

Summit to Acquire Advanced High-Grade IAC-Nb Project, Brazil

HIGHLIGHTS

- Executed agreement to acquire the highly prospective Mundo Novo IAC-Nb Alkaline Carbonatite project subject to completion and satisfaction on technical and legal due diligence by Summit.
- Confirmed niobium, REE, and phosphate-rich oxide mineralisation confirmed from surface. The complex features numerous zones offering multi-commodity exposure.
- Preliminary studies by Summit indicate IAC-style REE deposit akin to Meteoric's Poços De Caldas Alkaline Carbonatite Complex.
- Drilling to date is limited, averaging 30m depth with several holes extending to 50m; Summit will control the entire intrusive complex, offering substantial exploration potential under granted permits. Many holes have ended in mineralisation and remain open.
- Drilling highlights include for IAC Rare Earths (Table 1):
 - MN-RC-0009: 51m at 10,000ppm TREO from surface, including 14m at 15,800ppm TREO from surface & 6m at 23,800ppm TREO from 28m
 - MN-TH-0009: 15m at 12,200ppm TREO from surface, including 5m at 23,700ppm TREO from 8m.
 - MN-TH-0025: 20m at 12,100ppm TREO from surface
 - MN-RC-0010: 40m at 7,383 ppm TREO from the surface, including 30m at 8,681 PPM TREO from the surface and 10m at 12,500 ppm TREO from 21m.
 - 541 individual intersections grading above 5,000ppm TREO.
- Despite limited assay data, Summit has confirmed high-grade niobium, presenting a promising exploration opportunity and further analysis through additional drilling.
- Drilling highlights include for Niobium (Table 1):
 - MN-AC-0004: 9m at 1.23% Nb₂O₅ from 2m, including 4m at 1.62% Nb₂O₅ from 3m¹.
- Summit will prioritise niobium exploration at Mundo Novo through further assaying and drilling.
- The Mundo Novo Alkaline Carbonatite project mirrors the Morro Preto deposit in the Catalão Complex, part of the Goiás Alkaline Province (GAP). Catalão, owned by CMOB Brazil, hosts the world's second-largest niobium mine and is one of only three globally producing niobium mines.
- Summit has access to an extensive surface geochemistry and drilling exploration database, which it will review during the due diligence phase.
- Drill ready project, with all permitting in-place and valid.

¹ Using a 0.4% cutoff Nb₂O₅, 1m internal dilution.

Summit Minerals Limited (ASX: SUM) (“Summit” or the “Company”) is pleased to announce that the Company has executed a binding letter of intent to acquire the Mundo Novo Niobium-REE-Phosphate Carbonatite, located in central Brazil. The weathered cap of the outcropping carbonatite is enriched with niobium, REE, and phosphate. Niobium mineralisation is confirmed by pyrochlore, the primary host mineral in carbonatites. Bastnaesite, typically associated with granitic and alkaline igneous rocks, is a key host mineral for ionic clay-style deposits and plays a crucial role in enriching rare earth elements in secondary deposits, particularly in tropical climates. It is also identified as the host mineral for Meteoric’s ionic clay deposit at Poços de Caldas. Despite these confirmations, the deposit remains underexplored and under-drilled, underscoring its untapped potential for niobium resources.

The acquisition is subject to Summit completing its financial, legal, and technical due diligence on the Project to its absolute satisfaction.

The Mundo Novo Alkaline Complex (MNAC) lies adjacent to Highway 156, 6 km east of Mundo Novo, approximately 40 km north of Nova Crixás, Goiás State, and 326 km northwest of Brazil’s capital, Brasilia. The concession (ANM 861.559/2021) covers an area of 17.2 km², with the circular Mundo Novo intrusion prominently located at its centre.

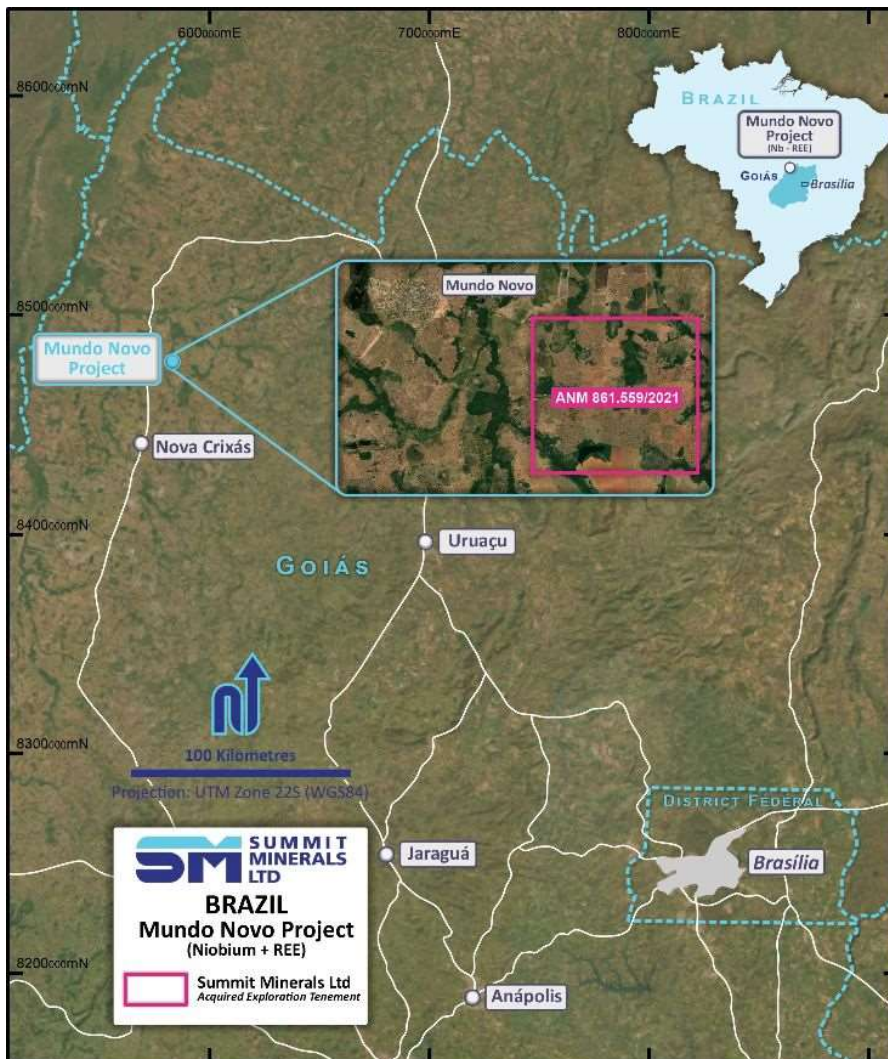


Figure 1: Location of the Mundo Novo Carbonatite, Goiás State, central Brazil.

For personal use only

Summit's Managing Director, Gower He, commented:

“We are thrilled with the potential acquisition of the Mundo Novo Carbonatite project, a key investment in the niobium and rare earth element sector. This investment is driven by strong long-term demand linked to the global clean energy transition and advancements in decarbonisation technologies.

Mundo Novo has shown substantial potential for niobium, rare earth element, and phosphate mineralisation, as evidenced by past drilling results that revealed considerable intercept widths. The project's geological potential aligns perfectly with our strategy to develop high-quality projects in Brazil that supply critical metals for the electric vehicle (EV) market and other clean energy applications.

Although the vendors had multiple suitors, they chose to partner with Summit. The Company was presented with this opportunity as recognition of its fast-paced and committed approach to niobium exploration in Brazil.

This project represents an outstanding addition to the company; upon completion, the Company will have added a drill-ready niobium carbonatite project to its existing suite of Brazilian assets.”

Table 1 – Significant drilling results for Niobium and REE: Mundo Novo Carbonatite (see Appendix 1)

Hole	Type	Easting	Northing	From	To	Width	Grade
		UTM zone 22S	UTM zone 22S	m	m	m	% or ppm
MN-AC-0004	Nb	582935.609	8474136.202	2	11	9	1.23
inc				3	7	4	1.62
MN-TH-0016	Nb	582769.8	8474844	5	8.9	3.9	1.06
inc				6	8	2	1.33
MN-AC-0031	Nb	583528.9	8474340.093	6	20	14	0.71
inc				14	19	5	1.18
MN-TH-0009	Nb	583059.8	8475096	9	14.9	5.95	0.71
MN-RC-0002	Nb	582961.3	8474837	19	20	1	3.36
MN-TH-0025	REE	583198	8474864	0	20	20	1.21
MN-RC-0009	REE	583140.2	8474657	0	51	51	1.00
inc				0	14	14	1.58
inc				28	34	6	2.38
MN-TH-0009	REE	583059.8	8475096	0	15	15	1.04
inc				8	13	5	2
MN-RC-0010	REE	583140.2	8474657	0	42	42	6,017
inc				0	30	30	7,821
inc				19	30	11	1.0
MN-TH-0009	REE	583059.8	8475096	0	15	15	1.22
inc				8	13	5	2.37
inc				1	11	12	3.49
MN-AC-0030	P	583429.1	8474248				25.01

Geology

The Mundo Novo Alkaline Complex (MNAC) lies in the northern section of the Goiás Alkaline Province (GAP), a region characterised by Late Cretaceous alkaline magmatism along the northern margin of the Paraná Basin. This magmatism is associated with the NE–SW Trans-Brazilian Lineament and was influenced by the Trindade mantle plume. The alkaline intrusions were emplaced into orthogneiss and granites of the Goiás Magmatic Arc and overlying basalts and sedimentary rocks of the Paraná Basin (Figure 2).

The MNAC occupies the contact zone between the Goiás Magmatic Arc and the Araguaia Belt, with its boundaries clearly defined by the Trans-Brazilian Lineament. Like most alkaline rock occurrences of the GAP, the MNAC intruded a dilatant zone developed along an N30°W lineament, reflecting the tectonic controls on its magmatic evolution.

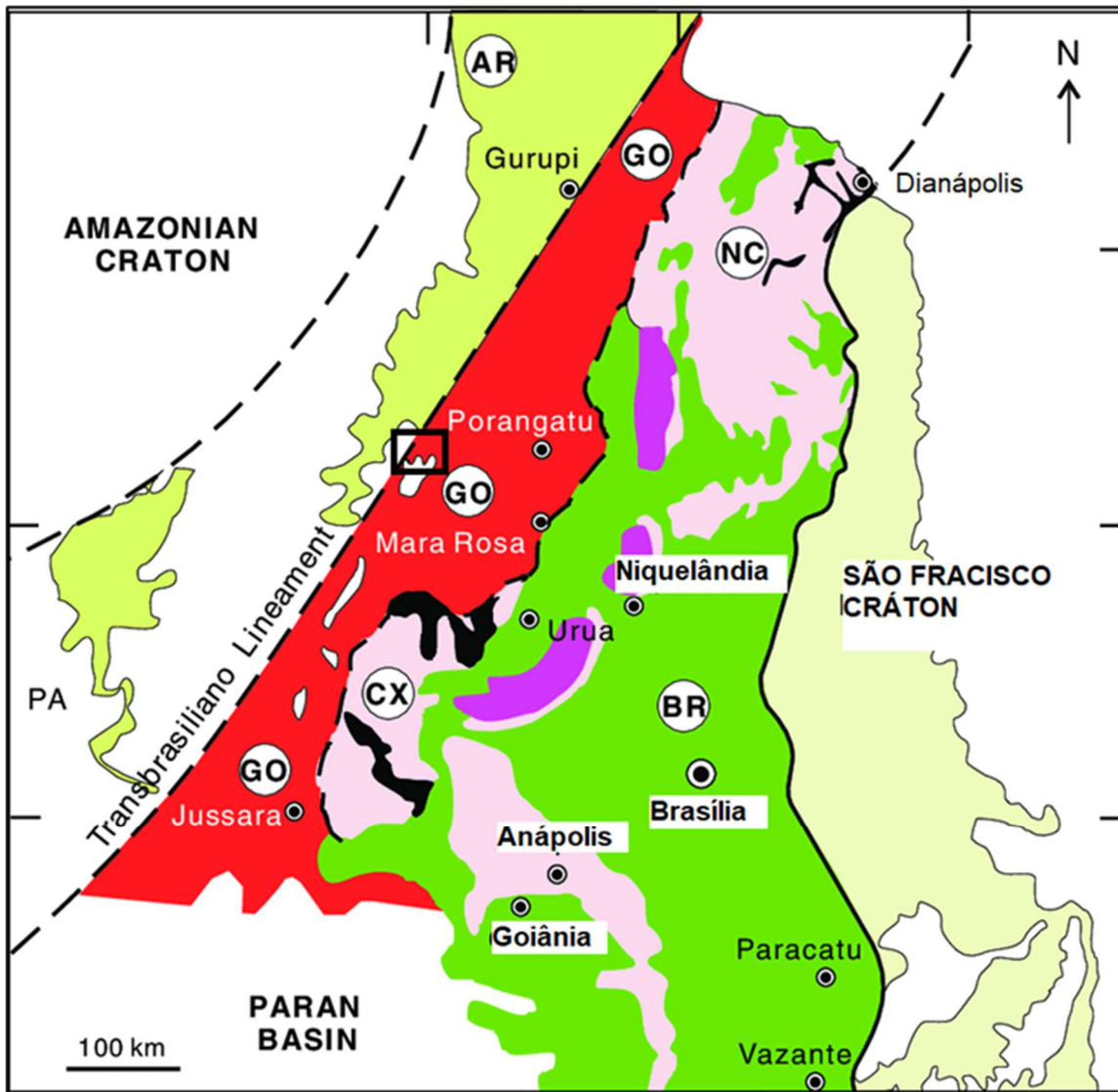


Figure 2: Geological schematic of the Brasília Belt, including the Mundo Novo Project area, in the eastern part of the Tocantins Province, central Brazil (Red = Goiás Magmatic Arc, Mid Green = Araguaia Belt)

For personal use only

The MNAC has ring-like characteristics, positive topography, and a broad fenite aureole. Its distinctive zoning patterns reflect magmatic differentiation, hydrothermal processes, and structural controls, crucial for understanding the intrusion's mineralisation and economic potential.

The central core is dominated by calcite-rich carbonatites formed during the early stages of intrusion and high-temperature minerals such as apatite, magnetite, ilmenite and pyrochlore, the principal host mineral for niobium. The peripheral zone comprises dolomite-rich or ankeritic carbonatites (dolomitic carbonatites), often representing more evolved magmatic stages. These zones are then surrounded by silicate rocks such as syenites, nepheline syenites, and ultramafic rocks, creating a concentric zoning pattern.

Niobium (Nb) is concentrated in the central zones of the carbonatite, closely tied to pyrochlore, with its mineralisation at Mundo Novo confirmed through petrological analysis. Phosphates, dominated by apatite, span the central to intermediate zones. Rare Earth Elements (REEs) display clear zonation: light REEs (LREEs) are enriched near the core, while heavy REEs (HREEs) dominate the periphery, reflecting magma evolution and the fractional crystallisation of minerals like monazite and bastnäsite. Near-surface lateritic weathering, extending to a depth of 30 meters, subsequently modifies and forms enrichment zones rich in secondary phosphates and rare earth elements (REEs).

The circular Mundo Novo Carbonatite, with a diameter of 2.5 km, shares similarities in size, shape, and geophysical characteristics with the Morro Preto deposit within the Catalão Complex, also part of the Goiás Alkaline Province (GAP). The Catalão Complex is a significant resource hub, hosting an estimated 786.6 million tonnes at 10.45% P_2O_5 ² and Brazil's Boa Vista Niobium Mine, the world's second-largest niobium producer. CMOB Brazil manages both operations.

Completed Exploration

Based on similarities with the Morro Preto deposit, the initial strategy focused on evaluating the phosphate potential for fertilizers. However, the initial research revealed significant geochemical anomalies of phosphorus, REE, and niobium barium in the soil geochemistry, along with magnetic and radiometric signatures indicative of an alkaline-type intrusion. Thus, the strategy was expanded to include rare earth elements (REE) and niobium (Nb), uncovering broader resource opportunities (Figure 3).

The foundational work included a topographic survey, terrestrial magnetometry, soil sampling, and detailed 1:15,000-scale mapping. This culminated in a comprehensive geochemical dataset derived from 2,902 soil and saprolite samples, 170 grid soil samples, 20 rock samples, and trenching over 400 metres with large-volume sampling.

² <https://minedocs.com/26/CMOC-AR-12312023.pdf>. 31 December 2023, P62.

