.4	134.8	0.4	32.0	74.9	23.9	10.1	1.2	0.6	43.0	3.5	45.78	558.48
MARC019	58	59	174.2	4.2	4.2	1.0	5.3	1.1	64.0	0.6	153.0	39.8	13.1	6.0	0.9	0.6	43.4	4.2	218.87	364.32
MARC019	59	60	173.8	9.3	9.3	1.3	10.8	2.9	82.7	1.1	162.0	59.4	18.7	11.2	2.0	1.4	87.2	8.5	231.74	483.40
MARC019	60	64	83.9	4.1	4.1	1.4	6.8	1.4	38.7	0.4	28.0	35.6	9.9	7.1	1.1	0.5	43.3	3.5	40.05	244.49
MARC019	64	68	109.1	4.5	4.5	1.5	7.8	1.4	51.3	0.4	34.0	45.5	12.6	8.5	1.2	0.6	44.8	3.9	48.64	300.00
MARC019	68	72	127.5	2.3	2.3	1.4	5.9	0.8	57.7	0.1	17.0	51.3	15.1	8.3	0.8	0.3	24.9	1.9	24.32	302.57
MARC019	72	76	79.7	4.2	4.2	1.0	5.6	1.4	36.8	0.4	28.0	33.1	9.3	6.1	1.0	0.6	42.2	4.0	40.05	231.63
MARC019	76	80	85.5	3.7	3.7	1.3	7.1	1.1	41.8	0.4	11.0	35.9	9.8	6.8	1.0	0.5	37.2	3.3	15.74	241.35
MARC019	80	84	103.1	4.8	4.8	1.5	8.3	1.6	46.7	0.4	25.0	43.3	12.1	7.9	1.3	0.6	51.0	3.9	35.76	294.32
MARC019	84	88	156.9	6.7	6.7	1.9	10.9	2.2	74.6	0.7	82.0	58.9	17.4	11.5	1.8	0.8	67.2	5.6	117.30	427.60
MARC019	88	92	166.0	9.3	9.3	2.2	14.1	3.0	77.3	1.1	109.0	65.3	19.0	14.1	2.5	1.3	100.8	8.7	155.92	499.57
MARC019	92	96	80.0	5.1	5.1	2.0	9.1	1.7	35.4	0.6	42.0	37.4	10.0	8.6	1.4	0.7	52.3	4.7	60.08	257.52
MARC019	96	97	59.7	3.5	3.5	1.9	6.9	1.1	25.0	0.3	19.0	31.0	7.6	6.5	1.0	0.5	36.3	3.3	27.18	190.60
MARC019	97	98	39.9	2.2	2.2	1.3	4.4	0.7	17.4	0.1	19.0	20.4	4.9	4.4	0.6	0.3	22.0	1.9	27.18	124.30
MARC019	98	99	419.6	35.0	35.0	3.6	41.3	11.0	203.4	4.0	338.0	164.5	47.4	35.4	7.7	4.8	330.3	29.6	483.51	1388.04
MARC019	99	100	87.3	2.2	2.2	1.6	3.6	0.7	52.5	0.1	10.0	28.2	8.8	4.5	0.6	0.3	21.5	1.7	14.31	217.05
MARC019	100	101	63.4	1.0	1.0	0.9	2.0	0.3	37.4	0.0	5.0	19.0	6.0	2.4	0.2	0.1	10.7	1.0	7.15	146.17
MARC019	101	102	288.6	15.0	15.0	1.7	18.8	4.6	142.7	2.2	207.0	101.2	30.9	19.1	3.1	2.3	141.5	15.4	296.11	807.93
MARC019	102	103	521.0	31.7	31.7	2.8	35.0	9.5	253.4	4.6	687.0	174.4	55.0	33.7	6.5	4.7	302.6	31.5	982.75	1509.36
MARC019	103	104	248.6	14.9	14.9	1.7	10.5	3.6	124.6	3.8	498.0	76.9	25.1	12.4	1.9	2.7	128.5	21.1	712.39	689.95
MARC019	104	105	1251.5	26.9	26.9	2.3	30.1	7.1	586.0	6.7	6653.0	337.6	122.2	41.5	4.6	4.9	262.1	37.9	9517.12	2750.75
MARC019	105	106	351.9	27.8	27.8	1.0	16.9	7.0	163.3	7.2	1553.0	108.7	35.9	16.6	3.4	5.2	254.0	40.8	2221.57	1065.13
MARC019	106	107	425.8	51.9	51.9	1.3	18.3	11.5	200.9	14.7	1948.0	119.4	41.8	17.4	4.4	9.7	414.2	80.6	2786.61	1449.92
MARC019	107	108	569.0	32.0	32.0	2.3	21.7	7.7	264.1	8.1	2196.0	167.0	57.2	25.0	4.1	6.0	266.6	45.3	3141.38	1505.91
MARC019	108	109	34.8	1.6	1.6	1.0	3.6	0.6	14.9	0.0	62.0	18.2	4.4	4.1	0.5	0.2	17.8	1.5	88.69	105.99
MARC019	109	110	33.3	1.6	1.6	1.0	3.2	0.6	14.4	0.0	35.0	17.0	4.3	3.6	0.5	0.2	17.5	1.7	50.07	101.80
MARC019	110	111	53.3	2.3	2.3	1.2	4.8	0.7	23.6	0.1	27.0	24.8	6.5	5.2	0.7	0.3	24.3	1.7	38.62	153.32
MARC019	111	112	64.0	3.4	3.4	1.7	6.3	1.1	28.6	0.3	32.0	29.7	7.8	6.3	1.0	0.5	35.4	2.7	45.78	194.76
MARC019	112	113	103.4	7.4	7.4	2.7	11.4	2.3	43.5	1.0	119.0	48.5	12.7	10.7	1.9	1.0	70.7	6.9	170.23	335.65
MARC019	113	114	67.2	5.0	5.0	2.3	9.3	1.7	27.9	0.5	20.0	35.0	8.8	8.1	1.5	0.7	51.7	4.6	28.61	233.03
MARC019	114	115	514.5	29.4	29.4	4.1	38.2	9.0	244.2	3.9	799.0	186.0	55.3	37.0	6.9	4.1	274.6	26.3	1142.97	1476.80
MARC019	115	116	174.1	9.9	9.9	2.8	16.9	3.3	78.3	1.1	106.0	75.5	20.6	17.0	2.8	1.4	102.6	8.4	151.63	531.46
MARC019	116	117	104.9	2.6	2.6	1.2	4.5	0.8	52.5	0.2	30.0	35.8	10.8	5.8	0.8	0.4	26.8	2.2	42.92	253.49
MARC019	117	118	495.4	15.7	15.7	2.3	19.6	4.5	234.4	3.0	1573.0	153.3	50.8	23.0	3.2	2.5	157.5	18.4	2250.18	1203.37
MARC019	118	119	875.8	31.6	31.6	3.8	44.4	9.7	420.4	4.7	1999.0	290.3	92.1	48.7	7.6	4.6	320.1	30.3	2859.57	2231.25
MARC019	119	120	394.7	18.3	18.3	2.7	26.3	5.8	194.3	2.1	273.0	136.8	42.4	26.1	4.5	2.5	178.4	16.3	390.53	1079.21
MARC019	120	121	205.1	6.9	6.9	3.2	12.8	2.2	104.0	0.7	48.0	72.9	21.7	13.3	2.0	0.9	69.0	5.7	68.66	531.80
MARC019	121	122	395.9	20.9	20.9	3.5	24.8	6.1	196.2	3.5	421.0	143.9	44.1	27.0	4.4	3.3	175.1	23.0	602.24	1100.16

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC019	122	123	177.1	10.6	10.6	2.2	13.6	3.2	78.2	1.5	459.0	69.9	19.9	13.6	2.2	1.6	88.0	10.9	656.60	507.33
MARC019	123	124	47.8	1.7	1.7	1.2	2.7	0.6	24.3	0.0	17.0	19.0	5.4	3.4	0.4	0.2	16.5	1.4	24.32	127.27
MARC019	124	125	65.7	2.2	2.2	1.5	4.4	0.7	32.8	0.1	18.0	25.2	7.2	4.5	0.6	0.3	22.7	2.0	25.75	173.74
MARC019	125	126	78.5	3.1	3.1	1.3	5.9	1.0	35.8	0.3	32.0	32.1	9.1	6.4	0.9	0.5	31.2	2.7	45.78	213.89
MARC019	126	127	233.3	9.8	9.8	2.0	14.8	2.9	110.4	1.7	226.0	90.6	26.1	15.9	2.2	1.6	88.4	11.0	323.29	623.95
MARC019	127	128	436.0	19.6	19.6	3.5	31.8	6.1	212.9	2.7	190.0	183.5	51.1	36.6	5.0	2.8	183.0	18.3	271.80	1221.85
MARC019	128	129	361.8	13.8	13.8	3.5	26.2	4.5	167.6	2.0	142.0	159.7	43.3	30.8	3.9	2.0	135.6	13.1	203.13	989.41
MARC019	129	130	36.2	1.3	1.3	0.9	3.5	0.5	16.9	0.0	5.0	18.3	4.7	3.7	0.4	0.2	13.7	1.1	7.15	103.84
MARC019	130	131	249.9	9.3	9.3	2.7	15.9	3.1	119.4	1.1	124.0	94.8	28.0	16.5	2.5	1.3	93.1	7.9	177.38	660.14
MARC019	131	132	433.4	24.1	24.1	3.7	34.5	7.4	206.2	2.6	269.0	168.7	49.9	35.1	6.2	3.2	230.5	19.7	384.80	1262.49
MARC019	132	133	45.5	1.9	1.9	1.5	4.1	0.7	20.6	0.1	12.0	21.2	5.5	4.5	0.5	0.3	20.4	1.7	17.17	131.86
MARC019	133	134	295.3	14.2	14.2	2.8	20.5	4.6	141.8	1.6	151.0	107.0	32.5	21.1	3.6	2.0	139.6	12.2	216.01	820.94
MARC019	134	135	581.2	33.5	33.5	3.4	40.1	10.2	267.5	4.7	757.0	203.2	62.8	39.7	7.3	4.9	291.1	30.9	1082.89	1627.81
MARC019	135	136	150.7	8.7	8.7	1.5	12.6	2.7	69.9	0.9	100.0	58.8	17.0	12.8	2.2	1.1	87.5	7.2	143.05	447.14
MARC019	136	140	191.0	8.8	8.8	2.2	12.2	2.9	101.3	1.0	62.0	64.4	19.9	11.9	2.2	1.2	87.1	7.1	88.69	526.93
MARC019	140	144	99.3	3.3	3.3	1.2	5.4	1.1	51.1	0.2	34.0	34.6	10.7	5.6	0.9	0.4	33.4	2.8	48.64	255.58
MARC019	144	145	82.7	7.3	7.3	2.5	12.0	2.5	34.5	0.8	37.0	41.6	10.6	10.7	2.1	1.0	74.3	5.9	52.93	301.12
MARC019	145	146	193.5	6.1	6.1	3.0	12.2	2.2	100.0	0.6	25.0	71.7	20.9	12.9	1.8	0.8	64.4	5.0	35.76	506.00
MARC019	146	147	85.3	2.3	2.3	1.4	4.3	0.7	46.1	0.1	13.0	28.5	8.8	4.8	0.7	0.3	23.6	1.8	18.60	212.46
MARC019	147	148	85.3	0.8	0.8	0.9	2.9	0.3	44.7	0.0	12.0	29.9	9.0	4.1	0.3	0.1	9.9	0.8	17.17	190.71
MARC019	148	149	471.8	28.2	28.2	2.5	34.1	8.7	233.7	3.1	425.0	169.2	51.3	33.0	6.3	3.7	245.6	22.7	607.96	1355.16
MARC019	149	150	110.2	3.8	3.8	1.4	5.8	1.1	55.8	0.2	53.0	39.4	11.9	6.6	1.0	0.5	37.2	2.8	75.82	283.62
MARC020	0	1	1085.3	89.3	89.3	3.2	52.3	22.8	293.6	21.2	1319.0	204.8	63.4	40.6	11.5	16.3	771.6	126.3	1886.83	2888.14
MARC020	1	2	520.2	22.9	22.9	3.6	29.6	6.9	236.3	3.9	444.0	179.9	53.0	32.8	6.0	3.6	208.6	25.7	635.14	1365.93
MARC020	2	3	249.1	8.1	8.1	2.3	16.0	2.7	155.3	1.2	203.0	122.8	35.6	20.6	3.5	1.3	85.7	8.0	290.39	726.70
MARC020	3	4	230.4	10.2	10.2	1.9	15.0	3.4	123.0	1.3	170.0	94.4	26.7	16.2	3.7	1.5	96.8	9.6	243.19	649.64
MARC020	4	5	1247.6	77.4	77.4	6.5	87.0	24.6	577.1	12.3	1494.0	448.6	132.6	87.8	17.6	12.3	782.0	82.8	2137.17	3703.07
MARC020	5	6	1094.4	67.1	67.1	5.4	74.9	20.7	523.9	11.3	1582.0	390.7	113.8	74.2	14.1	10.5	637.9	69.0	2263.05	3197.09
MARC020	6	7	641.6	46.1	46.1	4.6	47.6	13.9	323.8	10.1	859.0	246.2	73.4	47.8	8.9	8.1	457.9	56.5	1228.80	2044.38
MARC020	7	8	1344.9	84.3	84.3	5.4	73.7	24.4	662.4	19.6	3530.0	449.1	141.5	75.4	14.5	15.4	778.4	110.1	5049.67	3893.89
MARC020	8	9	944.8	41.5	41.5	3.7	45.9	12.6	464.2	7.7	3101.0	305.9	98.5	50.7	8.8	7.2	398.6	48.2	4435.98	2491.40
MARC020	9	10	82.5	2.2	2.2	1.3	4.3	0.8	46.6	0.4	133.0	29.9	9.1	4.5	0.5	0.3	27.0	2.0	190.26	215.46
MARC020	10	11	99.0	3.5	3.5	1.5	7.3	1.3	50.1	0.6	75.0	46.1	12.8	9.3	1.2	0.4	40.4	3.0	107.29	282.28
MARC020	11	12	674.6	34.0	34.0	3.4	34.9	9.6	323.9	6.6	1662.0	234.3	73.3	40.5	6.8	5.6	317.6	38.8	2377.49	1845.67
MARC020	12	13	66.9	2.2	2.2	1.3	5.8	0.7	35.8	0.3	34.0	33.8	9.3	6.1	0.7	0.3	23.7	1.7	48.64	192.54
MARC020	13	14	97.5	2.3	2.3	1.3	6.0	0.9	54.1	0.3	51.0	40.2	12.0	7.0	0.8	0.3	25.5	1.9	72.96	254.70
MARC020	14	15	495.8	25.2	25.2	3.0	29.6	7.9	219.2	4.0	722.0	180.6	53.2	32.7	5.6	4.0	239.0	24.4	1032.82	1358.37
MARC020	15	16	130.8	8.6	8.6	1.7	13.3	2.9	59.9	1.0	112.0	57.3	15.2	12.6	2.4	1.2	81.8	7.3	160.22	409.23
MARC020	16	17	446.9	24.1	24.1	2.9	33.4	8.5	231.9	2.8	328.0	169.7	49.8	32.7	6.2	3.7	236.1	21.9	469.20	1309.29
MARC020	17	18	65.6	2.6	2.6	0.9	4.0	0.8	36.2	0.3	48.0	24.6	7.4	4.4	0.7	0.3	24.8	3.0	68.66	179.37
MARC020	18	19	558.3	52.9	52.9	3.1	44.1	15.2	268.5	10.5	823.0	212.2	62.4	43.4	9.5	9.1	482.3	62.9	1177.30	1895.90
MARC020	19	20	416.6	38.0	38.0	2.3	25.9	10.0	206.9	8.7	782.0	148.7	44.3	24.5	5.4	6.8	320.5	50.4	1118.65	1346.35
MARC020	20	21	451.6	24.0	24.0	3.6	34.6	8.1	239.7	2.8	345.0	173.1	53.0	36.4	5.9	3.4	255.8	21.9	493.52	1352.09
MARC020	21	22	77.9	6.2	6.2	2.0	9.0	2.1	35.9	0.8	53.0	37.4	9.9	8.6	1.5	0.8	63.6	5.8	75.82	271.14
MARC020	22	23	100.7	2.6	2.6	1.3	5.3	0.8	50.0	0.3	29.0	38.0	11.5	6.1	0.7	0.3	24.5	2.0	41.48	248.51
MARC020	23	24	47.9	1.4	1.4	0.9	2.9	0.6	23.9	0.3	12.0	19.6	4.9	2.7	0.4	0.2	16.8	1.6	17.17	126.48
MARC020	24	28	113.3	5.5	5.5	2.2	10.3	2.1	52.0	0.8	65.0	48.1	13.5	9.9	1.7	0.8	60.8	4.6	92.98	334.37
MARC020	28	32	115.3	6.1	6.1	2.0	10.4	2.2	53.9	0.9	81.0	50.2	13.4	9.6	1.7	0.9	65.7	5.2	115.87	348.20
MARC020	32	33	62.4	1.5	1.5	0.9	2.9	0.6	31.7	0.3	43.0	21.3	6.4	3.2	0.4	0.3	17.9	1.9	61.51	154.21
MARC020	33	34	776.5	35.7	35.7	3.0	38.4	11.0	374.6	6.5	2405.0	242.6	78.5	39.3	7.4	6.1	346.9	38.9	3440.35	2053.25
MARC020	34	35	1113.7	53.5	53.5	5.2	65.5	17.8	538.8	8.1	2346.0	367.5	114.2	66.3	12.7	8.3	549.0	51.9	3355.95	3051.73
MARC020	35	36	110.8	6.6	6.6	2.8	12.9	2.7	53.6	1.0	137.0	53.3	14.2	12.2	2.1	1.0	74.5	5.6	195.98	365.73
MARC020	36	40	95.2	5.4	5.4	1.7	9.8	1.8	44.9	0.8	94.0	42.0	11.2	8.5	1.6	0.8	61.0	4.6	134.47	298.22
MARC020	40	44	110.7	5.3	5.3	1.5	9.0	1.7	53.1	0.7	100.0	42.8	12.4	8.6	1.6	0.8	53.7	4.7	143.05	314.68

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC020	44	45	96.7	3.9	3.9	1.6	8.0	1.4	45.6	0.6	73.0	39.3	10.8	7.5	1.3	0.6	44.6	3.4	104.43	271.78
MARC020	45	46	1375.2	76.4	76.4	4.5	55.1	20.6	676.7	18.3	5437.0	403.7	134.8	62.3	11.4	14.3	706.1	103.3	7777.63	3740.18
MARC020	46	47	1099.2	58.2	58.2	4.5	64.5	18.3	517.6	9.7	2578.0	352.5	110.5	66.1	13.2	9.2	592.2	60.2	3687.83	3057.19
MARC020	47	48	376.6	13.3	13.3	2.2	20.9	4.4	186.6	1.8	441.0	130.5	41.0	23.3	3.7	2.0	146.3	11.7	630.85	985.73
MARC020	48	52	210.5	6.9	6.9	2.1	12.7	2.5	104.8	1.0	184.0	75.7	22.5	13.5	2.1	1.1	73.9	6.0	263.21	546.98
MARC020	52	56	179.6	7.3	7.3	1.6	11.6	2.5	89.1	1.0	124.0	68.0	19.3	12.6	2.2	1.1	76.4	6.1	177.38	491.04
MARC020	56	57	159.0	4.9	4.9	1.5	8.6	1.7	80.8	0.6	92.0	54.5	16.8	9.7	1.5	0.7	51.0	4.1	131.61	403.81
MARC020	57	58	140.9	3.9	3.9	1.2	7.5	1.4	71.9	0.5	73.0	50.5	15.3	8.8	1.2	0.6	43.9	3.2	104.43	357.62
MARC020	58	59	108.1	3.4	3.4	1.4	6.2	1.4	56.2	0.6	62.0	40.0	11.8	7.4	1.1	0.6	41.3	3.8	88.69	289.95
MARC020	59	60	425.8	22.5	22.5	2.5	20.3	6.8	214.9	4.2	952.0	132.6	42.1	21.3	4.2	3.7	214.0	24.9	1361.84	1167.22
MARC020	60	61	327.5	7.4	7.4	1.4	7.7	2.2	167.7	2.1	1506.0	96.6	32.1	10.4	1.4	1.6	75.1	10.5	2154.33	752.38
MARC020	61	62	331.8	7.2	7.2	1.7	9.7	2.4	173.1	1.3	1059.0	99.1	32.9	13.8	1.7	1.2	71.7	8.0	1514.90	766.22
MARC020	62	63	134.6	2.2	2.2	1.2	4.0	0.7	74.4	0.4	114.0	43.4	13.7	5.3	0.5	0.3	22.6	1.6	163.08	307.97
MARC020	63	64	121.0	1.4	1.4	1.0	3.3	0.6	69.4	0.3	64.0	38.6	11.9	4.8	0.5	0.2	18.7	1.6	91.55	276.06
MARC020	64	65	305.9	14.3	14.3	2.0	18.1	4.7	162.9	1.7	214.0	103.1	31.9	18.4	3.5	2.3	120.3	12.8	306.13	822.44
MARC020	65	66	92.0	2.2	2.2	1.0	3.6	0.8	51.1	0.5	36.0	28.6	9.1	3.9	0.6	0.4	24.4	1.9	51.50	223.35
MARC020	66	67	176.3	5.7	5.7	1.5	9.3	2.1	95.9	0.8	82.0	59.5	18.2	9.9	1.6	0.8	56.1	4.9	117.30	452.03
MARC020	67	68	94.6	1.6	1.6	1.2	3.7	0.6	52.8	0.2	23.0	31.8	9.6	4.5	0.6	0.3	19.2	1.5	32.90	225.11
MARC020	68	69	508.7	23.8	23.8	2.3	23.5	7.4	266.5	4.2	519.0	161.5	53.0	26.3	4.7	4.1	216.0	24.7	742.43	1359.18
MARC020	69	70	150.2	2.5	2.5	1.4	4.7	0.8	86.0	0.4	52.0	49.5	15.2	7.1	0.8	0.4	25.8	2.0	74.39	350.99
MARC020	70	71	118.4	1.8	1.8	1.2	3.7	0.7	65.7	0.3	25.0	37.4	12.0	5.3	0.6	0.3	20.2	1.6	35.76	272.39
MARC020	71	72	223.2	9.1	9.1	2.0	16.4	3.4	112.8	1.1	158.0	80.6	23.6	16.7	3.2	1.3	105.8	6.6	226.02	622.84
MARC020	72	73	84.3	1.4	1.4	1.0	2.5	0.5	50.5	0.2	16.0	26.8	8.1	3.5	0.4	0.2	16.5	1.1	22.89	199.44
MARC020	73	74	97.9	1.9	1.9	0.9	3.6	0.7	56.2	0.3	41.0	30.4	9.5	4.4	0.6	0.3	21.8	1.8	58.65	233.83
MARC020	74	75	164.2	2.4	2.4	1.5	5.3	1.0	93.2	0.4	42.0	49.1	16.0	7.2	0.9	0.4	28.3	2.5	60.08	377.56
MARC020	75	76	174.4	6.6	6.6	1.6	8.4	2.2	92.7	1.0	141.0	58.1	18.3	10.0	1.7	0.9	71.5	6.7	201.70	463.54
MARC020	76	77	261.6	11.1	11.1	1.7	13.3	3.4	137.9	1.8	241.0	89.7	28.1	15.9	2.5	1.8	115.9	10.9	344.75	712.02
MARC020	77	78	270.7	11.0	11.0	1.9	14.2	3.6	141.4	1.8	240.0	91.8	29.3	15.7	2.7	1.8	117.7	11.5	343.32	731.15
MARC020	78	79	407.6	19.3	19.3	2.8	27.1	6.5	206.3	2.6	336.0	145.7	44.0	26.9	4.8	3.0	191.8	18.6	480.65	1135.70
MARC020	79	80	376.5	15.7	15.7	2.2	22.0	4.9	190.3	2.4	309.0	132.0	43.1	23.8	3.7	2.3	149.6	16.3	442.02	1009.63
MARC020	80	84	112.5	4.6	4.6	1.7	8.0	1.6	55.2	0.6	65.0	43.6	13.1	9.0	1.3	0.7	49.0	4.3	92.98	312.87
MARC020	84	88	297.5	8.2	8.2	2.3	11.8	2.4	168.9	1.0	114.0	88.1	29.9	13.9	2.0	1.1	79.1	7.4	163.08	725.28
MARC020	88	89	349.5	11.8	11.8	1.9	15.7	3.8	167.0	1.9	868.0	113.4	37.9	17.6	2.7	1.9	122.2	12.3	1241.67	877.27
MARC020	89	90	397.9	17.2	17.2	3.1	23.9	5.5	190.2	2.8	430.0	142.1	45.0	25.2	4.2	2.5	168.5	16.5	615.12	1071.31
MARC020	90	91	393.8	14.9	14.9	2.7	18.8	4.6	196.7	2.9	332.0	128.1	41.3	22.7	3.2	2.6	151.0	18.4	474.93	1023.42
MARC020	91	92	411.3	19.2	19.2	2.8	28.8	6.1	200.0	2.9	337.0	154.2	45.9	29.9	5.2	2.9	196.5	18.0	482.08	1153.82
MARC020	92	93	147.8	6.2	6.2	1.9	11.3	2.2	69.7	0.8	99.0	54.1	16.8	12.8	1.7	0.8	69.0	5.5	141.62	411.67
MARC020	93	94	135.7	7.3	7.3	2.9	13.8	2.7	62.7	1.1	64.0	56.3	16.3	12.8	2.2	1.2	77.8	6.8	91.55	413.77
MARC020	94	95	209.1	7.2	7.2	2.4	11.3	2.4	105.0	1.2	88.0	76.2	23.7	14.5	1.9	1.1	74.9	7.4	125.88	550.67
MARC020	95	96	114.9	2.9	2.9	1.7	6.1	1.1	56.5	0.4	26.0	42.0	12.9	8.1	1.0	0.4	33.9	2.7	37.19	290.05
MARC020	96	100	100.6	5.1	5.1	1.3	8.2	1.7	44.9	0.8	77.0	43.4	12.6	8.5	1.4	0.8	55.6	4.7	110.15	297.56
MARC020	100	101	56.9	2.6	2.6	1.4	4.7	0.8	26.2	0.3	27.0	23.8	7.0	4.8	0.7	0.4	27.7	2.6	38.62	164.05
MARC020	101	102	95.8	1.8	1.8	1.3	4.5	0.7	53.7	0.3	11.0	31.7	10.3	5.0	0.6	0.3	23.0	1.6	15.74	234.51
MARC020	102	103	86.4	4.2	4.2	1.5	7.1	1.4	37.9	0.7	50.0	35.3	10.1	7.0	1.1	0.5	45.7	3.8	71.53	249.42
MARC020	103	104	864.9	84.5	84.5	5.2	87.1	27.0	424.3	10.2	784.0	331.4	100.3	80.2	17.5	12.6	787.2	74.7	1121.51	3031.23
MARC020	104	105	206.1	12.5	12.5	1.9	13.1	3.9	99.2	2.0	354.0	74.4	23.3	14.4	2.7	2.0	122.2	13.4	506.40	608.90
MARC020	105	106	778.4	27.7	27.7	6.3	43.3	9.5	365.0	4.1	802.0	278.2	87.7	51.8	7.2	4.2	279.8	28.0	1147.26	2018.89
MARC020	106	107	790.8	39.1	39.1	4.3	54.3	12.9	372.6	4.3	643.0	273.5	86.5	57.3	9.7	5.4	397.0	33.5	919.81	2204.69
MARC020	107	108	806.2	31.2	31.2	4.3	45.1	10.2	405.8	4.1	939.0	261.0	85.0	48.4	7.5	4.5	304.4	29.3	1343.24	2095.54
MARC020	108	109	514.7	11.5	11.5	3.7	18.2	3.9	288.3	1.9	618.0	146.8	53.3	22.1	3.0	1.8	123.6	12.3	884.05	1223.36
MARC020	109	110	312.9	16.2	16.2	2.2	23.1	5.4	152.9	1.9	265.0	113.7	36.1	25.3	4.0	2.3	170.7	14.3	379.08	907.73
MARC020	110	111	173.6	3.9	3.9	2.1	7.3	1.4	102.3	0.4	32.0	52.1	17.1	7.8	1.1	0.5	38.9	3.1	45.78	418.65
MARC020	111	112	266.8	6.4	6.4	2.7	11.5	2.2	148.5	0.9	101.0	83.6	26.8	13.2	1.8	0.8	69.3	5.5	144.48	651.44
MARC020	112	113	65.4	3.2	3.2	1.2	5.4	1.0	30.7	0.4	40.0	26.7	7.6	5.2	0.9	0.4	36.2	2.5	57.22	192.07

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC020	113	114	396.7	24.7	24.7	3.4	31.4	8.2	185.4	3.3	491.0	146.1	45.3	31.7	6.1	3.7	249.7	23.3	702.38	1199.59
MARC020	114	115	858.9	43.5	43.5	3.8	51.6	13.6	431.2	5.7	2411.0	274.1	89.6	51.0	9.7	6.8	385.5	42.1	3448.94	2331.62
MARC020	115	116	230.2	17.3	17.3	0.9	11.6	4.5	107.7	4.0	712.0	74.4	24.8	12.5	2.3	3.1	157.7	23.3	1018.52	692.03
MARC020	116	117	442.2	21.3	21.3	2.7	29.5	7.1	207.2	3.2	463.0	162.1	50.6	31.3	4.9	3.2	213.6	22.7	662.32	1235.62
MARC020	117	118	558.8	21.5	21.5	4.2	33.5	7.1	245.6	2.8	999.0	211.0	67.5	40.4	5.7	3.2	233.5	19.8	1429.07	1491.25
MARC020	118	119	570.5	24.4	24.4	3.6	33.3	7.7	271.6	3.9	954.0	201.9	62.6	38.0	5.8	4.0	249.4	27.3	1364.70	1540.89
MARC020	119	120	399.7	17.8	17.8	2.5	22.4	5.6	184.4	3.3	738.0	145.1	44.8	25.2	3.8	3.0	181.1	21.9	1055.71	1087.69
MARC020	120	121	222.2	10.4	10.4	3.2	17.6	3.8	103.7	1.5	138.0	90.0	25.8	17.7	2.9	1.5	111.2	9.3	197.41	639.55
MARC020	121	122	509.2	16.9	16.9	3.1	23.5	5.5	252.3	2.8	977.0	165.4	55.1	27.9	4.2	2.6	175.2	17.8	1397.60	1288.40
MARC020	122	123	313.5	28.4	28.4	1.5	17.2	7.2	143.6	6.8	898.0	98.9	33.1	18.1	3.4	5.3	260.1	40.5	1284.59	1004.70
MARC020	123	124	43.4	1.4	1.4	0.9	2.3	0.5	22.0	0.3	19.0	16.4	5.2	3.1	0.4	0.2	14.0	1.5	27.18	113.63
MARC020	124	125	336.6	18.6	18.6	2.5	24.7	6.2	172.5	2.2	277.0	122.6	38.1	23.5	4.1	2.7	182.5	16.7	396.25	984.83
MARC020	125	126	79.5	2.7	2.7	1.2	4.3	0.8	40.2	0.4	40.0	29.0	8.9	5.5	0.7	0.4	27.9	2.3	57.22	207.98
MARC020	126	127	43.6	2.2	2.2	1.0	2.9	0.7	22.6	0.3	19.0	15.2	4.7	3.0	0.5	0.3	22.2	2.3	27.18	124.70
MARC020	127	128	70.3	9.3	9.3	1.2	8.0	2.9	34.9	1.1	52.0	26.4	8.6	6.7	2.0	1.3	102.1	8.1	74.39	297.15
MARC020	128	132	58.6	3.0	3.0	1.3	3.9	0.8	28.9	0.4	18.0	22.7	6.6	4.3	0.6	0.4	28.6	2.3	25.75	166.44
MARC020	132	136	82.7	3.4	3.4	1.2	5.1	1.1	44.3	0.4	24.0	29.6	9.3	5.1	0.8	0.4	36.2	3.0	34.33	227.99
MARC020	136	140	81.9	6.5	6.5	1.3	8.3	2.2	38.7	0.8	62.0	29.7	9.2	6.8	1.4	1.0	69.3	5.4	88.69	272.51
MARC020	140	144	68.2	2.9	2.9	1.4	4.3	0.9	32.7	0.4	21.0	24.7	7.7	4.6	0.8	0.4	31.0	2.4	30.04	187.57
MARC020	144	145	45.0	1.7	1.7	1.0	3.6	0.6	20.4	0.2	14.0	19.1	5.7	3.9	0.5	0.2	18.3	1.3	20.03	124.37
MARC020	145	146	40.7	0.8	0.8	1.0	1.8	0.2	21.3	0.2	5.0	14.0	4.7	2.6	0.2	0.1	9.0	0.9	7.15	99.19
MARC020	146	147	143.1	13.6	13.6	1.6	15.7	4.5	64.7	1.8	200.0	60.0	17.3	14.4	3.1	2.1	135.6	13.2	286.10	511.87
MARC020	147	148	92.7	7.7	7.7	0.9	7.4	2.1	42.1	1.5	137.0	36.4	10.7	7.3	1.3	1.3	71.5	9.2	195.98	301.74
MARC020	148	149	1067.6	42.0	42.0	2.8	39.2	11.6	442.5	9.5	3933.0	309.2	107.4	52.4	6.9	7.9	409.4	58.0	5626.16	2616.54
MARC020	149	150	962.9	59.3	59.3	3.2	45.8	16.3	411.3	14.3	2862.0	309.3	100.4	54.8	8.7	11.0	560.2	85.3	4094.09	2708.54
MARC020	150	151	482.1	20.2	20.2	1.9	19.4	5.4	215.9	4.0	1841.0	151.9	52.5	25.0	3.4	3.5	190.6	26.1	2633.55	1225.53
MARC020	151	152	830.3	33.4	33.4	4.2	51.5	11.7	393.9	4.2	1179.0	297.2	92.9	57.7	9.1	4.9	385.0	31.7	1686.56	2265.86
MARC020	152	153	99.3	8.7	8.7	1.3	10.5	2.9	43.7	1.1	131.0	36.9	12.0	8.6	2.0	1.3	84.7	7.9	187.40	334.50
MARC020	153	154	103.1	7.2	7.2	1.2	8.8	2.4	46.3	1.0	110.0	38.1	11.5	8.9	1.6	1.1	70.9	7.1	157.36	321.10
MARC020	154	155	71.7	5.8	5.8	0.8	6.9	1.8	31.7	0.7	59.0	29.6	8.5	7.8	1.3	0.9	61.3	5.1	84.40	243.38
MARC020	155	156	39.7	2.6	2.6	0.8	3.7	0.9	19.2	0.5	37.0	16.4	4.5	3.7	0.6	0.4	29.6	3.0	52.93	129.77
MARC021	0	4	169.9	7.4	7.4	1.6	9.1	2.3	83.7	1.2	146.0	55.3	16.2	10.0	2.9	1.1	74.8	7.7	208.85	454.26
MARC021	4	8	261.3	11.9	11.9	2.2	18.1	4.0	129.7	1.5	174.0	102.8	26.7	18.6	3.2	1.8	128.5	10.7	248.91	740.68
MARC021	8	9	54.4	1.7	1.7	0.9	2.8	0.6	28.9	0.2	23.0	18.5	5.4	3.1	0.4	0.3	18.0	1.6	32.90	139.82
MARC021	9	10	126.6	4.2	4.2	1.2	6.2	1.4	63.6	0.6	69.0	46.9	13.1	7.4	1.1	0.5	50.3	4.2	98.70	334.58
MARC021	10	11	365.7	13.4	13.4	1.9	19.9	4.6	156.7	1.6	365.0	124.3	34.5	23.4	3.6	2.1	142.4	12.4	522.13	929.59
MARC021	11	12	115.7	5.6	5.6	1.4	7.1	1.8	58.8	0.6	83.0	43.0	12.2	7.8	1.4	0.8	57.0	4.8	118.73	326.44
MARC021	12	13	1077.1	47.9	47.9	4.7	68.7	16.4	470.4	5.8	875.0	376.6	103.3	69.7	12.0	7.1	492.1	43.0	1251.69	2874.88
MARC021	13	14	217.2	7.8	7.8	1.6	13.6	2.7	101.2	0.9	168.0	86.1	22.8	14.6	2.3	1.2	94.9	7.6	240.32	589.10
MARC021	14	15	119.9	1.8	1.8	1.3	3.9	0.7	64.4	0.3	27.0	38.1	11.6	5.3	0.6	0.3	22.0	1.7	38.62	275.29
MARC021	15	16	191.6	10.1	10.1	1.5	11.9	3.3	99.1	1.4	155.0	74.5	20.9	13.6	2.3	1.5	106.8	8.9	221.73	563.27
MARC021	16	17	2177.7	53.4	53.4	8.7	116.6	20.5	891.3	5.6	3435.0	753.5	212.8	135.4	19.9	6.9	777.3	40.9	4913.77	5332.23
MARC021	17	18	2211.9	83.5	83.5	9.8	132.3	28.9	966.5	10.3	2573.0	788.4	216.1	148.0	22.9	12.1	995.7	74.5	3680.68	5845.97
MARC021	18	19	449.6	12.0	12.0	2.8	18.2	4.1	251.3	1.8	211.0	139.9	42.6	21.9	3.0	1.9	129.3	12.8	301.84	1110.84
MARC021	19	20	216.4	12.7	12.7	2.0	17.4	4.1	103.8	1.6	270.0	83.5	22.1	15.7	3.1	1.9	134.7	12.0	386.24	651.92
MARC021	20	21	504.7	24.1	24.1	2.5	31.7	8.2	243.5	3.3	637.0	198.2	53.3	34.8	6.0	3.7	242.9	23.0	911.23	1418.13
MARC021	21	22	94.5	3.9	3.9	1.2	5.5	1.1	47.0	0.5	61.0	35.5	10.3	7.0	1.0	0.5	40.9	3.5	87.26	258.83
MARC021	22	23	206.6	7.0	7.0	1.4	10.1	2.3	92.8	0.9	147.0	68.8	19.0	11.0	1.8	1.0	72.9	6.5	210.28	513.44
MARC021	23	24	209.3	7.7	7.7	1.6	11.6	2.9	92.1	1.0	149.0	73.2	20.1	13.7	2.2	1.1	83.1	7.4	213.14	540.42
MARC021	24	28	192.6	3.1	3.1	1.9	6.6	1.1	104.3	0.4	52.0	62.4	18.2	6.3	1.0	0.5	35.3	3.0	74.39	442.66
MARC021	28	32	420.2	11.4	11.4	2.3	16.0	3.9	230.5	1.5	271.0	125.2	37.7	19.1	3.0	1.6	122.4	10.7	387.67	1023.51
MARC021	32	33	150.5	5.8	5.8	1.3	8.9	2.2	72.7	0.7	113.0	58.4	15.9	10.0	1.6	0.9	68.2	5.7	161.65	413.59
MARC021	33	34	532.9	21.5	21.5	2.3	30.1	7.4	251.1	3.2	1426.0	190.5	54.2	31.5	5.5	3.3	224.0	21.5	2039.89	1414.51
MARC021	34	35	166.2	5.5	5.5	1.3	9.2	1.9	80.7	0.7	131.0	61.2	17.4	11.9	1.6	0.8	62.7	5.5	187.40	436.25

