

18 May 2023

ASX RELEASE

## 7,503ppm TREO Identified At Redlings REE Project

- **Surficial values up to 7,503ppm TREO associated with previously unrecognised REE-bearing dykes.**
- **Auger geochemistry highlights a 4.9 km x 1.2 km zone of anomalous.**
- **Ground gravity survey to be completed to test for source of surficial anomalous and to refine drill targets planned for Q3 2023.**

Marquee Resources Limited (“**Marquee**” or “**the Company**”) (ASX:**MQR**) is pleased to report the results from auger sampling recently completed at the Redlings Rare-Earth Element Project. Results have identified significant and wide spread zones of surficial rare-earth element (“**REE**”) anomalous related to the intrusion of REE-bearing carbonatitic dykes.

2,439 auger holes were completed over previously untested areas with results highlighting a ~4.9 km x 1.2 km discontinuous zone of anomalous (Figure 1). During the field program, Company geologists mapped REE-bearing dykes/veins with varying structural orientations which may represent late-stage carbonatite cone sheets or ring dykes. The Company is planning to complete a ground gravity survey to test for possible deep-seated intrusion(s) for follow-up drill testing in Q3 2023. In conjunction to the gravity survey further mapping and auger geochemistry is being planned to further understand the potential of the Project to host an economic REE mineral resource.

### **Auger Geochemistry Results & Forward Work Plan**

Following completion of slim-line RC drilling (refer MQR ASX Release 18<sup>th</sup> Aug 2021), the Company embarked on a 1,292 auger program in April 2022 (refer MQR ASX Release 26<sup>th</sup> April 2022) and has recently completed a further 2,439 auger holes. The auger program was designed to target possible dyke-bearing structures which ran parallel to the NW-striking Redlings Dyke. During the auger program, multiple orientations of REE-bearing dykes were observed and there is no specific orientation to the observed geochemical anomalous. Company geologists interpret the mapped REE-bearing dykes/veins may represent late-stage carbonatite cone sheets or ring dykes. The Company is planning to complete a ground gravity survey shortly to test for possible deep-seated intrusion(s) for follow-up drill testing in Q3 2023. In conjunction to the gravity survey further mapping and auger geochemistry is also being planned to further understand the potential of the Project to host an economic REE mineral resource.

At Redlings, REE mineralisation is related to carbonatitic intrusions or dykes and associated fenitic alteration, which are elevated in REE compared to background. Economic mineralisation intersected in RC drilling was constrained to the laterite profile where supergene REE enrichment of the underlying carbonatite has occurred, not dissimilar to the mineralisation style encountered at the Mount Weld (LYC) and Yangibana (HAS) deposits. The potential for REE-bearing dykes to host economic fresh-rock mineralisation requires further assessment, however early results suggest there is the potential to define economic supergene REE mineralisation (0-20m vertical depth). Individual REE bearing dykes are often part of a larger dyke swarm and the Company will continue to identify additional REE-bearing dykes by systematically testing numerous, analogous geophysical targets.

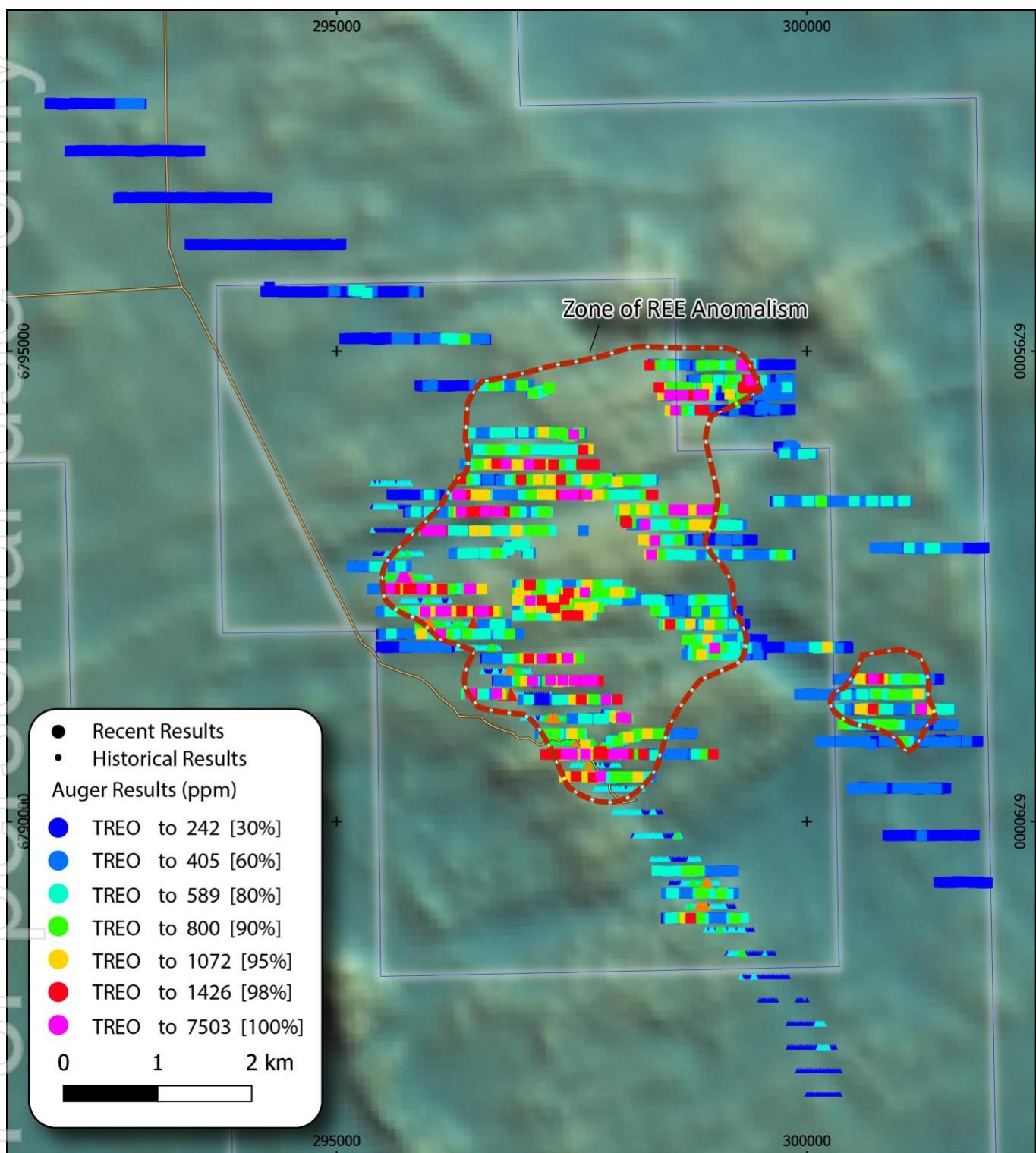


Figure 1: Redlings REE auger geochemistry results.

## Executive Chairman Comment:

Marquee Executive Chairman, Mr Charles Thomas, commented:

"These extremely positive results provide further evidence of the prospectivity and potential scale of rare earth mineralisation at our Redlings REE Project."

"Given the substantial size of the geochemical soil anomaly that we have now uncovered, the Company plans to conduct a ground gravity survey and further auger drilling, before following up in Q3 2023 with further RC drilling."

"We are very excited by these latest results and I look forward to updating our shareholders and the wider market as we systematically progress this exciting Project throughout the rest of 2023."

## The Redlings Rare Earth Element Project

The Redlings Project (formerly called Jungle Well) is 100% owned by Marquee and comprises exploration licences E 37/1311 and E 37/1376 (Figure 2). The Project is located approximately 40km west of Leonora, and 77km north of Menzies. Lynas Corporation's Mt Weld Project lies approximately 150km east of the project. The Redlings Project covers an area of approximately 108 square kilometres of tenure with historical rock-chip samples up to 7.8% TREO.

The Redlings Project is situated over a NNW trending high magnetic biotite-hornblende monzogranite granite that has intruded into the surrounding granite pluton. A series of NW trending faults run obliquely through the granite and are interpreted to be the controlling structures on the emplacement of REE bearing mafic dykes within the Project. Currently, only the Redlings dyke has been identified during prior exploration activities, however numerous parallel structures are observed in the magnetics data and form prospective structural targets for the discovery of additional REE bearing dykes.

