ASX ANNOUNCEMENT

9 March 2026

NIOBIUM DISCOVERY CONFIRMED AT MPYUPYU TARGET

KEY POINTS

- **Results reported within the Company's REE exploration program and diamond drilling at holes MPYDD006 and MPYDD002 at the Mpyupyu Target, results from holes 003,004,005 and 007 expected in the coming weeks.**
- **Globally significant Niobium intercepts reported from hole MPYDD006 prompting an additional drill program for exploration around the Mpyupyu target.**
- **Headline Niobium intercept of 0.31% Nb_2O_5 over 126m (from 125m downhole, MPYDD006) hosted in an alkaline quartz-syenite intrusive body. Mineralisation remains open at depth, with step-out drilling planned to test continuity.**
- **Assays expected for MPYDD003,4,5 and MPYDD007, proximal (180m West) to MPYDD006 (Figures,1 and 2).**
- **Niobium mineralisation in hole MPYDD006 is supported by associated tantalum (Ta) and gallium (Ga), consistent with an evolved alkaline system. TREO also elevated throughout drillhole.**
- **Drill program as outlined in figure 1 to test lateral and vertical extent of mineralisation.**
- **Exploration assay methodology to be revised to target Niobium and better assess full Niobium content, all samples from MPYDD006 to be re-assayed.**

OVERVIEW

Chilwa Minerals Limited (ASX: CHW) ("**Chilwa**" or "the "**Company**") is pleased to announce the discovery of Niobium mineralisation following receipt of further ICP-MS assay results from diamond drilling conducted in the south of the Mpyupyu Target. This complements the significant TREO mineralisation reported from drilling at MPYDD001 late last year (see announcement dated 20 October 2025). Drilling in the area has progressed to the southern sector of two adjacent thorium anomalies south of Mpyupyu Hill with hole MPYDD006 the first hole for which ICP-MS results have become available.

The identification of Niobium as a **high-value critical metal** adds a separate dimension to Chilwa's project overall, alongside defined Heavy Mineral Sands (HMS) resources and the potential REE and Ionic Clay Rare

Earth Element (REE) portfolio and further reinforces the Lake Chilwa basin as a potentially **globally significant, multi-commodity critical minerals system**.

Importantly, the nature and consistency of Nb_2O_5 grades in MPYDD006 confirm the presence of a niobium-enriched intrusive phase over 120m (downhole thickness) in extent. Key intervals (at **Nb_2O_5** >0.2%) from MPYDD006 include;

- **0.31% Nb_2O_5** (1,661ppm TREO, 174ppm Ta, 55ppm Ga) **over 126.1m** from 125m downhole
- **0.38% Nb_2O_5** (1,654ppm TREO, 225ppm Ta, 61ppm Ga) **over 62m** from 138m downhole.
  - Including **0.45% Nb205 over 10m (**2,365ppm TREO, 317 ppm Ta, 64 ppm Ga) from 190m downhole.
- **0.57% Nb_2O_5** (2,270ppm TREO, 320.4ppm Ta, 56.7ppm Ga) **over 1.55m** from 129m downhole.
- **0.51% Nb_2O_5** (2,438ppm TREO, 361ppm Ta, 65ppm Ga) over 1m from 195m downhole.
- **0.41% Nb_2O_5 (**1,405ppm TREO**,** 218ppm Ta, 62ppm Ga) over 12m from 155m downhole.

TREO remains present and elevated throughout the drillhole (not strata-bound) but is now subordinate to the Niobium identified in a specific alkaline syenite intrusive phase in the south of the Mpyupyu system. TREO grades recovered include;

- 2,670ppm TREO over 5.6m from 98m downhole (0.17% Nb_2O_5, 88.7ppm Ta, 57.32ppm Ga).
- Peak TREO grades of **3,682ppm** over 1m from 98m downhole.

Hole MPYDD002 intercepted predominantly sediments, and the hole was terminated at 108m without notable Niobium or TREO intervals. Results are tabled in Appendix 1, Table 1 below.

To date, niobium assays have been generated using lithium borate fusion digestion. While this is a widely accepted multi-element technique, it is not always optimal for fully digesting refractory Nb-bearing minerals, particularly in alkaline intrusive systems where niobium may reside in resistant oxide phases. As part of our technical review and in alignment with assay methodologies commonly adopted by other niobium projects (e.g. WA1's, Lumi Niobium Project), the Company will transition to sodium peroxide fusion digestion for future Nb-focused assaying. Using this technique will typically result in an improved overall grade reported when compared to using lithium borate.

Chilwa Minerals' Managing Director, Cadell Buss, commented:

This discovery is another significant milestone in the evolution of the company and validates that the company's tenements are on a 'mineralised system' hosting multiple critical minerals. My congratulations to the team on the ground for this achievement, we have essentially started with a conceptual target about 6 months ago, and are now moving through systematic follow up drilling, albeit for Niobium, rather than REE.

While earlier drilling (MPYDD001) confirmed the presence of an alkaline intrusive system with abundant TREO (Rare Earth Oxides), MPYDD006 demonstrates a coherent zone of niobium mineralisation with meaningful grade continuity over substantial downhole widths. This is now a very different proposition, and we have taken the decision to fund additional drilling of this exciting development in order to identify the extent of mineralisation and focus on the definition of a Niobium resource.

Importantly, given this drilling has indicated mineralisation at depth a picture is unfolding, from what was a broad geochemical outline, to a specific mineralised intrusive domain.

The Company's immediate priority is to convert this discovery into a resource with systematic step-out drilling, supported by ongoing logging and modelling to constrain true widths and continuity.

The Company will continue to explore for Carbonatite and alkaline intrusive hosted REE. The second diamond rig is currently working on geophysics and soil geochemistry anomalies in the Phalombe area. Our initial (first) Diamond rig will remain focussed on the Niobium prospect identified in MPYDD006.

This result is also significant for the developed (Indicated category) mineral sands deposits occurring in the Mpyupyu area, which are in proximity (several kilometres) to the discovery hole. There are potential synergies for infrastructural components of any future mine development.

The Company is also running an Ionic Clay program (announced in February 2026) and this new development highlights the evolution of discovery from an underdeveloped Mineral Sands project to a true multi-commodity critical minerals asset.

Mpyupyu Niobium and Rare Earth Target Diamond Drilling

Drilling has been ongoing at the Mpyupyu Target since August last year with a total of 8 drill holes now drilled over two distinct geophysical anomalies (thorium, uranium) with support from soil geochemistry values. A pyrochlore bearing riebeckite-aegerine-syenite ring-dyke feature was mapped in the area in 1960 (Ref: Garson, 1960) and partially outcrops in an area broadly coincident with the southern of the two anomalies (**Figure 1**).

Drilling at MPYYDD001[1] (350m north of MPYDD006) intercepted elevated TREO grades (**48.5m @1,567ppm TREO from 73.2m, 33m@ 1,545ppm TREO from 132.9m**) with moderate Niobium enrichment. The southern most of the two anomalies may represent a separate intrusive event or plug, or a higher-grade Niobium enriched phase within the overall Mpyupyu alkaline-syenite intrusive system.

Figure 1 below demonstrates the proposed work programme to be undertaken in the coming months to establish continuity, true widths, and variability in the potential Niobium resource. Work in understanding the nature of the mineralisation and host mineral phases is also planned on selected high-grade niobium composites.

[1] See announcement dated 20 October 2025.

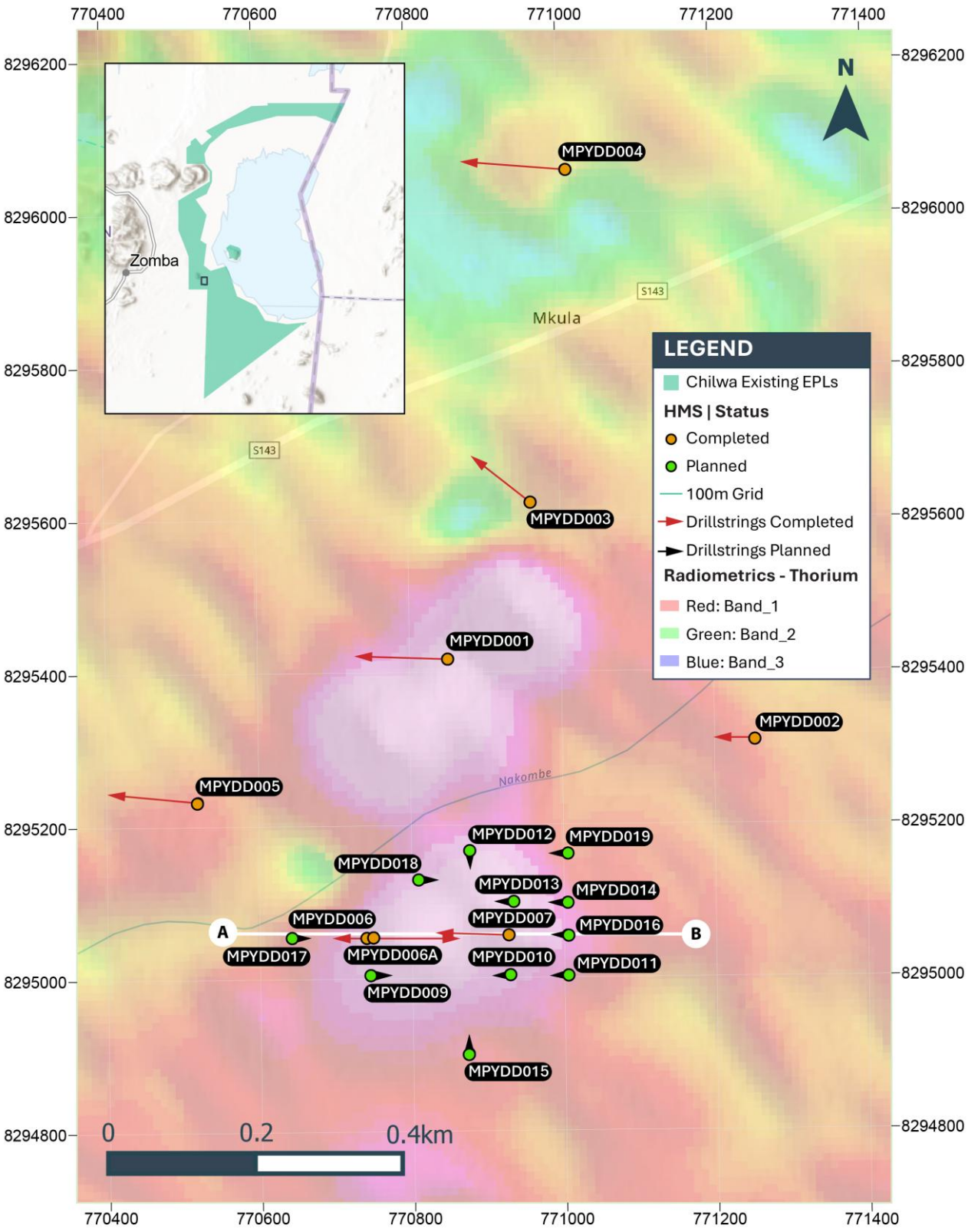

Figure 1 Completed and proposed drilling at the Mpyupyu Niobium & REE target. Results for MPYDD006 and MPYDD002 are reported in this announcement, Holes 003,004,005 and 007 are expected in the coming weeks. Planned drilling locations are shown with their indicated azimuth. Holes 012 and 015 are planned to a depth of 300+m testing the mineralisation which is currently open at depth.

What these results mean for Chilwa Minerals.

- *Niobium is a strategic metal with established end-use demand in high-strength low-alloy steels and increasingly in specialty applications tied to energy transition and advanced manufacturing. Like REE the market is also characterised by a relatively concentrated supply chain. The clear association with pathfinder elements such as tantalum and gallium is consistent with evolved alkaline systems that host globally recognised niobium deposits.*
- *Niobium deposits and Niobium rich regions/ domains within REE deposits are not uncommon globally as the metals can become concentrated concurrently during advanced magmatic differentiation. This co-enrichment is observed in globally recognised alkaline-hosted deposits such as **Panda Hill in Tanzania** and **Araxá in Brazil**, where niobium mineralisation occurs alongside elevated rare earth element concentrations within evolved intrusive complexes.*
- *The Company will continue to explore for Carbonatite hosted REE, with its second diamond rig currently working in the Phalombe area.*
    - *Understanding the scale of potential Niobium mineralisation at the Mpyupyu Target is now a priority, with the possibility of additional or associated REE mineralisation.*
    - *Further, the mineralisation is located within several kilometres of identified Indicated category Heavy Mineral Sands deposits at Mpyupyu, with clear benefits for potential future mining infrastructure and transport corridors.*

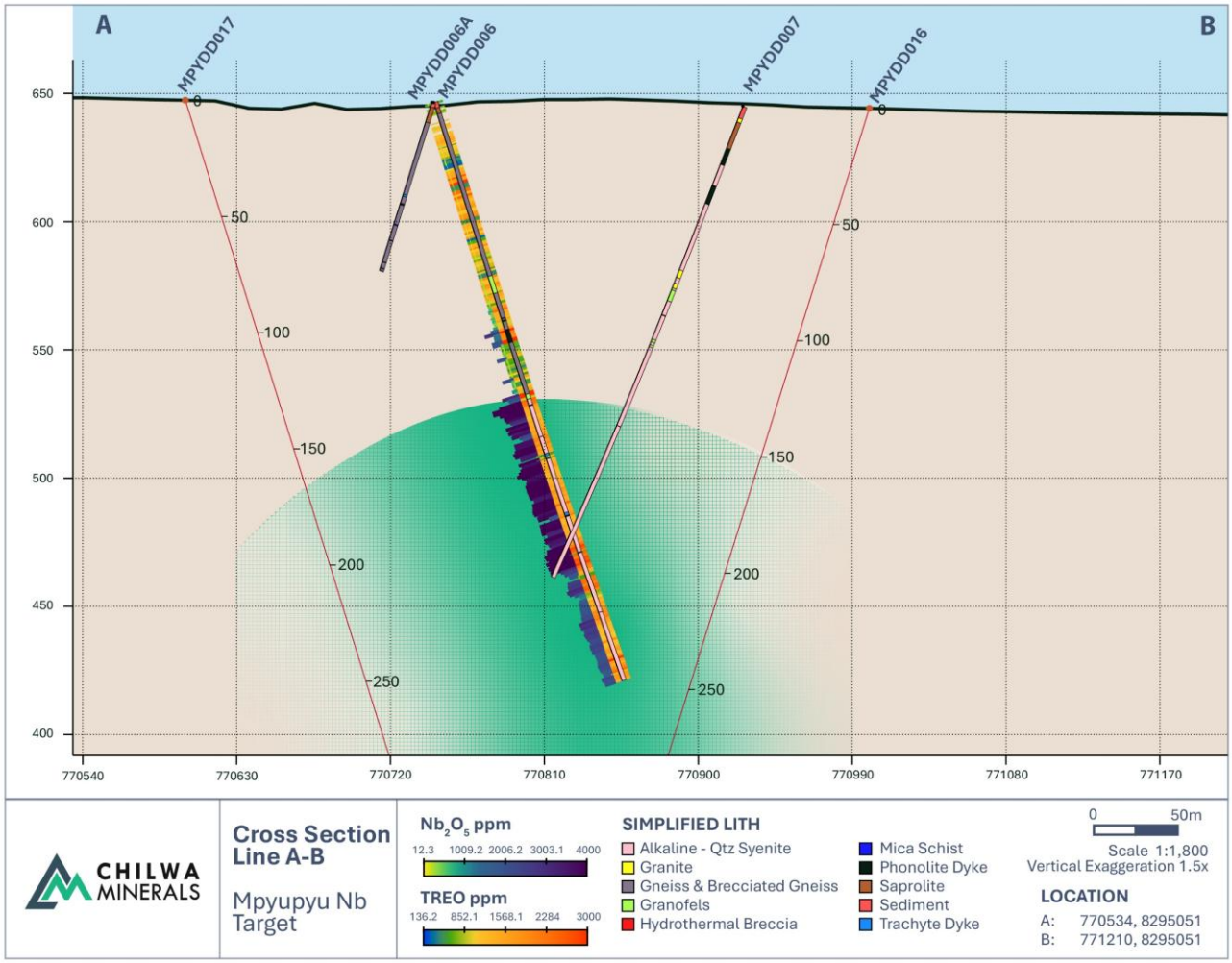

Figure 2 Sections line A-B (see figure 1) through MPYDD006 and MPYDD0007 (assays pending) with planned drill holes MPYDD016 &17 designed as step out holes around the target and to test vertical extent dimensions. Drill hole MPYDD007 passes within 10m of the drill string of MPYDD006 at a downhole depth of 190m. Green shading represents a potential Niobium enriched intrusive phase with associated TREO enrichment which remains open at depth.

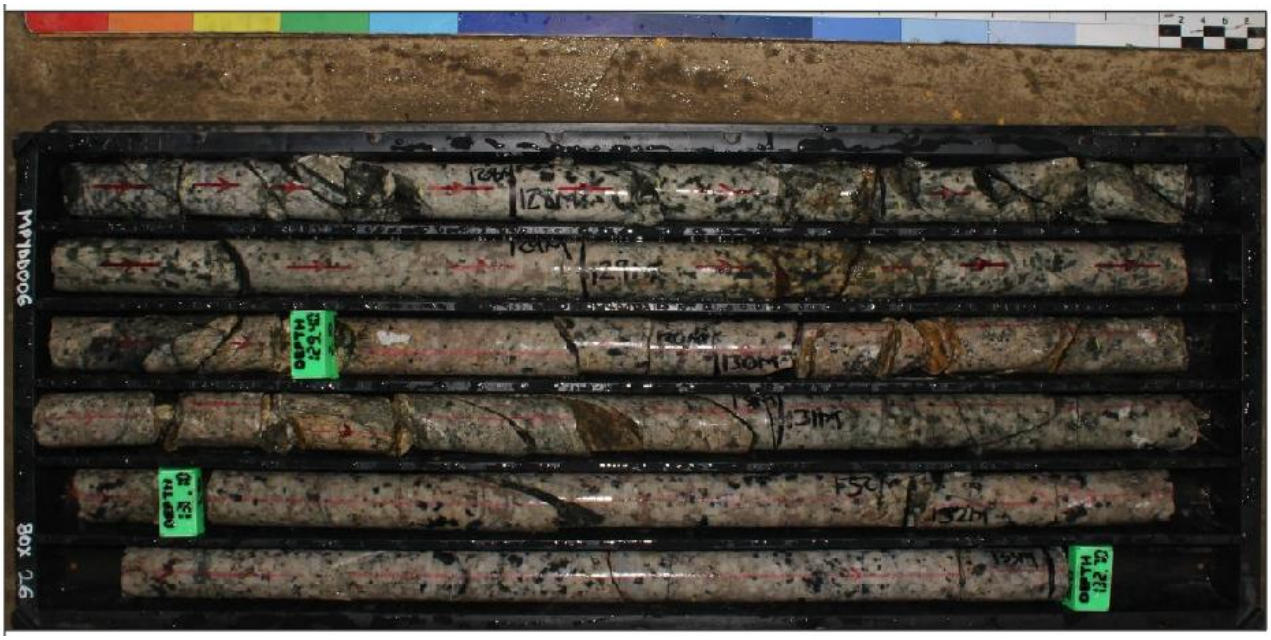

Figure 3 MPYDD006 Core box 26, 127m to 132m downhole.

Figure 3 displays fractured and locally brecciated **alkaline quartz syenite** series rocks intersected at the top of the Niobium mineralised interval. Assays from this interval e.g. 129m to 130.5m downhole returned **Nb_2O_5 grades up to ~0.57%**, with associated **TREO values at 2,270 ppm**, supporting the interpretation of an evolved alkaline intrusive system. Niobium and rare earth element mineralisation occurs within altered alkaline intrusive lithologies intersected in drilling. Elevated niobium values commonly occur in association with increased TREO, consistent with high-field-strength element enrichment typical of alkaline intrusive systems. While mineral phases are visible in drill core, the specific mineral hosts of niobium and rare earth elements have not yet been confirmed, and the visual appearance of mineralised intervals varies within drill holes. Detailed mineralogical studies are underway to determine the specific host phases and their textural relationships.

FURTHER WORK PROGRAMME

- Further ICP-MS assay results are expected for MPYDD00,3,4,5&7 in the coming weeks.
- Drilling to continue around the Mpyupyu magmatic complex (Figure 1) with further drilling directed by assay results and structural interpretations.
- Sample prep and assay to continue with either complete or selective sampling as appropriate.
- Assay method to be amended to Sodium Peroxide treatment prior to ICP-MS.
- Mineralogical and metallurgical program to determine niobium and Rare Earth host phases.

-ENDS-

This Announcement has been authorised by the Managing Director.

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Competent Person Statement

The information in this report that relates to the Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Russell Birrell who is a Member of the Australian Institute of Geoscientists and a Fellow of the Association of applied Geochemists. Mr Birrell is an employee of Globex Solutions Pty Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Birrell confirms there is no potential for a conflict of interest in acting as a Competent Person and has provided his prior written consent to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr Birrell owns shares in Chilwa Minerals Limited.

Prior Exploration Results

The Company confirms that the Exploration Results previously reported on the dates mentioned in the body of the announcement continue to apply and that the Company is not aware of any new information or data that materially affects the information included in those announcements.

ABOUT CHILWA MINERALS

Chilwa Minerals Limited (ASX:CHW) is exploring the Lake Chilwa mineral system in southern Malawi.

The Lake Chilwa Critical Minerals Project hosts significant mineral sands mineralisation, with sonic drilling underway to expand and increase the quality of the existing mineral resources.

Since listing, drilling at Mposa has intersected thicker sequences with higher grades, with a high-quality assemblage of value minerals.

Rare earth mineralisation has also been identified within the clay profile, with a dedicated team recruited to assess the REE potential of the Project, which is located in an area of well-known carbonatite-hosted REE mineralisation.