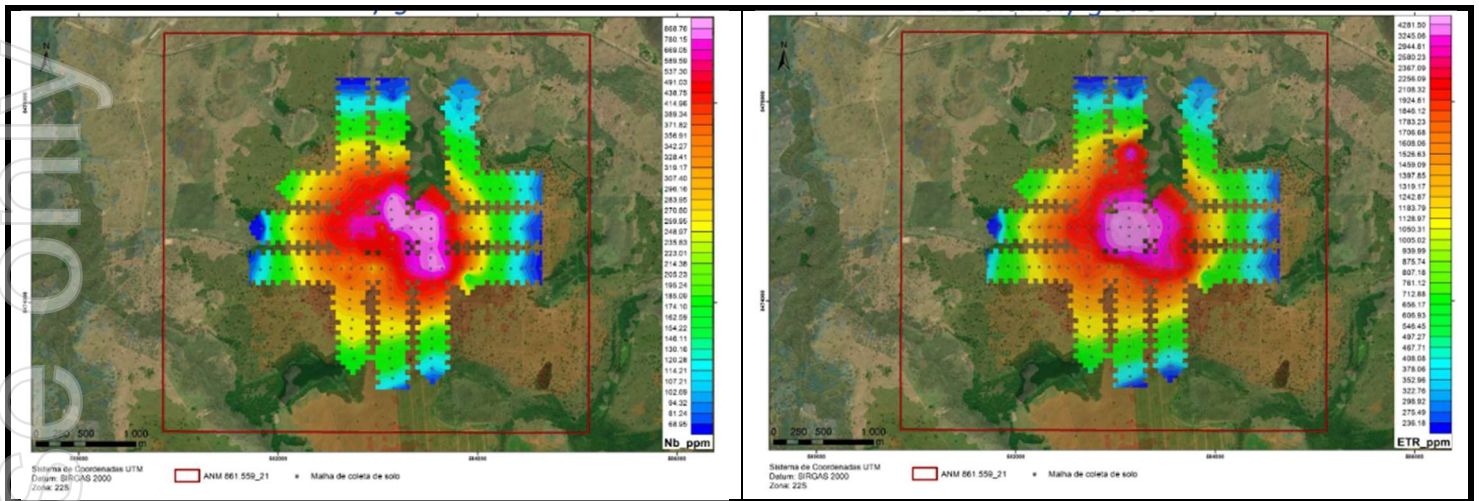


Figure 3: Niobium (left) and REE (right) surface geochemistry, Mundo Novo Carbonatite.

All 186 boreholes (Figure 4 and Table 2) intercepted similar lithologies, with up to 30 m of soil/saprolite, carbonatite zones with magnetite + apatite + dolomite, magnetite + apatite + ferrodolomite, grading to ferrodolomite only, and ankerite + siderite + ferrodolomite. The carbonatite zones are interbedded with carbonate breccia and fenitised host rocks.

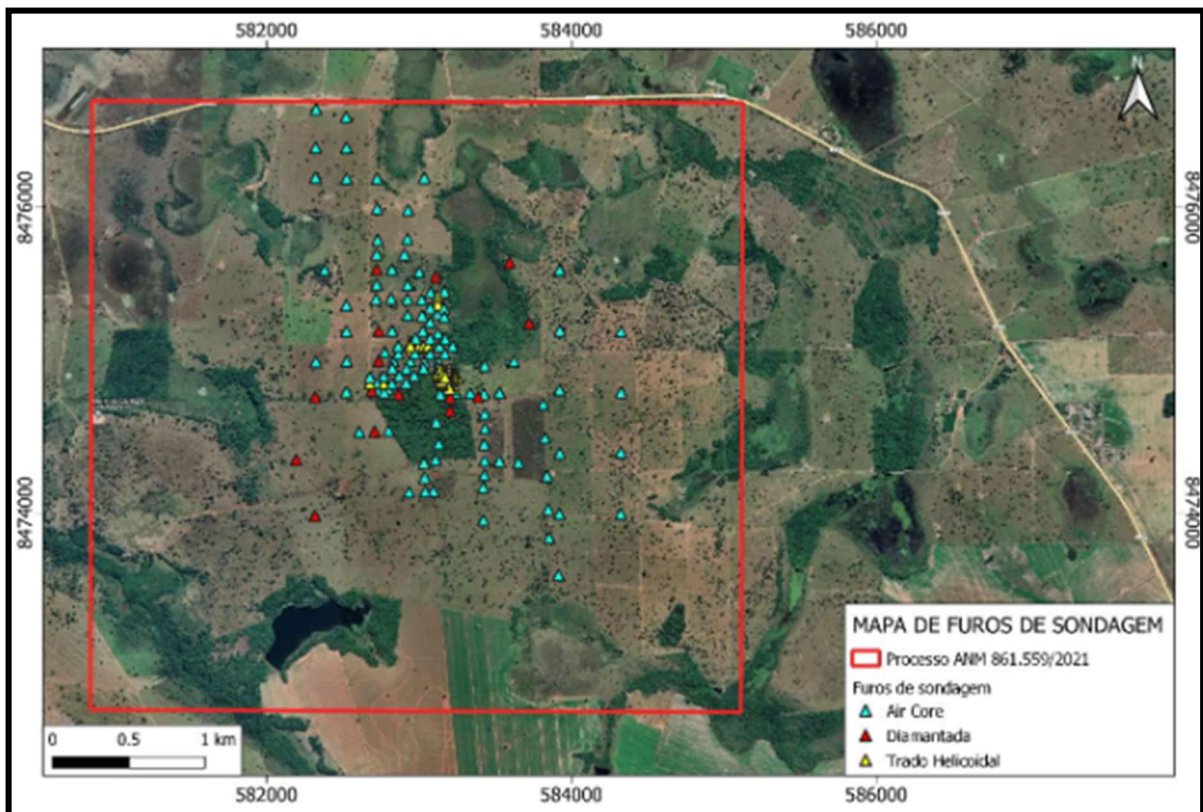


Figure 4: Drill hole locations by type.

Drilling to date has been primarily vertical and shallow (<30m), revealing significant potential for niobium expansion at depth. Table 1 showcases shallow, thick intersections of REE and niobium mineralisation, while the eastern flank of the surface niobium anomaly offers exciting untapped opportunities at depth.

More than half of the returned TREO values from all drilling exceed 1,500 ppm, with nearly 14% surpassing 5,000 ppm (equivalent to 0.5% TREO)³.

Table 2 - Drilling Summary Mundo Novo

Drilling Type	Abrev.	Quant. Holes	Metres	Analysis (SGS)
Air Core	AC	121	3,041	2,080
Reverse Circulation	RC	16	807	805
Diamond	DD	17	1,019	678
Auger	TH	38	511	500
TOTAL		186	5,378	4,063

Next Steps

The Company will be performing an extensive, legal and geological Due Diligence before recommending for shareholder approval. We look forward to updating our shareholders in due course.

This announcement has been approved by the Board of Directors.

For more information:

Gower He
Managing Director
info@summitminerals.com.au
T: +61 8 9426 0666

Dayna Louca
Media & Investor Relations
dayna@janemorganmanagement.com.au
+61 409 581 972

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

About Summit Minerals Limited

Summit Minerals Limited is an Australian-focused ASX-listed battery mineral exploration Company with a portfolio of projects in demand-driven commodities. It is focused on systematically exploring and developing its projects to delineate multiple JORC-compliant resources.

Summit's projects include the Niobium, REE and Lithium projects in Brazil, Castor Lithium Project in the prolific James Bay District, Quebec, Canada, the Phillips River Lithium Project in Ravensthorpe WA. Through focus, diligence and execution, the board of Summit Minerals is determined to unlock previously unrealised value in our projects.

Competent Persons Statement

The information in this report that relates to the Exploration Results is based on information compiled and reviewed by Jonathan King, a full-time employee of Geoimpact Pty Ltd, geological consultants employed by Summit Minerals Limited. Mr King is a Member of the Australian Institute of Geoscientists. He has sufficient relevant experience for the style of mineralisation, the type of deposit under consideration and the activity being undertaken to qualify as a Competent Person within the definition of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr King consents to the inclusion in the report of the Exploration Results in the form and context in which they appear.

³ 15 REE elements (excluding Sc and Pm) were converted to their oxide equivalents and summed to provide the calculated TREO number (see Appendix 2)

For personal use only

Material Terms of the Binding Letter of Intent (Agreement)

Acquisition	<p>SUMMIT MINERALS BRASIL MINERAÇÃO LTDA, a wholly owned subsidiary of Summit Minerals Limited (Summit) agrees to acquire and NEOFERTIL MINERAÇÃO LTDA (Neofertil) together with E2 MINERAIS E FERTILIZANTES LTDA (E2 Minerals), hereinafter referred to as Sellers agrees to sell 100% of its mineral rights in ANM tenements No. 861.559/2021 and 860.896/2024 (Tenements).</p> <p>The Sellers have the right to keep the phosphate mining activities within the Tenements.</p>
Due Diligence	<p>The Sellers have granted Summit a Due Diligence period of up to 60 days from the execution date of the Agreement, which may be extended by mutual consent of the parties (Due Diligence Period).</p> <p>The Sellers have granted Summit an exclusivity in relation to the Tenements during the Due Diligence Period.</p> <p>By the end of the Due Diligence Period, Summit shall notify the Sellers of its intention to proceed or not and the parties shall negotiate a Definitive Agreement.</p> <p>Summit may withdraw from the Letter of Intent at any time during the Due Diligence Period and without any charge, upon providing written notification to the Sellers.</p>
Consideration	<p>The Cash Consideration comprises:</p> <ol style="list-style-type: none"> a) Cash payment of A\$2,200,000 upon execution of the Definitive Agreement and receipt of Summit's shareholder approval; b) Cash payment of A\$1,000,000 within 12 months after the execution of the Definitive Agreement and receipt of Summit's shareholder approval; c) Cash payment of A\$1,000,000 on the earlier to occur of: <ol style="list-style-type: none"> i) 24 months after the execution of the Definitive Agreement; ii) Summit discovering a Maiden Mineral Resource Estimate in respect to the Mineral Rights to the Tenements. There is no minimum tonnages and grade for the Seller to achieve this milestone. d) Cash payment of A\$500,000 on the earlier to occur of: <ol style="list-style-type: none"> i) 36 months after the execution of the Definitive Agreement; ii) The granting of the Mining Concession by ANM in respect to the Mineral Rights to the Tenements. e) Cash payment of A\$500,000 on the earlier to occur of: <ol style="list-style-type: none"> i) 60 months after the execution of the Definitive Agreement; ii) The preparation of a Bankable Feasibility Study by Summit in respect to the Mineral Rights to the Tenements. <p>The Securities Consideration comprises:</p> <ol style="list-style-type: none"> a) The issue of Summit shares to the value of A\$2,000,000 upon execution of the Definitive Agreement and receipt of Summit's shareholder approval; b) The issue of Summit shares to the value of A\$1,000,000 within 12 months after the execution of the Definitive Agreement and receipt of Summit's shareholder approval; c) The issue of Summit shares to the value of A\$1,000,000 on the earlier to occur of: <ol style="list-style-type: none"> i) 24 months after the execution of the Definitive Agreement; ii) Summit discovering a Maiden Mineral Resource Estimate in respect to the Mineral Rights to the Tenements. There is no minimum tonnages and grade for the Seller to achieve this milestone.

For personal use only

	<p>d) The issue of Summit shares to the value of A\$500,000 on the earlier to occur of:</p> <ul style="list-style-type: none"> i) 36 months after the execution of the Definitive Agreement; ii) The granting of the Mining Concession by ANM in respect to the Mineral Rights to the Tenements. <p>e) The issue of Summit shares to the value of A\$500,000 on the earlier to occur of:</p> <ul style="list-style-type: none"> i) 60 months after the execution of the Definitive Agreement; ii) The preparation of a Bankable Feasibility Study by Summit in respect to the Mineral Rights to the Tenements. <p>The Securities Consideration will be issued to the Sellers or their nominees based on greater of A\$0.10 or the volume-weighted average price (VWAP) of the last 20 days prior to each issuance of shares.</p> <p>The shares issued will be subject to a 6-month escrow period from the date of issue.</p> <p>Royalty</p> <p>Summit to grant a 2.0% net smelter return royalty on standard terms to Sellers.</p>
Conditions Precedent	<p>Completion of the Acquisition is conditional upon the satisfaction (or waiver) of the following Conditions Precedent:</p> <ul style="list-style-type: none"> (a) Due diligence: completion of financial, legal, and technical due diligence by Summit on the Tenements, to the absolute satisfaction of Summit; (b) Shareholder approval: the shareholders of Summit approving the transactions contemplated by this Agreement in a general meeting, including a resolution authorising the allotment and issue of the Securities Consideration Securities to the Sellers in accordance with the ASX Listing Rules and the Corporations Act; (c) Regulatory approvals: the Parties obtaining all necessary regulatory approvals or waivers pursuant to the ASX Listing Rules, Corporations Act or any other law to allow the Parties to lawfully complete the matters set out in this Agreement; (d) Third party approvals: the Parties obtaining all third-party approvals and consents, including the consent of the Minister responsible for the Mining Act (if required), necessary to lawfully complete the matters set out in this Agreement; and (e) Deeds of assignment and assumption: Summit, Neofertil, E2 Minerals and, if necessary, under the Third-Party Agreements (if any), the relevant third party, executing a deed of assignment and assumption in relation to each Third-Party Agreement.
Termination	<p>This Agreement will be terminated in the following cases:</p> <ul style="list-style-type: none"> a) Within 60 days from the signing date of this Agreement, unless such period is extended by mutual consent of the parties; b) If Summit notifies the Seller of its decision not to proceed with the Definitive Agreement within the Due Diligence Period; c) If the parties do not reach an agreement on satisfactory terms for the negotiation of the Mineral Rights via Definitive Agreement, including mechanisms of protection and indemnities.

The Agreement is otherwise on standard terms and conditions, including confidentiality provisions, and representations and warranties.

Facilitation Fees

Subject to shareholder approval, RTB Geologica E Mineracao Ltda will be paid a facilitation fee of 15% to the value of the Cash and Securities Consideration for each completed milestone. The fees will be paid through the issue of Summit's shares at a price based on the volume-weighted average price (VWAP) of the last 15 days prior to each issuance of shares.

Appendix 1: PART A - Niobium Drill Results (all values $\geq 0.4\%$ Nb₂O₅ i.e Nb*1.4305)