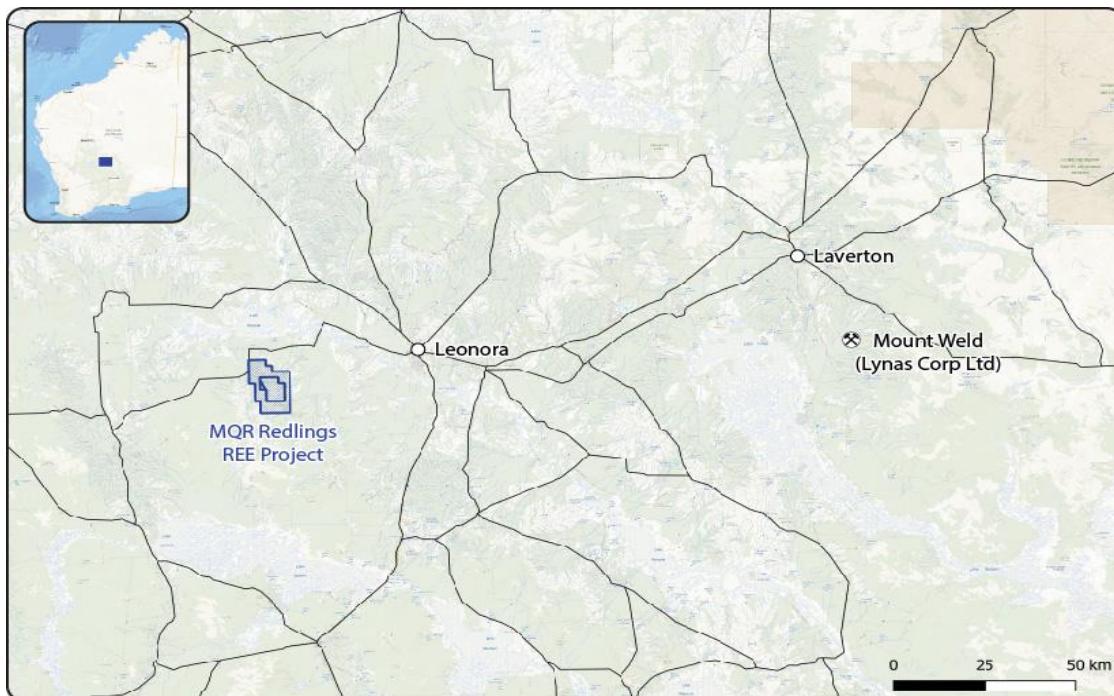


Figure 2: Location of the Redlings Project.

## COMPETENT PERSON STATEMENT

The information in this report which relates to Exploration Results is based on information compiled by Dr. James Warren, a Competent Person who is a member of the Australian Institute of Geoscientists. Dr. Warren is the Chief Technical Officer of Marquee Resources Limited. Dr. Warren has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr. Warren consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

## Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Marquee Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.

This ASX Release has been approved by the Board of Directors.



Charles Thomas – Executive Chairman  
Marquee Resources  
[info@marqueerесources.com.au](mailto:info@marqueerесources.com.au)

Table 1: Results (>1,000 ppm TREO) from the Redlings auger program.

SampleID	NAT East	NAT North	Depth	La2O3 (ppb)	CeO2 (ppb)	Pr2O3 (ppb)	Nd2O3 (ppb)	Sm2O3 (ppb)	Eu2O3 (ppb)	Gd2O3 (ppb)	Tb2O3 (ppb)	Dy2O3 (ppb)	Ho2O3 (ppb)	Er2O3 (ppb)	Tm2O3 (ppb)	Yb2O3 (ppb)	Lu2O3 (ppb)	Y2O3 (ppb)	TREO (ppm)
AUG00391	297604	6791492	0.250	369432.0	672326.2	61089.7	178459.2	22844.1	2917.9	16366.9	2014.3	10145.7	1569.3	4208.1	548.2	3233.9	432.1	60.2	7503.1
AUG00582	296561	6792233	0.1	408134.4	633673.3	84963.8	230947.2	21336.6	2674.7	11756.5	1461.8	6427.1	1008.0	2973.1	434.0	2903.7	432.1	47.0	6513.9
AUG01450	297006	6793791	0.1	300236.8	395899.4	50908.1	172627.2	23423.9	2871.6	13946.5	1807.1	8986.5	1580.8	4436.8	491.1	3427.5	500.3	51.7	6044.8
AUG00116	297847	6790469	0.200	111298.7	179208.9	20597.3	61236.0	8070.8	1100.0	5935.9	794.2	4303.9	756.0	2287.0	319.8	1901.6	284.3	31.4	5175.9
AUG01816	298621	6794533	1.000	890155.2	911271.4	139265.7	436233.6	57516.2	6796.9	33655.9	4385.3	22724.5	3929.1	10314.4	1187.8	7299.1	989.3	120.4	4677.4
AUG00020	297607	6790713	0.100	153636.8	378329.9	26799.9	75466.1	9972.6	1227.4	8195.0	1404.2	9962.0	1981.7	6712.3	1073.6	6809.4	886.9	60.1	3254.0
AUG00491	296139	6791989	0.250	200548.8	256514.7	30544.8	88413.1	11491.6	1586.3	6454.6	828.7	4051.4	675.8	1875.3	251.3	1571.4	216.0	31.1	3253.7
AUG01156	298645	6793311	0.250	431590.4	1144360.1	85080.8	313761.6	62966.3	8719.0	49907.6	7435.5	41546.7	7709.2	21955.2	2798.1	16511.2	2217.3	261.6	2837.9
AUG00011	297421	6790705	0.200	728308.8	1370421.0	124051.8	321926.4	38962.6	3554.8	23743.6	3004.1	14575.8	2382.6	6437.9	799.5	4384.0	557.2	106.7	2825.8
AUG01086	297622	6793474	0.250	197030.4	404098.5	32651.4	88763.0	10598.7	1239.0	5106.0	690.6	3110.3	504.0	1486.6	182.7	1218.4	318.4	16.3	2694.5
AUG00010	297401	6790713	1.000	201721.6	479061.7	35577.1	98444.2	11827.9	1204.2	7422.7	943.8	4694.1	767.5	2138.3	296.9	1810.5	238.8	32.4	2643.2
AUG00848	297161	6792351	0.250	222832.0	260028.6	36747.4	98910.7	13915.2	1447.4	8967.2	1151.0	5979.5	1031.0	2778.7	308.4	1833.3	250.2	31.6	2567.5
AUG01229	298323	6793151	0.250	75997.4	151097.7	12405.2	35925.1	4974.7	602.1	2893.0	391.3	2020.0	378.0	1063.5	125.6	842.6	113.7	12.0	2555.8
AUG01815	298639	6794527	0.100	377641.6	555196.2	66122.0	200620.8	28294.2	3427.4	16828.0	2359.6	12395.2	2199.4	5969.1	730.9	4611.7	648.1	59.2	2525.8
AUG00953	296358	6793290	0.1	324865.6	609076.0	55940.3	145800.0	18553.6	2107.4	10096.8	1243.1	5991.0	1008.0	2767.3	354.1	2106.6	295.6	31.6	2334.3
AUG01911	301248	6791198	0.250	743555.2	816396.1	111529.6	334756.8	41049.8	3913.7	24089.3	2820.0	14001.9	2611.7	7501.4	879.4	5682.1	852.8	105.1	2264.4
AUG01859	300662	6791510	0.500	329556.8	684039.2	55823.3	167961.6	21104.7	2362.1	12678.6	1553.9	7069.8	1191.3	3213.2	388.3	2391.3	318.4	37.1	2242.1
AUG01155	298624	6793312	0.250	93589.4	302195.4	15213.9	43856.6	6053.1	799.0	3619.2	506.4	2674.1	504.0	1417.9	194.2	1195.6	159.2	16.5	2196.8
AUG00385	297485	6791491	0.250	120798.4	233088.7	20012.1	55753.9	7177.9	1123.2	5232.8	679.1	3534.9	595.7	1692.4	251.3	1651.1	227.4	19.9	2163.2
AUG00645	295521	6792470	0.250	136044.8	231917.4	27853.1	64385.3	7943.3	1030.5	5048.4	633.1	3236.5	458.2	1463.7	194.2	1207.0	159.2	22.2	2144.9
AUG01910	301265	6791197	0.250	87256.3	190921.9	14043.6	41873.8	6331.4	822.1	4149.4	552.5	2938.1	549.8	1612.3	205.6	1446.1	216.0	15.9	2109.7
AUG01803	298882	6794534	0.500	363568.0	411126.3	62962.1	204120.0	39194.5	4608.4	37805.3	5720.5	36726.4	7972.7	25271.4	3038.0	19471.8	2888.2	327.6	2056.9
AUG01801	298921	6794532	0.250	254497.6	541140.6	52078.4	159796.8	28410.2	3276.9	19363.7	2854.5	17215.5	3333.4	10177.2	1347.7	9667.6	1341.8	85.2	1998.8
AUG00687	296361	6792472	0.500	181784.0	329135.3	33236.5	99260.6	12407.7	1389.5	8921.1	897.8	4395.7	721.7	2058.3	274.1	1810.5	261.5	34.9	1968.9
AUG01811	298722	6794523	1.000	221659.2	293996.3	39673.2	113957.3	14958.8	1713.7	7987.5	1001.4	4866.2	824.8	2264.1	262.7	1730.8	238.8	22.7	1941.0
AUG00841	297023	6792350	0.250	136044.8	258857.3	23054.9	70217.3	10192.9	1377.9	6154.9	828.7	4154.7	710.2	2149.8	262.7	1901.6	284.3	22.1	1891.0
AUG00255	297902	6791298	0.250	152464.0	255343.4	23874.1	70217.3	10958.2	1435.8	6858.0	909.3	7069.8	790.4	2298.4	308.4	1856.1	261.5	32.4	1877.9
AUG00395	297689	6791500	0.100	208758.4	523571.1	34523.9	97744.3	13451.4	2003.2	10165.9	1346.7	6989.5	1099.7	3018.8	411.2	2402.7	318.4	38.5	1871.7
AUG00404	297499	6791731	0.250	186475.2	664127.1	34874.9	95644.8	12523.7	1377.9	7803.1	1047.4	5187.6	882.0	2424.2	342.6	2322.9	329.8	30.2	1849.6
AUG01438	296763	6793795	0.1	229868.8	390042.9	45290.6	134136.0	18321.7	2211.6	11065.0	1484.8	7494.5	1340.2	3773.6	434.0	3028.9	466.2	44.4	1824.4
AUG01169	298901	6793313	0.250	225177.6	379501.2	35928.2	100777.0	12987.5	1273.7	7226.8	897.8	4212.1	721.7	2035.4	262.7	1560.0	216.0	23.9	1811.7
AUG00662	295861	6792470	0.250	292027.2	614932.5	55121.1	134136.0	16930.2	2049.5	11641.3	1484.8	7712.5	1099.7	3373.3	422.6	2300.2	295.6	52.1	1805.1
AUG00379	297362	6791484	0.100	219313.6	365445.6	35343.1	98210.9	11943.9	1447.4	7618.7	920.8	4292.4	675.8	1863.9	262.7	1628.3	216.0	24.6	1787.8
AUG00364	297040	6791492	0.250	258016.0	302195.4	41545.7	121305.6	14842.9	2037.9	9993.0	1231.6	6220.5	1031.0	2984.5	434.0	2858.1	398.0	39.0	1784.5
AUG00244	297982	6791101	0.100	227523.2	342019.6	31832.2	93312.0	13683.3	1447.4	7814.6	989.9	7196.1	767.5	2161.2	285.5	1753.6	227.4	32.1	1748.5