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC021	35	36	203.3	3.4	3.4	1.6	7.1	1.3	119.2	0.4	52.0	62.4	18.4	9.6	1.0	0.5	41.3	3.3	74.39	479.46
MARC021	36	37	172.6	5.6	5.6	2.5	10.1	2.1	75.2	0.7	33.0	53.8	14.7	9.3	1.6	0.8	65.0	5.2	47.21	429.46
MARC021	37	38	98.4	3.5	3.5	1.0	5.2	1.1	47.3	0.7	101.0	39.1	10.2	6.8	0.9	0.7	40.1	4.6	144.48	265.04
MARC021	38	39	485.8	26.6	26.6	2.5	31.8	8.6	231.3	4.3	847.0	173.3	48.2	31.8	6.0	4.2	278.0	27.6	1211.63	1397.92
MARC021	39	40	851.2	46.3	46.3	6.7	52.4	15.9	383.2	7.0	387.0	290.4	81.3	55.1	10.3	7.2	492.3	49.0	553.60	2420.14
MARC021	40	41	727.3	33.3	33.3	2.9	35.4	10.3	331.9	6.9	2606.0	246.9	72.4	38.4	6.4	6.1	344.0	44.0	3727.88	1949.73
MARC021	41	42	788.8	39.3	39.3	4.6	51.1	13.1	378.1	5.5	1125.0	294.7	81.0	54.3	9.4	6.0	400.5	38.8	1609.31	2225.91
MARC021	42	43	108.6	3.9	3.9	1.6	6.2	1.3	52.1	0.6	76.0	43.4	11.7	7.8	1.1	0.5	41.3	3.9	108.72	290.45
MARC021	43	44	372.8	6.4	6.4	3.7	12.2	2.2	194.1	1.1	105.0	116.5	35.7	16.8	1.6	0.9	65.7	6.8	150.20	847.15
MARC021	44	45	262.0	4.1	4.1	2.9	7.6	1.4	136.5	0.7	53.0	84.1	24.6	11.1	1.2	0.6	42.8	4.0	75.82	590.16
MARC021	45	46	197.2	7.5	7.5	2.1	12.2	2.4	92.7	1.1	159.0	76.5	20.7	13.7	2.2	1.1	85.6	7.2	227.45	535.83
MARC021	46	47	308.7	12.6	12.6	1.7	18.2	4.4	147.1	2.1	346.0	109.8	31.0	20.1	3.0	2.1	130.5	14.3	494.95	824.83
MARC021	47	48	476.3	14.4	14.4	4.2	25.4	4.8	231.7	1.9	289.0	177.1	49.1	29.3	4.1	2.1	185.4	13.8	413.41	1243.94
MARC021	48	49	1103.7	36.2	36.2	9.3	44.7	11.8	558.8	6.5	526.0	320.6	96.8	50.4	8.0	6.0	369.0	40.3	752.44	2715.58
MARC021	49	50	449.8	13.7	13.7	7.1	25.2	4.9	214.9	2.0	171.0	178.5	47.3	28.2	3.8	2.2	166.6	13.4	244.62	1180.67
MARC021	50	51	553.4	16.4	16.4	6.3	25.9	5.5	297.2	2.6	236.0	194.1	54.8	28.4	4.3	2.6	185.7	15.7	337.60	1419.29
MARC021	51	52	2638.6	40.6	40.6	13.2	68.1	14.2	1578.5	5.3	702.0	617.0	204.2	81.2	11.2	6.0	423.3	39.1	1004.21	5809.63
MARC021	52	53	375.2	7.1	7.1	2.0	15.0	2.5	176.4	1.3	376.0	140.4	39.0	22.0	2.2	1.2	76.6	8.1	537.87	881.34
MARC021	53	54	550.1	15.8	15.8	2.3	23.4	5.3	267.2	3.0	526.0	195.0	55.9	30.8	4.1	2.6	168.0	19.8	752.44	1367.98
MARC021	54	55	328.4	5.8	5.8	3.4	11.6	1.9	174.5	0.8	31.0	109.2	31.3	14.7	2.0	0.9	67.8	5.9	44.35	769.09
MARC021	55	56	131.2	6.1	6.1	2.4	9.3	2.1	67.2	0.8	36.0	51.8	13.8	9.3	1.6	0.8	67.3	5.6	51.50	379.32
MARC021	56	57	125.2	4.8	4.8	1.6	7.6	1.6	60.3	0.5	58.0	45.3	13.1	8.9	1.3	0.6	53.7	4.3	82.97	336.27
MARC021	57	58	69.4	1.9	1.9	1.4	3.1	0.7	36.5	0.2	10.0	25.1	7.2	3.7	0.5	0.3	23.1	1.7	14.31	178.18
MARC021	58	59	57.2	2.7	2.7	0.8	3.5	0.9	29.0	0.4	34.0	21.6	6.0	3.8	0.6	0.5	31.2	2.6	48.64	165.33
MARC021	59	60	118.0	6.4	6.4	1.2	8.4	2.1	54.8	0.8	102.0	48.3	12.9	9.5	1.6	1.0	65.5	6.8	145.91	347.50
MARC021	60	61	567.3	44.4	44.4	2.7	36.7	12.9	264.3	9.3	1103.0	204.6	56.5	35.6	7.1	7.7	432.5	58.1	1577.84	1792.28
MARC021	61	62	82.9	2.2	2.2	1.2	3.5	0.8	43.0	0.3	48.0	28.7	8.4	4.3	0.6	0.3	26.3	2.3	68.66	208.37
MARC021	62	63	62.6	3.5	3.5	1.5	5.5	1.1	30.1	0.5	31.0	26.6	6.9	5.3	0.9	0.5	37.1	3.3	44.35	190.89
MARC021	63	64	83.9	3.1	3.1	1.0	5.9	1.1	39.5	0.5	46.0	32.7	8.1	5.7	0.9	0.5	34.9	3.1	65.80	226.90
MARC021	64	68	122.3	5.6	5.6	1.7	8.6	1.9	59.2	0.6	74.0	47.0	12.6	8.8	1.4	0.8	62.7	4.9	105.86	347.62
MARC021	68	72	142.5	5.9	5.9	1.5	8.0	1.8	72.8	1.0	123.0	50.3	14.3	8.5	1.3	0.9	62.7	6.4	175.95	387.13
MARC021	72	73	131.6	7.0	7.0	1.3	8.8	2.4	61.9	1.2	141.0	49.7	13.9	8.6	1.6	1.1	76.4	8.1	201.70	383.63
MARC021	73	74	39.8	1.1	1.1	0.9	2.4	0.3	19.2	0.2	5.0	16.9	4.3	3.1	0.4	0.2	13.3	1.1	7.15	105.52
MARC021	74	75	360.9	3.3	3.3	2.4	6.7	1.1	234.8	0.5	11.0	88.4	29.5	9.0	1.1	0.5	35.6	3.9	15.74	783.64
MARC021	75	76	168.3	9.9	9.9	1.3	8.9	2.6	75.9	2.1	496.0	61.0	16.9	10.0	1.4	1.7	97.3	13.0	709.53	482.27
MARC021	76	77	386.9	37.5	37.5	1.4	18.1	9.2	194.3	10.1	861.0	123.2	37.4	19.7	4.2	7.2	333.3	60.1	1231.66	1276.88
MARC021	77	78	138.3	11.4	11.4	0.9	8.4	3.3	63.6	2.3	315.0	51.7	14.1	9.2	1.7	2.0	117.3	15.6	450.61	453.74
MARC021	78	79	38.3	3.8	3.8	1.9	5.9	1.4	16.7	0.6	27.0	21.0	4.7	5.5	1.0	0.6	42.2	4.0	38.62	153.84
MARC021	79	80	855.7	5.1	5.1	3.2	8.6	1.7	595.7	0.7	61.0	162.5	59.5	14.4	1.4	0.7	53.3	5.0	87.26	1776.25
MARC021	80	81	164.0	3.9	3.9	2.2	7.5	1.5	93.1	0.6	36.0	55.9	15.4	9.3	1.1	0.6	47.9	3.9	51.50	413.85
MARC021	81	82	48.9	3.5	3.5	1.5	5.6	1.4	23.1	0.6	5.0	22.2	5.2	5.0	1.0	0.6	42.8	4.0	7.15	171.33
MARC021	82	83	123.9	3.2	3.2	1.7	5.3	1.0	60.6	0.6	33.0	39.1	11.2	5.9	0.8	0.5	34.0	3.0	47.21	295.76
MARC021	83	84	51.6	1.1	1.1	0.8	2.1	0.3	26.3	0.2	11.0	18.2	4.8	2.6	0.2	0.2	12.3	1.1	15.74	123.80
MARC021	84	88	71.5	4.3	4.3	2.1	7.8	1.6	33.8	0.7	22.0	33.7	8.5	7.2	1.2	0.7	49.3	4.7	31.47	234.78
MARC021	88	92	142.5	5.0	5.0	2.1	9.5	1.8	72.2	0.6	40.0	57.6	14.7	10.2	1.5	0.8	56.8	4.2	57.22	388.32
MARC021	92	93	75.3	3.7	3.7	1.9	5.9	1.1	35.8	0.4	16.0	33.2	8.5	5.7	1.1	0.5	37.1	3.0	22.89	218.77
MARC021	93	94	286.1	12.3	12.3	2.2	14.5	3.8	143.3	2.8	906.0	99.1	28.6	16.0	2.7	2.2	118.1	16.6	1296.03	766.32
MARC021	94	95	384.0	19.8	19.8	3.1	23.2	6.4	189.8	3.2	892.0	141.5	39.4	24.9	4.6	3.2	200.8	21.6	1276.01	1095.69
MARC021	95	96	345.4	24.5	24.5	2.9	32.7	8.0	159.5	3.3	351.0	149.2	39.5	33.7	5.7	3.9	258.8	24.5	502.11	1130.38
MARC021	96	97	39.3	1.1	1.1	0.8	2.0	0.3	21.3	0.2	13.0	14.9	4.2	2.2	0.3	0.1	12.4	1.0	18.60	102.12
MARC021	97	98	57.7	4.5	4.5	1.0	5.4	1.5	28.4	0.5	53.0	23.9	6.6	4.8	1.2	0.7	54.1	4.6	75.82	202.29
MARC021	98	99	314.7	9.9	9.9	1.4	13.3	2.9	149.3	2.1	783.0	112.2	31.6	16.2	2.1	1.7	105.8	12.6	1120.08	789.03
MARC021	99	100	836.5	30.0	30.0	2.3	26.7	8.0	357.2	7.8	2461.0	247.3	75.1	35.3	4.7	5.8	304.8	46.3	3520.46	2020.98
MARC021	100	101	472.1	46.1	46.1	1.7	24.1	11.5	215.9	13.4	1294.0	163.4	47.0	26.3	5.0	9.5	417.3	76.7	1851.07	1571.25

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC021	101	102	372.6	40.6	40.6	1.7	18.2	9.7	170.6	12.2	1053.0	128.2	38.3	20.3	3.9	8.1	350.7	67.8	1506.32	1276.48
MARC021	102	103	392.6	16.4	16.4	2.5	25.6	5.8	193.5	2.0	315.0	147.0	40.3	28.1	4.5	2.4	182.7	15.0	450.61	1087.43
MARC021	103	104	86.6	2.4	2.4	1.3	5.5	1.0	41.0	0.4	54.0	37.4	9.3	6.4	0.8	0.4	30.4	2.8	77.25	230.26
MARC021	104	105	484.2	26.3	26.3	2.4	28.7	7.8	241.6	5.5	650.0	188.7	51.1	30.4	5.2	4.9	250.9	34.4	929.83	1395.56
MARC021	105	106	89.6	2.5	2.5	1.9	5.4	1.0	43.5	0.4	24.0	35.5	9.6	7.3	0.9	0.5	31.2	2.6	34.33	236.84
MARC021	106	107	61.3	5.6	5.6	2.3	8.2	1.8	27.4	0.7	37.0	34.6	7.8	7.8	1.5	0.9	59.8	4.9	52.93	234.00
MARC021	107	108	841.1	30.0	30.0	4.3	43.1	9.4	368.3	5.3	986.0	288.5	79.8	48.4	7.0	5.0	380.8	33.9	1410.47	2189.34
MARC021	108	109	3292.0	111.4	111.4	14.1	189.4	39.3	1595.8	15.1	2449.0	1176.3	327.9	216.5	31.7	16.8	1528.8	108.4	3503.29	8860.15
MARC021	109	110	3597.6	147.3	147.3	15.4	214.2	49.9	1714.3	19.3	3668.0	1269.7	352.9	231.3	37.5	21.7	1651.1	140.5	5247.07	9699.25
MARC021	110	111	699.8	19.4	19.4	6.8	36.5	6.6	326.5	3.0	718.0	304.3	79.0	50.4	5.7	3.0	235.1	19.7	1027.10	1829.76
MARC021	111	112	300.5	5.8	5.8	5.0	15.8	1.9	135.2	0.7	172.0	139.5	34.1	23.0	2.0	0.8	67.7	5.4	246.05	747.58
MARC021	112	116	134.5	4.5	4.5	1.7	6.3	1.5	69.5	0.6	77.0	48.8	13.4	8.5	1.1	0.6	49.4	4.2	110.15	351.77
MARC021	116	120	75.5	3.2	3.2	1.6	6.3	1.3	34.5	0.5	35.0	33.2	8.4	7.4	1.0	0.5	41.4	3.4	50.07	224.31
MARC022	0	1	1354.6	50.8	50.8	3.7	46.6	15.2	270.1	7.3	1749.0	200.7	63.4	42.1	10.5	7.9	425.2	53.7	2501.94	2619.83
MARC022	1	2	361.1	9.8	9.8	2.7	13.9	3.1	151.8	1.4	320.0	97.0	29.9	15.8	3.5	1.5	98.0	10.1	457.76	815.15
MARC022	2	3	111.2	4.0	4.0	2.0	8.4	1.5	99.1	0.5	49.0	59.7	17.8	10.7	2.4	0.5	45.6	3.3	70.09	374.21
MARC022	3	4	148.5	6.2	6.2	2.2	10.9	2.2	101.0	0.8	82.0	65.9	18.4	10.8	2.9	0.9	77.0	5.4	117.30	463.56
MARC022	4	8	183.6	3.9	3.9	2.1	7.6	1.4	100.6	0.5	61.0	61.5	19.1	9.0	1.2	0.5	41.9	3.2	87.26	442.67
MARC022	8	9	613.2	6.4	6.4	2.3	11.4	2.3	356.6	0.9	82.0	162.9	55.6	18.9	1.8	0.9	66.7	5.9	117.30	1316.73
MARC022	9	10	137.2	7.2	7.2	2.1	11.3	2.3	62.7	1.1	70.0	57.7	16.4	13.1	2.0	1.0	67.8	6.5	100.14	400.27
MARC022	10	11	123.2	4.9	4.9	2.7	10.4	1.8	60.2	0.8	34.0	52.7	14.5	10.9	1.6	0.7	52.3	4.2	48.64	349.97
MARC022	11	12	164.4	3.9	3.9	1.9	6.6	1.4	89.3	0.6	44.0	55.8	16.9	8.5	1.0	0.6	37.0	3.2	62.94	397.05
MARC022	12	13	409.1	22.3	22.3	3.1	26.0	6.9	201.1	3.1	480.0	147.8	44.0	27.9	4.9	3.5	191.8	19.9	686.64	1144.26
MARC022	13	14	478.1	18.3	18.3	3.2	24.8	6.0	254.5	2.3	252.0	154.8	49.6	28.1	4.4	2.7	199.9	15.0	360.49	1269.08
MARC022	14	15	312.0	11.3	11.3	2.1	16.1	3.6	158.6	1.3	185.0	112.3	34.8	19.0	2.9	1.5	116.1	9.2	264.64	819.49
MARC022	15	16	280.0	10.9	10.9	2.1	16.9	3.6	139.8	1.4	123.0	97.9	31.6	18.3	2.8	1.5	104.8	9.0	175.95	737.88
MARC022	16	20	161.3	6.1	6.1	1.5	9.3	2.1	80.1	0.8	95.0	56.5	17.7	10.2	1.7	1.0	58.5	5.5	135.90	421.86
MARC022	20	21	151.7	4.8	4.8	1.5	8.8	1.7	74.2	0.6	75.0	56.2	16.8	9.2	1.4	0.7	48.3	4.1	107.29	388.47
MARC022	21	22	418.4	16.7	16.7	2.3	23.2	5.5	202.2	2.1	289.0	151.4	46.3	25.7	4.0	2.2	155.9	14.6	413.41	1096.73
MARC022	22	23	211.4	12.8	12.8	1.9	13.6	3.9	110.8	1.7	119.0	75.2	22.7	13.9	2.5	1.9	111.0	11.8	170.23	612.53
MARC022	23	24	263.5	8.5	8.5	1.9	12.2	2.9	153.8	1.1	85.0	82.7	27.0	13.1	2.0	1.2	82.4	7.6	121.59	673.60
MARC022	24	25	1552.2	99.6	99.6	6.8	97.0	30.0	799.8	14.6	1174.0	505.5	159.7	97.8	19.9	15.3	828.5	97.4	1679.41	4461.51
MARC022	25	26	165.0	6.2	6.2	1.4	8.2	1.9	86.2	0.8	119.0	52.8	17.2	9.2	1.5	0.9	58.2	5.7	170.23	424.22
MARC022	26	27	107.2	2.7	2.7	1.3	4.4	0.9	58.9	0.4	36.0	40.6	11.6	5.8	0.7	0.5	24.5	2.2	51.50	265.96
MARC022	27	28	312.3	11.4	11.4	2.3	16.3	3.9	160.7	1.3	196.0	101.6	31.9	18.6	2.9	1.7	111.9	10.4	280.38	805.62
MARC022	28	29	510.8	10.2	10.2	2.7	15.9	3.3	312.1	1.5	176.0	139.6	47.8	21.2	2.5	1.4	101.1	8.8	251.77	1195.15
MARC022	29	30	834.6	17.0	17.0	3.0	24.3	5.5	536.8	2.3	284.0	207.3	75.0	30.7	4.3	2.5	165.0	15.3	406.26	1950.02
MARC022	30	31	254.9	9.1	9.1	2.0	13.5	3.0	126.2	1.3	130.0	86.5	26.0	13.7	2.2	1.4	87.6	8.2	185.97	650.18
MARC022	31	32	1254.2	56.8	56.8	4.6	61.0	16.7	615.8	10.1	2454.0	400.1	127.3	69.5	11.2	9.1	448.0	62.3	3510.45	3221.64
MARC022	32	33	931.3	45.2	45.2	3.6	46.1	13.2	437.5	8.3	1913.0	306.5	96.1	53.0	8.5	7.5	392.0	51.5	2736.55	2457.63
MARC022	33	34	377.4	15.1	15.1	2.2	21.6	4.9	185.7	1.9	337.0	129.4	41.4	24.2	3.5	2.2	145.0	13.7	482.08	992.05
MARC022	34	35	938.9	50.1	50.1	3.4	45.2	14.2	447.2	9.5	2451.0	305.0	98.1	52.2	8.8	8.2	431.3	58.0	3506.16	2531.49
MARC022	35	36	1252.6	61.3	61.3	5.2	70.9	19.5	651.6	7.3	979.0	420.5	132.0	77.1	13.9	8.9	492.3	52.7	1400.46	3356.34
MARC022	36	37	874.3	33.5	33.5	3.7	40.5	10.1	436.6	6.1	1440.0	285.4	91.5	49.1	7.2	5.5	288.3	37.3	2059.92	2217.55
MARC022	37	38	1109.1	39.2	39.2	5.0	51.4	12.1	548.4	6.2	1400.0	361.6	115.3	60.8	8.8	6.3	331.8	40.0	2002.70	2752.75
MARC022	38	39	576.9	14.3	14.3	3.0	20.7	4.5	292.4	2.3	776.0	187.7	58.9	27.1	3.3	2.2	126.7	14.6	1110.07	1355.08
MARC022	39	40	1022.2	42.8	42.8	4.9	56.7	14.3	521.1	5.3	642.0	346.3	108.4	62.5	10.4	6.2	380.2	37.0	918.38	2684.09
MARC022	40	41	485.6	12.3	12.3	2.7	20.7	4.2	251.2	1.5	201.0	161.5	52.1	25.5	3.4	1.7	114.4	10.4	287.53	1168.08
MARC022	41	42	725.5	20.9	20.9	4.1	31.4	7.0	383.9	2.8	410.0	249.4	77.7	40.2	5.1	3.1	185.7	18.1	586.51	1787.65
MARC022	42	43	2808.6	82.1	82.1	9.1	106.7	25.7	1590.2	10.7	1898.0	887.9	297.7	139.2	19.1	12.0	786.2	74.6	2715.09	6974.31
MARC022	43	44	6370.1	137.6	137.6	18.3	208.0	48.8	3727.3	15.2	3600.0	1888.4	654.0	269.8	37.2	19.1	1464.2	109.9	5149.80	15207.77
MARC022	44	45	1500.5	29.2	29.2	7.3	50.1	10.5	845.5	3.3	712.0	454.3	151.0	66.9	8.7	3.8	300.3	22.5	1018.52	3508.52
MARC022	45	46	1336.5	37.8	37.8	7.8	59.7	13.4	699.1	4.1	838.0	455.1	142.9	72.8	10.6	5.3	375.9	29.3	1198.76	3316.85
MARC022	46	47	530.7	14.0	14.0	3.9	20.6	4.7	293.6	2.1	222.0	165.4	53.8	26.2	3.7	2.0	137.5	12.5	317.57	1294.05

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC022	47	48	1119.8	63.5	63.5	5.3	76.0	20.3	537.1	8.3	1018.0	400.8	122.3	83.4	14.4	9.5	592.9	56.8	1456.25	3205.01
MARC022	48	49	567.6	13.6	13.6	4.3	22.0	4.2	312.9	1.8	222.0	181.1	60.4	27.7	3.4	2.0	137.0	12.6	317.57	1372.69
MARC022	49	50	514.5	12.3	12.3	2.2	22.8	4.2	288.7	1.7	125.0	163.5	52.8	27.1	3.7	1.8	135.6	10.2	178.81	1265.41
MARC022	50	51	792.6	22.0	22.0	3.6	35.4	7.1	448.8	2.7	274.0	252.4	81.0	42.6	6.2	3.2	220.1	18.1	391.96	1973.58
MARC022	51	52	537.9	14.2	14.2	2.7	23.9	4.5	282.5	2.0	257.0	184.4	58.7	32.6	4.2	2.0	145.0	11.5	367.64	1330.35
MARC022	52	53	317.2	16.7	16.7	2.3	21.8	5.4	150.5	1.9	220.0	121.9	36.1	23.3	4.1	2.3	162.8	13.9	314.71	906.22
MARC022	53	54	150.7	7.7	7.7	1.4	9.9	2.5	73.2	1.0	133.0	56.9	17.4	11.1	1.9	1.2	72.8	7.1	190.26	427.25
MARC022	54	55	1138.1	53.9	53.9	5.2	62.6	16.2	513.9	9.3	1313.0	409.6	127.0	72.8	11.3	8.4	572.5	58.6	1878.25	3132.04
MARC022	55	56	42.9	1.4	1.4	0.8	2.1	0.3	23.0	0.3	11.0	15.7	4.7	2.2	0.4	0.2	11.8	1.4	15.74	109.18
MARC022	56	60	97.0	6.7	6.7	2.1	9.3	2.2	43.7	0.9	52.0	45.4	12.1	10.1	1.7	0.9	62.0	5.5	74.39	310.25
MARC022	60	64	104.5	4.0	4.0	1.3	6.0	1.3	51.3	0.7	59.0	39.2	12.0	7.2	1.2	0.6	38.9	3.3	84.40	277.92
MARC022	64	68	77.9	2.4	2.4	1.5	4.6	0.8	39.8	0.4	28.0	29.3	8.9	5.7	0.7	0.4	23.1	2.2	40.05	202.02
MARC022	68	69	128.1	4.7	4.7	3.4	12.7	2.3	67.8	0.8	56.0	54.4	19.4	13.7	2.2	1.6	38.0	3.4	80.11	362.98
MARC022	69	70	50.0	1.1	1.1	1.0	2.0	0.5	28.7	0.3	17.0	16.7	5.3	2.6	0.4	0.2	11.7	1.5	24.32	123.96
MARC022	70	71	196.2	3.0	3.0	1.7	4.5	0.9	114.0	0.5	36.0	57.4	19.3	7.1	0.8	0.5	28.8	3.2	51.50	442.86
MARC022	71	72	828.2	31.4	31.4	3.6	42.6	10.1	402.7	5.1	1614.0	279.2	88.6	50.2	7.4	4.7	297.4	32.8	2308.83	2130.10
MARC022	72	73	266.1	8.7	8.7	1.7	12.0	2.7	132.3	1.4	494.0	91.1	28.8	15.2	2.3	1.4	82.4	8.8	706.67	668.19
MARC022	73	74	401.6	9.9	9.9	2.7	15.6	3.3	237.6	1.9	384.0	130.1	42.0	21.6	2.8	1.4	91.1	9.8	549.31	987.58
MARC022	74	75	285.1	9.9	9.9	2.1	12.8	3.0	168.4	1.5	114.0	81.9	28.3	14.8	2.3	1.4	81.0	9.1	163.08	716.57
MARC022	75	76	238.4	10.1	10.1	2.8	13.4	3.3	127.6	1.8	142.0	82.2	25.9	14.6	2.3	1.6	88.6	10.5	203.13	638.42
MARC022	76	77	561.9	27.9	27.9	1.5	17.8	6.9	287.5	7.1	1519.0	172.6	57.1	25.0	3.3	5.3	222.4	39.3	2172.93	1462.39
MARC022	77	78	147.3	4.6	4.6	1.5	6.3	1.4	78.6	0.9	177.0	48.8	15.3	7.9	1.0	0.8	40.5	4.7	253.20	365.44
MARC022	78	79	117.2	4.1	4.1	3.0	8.8	1.4	52.8	0.5	61.0	48.6	13.2	9.5	1.3	0.5	36.8	3.0	87.26	307.86
MARC022	79	80	133.5	3.2	3.2	2.4	7.4	1.1	67.6	0.4	37.0	50.5	14.6	8.5	1.1	0.5	30.4	2.4	52.93	329.60
MARC022	80	81	494.6	14.6	14.6	4.3	21.3	4.6	296.1	1.9	134.0	154.5	50.1	25.5	3.6	2.0	137.9	12.3	191.69	1246.37
MARC022	81	82	22.5	1.1	1.1	0.3	1.6	0.3	10.6	0.2	18.0	7.9	2.5	1.5	0.2	0.2	9.0	0.9	25.75	60.70
MARC022	82	83	186.0	7.4	7.4	1.9	10.3	2.2	93.0	1.1	118.0	67.0	19.6	12.1	1.7	1.1	66.9	7.1	168.80	488.35
MARC022	83	84	287.8	14.1	14.1	2.0	18.2	4.4	138.2	1.6	252.0	103.2	31.6	19.0	3.4	2.0	134.1	12.3	360.49	794.29
MARC022	84	85	364.3	17.6	17.6	2.3	20.5	5.8	173.2	2.4	376.0	120.4	37.2	22.3	4.0	2.6	160.9	16.3	537.87	977.71
MARC022	85	86	946.0	23.3	23.3	1.5	14.5	5.4	435.3	6.7	4632.0	253.3	90.7	25.6	2.6	4.6	174.4	36.2	6626.08	2039.86
MARC022	86	87	487.9	33.2	33.2	3.7	31.4	9.4	222.2	6.2	789.0	177.2	54.7	33.4	5.8	5.4	276.1	37.0	1128.66	1423.71
MARC022	87	88	106.3	4.2	4.2	1.9	7.8	1.5	49.4	0.6	45.0	45.0	12.6	8.6	1.2	0.7	42.5	3.6	64.37	293.45
MARC022	88	89	497.5	25.6	25.6	3.4	32.3	8.7	265.1	2.8	273.0	168.1	51.9	34.6	6.2	3.5	242.3	19.8	390.53	1403.13
MARC022	89	90	468.8	17.8	17.8	3.1	25.8	6.0	257.7	2.0	221.0	149.2	47.7	26.7	4.5	2.6	178.7	14.1	316.14	1233.85
MARC022	90	91	473.7	19.6	19.6	3.6	27.0	6.5	251.0	2.5	273.0	165.6	50.8	31.4	5.0	3.0	195.9	17.5	390.53	1284.87
MARC022	91	92	630.0	8.6	8.6	3.5	14.2	2.9	389.8	1.0	91.0	160.6	56.4	19.8	2.2	1.2	84.7	6.9	130.18	1396.24
MARC022	92	93	175.3	8.7	8.7	2.4	11.2	2.9	86.3	1.1	60.0	66.4	20.1	12.3	2.0	1.2	82.3	6.9	85.83	492.49
MARC022	93	94	422.4	12.7	12.7	2.4	19.4	4.0	200.1	1.8	845.0	142.1	45.5	24.6	3.2	1.9	127.0	11.4	1208.77	1038.74
MARC022	94	95	147.8	7.4	7.4	1.5	9.6	2.3	72.6	0.7	85.0	54.1	16.1	10.2	1.8	1.0	68.2	5.9	121.59	409.98
MARC022	95	96	271.1	11.8	11.8	2.2	14.8	3.6	125.7	1.5	208.0	90.0	27.9	17.3	2.7	1.7	113.3	10.0	297.54	711.49
MARC022	96	97	187.3	6.2	6.2	1.5	9.7	2.1	92.8	0.7	90.0	65.8	20.1	12.2	1.6	0.9	61.5	5.2	128.75	477.41
MARC022	97	98	185.6	6.4	6.4	1.6	8.5	1.9	97.9	0.8	75.0	59.6	19.0	10.0	1.6	0.9	58.4	5.5	107.29	467.90
MARC022	98	99	281.8	9.5	9.5	2.0	10.0	2.9	136.6	1.4	158.0	76.2	25.5	11.9	1.9	1.4	85.3	9.3	226.02	669.12
MARC022	99	100	489.5	25.7	25.7	2.5	22.6	7.6	194.9	4.0	626.0	131.3	41.5	23.2	4.6	4.0	219.7	26.1	895.49	1232.41
MARC022	100	101	487.3	17.2	17.2	2.7	19.1	5.2	210.2	2.9	1252.0	142.5	46.1	22.5	3.4	2.8	150.4	17.5	1790.99	1153.25
MARC022	101	102	99.9	2.4	2.4	1.3	3.3	0.9	49.7	0.5	47.0	26.8	8.7	4.4	0.6	0.4	24.1	2.3	67.23	229.20
MARC022	102	103	83.7	2.6	2.6	1.2	3.7	0.8	41.4	0.4	51.0	26.8	8.7	4.3	0.6	0.4	24.3	2.4	72.96	205.34
MARC022	103	104	192.0	8.5	8.5	1.5	8.1	2.7	75.1	1.2	118.0	43.3	13.9	7.3	1.7	1.3	70.0	7.6	168.80	446.05
MARC022	104	105	549.6	11.8	11.8	2.8	14.8	3.4	321.8	2.1	182.0	137.3	49.5	17.6	2.4	1.7	104.9	12.2	260.35	1248.12
MARC022	105	106	177.3	7.7	7.7	1.4	10.0	2.5	79.8	1.0	199.0	61.6	18.9	11.6	1.8	1.1	78.9	7.7	284.67	473.06
MARC022	106	107	562.5	48.7	48.7	3.5	40.1	14.7	259.8	5.5	718.0	204.4	61.4	38.5	8.3	6.6	555.5	39.6	1027.10	1911.73
MARC022	107	108	60.9	2.7	2.7	1.3	4.3	0.9	30.4	0.5	27.0	22.4	6.4	4.4	0.7	0.4	28.1	2.5	38.62	170.34
MARC022	108	109	445.2	43.1	43.1	2.0	27.1	10.8	205.5	10.5	904.0	154.7	48.4	28.8	5.5	8.0	372.6	59.3	1293.17	1463.05
MARC022	109	110	155.6	9.3	9.3	1.4	8.0	2.6	77.3	1.9	298.0	52.0	16.0	9.7	1.5	1.5	82.8	11.5	426.29	442.50

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC022	110	111	77.0	1.9	1.9	1.4	3.5	0.7	39.3	0.4	28.0	25.7	8.0	4.3	0.5	0.2	18.3	2.0	40.05	186.22
MARC022	111	112	141.5	1.9	1.9	1.4	3.7	0.6	79.5	0.4	34.0	40.9	13.8	4.9	0.5	0.3	16.9	1.9	48.64	311.50
MARC022	112	116	111.7	2.1	2.1	1.2	3.3	0.7	61.2	0.4	45.0	32.3	10.9	4.4	0.5	0.3	19.4	1.9	64.37	253.58
MARC022	116	120	260.2	8.9	8.9	2.3	12.0	2.9	133.9	1.4	191.0	85.6	26.0	14.8	2.3	1.4	88.8	9.2	273.23	663.22
MARC022	120	124	84.5	3.5	3.5	1.3	5.0	1.0	40.6	0.5	51.0	29.2	8.6	5.6	0.8	0.5	32.9	3.2	72.96	222.36
MARC023	4	5	633.5	15.9	15.9	3.4	28.1	5.5	321.6	1.9	243.0	235.1	69.7	36.4	4.2	2.2	167.9	13.6	347.61	1564.92
MARC023	5	6	562.5	24.9	24.9	3.1	33.4	8.2	267.9	2.7	373.0	206.9	59.5	37.9	5.9	3.3	257.4	20.6	533.58	1533.77
MARC023	6	7	613.3	18.9	18.9	2.9	29.2	6.6	279.8	1.9	363.0	207.3	61.9	35.6	5.2	2.7	205.2	15.8	519.27	1519.17
MARC023	7	8	164.9	4.8	4.8	1.5	8.3	1.6	75.2	0.7	98.0	53.3	16.4	10.2	1.5	0.7	54.5	4.3	140.19	406.59
MARC023	8	9	48.4	1.4	1.4	0.9	2.4	0.5	27.1	0.2	26.0	18.2	5.6	3.1	0.5	0.2	16.9	1.5	37.19	129.41
MARC023	9	10	276.5	5.3	5.3	1.7	9.6	1.7	166.4	0.7	39.0	79.5	27.5	12.2	1.7	0.7	66.0	4.1	55.79	662.81
MARC023	10	11	114.6	6.5	6.5	1.6	9.9	2.3	70.0	0.8	49.0	49.6	14.5	9.9	1.9	0.9	81.0	5.8	70.09	379.95
MARC023	11	12	3230.0	209.5	209.5	16.7	236.3	67.2	1669.9	27.4	2180.0	1145.6	350.2	242.7	51.2	31.9	2009.2	193.2	3118.49	9807.86
MARC023	12	13	4458.4	403.5	403.5	23.2	352.3	120.4	2338.6	60.6	3098.0	1504.3	509.5	342.9	81.6	63.8	3476.2	408.6	4431.69	14698.93
MARC023	13	14	889.0	44.1	44.1	5.8	60.1	15.2	391.2	5.1	655.0	310.1	94.4	64.9	12.3	6.4	460.6	36.6	936.98	2471.61
MARC023	14	15	2480.9	241.7	241.7	12.3	196.5	71.0	1350.4	37.7	2059.0	839.7	263.7	187.9	47.0	39.7	2047.3	255.2	2945.40	8392.55
MARC023	15	16	1458.0	119.2	119.2	7.1	105.1	36.0	770.1	18.7	1333.0	469.4	150.5	103.7	24.4	19.5	1080.3	123.3	1906.86	4646.02
MARC023	16	17	124.8	5.1	5.1	2.3	9.1	1.7	58.6	0.5	50.0	54.7	15.6	11.2	1.6	0.8	57.8	4.0	71.53	357.31
MARC023	17	18	159.3	5.0	5.0	2.1	9.2	1.7	77.8	0.7	73.0	61.8	18.6	11.6	1.6	0.8	53.3	4.4	104.43	416.76
MARC023	18	19	68.1	2.6	2.6	1.2	3.5	0.9	35.3	0.3	5.0	24.8	8.0	4.1	0.7	0.4	31.6	2.4	7.15	188.49
MARC023	19	20	124.7	7.5	7.5	2.3	11.3	2.6	52.1	1.1	56.0	54.4	14.7	11.6	2.1	1.1	87.9	6.4	80.11	393.01
MARC023	20	24	228.2	9.7	9.7	2.0	15.1	3.1	112.5	1.1	139.0	85.1	25.6	16.2	2.8	1.3	96.6	7.5	198.84	623.34
MARC023	24	28	172.0	5.8	5.8	1.5	8.8	1.9	86.2	0.8	98.0	61.0	19.3	10.4	1.6	0.8	55.9	5.1	140.19	440.01
MARC023	28	29	204.7	4.9	4.9	1.7	8.4	1.8	100.9	0.7	75.0	71.4	22.8	12.2	1.7	0.7	51.2	4.4	107.29	496.75
MARC023	29	30	42.1	1.1	1.1	0.8	1.8	0.3	22.2	0.2	13.0	14.8	4.8	2.6	0.4	0.2	11.9	1.1	18.60	106.52
MARC023	30	31	124.8	4.5	4.5	1.4	6.3	1.5	69.7	0.6	57.0	40.4	13.2	7.7	1.3	0.7	50.0	3.9	81.54	333.21
MARC023	31	32	150.7	6.2	6.2	1.7	8.0	1.9	80.7	0.8	105.0	47.6	15.5	9.4	1.6	0.9	65.1	5.1	150.20	405.31
MARC023	32	33	47.9	1.5	1.5	0.8	2.7	0.5	25.2	0.2	22.0	17.3	5.1	2.8	0.4	0.2	17.9	1.5	31.47	126.34
MARC023	33	34	52.0	1.4	1.4	0.8	2.1	0.5	28.4	0.2	16.0	16.2	5.4	2.6	0.4	0.2	15.1	1.4	22.89	128.38
MARC023	34	35	101.3	5.8	5.8	1.5	9.9	2.1	45.0	0.7	48.0	44.4	12.4	10.4	2.0	0.8	65.1	4.9	68.66	318.30
MARC023	35	36	173.8	8.9	8.9	1.9	14.8	3.1	77.9	0.8	108.0	74.1	20.7	16.0	2.8	1.2	94.1	6.5	154.49	513.37
MARC023	36	37	34.9	1.4	1.4	0.9	3.2	0.6	15.5	0.2	5.0	18.0	4.5	3.7	0.6	0.2	15.9	1.4	7.15	103.68
MARC023	37	38	41.5	1.6	1.6	0.8	2.5	0.6	20.6	0.2	16.0	17.0	4.8	3.0	0.5	0.3	17.9	1.4	22.89	115.74
MARC023	38	39	1392.3	55.3	55.3	6.3	82.4	18.8	745.8	5.8	825.0	457.5	145.0	94.9	16.6	7.9	533.5	43.7	1180.16	3705.90
MARC023	39	40	846.7	43.6	43.6	3.9	56.6	14.5	406.4	4.5	684.0	279.7	89.5	57.6	11.6	6.2	401.8	34.2	978.46	2329.74
MARC023	40	41	1417.3	61.9	61.9	6.5	85.6	21.5	700.4	6.7	2252.0	471.3	148.3	94.6	17.3	9.0	621.6	50.2	3221.49	3816.84
MARC023	41	42	435.6	19.8	19.8	2.7	27.9	6.8	216.7	2.2	489.0	157.1	49.6	33.0	5.9	2.9	200.8	16.9	699.51	1212.44
MARC023	42	43	67.6	1.7	1.7	0.9	3.2	0.7	35.7	0.3	39.0	22.7	7.2	3.9	0.5	0.3	19.3	1.6	55.79	168.19
MARC023	43	44	90.8	3.2	3.2	1.3	5.3	1.0	44.1	0.4	31.0	34.8	10.3	6.6	0.9	0.4	32.3	2.6	44.35	238.64
MARC023	44	48	173.9	10.4	10.4	2.3	13.0	3.1	88.7	1.4	114.0	65.7	19.4	13.7	2.6	1.6	100.6	8.9	163.08	521.24
MARC023	48	52	62.8	1.8	1.8	1.2	2.9	0.6	31.7	0.3	5.0	24.5	7.2	3.9	0.5	0.3	18.3	1.6	7.15	160.35
MARC023	52	53	35.5	3.7	3.7	1.4	5.4	1.1	16.3	0.5	15.0	18.9	4.6	4.9	1.0	0.6	36.7	3.5	21.46	140.08
MARC023	53	54	249.2	12.5	12.5	2.3	18.1	4.1	126.8	1.8	128.0	96.0	28.7	19.8	3.3	1.9	117.2	12.2	183.10	714.49
MARC023	54	55	893.5	61.3	61.3	4.3	52.9	18.3	438.9	11.5	1155.0	275.2	88.6	54.4	11.7	10.5	577.2	72.3	1652.23	2652.93
MARC023	55	56	64.4	3.2	3.2	0.9	4.3	0.9	32.3	0.5	48.0	24.0	7.1	4.6	0.7	0.5	31.4	2.7	68.66	182.41
MARC023	56	57	75.3	1.9	1.9	0.9	3.6	0.8	38.1	0.3	33.0	26.4	8.1	4.4	0.7	0.4	24.4	2.3	47.21	191.85
MARC023	57	58	37.6	0.8	0.8	0.8	1.5	0.3	19.7	0.2	5.0	13.2	4.1	2.3	0.3	0.1	9.1	0.8	7.15	92.22
MARC023	58	62	43.0	0.8	0.8	0.8	1.8	0.2	23.2	0.2	5.0	15.5	4.6	2.4	0.3	0.1	8.3	0.8	7.15	103.21
MARC023	62	66	42.3	1.1	1.1	0.9	2.8	0.5	21.8	0.2	10.0	17.5	4.7	3.4	0.4	0.2	13.6	1.3	14.31	113.22
MARC023	66	70	311.3	6.5	6.5	3.8	13.5	2.3	174.2	0.8	106.0	107.8	34.0	17.4	2.2	0.9	72.3	5.1	151.63	765.16
MARC023	70	74	78.1	2.3	2.3	1.0	3.9	0.8	40.1	0.3	29.0	27.8	8.7	4.9	0.7	0.3	24.0	2.0	41.48	198.49
MARC023	74	75	79.5	4.6	4.6	2.5	8.3	1.7	36.0	0.7	18.0	41.5	9.8	9.2	1.4	0.7	46.9	3.9	25.75	255.10
MARC023	75	76	34.4	1.5	1.5	1.2	2.5	0.5	17.4	0.2	5.0	14.7	4.0	3.1	0.5	0.2	15.1	1.4	7.15	99.43
MARC023	76	77	790.5	62.8	62.8	3.1	42.8	17.1	389.1	12.7	1587.0	238.4	78.1	46.5	10.0	10.8	517.2	77.2	2270.20	2367.42