Hole number	From	To	Length	Al2O3 %	Ba ppm	CaO %	Co ppm	Cr2O3 %	Cs ppm	Cu ppm	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	Nb ppm	Ni ppm	P2O5 %	SiO2 %	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	TiO2 %	Tl ppm	U ppm	Zn ppm
MN-AC-0007	9	10	1	1.84	11943	16.17	28.5	0	0.24	21	44.5	0.78	0.58	5.5	0.08	2797	10	12.56	6.01	129.7	3.8	3357	137.85	59.9	0.98	0.49	19.99	1175
MN-AC-0014	12	13	1	6.57	4909	2.57	30.6	0.01	1.61	22	39.7	1.98	1.3	1.14	0.09	2979	41	4.06	31.07	201.3	2.7	3031	168.73	28.3	1.32	0.49	43.21	290
MN-AC-0014	17	18	1	11.79	2815	6.37	15.7	0	2.49	13	18.74	8.51	1.92	0.22	0.62	4495	19	4.69	41.18	23.1	0.7	1394	76.46	12.2	0.95	0.49	20.52	182
MN-AC-0016	23	24	1	7.6	2418	20.53	30.6	0	1.92	52	17.71	4.11	3.16	0.58	0.26	3191	10	14.9	23.76	56.6	2	2974	23.72	18.3	1.82	0.49	5.1	187
MN-AC-0025	10	12	2	3.89	25557	2.53	42.6	0	4.91	28	44.22	0.69	1.04	9.16	0.03	3938	15	4.33	18.85	426.9	5.3	2633	0.69	57.9	1.52	1.7	11.68	707
MN-AC-0025	14	17	3	2.46	9504	19.98	30.3	0	1.12	18	32.85	0.79	0.63	3.1	0.1	6270	25	15.47	15.83	345.7	3.8	3252	33.8	164.7	0.79	0.49	24.03	737
MN-AC-0026	6	8	2	23.08	6772	0.29	43.5	0.03	3.67	90	27.31	0.64	0.25	0.97	0.03	4777	114	1.69	27.42	92.8	4.6	1805	37.48	100.8	2.32	0.9	34.86	239
MN-AC-0028	4	6	2	17.54	14408	1.25	37	0	2.24	40	32.65	0.39	0.32	3.51	0.01	3231	67	7.77	18.71	210.9	11.9	5563	304.73	47.3	1.31	3.3	86.07	338
MN-AC-0031	11	12	1	9.06	27214	0.37	49.5	0	3.01	27	49.46	0.04	0.28	7.91	0.02	6288	74	4.73	6.65	434.3	6.3	6764	6.97	58.1	1.35	3.7	22.23	654
MN-AC-0031	12	14	2	5.39	32692	0.35	46.8	0	1.26	21	49.23	0.06	0.26	10.01	0.01	3636	75	4.57	6.41	693.9	7.9	5560	13.95	87.4	0.66	9.3	22.91	736
MN-AC-0031	14	16	2	2.88	30068	0.26	38.4	0	0.74	13	45.28	0.06	0.2	10.01	0.02	6467	71	3.02	18.97	659.9	11.1	3135	7.04	82.8	0.46	8.7	19.45	683
MN-AC-0031	16	18	2	1.84	23252	0.27	38.3	0	1.22	10	50.13	0.21	0.34	8.47	0.04	10264	78	2.61	18.45	677.9	13.5	2495	0.36	81.6	0.45	4.2	17.71	741
MN-AC-0031	18	19	1	7.7	14634	3.39	26.5	0	3.17	13	34.61	3.29	1.09	4.53	0.22	7804	64	4.25	25.04	450.1	8.6	2647	19.22	59	0.66	2.8	16.19	575
MN-AC-0031	19	20	1	12.9	6783	2.32	18.1	0.01	3.62	21	20.79	4.91	1.86	1.96	0.28	3757	48	2.27	39.17	199.3	3.9	1222	7.75	29.1	0.88	1.7	7.15	358
MN-AC-0031	23	24	1	13.08	6316	2.8	22.6	0	4.11	25	20.2	6.73	2.18	1.8	0.37	3142	52	2.5	41.17	188.5	6.4	1270	17.57	32.1	0.88	1.7	9.28	380
MN-AC-0032	6	8	2	19.55	8942	0.37	43.9	0.02	1.29	47	30.98	0.29	0.22	3.6	0.03	2893	60	1.76	29.3	124.1	4.3	3369	7.67	46.7	1.37	1	11.43	317
MN-AC-0032	8	10	2	6.11	14754	0.53	52.7	0.01	1.03	25	41.15	0.34	0.28	5.67	0.04	3683	70	1.99	31.78	237.1	5.3	2398	1.66	75.5	0.83	1.3	10.73	647
MN-AC-0032	10	12	2	8.69	17498	0.55	62	0	7.69	30	43.87	1.25	1.96	5.26	0.04	6637	98	2.65	19.8	267.7	4.8	3136	0.04	40.2	0.87	1.8	16.21	686
MN-AC-0032	18	19	1	8.53	3423	8.17	30.1	0.05	5.14	47	25.07	4.69	6.43	0.94	0.14	4430	69	5.9	30.47	58.9	6.7	1380	0.85	15.3	2.08	0.6	5.18	408
MN-AC-0053	9	11	2	17.4	6527	0.62	31.2	0	6.12	43	25.73	4.32	4.29	1.59	0.09	3916	12	2.53	31.23	47.9	5.7	3190	32.23	25.3	2.64	0.49	7.7	371
MN-AC-0053	17	19	2	1.35	8865	32.55	16	0	0.4	20	18.14	0.4	0.48	4.63	0.17	3701	9	23.01	15.16	235.5	3.9	6521	4.69	29.2	0.22	0.49	15.22	215
MN-AC-0053	19	21	2	1.3	9563	32.42	10.8	0	0.39	17	18.33	0.43	0.47	4.53	0.28	2864	7	23.3	11.78	275.9	4	8151	3.14	34	0.21	0.49	10.29	217
MN-AC-0072	25	26	1	0.2	5038	40.24	10	0.01	0.05	8	15.69	0.09	0.39	3	0.07	3308	8	2.73	2.13	141.7	5.8	2863	0.05	20.2	0.11	0.5	2.06	202
MN-AC-0072	26	28	2	6.1	2763	27.55	29.4	0.01	1.29	112	14.24	1.71	2.64	1.36	0.07	3115	14	2.9	17.79	69.9	7.5	2485	1.43	13.9	2.13	0.5	2.2	180
MN-AC-0104	20	21	1	14.21	2307	4.46	14.9	0	3.89	19	11.72	9.05	4.2	0.31	0.62	3168	28	2.93	50.39	20.2	8	930	72.21	19.6	0.75	0.49	4.18	199
MN-AC-0104	21	22	1	15.14	1794	3.27	14.6	0.01	3.54	22	10.26	9.14	4.26	0.25	1.05	4749	26	1.9	50.14	14.3	8.3	1013	91.76	16.7	0.91	0.49	4.65	214
MN-AC-0116	6	7	1	17.7	6520	0.49	44.4	0.02	0.83	45	32.96	0.09	0.15	1.61	0	2905	45	2.86	32.95	111.2	2.5	4180	73.88	35.1	1.84	0.7	28.11	185
MN-AC-0117	5	6	1	13.32	8188	1.34	55.8	0	3.16	43	41.79	1.03	0.96	2.57	0.81	3004	15	5.38	18.95	205	2.7	3561	53.41	54.7	3.41	0.7	10.6	561
MN-AC-0117	7	8	1	4.9	12671	0.49	61.2	0	2	28	57.42	1.27	1.53	5.28	1.22	9904	9	2.74	9.38	442.9	5.7	2937	109.07	50.5	2.04	1.1	28.71	522
MN-DD-0003	3	4.5	1.5	15.04	16539	1.47	46.2	0	4.11	64	33.13	0.94	0.96	5.33	0.06	3683	37	5.53	25.14	161.2	10.6	4103	21.22	55.5	1.89	1.1	6.99	736
MN-DD-0003	13	14.5	1.5	10.99	7778	8.73	41.5	0	2.19	86	22.27	3.95	2.99	3.56	0.21	2875	32	6.66	35.67	177.4	4.6	2338	14.41	30.7	2.19	1.4	5.06	377
MN-DD-0009	31.02	33	1.98	5.19	1414	12.14	23.5	0	2.64	46	25.74	3.95	9.91	0.77	0.15	2864	10	1.77	18.67	14.1	6.1	2334	34.84	17.7	2.57	0.49	3.26	278
MN-DD-0010	47.7	49.8	2.1	3.87	2708	16.21	15.9	0	0.62	10	32.81	2.88	1.48	0.43	0.2	4691	8	3.82	22.9	57	8	1964	56.29	12.9	0.73	0.49	6.04	213
MN-RC-0002	1	2	1	8.3	2797	7.64	49.7	0	2.58	63	32.98	3.4	4.14	1	0.04	6645	13	7.52	23.44	86.6	8.5	1668	18.27	57.9	3.47	0.49	2.81	457
MN-RC-0002	19	20	1	6.25	1833	11.7	30	0	3.05	27	34.13	4.45	5.06	0.46	0.14	23473	6	8.12	23.08	47.4	13.7	2734	15.51	20.1	2.55	0.49	2.76	359
MN-RC-0003	16	17	1	12.68	2330	2.7	12.7	0	3.32	12	19.13	7.96	4.19	0.25	0.4	5328	9	1.86	45.27	26.7	7.7	952	414.12	23.1	0.98	0.49	27.37	256
MN-RC-0003	17	18	1	12.29	2634	10.5	18.7	0	2.86	21	13.15	7.02	2.97	0.35	0.43	4060	21	7.57	40.36	54.4	4.2	1458	304.5	26	1.21	0.49	20.96	226

MN-RC-0004	2	3	1	5.25	13279	2.56	50.2	0.01	1.05	51	44.36	1.08	1.35	6.6	0.06	4795	69	3.05	22.89	223.4	6.8	2607	25.77	56	1.68	0.49	7.71	647
MN-RC-0004	3	4	1	6.37	12044	2.95	58.8	0.01	1.08	54	44.89	1.31	1.52	6.14	0.08	7146	74	4.75	14.75	396.7	8.1	3382	82.49	59.6	2.62	0.49	16.21	479
MN-RC-0004	4	5	1	3.95	10482	3.88	56	0	0.78	37	48.12	0.84	1.12	6.56	0.07	9496	59	4.78	10.16	321	10.2	3472	90.28	80.9	2.16	0.49	17.04	556
MN-RC-0004	5	6	1	3.17	8754	5.26	56.5	0	0.62	34	50.12	0.64	0.94	6.77	0.06	14217	62	5.13	7.56	245.8	12.8	4514	53.13	57.2	1.59	0.49	12.19	531
MN-RC-0004	6	7	1	2.62	8121	4.57	45.2	0	0.52	27	52.68	0.71	1.02	7.04	0.08	14353	47	4.49	6.8	227.8	12.6	4192	52.09	77.4	1.32	0.49	12.2	572
MN-RC-0004	7	8	1	6.37	3921	12.05	50.2	0	1.85	45	29.32	3.17	3.27	2.8	0.17	4121	28	9.43	17.08	180.4	4.3	2050	36.99	50.7	2.34	0.49	8.86	367
MN-RC-0004	8	9	1	5.53	5133	10.59	64.2	0	1.15	78	34.59	2.92	3.14	3.54	0.14	5891	35	7.09	17.13	244.6	5.5	2041	155.65	93.5	2.37	0.49	24.94	513
MN-RC-0004	9	10	1	3.46	8241	9.89	60.9	0	0.68	38	46.58	1.75	1.79	5.43	0.13	3900	30	7.23	10.74	376.7	3.6	1904	65.99	123	1.61	0.49	14.39	955
MN-RC-0004	10	11	1	2.78	12181	9.34	55.2	0	0.45	32	48.39	1.29	1.44	7.31	0.11	3892	28	6.81	8.39	447.8	3.6	2068	70.84	116.9	1.37	0.49	15.8	1047
MN-RC-0004	11	12	1	3.77	9853	11.97	50	0	1.01	36	36.56	2.03	2.04	5.54	0.18	3523	24	8.62	11.26	351.2	2.8	2620	76.51	70.6	1.77	0.6	14.22	697
MN-RC-0004	48	49	1	2.07	1670	33.08	12.9	0	0.19	11	15.31	1.6	3.81	2.29	0.21	3688	4.99	6.13	7.68	50.5	6.8	4050	11.46	23.8	0.25	0.49	4.21	291
MN-RC-0006	1	2	1	6.74	14038	3.99	52	0	1.2	52	42.95	1.17	1.12	7.06	0.05	3427	24	5.64	17.25	205.9	5.8	2861	58.55	115.7	2.07	0.9	14.18	751
MN-RC-0008	1	2	1	10.27	10963	1.45	50.3	0	1.62	41	53.17	0.41	0.41	3.54	0.05	3210	38	4.74	11.01	146	6.2	2450	21.08	41.9	1.21	0.9	9.3	525
MN-RC-0008	12	13	1	9.79	3581	2.29	16.5	0	3.76	18	29.76	6.37	6.02	2.22	0.28	4834	15	1.95	32.11	17.8	4	1222	11.26	15.8	1.8	0.49	3.52	403
MN-RC-0008	13	14	1	8.48	3843	3.05	14.8	0	1.92	15	35.52	5.68	2.96	1.83	0.38	2938	13	2.51	33.04	22.9	2.9	1275	6.51	20.2	1.14	0.49	3.59	284
MN-RC-0008	14	15	1	3.78	1871	4.96	18.3	0	1.73	16	60.13	2.55	2.76	0.92	0.13	3784	7	3.78	13.12	21	2.9	1401	4.87	10.9	1.13	0.49	2.23	349
MN-RC-0008	15	16	1	6.52	3394	3.78	16.2	0	1.39	14	47.44	4.37	2.16	1.93	0.29	4556	7	3.01	21.99	17.9	2.9	1699	8.05	15.6	0.96	0.49	3.74	327
MN-RC-0008	16	17	1	6.54	3923	2.07	23.2	0	2.57	33	45.83	4.52	3.6	2.68	0.11	7383	9	1.99	22.11	14.5	4.2	2098	11.97	13.8	3.21	0.49	5.28	368
MN-RC-0008	17	18	1	6.63	1904	3.8	22.7	0	4.22	21	43.99	4.61	5.82	0.88	0.13	5332	8	2.87	23.11	24.8	3.6	1559	13.59	12.6	1.55	0.49	2.99	348
MN-RC-0008	19	20	1	5.5	1262	6.04	40.4	0	2.92	27	49.64	3.54	3.94	0.78	0.17	3133	13	4.8	18.42	32.7	2.7	1908	8.34	13.4	1.25	0.6	3.3	335
MN-RC-0008	20	21	1	4.18	1385	4.74	24.8	0	2.67	21	59.14	2.94	4.12	0.75	0.11	3876	8	3.53	15.21	21.3	3	1304	5.34	10.6	1.32	1.2	3.94	374
MN-RC-0008	21	22	1	4.69	1732	10.19	28.4	0	3.06	37	45.03	3.42	4.22	0.87	0.11	4312	15	7.57	17.07	38.1	2.9	2265	5.69	18.1	1.48	0.7	3.83	329
MN-RC-0008	22	23	1	9.36	2993	5.55	22.5	0	3.19	29	29.14	7.03	4.09	1.85	0.2	3386	9	4.09	33.3	19.7	2.9	1842	15.18	15.1	1.11	0.49	4.99	320
MN-RC-0009	11	12	1	2.77	12398	11.96	29.2	0	0.69	32	37.49	0.77	1.18	6.95	0.15	4572	22	10.33	12.67	262.7	17	1688	4.31	67.4	0.57	0.6	5.24	3358
MN-RC-0009	37	38	1	3.33	5881	28.4	19.6	0	0.9	24	15.8	1.54	4.84	2.28	0.07	3922	44	4.71	11.29	102.2	3.9	2582	69.67	33.9	0.77	0.49	13.53	389
MN-RC-0013	44	45	1	3.11	437	17.62	58.4	0.01	1.1	234	23.69	1.53	5.66	0.34	1.56	2867	44	2.04	31.25	27.1	10.1	1128	128.48	11.3	4.14	0.49	19.06	152
MN-TH-0002	2	3	1	5.96	9962	5.54	43.4	0.01	1.32	36	47.74	1.23	1.23	7.49	0.01	3282	23	6.17	12.66	121.9	9.8	2902	39.69	85.8	1.32	0.5	12.56	1160
MN-TH-0002	3	4	1	6	9169	6.53	41.8	0.01	1.8	62	42.17	1.98	2.18	6.47	0.04	3641	19	6.62	13.61	118.2	12.6	2631	24.55	59.5	1.75	0.5	10.49	1007
MN-TH-0002	4	5	1	3.12	9772	6.09	42.7	0.01	0.73	30	54.92	1.05	1.09	10	0.03	5096	18	5.94	7.22	107.7	10.1	2660	42.34	50.1	0.82	0.5	11.24	1070
MN-TH-0002	5	6	1	3.38	7754	10.8	46.4	0.01	0.97	31	46.82	1.28	1.26	8.17	0.02	3041	16	8.97	9.36	110.1	8.2	2240	68.57	43.4	0.82	0.5	14.46	977
MN-TH-0007	12	13	1	8.44	7248	5.42	39	0.01	3.56	66	29.31	4.97	5.86	3.36	0.15	3085	22	4.7	25.25	146	8.3	1619	8.02	32.3	2.5	0.5	4.01	348
MN-TH-0007	13	14	1	7.88	7077	8.71	32.7	0.01	2.5	36	29.07	5.26	4.62	3.21	0.19	4458	13	6.88	24.65	128.1	9.1	1802	1.72	26.3	2.45	0.6	3.68	322
MN-TH-0007	14	14.65	0.65	7.66	6481	11.65	36.1	0.01	2.21	42	24.34	4.75	4.26	2.6	0.18	6415	13	8.81	23.14	90.8	9.5	1882	0.05	21	2.57	0.5	2.89	251
MN-TH-0009	9	10	1	6.56	21074	0.64	51.2	0	1.51	47	49.43	1.46	1.58	10.01	0	4368	24	3.74	10.21	558.7	14.7	3621	13.51	58	1.92	0.49	19.14	604
MN-TH-0009	10	11	1	3.71	25178	0.7	52.1	0	0.43	38	56.22	0.57	0.97	10.01	0	4310	37	3.98	5.89	811.7	10.6	3134	1.78	77.4	0.87	0.49	31.45	726
MN-TH-0009	11	12	1	1.9	28213	1.66	57.6	0	0.04	13	58.64	0.22	0.44	10.01	0	5544	37	4.45	4.42	1000.01	7.1	2916	8.48	121.1	0.52	0.49	26.95	641
MN-TH-0009	12	13	1	2.67	15374	11.65	37.9	0	0.38	28	47	0.97	1.3	8.57	0.06	5530	24	10.12	7.46	533.8	7.2	2753	0.04	53.7	1.05	0.49	9.87	531
MN-TH-0009	13	14	1	2.93	9964	14.3	36.8	0	0.56	51	45.27	1.21	1.84	6.89	0.11	5236	16	11.15	9.75	325	8.6	2924	0.04	34.3	1.38	0.6	8.07	466
MN-TH-0009	14	14.95	0.95	5.18	8457	9.75	51.3	0	0.97	84	42.05	2.42	3.01	4.79	0.11	4697	15	7.08	15.57	203.8	7	1894	0.04	28.8	2.34	0.8	6.49	439
MN-TH-0016	5	6	1	16.63	5476	0.85	42.2	0	6.97	46	39.75	0.71	0.62	1.23	0.02	6095	30	3.46	24.04	162	7.5	2167	151.9	32.8	2.23	0.5	47.27	239
MN-TH-0016	6	7	1	5.94	6555	0.55	50.6	0	2.81	29	65.35	0.59	0.56	2.38	0.02	8569	28	2.69	12.1	208.5	8	2539	329.26	22.7	1.61	0.5	81.87	343

MN-TH-0016	7	8	1	5.85	10235	2.58	43.8	0	1.14	21	57.85	0.44	0.29	3.76	0.03	10044	18	4.87	11.2	216.4	9.4	3791	265.98	25.1	1.07	0.49	81.61	273
MN-TH-0016	8	8.9	0.9	3.11	4367	3.93	34.1	0	0.53	19	60.63	0.23	0.26	1.77	0	4314	24	4.39	15.87	202	7.4	2012	175.35	16.6	1.08	0.49	45.47	287
MN-TH-0020	2	3	1	5.55	6752	0.49	53	0	1.55	34	47.69	1.07	1.38	3.27	0.13	4317	14	2.33	27.52	319.8	8.3	1232	206.04	309.5	1.75	0.49	32.63	979
MN-TH-0020	3	4	1	6.71	7920	0.48	38.1	0	2.42	32	40.42	2.93	2.44	3.61	0.12	2973	12	1.97	28.22	208.8	5.7	1444	105.58	104.3	1.91	0.49	23.69	1021
MN-TH-0030	8	9	1	11.67	1830	2.44	59.4	0.02	3.85	170	27.26	5.99	6.74	0.36	0.15	4248	26	1.57	32.46	20.4	9	639	8.83	8.2	3.26	0.6	1.27	294
MN-TH-0030	9	10	1	10.32	2463	3.02	62.6	0.02	3.24	225	28.13	5	5.86	0.78	0.12	3822	25	2.15	32.79	38.8	8.1	608	7.4	11.5	3.13	0.7	1.31	313
MN-TH-0037	4	5	1	7.56	7185	8.74	51.2	0.02	1.25	54	35.69	2.59	2.37	3.39	0.02	3491	19	7.73	20.53	233.5	6	1618	159.83	38.2	1.75	1	16.26	758