SampleID	NAT East	NAT North	Depth	La2O3 (ppb)	CeO2 (ppb)	Pr2O3 (ppb)	Nd2O3 (ppb)	Sm2O3 (ppb)	Eu2O3 (ppb)	Gd2O3 (ppb)	Tb2O3 (ppb)	Dy2O3 (ppb)	Ho2O3 (ppb)	Er2O3 (ppb)	Tm2O3 (ppb)	Yb2O3 (ppb)	Lu2O3 (ppb)	Y2O3 (ppb)	TREO (ppm)
AUG01293	298422	6792990	0.250	180611.2	299852.8	36045.2	110224.8	14958.8	2014.7	9416.7	1151.0	5945.1	1134.0	3190.4	411.2	2619.0	363.9	35.9	1724.9
AUG00328	296741	6791354	0.250	201721.6	390042.9	31130.0	77565.6	11224.9	1551.6	7584.1	966.8	5015.4	882.0	2652.9	388.3	2653.2	238.8	35.3	1702.6
AUG01151	298544	6793312	0.500	179438.4	283454.6	34757.9	100077.1	13451.4	1841.1	7388.2	978.4	4877.7	847.7	2378.5	319.8	2061.0	295.6	26.2	1694.5
AUG00040	298005	6790711	0.400	118452.8	222547.0	20831.3	61119.4	9787.0	1100.0	5797.6	805.7	4246.5	710.2	2024.0	274.1	1821.9	261.5	29.2	1687.5
AUG01301	298259	6792993	0.1	172401.6	703951.3	35460.1	103343.0	13799.2	1354.7	7146.1	978.4	4671.1	801.9	2184.1	285.5	1867.5	295.6	23.4	1673.1
AUG00342	296466	6791354	0.250	354185.6	446265.3	63547.3	190123.2	22148.4	2628.4	12332.8	1404.2	6048.4	962.2	2355.6	285.5	1719.4	216.0	37.1	1647.9
AUG00372	297236	6791491	0.100	153636.8	220204.4	26214.7	70800.5	9555.1	1296.8	6685.1	897.8	4694.1	767.5	2172.7	331.2	2174.9	295.6	25.5	1643.1
AUG00600	296204	6792233	0.1	186475.2	500145.1	37449.6	100310.4	10935.0	1760.0	7768.5	1070.4	5405.7	904.9	2778.7	399.7	2744.3	409.4	41.5	1638.4
AUG01597	299280	6794851	0.250	328384.0	911271.4	60621.5	179625.6	27598.5	3137.9	19594.2	3004.1	17559.8	3356.3	10097.1	1302.0	8836.3	1228.1	106.0	1636.9
AUG01818	298582	6794531	0.500	224004.8	297510.2	34055.7	99610.6	13451.4	1366.3	8494.7	1162.5	6082.8	1111.1	3041.7	365.5	2243.2	318.4	37.5	1635.9
AUG02612	296543	6793295	0.100	362395.2	532941.5	54419.0	148132.8	17625.9	1609.5	9151.6	978.4	4292.4	698.8	1795.3	205.6	1184.2	159.2	23.4	1630.1
AUG00247	298044	6791099	0.100	221659.2	375987.3	31832.2	95294.9	14726.9	1644.2	8690.6	1081.9	7574.8	790.4	2081.2	262.7	1594.2	204.7	30.2	1611.3
AUG01166	298843	6793310	0.500	120798.4	473205.2	21182.4	59136.5	7931.7	845.3	4333.8	587.0	2766.0	481.1	1395.1	182.7	1070.4	136.5	15.0	1599.4
AUG01019	296281	6793472	0.250	397579.2	453293.1	67058.2	180792.0	23539.9	2767.4	14177.0	1899.2	9571.8	1729.7	4837.0	582.5	3655.2	557.2	73.0	1581.3
AUG01596	299258	6794851	0.100	54183.4	98740.6	9514.5	27410.4	4418.1	555.8	3284.9	494.9	2949.6	561.3	1692.4	217.0	1389.2	193.3	15.7	1575.7
AUG01826	298564	6794367	0.250	272089.6	564566.6	47865.3	136468.8	18321.7	2014.7	10165.9	1346.7	6760.0	1122.6	2927.4	354.1	2311.6	295.6	32.8	1573.5
AUG01017	296242	6793473	0.250	178265.6	244801.7	25278.5	72550.1	10053.7	1181.1	6258.6	863.3	4395.7	790.4	2252.7	274.1	1673.9	261.5	26.4	1549.0
AUG00943	296743	6793290	0.1	378814.4	805854.4	61791.8	158630.4	20640.9	2049.5	12217.6	1611.4	8102.8	1535.0	4425.3	479.7	3211.1	477.6	66.4	1534.7
AUG00393	297645	6791491	0.250	494921.6	578622.2	79112.3	244944.0	32005.0	5083.2	26509.8	3107.7	14690.6	2176.5	5305.8	639.6	3416.1	420.7	76.3	1532.1
AUG01074	297384	6793470	0.500	404616.0	571594.4	75133.3	225115.2	28642.1	3357.9	16366.9	2071.8	9789.9	1672.4	4848.4	571.1	3427.5	386.6	58.3	1519.3
AUG00855	296042	6793093	0.250	526587.2	542311.9	89528.0	237945.6	30033.6	2917.9	16366.9	1991.2	10444.1	1913.0	5511.7	639.6	4065.2	591.3	78.5	1518.8
AUG00611	295984	6792231	0.1	265052.8	363103.0	52546.5	137635.2	16002.5	1760.0	7906.8	909.3	4108.8	687.3	1783.9	239.8	1468.9	193.3	28.7	1507.2
AUG00418	297223	6791724	0.100	239251.2	323278.8	39205.1	111507.8	13915.2	1725.3	9555.1	1266.1	6232.0	1076.8	2938.8	411.2	2539.3	375.2	39.7	1495.8
AUG00392	297628	6791494	0.250	1735744.0	4251819.0	333535.5	919123.2	115960.0	15979.0	67542.4	7470.0	30987.9	4410.2	10657.4	1302.0	7447.1	932.4	161.3	1491.0
AUG00688	296384	6792471	0.500	622756.8	791798.8	119370.6	347587.2	40470.0	3948.4	23282.5	2071.8	9124.2	1363.1	3544.9	445.4	2721.5	386.6	66.7	1485.7
AUG00797	297680	6792434	0.250	157155.2	201463.6	28087.2	79198.6	8789.8	903.2	4806.3	598.5	2720.0	423.8	1143.5	137.1	842.6	113.7	20.4	1484.6
AUG01079	297486	6793471	1.000	185302.4	234260.0	29725.6	87246.7	11827.9	1551.6	6950.2	966.8	4946.6	870.6	2607.2	331.2	1935.8	79.6	29.8	1476.2
AUG00013	297462	6790713	1.000	233387.2	334991.8	38385.8	107892.0	12639.6	1354.7	8540.8	1128.0	6036.9	1031.0	3007.4	399.7	2368.5	318.4	42.9	1471.5
AUG00854	296016	6793087	0.500	284990.4	638358.5	50791.0	131803.2	17278.0	1713.7	9509.0	1162.5	5738.5	1019.5	3007.4	354.1	2379.9	341.1	33.8	1470.9
AUG00942	296763	6793290	0.1	136044.8	379501.2	19192.9	55987.2	8059.2	868.4	4598.9	633.1	3167.7	572.8	1635.2	182.7	1320.9	193.3	17.3	1459.9
AUG00856	296061	6793090	0.250	293200.0	1000290.2	49737.8	131803.2	16930.2	1783.2	9774.0	1220.1	6082.8	1099.7	3259.0	411.2	2755.7	398.0	39.2	1459.9
AUG00603	296142	6792232	0.1	216968.0	364274.3	41077.5	113607.4	11491.6	1609.5	7883.8	1047.4	5210.6	847.7	2515.7	342.6	2152.1	307.0	37.5	1458.7
AUG00852	295983	6793087	0.250	168883.2	269399.0	25980.7	76399.2	10401.6	1111.6	6500.7	897.8	5245.0	1008.0	3076.0	388.3	2527.9	363.9	30.2	1450.8
AUG00035	297903	6790713	0.200	205240.0	315079.7	31364.0	95294.9	14726.9	1285.3	8736.7	1128.0	5405.7	859.1	2229.8	274.1	1685.3	227.4	38.5	1442.5
AUG01644	299445	6794684	0.500	248633.6	482575.6	43886.3	135302.4	22612.2	3369.5	30659.2	6077.3	53138.5	15693.4	59690.7	8291.6	49533.5	8562.4	811.5	1430.5
AUG00580	296605	6792234	0.1	98046.1	202634.9	19427.0	52138.1	5287.8	856.8	3665.3	483.4	2479.0	412.4	1257.9	182.7	1275.3	193.3	17.7	1429.0