References

1: M.S. Garson 1960 -The Geology of the Lake Chilwa Area, Bulletin number 12, Nyasaland protectorate, Geological Survey Department

APPENDIX 1

Table 1: ICP-MS results, Mpyupyu anomaly hole MPYDD006 (0 to 210m) and MPYDD002 (0 to 110.8m)

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD006	MPY91336	0	0.83	171.46	210.63	13.44	15.43	7.87	9	2.2	2.54	10.53	12.14	3.14	3.6	83.83	98.32	1.53	1.74	74.63	87.05	21.35	25.8	14.93	22.9	15	17.39	1.86	2.19	1.74	1.99	80.1	101.72	10.9	12.41	**624.85**	17.99	71.6	**102.42**	0.01	6.53
MPYDD006	MPY91337	2.3	2.6	119.66	146.99	16.77	19.25	10.18	11.64	2.16	2.5	10.52	12.12	3.97	4.55	61.7	72.36	1.89	2.14	62.73	73.17	17.31	20.92	10.68	16.38	14.26	16.53	2.13	2.51	2.23	2.54	96.68	122.78	13.91	15.84	**542.22**	18.53	39.89	**57.06**	0.01	3.83
MPYDD006	MPY91338	2.6	3	156.39	192.11	29.49	33.84	17.81	20.37	3.16	3.66	18.61	21.45	6.94	7.95	91.22	106.98	3.22	3.66	98.46	114.84	26.35	31.84	12.26	18.8	24.57	28.49	3.83	4.51	3.9	4.46	165.57	210.25	24.08	27.43	**830.63**	22.01	34.17	**48.88**	0.00	1.64
MPYDD006	MPY91339	3.8	5	173.35	212.94	24.45	28.06	14.34	16.4	2.5	2.9	15.16	17.48	5.73	6.56	66.53	78.02	2.41	2.74	75.03	87.51	20.23	24.45	10.45	16.02	20.39	23.64	3.22	3.79	3.1	3.54	128.97	163.78	18.79	21.4	**709.22**	20.36	22.29	**31.89**	0.00	1.17
MPYDD006	MPY91341	5	5.3	157.86	193.91	40.62	46.62	26.77	30.62	2.53	2.93	19.55	22.53	9.97	11.42	69.27	81.24	4.3	4.89	80.35	93.72	21.29	25.72	14.58	22.36	23.72	27.5	4.8	5.64	5.97	6.82	229.26	291.13	35.1	39.97	**907.02**	21.51	30.58	**43.74**	0.00	1.59
MPYDD006	MPY91342	8.3	8.67	330.52	406.01	48.46	55.62	32.94	37.66	2.39	2.77	23.56	27.15	12.12	13.89	170.77	200.28	5.8	6.6	123.96	144.59	38.96	47.07	13.68	20.98	31.19	36.17	5.65	6.64	7.59	8.67	266.33	338.21	46.48	52.92	**1405.24**	23.61	170.37	**243.71**	0.02	13.91
MPYDD006	MPY91343	9.8	11.14	318.41	391.14	33.11	38	23.2	26.53	2.17	2.52	19.3	22.24	8.28	9.49	161.28	189.15	4.97	5.65	114.89	134.01	37.29	45.05	12.79	19.62	26.79	31.06	4.13	4.86	5.57	6.36	202.06	256.59	36.3	41.33	**1223.6**	23.85	151.18	**216.26**	0.02	11.72
MPYDD006	MPY91344	11.3	12	231.19	283.99	37.62	43.18	25.42	29.07	2.27	2.63	21.06	24.28	9.23	10.57	99.74	116.98	4.92	5.59	104.16	121.49	29.92	36.15	16.73	25.65	28.32	32.84	4.65	5.47	6.03	6.89	215.63	273.83	37.28	42.45	**1061.05**	22.03	38.27	**54.75**	0.01	1.28
MPYDD006	MPY91346	13.2	15	261.45	321.16	41.67	47.82	26.44	30.24	2.55	2.96	23.45	27.03	10.05	11.51	119.84	140.55	4.84	5.5	111.71	130.3	32.93	39.79	17.02	26.1	30.87	35.8	5.27	6.2	6.08	6.94	246.72	313.31	37.62	42.84	**1188.04**	21.57	36.4	**52.07**	0.01	1.27
MPYDD006	MPY91347	15	16	326.54	401.12	47.81	54.87	30.22	34.56	2.47	2.87	25.39	29.26	11.42	13.08	170.09	199.48	5.48	6.23	126.38	147.41	39.33	47.52	15.65	24	32.79	38.03	5.82	6.84	6.88	7.86	289.47	367.59	42.07	47.91	**1428.63**	22.47	44.87	**64.19**	0.01	2.11
MPYDD006	MPY91348	16	17	379.28	465.91	52.57	60.34	35.6	40.7	2.58	2.98	27.46	31.65	12.93	14.81	191.14	224.17	6.65	7.56	140.56	163.95	44.38	53.62	14.21	21.79	36.45	42.27	6.32	7.43	8.32	9.5	326.55	414.69	51.05	58.13	**1619.5**	21.39	51.02	**72.98**	0.01	2.34
MPYDD006	MPY91349	17	18	297.22	365.11	52.02	59.71	32.8	37.51	2.8	3.24	27.94	32.2	12.61	14.44	140	164.19	5.95	6.76	131.21	153.04	38.04	45.96	13.05	20.01	36.38	42.18	6.39	7.52	7.51	8.58	306.72	389.5	46.55	53.01	**1402.96**	21.29	38.69	**55.35**	0.01	2.5
MPYDD006	MPY91351	18	18.77	194.96	239.49	44.73	51.33	27.09	30.98	2.43	2.81	22.3	25.7	10.71	12.26	85	99.69	4.03	4.59	88.89	103.68	25.5	30.8	11.59	17.78	27.29	31.65	5.46	6.42	5.8	6.63	284.91	361.81	33.3	37.92	**1063.55**	21.97	146.65	**209.78**	0.02	15.25
MPYDD006	MPY91352	18.77	19.03	78.09	95.92	9.15	10.5	4.69	5.36	2	2.32	7.56	8.71	1.99	2.28	33.4	39.17	0.72	0.82	42.44	49.5	11.08	13.39	29.1	44.63	10.43	12.09	1.33	1.57	0.96	1.1	50.23	63.79	5.44	6.19	**357.33**	21.8	15.73	**22.50**	0.00	1.25
MPYDD006	MPY91353	19.03	21	207.76	255.22	41.38	47.49	26.4	30.19	2.51	2.9	22.73	26.2	9.97	11.42	90.4	106.02	4.4	5	99.38	115.92	27.89	33.69	13.34	20.46	29.7	34.44	5.2	6.12	5.94	6.79	241.14	306.23	35.57	40.51	**1048.6**	20.99	39.26	**56.16**	0.01	1.92
MPYDD006	MPY91354	21	22	208.57	256.21	33.19	38.1	20.47	23.41	2.42	2.8	19.82	22.85	7.78	8.92	94.28	110.57	4.1	4.67	93.87	109.5	27.1	32.75	12.12	18.59	26.44	30.66	4.34	5.11	4.69	5.36	189.14	240.19	29.65	33.76	**943.43**	21.71	33.91	**48.51**	0.00	1.26
MPYDD006	MPY91355	22	23	224.7	276.02	44.04	50.54	27.88	31.89	2.4	2.78	25.27	29.13	10.44	11.96	96.15	112.77	5.65	6.43	111.86	130.48	30.89	37.33	16.49	25.3	33.67	39.04	5.66	6.65	6.59	7.52	240.07	304.86	41.49	47.24	**1119.94**	21.57	52.42	**74.99**	0.01	5.75
MPYDD006	MPY91356	23	24	173.47	213.1	21.59	24.77	12.62	14.43	2.37	2.74	15.08	17.39	4.88	5.59	78.22	91.73	2.37	2.69	83.73	97.66	23.09	27.89	14.97	22.97	21.37	24.78	2.95	3.47	2.83	3.24	117.08	148.69	17.7	20.16	**721.29**	20.84	28.97	**41.44**	0.00	1.7
MPYDD006	MPY91357	24	24.5	62.13	76.33	4.12	4.72	1.91	2.19	2.35	2.72	4.87	5.62	0.86	0.98	32.36	37.96	0.3	0.34	33.48	39.05	8.74	10.55	9.53	14.62	7.16	8.31	0.65	0.77	0.35	0.4	22.77	28.91	1.93	2.2	**235.67**	19.47	8.63	**12.35**	0.00	2.01
MPYDD006	MPY91358	24.5	26	142.27	174.76	7.03	8.07	4.06	4.64	1.97	2.28	6.58	7.58	1.51	1.73	77.13	90.46	0.88	1	52.45	61.18	16.61	20.07	14.91	22.88	10.21	11.84	0.97	1.14	0.93	1.06	39.79	50.53	5.53	6.29	**465.53**	19.87	151.13	**216.19**	0.02	11.4
MPYDD006	MPY91359	26	27	83.25	102.26	5.24	6.02	3.13	3.58	2.08	2.41	4.57	5.26	1.19	1.36	46.75	54.83	0.67	0.76	33.36	38.91	10.19	12.31	11.85	18.18	6.78	7.86	0.71	0.83	0.72	0.83	33.4	42.42	4.35	4.95	**302.78**	16.58	39.01	**55.80**	0.01	3.24
MPYDD006	MPY91361	27	28	67.91	83.42	4.72	5.41	2.43	2.78	2.38	2.76	5.23	6.03	1.04	1.19	36.1	42.33	0.42	0.48	35.44	41.34	9.03	10.91	13.14	20.16	7.11	8.25	0.77	0.91	0.48	0.55	30.66	38.93	2.71	3.09	**268.55**	17.99	11.06	**15.82**	0.00	1.21
MPYDD006	MPY91362	28	29	181.56	223.03	42.31	48.56	22.57	25.8	2.49	2.89	24.11	27.79	9.74	11.15	81.88	96.02	2.64	3	89.03	103.85	24.08	29.09	16.49	25.29	27.34	31.7	5.68	6.69	4.44	5.08	259.13	329.06	21.69	24.7	**993.71**	22.83	35.22	**50.38**	0.01	1.79
MPYDD006	MPY91363	29	30	256.79	315.44	57.19	65.63	40.17	45.94	2.72	3.15	32.43	37.38	14.56	16.68	109.92	128.92	8.28	9.42	127.94	149.22	35.12	42.43	14.9	22.86	37.86	43.9	7.41	8.71	9.72	11.1	338.21	429.5	59.91	68.22	**1398.51**	22.54	53.88	**77.08**	0.01	2.18
MPYDD006	MPY91364	30	31	377.2	463.35	44.48	51.05	26.86	30.72	2.85	3.3	30.99	35.72	10.52	12.05	182.54	214.08	4.91	5.58	159.91	186.51	47.31	57.17	11.68	17.92	39.36	45.64	6.19	7.28	6.11	6.97	269.89	342.74	35.29	40.18	**1520.25**	22.43	52.83	**75.57**	0.01	5.04
MPYDD006	MPY91366	31	32	482.57	592.79	28.46	32.66	17.75	20.29	2.5	2.89	22.96	26.46	6.8	7.79	265.08	310.89	3.47	3.95	158.68	185.09	53.44	64.56	10.47	16.06	31.09	36.06	4.14	4.87	3.89	4.45	198.41	251.96	23.35	26.59	**1587.36**	22.28	47.3	**67.66**	0.01	1.94
MPYDD006	MPY91367	32	32.5	729.71	896.38	89.2	102.38	56.09	64.14	3.31	3.83	60.71	69.98	21.44	24.56	311.6	365.44	10.95	12.45	260.46	303.8	84.94	102.63	13.08	20.06	77.28	89.62	12.47	14.66	13.02	14.87	500.36	635.41	77.13	87.83	**2808.03**	22.2	111.6	**159.64**	0.02	1.37
MPYDD006	MPY91368	32.5	34.1	525.46	645.47	23.46	26.92	14.62	16.72	2.23	2.58	19.7	22.71	5.61	6.43	328.85	385.68	2.8	3.18	152.35	177.7	53.34	64.45	20.84	31.97	26.37	30.58	3.42	4.03	3.26	3.73	159.15	202.11	19.11	21.76	**1646.01**	22.52	36.39	**52.06**	0.01	1.25
MPYDD006	MPY91369	34.1	35.3	1009.25	1239.76	44.5	51.08	30.06	34.38	2.36	2.73	32.14	37.05	11.19	12.82	579.9	680.11	5.92	6.73	212.17	247.48	90.45	109.28	12.04	18.47	41.77	48.44	5.96	7.01	6.77	7.74	327.63	416.06	40.44	46.05	**2965.17**	23.96	92.76	**132.69**	0.01	1.8
MPYDD006	MPY91371	35.3	37	129.05	158.53	10.18	11.68	6.59	7.53	1.91	2.22	6.65	7.67	2.51	2.88	82.42	96.66	1.31	1.49	37.18	43.37	12.83	15.5	3.44	5.27	7.25	8.41	1.29	1.52	1.43	1.64	69.67	88.47	8.5	9.68	**462.52**	17.83	24.63	**35.23**	0.00	1.58
MPYDD006	MPY91372	37	37.5	145.79	179.09	9.91	11.37	5.9	6.75	1.58	1.83	7.31	8.42	2.41	2.77	95.04	111.46	1.08	1.23	44.25	51.62	14.85	17.94	5.73	8.78	8.35	9.69	1.35	1.59	1.25	1.42	65.79	83.55	7.33	8.35	**505.86**	18.34	11.98	**17.14**	0.00	2.09
MPYDD006	MPY91373	37.5	39	628.41	771.94	53.51	61.41	35.53	40.62	2.16	2.5	31.5	36.3	13.72	15.71	388.53	455.66	5.72	6.51	183.25	213.74	64.26	77.64	15.63	23.98	37.56	43.55	6.8	8	7.21	8.24	427.94	543.44	39.41	44.87	**2354.11**	22.64	76	**108.72**	0.01	1.89
MPYDD006	MPY91374	39	40	305.55	375.34	32.95	37.81	21.48	24.57	1.99	2.31	18.81	21.68	8.37	9.58	182.31	213.81	3.45	3.93	96.98	113.11	32.38	39.12	14.82	22.72	21.24	24.63	4.12	4.85	4.35	4.96	264.26	335.58	23.71	27	**1261.01**	20.71	54.31	**77.69**	0.01	1.82
MPYDD006	MPY91375	40	41	768.53	944.06	42.06	48.28	28.1	32.13	1.97	2.28	26.91	31.02	10.66	12.21	455.19	533.84	5.31	6.04	159.24	185.74	67.98	82.13	13.86	21.25	32.6	37.81	5.42	6.38	5.96	6.8	381.21	484.1	34.85	39.68	**2473.74**	22.89	97.88	**140.02**	0.01	1.76
MPYDD006	MPY91376	41	42	403.44	495.58	37.73	43.3	26.09	29.84	2.26	2.62	23.28	26.84	9.49	10.87	232.52	272.7	5.02	5.7	133.04	155.18	43.73	52.83	14.75	22.63	28.81	33.41	4.84	5.7	6.03	6.89	273.12	346.84	35.95	40.94	**1551.87**	22.62	52.88	**75.64**	0.01	2.5
MPYDD006	MPY91377	42	43	247.49	304.02	40.36	46.33	24.79	28.35	2.39	2.77	23.64	27.25	9.54	10.93	121.47	142.46	4.21	4.78	101.49	118.37	30.03	36.28	14.79	22.69	27.8	32.23	5.35	6.29	5.44	6.21	255.99	325.09	31.34	35.69	**1149.74**	21.5	38.84	**55.56**	0.01	1.85
MPYDD006	MPY91378	43	44	357.36	438.99	35.14	40.33	23.04	26.35	2.45	2.84	22.39	25.81	8.61	9.86	206.83	242.57	4.03	4.59	122.95	143.41	39.4	47.61	14.52	22.27	26.94	31.24	4.7	5.53	5.07	5.79	245.75	312.07	29.05	33.08	**1392.33**	21.63	37.38	**53.47**	0.01	2.45
MPYDD006	MPY91379	44	45	443.61	544.93	41.32	47.42	27.85	31.85	2.52	2.92	26.93	31.04	10.32	11.82	253.45	297.25	5.37	6.11	156.14	182.12	50.28	60.74	14.32	21.96	33.34	38.67	5.5	6.47	6.46	7.38	279.69	355.18	38.22	43.53	**1689.38**	22.68	66.16	**94.64**	0.01	2.51
MPYDD006	MPY91381	45	46	508.82	625.03	35.96	41.27	22.54	25.78	3.32	3.84	26.37	30.39	8.59	9.85	297.68	349.12	3.9	4.44	174.65	203.71	56.88	68.73	12.35	18.94	34.18	39.63	4.96	5.84	4.95	5.65	234.14	297.34	28.16	32.06	**1761.62**	20.78	49.57	**70.91**	0.01	2.51
MPYDD006	MPY91382	46	47	277.23	340.55	21.25	24.39	13.49	15.43	2.13	2.46	15.3	17.64	5.1	5.84	158.63	186.05	2.86	3.25	94.53	110.26	31.15	37.64	15.47	23.72	19.97	23.15	3.01	3.53	3.07	3.51	147.29	187.05	19.35	22.03	**1006.5**	23.96	43.74	**62.57**	0.01	2.17