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC023	77	78	372.2	28.2	28.2	3.1	27.2	8.2	175.9	4.3	522.0	136.9	41.6	27.5	5.9	4.4	249.4	29.5	746.72	1151.10
MARC023	78	79	143.8	12.5	12.5	3.0	18.0	4.4	66.8	1.7	92.0	66.6	17.7	16.2	3.6	1.9	139.3	11.2	131.61	529.31
MARC023	79	80	76.2	5.8	5.8	2.7	9.6	2.1	35.3	1.0	34.0	38.6	10.0	9.0	1.7	0.9	61.1	5.6	48.64	269.60
MARC023	80	81	458.2	29.8	29.8	4.5	58.8	10.5	195.2	3.7	737.0	209.7	58.4	57.6	10.3	4.4	351.3	24.9	1054.28	1533.12
MARC023	81	82	103.6	6.7	6.7	2.3	11.8	2.2	47.9	0.9	83.0	49.8	12.9	11.9	2.1	1.1	75.4	5.7	118.73	345.97
MARC023	82	86	295.7	7.4	7.4	4.1	14.8	2.5	150.1	1.1	126.0	112.7	33.3	19.1	2.6	1.1	78.1	6.6	180.24	743.38
MARC023	86	90	346.2	5.5	5.5	6.0	15.4	2.2	181.1	0.6	160.0	132.9	38.4	21.6	2.4	0.8	60.4	4.4	228.88	829.72
MARC023	90	94	117.7	4.5	4.5	1.5	7.5	1.5	57.6	0.5	57.0	44.2	13.2	8.8	1.6	0.7	49.8	4.0	81.54	321.04
MARC023	94	98	87.5	3.9	3.9	1.7	5.3	1.4	44.1	0.5	27.0	32.4	9.8	6.7	1.1	0.5	41.7	3.4	38.62	246.92
MARC023	98	99	102.7	6.5	6.5	1.9	10.1	2.3	47.3	0.8	73.0	44.2	12.4	10.3	2.0	0.9	71.7	5.5	104.43	330.40
MARC023	99	100	998.9	54.9	54.9	5.7	67.1	18.0	473.7	6.2	729.0	342.5	106.2	70.4	14.5	8.1	541.0	46.3	1042.83	2841.23
MARC023	100	101	903.0	62.0	62.0	2.9	29.0	15.0	416.6	18.0	3621.0	241.4	84.5	34.8	6.8	12.8	511.0	100.7	5179.84	2492.74
MARC023	101	102	314.0	10.9	10.9	1.9	10.7	3.0	158.3	2.4	350.0	101.5	33.3	14.8	1.9	1.9	96.9	13.4	500.68	778.33
MARC023	102	103	90.0	5.5	5.5	1.6	7.7	1.8	43.0	0.9	84.0	36.0	11.1	8.5	1.5	0.9	53.8	5.4	120.16	276.57
MARC023	103	104	210.7	9.4	9.4	2.0	12.1	3.0	107.8	1.3	146.0	69.8	22.9	13.5	2.3	1.4	91.3	8.4	208.85	570.00
MARC023	104	105	384.2	4.7	4.7	2.0	7.4	1.5	238.5	0.7	95.0	96.0	34.8	11.1	1.3	0.7	46.1	4.6	135.90	841.30
MARC023	105	106	1776.5	40.7	40.7	8.0	51.3	12.6	1099.6	6.2	658.0	452.3	162.0	65.2	10.3	6.5	401.7	41.7	941.27	4197.14
MARC023	106	107	294.9	7.3	7.3	2.0	12.2	2.6	159.6	0.8	114.0	96.2	31.0	16.9	2.4	1.0	82.0	6.0	163.08	728.73
MARC023	107	108	278.6	4.5	4.5	2.3	8.1	1.5	158.6	0.8	68.0	77.1	27.8	11.1	1.3	0.8	46.2	4.7	97.27	631.09
MARC023	108	109	256.2	10.6	10.6	1.6	14.1	3.4	129.5	1.4	174.0	97.6	29.3	17.4	2.7	1.6	106.4	9.8	248.91	698.79
MARC023	109	110	117.3	2.3	2.3	1.4	5.0	0.8	63.0	0.3	23.0	37.9	12.6	6.8	0.8	0.4	25.9	1.9	32.90	280.51
MARC023	110	111	1200.9	60.6	60.6	4.9	60.6	18.4	605.3	10.6	2404.0	368.2	122.6	69.0	12.9	10.2	585.6	67.2	3438.92	3281.88
MARC023	111	112	407.7	16.6	16.6	2.4	25.2	5.7	192.8	2.0	338.0	153.6	46.2	29.7	4.7	2.6	184.0	15.1	483.51	1116.72
MARC023	112	113	165.5	4.8	4.8	1.3	8.5	1.7	83.4	0.6	86.0	58.0	18.4	10.9	1.7	0.7	55.4	4.3	123.02	424.52
MARC023	113	114	142.0	3.5	3.5	1.4	6.9	1.1	72.7	0.5	51.0	48.1	15.1	8.0	1.1	0.5	40.0	3.2	72.96	350.26
MARC023	114	115	176.4	6.6	6.6	1.5	11.2	2.2	87.5	0.8	98.0	65.2	20.1	11.6	2.0	1.0	71.7	5.7	140.19	475.83
MARC023	115	116	38.0	0.7	0.7	0.8	1.2	0.2	21.6	0.1	5.0	12.5	3.9	1.6	0.2	0.1	7.7	0.8	7.15	90.69
MARC023	116	117	101.6	2.1	2.1	1.4	3.6	0.8	54.1	0.3	22.0	32.2	10.7	5.0	0.6	0.4	22.7	1.8	31.47	241.09
MARC023	117	118	238.6	5.3	5.3	1.4	8.3	1.8	120.6	0.9	129.0	77.8	25.6	11.5	1.5	0.9	53.7	5.7	184.53	562.64
MARC023	118	119	87.7	1.9	1.9	1.2	3.2	0.7	49.4	0.3	30.0	30.8	9.6	4.4	0.6	0.3	20.6	1.8	42.92	216.22
MARC023	119	120	361.5	2.7	2.7	2.4	5.8	0.9	223.2	0.5	12.0	92.5	34.3	10.7	0.9	0.4	27.4	2.6	17.17	771.02
MARC023	120	121	119.5	5.8	5.8	1.5	8.2	1.9	57.6	0.6	115.0	44.6	13.7	9.5	1.7	0.9	61.3	5.2	164.51	341.71
MARC023	121	122	459.4	15.8	15.8	2.2	21.4	5.2	223.9	2.0	279.0	156.5	50.9	27.1	4.1	2.4	149.3	14.1	399.11	1159.49
MARC023	122	123	309.8	13.2	13.2	2.0	18.1	4.5	154.1	1.7	237.0	114.2	35.7	20.9	3.5	1.9	132.3	11.5	339.03	845.52
MARC023	123	124	365.6	33.5	33.5	2.3	24.1	9.2	183.5	7.4	549.0	122.1	40.0	23.5	5.4	6.1	292.2	44.2	785.34	1197.40
MARC023	124	125	167.2	14.3	14.3	1.3	10.3	4.0	83.6	3.0	280.0	55.6	17.8	11.5	2.1	2.6	123.8	17.9	400.54	531.26
MARC023	125	126	277.1	10.3	10.3	1.6	13.6	3.2	134.8	1.5	191.0	98.8	30.6	16.5	2.7	1.7	98.0	10.5	273.23	716.76
MARC023	126	127	201.3	4.2	4.2	1.7	6.5	1.3	108.6	0.7	73.0	61.6	20.7	9.0	1.2	0.7	41.3	4.1	104.43	469.29
MARC023	127	128	188.9	3.7	3.7	1.7	6.5	1.3	101.2	0.5	43.0	57.4	19.4	8.6	1.1	0.6	37.3	2.8	61.51	437.72
MARC023	128	129	230.9	6.3	6.3	2.4	11.3	2.1	117.2	0.9	58.0	79.7	25.3	14.6	1.8	0.9	67.3	6.4	82.97	577.75
MARC023	129	130	1102.9	68.7	68.7	5.1	59.5	19.0	490.0	14.9	1618.0	359.7	113.8	65.4	12.7	12.1	691.7	87.1	2314.55	3185.53
MARC024	4	8	464.7	3.3	3.3	1.9	11.1	1.1	243.2	0.4	20.0	153.1	49.8	18.4	1.4	0.4	34.7	2.3	28.61	991.95
MARC024	8	9	474.9	3.0	3.0	1.4	9.1	0.9	251.6	0.4	31.0	147.9	49.4	16.7	1.2	0.4	33.7	2.6	44.35	998.64
MARC024	9	10	446.3	3.1	3.1	1.4	7.7	1.3	235.6	0.5	70.0	142.7	46.7	15.0	1.0	0.5	34.7	3.5	100.14	945.42
MARC024	10	11	365.8	5.9	5.9	1.7	12.2	1.9	198.1	0.8	109.0	110.2	37.9	18.3	1.9	1.0	68.1	5.4	155.92	840.96
MARC024	11	12	381.9	7.8	7.8	1.6	13.7	2.6	210.6	1.0	127.0	119.8	39.7	19.1	2.4	1.2	83.9	6.9	181.67	906.46
MARC024	12	13	194.3	6.9	6.9	1.4	11.8	2.4	97.9	0.9	103.0	70.2	21.5	12.6	2.0	1.0	74.8	5.8	147.34	515.78
MARC024	13	14	4936.4	373.9	373.9	23.4	366.2	118.1	2534.2	45.3	3706.0	1657.9	559.4	356.9	83.7	56.2	3245.9	327.9	5301.43	15239.72
MARC024	14	15	3426.7	117.1	117.1	19.3	228.9	42.0	1534.1	10.8	2285.0	1380.8	409.7	280.7	41.5	15.6	1428.0	82.7	3268.69	9247.57
MARC024	15	16	337.2	6.7	6.7	5.9	17.8	2.3	167.5	0.9	155.0	135.7	38.5	22.5	2.7	0.9	70.9	4.9	221.73	827.69
MARC024	16	20	475.1	9.6	9.6	4.4	19.5	3.3	248.0	1.1	140.0	164.9	51.5	25.9	3.1	1.3	101.8	8.3	200.27	1136.09
MARC024	20	21	441.5	17.2	17.2	2.4	25.1	5.8	220.6	2.0	219.0	153.6	45.4	28.8	4.8	2.7	162.3	14.3	313.28	1155.11
MARC024	21	22	745.4	10.5	10.5	2.4	22.7	3.8	357.5	1.3	260.0	227.8	69.1	31.4	3.4	1.6	115.9	8.7	371.93	1621.86
MARC024	22	23	191.9	2.5	2.5	1.6	6.5	1.0	107.9	0.3	35.0	62.6	18.7	9.5	1.1	0.4	30.4	2.2	50.07	442.34

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC024	23	24	265.1	2.1	2.1	1.4	6.5	0.8	141.4	0.3	32.0	81.3	25.8	10.3	0.8	0.4	26.2	1.9	45.78	568.56
MARC024	24	25	591.8	9.1	9.1	2.1	17.6	3.3	282.6	1.1	189.0	181.7	54.7	25.5	2.9	1.3	96.5	7.9	270.36	1295.64
MARC024	25	26	529.2	2.9	2.9	1.6	11.1	1.0	281.4	0.4	48.0	168.3	51.7	19.4	1.3	0.4	35.3	2.5	68.66	1113.31
MARC024	26	27	98.5	2.5	2.5	1.3	4.4	0.8	54.7	0.3	33.0	35.7	10.6	5.6	0.7	0.3	25.4	1.9	47.21	246.46
MARC024	27	28	188.3	3.5	3.5	3.4	10.1	1.4	94.3	0.4	103.0	76.3	20.0	13.1	1.4	0.5	39.9	2.5	147.34	463.27
MARC024	28	32	247.4	4.1	4.1	2.3	10.6	1.5	122.1	0.6	60.0	89.0	26.3	15.0	1.4	0.6	48.3	3.2	85.83	580.68
MARC024	32	33	77.5	2.1	2.1	1.2	3.5	0.7	38.8	0.4	17.0	26.7	8.1	4.5	0.5	0.3	23.0	2.3	24.32	192.71
MARC024	33	34	143.2	5.3	5.3	2.0	8.4	1.7	70.1	0.7	63.0	52.6	15.1	10.2	1.5	0.7	55.5	4.7	90.12	380.42
MARC024	34	35	140.5	5.1	5.1	1.9	8.5	1.7	68.5	0.6	68.0	52.3	14.8	10.2	1.5	0.7	56.5	4.2	97.27	376.16
MARC024	35	36	140.9	3.5	3.5	2.3	7.1	1.3	70.1	0.6	16.0	50.0	14.7	8.9	1.2	0.5	39.6	3.5	22.89	351.04
MARC024	36	40	88.7	3.4	3.4	1.2	5.0	1.1	48.6	0.5	35.0	29.9	9.2	5.1	0.9	0.6	38.7	3.4	50.07	242.07
MARC024	40	41	52.0	1.4	1.4	0.9	2.9	0.5	28.5	0.2	19.0	18.8	5.4	3.0	0.5	0.2	16.0	1.4	27.18	134.31
MARC024	41	42	116.6	6.5	6.5	1.4	10.0	2.3	59.1	0.7	80.0	46.0	13.2	10.3	1.9	1.0	75.4	5.4	114.44	362.13
MARC024	42	43	100.5	2.6	2.6	1.3	6.0	1.0	56.4	0.2	30.0	36.2	11.2	6.3	0.9	0.4	35.0	2.3	42.92	265.94
MARC024	43	44	641.1	33.3	33.3	3.1	39.5	10.7	315.1	4.8	919.0	224.1	68.0	40.7	7.6	5.5	345.8	35.3	1314.63	1826.18
MARC024	44	45	1022.5	52.8	52.8	5.3	68.0	17.3	503.7	6.2	1209.0	376.2	110.7	74.2	12.8	7.8	529.8	47.3	1729.47	2920.34
MARC024	45	46	688.5	26.6	26.6	3.4	45.1	9.4	343.6	2.6	433.0	266.8	76.9	53.2	8.1	3.7	286.9	20.6	619.41	1884.65
MARC024	46	47	81.9	2.6	2.6	1.2	5.0	0.8	43.0	0.3	42.0	30.6	9.1	5.1	0.8	0.4	28.2	2.4	60.08	216.02
MARC024	47	48	65.6	1.8	1.8	0.9	3.5	0.6	36.0	0.2	14.0	25.0	7.1	4.6	0.5	0.2	17.5	1.4	20.03	168.01
MARC024	48	49	99.9	3.7	3.7	1.2	5.4	1.1	56.5	0.5	45.0	33.4	10.4	5.6	0.9	0.5	39.7	2.8	64.37	267.17
MARC024	49	50	108.5	5.0	5.0	1.6	7.5	1.6	56.6	0.7	32.0	43.2	12.1	8.3	1.3	0.7	51.9	4.4	45.78	311.85
MARC024	50	51	160.7	6.5	6.5	1.4	10.0	2.2	82.9	0.8	66.0	62.6	17.4	11.9	1.9	0.9	64.5	5.5	94.41	440.21
MARC024	51	52	55.3	2.5	2.5	1.5	3.8	0.8	29.2	0.4	5.0	23.0	6.7	4.8	0.7	0.3	23.0	2.3	7.15	157.94
MARC024	52	53	52.2	1.5	1.5	0.8	2.5	0.5	27.9	0.3	10.0	18.3	6.0	2.9	0.5	0.2	14.2	1.6	14.31	132.01
MARC024	53	54	736.9	40.8	40.8	3.4	45.3	12.1	390.1	5.5	523.0	262.4	78.1	48.4	9.0	6.3	400.7	39.6	748.15	2140.34
MARC024	54	55	835.2	62.7	62.7	3.4	45.4	17.6	459.9	11.4	1972.0	259.6	82.1	46.6	10.0	10.8	519.3	75.8	2820.95	2515.21
MARC024	55	56	38.3	0.7	0.7	0.9	1.6	0.2	21.6	0.2	5.0	13.9	3.9	1.5	0.2	0.1	6.6	0.7	7.15	91.12
MARC024	56	60	105.0	2.6	2.6	1.6	4.0	0.8	61.7	0.4	21.0	37.7	10.9	5.5	0.8	0.3	26.0	2.2	30.04	263.81
MARC024	60	64	124.7	2.3	2.3	1.3	4.4	0.8	67.9	0.3	34.0	41.8	12.9	6.4	0.8	0.3	23.9	1.9	48.64	293.40
MARC024	64	68	75.4	2.3	2.3	1.2	3.3	0.7	41.8	0.3	28.0	26.4	8.1	4.9	0.6	0.4	26.8	2.3	40.05	198.24
MARC024	68	72	106.5	4.0	4.0	1.5	7.3	1.4	55.7	0.5	36.0	41.9	11.8	8.7	1.2	0.6	45.2	3.3	51.50	297.38
MARC024	72	73	133.3	7.5	7.5	1.5	10.0	2.4	70.5	0.8	84.0	49.5	14.5	10.6	1.9	1.1	79.4	6.4	120.16	401.80
MARC024	73	74	46.9	1.0	1.0	0.9	2.2	0.3	26.2	0.2	5.0	15.9	5.1	2.6	0.3	0.1	11.6	0.9	7.15	116.02
MARC024	74	75	87.5	4.0	4.0	1.5	6.5	1.4	47.5	0.4	32.0	31.8	9.8	6.4	1.1	0.6	46.0	2.8	45.78	254.69
MARC024	75	76	450.0	16.1	16.1	3.9	22.5	5.7	233.2	2.1	232.0	157.2	47.6	28.8	4.2	2.6	185.5	16.5	331.88	1203.75
MARC024	76	77	871.2	24.5	24.5	5.1	34.1	7.7	491.4	3.5	609.0	261.0	86.1	43.4	6.2	3.7	236.5	23.5	871.17	2136.02
MARC024	77	78	1131.1	56.5	56.5	6.6	65.0	17.9	625.0	7.3	845.0	368.6	114.4	70.0	12.8	9.0	539.3	54.5	1208.77	3164.46
MARC024	78	79	507.2	27.2	27.2	3.2	35.6	8.7	269.7	3.6	470.0	173.4	54.0	36.3	6.4	4.2	267.2	26.2	672.34	1467.60
MARC024	79	80	594.5	18.6	18.6	4.2	30.7	6.3	305.4	2.9	460.0	209.8	63.5	37.3	5.4	2.9	196.3	19.7	658.03	1531.03
MARC024	80	81	358.1	12.5	12.5	4.2	20.5	4.2	178.6	2.3	304.0	132.3	39.0	23.4	3.6	1.9	126.6	13.1	434.87	943.01
MARC024	81	82	202.6	10.2	10.2	3.2	15.9	3.4	97.5	1.4	135.0	80.5	22.9	16.2	2.9	1.4	98.8	9.1	193.12	583.93
MARC024	82	83	907.7	53.1	53.1	5.9	59.4	16.3	476.3	7.4	613.0	315.9	96.5	62.3	11.4	8.0	520.0	51.0	876.90	2667.04
MARC024	83	84	195.1	10.2	10.2	2.7	13.9	3.2	102.5	1.3	110.0	74.1	21.7	14.8	2.4	1.4	96.8	9.6	157.36	565.10
MARC024	84	88	227.1	9.1	9.1	2.3	13.7	3.1	120.0	1.3	159.0	80.9	24.0	15.7	2.3	1.4	98.5	8.2	227.45	623.48
MARC024	88	89	107.7	5.3	5.3	2.3	8.1	1.6	53.7	0.7	60.0	47.1	12.1	9.0	1.4	0.8	53.0	4.8	85.83	316.36
MARC024	89	90	310.5	8.3	8.3	2.3	12.2	2.7	192.0	1.0	156.0	92.4	30.3	14.7	2.2	1.4	94.5	7.7	223.16	786.83
MARC024	90	91	220.5	5.3	5.3	2.0	8.1	1.8	129.6	0.8	86.0	63.6	20.8	10.7	1.3	0.9	58.5	5.1	123.02	537.23
MARC024	91	92	194.5	7.0	7.0	2.0	9.9	2.2	105.0	0.8	78.0	66.7	20.5	10.9	1.6	1.0	74.4	5.9	111.58	513.61
MARC024	92	93	248.3	10.9	10.9	1.9	15.2	3.7	131.5	1.3	171.0	86.7	26.8	16.1	2.5	1.7	114.2	10.4	244.62	688.78
MARC024	93	94	225.9	8.7	8.7	1.9	11.8	2.7	121.2	1.3	165.0	77.1	23.5	14.7	2.1	1.4	95.4	8.7	236.03	611.40
MARC024	94	95	115.0	5.5	5.5	2.2	9.2	1.9	57.9	0.7	67.0	45.4	12.7	10.6	1.7	0.9	61.0	5.2	95.84	340.11
MARC024	95	96	292.6	23.0	23.0	2.3	27.1	7.2	139.9	3.1	393.0	115.1	33.7	25.7	5.4	3.6	239.6	24.1	562.19	977.56
MARC024	96	97	524.0	65.2	65.2	2.9	43.7	17.5	272.7	12.9	739.0	192.7	56.7	39.7	9.8	11.3	594.9	81.4	1057.14	1996.95
MARC024	97	98	456.1	44.0	44.0	3.0	29.4	11.5	237.8	9.1	713.0	160.8	49.4	30.5	6.5	7.9	378.0	57.8	1019.95	1529.10

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC024	98	99	78.7	4.6	4.6	1.3	5.5	1.4	41.2	0.7	78.0	29.4	8.5	4.9	0.8	0.8	45.7	5.0	111.58	234.18
MARC024	99	100	300.8	18.8	18.8	2.7	23.4	5.7	151.6	2.3	238.0	117.2	33.5	25.7	4.3	2.8	179.8	18.2	340.46	915.62
MARC024	100	104	129.8	4.7	4.7	1.9	5.9	1.4	68.6	0.7	52.0	46.4	13.9	8.5	1.1	0.7	46.9	4.7	74.39	341.60
MARC024	104	108	82.7	2.9	2.9	1.3	3.9	0.9	43.7	0.4	32.0	29.6	8.7	4.6	0.7	0.4	28.4	2.6	45.78	215.29
MARC024	108	109	69.2	3.0	3.0	1.3	4.3	0.8	37.2	0.5	32.0	25.7	8.1	5.3	0.8	0.4	27.2	2.7	45.78	190.59
MARC024	109	110	1298.8	86.1	86.1	6.8	86.0	26.1	710.7	11.9	1616.0	439.1	135.2	85.2	17.6	13.4	717.6	81.6	2311.69	3838.01
MARC024	110	111	1784.6	114.6	114.6	7.2	89.9	31.5	934.5	22.6	4118.0	566.1	182.5	96.9	18.2	20.2	930.5	140.2	5890.80	5073.12
MARC024	111	112	631.9	32.8	32.8	3.8	35.2	9.7	331.8	5.4	1213.0	218.2	66.4	39.0	6.6	5.2	291.6	33.9	1735.20	1757.42
MARC024	112	113	222.7	8.2	8.2	2.7	12.0	2.7	121.9	1.3	246.0	76.9	24.2	14.7	2.1	1.4	83.3	9.0	351.90	596.74
MARC024	113	114	398.4	16.0	16.0	4.6	23.3	4.9	211.7	2.2	296.0	156.4	44.1	28.3	4.1	2.5	154.8	15.5	423.43	1091.64
MARC024	114	115	398.7	16.0	16.0	5.0	24.0	5.0	212.7	2.3	288.0	154.5	43.5	28.2	4.1	2.6	154.0	15.7	411.98	1091.53
MARC025	4	5	371.2	14.2	14.2	3.5	22.9	4.9	185.8	1.8	323.0	144.8	41.9	27.9	4.1	2.0	148.7	11.7	462.05	1010.19
MARC025	5	6	41.6	1.3	1.3	0.8	2.3	0.5	27.7	0.2	26.0	15.7	5.1	2.6	0.4	0.2	13.7	0.9	37.19	115.44
MARC025	6	7	191.0	4.5	4.5	2.0	7.7	1.5	111.2	0.6	133.0	62.9	20.5	9.5	1.3	0.8	44.7	4.1	190.26	469.04
MARC025	7	8	131.2	3.8	3.8	1.5	5.8	1.3	76.3	0.5	69.0	49.0	14.9	8.0	1.0	0.6	35.2	3.4	98.70	338.41
MARC025	8	9	181.8	3.4	3.4	1.7	7.7	1.1	97.8	0.4	58.0	65.3	20.2	10.1	1.1	0.5	35.4	2.5	82.97	435.29
MARC025	9	10	137.2	4.0	4.0	1.7	7.4	1.4	78.8	0.4	54.0	52.1	16.0	9.4	1.2	0.6	37.8	3.1	77.25	357.60
MARC025	10	11	108.1	3.3	3.3	3.1	8.6	1.4	51.1	0.5	55.0	49.8	12.5	10.3	1.4	0.4	38.9	2.7	78.68	299.59
MARC025	11	12	169.0	5.0	5.0	2.1	9.8	1.6	96.1	0.6	72.0	63.9	18.8	11.4	1.5	0.6	54.1	4.2	103.00	447.69
MARC025	12	16	122.6	3.8	3.8	3.5	9.5	1.4	58.2	0.4	58.0	59.0	15.1	12.2	1.4	0.4	39.6	2.7	82.97	337.64
MARC025	16	20	163.9	4.0	4.0	4.3	10.3	1.4	78.2	0.4	81.0	71.7	19.1	11.7	1.4	0.4	41.4	2.6	115.87	419.22
MARC025	20	24	143.8	3.4	3.4	4.1	9.7	1.3	70.6	0.4	73.0	65.0	16.8	12.4	1.4	0.4	36.2	2.2	104.43	375.30
MARC025	24	25	146.5	3.7	3.7	3.9	10.4	1.3	73.8	0.3	77.0	70.2	17.4	12.1	1.5	0.4	38.4	2.3	110.15	390.03
MARC025	25	26	944.3	57.1	57.1	7.1	70.7	19.2	522.8	5.6	895.0	336.5	100.7	67.6	13.9	8.1	503.9	44.8	1280.30	2794.44
MARC025	26	27	1847.6	188.3	188.3	9.8	156.4	55.8	1001.3	26.8	1755.0	649.7	195.3	143.1	34.6	29.6	1581.2	189.7	2510.53	6356.80
MARC025	27	28	1164.0	175.5	175.5	7.1	106.3	47.3	633.1	34.0	1170.0	420.7	121.3	92.7	24.3	31.0	1442.0	219.9	1673.69	4707.52
MARC025	28	29	1668.3	180.8	180.8	8.8	130.5	51.2	886.2	31.5	2259.0	578.8	174.5	118.7	29.3	31.1	1580.0	206.4	3231.50	5893.64
MARC025	29	30	343.5	17.5	17.5	3.0	17.5	4.9	188.9	2.6	238.0	112.9	35.7	20.5	3.5	2.7	160.1	17.2	340.46	953.89
MARC025	30	31	267.1	9.8	9.8	1.7	13.1	3.0	138.5	1.4	146.0	93.5	28.5	15.2	2.3	1.5	95.8	9.9	208.85	696.15
MARC025	31	32	298.5	2.1	2.1	1.4	6.0	0.7	164.2	0.3	26.0	97.9	30.2	10.8	0.7	0.4	22.2	2.0	37.19	641.51
MARC025	32	33	528.6	31.2	31.2	3.5	34.0	10.4	272.0	3.8	341.0	184.9	56.5	37.3	6.9	4.8	283.8	27.6	487.80	1533.34
MARC025	33	34	145.0	3.2	3.2	1.5	6.0	1.1	78.6	0.5	38.0	49.2	15.2	7.1	0.8	0.5	33.3	3.1	54.36	349.94
MARC025	34	35	95.2	6.4	6.4	3.0	11.5	2.4	45.5	0.9	26.0	48.2	11.4	11.2	1.8	1.0	66.0	5.6	37.19	321.27
MARC025	35	36	142.9	11.8	11.8	3.9	18.0	3.9	68.0	1.4	74.0	68.0	17.9	16.5	3.2	1.6	136.4	9.6	105.86	523.71
MARC025	36	37	166.1	8.7	8.7	2.3	12.8	3.0	83.6	1.1	74.0	66.5	19.1	13.9	2.4	1.2	91.7	7.7	105.86	495.24
MARC025	37	38	140.5	3.8	3.8	1.2	6.8	1.3	76.1	0.4	39.0	47.5	15.0	8.1	1.3	0.5	44.7	2.7	55.79	357.25
MARC025	38	39	330.1	19.9	19.9	2.2	21.7	6.3	175.1	3.2	211.0	117.8	33.9	22.3	4.0	3.3	192.5	21.0	301.84	980.87
MARC025	39	40	246.2	12.3	12.3	2.0	15.1	3.9	125.5	1.6	186.0	91.0	27.2	17.9	2.8	1.9	115.6	11.8	266.07	693.24
MARC025	40	41	133.8	3.4	3.4	1.9	7.4	1.3	71.2	0.4	60.0	51.9	14.8	9.0	1.2	0.5	38.7	3.2	85.83	345.13
MARC025	41	42	112.5	3.2	3.2	1.6	5.9	0.9	63.3	0.4	77.0	40.1	11.8	6.8	0.9	0.4	31.9	2.8	110.15	287.83
MARC025	42	43	97.2	2.7	2.7	1.9	6.3	0.9	49.1	0.4	21.0	38.3	10.9	6.8	1.0	0.3	27.2	2.0	30.04	250.01
MARC025	43	44	205.4	6.7	6.7	2.3	10.9	2.1	103.9	0.9	79.0	75.1	22.4	13.2	2.0	0.9	61.3	5.2	113.01	524.21
MARC025	44	45	189.5	8.9	8.9	2.1	13.6	3.0	95.3	0.9	94.0	75.0	21.0	13.8	2.4	1.3	82.9	7.1	134.47	531.16
MARC025	45	46	122.2	5.3	5.3	1.4	8.3	1.9	61.5	0.6	126.0	45.4	13.4	8.3	1.4	0.8	56.5	4.0	180.24	340.00
MARC025	46	47	137.2	6.3	6.3	2.3	9.9	2.2	73.1	0.8	115.0	50.9	14.8	9.7	1.6	0.9	66.8	6.3	164.51	393.37
MARC025	47	48	421.8	14.6	14.6	4.1	21.7	4.9	232.6	2.1	394.0	134.1	43.9	23.8	3.8	2.2	145.3	13.3	563.62	1092.34
MARC025	48	49	415.6	11.4	11.4	3.7	13.5	3.6	253.3	2.0	237.0	115.9	39.0	17.6	2.3	1.8	102.6	12.4	339.03	1010.38
MARC025	49	50	80.6	5.0	5.0	2.0	6.9	1.8	42.0	0.6	52.0	33.0	9.0	7.2	1.3	0.7	48.8	4.9	74.39	252.32
MARC025	50	51	98.8	7.3	7.3	2.1	10.0	2.2	51.7	0.9	74.0	40.0	11.7	8.9	1.8	1.0	63.4	5.9	105.86	316.28
MARC025	51	52	36.6	1.0	1.0	0.7	1.4	0.3	21.3	0.2	22.0	11.5	4.1	1.7	0.2	0.2	10.3	1.0	31.47	92.15
MARC025	52	53	73.5	1.8	1.8	1.3	3.9	0.7	39.6	0.3	15.0	28.0	7.7	3.9	0.6	0.2	19.2	1.9	21.46	186.14
MARC025	53	54	138.1	5.5	5.5	2.2	9.7	1.9	73.1	0.6	47.0	52.4	15.0	10.8	1.6	0.8	56.6	4.3	67.23	382.76
MARC025	54	55	76.5	3.7	3.7	1.3	4.1	1.1	42.8	0.4	26.0	26.9	7.9	5.1	0.8	0.5	36.7	3.1	37.19	216.58
MARC025	55	56	916.0	64.4	64.4	4.7	69.0	20.2	468.5	9.3	784.0	327.3	99.5	68.9	13.9	10.2	689.4	63.7	1121.51	2919.24

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC025	56	57	135.9	1.7	1.7	1.3	3.7	0.6	77.2	0.3	31.0	42.7	13.6	5.8	0.6	0.2	18.0	1.6	44.35	305.96
MARC025	57	58	128.0	2.7	2.7	1.7	5.6	1.0	69.4	0.4	26.0	45.0	13.6	7.2	0.8	0.4	28.7	2.4	37.19	311.93
MARC025	58	59	158.0	1.7	1.7	1.4	4.4	0.6	90.1	0.3	39.0	52.3	16.2	6.8	0.6	0.3	18.2	1.8	55.79	355.78
MARC025	59	60	180.7	3.1	3.1	1.7	6.6	1.1	99.3	0.4	50.0	62.5	19.3	8.8	1.0	0.4	31.7	2.8	71.53	425.11
MARC025	60	61	128.6	1.8	1.8	1.7	4.8	0.7	73.5	0.3	19.0	45.1	13.6	5.8	0.6	0.3	21.0	1.7	27.18	302.95
MARC025	61	62	147.5	4.9	4.9	2.0	8.8	1.8	77.1	0.8	73.0	54.4	16.0	10.3	1.4	0.7	46.7	4.6	104.43	385.76
MARC025	62	63	195.2	2.1	2.1	1.3	5.1	0.7	107.3	0.3	28.0	62.2	19.6	7.5	0.7	0.3	19.0	1.7	40.05	426.15
MARC025	63	64	631.0	3.7	3.7	5.1	12.7	1.4	390.8	0.6	39.0	171.7	59.9	21.8	1.7	0.5	44.3	2.7	55.79	1355.55
MARC025	64	65	1330.4	62.9	62.9	6.7	89.8	20.7	702.0	7.5	1096.0	471.9	142.6	91.3	16.7	9.2	655.9	54.5	1567.83	3763.18
MARC025	65	66	247.2	10.2	10.2	2.8	17.6	3.7	128.3	1.2	144.0	95.8	27.1	18.7	3.2	1.5	103.6	8.5	205.99	688.88
MARC025	66	67	359.3	13.5	13.5	3.0	22.7	4.7	187.1	1.5	217.0	135.5	40.2	23.4	4.1	1.9	130.0	11.2	310.42	961.81
MARC025	67	68	438.0	15.9	15.9	4.7	23.6	5.2	235.9	2.3	278.0	169.0	49.2	29.3	4.2	2.5	161.5	14.9	397.68	1182.38
MARC025	68	69	425.8	12.8	12.8	5.6	23.9	4.5	223.8	1.5	227.0	170.6	47.6	30.1	4.0	1.8	130.7	10.7	324.72	1117.29
MARC025	69	70	337.8	9.0	9.0	5.2	19.4	3.1	174.2	1.1	191.0	139.3	37.8	24.1	3.1	1.2	101.0	7.1	273.23	880.78
MARC025	70	71	414.1	15.4	15.4	5.4	23.4	4.9	210.8	2.6	328.0	169.0	47.3	29.5	4.1	2.5	160.5	16.3	469.20	1130.59
MARC025	71	72	512.9	14.1	14.1	6.1	28.0	4.8	266.2	1.9	279.0	210.9	59.8	36.2	4.5	2.1	148.5	12.8	399.11	1334.41
MARC025	72	73	391.5	10.2	10.2	5.8	21.6	3.8	194.5	1.2	225.0	162.0	44.8	28.9	3.7	1.5	122.8	8.0	321.86	1020.96
MARC025	73	74	1159.5	72.5	72.5	6.8	72.8	21.9	632.4	11.7	1773.0	408.7	124.4	77.0	15.2	12.2	665.7	75.5	2536.28	3458.58
MARC025	74	75	339.2	11.3	11.3	4.9	20.3	3.9	172.3	1.7	304.0	140.6	39.0	24.6	3.4	1.7	122.3	11.0	434.87	916.39
MARC025	75	76	354.0	10.4	10.4	5.1	21.9	3.7	184.6	1.2	213.0	144.5	40.8	26.2	3.6	1.4	120.1	8.2	304.70	945.66
MARC025	76	77	452.9	12.9	12.9	5.8	26.4	4.6	234.7	1.5	255.0	179.5	51.8	31.8	4.3	1.9	150.0	10.5	364.78	1193.18
MARC025	77	78	412.6	9.9	9.9	6.3	22.4	3.7	220.7	1.1	227.0	161.9	45.6	28.4	3.6	1.4	123.1	7.5	324.72	1068.54
MARC025	78	82	174.7	4.1	4.1	2.1	8.0	1.5	82.3	0.5	66.0	57.9	17.0	9.9	1.3	0.7	50.7	3.4	94.41	421.90
MARC025	82	86	233.8	8.3	8.3	2.3	13.4	2.9	126.8	1.0	119.0	82.8	24.8	15.3	2.4	1.2	92.7	6.8	170.23	629.97
MARC025	86	87	226.1	6.4	6.4	2.2	10.1	2.2	116.0	0.9	139.0	78.1	24.1	13.2	1.8	1.0	69.0	6.3	198.84	568.99
MARC025	87	88	496.4	38.1	38.1	2.9	31.5	10.9	258.8	7.3	759.0	174.5	52.4	33.4	6.6	6.7	358.9	44.3	1085.75	1570.90
MARC025	88	89	74.8	2.9	2.9	1.3	4.3	0.8	38.8	0.4	31.0	29.7	8.4	5.6	0.7	0.4	32.0	2.4	44.35	206.88
MARC025	89	90	315.7	16.6	16.6	2.4	20.3	5.4	160.2	2.3	306.0	118.5	34.7	22.5	4.0	2.6	163.2	15.5	437.73	910.97
MARC025	90	91	372.7	24.5	24.5	2.7	30.8	8.0	178.7	3.4	501.0	144.1	41.8	32.4	6.0	4.0	267.1	23.2	716.68	1179.36
MARC025	91	92	79.4	3.8	3.8	1.3	5.1	1.1	40.5	0.6	64.0	30.2	8.5	5.5	1.0	0.6	40.4	3.6	91.55	227.63
MARC025	92	93	365.0	20.6	20.6	3.2	33.1	7.1	175.7	2.8	431.0	145.0	41.8	33.9	6.2	3.3	230.5	19.1	616.55	1125.21
MARC025	93	94	227.0	11.5	11.5	2.4	18.1	4.0	110.0	1.4	180.0	96.1	26.4	20.1	3.3	1.8	118.7	10.1	257.49	672.21
MARC025	94	95	256.5	10.5	10.5	1.9	16.6	3.7	127.6	1.2	189.0	97.3	28.3	19.1	3.1	1.5	121.8	8.8	270.36	717.56
MARC025	95	96	313.4	16.4	16.4	2.3	21.2	5.5	156.3	2.1	219.0	121.7	35.3	24.6	4.4	2.5	175.1	14.8	313.28	923.53
MARC025	96	97	306.1	13.6	13.6	2.0	18.8	4.5	154.2	1.7	287.0	113.0	33.2	21.7	3.5	2.1	150.9	11.5	410.55	859.22
MARC025	97	98	1742.0	90.3	90.3	8.7	109.7	28.1	787.1	15.0	1906.0	665.9	192.7	132.9	20.9	15.2	1041.6	96.9	2726.53	5082.87
MARC025	98	99	951.0	44.3	44.3	4.9	57.5	13.6	444.0	7.8	1198.0	363.7	107.6	70.2	10.4	7.7	510.2	49.0	1713.74	2709.15
MARC025	99	100	211.9	8.5	8.5	1.7	12.9	3.0	106.4	1.1	168.0	79.1	23.1	15.7	2.3	1.4	101.6	7.9	240.32	591.63
MARC025	100	101	199.4	8.5	8.5	1.7	13.8	2.9	96.9	1.1	134.0	79.3	22.3	16.6	2.5	1.2	98.0	6.9	191.69	566.79
MARC025	101	102	249.9	10.3	10.3	2.0	16.4	3.6	124.6	1.3	166.0	97.0	28.1	18.9	3.0	1.6	117.8	8.5	237.46	701.25
MARC025	102	106	152.9	6.4	6.4	1.4	9.5	2.1	77.3	0.9	116.0	57.7	16.8	10.6	1.7	0.9	66.4	5.5	165.94	420.80
MARC025	106	110	146.2	6.7	6.7	1.7	10.7	2.3	69.7	1.0	102.0	59.1	16.3	11.7	1.9	1.1	73.9	6.6	145.91	420.75
MARC025	110	114	257.3	8.2	8.2	1.6	13.1	2.9	132.3	1.1	197.0	92.0	28.0	16.1	2.4	1.3	90.7	7.3	281.81	669.53
MARC025	114	115	253.5	7.2	7.2	1.5	11.3	2.2	131.7	1.1	269.0	88.8	27.1	14.7	1.9	1.2	76.1	6.8	384.80	637.04
MARC025	115	116	303.8	9.7	9.7	2.3	13.4	3.0	160.1	1.8	242.0	105.4	32.4	18.3	2.4	1.7	101.3	10.7	346.18	781.32
MARC025	116	117	896.0	53.5	53.5	4.7	60.9	17.2	456.9	8.2	1030.0	320.1	95.1	64.8	12.3	8.8	529.9	52.5	1473.42	2665.14
MARC025	117	118	917.4	41.5	41.5	5.0	53.8	13.9	468.4	5.3	906.0	313.2	94.9	59.7	10.5	6.4	423.3	36.8	1296.03	2519.75
MARC025	118	119	372.0	12.0	12.0	2.9	16.6	3.8	184.8	2.2	427.0	117.7	37.3	20.5	3.0	2.0	122.3	13.1	610.82	929.44
MARC025	119	120	282.2	9.3	9.3	2.7	14.3	3.0	150.1	1.7	267.0	94.5	29.3	17.5	2.7	1.6	102.0	9.9	381.94	736.24
MARC025	120	121	166.9	5.0	5.0	2.9	10.4	1.8	85.1	0.7	127.0	65.7	18.8	12.6	1.7	0.7	60.2	4.2	181.67	446.72
MARC025	121	122	153.3	3.1	3.1	3.6	9.7	1.1	79.5	0.4	117.0	65.0	17.3	12.1	1.3	0.4	37.3	2.3	167.37	393.81
MARC025	122	123	166.1	3.1	3.1	4.2	10.3	1.3	84.6	0.4	123.0	70.5	18.5	12.4	1.5	0.4	38.1	2.3	175.95	420.95
MARC025	123	124	164.4	4.2	4.2	3.7	10.5	1.5	86.7	0.6	131.0	68.5	18.4	12.4	1.6	0.6	49.3	3.4	187.40	434.68
MARC025	124	125	137.9	3.7	3.7	2.9	8.0	1.3	70.4	0.5	103.0	55.6	15.0	10.8	1.2	0.5	44.3	2.8	147.34	361.90