PART B - TREO Drill Results (all values $\geq 0.5\%$ TREO)

Hole number	From	To	TREO	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm
MN-AC-0001	0	2	5055.38	2162.5	29.68	11.19	21.63	52.5	4.89	978	0.81	636	199.35	84.6	5.96	1.3	115.37	7.4
MN-AC-0006	0	1	10290.42	4117.2	35.75	13.2	27.41	71.34	5.46	2724	0.98	1113.5	392.31	121	7.99	1.47	140.01	7.8
MN-AC-0006	1	2	6855.68	2682.8	21.08	7.37	17.52	42.03	3.09	1965.8	0.52	702.1	248.85	71.3	4.75	0.8	77.17	4.5
MN-AC-0006	7	8	10052.37	3926.7	16.97	6.57	15.07	35.79	2.56	3263.5	0.5	833	330.15	68.9	3.89	0.74	69.8	4
MN-AC-0006	8	9	21054.37	8279.4	31.76	11.78	29.65	68.3	4.67	6853.8	0.94	1708.4	709	136.1	7.42	1.35	118.37	7.5
MN-AC-0006	9	10	7181.40	2783.2	17.13	6.42	13.6	33.92	2.66	2294.8	0.49	602.8	239.34	58.2	3.67	0.75	66.31	4.1
MN-AC-0006	14	15	5127.74	2033.8	13.46	4.46	11.74	27.73	1.96	1480.2	0.29	504.2	191.08	48.3	3.06	0.53	52.12	2.5
MN-AC-0007	0	1	6920.58	2728.9	34.29	12.78	26.68	65.82	5.23	1588.7	1.13	897.6	286.14	107.5	7.32	1.53	131.59	8.1
MN-AC-0007	1	2	13072.21	5371.1	31.58	12.56	23.45	57.94	4.95	3533.3	1.11	1361.5	501.32	107.6	6.44	1.47	131.84	8.5
MN-AC-0007	2	3	22158.36	9413.2	24.91	10.6	27.88	60.04	4.14	6185.5	1.03	2085	825.01	143.7	6.45	1.33	116.96	7.6
MN-AC-0007	3	4	29152.27	10000.01	27.44	10.83	39.15	77.48	4.18	10000.01	1.11	3386.3	1000.01	211.4	7.78	1.34	111.71	8
MN-AC-0007	4	5	30756.16	10000.01	35.72	14.34	48.87	103.48	5.53	10000.01	1.43	4598	1000.01	268.4	10.65	1.78	159.96	10.4
MN-AC-0007	5	6	10104.11	4127.5	24.11	10.41	19.37	46.66	3.84	2843.7	1.05	958.1	374.56	81.8	5.3	1.24	115.4	7.3
MN-AC-0007	6	7	9411.76	3860	21.36	9.13	16.66	41.84	3.54	2611.9	0.9	922.4	353.27	76.2	4.63	1.14	100.56	6.8
MN-AC-0007	7	8	7498.90	3048.3	24.2	9.08	20.45	48.42	3.75	1887.9	0.89	849.7	295.73	86.6	5.36	1.11	109.38	6.5
MN-AC-0007	8	9	18144.83	7599.2	27.48	11.03	23.84	55.67	4.36	5147.1	1.06	1694.1	667.92	117.6	6.2	1.36	120.81	8
MN-AC-0007	9	10	13359.96	5399.9	38.92	14.82	29.58	72.83	6.09	3606	1.28	1400.1	520.19	129.7	8.36	1.89	158.93	10.4

MN-AC-0007	10	11	14993.91	6067	40.5	15.35	34.35	80.58	6.33	4077.7	1.42	1569	576.29	144.9	8.97	1.78	160.23	10
MN-AC-0007	11	12	11374.62	4425.8	58.68	18.9	54.63	123.49	8.18	2349.2	1.4	1700	516.55	215.4	13.13	2.05	207	11
MN-AC-0007	12	13	13645.44	5419.5	50.49	17.22	46.34	104.63	7.34	3310.3	1.46	1713.4	580.44	184.5	11.48	1.92	184.06	10.9
MN-AC-0007	13	14	10683.53	4192	43.34	15.84	37.72	89.72	6.54	2607.8	1.29	1328.5	443.02	150.1	9.85	1.8	176.5	10.1
MN-AC-0007	14	15	6226.68	2473.8	30.34	10.12	28.1	63.68	4.57	1314.8	0.76	887.4	259.45	111.6	7.01	1.11	113.9	5.8
MN-AC-0008	1	2	5228.70	2072.8	29.11	11.26	23.55	55.21	4.82	1112.6	0.96	714.8	211.32	88.8	6.4	1.36	118.75	7.4
MN-AC-0008	2	3	10052.82	4107.4	40.62	16.01	32.13	72.84	6.84	2427.4	1.26	1184	367.07	122.3	8.63	1.89	176.08	10.1
MN-AC-0009	2	4	5696.73	2307.1	28.36	10.45	23.89	53.56	4.6	1200.2	0.96	775.7	231.21	89.9	6.06	1.3	118.09	7.5
MN-AC-0010	2	4	5763.75	2347.9	28.73	10.96	22.35	51.53	4.76	1242.4	0.96	742.9	237.51	88.6	6.22	1.38	121.77	7.6
MN-AC-0010	4	6	12822.84	4935.3	89.85	27.5	82.42	176.05	12.86	2157.9	1.65	2196.3	606.15	318.9	20.85	2.85	297.14	14.3
MN-AC-0010	6	8	15661.79	5906.6	131.73	44.4	105.82	239.45	19.99	2486.3	2.64	2738.5	737.09	412.9	28.66	4.98	472.33	23.7
MN-AC-0010	8	10	14129.59	5348.2	116.63	39.99	96.66	214.31	17.68	2303.9	2.37	2399.2	675.55	368.9	25.47	4.46	414.62	21.1
MN-AC-0010	10	12	8286.44	3078.4	82.08	31.1	58.18	136.82	13.14	1265.5	2.11	1418	386.84	216	16.83	3.49	333.29	18
MN-AC-0012	2	4	5400.51	2145.9	29.85	11.82	24.4	55.42	5.05	1091.1	0.96	775.3	224.27	94.2	6.49	1.38	131.24	7.8
MN-AC-0012	23	24	5926.50	2216.4	49.67	18.79	39.07	85.43	7.84	1008.4	1.3	982.8	270.53	147.8	10.48	2.23	199.21	11.6
MN-AC-0013	2	4	5156.55	2005.7	29.94	11.62	22.91	55.4	5.01	1149.8	0.98	680.8	199.15	88.7	6.51	1.41	130.65	7.8
MN-AC-0013	22	24	6449.98	2494.9	28.31	10.89	22.49	51.64	4.37	1738.5	0.9	695.7	235.16	88.4	6.02	1.24	115.66	6.9
MN-AC-0014	12	13	6915.66	2526.2	58.19	18.55	53.9	118.1	8.82	1031.2	1.25	1331.5	325.31	201.3	13.41	2.11	198.39	10.8
MN-AC-0016	2	4	5697.46	2294.8	32.41	12.29	24.48	60.92	5.24	1204.6	1.08	745.4	225.28	93.1	7.24	1.47	141.25	8.2
MN-AC-0016	4	6	6187.98	2480.3	40.52	14.42	32.26	77.36	6.36	1170.3	1.19	902.5	255.56	120.4	9.43	1.7	155.33	9.4
MN-AC-0016	25	26	12465.63	4789.2	102.25	35.5	80.46	186.42	15.82	2051.8	2.43	2087.6	544.86	303.7	22.32	4.04	381.7	20.2
MN-AC-0017	2	3	6053.04	2386.4	44.18	16.61	31.53	81.62	7.1	1184.3	1.35	839.3	240.06	117.9	9.68	1.89	186.78	10.4
MN-AC-0017	25	26	9623.42	3318.6	134.21	36.78	99.85	261.99	18.9	1194.8	1.17	1868.1	428.76	345	30.91	3.02	444.42	12.5
MN-AC-0021	0	2	5512.44	2281.3	28.07	10.93	21.46	51.52	4.6	1226	1	659.9	205.86	82.5	6.33	1.31	112.94	7.6
MN-AC-0021	2	4	8860.55	3728.9	33.01	13.37	28.35	65.54	5.57	1925.2	1.27	1124.9	349.62	119	7.65	1.64	145.88	9.2
MN-AC-0022	0	2	11258.87	4623.9	37.62	15.32	28.49	69.61	6.3	3088.5	1.24	1064.2	369.01	113.4	8.62	1.86	165.35	10.1

MN-AC-0022	2	4	8161.76	3548.6	23.76	9.98	21.92	49.27	3.96	1830.4	1.05	949.4	314.83	94.3	5.66	1.25	102.56	7.6
MN-AC-0022	6	8	6071.22	2513.3	27	10.3	21.2	49.76	4.42	1410.3	0.96	710.3	224.08	84.3	6.04	1.26	108.45	7
MN-AC-0023	0	1	6108.70	2463.7	28	10.83	22.01	52.55	4.55	1491.5	0.96	699.3	220.31	86.8	6.35	1.29	114.76	7.2
MN-AC-0023	1	2	7214.82	2965.4	31.57	12.54	22.99	56.83	5.3	1802.3	1	761.5	248.07	90.2	6.93	1.59	138.15	8.3
MN-AC-0023	2	3	10641.48	4364.8	35.76	12.79	30.16	69.81	5.66	2829	1.07	1080.5	368.75	123.4	8.5	1.5	138.9	8.4
MN-AC-0023	10	11	10841.83	4512.5	25.47	9.82	22.87	51.97	4.2	3003.4	0.87	1034.7	357.7	93.7	6.36	1.19	118.43	7.1
MN-AC-0023	17	18	5380.55	2088.2	41.94	16.64	33.11	81.06	7.03	860.5	1.43	879.1	224.74	125.5	9.3	1.96	202.37	11.4
MN-AC-0024	0	2	11479.30	4846.9	34.33	14.13	26.56	65.81	5.84	2910.9	1.22	1185.3	393.75	111	8.05	1.74	176.19	9.6
MN-AC-0024	2	4	5414.61	2322.2	18.06	7.52	14.37	33.42	3.1	1261.2	0.72	604.6	194.42	58.8	4.26	0.91	89.29	5.6
MN-AC-0024	8	10	9467.25	3961.7	27.6	11.34	23.51	55.54	4.68	2411.8	1.2	991.8	331.08	97	6.69	1.46	141.68	8.5
MN-AC-0024	18	19	6334.70	2651.2	30.88	12.09	24.47	57.32	5.14	1290.1	1.11	817.2	244.98	94.2	6.91	1.46	155.47	8.2
MN-AC-0025	2	4	7371.13	3239.5	36.45	13.51	28.67	70.08	5.85	1433.2	1.08	903.1	263.29	106.1	8.38	1.62	166.21	8.4
MN-AC-0025	8	10	6363.98	2432.9	55.04	20.22	40.24	104.39	9.04	983.5	1.49	1066	269.55	156.5	11.3	2.36	256.31	12.4
MN-AC-0025	10	12	18225.83	7030.7	153.71	54.45	115.51	269.8	24.34	3019.3	3.68	2992.2	785.17	426.9	33.3	6.1	590.51	30.8
MN-AC-0025	12	14	7478.93	2794.9	75.83	25.59	59.87	148.18	11.78	1070.8	1.77	1308.5	328.27	216.8	16.97	2.75	296.32	14.7
MN-AC-0025	14	17	13404.54	5007.7	119.94	39.67	94.25	224.46	17.77	2239.5	2.51	2267.8	572.23	345.7	26.79	4.22	443.66	20.8
MN-AC-0026	2	4	5637.07	2413.4	37.82	13.83	28.89	70.42	5.94	961.6	1.1	785.2	216.71	109.1	8.41	1.6	144.44	8.5
MN-AC-0026	4	6	5115.74	1951.2	44.89	16.92	34.01	81.56	7.18	826	1.34	843.4	218.3	126.7	9.9	2.05	185.09	11.1
MN-AC-0027	0	2	5005.04	2079.8	28.35	10.51	22.41	53.53	4.46	1023.8	0.8	643.3	191.35	85.8	6.44	1.18	110.32	6.5
MN-AC-0027	2	4	9160.07	4186.9	40.56	14.97	32.15	77.61	6.62	1845.1	1.11	1002.8	301.47	123	9.57	1.72	160.94	9.1
MN-AC-0028	2	4	6534.70	2694.2	48.56	21.33	37.21	89.53	8.4	1038.5	2.04	970.6	258.55	139.6	10.47	2.79	230.19	16.3
MN-AC-0028	4	6	8386.24	3178.2	72.41	35.95	56.45	131.54	12.93	1216.9	3.71	1419.5	366	210.9	15.21	4.77	387.06	29.1
MN-AC-0029	2	4	6716.33	3133.9	39.22	14.59	30.34	73.88	6.19	1087.7	1.28	826.5	234.25	117	8.88	1.67	143.72	9.6
MN-AC-0030	6	8	6274.69	2114.9	100.88	37.13	60.63	154.82	16.57	906.5	2.16	1078.8	276.39	195.7	19.91	4.13	351.31	20.7
MN-AC-0030	14	15	7562.69	2431.2	119.97	50.39	76.76	190.69	20.26	1011.3	4.42	1346.5	336.15	253.2	24.28	6.33	523.36	34.6
MN-AC-0031	2	4	6858.48	3221.5	35.58	13.02	28.72	65	5.49	1178.3	1.05	810.4	240.65	109	7.83	1.53	124.43	8.6

MN-AC-0031	4	6	10225.82	5073	37.62	12.83	33.74	71.76	5.6	1729.2	1.09	1131	358.64	136.8	8.81	1.47	117.8	8.4
MN-AC-0031	6	8	9548.32	4489.3	40.01	13.24	35.27	73.77	5.87	1683.5	1.03	1155.3	366.59	138.7	9.08	1.56	126.97	8.7
MN-AC-0031	8	10	8407.96	3091.3	89.07	31.38	59.09	141.17	14.15	1334.1	1.83	1444.9	380.73	209.7	17.93	3.33	328.89	16.5
MN-AC-0031	10	11	10852.05	4218.1	95.81	41.29	67.72	158.42	16.54	1705.8	3.11	1714.8	479.16	250	19.44	4.74	443.15	25.3
MN-AC-0031	11	12	19236.60	7495.2	142.56	46.85	116.8	263.56	21.11	3467.5	3.26	3013.4	832.63	434.3	31.37	5.1	505.32	26.5
MN-AC-0031	12	14	27776.02	10000.01	230.54	79.01	184.06	419.75	35.35	5267.5	5.15	4827.5	1000.01	693.9	49.68	8.51	839.45	42.5
MN-AC-0031	14	16	26726.20	10000.01	207.4	70	178.93	395.3	31.69	4805.9	4.36	4555.5	1000.01	659.9	46.44	7.48	787.74	38
MN-AC-0031	16	18	26899.16	10000.01	200.59	61.95	178.3	396.19	29.64	4918.2	3.51	4712.8	1000.01	677.9	46.06	6.5	683.13	30.4
MN-AC-0031	18	19	18720.84	7292.8	128.29	37.89	119.59	262.16	18.57	3254.3	2.21	3077.8	844	450.1	29.72	3.84	431.16	18.8
MN-AC-0031	19	20	8258.92	3306.6	57.7	17.44	52.3	115.56	8.52	1299.2	1.14	1397.2	374.83	199.3	13.2	1.82	192.24	9.1
MN-AC-0031	23	24	7991.00	3234.1	55.39	17.64	50.66	113.38	8.37	1246.7	1.28	1333.1	361.48	188.5	12.85	1.86	183.06	9.4
MN-AC-0032	0	2	5838.53	2611.1	34.08	10.84	29.11	63.74	4.91	973	0.98	789	223.82	110.6	7.56	1.29	114.25	6.9
MN-AC-0032	2	4	6536.53	3066.6	36.42	12.9	31.11	66.93	5.5	1014.3	1.17	843.7	244.3	117.2	8.09	1.49	119.08	8.4
MN-AC-0032	4	6	8386.20	4184.4	42.08	14.11	34.77	73.23	6.34	1240.9	1.32	981.4	297.55	128.7	9.4	1.67	130.54	9.8
MN-AC-0032	6	8	6753.12	2771.3	39.88	13.89	32.76	71.03	6.16	1283.5	1.21	966.4	296.68	124.1	8.91	1.64	134.56	9.3
MN-AC-0032	8	10	10808.92	4220.5	84.12	28.47	64.63	148.2	12.95	1932.6	2.09	1671.4	473.49	237.1	18.08	3.16	303.55	16.2
MN-AC-0032	10	12	11692.36	4538	108.11	43.06	73.53	180.89	18.25	1873.2	3.15	1817.1	505.25	267.7	21.92	4.74	479.7	24.3
MN-AC-0032	12	14	6952.58	2726.3	50.19	19.43	40.17	92.46	8.01	1226.1	1.85	1058.4	302.21	150.2	11.17	2.27	224.03	13
MN-AC-0032	14	15	7036.02	2762.7	55.2	20.37	42.9	101.99	8.65	1195.4	1.72	1104.2	310.1	160.2	11.87	2.3	208.5	12.9
MN-AC-0032	15	16	5089.32	1892	41.76	14.85	32.53	75.21	6.59	925.8	1.31	818.8	229.56	119.3	8.88	1.77	160.49	9.7
MN-AC-0035	4	6	6867.86	3281.7	36.88	14.7	25.97	62.21	5.94	1198.7	1.42	748.6	232.01	98.8	8	1.82	131.17	10.3
MN-AC-0035	6	8	5025.39	1712.4	62.34	29.88	38.11	98.6	11.27	795.2	3.15	833	215.76	129.5	11.95	3.86	305.87	23
MN-AC-0036	0	2	6548.12	2896.3	32.02	13.02	23.9	57.18	5.31	1319.9	1.06	759.2	234.91	92.4	6.86	1.54	132.51	8.5
MN-AC-0037	0	3	5391.74	2167.9	29.73	11.59	21.48	52.72	4.9	1224	1.06	657	201.91	85.3	6.27	1.43	124.41	7.7
MN-AC-0037	12	15	7923.03	3309	16.03	6.34	13.6	31.54	2.6	2341.1	0.58	659.4	245.25	57.8	3.68	0.76	68.6	4.2
MN-AC-0038	0	2	12506.13	5538.5	31.46	14.09	26.6	60.16	5.43	2981.2	1.35	1280.1	447.7	114.1	6.99	1.73	150.74	10.2