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD006	MPY91383	47	47.6	328.26	403.24	26.13	29.98	17.81	20.37	2.32	2.68	17.97	20.71	6.61	7.58	187.96	220.43	3.36	3.83	111.6	130.17	36.44	44.03	13.15	20.17	23.2	26.91	3.51	4.13	4.04	4.61	177.39	225.27	23.9	27.22	**1191.33**	22.77	45.21	**64.67**	0.01	2.82
MPYDD006	MPY91384	47.6	49	454.57	558.4	51.14	58.7	32.49	37.15	2.65	3.07	31.95	36.83	12.51	14.33	250.29	293.54	5.87	6.68	165.05	192.52	52.72	63.69	13.58	20.84	39.47	45.77	6.84	8.04	7.29	8.33	325.43	413.26	42.08	47.92	**1809.08**	23.93	58.88	**84.23**	0.01	2.57
MPYDD006	MPY91386	49	49.9	537.52	660.29	45.26	51.95	30	34.31	2.4	2.78	29.78	34.33	11.21	12.84	300.16	352.03	6.04	6.86	187.21	218.36	60.97	73.66	11.66	17.89	38.99	45.21	6.06	7.13	6.83	7.8	313.5	398.11	40.99	46.67	**1970.2**	23.32	50.47	**72.20**	0.01	2.32
MPYDD006	MPY91387	49.9	51.5	102.9	126.4	14.77	16.95	9.75	11.15	2	2.31	10.01	11.54	3.7	4.24	51.56	60.47	1.97	2.24	49.36	57.57	13.51	16.33	15.9	24.39	11.87	13.76	1.98	2.33	2.2	2.51	100.5	127.63	13.3	15.14	**494.97**	21.85	36.51	**52.23**	0.01	2.98
MPYDD006	MPY91388	51.5	53	430.61	528.96	25.13	28.84	15.38	17.58	2.21	2.56	19.96	23.01	6	6.88	259.23	304.02	3.02	3.43	143.24	167.08	47.59	57.5	11.25	17.26	27.04	31.36	3.62	4.25	3.41	3.89	165.41	210.06	20.43	23.26	**1429.94**	20.92	35.16	**50.30**	0.01	2.26
MPYDD006	MPY91389	53	54	278.59	342.22	44.87	51.5	29.63	33.88	2.65	3.07	28.26	32.57	11.08	12.69	134.92	158.24	5.72	6.51	130.15	151.81	36.8	44.47	10.68	16.38	34.66	40.19	6.01	7.07	6.87	7.85	269.84	342.68	40.58	46.2	**1297.34**	21.41	47.83	**68.42**	0.01	2.07
MPYDD006	MPY91390	54	55	220.11	270.38	34.08	39.11	21.29	24.35	2.26	2.62	22.06	25.42	8.17	9.36	102.69	120.44	4.11	4.67	101.92	118.88	28.65	34.62	12.96	19.88	27.25	31.6	4.62	5.43	4.88	5.57	200.08	254.09	28.76	32.75	**999.15**	21.59	37.26	**53.30**	0.01	1.88
MPYDD006	MPY91391	55	56	441.71	542.6	61.56	70.65	42.53	48.63	2.88	3.34	38.33	44.18	15.57	17.83	219.55	257.48	8.7	9.89	186.42	217.45	55.1	66.57	12.26	18.8	46.99	54.49	8.15	9.59	10.05	11.48	368.94	468.51	60.63	69.04	**1910.53**	24.19	90.16	**128.97**	0.01	2.76
MPYDD006	MPY91392	56	57	232.59	285.71	30.62	35.14	21.17	24.2	2.29	2.66	18.82	21.69	7.77	8.9	125.34	146.99	3.99	4.54	96.75	112.85	27.95	33.77	13.65	20.94	22.4	25.98	3.97	4.67	4.87	5.57	193.15	245.28	28.5	32.45	**1011.34**	23.7	43.54	**62.28**	0.01	2.06
MPYDD006	MPY91393	57	57.9	523.75	643.38	31.38	36.01	21.79	24.92	2.1	2.43	21.53	24.82	7.95	9.11	328.45	385.21	4.3	4.89	151.67	176.91	53.86	65.07	11.97	18.36	27.62	32.03	4.17	4.91	5.07	5.79	207.33	263.29	30.23	34.42	**1731.55**	23.76	51.12	**73.13**	0.01	1.76
MPYDD006	MPY91394	57.9	59	63.22	77.65	8.18	9.38	4.39	5.02	2.38	2.76	7.3	8.41	1.88	2.15	30.73	36.05	0.79	0.9	35.41	41.3	8.72	10.54	25.73	39.46	8.36	9.69	1.22	1.43	0.88	1	48.21	61.22	5.16	5.88	**312.85**	19.44	12.2	**17.45**	0.00	1.06
MPYDD006	MPY91395	59	60.3	152.19	186.96	15.54	17.83	9.94	11.37	1.84	2.13	10.89	12.55	3.85	4.41	85.57	100.36	2.01	2.28	61.27	71.46	18.22	22.01	16.24	24.91	13.62	15.8	2.11	2.48	2.24	2.56	98.93	125.63	13.45	15.31	**618.07**	20.25	31.21	**44.65**	0.00	1.53
MPYDD006	MPY91396	60.3	62	334.23	410.57	39.11	44.88	25.44	29.09	2.47	2.86	23.08	26.6	9.82	11.25	179.36	210.36	4.56	5.18	116.71	136.13	38.3	46.27	12.88	19.76	28.63	33.2	4.89	5.75	5.39	6.16	257.78	327.35	33.82	38.51	**1353.92**	24.08	82.67	**118.26**	0.01	2.32
MPYDD006	MPY91397	62	62.55	605.35	743.61	52.72	60.5	37.03	42.34	2.47	2.86	30.57	35.23	13.6	15.57	336.19	394.28	7.39	8.4	182.68	213.08	65.94	79.67	9.93	15.23	40.18	46.59	6.48	7.63	8.26	9.43	332.43	422.15	53.16	60.54	**2157.13**	23.26	72.12	**103.17**	0.01	1.96
MPYDD006	MPY91398	62.55	63.65	308.62	379.11	21.24	24.38	12.57	14.37	2.56	2.96	16.6	19.13	5.01	5.73	179.29	210.27	2.24	2.55	105.65	123.23	34.86	42.12	18.48	28.34	22.99	26.65	2.89	3.4	2.64	3.02	130.52	165.74	16.4	18.67	**1069.67**	25.25	44.97	**64.33**	0.01	2.08
MPYDD006	MPY91399	63.65	65	429.52	527.62	22.23	25.51	13.9	15.89	2.55	2.95	17.26	19.89	5.37	6.15	273.73	321.03	2.55	2.91	125.14	145.96	44.21	53.42	16.25	24.92	23.72	27.5	2.98	3.5	2.91	3.33	138.54	175.94	18.28	20.81	**1377.33**	25.61	48.67	**69.62**	0.01	2.54
MPYDD006	MPY91401	65	66	185.85	228.3	26.19	30.06	16.61	19	2.06	2.39	15.31	17.65	6.56	7.51	105.7	123.96	3.11	3.54	70.7	82.46	22.78	27.53	13.63	20.9	18.53	21.49	3.28	3.85	3.47	3.97	184.01	233.68	22.14	25.21	**851.5**	22.72	72.46	**103.65**	0.01	2.67
MPYDD006	MPY91402	66	67	214.15	263.06	31.3	35.93	19.8	22.64	2.42	2.8	17.84	20.56	7.68	8.79	118.21	138.63	3.74	4.25	79.45	92.68	25.76	31.12	10.67	16.37	21.49	24.92	3.87	4.55	4.25	4.86	195.21	247.9	27.06	30.81	**949.87**	21.89	55.79	**79.81**	0.01	2.65
MPYDD006	MPY91403	67	68	152.22	186.99	21.84	25.07	15.59	17.82	2.33	2.7	12.14	14	5.75	6.58	88.36	103.63	3.63	4.12	56.46	65.86	17.88	21.6	10.68	16.38	14.41	16.71	2.6	3.06	3.48	3.97	155.83	197.89	24.01	27.34	**713.72**	19.92	44.42	**63.54**	0.01	2.65
MPYDD006	MPY91404	68	69	271.07	332.98	40.73	46.75	29.15	33.33	3.13	3.62	21.02	24.23	10.71	12.26	149.56	175.4	6.49	7.38	94.38	110.08	31.29	37.81	12.86	19.72	25.01	29.01	4.8	5.64	6.57	7.5	276.5	351.13	44.09	50.21	**1247.06**	22.98	74.06	**105.94**	0.01	2.5
MPYDD006	MPY91405	69	70	217.6	267.3	33.69	38.66	24.09	27.55	2.37	2.74	17.17	19.78	8.91	10.21	123.16	144.44	5.59	6.36	72.69	84.79	24.46	29.55	14.15	21.71	19.51	22.63	3.92	4.61	5.42	6.19	240.33	305.2	36.8	41.91	**1033.62**	23.47	69.21	**99.00**	0.01	1.96
MPYDD006	MPY91406	70	71	176.06	216.27	29.48	33.83	21.98	25.14	2.48	2.87	15.14	17.46	7.84	8.98	97.75	114.64	6.12	6.95	62.57	72.99	20.24	24.46	11.98	18.38	17.51	20.3	3.47	4.09	5.3	6.05	205.7	261.21	38.3	43.61	**877.22**	23.38	68.63	**98.18**	0.01	2.07
MPYDD006	MPY91407	71	71.75	388.38	477.08	40.68	46.69	28.2	32.25	2.98	3.45	22.56	26	10.47	12	224.72	263.55	7.08	8.05	119.73	139.65	41.8	50.51	13.68	20.98	27.69	32.11	4.86	5.72	6.54	7.47	297.16	377.36	45.88	52.24	**1555.11**	22.32	87.7	**125.45**	0.01	2.66
MPYDD006	MPY91408	71.75	72.4	142.25	174.74	13.19	15.14	8.3	9.49	2.39	2.77	8.77	10.11	3.25	3.72	82.97	97.31	1.61	1.83	49.28	57.47	16.36	19.76	5.17	7.93	11.43	13.26	1.7	2	1.83	2.09	86.77	110.19	11.52	13.12	**540.92**	20.59	23.2	**33.19**	0.00	1.13
MPYDD006	MPY91409	72.4	73.2	223.57	274.64	35.95	41.26	24.99	28.57	2.72	3.15	18.84	21.72	9.38	10.74	123.3	144.61	4.89	5.56	79.87	93.16	25.95	31.35	11.99	18.39	21.33	24.73	4.24	4.98	5.42	6.19	292.12	370.96	34.14	38.88	**1118.91**	21.45	74.36	**106.37**	0.01	1.89
MPYDD006	MPY91410	73.2	75	82.98	101.93	12.13	13.93	7.53	8.61	2.21	2.56	8.39	9.67	3.02	3.46	42.14	49.42	1.49	1.7	37.77	44.05	10.82	13.07	17.79	27.28	10.08	11.69	1.6	1.88	1.57	1.8	82.59	104.88	10.29	11.72	**407.65**	25.12	38.06	**54.44**	0.01	2.58
MPYDD006	MPY91411	75	76	568.85	698.77	32.82	37.67	19.33	22.1	2.78	3.22	23.33	26.89	7.83	8.97	366.86	430.26	3.16	3.59	152.06	177.36	57.2	69.1	15.77	24.19	30.54	35.42	4.33	5.09	3.8	4.34	283.14	359.56	22.99	26.17	**1932.72**	24.95	185.58	**265.47**	0.03	3.22
MPYDD006	MPY91412	76	77	298.58	366.77	25.48	29.24	14.56	16.65	2.76	3.2	18.03	20.78	6.02	6.89	177.11	207.72	2.58	2.93	96.96	113.09	32.94	39.8	17.93	27.5	22.48	26.07	3.39	3.99	2.88	3.29	200.61	254.76	18	20.5	**1143.17**	25.1	105.02	**150.23**	0.02	3.42
MPYDD006	MPY91413	77	78	281.16	345.37	27.52	31.59	16.91	19.34	2.65	3.07	17.44	20.1	6.71	7.68	158.4	185.77	3.08	3.5	89.65	104.57	30.86	37.28	14.05	21.55	21.51	24.95	3.48	4.09	3.43	3.92	222.5	282.55	21.73	24.74	**1120.07**	25.47	197.89	**283.08**	0.03	8.96
MPYDD006	MPY91414	78	79	478.05	587.24	44.18	50.71	28.36	32.43	2.56	2.97	26.71	30.79	11.03	12.63	282.17	330.92	5.32	6.05	138.71	161.79	50.32	60.8	11.49	17.63	31.79	36.86	5.56	6.54	5.84	6.67	395.32	502.02	37.25	42.41	**1888.45**	24.68	235.3	**336.60**	0.03	5.55
MPYDD006	MPY91415	79	80	431.88	530.53	38.55	44.24	25.28	28.9	2.96	3.43	24.44	28.17	9.71	11.12	255.71	299.89	5.56	6.32	134.71	157.12	46.84	56.59	11.47	17.59	30.47	35.33	4.93	5.8	5.54	6.33	304.21	386.31	37.41	42.6	**1660.28**	23.36	192.8	**275.80**	0.03	4.98
MPYDD006	MPY91416	80	81	252.6	310.29	30.01	34.44	17.04	19.49	2.25	2.61	19.39	22.34	7.16	8.21	144.58	169.57	2.88	3.28	86.3	100.66	28.72	34.7	14.61	22.42	21.67	25.13	3.89	4.57	3.29	3.75	261.87	332.55	20.43	23.27	**1117.26**	24.17	140.26	**200.64**	0.02	3.18
MPYDD006	MPY91417	81	82	234.64	288.23	29.94	34.36	16.85	19.27	2.66	3.08	19.43	22.4	7.13	8.17	128.22	150.37	2.67	3.03	87.54	102.11	27.65	33.4	14.53	22.29	22.52	26.11	3.93	4.62	3.22	3.68	257.46	326.95	19.14	21.8	**1069.86**	23.23	100.39	**143.61**	0.01	2.76
MPYDD006	MPY91418	82	82.35	146.45	179.9	19.65	22.55	10.95	12.52	3.32	3.84	15.59	17.97	4.6	5.27	71.47	83.82	1.67	1.9	74.65	87.08	20.59	24.87	4.84	7.42	19.31	22.39	2.74	3.22	2.07	2.37	124.12	157.62	12.03	13.7	**646.44**	20.62	15.91	**22.76**	0.00	0.05
MPYDD006	MPY91419	82.35	84	387.48	475.98	39.8	45.68	22.99	26.29	2.82	3.27	25.48	29.37	9.54	10.93	220.29	258.36	3.66	4.16	124.56	145.28	42.84	51.76	12.36	18.97	30.63	35.52	5.14	6.05	4.45	5.09	346.95	440.59	26.84	30.56	**1587.84**	24.68	146.28	**209.25**	0.02	3.53
MPYDD006	MPY91421	84	85	286.82	352.33	35.83	41.13	20.77	23.75	2.44	2.83	22.43	25.85	8.58	9.82	159.94	187.58	3.51	3.99	97.54	113.78	32.56	39.34	13.01	19.96	25.57	29.66	4.58	5.39	3.96	4.52	326.74	414.93	24.61	28.03	**1302.87**	25.83	244.55	**349.83**	0.03	5.24
MPYDD006	MPY91422	85	86	265.73	326.42	30.14	34.59	16.68	19.08	2.9	3.35	20.66	23.81	7.03	8.05	150.06	176	2.62	2.98	91.32	106.52	30.25	36.54	16.6	25.47	24.13	27.98	4.06	4.78	3.08	3.52	258.27	327.97	18.7	21.29	**1148.35**	23.44	124.18	**177.64**	0.02	3.19
MPYDD006	MPY91423	86	87	135.82	166.84	18.34	21.05	11.19	12.79	2.4	2.78	11.95	13.78	4.47	5.12	70.06	82.17	2.26	2.57	54.39	63.44	16.6	20.05	24.77	37.99	14.36	16.65	2.38	2.8	2.4	2.74	133.24	169.2	15.43	17.57	**637.54**	24.95	157.84	**225.79**	0.02	6.78
MPYDD006	MPY91424	87	88	342.83	421.13	44.21	50.74	26.61	30.43	2.51	2.91	26.86	30.96	10.81	12.39	181.85	213.27	4.32	4.91	116.81	136.25	39.03	47.16	13.63	20.9	31.27	36.27	5.63	6.62	5.27	6.02	387.91	492.6	32.01	36.45	**1549.02**	28.74	370.8	**530.43**	0.05	12.22
MPYDD006	MPY91426	88	89	431.76	530.37	49.79	57.14	28.8	32.93	2.71	3.14	30.83	35.54	11.97	13.71	237.31	278.32	4.36	4.96	141.63	165.2	48.14	58.16	12.57	19.27	35.65	41.33	6.41	7.54	5.43	6.2	428.93	544.7	32.26	36.73	**1835.25**	26.15	395.71	**566.06**	0.06	10.59
MPYDD006	MPY91427	89	90	478.31	587.56	72.61	83.33	41.07	46.96	2.91	3.37	43.05	49.62	17.34	19.86	249.36	292.45	6	6.82	165.67	193.24	55.26	66.76	13.58	20.83	46.63	54.07	9.16	10.77	7.76	8.87	666.14	845.93	45.94	52.31	**2342.74**	25.95	563.42	**805.97**	0.08	11.94
MPYDD006	MPY91428	90	91.95	306.48	376.48	41.3	47.4	22.93	26.22	2.56	2.97	25.69	29.61	9.77	11.19	161.95	189.93	3.56	4.05	109.67	127.92	35.91	43.39	17.6	27	29.86	34.62	5.38	6.33	4.37	5	350.46	445.04	26.04	29.65	**1406.8**	25.56	292.73	**418.75**	0.04	8.58

