

ASX RELEASE

22 April 2025

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REGISTERED OFFICE

Power Minerals Limited
Suite 6, Level 1
389 Oxford Street
Mount Hawthorn WA 6019

t: +61 8 6385 2299
e: admin@powerminerals.com.au
w: www.powerminerals.com.au

BOARD

Stephen Ross
Non-Executive Chairman

Mena Habib
Managing Director

James Moses
Non-Executive Director

Caue Pauli de Araujo
Non-Executive Director

Power to commence drill testing of REE potential at Santa Anna project, Brazil

Highlights

- Power has identified REE potential at the Santa Anna niobium carbonatite project in Goiás State, Brazil
- Power has signed a binding letter of intent for an option to acquire the Santa Anna niobium carbonatite project
- Santa Anna is a high-grade, niobium-REE carbonatite-hosted asset with niobium drilling results up to 3.36% Nb₂O₅
- As part of due diligence for the acquisition, Power has identified drillholes containing REE mineralisation from surface to end-of-hole depth – including up to 35,473ppm (or 3.55%) TREO
- Notable REE results include:
 - 14.95m at 12,434ppm TREO from surface to end of hole (EOH), incl. 6m at 22,284ppm TREO from 8m, incl. 1m at 35,473ppm from 6m (MN-TH-0009)
 - 51m at 10,262ppm TREO from surface to EOH, incl. 6m at 24,210ppm TREO from 28m and 13m at 16,759ppm from surface, incl. 1m at 32,297ppm TREO from 6m (MN-RC-0009)
 - 15m at 14,841ppm TREO from surface to EOH, incl. 5m at 21,521ppm TREO from 1m, incl. 1m at 31,365ppm TREO from 4m (MN-AC-0007)
- Drilling to commence to immediately define an Exploration Target, with further drilling designed to delineate a JORC Mineral Resource Estimate (subject to results and the exercise of the option)
- Power to test drill samples to confirm if the clay-hosted REEs are Ionic Adsorption Clays (IACs)
- If Power exercises the option to acquire Santa Anna, the project will complement its existing portfolio of strategic critical minerals assets and strengthen its position as a South American-focused clean energy metals explorer and developer.

Power Minerals Limited (ASX: **PNN**, **Power** or the **Company**) is pleased to announce it has identified rare earth elements (REE) potential at the Santa Anna niobium carbonatite project ("Santa Anna" or "the Project") in Goiás State, located in the central region of Brazil. Power has signed a binding letter of intent (LoI) for an exclusive option to acquire the Santa Anna Project, and is currently undertaking due diligence in respect of the acquisition (ASX announcement 16 April 2025).



The Santa Anna Project is a high-grade drill-ready niobium carbonatite-hosted asset, and the acquisition, if completed, will significantly enhance Power's position as a South American-focused clean energy metals explorer and developer.

"The REE potential of the Santa Anna Project represents an exciting addition to the Project's value proposition. Our due diligence of Santa Anna's drilling data base has identified that a number of drillholes contain significant REE mineralisation from surface to end-of-hole depth. In addition, large areas of the Santa Anna have been subject to minimal or no drilling, providing discovery potential for new niobium and RRE deposits from our planned targeted exploration programs. We view the acquisition of the Santa Anna Project as having the potential to be highly value accretive.

On exercise of the option and completion of the acquisition, Power will hold a significant alkaline complex, and the opportunity to pursue REE discoveries - in addition to niobium carbonatite discoveries - further adding to our positive initial view of the Project's upside and value."

Power Minerals Limited Managing Director, Mena Habib

Background to REE potential

As part of its due diligence at the Santa Anna Project, Power advises that further evaluation of available exploration data indicates that the Project hosts significant REE potential.

The Project has a comprehensive drilling database of 192 drillholes for 5,377 metres in total, 196 surface geochemical samples, plus extensive trenching data.

Power has identified that a number of drillholes contain significant REE mineralisation within the clay-rich, highly weathered zone - from surface to end of hole (EOH) depth, while still containing REE. This suggests that there may be potential for expanding the thickness of the material that hosts REEs.

Furthermore, there are extensive areas of the Project that have seen minimal or no drilling to date. This presents an opportunity for additional discoveries of niobium and REE's in the undrilled areas and also at depth within the Santa Anna Alkaline Complex.

Power has identified that the heavily weathered, clay-rich upper layer of the Santa Anna Alkaline Complex contains significant amounts of REE. Depending on the mineralogy, there may be potential for both niobium and REE to be recovered separately during processing in any future mining operation at the Project - and deliver REE credits, which may significantly improve the economic viability of a future mining and processing operation at the Santa Anna Project.

Subject to exercise of the option and completion of the acquisition, Power will hold an alkaline complex, spanning approximately 2.5km from west to east. Carbonatite niobium projects are highly sought after worldwide, and Power considers this to be a rare opportunity to acquire such a large carbonatite field.

Carbonatite is known to be enriched in REE, with REE minerals (such as bastnäsite, monazite, allanite, xenotime and parasite) found in magmatic carbonatite, and the entire rock body may have the potential to be mineralised. During the later stages, and often following intrusion, hydrothermal processes can lead to the migration and concentration of REEs within and around carbonatite.



This leads to the formation of REE Ionic Adsorption Clays (IACs). Contributing factors in the formation of IACs include the type of host rocks and the presence of a tropical climate with deep weathering. It is known that the Santa Anna Alkaline Complex has experienced long-term tropical deep weathering and leaching. This may mobilise REEs and cause them to precipitate onto the surfaces of clay minerals.

The higher REE concentrations within the near surface clays over Santa Anna Alkaline Complex supports this process of REE ion migration, suggesting the soft laterite REE concentrations may be IAC hosted.

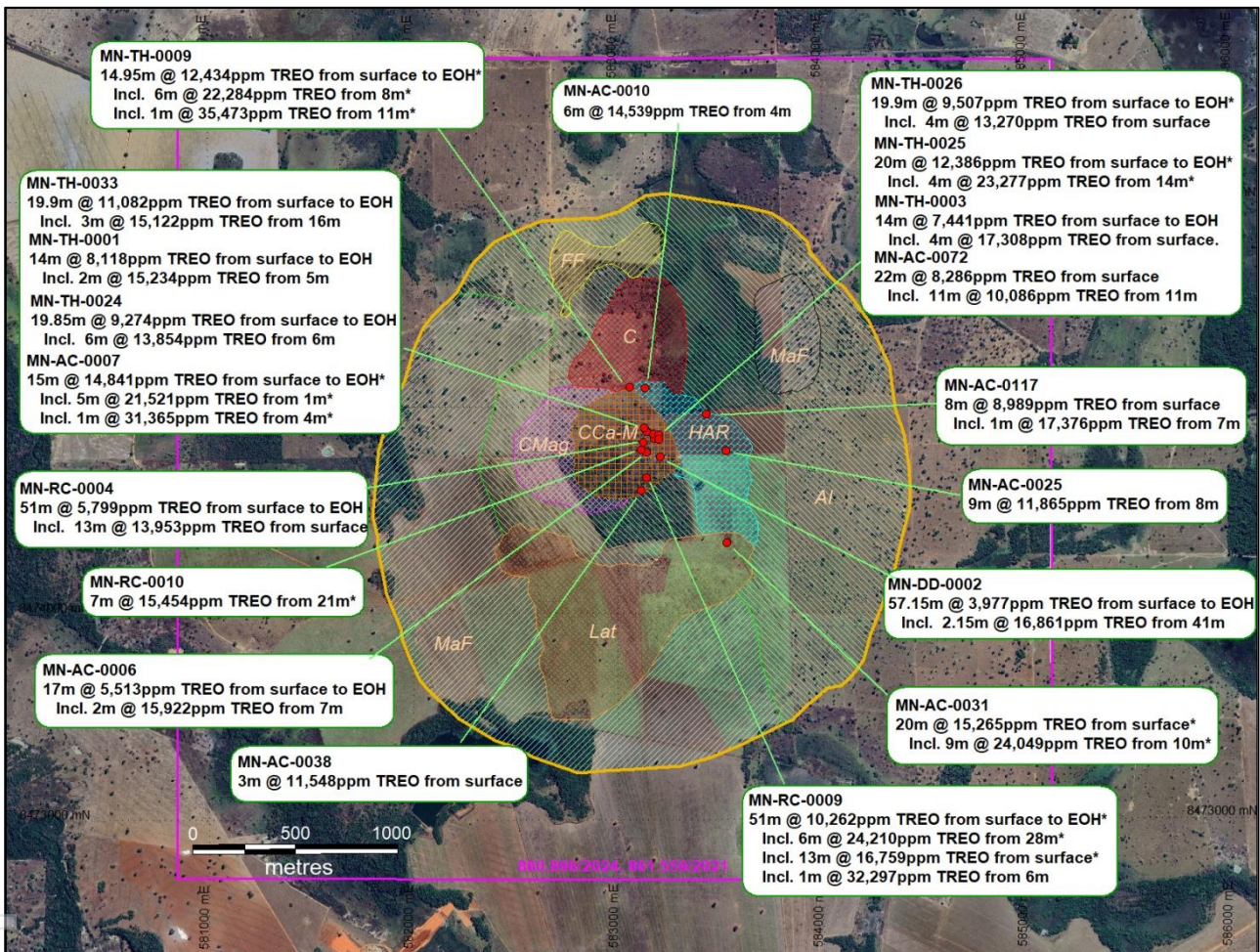


Figure 1. Santa Anna Project plan showing significant TREO drilling results. Refer to Tables 2 to 4 for details of all drillhole locations and drilling results.

Next steps

Exploration permits are already in place at the Santa Anna Project. Power has commenced due diligence regarding the option to acquire the Project, and as part of this process will conduct at least 2,000 metres of reverse circulation (RC) drilling. Drilling will aim to confirm an Exploration Target as defined in the 2012 JORC Code. See Figure 2 for planned priority drilling locations.

Subject to the results of the initial drilling program, the exercise of the option and completion of the acquisition, Power intends to conduct further drilling to delineate a maiden JORC-compliant Mineral Resource Estimate (MRE).

Surplus material generated from the initial drilling will be used for leach testing to evaluate the pH required for maximum REE recovery. A pH measure of around 4 is considered to be an optimal result, and is a key factor in determining whether significant extraction can be achieved from a clay deposit – and is a critical parameter in determining its economic viability.

Predicting the location of REE and Nb concentrations within highly weathered clay laterite is challenging, and systematic drillhole sampling will be undertaken to map their concentrations. The project vendor has previously completed 17 diamond core holes, which will provide essential initial bulk density information on the Project’s lithology.

Table 1. Significant TREO results returned from drilling by vendor EDEM. Intervals marked with * have a minimum TREO value as one or more individual REE values was over laboratory method upper limit.

<p>MN-AC-0006 17m @ 5,513ppm TREO from surface to EOH Incl. 2m @ 15,922ppm TREO from 7m</p>	<p>MN-RC-0009 51m @ 10,262ppm TREO from surface to EOH* Incl. 6m @ 24,210ppm TREO from 28m* Incl. 13m @ 16,759ppm TREO from surface* Incl. 1m @ 32,297ppm TREO from 6m</p>
<p>MN-AC-0007 15m @ 14,841ppm TREO from surface to EOH* Incl. 5m @ 21,521ppm TREO from 1m* Incl. 1m @ 31,365ppm TREO from 4m*</p>	<p>MN-RC-0010 7m @ 15,454ppm TREO from 21m*</p>
<p>MN-AC-0010 6m @ 14,539ppm TREO from 4m</p>	<p>MN-TH-0001 14m @ 8,118ppm TREO from surface to EOH Incl. 2m @ 15,234ppm TREO from 5m</p>
<p>MN-AC-0025 9m @ 11,865ppm TREO from 8m</p>	<p>MN-TH-0003 14m @ 7,441ppm TREO from surface to EOH Incl. 4m @ 17,308ppm TREO from surface.</p>
<p>MN-AC-0031 20m @ 15,265ppm TREO from surface* Incl. 9m @ 24,049ppm TREO from 10m*</p>	<p>MN-TH-0009 14.95m @ 12,434ppm TREO from surface to EOH* Incl. 6m @ 22,284ppm TREO from 8m* Incl. 1m @ 35,473ppm TREO from 11m*</p>
<p>MN-AC-0038 3m @ 11,548ppm TREO from surface</p>	<p>MN-TH-0024 19.85m @ 9,274ppm TREO from surface to EOH Incl. 6m @ 13,854ppm TREO from 6m</p>
<p>MN-AC-0072 22m @ 8,286ppm TREO from surface Incl. 11m @ 10,086ppm TREO from 11m</p>	<p>MN-TH-0025 20m @ 12,386ppm TREO from surface to EOH* Incl. 4m @ 23,277ppm TREO from 14m*</p>
<p>MN-AC-0117 8m @ 8,989ppm TREO from surface Incl. 1m @ 17,376ppm TREO from 7m</p>	<p>MN-TH-0026 19.9m @ 9,507 TREO from surface to EOH* Incl. 4m @ 13,270ppm TREO from surface</p>
<p>MN-DD-0002 57.15m @ 3,977ppm TREO from surface to EOH Incl. 2.15m @ 16,861ppm TREO from 41m</p>	<p>MN-TH-0033 19.9m @ 11,082ppm TREO from surface to EOH Incl. 3m @ 15,122ppm TREO from 16m</p>
<p>MN-RC-0004 51m @ 5,799ppm TREO from surface to EOH Incl. 13m @ 13,953ppm TREO from surface</p>	

NOTE: The standard analytical method used by the laboratory used by vendor EDEM had an upper limit of >1% lanthanum (La), >1% cerium (Ce), Pr>0.1% and >0.1% samarium (Sm) for those elements. Twenty-one EDEM drillhole samples from seven separate drillholes exceed one or more of these limits, and the corresponding element assay value was assigned the upper limit value (see Table 4). These samples were not re-analysed using over limit methods as REE were not a target commodity at the time by EDEM. This means that the TREO results for drillholes MN-AC-0007, MN-AC-0031, MN-RC-0009, MN-RC-0010, MN-TH-0009, MN-TH-0025 and MN-TH-0026 must be considered **minimum TREO values**.