SampleID	NAT East	NAT North	Depth	La2O3 (ppb)	CeO2 (ppb)	Pr2O3 (ppb)	Nd2O3 (ppb)	Sm2O3 (ppb)	Eu2O3 (ppb)	Gd2O3 (ppb)	Tb2O3 (ppb)	Dy2O3 (ppb)	Ho2O3 (ppb)	Er2O3 (ppb)	Tm2O3 (ppb)	Yb2O3 (ppb)	Lu2O3 (ppb)	Y2O3 (ppb)	TREO (ppm)
AUG02322	297001	6792513	0.100	307273.6	305709.3	49503.7	144633.6	19017.4	2142.1	11514.5	1392.7	6782.9	1145.5	3293.3	399.7	2505.1	341.1	38.4	1426.3
AUG01081	297521	6793472	0.500	224004.8	326792.7	38502.9	110808.0	14495.0	1528.4	7976.0	1024.4	4613.8	767.5	2252.7	262.7	1571.4	170.6	26.5	1426.1
AUG01862	300723	6791513	0.100	133699.2	564566.6	24342.2	76399.2	11827.9	1563.2	8125.8	1185.5	6232.0	1122.6	3121.8	388.3	2482.4	329.8	31.7	1425.3
AUG01485	297703	6793794	0.1	351840.0	557538.8	53248.7	173793.6	20872.8	1864.2	10949.7	1220.1	5405.7	927.9	2595.7	319.8	2004.1	284.3	29.5	1416.2
AUG00581	296581	6792232	0.1	201721.6	1057683.9	38268.8	101476.8	10181.3	1574.7	7007.8	932.3	4441.6	744.6	2252.7	308.4	2026.9	307.0	35.6	1409.2
AUG00398	297748	6791489	0.250	283817.6	603219.5	45524.7	128304.0	15538.6	1806.3	9359.1	1128.0	5026.9	824.8	2115.5	274.1	1708.1	261.5	31.2	1408.0
AUG01170	298924	6793327	6.500	326038.4	1218152.0	57812.8	160963.2	20177.0	1956.9	11122.6	1392.7	6415.6	1179.9	3350.5	411.2	2402.7	329.8	44.3	1406.0
AUG00051	298222	6790711	0.100	87139.0	171009.8	14160.6	40940.6	6574.9	752.6	3838.2	518.0	2674.1	446.7	1269.3	171.3	1150.1	159.2	20.3	1402.1
AUG01479	297582	6793796	0.100	281472.0	532941.5	51025.1	169128.0	21684.5	2408.4	11756.5	1369.7	6530.4	1076.8	2881.6	342.6	2072.4	272.9	31.9	1398.5
AUG01738	299285	6794609	0.500	102268.2	130014.3	17671.5	52837.9	8372.3	1007.4	5901.3	932.3	5818.8	1157.0	3773.6	536.8	3974.1	591.3	37.5	1398.2
AUG02323	297023	6792507	0.100	439800.0	598534.3	79697.4	236779.2	31077.3	3473.7	16021.1	2014.3	9319.3	1512.1	4128.0	491.1	3028.9	409.4	44.7	1395.7
AUG01807	298802	6794535	0.250	95114.1	173352.4	20363.2	62869.0	11248.1	1331.6	7641.7	1035.9	5876.2	1122.6	3453.4	445.4	2949.2	454.8	33.4	1390.0
AUG00135	297437	6790474	0.1	273262.4	501316.4	44354.4	128304.0	17625.9	1910.5	8909.6	1692.0	5359.8	1752.6	2515.7	354.1	6422.3	329.8	44.6	1387.7
AUG01072	297342	6793473	0.500	307273.6	419325.4	62728.1	186624.0	24815.4	3022.1	13831.2	1853.1	9365.2	1672.4	5111.4	662.4	4031.0	113.7	59.1	1366.2
23RD13	298916	6789393	0.1	463256.0	448607.9	62611.1	187790.4	28178.3	4701.1	19478.9	2532.2	12395.2	2130.6	5523.1	673.8	3894.4	500.3	72.1	1360.9
AUG00771	297321	6792269	0.250	167710.4	330306.6	33470.6	95761.4	9949.4	1123.2	6569.8	828.7	3821.8	733.1	1955.4	285.5	2061.0	307.0	29.1	1360.5
AUG02609	298723	6791776	0.100	394060.8	646557.6	61908.9	176126.4	21568.6	2315.8	10984.3	1300.6	5669.6	950.8	2458.5	296.9	1730.8	238.8	30.4	1351.5
AUG01073	297362	6793472	0.500	419862.4	561052.7	72792.7	236779.2	30961.3	3612.6	17519.5	2198.4	10340.8	1764.1	4962.8	593.9	3393.3	284.3	59.2	1347.7
AUG00390	297585	6791492	0.100	229868.8	308051.9	40141.3	117806.4	15306.7	2223.2	11157.2	1335.2	6518.9	1008.0	2664.4	354.1	2061.0	284.3	38.9	1345.6
AUG00008	297360	6790716	0.100	140736.0	618446.4	25629.6	69984.0	8917.3	961.1	6189.5	874.8	4820.3	813.3	2298.4	319.8	1844.7	238.8	29.6	1339.7
AUG00648	295583	6792471	0.250	165364.8	221375.7	35109.0	81648.0	9729.0	1215.8	5889.8	713.6	3718.5	526.9	1703.8	228.4	1320.9	181.9	21.1	1339.0
AUG01463	297264	6793790	0.1	185302.4	256514.7	33236.5	102643.2	14726.9	1956.9	9117.1	1197.0	6048.4	1134.0	3293.3	376.9	2710.1	432.1	39.6	1336.0
AUG00945	296702	6793292	0.1	202894.4	279940.7	29491.6	85380.5	11387.3	1134.7	6396.9	863.3	4430.1	813.3	2309.9	262.7	1856.1	272.9	26.5	1334.1
AUG01451	297023	6793791	0.1	1817840.0	2565147.0	341727.6	997272.0	150748.0	16210.6	74342.7	8816.7	37529.8	6162.8	15666.0	1598.9	10111.7	1421.4	189.2	1329.7
AUG02608	298735	6791773	0.100	120798.4	174523.7	19192.9	55054.1	7502.6	949.5	4379.9	541.0	2651.2	435.3	1200.7	159.9	945.1	136.5	14.2	1326.2
AUG02613	296561	6793299	0.100	485539.2	809368.3	70452.1	204120.0	25163.3	2709.5	14522.8	1703.5	8010.9	1431.9	3807.9	445.4	2459.6	341.1	49.3	1325.1
AUG02614	296581	6793295	0.100	401097.6	633673.3	60738.6	178459.2	22032.4	2049.5	11871.8	1450.3	6863.2	1179.9	2984.5	342.6	1947.2	318.4	41.9	1292.8
AUG01020	296304	6793469	0.250	351840.0	958123.4	58632.0	158630.4	21104.7	2257.9	12217.6	1692.0	8389.7	1420.4	3750.7	411.2	2436.8	341.1	40.6	1291.7
AUG01600	299314	6794854	0.100	180611.2	220204.4	30427.8	90396.0	15190.8	1644.2	11491.4	1887.6	11706.5	2336.8	7215.5	925.1	5966.8	807.3	59.7	1291.4
23RD19	298935	6789130	0.100	43276.3	138213.4	10556.1	36391.7	5508.1	880.0	4391.4	621.5	3374.2	721.7	2241.3	274.1	1628.3	216.0	23.4	1290.4
AUG01858	300642	6791512	0.500	229868.8	379501.2	41428.6	124804.8	15770.6	1899.0	9624.2	1208.6	5841.8	1031.0	2915.9	365.5	2357.1	318.4	33.1	1289.7
AUG00769	297362	6792270	0.500	107428.5	192093.2	21533.5	64968.5	7514.2	995.8	5509.4	725.1	3500.5	687.3	1841.0	262.7	1810.5	272.9	26.0	1289.4
AUG01642	299479	6794691	0.250	50899.5	141727.3	9479.4	29160.0	5647.3	729.5	4691.1	874.8	5933.6	1191.3	3865.0	536.8	3530.0	511.7	33.9	1279.0
AUG01814	298660	6794531	0.250	191166.4	306880.6	33938.7	103109.8	14842.9	1760.0	8771.3	1266.1	6817.3	1168.4	3167.5	399.7	2607.6	352.5	30.2	1277.1
AUG01936	300738	6791194	0.100	220486.4	327964.0	34992.0	101826.7	14842.9	1806.3	9462.8	1243.1	6346.8	1111.1	2984.5	365.5	2140.8	272.9	42.7	1276.3
AUG00948	296463	6793291	0.100	274435.2	455635.7	46812.0	122472.0	16002.5	1852.6	9370.6	1174.0	6013.9	1076.8	3178.9	399.7	2471.0	375.2	36.1	1271.0