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD006	MPY91429	91.95	92.15	259.54	318.82	30.31	34.78	18.65	21.33	2.69	3.11	18.69	21.54	7.29	8.35	131.65	154.4	4.18	4.75	91.93	107.23	30.45	36.8	19.42	29.78	23.96	27.78	3.95	4.64	4.12	4.7	206.62	262.38	27.66	31.49	**1071.89**	31.14	459.61	**657.47**	0.07	29.65
MPYDD006	MPY91431	92.15	92.37	363.58	446.62	29.42	33.76	16.35	18.69	2.18	2.52	22.09	25.46	6.56	7.51	209.87	246.14	2.6	2.95	115	134.14	38.96	47.07	14.26	21.87	22.77	26.4	3.97	4.67	3.12	3.56	273.02	346.71	18.61	21.19	**1389.26**	27.94	611.58	**874.87**	0.09	33.69
MPYDD006	MPY91432	92.37	92.75	390.47	479.66	37.85	43.44	21.09	24.12	2.74	3.17	27.82	32.06	8.46	9.69	220.15	258.19	3.17	3.6	132.16	154.15	43.09	52.07	17.75	27.23	28.27	32.79	5.13	6.04	3.94	4.5	341.69	433.91	22.97	26.15	**1590.75**	26.76	426.08	**609.51**	0.06	21.86
MPYDD006	MPY91433	92.75	93	269.8	331.42	23.62	27.11	13.91	15.9	1.89	2.19	18.46	21.28	5.39	6.17	146.97	172.37	2.42	2.75	97.01	113.15	30.71	37.1	14.22	21.81	19.47	22.58	3.22	3.78	2.74	3.12	197.51	250.81	16.8	19.13	**1050.66**	31.81	383.2	**548.17**	0.05	28.47
MPYDD006	MPY91434	93	93.2	290.24	356.53	28.36	32.55	17.11	19.56	1.98	2.3	20.96	24.16	6.61	7.57	156.18	183.17	3.08	3.51	104.63	122.05	33.34	40.28	17.05	26.16	21.58	25.02	3.77	4.43	3.43	3.91	231.96	294.56	20.95	23.86	**1169.64**	32.45	361.58	**517.24**	0.05	26.18
MPYDD006	MPY91435	93.2	94	391.57	481.01	44.29	50.83	25.76	29.46	3.3	3.83	31.22	35.99	10.06	11.52	203.59	238.77	4.29	4.87	140.36	163.72	45.17	54.58	16.84	25.83	31.68	36.74	5.88	6.91	5.13	5.86	327.21	415.52	30.47	34.69	**1600.12**	28.48	465.17	**665.43**	0.07	30.01
MPYDD006	MPY91436	94	94.5	227.56	279.54	21.67	24.87	12.81	14.65	2.38	2.76	16.07	18.52	4.92	5.64	126.3	148.13	2.16	2.46	80.29	93.65	25.5	30.81	16.85	25.85	16.72	19.38	2.96	3.48	2.53	2.89	165.75	210.49	15.45	17.59	**900.71**	24.07	150.21	**214.88**	0.02	9.31
MPYDD006	MPY91437	94.5	96	264.04	324.34	22.32	25.61	13.42	15.35	2.18	2.53	16.44	18.95	5.06	5.8	148.77	174.48	2.44	2.77	88.84	103.62	28.73	34.72	14.96	22.95	17.65	20.46	2.92	3.44	2.75	3.14	156.18	198.34	17.07	19.43	**975.93**	29.23	293.82	**420.31**	0.04	22.12
MPYDD006	MPY91438	96	97	365.64	449.16	21.54	24.72	13.79	15.76	2.04	2.36	17.44	20.1	4.99	5.72	220.59	258.71	2.87	3.27	110.2	128.54	37.65	45.48	17.09	26.22	18.73	21.73	2.91	3.42	2.92	3.34	144.95	184.08	19.06	21.7	**1214.32**	35.61	604.07	**864.12**	0.09	49.75
MPYDD006	MPY91439	97	98	567.57	697.2	27.51	31.57	17.24	19.71	1.35	1.56	22.53	25.97	6.44	7.38	350.19	410.71	3.59	4.08	158.51	184.89	56.86	68.7	11.95	18.33	25	28.99	3.76	4.42	3.66	4.18	194.44	246.91	23.5	26.77	**1781.36**	46.47	1033.4	**1478.28**	0.15	75.68
MPYDD006	MPY91441	98	99	1321.08	1622.81	47.73	54.78	25.79	29.49	1.7	1.97	47.42	54.65	10.3	11.8	760.18	891.54	5.01	5.69	304.78	355.49	122.76	148.31	11.99	18.4	54.55	63.26	7.1	8.35	5.16	5.89	293.5	372.71	32.68	37.21	**3682.37**	61.32	1958.43	**2801.53**	0.28	145.49
MPYDD006	MPY91442	99	100.2	606.99	745.63	40.81	46.84	24.1	27.56	1.08	1.25	32.92	37.94	9.29	10.65	367.7	431.24	4.63	5.26	188.77	220.18	63.78	77.05	5.94	9.11	35.27	40.9	5.63	6.62	4.89	5.58	275.16	349.43	30.93	35.22	**2050.45**	58.69	845.81	**1209.93**	0.12	65.44
MPYDD006	MPY91443	100.2	102	585.5	719.23	38.29	43.95	20.88	23.87	1.22	1.41	32.78	37.78	8.43	9.66	348.26	408.44	3.78	4.29	182.41	212.76	62.56	75.58	6.22	9.54	34.75	40.3	5.45	6.41	4.07	4.65	263.6	334.75	25.36	28.88	**1961.5**	55.9	874.96	**1251.63**	0.13	72.1
MPYDD006	MPY91444	102	103.6	1023.12	1256.81	68.46	78.57	36.66	41.93	2.23	2.58	62.05	71.52	14.77	16.92	531.37	623.19	6.62	7.52	312.23	364.19	107.81	130.26	8.02	12.31	67.13	77.84	9.9	11.64	7.16	8.18	433.31	550.26	44.17	50.29	**3304**	55.39	1341.22	**1918.62**	0.19	89.36
MPYDD006	MPY91446	103.6	105	176.13	216.35	14.29	16.4	8.68	9.92	2.55	2.95	12.43	14.32	3.3	3.78	93.82	110.03	1.89	2.15	70.2	81.88	20.7	25.02	17.92	27.49	13.81	16.01	2.03	2.39	1.85	2.11	89.65	113.84	12.23	13.93	**658.57**	24.74	284.75	**407.33**	0.04	18.99
MPYDD006	MPY91447	105	105.8	175.79	215.94	15.9	18.25	9.9	11.32	2.72	3.15	12.02	13.85	3.66	4.19	97.06	113.84	1.93	2.19	65.65	76.57	20.23	24.45	12.68	19.45	13.37	15.51	2.12	2.5	2.07	2.36	100.37	127.46	13.1	14.92	**665.95**	22.54	180.71	**258.51**	0.03	11.73
MPYDD006	MPY91448	105.8	106.1	75.33	92.54	11.79	13.53	6.76	7.73	2.5	2.9	9.33	10.75	2.66	3.05	35.14	41.21	1.12	1.27	40.49	47.23	10.36	12.51	24.39	37.41	9.69	11.23	1.58	1.85	1.33	1.52	71.02	90.18	8.08	9.2	**384.12**	23.39	28.91	**41.36**	0.00	1.86
MPYDD006	MPY91449	106.1	106.35	110.35	135.56	18.86	21.65	13.6	15.56	1.58	1.83	8.9	10.26	4.78	5.47	59.17	69.4	2.49	2.83	36.03	42.03	12.03	14.54	5.79	8.88	8.66	10.04	2.16	2.54	3.01	3.44	140.21	178.06	18.48	21.04	**543.12**	13.11	32.14	**45.98**	0.00	1.07
MPYDD006	MPY91451	106.35	107.62	160.01	196.56	24.57	28.2	16.44	18.8	2.52	2.91	16.73	19.29	5.99	6.86	78.44	92	3.33	3.79	70.8	82.58	20	24.16	20.56	31.54	16.81	19.49	3.13	3.68	3.57	4.08	148.96	189.17	22.69	25.84	**748.95**	24.22	209.18	**299.23**	0.03	14.85
MPYDD006	MPY91452	107.62	109	273.44	335.9	14.66	16.83	9.39	10.73	2.11	2.44	13.1	15.1	3.45	3.96	160.14	187.82	2.15	2.44	86.76	101.19	29.04	35.09	14.53	22.29	14.67	17.01	2.04	2.4	2.09	2.39	103.93	131.98	13.85	15.77	**903.35**	28.14	323.86	**463.28**	0.05	23.62
MPYDD006	MPY91453	109	110	411.89	505.96	19.84	22.77	12.31	14.07	2.08	2.41	18.31	21.1	4.56	5.22	216.07	253.41	2.72	3.09	122.78	143.21	43.26	52.27	8.92	13.67	20.97	24.31	2.78	3.27	2.63	3	118.57	150.57	17.46	19.88	**1238.22**	42.11	1369.93	**1959.68**	0.20	115.93
MPYDD006	MPY91454	110	111	178.87	219.72	13.92	15.98	8.06	9.22	1.93	2.23	11.98	13.81	3.14	3.6	98.9	115.99	1.5	1.71	65.08	75.91	20.47	24.73	12.57	19.29	12.91	14.97	1.95	2.29	1.67	1.91	89.11	113.16	10.35	11.78	**646.28**	25.3	219.96	**314.65**	0.03	17.56
MPYDD006	MPY91455	111	112	164.34	201.87	14.71	16.88	8.99	10.28	2.05	2.38	11.33	13.06	3.37	3.86	91.8	107.66	1.52	1.72	60.74	70.84	18.75	22.65	9.18	14.08	12.47	14.46	1.99	2.35	1.83	2.09	96.21	122.18	11.05	12.58	**618.92**	19.35	97.08	**138.87**	0.01	10.09
MPYDD006	MPY91456	112	112.25	136.08	167.16	10.68	12.26	5.09	5.82	3.33	3.85	9.2	10.6	2.4	2.74	77.61	91.03	0.9	1.03	71.75	83.68	18.31	22.13	16.39	25.15	14.74	17.09	1.54	1.81	1.03	1.17	65.32	82.95	6.69	7.61	**536.07**	18.83	93.15	**133.25**	0.01	8.47
MPYDD006	MPY91457	112.25	112.5	150.49	184.86	5.52	6.33	2.01	2.3	3.9	4.51	8.31	9.58	1.06	1.22	82.97	97.31	0.32	0.37	85.15	99.32	21.03	25.41	18.76	28.77	15.58	18.07	1.02	1.2	0.35	0.4	27.58	35.02	2.26	2.57	**517.24**	16.82	23.56	**33.70**	0.00	1.35
MPYDD006	MPY91458	112.5	112.9	286.81	352.32	12.76	14.64	6.53	7.46	1.79	2.07	10.48	12.08	3	3.43	189.72	222.51	1.38	1.56	89.97	104.94	31.35	37.88	9.87	15.14	15.8	18.32	1.75	2.05	1.41	1.61	90.94	115.49	9.8	11.16	**922.67**	23.02	265.52	**379.83**	0.04	23.1
MPYDD006	MPY91459	112.9	114	181.92	223.47	16.79	19.27	8.35	9.55	2.47	2.86	13.12	15.12	3.81	4.37	103.96	121.92	1.49	1.7	85.44	99.66	23.26	28.1	17.94	27.51	20.14	23.36	2.39	2.82	1.75	2	107.23	136.17	11.42	13	**730.87**	20.59	119.05	**170.30**	0.02	9.12
MPYDD006	MPY91461	114	115	110.77	136.07	8.32	9.55	4.16	4.76	2.04	2.36	7	8.07	1.92	2.2	63.08	73.97	0.81	0.93	50.62	59.04	14.05	16.97	18.52	28.4	10.52	12.2	1.16	1.37	0.84	0.95	53.51	67.96	5.81	6.61	**431.42**	19.7	119.22	**170.54**	0.02	9.26
MPYDD006	MPY91462	115	116	193.19	237.31	10.57	12.13	5.3	6.06	2.95	3.42	8.67	9.99	2.48	2.84	127.64	149.69	1	1.14	74	86.31	22.31	26.96	11.89	18.24	14.22	16.49	1.46	1.72	1.13	1.29	68.22	86.64	7.64	8.7	**668.94**	19.37	179.99	**257.48**	0.03	14.1
MPYDD006	MPY91463	116	117	263.83	324.09	28.86	33.12	16.05	18.35	2.46	2.84	16.83	19.4	7.09	8.12	162.48	190.56	3.06	3.47	107.29	125.15	32.47	39.23	14.02	21.5	24.04	27.88	3.58	4.21	3.52	4.02	186.92	237.36	23.39	26.63	**1085.95**	20.12	165.38	**236.58**	0.02	12.71
MPYDD006	MPY91464	117	118	135.66	166.64	11.89	13.64	6.49	7.42	2.16	2.5	9.32	10.74	2.9	3.33	76.23	89.41	1.34	1.52	66.24	77.26	17.63	21.3	14.69	22.53	13.97	16.2	1.65	1.95	1.41	1.61	81.81	103.9	9.81	11.17	**551.11**	17.79	61.95	**88.62**	0.01	4.93
MPYDD006	MPY91613	118	119	446.6	548.6	41.37	47.48	24.74	28.29	0.98	1.13	23.96	27.62	8.77	10.04	209.8	246.05	3.53	4.01	169.49	197.69	52.64	63.6	17.73	27.2	34.87	40.43	4.75	5.58	3.95	4.51	287.72	365.37	24.15	27.5	**1645.12**	43.58	1528.63	**2186.71**	0.22	105.47
MPYDD006	MPY91466	119	120	268.19	329.45	19.92	22.86	11.98	13.7	2.45	2.84	14	16.14	5.09	5.83	158.41	185.79	2.86	3.25	103.45	120.67	31.52	38.08	22.34	34.26	21.06	24.43	2.62	3.08	2.81	3.2	143.43	182.15	20.12	22.91	**1008.63**	21.36	412.46	**590.02**	0.06	20.5
MPYDD006	MPY91467	120	121	134.88	165.69	9.56	10.98	6.13	7.01	1.88	2.18	7.79	8.98	2.46	2.82	73.05	85.67	1.83	2.08	59.59	69.5	16.74	20.23	23.43	35.94	12.07	13.99	1.33	1.56	1.51	1.73	64.8	82.29	11.79	13.43	**524.09**	19.42	251.8	**360.20**	0.04	14.29
MPYDD006	MPY91468	121	122	138.49	170.12	12.66	14.53	7.14	8.17	1.88	2.18	8.33	9.6	3.14	3.6	78.65	92.25	1.5	1.71	55.49	64.73	16.64	20.11	10.73	16.46	12.24	14.19	1.62	1.91	1.61	1.84	84.23	106.96	11.46	13.05	**541.4**	18.82	206.43	**295.30**	0.03	16.27
MPYDD006	MPY91469	122	123	319.76	392.79	19.56	22.45	10.21	11.68	2.24	2.6	14.95	17.24	4.55	5.22	206.27	241.91	1.82	2.07	118.36	138.05	36	43.49	14.59	22.38	22.48	26.06	2.63	3.1	2.13	2.44	125.67	159.59	14.17	16.14	**1107.19**	21.58	295.87	**423.24**	0.04	23.15
MPYDD006	MPY91471	123	124	408.85	502.23	25.47	29.23	15.44	17.65	2.63	3.05	18.29	21.08	6.34	7.26	251.97	295.51	4.09	4.66	143.97	167.93	46.12	55.72	23.3	35.74	27.56	31.96	3.3	3.88	3.69	4.21	172.39	218.92	27.55	31.37	**1430.41**	24.33	701.29	**1003.20**	0.10	41.86
MPYDD006	MPY91472	124	125	229.55	281.98	18.24	20.94	10.78	12.33	2.66	3.08	12.07	13.91	4.56	5.22	139.56	163.68	2.7	3.06	87.12	101.62	26.94	32.55	20.67	31.71	17.5	20.3	2.27	2.67	2.52	2.87	137.76	174.94	18.38	20.93	**891.79**	21.66	407	**582.21**	0.06	24.9
MPYDD006	MPY91473	125	125.9	1011.87	1242.98	43.81	50.28	25.02	28.61	2.37	2.75	32.5	37.46	10.72	12.28	657.33	770.92	5.43	6.17	250.56	292.25	100.37	121.27	21.37	32.78	48	55.66	5.74	6.76	5.42	6.19	303.9	385.92	38.31	43.62	**3095.89**	38.64	2255.34	**3226.26**	0.32	101.71
MPYDD006	MPY91474	125.9	127	1280.88	1573.43	22.49	25.81	11.76	13.45	0.82	0.95	25.13	28.97	5.26	6.03	1034.55	1213.32	2.64	3	235.08	274.19	109.3	132.05	15.96	24.49	35.04	40.63	3.4	4	2.42	2.77	159.74	202.86	17.62	20.07	**3566**	36.17	1549.44	**2216.47**	0.22	111.69
MPYDD006	MPY91475	127	128	299.71	368.17	9.46	10.85	7.1	8.12	0.34	0.4	8.18	9.43	2.6	2.97	169.67	198.99	2.69	3.06	87.25	101.76	31.65	38.24	30.52	46.82	12.64	14.65	1.24	1.46	1.88	2.15	65.27	82.88	15.82	18.01	**907.96**	28.55	1385.04	**1981.30**	0.20	81.22
MPYDD006	MPY91476	128	129	914.59	1123.48	24.94	28.62	14.07	16.09	0.93	1.08	24.92	28.73	6	6.87	492.22	577.27	3.64	4.14	196.94	229.71	89.59	108.24	23.11	35.45	38.32	44.44	3.62	4.26	3.18	3.63	133.39	169.39	23.35	26.59	**2408**	58.86	2950.82	**4221.15**	0.42	213.58

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD006	MPY91477	129	130.55	867.36	1065.47	22.43	25.74	17.47	19.98	0.67	0.77	18.54	21.37	6.16	7.06	420.88	493.61	6.41	7.29	148.53	173.24	79.4	95.93	65.73	100.82	26.27	30.46	2.85	3.36	4.66	5.33	138.49	175.87	38.88	44.27	**2270.56**	56.67	3963.92	**5670.39**	0.57	320.37
MPYDD006	MPY91478	130.55	130.9	697.82	857.2	12.3	14.12	11.55	13.21	0.42	0.49	11.22	12.94	3.7	4.23	326.7	383.16	5.01	5.69	99.27	115.79	62.38	75.37	59.41	91.13	17.27	20.03	1.55	1.82	3.35	3.83	83.14	105.58	30.07	34.24	**1738.83**	46.69	3445.83	**4929.26**	0.49	286.99
MPYDD006	MPY91479	130.9	132	658.96	809.47	11.15	12.8	9.86	11.28	0.36	0.42	10.89	12.55	3.26	3.74	316.05	370.66	4.21	4.79	94.39	110.09	57.69	69.7	51.77	79.4	16.57	19.21	1.46	1.72	2.89	3.31	68.62	87.13	24.95	28.41	**1624.68**	53.62	3214.84	**4598.83**	0.46	258.96
MPYDD006	MPY91481	132	133	638.61	784.46	8.22	9.43	7.45	8.52	0.23	0.26	11.27	12.99	2.18	2.5	291.9	342.34	3.22	3.66	68.56	79.96	50.91	61.51	40.85	62.65	13.7	15.89	1.26	1.48	2.13	2.43	46.53	59.09	16.85	19.18	**1466.36**	59.15	2777.08	**3972.61**	0.40	218.23
MPYDD006	MPY91482	133	134	637.07	782.58	9.37	10.75	7.92	9.06	0.22	0.26	11.54	13.31	2.48	2.84	282.31	331.1	2.78	3.16	68.98	80.46	51.22	61.88	25.63	39.31	14.05	16.29	1.38	1.62	2.12	2.42	58.19	73.9	15.64	17.81	**1446.72**	62.05	2790.19	**3991.37**	0.40	211.57
MPYDD006	MPY91483	134	135	569.19	699.2	11.34	13.02	10.08	11.52	0.22	0.25	12.04	13.88	3.1	3.55	270.47	317.2	3.84	4.36	69.45	81	46.38	56.04	43.39	66.55	13.74	15.94	1.54	1.81	2.77	3.17	72.28	91.79	20.9	23.8	**1403.09**	60.73	2637.25	**3772.59**	0.38	198.68
MPYDD006	MPY91484	135	136	475.69	584.33	7.02	8.06	7.62	8.72	0.13	0.15	8.29	9.56	2.04	2.33	221.66	259.96	4.05	4.6	52.07	60.73	38.11	46.05	65.38	100.28	9.65	11.19	0.95	1.12	2.44	2.78	41.63	52.87	20.04	22.82	**1175.55**	58.72	2198.85	**3145.45**	0.31	177.82
MPYDD006	MPY91486	136	137	475.63	584.26	15.29	17.55	13.65	15.61	0.24	0.28	12.07	13.92	4.27	4.89	230.47	270.3	4.87	5.54	61.91	72.22	39.19	47.35	48.12	73.81	13	15.07	1.91	2.24	3.66	4.18	109.26	138.74	26.92	30.65	**1296.6**	56.95	1939.79	**2774.87**	0.28	158.36
MPYDD006	MPY91487	137	138	649.1	797.36	10.5	12.05	8.05	9.21	0.25	0.29	12.68	14.62	2.63	3.01	294.13	344.96	2.69	3.06	78.99	92.14	53.29	64.39	34	52.14	15.03	17.43	1.58	1.86	2.09	2.39	65.32	82.95	14.83	16.89	**1514.73**	59.95	2963.18	**4238.83**	0.42	221.08
MPYDD006	MPY91488	138	139	577.98	710	7.75	8.9	6.05	6.92	0.18	0.21	10.56	12.18	1.9	2.17	253.72	297.56	2.38	2.7	65.14	75.98	47.76	57.7	33.55	51.46	13.11	15.2	1.2	1.41	1.66	1.89	41.17	52.28	12.43	14.15	**1310.71**	60.42	2599.63	**3718.77**	0.37	198.69
MPYDD006	MPY91489	139	140	630.36	774.34	10.21	11.72	8.51	9.73	0.23	0.27	12.39	14.28	2.59	2.97	280.79	329.31	3.7	4.21	71.65	83.57	51.4	62.1	47.16	72.34	15.12	17.53	1.52	1.78	2.44	2.79	57.87	73.49	19.02	21.65	**1482.06**	62.08	2859.58	**4090.63**	0.41	207.7
MPYDD006	MPY91490	140	141	649.07	797.32	9.94	11.4	5.76	6.58	0.33	0.39	13.65	15.73	2.21	2.53	306.37	359.31	1.4	1.6	76.69	89.45	53.85	65.06	10.43	15.99	16.83	19.51	1.67	1.97	1.28	1.46	55.48	70.46	8.32	9.47	**1468.22**	57.61	2420.91	**3463.11**	0.35	172.41
MPYDD006	MPY91491	141	142	640.48	786.76	18.59	21.33	14.48	16.56	0.39	0.45	17.11	19.72	4.88	5.59	287.76	337.48	5.1	5.8	86.54	100.95	54.07	65.33	43.25	66.34	18.87	21.88	2.55	3	3.88	4.43	121.77	154.64	28.41	32.34	**1642.61**	62.19	2593.15	**3709.50**	0.37	202.1
MPYDD006	MPY91492	142	143	508.38	624.49	23.06	26.46	18.11	20.71	0.4	0.47	18.27	21.06	6.05	6.93	246.41	288.99	6.1	6.94	74.67	87.09	44.42	53.66	49.04	75.22	18.85	21.86	2.98	3.5	4.69	5.35	158.26	200.97	34	38.71	**1482.42**	64.99	1662.77	**2378.59**	0.24	127.85
MPYDD006	MPY91493	143	144.35	614.52	754.87	21.55	24.73	15.06	17.22	0.42	0.48	21.89	25.23	5.32	6.09	339.91	398.65	5.02	5.7	97.97	114.28	53.27	64.36	38.18	58.56	22.74	26.37	3.13	3.68	3.81	4.35	136.36	173.17	27.85	31.71	**1709.47**	64.54	1383.48	**1979.07**	0.20	108.4
MPYDD006	MPY91494	144.35	144.55	880.89	1082.08	20.24	23.23	10.89	12.46	0.48	0.55	26.77	30.86	4.44	5.09	503.08	590.01	2.77	3.15	131.7	153.61	75.1	90.73	18.88	28.95	29.6	34.32	3.3	3.88	2.36	2.7	112.58	142.96	15.86	18.06	**2222.65**	64.2	2506.71	**3585.85**	0.36	207.83
MPYDD006	MPY91495	144.55	146	774.96	951.96	19.15	21.98	12.85	14.69	0.4	0.46	21.89	25.23	4.62	5.29	451.18	529.14	4.31	4.9	101.01	117.81	64.07	77.41	47.49	72.84	22.63	26.24	2.95	3.46	3.16	3.61	113.27	143.84	23.07	26.27	**2025.12**	62.94	2589.07	**3703.66**	0.37	223.86
MPYDD006	MPY91496	146	147	696.27	855.3	16.93	19.43	10.95	12.52	0.37	0.42	19.1	22.02	4.01	4.6	352.43	413.33	3.33	3.79	91.71	106.98	57.93	69.99	40.3	61.82	20.32	23.57	2.52	2.97	2.59	2.96	98.37	124.92	17.94	20.43	**1745.05**	60.86	2568.43	**3674.14**	0.37	220.33
MPYDD006	MPY91497	147	148	775	952	23.12	26.53	13.96	15.96	0.43	0.5	24.39	28.11	5.41	6.19	440.85	517.03	3.54	4.02	102.4	119.44	64.96	78.49	37.28	57.19	24.62	28.55	3.47	4.08	3.07	3.51	131.8	167.37	20.32	23.14	**2032.12**	63.42	2761.66	**3950.55**	0.40	231.01
MPYDD006	MPY91498	148	149	652.5	801.54	15.31	17.57	9.2	10.52	0.32	0.37	17.07	19.67	3.46	3.96	295.2	346.21	2.61	2.97	84.77	98.88	53.57	64.72	38.76	59.44	18.96	21.98	2.38	2.8	2.11	2.41	91.15	115.76	14.34	16.32	**1585.12**	62.96	3070.61	**4392.51**	0.44	260.21
MPYDD006	MPY91499	149	150	719.21	883.48	16.95	19.46	9.4	10.74	0.36	0.42	19.28	22.22	3.74	4.29	347.43	407.46	2.31	2.63	95.7	111.63	60.91	73.59	28.11	43.11	20.96	24.3	2.69	3.16	2.02	2.3	101.71	129.16	13.17	14.99	**1752.94**	67.77	2969.9	**4248.44**	0.42	259.57
MPYDD006	MPY91501	150	151.6	600.13	737.21	17.62	20.22	10.89	12.45	0.36	0.41	18.29	21.08	4.08	4.67	285.61	334.96	3.29	3.74	80.92	94.38	50.71	61.27	50.24	77.06	19.45	22.55	2.62	3.08	2.51	2.86	110.5	140.33	17.67	20.13	**1556.41**	63.95	2407.65	**3444.14**	0.34	200.62
MPYDD006	MPY91502	151.6	152.65	151.83	186.51	13.44	15.43	7.22	8.26	0.15	0.18	12.47	14.38	2.98	3.41	73.7	86.43	1.54	1.75	52.61	61.36	18.56	22.43	3.34	5.13	13.8	16	2.06	2.42	1.62	1.85	85.59	108.69	10.1	11.5	**545.73**	41.42	332.17	**475.17**	0.05	31.24
MPYDD006	MPY91503	152.65	153.5	580.04	712.53	10.78	12.37	8.17	9.35	0.22	0.26	12.57	14.49	2.68	3.07	258.02	302.61	3.28	3.73	69.15	80.66	48	57.99	49.55	76	14.15	16.41	1.62	1.9	2.21	2.53	69.57	88.35	17.04	19.4	**1401.64**	63.64	2834.46	**4054.70**	0.41	236.93
MPYDD006	MPY91504	153.5	153.9	169.28	207.95	14.19	16.28	8.14	9.31	0.16	0.18	12.32	14.2	3.22	3.69	82.05	96.23	1.85	2.11	53.09	61.92	19.94	24.09	8.07	12.37	13.84	16.05	2.06	2.42	1.83	2.09	91.27	115.91	11.62	13.24	**598.04**	42.64	432.28	**618.38**	0.06	40.83
MPYDD006	MPY91505	153.9	155	531.33	652.69	11.96	13.72	8.49	9.71	0.22	0.26	12.79	14.74	2.94	3.37	235.9	276.66	3.14	3.57	68.07	79.39	44.7	54.01	46.46	71.25	14.21	16.47	1.73	2.04	2.21	2.53	80.7	102.48	16.66	18.97	**1321.86**	61.93	2572.28	**3679.65**	0.37	213.71
MPYDD006	MPY91506	155	156	602.21	739.75	8.9	10.22	5.72	6.54	0.22	0.25	11.9	13.72	2.04	2.33	265.49	311.36	1.96	2.23	74.41	86.79	49.74	60.09	31.3	48.01	14.3	16.58	1.44	1.69	1.44	1.65	56.81	72.14	10.52	11.98	**1385.34**	64.17	2839.28	**4061.59**	0.41	227.16
MPYDD006	MPY91507	156	157	643.19	790.1	10.3	11.83	6.13	7.01	0.26	0.3	13.82	15.93	2.27	2.6	283.72	332.74	2.01	2.29	85.31	99.5	54.54	65.9	29.92	45.89	17.26	20.02	1.7	2	1.49	1.7	62.35	79.18	11.07	12.6	**1489.59**	62.35	3152.02	**4508.96**	0.45	230.51
MPYDD006	MPY91508	157	158	706.47	867.83	12.64	14.5	7.96	9.11	0.29	0.33	15.9	18.33	2.89	3.31	316.1	370.73	2.59	2.94	90.32	105.35	59.43	71.81	35.35	54.21	18.91	21.93	2.01	2.36	1.91	2.18	73.35	93.15	14.06	16.01	**1654.08**	63.68	3459.02	**4948.13**	0.49	260.72
MPYDD006	MPY91509	158	158.9	606.93	745.55	10.59	12.15	7.13	8.15	0.25	0.29	13.55	15.62	2.44	2.8	265.47	311.35	2.55	2.9	80.22	93.57	51.18	61.83	44.81	68.72	16.06	18.62	1.69	1.98	1.78	2.04	64.27	81.61	13.83	15.75	**1442.93**	61.5	3009.59	**4305.22**	0.43	236.58
MPYDD006	MPY91510	158.9	159.3	573.85	704.92	11.53	13.24	6.72	7.68	0.35	0.4	14.27	16.45	2.55	2.92	252.96	296.67	1.98	2.26	78.15	91.15	49.11	59.34	35.2	53.99	16.73	19.4	1.83	2.15	1.56	1.78	71.01	90.17	10.92	12.43	**1374.94**	62.23	2823.11	**4038.46**	0.40	216.3
MPYDD006	MPY91511	159.3	161	523.89	643.55	10.55	12.11	6.97	7.97	0.24	0.28	11.54	13.3	2.48	2.84	235.03	275.64	2.31	2.62	61.63	71.88	43.13	52.11	40.27	61.77	13.47	15.62	1.59	1.88	1.69	1.93	65.22	82.82	12.21	13.91	**1260.23**	61.04	2530.9	**3620.45**	0.36	187.68
MPYDD006	MPY91512	161	162	540.81	664.33	9.01	10.34	6.47	7.4	0.2	0.23	11.47	13.22	2.18	2.5	240.03	281.51	2.48	2.82	67.42	78.64	44.87	54.21	41.04	62.95	13.48	15.63	1.43	1.68	1.69	1.93	54.32	68.98	13.07	14.89	**1281.25**	62.22	2686.93	**3843.65**	0.38	214.45
MPYDD006	MPY91513	162	163	571.9	702.52	7.71	8.84	5.55	6.35	0.2	0.24	11.84	13.64	1.81	2.07	253.69	297.52	2.4	2.73	69.79	81.4	47.29	57.14	40.82	62.61	14.28	16.56	1.34	1.58	1.52	1.74	41.13	52.23	12.07	13.74	**1320.92**	62.6	2889.26	**4133.09**	0.41	217.27
MPYDD006	MPY91514	163	164	559.5	687.29	9.4	10.78	7.48	8.55	0.21	0.25	12.3	14.18	2.38	2.73	254.22	298.15	3.38	3.85	74.17	86.51	47.68	57.61	49.59	76.06	14.46	16.77	1.5	1.76	2.09	2.38	52.46	66.62	16.8	19.13	**1352.63**	62.89	2861.33	**4093.13**	0.41	210.65
MPYDD006	MPY91515	164	165	610.84	750.35	10.89	12.5	7.17	8.19	0.25	0.29	13.51	15.57	2.57	2.94	271.51	318.42	2.45	2.79	76.05	88.71	50.89	61.49	31.16	47.8	16.05	18.61	1.73	2.03	1.79	2.04	61.49	78.09	12.73	14.5	**1424.32**	62.67	2913.07	**4167.15**	0.42	213.72
MPYDD006	MPY91516	165	166	635.7	780.9	16.51	18.95	12.79	14.63	0.29	0.33	15.82	18.24	4.28	4.9	284.94	334.18	4.48	5.09	81.29	94.81	53.72	64.9	46.82	71.81	17.89	20.74	2.31	2.72	3.26	3.73	112.76	143.19	23.98	27.31	**1606.43**	62.31	2852.59	**4080.63**	0.41	214.67
MPYDD006	MPY91517	166	167	560.83	688.92	9.52	10.93	7.91	9.05	0.33	0.39	9.92	11.44	2.26	2.59	249.94	293.13	3.16	3.59	85.81	100.09	47.37	57.24	45.13	69.21	14.98	17.38	1.32	1.55	2.19	2.5	56.5	71.75	17.15	19.52	**1359.25**	57.54	2851.78	**4079.47**	0.41	215.98
MPYDD006	MPY91518	167	168	704.9	865.89	19.36	22.22	10.99	12.57	0.61	0.7	18.29	21.08	3.97	4.55	356.32	417.9	2.7	3.08	127.14	148.29	61.29	74.06	24.6	37.73	24.28	28.15	2.69	3.16	2.42	2.76	126.25	160.33	16.03	18.25	**1820.72**	58.99	2780.14	**3976.99**	0.40	217.05
MPYDD006	MPY91519	168	169	680.45	835.86	14.51	16.66	8.3	9.5	0.58	0.67	17.2	19.83	2.88	3.3	361.05	423.44	2.51	2.85	117.51	137.06	57.64	69.65	25.49	39.09	23.07	26.75	2.31	2.71	1.98	2.26	80.1	101.72	14.26	16.24	**1707.59**	61.41	2435.99	**3484.68**	0.35	195.41
MPYDD006	MPY91521	169	170	607.14	745.81	12.14	13.93	8.7	9.95	0.46	0.53	13.82	15.92	2.67	3.05	302.17	354.39	3.42	3.89	108.86	126.97	53.32	64.42	43.01	65.97	20	23.19	1.8	2.11	2.33	2.66	66.25	84.14	18.15	20.67	**1537.61**	62.59	2440.95	**3491.78**	0.35	198.49
MPYDD006	MPY91522	170	171	643.07	789.95	17.47	20.05	11.03	12.61	0.69	0.8	18.55	21.38	3.67	4.21	300.27	352.15	3.77	4.29	123.25	143.76	57.27	69.19	39	59.82	25.79	29.9	2.59	3.04	2.78	3.17	97.38	123.66	20.61	23.47	**1661.45**	64.38	2793.69	**3996.37**	0.40	220.93