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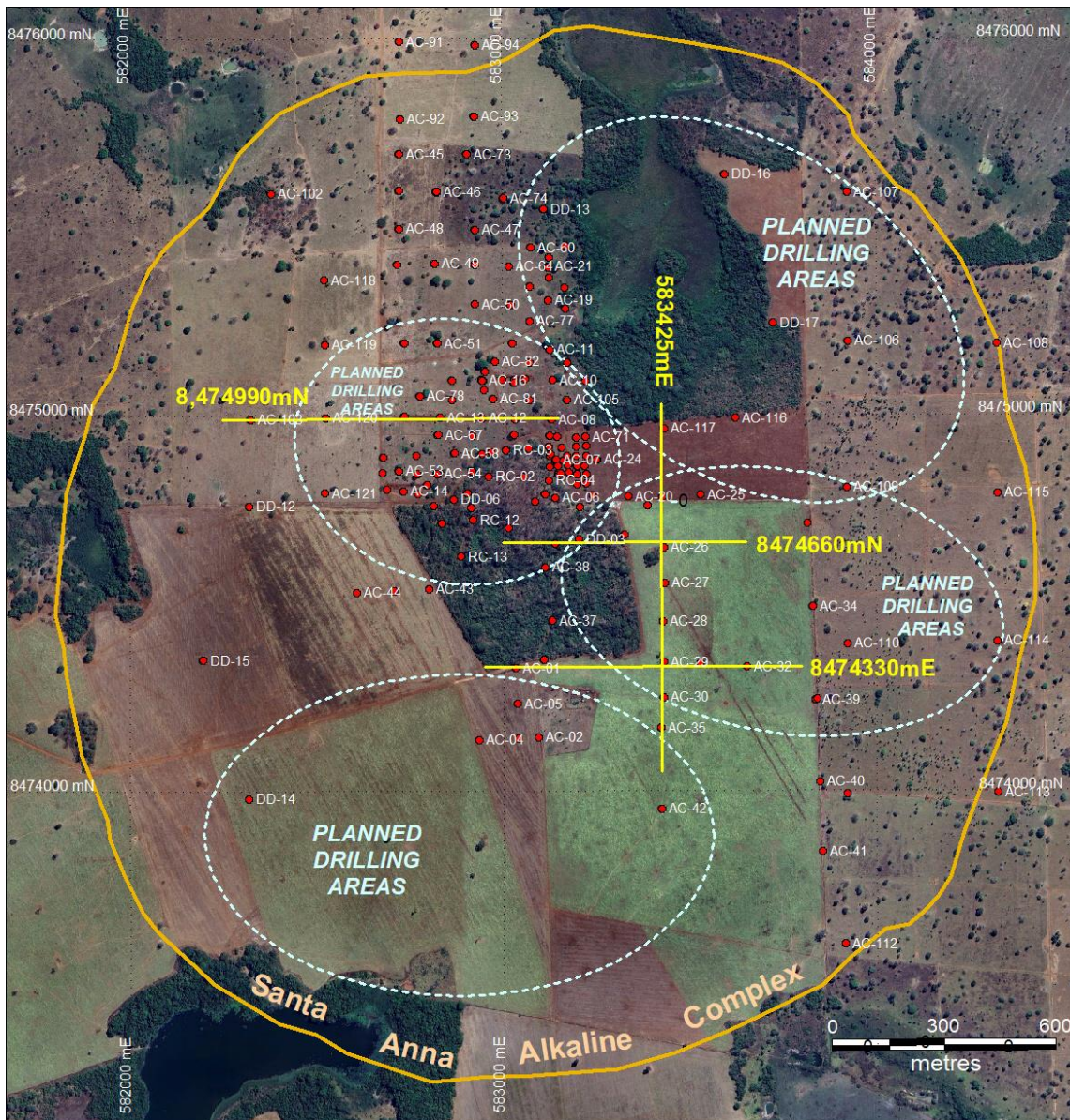


Figure 2. The Santa Anna Alkaline Complex with cross-section locations and planned priority drilling areas shown. Previous drilling shown as red dots.

Santa Anna Project Summary

The Santa Anna Alkaline Complex (SAAC) circular intrusion (roughly 2.5km in diameter) is held under ANM tenements 861.559/2021 and 860.896/2024 which cover 17.2km² - with the complex in the centre of the Project area.

The Project is 40km north of Nova Crixás and 335km northwest of the Brazilian capital, Brasilia, offering ready access to contractors and workforce. The tenement area sits on flat, cleared farmland and established local relationships are in place. It is easily accessible by Highway GO-156 and sealed roads and is also proximal to established power infrastructure.

Geologically the Santa Anna target intrusion is classified as a carbonatite alkaline complex and it is situated in the northern extent of the Goiás Alkaline Province (GAP), an area in central Brazil characterised by Late Cretaceous alkaline magmatism along the northern margin of the Paraná Basin.

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The Project area hosts a weathered cap of outcropping carbonatite (particularly in the upper 40m - clay saprolite), enriched with niobium and phosphate, and prospective for REE mineralisation. This complex consists of a collection of alkaline igneous rocks that are plutonic in nature and rich in key minerals such as calcium, magnesium, phosphate, and potassium.

The Santa Anna Project has been subject to significant recent exploration. A detailed database containing exploration drilling data and surface geochemistry sampling is available and will be thoroughly analysed by Power during its due diligence process.

So far, 192 drillholes have been completed, revealing impressive niobium (Nb₂O₅) grades reaching up to 3.36% (see Figure 2). The geological characteristics observed in every hole were consistent, displaying up to 30 metres of soil and saprolite, alongside carbonatite zones that include a combination of magnetite, apatite, dolomite, ferro-dolomite, ankerite, and siderite.

The levels of uranium and thorium at the Santa Anna Project are low, with average concentrations of 4.8 ppm uranium and 28.8 ppm thorium across all drillholes, which may simplify potential mineral processing (and help alleviate environmental concerns) in any future mining operation.

Further details of the Santa Anna Project and the Lol for the option to acquire the Project – including a summary of transaction terms - are provided in ASX announcement of 16 April 2025.

Authorised for release by the Board of Power Minerals Limited.

-ENDS-

For further information please contact:

Power Minerals Limited
E: admin@powerminerals.com.au
T: +61 8 8218 5000

Additional information is available at www.powerminerals.com.au

ABOUT POWER MINERALS LIMITED

Power Minerals Limited is an ASX-listed exploration and development company. We are focused on transforming our lithium resources in Argentina, exploring our promising niobium and other critical mineral assets in Brazil, and maximizing value from our Australian assets.

Competent Persons Statement

The information in this announcement that relates to exploration results in respect of the Santa Anna Project in Brazil is based on and fairly represents, information and supporting documentation prepared by Steven Cooper, FAusIMM (No 108265). Mr Cooper is the Exploration Manager and is a full-time employee of the Company. Mr Cooper has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Cooper consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

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Figure 3. Santa Anna Project location map in Goiás State, central Brazil.



Figure 4. Trial pit excavated by vendor EDEM in May 2023; upper part of alkaline complex is very weathered and suitable for free digging by excavator.

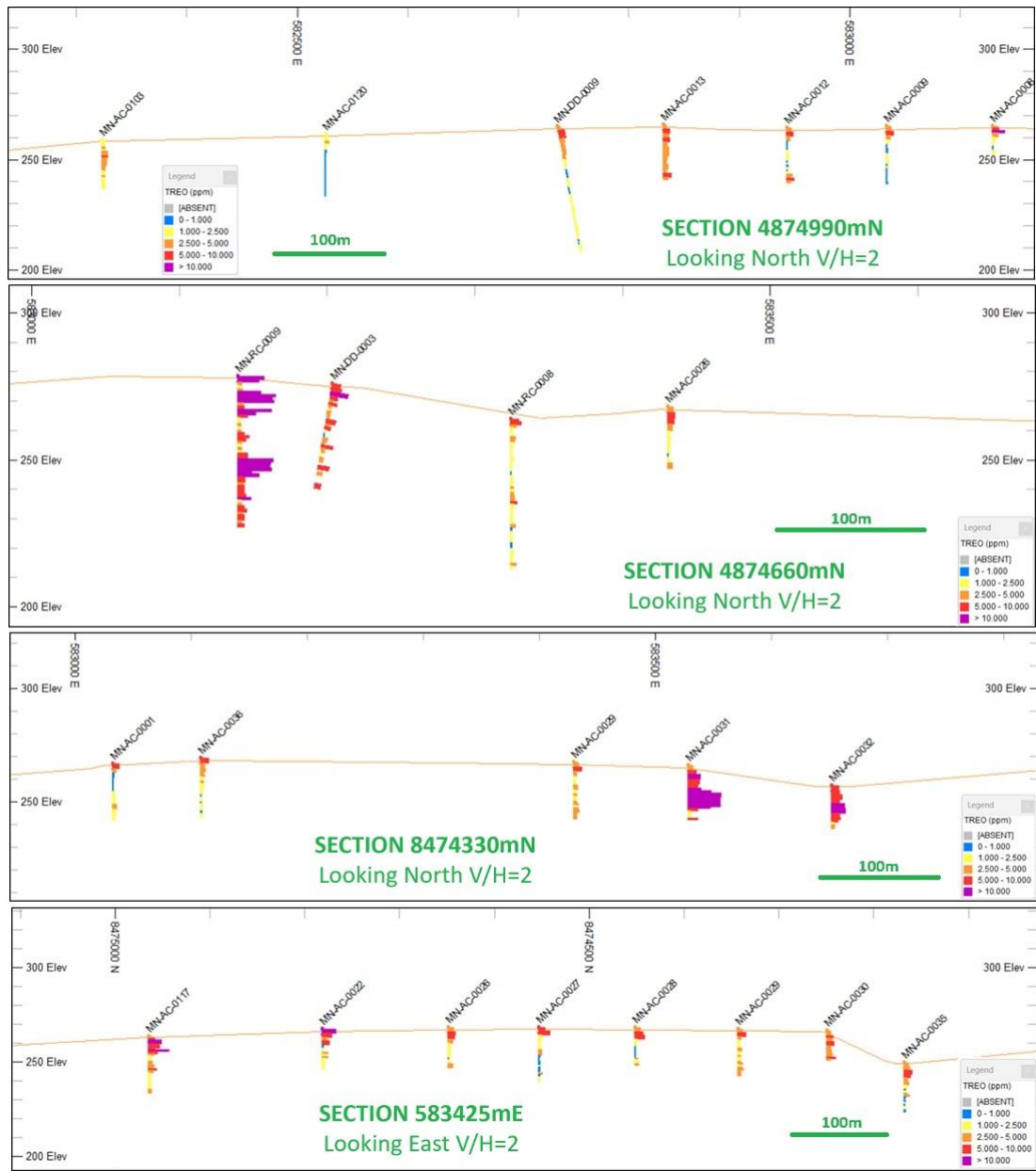


Figure 5. Cross-sections looking north (top three) and looking east (lower one) with TREO drillhole sample assays shown. The vertical scale is exaggerated 2 times the horizontal scale. Cross-section locations are shown in Figure 2 and are all entirely within the Santa Anna Alkaline Complex.