MN-AC-0038	2	3	8741.56	3653.4	48.48	17.63	40.1	93.03	7.59	1661	1.54	1203.6	355.41	158.9	10.64	2.05	190.9	11.7
MN-AC-0038	10	12	7494.01	3369.2	15.56	8.66	14.97	28.4	3.06	1510.3	0.94	942.7	311.03	75.7	3.39	1.25	101.67	7.2
MN-AC-0039	11	13	5950.15	2113.7	80.54	29.23	46.1	127.79	12.88	1043	2.49	900.2	241.52	159.6	15.85	3.47	271.15	20
MN-AC-0043	3	5	5811.97	2304.9	43.84	17.25	30.04	72.33	7.1	1080.2	1.59	814.2	237.89	112.5	8.94	2.13	206.75	11.8
MN-AC-0044	10	11	5932.00	2112.6	62.89	24.44	46.69	115.81	10.15	876.6	2.21	1080.8	266.69	173.2	13.28	3	248.9	16.9
MN-AC-0051	2	4	5943.07	2348.4	35.86	14.06	25.9	73.24	6.06	1210.2	1.18	834.4	225.31	96.7	8.69	1.58	174.75	9.1
MN-AC-0053	16	17	6426.63	2305.1	53.67	17.18	47.28	106.98	7.98	1068.1	1.1	1282.2	183.73	178.4	14.29	1.82	202.52	9.8
MN-AC-0053	17	19	9109.80	3433.1	74.9	25.53	61.94	143.06	11.29	1467.8	1.83	1716.3	249.46	235.5	19.09	2.88	307.91	15.1
MN-AC-0053	19	21	10852.25	4122.9	84.97	27.83	73.3	165.77	12.51	1780.1	1.92	2028.6	299.17	275.9	21.97	3.18	337.91	17
MN-AC-0054	10	11	8453.57	2860.6	104.7	36.73	77.94	206.2	16.69	1063.1	2.35	1682.1	373.87	276.5	24.99	4.06	446.96	20.3
MN-AC-0054	15	17	5597.02	1897.1	65.06	25.32	47.35	122.12	10.8	739.2	1.8	1101.1	250.22	170.8	15.14	2.96	299.62	15.7
MN-AC-0054	17	19	5977.42	2057.2	65.06	24.64	48.97	127.29	10.73	822.1	1.76	1161.6	265.17	177.6	15.54	2.91	293.34	16
MN-AC-0055	0	2	5183.67	2065.9	26.81	9.93	21.12	55.53	4.19	1109.6	0.8	698.9	220.73	85.1	6.84	1.16	108.15	6.6
MN-AC-0055	5	7	11835.59	4423.6	99.64	33	93.21	223.92	15.04	1688.5	1.92	2186.7	556.25	361.2	25.28	3.44	365.47	16.6
MN-AC-0057	3	4	5743.81	2135.9	51.71	19.95	40.05	104.5	8.44	909.6	1.65	978.8	256.9	151.3	12.63	2.39	208.23	13.4
MN-AC-0057	4	6	8018.78	3170.5	62.19	22.78	51.01	130.17	9.87	1294.8	1.82	1287.8	351.45	192.8	15.41	2.53	230.62	14.3
MN-AC-0057	17	18	5065.78	1903.1	43.33	16.09	34.82	85.63	6.96	826.2	1.42	854.6	229.18	130.1	10.5	1.95	164.18	10.8
MN-AC-0058	5	6	6736.30	2386.5	71.53	23.46	57.32	143.2	10.74	986.3	1.27	1259.3	319.3	208.6	17.43	2.38	243.84	11.7
MN-AC-0059	1	3	6786.47	2782.2	27.75	10.95	22.49	59.64	4.53	1528.3	0.97	849.1	285.75	90.7	7.24	1.3	111.79	7.1
MN-AC-0068	4	5	6906.53	2681.4	47.06	17.97	35.47	91.46	7.82	1378.2	1.48	981.2	290.38	132	11.87	2.1	197.93	11.4
MN-AC-0069	0	2	6043.57	2442.6	25.3	10.2	20.48	51.95	3.99	1465.5	0.92	702.5	236.09	79.6	6.38	1.18	101.78	7
MN-AC-0070	0	2	6362.53	2576.5	30.27	11.7	24.13	58.58	4.83	1408.8	1.05	823.9	246.5	94.7	5.63	1.45	130.04	8.4
MN-AC-0070	2	4	5224.28	2146.8	26.35	10.61	21.08	49.98	4.24	942.8	1.14	803.4	228.31	87.3	4.78	1.37	119.17	8.4
MN-AC-0070	4	6	5014.09	1934.3	36.52	15.19	27.35	66.38	5.94	844.3	1.54	822.4	219.86	107.2	6.81	1.92	171.68	11.7
MN-AC-0070	6	8	5955.25	2540.1	17.99	8.3	18.1	38.88	3.13	983.9	1.36	978.2	291.91	85	3.06	1.34	100.74	9.6
MN-AC-0071	2	4	8708.45	3611.7	37	15.1	28.05	71.06	6.19	1900	1.26	1095.1	371.16	112.6	8.77	1.73	158.85	9.7

MN-AC-0071	12	14	5253.38	2022.2	41.07	13.03	31.01	76.15	6.25	960.7	0.8	816.1	235.46	115	9.56	1.33	144.72	6.3
MN-AC-0071	20	21	14149.66	5808.3	13.5	4.41	19.77	43.49	1.92	4268.9	0.43	1266.6	499.03	96.1	5.27	0.51	47.99	2.8
MN-AC-0071	23	24	5262.47	2086.1	23.31	8.93	17.94	46.47	3.78	1314.7	0.88	605.1	202.76	71.2	5.72	1.02	94.54	6.2
MN-AC-0072	0	2	14877.46	5919	40.47	15.62	31.21	77.36	6.72	4477.8	1.26	1306.1	498.9	124.4	10.38	1.87	170.68	10.4
MN-AC-0072	9	11	8383.81	3207.2	47.72	17.86	36.97	91.44	7.56	2013.7	1.39	1054.9	328.06	136.2	11.39	2.09	182.1	11.3
MN-AC-0072	11	13	12524.70	4934.5	42.38	14.69	34.54	83.47	6.54	3547.8	1.24	1259.6	447.18	134.5	10.82	1.85	157.03	9.7
MN-AC-0072	13	15	10254.48	3950	58.15	21.7	44.55	111.9	9.42	2439.3	1.94	1284	405.33	167.1	14.19	2.57	220.86	14.4
MN-AC-0072	15	17	6547.88	2463.4	47.14	18	35.18	90.5	7.65	1396.4	1.65	910.7	269.16	127.6	11.08	2.26	188.81	12.4
MN-AC-0072	17	18	6618.56	2569.3	41.64	14.96	34.27	84.33	6.51	1314.1	1.08	981.9	290.21	134.3	9.93	1.74	152.03	9.1
MN-AC-0072	18	20	11186.26	4385.1	65.11	22.37	57.84	137.44	9.94	2134.1	1.57	1730.2	507.48	228.6	16.29	2.48	231.77	13.4
MN-AC-0072	20	22	10360.92	4041.7	58.59	20.81	49.8	121.51	9.22	2182.7	1.56	1471.4	446.19	191.3	14.18	2.32	214.55	12.5
MN-AC-0072	22	24	6808.36	2645.6	37.47	13.32	31.03	76.42	6.07	1524.5	1.15	910.9	280.13	118.3	9.17	1.52	142.88	8.7
MN-AC-0072	24	25	6037.80	2322.2	39.9	14.22	32.59	78.08	6.43	1208.9	1.08	891.4	262.71	123	9.48	1.58	149.17	8.5
MN-AC-0072	25	26	5878.47	2239.4	46.85	15.98	37.4	90.99	7.43	988.4	1.02	978.1	273.88	141.7	11.44	1.71	169.37	9.2
MN-AC-0073	12	14	11011.62	3971.7	98.91	50.53	62.52	175.5	19.65	1900.3	6.31	1706.6	462.94	249.1	19.42	7.38	591.19	46.1
MN-AC-0073	14	16	6604.32	2405.7	59.49	29.57	38.06	107.65	11.75	1109.3	3.89	1024.7	269.12	154.8	11.89	4.21	360.61	27.5
MN-AC-0073	16	18	5576.71	2049.2	48.91	21.93	32.85	91.45	9.22	956.1	2.51	877.5	229.83	131.8	10.05	3.04	264.24	18.6
MN-AC-0073	18	19	5135.02	1929.3	42.65	16.61	30.82	85.75	7.82	881.7	1.63	821.1	211.96	122.6	8.99	2.2	199.02	12.6
MN-AC-0076	2	4	8486.40	3458.1	49.59	18.74	34.79	87.48	7.82	1935.1	1.49	982.8	304.34	124.7	9.25	2.2	206.18	12.5
MN-AC-0078	2	3	5313.77	2117	29.6	11.66	22.41	58.02	4.64	1135.7	0.98	705.7	209.24	85.7	5.7	1.48	135.01	7.5
MN-AC-0078	3	5	6359.07	2411.5	45.47	16.7	36.07	92.9	6.99	1197.4	1.32	998.4	265.86	136.5	9.04	1.94	190.66	10.4
MN-AC-0078	5	7	7243.69	2653.2	57.42	19.1	49.7	125.63	8.51	1200.5	1.44	1296	328.47	188.9	11.89	2.14	222.25	11.5
MN-AC-0078	9	10	6341.75	2323.9	50.3	15.9	45.36	114.24	7.43	1017.7	1.15	1166	284.22	175.2	10.77	1.76	185.25	9.5
MN-AC-0078	10	12	6185.82	2275.6	49.21	15.55	43.98	112	7.11	984.2	1.11	1135.9	274.83	171.7	10.29	1.68	183.32	9
MN-AC-0078	12	14	6649.00	2283.6	54.51	12.77	36.69	122.61	11.94	762.7	0.96	1626.9	446.47	146	9.49	1.41	152.37	7.5
MN-AC-0078	14	16	5395.46	1978.6	42.61	13.59	37.66	96.94	6.14	884.1	1.07	978.5	240.61	143.6	8.9	1.56	158.98	8.5

MN-AC-0080	3	5	5277.77	1967.5	44.79	16.6	31.41	82.35	7.26	1000.1	1.42	806.9	217.32	117.5	8.96	2.01	182.65	10.9
MN-AC-0081	2	4	5633.33	2221.5	33.54	12.71	26.57	67.9	5.23	1156	1.09	789.6	225.7	102	6.64	1.57	144.59	8.6
MN-AC-0081	4	6	5746.79	2237.9	33.94	12.32	27.68	69.9	5.22	1187.3	1	825.4	232.65	108.7	6.73	1.48	142.19	8.1
MN-AC-0081	15	17	5153.87	1902.8	39.97	14.53	31.32	81.48	6.35	974.9	1.17	819.4	211.54	120.4	8.01	1.74	169.63	9.6
MN-AC-0082	2	4	5326.23	2036.3	38.22	14.61	26.66	71.67	6.21	1094.4	1.21	762.5	206.13	103.4	7.6	1.67	160.18	9.2
MN-AC-0085	2	4	6163.13	2401	34.95	12.81	28.54	70.94	5.74	1265.5	1.1	898.4	262.45	116.9	7.07	1.54	141.12	8.4
MN-AC-0085	6	7	5173.41	1976.8	22.67	8.09	19.76	48.15	3.56	1350.7	0.72	618	186.07	80.8	4.7	0.97	87.1	5.2
MN-AC-0086	2	4	9711.77	3802.6	71.07	25.48	51.68	129.25	11.54	1896.7	1.86	1382.3	393.86	188.9	16.65	2.96	288.56	15.1
MN-AC-0088	15	17	5838.86	2065.8	54.38	18.67	47.08	104.15	8.47	842	1.16	1158.4	279.83	175.1	12.89	1.9	198.74	9.9
MN-AC-0088	17	18	6478.87	2246.2	66.09	26.13	53.88	118.68	11.02	906.7	1.76	1276.8	315.31	197.7	14.98	2.95	267.02	15.6
MN-AC-0104	2	3	5346.27	2094.2	28.41	10.42	21.89	56.2	4.59	1194.5	1.01	723.1	206.06	81.7	5.74	1.42	121.75	8.1
MN-AC-0104	3	4	9770.49	3937.5	36.56	14.43	29.64	75.63	6.17	2384.8	1.26	1166.7	383.05	109.5	7.12	1.82	169.7	9.9
MN-AC-0104	4	5	8914.21	3579.2	37.22	13.86	30.2	76.06	6.17	2018.7	1.29	1170	370.41	114.4	7.28	1.82	166.99	9.9
MN-AC-0105	2	3	6863.70	2758.2	35.19	13.17	28.38	71.46	5.89	1338	1.13	1007.2	305.58	113.2	6.96	1.71	158.27	9.2
MN-AC-0105	3	4	7600.28	3009	44.88	15.48	34.73	94.08	9.01	1179.6	1.26	1358.8	393.78	139.7	8.3	1.89	182.11	10.6
MN-AC-0105	4	5	12971.89	4722	121.63	37.49	94.86	235.43	18.75	1954.1	1.86	2420.8	614.03	353.1	24.75	4.25	437.22	19.1
MN-AC-0105	7	8	7043.47	2464.8	70	22.91	56.29	138.63	10.8	972.1	1.2	1415.7	345.63	211.7	14.26	2.54	265.21	12.1
MN-AC-0105	8	9	7133.79	2483.3	65.83	20.95	54.44	131.93	10.35	1047.6	1	1424.5	339.69	216.8	13.43	2.35	258.52	10.5
MN-AC-0105	9	10	5810.72	2081.5	51.1	15.57	43.67	106.47	7.87	877.8	0.95	1121.6	272.05	170	10.75	1.82	185.33	8.6
MN-AC-0116	3	4	7097.82	2879.1	43.25	15.25	5.72	10.15	7.14	1533.2	1.54	955.2	287.99	115.1	13.04	2.06	172.01	10.2
MN-AC-0116	4	5	5249.19	2042.1	39.91	14.05	8.66	29.86	6.51	1062.9	1.54	765.6	216.01	104.8	11.45	1.95	158.25	10.1
MN-AC-0117	1	2	5079.31	1961.5	31.58	10.68	25.09	49.84	4.95	1166.8	1.1	661.4	193.17	86.4	9.54	1.35	120.54	7.2
MN-AC-0117	2	3	10513.37	4166.4	51.94	17.68	45.27	65.96	8.27	2627.3	1.68	1211.2	393.79	137.8	16.71	2.2	208.4	11
MN-AC-0117	3	4	10505.24	4100	62.41	20.03	55.7	94.15	10.19	2414	1.83	1348.2	421.22	162.1	18.56	2.43	235.79	11.8
MN-AC-0117	4	5	8785.55	3337.3	61	19.43	52.29	128.49	9.27	1803.4	1.76	1285.7	372.31	171.5	17.93	2.36	218.62	11.3
MN-AC-0117	5	6	9477.85	3529.2	73.16	22.77	61.06	204.02	11.13	1698.8	2.13	1563	422.45	205	21.96	2.76	253.34	13.5