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD006	MPY91523	171	172	615.12	755.61	12.17	13.96	8.42	9.62	0.45	0.52	13.3	15.33	2.61	2.99	276.09	323.8	3.16	3.6	108.44	126.49	53.95	65.19	39.1	59.97	19.46	22.57	1.76	2.08	2.2	2.51	69.42	88.16	17.12	19.5	**1511.89**	61.65	2832.16	**4051.40**	0.41	222.96
MPYDD006	MPY91524	172	173	638.48	784.31	11.7	13.43	8.37	9.57	0.49	0.56	12.85	14.81	2.56	2.93	301.55	353.65	3.33	3.79	105.55	123.11	54.38	65.71	44.39	68.09	18.7	21.68	1.67	1.97	2.27	2.59	66.48	84.43	17.78	20.25	**1570.88**	62.62	2938.71	**4203.82**	0.42	241.86
MPYDD006	MPY91526	173	174	901.44	1107.33	20.18	23.16	11.87	13.57	0.7	0.81	21.15	24.37	4.2	4.81	538.22	631.22	3.57	4.07	158.07	184.37	77.13	93.19	36.57	56.09	28.67	33.24	2.92	3.44	2.82	3.22	121.87	154.77	19.96	22.73	**2360.39**	64.16	3050.81	**4364.18**	0.44	246.07
MPYDD006	MPY91527	174	175	638.78	784.67	11.71	13.44	7.65	8.75	0.48	0.56	13.29	15.31	2.47	2.83	277.29	325.2	2.88	3.27	107.87	125.82	56.3	68.02	40.35	61.88	20.47	23.74	1.76	2.07	2.04	2.32	68.13	86.51	15.52	17.68	**1542.08**	62.36	2968.63	**4246.63**	0.42	239.55
MPYDD006	MPY91528	175	176	591.31	726.37	15.79	18.13	10.88	12.45	0.51	0.59	14.68	16.92	3.51	4.03	267.89	314.18	3.93	4.47	110.82	129.26	53.06	64.1	47.69	73.15	21.02	24.37	2.2	2.58	2.88	3.29	95.8	121.66	21.36	24.33	**1539.87**	60.2	2557	**3657.79**	0.37	217.29
MPYDD006	MPY91529	176	177.4	594.66	730.47	14.55	16.7	10.31	11.79	0.49	0.57	13.38	15.42	3.29	3.77	272.25	319.29	3.75	4.26	102.21	119.22	52.19	63.05	52.18	80.03	19.22	22.29	1.99	2.34	2.73	3.12	82.7	105.02	20.75	23.63	**1520.98**	59.61	2692.14	**3851.11**	0.39	219.37
MPYDD006	MPY91531	177.4	178.7	560.33	688.31	39.19	44.98	25.76	29.46	0.94	1.08	22.86	26.35	8.84	10.13	279.59	327.91	5.69	6.47	124.56	145.29	54.33	65.64	11.1	17.02	30.51	35.38	4.66	5.48	5.95	6.79	248.75	315.88	37.95	43.21	**1769.4**	45.77	1325.5	**1896.13**	0.19	105.44
MPYDD006	MPY91532	178.7	179.1	710.93	873.3	62.22	71.41	37.98	43.42	1.29	1.49	33.97	39.15	13.8	15.81	358.57	420.53	6.43	7.32	168.22	196.21	71.27	86.11	8.59	13.18	45.15	52.35	7.46	8.78	7.87	8.98	404.78	514.03	45.38	51.68	**2403.76**	43.45	1048.61	**1500.04**	0.15	86.16
MPYDD006	MPY91533	179.1	180	545.43	670	11.43	13.11	7.92	9.06	0.43	0.5	11.35	13.08	2.46	2.81	233.74	274.13	3.06	3.48	96.53	112.59	48.72	58.87	41.92	64.3	17.69	20.52	1.57	1.85	2.21	2.52	60.17	76.4	16.75	19.07	**1342.3**	61.2	2735.42	**3913.02**	0.39	242.51
MPYDD006	MPY91534	180	181	532.99	654.73	9.94	11.41	7.13	8.15	0.38	0.44	9.99	11.52	2.17	2.49	224.29	263.05	2.76	3.14	90.13	105.13	47.09	56.89	34.49	52.9	16.22	18.81	1.4	1.64	1.94	2.21	47.52	60.35	15.09	17.19	**1270.05**	62.63	2713.27	**3881.33**	0.39	236.85
MPYDD006	MPY91535	181	182	523.07	642.54	10.56	12.12	7.52	8.6	0.36	0.42	10.04	11.57	2.32	2.66	228.73	268.25	2.77	3.15	84.24	98.25	45.05	54.43	35	53.69	15.25	17.68	1.45	1.71	2	2.29	57.93	73.57	15.38	17.51	**1268.45**	63.66	2780.42	**3977.39**	0.40	249.95
MPYDD006	MPY91536	182	183.35	572.04	702.69	15.05	17.27	10.04	11.49	0.48	0.55	13.56	15.63	3.29	3.76	252.67	296.33	3.19	3.63	101.43	118.3	50.98	61.6	34.23	52.5	19.55	22.67	2.04	2.4	2.53	2.89	85.53	108.61	18.2	20.73	**1441.05**	62.7	2828.54	**4046.23**	0.40	268.9
MPYDD006	MPY91537	183.35	185	528	648.59	15.73	18.06	11.33	12.96	0.48	0.55	13.38	15.43	3.61	4.14	238.73	279.98	3.71	4.22	95.3	111.15	47.22	57.06	32.71	50.16	19.47	22.58	2.08	2.45	2.89	3.3	89.33	113.44	21.11	24.04	**1368.11**	52.55	2242.59	**3208.02**	0.32	191.72
MPYDD006	MPY91538	185	185.4	548.03	673.2	20.27	23.26	11.58	13.24	0.82	0.95	16.56	19.08	4.22	4.83	243.19	285.22	2.83	3.22	100.18	116.85	49	59.21	29.42	45.13	22.12	25.65	2.75	3.24	2.56	2.93	132.83	168.69	16.85	19.19	**1463.87**	51.43	2332.75	**3337.00**	0.33	201.8
MPYDD006	MPY91539	185.4	187	605.4	743.67	14.11	16.2	7.49	8.57	0.5	0.58	13.52	15.58	2.8	3.21	271.56	318.49	1.78	2.02	101.64	118.56	53.27	64.36	20.81	31.92	19.93	23.11	2.02	2.38	1.62	1.85	83.89	106.53	10.73	12.22	**1469.25**	62.94	2771.43	**3964.53**	0.40	247.17
MPYDD006	MPY91541	187	188	537.6	660.39	10.78	12.37	6.65	7.6	0.42	0.48	10.93	12.59	2.26	2.58	238.35	279.53	2.06	2.35	89.66	104.58	46.93	56.71	31	47.55	16.37	18.98	1.58	1.86	1.61	1.84	62.35	79.18	11.63	13.24	**1301.85**	63.82	2494.61	**3568.54**	0.36	225.95
MPYDD006	MPY91542	188	189	524.6	644.42	12.65	14.52	7.63	8.72	0.47	0.54	11.89	13.7	2.63	3.02	226.51	265.65	2.21	2.52	89.5	104.39	46.57	56.26	27.05	41.49	18.11	20.99	1.78	2.1	1.76	2.01	69.66	88.46	12.64	14.39	**1283.18**	61.36	2443.12	**3494.88**	0.35	215.38
MPYDD006	MPY91543	189	190	663.72	815.32	25.8	29.61	13.45	15.38	0.73	0.84	20.97	24.17	5.29	6.07	333.39	391	2.56	2.91	129.12	150.61	59.98	72.47	25.46	39.06	28.64	33.21	3.5	4.12	2.68	3.06	157.27	199.72	16.07	18.3	**1805.85**	61.09	2262.83	**3236.98**	0.32	191.73
MPYDD006	MPY91544	190	191	730.02	896.76	18.33	21.04	9.25	10.57	0.65	0.76	17.63	20.32	3.61	4.14	343.85	403.26	1.81	2.05	132.73	154.82	64.52	77.96	21.08	32.34	26.01	30.16	2.63	3.1	1.84	2.1	96.94	123.1	11.2	12.75	**1795.23**	62.81	2915.06	**4169.99**	0.42	257.98
MPYDD006	MPY91546	191	192	833.97	1024.45	26.62	30.55	13.06	14.94	0.91	1.06	25	28.81	5.15	5.9	444.8	521.66	2.5	2.84	162.12	189.09	76.01	91.83	22.67	34.76	34.71	40.25	3.86	4.54	2.55	2.91	153.02	194.32	15.39	17.52	**2205.43**	64.41	3005.41	**4299.24**	0.43	265.64
MPYDD006	MPY91547	192	193	1044.54	1283.12	33.98	38.99	15.31	17.51	1.23	1.42	34.14	39.35	6.39	7.32	580.55	680.87	2.52	2.87	213.16	248.63	94.58	114.27	18.37	28.17	45.46	52.72	5.09	5.98	2.86	3.27	197.45	250.74	16.52	18.81	**2794.04**	65.18	3419.87	**4892.12**	0.49	315.92
MPYDD006	MPY91548	193	194	971.82	1193.78	29.86	34.27	13.07	14.95	1.08	1.25	30.84	35.54	5.49	6.29	522.35	612.61	2.31	2.63	192.28	224.28	88.76	107.24	17.35	26.61	42.44	49.21	4.62	5.43	2.49	2.85	157.65	200.2	14.72	16.76	**2533.92**	65.4	3369.57	**4820.17**	0.48	323.01
MPYDD006	MPY91549	194	194.65	816.33	1002.79	25.61	29.39	11.46	13.1	0.98	1.13	26.16	30.15	4.67	5.35	380.26	445.97	2.54	2.89	158.02	184.31	74.53	90.05	22.35	34.28	36.33	42.13	3.99	4.69	2.35	2.68	129.81	164.85	15.17	17.27	**2071.03**	62.1	3119.43	**4462.34**	0.45	310.65
MPYDD006	MPY91551	194.65	195	146.52	179.99	17.66	20.27	9.8	11.21	0.21	0.24	11.56	13.33	3.72	4.26	72.83	85.41	1.84	2.09	57.71	67.31	18.09	21.85	2.56	3.92	15.06	17.47	2.23	2.63	2.12	2.42	117.89	149.71	12.89	14.68	**596.78**	43.89	369.97	**529.24**	0.05	40
MPYDD006	MPY91552	195	196	948.66	1165.33	27.26	31.29	11.54	13.2	1.04	1.2	28.96	33.38	4.84	5.55	512	600.48	2.44	2.77	185.37	216.21	85.23	102.98	17.89	27.45	40.84	47.36	4.33	5.09	2.33	2.66	130.88	166.2	15.06	17.15	**2438.3**	65.56	3555.98	**5086.83**	0.51	361.16
MPYDD006	MPY91553	196	197	846.5	1039.84	22.81	26.18	10.87	12.44	0.86	0.99	22.22	25.61	4.41	5.05	445.8	522.83	2.19	2.49	156.71	182.78	75.76	91.53	19.3	29.6	32.45	37.62	3.35	3.94	2.16	2.47	113.6	144.27	13.55	15.43	**2143.07**	61.28	3284.67	**4698.72**	0.47	336.36
MPYDD006	MPY91554	197	198	1070.7	1315.24	26.79	30.74	11.78	13.47	0.98	1.14	27.8	32.04	4.97	5.69	617.74	724.48	1.92	2.19	203.09	236.89	94.51	114.18	16.97	26.03	39.8	46.15	4.06	4.78	2.15	2.45	142.66	181.16	12.46	14.19	**2750.83**	65.96	3477.24	**4974.19**	0.50	369.37
MPYDD006	MPY91555	198	199	1004.67	1234.14	24.09	27.65	10.88	12.44	0.89	1.03	25.12	28.95	4.57	5.23	583.27	684.06	1.68	1.91	182.41	212.76	87.85	106.14	15.16	23.25	35.85	41.57	3.63	4.27	1.98	2.26	127.98	162.53	11.13	12.67	**2560.86**	65.29	3311.73	**4737.43**	0.47	356.11
MPYDD006	MPY91556	199	200	1096.09	1346.44	32.85	37.71	15.93	18.21	1.27	1.47	31.79	36.65	6.36	7.28	611.29	716.92	2.62	2.98	213.72	249.28	98.4	118.88	16.69	25.59	44.66	51.79	4.86	5.71	2.99	3.41	183.11	232.54	17.3	19.7	**2874.56**	64.32	3390.99	**4850.81**	0.49	364.18
MPYDD006	MPY91557	200	201	832.51	1022.66	31.86	36.57	15.07	17.23	1.05	1.21	29.11	33.55	6.21	7.11	471.43	552.9	2.46	2.8	174.24	203.23	76.45	92.37	15.21	23.33	39.59	45.91	4.54	5.34	2.83	3.23	180.02	228.61	16.36	18.63	**2294.66**	61.63	2119.97	**3032.62**	0.30	223.05
MPYDD006	MPY91558	201	202.4	714.03	877.12	29.35	33.68	14.44	16.51	0.96	1.11	26.08	30.06	5.81	6.66	371.02	435.13	2.64	3.01	159.03	185.49	66.87	80.79	21.37	32.78	35.87	41.6	4.17	4.9	2.83	3.24	166.11	210.95	16.94	19.29	**1982.31**	64.21	1769.21	**2530.85**	0.25	167.61
MPYDD006	MPY91559	202.4	202.7	326.7	401.32	26.04	29.89	14.94	17.08	0.68	0.79	17.18	19.8	5.52	6.32	170.99	200.53	2.83	3.22	100.03	116.67	36.04	43.54	8.91	13.67	22.62	26.23	3.29	3.87	3.22	3.68	167.74	213.01	19.47	22.17	**1121.8**	47.02	1206.7	**1726.18**	0.17	115.8
MPYDD006	MPY91561	202.7	204.1	517.97	636.27	22.02	25.28	11.49	13.14	1.24	1.43	19.02	21.93	4.42	5.06	253.53	297.34	2.37	2.69	118.13	137.79	49.84	60.22	22.5	34.51	26.51	30.74	3.08	3.62	2.39	2.73	120.17	152.6	14.83	16.89	**1442.24**	51.19	1309.07	**1872.62**	0.19	125.1
MPYDD006	MPY91562	204.1	205.66	200.41	246.18	7.69	8.83	3.9	4.46	1.87	2.17	7.89	9.09	1.49	1.71	104.31	122.33	0.77	0.87	66.88	78.01	22.51	27.2	6.2	9.5	12.28	14.24	1.12	1.32	0.8	0.91	44.07	55.97	4.92	5.6	**588.38**	28.72	135.7	**194.12**	0.02	13.75
MPYDD006	MPY91563	205.66	207	807.71	992.19	32.21	36.96	16.7	19.09	1.21	1.4	28.67	33.04	6.46	7.41	478.14	560.76	3.07	3.5	176.34	205.68	75.01	90.63	22.8	34.96	39.16	45.41	4.54	5.34	3.29	3.76	184.91	234.81	19.73	22.46	**2297.42**	61.72	1763.34	**2522.46**	0.25	162.94
MPYDD006	MPY91564	207	208	803.04	986.45	38.94	44.69	20	22.87	1.19	1.38	31.88	36.74	7.94	9.1	454.46	532.99	3.61	4.1	181.7	211.93	76.45	92.37	23.52	36.07	42.9	49.74	5.35	6.29	3.91	4.47	228.2	289.8	23	26.18	**2355.16**	67.97	1886.29	**2698.34**	0.27	175.36
MPYDD006	MPY91566	208	209	718.03	882.03	34.48	39.57	17.9	20.47	0.98	1.13	26.97	31.08	7.09	8.12	353.18	414.21	3.39	3.86	153.61	179.17	67.98	82.14	24.23	37.16	36.52	42.35	4.62	5.44	3.66	4.18	200.41	254.51	21.66	24.66	**2030.09**	70.16	1884.71	**2696.08**	0.27	183.88
MPYDD006	MPY91567	209	210	855.79	1051.26	38.61	44.32	20.24	23.14	1.11	1.29	30.61	35.28	7.9	9.05	473.19	554.96	3.58	4.07	185.51	216.37	80.65	97.45	21.56	33.06	41.54	48.16	5.15	6.06	4.04	4.61	230.92	293.25	23.51	26.78	**2449.1**	68.59	2190.36	**3133.31**	0.31	215.47
MPYDD006	MPY91568	210	211	832.66	1022.84	49.15	56.41	24.63	28.16	1.34	1.55	37.02	42.67	10.01	11.47	453.18	531.49	4.03	4.58	197.73	230.64	80.8	97.62	13.83	21.22	47.88	55.53	6.51	7.66	4.66	5.32	304.61	386.83	26.53	30.21	**2534.19**	70.44	2018.85	**2887.96**	0.29	191.96
MPYDD006	MPY91569	211	212	694.91	853.63	38.84	44.58	22.16	25.34	0.99	1.15	27.41	31.59	8.35	9.56	349.05	409.37	4.03	4.58	149.96	174.91	66	79.75	19.98	30.64	35.87	41.6	4.96	5.83	4.5	5.14	242.88	308.44	26.26	29.9	**2056.01**	67.05	1442.13	**2062.97**	0.21	130.79
MPYDD006	MPY91571	212	213	224.21	275.42	15.01	17.23	8.44	9.65	0.4	0.46	13.5	15.56	2.78	3.18	104.99	123.13	1.2	1.37	69.11	80.61	23.79	28.75	9.09	13.94	13.44	15.58	2.13	2.51	1.39	1.59	99.67	126.57	7.85	8.94	**724.49**	64.07	857.18	**1226.20**	0.12	76.97
MPYDD006	MPY91572	213	214	237.71	292	19.94	22.88	10.78	12.33	0.52	0.61	17.98	20.72	3.66	4.19	113.98	133.68	1.38	1.57	81.93	95.57	26.2	31.65	11.91	18.27	17.03	19.75	2.84	3.34	1.7	1.94	132.88	168.74	9.13	10.4	**837.63**	64.79	765.86	**1095.56**	0.11	67.22