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Table 2. All Santa Anna diamond core (DD) drillhole collars. Final depth is in metres.

Drillhole	Easting	Northing	RL	Depth	Azimuth	Dip	Type
MN-DD-0001	583388.2	8474758.6	269.80	68	250	-70	DD
MN-DD-0002	583205.9	8474755.0	274.70	57.15	250	-70	DD
MN-DD-0003	583204.1	8474668.5	275.80	37.85	250	-70	DD
MN-DD-0004	582709.1	8474532.6	266.70	60.15	75	-70	DD
MN-DD-0005	582690.5	8474801.4	266.80	60.15	90	-65	DD
MN-DD-0006	582867.4	8474775.5	272.70	61.1	90	-70	DD
MN-DD-0007	582943.9	8474896.4	269.50	58.1	180	-70	DD
MN-DD-0008	583163.2	8474879.3	271.70	60.35	270	-70	DD
MN-DD-0009	582736.0	8474996.3	264.90	60.1	90	-70	DD
MN-DD-0010	582736.3	8475191.7	262.20	72.6	90	-60	DD
MN-DD-0011	582722.8	8475596.8	255.90	64.9	180	-70	DD
MN-DD-0012	582319.9	8474757.7	261.30	67.3	90	-70	DD
MN-DD-0013	583110.0	8475546.5	252.60	42.15	180	-70	DD
MN-DD-0014	582318.4	8473979.8	260.80	57.4	90	-70	DD
MN-DD-0015	582194.9	8474348.8	259.60	60.15	90	-70	DD
MN-DD-0016	583594.2	8475639.5	248.70	60	180	-70	DD
MN-DD-0017	583723.3	8475242.8	255.50	71.3	180	-70	DD

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Table 3. All Santa Anna aircore (AC), reverse circulation (RC) and auger drillhole collars. All drillholes are vertical and final depth is in metres.

Drillhole	Easting	Northing	RL	Depth	Type
MN-AC-0001	583032.9	8474327.0	266.70	25	AC
MN-AC-0002	583094.9	8474143.3	266.40	25	AC
MN-AC-0003	583041.1	8474139.9	265.90	22	AC
MN-AC-0004	582935.6	8474136.2	265.80	29	AC
MN-AC-0005	583038.1	8474231.9	265.50	30	AC
MN-AC-0006	583139.7	8474779.2	276.10	17	AC
MN-AC-0007	583143.5	8474879.9	270.50	15	AC
MN-AC-0008	583130.0	8474988.0	265.10	13	AC
MN-AC-0009	583033.7	8474988.2	264.80	26	AC
MN-AC-0010	583134.6	8475091.9	260.60	28	AC
MN-AC-0011	583125.4	8475173.6	255.10	23	AC
MN-AC-0012	582943.7	8474992.0	264.30	25	AC
MN-AC-0013	582831.9	8474993.3	265.70	25	AC
MN-AC-0014	582733.6	8474797.9	265.80	20	AC
MN-AC-0015	582796.4	8474814.0	267.00	4	AC
MN-AC-0016	582943.8	8475091.8	261.80	26	AC
MN-AC-0017	583030.0	8475084.7	263.60	26	AC
MN-AC-0018	583025.6	8475190.6	257.90	26	AC
MN-AC-0019	583122.7	8475305.5	250.30	19	AC
MN-AC-0020	583336.4	8474782.9	268.80	27	AC
MN-AC-0021	583122.6	8475394.9	250.30	27	AC
MN-AC-0022	583425.7	8474780.5	267.00	21	AC
MN-AC-0023	583241.3	8474785.8	270.90	31	AC
MN-AC-0024	583252.2	8474880.9	267.80	24	AC
MN-AC-0025	583528.8	8474786.6	265.40	17	AC
MN-AC-0026	583431.0	8474647.7	267.90	21	AC
MN-AC-0027	583432.2	8474552.0	268.20	29	AC
MN-AC-0028	583427.2	8474450.7	268.00	20	AC
MN-AC-0029	583430.6	8474342.7	267.30	28	AC
MN-AC-0030	583429.1	8474248.2	266.50	17	AC
MN-AC-0031	583528.9	8474340.1	265.90	24	AC
MN-AC-0032	583652.4	8474329.8	257.00	19	AC
MN-AC-0033	583815.7	8474711.6	261.80	27	AC
MN-AC-0034	583828.2	8474489.6	265.00	29	AC
MN-AC-0035	583421.7	8474167.0	249.50	26	AC
MN-AC-0036	583108.9	8474347.8	269.00	26	AC
MN-AC-0037	583131.0	8474453.0	272.10	15	AC
MN-AC-0038	583113.5	8474594.7	276.70	12	AC
MN-AC-0039	583835.0	8474241.3	264.90	24	AC
MN-AC-0040	583848.5	8474024.1	264.10	32	AC
MN-AC-0041	583854.3	8473837.9	262.90	12	AC
MN-AC-0042	583422.6	8473952.7	260.00	19	AC
MN-AC-0043	582802.5	8474538.0	254.50	24	AC
MN-AC-0044	582608.9	8474528.4	258.50	29	AC
MN-AC-0045	582723.1	8475694.4	253.10	28	AC
MN-AC-0046	582823.1	8475593.1	254.70	30	AC

Drillhole	Easting	Northing	RL	Depth	Type
MN-AC-0089	583840.7	8474243.7	263.70	22	AC
MN-AC-0090	582724.7	8476190.7	243.40	18	AC
MN-AC-0091	582725.4	8475993.2	249.10	18	AC
MN-AC-0092	582727.9	8475788.3	252.00	18	AC
MN-AC-0093	582924.4	8475794.4	251.50	18	AC
MN-AC-0094	582928.0	8475984.3	248.70	18	AC
MN-AC-0095	583035.5	8476194.7	243.50	18	AC
MN-AC-0096	582525.8	8476190.2	246.80	18	AC
MN-AC-0097	582524.6	8476391.9	246.20	18	AC
MN-AC-0098	582522.7	8476593.4	245.20	18	AC
MN-AC-0099	582325.5	8476643.1	243.20	18	AC
MN-AC-0100	582322.9	8476392.2	245.90	18	AC
MN-AC-0101	582322.0	8476196.0	246.60	18	AC
MN-AC-0102	582381.1	8475590.0	247.20	26	AC
MN-AC-0103	582324.1	8474989.0	258.70	22	AC
MN-AC-0104	583072.7	8475039.0	263.20	26	AC
MN-AC-0105	583171.3	8475040.0	262.90	15	AC
MN-AC-0106	583923.9	8475194.9	256.30	32	AC
MN-AC-0107	583923.0	8475590.4	249.10	30	AC
MN-AC-0108	584324.3	8475187.8	253.30	30	AC
MN-AC-0109	583921.8	8474805.7	260.90	30	AC
MN-AC-0110	583923.0	8474391.0	267.00	30	AC
MN-AC-0111	583921.5	8473992.3	262.00	20	AC
MN-AC-0112	583915.4	8473592.4	257.80	27	AC
MN-AC-0113	584324.3	8473993.5	259.40	30	AC
MN-AC-0114	584323.4	8474396.0	259.40	29	AC
MN-AC-0115	584325.6	8474790.7	257.80	30	AC
MN-AC-0116	583623.0	8474991.4	260.70	28	AC
MN-AC-0117	583431.3	8474964.1	263.30	30	AC
MN-AC-0118	582523.4	8475359.3	257.00	29	AC
MN-AC-0119	582524.8	8475188.2	259.10	29	AC
MN-AC-0120	582525.8	8474992.8	261.20	28	AC
MN-AC-0121	582524.0	8474793.1	263.00	24	AC
MN-RC-0001	582904.6	8474792.7	269.40	51	RC
MN-RC-0002	582961.3	8474836.7	270.10	51	RC
MN-RC-0003	583008.8	8474906.7	263.20	51	RC
MN-RC-0004	583123.5	8474826.1	273.90	51	RC
MN-RC-0005	583054.3	8474836.3	281.00	51	RC
MN-RC-0006	583086.0	8474768.9	281.40	50	RC
MN-RC-0007	583068.9	8474911.7	267.50	50	RC
MN-RC-0008	583325.1	8474681.8	263.80	51	RC
MN-RC-0009	583140.2	8474656.9	278.20	51	RC
MN-RC-0010	583112.0	8474789.8	283.10	51	RC
MN-RC-0011	582915.7	8474754.2	269.10	45	RC
MN-RC-0012	582920.2	8474721.2	271.30	51	RC
MN-RC-0013	582888.3	8474623.6	270.20	51	RC

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Drillhole	Easting	Northing	RL	Depth	Type
MN-AC-0047	582925.8	8475492.6	256.10	30	AC
MN-AC-0048	582722.4	8475495.6	256.20	32	AC
MN-AC-0049	582818.4	8475403.4	258.00	32	AC
MN-AC-0050	582926.6	8475294.4	258.50	32	AC
MN-AC-0051	582824.9	8475190.6	260.90	33	AC
MN-AC-0052	582772.8	8474791.0	267.00	32	AC
MN-AC-0053	582720.9	8474852.2	265.10	31	AC
MN-AC-0054	582823.6	8474844.2	267.00	19	AC
MN-AC-0055	582917.0	8474851.3	269.50	26.1	AC
MN-AC-0056	582678.7	8474887.6	264.30	29	AC
MN-AC-0057	582769.3	8474892.8	254.30	23	AC
MN-AC-0058	582870.0	8474898.5	266.40	30	AC
MN-AC-0059	582968.9	8474901.5	268.10	27	AC
MN-AC-0060	583075.9	8475445.4	253.30	30	AC
MN-AC-0061	583169.0	8475449.8	244.60	28	AC
MN-AC-0062	583166.7	8475338.2	247.80	30	AC
MN-AC-0063	583073.3	8475342.0	253.50	30	AC
MN-AC-0064	583017.9	8475395.3	255.90	30	AC
MN-AC-0065	583020.6	8475292.5	256.30	30	AC
MN-AC-0066	583168.4	8475282.8	244.90	25	AC
MN-AC-0067	582825.8	8474947.0	264.80	29	AC
MN-AC-0068	582917.8	8474944.8	265.70	28	AC
MN-AC-0069	583029.6	8474946.9	266.50	29	AC
MN-AC-0070	583125.2	8474944.7	267.10	30	AC
MN-AC-0071	583220.8	8474941.2	266.10	26	AC
MN-AC-0072	583177.6	8474846.2	271.30	28	AC
MN-AC-0073	582904.6	8475693.2	252.70	30	AC
MN-AC-0074	583001.8	8475576.4	254.30	30	AC
MN-AC-0075	582718.5	8475400.9	258.40	30	AC
MN-AC-0076	582925.2	8475400.1	257.50	30	AC
MN-AC-0077	583072.9	8475249.2	253.80	25	AC
MN-AC-0078	582777.3	8475051.2	262.90	30	AC
MN-AC-0079	582865.0	8475039.8	263.20	29	AC
MN-AC-0080	582863.4	8475092.2	262.10	31	AC
MN-AC-0081	582973.9	8475043.2	263.20	30	AC
MN-AC-0082	582979.3	8475142.8	260.60	30	AC
MN-AC-0083	583073.5	8475139.6	259.00	29	AC
MN-AC-0084	583173.8	8475138.4	257.20	30	AC
MN-AC-0085	583221.2	8475090.4	260.00	30	AC
MN-AC-0086	582825.0	8475191.5	260.90	22	AC
MN-AC-0087	582823.8	8475593.8	254.70	22	AC
MN-AC-0088	582824.6	8474844.2	267.00	18	AC