MN-AC-0117	6	7	5539.81	2000.3	50.83	16.23	40.42	146.22	7.75	947	1.71	931.8	237.41	133.3	14.92	2.08	182.73	10.8
MN-AC-0117	7	8	16996.26	6107.1	154.31	44.15	130.71	531.61	22.37	2576	3.85	3095.1	788.92	442.9	46.97	5.18	525.46	22.8
MN-AC-0117	8	9	7494.26	2626.7	76.18	24.99	59.6	227.18	11.7	1167.7	2.2	1321.1	343.58	197.2	21.82	2.88	290.91	13.9
MN-AC-0117	17	18	6981.21	2528.9	62.82	19.99	49.75	132.73	9.45	1147.3	1.88	1233	327.58	181.6	16.85	2.37	226.04	12.1
MN-DD-0001	1	2	6290.05	2546.5	31.08	12.44	23.62	59.83	5.04	1469.7	1.09	747.2	234.75	90.2	6.97	1.44	126.19	8.5
MN-DD-0001	2	3	14401.29	5859.9	52.52	21.41	39.21	101.68	8.77	3846.8	1.71	1447.2	496.7	150.2	11.92	2.54	229.35	13.5
MN-DD-0001	3	4	8024.26	3117.9	49.99	20.33	36.28	94.17	8.31	1826.6	1.56	1005.8	302.67	131.1	11.19	2.36	219.1	12.6
MN-DD-0001	4	5.4	5530.23	2218.4	27.48	11.41	20.77	51.15	4.62	1305.7	0.99	653.7	207.52	79.4	6.02	1.39	119.53	7.7
MN-DD-0001	64	65	6214.70	2491.5	22.36	9.05	16.85	37.54	3.66	1654.3	0.57	664.3	230.93	68	4.58	1.06	91.55	5.2
MN-DD-0002	0	1	7957.57	3150.9	31.7	12	26.2	65.09	5.02	2054.1	0.99	904.4	295.25	107.1	7.67	1.34	119.71	7.5
MN-DD-0002	1	2.1	7950.98	3152.1	32.54	11.83	26.31	68.1	5.12	2043.5	1.01	905.8	293.57	103.9	7.87	1.44	122.03	8.1
MN-DD-0002	2.1	2.8	11739.44	4845.1	42.23	16.24	34.81	89.66	6.86	3011.9	1.12	1236.3	408.57	138.3	10.14	1.89	163.1	9.4
MN-DD-0002	7	8	6017.32	2336.5	28.62	10.18	22.82	58.18	4.58	1530.4	0.9	710.5	223.77	87.8	6.85	1.3	103.55	7.2
MN-DD-0002	10	11.5	5927.41	2326.3	20	7.34	16.48	39.75	3.16	1693.8	0.48	599	204.16	65	4.76	0.83	71.99	4.3
MN-DD-0002	21	22.5	14069.79	5683	34.11	12.48	28.5	73.06	5.42	4277.8	0.91	1198	433.51	118.3	8.43	1.48	123.15	7.7
MN-DD-0002	22.5	24	8508.04	3362.1	19.04	6.71	17.02	42.39	2.92	2655.4	0.47	738	270.36	69.9	4.89	0.71	66.57	4
MN-DD-0002	40	41	6762.03	2563.3	22.38	8.21	18.84	50.49	3.55	2054.6	0.59	657	221.18	76.8	5.63	0.89	81.19	4.7
MN-DD-0002	41	42	21475.97	8437.8	28.03	9.78	28.91	68.34	4.21	7396.7	0.65	1522.4	594.39	124.3	7.92	1.1	98.07	5.6
MN-DD-0002	42	43.15	12120.35	4799.7	22.83	7.77	23.61	55.14	3.48	3836.9	0.51	1034.8	367.15	99.7	6.2	0.86	80.61	4.6
MN-DD-0003	0	1.5	6996.41	2876.2	30.17	11.81	24.54	61.51	4.91	1635.9	1.09	833.3	254.98	97.9	7.25	1.41	119.53	7.9
MN-DD-0003	1.5	3	8678.85	3587.9	36.49	13.7	29.38	72.21	6.06	2078.1	1.17	993.7	310.89	114.1	8.52	1.6	140.78	9.2
MN-DD-0003	3	4.5	15393.29	6138.3	54.81	21.56	41.42	107.2	9.27	4362	1.51	1483	493.99	161.2	12.75	2.44	228.13	12.6
MN-DD-0003	4.5	5.9	6583.60	2668.8	33.21	12.51	25.4	64	5.29	1501.5	1.02	818	241.68	98.4	7.59	1.43	128.61	8
MN-DD-0003	6.8	7.8	6808.96	2624.3	45.67	16.19	38.78	91.66	7.04	1236.5	1.21	1112.4	301.63	147.6	10.2	1.77	163.27	9.9
MN-DD-0003	13	14.5	7710.30	2976.1	57.35	20.63	47.05	107.93	9.12	1295.1	1.46	1288	339.24	177.4	12.82	2.33	227.47	12.1
MN-DD-0003	15.5	16.6	5101.07	1902.4	43.35	16.69	31	75.18	7.06	892.9	1.4	842.5	221.51	116	8.98	1.9	175.74	10.9

MN-DD-0003	22	23.2	9428.61	3762.6	66.27	23.92	53.95	130.6	10.34	1560.7	1.73	1538.2	410.78	203.4	15.26	2.65	247.11	13.8
MN-DD-0003	29.4	31	9385.12	3777.3	63.63	21.27	52.79	123.63	9.67	1579.2	1.3	1509	407.98	200.7	14.58	2.26	230.35	11.4
MN-DD-0003	36.05	37.85	5169.99	1958.8	40.3	14.14	31.87	79.04	6.15	872.5	1.1	872.6	234.21	121.7	8.91	1.53	156.76	8.4
MN-DD-0004	1.5	3	6002.54	2436.2	32.74	12.66	22.94	61.24	5.4	1250.1	1.2	798.9	243.8	88.5	7.16	1.62	146.49	9
MN-DD-0007	4	5	6308.23	2501	32.15	12.36	24.7	63.98	4.99	1351.4	1.1	836.5	291.43	102.6	7.1	1.42	140.62	8.3
MN-DD-0007	5	6	9008.02	3702.5	25.76	10.04	22.49	55.66	4.01	2212.3	0.97	1030.6	391.97	104.1	6.23	1.2	111.42	7.2
MN-DD-0007	6	7	7681.57	3152.5	29.86	11	23.31	58.73	4.6	1710.4	0.95	964.9	349.73	100.5	6.56	1.33	131.23	7.2
MN-DD-0008	0	1.55	6145.95	2392.5	33.84	13.25	25.53	65.44	5.39	1384.9	1.07	814.9	252.54	103.4	7.43	1.51	131.52	8.6
MN-DD-0008	1.55	3	11653.24	4733.1	41.1	17.45	27.62	71.36	7.02	3134	1.35	1157.6	424.43	114	8.55	2.04	188.15	11.1
MN-DD-0008	3	5	7088.62	2716	46.21	17.05	35.78	89.43	7.15	1433.1	1.28	1049.6	302.86	141.6	10.51	1.91	181.94	10.3
MN-DD-0008	5	6.5	8464.81	3339.4	43.44	16.12	33.04	81.13	6.71	1941.5	1.3	1089.2	343.54	135.5	9.56	1.85	167.49	10.3
MN-DD-0008	6.5	8.2	7627.12	3102.8	21.68	8.85	17.55	44.47	3.63	2024.2	0.85	811.6	293.22	77.7	4.93	1.05	89.21	6.2
MN-DD-0008	20.6	22	5261.48	2173.8	12.57	6.05	9.31	23.45	2.23	1451.1	0.56	501	195.9	41.8	2.68	0.75	62.78	4.7
MN-DD-0008	32	34	5369.82	2163.4	16.93	6.11	14.95	35.55	2.68	1405	0.53	597.8	200.96	63.8	3.82	0.74	65.43	4.3
MN-DD-0008	34	36	5528.77	2195.7	16.58	6.42	14.26	35.08	2.75	1520.9	0.53	582.2	204.46	61.2	4.04	0.77	68.05	4.3
MN-DD-0008	45.95	47	5508.40	2233	10.74	4.36	9.17	23.58	1.72	1639.3	0.4	495	191.24	41.2	2.54	0.56	44.86	2.9
MN-DD-0009	4	6	5146.02	1871.4	47.49	18.58	33.39	87.15	8.75	836.9	1.57	864.4	218.73	131.5	11.49	2.2	236.14	11.9
MN-DD-0012	5.65	7.5	6721.94	2820.7	23.36	9.46	19.63	46.6	3.97	1522.5	0.96	826.5	259.62	82.2	5.74	1.21	105.13	7.1
MN-DD-0013	34.8	36	5735.79	2023.1	57.74	22.14	43.84	109.9	9.44	845	1.91	1067.2	257.31	163.8	12.9	2.66	253.97	14.8
MN-RC-0002	0	1	7532.34	2937.8	42.99	12.02	32.5	84.65	8.64	1567.4	0.81	1123.4	340.89	119.2	8.24	1.25	140	6.8
MN-RC-0003	0	1	10529.62	4471.4	26.89	9.84	25.45	55.65	4.2	2551.5	0.85	1177.3	424.62	108.1	5.39	1.21	116.1	6.9
MN-RC-0003	1	2	5625.46	2349.3	25.21	9.88	22.36	49.93	3.98	1096.5	0.76	782.1	250.06	89.2	5.03	1.23	107.16	6.2
MN-RC-0003	44	45	5061.26	1769.1	56.48	15.51	52.93	125.59	7.81	721.8	0.64	950.9	224.35	186.7	12.6	1.44	183.15	6.5
MN-RC-0003	45	46	8633.66	3361.1	62.47	17.91	58.3	133.85	8.76	1405.5	0.92	1461.5	397.43	218.9	13.5	1.85	214.34	8.7
MN-RC-0004	0	1	10372.35	4089.6	41.94	14.84	34.41	78.26	6.43	2740	1.07	1144.2	380.53	134.7	8.63	1.62	162.88	9
MN-RC-0004	1	2	12813.99	5000.7	57.72	20.1	48.99	109.64	8.82	3254.5	1.22	1517.5	486.2	188.5	11.98	2.18	211.83	11.5

MN-RC-0004	2	3	12184.11	4720	70.13	23.66	58.91	133.41	10.55	2665.6	1.56	1695.1	501.91	223.4	14.41	2.74	257.1	14.2
MN-RC-0004	3	4	16216.05	6091.6	119.43	39.98	103.65	234.02	18.24	2900.8	2.48	2691.8	738.7	396.7	25.71	4.4	439.28	22.8
MN-RC-0004	4	5	15682.51	5962.9	98.71	32.88	83.83	191.29	14.85	3280.6	2.02	2300.7	681.65	321	20.55	3.5	362.89	18.4
MN-RC-0004	5	6	11406.60	4338.7	76.49	25.25	64.17	144.96	11.51	2300.8	1.68	1709.3	487.12	245.8	15.83	2.81	288.61	14.4
MN-RC-0004	6	7	11657.03	4420	68.14	23.57	60.03	134.24	10.53	2602.3	1.6	1633.8	477.49	227.8	14.26	2.62	252.87	13.6
MN-RC-0004	7	8	8142.64	3086.3	59.59	20.47	48.12	111.74	8.98	1594.2	1.58	1239.4	347.02	180.4	12.07	2.3	218.29	13.1
MN-RC-0004	8	9	9973.78	3715.9	75.6	26.4	65.45	148.78	11.73	1844.2	2.02	1622.2	438.25	244.6	15.85	2.98	275.78	15.8
MN-RC-0004	9	10	15245.71	5686.2	113.8	41.58	97.02	219.22	17.5	2668	2.9	2592.8	710.22	376.7	23.45	4.61	422.39	25.5
MN-RC-0004	10	11	17747.20	6596.3	130.67	46.95	116.62	259.37	19.99	3027	3.42	3094.3	825.39	447.8	27.39	5.17	505.59	28.6
MN-RC-0004	11	12	13211.09	4869.4	106.21	37.02	91.96	208.88	16.27	2174	2.76	2330.7	613.36	351.2	22.59	4.23	412.75	22.9
MN-RC-0004	12	13	9899.98	3703.9	74.73	26.41	64.99	148.52	11.77	1740	2.01	1660.3	447.94	247	15.75	3.01	279.96	16.2
MN-RC-0004	13	14	7404.13	2791.4	56.75	20.11	47.23	111.16	8.84	1293.2	1.56	1223.1	336.66	181.4	11.65	2.36	215.03	13.1
MN-RC-0004	23	24	12511.26	5087.9	12.79	3.54	14.45	29.04	1.92	4067	0.29	947.4	393.62	68.8	2.75	0.45	46.29	2.3
MN-RC-0004	26	27	5817.73	2251	41.22	13.07	35.4	79.06	5.96	1011.4	0.74	955.8	267.92	135.3	8.51	1.36	148.21	7.1
MN-RC-0004	26	27	5735.71	2238.3	40.43	12.84	34.81	77.3	5.96	977.8	0.74	944.8	264.29	133.3	8.54	1.39	144.64	7.1
MN-RC-0004	34	35	5121.40	1978.7	33.25	11.33	28.93	65.74	5.12	959.6	0.75	807.5	224.39	112.1	7.02	1.18	126.03	6.4
MN-RC-0004	43	44	6268.43	2691	5.59	2.01	6.5	12.59	0.86	1824.9	0.18	528.9	219.97	32.7	1.07	0.22	22.88	1.3
MN-RC-0004	44	45	7318.74	2997.4	6.64	2.5	6.65	12.77	0.98	2420	0.2	512.2	223.38	31.6	1.28	0.3	28.61	1.6
MN-RC-0005	0	1	16075.92	6317.1	42.8	10.7	24.91	76.98	11.97	4674.9	0.92	1687.7	629.55	109.2	6.81	1.17	118.99	7.1
MN-RC-0005	1	2	15480.11	6247.7	19.9	7.49	18.88	43.18	3.08	5063.1	0.73	1144.9	480.72	86.1	4.2	0.9	83.85	5.8
MN-RC-0005	15	16	5218.17	2065.7	16.27	6.05	14.13	34.4	2.7	1416.9	0.56	572.9	185.84	59	3.5	0.8	69.32	3.9
MN-RC-0005	19	20	5560.85	2281	18.75	6.9	17.24	39.11	3.18	1230.1	0.61	752.3	232.2	72.4	4.01	0.84	81.82	4.4
MN-RC-0006	0	1	11181.50	4484.1	48.67	18.45	41.38	91.44	7.97	2652.3	1.35	1369.3	438.54	159.9	10.25	2.06	200.65	11.4
MN-RC-0006	1	2	11529.62	4513.2	64.02	23.16	53.58	120.26	10.15	2516.7	1.69	1565.6	476.08	205.9	13.32	2.68	252.75	14.2
MN-RC-0006	2	3	7871.30	2963.8	59.34	19.92	49.75	114.61	8.98	1429.4	1.46	1278.6	350.92	187.8	12.6	2.3	220.69	12
MN-RC-0006	3	4	6050.85	2267.5	48.33	17.41	41.99	99.41	7.47	989.5	1.33	1041.8	277.64	160.8	10.57	1.93	183.24	10.7

MN-RC-0006	5	6	5360.92	2094.9	38.54	11.68	28.87	69.55	6.9	895.3	0.85	909.3	262.18	110.3	7.29	1.32	129.06	7
MN-RC-0006	9	10	6254.69	2546.5	6.43	2.56	6.7	14.42	1.22	2072.9	0.25	433.6	188.83	30.5	1.5	0.31	30.14	1.8
MN-RC-0006	10	11	6011.38	2435	20.34	7.66	17.2	37.33	3.45	1513.5	0.7	688.2	232.04	72.1	4	0.99	90.21	5.5
MN-RC-0006	14	15	5648.48	2229.3	36.44	12.34	32.67	71.28	5.78	954	0.72	927.8	262.63	126.7	7.82	1.32	142.13	6.7
MN-RC-0006	28	29	7312.72	2900.6	22.55	9.29	18.08	41.24	3.82	2118.1	0.93	684.4	248.23	73	4.38	1.08	104.86	6.9
MN-RC-0006	29	30	6234.25	2462.9	26.06	10.81	20.02	45.44	4.36	1641.4	0.92	664.5	227.91	77.3	5.23	1.24	120.78	7.3
MN-RC-0006	37	38	6012.31	2577.3	10.43	4.06	12.73	23.7	1.69	1455.1	0.45	691	246.54	56.2	2.13	0.53	46.57	3.5
MN-RC-0006	39	40	10773.86	4351.8	7.31	2.69	9.25	17.97	1.09	3693	0.22	714.7	320.94	43.6	1.57	0.3	29.11	1.9
MN-RC-0006	42	43	17142.88	6837.7	10.16	3.85	13.27	24.24	1.6	6058.4	0.36	1073.3	492.9	65.9	2.06	0.51	43.67	3
MN-RC-0006	43	44	9223.93	3703.2	11.27	5.34	9.71	19.44	1.91	3102.1	0.5	630.8	277.46	44.1	2.08	0.67	57.93	3.9
MN-RC-0006	44	45	6343.50	2513	18.19	6.58	16.72	36.59	2.83	1831.1	0.54	623.7	218.9	67.5	3.67	0.74	68.19	4.5
MN-RC-0007	0	1	5593.33	2301.6	19.26	7.45	16.96	53.8	2.98	1355.9	0.66	639.4	216.88	69	6.07	0.92	76.4	5.4
MN-RC-0007	5	6	6022.42	2344.9	42.13	15.7	33.44	100.8	6.57	1107.2	1.45	906.1	261.83	124.5	11.47	1.84	166.5	11
MN-RC-0007	6	7	15398.64	6607.5	22.07	9.08	26.27	92.51	3.62	3889.4	1.03	1623.1	628.31	124.8	10.42	1.16	98.06	7.6
MN-RC-0007	7	8	9160.77	3816.7	33.76	13.41	30.61	98.86	5.44	1943.8	1.41	1189.4	393.41	125.3	10.85	1.59	142.19	10
MN-RC-0007	8	9	7301.85	3010.6	33.42	12.59	29.02	92.43	5.21	1443.3	1.23	1008.7	317.15	115.9	10.11	1.53	139.07	9.2
MN-RC-0007	9	10	7161.59	2906.2	37.97	14.13	32.05	98.73	5.93	1371.1	1.35	1022.5	315.34	126.4	11.06	1.73	154.15	10.4
MN-RC-0008	0	1	6592.86	2594.1	34.82	13.11	27.41	84.17	5.58	1527.7	1.2	818.5	252.66	105.5	9.82	1.56	137.68	9.3
MN-RC-0008	1	2	8437.50	3064.8	66.38	19.94	39.79	152.7	15.51	1411.8	1.62	1565.6	468.24	146	16.83	2.29	213.11	13.4
MN-RC-0008	28	29	5062.08	1957.7	36.33	12.8	29.97	72.79	5.51	938.2	0.94	777.5	217.83	115.4	7.46	1.3	135.21	7.9
MN-RC-0009	0	1	22049.77	9301.1	30.99	13.42	28.23	62.52	5.35	6682.3	1.26	1672.4	728.24	127.8	6.23	1.59	145.07	9.5
MN-RC-0009	1	2	18137.57	7531.7	37.61	15.78	30.97	70.43	6.08	5416.7	1.5	1471.3	577.89	133.1	7.36	1.9	162.05	11.3
MN-RC-0009	5	6	19347.57	7342.9	128.11	43.97	108.56	241.71	19.23	3922.3	2.84	2908.3	860.13	409	26.14	4.45	459.28	24.9
MN-RC-0009	6	7	31687.96	10000.01	131.41	43.48	119.27	259.96	19.06	10000.01	3.05	4450.4	1000.01	477.6	27.3	4.69	474.6	25.3
MN-RC-0009	7	8	29324.34	10000.01	75.28	25.08	71.88	157.11	10.84	10000.01	1.96	3078.3	1000.01	302.6	15.92	2.8	266.01	16
MN-RC-0009	8	9	30457.74	10000.01	56.03	19.05	65.07	135.34	8.18	10000.01	1.31	4187.3	1000.01	300.4	12.47	2.07	201.87	11.1