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD006	MPY91573	214	215	313.89	385.58	21.55	24.73	11.84	13.54	0.59	0.68	19.84	22.87	4.01	4.59	154.24	180.9	1.6	1.82	100.19	116.86	33.54	40.52	16.29	24.98	19.34	22.43	3.1	3.64	1.88	2.15	139.3	176.9	10.36	11.8	**1033.99**	63.55	1106.4	**1582.71**	0.16	104.55
MPYDD006	MPY91574	215	216	381.13	468.18	39.82	45.7	24.03	27.48	0.91	1.05	30.85	35.55	7.87	9.02	179.3	210.28	2.99	3.4	137.43	160.3	43.17	52.15	13.7	21.01	28.01	32.48	5.29	6.22	3.87	4.42	284.3	361.03	20.66	23.53	**1461.81**	46.6	1260.07	**1802.53**	0.18	113.23
MPYDD006	MPY91575	216	217	354.88	435.93	34.3	39.37	20.25	23.15	0.84	0.97	27.38	31.56	6.64	7.6	164.81	193.29	2.63	2.99	128.99	150.45	40.21	48.58	10.28	15.77	26.05	30.21	4.62	5.43	3.32	3.79	238.13	302.4	17.92	20.4	**1311.91**	45.41	1214.21	**1736.93**	0.17	109.54
MPYDD006	MPY91576	217	218	479.46	588.97	41.12	47.19	23.3	26.64	0.97	1.12	32.81	37.81	7.88	9.03	208.5	244.53	2.92	3.32	133.45	155.66	48.14	58.17	16.27	24.96	30.44	35.3	5.53	6.5	3.72	4.25	280.63	356.38	20.01	22.79	**1622.63**	46.26	1353.68	**1936.44**	0.19	116.74
MPYDD006	MPY91577	218	219	324.14	398.17	31.13	35.73	12.98	14.84	0.87	1.01	21.72	25.04	7.24	8.29	155.3	182.14	2.1	2.39	134.61	157.01	40.82	49.32	9.01	13.81	28.81	33.4	3.7	4.36	2.93	3.35	259.98	330.15	15.17	17.28	**1276.3**	43.46	1337.61	**1913.45**	0.19	83.97
MPYDD006	MPY91578	219	220	359.39	441.48	33.31	38.23	13.99	15.99	0.95	1.1	23.76	27.38	7.79	8.92	177.3	207.93	2.31	2.62	150.41	175.44	44.78	54.11	9.88	15.16	31.95	37.05	4.01	4.72	3.22	3.68	278.18	353.26	16.57	18.87	**1405.94**	43.13	1381.75	**1976.59**	0.20	84.61
MPYDD006	MPY91579	220	221.08	524.56	644.36	44.99	51.63	18.87	21.58	1.35	1.56	33.76	38.91	10.47	11.99	272.4	319.47	3.3	3.76	206.5	240.87	64.04	77.37	13.12	20.13	43.89	50.9	5.52	6.5	4.35	4.97	360.56	457.87	22.75	25.9	**1977.77**	45.42	1423.68	**2036.57**	0.20	84.7
MPYDD006	MPY91581	221.08	221.28	468.77	575.83	34.33	39.41	14.72	16.83	1.06	1.22	26.23	30.23	8.11	9.29	243.3	285.34	2.76	3.13	173.88	202.82	55.9	67.54	13.33	20.44	34.84	40.4	4.21	4.95	3.47	3.97	281.76	357.81	18.68	21.27	**1680.5**	42.36	1206.87	**1726.43**	0.17	70.68
MPYDD006	MPY91582	221.28	223	548.86	674.22	41.62	47.77	17.3	19.79	1.28	1.49	32.09	36.98	9.58	10.97	281.45	330.08	3.09	3.51	208.33	243	65.3	78.89	11.28	17.3	42.44	49.21	5.19	6.1	3.92	4.48	348.84	443	20.99	23.9	**1990.69**	46.1	1545.96	**2211.50**	0.22	84.57
MPYDD006	MPY91583	223	224	589.13	723.68	46.5	53.37	19.81	22.66	2.44	2.83	34.63	39.91	10.79	12.37	304.16	356.72	4.12	4.68	224.52	261.89	70.54	85.23	23.23	35.63	45.9	53.22	5.74	6.75	4.81	5.49	352.83	448.06	26.7	30.4	**2142.88**	46.2	2091.59	**2992.02**	0.30	111.22
MPYDD006	MPY91584	224	225	453.27	556.8	35.28	40.49	15.86	18.14	1.14	1.32	25.34	29.21	8.47	9.7	212.79	249.55	3.25	3.7	167.84	195.76	54.3	65.61	19.6	30.06	33.95	39.37	4.19	4.93	3.86	4.41	304.31	386.44	21.34	24.3	**1659.81**	44.93	1921.49	**2748.69**	0.27	101.12
MPYDD006	MPY91586	225	226	438.77	538.98	31.67	36.35	14.7	16.81	0.98	1.13	22.91	26.4	7.66	8.78	196.01	229.88	3.39	3.85	159.73	186.31	52.63	63.59	19.19	29.44	30.73	35.64	3.72	4.37	3.69	4.21	270.78	343.86	21.4	24.37	**1553.96**	46.13	2039.18	**2917.05**	0.29	107.4
MPYDD006	MPY91587	226	227	354.99	436.07	24.7	28.35	11.5	13.15	0.72	0.83	17.64	20.33	5.96	6.82	156.53	183.58	2.55	2.9	127.92	149.2	42.08	50.84	15.86	24.33	24.11	27.95	2.9	3.41	2.85	3.25	231.62	294.13	16.14	18.38	**1263.52**	45.44	1741.6	**2491.36**	0.25	96.78
MPYDD006	MPY91588	227	228	351.59	431.89	23.23	26.66	11.17	12.78	0.69	0.8	16.8	19.37	5.72	6.56	156.2	183.19	2.53	2.87	124.76	145.52	41.24	49.83	16.18	24.81	23.3	27.01	2.76	3.24	2.8	3.2	219.18	278.34	16.1	18.33	**1234.41**	45.54	1767.6	**2528.55**	0.25	97.82
MPYDD006	MPY91589	228	229	370.63	455.28	21.77	24.98	9.77	11.17	0.67	0.77	17.18	19.8	5.19	5.95	162.9	191.05	2.16	2.46	129.71	151.3	43.58	52.66	14.39	22.08	23.78	27.58	2.64	3.1	2.39	2.73	199.57	253.43	13.82	15.73	**1240.05**	45.82	1895.17	**2711.04**	0.27	96.38
MPYDD006	MPY91590	229	230	356.75	438.23	18	20.66	7.9	9.03	0.74	0.86	15.44	17.79	4.17	4.78	159.75	187.36	1.85	2.1	124.72	145.47	41.87	50.59	11.86	18.2	21.79	25.27	2.26	2.66	1.94	2.22	158.99	201.91	11.27	12.83	**1139.94**	43.74	1797.64	**2571.52**	0.26	94.4
MPYDD006	MPY91591	230	231	328.76	403.84	20.65	23.7	9.14	10.45	0.63	0.74	16.01	18.46	4.86	5.57	144.58	169.57	1.82	2.07	118.56	138.29	38.64	46.69	15.03	23.06	21.92	25.42	2.48	2.91	2.18	2.49	189.49	240.64	12.03	13.7	**1127.59**	45.71	1710.01	**2446.17**	0.24	99.06
MPYDD006	MPY91592	231	232	298.18	366.29	19.47	22.35	8.54	9.76	0.69	0.8	15.46	17.82	4.54	5.2	129.7	152.11	1.78	2.03	110.24	128.59	35.86	43.33	13.51	20.71	21.22	24.61	2.42	2.85	2.06	2.35	184.04	233.71	11.47	13.06	**1045.57**	43.8	1519.39	**2173.49**	0.22	86.05
MPYDD006	MPY91593	232	233.3	311.24	382.33	20.72	23.78	8.98	10.27	0.64	0.75	16.3	18.79	4.87	5.58	139.52	163.63	1.89	2.14	117.91	137.52	37.62	45.46	6.86	10.52	22.18	25.71	2.52	2.97	2.15	2.45	192.87	244.92	12.06	13.73	**1090.56**	44.73	1503	**2150.04**	0.22	80.07
MPYDD006	MPY91594	233.3	234	561.05	689.2	29.05	33.34	12.65	14.47	0.92	1.07	24.79	28.58	6.8	7.79	340.74	399.62	2.43	2.77	188.32	219.66	61.71	74.56	13.69	21	32.51	37.7	3.6	4.23	2.98	3.4	256.38	325.58	16.13	18.37	**1881.33**	45.31	1702.24	**2435.05**	0.24	91.03
MPYDD006	MPY91595	234	235	330.08	405.47	19.73	22.65	8.69	9.94	0.88	1.02	15.35	17.69	4.66	5.34	142.05	166.6	1.88	2.14	119.74	139.67	39.23	47.39	13.1	20.09	21.81	25.29	2.41	2.84	2.12	2.42	190.6	242.04	11.97	13.62	**1124.2**	44.34	1727.4	**2471.05**	0.25	93.61
MPYDD006	MPY91596	235	236	340.8	418.64	22.02	25.27	10.09	11.54	0.69	0.8	16.48	18.99	5.33	6.1	155.37	182.22	2.16	2.45	124.07	144.71	40.66	49.13	13.19	20.23	23.12	26.81	2.68	3.15	2.47	2.82	199.45	253.28	13.92	15.85	**1182.01**	45.18	1597.73	**2285.55**	0.23	86.14
MPYDD006	MPY91597	236	236.9	406.65	499.53	27.34	31.38	11.97	13.69	0.94	1.09	20.95	24.14	6.41	7.35	194.87	228.54	2.48	2.82	155.9	181.84	48.89	59.07	19.35	29.68	29.68	34.41	3.36	3.95	2.93	3.35	232.7	295.51	16.24	18.5	**1434.84**	45.42	1682.36	**2406.62**	0.24	95.87
MPYDD006	MPY91598	236.9	238.45	506.28	621.92	30.75	35.29	11.78	13.47	1.19	1.38	27.77	32.01	6.77	7.76	253.06	296.79	2.15	2.44	205.33	239.5	62.32	75.3	12.46	19.11	39.94	46.31	4.09	4.81	2.65	3.03	242.69	308.19	14.3	16.28	**1723.58**	44.5	1447.61	**2070.81**	0.21	81.73
MPYDD006	MPY91599	238.45	240	363.83	446.92	31.18	35.79	16.55	18.93	0.81	0.94	19.25	22.19	6.56	7.51	166.89	195.73	2.53	2.87	135.68	158.26	42.14	50.92	15.89	24.37	28.13	32.62	3.68	4.33	2.85	3.26	231.41	293.87	17.24	19.63	**1318.14**	43	1406.48	**2011.97**	0.20	98.21
MPYDD006	MPY91601	240	241	518.98	637.51	38.85	44.59	20.19	23.09	0.96	1.11	23.95	27.6	8.12	9.3	271.82	318.79	2.53	2.87	178.3	207.97	57.19	69.09	7.54	11.56	35.18	40.8	4.52	5.31	3.34	3.82	290.91	369.42	18.75	21.35	**1794.19**	44.61	1402.97	**2006.95**	0.20	93.03
MPYDD006	MPY91602	241	242	973.32	1195.62	51.78	59.43	25.72	29.41	1.41	1.63	37.28	42.97	10.49	12.02	520.04	609.9	3.1	3.53	256.91	299.67	93.43	112.88	12.49	19.16	53.05	61.52	6.33	7.44	4.17	4.76	358.76	455.59	23	26.19	**2941.73**	47.63	1470.5	**2103.55**	0.21	99.56
MPYDD006	MPY91603	242	243	498.28	612.08	38.93	44.68	19.3	22.07	1.07	1.24	24.88	28.67	7.91	9.06	249.24	292.3	2.49	2.83	184.86	215.62	57.35	69.29	10.47	16.07	37.44	43.42	4.63	5.45	3.22	3.67	282.89	359.24	18.14	20.66	**1746.34**	45.13	1578.39	**2257.89**	0.23	109.4
MPYDD006	MPY91604	243	244	416.67	511.84	30.51	35.01	15.59	17.83	0.83	0.96	20.2	23.28	6.31	7.23	198.16	232.4	2.24	2.54	149.38	174.24	47.52	57.41	11.65	17.88	30.42	35.27	3.65	4.29	2.69	3.07	218.6	277.59	15.68	17.85	**1418.71**	43.43	1510.79	**2161.19**	0.22	102.91
MPYDD006	MPY91605	244	245	481.66	591.67	42.41	48.67	22.19	25.37	1.29	1.49	26.26	30.27	8.8	10.09	238.22	279.38	3.08	3.5	184.25	214.91	56.14	67.83	18.54	28.44	38.54	44.69	5	5.89	3.75	4.29	289.75	367.95	22.11	25.17	**1749.61**	44.34	1462.04	**2091.45**	0.21	106.04
MPYDD006	MPY91606	245	246	595.08	731	41.6	47.74	20.74	23.72	1.16	1.34	28.31	32.63	8.51	9.75	325.01	381.17	2.69	3.06	214.65	250.37	67.12	81.1	10.49	16.09	42.35	49.11	5.02	5.91	3.46	3.95	286.84	364.25	19.47	22.17	**2023.36**	43.39	1254.8	**1794.99**	0.18	89.76
MPYDD006	MPY91607	246	247	781.68	960.22	40.61	46.61	20.25	23.15	1.4	1.62	31.27	36.04	8.15	9.33	407.69	478.14	2.68	3.05	223.65	260.86	78.11	94.37	12.29	18.85	45.93	53.26	5.13	6.03	3.35	3.83	280.74	356.51	19.51	22.22	**2374.11**	44.59	1244.6	**1780.40**	0.18	91.94
MPYDD006	MPY91608	247	247.45	259.76	319.08	20.6	23.65	13	14.86	1.85	2.15	11.3	13.02	4.65	5.32	154.56	181.27	2.3	2.62	82.79	96.56	27.15	32.8	15.36	23.56	16.49	19.12	2.26	2.66	2.55	2.91	161.72	205.37	16.38	18.66	**963.62**	23.83	227.11	**324.88**	0.03	14.93
MPYDD006	MPY91609	247.45	248	510.87	627.56	33.32	38.24	20.06	22.94	1.06	1.22	23.81	27.45	7.06	8.09	255.19	299.29	2.75	3.13	189.37	220.88	58.96	71.23	17.69	27.13	36.24	42.02	4.13	4.85	3.1	3.54	245.9	312.26	18.57	21.15	**1730.99**	43.85	1624.92	**2324.45**	0.23	110.84
MPYDD006	MPY91610	248	249	515.25	632.94	33.41	38.35	19.86	22.71	1.06	1.23	23.71	27.32	7.11	8.14	255.69	299.87	2.74	3.11	188.84	220.26	58.93	71.19	18.63	28.57	36.22	42	4.1	4.82	3.09	3.53	245.88	312.24	18.77	21.37	**1737.65**	43.67	1647.8	**2357.18**	0.24	110.1
MPYDD006	MPY91611	249	250	491.62	603.9	37.65	43.21	22.27	25.46	1.07	1.23	26.02	29.99	7.84	8.98	240.89	282.51	2.94	3.35	190.57	222.28	57.81	69.85	15.37	23.57	39.1	45.33	4.55	5.35	3.48	3.97	263.88	335.1	20.74	23.62	**1727.72**	43.32	1440.47	**2060.59**	0.21	103.39
MPYDD006	MPY91612	250	251.1	410.83	504.67	35.8	41.09	22.04	25.2	0.86	1	21.69	24.99	7.73	8.86	187.31	219.68	3.32	3.77	153.22	178.71	47.92	57.9	18.47	28.33	31.48	36.51	4.05	4.76	3.61	4.12	252.59	320.77	22.55	25.68	**1486.04**	43.08	1432.49	**2049.18**	0.20	103.22
MPYDD002	MPY90797	0.3	1.2	161.42	198.29	9.75	11.19	4.76	5.45	3.5	4.05	10.17	11.72	2	2.29	86.01	100.88	0.74	0.84	86.44	100.82	22.19	26.81	18.73	28.73	15.27	17.71	1.52	1.79	0.81	0.92	50.23	63.79	4.96	5.65	**580.95**	-	40.95	**58.59**	0.01	-
MPYDD002	MPY90798	1.2	2.1	118.31	145.33	5.4	6.2	2.84	3.25	2.15	2.48	5.73	6.61	1.17	1.34	52.99	62.14	0.5	0.56	50.39	58.78	13.21	15.96	16.01	24.56	8.57	9.94	0.83	0.98	0.5	0.58	28.23	35.84	3.24	3.69	**378.25**	-	41.75	**59.74**	0.01	-
MPYDD002	MPY90799	2.1	3.5	104.7	128.62	5.74	6.59	3.04	3.47	2.18	2.52	5.81	6.7	1.22	1.39	52.06	61.06	0.55	0.62	49.82	58.11	13.03	15.75	14.85	22.77	8.68	10.06	0.86	1.02	0.54	0.62	30.05	38.16	3.53	4.02	**361.47**	-	44.69	**63.94**	0.01	-
MPYDD002	MPY90801	4.5	5.1	120.36	147.85	7	8.03	3.63	4.16	2.52	2.91	7.15	8.24	1.46	1.67	64.66	75.83	0.65	0.73	61.98	72.3	16.29	19.69	13.88	21.29	10.74	12.45	1.06	1.25	0.63	0.72	37.73	47.91	4.07	4.63	**429.67**	-	47.1	**67.39**	0.01	-
MPYDD002	MPY90802	6.1	6.6	130.46	160.26	7.33	8.41	4.15	4.74	1.88	2.18	6.62	7.63	1.59	1.83	58.56	68.68	0.86	0.98	55.24	64.44	14.77	17.85	14.36	22.02	9.75	11.31	1.03	1.21	0.81	0.92	38.97	49.49	5.45	6.2	**428.14**	-	110.91	**158.67**	0.02	-