SampleID	NAT East	NAT North	Depth	La2O3 (ppb)	CeO2 (ppb)	Pr2O3 (ppb)	Nd2O3 (ppb)	Sm2O3 (ppb)	Eu2O3 (ppb)	Gd2O3 (ppb)	Tb2O3 (ppb)	Dy2O3 (ppb)	Ho2O3 (ppb)	Er2O3 (ppb)	Tm2O3 (ppb)	Yb2O3 (ppb)	Lu2O3 (ppb)	Y2O3 (ppb)	TREO (ppm)
AUG00425	297083	6791726	0.250	331902.4	414640.2	55940.3	158630.4	19017.4	2153.7	11641.3	1450.3	6817.3	1168.4	3121.8	434.0	2801.2	420.7	47.4	1269.3
23RD05	299267	6794643	0.100																1267.2
AUG00754	297464	6792193	0.500	221659.2	393556.8	40492.4	114540.5	11387.3	1030.5	6396.9	748.2	3041.4	526.9	1269.3	159.9	1081.8	147.8	18.7	1258.9
AUG00043	298059	6790712	0.100	113996.2	288139.8	18256.7	51438.2	7560.6	787.4	4126.3	552.5	2731.5	435.3	1166.4	159.9	990.7	136.5	17.9	1258.1
AUG01120	298301	6793471	0.250	197030.4	260028.6	35343.1	104276.2	14495.0	1910.5	8241.1	1070.4	5279.4	916.4	2412.8	296.9	1958.6	307.0	29.8	1256.8
AUG01237	298126	6793170	0.100	357704.0	579793.5	49386.7	164462.4	20640.9	2165.3	11030.4	1358.2	6232.0	1076.8	2813.0	296.9	1992.7	272.9	38.2	1256.3
AUG00249	298081	6791095	0.300	211104.0	293996.3	32534.3	97161.1	14958.8	1945.3	8586.9	1151.0	8653.7	962.2	2847.3	399.7	2619.0	363.9	38.4	1253.0
AUG00388	297544	6791495	0.100	193512.0	243630.4	33821.7	96461.3	12755.6	1945.3	9601.2	1243.1	6335.3	1031.0	2835.9	399.7	2482.4	352.5	44.7	1250.3
AUG02615	296603	6793295	0.100	379987.2	621960.3	60153.4	178459.2	22264.3	2142.1	11987.0	1484.8	7115.7	1237.1	3144.6	365.5	2118.0	295.6	42.8	1250.3
23RD14	298916	6789393	0.100	480848.0	573937.0	61791.8	179625.6	22264.3	4353.7	14407.5	1933.7	9755.5	1775.5	5020.0	639.6	4019.6	511.7	58.9	1243.9
AUG01839	298823	6794369	0.100	125489.6	168667.2	25161.5	78965.3	14842.9	1424.2	10292.7	1542.3	8917.6	1729.7	5168.6	639.6	4019.6	579.9	54.9	1243.7
23RD12	298916	6789393	0.100	25097.9	32093.6	4049.2	15396.5	2945.4	1459.0	4276.1	656.1	4280.9	1008.0	3053.1	411.2	2300.2	318.4	42.7	1242.3
AUG00849	295926	6793089	0.250	775220.8	1194726.0	127562.7	362750.4	43832.9	4087.4	25241.9	3199.8	15264.4	2646.1	6998.2	753.8	4486.5	636.8	108.8	1241.8
AUG01739	299301	6794614	0.100	368259.2	623131.6	73845.9	222782.4	32468.8	3612.6	20170.5	3222.8	19510.9	3711.4	11663.7	1667.5	12184.1	1853.5	128.3	1239.4
AUG01646	299400	6794693	0.500	262707.2	351390.0	46109.8	137635.2	20409.0	2304.2	14868.5	2428.6	15149.6	3138.7	10177.2	1404.8	9303.2	1455.5	133.3	1239.3
AUG00949	296439	6793294	0.100	437454.4	510686.8	69866.9	187790.4	23887.8	2790.5	14753.3	1841.6	9663.6	1775.5	5157.2	662.4	4076.5	568.6	71.0	1235.8
AUG01802	298901	6794534	0.500	688433.6	534112.8	107082.5	351086.4	64705.7	8429.5	66735.5	9979.2	64500.7	14318.8	44596.5	5367.9	33705.5	5185.2	560.0	1224.8
AUG02071	298722	6788973	0.100	211104.0	268227.7	35694.2	107308.8	14842.9	1644.2	9140.1	1128.0	5669.6	1065.3	3064.6	388.3	2539.3	386.6	35.6	1224.0
AUG01167	298865	6793313	0.250	435108.8	817567.4	74665.1	212284.8	26438.9	2257.9	14177.0	1692.0	7609.3	1248.6	3304.7	388.3	2357.1	307.0	39.6	1223.3
AUG00583	296542	6792233	0.100	2275232.0	2530008.0	403753.5	1078920.0	105059.8	10015.8	58091.0	5985.2	22724.5	3574.0	10108.5	1290.6	7765.9	1182.6	179.1	1216.7
AUG00658	295783	6792472	0.250	222832.0	350218.7	41896.7	104626.1	13335.4	1609.5	9681.8	1266.1	6817.3	996.6	3041.7	376.9	2026.9	261.5	46.4	1216.2
AUG02371	297983	6792515	0.100	170056.0	115607.3	30778.9	98677.4	17162.1	2003.2	12563.3	1864.6	10478.5	2050.4	5843.3	696.7	4031.0	636.8	73.8	1205.4
AUG01488	297673	6793958	0.100	216968.0	371302.1	40492.4	118972.8	17278.0	1574.7	10650.0	1323.7	6427.1	1134.0	3156.1	388.3	2322.9	329.8	30.6	1200.5
AUG01236	298137	6793150	0.500	202894.4	324450.1	44003.3	127137.6	17394.0	1690.5	9071.0	1185.5	5933.6	1088.2	3201.8	388.3	2949.2	409.4	35.2	1199.3
AUG00857	296084	6793089	0.500	436281.6	673497.5	78878.2	207619.2	26902.7	2917.9	14177.0	1749.5	8229.0	1397.5	4025.1	468.3	3233.9	477.6	43.4	1186.3
AUG00120	297763	6790472	0.100	165364.8	491946.0	29959.7	86313.6	11166.9	1470.5	8045.1	1139.5	6415.6	1168.4	3624.9	536.8	3199.7	454.8	46.5	1183.7
AUG01484	297683	6793793	0.100	344803.2	550511.0	52546.5	172627.2	21104.7	1875.8	11364.6	1208.6	5084.3	813.3	2035.4	228.4	1389.2	204.7	23.5	1182.9
AUG00952	296381	6793291	0.100	293200.0	552853.6	50322.9	132969.6	17046.1	1817.9	9359.1	1105.0	5267.9	916.4	2435.7	308.4	1821.9	272.9	29.8	1180.2
AUG01121	298319	6793466	0.250	377641.6	506001.6	72090.5	222782.4	31077.3	4041.1	17519.5	2279.0	11477.0	1970.3	5065.7	616.7	3632.5	523.1	58.7	1179.4
AUG00031	297820	6790713	0.200	132526.4	290482.4	24810.4	71383.7	10668.3	1146.3	8275.7	1070.4	5772.9	973.7	2698.7	365.5	2061.0	284.3	42.9	1175.7
AUG00592	296365	6792233	0.100	246288.0	517714.6	49854.8	136468.8	13567.3	1922.1	8540.8	1139.5	5245.0	801.9	2241.3	285.5	1776.4	238.8	35.3	1172.0
AUG01643	299468	6794693	0.100	99336.2	1014345.8	21884.6	67534.6	12639.6	1736.9	11180.2	2198.4	16182.6	3700.0	12807.2	1804.5	11728.6	1796.6	149.8	1168.8
AUG01483	297661	6793792	0.100	225177.6	326792.7	40726.4	122472.0	16234.4	1736.9	10189.0	1197.0	5876.2	1053.9	2996.0	365.5	2322.9	341.1	34.5	1165.8
AUG00578	296642	6792231	0.100	146600.0	267056.4	28321.3	74649.6	7433.0	1088.4	4852.4	621.5	2961.1	481.1	1417.9	205.6	1377.8	204.7	19.0	1165.7
AUG00186	297837	6790749	0.400	236905.6	709807.8	44822.5	125971.2	17046.1	1621.1	10569.3	1461.8	7333.8	1202.8	3247.5	445.4	2641.8	329.8	43.3	1165.2
AUG00185	297855	6790771	0.500	146600.0	501316.4	27853.1	75816.0	11201.7	1076.8	7676.3	1128.0	6174.6	1088.2	3064.6	456.8	2812.6	363.9	36.8	1163.4