Drillhole	Easting	Northing	RL	Depth	Type
MN-RC-0014	583015.0	8474700.1	280.40	51	RC
MN-RC-0015	582814.3	8474757.7	265.60	51	RC
MN-RC-0016	582835.9	8474712.4	264.60	51	RC
MN-TH-0001	583143.5	8474880.7	270.50	14	Auger
MN-TH-0002	583126.5	8474862.6	272.10	7.3	Auger
MN-TH-0003	583173.3	8474866.4	270.50	14.6	Auger
MN-TH-0004	582951.4	8475114.8	261.30	14.1	Auger
MN-TH-0005	582948.1	8475091.0	262.00	14.7	Auger
MN-TH-0006	582950.2	8475067.0	262.50	14	Auger
MN-TH-0007	582998.9	8475092.9	261.70	14.7	Auger
MN-TH-0008	583031.0	8475092.7	261.50	9.5	Auger
MN-TH-0009	583059.8	8475096.3	261.20	15	Auger
MN-TH-0010	583121.3	8475391.8	250.30	7.95	Auger
MN-TH-0011	583124.1	8475419.1	250.50	8.25	Auger
MN-TH-0012	583124.7	8475364.2	249.90	8.5	Auger
MN-TH-0013	583218.6	8474864.0	279.90	17	Auger
MN-TH-0014	583250.9	8474881.1	267.90	9.4	Auger
MN-TH-0015	582678.5	8474845.8	264.60	17	Auger
MN-TH-0016	582769.8	8474843.8	266.00	8.9	Auger
MN-TH-0017	583223.2	8474816.7	270.60	13	Auger
MN-TH-0018	583224.4	8474841.6	269.60	8.3	Auger
MN-TH-0019	583224.2	8474891.4	268.00	9.1	Auger
MN-TH-0020	583223.1	8474917.2	267.00	12.2	Auger
MN-TH-0021	583196.7	8474939.4	266.50	6	Auger
MN-TH-0022	583197.1	8474916.2	267.60	13	Auger
MN-TH-0023	583196.6	8474890.3	268.90	17.5	Auger
MN-TH-0024	583141.1	8474879.5	270.70	19.9	Auger
MN-TH-0025	583198.0	8474864.1	269.90	20	Auger
MN-TH-0026	583199.3	8474841.4	270.60	19.9	Auger
MN-TH-0027	583199.4	8474816.1	271.30	19.9	Auger
MN-TH-0028	583149.1	8474845.4	272.30	3.5	Auger
MN-TH-0029	583148.7	8474840.9	272.40	5.6	Auger
MN-TH-0030	583155.1	8474845.3	272.20	12.7	Auger
MN-TH-0031	583148.4	8474864.8	271.30	19.9	Auger
MN-TH-0032	583126.2	8474890.0	270.20	7.05	Auger
MN-TH-0033	583127.5	8474896.9	269.70	19.9	Auger
MN-TH-0034	583123.5	8474915.7	268.50	20	Auger
MN-TH-0035	583144.9	8474941.2	267.10	19.8	Auger
MN-TH-0036	583157.5	8474912.5	268.50	19.7	Auger
MN-TH-0037	583171.9	8474890.3	269.40	12.9	Auger
MN-TH-0038	582943.7	8475094.1	261.90	16.3	Auger

Table 4. All Santa Anna drillhole assay intercepts with over 1.0% TREO, together with Nb₂O₅, in percentage.

Downhole interval in meters, REE, TREO and MREO values are all in ppm. Samples marked with* have over limit values for elements in shaded cells.

Drillhole	From	To	Sample	Nb ₂ O ₅ %	La	Ce	Pr	Nd	Sm	Dy	Er	Eu	Gd	Tb	Tm	Ho	Yb	Lu	Y	TREO	MREO
MN-AC-0006	0	1	MN-0279	0.18	2724	4117	392.3	1114	121.0	35.8	13.2	27.4	71.3	8.0	1.5	5.5	7.8	1.0	140.0	10,541	1,823
MN-AC-0006	7	8	MN-0287	0.11	3264	3927	330.2	833	68.9	17.0	6.6	15.1	35.8	3.9	0.7	2.6	4.0	0.5	69.8	10,289	1,395
MN-AC-0006	8	9	MN-0288	0.12	6854	8279	709.0	1708	136.1	31.8	11.8	29.7	68.3	7.4	1.4	4.7	7.5	0.9	118.4	21,554	2,894
MN-AC-0007	1	2	MN-0299	0.09	3533	5371	501.3	1362	107.6	31.6	12.6	23.5	57.9	6.4	1.5	5.0	8.5	1.1	131.8	13,398	2,238
MN-AC-0007	2	3	MN-0300	0.06	6186	9413	825.0	2085	143.7	24.9	10.6	27.9	60.0	6.5	1.3	4.1	7.6	1.0	117.0	22,727	3,465
MN-AC-0007	3	4	MN-301*	0.26	10000	10000	1000.0	3386	211.4	27.4	10.8	39.2	77.5	7.8	1.3	4.2	8.0	1.1	111.7	29,761	5,199
MN-AC-0007	4	5	MN-302*	0.13	10000	10000	1000.0	4598	268.4	35.7	14.3	48.9	103.5	10.7	1.8	5.5	10.4	1.4	160.0	31,365	6,625
MN-AC-0007	5	6	MN-0303	0.06	2844	4128	374.6	958	81.8	24.1	10.4	19.4	46.7	5.3	1.2	3.8	7.3	1.1	115.4	10,354	1,604
MN-AC-0007	8	9	MN-0306	0.07	5147	7599	667.9	1694	117.6	27.5	11.0	23.8	55.7	6.2	1.4	4.4	8.0	1.1	120.8	18,604	2,822
MN-AC-0007	9	10	MN-0307	0.40	3606	5400	520.2	1400	129.7	38.9	14.8	29.6	72.8	8.4	1.9	6.1	10.4	1.3	158.9	13,688	2,316
MN-AC-0007	10	11	MN-0309	0.35	4078	6067	576.3	1569	144.9	40.5	15.4	34.4	80.6	9.0	1.8	6.3	10.0	1.4	160.2	15,362	2,583
MN-AC-0007	11	12	MN-0310	0.40	2349	4426	516.6	1700	215.4	58.7	18.9	54.6	123.5	13.1	2.1	8.2	11.0	1.4	207.0	11,647	2,690
MN-AC-0007	12	13	MN-0311	0.31	3310	5420	580.4	1713	184.5	50.5	17.2	46.3	104.6	11.5	1.9	7.3	10.9	1.5	184.1	13,977	2,771
MN-AC-0007	13	14	MN-0312	0.28	2608	4192	443.0	1329	150.1	43.3	15.8	37.7	89.7	9.9	1.8	6.5	10.1	1.3	176.5	10,940	2,146
MN-AC-0008	2	3	MN-0316	0.15	2427	4107	367.1	1184	122.3	40.6	16.0	32.1	72.8	8.6	1.9	6.8	10.1	1.3	176.1	10,301	1,881
MN-AC-0010	4	6	MN-0344	0.10	2158	4935	606.2	2196	318.9	89.9	27.5	82.4	176.1	20.9	2.9	12.9	14.3	1.7	297.1	13,128	3,422
MN-AC-0010	6	8	MN-0345	0.25	2486	5907	737.1	2739	412.9	131.7	44.4	105.8	239.5	28.7	5.0	20.0	23.7	2.6	472.3	16,028	4,270
MN-AC-0010	8	10	MN-0346	0.13	2304	5348	675.6	2399	368.9	116.6	40.0	96.7	214.3	25.5	4.5	17.7	21.1	2.4	414.6	14,461	3,778
MN-AC-0016	25	26	MN-0460	0.07	2052	4789	544.9	2088	303.7	102.3	35.5	80.5	186.4	22.3	4.0	15.8	20.2	2.4	381.7	12,760	3,237
MN-AC-0022	0	2	MN-0577	0.15	3089	4624	369.0	1064	113.4	37.6	15.3	28.5	69.6	8.6	1.9	6.3	10.1	1.2	165.4	11,537	1,740
MN-AC-0023	2	3	MN-0596	0.11	2829	4365	368.8	1081	123.4	35.8	12.8	30.2	69.8	8.5	1.5	5.7	8.4	1.1	138.9	10,905	1,757
MN-AC-0023	10	11	MN-0605	0.14	3003	4513	357.7	1035	93.7	25.5	9.8	22.9	52.0	6.4	1.2	4.2	7.1	0.9	118.4	11,113	1,676
MN-AC-0024	0	2	MN-0628	0.11	2911	4847	393.8	1185	111.0	34.3	14.1	26.6	65.8	8.1	1.7	5.8	9.6	1.2	176.2	11,771	1,907
MN-AC-0025	10	12	MN-0654	0.56	3019	7031	785.2	2992	426.9	153.7	54.5	115.5	269.8	33.3	6.1	24.3	30.8	3.7	590.5	18,658	4,654
MN-AC-0025	14	17	MN-0657	0.90	2240	5008	572.2	2268	345.7	119.9	39.7	94.3	224.5	26.8	4.2	17.8	20.8	2.5	443.7	13,713	3,506
MN-AC-0031	4	6	MN-0748	0.13	1729	5073	358.6	1131	136.8	37.6	12.8	33.7	71.8	8.8	1.5	5.6	8.4	1.1	117.8	10,529	1,806
MN-AC-0031	10	11	MN-0752	0.31	1706	4218	479.2	1715	250.0	95.8	41.3	67.7	158.4	19.4	4.7	16.5	25.3	3.1	443.2	11,112	2,712
MN-AC-0031	11	12	MN-0753	0.90	3468	7495	832.6	3013	434.3	142.6	46.9	116.8	263.6	31.4	5.1	21.1	26.5	3.3	505.3	19,697	4,721
MN-AC-0031	12	14	MN-754*	0.52	5268	10000	1000.0	4828	693.9	230.5	79.0	184.1	419.8	49.7	8.5	35.4	42.5	5.2	839.5	28,386	7,162

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Drillhole	From	To	Sample	Nb ₂ O ₅ %	La	Ce	Pr	Nd	Sm	Dy	Er	Eu	Gd	Tb	Tm	Ho	Yb	Lu	Y	TREO	MREO
MN-AC-031	14	16	MN-755*	0.93	4806	10000	1000.0	4556	659.9	207.4	70.0	178.9	395.3	46.4	7.5	31.7	38.0	4.4	787.7	27,336	6,814
MN-AC-031	16	18	MN-756*	1.47	4918	10000	1000.0	4713	677.9	200.6	62.0	178.3	396.2	46.1	6.5	29.6	30.4	3.5	683.1	27,509	6,990
MN-AC0031	18	19	MN-0757	1.12	3254	7293	844.0	3078	450.1	128.3	37.9	119.6	262.2	29.7	3.8	18.6	18.8	2.2	431.2	19,170	4,792
MN-AC-032	8	10	MN-0768	0.53	1933	4221	473.5	1671	237.1	84.1	28.5	64.6	148.2	18.1	3.2	13.0	16.2	2.1	303.6	11,068	2,639
MN-AC-032	10	12	MN-0769	0.95	1873	4538	505.3	1817	267.7	108.1	43.1	73.5	180.9	21.9	4.7	18.3	24.3	3.2	479.7	11,971	2,880
MN-AC-038	0	2	MN-0874	0.05	2981	5539	447.7	1280	114.1	31.5	14.1	26.6	60.2	7.0	1.7	5.4	10.2	1.4	150.7	12,840	2,078
MN-AC-053	19	21	MN-1910	0.41	1780	4123	299.2	2029	275.9	85.0	27.8	73.3	165.8	22.0	3.2	12.5	17.0	1.9	337.9	11,100	2,851
MN-AC-055	5	7	MN-1975	0.02	1689	4424	556.3	2187	361.2	99.6	33.0	93.2	223.9	25.3	3.4	15.0	16.6	1.9	365.5	12,110	3,367
MN-AC-071	20	21	MN-2284	0.03	4269	5808	499.0	1267	96.1	13.5	4.4	19.8	43.5	5.3	0.5	1.9	2.8	0.4	48.0	14,500	2,102
MN-AC-072	0	2	MN-2289	0.17	4478	5919	498.9	1306	124.4	40.5	15.6	31.2	77.4	10.4	1.9	6.7	10.4	1.3	170.7	15,235	2,185
MN-AC-072	11	13	MN-2296	0.16	3548	4935	447.2	1260	134.5	42.4	14.7	34.5	83.5	10.8	1.9	6.5	9.7	1.2	157.0	12,824	2,071
MN-AC-072	13	15	MN-2297	0.13	2439	3950	405.3	1284	167.1	58.2	21.7	44.6	111.9	14.2	2.6	9.4	14.4	1.9	220.9	10,496	2,071
MN-AC-072	18	20	MN-2300	0.10	2134	4385	507.5	1730	228.6	65.1	22.4	57.8	137.4	16.3	2.5	9.9	13.4	1.6	231.8	11,456	2,725
MN-AC-072	20	22	MN-2302	0.39	2183	4042	446.2	1471	191.3	58.6	20.8	49.8	121.5	14.2	2.3	9.2	12.5	1.6	214.6	10,609	2,339
MN-AC-073	12	14	MN-2496	0.08	1900	3972	462.9	1707	249.1	98.9	50.5	62.5	175.5	19.4	7.4	19.7	46.1	6.3	591.2	11,256	2,686
MN-AC-104	3	4	MN-3120	0.10	2385	3938	383.1	1167	109.5	36.6	14.4	29.6	75.6	7.1	1.8	6.2	9.9	1.3	169.7	10,010	1,874
MN-AC-105	4	5	MN-3151	0.12	1954	4722	614.0	2421	353.1	121.6	37.5	94.9	235.4	24.8	4.3	18.8	19.1	1.9	437.2	13,265	3,734
MN-AC-117	2	3	MN-3524	0.15	2627	4166	393.8	1211	137.8	51.9	17.7	45.3	66.0	16.7	2.2	8.3	11.0	1.7	208.4	10,767	1,968
MN-AC-117	3	4	MN-3525	0.37	2414	4100	421.2	1348	162.1	62.4	20.0	55.7	94.2	18.6	2.4	10.2	11.8	1.8	235.8	10,756	2,175
MN-AC-117	7	8	MN-3529	1.42	2576	6107	788.9	3095	442.9	154.3	44.2	130.7	531.6	47.0	5.2	22.4	22.8	3.9	525.5	17,376	4,796
MN-DD-001	2	3	MN-0991	0.11	3847	5860	496.7	1447	150.2	52.5	21.4	39.2	101.7	11.9	2.5	8.8	13.5	1.7	229.4	14,755	2,362
MN-DD-002	2.1	2.8	MN-1064	0.11	3012	4845	408.6	1236	138.3	42.2	16.2	34.8	89.7	10.1	1.9	6.9	9.4	1.1	163.1	12,032	1,996
MN-DD-002	21	22.5	MN-1082	0.33	4278	5683	433.5	1198	118.3	34.1	12.5	28.5	73.1	8.4	1.5	5.4	7.7	0.9	123.2	14,411	1,970
MN-DD-002	41	42	MN-1099	0.09	7397	8438	594.4	1522	124.3	28.0	9.8	28.9	68.3	7.9	1.1	4.2	5.6	0.7	98.1	21,980	2,535
MN-DD-002	42	43.15	MN-1100	0.05	3837	4800	367.2	1035	99.7	22.8	7.8	23.6	55.1	6.2	0.9	3.5	4.6	0.5	80.6	12,409	1,684
MN-DD-003	3	4.5	MN-1115	0.53	4362	6138	494.0	1483	161.2	54.8	21.6	41.4	107.2	12.8	2.4	9.3	12.6	1.5	228.1	15,763	2,405
MN-DD-008	1.55	3	MN-1361	0.10	3134	4733	424.4	1158	114.0	41.1	17.5	27.6	71.4	8.6	2.0	7.0	11.1	1.4	188.2	11,940	1,920
MN-RC-003	0	1	MN-4030	0.04	2552	4471	424.6	1177	108.1	26.9	9.8	25.5	55.7	5.4	1.2	4.2	6.9	0.9	116.1	10,801	1,923
MN-RC-004	0	1	MN-4087	0.21	2740	4090	380.5	1144	134.7	41.9	14.8	34.4	78.3	8.6	1.6	6.4	9.0	1.1	162.9	10,621	1,853
MN-RC-004	1	2	MN-4088	0.34	3255	5001	486.2	1518	188.5	57.7	20.1	49.0	109.6	12.0	2.2	8.8	11.5	1.2	211.8	13,118	2,438