MN-RC-0009	10	11	5557.68	2171.8	31.28	11.45	25.04	59.25	4.74	1282	1.08	705.5	215.87	97.1	6.32	1.28	119.05	8.2
MN-RC-0009	11	12	28359.17	10000.01	65.52	22.8	62.61	134.55	9.91	9636.2	1.75	2724.8	1000.01	262.7	13.63	2.53	247.94	14.1
MN-RC-0009	12	13	15139.27	5974.2	52.68	18.31	42.21	98.32	8.95	4206.6	1.68	1576.3	548.85	167.5	10.27	2.04	196	12.5
MN-RC-0009	13	14	8212.53	3190.3	38.58	14.08	32.64	74.53	5.91	2094	1.15	959.2	305.26	124.3	7.74	1.57	147.2	8.7
MN-RC-0009	20	21	9151.35	3562.4	31.39	12.61	24.16	56.51	5.03	2732.2	1.07	845.9	298.55	94.7	6.08	1.44	125.82	8.4
MN-RC-0009	21	22	6942.09	2723.5	26.45	11.1	23.03	51.06	4.44	1744.5	1.15	840.1	266.43	98.6	5.06	1.32	117.25	7.8
MN-RC-0009	26	27	7926.76	3154.5	16.21	5.79	15.27	49.82	2.31	2434.6	0.52	699.6	256.08	65.9	5.87	0.66	54.3	3.9
MN-RC-0009	27	28	8395.79	3240.5	31.03	10.87	27.1	81.55	4.69	2417.9	0.89	837.6	278.87	103.9	9.52	1.22	110.31	7.4
MN-RC-0009	28	29	29964.39	10000.01	63.97	20.73	64.12	145.53	9.27	10000.01	1.37	3708.6	1000.01	286	15.23	2.18	244.87	11.8
MN-RC-0009	29	30	27452.47	10000.01	42.1	13.43	42.86	144.55	6.14	9798.5	1.01	2146	884.07	180.8	17.2	1.49	142.9	8.2
MN-RC-0009	30	31	26759.96	10000.01	42.8	14.62	44.49	147.53	6.41	9154.7	1.07	2181	874.86	192.8	17.29	1.59	150.36	9.1
MN-RC-0009	31	32	28438.02	10000.01	37.61	12.59	41.47	91.47	5.68	10000.01	0.82	2730.6	1000.01	191.9	9.47	1.38	141.97	7
MN-RC-0009	32	33	11318.86	4578.3	19.73	7.22	22.95	49.61	3.03	3181.5	0.5	1172.2	426.26	109.5	4.82	0.81	80.14	4.4
MN-RC-0009	33	34	18190.56	7139.3	33.17	12.1	33.11	110.01	5.02	5867.1	0.9	1457.8	586.78	138.9	12.6	1.29	119.08	7.2
MN-RC-0009	34	35	5785.68	2251	32.84	10.31	31.19	89.39	4.75	1256.2	0.66	785.8	230.21	116.8	9.77	1.12	110.51	5.9
MN-RC-0009	35	36	5826.65	2389.7	17.14	6.21	20.32	60.25	2.64	1287	0.41	787.6	243.6	84.3	6.42	0.74	63.71	3.8
MN-RC-0009	37	38	5042.73	1949.7	33.86	12.51	27.52	79.16	5.27	996.1	0.93	739.9	208	102.2	9.41	1.4	126.75	8
MN-RC-0009	38	39	5547.97	2226.2	28.55	9.67	24.76	73.38	4.19	1190.5	0.7	741.2	225.18	95.1	8.42	1.14	98.54	6.2
MN-RC-0009	39	40	5166.25	1999.3	33.86	12.11	27.99	79.65	5.09	1054.8	0.92	734.9	210.48	103.7	9.22	1.29	125.37	7.5
MN-RC-0009	40	41	6724.90	2613.5	29.18	9.92	26.73	78.14	4.45	1717.7	0.76	788.2	247.45	100.3	8.86	1.07	105.15	6.3
MN-RC-0009	41	42	10552.97	4130	30.77	10.52	29.69	89.68	4.57	3027.4	0.8	1068.2	363.58	121.6	10.44	1.14	110.6	6.6
MN-RC-0009	45	46	7699.19	2957.5	46.87	14.34	44.86	126.68	6.62	1561.7	0.99	1137.1	316.56	174.1	13.73	1.51	157.66	9
MN-RC-0009	47	48	5349.76	2122.5	24.83	9.46	22.26	64.56	3.69	1235.2	0.69	681.7	207.95	84.8	7.6	0.98	92.21	5.9
MN-RC-0009	48	49	5388.69	2091.5	28.48	10.1	25.32	71.91	4.11	1224.9	0.82	713.7	209.99	94.8	8.42	1.2	105.08	6.7
MN-RC-0009	50	51	5547.31	2301.3	11.76	4.55	14.33	43.58	1.86	1376	0.33	651.2	214.99	62	4.82	0.46	45.24	3
MN-RC-0010	0	1	8972.55	3551.7	33.64	12.5	29.04	87.38	5.3	2385	1.16	971.7	319.16	113.3	10.28	1.52	125.59	8.2

MN-RC-0010	1	2	8104.30	3178.8	42.99	15.6	34.49	100.66	6.53	1917.1	1.33	998.4	301.36	126.4	11.91	1.82	164.62	10.4
MN-RC-0010	2	3	7088.23	2743.2	42.22	15.45	34.94	101.99	6.4	1566.2	1.26	951.7	272.88	127.8	11.81	1.76	158.11	10
MN-RC-0010	3	4	8159.83	3151.3	49.34	18.12	39.58	121.03	7.67	1812.5	1.56	1080.7	315.59	147.2	13.69	2.13	186.83	12.1
MN-RC-0010	4	5	6528.51	2436	52.67	18.23	41.2	126.85	7.8	1188.5	1.43	1046.1	278.5	156.9	14.46	1.97	185.4	11.6
MN-RC-0010	5	6	8271.86	3158.9	57.72	19.37	48.3	144.77	8.48	1608.4	1.62	1254	345.93	183	16.18	2.14	195.19	12.4
MN-RC-0010	6	7	8040.07	3042.3	62.2	21.13	49.23	146.34	9.13	1527.4	1.64	1242.8	341.45	178.7	16.68	2.21	203.79	13
MN-RC-0010	7	8	8905.59	3437.5	58.09	20.71	48.97	141.96	8.67	1798.7	1.56	1300.7	367.46	180.9	16.57	2.32	200.46	12.4
MN-RC-0010	8	9	10148.25	3906.1	63.03	22.18	52.01	151.05	9.37	2170.1	1.71	1418.1	416.91	189.4	17.35	2.48	222.58	14.2
MN-RC-0010	9	10	5766.97	2197.9	38.44	13.03	28.14	92.63	6.7	1184.2	1.12	849.4	241.88	107	10.34	1.54	137.33	9.2
MN-RC-0010	10	11	10170.36	3866.1	77.09	26.72	62.15	182.69	11.56	1803.5	1.85	1621.8	462.91	234.8	21.24	2.95	282.18	15.9
MN-RC-0010	11	12	7162.72	2719.7	56.75	19.93	44.58	130.51	8.65	1278.1	1.59	1138.7	305.09	164.4	15.02	2.23	209.64	12.8
MN-RC-0010	17	18	5845.75	2245.4	40.03	14.41	31.17	94.48	5.99	1211.7	1.21	827.2	230.99	120.4	10.76	1.61	141.08	9.5
MN-RC-0010	18	19	6470.47	2452.3	46.01	15.96	37.01	116.73	6.8	1254.7	1.39	992.5	273.15	138.8	12.68	1.86	158.56	10.9
MN-RC-0010	19	20	5283.79	2007.4	37.74	13.7	29.69	88.23	5.75	1101.2	1.29	736.3	207.06	108.2	10.13	1.61	146.72	10.1
MN-RC-0010	20	21	5087.90	1948.4	35.33	13.21	27.25	80.84	5.56	1069.8	1.19	701.8	198.67	99.1	9.21	1.55	137.39	8.9
MN-RC-0010	21	22	10492.62	4161.8	60.71	20.95	53.36	157.06	9.01	2044.6	1.6	1534.3	462.78	205.3	17.78	2.28	207.93	13.2
MN-RC-0010	22	23	25461.94	10000.01	128.41	36.98	122.1	369.49	17.43	5167.2	2	3959.9	1000.01	490.7	40.74	3.54	377.97	18.1
MN-RC-0010	23	24	5059.63	1954.6	32	11.77	25.51	76.21	4.96	1098.5	1	680.2	196.95	95.4	8.66	1.29	120.5	7.5
MN-RC-0010	24	25	16686.26	6339.5	127.22	41.78	104.35	305.55	18.65	2784.1	2.48	2839.6	777.15	395	34.68	4.32	437.29	21.8
MN-RC-0010	25	26	25682.55	10000.01	177.2	54.89	154.84	454.19	25.28	4364.3	3.08	4438.3	1000.01	592.6	50.84	5.39	566.49	27.5
MN-RC-0010	26	27	11392.95	4428.2	78.59	26.59	65.72	192.76	11.69	2016.4	1.75	1806.8	527.33	254	21.83	2.79	269.6	15.2
MN-RC-0010	27	28	10881.52	4319.6	45.83	15.85	39.64	116.88	6.72	2782.6	1.17	1227.8	393.54	144.6	13.74	1.67	164.63	9.7
MN-RC-0010	28	29	7305.97	2875.1	36.91	12.72	30.97	92.15	5.52	1733.1	1.02	906.7	275.3	114.7	10.43	1.38	129.22	7.8
MN-RC-0010	29	30	5176.87	2008.4	32.78	11.65	24.61	75.9	5.11	1101.6	0.84	713.7	214.59	94.6	8.42	1.26	114.98	7.3
MN-RC-0010	30	31	6493.40	2516.8	36.98	13.05	30.74	88.4	5.61	1481.6	0.99	841.9	257.11	113.1	10.33	1.41	132.57	8.4
MN-RC-0012	1	2	7315.43	2799.2	52.94	19.75	37.32	98.4	8.33	1553.8	1.34	986	291.42	139.7	10.42	2.07	222.98	11.2

MN-RC-0013	2	3	6842.12	2718.2	42.64	17.34	30.86	77.37	6.94	1428.5	2.88	908.3	277.76	118.6	9.29	3.39	180.27	11
MN-RC-0015	34	35	6485.59	2678.1	22.43	8.66	19.45	59.98	3.65	1628.4	0.99	682.2	237.95	73.1	7.25	1.19	101.78	7.4
MN-RC-0015	35	36	6026.56	2413	27.34	10.9	21.57	68.77	4.48	1447.8	1.19	694.9	229.76	79.6	8.13	1.42	122.19	8.6
MN-RC-0015	36	37	12703.85	5318.9	34.13	13.98	32.34	105.66	5.56	3175.6	1.67	1367.3	484.64	124.9	12.67	2	149.29	11.9
MN-RC-0015	37	38	12402.80	5274.2	19.37	8.53	21.3	75.12	3.17	3383.6	0.93	1155.3	445.91	91.7	9.24	1.06	89.46	6.8
MN-RC-0016	1	2	6802.49	2691.7	35.95	13.57	28.47	90.82	5.9	1507.6	1.24	876	274.29	100.8	11.06	1.57	153.49	8.7
MN-TH-0001	0	1	8290.73	3262.2	36.01	14.17	28.35	71.68	5.98	1974.5	1.52	1081.6	315.38	110.7	8.7	1.99	150.32	9
MN-TH-0001	1	2	9661.09	3799.8	40.02	15.6	30.2	78.53	6.61	2381.2	1.41	1206.3	361.17	118.5	9.53	1.99	178.91	10.3
MN-TH-0001	2	3	10783.43	4202.5	49.55	18.18	40.82	102.34	8.01	2455.2	1.74	1505.3	423.06	157.3	12.07	2.3	207.95	12
MN-TH-0001	3	4	5628.31	2162.2	30.19	11.18	23.51	59.38	4.93	1232.7	1.08	815.1	224.53	91	7.03	1.44	128.06	7.6
MN-TH-0001	5	6	16303.03	6754.8	21.29	9.34	21.8	54.6	3.63	4641.8	1	1607.4	572.77	100.9	6.77	1.25	109.67	7
MN-TH-0001	6	7	13422.54	5530.9	24.19	10.56	21.67	55.41	4.12	3667.2	1.2	1413.8	482.68	97.7	6.9	1.49	127.65	8.3
MN-TH-0001	9	10	8855.38	3571.7	24.87	9.62	21.31	54.41	4.04	2322.5	0.99	1015.3	321.45	86.6	6.6	1.28	108.23	7
MN-TH-0001	11	12	5289.91	1979.1	31.52	10.54	27.34	69.07	4.68	1027	0.92	894.1	225.02	107.5	7.79	1.32	120.04	6.7
MN-TH-0001	12	13	5942.02	2293.4	29.36	10.08	25.94	65.56	4.57	1245.1	0.91	915.5	246.16	101.4	7.64	1.31	115.75	6.7
MN-TH-0001	13	14	9702.34	3831.8	38.24	12.67	34.38	84.3	5.7	2243.4	1.12	1336.2	380.91	137.4	10.06	1.58	152.34	8.3
MN-TH-0002	0	1	7661.79	2997.5	38.46	13.97	30.7	74.16	6	1797.5	1.19	995	290.4	119.5	7.5	1.65	152.35	9.1
MN-TH-0002	1	2	8372.23	3307.4	36.07	13.53	28.66	67.97	5.7	2134.9	1.06	968.8	304.23	108.8	6.77	1.59	146.85	8.8
MN-TH-0002	2	3	10167.33	4006.9	37.33	14.26	30.09	73.92	5.96	2715.5	1.32	1122.6	364.88	121.9	7.13	1.76	159.21	10.2
MN-TH-0002	3	4	8994.90	3510.5	36.98	13.43	30.04	72.61	5.76	2338	1.21	1041.2	331.86	118.2	7.08	1.63	154.67	9.2
MN-TH-0002	4	5	8854.16	3488	33.67	12.12	27.57	65.5	5.27	2361.7	1.01	984.5	313.81	107.7	6.34	1.38	136.57	7.9
MN-TH-0002	5	6	7300.85	2825.6	35.77	13.03	28.32	67.93	5.52	1794.9	1.11	914.3	270.67	110.1	6.81	1.51	142.59	8.8
MN-TH-0002	6	7	6783.83	2614.4	35.87	12.48	29.09	71.65	5.54	1595	1.13	895.5	255.92	112.4	6.95	1.5	139.99	8.6
MN-TH-0002	7	7.3	7009.96	2696.8	35.91	13.36	29.06	69.61	5.47	1683.4	1.1	905.4	260.58	112.4	6.99	1.6	147.41	9.3
MN-TH-0003	0	1	13300.65	5497.6	34.06	12.39	28.18	68.06	5.39	3689.3	1.02	1276.4	462.51	113.6	6.29	1.55	143.68	8.4
MN-TH-0003	1	2	16281.13	6394.6	76.41	25.97	64.87	154.5	11.53	3823.2	1.87	2111.4	635.64	254.5	15.09	3.04	299.5	16.2