SampleID	NAT East	NAT North	Depth	La2O3 (ppb)	CeO2 (ppb)	Pr2O3 (ppb)	Nd2O3 (ppb)	Sm2O3 (ppb)	Eu2O3 (ppb)	Gd2O3 (ppb)	Tb2O3 (ppb)	Dy2O3 (ppb)	Ho2O3 (ppb)	Er2O3 (ppb)	Tm2O3 (ppb)	Yb2O3 (ppb)	Lu2O3 (ppb)	Y2O3 (ppb)	TREO (ppm)
AUG01018	296262	6793471	0.250	391715.2	822252.6	70218.0	194788.8	26322.9	2929.5	16251.7	2163.9	10776.9	1855.7	4928.5	582.5	3609.7	534.4	69.1	1162.1
AUG00003	297262	6790714	1.000	324865.6	525913.7	50908.1	148132.8	18553.6	2119.0	12909.1	1553.9	7701.1	1294.4	3556.3	456.8	2516.5	341.1	52.4	1159.5
AUG00664	295902	6792472	0.500	194684.8	235431.3	38619.9	91445.8	11456.8	1459.0	7549.5	1012.9	5635.2	859.1	2893.1	388.3	2220.5	284.3	35.0	1159.0
AUG01414	296362	6793628	0.100	147772.8	317422.3	28204.2	88646.4	15190.8	1609.5	10477.1	1542.3	8401.2	1466.2	4208.1	536.8	3564.1	568.6	44.7	1155.9
AUG02522	298579	6792100	0.100	201721.6	298681.5	33587.6	93545.3	12871.6	1227.4	7146.1	909.3	4292.4	744.6	2069.7	262.7	1594.2	238.8	23.7	1153.7
AUG00853	296002	6793096	0.500	493748.8	503659.0	102752.3	279936.0	33860.3	2929.5	15675.4	1864.6	8252.0	1271.5	3407.6	399.7	2687.3	363.9	35.6	1148.5
AUG00661	295843	6792469	0.250	195857.6	258857.3	37566.6	93661.9	12755.6	2119.0	9117.1	1116.5	5899.2	882.0	2801.6	365.5	2061.0	284.3	44.6	1143.6
AUG01598	299302	6794852	0.250	435108.8	774229.3	78410.1	239112.0	34788.0	3797.9	22706.2	3280.4	18592.7	3516.7	10817.5	1404.8	9599.2	1398.6	116.6	1143.6
23RD20	301428	6791624	0.100	337766.4	668812.3	59217.2	170294.4	20293.0	2385.3	12678.6	1588.4	8091.3	1374.6	3899.3	525.4	3006.2	409.4	54.7	1143.0
AUG00939	296820	6793291	0.100	181784.0	401755.9	26565.8	79898.4	11596.0	1516.8	7664.8	1070.4	5830.3	1099.7	3327.6	388.3	2812.6	420.7	36.6	1141.6
AUG01742	299363	6794610	0.100	121971.2	152269.0	18607.8	54587.5	7769.3	1100.0	4990.8	667.6	3638.2	698.8	1978.3	251.3	1605.6	227.4	27.8	1140.6
AUG00413	297322	6791730	0.250	186475.2	569251.8	34406.8	98210.9	12407.7	1679.0	8091.3	1070.4	5279.4	962.2	2744.4	399.7	2789.8	443.5	37.2	1138.2
AUG01546	296504	6793955	1.000	71658.1	214347.9	12990.3	40357.4	5728.4	787.4	3941.9	494.9	2697.1	515.5	1669.5	171.3	1366.4	216.0	15.2	1135.9
AUG02611	296522	6793293	0.100	331902.4	504830.3	52312.4	143467.2	17278.0	1621.1	8748.2	920.8	3994.0	664.4	1738.1	205.6	1229.8	181.9	21.7	1135.6
AUG00405	297485	6791730	0.250	532451.2	879646.3	95028.4	267105.6	32584.8	3045.3	17750.0	2232.9	10053.9	1535.0	3865.0	525.4	3268.1	432.1	54.1	1135.6
AUG01382	297000	6793635	0.100	174747.2	440408.8	34055.7	103226.4	14031.2	1794.7	8137.4	1024.4	5130.2	916.4	2595.7	331.2	2026.9	295.6	26.8	1121.3
AUG00027	297742	6790711	0.100	78343.0	165153.3	14277.7	38491.2	5218.2	683.2	3550.0	483.4	2674.1	469.7	1406.5	194.2	1252.6	181.9	21.0	1120.4
AUG01456	297124	6793793	0.100	184129.6	270570.3	35109.0	104159.5	13915.2	1435.8	8229.6	1093.5	5451.6	939.3	2401.4	251.3	1605.6	204.7	29.6	1119.3
AUG00806	297501	6792430	0.250	138390.4	260028.6	27502.1	77915.5	8789.8	949.5	4771.8	598.5	2869.3	481.1	1337.9	182.7	1172.9	159.2	22.5	1112.1
AUG01682	301140	6791191	0.100	38937.0	80585.4	7454.8	24027.8	5009.5	752.6	5209.8	966.8	6679.6	1454.8	4745.5	651.0	4156.3	579.9	43.3	1105.0
AUG01800	298942	6794535	0.100	137217.6	592677.8	30778.9	94945.0	17857.8	1991.6	13139.6	2048.8	12854.2	2497.2	7901.6	1050.7	7720.4	1103.0	63.5	1104.6
AUG00341	296481	6791348	0.250	175920.0	264713.8	32300.3	90979.2	10587.1	1354.7	6028.1	748.2	3466.1	572.8	1566.6	217.0	1309.5	170.6	22.0	1104.3
AUG00655	295723	6792470	0.250	179438.4	616103.8	37566.6	88646.4	11827.9	1250.5	8552.3	1162.5	6289.4	870.6	2698.7	331.2	1867.5	250.2	39.1	1103.5
AUG00002	297244	6790710	1.000	185302.4	315079.7	30661.9	85147.2	10227.7	1181.1	6788.8	886.3	4533.4	767.5	2207.0	296.9	1673.9	216.0	32.1	1100.9
AUG00032	297839	6790712	0.500	152464.0	890188.0	27502.1	76165.9	10448.0	1134.7	7203.8	920.8	4671.1	756.0	2081.2	274.1	1617.0	216.0	27.9	1100.7
AUG00397	297724	6791494	1.000	276780.8	371302.1	41896.7	117806.4	14379.0	2084.2	9716.4	1162.5	5233.5	790.4	2058.3	274.1	1787.8	227.4	32.5	1098.9
AUG00673	296083	6792470	0.250	145427.2	380672.5	29257.5	68234.4	8824.6	1065.3	5693.8	725.1	3810.4	538.4	1715.3	228.4	1298.1	170.6	24.8	1091.3
AUG01021	296321	6793467	0.250	354185.6	654756.7	61557.8	162129.6	22612.2	2570.5	13485.4	1841.6	9170.1	1569.3	4093.7	479.7	2824.0	420.7	47.7	1090.0
AUG00268	297645	6791294	0.250	241596.8	514200.7	35460.1	103809.6	14842.9	2014.7	8552.3	1093.5	7999.5	859.1	2378.5	308.4	1844.7	250.2	36.8	1088.2
AUG01478	297561	6793793	0.100	186475.2	320936.2	36513.4	107542.1	14031.2	1540.0	7457.3	874.8	4143.2	710.2	1932.5	228.4	1343.7	204.7	20.3	1085.0
AUG00129	297582	6790473	0.100	228696.0	377158.6	36864.5	106259.0	12639.6	1459.0	8517.7	1116.5	5818.8	985.1	2847.3	399.7	2334.3	329.8	40.3	1084.8
AUG00751	297401	6792195	0.500	214622.4	365445.6	42130.8	122472.0	12639.6	1204.2	7837.7	966.8	4062.9	710.2	1738.1	217.0	1480.3	204.7	25.7	1083.2
AUG02429	297785	6792277	0.100	205240.0	308051.9	30427.8	85613.8	10343.6	1007.4	4944.7	610.0	2788.9	446.7	1143.5	125.6	751.5	102.3	14.1	1079.5
AUG01433	296667	6793799	0.100	314310.4	424010.6	52195.4	184291.2	24467.6	2501.1	14753.3	1841.6	8699.6	1454.8	3796.4	365.5	2277.4	318.4	52.8	1077.1
AUG00954	296341	6793291	0.100	655595.2	1153730.5	108720.9	319593.6	37687.0	4654.8	22245.2	2773.9	13887.2	2439.9	6575.1	822.3	4793.9	648.1	90.4	1076.3
AUG01453	297062	6793792	0.100	170056.0	315079.7	32066.2	97044.5	13103.5	1459.0	7664.8	966.8	4797.4	824.8	2218.4	239.8	1639.7	227.4	24.9	1072.0