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Drillhole	From	To	Sample	Nb ₂ O ₅ %	La	Ce	Pr	Nd	Sm	Dy	Er	Eu	Gd	Tb	Tm	Ho	Yb	Lu	Y	TREO	MREO
MN-RC-0004	3	4	MN-4090	1.02	2901	6092	738.7	2692	396.7	119.4	40.0	103.7	234.0	25.7	4.4	18.2	22.8	2.5	439.3	16,593	4,200
MN-RC-0004	4	5	MN-4092	1.36	3281	5963	681.7	2301	321.0	98.7	32.9	83.8	191.3	20.6	3.5	14.9	18.4	2.0	362.9	16,049	3,645
MN-RC-0004	5	6	MN-4093	2.03	2301	4339	487.1	1709	245.8	76.5	25.3	64.2	145.0	15.8	2.8	11.5	14.4	1.7	288.6	11,673	2,689
MN-RC-0004	6	7	MN-4094	2.05	2602	4420	477.5	1634	227.8	68.1	23.6	60.0	134.2	14.3	2.6	10.5	13.6	1.6	252.9	11,928	2,578
MN-RC-0004	8	9	MN-4096	0.84	1844	3716	438.3	1622	244.6	75.6	26.4	65.5	148.8	15.9	3.0	11.7	15.8	2.0	275.8	10,203	2,527
MN-RC-0004	9	10	MN-4097	0.56	2668	5686	710.2	2593	376.7	113.8	41.6	97.0	219.2	23.5	4.6	17.5	25.5	2.9	422.4	15,598	4,040
MN-RC-0004	10	11	MN-4098	0.56	3027	6596	825.4	3094	447.8	130.7	47.0	116.6	259.4	27.4	5.2	20.0	28.6	3.4	505.6	18,156	4,789
MN-RC-0004	11	12	MN-4100	0.50	2174	4869	613.4	2331	351.2	106.2	37.0	92.0	208.9	22.6	4.2	16.3	22.9	2.8	412.8	13,513	3,608
MN-RC-0004	12	13	MN-4101	0.33	1740	3704	447.9	1660	247.0	74.7	26.4	65.0	148.5	15.8	3.0	11.8	16.2	2.0	280.0	10,129	2,582
MN-RC-0004	23	24	MN-4113	0.03	4067	5088	393.6	947	68.8	12.8	3.5	14.5	29.0	2.8	0.5	1.9	2.3	0.3	46.3	12,817	1,599
MN-RC-0005	0	1	MN-4145	0.15	4675	6317	629.6	1688	109.2	42.8	10.7	24.9	77.0	6.8	1.2	12.0	7.1	0.9	119.0	16,461	2,786
MN-RC-0005	1	2	MN-4146	0.09	5063	6248	480.7	1145	86.1	19.9	7.5	18.9	43.2	4.2	0.9	3.1	5.8	0.7	83.9	15,855	1,944
MN-RC-0006	0	1	MN-4202	0.16	2652	4484	438.5	1369	159.9	48.7	18.5	41.4	91.4	10.3	2.1	8.0	11.4	1.4	200.7	11,454	2,195
MN-RC-0006	1	2	MN-4203	0.49	2517	4513	476.1	1566	205.9	64.0	23.2	53.6	120.3	13.3	2.7	10.2	14.2	1.7	252.8	11,806	2,490
MN-RC-0006	39	40	MN-4245	0.13	3693	4352	320.9	715	43.6	7.3	2.7	9.3	18.0	1.6	0.3	1.1	1.9	0.2	29.1	11,035	1,232
MN-RC-0006	42	43	MN-4248	0.12	6058	6838	492.9	1073	65.9	10.2	3.9	13.3	24.2	2.1	0.5	1.6	3.0	0.4	43.7	17,552	1,861
MN-RC-0007	6	7	MN-4264	0.02	3889	6608	628.3	1623	124.8	22.1	9.1	26.3	92.5	10.4	1.2	3.6	7.6	1.0	98.1	15,800	2,690
MN-RC-0009	0	1	MN-4370	0.06	6682	9301	728.2	1672	127.8	31.0	13.4	28.2	62.5	6.2	1.6	5.4	9.5	1.3	145.1	22,609	2,874
MN-RC-0009	1	2	MN-4371	0.09	5417	7532	577.9	1471	133.1	37.6	15.8	31.0	70.4	7.4	1.9	6.1	11.3	1.5	162.1	18,590	2,466
MN-RC-0009	5	6	MN-4375	0.16	3922	7343	860.1	2908	409.0	128.1	44.0	108.6	241.7	26.1	4.5	19.2	24.9	2.8	459.3	19,800	4,609
MN-RC-0009	6	7	MN-4376*	0.18	10000	10000	1000.0	4450	477.6	131.4	43.5	119.3	260.0	27.3	4.7	19.1	25.3	3.1	474.6	32,297	6,582
MN-RC-0009	7	8	MN-4377*	0.29	10000	10000	1000.0	3078	302.6	75.3	25.1	71.9	157.1	15.9	2.8	10.8	16.0	2.0	266.0	29,934	4,904
MN-RC-0009	8	9	MN-4378*	0.22	10000	10000	1000.0	4187	300.4	56.0	19.1	65.1	135.3	12.5	2.1	8.2	11.1	1.3	201.9	31,067	6,171
MN-RC-0009	11	12	MN-4382*	0.65	9636	10000	1000.0	2725	262.7	65.5	22.8	62.6	134.6	13.6	2.5	9.9	14.1	1.8	247.9	28,968	4,478
MN-RC-0009	12	13	MN-4383	0.17	4207	5974	548.9	1576	167.5	52.7	18.3	42.2	98.3	10.3	2.0	9.0	12.5	1.7	196.0	15,501	2,574
MN-RC-0009	28	29	MN-4401*	0.10	10000	10000	1000.0	3709	286.0	64.0	20.7	64.1	145.5	15.2	2.2	9.3	11.8	1.4	244.9	30,574	5,625
MN-RC-0009	29	30	MN-4402*	0.11	9799	10000	884.1	2146	180.8	42.1	13.4	42.9	144.6	17.2	1.5	6.1	8.2	1.0	142.9	28,057	3,640
MN-RC-0009	30	31	MN-4403*	0.17	9155	10000	874.9	2181	192.8	42.8	14.6	44.5	147.5	17.3	1.6	6.4	9.1	1.1	150.4	27,364	3,670
MN-RC-0009	31	32	MN-4404*	0.12	10000	10000	1000.0	2731	191.9	37.6	12.6	41.5	91.5	9.5	1.4	5.7	7.0	0.8	142.0	29,047	4,448
MN-RC-0009	32	33	MN-4405	0.09	3182	4578	426.3	1172	109.5	19.7	7.2	23.0	49.6	4.8	0.8	3.0	4.4	0.5	80.1	11,597	1,911