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD002	MPY90803	6.6	7.6	146.65	180.14	7.13	8.18	3.93	4.49	2.23	2.58	7.36	8.48	1.54	1.76	68.31	80.12	0.81	0.92	66.3	77.33	17.88	21.6	18.42	28.26	11.45	13.27	1.08	1.27	0.74	0.85	36.6	46.47	5.05	5.75	**481.47**	-	81.97	**117.27**	0.01	-
MPYDD002	MPY90804	7.6	8.6	220.2	270.49	9.73	11.17	5.05	5.78	3.1	3.59	10.29	11.86	2.08	2.38	88.98	104.36	0.9	1.02	89.51	104.41	23.23	28.07	20.01	30.69	15.81	18.34	1.51	1.77	0.9	1.03	50.75	64.45	5.71	6.5	**665.91**	-	58.36	**83.49**	0.01	-
MPYDD002	MPY90805	8.6	9.8	146.96	180.52	8.54	9.8	4.32	4.94	2.91	3.37	8.66	9.98	1.78	2.04	72.77	85.34	0.75	0.85	71.73	83.66	18.94	22.89	17.98	27.58	12.98	15.06	1.29	1.52	0.75	0.86	45.44	57.71	4.72	5.38	**511.48**	-	43.82	**62.69**	0.01	-
MPYDD002	MPY90806	9.8	11	148.74	182.71	9.52	10.92	4.77	5.46	3.11	3.6	9.78	11.28	1.99	2.27	80.12	93.96	0.78	0.88	85.15	99.32	21.41	25.86	20.51	31.46	14.86	17.23	1.45	1.71	0.82	0.94	50.59	64.24	5.16	5.88	**557.73**	-	30.86	**44.16**	0.00	-
MPYDD002	MPY90807	11	12	133.75	164.3	9.28	10.65	4.78	5.47	2.79	3.23	8.98	10.35	1.99	2.28	67	78.58	0.79	0.9	68.63	80.05	17.36	20.98	19.85	30.45	12.58	14.59	1.37	1.61	0.84	0.96	51.35	65.21	5.18	5.9	**495.5**	-	24.77	**35.44**	0.00	-
MPYDD002	MPY90808	12	13	143.39	176.14	8.24	9.45	4.29	4.9	2.42	2.81	7.89	9.09	1.74	1.99	61.39	72	0.73	0.83	60.74	70.84	15.64	18.9	22.25	34.12	11.25	13.05	1.22	1.43	0.78	0.89	42.86	54.43	4.82	5.48	**476.37**	-	25.06	**35.86**	0.00	-
MPYDD002	MPY90809	13	14	107.14	131.61	5.42	6.22	2.85	3.25	1.81	2.1	5.59	6.44	1.13	1.29	51.8	60.75	0.53	0.6	49.33	57.54	13.01	15.72	16.67	25.57	8.68	10.07	0.83	0.98	0.51	0.58	27.49	34.91	3.28	3.74	**361.37**	-	28.83	**41.25**	0.00	-
MPYDD002	MPY90810	14	15.15	108.19	132.9	5.92	6.79	3.17	3.63	2.04	2.36	5.95	6.86	1.28	1.46	52.49	61.56	0.57	0.65	50.81	59.27	13.21	15.96	17.02	26.11	8.98	10.41	0.9	1.06	0.58	0.66	32.06	40.71	3.63	4.13	**374.5**	-	26.2	**37.48**	0.00	-
MPYDD002	MPY90811	16.6	18	95.56	117.39	4.69	5.38	2.56	2.93	1.72	1.99	4.87	5.61	1.02	1.17	44.53	52.22	0.47	0.53	41.81	48.77	11.12	13.43	13.66	20.95	7.41	8.59	0.71	0.83	0.45	0.52	26.25	33.33	2.9	3.3	**316.93**	-	21.6	**30.91**	0.00	-
MPYDD002	MPY90899	18	18.6	138.61	170.27	5.92	6.79	3.13	3.58	1.75	2.03	6.19	7.13	1.25	1.43	64.09	75.16	0.59	0.67	56.25	65.61	15.32	18.51	13.08	20.06	9.67	11.22	0.94	1.11	0.57	0.65	32.61	41.41	3.63	4.13	**429.76**	-	56.52	**80.87**	0.01	-
MPYDD002	MPY90812	19.4	20	113.76	139.74	6.43	7.38	3.48	3.98	2.03	2.36	6.48	7.47	1.39	1.59	55.46	65.04	0.66	0.75	53.68	62.61	13.86	16.75	17.64	27.05	9.42	10.92	0.97	1.14	0.65	0.74	35.23	44.74	4.07	4.63	**396.89**	-	38.78	**55.48**	0.01	-
MPYDD002	MPY90813	20	21	127.65	156.81	7.95	9.13	4.14	4.74	2.47	2.85	7.67	8.84	1.68	1.93	60.09	70.48	0.68	0.77	60.38	70.42	15.74	19.01	19.84	30.43	11.23	13.02	1.18	1.39	0.7	0.8	43.78	55.6	4.47	5.09	**451.3**	-	24.1	**34.48**	0.00	-
MPYDD002	MPY90814	21	22	129.96	159.64	8.9	10.22	4.61	5.27	2.62	3.04	8.41	9.69	1.91	2.18	61.92	72.62	0.75	0.85	65.46	76.36	16.25	19.64	20.97	32.16	12.1	14.04	1.33	1.57	0.8	0.91	49.64	63.04	5.02	5.71	**476.95**	-	22.2	**31.76**	0.00	-
MPYDD002	MPY90815	22	23	143.02	175.69	10	11.48	5.26	6.01	2.92	3.38	9.65	11.12	2.17	2.49	69.4	81.39	0.85	0.97	72.57	84.65	18.44	22.28	23.67	36.3	13.87	16.09	1.49	1.75	0.92	1.06	57.23	72.68	5.61	6.39	**533.72**	-	25.9	**37.05**	0.00	-
MPYDD002	MPY90816	23	24	125.4	154.05	9.53	10.94	4.83	5.52	2.86	3.31	9	10.37	2.02	2.31	65.46	76.77	0.81	0.92	68.44	79.83	17.37	20.99	23.48	36.02	12.83	14.87	1.41	1.66	0.86	0.98	51.18	64.99	5.28	6.01	**489.54**	-	27.2	**38.91**	0.00	-
MPYDD002	MPY90817	24	25	131.91	162.04	10.42	11.96	5.19	5.94	3.18	3.69	10.01	11.53	2.18	2.5	72.68	85.24	0.81	0.92	76.54	89.27	19.24	23.25	23.03	35.32	14.57	16.9	1.56	1.84	0.88	1.01	55.05	69.91	5.46	6.22	**527.51**	-	23.3	**33.33**	0.00	-
MPYDD002	MPY90818	25	26	144.01	176.9	10.01	11.49	5.22	5.96	3.09	3.57	9.78	11.28	2.13	2.44	76.65	89.89	0.84	0.96	78.08	91.07	19.8	23.92	20.11	30.85	14	16.23	1.49	1.76	0.89	1.02	55.03	69.88	5.57	6.34	**543.56**	-	29.07	**41.6**	0.00	-
MPYDD002	MPY90819	26	27	145.65	178.92	8.51	9.77	4.49	5.14	2.74	3.18	8.4	9.68	1.83	2.09	71.9	84.33	0.81	0.92	69.41	80.96	17.98	21.72	19.46	29.85	12.29	14.25	1.27	1.5	0.78	0.89	46.82	59.45	5.07	5.77	**508.41**	-	34.48	**49.33**	0.00	-
MPYDD002	MPY90821	27	28	147.43	181.11	6.2	7.12	3.46	3.96	2.13	2.47	6.74	7.77	1.36	1.56	68.76	80.64	0.67	0.76	64.23	74.92	16.82	20.33	17.21	26.39	10.42	12.08	0.94	1.1	0.62	0.71	35.22	44.73	4.13	4.71	**470.35**	-	48.3	**69.1**	0.01	-
MPYDD002	MPY90822	28	29.3	132.67	162.97	6.06	6.96	3.25	3.71	2.28	2.64	6.47	7.46	1.3	1.49	65.99	77.4	0.64	0.73	59.53	69.44	15.88	19.18	16.82	25.81	10.1	11.71	0.92	1.08	0.59	0.68	33.86	43	3.85	4.39	**438.64**	-	37.46	**53.59**	0.01	-
MPYDD002	MPY90823	29.3	29.85	176.6	216.94	7.29	8.36	4.12	4.72	2.1	2.43	8.43	9.72	1.59	1.82	88.96	104.33	0.83	0.94	82.36	96.06	21.73	26.26	24.08	36.94	13.47	15.62	1.13	1.33	0.75	0.86	42.19	53.57	4.94	5.63	**585.53**	-	72.42	**103.61**	0.01	-
MPYDD002	MPY90824	29.85	31.4	126.44	155.32	7.16	8.22	3.89	4.45	2.1	2.43	7.21	8.31	1.55	1.78	65.76	77.13	0.76	0.87	62.34	72.71	16.41	19.83	15.99	24.53	10.62	12.32	1.07	1.26	0.7	0.8	40.57	51.52	4.59	5.22	**446.69**	-	41.94	**60**	0.01	-
MPYDD002	MPY90826	33.3	35.1	149.41	183.53	7.86	9.02	4.16	4.75	2.22	2.57	8.13	9.38	1.64	1.88	72.76	85.33	0.73	0.83	71.56	83.47	18.84	22.76	13.88	21.28	12.38	14.36	1.2	1.41	0.71	0.81	43.01	54.62	4.58	5.21	**501.2**	-	46.38	**66.35**	0.01	-
MPYDD002	MPY90827	36.1	37.1	135.38	166.3	6.18	7.1	3.21	3.67	1.95	2.26	6.75	7.79	1.3	1.49	61.3	71.9	0.58	0.66	61.12	71.3	15.95	19.27	12.21	18.73	10.39	12.04	0.97	1.14	0.57	0.65	33.18	42.14	3.69	4.21	**430.63**	-	41.27	**59.05**	0.01	-
MPYDD002	MPY90828	37.1	38.1	113.03	138.85	5.69	6.54	3.07	3.52	1.97	2.28	5.91	6.81	1.24	1.42	55.47	65.06	0.56	0.64	53.47	62.37	14.08	17.01	13.48	20.68	9.14	10.59	0.88	1.04	0.54	0.62	31.55	40.07	3.54	4.03	**381.5**	-	38.91	**55.67**	0.01	-
MPYDD002	MPY90829	38.8	39.3	98.13	120.54	5.52	6.33	2.84	3.25	2.08	2.41	5.77	6.65	1.18	1.35	53.36	62.58	0.52	0.59	51.95	60.59	13.55	16.37	15.55	23.85	8.93	10.36	0.85	1	0.52	0.6	29.29	37.19	3.24	3.69	**357.35**	-	30.26	**43.29**	0.00	-
MPYDD002	MPY90831	39.3	40.3	98.08	120.49	5.87	6.73	3.1	3.54	2.23	2.58	6.09	7.03	1.25	1.43	51.93	60.9	0.55	0.62	51.77	60.38	13.36	16.15	14.29	21.91	9.16	10.63	0.9	1.06	0.53	0.6	31.91	40.53	3.42	3.89	**358.48**	-	36.38	**52.05**	0.01	-
MPYDD002	MPY90832	40.3	41.3	105.49	129.58	6.03	6.92	3.13	3.58	2.2	2.55	6.16	7.1	1.28	1.47	53.38	62.61	0.56	0.64	52.93	61.74	13.61	16.45	14.7	22.55	9.27	10.75	0.92	1.08	0.55	0.63	32.92	41.8	3.53	4.02	**373.45**	-	32.33	**46.26**	0.00	-
MPYDD002	MPY90833	41.3	42.3	98.71	121.25	5	5.74	2.71	3.1	1.89	2.19	5.24	6.04	1.08	1.24	51.22	60.07	0.53	0.6	47.53	55.43	12.66	15.3	14.66	22.48	8.12	9.42	0.77	0.9	0.5	0.57	28	35.56	3.17	3.61	**343.51**	-	32.59	**46.62**	0.00	-
MPYDD002	MPY90834	42.3	43.3	154.59	189.89	4.86	5.58	2.72	3.11	1.8	2.08	5.03	5.8	1.05	1.2	50.47	59.19	0.53	0.6	45.52	53.09	12.22	14.77	14.61	22.41	7.62	8.84	0.72	0.85	0.48	0.55	25.57	32.47	3.21	3.66	**404.09**	-	34.07	**48.75**	0.00	-
MPYDD002	MPY90835	43.3	44	110.42	135.64	4.83	5.55	2.6	2.98	1.8	2.09	4.83	5.57	1.06	1.22	42.02	49.28	0.49	0.56	40.86	47.66	10.5	12.69	11.41	17.5	7.12	8.26	0.72	0.85	0.48	0.55	25.74	32.69	3.03	3.46	**326.52**	-	24.14	**34.54**	0.00	-
MPYDD002	MPY90836	44	45	101.08	124.16	6.05	6.94	3.25	3.71	1.96	2.28	5.61	6.47	1.3	1.49	41.99	49.25	0.56	0.63	42.57	49.66	10.85	13.11	11.9	18.26	8.03	9.32	0.87	1.02	0.56	0.64	33.75	42.86	3.64	4.15	**333.94**	-	21.94	**31.38**	0.00	-
MPYDD002	MPY90837	45	46	108.79	133.63	6.41	7.36	3.59	4.11	2.16	2.5	6.04	6.96	1.38	1.58	48.54	56.93	0.69	0.78	47.73	55.68	12.45	15.04	15.79	24.21	8.93	10.36	0.94	1.11	0.68	0.78	36.3	46.1	4.37	4.98	**372.1**	-	33.57	**48.03**	0.00	-
MPYDD002	MPY90838	46	47.1	102.28	125.64	5.96	6.84	3.12	3.57	2.18	2.52	5.89	6.79	1.27	1.46	47.18	55.33	0.54	0.61	47.5	55.4	12.12	14.64	12.47	19.12	8.61	9.98	0.9	1.06	0.55	0.63	32.5	41.28	3.45	3.93	**348.81**	-	23.74	**33.97**	0.00	-
MPYDD002	MPY90839	48.4	49	68.82	84.53	3.45	3.96	1.92	2.2	1.5	1.73	3.33	3.83	0.75	0.86	30.62	35.92	0.4	0.45	27.85	32.48	7.4	8.94	8.28	12.7	4.94	5.72	0.5	0.59	0.37	0.43	19.52	24.79	2.41	2.75	**221.88**	-	28.68	**41.04**	0.00	-
MPYDD002	MPY90841	49	49.5	76.23	93.64	3.32	3.81	1.88	2.15	1.93	2.24	3.62	4.17	0.72	0.82	40.42	47.41	0.36	0.41	34.95	40.76	9.36	11.31	14.2	21.78	5.91	6.85	0.5	0.59	0.34	0.38	18.48	23.47	2.21	2.51	**262.32**	-	40.48	**57.91**	0.01	-
MPYDD002	MPY90842	49.5	50	72.89	89.54	3.05	3.5	1.81	2.07	1.84	2.13	3.37	3.88	0.68	0.78	39.05	45.8	0.41	0.46	32.95	38.43	8.83	10.67	14.02	21.5	5.36	6.21	0.48	0.56	0.34	0.39	17.72	22.5	2.33	2.65	**251.09**	-	41.4	**59.23**	0.01	-
MPYDD002	MPY90843	50	50.8	74.98	92.1	3.84	4.4	2.08	2.38	2.1	2.43	4	4.61	0.81	0.93	38.22	44.83	0.4	0.46	35.18	41.04	9.21	11.13	13.15	20.17	6.2	7.19	0.57	0.68	0.38	0.44	21.52	27.33	2.43	2.77	**262.89**	-	35.87	**51.32**	0.01	-
MPYDD002	MPY90844	52	53.1	62.89	77.25	3.39	3.89	1.83	2.1	1.96	2.27	3.55	4.09	0.72	0.82	32.76	38.42	0.36	0.4	30.52	35.6	7.96	9.61	10.53	16.16	5.54	6.42	0.52	0.61	0.33	0.37	19.1	24.26	2.16	2.46	**224.72**	-	31.12	**44.52**	0.00	-
MPYDD002	MPY90846	54.3	55	87.94	108.03	3.91	4.49	2.27	2.59	1.68	1.94	4.23	4.87	0.87	0.99	44.9	52.66	0.47	0.54	40.15	46.83	10.62	12.83	15.82	24.27	6.73	7.8	0.59	0.7	0.42	0.48	25	31.75	2.83	3.23	**303.99**	-	55.02	**78.72**	0.01	-
MPYDD002	MPY90847	55	56.25	96.62	118.69	6.32	7.25	3.31	3.78	2.03	2.35	6.29	7.24	1.35	1.54	50.69	59.45	0.6	0.68	50.45	58.84	12.76	15.42	16.4	25.16	8.97	10.4	0.95	1.12	0.58	0.67	35.82	45.49	3.73	4.24	**362.35**	-	30.6	**43.78**	0.00	-
MPYDD002	MPY90848	56.25	57.5	96.69	118.77	5.04	5.79	2.72	3.11	1.71	1.98	5.24	6.04	1.05	1.21	49.18	57.67	0.52	0.59	46.3	54	12.04	14.54	14.11	21.64	8.06	9.35	0.75	0.88	0.49	0.56	28.08	35.65	3.22	3.66	**335.47**	-	37.79	**54.06**	0.01	-