SampleID	NAT East	NAT North	Depth	La2O3 (ppb)	CeO2 (ppb)	Pr2O3 (ppb)	Nd2O3 (ppb)	Sm2O3 (ppb)	Eu2O3 (ppb)	Gd2O3 (ppb)	Tb2O3 (ppb)	Dy2O3 (ppb)	Ho2O3 (ppb)	Er2O3 (ppb)	Tm2O3 (ppb)	Yb2O3 (ppb)	Lu2O3 (ppb)	Y2O3 (ppb)	TREO (ppm)
AUG02068	298665	6788978	0.100	204067.2	235431.3	33470.6	97627.7	13451.4	1459.0	7757.0	989.9	4785.9	824.8	2184.1	262.7	1617.0	227.4	27.2	1071.3
AUG00951	296403	6793289	0.100	307273.6	411126.3	50205.9	132969.6	17394.0	1945.3	10223.6	1254.6	6404.2	1145.5	3201.8	411.2	2482.4	375.2	37.8	1069.7
AUG02610	296504	6793294	0.100	419862.4	641872.4	65302.7	181958.4	21452.6	1910.5	9762.5	1035.9	4189.1	698.8	1795.3	217.0	1286.7	181.9	22.4	1069.1
AUG01825	298543	6794367	0.250	235732.8	204977.5	41428.6	115706.9	14958.8	1516.8	6500.7	805.7	3420.1	481.1	1097.8	114.2	694.6	91.0	12.3	1066.6
AUG02511	298808	6792088	0.100	103206.4	153440.3	17788.6	51205.0	7212.7	856.8	4564.3	541.0	2708.6	481.1	1395.1	182.7	1150.1	170.6	14.9	1059.4
AUG00426	297061	6791730	0.100	365913.6	624302.9	59334.2	169128.0	19945.1	2165.3	12332.8	1507.8	6794.4	1145.5	3087.5	411.2	2744.3	398.0	52.7	1055.5
AUG01459	297183	6793793	0.100	147772.8	196778.4	24810.4	74649.6	9984.2	1181.1	6212.5	782.7	3810.4	664.4	1783.9	182.7	1218.4	170.6	19.9	1051.9
AUG01161	298743	6793308	0.250	179438.4	353732.6	30076.7	85613.8	10888.6	1401.1	6558.3	851.7	4258.0	824.8	2527.1	342.6	2288.8	341.1	30.5	1049.1
AUG01300	298282	6792991	0.100	245115.2	384186.4	43301.1	146966.4	19713.2	2026.3	12102.3	1507.8	7276.4	1248.6	3373.3	445.4	2653.2	432.1	40.9	1048.6
AUG00036	297923	6790709	0.200	449182.4	662955.8	66473.0	197121.6	28874.0	2176.9	15214.3	1933.7	8906.2	1443.3	3933.6	513.9	3268.1	454.8	69.0	1046.1
AUG01071	297324	6793470	1.000	219313.6	364274.3	41779.7	122472.0	16350.4	1968.4	8759.8	1174.0	5566.3	939.3	2790.1	331.2	1935.8	238.8	30.5	1040.5
AUG01432	296647	6793795	0.100	189993.6	447436.5	40141.3	115590.2	15770.6	1817.9	8460.1	1139.5	5520.4	904.9	2492.8	274.1	1981.3	284.3	26.5	1035.3
AUG02432	297581	6792190	0.100	282644.8	420496.7	42598.9	115240.3	13219.4	1366.3	6708.1	771.2	3466.1	572.8	1486.6	171.3	1059.0	147.8	19.0	1032.0
AUG00122	297727	6790468	0.100	213449.6	452121.8	36864.5	103343.0	12175.8	1389.5	7365.1	943.8	4682.6	767.5	2149.8	296.9	1685.3	216.0	27.6	1032.0
AUG01943	300601	6791194	0.500	114113.4	221375.7	19192.9	57037.0	8453.5	1053.7	5244.3	690.6	3569.3	641.5	1841.0	239.8	1525.9	204.7	22.1	1031.3
AUG00403	297525	6791733	0.250	100860.8	243630.4	16618.3	44906.4	6053.1	764.2	3895.8	541.0	2811.9	481.1	1349.3	194.2	1275.3	170.6	14.6	1015.4
AUG00424	297105	6791732	0.250	179438.4	254172.1	32651.4	88063.2	10853.9	1250.5	6777.3	851.7	4097.3	710.2	1932.5	262.7	1753.6	261.5	28.6	1010.2
AUG00005	297304	6790714	1.000	189993.6	242459.1	31949.2	89579.5	10448.0	1123.2	6662.0	851.7	4154.7	687.3	1852.5	239.8	1355.1	181.9	28.7	1009.2
AUG00612	295963	6792229	0.100	433936.0	701608.7	89176.9	225115.2	25743.1	2281.1	13024.4	1576.9	7150.2	1145.5	3098.9	411.2	2505.1	352.5	52.3	1008.8
AUG00595	296307	6792236	0.100	266225.6	411126.3	45407.6	130636.8	12871.6	1991.6	8736.7	1116.5	5118.7	801.9	2229.8	285.5	1696.7	250.2	38.2	1006.9
AUG00800	297618	6792432	0.250	262707.2	436894.9	52078.4	150465.6	16350.4	1841.1	8575.3	1093.5	5267.9	847.7	2344.2	319.8	2072.4	295.6	40.3	1005.4