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Drillhole	From	To	Sample	Nb ₂ O ₅ %	La	Ce	Pr	Nd	Sm	Dy	Er	Eu	Gd	Tb	Tm	Ho	Yb	Lu	Y	TREO	MREO
MN-RC-0009	33	34	MN-4406	0.08	5867	7139	586.8	1458	138.9	33.2	12.1	33.1	110.0	12.6	1.3	5.0	7.2	0.9	119.1	18,621	2,462
MN-RC-0009	41	42	MN-4415	0.14	3027	4130	363.6	1068	121.6	30.8	10.5	29.7	89.7	10.4	1.1	4.6	6.6	0.8	110.6	10,803	1,733
MN-RC-0010	8	9	MN-4435	0.30	2170	3906	416.9	1418	189.4	63.0	22.2	52.0	151.1	17.4	2.5	9.4	14.2	1.7	222.6	10,388	2,251
MN-RC-0010	10	11	MN-4437	0.10	1804	3866	462.9	1622	234.8	77.1	26.7	62.2	182.7	21.2	3.0	11.6	15.9	1.9	282.2	10,409	2,564
MN-RC-0010	21	22	MN-4450	0.18	2045	4162	462.8	1534	205.3	60.7	21.0	53.4	157.1	17.8	2.3	9.0	13.2	1.6	207.9	10,748	2,439
MN-RC-0010	22	23	MN-4451*	0.05	5167	10000	1000.0	3960	490.7	128.4	37.0	122.1	369.5	40.7	3.5	17.4	18.1	2.0	378.0	26,072	6,022
MN-RC-0010	24	25	MN-4453	0.08	2784	6340	777.2	2840	395.0	127.2	41.8	104.4	305.6	34.7	4.3	18.7	21.8	2.5	437.3	17,079	4,438
MN-RC-0010	25	26	MN-4454*	0.05	4364	10000	1000.0	4438	592.6	177.2	54.9	154.8	454.2	50.8	5.4	25.3	27.5	3.1	566.5	26,293	6,648
MN-RC-0010	26	27	MN-4455	0.22	2016	4428	527.3	1807	254.0	78.6	26.6	65.7	192.8	21.8	2.8	11.7	15.2	1.8	269.6	11,666	2,860
MN-RC-0010	27	28	MN-4456	0.25	2783	4320	393.5	1228	144.6	45.8	15.9	39.6	116.9	13.7	1.7	6.7	9.7	1.2	164.6	11,143	1,976
MN-RC-0015	36	37	MN-4745	0.10	3176	5319	484.6	1367	124.9	34.1	14.0	32.3	105.7	12.7	2.0	5.6	11.9	1.7	149.3	13,026	2,234
MN-RC-0015	37	38	MN-4746	0.02	3384	5274	445.9	1155	91.7	19.4	8.5	21.3	75.1	9.2	1.1	3.2	6.8	0.9	89.5	12,721	1,919
MN-TH-0001	2	3	MN-1958	0.23	2455	4203	423.1	1505	157.3	49.6	18.2	40.8	102.3	12.1	2.3	8.0	12.0	1.7	208.0	11,040	2,338
MN-TH-0001	5	6	MN-1961	0.07	4642	6755	572.8	1607	100.9	21.3	9.3	21.8	54.6	6.8	1.3	3.6	7.0	1.0	109.7	16,711	2,599
MN-TH-0001	6	7	MN-1962	0.05	3667	5531	482.7	1414	97.7	24.2	10.6	21.7	55.4	6.9	1.5	4.1	8.3	1.2	127.7	13,757	2,268
MN-TH-0002	2	3	MN-2330	0.47	2716	4007	364.9	1123	121.9	37.3	14.3	30.1	73.9	7.1	1.8	6.0	10.2	1.3	159.2	10,410	1,801
MN-TH-0003	0	1	MN-2336	0.11	3689	5498	462.5	1276	113.6	34.1	12.4	28.2	68.1	6.3	1.6	5.4	8.4	1.0	143.7	13,632	2,094
MN-TH-0003	1	2	MN-2338	0.23	3823	6395	635.6	2111	254.5	76.4	26.0	64.9	154.5	15.1	3.0	11.5	16.2	1.9	299.5	16,671	3,336
MN-TH-0003	2	3	MN-2339	0.19	4209	6380	568.8	1805	195.8	61.1	22.6	49.1	116.2	11.3	2.6	9.6	13.2	1.5	255.6	16,448	2,876
MN-TH-0003	3	4	MN-2340	0.29	5195	8642	848.3	2887	345.4	95.6	29.7	87.1	204.8	19.7	3.3	13.9	16.9	2.0	343.9	22,483	4,525
MN-TH-0009	8	9	MN-2413	0.39	1963	4713	590.4	2094	323.8	112.2	37.9	86.8	219.9	27.0	4.2	17.2	22.8	2.7	388.9	12,729	3,317
MN-TH-0009	9	10	MN-2414*	0.62	3378	7976	1000.0	3650	558.7	192.7	64.7	150.6	381.3	46.4	6.9	29.8	35.6	4.4	639.6	21,735	5,741
MN-TH-0009	10	11	MN-2415*	0.62	4974	10000	1000.0	5295	811.7	268.7	88.9	215.6	544.8	66.0	9.5	40.2	49.1	5.9	872.7	29,036	7,770
MN-TH-0009	11	12	MN-2417*	0.79	7107	10000	1000.0	7626	1000.0	362.2	122.8	303.3	767.7	91.9	13.5	55.7	68.6	8.2	1200.6	35,473	10,627
MN-TH-0009	12	13	MN-2418	0.79	3425	7926	999.0	3556	533.8	177.7	63.8	142.4	359.4	43.4	7.2	27.7	39.0	4.9	627.0	21,518	5,609
MN-TH-0009	13	14	MN-2419	0.75	2086	4906	611.3	2168	325.0	108.8	37.7	85.7	220.2	26.7	4.2	16.9	21.8	2.8	388.3	13,215	3,424
MN-TH-0013	0	1	MN-2440	0.15	2611	4004	381.0	1142	103.3	32.3	11.9	25.2	68.9	6.9	1.7	5.7	8.1	1.1	144.9	10,263	1,838
MN-TH-0013	1	2	MN-2441	0.25	4049	5901	523.6	1448	110.7	31.1	12.0	25.9	69.5	6.6	1.7	5.8	9.1	1.2	157.1	14,834	2,365
MN-TH-0013	16	17	MN-2458	0.07	3276	4858	446.9	1215	90.9	23.8	9.2	21.0	54.7	5.2	1.3	4.4	6.7	0.9	111.5	12,160	1,991
MN-TH-0014	0	1	MN-2307	0.10	4515	6939	581.2	1589	137.2	39.1	15.5	33.0	85.8	7.8	2.2	7.0	11.6	1.4	177.8	16,994	2,610

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Drillhole	From	To	Sample	Nb ₂ O ₅ %	La	Ce	Pr	Nd	Sm	Dy	Er	Eu	Gd	Tb	Tm	Ho	Yb	Lu	Y	TREO	MREO
MN-TH-0014	1	2	MN-2308	0.11	2747	4545	408.4	1196	114.7	31.3	12.5	27.8	70.0	6.4	1.8	5.5	9.7	1.3	138.3	11,193	1,932
MN-TH-0015	6	7	MN-2466	0.06	3346	5926	589.6	1814	156.5	29.4	10.8	33.5	75.7	6.0	1.4	4.5	8.2	1.2	122.3	14,565	2,868
MN-TH-0015	7	8	MN-2467	0.07	3180	5886	643.5	2063	183.0	48.6	16.5	40.9	105.6	8.7	2.1	8.9	12.5	1.7	186.4	14,875	3,250
MN-TH-0017	7	8	MN-2959	0.12	2664	3966	337.3	1032	105.7	32.8	12.9	26.8	71.2	6.9	1.6	5.6	8.9	1.1	141.6	10,103	1,657
MN-TH-0018	0	1	MN-2966	0.15	4260	6334	531.0	1427	127.3	36.1	14.5	30.8	82.5	7.6	1.9	6.5	11.0	1.3	179.3	15,680	2,357
MN-TH-0019	0	1	MN-2928	0.09	3021	5432	506.0	1377	133.8	36.6	13.3	32.7	79.4	7.1	1.7	5.6	9.1	1.1	152.4	12,997	2,268
MN-TH-0019	1	2	MN-2929	0.16	2585	5145	544.8	1722	202.4	58.3	20.5	50.6	122.7	11.5	2.5	9.0	14.4	1.7	233.0	12,884	2,748
MN-TH-0019	2	3	MN-2930	0.18	3308	5998	636.6	2133	254.6	75.6	26.0	64.7	154.3	15.2	3.0	11.2	16.4	1.8	290.5	15,594	3,362
MN-TH-0019	3	4	MN-2932	0.14	2369	4178	439.4	1380	169.4	50.4	18.2	43.9	104.3	10.0	2.2	7.7	12.9	1.6	207.5	10,799	2,209
MN-TH-0020	0	1	MN-2938	0.13	2925	5068	447.3	1332	115.6	35.6	14.8	27.6	76.2	6.7	1.9	5.9	10.6	1.3	175.1	12,313	2,143
MN-TH-0020	2	3	MN-2940	0.62	1965	4448	527.7	2167	319.8	102.3	32.4	86.6	214.0	21.4	3.8	14.4	20.7	2.4	340.2	12,310	3,307
MN-TH-0020	3	4	MN-2942	0.43	2083	4137	441.5	1627	208.8	66.1	24.1	53.9	133.4	12.8	2.9	9.9	17.4	2.2	278.1	10,922	2,522
MN-TH-0023	4	5	MN-3000	0.16	3088	5284	553.5	1906	199.4	55.6	18.9	49.2	125.1	11.5	2.3	8.8	12.9	1.5	220.8	13,844	2,969
MN-TH-0024	6	7	MN-3023	0.16	3665	5169	497.9	1463	141.5	40.4	14.9	34.4	87.4	8.1	1.9	6.5	11.1	1.4	185.9	13,593	2,364
MN-TH-0024	7	8	MN-3024	0.06	4821	6460	570.7	1445	92.4	19.4	8.9	18.9	51.3	3.5	1.3	3.5	8.1	1.1	111.9	16,346	2,401
MN-TH-0024	8	9	MN-3025	0.15	4433	6448	613.4	1780	161.5	40.3	15.6	36.8	92.1	8.0	2.0	6.4	12.3	1.6	177.9	16,597	2,873
MN-TH-0024	9	10	MN-3026	0.14	2974	4727	508.8	1637	190.3	53.4	18.4	47.2	115.0	11.0	2.4	8.1	12.4	1.5	212.1	12,619	2,599
MN-TH-0024	10	11	MN-3027	0.22	2935	4724	510.1	1724	200.9	56.1	18.7	49.9	122.5	11.6	2.2	8.4	11.8	1.4	226.6	12,717	2,705
MN-TH-0024	11	12	MN-3028	0.15	2682	4174	440.3	1459	166.8	48.9	17.4	41.8	105.0	10.0	2.0	7.6	11.2	1.4	215.0	11,255	2,301
MN-TH-0024	19	19.85	MN-3037	0.14	2853	4450	466.9	1513	170.0	45.1	15.5	43.6	101.1	8.7	1.9	7.0	10.1	1.2	179.3	11,836	2,391
MN-TH-0025	2	3	MN-3040	0.15	4467	6616	629.5	1750	153.7	40.4	13.3	32.2	90.6	7.8	1.9	6.5	10.9	1.4	176.0	16,805	2,857
MN-TH-0025	6	7	MN-3045	0.18	3189	5194	540.9	1741	181.1	48.8	15.5	40.0	108.6	10.0	2.2	7.7	12.2	1.6	196.6	13,549	2,752
MN-TH-0025	7	8	MN-3046	0.12	3984	5906	546.9	1509	127.4	35.2	12.7	27.0	75.5	6.5	1.9	5.8	10.9	1.4	161.0	14,904	2,469
MN-TH-0025	8	9	MN-3047	0.13	3417	4907	450.6	1195	96.5	25.3	9.1	20.2	56.2	4.9	1.3	4.3	7.7	1.0	120.2	12,388	1,973
MN-TH-0025	11	12	MN-3051	0.13	3534	4707	421.4	1082	85.8	24.6	9.2	17.9	51.2	4.4	1.3	4.2	7.4	1.0	118.3	12,087	1,805
MN-TH-0025	14	15	MN-3054*	0.07	8795	10000	921.9	2431	176.6	34.2	10.9	33.5	93.3	6.9	1.6	5.5	8.0	1.0	144.0	27,160	3,997
MN-TH-0025	15	16	MN-3055*	0.15	10000	10000	1000.0	3241	225.8	44.8	14.3	44.0	123.2	9.0	2.0	7.1	11.0	1.3	182.6	29,790	5,050