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD002	MPY90849	57.5	58.6	102.94	126.45	4.53	5.2	2.52	2.89	1.4	1.62	4.79	5.52	0.98	1.12	53.36	62.58	0.5	0.57	46.99	54.81	12.64	15.28	10.68	16.37	7.81	9.06	0.68	0.79	0.47	0.53	25.62	32.54	3.07	3.5	**338.84**	-	52.82	**75.56**	0.01	-
MPYDD002	MPY90851	58.6	60	82.68	101.57	4.28	4.91	2.34	2.68	1.54	1.79	4.37	5.04	0.9	1.03	40.73	47.76	0.43	0.49	36.95	43.1	9.91	11.97	12.98	19.91	6.43	7.45	0.65	0.77	0.41	0.46	23.07	29.29	2.62	2.98	**281.21**	-	26.64	**38.11**	0.00	-
MPYDD002	MPY90852	60	61	65.26	80.17	3.25	3.73	1.78	2.04	1.12	1.3	3.31	3.81	0.71	0.81	32.13	37.68	0.35	0.4	28.31	33.02	7.76	9.37	10.31	15.81	5.06	5.87	0.5	0.59	0.32	0.36	18.55	23.56	2.09	2.38	**220.91**	-	27.48	**39.32**	0.00	-
MPYDD002	MPY90853	61	62.1	97.84	120.18	4.77	5.47	2.89	3.3	1.22	1.41	4.67	5.39	1.1	1.26	49.01	57.48	0.59	0.67	42.08	49.08	11.69	14.12	14.74	22.61	7.19	8.34	0.73	0.85	0.54	0.62	29.01	36.84	3.55	4.04	**331.68**	-	55.19	**78.96**	0.01	-
MPYDD002	MPY90854	62.6	64	96.11	118.06	5.37	6.16	2.83	3.24	1.95	2.25	5.29	6.09	1.14	1.3	47.33	55.51	0.51	0.58	43.14	50.32	11.43	13.81	12.52	19.2	7.75	8.99	0.82	0.96	0.5	0.58	30.48	38.7	3.19	3.63	**329.39**	-	30.95	**44.28**	0.00	-
MPYDD002	MPY90855	64	65	68.58	84.24	3.9	4.48	2.03	2.32	1.55	1.79	3.83	4.42	0.81	0.93	33.93	39.79	0.37	0.42	30.97	36.12	8.19	9.9	10.42	15.98	5.56	6.44	0.58	0.69	0.37	0.42	21.71	27.57	2.3	2.62	**238.14**	-	25.06	**35.85**	0.00	-
MPYDD002	MPY90856	65	66	104.24	128.05	6.43	7.38	3.37	3.85	2.01	2.33	6.22	7.16	1.36	1.55	52.49	61.56	0.55	0.63	49.02	57.18	12.77	15.42	13.64	20.93	9.01	10.44	0.97	1.14	0.59	0.67	35.9	45.59	3.6	4.1	**368**	-	24.96	**35.72**	0.00	-
MPYDD002	MPY90857	66	67	106.87	131.28	6.03	6.92	3.14	3.59	1.91	2.21	5.95	6.86	1.27	1.46	50.36	59.06	0.55	0.62	47.52	55.43	12.58	15.2	14.03	21.51	8.65	10.03	0.91	1.07	0.54	0.62	33.51	42.56	3.46	3.94	**362.36**	-	26.37	**37.73**	0.00	-
MPYDD002	MPY90858	67	68	109.98	135.09	6.5	7.46	3.32	3.79	2.04	2.36	6.32	7.28	1.4	1.6	53.02	62.18	0.57	0.65	49.13	57.3	13.16	15.9	15.84	24.3	9.1	10.55	0.99	1.17	0.59	0.68	36.03	45.75	3.69	4.2	**380.27**	-	27.71	**39.65**	0.00	-
MPYDD002	MPY90859	68	69	111.47	136.93	6.73	7.72	3.5	4.01	2.04	2.36	6.47	7.45	1.42	1.63	52.54	61.62	0.57	0.65	49.76	58.04	13	15.71	13.33	20.44	9.2	10.67	1	1.18	0.6	0.69	37.59	47.74	3.69	4.2	**381.05**	-	23.08	**33.02**	0.00	-
MPYDD002	MPY90861	69	70	105.87	130.05	6.04	6.94	3.18	3.64	1.91	2.21	6.06	6.98	1.3	1.49	51.63	60.55	0.54	0.62	48.49	56.56	12.74	15.39	13.46	20.64	8.81	10.21	0.93	1.09	0.55	0.63	34.15	43.37	3.45	3.93	**364.3**	-	28.89	**41.33**	0.00	-
MPYDD002	MPY90862	70	71.1	88.45	108.65	4.59	5.27	2.46	2.81	1.5	1.73	4.64	5.35	0.96	1.1	44.11	51.73	0.43	0.49	39.9	46.54	10.66	12.87	12.37	18.98	7.06	8.18	0.7	0.82	0.44	0.5	25.22	32.02	2.77	3.16	**300.21**	-	32.93	**47.11**	0.00	-
MPYDD002	MPY90863	72.5	73.1	100.06	122.91	5.57	6.4	2.83	3.24	1.91	2.22	5.63	6.49	1.17	1.34	50.14	58.81	0.49	0.56	46.92	54.73	12.33	14.9	12.92	19.82	8.28	9.61	0.86	1.01	0.5	0.57	29.6	37.59	3.12	3.55	**343.72**	-	29.45	**42.13**	0.00	-
MPYDD002	MPY90864	74.1	75.9	93.04	114.29	5.3	6.09	2.78	3.18	1.82	2.1	5.29	6.1	1.14	1.31	45.49	53.35	0.49	0.56	42.56	49.64	11.26	13.6	12.83	19.68	7.81	9.06	0.81	0.95	0.48	0.55	29.35	37.27	3.05	3.47	**321.2**	-	25.05	**35.85**	0.00	-
MPYDD002	MPY90866	75.9	77.1	95.17	116.91	5.61	6.43	2.9	3.31	1.94	2.25	5.51	6.35	1.17	1.34	48.07	56.37	0.49	0.55	45.64	53.23	11.82	14.28	11.59	17.77	8.15	9.46	0.83	0.97	0.51	0.58	30.13	38.26	3.13	3.57	**331.64**	-	28.93	**41.4**	0.00	-
MPYDD002	MPY90867	78.7	80	98.18	120.6	5.35	6.14	2.82	3.23	1.86	2.16	5.3	6.11	1.14	1.31	48.81	57.24	0.47	0.53	44.26	51.62	11.72	14.16	11.7	17.95	7.94	9.21	0.83	0.97	0.49	0.56	29.94	38.02	3.04	3.46	**333.27**	-	29.29	**41.9**	0.00	-
MPYDD002	MPY90868	80	81	99.73	122.5	6.05	6.95	3.18	3.63	1.99	2.31	5.81	6.7	1.27	1.45	52.68	61.78	0.53	0.6	47.34	55.22	12.7	15.34	11.64	17.86	8.69	10.08	0.91	1.07	0.54	0.61	33.45	42.48	3.4	3.87	**352.44**	-	29.9	**42.78**	0.00	-
MPYDD002	MPY90869	81	82	139.09	170.86	6.93	7.95	3.63	4.15	2.35	2.72	7	8.06	1.46	1.68	77.16	90.49	0.6	0.68	60.25	70.28	16.43	19.86	13.49	20.7	10.3	11.95	1.07	1.26	0.6	0.68	38.48	48.86	3.87	4.4	**464.59**	-	31.21	**44.65**	0.00	-
MPYDD002	MPY90871	82	83.1	109.61	134.64	5.98	6.87	3.08	3.53	2.11	2.45	5.99	6.91	1.27	1.45	56.75	66.56	0.52	0.6	49.64	57.9	13.37	16.15	11.66	17.88	8.86	10.28	0.93	1.09	0.53	0.61	32.43	41.18	3.31	3.77	**371.85**	-	29.85	**42.71**	0.00	-
MPYDD002	MPY90872	84.2	85.6	74.93	92.04	4.41	5.06	2.33	2.66	1.59	1.84	4.24	4.89	0.95	1.09	37.78	44.3	0.42	0.48	34.57	40.32	9.23	11.16	9.26	14.2	6.37	7.39	0.66	0.78	0.41	0.47	24.87	31.58	2.61	2.97	**261.22**	-	29.98	**42.89**	0.00	-
MPYDD002	MPY90873	85.6	86.1	88.42	108.61	4.87	5.59	2.63	3.01	1.7	1.97	4.76	5.48	1.06	1.21	46.28	54.28	0.47	0.53	40.79	47.58	10.79	13.03	11.41	17.5	7.13	8.27	0.73	0.86	0.46	0.53	28.5	36.19	2.97	3.38	**308.02**	-	32.2	**46.07**	0.00	-
MPYDD002	MPY90874	86.55	88	101.88	125.15	6.28	7.21	3.27	3.74	1.94	2.24	5.88	6.78	1.34	1.53	51.81	60.76	0.58	0.66	47.63	55.55	12.47	15.07	11.22	17.22	8.49	9.85	0.94	1.1	0.58	0.66	35.68	45.31	3.64	4.14	**356.98**	-	41.66	**59.6**	0.01	-
MPYDD002	MPY90875	88	89	104.9	128.86	6.05	6.94	3.28	3.75	1.92	2.22	5.69	6.56	1.28	1.47	52.04	61.03	0.59	0.67	46.94	54.75	12.76	15.42	11.58	17.77	8.41	9.75	0.89	1.05	0.57	0.65	34.19	43.42	3.65	4.16	**358.47**	-	46.3	**66.25**	0.01	-
MPYDD002	MPY90876	89	90	106.05	130.27	5.92	6.8	3.23	3.69	1.77	2.04	5.59	6.45	1.29	1.48	54.16	63.52	0.61	0.69	47.66	55.59	12.85	15.53	12.54	19.23	8.27	9.59	0.87	1.02	0.59	0.68	34.39	43.68	3.8	4.33	**364.58**	-	59.12	**84.58**	0.01	-
MPYDD002	MPY90877	90	91.3	109.93	135.04	6.34	7.27	3.45	3.94	1.95	2.26	6.19	7.13	1.37	1.57	59.05	69.25	0.62	0.71	52.45	61.17	14.11	17.05	11.32	17.37	9.17	10.63	0.94	1.11	0.62	0.7	37.01	47	3.91	4.45	**386.67**	-	53.88	**77.09**	0.01	-
MPYDD002	MPY90878	91.3	92.8	96.15	118.11	5.35	6.13	2.96	3.38	1.58	1.83	4.79	5.52	1.14	1.31	48.49	56.87	0.55	0.63	39.3	45.84	10.85	13.1	6.26	9.61	7.02	8.14	0.78	0.91	0.54	0.62	29.72	37.74	3.51	3.99	**313.74**	-	72.53	**103.77**	0.01	-
MPYDD002	MPY90879	92.8	94	130.04	159.75	7.54	8.65	4.06	4.65	2.07	2.4	6.89	7.94	1.59	1.82	67.08	78.67	0.74	0.84	59.2	69.05	16.15	19.51	10.05	15.41	10.28	11.92	1.11	1.3	0.73	0.84	43.07	54.69	4.62	5.26	**442.69**	-	70.37	**100.68**	0.01	-
MPYDD002	MPY90881	94	95	111.86	137.4	6.62	7.6	3.69	4.21	1.86	2.15	6.06	6.99	1.45	1.66	59.85	70.19	0.68	0.77	52.09	60.76	14.35	17.33	10.67	16.36	9.15	10.61	0.99	1.16	0.67	0.77	38.95	49.47	4.27	4.87	**392.31**	-	68.37	**97.82**	0.01	-
MPYDD002	MPY90882	95	96	123.66	151.9	7.13	8.18	3.86	4.42	2.02	2.34	6.72	7.74	1.54	1.77	63.22	74.14	0.67	0.76	54.58	63.66	15.04	18.17	8.75	13.42	9.73	11.28	1.08	1.27	0.69	0.78	41.13	52.23	4.3	4.9	**416.97**	-	62.17	**88.95**	0.01	-
MPYDD002	MPY90883	96	97	129.02	158.49	7.04	8.08	3.81	4.35	1.99	2.31	6.54	7.54	1.53	1.75	63.45	74.42	0.68	0.78	56.39	65.77	15.09	18.23	9.4	14.42	9.82	11.39	1.05	1.24	0.69	0.78	40.87	51.9	4.34	4.94	**426.39**	-	69.45	**99.36**	0.01	-
MPYDD002	MPY90884	97	98	133.74	164.28	7.11	8.17	4.05	4.63	2.01	2.32	6.43	7.41	1.57	1.8	64.05	75.11	0.76	0.86	53	61.82	14.96	18.07	9.74	14.95	9.61	11.15	1.05	1.23	0.75	0.86	41.63	52.86	4.77	5.43	**430.95**	-	72	**103.01**	0.01	-
MPYDD002	MPY90886	98	99	123.89	152.19	6.94	7.97	4.03	4.61	2	2.32	6.47	7.46	1.56	1.79	62.03	72.75	0.75	0.86	54.06	63.06	14.77	17.84	10.59	16.25	9.41	10.91	1.02	1.2	0.73	0.84	41.28	52.42	4.76	5.42	**417.86**	-	71.42	**102.18**	0.01	-
MPYDD002	MPY90887	99	100	130.44	160.23	7.32	8.4	4	4.58	2.06	2.38	6.81	7.85	1.6	1.83	63.77	74.79	0.76	0.86	55.74	65.02	15.33	18.52	10.43	15.99	9.9	11.47	1.08	1.27	0.73	0.83	42.45	53.91	4.64	5.28	**433.22**	-	69.97	**100.11**	0.01	-
MPYDD002	MPY90888	100	101	137.23	168.57	7.6	8.72	4.26	4.88	2.11	2.45	7.24	8.34	1.66	1.9	69.14	81.09	0.76	0.87	59.53	69.43	16.23	19.61	9.75	14.96	10.34	12	1.13	1.33	0.77	0.87	44.93	57.06	4.84	5.51	**457.59**	-	79.39	**113.59**	0.01	-
MPYDD002	MPY90889	101	102	156.04	191.68	8.86	10.17	4.94	5.65	2.26	2.62	8.11	9.34	1.92	2.2	76.94	90.23	0.88	1	65.19	76.04	18.13	21.91	10	15.34	11.85	13.74	1.33	1.56	0.9	1.03	52.9	67.18	5.57	6.34	**516.04**	-	83.46	**119.41**	0.01	-
MPYDD002	MPY90890	102	103	138.05	169.58	8.39	9.63	4.75	5.44	2.1	2.44	7.4	8.53	1.84	2.1	73.46	86.15	0.9	1.02	61.67	71.94	17.22	20.8	10.55	16.18	11.02	12.78	1.2	1.42	0.88	1	50.08	63.6	5.56	6.34	**478.93**	-	93.06	**133.15**	0.01	-
MPYDD002	MPY90891	103	104	157.38	193.32	8.46	9.72	4.95	5.65	1.99	2.3	7.36	8.49	1.9	2.18	74.1	86.9	0.94	1.07	60.49	70.56	17.11	20.67	11.61	17.81	10.74	12.45	1.21	1.43	0.93	1.06	50.9	64.64	6.01	6.84	**505.1**	-	100.32	**143.53**	0.01	-
MPYDD002	MPY90892	104	105	171.89	211.15	10.06	11.55	5.92	6.77	2.01	2.32	8.41	9.69	2.25	2.58	86.65	101.62	1.16	1.31	68.75	80.19	19.75	23.86	11.28	17.3	12.22	14.17	1.42	1.67	1.11	1.27	61.89	78.59	7.28	8.29	**572.34**	-	121.51	**173.84**	0.02	-
MPYDD002	MPY90893	105	106	185.47	227.84	10.54	12.09	6.26	7.15	1.98	2.3	8.83	10.17	2.35	2.69	96.82	113.55	1.2	1.37	73.59	85.83	21.15	25.56	10.98	16.84	12.49	14.49	1.48	1.75	1.19	1.36	63.63	80.8	7.66	8.73	**612.5**	-	138.79	**198.57**	0.02	-
MPYDD002	MPY90894	106	107	210.65	258.76	11.27	12.94	7.19	8.22	1.97	2.28	9.01	10.39	2.63	3.01	98.25	115.22	1.47	1.67	75.19	87.71	21.69	26.21	11.47	17.59	13.01	15.09	1.54	1.81	1.4	1.6	71.64	90.97	9.28	10.57	**664.04**	-	150.72	**215.63**	0.02	-
MPYDD002	MPY90895	107	108	230.75	283.45	11.74	13.47	7.38	8.44	2.03	2.35	9.43	10.87	2.69	3.08	107.88	126.53	1.47	1.67	80.64	94.06	23.53	28.43	12.27	18.82	13.81	16.01	1.62	1.9	1.43	1.64	73.75	93.66	9.44	10.75	**715.13**	-	183.75	**262.9**	0.03	-
MPYDD002	MPY90896	108	109	245.66	301.77	12.78	14.67	7.74	8.85	2.26	2.61	10.56	12.18	2.89	3.31	122.38	143.52	1.51	1.71	89.74	104.67	26.44	31.94	11.33	17.38	15.54	18.02	1.79	2.1	1.46	1.67	78.46	99.64	9.84	11.2	**775.25**	-	190.98	**273.24**	0.03	-

NIOBIUM DISCOVERY AT MPYUPYU TARGET

Hole Number	Sample ID	From	To	Ce ppm	CeO_2 ppm	Dy ppm	Dy_2O_3 ppm	Er ppm	Er_2O_3 ppm	Eu ppm	Eu_2O_3 ppm	Gd ppm	Gd_2O_3 ppm	Ho ppm	Ho_2O_3 ppm	La ppm	La_2O_3 ppm	Lu ppm	Lu_2O_3 ppm	Nd ppm	Nd_2O_3 ppm	Pr ppm	Pr_6O_{11} ppm	Sc ppm	Sc_2O_3 ppm	Sm ppm	Sm_2O_3 ppm	Tb ppm	Tb_4O_7 ppm	Tm ppm	Tm_2O_3 ppm	Y ppm	Y_2O_3 ppm	Yb ppm	Yb_2O_3 ppm	TREO ppm	Ga^3 ppm	Nb ppm	Nb_2O_5 ppm	Nb_2O_5 %	Ta^3 ppm
MPYDD002	MPY90897	109	110	224.63	275.93	9.36	10.74	4.75	5.43	2.77	3.21	9.47	10.92	1.94	2.22	108.6	127.36	0.85	0.97	87.18	101.69	24.62	29.74	11.74	18.01	14.3	16.58	1.46	1.72	0.86	0.99	49.37	62.7	5.47	6.22	**674.42**	-	124.73	**178.45**	0.02	-
MPYDD002	MPY90898	110	110.8	174.38	214.21	9.16	10.51	5.2	5.95	2.73	3.16	8.28	9.54	2.02	2.31	100.5	117.86	0.94	1.07	74.83	87.28	21.74	26.27	12.36	18.95	12.31	14.28	1.33	1.57	0.96	1.1	56.23	71.4	6.17	7.03	**592.49**	-	128.56	**183.92**	0.02	-

-*3 Drillhole MPYDD002 was not assayed for Gallium and Tantalum.

Table 2: Locations all drill holes shown or mentioned in this announcement.

-Project	Hole number	Depth	Area	Grid	Easting	Northing	Azimuth	Elevation
-CHILWA REE	MPYDD001	180.4	MPYUPYU	WGS 84 / UTM zone 36S	770850.638	8295417.436	270	648.89
CHILWA REE	MPYDD002	110.8	MPYUPYU	WGS 84 / UTM zone 36S	771251.31	8295311.04	270	641.7955
CHILWA REE	MPYDD003	217.8	MPYUPYU	WGS 84 / UTM zone 36S	770961.25	8295621.7	319	648.1866
CHILWA REE	MPYDD004	239.1	MPYUPYU	WGS 84 / UTM zone 36S	771010.76	8296055.69	270	648.3398
CHILWA REE	MPYDD005	170.4	MPYUPYU	WGS 84 / UTM zone 36S	770520.244	8295232.78	270	653.2327
CHILWA REE	MPYDD006	251.1	MPYUPYU	WGS 84 / UTM zone 36S	770745.26	8295053.5	90	646.4651
CHILWA REE	MPYDD006A	72.4	MPYUPYU	WGS 84 / UTM zone 36S	770744.09	8295053.38	270	646.5075
CHILWA REE	MPYDD007	215	MPYUPYU	WGS 84 / UTM zone 36S	770960	8295053	273	645

Table 3 Significant intercepts calculations

Hole Number	Depth From(m)	Depth To (m)	Intercept (m)	Nb205_%	TREO ppm	Ta ppm	Ga ppm
MPYDD006	98	103.6	5.6	0.17	2,671	88.7	57.3
MPYDD006	98	99	1	0.28	3,682	145.48	61.32
MPYDD006	125	251.1	126.1	0.31	1,661	174.81	55.42
MPYDD006	129	130.55	1.55	0.57	2,270	320.4	56.7
MPYDD006	138	200	62	0.38	1,654	225.2	61.31
incl	190	200	10	0.45	2,365	316.57	63.59
MPYDD006	155	167	12	0.41	1,405	218.64	62.03
MPYDD006	195	196	1	0.51	2,438	361.15	65.56

APPENDIX 1 – JORC TABLE 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (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.*	Sampling was undertaken on diamond drill core (PQ, HQ and NQ diameters) recovered from reconnaissance drilling. Half-core sampling was carried out using a diamond saw. Intervals were selected based on geological logging (lithology, alteration, mineralisation, veining). No XRF tools were used for external reporting, only for qualitative field guidance. Samples were collected in 1 m or lithology-constrained intervals. 2.5–5 kg of half-core material was collected per sample, prepared (crushed to <1mm) at in house prep lab and sent to an accredited lab for REE assay by ICP-MS. Mineralisation was logged visually and confirmed using historic data and petrography.
Drilling techniques	*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*	Reconnaissance drilling was completed using diamond drilling (PQ, HQ and NQ core diameter) with standard wireline/winch technique. Core orientation was conducted using Axis

Criteria	JORC Code explanation	Commentary
	is oriented and if so, by what method, etc).	Mining technology Champ Ori device and software.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	Core recoveries were recorded for each run by measuring recovered length vs drilled length. Recoveries generally exceed 99% in fresh rock and 93% in weathered zone. Poorly recovered zones were logged as poor recovery or core loss as applicable. Drilling was monitored continuously. Drillers used manual extraction off the core barrel techniques throughout the exercise. Sampling avoided zones of core loss. No bias has been observed. medium-grained REE/Nb minerals are not expected to be preferentially lost. However, this will be reassessed as project advances.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	All drill core was geologically logged (lithology, alteration, structure, mineralisation, veining) to industry standards. Logging is suitable to support Geological Modelling requirements. Logging was both qualitative and semi-quantitative. All cores were photographed (wet and dry). Modal mineralogy was estimated visually. 100% of core was logged from surface to end of hole.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all cores taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Sample Core was half-core sampled using a diamond saw. In some instances, quarter-core for duplicate. Not applicable – diamond core only. Sample prep followed industry best practices: drying, crushing 80% to < 1

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique. *Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second- half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	mm to, splitting, bagging 100g per sample for shipment. QAQC includes field duplicates, blanks, certified reference materials (CRMs) inserted at regular intervals (~1:20). Field and laboratory duplicates strongly replicated indicating sampling precision. REE-bearing minerals (e.g. Synchysite, Bastnasite, monazite, pyrochlore,) are fine- to medium-grained; current sample sizes (2.5 –5 kg) is appropriate.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis include instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *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.*	Assays conducted at UIS Analytical Services Pty.Ltd in Johannesburg. ICP-MS and ICP-OES were used for REE suite-, Ce, La, Tb, Dy, Pm, Pr, Nd, Sm, Gd, Eu, Ho, Er, Tm, Lu, Yb,Y and Sc ensuring near-total digestion of resistant minerals. Handheld Olympus Vanta XRF used only for qualitative logging guidance. Not used in public reporting. QAQC program includes insertion of CRMs, blanks, duplicates. Initial internal lab QC and CRM results indicate acceptable accuracy and precision. Independent check assays to follow.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data*	Logging and sampling verified by project geologist and reviewed by the Chief Project Geologist. No twinning conducted during this a reconnaissance stage. All logging and sampling data recorded digitally in the field/core sample shed, validated, and backed up on secure

Criteria	JORC Code explanation	Commentary
	storage (physical and electronic) protocols. *Discuss any adjustment to assay data.*	servers. Hardcopy backups also maintained. No adjustments to raw assay data. REO calculated from elemental REE data using standard conversion factors.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine* *workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Drill collar locations surveyed using differential GPS (DGPS) with sub-metre accuracy. Downhole surveys conducted with AXIS gyro tools. WGS84 / UTM Zone 36S. LiDAR-based topographic control used for collar elevations and drill planning. Accuracy within ±0.5 m.
Data spacing and distribution	*Data spacing for reporting Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	Reconnaissance holes spaced at ~300 x 300 m grid, sufficient for early-stage targeting but not for resource estimation. No Mineral Resource defined at this stage. Drill hole spacing is not yet sufficient for Inferred classification. No compositing done for reporting purposes.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	Analysis of the structure tested is ongoing to arrive to a determination of true width of mineralisation. Holes were oriented to intercept interpreted geophysical anomaly structures. Orientation is believed to be suitable for initial reconnaissance drilling. Any bias will be evaluated as more structural data is obtained.

Criteria	JORC Code explanation	Commentary
Sample security	*The measures taken to ensure sample security.*	Samples were stored securely on site, transported by Chilwa Minerals Field personnel and shipped directly to the laboratory via tracked courier. Chain-of-custody protocols were followed until delivery to UIS Analytic Laboratory.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Internal review of sampling protocols conducted. External audit planned upon receipt of entire Mposa assay batches.

Section 2 Reporting Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	Work is undertaken under exploration license EL0670/22/R1 100% owned by Chilwa Minerals Africa. Chilwa Minerals Limited also controls (100%) of license EL0835/25 directly to the south of EL0670/22/R1 through its 100% subsidiary Phalombe Minerals. EL0670/22/R1 and EL0835/25 have been issued in July 2025 for 3 and 5 year exploration terms
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Systematic exploration for REE mineralisation and Carbonatites has not been undertaken within the tenement, however, has been conducted in the immediate regional area (eg Tundulu and Songwe hills). Academic research into the deposition of the HMS deposits around Lake Chilwa have been undertaken since the 1980's. Exploration of the HMS mineralisation in the lake Chilwa area has been undertaken by various

Criteria	JORC Code explanation	Commentary
		government concerns and companies, commencing with Claus Brinkmann between 1991 and 1993 as part of an initiative by the German Government to aid mineral development in Malawi. Millennium Mining Limited (MML) concluded exploration work in the area, focusing on the northern deposits of Halala and Namanja during the early 2000s. In 2014, Tate Minerals (Tate) undertook a desktop review of the work undertaken by Claus Brinkmann and entered into a Joint Venture agreement with Mota-Engil Investments (Malawi) Limited (MEIML) to explore EL 0572/20, an EL that contains the current target area.
Geology	*Deposit type, geological setting and style of mineralisation.*	Potential REE and Niobium, Tantalum, Gallium mineralisation within and beneath previously identified Heavy Mineral Sands deposits. As well as potential separate REE deposits within or resulting from Alkaline magmatic activity (Carbonatites) in the area, a component of the Cretaceous age Chilwa Alkaline province.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *downhole length and interception depth*	A full table of results is provided in **Appendix 1.** Details are provided in Table 2 in the announcement**.**

Criteria	JORC Code explanation	Commentary
	• *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this* *exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Length-weighted average grades were used to report grades with a cut-off grade of 0.2% Nb205 applied with minor (up to 1.3m) intervals below 1.0% Nb205), for a weighted average interval of a minimum 0.2% Nb205, as is deemed appropriate for early-stage exploration reporting. Interval calculation used a standard length- weighted (weighted average grade) techniques as shown in table 3. No metal equivalent values were reported. All grades are reported as individual elemental values (ppm) and Total Rare Earth Oxide (TREO) values, calculated using standard oxide conversion factors.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Addressed in Table 3 above with detail on intercepts quoted in the announcement.

Criteria	JORC Code explanation	Commentary
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Maps, sections and plan view are provided in the accompanying press release.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All relevant information has been included in this press release and is considered to represent a balanced report.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to):* *geological observations; geophysical survey results;* *geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	See previous Company announcements for further reference.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological* *interpretations and future drilling areas, provided this information is not commercially sensitive.*	Reconnaissance Diamond Drilling testing all 47 geophysics anomalies as well as geochemistry soil anomalies is ongoing. A drill program aimed at resource definition around hole MPYDD006 has been planned as shown in Figure 1.