## JORC Code, 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Auger soil sampling is a reconnaissance stage technique and offers only an indication of the tenor of underlying mineralisation.</li> <li>Auger soil samples were taken from drilled spoil, scooped by hand from the top of the spoil pile to represent end of hole material.</li> <li>Samples were sieved to 2mm and 1-2kg of material was collected in numbered calico bags.</li> <li>Sample preparation and laboratory analysis was undertaken at LabWest Minerals Analysis Pty Ltd, Perth, Western Australia.</li> <li>Samples were dried, crushed (~2mm) and rotary divided where required. Pulverisation to 85% passing 75 microns is undertaken by LM1 mill, and bowls are barren-washed after each sample.</li> <li>For gold analysis (WAR-25); A 25g portion of pulverised sample is analysed for gold content using aqua-regia digestion, with determination by ICP-MS to achieve high recovery and low detection limits (0.5ppb).</li> <li>For 64 element geochemical analysis (MMA-04); the MMA technique is a microwave-assisted, HF-based digestion that effectively offers total recovery for all but the most refractory of minerals. A portion of sample is digested in an HF-based acid mixture under high pressure and temperature in microwave apparatus for analysis, with determination of 64 elements including Rare-Earths by a combination of ICP-MS and ICP-OES.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>Auger holes were drilled vertically down to a maximum depth of 1m with the average hole depth of approx. 0.5m</li> <li>Auger diameter was 300 mm.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>Whether a relationship exists between sample recovery and grade</i></li> </ul>	<ul style="list-style-type: none"> <li>Auger sample recoveries are considered to be 100%.</li> <li>Some sample bias may have occurred during augering through sandy soils, in which material may have fallen into the hole and diluted the end of hole sample.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	
Logging	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were qualitatively logged with colour, and lithology of end of hole material.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>All company samples submitted for analysis underwent drying and were pulverized to 85 % passing 75 microns each, from which a 0.25 g charge was taken for four-acid digest and ICP analysis.</li> <li>This sample preparation technique is considered appropriate for the type and tenor of mineralisation.</li> <li>The laboratory inserted certified reference material and blanks into the analytical sequence and analysed lab duplicates. These appear to confirm accuracy and precision of the sample assays.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>Assaying was completed by Labwest Minerals Analysis Pty Ltd, 10 Hod Way, Malaga WA 6090.</li> <li>For gold analysis (WAR-25); A 25g portion of pulverised sample is analysed for gold content using aqua-regia digestion, with determination by ICP-MS to achieve high recovery and low detection limits (0.5ppb).</li> <li>For 64 element geochemical analysis (MMA-04); the MMA technique is a microwave-assisted, HF-based digestion that effectively offers total recovery for all but the most refractory of minerals. A portion of sample is digested in an HF-based acid mixture under high pressure and temperature in microwave apparatus for analysis, with determination of 64 elements including Rare-Earths by a combination of ICP-MS and ICP-OES from the historical reports.</li> </ul>
Verification of sampling	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent</i></li> </ul>	<ul style="list-style-type: none"> <li>This release refers to 2,439 results of a recently completed auger program.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>and assaying</i>	<p><i>or alternative company personnel.</i></p> <ul style="list-style-type: none"> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Data was recorded digitally and in hard copy by on-site Company field staff.</li> <li>• All field data is directly recorded in hard copy, then sent electronically to the Chief Technical Officer in the office. Assay files are received electronically from the Laboratory. All data is stored in an Access database system, and maintained by the Database Manager</li> <li>• All results have been collated and checked by the Company's Chief Technical Officer.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The coordinate system used is MGA_94 Zone 51.</li> <li>• A handheld GPS was used to record the position of the auger holes. Horizontal accuracy was +/- 3 metres.</li> <li>• Location accuracy at collars is considered adequate for this stage of exploration.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Company auger hole spacing was approximately 20 metres along 500 metre-spaced lines.</li> <li>• The spacing is appropriate for this stage of exploration.</li> <li>• The samples are not appropriate for Mineral Resource estimation.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Known REE-bearing dykes strike NW. Further work is required to understand the geometries of dyke-bearing structures.</li> <li>• Sampling was completed on east-west oriented lines, roughly sub-perpendicular to the orientation of known REE-bearing dykes</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Company samples were kept by the company representatives and submitted directly to the laboratory.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No audits or reviews beyond consultant geologists have been conducted on the exploration data.</li> </ul>