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Drillhole	From	To	Sample	Nb ₂ O ₅ %	La	Ce	Pr	Nd	Sm	Dy	Er	Eu	Gd	Tb	Tm	Ho	Yb	Lu	Y	TREO	MREO
MN-TH-0025	17	18	MN-3058	0.14	5853	7909	685.1	1775	129.5	31.8	10.9	25.7	74.7	6.1	1.6	5.2	9.0	1.1	133.7	19,988	2,941
MN-TH-0026	0	1	MN-3760	0.16	5537	8168	608.4	1607	143.7	49.0	19.8	35.6	85.4	11.8	2.4	8.4	12.4	1.5	221.0	19,845	2,680
MN-TH-0026	1	2	MN-3761	0.16	2720	3995	350.5	1022	109.8	35.3	13.7	27.5	65.2	8.2	1.7	5.9	9.1	1.2	150.2	10,223	1,665
MN-TH-0026	3	4	MN-3763	0.07	4129	5782	485.2	1305	107.8	25.9	10.1	24.5	54.0	6.9	1.3	4.3	7.6	1.1	109.9	14,473	2,146
MN-TH-0026	14	15	MN-3776	0.11	5312	7261	514.2	1304	104.0	26.5	9.6	23.5	51.2	7.3	1.2	4.2	6.1	0.8	102.5	17,692	2,181
MN-TH-0026	17	18	MN-3780	0.33	5057	6290	494.1	1269	108.7	30.3	11.6	26.0	59.4	8.1	1.4	5.0	7.6	1.1	123.1	16,190	2,121
MN-TH-0026	18	19	MN-3781*	0.17	9589	10000	756.0	1783	129.6	28.8	11.1	27.8	61.8	8.8	1.3	4.7	7.3	0.9	118.8	27,000	3,037
MN-TH-0027	0	1	MN-3783	0.16	3490	4915	415.3	1245	132.1	50.2	19.4	35.1	86.2	11.4	2.1	8.2	11.5	1.4	203.8	12,756	2,024
MN-TH-0033	1	2	MN-3845	0.14	3499	5274	473.2	1256	118.8	39.3	15.9	28.9	67.5	8.9	1.9	6.8	10.2	1.4	168.9	13,178	2,092
MN-TH-0033	5	6	MN-3849	0.16	4020	7275	769.0	2377	277.5	78.9	28.7	69.1	156.2	18.6	3.5	12.7	18.7	2.3	310.8	18,517	3,814
MN-TH-0033	6	7	MN-3850	0.15	3732	6408	632.2	1798	176.4	44.3	16.9	41.4	90.3	10.9	2.0	7.2	11.2	1.5	175.4	15,795	2,924
MN-TH-0033	7	8	MN-3851	0.14	4646	7858	769.8	2237	224.8	56.6	22.5	51.2	115.2	14.2	2.7	9.5	13.9	1.7	232.0	19,527	3,621
MN-TH-0033	12	13	MN-3857	0.07	4318	6986	649.7	1733	155.9	37.8	14.4	34.3	78.0	9.8	1.7	6.2	10.6	1.3	155.6	17,053	2,861
MN-TH-0033	13	14	MN-3859	0.20	2369	4744	542.1	1835	244.8	68.7	24.4	63.6	143.4	16.5	2.7	10.7	14.9	1.7	250.9	12,403	2,894
MN-TH-0033	16	17	MN-3862	0.18	2394	4823	507.6	1615	193.6	61.1	25.2	47.7	120.6	13.8	3.1	11.2	17.1	2.2	290.8	12,170	2,583
MN-TH-0033	17	18	MN-3863	0.12	4519	7966	832.1	2636	321.2	91.9	33.0	80.1	182.2	21.3	3.9	14.7	21.2	2.5	355.6	20,509	4,211
MN-TH-0033	18	19	MN-3864	0.07	3187	5127	482.1	1330	127.6	32.0	13.5	29.6	67.4	8.3	1.7	5.5	9.7	1.3	138.4	12,687	2,180
MN-TH-0036	0	1	MN-3676	0.08	2942	5338	466.9	1309	110.5	32.4	12.9	26.0	60.4	8.1	1.6	5.5	9.1	1.1	144.2	12,592	2,137
MN-TH-0036	1	2	MN-3677	0.12	2588	4739	453.8	1453	159.6	51.6	18.3	41.4	94.6	12.1	2.2	7.9	12.1	1.5	208.8	11,829	2,317
MN-TH-0036	2	3	MN-3679	0.12	2500	4557	435.9	1379	154.1	48.6	18.0	39.1	90.0	11.6	2.1	7.5	11.4	1.4	193.1	11,353	2,205
MN-TH-0037	1	2	MN-3700	0.11	3062	4742	409.5	1148	102.2	33.3	12.7	25.3	59.1	8.4	1.7	5.4	9.2	1.2	138.5	11,724	1,882
MN-TH-0037	4	5	MN-3704	0.50	2225	4395	511.8	1856	233.5	71.2	23.5	60.8	141.0	16.8	2.7	11.9	14.6	1.8	257.3	11,785	2,885

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JORC Code, 2012 Edition – Table 1 report template

Section 1. Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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 downhole 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 1m samples from which 3kg was pulverised to produce a 30g 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. 	<ul style="list-style-type: none"> The niobium and rare earth element (REE) exploration results presented in this Santa Anna Project ASX release have been prepared using exploration data collected by Empresa de Desenvolvimento e Mineração (EDEM) during the period 2002-2023 over the project area. EDEM's exploration was aimed to produce multi-nutrient phosphate from the altered superficially carbonatite. 192 drillholes for a total of 5,377.45 metres have been completed using four different drilling techniques: Reverse Circulation (RC: 8.3% of drillholes), diamond core (DD: 8.9%), mechanical auger (TH: 19.8%), and aircore (AC: 63.0%). EDEM has provided analytical results for 4,075 drillhole samples, with the majority (51%) from the aircore drilling. Diamond core sampling was conducted with careful consideration of lithological boundaries, ensuring that samples are taken directly at major contacts rather than across them. The core size used was either HQ or NQ, with sample intervals ranging from a minimum of 0.55 metres to a maximum of 3 metres. After cutting along a designated line, half of the core was analysed. Geochemical analyses were completed by commercial laboratory SGS Geosol using lithium metaborate fusion followed by ICP-OES or ICP-MS to determine major oxides and 41 trace elements. All drilling provided a continuous sample of mineralized zone. The mineralisation relevant to this report has been assessed through quantitative laboratory analysis techniques which are described in greater detail in the following sections.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> EDEM has employed several drilling techniques throughout the Santa Anna Project permit. A total of seventeen diamond core drillholes were completed, comprising 14 HQ/NQ holes (including 3 that are exclusively HQ), totaling 1018.75 metres. Most of these drillholes were inclined at -70 degrees, with one set at -65 degrees (MN-DD-0005) and another at -60 degrees (MN-DD-0010). The deepest cored drillhole reached 72.6 metres (MN-DD-0010). Sixteen (16) standard reverse circulation (RC) drillholes for 822 metres. All were vertical, deepest 51 metres,

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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> • A total of 121 aircore drillholes for 3040.1 metres. All are vertical and deepest drillhole (MN-AC-0051) reached 33 metres. • Thirty-eight (38) auger holes, totalling 510.6 metres. All are vertical and the deepest is 20 metres (Drillhole MN-TH-0025). Powered (52kW) SD-400 auger with twenty (20) cm wide auger bit used. • No downhole surveys are reported, but this is to be confirmed. Most drillholes (91.1%) are vertical.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • For diamond core drillholes, the actual length of core recovered was compared to the total recorded drill length for that run. Any variation was recorded as a recovery percentage. • For aircore, RC, and auger drillholes the individual samples were weighed. After allowing for drillhole diameter/volume and an assumed density, the covered weights were compared to the calculated weights, and a recovery percentage was calculated. This Recovery (R) was monitored on-site during the drilling as under the EDEM drilling contract when the entire sample recovery for the drillhole was R<70% then the hole was to be twined by the drilling contractor. • The powered helical auger was advanced 0.2 to 0.3 metres at a time, after which side contamination was removed before the next advance could proceed. These were entirely combined to form a one metre-sample interval.
Logging	<ul style="list-style-type: none"> • <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • Core samples were not geotechnically logged as the mineralisation is not structurally controlled. • All drillholes were geologically logged throughout their full length with the necessary detail to facilitate accurate mineral resource estimation, as well as mining and metallurgical studies. • Representative material has been retained to support further studies as required. • Drillhole logging was qualitative in nature. • All drillhole samples from all drill types were photographed.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> 	<ul style="list-style-type: none"> • Diamond core was cut and the half core submitted for analysis. If material was soft (clay-rich), care was taken to use a knife and spoon for halving the core, ensuring minimal loss of material. • The aircore and RC samples were rotary split and then reduced to a representative 3kg for additional sub-sampling and analyses. All drillhole material was dry. • The powered auger generated substantial one-metre samples weighing less than 150kg. These samples were then laid out on canvas, thoroughly mixed for homogenization, and subjected to quartering to achieve the required sample size.

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Criteria	JORC Code explanation	Commentary																
	<ul style="list-style-type: none"> Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Samples were almost all drilled dry due to the shallow depth and the Aircore/RC drilling air pressure holding back any possible water. Between samples the hose and cyclone were systematically cleared. EDEM company representatives were required to monitor for any excessive dust escaping from the top of the cyclone or the hoses. If any loss was observed, they were to document it and take corrective action. Sample size is considered appropriate for the grain size of the sample material. 																
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, handheld XRF instruments, etc, the used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (lack of bias) and precision have been established. 	<ul style="list-style-type: none"> EDEM selected SGS Geosol as its primary commercial laboratory. This decision came after conducting a series of round robin analyses to validate two in-house standards: the higher-grade (Alto) and the lower-grade (Baixo). The validation process involved four laboratories and included ten duplicate samples of each standard type. The sole parameter analysed in both standard round robin analyses was P₂O₅. Geochemical analysis for EDEM was completed by SGS Geosol Laboratory, Vespasiano, MG, Brazil. Certified ISO 9001:2015 and ISO 14001:2015. Using method ICP95A which determines 11 major oxides and 5 elements by lithium metaborate fusion followed by ICP-OES, together with method IMS95A for 36 elements by lithium metaborate fusion followed by ICP-MS. Method PHY01E was used to determine LOI by calcination of the sample at 1000°C. If Nb by method IMS95A was >0.1%, then method ICP95A was used by SGS. The IMS95A method had an upper limits of La>1%, Ce>1%, Pr>0.1% and Sm>0.1%. Twenty one EDEM drill samples exceed one or more of these limits, and the corresponding element assay value was assigned the upper limit value. These samples were not re-analysed using over limit methods as REE were not the target commodity at the time. The lithium borate fusion method ensures complete breakdown of samples, even those containing the most resilient acid-resistant minerals. This technique is deemed suitable for analysing Nb in the Goiás Niobium Carbonatite Project samples. The table below lists the elements measured by the SGS methods along with their corresponding detection limits: 17.1) ICP95A <table border="1"> <caption>Determinação por Fusão com Metaborato de Lítio - ICP OES</caption> <tbody> <tr> <td>Al₂O₃ 0,01 - 75 (%)</td> <td>Ba 10 - 100000 (ppm)</td> <td>CaO 0,01 - 60 (%)</td> <td>Cr₂O₃ 0,01 - 10 (%)</td> </tr> <tr> <td>Fe₂O₃ 0,01 - 75 (%)</td> <td>K₂O 0,01 - 25 (%)</td> <td>MgO 0,01 - 30 (%)</td> <td>MnO 0,01 - 10 (%)</td> </tr> <tr> <td>Na₂O 0,01 - 30 (%)</td> <td>P₂O₅ 0,01 - 25 (%)</td> <td>SiO₂ 0,01 - 90 (%)</td> <td>Sr 10 - 100000 (ppm)</td> </tr> <tr> <td>TiO₂ 0,01 - 25 (%)</td> <td>V 5 - 10000 (ppm)</td> <td>Zn 5 - 10000 (ppm)</td> <td>Zr 10 - 100000 (ppm)</td> </tr> </tbody> </table>	Al ₂ O ₃ 0,01 - 75 (%)	Ba 10 - 100000 (ppm)	CaO 0,01 - 60 (%)	Cr ₂ O ₃ 0,01 - 10 (%)	Fe ₂ O ₃ 0,01 - 75 (%)	K ₂ O 0,01 - 25 (%)	MgO 0,01 - 30 (%)	MnO 0,01 - 10 (%)	Na ₂ O 0,01 - 30 (%)	P ₂ O ₅ 0,01 - 25 (%)	SiO ₂ 0,01 - 90 (%)	Sr 10 - 100000 (ppm)	TiO ₂ 0,01 - 25 (%)	V 5 - 10000 (ppm)	Zn 5 - 10000 (ppm)	Zr 10 - 100000 (ppm)
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Criteria	JORC Code explanation	Commentary																																																										
		<p>17.2) IMS95A</p> <table border="1"> <thead> <tr> <th colspan="6">Determinação por Fusão com Metaborato de Lítio - ICP MS</th> </tr> </thead> <tbody> <tr> <td>Ce</td> <td>0,1 - 10000 (ppm)</td> <td>Co</td> <td>0,5 - 10000 (ppm)</td> <td>Cs</td> <td>0,05 - 1000 (ppm)</td> </tr> <tr> <td>Dy</td> <td>0,05 - 1000 (ppm)</td> <td>Er</td> <td>0,05 - 1000 (ppm)</td> <td>Eu</td> <td>0,05 - 1000 (ppm)</td> </tr> <tr> <td>Gd</td> <td>0,05 - 1000 (ppm)</td> <td>Hf</td> <td>0,05 - 500 (ppm)</td> <td>Ho</td> <td>0,05 - 1000 (ppm)</td> </tr> <tr> <td>Lu</td> <td>0,05 - 1000 (ppm)</td> <td>Mo</td> <td>2 - 10000 (ppm)</td> <td>Nb</td> <td>0,05 - 1000 (ppm)</td> </tr> <tr> <td>Ni</td> <td>5 - 10000 (ppm)</td> <td>Pr</td> <td>0,05 - 1000 (ppm)</td> <td>Rb</td> <td>0,2 - 10000 (ppm)</td> </tr> <tr> <td>Sn</td> <td>0,3 - 1000 (ppm)</td> <td>Ta</td> <td>0,05 - 10000 (ppm)</td> <td>Tb</td> <td>0,05 - 1000 (ppm)</td> </tr> <tr> <td>Ti</td> <td>0,5 - 1000 (ppm)</td> <td>Tm</td> <td>0,05 - 1000 (ppm)</td> <td>U</td> <td>0,05 - 10000 (ppm)</td> </tr> <tr> <td>Y</td> <td>0,05 - 10000 (ppm)</td> <td>Yb</td> <td>0,1 - 1000 (ppm)</td> <td></td> <td></td> </tr> </tbody> </table> <p>17.3) PHY01E</p> <table border="1"> <thead> <tr> <th colspan="2">LOI (Loss on ignition) - Perda ao fogo por calcinação da amostra a 1000°C</th> </tr> </thead> <tbody> <tr> <td>LOI</td> <td>-45 - 100 (%)</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Determinação de Perda ao Fogo (LOI) por Gravimetria - 1000°C • Perda ao fogo por calcinação a 1000°C. <ul style="list-style-type: none"> • EDEM included three types of control samples in their analyses: Blank (BLK), field duplicates (DUP), and Standard (PAD). The auger samples utilized only duplicates. Two in-house Standards were employed, known as Alto (with a higher P₂O₅ grade) and Baixo (with a lower grade), although neither was certified for Nb or REE as this was not the target element during the EDEM drilling programs. • The combined Standards, Blanks, and blind duplicates totalled 5.4% of the drillholes samples submitted. The reported values were all within acceptable range. The quality control sampling is still undergoing thorough examination and evaluation as PNN continues the due diligence. 	Determinação por Fusão com Metaborato de Lítio - ICP MS						Ce	0,1 - 10000 (ppm)	Co	0,5 - 10000 (ppm)	Cs	0,05 - 1000 (ppm)	Dy	0,05 - 1000 (ppm)	Er	0,05 - 1000 (ppm)	Eu	0,05 - 1000 (ppm)	Gd	0,05 - 1000 (ppm)	Hf	0,05 - 500 (ppm)	Ho	0,05 - 1000 (ppm)	Lu	0,05 - 1000 (ppm)	Mo	2 - 10000 (ppm)	Nb	0,05 - 1000 (ppm)	Ni	5 - 10000 (ppm)	Pr	0,05 - 1000 (ppm)	Rb	0,2 - 10000 (ppm)	Sn	0,3 - 1000 (ppm)	Ta	0,05 - 10000 (ppm)	Tb	0,05 - 1000 (ppm)	Ti	0,5 - 1000 (ppm)	Tm	0,05 - 1000 (ppm)	U	0,05 - 10000 (ppm)	Y	0,05 - 10000 (ppm)	Yb	0,1 - 1000 (ppm)			LOI (Loss on ignition) - Perda ao fogo por calcinação da amostra a 1000°C		LOI	-45 - 100 (%)
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Criteria	JORC Code explanation	Commentary																																																										