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC025	125	126	433.0	20.8	20.8	2.8	27.5	7.0	222.5	2.5	299.0	154.2	46.3	31.0	5.4	3.2	212.6	17.5	427.72	1221.82
MARC025	126	127	948.7	45.4	45.4	3.8	33.7	11.9	477.8	11.5	3799.0	292.4	95.1	41.9	6.8	9.1	421.2	65.0	5434.47	2513.49
MARC025	127	128	129.2	5.3	5.3	1.2	7.4	1.7	67.3	0.8	113.0	47.6	13.8	8.6	1.4	0.8	55.4	4.7	161.65	354.10
MARC025	128	129	126.4	5.4	5.4	1.2	8.0	1.8	65.0	0.7	105.0	44.4	13.6	8.3	1.4	0.8	57.3	4.7	150.20	347.82
MARC025	129	130	207.0	7.8	7.8	1.4	12.0	2.6	103.7	1.2	130.0	75.2	22.6	14.6	2.1	1.2	82.4	6.7	185.97	554.30
MARC025	130	131	876.5	46.4	46.4	4.1	52.6	14.5	447.3	6.8	1092.0	312.4	93.5	59.4	10.7	7.5	451.3	44.9	1562.11	2499.39
MARC025	131	132	63.9	1.7	1.7	0.9	2.8	0.6	34.6	0.4	26.0	22.6	6.5	3.4	0.4	0.3	19.2	1.6	37.19	161.71
MARC025	132	133	422.8	18.0	18.0	2.3	20.3	5.4	224.2	3.3	459.0	148.2	45.4	25.3	3.9	3.2	181.6	20.0	656.60	1149.60
MARC025	133	134	758.2	7.2	7.2	6.9	19.1	2.5	463.8	1.1	95.0	224.3	74.3	29.6	2.6	1.1	86.9	6.5	135.90	1698.08
MARC025	134	135	184.6	8.9	8.9	1.7	11.3	2.9	96.6	1.4	166.0	62.5	19.2	12.2	2.3	1.4	92.8	8.3	237.46	520.97
MARC025	135	136	161.3	7.8	7.8	1.7	9.6	2.4	80.9	1.2	150.0	57.6	17.0	10.6	1.9	1.3	78.0	7.4	214.58	450.31
MARC025	136	137	79.8	3.9	3.9	1.4	5.1	1.3	42.2	0.6	19.0	29.9	8.6	5.7	1.0	0.6	40.1	3.3	27.18	230.08
MARC025	137	138	157.1	8.0	8.0	2.0	11.9	2.7	77.8	1.0	82.0	63.7	17.7	13.2	2.2	1.2	85.5	6.4	117.30	464.69
MARC025	138	139	145.6	8.3	8.3	1.9	11.9	2.7	70.0	1.2	78.0	60.2	16.7	13.2	2.2	1.4	89.8	7.6	111.58	447.02
MARC025	139	140	1185.2	82.3	82.3	5.1	67.7	22.7	592.3	16.7	2228.0	402.8	121.0	71.8	14.1	15.0	814.5	98.6	3187.15	3612.61
MARC025	140	141	714.7	43.7	43.7	3.7	54.2	13.3	345.9	6.6	570.0	268.6	77.3	53.8	9.2	6.6	428.3	45.1	815.39	2134.51
MARC025	141	142	915.6	53.1	53.1	4.7	65.7	17.5	471.0	6.5	775.0	338.4	100.5	69.8	13.5	8.4	521.3	46.5	1108.64	2719.33
MARC026	0	4	232.7	8.3	8.3	2.1	12.6	2.7	99.3	1.2	177.0	76.0	22.1	14.8	2.3	1.3	86.0	7.7	253.20	583.83
MARC026	4	8	237.7	5.1	5.1	1.9	11.1	1.8	117.2	0.8	50.0	90.0	26.2	14.3	1.7	0.8	56.5	4.7	71.53	579.43
MARC026	8	12	127.8	6.4	6.4	2.1	9.9	2.1	58.8	0.9	114.0	55.1	14.3	11.1	1.8	1.0	68.3	5.4	163.08	375.97
MARC026	12	16	111.7	3.8	3.8	1.9	7.8	1.5	51.5	0.6	38.0	50.2	13.4	9.4	1.2	0.6	43.9	3.3	54.36	308.47
MARC026	16	20	207.5	6.3	6.3	2.2	12.3	2.2	97.8	0.8	82.0	84.0	23.7	15.7	2.1	0.9	70.4	5.1	117.30	542.78
MARC026	20	24	207.6	7.4	7.4	2.2	14.6	2.5	99.0	0.9	100.0	86.3	23.7	17.0	2.4	1.0	83.6	5.8	143.05	568.24
MARC026	24	28	96.9	3.5	3.5	1.9	7.0	1.3	45.5	0.6	12.0	45.0	11.6	8.6	1.1	0.5	38.2	3.3	17.17	271.62
MARC026	28	32	172.2	7.3	7.3	2.0	13.0	2.5	86.1	1.0	86.0	70.0	19.6	14.3	2.2	1.1	82.0	6.5	123.02	493.17
MARC026	32	36	149.6	5.0	5.0	2.0	10.5	1.7	67.4	0.7	38.0	66.4	18.0	13.0	1.7	0.7	55.0	4.0	54.36	405.21
MARC026	36	40	155.5	3.4	3.4	1.5	6.8	1.1	79.0	0.6	26.0	57.3	16.8	9.3	1.0	0.5	37.6	3.2	37.19	380.00
MARC026	40	44	106.9	3.3	3.3	1.7	7.5	1.1	50.1	0.6	16.0	47.6	12.6	9.5	1.1	0.5	37.8	3.0	22.89	289.39
MARC026	44	45	245.3	10.6	10.6	2.3	16.5	3.7	114.0	1.4	145.0	103.2	28.4	19.0	2.9	1.6	113.9	9.3	207.42	690.84
MARC026	45	46	200.4	6.5	6.5	2.0	10.6	2.2	110.4	1.0	79.0	72.4	21.0	12.8	1.8	1.0	66.8	5.8	113.01	525.56
MARC026	46	47	48.5	1.5	1.5	1.0	3.0	0.5	24.2	0.3	5.0	19.9	5.4	3.8	0.4	0.2	16.0	1.3	7.15	128.85
MARC026	47	48	41.8	1.0	1.0	1.0	2.3	0.3	21.8	0.2	5.0	16.8	4.6	2.8	0.4	0.2	11.0	0.9	7.15	107.16
MARC026	48	49	4441.0	287.7	287.7	20.3	316.0	94.8	2450.6	31.5	4124.0	1483.5	451.9	306.8	68.4	42.6	2583.5	232.2	5899.38	13280.37
MARC026	49	50	393.0	16.2	16.2	3.4	28.0	5.8	187.5	1.8	260.0	160.3	45.6	31.3	5.0	2.4	186.8	12.8	371.93	1109.77
MARC026	50	51	1253.1	70.7	70.7	6.9	93.2	24.2	656.5	7.3	1057.0	467.8	136.6	95.6	18.6	10.5	701.9	55.8	1512.04	3721.72
MARC026	51	52	247.4	9.7	9.7	2.1	16.3	3.4	120.8	1.2	161.0	96.5	27.3	19.2	2.9	1.4	108.6	7.5	230.31	681.91
MARC026	52	53	1153.1	70.8	70.8	6.4	84.3	23.4	632.1	7.9	920.0	410.8	122.6	88.0	17.6	10.7	676.0	58.5	1316.06	3479.84
MARC026	53	54	424.3	17.8	17.8	3.4	30.3	6.1	192.2	2.1	383.0	173.4	49.3	35.0	5.4	2.7	206.0	15.1	547.88	1196.53
MARC026	54	55	103.4	2.6	2.6	1.4	5.3	0.9	53.9	0.4	19.0	39.0	11.2	6.6	0.9	0.4	29.1	2.3	27.18	262.24
MARC026	55	56	157.8	3.1	3.1	1.4	5.6	1.0	85.0	0.4	46.0	49.0	15.5	7.4	0.9	0.5	35.4	2.4	65.80	371.30
MARC026	56	57	203.2	4.9	4.9	1.5	9.2	1.7	107.2	0.6	100.0	69.8	21.3	11.7	1.5	0.7	57.9	4.1	143.05	504.92
MARC026	57	58	703.4	6.4	6.4	2.4	16.3	2.3	407.0	0.8	91.0	204.7	68.3	25.5	2.3	0.9	78.2	5.4	130.18	1536.84
MARC026	58	59	265.9	10.4	10.4	2.7	19.2	3.8	125.6	1.3	169.0	108.1	30.1	21.6	3.4	1.5	124.5	8.5	241.75	746.66
MARC026	59	60	195.4	8.0	8.0	2.4	14.6	2.7	90.4	1.0	89.0	85.1	23.3	17.4	2.6	1.2	86.2	6.1	127.31	551.85
MARC026	60	61	350.2	16.8	16.8	3.0	25.8	5.8	177.1	2.2	234.0	139.0	39.1	28.5	4.8	2.5	177.9	14.2	334.74	1017.58
MARC026	61	62	508.7	33.0	33.0	4.1	40.9	11.0	261.7	3.7	308.0	197.0	55.3	42.1	8.4	4.9	296.3	27.1	440.59	1548.33
MARC026	62	63	177.1	6.7	6.7	1.7	10.9	2.3	86.3	0.8	70.0	69.8	19.4	13.5	2.0	0.9	77.6	5.1	100.14	486.21
MARC026	63	64	2106.3	114.1	114.1	9.6	139.3	38.5	1115.3	12.5	1679.0	694.0	213.3	142.2	29.0	17.3	1078.0	92.0	2401.81	5995.27
MARC026	64	65	2017.8	119.6	119.6	10.8	156.3	40.6	1023.6	12.4	1735.0	745.9	215.8	160.0	31.6	17.5	1123.4	94.1	2481.92	5978.58
MARC026	65	66	257.5	16.2	16.2	2.5	24.3	5.6	121.2	1.6	184.0	105.8	29.1	24.6	4.6	2.3	181.5	12.0	263.21	818.12
MARC026	66	67	235.6	8.7	8.7	2.1	15.3	3.0	111.2	1.1	133.0	93.4	26.4	18.6	2.7	1.3	102.1	7.2	190.26	644.89
MARC026	67	68	286.7	5.4	5.4	2.4	11.4	1.8	148.5	0.7	62.0	101.6	30.2	16.4	1.8	0.8	61.1	4.6	88.69	683.09
MARC026	68	72	156.5	6.2	6.2	2.0	10.6	2.1	76.1	0.8	59.0	64.7	18.0	12.3	1.8	0.9	70.2	5.0	84.40	438.40
MARC026	72	76	129.5	5.8	5.8	2.0	9.7	1.9	63.0	0.8	63.0	53.7	14.5	10.7	1.6	0.9	65.0	5.1	90.12	374.61

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC026	76	77	167.4	4.1	4.1	1.5	7.1	1.4	87.7	0.6	84.0	55.8	17.4	9.7	1.2	0.6	44.1	3.4	120.16	409.63
MARC026	77	78	115.1	2.5	2.5	1.4	5.2	0.9	59.5	0.4	25.0	42.6	12.3	6.8	0.8	0.4	27.0	2.2	35.76	281.63
MARC026	78	79	85.7	3.2	3.2	1.5	5.8	1.0	40.7	0.5	18.0	37.3	10.1	7.1	0.9	0.5	32.8	2.7	25.75	235.04
MARC026	79	80	321.3	7.1	7.1	2.0	12.2	2.4	173.0	0.9	104.0	107.4	33.6	16.9	2.1	1.0	72.6	6.1	148.77	771.35
MARC026	80	81	1316.8	51.2	51.2	6.0	77.2	17.6	659.3	5.3	771.0	472.2	142.3	86.3	14.6	7.5	541.2	40.4	1102.92	3529.93
MARC026	81	82	187.3	8.5	8.5	2.1	13.7	2.7	89.8	1.0	94.0	78.8	21.5	15.8	2.4	1.2	93.0	6.6	134.47	539.36
MARC026	82	83	368.5	8.1	8.1	2.3	16.7	3.0	183.2	1.0	118.0	134.5	40.4	22.1	2.7	1.2	93.5	6.6	168.80	899.93
MARC026	83	84	75.7	1.8	1.8	1.2	3.8	0.7	38.9	0.3	13.0	28.3	8.3	4.8	0.6	0.3	23.2	1.5	18.60	193.06
MARC026	84	85	479.3	15.2	15.2	2.8	28.1	5.3	230.2	1.8	283.0	181.7	53.1	34.7	4.8	2.2	183.1	12.2	404.83	1263.69
MARC026	85	86	76.9	4.7	4.7	1.4	6.9	1.5	34.7	0.7	42.0	33.2	8.7	7.5	1.1	0.7	45.6	4.1	60.08	235.40
MARC026	86	87	57.2	2.7	2.7	1.4	4.7	0.9	26.3	0.5	17.0	25.8	6.8	5.6	0.8	0.4	30.1	2.3	24.32	170.33
MARC026	87	88	34.3	0.9	0.9	0.8	1.7	0.3	17.8	0.2	5.0	12.8	3.6	2.4	0.3	0.1	8.8	0.8	7.15	86.42
MARC026	88	89	183.4	5.8	5.8	1.5	10.9	2.1	92.3	0.6	87.0	65.6	19.2	12.6	1.9	0.8	70.7	4.2	124.45	483.02
MARC026	89	90	85.1	3.2	3.2	1.0	5.2	1.1	43.7	0.5	41.0	32.3	9.3	6.4	1.0	0.4	38.6	2.7	58.65	236.50
MARC026	90	91	483.4	24.5	24.5	3.0	36.8	8.4	228.5	2.4	412.0	192.7	54.7	41.0	6.6	3.3	255.1	19.8	589.37	1402.46
MARC026	91	92	1630.5	93.7	93.7	7.6	115.7	31.5	853.4	10.1	1631.0	586.5	173.4	116.7	22.0	13.3	836.0	77.1	2333.15	4719.39
MARC026	92	93	662.7	33.3	33.3	4.4	52.2	11.8	324.3	3.1	480.0	269.7	76.0	57.1	9.3	4.6	338.9	25.7	686.64	1933.66
MARC026	93	94	395.8	16.9	16.9	2.9	28.7	6.0	192.2	1.8	256.0	157.9	45.2	31.7	4.8	2.3	186.2	13.3	366.21	1116.48
MARC026	94	95	550.9	34.2	34.2	3.4	42.2	11.5	284.5	3.8	427.0	205.8	59.9	43.9	8.2	5.0	320.5	28.7	610.82	1657.60
MARC026	95	96	255.6	11.1	11.1	1.7	17.8	3.9	125.8	1.2	115.0	102.4	29.4	19.1	2.9	1.6	110.6	9.0	164.51	711.16
MARC026	96	97	1732.9	86.9	86.9	6.9	103.2	28.9	950.8	10.2	1350.0	584.9	176.1	107.0	19.7	12.8	763.8	75.5	1931.18	4797.36
MARC026	97	98	197.2	8.1	8.1	1.6	13.5	2.6	95.9	0.9	133.0	79.7	22.6	15.5	2.2	1.1	88.0	6.5	190.26	549.00
MARC026	98	99	536.6	74.2	74.2	2.8	42.1	19.9	278.1	15.5	836.0	194.9	57.7	38.7	9.2	13.3	644.2	98.6	1195.90	2103.21
MARC026	99	100	90.9	4.3	4.3	1.3	6.7	1.5	43.6	0.7	59.0	38.4	10.4	7.9	1.1	0.7	47.7	4.4	84.40	267.18
MARC026	100	101	95.0	5.6	5.6	1.2	6.6	1.7	45.9	0.9	53.0	39.4	10.9	7.3	1.1	0.9	53.7	6.1	75.82	284.11
MARC026	101	102	118.0	3.3	3.3	1.2	5.5	1.1	59.1	0.5	25.0	44.0	13.1	7.0	0.9	0.5	34.7	3.1	35.76	297.71
MARC026	102	103	107.5	4.3	4.3	1.0	7.0	1.6	54.7	0.5	56.0	40.9	11.9	7.8	1.2	0.5	47.6	3.4	80.11	297.95
MARC026	103	104	290.9	13.6	13.6	2.1	16.5	4.4	146.7	1.9	345.0	101.1	30.8	18.6	3.1	2.1	145.7	13.2	493.52	811.02
MARC026	104	105	77.6	3.2	3.2	1.0	5.0	1.1	39.3	0.5	31.0	30.7	8.7	5.7	0.8	0.5	33.8	3.1	44.35	216.45
MARC026	105	106	147.4	7.4	7.4	1.5	12.0	2.6	67.0	0.8	77.0	64.6	17.6	13.1	2.0	1.1	84.4	5.9	110.15	441.09
MARC026	106	107	80.6	2.6	2.6	1.2	5.6	0.9	37.6	0.3	17.0	36.5	9.5	6.4	0.8	0.4	29.1	2.2	24.32	218.50
MARC026	107	108	80.3	7.0	7.0	1.4	6.3	2.2	40.9	1.1	87.0	33.0	9.2	6.5	1.3	1.2	71.5	7.6	124.45	279.71
MARC026	108	109	289.5	15.1	15.1	2.1	23.4	4.9	134.4	2.2	325.0	118.3	32.9	25.7	3.8	2.3	165.1	15.3	464.91	860.30
MARC026	109	110	221.0	9.8	9.8	1.5	13.5	3.2	106.0	1.4	210.0	83.9	24.0	15.5	2.4	1.4	95.6	9.6	300.41	604.36
MARC026	110	111	81.4	4.2	4.2	0.9	5.6	1.4	40.8	0.6	65.0	31.0	8.9	6.0	1.0	0.6	41.1	4.0	92.98	234.63
MARC026	111	112	70.8	3.3	3.3	1.0	5.0	1.0	34.2	0.3	17.0	28.9	7.9	5.6	0.9	0.4	32.4	2.4	24.32	199.83
MARC026	112	113	71.0	4.7	4.7	1.2	5.1	1.5	35.2	0.6	47.0	28.0	7.9	5.1	0.9	0.7	41.0	4.3	67.23	214.36
MARC026	113	114	83.5	14.1	14.1	1.4	12.2	4.6	37.3	1.6	73.0	36.0	9.9	10.0	2.8	2.1	131.4	12.4	104.43	380.29
MARC026	114	115	191.9	10.7	10.7	1.5	12.2	3.4	100.5	1.3	99.0	67.3	20.2	13.2	2.4	1.6	101.6	9.7	141.62	554.33
MARC026	115	116	162.5	3.1	3.1	0.9	4.1	1.0	95.3	0.4	27.0	47.1	15.2	6.1	0.8	0.4	28.7	2.4	38.62	373.45
MARC026	116	117	120.3	4.8	4.8	1.5	7.6	1.7	62.5	0.6	43.0	44.9	13.1	8.3	1.2	0.7	52.1	4.0	61.51	331.51
MARC026	117	118	431.9	13.3	13.3	4.5	22.1	4.6	239.0	1.7	175.0	148.7	44.7	24.9	3.7	1.9	142.4	12.3	250.34	1119.08
MARC026	118	119	372.9	11.7	11.7	4.3	17.8	4.0	207.4	1.6	171.0	125.4	37.9	21.1	3.0	1.6	122.8	10.6	244.62	961.92
MARC026	119	120	125.9	3.7	3.7	2.1	7.0	1.3	64.6	0.5	28.0	49.3	13.7	8.6	1.0	0.5	38.7	3.2	40.05	326.52
MARC026	120	124	160.3	7.3	7.3	1.6	8.1	2.2	83.3	1.2	117.0	55.3	16.9	9.6	1.4	1.2	67.7	7.7	167.37	433.76
MARC026	124	128	117.4	9.8	9.8	2.0	14.6	3.3	54.5	1.3	92.0	55.9	14.1	13.3	2.5	1.4	103.0	8.9	131.61	418.86
MARC026	128	129	75.2	3.5	3.5	1.7	5.8	1.1	37.9	0.5	37.0	31.4	8.5	6.4	0.9	0.5	35.7	3.6	52.93	218.56
MARC026	129	130	95.2	10.3	10.3	1.9	12.3	3.3	44.2	1.3	78.0	44.1	11.3	11.6	2.3	1.5	100.8	9.2	111.58	365.82
MARC026	130	131	340.5	23.1	23.1	2.5	28.5	7.8	168.3	2.4	221.0	133.3	38.0	28.5	5.5	3.3	230.7	18.9	316.14	1068.83
MARC026	131	132	224.8	14.3	14.3	2.3	19.4	5.0	106.8	1.6	168.0	96.6	26.2	20.6	3.5	2.2	152.1	13.1	240.32	712.70
MARC026	132	133	97.2	3.2	3.2	1.4	5.6	1.0	49.5	0.4	29.0	39.1	11.0	7.1	0.9	0.4	32.9	2.5	41.48	258.02
MARC026	133	134	129.8	8.7	8.7	1.7	10.8	2.9	64.4	0.9	65.0	53.2	14.7	11.4	2.0	1.1	80.3	6.6	92.98	402.43
MARC026	134	135	568.9	37.5	37.5	3.0	38.4	11.6	293.7	5.8	557.0	203.4	60.8	39.7	7.3	6.0	341.1	38.7	796.79	1709.91
MARC026	135	136	307.8	12.5	12.5	2.1	20.5	4.5	148.1	1.2	151.0	120.1	33.9	23.3	3.5	1.6	133.2	9.3	216.01	844.91

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC026	136	140	235.5	10.9	10.9	1.9	16.3	3.7	115.4	1.4	163.0	87.7	25.8	17.4	2.9	1.6	118.6	9.5	233.17	667.04
MARC027	0	1	4346.9	261.3	261.3	11.1	165.2	78.1	1115.0	34.5	3899.0	781.6	239.2	164.3	41.3	41.1	1970.8	254.2	5577.52	9845.80
MARC027	1	2	305.3	19.6	19.6	2.4	17.9	6.0	101.4	2.6	240.0	79.1	22.3	16.8	3.7	2.9	162.3	18.9	343.32	789.38
MARC027	2	3	80.6	7.1	7.1	1.7	8.0	2.4	29.7	1.0	41.0	30.7	7.6	7.5	1.5	1.1	65.1	6.8	58.65	262.05
MARC027	3	4	140.3	6.6	6.6	2.4	11.9	2.4	64.6	0.9	12.0	56.0	15.1	12.6	2.0	0.9	74.8	5.5	17.17	408.64
MARC027	4	8	64.2	3.3	3.3	1.4	5.5	1.1	30.3	0.4	18.0	28.9	7.4	5.9	0.9	0.5	34.2	2.8	25.75	192.62
MARC027	8	12	137.5	5.1	5.1	1.9	9.0	1.8	67.9	0.6	49.0	56.7	15.6	10.7	1.4	0.7	52.8	4.2	70.09	375.13
MARC027	12	13	101.1	5.4	5.4	1.3	6.6	1.7	42.0	0.8	43.0	33.2	9.4	6.4	1.1	0.8	47.9	4.9	61.51	270.42
MARC027	13	14	454.6	20.0	20.0	2.8	30.9	7.0	227.3	2.0	274.0	177.9	50.7	34.2	5.4	2.8	197.9	15.9	391.96	1264.89
MARC027	14	15	430.7	13.8	13.8	2.2	19.8	4.7	198.1	1.6	302.0	147.1	43.1	25.0	3.5	2.0	123.7	11.5	432.01	1049.56
MARC027	15	16	1038.0	98.7	98.7	5.6	84.8	30.0	541.4	15.0	874.0	378.0	110.7	80.4	17.4	15.9	841.6	102.3	1250.26	3491.40
MARC027	16	17	1134.4	98.6	98.6	6.0	89.8	30.5	603.3	14.1	1267.0	403.1	120.0	84.0	18.4	15.5	867.2	99.3	1812.44	3719.02
MARC027	17	18	161.0	8.3	8.3	2.5	12.4	2.7	83.7	1.1	100.0	63.2	18.1	13.0	2.0	1.2	83.1	7.7	143.05	473.36
MARC027	18	19	385.1	18.1	18.1	2.7	25.9	6.1	193.4	2.2	402.0	146.4	41.7	28.8	4.7	2.6	184.6	15.6	575.06	1088.18
MARC027	19	20	94.7	5.7	5.7	1.7	7.4	1.8	47.6	0.9	24.0	37.7	10.3	7.4	1.2	0.8	61.6	5.6	34.33	293.15
MARC027	20	24	117.4	5.6	5.6	1.5	8.3	1.9	62.4	0.8	70.0	44.4	12.8	8.8	1.4	0.9	60.7	5.2	100.14	342.05
MARC027	24	28	112.9	5.0	5.0	1.9	8.9	1.7	54.2	0.6	40.0	49.1	12.9	9.6	1.3	0.7	55.2	4.1	57.22	326.67
MARC027	28	29	538.9	24.0	24.0	2.8	33.2	8.1	278.4	2.7	546.0	195.3	58.0	36.3	6.0	3.3	249.2	19.7	781.05	1495.36
MARC027	29	30	164.6	8.0	8.0	1.9	13.5	2.9	76.2	0.9	95.0	71.3	19.1	14.6	2.2	1.1	86.0	6.5	135.90	483.12
MARC027	30	31	109.8	4.6	4.6	1.6	6.9	1.5	56.2	0.6	52.0	41.2	11.9	7.9	1.1	0.7	46.0	4.1	74.39	301.12
MARC027	31	32	142.7	4.6	4.6	1.5	6.7	1.5	77.6	0.6	80.0	48.5	14.5	8.0	1.1	0.7	45.0	4.4	114.44	364.80
MARC027	32	33	2623.0	216.9	216.9	13.3	211.3	66.6	1267.6	20.2	3308.0	953.8	280.9	208.3	42.4	32.5	2039.6	174.7	4732.09	8455.25
MARC027	33	34	4307.3	452.6	452.6	24.2	390.7	132.8	2020.6	41.0	9352.0	1688.4	478.5	377.8	80.1	68.2	4187.1	357.4	13378.04	15200.97
MARC027	34	35	125.9	9.8	9.8	1.6	12.8	3.3	58.1	0.9	146.0	56.5	14.9	13.2	2.4	1.3	103.8	6.9	208.85	427.77
MARC027	35	36	323.6	10.7	10.7	1.7	16.0	3.6	167.4	1.1	163.0	112.4	34.0	19.2	2.8	1.5	106.3	8.3	233.17	826.87
MARC027	36	40	63.4	3.3	3.3	1.2	5.1	1.1	31.2	0.4	23.0	27.6	7.6	5.7	0.8	0.5	33.3	2.7	32.90	189.55
MARC027	40	44	198.6	4.1	4.1	1.6	8.6	1.4	110.7	0.6	27.0	71.7	21.1	10.9	1.2	0.6	45.5	3.9	38.62	487.96
MARC027	44	45	178.5	6.4	6.4	2.1	13.4	2.4	82.8	0.9	103.0	78.4	21.6	15.2	2.1	0.9	69.8	5.5	147.34	491.85
MARC027	45	46	189.9	7.0	7.0	1.7	13.1	2.4	94.8	0.7	82.0	80.4	22.5	15.5	2.1	1.0	71.2	5.6	117.30	521.07
MARC027	46	47	506.7	30.2	30.2	3.5	38.6	9.5	233.3	4.5	400.0	212.6	58.9	43.5	6.8	4.7	298.3	31.2	572.20	1528.07
MARC027	47	48	147.7	9.9	9.9	1.5	13.4	3.3	67.9	1.3	106.0	65.3	17.5	14.4	2.4	1.5	100.1	9.2	151.63	471.69
MARC027	48	49	200.8	8.1	8.1	1.6	13.4	2.7	93.8	1.0	108.0	82.6	23.3	15.8	2.1	1.2	84.3	7.3	154.49	552.18
MARC027	49	50	98.1	4.5	4.5	1.7	7.5	1.5	46.4	0.6	21.0	42.5	11.5	8.1	1.2	0.7	50.7	4.3	30.04	286.65
MARC027	50	51	66.1	3.3	3.3	1.2	5.3	1.0	30.5	0.4	14.0	30.0	8.1	5.8	0.8	0.5	37.3	3.0	20.03	198.39
MARC027	51	52	162.3	5.5	5.5	1.4	10.0	1.9	81.6	0.6	58.0	68.1	19.0	12.5	1.5	0.7	62.6	4.6	82.97	442.23
MARC027	52	53	147.2	3.7	3.7	1.5	6.7	1.3	72.9	0.5	17.0	58.3	16.3	9.5	1.0	0.5	38.0	3.3	24.32	366.56
MARC027	53	54	150.1	3.3	3.3	1.4	5.4	1.0	78.5	0.4	20.0	51.1	15.9	7.5	0.8	0.5	33.8	2.8	28.61	358.13
MARC027	54	55	100.1	4.1	4.1	1.4	6.7	1.5	50.9	0.5	47.0	44.6	11.8	8.2	1.2	0.6	43.0	3.6	67.23	285.43
MARC027	55	56	198.8	12.9	12.9	2.3	18.1	4.4	84.4	1.6	179.0	93.7	24.6	19.5	3.2	1.9	128.1	11.0	256.06	625.66
MARC027	56	57	444.7	34.9	34.9	3.4	37.1	10.5	194.6	5.6	490.0	190.1	52.5	40.9	6.7	5.8	359.8	38.1	700.95	1472.20
MARC027	57	58	665.1	32.5	32.5	3.6	43.3	10.9	320.6	3.9	347.0	260.0	73.7	49.3	7.8	4.8	341.6	29.4	496.38	1898.90
MARC027	58	59	273.6	9.1	9.1	2.4	14.4	3.1	147.5	1.2	78.0	99.0	29.3	17.2	2.4	1.3	95.0	8.5	111.58	719.42
MARC027	59	60	185.4	10.9	10.9	1.9	14.1	3.7	92.4	1.3	123.0	74.1	20.6	15.2	2.6	1.6	108.1	9.7	175.95	559.28
MARC027	60	61	193.1	10.3	10.3	1.9	14.5	3.4	98.9	1.3	98.0	74.6	21.4	15.9	2.6	1.5	109.3	8.9	140.19	574.92
MARC027	61	62	133.0	6.7	6.7	1.6	12.0	2.4	57.8	0.9	56.0	62.6	16.5	13.2	2.0	1.0	77.5	5.9	80.11	405.75
MARC027	62	63	113.1	4.6	4.6	2.2	9.9	1.6	51.0	0.6	39.0	55.3	14.3	11.7	1.4	0.6	50.4	4.0	55.79	329.19
MARC027	63	64	57.9	3.1	3.1	1.5	5.3	1.0	25.4	0.4	14.0	30.3	7.4	6.5	0.9	0.4	31.4	2.6	20.03	179.48
MARC027	64	65	59.1	4.7	4.7	1.4	6.2	1.6	27.8	0.5	25.0	27.9	7.1	6.3	1.1	0.6	47.2	3.4	35.76	202.47
MARC027	65	66	409.7	23.0	23.0	2.9	29.9	7.3	194.3	3.1	308.0	167.7	47.2	34.0	5.1	3.5	231.0	22.0	440.59	1215.55
MARC027	66	67	290.4	16.4	16.4	2.0	18.8	4.9	140.5	2.3	253.0	114.2	32.4	21.7	3.4	2.5	158.5	16.5	361.92	847.56
MARC027	67	68	69.3	2.4	2.4	1.0	3.1	0.8	39.4	0.3	28.0	23.6	7.2	4.1	0.6	0.3	25.3	2.0	40.05	183.30
MARC027	68	69	109.3	3.4	3.4	1.5	4.8	1.1	63.4	0.5	36.0	36.4	11.0	6.4	0.8	0.5	35.0	3.2	51.50	283.02
MARC027	69	70	283.9	14.0	14.0	2.2	22.8	5.0	131.9	1.3	122.0	116.4	32.5	25.2	3.9	1.9	149.7	10.7	174.52	827.39
MARC027	70	71	445.3	29.3	29.3	2.4	30.8	9.2	217.6	4.3	366.0	168.9	49.8	33.6	5.7	4.6	282.4	29.5	523.56	1354.84

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC027	71	72	92.0	8.5	8.5	1.3	10.6	2.9	41.2	0.9	58.0	39.2	11.0	9.9	2.0	1.1	88.4	6.5	82.97	329.39
MARC027	72	73	417.4	25.5	25.5	3.6	27.5	7.9	215.7	4.2	297.0	155.5	45.8	29.5	5.1	4.2	270.1	27.8	424.86	1276.82
MARC027	73	74	54.8	3.8	3.8	1.5	5.9	1.3	24.3	0.5	15.0	28.2	7.0	5.9	1.0	0.5	41.5	3.4	21.46	186.16
MARC027	74	75	84.4	4.6	4.6	1.6	7.6	1.5	37.8	0.7	24.0	41.6	10.4	8.3	1.2	0.6	49.5	3.9	34.33	261.56
MARC027	75	76	1000.7	52.8	52.8	5.2	67.2	18.0	495.4	5.5	517.0	381.3	110.6	72.1	12.6	7.8	519.6	42.9	739.57	2879.58
MARC027	76	77	345.2	18.2	18.2	2.8	28.8	6.3	158.4	1.9	174.0	145.2	40.0	30.6	5.0	2.5	194.0	14.1	248.91	1025.66
MARC027	77	78	447.0	10.9	10.9	2.1	21.9	3.8	211.5	1.2	154.0	166.4	49.5	28.6	3.3	1.5	119.6	8.4	220.30	1095.82
MARC027	78	79	551.6	25.2	25.2	2.9	31.0	7.9	265.4	3.7	577.0	211.1	61.9	37.8	5.4	4.0	261.1	25.6	825.40	1531.68
MARC027	79	80	212.5	5.4	5.4	2.3	12.3	1.9	94.6	0.7	151.0	90.2	24.9	16.9	1.8	0.8	72.5	4.7	216.01	552.09
MARC027	80	81	145.3	4.6	4.6	1.6	9.5	1.6	64.4	0.5	91.0	61.5	17.3	11.9	1.4	0.6	57.9	4.0	130.18	390.75
MARC027	81	82	221.6	8.8	8.8	2.0	15.7	3.0	110.0	1.0	137.0	87.8	24.8	17.9	2.6	1.2	98.5	7.3	195.98	617.81
MARC027	82	83	397.0	9.4	9.4	4.7	18.0	3.4	195.0	1.0	74.0	145.1	43.2	23.5	2.9	1.3	110.0	7.3	105.86	980.57
MARC027	83	84	106.7	4.7	4.7	1.4	8.2	1.6	47.3	0.5	80.0	46.4	12.5	9.6	1.4	0.6	55.6	3.8	114.44	308.70
MARC027	84	85	225.8	13.5	13.5	2.1	21.1	4.8	102.7	1.5	230.0	95.8	26.2	21.1	3.7	1.9	151.6	11.4	329.02	707.71
MARC027	85	86	1457.3	83.9	83.9	6.8	98.5	26.9	726.3	11.0	1728.0	526.7	155.0	104.1	18.4	12.8	830.3	79.1	2471.90	4264.93
MARC027	86	87	1997.4	105.1	105.1	8.3	129.0	34.5	1026.2	11.8	2020.0	695.2	205.5	134.6	24.2	15.1	1016.4	90.0	2889.61	5661.43
MARC027	87	88	1867.2	110.5	110.5	9.6	127.1	36.2	925.7	12.4	1214.0	694.0	202.6	137.9	25.5	16.0	1013.8	95.2	1736.63	5438.37
MARC027	88	89	951.5	69.9	69.9	3.7	46.9	18.8	462.6	12.9	2068.0	302.0	94.6	50.2	9.7	12.2	599.1	87.0	2958.27	2793.01
MARC027	89	90	173.1	8.2	8.2	2.0	13.6	2.9	76.2	0.9	107.0	73.8	20.0	14.5	2.2	1.1	82.8	6.9	153.06	491.61
MARC027	90	91	2150.6	119.4	119.4	9.4	132.2	39.6	1063.6	13.7	2789.0	741.6	223.9	139.0	26.3	17.4	1034.2	103.8	3989.66	5990.32
MARC027	91	92	182.3	8.3	8.3	2.0	12.6	2.9	81.6	1.0	130.0	73.0	20.1	15.2	2.2	1.2	85.0	6.8	185.97	507.56
MARC027	92	93	584.0	36.7	36.7	3.9	46.2	12.5	268.2	4.4	565.0	228.7	64.0	46.6	8.5	5.5	362.2	32.8	808.23	1760.09
MARC027	93	94	1088.2	54.2	54.2	4.5	60.2	16.4	519.9	8.0	1450.0	382.8	116.3	67.4	11.2	8.4	493.4	54.3	2074.23	2958.36
MARC027	94	95	190.8	8.8	8.8	2.1	14.2	3.2	85.8	1.0	177.0	76.5	21.9	15.1	2.4	1.3	95.9	8.0	253.20	541.65
MARC027	95	96	183.3	7.5	7.5	2.1	14.1	2.6	76.2	0.9	81.0	79.3	22.0	15.4	2.2	1.0	79.0	6.1	115.87	505.45
MARC027	96	97	322.3	10.4	10.4	4.5	20.3	3.8	152.6	1.2	168.0	129.6	34.8	23.9	3.2	1.4	101.6	7.9	240.32	835.89
MARC027	97	98	147.5	3.5	3.5	3.7	9.8	1.3	71.1	0.5	91.0	64.7	16.8	11.6	1.3	0.5	38.7	2.7	130.18	380.97
MARC027	98	99	147.7	3.2	3.2	3.5	10.1	1.3	71.0	0.4	84.0	63.5	16.7	11.6	1.4	0.4	34.9	2.6	120.16	375.11
MARC027	99	100	121.6	3.3	3.3	3.4	9.1	1.3	58.3	0.4	63.0	53.9	14.0	9.9	1.2	0.4	34.5	2.3	90.12	319.87
MARC027	100	101	133.4	5.6	5.6	2.9	10.1	2.1	63.1	0.7	47.0	56.6	15.3	10.4	1.6	0.8	61.5	5.2	67.23	378.55
MARC027	101	102	215.5	8.7	8.7	2.2	14.4	3.0	98.2	1.0	102.0	85.5	24.2	16.0	2.3	1.2	94.7	7.3	145.91	588.87
MARC027	102	103	468.3	20.2	20.2	3.4	30.4	7.1	221.3	2.1	247.0	174.5	49.5	34.6	5.5	2.9	214.5	16.9	353.33	1285.72
MARC027	103	104	180.8	8.2	8.2	2.3	13.9	2.9	80.0	1.2	90.0	78.4	21.4	15.1	2.2	1.2	84.2	7.9	128.75	513.11
MARC027	104	105	70.6	3.8	3.8	1.9	7.5	1.4	29.2	0.5	16.0	39.4	9.8	8.0	1.0	0.5	39.4	3.4	22.89	222.85
MARC027	105	106	69.0	3.4	3.4	2.0	7.1	1.3	27.7	0.5	11.0	38.6	9.0	8.1	1.0	0.4	35.2	3.1	15.74	212.34
MARC027	106	107	168.7	7.8	7.8	2.2	14.3	2.9	71.5	0.9	76.0	74.5	19.9	15.5	2.2	1.1	83.8	6.5	108.72	485.28
MARC027	107	108	105.2	4.6	4.6	2.1	10.7	1.8	44.4	0.6	25.0	54.1	13.3	10.9	1.4	0.6	49.5	4.1	35.76	311.77
MARC027	108	109	71.5	3.1	3.1	1.6	6.2	1.1	31.3	0.5	11.0	35.9	8.8	7.1	0.9	0.5	31.5	2.6	15.74	207.83
MARC027	109	110	573.8	14.6	14.6	5.0	19.9	4.7	322.5	2.2	183.0	180.6	56.4	26.8	3.3	2.2	141.2	14.7	261.78	1388.80
MARC027	110	111	406.0	11.9	11.9	3.0	14.9	3.7	207.8	1.8	199.0	130.1	40.7	18.7	2.5	1.8	118.7	12.5	284.67	989.70
MARC027	111	112	480.9	33.3	33.3	3.7	45.2	11.0	218.7	3.7	419.0	197.5	55.3	44.9	7.8	4.7	353.5	30.1	599.38	1540.96
MARC027	112	113	231.1	12.2	12.2	2.1	16.0	4.0	105.6	1.6	224.0	89.8	25.8	17.4	2.6	1.9	130.3	11.7	320.43	670.30
MARC027	113	114	127.8	4.0	4.0	1.4	6.8	1.4	59.9	0.5	20.0	50.5	13.9	8.5	1.0	0.6	37.3	3.0	28.61	322.66
MARC027	114	115	176.3	7.0	7.0	1.9	11.3	2.6	84.1	0.9	74.0	68.6	19.6	13.0	2.0	1.0	77.8	6.4	105.86	484.25
MARC027	115	116	90.5	3.7	3.7	1.5	6.7	1.3	39.9	0.5	20.0	37.8	10.4	6.7	1.1	0.5	39.4	3.1	28.61	249.36
MARC027	116	120	153.9	6.3	6.3	1.7	10.8	2.2	73.4	0.7	44.0	64.5	17.4	12.5	1.7	0.8	72.0	5.2	62.94	433.74
MARC027	120	124	120.0	6.4	6.4	1.6	8.6	2.2	55.1	0.8	69.0	49.0	13.6	9.7	1.6	0.9	70.0	5.1	98.70	355.22
MARC027	124	125	165.5	3.1	3.1	1.5	5.8	1.0	83.6	0.5	18.0	60.5	17.9	9.2	0.9	0.5	34.0	2.8	25.75	391.80
MARC027	125	126	1230.2	51.7	51.7	5.6	74.3	17.1	610.2	7.0	1132.0	437.9	133.6	82.6	12.6	7.7	521.7	50.7	1619.33	3322.95
MARC027	126	127	132.1	3.2	3.2	1.4	6.7	1.1	69.4	0.5	26.0	50.5	14.3	7.9	1.0	0.5	39.1	3.1	37.19	336.40
MARC027	127	128	143.8	4.3	4.3	1.5	7.7	1.5	74.0	0.6	112.0	53.3	15.3	9.9	1.3	0.6	46.7	4.3	160.22	371.93
MARC027	128	129	261.3	17.8	17.8	2.9	24.1	6.5	122.6	1.8	154.0	101.5	29.5	23.4	4.5	2.6	199.5	15.5	220.30	842.83
MARC027	129	130	913.9	48.0	48.0	6.0	52.1	15.2	471.3	7.2	875.0	308.9	95.6	59.8	10.0	7.8	431.5	51.2	1251.69	2544.87
MARC027	130	131	1219.1	49.9	49.9	8.0	66.6	17.1	637.3	6.3	712.0	394.4	122.9	69.9	11.9	7.0	481.3	47.1	1018.52	3217.98

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC027	131	132	1174.5	33.6	33.6	8.1	57.9	12.1	606.5	3.8	520.0	390.4	121.8	69.2	9.5	4.8	386.0	28.9	743.86	2965.51
MARC027	132	133	1043.0	33.0	33.0	8.1	59.1	12.0	519.3	3.6	499.0	369.9	112.6	70.7	9.2	4.7	385.5	28.7	713.82	2719.68
MARC027	133	134	1813.2	75.1	75.1	8.6	97.6	26.0	945.3	9.2	2350.0	613.8	190.7	107.7	17.4	11.1	710.9	68.8	3361.68	4813.57
MARC027	134	135	2009.3	95.3	95.3	11.6	131.3	32.8	1058.3	13.1	1355.0	718.6	217.3	141.0	23.2	15.0	968.7	96.6	1938.33	5685.77
MARC027	135	136	1629.3	94.3	94.3	12.6	120.0	31.0	788.5	12.3	1681.0	600.8	180.1	124.8	21.3	14.6	920.6	93.5	2404.67	4788.29
MARC027	136	137	803.1	30.6	30.6	5.8	43.7	10.2	401.3	3.8	857.0	286.4	87.4	54.7	7.4	4.5	303.1	27.7	1225.94	2118.70
MARC027	137	138	178.5	8.9	8.9	2.5	13.1	3.1	88.7	1.1	104.0	74.4	20.5	14.5	2.3	1.3	92.3	8.0	148.77	523.78
MARC027	138	139	148.6	4.9	4.9	2.0	8.8	1.7	73.3	0.6	55.0	54.8	15.6	10.0	1.3	0.7	51.0	4.7	78.68	386.61
MARC027	139	140	1166.2	72.8	72.8	7.1	84.3	24.6	592.1	8.7	756.0	398.3	122.4	83.6	16.0	11.0	681.9	65.4	1081.46	3446.34
MARC027	140	141	1345.0	78.0	78.0	7.2	95.6	26.3	674.8	8.8	954.0	476.6	142.0	99.6	18.2	11.0	732.9	70.3	1364.70	3907.91
MARC028	0	4	161.3	4.7	4.7	1.6	7.6	1.7	80.1	0.5	164.0	53.2	16.4	9.5	1.3	0.7	47.7	4.1	234.60	398.19
MARC028	4	8	58.5	2.2	2.2	1.0	4.4	0.8	29.6	0.3	38.0	25.0	7.2	4.8	0.7	0.3	23.7	1.9	54.36	164.66
MARC028	8	12	41.3	1.4	1.4	1.2	2.8	0.6	20.3	0.2	24.0	17.0	4.7	2.9	0.5	0.2	16.4	1.3	34.33	113.13
MARC028	12	16	110.3	3.3	3.3	1.3	5.4	1.3	58.8	0.5	101.0	36.5	11.1	5.9	0.9	0.5	37.0	3.3	144.48	281.29
MARC028	16	20	116.2	3.3	3.3	1.0	5.3	1.1	65.6	0.4	69.0	35.6	11.5	6.0	0.8	0.5	33.4	2.8	98.70	288.33
MARC028	20	21	2030.2	116.2	116.2	9.7	136.9	40.9	1044.6	13.0	1758.0	662.7	205.2	136.1	26.6	17.3	1061.6	102.0	2514.82	5786.81
MARC028	21	22	1011.6	53.1	53.1	5.2	69.4	18.3	499.1	5.3	848.0	354.2	105.2	71.1	12.7	7.5	486.8	45.0	1213.06	2831.91
MARC028	22	23	321.8	12.9	12.9	2.3	20.4	4.6	153.4	1.3	243.0	116.1	34.7	23.5	3.5	1.8	147.8	10.9	347.61	878.09
MARC028	23	24	1013.3	36.4	36.4	6.0	66.5	13.3	445.0	3.2	592.0	402.8	111.0	74.6	10.7	5.1	428.6	27.6	846.86	2710.39
MARC028	24	25	300.7	12.0	12.0	2.0	18.4	3.9	137.6	1.3	213.0	110.2	32.0	21.5	3.1	1.7	124.3	8.9	304.70	797.25
MARC028	25	26	197.8	8.0	8.0	1.7	13.4	3.0	94.5	0.8	100.0	76.3	21.7	15.0	2.2	1.1	101.3	5.9	143.05	556.90
MARC028	26	27	827.9	31.3	31.3	5.1	56.9	11.8	370.1	3.2	604.0	316.4	93.0	64.4	9.3	4.4	372.6	26.4	864.02	2250.47
MARC028	27	28	433.3	17.4	17.4	3.0	32.2	6.5	189.6	1.7	296.0	171.2	50.6	35.9	5.4	2.4	216.8	14.1	423.43	1212.61
MARC028	28	29	1468.6	65.5	65.5	6.8	94.6	23.5	722.1	7.5	1377.0	508.0	154.0	102.4	16.9	9.4	643.8	59.6	1969.80	3991.97
MARC028	29	30	3612.1	189.4	189.4	18.6	248.6	66.7	1812.6	19.0	2386.0	1240.9	378.9	250.9	46.6	27.6	1848.3	158.3	3413.17	10233.09
MARC028	30	31	592.9	23.1	23.1	7.4	38.3	8.4	283.0	2.3	391.0	232.8	65.9	44.4	6.4	3.2	238.9	18.9	559.33	1606.77
MARC028	31	32	294.3	5.0	5.0	5.7	15.2	2.1	142.8	0.5	197.0	118.5	32.9	19.4	1.8	0.7	59.9	4.1	281.81	713.85
MARC028	32	36	288.1	5.4	5.4	5.3	13.8	2.1	140.4	0.6	158.0	116.8	33.3	18.7	2.0	0.7	57.0	3.9	226.02	698.73
MARC028	36	40	288.1	5.3	5.3	4.6	14.9	2.1	145.1	0.6	156.0	111.9	32.8	19.6	2.0	0.7	61.8	4.4	223.16	704.91
MARC028	40	44	138.4	4.1	4.1	1.6	7.3	1.5	71.9	0.5	73.0	44.4	14.2	7.9	1.2	0.6	43.7	3.6	104.43	347.93
MARC028	44	45	189.8	6.9	6.9	2.0	12.7	2.5	93.9	0.8	127.0	68.1	20.6	13.7	2.0	1.1	78.5	6.0	181.67	511.12
MARC028	45	46	503.2	51.1	51.1	3.1	39.0	15.2	240.2	9.4	503.0	182.3	54.5	37.6	8.3	9.0	448.0	62.4	719.54	1723.83
MARC028	46	47	45.2	3.7	3.7	1.5	5.3	1.1	21.1	0.5	10.0	22.7	5.7	5.2	0.8	0.5	38.5	3.1	14.31	160.32
MARC028	47	48	95.4	6.6	6.6	1.9	9.9	2.2	39.3	1.0	90.0	44.7	12.1	10.2	1.6	1.1	69.0	6.3	128.75	311.52
MARC028	48	49	94.2	7.3	7.3	2.0	9.8	2.5	40.8	1.1	93.0	41.3	10.8	10.3	1.8	1.0	67.7	6.9	133.04	309.27
MARC028	49	50	50.9	3.4	3.4	1.7	5.3	1.1	23.6	0.5	33.0	24.5	5.9	5.2	0.8	0.5	35.8	3.4	47.21	168.34
MARC028	50	51	182.7	3.4	3.4	4.4	10.4	1.3	89.7	0.4	102.0	74.8	20.7	13.3	1.3	0.5	39.4	2.4	145.91	451.61
MARC028	51	52	138.6	3.3	3.3	3.7	9.1	1.3	68.1	0.4	88.0	60.7	15.9	10.9	1.2	0.4	34.5	2.3	125.88	356.73
MARC028	52	53	238.3	3.4	3.4	4.9	11.6	1.5	119.4	0.4	114.0	95.1	26.6	15.1	1.5	0.5	42.0	2.8	163.08	571.25
MARC028	53	54	163.0	6.3	6.3	2.3	10.3	2.3	79.3	0.8	111.0	62.2	18.0	11.8	1.7	1.0	69.0	6.3	158.79	444.82
MARC028	54	55	416.7	9.9	9.9	3.1	18.1	3.7	226.7	1.3	169.0	133.7	41.4	22.4	2.8	1.6	113.5	8.9	241.75	1022.15
MARC028	55	56	319.9	18.1	18.1	3.1	27.2	6.6	142.5	1.8	203.0	122.8	35.8	28.5	5.1	2.6	190.1	14.2	290.39	950.90
MARC028	56	60	86.0	3.0	3.0	2.1	6.5	1.1	41.4	0.4	37.0	37.2	10.4	7.1	1.0	0.4	33.9	2.8	52.93	239.02
MARC028	60	64	113.6	4.6	4.6	2.8	9.3	1.6	52.1	0.5	72.0	49.9	13.5	10.3	1.4	0.6	47.6	3.8	103.00	319.31
MARC028	64	68	116.7	4.8	4.8	2.3	10.0	1.8	54.1	0.5	59.0	49.8	13.9	10.0	1.5	0.7	60.4	3.8	84.40	339.91
MARC028	68	72	138.2	9.7	9.7	2.1	15.4	3.6	59.2	0.9	70.0	60.0	15.9	14.6	2.6	1.3	97.7	7.5	100.14	445.86
MARC028	72	76	102.8	4.0	4.0	2.0	7.3	1.4	47.5	0.6	30.0	43.9	12.5	8.3	1.1	0.6	40.6	3.5	42.92	283.09
MARC028	76	80	107.2	3.5	3.5	3.0	8.6	1.5	49.1	0.4	57.0	49.8	13.1	10.0	1.2	0.5	44.6	2.8	81.54	302.81
MARC028	80	84	125.1	4.1	4.1	2.9	9.0	1.6	58.9	0.5	92.0	51.8	14.4	10.2	1.3	0.5	46.2	3.3	131.61	337.75
MARC028	84	88	97.8	3.7	3.7	3.1	9.0	1.5	45.9	0.4	61.0	46.2	11.5	9.0	1.2	0.5	41.9	2.8	87.26	282.15
MARC028	88	92	200.5	11.0	11.0	2.9	16.8	3.6	92.2	1.3	196.0	84.7	23.4	16.7	2.8	1.5	110.2	9.9	280.38	595.21
MARC028	92	93	271.4	8.3	8.3	4.1	14.3	2.9	147.0	1.0	101.0	91.8	27.3	17.4	2.4	1.2	94.1	7.7	144.48	706.01
MARC028	93	94	149.7	4.1	4.1	3.1	10.1	1.6	64.6	0.6	39.0	68.2	18.2	13.1	1.4	0.7	49.0	4.1	55.79	396.93
MARC028	94	95	528.0	26.3	26.3	4.1	25.1	7.7	258.8	5.5	1721.0	184.1	56.2	29.8	4.5	4.8	241.9	34.6	2461.89	1443.69

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC028	95	96	70.3	4.2	4.2	1.5	6.5	1.5	30.4	0.6	55.0	32.5	8.4	7.1	1.0	0.7	42.4	4.3	78.68	218.47
MARC028	96	100	154.2	8.0	8.0	2.0	12.2	2.7	70.3	1.1	138.0	62.5	17.7	13.8	2.0	1.1	83.2	7.6	197.41	451.65
MARC028	100	104	460.8	3.8	3.8	1.9	8.8	1.4	236.3	0.6	29.0	139.5	46.0	15.7	1.2	0.5	43.3	3.6	41.48	969.94
MARC028	104	108	547.6	4.2	4.2	1.7	10.4	1.5	271.2	0.6	54.0	161.5	52.9	18.8	1.3	0.6	41.8	3.6	77.25	1125.25
MARC028	108	112	411.1	6.6	6.6	1.7	12.0	2.2	207.1	0.9	81.0	132.6	41.9	16.7	1.9	1.1	69.7	6.6	115.87	923.06
MARC028	112	116	269.0	9.8	9.8	2.3	13.5	3.0	135.0	1.5	168.0	94.0	28.6	16.4	2.0	1.6	90.9	9.9	240.32	691.13
MARC028	116	120	338.1	12.5	12.5	3.9	17.6	4.0	169.6	1.6	202.0	114.2	35.6	20.8	2.8	1.7	122.7	11.4	288.96	875.03
MARC028	120	124	309.2	7.1	7.1	3.2	12.1	2.5	160.3	0.9	124.0	91.9	29.9	14.7	1.9	1.0	75.3	6.4	177.38	728.46
MARC028	124	128	311.3	7.7	7.7	2.7	13.1	2.6	160.3	1.0	171.0	103.2	32.4	16.8	2.1	1.1	81.5	7.4	244.62	756.38
MARC029	0	1	2576.7	135.6	135.6	6.4	85.5	41.9	472.3	19.5	2657.0	319.4	102.7	75.0	21.8	22.2	1074.2	145.6	3800.84	5274.52
MARC029	1	2	3217.4	95.7	95.7	8.1	91.6	30.7	539.7	12.2	3003.0	471.3	143.0	97.4	19.0	15.5	740.6	99.0	4295.79	5717.68
MARC029	2	3	1255.7	43.6	43.6	5.1	48.4	14.5	362.2	5.5	1082.0	275.0	83.8	54.0	9.8	6.7	369.3	43.6	1547.80	2643.28
MARC029	3	4	2477.8	56.9	56.9	6.6	64.7	18.7	419.7	7.0	1773.0	415.9	122.3	84.9	13.5	8.8	429.2	54.3	2536.28	4269.40
MARC029	4	5	1812.6	69.9	69.9	6.4	63.4	22.5	406.4	7.8	1199.0	334.2	102.0	67.6	13.5	10.2	547.1	64.0	1715.17	3625.88
MARC029	5	6	931.3	42.4	42.4	7.2	69.0	14.7	554.6	4.4	711.0	396.1	120.0	74.3	11.6	6.2	425.7	37.2	1017.09	2766.60
MARC029	6	7	4945.7	243.0	243.0	26.5	365.1	89.3	2099.2	22.5	3702.0	1830.5	536.5	392.1	66.6	33.3	2406.8	191.6	5295.71	13680.74
MARC029	7	8	3024.3	189.5	189.5	14.6	218.8	65.6	1454.0	20.3	3264.0	999.3	307.5	214.1	44.5	27.7	1610.2	159.4	4669.15	8650.23
MARC029	8	12	248.6	10.2	10.2	2.2	16.0	3.8	127.8	1.1	133.0	93.2	28.3	17.4	2.8	1.5	108.3	8.1	190.26	687.40
MARC029	12	16	100.5	3.9	3.9	1.3	6.2	1.5	50.4	0.4	56.0	36.2	11.5	7.5	1.1	0.6	42.9	3.6	80.11	274.47
MARC029	16	20	109.3	3.1	3.1	2.0	6.5	1.1	53.7	0.4	35.0	40.5	11.8	7.8	1.0	0.5	30.6	3.1	50.07	276.88
MARC029	20	24	89.6	3.0	3.0	1.3	4.1	0.9	48.1	0.4	51.0	30.1	9.2	5.9	0.8	0.4	30.6	2.6	72.96	231.77
MARC029	24	28	122.0	6.5	6.5	2.0	9.0	2.2	58.9	0.9	61.0	46.9	13.9	9.4	1.6	1.0	69.0	6.1	87.26	359.40
MARC029	28	29	775.6	22.4	22.4	3.7	40.2	7.9	374.0	2.2	356.0	258.0	80.5	47.2	6.5	2.9	241.4	16.7	509.26	1919.20
MARC029	29	30	80.8	3.5	3.5	1.3	5.1	1.1	40.6	0.4	37.0	31.4	9.0	6.0	0.9	0.5	39.0	3.3	52.93	228.78
MARC029	30	31	2213.5	107.3	107.3	10.5	149.8	38.3	1152.4	10.1	1559.0	787.1	244.0	155.4	28.0	14.5	1060.9	83.6	2230.15	6232.26
MARC029	31	32	208.6	9.4	9.4	1.5	12.7	3.0	102.2	0.9	181.0	72.8	22.2	15.0	2.3	1.3	91.7	7.5	258.92	565.91
MARC029	32	33	48.5	1.9	1.9	0.9	3.2	0.7	25.3	0.3	21.0	17.7	5.4	3.6	0.6	0.3	21.3	1.9	30.04	135.06
MARC029	33	34	57.0	1.9	1.9	1.2	2.8	0.7	29.9	0.3	14.0	21.0	5.9	3.7	0.5	0.3	17.3	1.8	20.03	146.96
MARC029	34	35	52.9	1.8	1.8	1.3	2.5	0.6	28.5	0.3	16.0	19.6	5.8	3.5	0.5	0.3	17.0	1.6	22.89	139.06
MARC029	35	36	33.9	1.1	1.1	0.9	2.2	0.3	18.4	0.2	5.0	13.3	3.8	2.7	0.3	0.2	10.4	1.0	7.15	90.61
MARC029	36	37	89.4	3.7	3.7	1.6	5.8	1.3	45.6	0.5	30.0	33.0	9.8	6.7	1.0	0.6	39.5	3.5	42.92	247.89
MARC029	37	38	50.9	1.7	1.7	1.3	3.1	0.6	26.6	0.3	11.0	19.5	5.7	3.7	0.5	0.3	18.0	1.5	15.74	136.33
MARC029	38	39	446.6	14.2	14.2	5.9	25.9	4.9	226.8	1.5	206.0	170.5	49.8	29.6	4.1	2.0	140.1	11.3	294.68	1156.74
MARC029	39	40	1216.6	64.0	64.0	9.4	79.0	20.4	619.0	7.5	787.0	449.3	134.7	83.7	14.3	9.1	601.0	57.4	1125.80	3462.36
MARC029	40	44	317.7	9.1	9.1	4.7	19.9	3.4	154.5	1.0	130.0	127.3	35.4	24.6	3.1	1.2	104.1	7.2	185.97	831.33
MARC029	44	48	93.4	2.1	2.1	1.3	4.1	0.7	48.7	0.3	19.0	30.7	9.6	5.1	0.6	0.3	22.0	1.8	27.18	224.09
MARC029	48	52	355.0	8.8	8.8	3.8	15.0	3.0	189.5	1.4	114.0	121.2	37.3	19.0	2.3	1.4	90.3	8.9	163.08	871.09
MARC029	52	56	277.6	6.1	6.1	3.0	10.7	2.1	147.5	0.9	101.0	91.4	28.7	14.8	1.7	0.9	65.9	5.9	144.48	667.45
MARC029	56	60	353.7	9.3	9.3	4.1	18.0	3.3	175.3	1.1	113.0	134.7	40.5	22.6	3.0	1.3	97.9	7.6	161.65	889.53
MARC029	60	64	313.9	7.0	7.0	4.2	17.5	2.5	152.3	0.7	114.0	125.4	35.7	22.3	2.5	1.1	81.4	5.7	163.08	785.84
MARC029	64	68	157.0	3.3	3.3	2.8	6.7	1.1	82.4	0.4	62.0	57.0	16.8	9.6	1.1	0.4	34.5	2.6	88.69	381.95
MARC029	68	69	969.3	92.1	92.1	3.1	44.6	23.1	473.2	20.7	3016.0	293.8	94.7	44.5	10.2	17.1	761.2	132.2	4314.39	3063.66
MARC029	69	70	84.4	4.0	4.0	1.3	5.6	1.3	43.2	0.5	70.0	29.6	8.9	5.6	1.0	0.6	41.3	3.4	100.14	236.94
MARC029	70	71	250.2	5.0	5.0	3.2	8.9	1.7	136.3	0.7	39.0	80.7	25.3	12.2	1.4	0.8	51.4	4.4	55.79	590.14
MARC029	71	72	53.2	1.4	1.4	0.9	2.3	0.6	28.9	0.2	10.0	19.0	5.7	3.0	0.4	0.2	13.1	1.1	14.31	132.39
MARC029	72	73	122.3	4.5	4.5	1.4	6.6	1.5	64.7	0.5	60.0	38.3	12.7	7.1	1.1	0.7	46.9	4.0	85.83	319.38
MARC029	73	74	255.3	8.5	8.5	1.7	15.6	2.9	128.2	0.7	117.0	90.7	27.1	17.0	2.4	1.1	85.6	5.9	167.37	657.24
MARC029	74	75	221.7	4.5	4.5	3.0	8.2	1.6	120.7	0.6	12.0	66.0	21.8	10.2	1.4	0.7	47.2	4.0	17.17	519.64
MARC029	75	76	131.6	3.1	3.1	1.6	5.5	1.0	75.6	0.4	5.0	41.1	13.0	6.5	0.9	0.5	32.9	2.7	7.15	321.67
MARC029	76	77	41.0	1.3	1.3	1.0	2.4	0.3	20.3	0.2	5.0	15.3	4.7	2.8	0.4	0.2	11.4	1.1	7.15	104.23
MARC029	77	78	37.0	1.4	1.4	1.0	2.5	0.5	19.0	0.2	5.0	14.2	4.3	3.1	0.4	0.2	14.0	1.0	7.15	101.18
MARC029	78	79	718.9	17.5	17.5	4.4	25.2	5.5	393.7	2.5	490.0	197.8	67.4	31.8	4.2	2.8	173.3	17.9	700.95	1689.26
MARC029	79	80	87.3	1.6	1.6	1.4	3.7	0.6	49.6	0.3	13.0	27.8	8.7	4.4	0.6	0.3	17.3	1.5	18.60	208.24
MARC029	80	84	229.1	7.3	7.3	3.4	11.6	2.5	126.9	1.0	45.0	76.0	23.4	13.7	2.1	1.1	82.9	7.4	64.37	600.98

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC029	84	88	77.1	2.4	2.4	1.4	4.5	0.9	40.7	0.3	17.0	26.9	8.3	4.8	0.6	0.4	24.8	2.0	24.32	199.25
MARC029	88	89	456.7	20.2	20.2	2.3	28.0	6.6	219.2	2.4	424.0	157.7	49.6	30.6	5.0	2.9	193.4	17.8	606.53	1224.42
MARC029	89	90	163.0	9.0	9.0	2.2	15.8	3.2	76.3	0.9	101.0	69.9	19.0	15.7	2.6	1.2	95.4	6.6	144.48	496.84
MARC029	90	91	253.4	10.7	10.7	2.8	15.7	3.8	135.8	1.5	109.0	85.6	26.3	15.5	2.8	1.7	119.5	11.0	155.92	702.97
MARC029	91	92	495.0	25.2	25.2	4.5	34.7	8.0	263.8	3.0	345.0	179.2	51.7	33.9	5.9	3.5	247.8	21.6	493.52	1416.73
MARC029	92	93	53.2	1.5	1.5	1.3	2.7	0.6	30.0	0.2	10.0	18.8	5.3	3.6	0.4	0.2	13.7	1.4	14.31	134.99
MARC029	93	94	412.3	19.9	19.9	2.1	18.3	5.8	203.0	3.8	951.0	125.2	42.0	19.8	3.6	3.6	179.9	24.5	1360.41	1087.78
MARC029	94	95	1128.9	56.3	56.3	4.7	62.2	17.5	556.1	8.2	1512.0	367.8	115.3	67.0	12.2	9.2	548.1	58.1	2162.92	3090.98
MARC029	95	96	85.3	4.2	4.2	1.3	5.4	1.4	43.4	0.7	103.0	30.7	9.3	5.9	0.9	0.7	39.1	4.6	147.34	238.63
MARC029	96	97	1235.3	69.2	69.2	5.4	78.3	22.7	655.0	8.5	1267.0	410.1	126.7	78.6	15.7	10.3	636.7	65.0	1812.44	3522.20
MARC029	97	98	255.1	15.0	15.0	1.7	18.9	5.0	131.2	1.8	146.0	86.5	26.9	19.5	3.8	2.2	161.4	12.9	208.85	765.06
MARC029	98	99	435.0	21.7	21.7	2.4	25.5	6.9	227.9	2.5	508.0	138.5	43.9	26.3	5.0	3.1	190.5	19.7	726.69	1181.84
MARC029	99	100	464.2	20.9	20.9	2.9	30.2	7.2	224.0	2.5	319.0	163.8	48.6	31.4	5.4	3.2	221.3	18.8	456.33	1278.13
MARC029	100	101	128.4	4.6	4.6	1.4	8.3	1.6	60.5	0.6	55.0	48.6	14.9	9.9	1.3	0.7	50.8	4.2	78.68	343.75
MARC029	101	102	891.1	66.3	66.3	3.4	46.7	18.0	441.1	13.9	2089.0	271.3	86.2	48.0	9.5	12.0	569.8	90.1	2988.31	2638.32
MARC029	102	103	33.5	4.0	4.0	1.9	5.8	1.4	14.5	0.6	15.0	20.5	4.5	5.3	1.0	0.6	38.7	3.8	21.46	142.57
MARC029	103	104	45.9	3.9	3.9	1.9	5.5	1.4	21.2	0.6	10.0	23.7	5.9	5.6	1.0	0.6	39.0	4.2	14.31	166.53
MARC029	104	108	79.2	2.3	2.3	1.3	4.1	0.9	36.7	0.4	24.0	27.6	8.2	5.0	0.7	0.4	23.4	2.2	34.33	196.28
MARC029	108	112	156.3	4.0	4.0	1.5	6.8	1.3	80.8	0.6	50.0	50.3	15.9	8.6	1.1	0.6	42.2	4.1	71.53	380.68
MARC029	112	116	133.5	2.7	2.7	1.4	5.2	0.9	66.8	0.4	36.0	42.2	13.3	6.4	0.8	0.5	29.2	2.6	51.50	310.97
MARC029	116	120	281.8	7.1	7.1	2.1	13.0	2.6	134.2	0.9	100.0	96.3	30.9	16.2	2.2	1.0	73.8	6.4	143.05	680.81
MARC029	120	124	193.1	6.9	6.9	1.4	8.2	2.2	71.3	0.8	93.0	51.9	16.1	10.1	1.5	1.0	65.0	6.0	133.04	445.75
MARC030	0	4	227.7	5.5	5.5	1.5	8.2	1.9	69.0	0.7	56.0	53.7	15.8	10.1	1.4	0.8	55.6	4.8	80.11	465.33
MARC030	4	5	90.2	2.5	2.5	1.0	5.1	0.9	45.9	0.3	22.0	32.1	9.5	6.4	0.9	0.4	27.2	2.3	31.47	229.21
MARC030	5	6	950.3	28.0	28.0	4.6	54.4	9.9	435.8	2.6	495.0	348.9	104.9	65.9	8.7	3.8	320.0	21.4	708.10	2410.63
MARC030	6	7	91.9	2.1	2.1	1.2	4.8	0.8	42.5	0.3	23.0	34.6	10.1	6.5	0.7	0.3	22.0	1.9	32.90	223.15
MARC030	7	8	164.6	4.2	4.2	2.4	9.3	1.6	73.4	0.6	64.0	68.1	19.0	12.8	1.4	0.6	42.5	3.3	91.55	412.19
MARC030	8	12	245.8	5.3	5.3	2.4	10.8	1.8	122.2	0.6	77.0	84.6	26.5	14.3	1.7	0.7	54.4	4.0	110.15	585.41
MARC030	12	16	82.1	1.4	1.4	1.2	3.9	0.7	39.6	0.2	35.0	28.9	8.5	5.1	0.6	0.3	17.0	1.3	50.07	193.96
MARC030	16	20	98.9	3.8	3.8	1.5	6.1	1.3	51.3	0.5	39.0	35.3	10.6	6.8	1.0	0.6	38.6	3.5	55.79	266.62
MARC030	20	24	241.7	4.7	4.7	1.3	8.4	1.6	113.2	0.5	76.0	77.6	24.4	12.3	1.4	0.7	50.8	3.6	108.72	550.34
MARC030	24	28	45.3	1.1	1.1	1.0	2.7	0.3	24.5	0.2	5.0	17.3	5.1	3.0	0.4	0.3	13.1	1.1	7.15	117.55
MARC030	28	32	49.6	1.1	1.1	0.9	2.3	0.5	27.2	0.2	5.0	18.1	5.4	2.9	0.3	0.2	10.7	1.0	7.15	122.15
MARC030	32	36	101.3	5.1	5.1	1.7	8.3	1.7	49.0	0.6	50.0	41.3	11.5	8.2	1.4	0.8	49.7	4.6	71.53	293.63
MARC030	36	40	51.8	1.3	1.3	1.2	2.8	0.3	26.6	0.2	5.0	20.9	5.7	3.4	0.5	0.2	11.2	1.0	7.15	128.90
MARC030	40	41	106.3	3.1	3.1	1.4	6.5	1.3	48.9	0.4	39.0	39.5	11.7	8.1	1.0	0.5	34.5	2.4	55.79	271.59
MARC030	41	42	25.9	0.8	0.8	0.8	1.4	0.3	14.1	0.1	5.0	9.7	2.9	1.7	0.3	0.1	7.2	0.7	7.15	67.33
MARC030	42	43	48.4	1.3	1.3	0.8	2.1	0.5	25.0	0.2	12.0	17.1	5.0	3.2	0.4	0.2	12.7	1.4	17.17	120.46
MARC030	43	44	744.0	33.2	33.2	3.9	49.9	11.2	358.2	3.2	457.0	267.6	81.0	52.9	8.7	4.6	330.7	26.0	653.74	2030.03
MARC030	44	45	1124.6	62.8	62.8	5.8	76.6	20.8	562.6	7.1	680.0	395.5	118.1	78.2	14.7	9.2	582.5	54.9	972.74	3210.37
MARC030	45	46	61.2	2.5	2.5	0.9	3.7	0.8	32.6	0.3	22.0	22.6	6.7	4.3	0.6	0.4	22.6	2.2	31.47	165.18
MARC030	46	47	57.0	1.3	1.3	1.0	2.4	0.6	30.3	0.2	16.0	20.4	6.2	3.7	0.5	0.2	15.2	1.4	22.89	142.93
MARC030	47	48	112.0	6.1	6.1	1.4	10.0	2.3	52.4	0.6	67.0	43.6	12.8	9.6	1.8	0.8	75.9	4.8	95.84	345.55
MARC030	48	49	2590.4	222.1	222.1	12.5	197.9	67.8	1363.1	29.2	2290.0	857.4	264.4	179.9	42.3	33.9	1824.1	217.6	3275.85	8197.27
MARC030	49	50	594.1	31.7	31.7	3.5	40.0	10.8	289.2	3.3	359.0	209.4	62.9	43.6	7.6	4.8	303.4	26.4	513.55	1681.70
MARC030	50	51	2112.0	132.5	132.5	10.7	152.8	43.1	1102.3	14.4	1461.0	708.9	221.5	146.0	29.7	19.0	1194.1	112.7	2089.96	6199.57
MARC030	51	52	305.5	16.0	16.0	3.1	23.2	5.5	153.4	1.7	177.0	113.3	33.7	23.4	4.2	2.2	155.9	13.6	253.20	881.62
MARC030	52	56	56.3	2.4	2.4	1.2	4.0	0.8	28.3	0.3	23.0	21.0	6.1	4.5	0.7	0.4	24.9	2.4	32.90	157.47
MARC030	56	60	78.4	1.9	1.9	1.2	4.3	0.7	38.5	0.3	19.0	28.3	8.5	5.0	0.6	0.3	20.6	1.7	27.18	193.76
MARC030	60	61	77.9	1.6	1.6	1.2	3.2	0.6	40.7	0.2	11.0	26.5	8.2	4.4	0.4	0.3	14.2	1.3	15.74	183.15
MARC030	61	62	638.9	26.4	26.4	3.7	41.6	9.3	293.9	2.4	439.0	229.8	69.6	45.0	7.6	3.7	294.1	20.6	627.99	1733.27
MARC030	62	63	169.5	5.1	5.1	1.6	8.4	1.7	89.0	0.5	74.0	57.3	17.4	9.6	1.5	0.8	52.6	4.0	105.86	427.76
MARC030	63	64	293.7	7.2	7.2	2.3	13.8	2.7	148.9	0.7	109.0	100.1	31.3	18.0	2.4	1.0	82.8	5.5	155.92	724.85
MARC030	64	65	3043.7	257.4	257.4	14.4	232.1	80.4	1579.3	33.4	2984.0	1035.9	313.8	212.7	49.3	38.9	2081.2	253.4	4268.61	9564.95