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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 storage (physical and electronic) protocols.
- Discuss any adjustment to assay data.

- Power Minerals is currently in the process of verifying the digital data against the laboratory certificates provided by EDEM. So far, no independent verification has been completed.
- Twin drillholes could be required under the EDEM drilling contract when the entire sample recovery for the first drillhole was less than 70%. The use of twin drillholes to verify and validate sampling and assaying results is to be confirmed.
- EDEM kept a comprehensive in-house database that captured all digital results. Details from field samples were documented in spreadsheets and uploaded on a daily basis. Laboratory results were received both as digital data and as pdf certificates.

Criteria

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Location of data points

- Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
- Specification of the grid system used.
- Quality and adequacy of topographic control.

- The EDEM data has successfully been imported into the secure Power Minerals relational database. This automated process has verified several key aspects of the data set, and we are committed to ongoing validation of the information.
- The only adjustments utilised with the assay data is for Nb and REE to be converted to stoichiometric oxides using standard conversion factors (see Advanced Analytical Centre, James Cook University). This includes $Nb_2O_5 = Nb * 1.4305$
- Power Minerals uses the following definitions:
 - TREO (Total Rare Earth Oxides) = $[La_2O_3] + [CeO_2] + [Pr_6O_{11}] + [Nd_2O_3] + [Sm_2O_3] + [Eu_2O_3] + [Gd_2O_3] + [Tb_4O_7] + [Dy_2O_3] + [Ho_2O_3] + [Er_2O_3] + [Tm_2O_3] + [Yb_2O_3] + [Lu_2O_3] + [Y_2O_3]$
 - HREO (Heavy Rare Earth Oxides) = $[Sm_2O_3] + [Eu_2O_3] + [Gd_2O_3] + [Tb_4O_7] + [Dy_2O_3] + [Ho_2O_3] + [Er_2O_3] + [Tm_2O_3] + [Yb_2O_3] + [Lu_2O_3] + [Y_2O_3]$
 - CREO (Critical Rare Earth Oxides) = $[Nd_2O_3] + [Eu_2O_3] + [Tb_4O_7] + [Dy_2O_3] + [Y_2O_3]$
 - MREO (Magnet Rare Earth Oxides) = $[Nd_2O_3] + [Pr_6O_{11}] + [Tb_4O_7] + [Dy_2O_3]$
- Drillhole collars were georeferenced with DGPS (RTK). Accuracy is estimated to be within 0.1 metres.
- Map and collar coordinates are in SIRGAS 2000 UTM Zone 22 South.
- Topographic control was gathered using a photogrammetric drone in collaboration with a Sentinel-2 satellite Copernicus digital terrain model specifically in areas of denser vegetation. Both methods were georeferenced with DGPS (RTK) unitising the coordinates of the registered drillhole collars.

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Data spacing and distribution

- *Data spacing for reporting of Exploration Results.*
- *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*
- *Whether sample compositing has been applied.*

- The limited outcrop prompted the initial use of detailed magnetic and radiometric aerial survey imagery to establish the intrusion boundary. Later on, a ground magnetic survey was conducted with a line spacing of 200 metres and a reading interval of 20 metres to refine this boundary further.
- Magnetic interpretation was supported by a soil geochemical survey and mapping of occasional rock float. Soil sampling was completed on three north-south and three east-west traverses, all 400 metres apart and with 100 metres sample intervals.
- The 38 auger drillholes are concentrated near the centre of the intrusion, featuring an orthogonal spacing of around 25 metres. These drillholes reached an average depth of 13.4 metres, with the deepest measuring 20 metres. In addition, there are 121 aircore drillholes, primarily spaced at 50 x 100 metres in the area northwest of the intrusion centre, which were later expanded to a regional 400 x 400 metres. Their average depth is 25.1 metres, with a maximum depth of 33 metres. Furthermore, 16 RC drillholes are clustered around the carbonatite core, maintaining an irregular spacing of roughly 50 metres and achieving an

Criteria

JORC Code explanation

Commentary

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.*

- average depth of 50.5 metres and a maximum depth of 51 metres. The diamond core drilling features a more irregular spacing of 400 metres, although some holes are positioned closer to the centre. The average depth for the 17 inclined core drillholes is 59.9 metres, with the deepest one reaching 72.6 metres.
- On the northern side, a small number of aircore drillholes were completed outside of the mapped intrusion to confirm lithology beneath the thin cover.
 - The data quality, spacing, and distribution is sufficient to establish grade continuity only over localised areas of the project area. There are large volumes within the carbonatite with insufficient data for any estimation of grade and that require further drilling.
 - No orientation bias has been detected at this stage. It is expected there will be a vertical variation related to the deep lateritic weathering combined with the concentric nature of the carbonatite mineralogy and geochemistry.
 - The location of the Project is probably structurally controlled, but the internal target mineralogy is not.

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Sample security • *The measures taken to ensure sample security.*

- Samples were given individual sample numbers for tracking.
- The sample chain of custody is overseen by the EDEM geologist in charge of the program.
- EDEM company geologist was responsible for collecting the samples and transporting them to the company dispatch centre or commercial laboratory.

Audits or reviews • *The results of any audits or reviews of sampling techniques and data.*

- No external audits or review of the sampling techniques and data related to niobium mineralisation have been completed.

Section 2. Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The Santa Anna Project is wholly contained with two permits ANM 861.559/2021 and 861.559/2021 which cover the entire alkaline complex. The current holders are subsidiaries of Empresa de Desenvolvimento e Mineração (EDEM). Power Minerals Ltd has a binding option to acquire ANM 861.559/2021 from EDEM subject to completion of due diligence and certain exploration milestones. No impediments are known or expected by the company to prevent the transfer occurring. The permits cover 1,705 hectares, are granted and in good standing with the relevant government authorities and there are no known impediments to operating in the project area. The site is 6km east-southeast from the small town of Mundo Novo, in the Brazilian state of Goiás. It is on the south side of state highway GO-156 and 335km northwest of the Brazil capital of Brasília.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The Project was identified in 2021 by EDEM after investigating a significant radiometric anomaly found during aerial geophysical surveys. These surveys were a part of the Southeast Mato Grosso Aerogeophysical Project (2011) and the West Aerogeophysical Project of the Mara Rosa Magmatic Arc (2005), both of which utilized a line spacing of 500 metres and a flight height of 100 metres. There is no known artisan or modern exploration over the site prior to EDEM.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of The Project is situated in the northern part of the Goiás Alkaline Province mineralisation. 	<ul style="list-style-type: none"> The Project is situated in the northern part of the Goiás Alkaline Province (GAP), a region notable for its Late Cretaceous alkaline magmatism along the northern boundary of the Paraná Basin. This magmatic activity is linked to the NE–SW Trans-Brazilian Lineament and has been shaped by the influence of the Trindade mantle plume. Alkaline intrusions in this area have penetrated through orthogneiss and granites of the Goiás Magmatic Arc, as well as the overlying basalts and sedimentary formations of the Paraná Basin. The Project is situated at the intersection of the Goiás Magmatic Arc and the Araguaia Belt, with its edges distinctly outlined by the Trans-Brazilian Lineament. Similar to other occurrences of alkaline rocks in the GAP, the carbonatite intrusion took place within a dilatant zone that developed along a northwest lineament, highlighting the tectonic influences on its magmatic development. The internal detail of the carbonatite intrusion is poorly understood due lack of <i>in situ</i> outcrop, intense laterization, and limited drilling completed. Zones of fenitized (phlogopite) mafic and felsics, various alkaline rocks, different carbonatites including magnetite-rich and Ca-Mg-rich are poorly mapped.

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Criteria	JORC Code explanation	Commentary
Drillhole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: <ul style="list-style-type: none"> easting and northing of the drillhole collar elevation or RL (Reduced Level - elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole downhole length and interception depth 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. 	<ul style="list-style-type: none"> The material drillhole information including maps have been included within the main body of this release.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cutoff 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. 	<ul style="list-style-type: none"> No upper-cut has been applied. Unless otherwise stated, all reported intercepts grades over more than one sample are weighted average by length. No metal equivalents values are used in this release. Combined totals of rare earth oxides are used as defined in the <i>Verification of sampling and assaying</i> section above.

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<p>Relationship between mineralisation widths and intercept lengths</p>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> • <i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</i> 	<ul style="list-style-type: none"> • The precise orientation/geometry of the mineralisation is unknown but is interpreted to be vertically stratified due to the overprinting effects of lateritic weathering within the boundaries of the intrusion. • The deep weathering profile often extends to depths of over 30 metres and as much as 50 metres below surface. • The majority of drillholes (n=175) are vertical and thus, are considered to be orthogonal to the generally flat lying regolith-controlled mineralisation. There are 15 diamond core drillholes which are steeply inclined at -70°, and one at -65° and one at -60°. All reported intersections for these drillholes are provided as downhole lengths. • All reported intersections are downhole lengths.
<p>Criteria</p>	<p>JORC Code explanation</p>	<p>Commentary</p>
<p>Diagrams</p>	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> • The appropriate exploration maps and diagrams have been included within the main body of this release.
<p>Balanced reporting</p>	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> • All significant drillhole results have been reported, including low grade intersections.

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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.*

- Soil sampling was completed on three north-south and three east-west traverses, all 400 metres apart and with 100 metre sample intervals, centred over the intrusion.
- EDEM has successfully completed around 400 metres of trenching to collect bulk samples specifically for phosphate testing. It's important to note that this activity holds little significance for the niobium exploration efforts.
- A significant number of bulk density measurements have been conducted throughout the project area utilizing the diamond core method in conjunction with the caliper approach (where volume is measured and calculated before weighing the sample). In total, 155 measurements were collected from 11 distinct drillholes, spanning depths from 0.14 to 71.3 meters. The averaged bulk density across all measurements stands at 2.18t/m³, confirming the anticipated trend of increasing bulk density with increasing depth.
- A minor undergraduate thesis was completed by Letícia Gonçalves de Oliveira and Taís Costa Cardoso, on the Project area at the Federal University of Goiás in 2022. Ground magnetics and soil and rock sampling was undertaken in conjunction EDEM. Petrology and mineralogy (XRD) studies were completed by the university.

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.*

- Preparations for further drilling are underway to confirm, infill and extend known mineralisation.
- Diagrams showing areas of possible future drilling areas are provided in the main body of this release.