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC030	65	66	154.9	5.9	5.9	2.0	9.8	2.1	74.9	0.8	59.0	57.9	17.2	11.1	1.8	0.9	63.1	5.5	84.40	418.54
MARC030	66	67	114.4	6.1	6.1	2.4	9.5	1.9	58.2	0.8	49.0	45.6	12.9	10.0	1.6	0.9	57.8	5.2	70.09	337.22
MARC030	67	68	253.7	14.8	14.8	2.2	17.9	4.8	125.4	1.5	251.0	92.5	28.4	19.8	3.5	2.2	141.8	12.8	359.06	743.70
MARC030	68	72	60.4	2.7	2.7	1.0	4.1	0.9	30.6	0.4	24.0	21.7	6.1	4.5	0.8	0.4	26.3	2.2	34.33	166.51
MARC030	72	76	97.8	2.3	2.3	2.4	6.8	0.9	49.7	0.4	50.0	41.2	11.4	7.4	0.9	0.4	25.3	1.9	71.53	253.83
MARC030	76	80	74.6	2.9	2.9	1.2	4.0	1.0	39.1	0.4	41.0	24.5	7.6	5.0	0.8	0.5	30.2	2.5	58.65	198.67
MARC030	80	81	187.1	16.8	16.8	1.6	12.8	4.9	96.9	2.7	233.0	63.1	19.4	12.6	2.8	2.6	136.6	18.8	333.31	599.57
MARC030	81	82	1566.8	115.5	115.5	7.9	115.0	37.0	807.9	13.9	1521.0	522.3	160.1	109.0	24.2	17.0	971.2	104.5	2175.79	4736.62
MARC030	82	83	265.3	19.4	19.4	1.9	19.0	6.2	135.7	3.0	189.0	92.4	28.0	19.0	3.7	3.3	172.1	21.3	270.36	816.62
MARC030	83	84	83.0	3.2	3.2	1.3	4.7	1.1	42.9	0.5	37.0	27.5	8.6	5.5	0.9	0.5	34.4	3.4	52.93	223.48
MARC030	84	85	106.0	6.1	6.1	1.4	8.6	2.2	51.5	0.6	63.0	38.1	11.5	9.0	1.8	0.8	61.7	4.3	90.12	314.56
MARC030	85	86	52.2	1.0	1.0	1.0	2.2	0.3	28.4	0.2	5.0	18.2	5.3	3.1	0.3	0.2	10.8	1.1	7.15	126.31
MARC030	86	87	51.6	1.4	1.4	0.9	2.1	0.5	27.8	0.3	5.0	18.2	5.5	2.9	0.4	0.2	14.0	1.5	7.15	129.35
MARC030	87	88	49.5	5.4	5.4	1.2	4.5	1.7	25.3	0.8	41.0	17.7	5.3	4.6	1.1	0.9	47.6	5.2	58.65	178.30
MARC030	88	89	66.2	1.7	1.7	1.0	2.3	0.6	36.7	0.4	46.0	17.4	6.3	2.8	0.4	0.3	15.0	1.8	65.80	155.09
MARC030	89	90	443.5	9.1	9.1	3.5	14.8	3.1	244.3	1.5	340.0	120.6	41.4	18.6	2.4	1.4	97.1	10.2	486.37	1026.84
MARC030	90	91	642.3	14.3	14.3	6.0	21.2	4.9	345.6	2.2	475.0	183.1	60.3	27.5	3.5	2.3	147.3	15.0	679.49	1498.51
MARC030	91	92	460.5	11.2	11.2	4.9	15.6	3.6	255.3	1.6	295.0	130.2	44.3	20.2	2.8	1.8	110.6	11.4	422.00	1091.24
MARC030	92	93	362.6	8.3	8.3	3.8	13.7	2.7	193.0	1.1	243.0	112.4	36.5	18.2	2.3	1.4	82.0	8.3	347.61	860.74
MARC030	93	94	206.2	7.2	7.2	2.7	12.0	2.6	105.6	1.0	119.0	69.9	21.7	13.7	2.1	1.1	80.6	6.6	170.23	546.09
MARC030	94	95	137.9	7.4	7.4	2.0	9.8	2.3	72.5	0.9	95.0	49.1	14.8	9.5	1.8	1.0	67.7	6.3	135.90	394.04
MARC030	95	96	80.8	3.5	3.5	1.5	5.9	1.3	40.8	0.5	24.0	31.6	9.1	6.3	1.1	0.5	36.7	3.1	34.33	229.41
MARC030	96	97	169.9	21.0	21.0	2.1	26.2	6.9	72.7	2.6	276.0	74.4	20.6	22.0	4.9	3.0	220.5	19.2	394.82	700.25
MARC030	97	98	138.7	5.7	5.7	1.7	8.2	1.8	71.1	0.8	96.0	47.9	14.7	8.7	1.5	0.9	54.7	5.2	137.33	371.34
MARC030	98	99	105.2	3.9	3.9	1.3	6.6	1.3	52.1	0.5	47.0	38.4	11.7	7.2	1.1	0.5	38.9	3.2	67.23	278.46
MARC030	99	100	85.4	3.0	3.0	0.9	5.2	1.0	42.9	0.3	40.0	29.3	9.0	5.7	0.9	0.4	33.4	2.6	57.22	225.25
MARC030	100	101	1237.1	93.2	93.2	6.1	97.7	28.6	631.6	13.0	920.0	409.1	125.5	85.6	18.8	14.7	818.7	92.1	1316.06	3804.24
MARC030	101	102	157.5	14.2	14.2	1.4	14.6	4.5	80.5	1.8	125.0	55.5	16.9	11.5	2.9	2.1	135.8	13.3	178.81	532.94
MARC030	102	103	91.1	2.4	2.4	0.9	4.4	0.8	48.6	0.3	34.0	31.3	9.8	5.0	0.7	0.4	26.0	2.3	48.64	228.04
MARC030	103	104	227.5	10.1	10.1	1.6	14.9	3.3	116.3	1.1	174.0	80.2	25.1	14.5	2.5	1.4	101.8	8.8	248.91	625.23
MARC030	104	105	174.4	12.5	12.5	1.6	12.3	3.6	86.7	2.2	121.0	61.9	18.7	11.9	2.1	2.1	115.6	14.2	173.09	535.71
MARC030	105	106	810.0	90.9	90.9	3.7	63.2	24.4	400.9	17.7	1248.0	266.5	82.6	52.6	12.8	16.4	757.7	115.5	1785.26	2813.98
MARC030	106	107	133.8	7.9	7.9	1.3	9.5	2.3	68.4	1.1	103.0	45.5	13.8	8.3	1.6	1.1	71.9	7.5	147.34	384.88
MARC030	107	108	230.9	10.2	10.2	2.0	16.8	3.6	111.1	1.1	165.0	83.3	25.7	17.0	2.9	1.5	114.9	8.7	236.03	647.60
MARC030	108	109	80.3	2.2	2.2	0.9	4.3	0.7	42.2	0.3	34.0	28.0	8.7	4.2	0.6	0.3	24.3	1.9	48.64	202.45
MARC030	109	110	152.9	8.1	8.1	1.4	10.0	2.5	79.6	1.2	113.0	51.7	16.5	9.6	1.8	1.2	76.3	8.1	161.65	433.00
MARC031	0	4	299.2	12.5	12.5	2.8	18.4	4.0	135.8	1.6	209.0	96.8	29.6	18.2	3.1	1.8	120.1	11.5	298.97	774.95
MARC031	4	8	159.0	4.9	4.9	3.8	13.1	1.8	85.0	0.5	84.0	73.7	20.2	13.2	1.9	0.6	56.4	3.9	120.16	448.18
MARC031	8	12	142.1	2.9	2.9	3.6	10.4	1.3	69.7	0.5	71.0	61.8	16.7	10.9	1.4	0.4	36.8	2.4	101.57	368.04
MARC031	12	16	142.6	3.4	3.4	3.5	10.9	1.4	71.0	0.3	82.0	64.3	16.5	11.4	1.4	0.4	37.1	2.5	117.30	374.27
MARC031	16	20	135.0	3.0	3.0	3.5	10.0	1.3	66.0	0.4	77.0	56.2	15.3	10.3	1.3	0.4	37.3	2.4	110.15	349.19
MARC031	20	24	139.2	4.5	4.5	3.0	9.1	1.5	71.1	0.5	82.0	55.4	15.5	9.4	1.3	0.6	51.4	3.5	117.30	373.96
MARC031	24	25	228.1	7.7	7.7	2.1	12.1	2.3	122.7	0.9	141.0	70.0	22.9	12.1	1.9	1.1	86.6	6.0	201.70	588.72
MARC031	25	26	41.4	1.1	1.1	0.9	1.6	0.3	23.8	0.2	14.0	12.9	4.1	2.0	0.3	0.1	12.3	1.3	20.03	104.10
MARC031	26	27	106.1	2.9	2.9	1.2	5.1	1.0	57.6	0.4	42.0	34.9	11.0	6.0	0.8	0.4	31.6	2.4	60.08	266.62
MARC031	27	28	538.7	24.8	24.8	3.2	35.4	8.2	276.1	2.8	340.0	182.7	57.3	36.4	6.3	3.6	248.0	20.0	486.37	1485.01
MARC031	28	32	89.6	2.3	2.3	0.9	4.3	0.8	46.2	0.4	27.0	30.3	9.4	4.5	0.6	0.3	26.9	2.0	38.62	222.48
MARC031	32	36	123.3	2.9	2.9	1.3	6.5	0.9	61.5	0.3	40.0	42.0	13.0	7.0	0.9	0.4	32.4	2.0	57.22	299.70
MARC031	36	40	128.4	2.4	2.4	1.2	5.4	0.9	68.5	0.3	41.0	40.5	12.8	6.3	0.8	0.3	30.2	1.9	58.65	304.67
MARC031	40	44	337.2	12.2	12.2	2.2	22.2	4.1	163.0	1.3	173.0	119.2	36.4	22.3	3.6	1.6	133.6	9.9	247.48	890.66
MARC031	44	48	75.4	1.5	1.5	1.2	3.6	0.6	40.5	0.2	5.0	26.1	8.0	3.7	0.4	0.2	16.0	1.0	7.15	180.98
MARC031	48	52	70.8	1.4	1.4	1.3	3.2	0.3	35.7	0.2	5.0	28.3	7.9	3.7	0.4	0.1	13.5	0.8	7.15	169.83
MARC031	52	53	133.5	7.2	7.2	1.6	16.5	2.9	59.5	0.5	76.0	52.0	15.3	12.3	2.9	0.9	91.9	4.6	108.72	418.55
MARC031	53	54	44.0	2.5	2.5	1.2	3.8	0.8	21.5	0.3	15.0	17.8	4.9	3.1	0.6	0.3	31.1	1.9	21.46	137.93

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC031	54	55	361.9	12.7	12.7	2.4	25.8	4.6	159.3	1.2	202.0	147.0	43.8	27.1	4.1	1.7	153.0	9.9	288.96	978.58
MARC031	55	56	7029.4	528.1	528.1	34.5	613.0	166.6	3737.0	56.8	5623.0	2420.0	732.9	502.9	113.3	76.0	4427.5	431.6	8043.70	21679.78
MARC031	56	57	440.0	27.1	27.1	2.8	35.2	8.8	230.7	2.7	413.0	157.6	48.3	32.9	6.5	3.7	240.3	21.3	590.80	1301.49
MARC031	57	58	136.5	7.2	7.2	1.2	10.3	2.5	68.4	0.8	102.0	47.6	14.2	9.0	1.8	1.0	69.3	6.3	145.91	388.30
MARC031	58	62	100.5	2.9	2.9	1.5	5.0	0.9	55.1	0.4	51.0	32.0	10.2	5.2	0.8	0.4	30.6	2.5	72.96	252.66
MARC031	62	66	45.3	1.0	1.0	0.8	2.3	0.3	25.6	0.2	17.0	15.3	4.7	2.1	0.3	0.2	11.6	1.0	24.32	112.39
MARC031	66	70	54.7	1.3	1.3	0.9	2.2	0.3	29.4	0.2	18.0	18.8	5.7	2.9	0.3	0.1	11.8	1.1	25.75	131.65
MARC031	70	71	69.2	1.4	1.4	1.4	3.7	0.5	34.4	0.2	14.0	26.4	7.4	4.2	0.4	0.2	13.8	1.1	20.03	166.61
MARC031	71	72	58.2	0.6	0.6	1.2	2.5	0.2	29.6	0.1	5.0	23.2	6.9	3.9	0.2	0.1	6.9	0.5	7.15	135.54
MARC031	72	73	301.1	6.3	6.3	3.1	13.7	2.2	146.6	0.9	100.0	102.5	32.4	16.5	1.9	0.9	62.1	5.6	143.05	707.32
MARC031	73	74	1041.7	34.5	34.5	4.9	59.9	12.3	500.6	3.5	466.0	356.3	111.7	64.4	10.0	4.8	347.3	27.4	666.61	2641.89
MARC031	74	75	191.4	5.9	5.9	2.2	10.4	1.8	90.9	0.9	79.0	66.4	21.0	11.0	1.7	0.9	60.3	5.5	113.01	480.16
MARC031	75	76	215.3	8.0	8.0	2.7	15.4	2.9	98.6	1.0	69.0	81.8	24.5	16.4	2.4	1.2	85.0	7.2	98.70	577.28
MARC031	76	77	53.6	1.9	1.9	1.2	3.2	0.7	27.1	0.3	17.0	18.5	5.7	3.5	0.6	0.3	21.6	1.8	24.32	143.29
MARC031	77	78	77.5	3.0	3.0	1.3	5.4	0.9	37.8	0.4	34.0	27.1	8.3	5.5	0.8	0.4	31.7	2.3	48.64	207.32
MARC031	78	79	2732.6	116.9	116.9	12.3	198.5	39.4	1265.3	10.3	1813.0	981.8	298.8	194.8	32.8	16.0	1162.0	83.2	2593.50	7352.82
MARC031	79	80	150.6	7.0	7.0	1.4	10.9	2.4	71.7	1.0	107.0	56.3	16.7	10.8	1.8	1.0	69.7	5.9	153.06	418.67
MARC031	80	84	76.4	3.9	3.9	1.3	7.0	1.3	38.6	0.5	54.0	31.4	8.6	6.6	1.1	0.5	41.7	3.1	77.25	228.97
MARC031	84	88	64.4	4.1	4.1	1.7	7.1	1.3	31.9	0.6	29.0	28.5	7.9	6.4	1.0	0.6	38.9	3.8	41.48	204.83
MARC031	88	92	63.1	5.0	5.0	2.1	8.4	1.7	28.9	0.7	30.0	27.8	7.6	7.2	1.3	0.7	48.9	4.4	42.92	216.03
MARC031	92	96	58.2	3.3	3.3	1.0	4.3	1.1	29.1	0.5	29.0	22.2	6.5	3.9	0.8	0.5	35.4	3.0	41.48	175.02
MARC031	96	97	67.3	7.0	7.0	1.5	8.1	2.3	32.0	1.0	60.0	28.9	7.8	6.6	1.5	1.1	68.4	7.1	85.83	251.47
MARC031	97	98	56.1	2.3	2.3	0.9	3.7	0.7	27.7	0.3	36.0	21.1	6.3	3.8	0.6	0.3	23.1	2.0	51.50	152.61
MARC031	98	99	36.1	1.9	1.9	0.9	2.3	0.6	19.9	0.3	16.0	12.4	3.9	2.3	0.3	0.3	16.6	2.0	22.89	102.49
MARC031	99	100	390.3	35.0	35.0	2.5	32.6	10.5	181.9	5.4	403.0	138.5	42.7	29.1	6.4	5.6	339.3	36.3	576.49	1302.75
MARC031	100	101	628.3	28.7	28.7	3.1	43.1	9.3	308.1	3.2	420.0	225.1	68.4	42.0	7.2	4.3	275.4	23.7	600.81	1717.88
MARC031	101	102	839.1	66.9	66.9	5.1	100.4	22.2	384.2	8.1	1028.0	321.1	92.9	79.1	17.3	9.5	691.7	58.4	1470.55	2808.70
MARC031	102	103	848.2	70.8	70.8	4.1	59.6	20.0	419.9	12.5	1696.0	280.4	87.8	51.4	11.1	11.7	636.2	82.4	2426.13	2681.37
MARC031	103	104	1365.6	61.6	61.6	6.5	97.7	21.0	701.1	6.6	1168.0	482.0	146.7	92.2	16.5	9.0	610.1	50.8	1670.82	3774.05
MARC031	104	108	97.5	3.9	3.9	1.6	6.3	1.3	51.8	0.6	46.0	34.5	10.8	6.6	1.0	0.6	38.0	3.4	65.80	264.10
MARC031	108	112	72.4	2.9	2.9	1.0	5.3	0.8	34.9	0.3	45.0	25.9	7.9	5.0	0.8	0.4	30.7	2.4	64.37	195.89
MARC031	112	116	123.0	4.3	4.3	1.4	8.0	1.5	59.7	0.5	52.0	45.7	13.4	8.5	1.2	0.6	48.0	3.5	74.39	326.94
MARC031	116	117	68.5	1.7	1.7	1.7	4.7	0.6	35.5	0.3	16.0	26.5	7.5	4.9	0.6	0.3	17.5	1.6	22.89	175.25
MARC031	117	118	64.0	2.1	2.1	1.4	4.4	0.8	32.4	0.3	23.0	24.8	7.1	4.6	0.6	0.4	22.4	1.9	32.90	171.07
MARC031	118	119	417.3	42.3	42.3	3.1	37.1	12.1	204.2	7.3	425.0	146.1	43.8	31.0	7.1	7.1	382.4	48.7	607.96	1441.43
MARC031	119	120	187.3	6.3	6.3	1.9	11.3	2.1	87.7	0.9	87.0	68.6	20.9	12.6	1.7	1.0	64.1	5.5	124.45	482.12
MARC032	0	1	1439.2	71.8	71.8	5.0	65.7	21.8	409.2	10.2	1880.0	294.2	93.0	60.3	13.2	11.2	663.5	74.5	2689.34	3331.29
MARC032	1	2	308.9	20.4	20.4	5.4	41.7	7.2	249.6	2.2	164.0	191.4	55.7	37.6	6.5	2.8	251.8	15.3	234.60	1234.72
MARC032	2	3	336.8	24.8	24.8	3.7	35.5	8.1	156.9	3.4	373.0	134.7	39.1	30.1	6.1	3.6	245.9	23.0	533.58	1093.06
MARC032	3	4	106.9	4.8	4.8	1.5	9.8	1.7	54.7	0.6	59.0	46.0	13.4	10.2	1.4	0.8	55.7	4.2	84.40	320.30
MARC032	4	5	234.3	11.8	11.8	1.9	17.2	3.8	104.0	1.7	241.0	78.5	23.4	14.8	2.7	1.8	121.5	11.6	344.75	647.82
MARC032	5	6	614.2	29.3	29.3	3.4	43.7	9.3	327.1	3.3	637.0	212.2	65.0	41.9	7.2	4.3	298.2	24.7	911.23	1731.65
MARC032	6	7	131.2	7.4	7.4	1.9	11.6	2.3	72.1	1.1	43.0	51.8	14.6	10.4	1.9	1.1	78.9	6.7	61.51	404.99
MARC032	7	8	654.7	45.3	45.3	4.7	56.5	14.7	341.1	5.9	657.0	236.5	69.2	48.2	10.3	6.8	449.2	42.6	939.84	2056.04
MARC032	8	9	115.5	7.1	7.1	1.7	10.1	2.3	58.3	1.0	98.0	44.4	12.7	8.8	1.7	1.1	75.7	6.4	140.19	357.89
MARC032	9	10	237.8	7.7	7.7	1.6	15.0	2.5	116.0	1.1	167.0	86.3	25.3	14.8	2.2	1.1	79.6	7.1	238.89	611.79
MARC032	10	11	379.6	14.6	14.6	2.9	22.6	4.6	185.1	2.0	264.0	124.8	39.4	23.1	3.6	2.1	144.6	13.8	377.65	985.61
MARC032	11	12	99.4	3.8	3.8	1.9	7.7	1.3	48.8	0.6	62.0	39.0	11.2	7.1	1.1	0.6	42.8	3.3	88.69	275.25
MARC032	12	13	1079.4	58.8	58.8	5.9	78.3	18.1	528.1	7.7	1287.0	370.3	111.4	68.2	12.8	9.0	547.7	54.4	1841.05	3041.07
MARC032	13	14	364.2	16.1	16.1	2.7	28.6	5.3	164.8	1.9	302.0	135.4	39.1	27.3	4.5	2.2	164.5	13.4	432.01	998.27
MARC032	14	15	123.5	3.3	3.3	2.0	7.1	1.3	65.0	0.5	53.0	43.6	13.8	7.7	1.0	0.5	38.5	3.0	75.82	316.82
MARC032	15	16	87.7	3.7	3.7	1.2	6.9	1.1	44.0	0.5	39.0	34.4	9.8	6.6	1.0	0.6	37.7	3.1	55.79	244.29
MARC032	16	17	156.0	3.7	3.7	1.5	8.0	1.1	80.1	0.5	40.0	54.2	17.1	8.9	1.1	0.5	38.1	3.1	57.22	380.27
MARC032	17	18	117.2	4.7	4.7	2.0	10.1	1.6	59.8	0.7	53.0	45.7	13.1	8.8	1.4	0.7	54.5	4.1	75.82	332.83

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC032	18	19	413.0	10.1	10.1	3.1	17.2	3.3	228.7	1.4	197.0	114.3	38.7	18.4	2.6	1.6	105.8	9.2	281.81	984.78
MARC032	19	20	183.4	7.7	7.7	2.0	13.3	2.5	88.1	0.9	150.0	69.4	21.1	13.8	2.0	1.1	93.8	6.6	214.58	518.56
MARC032	20	21	301.2	12.9	12.9	2.4	21.3	4.1	147.9	1.5	261.0	108.2	32.8	20.6	3.3	1.8	136.4	10.8	373.36	827.08
MARC032	21	22	141.4	3.2	3.2	1.7	7.3	1.1	78.6	0.5	37.0	47.9	15.1	7.9	0.9	0.4	37.8	3.0	52.93	352.78
MARC032	22	23	379.3	18.0	18.0	3.4	24.7	6.0	184.2	2.4	239.0	135.1	41.0	26.6	4.5	2.6	185.2	15.7	341.89	1058.46
MARC032	23	24	332.5	18.8	18.8	2.5	24.2	6.2	172.6	2.3	402.0	115.1	36.0	23.4	4.3	2.8	180.3	16.7	575.06	967.00
MARC032	24	25	912.0	45.1	45.1	4.3	60.3	14.2	441.1	7.1	1068.0	305.7	96.5	58.1	9.8	7.4	478.6	47.4	1527.77	2555.77
MARC032	25	26	1259.5	68.4	68.4	6.8	92.1	21.9	644.2	8.8	1097.0	425.4	130.1	85.0	15.7	10.4	667.8	63.5	1569.26	3606.70
MARC032	26	27	734.3	47.1	47.1	4.2	52.9	14.2	365.0	7.2	1119.0	247.0	75.9	49.9	9.3	7.4	398.9	47.4	1600.73	2126.55
MARC032	27	28	229.0	8.8	8.8	2.3	15.2	3.0	106.3	1.1	92.0	89.9	26.3	17.6	2.6	1.3	93.2	7.4	131.61	619.85
MARC032	28	29	481.9	15.4	15.4	2.2	20.5	4.5	283.2	3.3	216.0	164.9	49.8	25.6	3.2	2.7	154.4	18.7	308.99	1251.06
MARC032	29	30	219.3	8.8	8.8	2.0	14.8	3.1	103.0	1.3	182.0	85.0	24.6	17.0	2.5	1.4	92.7	8.7	260.35	599.59
MARC032	30	31	393.2	14.1	14.1	2.5	18.7	4.5	184.4	2.1	1032.0	128.1	40.2	21.7	3.5	2.1	148.5	13.6	1476.28	999.92
MARC032	31	32	632.4	28.4	28.4	4.6	41.0	9.5	312.0	3.6	462.0	223.8	68.5	44.4	7.4	4.1	267.9	24.4	660.89	1720.97
MARC032	32	33	607.9	28.5	28.5	4.4	41.4	9.7	305.5	3.4	505.0	218.1	63.9	42.4	7.6	4.1	297.8	24.5	722.40	1708.06
MARC032	33	34	1907.3	71.2	71.2	9.0	112.1	24.3	958.8	9.0	1536.0	618.8	194.8	120.0	20.5	11.1	778.4	69.1	2197.25	5031.90
MARC032	34	35	411.8	22.1	22.1	2.8	17.9	6.5	211.7	3.1	1236.0	121.9	39.7	18.6	3.8	3.7	204.8	22.8	1768.10	1118.38
MARC032	35	36	124.4	7.3	7.3	1.4	9.1	2.5	61.3	0.8	80.0	47.9	13.5	8.6	1.6	1.1	74.9	5.6	114.44	372.15
MARC032	36	37	273.0	10.5	10.5	2.8	13.9	3.6	140.7	1.2	164.0	92.7	28.6	16.7	2.4	1.5	108.1	8.2	234.60	721.08
MARC032	37	41	164.2	8.8	8.8	1.7	12.9	2.9	77.8	1.3	131.0	66.1	18.8	12.6	2.4	1.3	98.4	8.2	187.40	492.12
MARC032	41	45	158.7	8.0	8.0	1.5	11.6	2.6	75.6	1.3	116.0	57.7	17.1	12.5	2.1	1.3	85.0	7.5	165.94	455.81
MARC032	45	46	482.1	24.8	24.8	3.0	31.8	8.0	235.1	3.0	488.0	167.3	50.1	32.8	6.1	3.6	248.9	21.9	698.08	1358.97
MARC032	46	47	576.5	29.5	29.5	3.8	37.6	9.7	285.6	3.7	786.0	200.5	63.3	40.7	7.3	4.5	272.5	26.4	1124.37	1610.43
MARC032	47	48	841.9	47.7	47.7	5.7	63.6	15.2	406.8	5.7	1182.0	314.0	93.7	63.5	11.6	7.1	462.0	43.3	1690.85	2460.29
MARC032	48	49	655.1	35.2	35.2	4.1	42.9	11.3	342.1	5.1	725.0	251.4	70.6	46.2	8.2	5.5	335.8	36.1	1037.11	1898.99
MARC032	49	50	1073.0	69.8	69.8	5.2	66.5	22.0	589.1	9.4	1587.0	363.2	109.3	66.4	14.6	10.7	599.8	68.5	2270.20	3161.17
MARC032	50	51	968.3	58.7	58.7	5.2	64.5	19.5	530.2	6.9	868.0	335.8	99.9	66.7	13.9	8.8	539.2	53.7	1241.67	2856.46
MARC032	51	52	206.0	8.5	8.5	1.9	10.4	2.9	116.9	1.2	204.0	65.4	20.7	11.7	2.0	1.4	84.1	8.3	291.82	553.99
MARC032	52	53	89.2	2.3	2.3	1.0	3.1	0.8	55.8	0.4	31.0	26.4	7.9	4.2	0.6	0.3	24.3	2.0	44.35	221.70
MARC032	53	57	190.3	9.8	9.8	1.9	11.4	3.3	102.6	1.3	168.0	68.6	20.0	13.2	2.3	1.5	95.8	9.8	240.32	546.69
MARC032	57	61	95.2	3.5	3.5	1.4	5.2	1.1	52.4	0.5	39.0	34.1	9.7	6.4	0.9	0.5	35.7	3.4	55.79	255.38
MARC032	61	65	134.8	4.0	4.0	1.5	6.1	1.5	78.5	0.6	55.0	44.2	13.2	7.8	1.1	0.6	42.8	4.2	78.68	347.24
MARC032	65	69	236.5	10.1	10.1	2.1	13.7	3.4	121.4	1.3	126.0	87.0	25.3	16.6	2.7	1.6	101.3	9.8	180.24	648.28
MARC032	69	70	87.0	2.7	2.7	1.2	4.4	0.9	46.4	0.4	39.0	30.9	8.9	5.1	0.7	0.4	28.7	2.8	55.79	224.73
MARC032	70	71	90.8	6.1	6.1	1.3	8.0	2.1	42.9	0.8	77.0	36.9	9.9	8.3	1.7	0.9	61.2	5.9	110.15	286.77
MARC032	71	72	88.1	3.8	3.8	0.9	5.3	1.3	44.4	0.5	39.0	33.9	9.4	6.3	1.0	0.6	41.5	3.8	55.79	246.53
MARC032	72	73	534.6	38.0	38.0	3.5	34.7	11.6	278.0	6.3	631.0	189.2	55.3	36.5	7.5	6.3	360.8	43.5	902.65	1654.27
MARC032	73	74	267.8	14.1	14.1	2.0	17.5	4.7	133.0	1.8	196.0	96.6	28.1	18.6	3.6	2.2	142.1	13.6	280.38	766.33
MARC032	74	75	49.0	1.7	1.7	0.9	2.5	0.6	25.7	0.2	20.0	18.9	5.2	3.0	0.4	0.2	17.5	1.5	28.61	130.14
MARC032	75	76	161.2	4.5	4.5	1.5	9.0	1.6	82.8	0.7	146.0	64.0	17.6	12.2	1.5	0.7	52.7	4.4	208.85	422.55
MARC032	76	77	268.8	6.1	6.1	2.1	14.2	2.3	138.9	0.9	232.0	103.6	28.2	18.2	2.1	0.9	73.7	5.6	331.88	676.79
MARC032	77	78	164.2	11.9	11.9	2.0	13.7	3.9	75.8	1.7	164.0	72.1	19.4	14.5	2.8	2.0	115.2	13.4	234.60	528.95
MARC032	78	79	302.8	23.9	23.9	2.8	16.7	6.8	156.6	5.2	599.0	105.9	30.8	18.9	3.5	4.3	222.0	34.2	856.87	959.02
MARC032	79	80	393.1	35.9	35.9	1.5	15.9	8.8	200.4	9.7	1745.0	115.8	37.5	16.9	3.7	7.2	317.7	58.9	2496.22	1252.67
MARC032	80	81	123.3	3.9	3.9	1.5	5.5	1.3	69.7	0.6	52.0	39.8	12.1	7.1	1.0	0.6	40.9	3.9	74.39	316.92
MARC032	81	85	110.9	6.7	6.7	1.3	8.5	2.2	55.8	0.8	68.0	41.4	11.8	8.8	1.8	1.0	68.2	6.0	97.27	336.55
MARC032	85	89	232.8	9.7	9.7	2.1	14.3	3.4	122.0	1.1	134.0	85.4	24.5	15.3	2.5	1.4	104.6	8.8	191.69	643.34
MARC032	89	90	409.1	18.0	18.0	2.4	22.0	5.8	209.8	2.6	379.0	145.8	42.5	26.0	4.5	2.8	175.2	19.1	542.16	1110.96
MARC032	90	91	3597.4	30.0	30.0	6.5	66.4	10.7	1896.5	4.0	1013.0	1162.6	359.0	124.0	9.8	4.5	321.4	29.8	1449.10	7674.41
MARC032	91	92	2594.0	78.8	78.8	9.6	104.0	25.3	1330.5	12.2	4708.0	879.3	266.0	136.7	19.4	12.2	852.5	84.9	6734.79	6522.05
MARC032	92	93	241.6	6.1	6.1	2.3	9.8	2.1	127.1	0.7	105.0	83.3	25.2	12.4	1.7	0.8	66.4	5.2	150.20	593.92
MARC032	93	97	153.4	7.2	7.2	1.4	9.6	2.4	77.4	0.8	95.0	56.8	16.1	11.1	1.9	1.0	74.4	6.5	135.90	430.60
MARC032	97	100	305.9	7.2	7.2	2.1	11.1	2.4	168.4	0.9	107.0	97.9	30.3	14.7	1.9	1.1	79.1	7.2	153.06	742.26
MARC033	0	1	1829.9	117.7	117.7	7.6	83.9	35.9	606.0	13.9	1721.0	434.5	126.6	83.4	19.9	18.3	1095.4	112.8	2461.89	4725.80

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC033	1	2	680.5	28.7	28.7	4.3	37.6	8.9	377.3	4.4	633.0	274.8	80.8	47.2	6.4	4.5	290.3	31.0	905.51	1915.81
MARC033	2	3	168.5	5.8	5.8	2.0	12.3	2.2	123.7	0.7	61.0	85.6	24.2	14.6	2.1	0.8	66.3	4.8	87.26	524.86
MARC033	3	4	433.6	18.5	18.5	2.4	23.6	6.1	213.9	2.7	441.0	164.6	47.5	28.8	4.5	2.8	205.0	19.1	630.85	1199.44
MARC033	4	5	429.6	19.1	19.1	2.3	25.8	6.6	207.1	2.0	390.0	156.6	44.7	30.3	4.9	2.8	200.0	16.6	557.90	1178.84
MARC033	5	6	374.7	18.4	18.4	2.8	21.7	6.2	186.7	1.8	584.0	137.4	40.0	24.2	4.6	2.6	218.2	15.7	835.41	1083.74
MARC033	6	7	189.8	7.8	7.8	2.3	11.8	2.6	96.9	0.9	94.0	67.2	18.6	12.3	2.2	1.1	88.5	6.6	134.47	521.45
MARC033	7	8	702.0	45.5	45.5	3.8	44.3	13.9	366.5	6.9	944.0	249.5	74.9	46.3	9.4	7.0	435.1	48.5	1350.39	2113.05
MARC033	8	9	1387.5	10.1	10.1	5.0	17.5	3.6	1035.7	1.2	79.0	286.0	109.4	27.7	2.8	1.4	122.5	8.7	113.01	3037.04
MARC033	9	10	259.6	7.8	7.8	1.4	12.8	2.5	141.8	1.1	136.0	91.3	27.0	15.7	2.3	1.1	79.5	8.0	194.55	664.13
MARC033	10	11	79.4	3.1	3.1	0.9	4.6	1.0	50.3	0.4	26.0	30.3	8.5	6.0	0.8	0.4	31.7	2.8	37.19	225.08
MARC033	11	12	56.6	2.1	2.1	1.0	3.5	0.7	32.6	0.3	27.0	20.8	6.0	4.1	0.6	0.3	24.3	2.0	38.62	158.03
MARC033	12	13	480.8	27.6	27.6	3.1	32.4	9.4	262.9	3.2	561.0	166.7	49.1	32.7	6.8	3.9	291.6	25.3	802.51	1438.52
MARC033	13	14	508.9	17.3	17.3	2.9	24.6	6.1	286.6	1.8	421.0	169.8	50.2	28.4	4.9	2.5	190.0	14.7	602.24	1337.99
MARC033	14	15	291.4	14.2	14.2	2.1	20.2	4.8	145.2	1.6	288.0	110.5	30.0	21.7	3.8	2.1	152.1	12.5	411.98	835.36
MARC033	15	16	236.8	11.3	11.3	1.9	15.4	3.6	113.6	1.2	200.0	85.8	24.3	16.5	3.0	1.5	122.2	8.9	286.10	663.30
MARC033	16	17	34.0	1.5	1.5	0.8	2.5	0.6	19.1	0.2	13.0	14.2	3.8	2.7	0.5	0.2	17.1	1.5	18.60	101.38
MARC033	17	18	322.8	12.9	12.9	1.6	15.9	4.1	160.0	2.0	327.0	112.6	32.9	19.4	2.9	2.0	123.6	13.7	467.77	844.78
MARC033	18	19	123.6	5.5	5.5	1.2	8.4	1.8	63.8	0.8	101.0	46.7	13.0	9.4	1.5	1.0	60.7	5.5	144.48	351.38
MARC033	19	20	790.7	26.0	26.0	3.6	33.9	8.5	393.9	3.6	1142.0	263.1	79.2	42.2	6.4	4.0	275.1	26.2	1633.63	1995.12
MARC033	20	21	331.5	13.6	13.6	2.2	15.7	4.4	163.7	1.5	493.0	119.2	35.3	18.4	3.1	1.9	140.2	10.8	705.24	881.00
MARC033	21	22	865.8	16.4	16.4	4.1	24.8	5.7	612.2	1.8	204.0	222.7	74.9	29.6	4.6	2.4	172.7	14.5	291.82	2079.06
MARC033	22	23	334.5	16.1	16.1	2.9	23.3	5.6	171.9	1.7	245.0	136.0	36.9	26.3	4.4	2.2	177.7	13.3	350.47	979.02
MARC033	23	24	632.0	27.9	27.9	3.2	36.4	9.2	321.8	3.4	762.0	222.9	65.9	40.9	7.3	3.9	292.7	25.7	1090.04	1736.66
MARC033	24	25	135.9	7.1	7.1	1.7	9.5	2.4	72.4	0.7	69.0	52.0	14.9	10.4	2.0	1.0	79.0	5.9	98.70	406.34
MARC033	25	26	751.2	34.1	34.1	4.1	42.6	11.7	377.4	3.3	999.0	261.0	77.2	46.6	8.5	4.7	360.9	28.8	1429.07	2064.50
MARC033	26	27	1398.9	54.4	54.4	5.8	71.3	18.8	733.5	6.4	3267.0	461.1	143.6	77.9	14.3	7.7	563.1	49.2	4673.44	3693.70
MARC033	27	28	632.7	36.6	36.6	4.1	45.4	12.6	318.9	4.0	449.0	233.4	66.0	46.5	9.4	5.4	357.2	31.7	642.29	1861.86
MARC033	28	29	322.2	12.2	12.2	2.4	19.0	4.2	154.8	1.2	259.0	124.1	36.1	22.5	3.7	1.7	150.0	9.8	370.50	884.49
MARC033	29	30	482.4	21.5	21.5	3.1	30.4	7.6	237.4	2.4	381.0	180.3	52.0	33.2	6.0	3.2	239.4	19.4	545.02	1353.29
MARC033	30	31	627.8	31.3	31.3	3.7	40.0	10.8	322.1	3.1	1083.0	218.2	65.4	42.8	8.2	4.4	333.7	26.1	1549.23	1787.80
MARC033	31	32	1074.2	36.6	36.6	4.4	53.4	12.3	545.2	4.7	2791.0	367.8	113.4	63.9	9.9	5.4	425.8	35.5	3992.53	2810.72
MARC033	32	33	164.4	5.7	5.7	1.6	9.2	1.9	84.6	0.7	132.0	63.1	17.6	10.9	1.6	0.8	62.6	5.1	188.83	439.61
MARC033	33	34	103.4	3.3	3.3	1.3	5.3	1.3	56.5	0.4	49.0	38.4	11.3	6.3	1.0	0.5	41.4	3.1	70.09	279.33
MARC033	34	35	417.5	13.0	13.0	2.4	20.7	4.6	208.2	1.4	316.0	147.8	43.7	24.8	3.9	1.9	152.3	10.7	452.04	1074.64
MARC033	35	36	399.6	8.7	8.7	2.9	15.1	2.9	217.1	1.1	141.0	130.8	40.4	18.9	2.6	1.4	99.8	8.2	201.70	964.28
MARC033	36	37	131.7	5.7	5.7	1.5	9.0	2.1	60.0	0.7	92.0	52.5	14.5	11.1	1.7	0.9	64.4	5.8	131.61	371.23
MARC033	37	38	262.8	9.0	9.0	1.9	15.4	3.3	130.5	0.9	135.0	100.5	29.7	19.1	2.8	1.3	103.6	8.2	193.12	705.05
MARC033	38	39	291.6	14.6	14.6	1.9	17.4	4.6	143.7	2.1	334.0	108.1	30.0	19.5	3.5	2.3	152.4	14.9	477.79	826.19
MARC033	39	40	432.4	19.2	19.2	2.5	23.9	6.2	209.0	2.5	538.0	163.9	46.6	30.1	4.8	2.9	200.0	19.7	769.61	1192.60
MARC033	40	41	108.6	2.2	2.2	1.2	3.3	0.7	65.0	0.3	36.0	31.8	10.5	4.9	0.6	0.3	24.1	2.0	51.50	258.75
MARC033	41	42	92.1	4.3	4.3	1.2	6.9	1.6	46.4	0.5	67.0	37.7	10.4	7.4	1.3	0.6	50.0	4.1	95.84	271.68
MARC033	42	43	158.8	6.2	6.2	1.5	9.1	2.2	77.3	0.8	120.0	61.6	17.1	11.4	1.7	0.9	68.6	6.0	171.66	433.79
MARC033	43	44	121.2	5.7	5.7	1.2	8.5	2.1	59.0	0.7	104.0	50.2	13.5	10.3	1.7	0.8	67.2	4.7	148.77	355.75
MARC033	44	45	343.7	18.6	18.6	2.9	23.4	6.0	171.1	2.0	285.0	132.0	37.4	25.3	4.6	2.8	195.8	17.0	407.69	1011.03
MARC033	45	46	568.7	18.6	18.6	3.5	30.7	6.6	291.2	2.5	489.0	198.3	58.9	36.2	5.9	2.7	216.4	17.6	699.51	1490.67
MARC033	46	47	810.4	23.3	23.3	4.6	44.0	8.4	405.7	2.8	806.0	288.9	85.7	50.2	7.9	3.2	278.2	21.1	1152.98	2076.81
MARC033	47	48	119.5	5.0	5.0	1.6	8.6	1.8	57.7	0.7	96.0	50.7	13.1	9.7	1.6	0.7	57.9	4.4	137.33	341.75
MARC033	48	49	628.8	26.1	26.1	5.4	37.8	9.2	332.3	3.1	386.0	220.7	63.5	41.3	7.0	3.7	286.4	24.0	552.17	1731.34
MARC033	49	50	77.3	4.0	4.0	1.6	6.1	1.4	43.6	0.5	18.0	32.8	8.3	5.9	1.2	0.6	42.3	3.4	25.75	235.33
MARC033	50	51	751.4	39.2	39.2	4.9	47.9	13.2	388.8	4.7	609.0	271.5	78.6	51.0	9.8	6.0	394.9	36.3	871.17	2156.30
MARC033	51	52	52.7	1.4	1.4	1.0	2.4	0.5	30.8	0.2	11.0	17.5	5.0	2.9	0.3	0.2	14.7	1.5	15.74	133.40
MARC033	52	53	579.7	18.4	18.4	4.5	26.9	6.0	306.1	2.0	201.0	197.6	59.4	32.2	5.1	2.5	204.6	15.9	287.53	1490.12
MARC033	53	54	290.4	16.7	16.7	2.3	18.0	5.0	155.5	2.5	188.0	105.4	30.1	20.1	3.4	2.7	160.6	17.9	268.93	852.27
MARC033	54	55	285.4	17.3	17.3	2.4	18.6	5.4	139.8	2.3	471.0	109.4	31.0	20.4	3.9	2.5	162.4	16.7	673.77	841.13

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC033	55	56	59.1	7.0	7.0	2.0	6.2	2.2	34.2	1.0	30.0	25.5	6.7	5.6	1.3	1.0	62.5	6.9	42.92	229.98
MARC033	56	57	121.9	7.5	7.5	1.5	7.6	2.3	57.6	1.0	102.0	48.3	13.3	9.6	1.7	1.1	74.3	7.5	145.91	365.76
MARC033	57	58	91.8	4.2	4.2	1.2	6.0	1.4	46.4	0.6	61.0	35.6	10.1	6.6	1.2	0.6	46.7	4.0	87.26	262.90
MARC033	58	59	78.2	4.0	4.0	1.2	5.6	1.4	39.1	0.5	66.0	32.7	8.5	6.0	1.1	0.7	45.6	3.5	94.41	234.28
MARC033	59	60	34.5	1.5	1.5	0.8	2.1	0.6	19.0	0.2	16.0	13.2	3.7	2.6	0.5	0.2	16.6	1.5	22.89	99.09
MARC033	60	61	384.4	30.8	30.8	2.3	23.7	8.7	188.8	5.8	764.0	138.3	40.5	24.2	4.9	5.5	277.2	39.4	1092.90	1207.48
MARC033	61	62	1487.3	86.3	86.3	8.0	98.2	28.4	771.1	9.9	1263.0	540.5	157.7	105.2	20.5	12.6	866.1	78.6	1806.72	4397.06
MARC033	62	63	445.0	23.2	23.2	3.2	29.6	7.4	220.6	3.3	408.0	166.7	47.5	32.6	5.8	3.6	241.9	23.0	583.64	1287.75
MARC033	63	64	77.5	4.1	4.1	1.4	4.5	1.3	39.6	0.6	61.0	30.1	8.2	4.9	0.9	0.6	40.8	4.3	87.26	224.73
MARC033	64	65	53.3	2.6	2.6	1.0	2.5	0.8	27.6	0.5	41.0	18.9	5.4	3.5	0.5	0.5	25.9	3.1	58.65	149.97
MARC033	65	66	176.3	7.3	7.3	1.7	10.8	2.5	87.7	1.0	147.0	63.0	18.1	12.1	2.2	1.1	78.1	7.2	210.28	481.49
MARC033	66	67	3285.6	123.4	123.4	17.6	177.7	42.8	1639.9	14.2	2511.0	1192.8	342.8	209.7	35.3	17.5	1441.3	110.2	3591.99	8858.96
MARC033	67	68	21274.3	390.6	390.6	92.4	842.1	134.0	10744.1	45.5	4150.0	7667.9	2219.2	1231.3	128.9	58.2	5090.6	359.9	5936.58	50949.47
MARC033	68	69	2832.3	70.9	70.9	14.2	143.2	26.0	1441.4	9.8	3607.0	997.6	298.6	174.6	25.4	10.4	855.0	68.5	5159.81	7104.99
MARC033	69	70	825.6	36.8	36.8	6.3	51.1	12.7	424.8	5.3	673.0	298.6	87.4	56.6	10.4	5.6	387.4	38.0	962.73	2305.25
MARC033	70	74	548.2	22.4	22.4	4.3	31.9	7.3	278.9	2.7	452.0	201.4	57.1	35.9	5.8	3.3	236.5	19.9	646.59	1490.58
MARC033	74	78	197.3	7.4	7.4	2.9	12.2	2.6	99.1	1.0	141.0	77.6	21.3	14.0	2.1	1.2	85.5	7.2	201.70	543.97
MARC033	78	82	233.0	7.8	7.8	3.0	13.3	2.9	116.5	1.0	148.0	88.5	25.3	16.2	2.5	1.2	91.9	7.5	211.71	624.37
MARC033	82	86	138.9	4.3	4.3	2.2	9.2	1.6	69.8	0.5	85.0	56.8	15.1	10.3	1.4	0.6	50.0	3.8	121.59	372.52
MARC033	86	87	117.4	3.5	3.5	2.4	6.8	1.4	62.3	0.5	67.0	44.1	12.0	8.1	1.2	0.5	37.0	3.0	95.84	306.60
MARC033	87	88	126.9	3.9	3.9	2.4	8.2	1.4	63.0	0.5	73.0	50.9	14.0	9.0	1.3	0.6	42.3	3.3	104.43	334.32
MARC033	88	89	182.0	5.6	5.6	2.2	9.5	1.9	100.0	0.8	141.0	61.6	18.2	10.8	1.8	0.8	61.8	5.7	201.70	471.88
MARC033	89	90	303.2	23.2	23.2	2.9	14.6	6.0	170.5	5.3	524.0	101.6	30.3	17.6	3.4	4.2	199.4	32.3	749.58	938.46
MARC033	90	91	699.8	50.2	50.2	2.0	24.6	12.5	332.0	11.7	3969.0	209.4	68.0	28.8	5.8	9.3	453.7	73.6	5677.65	2026.68
MARC033	91	92	486.6	33.6	33.6	1.9	19.0	9.0	230.0	7.6	1934.0	153.6	47.9	22.5	4.3	6.2	304.5	50.4	2766.59	1409.57
MARC033	92	93	181.6	11.2	11.2	1.6	12.8	3.6	84.4	1.6	174.0	70.3	20.1	14.7	2.5	1.7	104.5	11.3	248.91	537.64
MARC033	93	94	85.6	4.5	4.5	1.5	6.7	1.4	40.1	0.6	77.0	34.4	9.8	7.4	1.1	0.7	40.1	4.9	110.15	245.90
MARC033	94	95	72.4	3.2	3.2	1.2	5.3	1.0	36.0	0.5	37.0	29.3	8.0	6.1	0.8	0.5	32.5	3.2	52.93	205.32
MARC033	95	96	71.5	3.1	3.1	1.4	5.0	1.0	37.1	0.5	34.0	29.6	8.4	6.1	0.8	0.5	29.2	3.2	48.64	202.68
MARC033	96	97	220.0	11.3	11.3	2.3	16.5	3.7	112.8	1.5	119.0	80.7	24.1	16.5	2.9	1.6	102.4	10.0	170.23	624.85
MARC033	97	98	927.8	28.8	28.8	4.3	49.0	9.5	473.1	3.7	1256.0	297.1	97.0	55.2	8.4	4.0	295.1	26.0	1796.71	2330.15
MARC033	98	99	944.5	27.7	27.7	4.7	46.2	9.3	468.9	3.8	1466.0	293.1	93.4	50.2	7.7	4.0	294.1	27.0	2097.11	2322.29
MARC033	99	100	315.1	8.1	8.1	3.9	18.6	2.7	158.2	1.4	436.0	115.1	34.4	20.6	2.7	1.2	82.9	9.2	623.70	789.81
MARC034	0	1	315.9	16.0	16.0	2.4	15.8	4.4	147.2	3.2	630.0	103.2	32.7	18.0	3.0	2.7	130.9	20.4	901.22	836.24
MARC034	1	2	144.5	4.2	4.2	1.5	7.7	1.5	69.7	0.5	78.0	51.0	15.5	9.5	1.3	0.6	42.9	3.5	111.58	361.35
MARC034	2	3	60.6	2.6	2.6	1.5	5.4	0.9	36.8	0.4	21.0	31.6	8.8	6.5	0.8	0.4	28.7	2.2	30.04	192.10
MARC034	3	4	66.5	2.9	2.9	1.3	5.4	0.9	39.3	0.3	12.0	33.2	9.1	6.1	0.8	0.4	29.6	2.4	17.17	202.52
MARC034	4	5	218.5	3.2	3.2	1.6	6.8	1.3	130.3	0.4	17.0	63.6	20.7	9.9	1.1	0.4	40.5	3.0	24.32	507.66
MARC034	5	6	242.9	11.9	11.9	2.3	16.1	3.7	116.9	1.8	205.0	91.2	26.9	18.4	2.8	1.9	114.0	12.8	293.25	681.00
MARC034	6	7	59.5	4.0	4.0	1.5	5.9	1.4	28.6	0.7	85.0	25.5	7.0	6.0	1.0	0.7	40.8	4.6	121.59	193.48
MARC034	7	8	72.6	3.0	3.0	1.2	3.9	0.9	40.2	0.5	25.0	27.6	8.1	4.5	0.7	0.5	31.0	3.0	35.76	202.49
MARC034	8	12	70.6	3.1	3.1	1.5	5.9	1.3	36.1	0.4	23.0	32.1	8.5	5.5	0.9	0.4	33.7	2.7	32.90	208.07
MARC034	12	16	198.4	7.7	7.7	2.1	12.9	2.6	98.7	1.0	134.0	71.5	21.4	13.0	2.2	1.1	75.1	7.2	191.69	527.49
MARC034	16	17	30.6	1.7	1.7	0.9	3.2	0.7	18.4	0.3	5.0	15.3	4.0	3.4	0.6	0.2	18.3	1.6	7.15	102.09
MARC034	17	18	338.1	23.4	23.4	2.2	23.2	7.1	188.1	3.8	365.0	120.3	36.0	21.9	4.6	3.7	196.7	24.7	522.13	1026.43
MARC034	18	19	1589.9	98.7	98.7	8.0	119.1	30.9	855.7	12.6	1458.0	576.8	176.4	115.1	23.3	14.2	897.4	91.3	2085.67	4762.63
MARC034	19	20	100.5	4.2	4.2	1.5	7.6	1.4	51.8	0.6	47.0	39.9	11.8	7.7	1.2	0.5	42.8	3.4	67.23	282.12
MARC034	20	21	202.1	11.5	11.5	2.4	19.7	3.9	112.5	1.5	144.0	88.6	24.5	18.9	3.4	1.6	123.2	10.1	205.99	645.08
MARC034	21	22	71.1	3.7	3.7	1.3	6.1	1.1	39.9	0.4	37.0	29.2	8.7	6.4	1.0	0.4	37.0	2.8	52.93	215.14
MARC034	22	23	97.8	4.8	4.8	1.0	6.2	1.4	45.9	0.7	76.0	35.5	10.6	6.3	1.1	0.6	44.3	4.8	108.72	268.08
MARC034	23	24	172.6	6.2	6.2	3.8	14.6	2.2	88.2	0.7	141.0	77.2	21.8	16.6	2.3	0.7	67.1	5.0	201.70	491.29
MARC034	24	25	125.5	3.2	3.2	3.6	9.6	1.1	63.8	0.4	68.0	55.6	15.1	11.0	1.4	0.4	34.8	2.4	97.27	334.95
MARC034	25	26	118.8	2.6	2.6	3.2	9.5	1.0	59.3	0.4	59.0	54.8	14.2	10.3	1.2	0.3	31.1	1.8	84.40	315.03
MARC034	26	27	119.6	2.7	2.7	3.4	8.9	1.1	57.7	0.3	70.0	53.5	14.2	10.6	1.3	0.4	34.0	2.2	100.14	316.34

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb2O5	TREO
MARC034	27	28	2636.9	172.2	172.2	12.7	183.3	52.8	1276.2	20.8	2450.0	837.9	262.6	175.6	37.8	24.8	1348.3	157.6	3504.73	7459.47
MARC034	28	29	2269.7	119.6	119.6	10.5	160.7	39.6	1150.8	13.2	1431.0	779.6	235.1	159.8	30.2	16.6	1100.1	103.6	2047.05	6386.08
MARC034	29	30	957.5	59.5	59.5	5.4	75.1	19.0	481.9	6.6	688.0	335.8	104.2	72.1	14.7	8.4	555.6	50.4	984.18	2841.23
MARC034	30	31	1273.9	69.4	69.4	5.6	78.5	21.5	548.4	9.1	1308.0	388.1	118.6	76.6	15.1	10.2	630.6	64.7	1871.09	3412.97
MARC034	31	32	252.2	10.7	10.7	1.6	14.6	3.3	132.1	1.4	211.0	83.3	25.5	15.9	2.5	1.6	97.8	10.6	301.84	669.68
MARC034	32	33	115.2	2.4	2.4	1.2	5.1	1.0	62.4	0.3	46.0	36.5	11.8	6.1	0.9	0.4	32.9	2.5	65.80	283.47
MARC034	33	34	36.2	1.3	1.3	0.9	2.5	0.5	18.8	0.2	11.0	14.6	3.9	2.8	0.3	0.2	14.3	1.4	15.74	100.37
MARC034	34	35	30.1	1.8	1.8	0.9	2.8	0.6	15.0	0.2	5.0	12.7	3.6	2.9	0.6	0.3	19.3	1.7	7.15	95.34
MARC034	35	36	37.2	2.3	2.3	0.9	3.6	0.7	19.1	0.3	5.0	14.6	4.2	3.5	0.6	0.3	23.4	1.9	7.15	116.20
MARC034	36	37	22.8	2.1	2.1	0.9	2.7	0.6	11.1	0.3	5.0	10.6	2.8	2.4	0.5	0.3	18.9	1.6	7.15	81.17
MARC034	37	38	25.2	0.6	0.6	0.7	1.7	0.2	13.5	0.1	5.0	9.9	2.8	1.9	0.3	0.1	9.0	0.8	7.15	68.18
MARC034	38	39	96.1	2.4	2.4	1.2	5.9	0.9	44.6	0.3	25.0	37.8	10.5	7.4	0.9	0.4	29.3	2.3	35.76	244.96
MARC034	39	40	479.2	6.1	6.1	2.0	18.0	2.2	222.9	0.6	87.0	173.0	53.1	28.6	2.5	0.8	60.2	5.2	124.45	1067.34
MARC034	40	41	28.3	1.9	1.9	0.2	3.0	0.7	13.1	0.4	18.0	10.5	3.0	3.1	0.5	0.3	24.0	2.2	25.75	94.51
MARC034	41	42	165.7	6.1	6.1	0.8	11.3	2.5	70.7	0.7	103.0	61.9	18.9	12.6	2.0	0.9	80.9	5.7	147.34	452.81
MARC034	42	43	119.8	4.7	4.7	1.0	9.6	1.7	62.6	0.6	58.0	51.2	14.9	11.5	1.8	0.7	56.6	4.4	82.97	349.65
MARC034	43	44	543.4	18.8	18.8	3.4	27.1	6.2	277.5	2.5	328.0	172.9	54.4	30.5	4.7	2.7	192.9	17.6	469.20	1384.73
MARC034	44	45	786.7	49.4	49.4	4.1	58.4	15.5	404.0	6.7	729.0	276.1	83.4	56.1	11.5	7.2	468.0	47.4	1042.83	2352.64
MARC034	45	46	79.5	3.1	3.1	0.6	4.7	1.0	44.4	0.8	140.0	28.9	9.0	5.1	0.8	0.5	29.1	3.9	200.27	216.28
MARC034	46	47	613.7	31.8	31.8	3.2	41.4	11.2	316.7	3.9	480.0	204.1	64.4	39.9	8.8	4.2	305.5	27.1	686.64	1735.69
MARC034	47	48	301.3	7.7	7.7	2.7	14.9	3.1	145.9	1.2	198.0	110.9	33.1	19.0	2.6	1.2	82.8	7.4	283.24	750.01
MARC034	48	49	623.9	24.6	24.6	4.6	36.9	8.0	295.0	3.6	385.0	230.2	71.1	42.0	6.4	3.5	233.4	23.7	550.74	1647.96
MARC034	49	50	850.4	41.2	41.2	5.1	53.6	12.9	441.8	4.8	556.0	285.5	88.9	53.3	9.9	5.7	365.7	36.1	795.36	2320.95
MARC034	50	51	1066.5	61.1	61.1	5.0	61.8	17.5	534.9	10.2	1995.0	333.5	110.6	63.1	11.9	9.5	544.0	68.1	2853.85	2979.66
MARC034	51	52	697.6	45.7	45.7	3.0	29.4	11.5	346.6	11.7	2177.0	214.9	70.3	33.4	6.4	8.5	382.1	69.5	3114.20	1978.68
MARC034	52	53	852.9	42.5	42.5	4.6	53.0	12.8	440.6	7.1	1011.0	293.3	89.7	54.4	9.8	6.2	381.7	45.9	1446.24	2358.56
MARC034	53	54	927.1	52.0	52.0	4.9	59.9	15.3	473.9	8.7	1404.0	320.2	97.9	60.3	11.5	8.2	476.3	56.4	2008.42	2650.05
MARC034	54	55	909.9	32.1	32.1	4.7	43.1	10.2	502.4	4.9	590.0	273.6	89.5	47.4	7.8	4.7	300.2	33.3	844.00	2314.88
MARC034	55	56	812.6	41.3	41.3	4.5	44.5	11.8	414.5	7.9	665.0	269.8	86.0	49.7	8.4	6.8	369.9	49.4	951.28	2231.92
MARC034	56	57	379.8	9.0	9.0	3.4	17.4	3.2	207.1	1.3	156.0	129.9	40.5	21.2	2.9	1.3	91.2	8.4	223.16	932.99
MARC034	57	58	206.1	12.6	12.6	1.7	14.8	3.8	101.8	1.9	145.0	78.6	22.1	15.3	2.7	2.0	117.6	13.1	207.42	611.86
MARC034	58	59	629.3	42.1	42.1	3.8	46.2	12.6	331.3	6.5	484.0	214.6	66.1	44.2	9.0	6.4	373.6	43.3	692.36	1890.33
MARC034	59	60	164.2	9.0	9.0	1.9	10.7	2.7	84.2	1.6	116.0	56.6	16.8	10.8	2.0	1.4	88.5	10.4	165.94	473.98
MARC034	60	61	113.7	4.3	4.3	1.7	6.0	1.5	57.8	0.8	60.0	41.3	12.2	7.4	1.1	0.7	47.4	4.4	85.83	307.21
MARC034	61	62	481.8	31.9	31.9	3.1	31.1	9.3	247.6	5.2	706.0	165.3	50.4	32.8	6.3	5.0	283.3	33.7	1009.93	1430.65
MARC034	62	63	311.5	26.9	26.9	2.9	20.2	7.0	172.3	5.9	377.0	100.0	31.6	18.4	4.0	4.8	229.6	36.4	539.30	1000.87
MARC034	63	64	73.5	6.5	6.5	2.7	10.6	2.1	31.7	0.8	32.0	38.4	9.1	9.0	1.7	0.9	59.6	5.6	45.78	262.52
MARC034	64	65	55.3	3.8	3.8	2.0	7.0	1.3	26.2	0.6	17.0	27.4	7.3	6.6	1.1	0.6	35.7	3.6	24.32	184.55
MARC034	65	66	57.5	2.6	2.6	1.5	5.0	1.0	28.0	0.4	22.0	23.6	6.6	5.0	1.0	0.4	31.4	3.0	31.47	171.79
MARC034	66	67	157.4	4.2	4.2	1.6	6.9	1.4	91.4	0.6	56.0	45.1	15.4	7.5	1.3	0.6	42.9	4.0	80.11	387.48
MARC034	67	68	287.9	18.4	18.4	2.7	24.1	6.0	144.0	2.5	209.0	106.0	31.5	23.1	4.4	2.8	198.6	17.9	298.97	898.97
MARC034	68	69	932.1	27.6	27.6	5.8	36.7	8.4	551.9	4.9	401.0	265.7	90.3	42.7	6.4	4.3	274.7	30.1	573.63	2323.13
MARC034	69	70	173.2	9.8	9.8	1.4	10.1	2.6	89.0	2.0	209.0	60.5	18.5	10.8	1.9	1.5	87.1	12.0	298.97	493.61
MARC034	70	74	127.6	5.0	5.0	1.4	7.7	1.7	67.3	0.8	123.0	45.3	13.9	8.2	1.3	0.8	52.1	4.8	175.95	345.92
MARC034	74	78	67.3	2.2	2.2	1.3	3.9	0.6	36.6	0.3	26.0	25.8	7.1	4.5	0.6	0.3	23.0	1.9	37.19	178.97
MARC034	78	82	146.5	7.3	7.3	1.5	10.5	2.2	74.4	0.9	103.0	55.6	16.9	11.0	1.8	1.0	72.4	6.4	147.34	420.33
MARC034	82	83	280.0	13.4	13.4	2.1	19.9	4.1	139.4	1.5	205.0	105.2	31.5	19.9	3.8	1.8	139.8	11.6	293.25	796.51
MARC034	83	84	618.7	40.0	40.0	3.6	44.7	12.4	329.4	5.9	998.0	213.9	67.1	43.5	8.7	6.1	365.6	42.1	1427.64	1860.56
MARC034	84	85	625.4	40.6	40.6	3.5	43.7	12.7	346.0	5.5	853.0	208.3	66.3	40.6	9.0	6.0	336.5	38.6	1220.22	1842.94
MARC034	85	86	301.6	15.7	15.7	2.4	19.6	4.9	155.4	2.0	355.0	105.8	31.6	19.7	3.7	2.3	136.0	14.9	507.83	840.48
MARC034	86	87	120.6	4.7	4.7	2.2	9.5	1.5	61.2	0.6	75.0	49.0	14.1	9.7	1.5	0.6	49.7	4.4	107.29	338.40
MARC034	87	88	117.4	4.9	4.9	1.7	8.4	1.7	59.5	0.7	53.0	46.1	13.6	8.8	1.4	0.7	50.2	4.2	75.82	327.88
MARC034	88	89	490.7	19.6	19.6	2.8	26.7	6.3	250.5	2.5	626.0	165.4	51.9	29.9	5.0	2.7	203.3	17.8	895.49	1307.42
MARC034	89	90	334.9	15.8	15.8	2.1	20.9	4.7	163.0	2.6	542.0	122.5	36.4	23.9	3.7	2.4	160.8	18.1	775.33	935.78

Hole ID	From	To	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MARC034	90	91	140.0	8.6	8.6	1.3	9.3	2.6	69.9	1.3	152.0	50.6	15.4	10.7	1.8	1.4	78.2	8.9	217.44	412.71
MARC034	91	92	200.1	10.1	10.1	1.7	13.3	3.1	106.7	1.6	161.0	72.4	22.4	13.5	2.3	1.5	95.8	10.1	230.31	570.73
MARC034	92	93	163.3	6.7	6.7	1.5	10.0	2.1	81.9	0.8	120.0	57.9	18.0	11.8	1.8	0.9	67.6	5.8	171.66	440.88
MARC034	93	94	185.4	8.7	8.7	1.6	12.8	2.7	93.5	1.1	138.0	69.4	20.3	13.5	2.2	1.2	83.9	7.9	197.41	518.10
MARC034	94	95	247.8	13.0	13.0	2.1	16.8	3.9	124.3	1.8	193.0	88.3	26.5	16.8	3.0	1.7	119.2	12.9	276.09	698.26
MARC034	95	96	739.7	34.6	34.6	2.4	34.8	10.0	381.7	6.2	2625.0	225.2	75.1	36.9	6.6	5.4	303.9	38.5	3755.06	1948.00
MARC034	96	97	744.7	37.6	37.6	4.1	51.8	12.1	380.5	4.4	675.0	263.7	80.0	52.4	9.6	5.3	384.8	33.7	965.59	2126.46
MARC034	97	98	1345.1	70.9	70.9	6.7	92.0	22.8	703.7	8.9	1147.0	462.5	142.3	89.2	18.1	10.2	701.1	64.3	1640.78	3853.45
MARC034	98	99	516.5	13.5	13.5	3.2	20.1	4.4	296.1	1.8	277.0	152.8	51.7	22.7	3.4	2.0	124.6	12.5	396.25	1246.69
MARC034	99	100	179.1	5.7	5.7	1.7	8.4	1.8	96.6	0.7	113.0	55.6	17.5	9.4	1.4	0.8	54.0	4.9	161.65	446.84

Table 4: Historical Trenching Results at Machinga (all values in ppm)

Trench ID	From	To	Midpoint East	North	RL	Interval	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MATR001	34	35	749929.5	8320954	758.8	1	357.5	24.1	13.4	3.0	23.6	5.0	197.8	1.6	213.0	145.5	40.4	26.6	3.8	1.9	141.9	11.2	304.7	997.3
MATR001	35	36	749930.5	8320954	758.72	1	1340.9	125.5	75.6	8.1	97.8	27.5	532.8	8.1	1014.0	465.1	125.8	99.1	18.6	11.1	768.1	61.6	1450.6	3765.6
MATR001	36	37	749931.5	8320954	758.64	1	561.0	42.0	25.3	3.6	36.6	9.2	268.6	3.0	449.0	222.1	60.6	41.8	6.4	3.5	269.7	21.4	642.3	1574.8
MATR001	37	38	749932.5	8320954	758.56	1	328.7	17.4	8.9	2.9	21.2	3.4	206.0	1.0	125.0	155.3	42.6	26.7	3.0	1.3	104.9	6.7	178.8	930.1
MATR001	38	39	749933.5	8320954	758.48	1	413.5	33.3	19.7	3.5	28.5	7.1	217.9	2.2	309.0	168.4	45.5	31.3	5.0	2.9	201.3	16.4	442.0	1196.3
MATR001	39	40	749934.5	8320954	758.4	1	415.7	24.3	12.5	3.6	26.4	4.9	242.6	1.4	214.0	183.3	50.4	32.8	4.0	1.7	147.5	9.7	306.1	1160.8
MATR001	40	41	749935.5	8320954	758.32	1	639.8	30.5	16.7	3.7	32.2	6.2	262.9	1.8	254.0	217.7	58.9	38.2	5.0	2.3	180.3	13.3	363.4	1509.5
MATR001	41	42	749936.5	8320954	758.24	1	388.8	20.4	10.3	2.9	24.1	4.2	201.3	1.1	151.0	157.8	41.8	27.7	3.5	1.4	122.1	7.6	216.0	1014.9
MATR001	42	43	749937.5	8320954	758.16	1	238.2	18.5	8.5	3.0	23.9	3.6	200.1	0.9	88.0	164.5	43.4	28.2	3.3	1.1	111.5	6.0	125.9	854.7
MATR001	43	44	749938.5	8320954	758.08	1	264.6	20.1	9.9	2.5	22.9	4.1	200.5	1.1	127.0	155.0	41.3	26.6	3.4	1.4	116.9	7.7	181.7	878.1
MATR001	44	45	749939.5	8320954	758	1	259.1	17.2	8.5	2.7	23.6	3.4	198.0	0.8	97.0	156.8	41.5	27.0	3.1	1.0	98.7	5.8	138.8	847.4
MATR001	45	46	749940.5	8320954	757.92	1	229.2	19.3	9.3	2.9	24.8	3.8	224.5	0.9	119.0	170.9	46.3	29.2	3.4	1.3	107.7	6.4	170.2	879.9
MATR001	46	47	749941.5	8320954	757.84	1	389.5	30.5	15.8	3.4	33.0	6.3	290.1	1.7	211.0	206.3	57.5	36.8	5.1	2.1	171.3	11.6	301.8	1260.8
MATR001	47	48	749942.5	8320954	757.76	1	958.7	65.1	42.1	3.7	43.2	14.9	366.4	4.7	857.0	240.8	71.3	44.9	9.0	6.3	426.9	34.6	1226.0	2332.6
MATR001	48	49	749943.5	8320954	757.68	1	8111.9	736.7	568.6	25.2	383.4	181.2	2421.2	72.6	7280.0	1617.6	488.3	342.1	92.8	90.0	4414.7	535.4	10414.3	20081.7
MATR001	49	50	749944.5	8320954	757.6	1	4506.5	305.8	236.5	10.8	157.0	75.1	1254.5	33.5	5476.0	761.2	246.5	146.7	38.5	38.9	1942.6	240.3	7833.6	9994.4
MATR001	50	51	749945.5	8320954	757.52	1	3604.8	248.4	182.0	8.9	122.7	59.5	879.4	23.8	2948.0	578.8	178.5	113.2	31.1	28.7	1540.3	172.8	4217.2	7772.8
MATR001	51	52	749946.5	8320954	757.44	1	1379.3	104.6	72.1	3.9	54.9	24.4	422.5	8.5	2162.0	268.2	86.4	50.8	13.3	11.2	662.3	63.9	3092.8	3226.4
MATR001	52	53	749947.5	8320954	757.36	1	3654.1	261.6	178.3	9.8	142.6	59.5	853.8	24.1	3252.0	624.6	185.9	130.2	34.3	28.7	1550.2	171.6	4652.1	7909.4
MATR001	53	54	749948.5	8320954	757.28	1	2170.7	160.0	105.0	6.7	93.2	36.4	523.2	11.4	1715.0	413.0	121.0	85.1	20.9	15.5	1081.8	87.9	2453.4	4932.0
MATR001	54	55	749949.5	8320954	757.2	1	1158.0	71.5	42.1	4.7	56.8	15.8	408.0	4.4	826.0	313.9	89.9	59.5	10.6	6.2	484.8	34.1	1181.6	2760.2
MATR001	55	56	749950.5	8320954	757.12	1	565.5	43.3	25.9	3.4	37.8	9.5	292.8	2.7	390.0	215.2	58.8	40.0	6.5	3.8	270.3	20.5	557.9	1596.0
MATR001	56	57	749951.5	8320954	757.04	1	677.3	48.2	29.0	3.6	39.7	10.5	288.2	3.2	454.0	214.4	59.0	41.2	7.4	4.3	293.4	24.0	649.5	1743.6
MATR001	57	58	749952.5	8320954	756.96	1	399.7	33.2	17.8	3.6	35.1	7.0	292.3	1.8	227.0	216.9	59.4	39.1	5.4	2.4	206.3	13.3	324.7	1333.3
MATR001	58	59	749953.5	8320954	756.88	1	393.3	31.5	16.8	3.1	31.8	6.4	264.2	1.7	178.0	192.9	53.1	34.5	4.9	2.3	184.9	12.4	254.6	1233.8
MATR001	59	60	749954.5	8320954	756.8	1	471.7	34.1	18.9	3.5	35.5	7.1	319.2	2.0	214.0	223.4	61.1	38.7	5.7	2.6	207.6	14.8	306.1	1445.9
MATR001	60	61	749955.5	8320954	756.72	1	1292.3	84.6	59.9	4.1	51.4	20.1	343.6	7.3	811.0	236.2	68.4	47.9	11.2	9.0	519.0	53.2	1162.0	2808.2
MATR001	61	62	749956.5	8320954	756.64	1	7329.6	588.5	525.9	17.4	249.0	156.1	2188.3	77.8	8096.0	1295.7	408.7	235.8	67.4	87.1	3634.5	550.6	11581.6	17412.5
MATR001	62	63	749957.5	8320954	756.56	1	5817.8	564.9	463.6	13.4	212.2	146.2	955.5	61.0	4977.0	673.0	202.4	159.8	64.5	75.1	3571.1	441.6	7119.7	13422.3
MATR001	63	64	749958.5	8320954	756.48	1	5078.9	495.5	382.2	12.5	205.8	123.3	873.2	46.9	5064.0	625.0	184.3	150.3	57.8	59.5	2830.8	353.4	7244.2	11479.3
MATR001	64	65	749959.5	8320954	756.4	1	3130.4	247.7	171.6	11.0	150.1	57.0	904.1	2.1	2458.0	701.9	201.0	149.2	33.4	29.4	1336.4	161.3	3516.2	7303.1
MATR001	65	66	749960.5	8320954	756.32	1	4484.1	430.8	302.9	16.8	251.1	103.3	1177.6	36.1	3294.0	875.5	244.9	208.9	57.6	45.2	2517.7	262.5	4712.2	11015.1
MATR001	66	67	749961.5	8320954	756.24	1	6941.3	730.2	487.0	27.4	426.6	166.9	1598.1	56.0	4289.0	1337.6	368.8	344.1	97.4	72.4	4075.6	408.7	6135.5	17138.2
MATR001	67	68	749962.5	8320954	756.16	1	3978.8	379.0	269.9	17.0	231.9	90.3	1411.8	32.2	2698.0	1105.4	318.5	232.5	50.8	40.9	2239.2	239.1	3859.6	10637.1
MATR001	68	69	749963.5	8320954	756.08	1	1808.3	178.2	121.8	8.7	112.3	41.7	684.4	14.5	1452.0	498.9	141.5	105.8	24.0	18.3	1071.5	105.0	2077.1	4935.0
MATR001	69	70	749964.5	8320954	756	1	838.1	77.5	46.5	5.4	67.2	17.4	497.9	5.2	506.0	360.2	98.5	69.8	11.7	6.7	471.6	37.7	723.8	2611.5
MATR001	70	71	749965.5	8320954	755.92	1	406.1	40.4	22.2	4.2	44.0	8.4	351.5	2.3	231.0	259.4	69.6	47.1	6.7	3.0	249.9	16.4	330.5	1531.1
MATR001	71	72	749966.5	8320954	755.84	1	279.3	40.1	19.8	5.0	47.3	7.9	377.1	1.9	149.0	284.2	74.1	51.0	6.8	2.5	242.8	13.9	213.1	1453.5
MATR001	72	73	749967.5	8320954	755.76	1	286.4	35.8	18.2	4.3	42.3	7.2	332.2	1.8	143.0	255.9	66.4	45.1	6.2	2.4	221.3	12.9	204.6	1338.4
MATR001	73	74	749968.5	8320954	755.68	1	482.5	44.4	25.7	4.3	42.8	9.6</												

Trench ID	From	To	Midpoint East	North	RL	Interval	CoO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MATR001	86	87	749981.5	8320954	754.64	1	2154.4	183.9	140.8	8.6	91.7	45.8	660.4	18.3	1704.0	439.1	129.4	86.0	22.2	22.5	1155.2	132.7	2437.6	5290.9
MATR001	87	88	749982.5	8320954	754.56	1	781.4	69.2	47.8	5.3	48.3	16.3	378.8	6.0	618.0	276.8	76.1	51.2	9.5	7.2	429.2	43.7	884.1	2240.8
MATR001	88	89	749983.5	8320954	754.48	1	207.1	28.0	13.6	4.6	29.1	5.5	204.0	1.5	77.0	164.8	44.7	32.2	4.6	1.9	153.5	10.1	110.2	905.4
MATR001	89	90	749984.5	8320954	754.4	1	223.9	19.9	10.4	3.2	22.6	4.1	157.9	1.2	102.0	127.1	33.3	22.9	3.3	1.5	121.4	7.9	145.9	760.5
MATR002	65	66	749911.5	8320814	755	1	78.1	14.7	8.6	3.4	16.4	3.2	97.2	1.1	49.0	75.1	19.8	15.2	2.6	1.1	92.5	6.9	70.1	436.0
MATR002	66	67	749912.5	8320814	755	1	414.3	45.8	25.6	6.1	48.7	9.3	438.5	3.1	319.0	353.6	99.3	66.1	7.7	3.8	247.2	21.8	456.3	1790.8
MATR002	67	68	749913.5	8320814	755	1	3638.2	348.8	268.3	18.1	241.0	83.7	1427.2	41.0	6191.0	1047.5	305.1	221.4	48.3	44.2	2324.2	284.0	8856.4	10340.8
MATR002	68	69	749914.5	8320814	755	1	443.5	30.4	18.1	4.5	33.1	6.6	331.5	2.4	323.0	241.7	68.0	39.2	5.2	2.7	180.8	16.6	462.1	1424.4
MATR002	69	70	749915.5	8320814	755	1	929.0	49.5	34.4	4.6	43.2	10.9	333.7	5.2	733.0	242.5	68.8	42.9	7.6	5.6	314.7	35.3	1048.6	2128.0
MATR002	143	144	749989.5	8320814	755	1	180.9	12.4	7.2	2.3	14.1	2.5	160.5	0.9	116.0	111.6	31.5	18.1	2.1	1.0	76.6	6.5	165.9	628.2
MATR002	144	145	749990.5	8320814	755	1	417.0	21.1	13.1	3.1	22.1	4.7	224.5	1.8	310.0	152.5	44.8	26.0	3.5	2.1	130.6	12.6	443.5	1079.5
MATR002	145	146	749991.5	8320814	755	1	1488.5	63.7	42.3	4.4	47.6	14.2	356.0	5.3	1846.0	285.4	83.2	53.0	9.2	6.3	362.6	41.9	2640.8	2863.7
MATR002	203	204	750049.5	8320814	755	1	2126.7	74.7	50.2	5.1	57.3	17.0	451.7	6.7	2688.0	335.3	98.2	60.7	11.1	8.2	396.9	50.8	3845.3	3750.7
MATR002	204	205	750050.5	8320814	755	1	2912.7	125.1	89.0	6.6	84.3	28.5	562.8	12.5	3038.0	462.2	137.8	91.5	17.9	14.5	664.7	95.4	4346.0	5305.6
MATR002	205	206	750051.5	8320814	755	1	11011.1	184.7	128.6	9.3	122.3	40.8	835.2	18.8	7343.0	611.5	182.5	131.8	26.8	21.5	749.3	149.0	10504.4	14223.1
MATR002	206	207	750052.5	8320814	755	1	2602.0	96.3	60.6	5.9	75.2	20.6	461.2	7.8	2358.0	416.5	119.1	85.4	14.2	9.7	454.3	60.8	3373.2	4489.6
MATR002	207	208	750053.5	8320814	755	1	2156.7	88.2	55.1	5.6	67.3	18.7	369.5	7.1	1936.0	344.1	99.0	73.2	12.5	8.6	422.5	55.9	2769.5	3783.9
MATR002	208	209	750054.5	8320814	755	1	1544.7	93.9	62.0	5.9	68.9	20.9	445.4	8.4	1696.0	387.1	109.9	76.1	13.5	10.3	494.7	63.9	2426.2	3405.4
MATR002	209	210	750055.5	8320814	755	1	5565.2	137.9	100.4	7.2	86.1	32.1	593.2	16.4	6097.0	452.5	135.4	90.4	18.2	17.4	636.4	121.0	8721.9	8009.5
MATR002	210	211	750056.5	8320814	755	1	4316.5	232.9	179.3	9.8	132.7	54.9	542.9	29.3	3552.0	452.9	124.8	115.5	29.7	31.7	1270.3	215.0	5081.2	7738.4
MATR002	211	212	750057.5	8320814	755	1	7524.6	520.7	411.8	19.9	271.0	123.4	567.1	73.2	5332.0	652.4	170.4	220.1	66.3	73.4	2572.8	523.3	7672.6	13790.3
MATR002	212	213	750058.5	8320814	755	1	2415.0	105.8	77.5	5.6	66.1	24.5	340.3	11.4	2134.0	279.0	81.1	62.1	13.8	12.7	586.5	84.6	3052.8	4165.9
MATR002	213	214	750059.5	8320814	755	1	1919.6	141.3	102.1	6.7	80.6	33.2	310.7	14.3	1785.0	259.9	72.1	65.4	18.9	16.8	795.0	108.4	2553.5	3945.2
MATR002	214	215	750060.5	8320814	755	1	1571.4	140.9	99.0	5.8	80.2	33.7	321.4	10.4	2195.0	262.4	74.7	63.8	18.1	14.5	877.1	86.5	3140.0	3659.8
MATR002	215	216	750061.5	8320814	755	1	1529.0	128.1	99.4	4.7	64.0	31.7	259.9	11.1	1560.0	191.6	56.5	45.5	15.7	15.4	790.0	88.4	2310.6	3331.0
MATR002	216	217	750062.5	8320814	755	1	2439.1	206.8	167.6	6.6	103.1	51.6	389.7	24.9	2450.0	316.5	89.3	75.9	24.9	27.2	1402.0	182.2	3504.8	5507.2
MATR002	217	218	750063.5	8320814	755	1	2325.0	196.9	155.8	7.6	98.7	49.3	354.0	21.1	2010.0	295.7	84.3	75.3	24.2	26.2	1258.6	163.3	2875.4	5136.0
MATR002	218	219	750064.5	8320814	755	1	1662.6	165.1	133.6	6.0	82.4	41.0	319.6	19.2	1705.0	255.8	75.0	60.8	19.6	21.8	1182.6	139.9	2439.1	4185.1
MATR002	219	220	750065.5	8320814	755	1	2377.6	148.2	122.1	5.9	77.7	37.2	397.3	8.1	1561.0	308.3	90.4	67.7	18.5	20.1	1121.5	130.8	2233.1	4941.5
MATR002	220	221	750066.5	8320814	755	1	2368.1	189.3	158.6	4.7	82.7	48.8	356.9	22.1	1685.0	256.3	76.6	57.3	21.5	25.5	1488.3	161.1	2410.4	5317.9
MATR002	221	222	750067.5	8320814	755	1	1750.1	208.8	202.5	5.9	96.3	57.4	314.8	36.2	1678.0	247.8	73.4	63.8	24.3	34.9	1855.8	240.1	2400.4	5212.1
MATR002	222	223	750068.5	8320814	755	1	2111.1	224.2	211.2	5.6	98.2	60.3	428.6	37.3	1854.0	289.1	89.2	63.7	24.8	37.0	1904.8	260.7	2652.2	5845.7
MATR002	223	224	750069.5	8320814	755	1	1378.1	100.6	78.6	3.7	54.4	25.8	268.0	10.5	1134.0	197.2	58.7	42.9	12.7	12.4	711.4	77.3	1622.2	3032.5
MATR002	224	225	750070.5	8320814	755	1	1751.5	143.3	129.7	3.9	66.6	38.5	263.0	21.4	1168.0	212.3	63.3	49.6	16.6	22.7	1208.6	150.7	1670.9	4141.8
MATR002	225	226	750071.5	8320814	755	1	2594.4	231.6	200.5	5.8	103.6	60.3	266.4	31.7	1997.0	221.3	63.5	58.8	27.1	33.8	1920.5	221.8	2856.8	6040.7
MATR002	226	227	750072.5	8320814	755	1	4234.9	502.8	378.8	15.3	269.1	121.5	664.9	48.9	3650.0	591.0	170.1	170.2	64.0	57.7	3617.2	360.7	5221.4	11267.1
MATR002	227	228	750073.5	8320814	755	1	8226.3	504.8	516.1	8.7	176.9	143.5	512.2	81.3	5721.0	385.6	122.1	99.4	50.5	89.0	3650.0	587.2	8184.1	15153.1
MATR002	228	229	750074.5	8320814	755	1	2647.2	420.6	360.7	9.5	181.8	110.2	519.3	53.2	2652.0	413.7	119.8	108.1	48.6	58.8	3162.2	378.9	3793.8	8592.8
MATR002	229	230	750075.5	8320814	755	1	1841.7	219.6	224.8	4.9	92.6	62.5	335.1	42.5	1720.0	224.3	66.6	53.8	23.7	40.4	1957.1	287.5	2460.5	5477.2
MATR002	230	231	750076.5	8320814	755	1	1575.3	249.2	259.7	6.5	112.4	72.7	396.1	50.0	1629.0	318.7	89.8	74.2	28.3	45.6	2258.3	328.5	2330.3	5865.4
MATR002	231	232	750077.5	8320814	755	1	3214.6	277.1	231.2	8.3	128.9	70.7	585.0	35.2	2057.0	397.1	116.4	91.5	32.9	38.7	2028.5	248.2	2942.6	7504.4
MATR002	232	233	750078.5	8320814	755	1	3729.2	266.2	242.1	6.6	101.5	71.9	478.8	29.7	2197.0	319.6	99.6	71.2	28.3	38.1	1866.8	237.3	3142.9	7586.9
MATR002	233	234	750079.5	8320814	755	1	1719.0	256.3	268.1	5.6	112.6	73.8	333.2	54.2	1292.0	234.1	67.0	63.1	28.5	50.0	2363.3	353.3	1848.2	5982.4
MATR002	234	235	750080.5	8320814	755	1	3867.7	439.3	378.7	10.5	200.0	114.8	583.9	59.1	2812.0	390.5	111.2	111.2	52.1	62.9	3233.3	414.8	4022.7	10030.2
MATR002	235	236	750081.5	8320814	755	1	6945.2	650.7	524.8	21.7	367.6	159.8	2461.9	70.7	5387.0	1487.7	441.1	301.5	83.6	83.1	3974.0	525.6	7706.3	18098.8
MATR002	236	237	750082.5	8320814	755	1	6102.1	483.7	366.0	15.5	266.0	115.9	1992.0	40.3	6422.0	1113.6	346.7	217.6	60.9	54.8	3027.7	325.8	9186.9	14528.5
MATR002	237	238	750083.5	8320814	755	1	1542.7	82.3	59.4	4.4	55.8	19.6	375.5	7.7	726.0	264.7	75.0	53.0	11.1	9.3	510.3	57.1	1038.6	3127.8
MATR002	238	239	750084.5	8320814	755	1	1259.5	85.0	61.7	4.6	58.6	20.6	408.9	8.2	974.0	279.6	82.6	55.9	11.8	9.6	545.9	59.0	1393.3	2951.6
MATR002	239	240	750085.5	8320814	755	1	1139.3	78.2	58.3	4.1	48.1	18.3	311.0	7.5	745.0	232.6	65.7	47.1	10.3	9.1	465.0	56.3	1065.7	2550.7
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Trench ID	From	To	Midpoint East	North	RL	Interval	CoO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MATR004	74	76	749824	8320447	787	2	1168.0	107.5	96.4	4.5	56.3	28.5	238.9	17.2	1991.0	245.9	64.9	55.3	13.3	15.9	964.3	109.9	2848.2	3186.7
MATR004	76	78	749826	8320447	787	2	2157.6	71.4	52.8	4.9	46.6	16.8	554.1	8.6	9151.0	392.1	125.9	59.3	9.8	8.8	468.5	57.5	13090.8	4034.7
MATR004	78	80	749828	8320447	787	2	2693.7	165.1	121.6	7.9	111.0	39.3	718.9	18.0	3716.0	591.9	173.2	120.4	23.3	19.5	1247.4	123.7	5315.8	6174.9
MATR004	80	82	749830	8320447	787	2	1797.6	131.3	104.6	5.4	72.3	32.9	547.2	13.6	3962.0	415.2	123.0	79.9	16.2	16.3	1082.7	96.7	5667.8	4535.1
MATR004	82	84	749832	8320447	787	2	1733.2	115.0	95.8	4.2	59.0	29.9	394.5	13.8	3242.0	314.8	90.3	60.6	13.9	15.5	998.7	97.4	4637.8	4036.6
MATR004	84	86	749834	8320447	787	2	1343.6	78.4	70.9	2.4	33.8	20.6	180.6	11.1	2695.0	134.6	44.9	29.0	8.9	12.2	660.3	75.9	3855.3	2707.1
MATR004	86	88	749836	8320447	787	2	1167.7	37.9	26.9	2.5	26.6	8.8	279.5	3.7	3002.0	218.3	63.0	33.4	5.5	4.2	241.6	27.7	4294.5	2147.4
MATR004	88	90	749838	8320447	787	2	2352.1	36.6	24.9	3.7	32.4	7.8	824.6	4.8	11729.0	510.9	169.0	55.8	5.5	4.0	218.5	30.6	16778.7	4281.3
MATR004	258	260	750008	8320447	777	2	370.7	21.4	12.3	3.9	26.3	4.7	223.5	1.4	155.0	206.3	51.5	34.2	3.9	1.9	133.2	10.8	221.7	1106.1
MATR004	260	262	750010	8320447	777	2	984.6	49.0	43.4	3.1	36.2	12.3	399.2	8.9	2553.0	300.1	87.2	48.0	6.2	8.6	409.4	55.9	3652.1	2452.1
MATR004	262	264	750012	8320447	777	2	2283.1	122.0	100.2	6.9	91.1	30.5	905.0	19.2	4454.0	657.6	200.5	107.9	17.4	17.2	972.2	125.9	6371.6	5656.8
MATR004	315	317	750065	8320447	770	2	1239.7	129.0	112.5	5.3	67.7	34.3	425.0	19.7	1733.0	339.5	94.5	67.0	16.3	19.2	1050.6	129.6	2479.1	3750.1
MATR004	317	319	750067	8320447	770	2	462.7	70.1	92.7	2.1	28.7	23.1	216.8	23.7	1529.0	136.5	42.6	23.3	7.6	18.5	853.8	144.0	2187.3	2146.3
MATR004	319	321	750069	8320447	770	2	606.3	61.4	48.2	3.0	39.9	15.2	258.3	6.6	973.0	239.1	63.7	45.2	8.2	7.5	454.9	47.6	1391.9	1905.3
MATR004	321	323	750071	8320447	770	2	162.9	15.0	10.9	1.9	13.6	3.1	115.9	1.6	237.0	97.2	24.5	14.7	2.2	1.6	109.1	11.2	339.0	585.4
MATR004	323	324	750072.5	8320447	770	1	872.3	85.4	106.3	3.0	40.7	25.8	310.8	26.7	1131.0	236.7	65.3	40.8	9.9	21.0	868.9	155.4	1617.9	2869.0
MATR004	324	325	750073.5	8320447	770	1	735.6	60.8	69.8	2.3	32.3	18.6	246.2	15.5	1097.0	187.3	52.1	32.4	7.6	12.1	582.3	94.0	1569.3	2148.9
MATR004	325	326	750074.5	8320447	770	1	1043.0	107.7	149.4	2.2	37.0	35.4	319.3	39.6	3412.0	207.4	61.6	29.1	10.6	29.8	1250.9	234.4	4881.0	3557.4
MATR004	326	327	750075.5	8320447	770	1	1994.7	189.3	229.2	5.7	86.6	58.9	771.2	56.5	4538.0	512.3	156.8	82.9	21.4	43.9	1842.7	337.5	6491.7	6389.6
MATR004	327	328	750076.5	8320447	770	1	2756.9	160.1	145.2	6.6	92.0	42.7	1232.0	31.8	7655.0	753.5	238.6	112.9	19.4	26.8	1371.2	196.1	10950.7	7185.8
MATR004	328	329	750077.5	8320447	770	1	3060.2	199.1	168.4	9.5	128.1	52.5	1339.2	31.7	7588.0	922.2	262.8	154.7	24.8	29.7	1647.2	203.1	10854.9	8233.1
MATR004	329	330	750078.5	8320447	770	1	754.7	34.8	28.6	3.4	28.6	8.4	386.4	6.0	2669.0	280.7	84.6	42.1	4.5	4.7	291.4	36.0	3818.1	1994.7
MATR004	330	331	750079.5	8320447	770	1	664.9	46.3	19.9	8.7	54.3	8.1	445.4	2.3	174.0	439.8	119.0	81.0	8.1	2.7	220.9	16.9	248.9	2138.2
MATR004	331	332	750080.5	8320447	770	1	385.5	18.5	10.7	3.1	19.9	4.1	213.4	1.5	182.0	162.5	42.8	26.8	3.1	1.5	133.5	10.5	260.4	1037.5
MATR004	332	333	750081.5	8320447	770	1	964.3	54.9	60.7	4.2	34.6	16.3	424.4	15.4	3018.0	331.6	93.5	49.9	6.9	11.9	539.2	91.9	4317.3	2699.5
MATR004	333	334	750082.5	8320447	770	1	1130.2	82.5	73.5	3.6	41.9	23.6	382.3	15.0	2847.0	261.5	80.4	44.2	10.0	13.5	657.0	95.1	4072.7	2914.3
MATR004	334	335	750083.5	8320447	770	1	847.9	42.6	40.5	2.9	31.1	11.6	427.9	9.7	1779.0	293.8	84.2	42.1	5.8	7.5	391.9	57.7	2544.9	2297.2
MATR004	335	336	750084.5	8320447	770	1	1588.9	90.7	97.3	3.0	47.3	27.0	598.6	24.2	4185.0	411.5	124.8	58.2	10.5	19.4	947.3	141.2	5986.8	4189.9
MATR004	336	337	750085.5	8320447	770	1	1831.6	96.9	106.4	3.4	48.9	30.0	594.7	22.2	3336.0	369.6	112.9	56.7	11.1	19.8	982.8	143.2	4772.2	4430.2
MATR004	337	338	750086.5	8320447	770	1	1119.8	89.2	87.7	4.1	49.0	25.4	454.3	19.4	2728.0	341.3	97.0	57.5	10.6	17.0	832.5	122.8	3902.5	3327.6
MATR004	423	425	750173	8320447	760	2	157.4	23.2	22.6	2.1	13.3	6.6	96.4	5.2	126.0	76.1	20.0	14.6	2.9	4.2	223.2	32.8	180.2	700.7
MATR004	425	427	750175	8320447	760	2	338.4	18.8	8.3	4.5	21.2	3.3	218.1	1.0	70.0	201.4	54.1	37.6	3.2	1.1	87.8	6.4	100.1	1005.3
MATR004	427	429	750177	8320447	760	2	440.9	19.1	13.5	1.7	14.4	4.2	208.1	2.2	379.0	133.4	38.0	20.2	2.6	1.9	137.1	13.3	542.2	1045.3
MATR004	429	431	750179	8320447	760	2	886.8	67.2	48.0	3.6	43.2	15.6	373.4	5.4	1013.0	271.6	77.6	46.1	8.3	6.6	450.5	43.9	1449.1	2347.6
MATR004	431	433	750181	8320447	760	2	764.8	68.5	58.2	4.6	43.9	18.8	431.9	11.0	648.0	267.0	74.9	47.2	8.8	10.2	567.1	72.9	927.0	2449.9
MATR004	433	435	750183	8320447	760	2	3597.0	158.1	124.8	8.0	104.7	38.8	2076.3	21.0	3135.0	988.5	312.6	140.2	20.7	21.4	1105.4	143.6	4484.7	8861.2
MATR004	482	484	750232	8320447	760	2	1679.1	134.3	95.4	5.9	75.6	30.3	558.7	14.3	1751.0	392.1	119.0	74.0	16.7	16.4	689.6	98.2	2504.9	3999.8
MATR004	484	486	750234	8320447	760	2	558.2	56.3	50.1	2.8	31.2	14.9	186.3	9.9	934.0	156.6	43.3	32.6	7.1	9.1	364.7	58.8	1336.1	1581.9
MATR004	486	488	750236	8320447	760	2	197.3	13.1	7.3	2.1	11.2	2.6	111.7	1.0	133.0	92.1	28.2	17.3	1.6	1.3	70.8	7.2	190.3	564.8
MATR004	488	490	750238	8320447	760	2	1457.7	107.2	91.0	4.5	57.1	26.5	627.8	16.9	3275.0	394.3	123.3	63.5	12.8	16.8	681.2	115.2	4685.0	3795.6
MATR004	490	492	750240	8320447	760	2	4501.9	346.6	208.5	16.1	236.7	73.1	2043.2	23.0	2969.0	1437.1	413.4	271.7	45.6	32.2	1555.0	182.2	4247.2	11386.4
MATR004	587	589	750337	8320447	756	2	2025.5	177.8	118.0	7.9	97.4	37.7	655.7	14.9	1823.0	495.2	137.1	101.3	22.5	19.4	926.6	111.3	2607.9	4948.2
MATR004	589	591	750339	8320447	756	2	2657.1	249.3	189.1	9.0	120.6	58.6	696.8	23.5	2395.0	545.5	159.4	125.0	30.2	30.0	1348.1	179.5	3426.1	6421.7
MATR004	591	593	750341	8320447	756	2	1654.2	134.3	91.1	7.1	85.0	30.3	613.9	10.9	1665.0	482.3	137.6	95.7	17.5	14.3	709.5	84.5	2381.8	4168.0
MATR004	593	595	750343	8320447	756	2	1578.2	143.5	95.1	6.7	80.8	31.3	624.2	11.3	1313.0	473.7	135.9	95.9	18.1	15.3	781.8	87.7	1878.3	4179.6
MATR004	595	597	750345	8320447	756	2	3332.5	298.1	213.5	10.5	162.0	69.2	873.1	23.8	2630.0	801.9	213.2	170.2	36.4	32.1	1508.6	184.3	3762.3	7929.3
MATR005	51	53	750956	8319245	760	2	2468.6	206.1	147.9	8.5	128.0	48.7	838.8	17.3	2638.0	615.8	184.6	131.2	27.6	22.8	1358.0	129.0	3773.7	6332.9
MATR005	53	55	750958	8319245	760	2	1161.2	98.2	86.9	3.5	50.4	26.6	303.3	14.0	2066.0	342.0	101.4	51.2	11.4	14.3	735.6	97.7	2955.5	3397.5
MATR005	68	70	750973	8319245	760	2	4716.8	185.7	151.3	10.4	115.4	44.2	1385.0	25.9	1997.0	1080.2	317.6	173.9	23.9	28.8	1003.1	188.3	2856.8	9450.5
MATR005	70	72	750975	8319245	760	2	4742.6	280.7	175.5	13.9	195.8	60.3	2143.0	19.9	2984.0	1510.6</								

Trench ID	From	To	Midpoint East	North	RL	Interval	CoO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MATR007	86	90	751038	8317800	760	4	1741.5	30.9	23.1	2.2	27.7	7.4	553.4	4.4	581.0	266.5	90.5	35.0	4.8	4.1	230.7	27.4	831.1	3049.7
MATR007	90	94	751042	8317800	760	4	3855.0	44.1	36.6	2.2	29.9	10.7	445.6	6.7	1032.0	240.3	80.1	34.2	6.1	6.2	293.4	43.3	1476.3	5134.3
MATR007	94	98	751046	8317800	760	4	3923.8	60.2	48.3	2.4	33.2	15.1	417.6	7.0	924.0	240.5	79.2	37.0	7.7	7.8	384.3	50.8	1321.8	5315.0
MATR007	98	102	751050	8317800	760	4	2137.3	26.5	18.6	1.5	20.5	6.2	261.9	3.3	526.0	160.1	50.8	23.1	3.8	3.1	164.2	21.9	752.5	2902.8
MATR007	102	106	751054	8317800	760	4	3540.4	50.2	40.2	2.7	35.2	12.3	429.6	7.0	1499.0	262.6	86.6	40.4	7.0	7.0	343.9	45.9	2144.4	4910.8
MATR007	106	110	751058	8317800	760	4	1799.0	39.3	30.9	2.2	29.9	9.4	451.7	5.4	711.0	264.8	89.0	37.9	5.4	5.0	247.5	35.1	1017.1	3052.4
MATR007	110	114	751062	8317800	760	4	1381.7	44.7	36.7	2.3	31.2	11.1	472.1	6.8	977.0	247.8	82.7	35.1	6.2	6.3	307.7	44.8	1397.6	2717.2
MATR007	114	118	751066	8317800	760	4	1435.2	32.3	22.7	2.4	28.4	7.4	351.1	3.9	851.0	236.3	72.6	33.9	4.9	3.5	219.3	24.4	1217.4	2478.3
MATR007	118	122	751070	8317800	760	4	1821.0	38.9	30.2	2.2	29.4	9.4	361.9	4.9	1407.0	233.2	73.7	34.5	5.5	4.7	254.7	32.9	2012.8	2937.1
MATR007	122	126	751074	8317800	760	4	1581.1	67.4	54.6	5.1	43.9	16.8	447.4	8.0	1234.0	281.9	90.6	45.2	9.2	8.7	472.4	55.7	1765.3	3188.2
MATR007	126	130	751078	8317800	760	4	2292.5	67.7	50.2	3.9	44.6	16.0	436.6	7.5	939.0	271.1	85.8	45.9	9.2	8.0	450.9	52.6	1343.3	3842.6
MATR007	130	134	751082	8317800	760	4	2681.8	130.9	99.1	5.7	69.5	31.2	357.9	16.3	1943.0	278.1	81.4	60.4	16.6	16.9	794.1	116.6	2779.5	4756.5
MATR007	134	138	751086	8317800	760	4	1824.8	75.2	60.2	3.6	43.2	18.3	253.1	9.7	1337.0	193.1	56.7	38.3	9.6	9.7	462.8	68.8	1912.6	3127.2
MATR007	138	142	751090	8317800	760	4	1368.7	22.8	18.3	1.5	19.3	5.8	236.2	3.4	989.0	151.8	48.1	23.3	3.3	3.2	156.1	22.8	1414.8	2084.6
MATR007	142	146	751094	8317800	760	4	971.5	19.5	15.5	1.0	17.8	4.7	277.4	3.9	1162.0	185.5	59.6	26.0	3.0	2.9	118.3	22.1	1662.3	1728.6
MATR007	146	150	751098	8317800	760	4	1023.1	23.6	18.3	1.3	21.1	5.6	355.5	3.8	926.0	221.7	72.6	30.6	3.6	3.3	136.3	22.3	1324.7	1942.8
MATR007	150	154	751102	8317800	760	4	739.1	13.7	11.1	0.9	13.5	3.1	256.9	3.1	593.0	150.5	48.5	18.4	2.1	2.1	71.8	17.0	848.3	1351.8
MATR007	154	158	751106	8317800	760	4	1129.0	22.6	15.4	1.7	25.4	4.9	523.9	3.4	946.0	319.6	104.8	41.8	3.8	2.7	127.0	20.7	1353.3	2346.7
MATR007	158	162	751110	8317800	760	4	817.8	15.7	13.0	0.9	14.3	3.8	289.6	3.2	614.0	160.4	53.8	20.3	2.3	2.4	97.1	18.8	878.3	1513.5
MATR007	162	166	751114	8317800	760	4	1150.0	26.7	21.3	1.2	21.4	6.5	344.5	4.4	973.0	205.8	69.5	29.1	3.8	3.8	161.7	27.0	1391.9	2076.8
MATR007	166	170	751118	8317800	760	4	940.1	48.1	34.7	1.6	37.8	11.3	223.5	5.6	1305.0	181.1	54.8	36.2	7.0	5.6	282.5	36.3	1866.8	1906.3
MATR007	170	174	751122	8317800	760	4	1817.0	47.5	35.1	2.5	35.4	11.2	388.0	5.5	988.0	268.6	84.3	42.0	6.8	5.7	304.9	38.5	1413.4	3093.3
MATR007	174	178	751126	8317800	760	2	1068.4	78.8	57.2	5.1	53.4	18.3	356.5	8.1	1572.0	303.9	91.3	55.6	11.0	8.8	512.4	58.0	2248.8	2686.7
MATR007	178	182	751130	8317800	760	2	588.0	43.9	28.9	3.7	39.4	9.6	445.7	3.9	609.0	308.6	95.1	48.1	6.8	4.6	277.5	28.6	871.2	1932.5
MATR007	182	186	751134	8317800	760	2	668.5	59.1	41.8	3.7	41.9	13.8	258.5	6.0	918.0	211.4	63.2	37.9	8.3	6.6	400.0	42.3	1313.2	1863.0
MATR007	186	190	751138	8317800	760	2	577.8	71.5	43.8	7.1	68.5	15.2	634.8	5.7	442.0	506.9	155.9	81.2	11.3	6.6	462.2	42.5	632.3	2690.8
MATR007	190	194	751142	8317800	760	2	887.9	59.5	41.7	3.7	43.2	13.8	260.2	6.0	564.0	211.2	63.2	39.3	8.4	6.6	407.2	43.7	806.8	2095.6
MATR007	194	198	751146	8317800	760	2	1280.3	117.7	83.1	5.2	60.8	28.0	395.3	10.2	1645.0	290.1	92.8	52.4	15.0	12.6	864.2	77.2	2353.2	3384.8
MATR007	198	202	751150	8317800	760	2	1070.9	53.7	40.9	2.3	30.7	12.9	209.6	5.3	894.0	139.7	44.8	24.0	7.1	6.4	405.3	38.2	1789.9	2087.0
MATR007	202	206	751154	8317800	760	2	1089.5	86.4	67.6	3.4	43.0	21.5	277.9	8.7	1494.0	181.3	60.4	34.2	10.9	10.6	632.2	66.1	2137.2	2593.7
MATR007	206	210	751158	8317800	760	4	1722.0	39.5	32.7	1.6	22.5	9.9	205.5	4.9	950.0	123.0	39.9	20.5	5.1	5.3	272.2	35.7	1359.0	2540.2
MATR007	210	214	751162	8317800	760	4	2270.8	41.6	32.6	1.9	26.4	10.3	320.5	5.3	1147.0	178.9	58.2	26.9	5.4	5.5	271.8	36.2	1640.8	3292.2
MATR007	214	218	751166	8317800	760	2	1570.8	77.7	62.3	3.1	37.2	19.8	266.5	8.6	1259.0	177.8	59.1	30.7	9.5	9.7	595.7	62.8	1801.0	2991.4
MATR007	218	222	751170	8317800	760	2	1260.3	68.1	56.3	3.0	37.9	17.4	244.8	8.2	1358.0	185.0	60.4	32.9	8.4	9.1	508.4	58.5	1942.7	2558.9
MATR007	222	226	751174	8317800	760	2	1541.7	55.4	43.8	2.4	32.2	13.6	205.3	6.1	1346.0	154.4	49.9	27.5	7.0	7.1	408.2	44.8	1925.5	2599.4
MATR007	226	230	751178	8317800	760	4	1733.7	28.0	20.9	1.5	20.5	6.5	213.5	3.4	638.0	142.7	44.9	21.5	4.0	3.1	196.1	21.8	912.7	2462.3
MATR007	230	234	751182	8317800	760	4	770.9	42.9	27.4	2.9	38.6	9.4	351.7	3.7	538.0	260.8	80.8	43.8	6.6	4.2	276.4	25.4	769.6	1945.7
MATR007	234	238	751186	8317800	760	4	1095.0	94.9	74.8	4.3	63.1	23.1	519.8	11.4	1512.0	374.5	118.4	65.1	12.7	12.0	648.5	78.7	2163.0	3196.3
MATR007	238	242	751190	8317800	760	4	860.6	85.1	81.0	2.4	40.6	23.0	302.8	14.0	1168.0	221.2	68.7	36.4	9.9	13.4	679.7	94.5	1670.9	2533.2
MATR007	242	246	751194	8317800	760	4	481.3	35.0	23.8	1.6	28.6	7.7	205.7	4.1	817.0	170.8	51.5	30.9	5.2	3.8	195.9	26.0	1168.7	1271.8
MATR007	246	250	751198	8317800	760	4	791.2	53.4	32.8	4.1	49.6	11.0	616.5	4.7	947.0	429.4	137.0	64.8	8.3	5.0	302.1	32.1	1354.7	2542.1
MATR007	250	254	751202	8317800	760	4	780.4	41.8	33.5	1.3	26.7	10.4	218.6	5.3	1544.0	150.3	50.7	26.3	5.7	5.4	277.4	36.1	2208.7	1669.9
MATR007	254	258	751206	8317800	760	2	1281.4	53.7	40.0	3.1	42.8	12.7	617.2	6.0	1428.0	370.4	118.8	51.7	7.5	6.3	393.1	41.1	2024.8	3046.0
MATR007	258	262	751210	8317800	760	2	1457.3	85.4	67.0	3.7	51.1	21.4	591.9	8.8	1904.0	358.9	118.9	53.6	11.1	10.5	579.4	66.2	2742.7	3485.3
MATR007	262	266	751214	8317800	760	2	1381.4	75.4	61.6	3.4	45.0	18.9	415.1	9.1	1467.0	276.1	85.9	46.7	9.7	10.2	525.5	64.9	2098.6	3028.9
MATR007	266	270	751218	8317800	760	2	1687.3	83.9	61.6	4.4	56.6	20.3	542.0	8.3	1251.0	337.1	108.1	55.7	11.7	9.5	601.4	60.4	1789.6	3648.3
MATR007	270	274	751222	8317800	760	2	882.8	48.6	36.8	2.2	32.7	11.3	275.7	5.6	1082.0	188.9	59.2	32.6	6.7	5.8	313.6	38.3	1547.8	1940.8
MATR007	274	278	751226	8317800	760	2	1026.4	78.3	59.1	3.7	48.0	18.6	362.3	8.2	1583.0	253.8	81.2	43.4	10.2	9.1	527.9	58.1	2264.5	2588.3
MATR007	278	282	751230	8317800	760	4	1195.5	54.8	45.5	2.2	28.1	14.1	228.7	6.9	989.0	140.7	46.8	23.9	6.7	7.3	396.8	48.4	1414.8	2246.5
MATR007	282	286	751234	8317800	760	4	1502.4	37.0	29.0	1.9	26.1	9.1	256.9	4.7	767.0	166.3	53.7	26.8	5.0	4.8	266.0	31.8	1097.2	2421.3
MATR007	286	290	751238	8317800	760	4	1067.8	30.0	22.2	1.7	24.2	7.1	314.2	3.8										

Trench ID	From	To	Midpoint East	North	RL	Interval	CeO ₂	Dy ₂ O ₃	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nb	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tb ₄ O ₇	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃	Nb ₂ O ₅	TREO
MATR007	348	352	751300	8317800	760	4	1853.6	25.9	17.6	2.1	20.4	6.0	164.8	2.7	749.0	137.6	41.6	24.7	3.9	2.9	152.4	18.2	1071.5	2474.4
MATR007	352	356	751304	8317800	760	4	2438.7	106.9	79.2	5.7	71.3	25.1	406.6	10.0	1350.0	358.9	105.2	71.3	14.3	12.1	673.2	76.8	1931.2	4455.3
MATR007	356	360	751308	8317800	760	4	2024.0	101.6	90.0	5.1	61.1	25.9	374.2	14.8	1207.0	281.1	84.6	55.8	12.7	15.3	744.3	101.3	1726.6	3991.7
MATR007	360	364	751312	8317800	760	4	2168.5	117.4	102.5	5.2	71.8	29.7	586.9	17.3	1931.0	385.1	119.9	69.1	15.4	17.4	802.9	121.2	2762.4	4630.3
MATR007	364	368	751316	8317800	760	4	1486.7	46.6	40.3	3.0	31.7	11.9	231.2	7.4	884.0	183.3	54.0	34.7	6.4	7.1	318.6	50.0	1264.6	2513.0
MATR007	368	372	751320	8317800	760	4	1022.3	63.0	57.3	2.9	42.8	16.5	257.6	11.3	1735.0	239.7	70.8	47.1	8.3	10.3	410.9	72.6	2482.0	2333.3

Table 5: Conversion Factors Applied

CeO ₂	1.2284
Dy ₂ O ₃	1.1477
Er ₂ O ₃	1.1435
Eu ₂ O ₃	1.1579
Gd ₂ O ₃	1.1526
Ho ₂ O ₃	1.1455
La ₂ O ₃	1.1728
Lu ₂ O ₃	1.1371
Nb ₂ O ₅	1.4305
Nd ₂ O ₃	1.1664
Pr ₆ O ₁₁	1.2082
Sm ₂ O ₃	1.1596
Sc ₂ O ₃	1.5338
Ta ₂ O ₅	1.2211
Tb ₄ O ₇	1.1762
Tm ₂ O ₃	1.1421
Y ₂ O ₃	1.2699
Yb ₂ O ₃	1.1387
ZrO ₂	1.3508

APPENDIX 1. JORC Code, 2012 Edition Table 1 – Machinga REE-Nb-Ta Project

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results at Machinga.

Section 1: Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> • Ground radiometric surveys were conducted using a handheld ThermoScientific Radeye brand scintillometer integrated with a GPS (GARMIN GPSMAP78s). Soil sampling was carried out in a grid pattern with approximately 2kg samples collected at each point. • Rock chip samples were collected where outcropping rock occurs. • Trenches were dug to the bedrock, or 1.5m and 2kg samples taken over a 1m length. • Careful bagging of samples in individual plastic bags and accurate numbering and labelling of samples was completed in the field. QAQC procedures such as field duplicates, were carried out to ensure sample representivity. • Re-sampling was carried out where necessary. Hand held GPS units (GARMIN GPSMAP 78s) were used to locate sampling locations, which undergo regular checks. Hand held ThermoScientific Radeye brand scintillometer is regularly calibrated. • RC drilling at Machinga was to test mineralisation identified in trenching. This drilling was sampled at one metre intervals, from which a 2-4kg sub sample was collected for laboratory multi-element analysis including: Be, Ca, Ce, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Li, Lu, Nb, Nd, P, Pr, Sm, Sn, Ta, Tb, Th, Tm, U, W, Y, Yb, Zr
Drilling techniques	<ul style="list-style-type: none"> • A total of 4045m of RC drilling has been completed at Machinga in 2010/12, with a maximum hole depth of 156m. • Specific details of the truck mounted rig were not recorded.
Drill sample recovery	<ul style="list-style-type: none"> • Sample recoveries were monitored by the geologist in the field during logging and sampling. • If poor recoveries were encountered, the geologist and driller endeavor to rectify the problem to ensure maximum sample recovery. • Visual assessments are made for recovery, moisture and possible contamination. • Samples were riffle split to obtain a representative sample, which was inspected and cleaned as required. • Insufficient data exists to determine whether a relationship exists between grade and recovery. This will be assessed when sufficient statistical data is available.

Criteria	Commentary
Logging	<ul style="list-style-type: none"> Trenching and drill samples were geologically logged over 1m lengths intervals to an appropriate level of detail to correlate specifically with sampling. Geological logging of trenching drilling was quantitative in nature. All RC drill holes were logged in full.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> The RC drill ~20kg samples were riffle split in the field to obtain a representative sub-sample of 2-4kg for each which was weighted. Samples were mostly dry. The field sample size of approximately 2kg or greater is appropriate to the grain size of material sampled. Appropriate industry standard quality control procedures were adopted at each stage of sub-sampling to maximise representivity of samples, with reference standards inserted during drilling. Field duplicates were used at a rate of 5% and analysed to ensure representivity of in situ material.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> In 2009 Resource Star Limited submitted 149 soil and rock chip samples (including 23 QAQC samples) to ALS Chemex Laboratories for analysis by initially using aqua regia digest, then 4 Acid digest, followed by lithium borate fusion with ICP finish using methods ME-MS41u, ME-MS61u, ME-MS81u and ME-XRF10 for a comprehensive suite of elements. Elements were: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tl, Tm U, V, W, Y, Yb, Zn, Zr. Global Metals and Mining Limited RC drilling and trenching samples were submitted to Genalysis Laboratory Services in South Africa for sample preparation prior to export to Perth, Western Australia for analysis sodium peroxide fusion (DX) with hydrochloric acid digest ICP/OES or MS finish as appropriate. At Genalysis samples were dried, then crushed to either -2mm or -10mm as appropriate. Large samples were riffle split and the excess stored. Samples were pulverized in an enclosed unit to 85% -75micron. A 120-150gm analytical split was taken for export to Australia and the pulp residue was retained and stored. Elements analysed for the trench samples were: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Nb, Nd, P, Pb, Pr, Rb, Re, S, Sb, Sc, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr. Elements analysed for the drill samples were: Be, Ca, Ce, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Li, Lu, Nb, Nd, P, Pr, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, W, Y, Yb, Zr. A field duplicate, blank (silica sand) and a CRM (certified reference material) were inserted approximately every 20 samples for the soil, trenching and drilling samples. CRM codes were recorded to maintain on-going quality assurance and acceptable levels of accuracy and precision.
Verification of sampling and assaying	<ul style="list-style-type: none"> Assay results are reviewed by 2 company personnel. No adjustments to data were considered necessary.
Verification of sampling and assaying	<ul style="list-style-type: none"> Not reported
Location of data points	<ul style="list-style-type: none"> All locations determined by handheld GPS units (GARMIN GPSMAP 78s were used to define field locations of soil, rock chip samples, trenches and drill collars. These locations were considered accurate to 5m. The grid system used is UTM Zone 36S, WGS 84. Downhole surveys were not completed. Drillhole collars were surveyed using DGPS on completion of the program. The GPS was sufficient topographic control with data downloaded via Map Source to spreadsheet.

Criteria	Commentary
Data spacing and distribution	<ul style="list-style-type: none"> • Current drillhole spacing is irregular as the program was first pass evaluation of trench sampling results. • Drill samples were collected on 1m intervals on site and composited to 4m samples in zones indicated by the scintillometer to be only weakly mineralized or barren. • All other drill samples were submitted on as collected on a 1m basis.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Soil and rock chip sampling was of a reconnaissance nature only and was not designed to achieve unbiased sampling. • Drilling has been undertaken and orientated perpendicular to the inferred orientation of the mineralised structures based on the trench mapping.
Sample security	<ul style="list-style-type: none"> • Samples were collected from the Global Metals, Malawi office and delivered by secure transport to Genalysis Laboratory in Johannesburg, South Africa. • Chain of custody was overseen by the Geology Manager.
Audits or reviews	<ul style="list-style-type: none"> • Data was reviewed and audited on a regular basis, along with QAQC checks, no problematic issues were identified.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria	Commentary
Mineral tenement and land tenure status	<p>Exploration is conducted within several licences in Malawi, being:</p> <ul style="list-style-type: none"> • Machinga EL0529 which is held 100% by Green Exploration Limited covering an area of 42.9km². • Application Machinga South APL0251 of 157.5km² is held by Green Exploration Limited. <p>All licences are in good standing and no known impediments area known to exist.</p>
Exploration done by other parties	<p>Machinga was first identified by the American Smelting and Refining Company and the Atomic Energy Division of the Geological Survey of Britain in 1955 who completed preliminary geological work (Scintillometer survey, mapping trenching and drilling). Radiometric anomalies were found but none of the factual data is available.</p> <p>Detailed geological mapping of the Malsoa-Zomba mountains was completed by Bloomfield et al in 1965.</p> <p>In 1986, the United Nation Development Program sponsored an airborne magnetic and radiometric survey was undertaken by Huntington Geology and Geophysics Limited. Interpretation was completed by Paterson, Grant & Watson Limited in 1987. The survey located Uranium channel anomalies in the region.</p> <p>In 2009 Resource Star Limited completed an orientation soil sampling program over the Machinga Main Anomaly, 149 samples were collected.</p>

Criteria	Commentary
Geology	<p>The area of the Machinga licence is dominated by rocks of the Mesozoic Chilwa Alkaline Province; consisting of granite, syenite, nepheline-syenite plutons with associated volcanic vents characterized by carbonatite and agglomerate.</p> <p>The Malosa Pluton consists of a heterogeneous mixture of syenitic and granitic units. The REE-Nb-Ta mineralization at Machinga is associated with the eastern margin of the Malosa Pluton of the Chilwa Alkaline Province.</p> <p>Uranium and thorium anomalies are associated with the REE-Nb-Ta mineralization.</p>
Drill hole Information	<p>Drill hole positions located in the field during due diligence inspections correspond to reported drill hole positions plus/minus a 5meter GPS error. Indicating an appropriate data quality.</p>
Data aggregation methods	<p>All intervals are reported as one metre downhole or trench section and are therefore length weighted.</p> <p>No metal equivalent values are being used.</p>
Relationship between mineralisation widths and intercept lengths	<p>Insufficient drilling has been completed to determine true widths of mineralization.</p> <p>Due to the low to moderate dips identified in the trenching and drilling to date, it is expected true widths will be less than reported downhole thicknesses.</p>
Diagrams	<p>Location maps of projects within the release with relevant exploration information contained.</p>
Balanced reporting	<p>The reporting of exploration results is considered balanced by the competent person.</p> <p>All results have been reported.</p>
Other substantive exploration data	<p>No other exploration to report.</p>
Further work	<p>Mineralisation has been identified at the project area; with the worldwide focus transition to renewal energy requiring major new sources of elements critical to this transition.</p> <p>This project has been shown to host potentially economic grades of mineralisation but has not been fully explored to define the extent of this mineralisation.</p>