MN-TH-0003	2	3	16061.92	6379.8	61.1	22.56	49.09	116.17	9.63	4209.2	1.5	1804.7	568.82	195.8	11.33	2.58	255.57	13.2
MN-TH-0003	3	4	21956.93	8641.7	95.61	29.65	87.13	204.78	13.86	5195.2	1.97	2887.2	848.28	345.4	19.74	3.32	343.85	16.9
MN-TH-0003	4	5	7027.81	2673.9	45.51	14.12	41.8	97.84	6.56	1297.3	1.13	1168.3	305.9	160.5	9.47	1.66	162.19	9.2
MN-TH-0003	6	7	6444.84	2471.2	38.88	13.49	32.04	77.56	5.84	1372	1.25	942.6	254.29	125.1	7.74	1.62	144.12	9.4
MN-TH-0005	3	4	5776.66	2303.2	28.89	11.3	21.88	59.78	4.7	1307.8	0.99	735.8	217.28	83.8	7.64	1.34	133.49	7.7
MN-TH-0006	4	5	5356.92	1991.2	38.01	13.85	30.47	82.81	6.43	1073.9	1.49	807.8	234.69	115.3	9.96	1.8	149.77	10.2
MN-TH-0006	13	14	6545.10	2338.2	57.2	19.88	45.74	132.02	9.24	1084.3	1.97	1155.3	312.83	173.3	15.57	2.56	217.12	15.1
MN-TH-0007	2	3	8097.98	3078.1	56.9	25.15	37.62	101.27	9.84	1773.9	2.33	1078.9	328.29	142.4	12.72	2.86	235.36	17
MN-TH-0007	3	4	5231.83	1960.7	38.22	14.12	28.66	77.37	6.33	1076.9	1.21	775.7	222.08	108.7	9.23	1.71	131.9	9.2
MN-TH-0007	5	6	5633.61	2018.4	53.11	18.33	42.43	112.47	8.35	940.9	1.9	1011.1	261.94	158.1	13.16	2.2	151.72	12.3
MN-TH-0007	6	7	5769.99	2047.3	54.76	19.91	44.43	116.07	8.64	926	1.94	1072.5	272.01	167.9	13.59	2.22	162.17	13.1
MN-TH-0007	9	10	7271.79	2643.3	60.8	23.11	47.91	124.54	9.63	1289.5	1.8	1217.9	328.16	183.7	14.35	2.72	237.18	14.6
MN-TH-0007	10	11	6764.92	2493.4	50.29	18.09	41.79	104.39	7.89	1278.7	1.4	1095.3	301.78	158.5	12.53	2.17	191.03	11.4
MN-TH-0007	11	12	6335.98	2374.7	47.18	16.72	38.74	93.75	7.18	1153.7	1.29	1042.4	290.84	146.2	11.76	1.95	167.01	10.5
MN-TH-0007	12	13	6640.80	2476.2	49.51	17.3	38.52	97.24	7.61	1290.8	1.33	1040	295.32	146	11.85	2.01	178.91	10.5
MN-TH-0007	13	14	5499.73	2053.7	43.69	15.51	32.65	86.17	6.72	1012.1	1.25	879.8	248.33	128.1	10.45	1.89	159.39	9.8
MN-TH-0008	3	4	6399.93	2480.2	47.05	16.91	35.11	92.88	7.44	1221.2	2.83	945	272.96	132.7	10.87	1.99	179.1	10.6
MN-TH-0008	9	9.5	5043.23	1879.9	44.36	16.35	33.76	88.89	7.04	839.2	1.52	842.4	230.66	127.8	10.3	1.87	165.14	10.3
MN-TH-0009	3	4	6124.64	2378.6	40.19	15.33	30.17	82.97	6.8	1225.7	1.32	874.2	265.3	120.1	9.7	1.82	159.91	10.4
MN-TH-0009	4	5	6591.10	2557.1	43.33	15.86	33.22	87.09	6.84	1312.3	1.32	952	291.34	130.2	10.32	1.96	166.48	11.4
MN-TH-0009	5	6	5626.62	2078.7	50.93	18.48	38.09	100.56	8.05	943.6	1.41	935.3	262.55	144.8	11.87	2.18	188.26	11.8
MN-TH-0009	6	7	7754.12	2883.8	68.57	23.4	54.38	140.19	10.9	1261.6	1.61	1324.9	368.62	206.4	16.79	2.59	234.54	14.2
MN-TH-0009	7	8	5361.49	1972	49.86	18.39	36.89	97.22	8.11	883.8	1.43	899.8	251.12	136.4	11.55	2.21	189.48	11.6
MN-TH-0009	8	9	12436.58	4713.4	112.16	37.88	86.84	219.89	17.16	1962.8	2.73	2094.4	590.42	323.8	26.96	4.24	388.86	22.8
MN-TH-0009	9	10	21240.73	7975.9	192.71	64.72	150.56	381.33	29.8	3377.5	4.41	3649.7	1000.01	558.7	46.41	6.91	639.58	35.6
MN-TH-0009	10	11	28425.57	10000.01	268.69	88.93	215.58	544.75	40.24	4974.2	5.91	5294.8	1000.01	811.7	66.04	9.52	872.69	49.1

MN-TH-0009	11	12	34862.27	10000.01	362.22	122.75	303.29	767.66	55.69	7106.9	8.22	7626.2	1000.01	1000.01	91.91	13.49	1200.6	68.6
MN-TH-0009	12	13	21026.92	7925.6	177.67	63.8	142.39	359.42	27.74	3424.5	4.93	3555.5	999.02	533.8	43.42	7.17	626.95	39
MN-TH-0009	13	14	12910.79	4905.5	108.81	37.72	85.74	220.2	16.89	2086.3	2.82	2168	611.34	325	26.69	4.23	388.27	21.8
MN-TH-0009	14	14.95	7954.70	2962.3	69.46	24.25	53.9	134.13	10.79	1304	1.8	1353.5	383.3	203.8	16.41	2.86	247.19	15
MN-TH-0013	0	1	10020.16	4003.9	32.34	11.89	25.16	68.87	5.72	2611.2	1.07	1142.1	381.02	103.3	6.93	1.68	144.91	8.1
MN-TH-0013	1	2	14477.17	5901.4	31.06	12.04	25.85	69.51	5.79	4048.6	1.2	1447.7	523.61	110.7	6.6	1.74	157.11	9.1
MN-TH-0013	2	3	5850.33	2233.4	29.86	11.38	22.45	62.97	5.43	1347.7	1.07	803.7	229.37	90.9	6.69	1.55	134.62	7.7
MN-TH-0013	15	16	6393.36	2551.1	23.58	8.97	19.2	51.81	4.24	1552.3	0.86	795.1	249.41	77	5.27	1.19	107.62	6.1
MN-TH-0013	16	17	11865.79	4858.2	23.84	9.23	20.98	54.65	4.35	3275.5	0.9	1215.4	446.86	90.9	5.16	1.31	111.5	6.7
MN-TH-0014	0	1	16575.50	6938.9	39.12	15.51	33.02	85.76	7.04	4515.3	1.44	1588.9	581.16	137.2	7.81	2.15	177.83	11.6
MN-TH-0014	1	2	10917.93	4544.8	31.31	12.46	27.82	70.01	5.48	2746.8	1.29	1196.3	408.43	114.7	6.4	1.75	138.25	9.7
MN-TH-0015	6	7	14204.06	5926	29.37	10.75	33.5	75.65	4.54	3346.2	1.21	1813.5	589.64	156.5	5.95	1.44	122.31	8.2
MN-TH-0015	7	8	14514.43	5885.9	48.61	16.52	40.88	105.61	8.9	3179.5	1.67	2063.4	643.53	183	8.71	2.12	186.44	12.5
MN-TH-0015	8	9	7312.44	2706.1	62.11	24.06	46.2	115.14	9.78	1281.5	2.33	1205.7	312.57	169.6	12.19	3.03	263.08	18.1
MN-TH-0016	5	6	5577.13	2037.8	45.23	16.2	38.44	104.68	7.89	855.6	1.23	1017	272.23	162	12.41	1.95	172.5	11
MN-TH-0016	6	7	6750.01	2389.3	62.09	23.08	49.71	138.48	10.71	945.5	1.88	1301.9	336.62	208.5	16.34	3.01	250.79	16.1
MN-TH-0016	7	8	6946.44	2445	64.85	25.52	52.44	144.3	11.84	933	2.15	1351.6	347.56	216.4	17.03	3.4	285.93	18.4
MN-TH-0016	8	8.9	6238.66	2207.5	58.18	21.33	47.84	128.82	9.98	811.4	1.62	1239.6	316.54	202	15.36	2.84	240.26	14.5
MN-TH-0017	0	1	6524.76	2517.4	32.19	10.59	23.22	68.37	6.72	1415.2	0.91	983.6	284.88	90.3	6.16	1.33	118.51	7.4
MN-TH-0017	1	2	9501.15	3888.2	32.89	13.32	24.39	67.99	5.78	2510.1	1.17	974.3	321.66	97.3	6.61	1.67	149.31	9.4
MN-TH-0017	7	8	9863.34	3966.2	32.75	12.89	26.77	71.23	5.55	2663.7	1.05	1032	337.33	105.7	6.89	1.58	141.61	8.9
MN-TH-0017	9	10	8857.39	3550.3	28.07	11.13	21.54	58.7	4.86	2480.7	0.9	881.8	290.54	87	5.63	1.4	125.5	7.5
MN-TH-0017	10	11	6232.95	2501.4	19.61	7.7	17.3	45.03	3.29	1649.4	0.71	692.9	213.66	72.6	4.14	0.94	83.61	5.6
MN-TH-0018	0	1	15297.99	6333.8	36.14	14.47	30.8	82.51	6.49	4260.4	1.34	1427.2	531.04	127.3	7.59	1.86	179.31	11
MN-TH-0018	1	2	7008.61	2826.9	24.46	9.74	21.61	54.36	4.33	1806.8	0.98	766.7	248.25	83.1	5.32	1.33	116.47	7.7
MN-TH-0018	5	6	5300.84	2135.4	17.76	7.22	15.52	39.26	3.14	1396.7	0.76	568.7	183.84	60.5	3.71	0.96	82.33	5.9

MN-TH-0018	7	8.3	6259.28	2616.5	15.22	6.07	13.83	35.28	2.69	1651.4	0.66	632.8	220.62	57.7	3.18	0.84	78.08	5.2
MN-TH-0019	0	1	12667.07	5432	36.61	13.27	32.66	79.38	5.61	3021	1.12	1376.9	506.03	133.8	7.12	1.67	152.37	9.1
MN-TH-0019	1	2	12569.43	5144.6	58.31	20.46	50.6	122.66	9.01	2584.7	1.71	1722.4	544.81	202.4	11.49	2.54	232.97	14.4
MN-TH-0019	2	3	15226.84	5998.4	75.61	26.01	64.72	154.26	11.24	3308.3	1.81	2133.1	636.62	254.6	15.2	2.95	290.49	16.4
MN-TH-0019	3	4	10543.81	4177.6	50.39	18.19	43.86	104.34	7.66	2369	1.56	1379.5	439.36	169.4	10.01	2.24	207.54	12.9
MN-TH-0019	5	6	6103.77	2527.4	16.89	6.62	14.41	37.31	2.79	1604.5	0.6	630.5	220.96	60.3	3.33	0.88	75.96	5.2
MN-TH-0020	0	1	12006.93	5067.6	35.55	14.81	27.58	76.15	5.85	2924.5	1.34	1332.2	447.34	115.6	6.68	1.94	175.06	10.6
MN-TH-0020	1	2	8559.43	3511.5	33.68	12.76	27.88	71.18	5.16	1972.8	1.17	1065.2	326.69	110.3	6.56	1.66	145.74	9.4
MN-TH-0020	2	3	12035.70	4448.1	102.26	32.42	86.64	213.97	14.44	1965.2	2.44	2166.6	527.72	319.8	21.42	3.77	340.24	20.7
MN-TH-0020	3	4	10668.73	4136.6	66.06	24.11	53.92	133.36	9.86	2082.8	2.21	1627	441.54	208.8	12.75	2.85	278.09	17.4
MN-TH-0020	9	10	5396.42	2318.5	14.08	6.31	12.32	32.29	2.33	1200.3	0.71	655.9	214.17	55.2	2.62	0.99	82.65	5.2
MN-TH-0020	10	11	5215.07	2154.6	21.78	8.28	17.98	46.77	3.43	1117.2	0.75	687.9	205.46	71.3	4.25	1.07	101.09	6.3
MN-TH-0021	0	1	6588.51	2684.5	31.35	12.79	23.83	60.06	5.12	1475.4	1.04	820	253.84	93.8	6.04	1.45	140.86	8.4
MN-TH-0021	1	2	7296.47	2933.9	44.94	18.4	31.76	82.33	7.34	1425.8	1.47	1011.4	299.68	122.8	8.39	2.24	215.91	12.5
MN-TH-0021	4	5	5181.85	1918.4	47.17	16.6	37.28	92.18	6.99	866.9	1.29	864.5	220.82	134.8	9.43	1.77	187.84	10.2
MN-TH-0021	5	6	5462.02	2011.2	50.39	18.08	38.76	97.33	7.71	895.2	1.35	925.3	234.45	144.6	10.03	1.98	206.87	11.1
MN-TH-0023	0	1	5349.82	2155.7	16.69	6.26	13.37	35.34	2.73	1406.9	0.66	597.7	194.12	55.3	3.21	0.82	70.77	4.8
MN-TH-0023	2	3	5399.33	2122.9	24.03	9.22	18.78	50.5	4.01	1275.8	0.95	698.9	212.51	75.8	4.76	1.17	99.37	7
MN-TH-0023	4	5	13521.17	5283.5	55.56	18.86	49.19	125.1	8.76	3087.5	1.47	1906.3	553.48	199.4	11.47	2.29	220.82	12.9
MN-TH-0023	7	8	8980.02	3333.6	59.74	21.01	47.74	122.89	9.26	1787	1.59	1447	389.98	184.9	12.25	2.57	225.92	13.3
MN-TH-0023	9	10	6938.58	2804.2	20.8	8.07	16.38	45.67	3.57	1816.9	0.74	761.4	265.23	69	4.14	1.06	96.32	5.9
MN-TH-0023	12	13	8395.53	3383.8	19.76	7.94	17.2	46.37	3.34	2348.6	0.88	853.5	306.52	72.6	4.02	1.07	91.63	6.2
MN-TH-0024	0	1	8257.80	3154.6	33.6	12.54	27.64	69.42	5.37	2163.2	1.03	984.2	318.68	110.5	6.58	1.53	145.91	8.7
MN-TH-0024	1	2	7124.99	2691.6	34.16	12.82	25.73	66.88	5.47	1816.1	1.08	882.5	267.78	103.6	6.68	1.66	151.13	8.6
MN-TH-0024	2	3	5485.11	2079.6	28.02	10.78	21.64	55.23	4.51	1347.8	0.96	700.3	209.27	84.2	5.59	1.31	120.78	7.4
MN-TH-0024	3	4	7798.98	2982.4	32.29	13.29	23.52	61.41	5.38	2114	1.18	873	282.68	92.7	6.1	1.67	151.78	9.1

MN-TH-0024	4	5	6417.82	2453.6	26.47	9.86	21.84	56.84	4.38	1657.7	0.96	782	242.26	87.3	5.4	1.28	116.72	7.4
MN-TH-0024	5	6	7268.67	2817.8	27.68	10.84	21.34	56.97	4.65	1915	0.98	843.8	272.42	87	5.35	1.38	126.51	7.9
MN-TH-0024	6	7	13279.21	5168.9	40.36	14.94	34.37	87.43	6.53	3665.2	1.39	1462.9	497.89	141.5	8.11	1.91	185.88	11.1
MN-TH-0024	7	8	15955.46	6459.7	19.4	8.86	18.85	51.28	3.45	4820.8	1.11	1444.5	570.68	92.4	3.54	1.34	111.92	8.1
MN-TH-0024	8	9	16205.08	6447.7	40.33	15.59	36.77	92.09	6.41	4432.5	1.56	1779.8	613.42	161.5	8.04	1.99	177.85	12.3
MN-TH-0024	9	10	12329.18	4726.8	53.41	18.4	47.18	114.97	8.12	2973.7	1.45	1637.3	508.81	190.3	10.96	2.37	212.12	12.4
MN-TH-0024	10	11	12427.75	4723.7	56.08	18.71	49.89	122.5	8.38	2934.5	1.43	1723.6	510.09	200.9	11.55	2.19	226.63	11.8
MN-TH-0024	11	12	10999.84	4174.1	48.91	17.4	41.76	105.01	7.62	2682	1.36	1458.6	440.27	166.8	10.03	2.02	214.97	11.2
MN-TH-0024	12	13	8979.59	3426.1	37.09	13.21	32.39	80.99	5.66	2242.9	1.12	1157	359.06	130.7	7.59	1.58	155.64	9.1
MN-TH-0024	13	14	7681.74	2906.1	38.77	13.59	32.12	83.37	6.01	1792.8	1.28	1056	314.54	128.5	8.02	1.68	159.4	9.8
MN-TH-0024	15	16	6206.76	2391.1	24.69	9.52	20.01	51.72	3.94	1604.2	0.86	743.9	233.89	81.8	4.83	1.23	114.94	7
MN-TH-0024	17	18	7440.37	2854.8	31.88	13.02	24.21	63.88	5.42	1918.6	1.27	880.7	276.85	97.3	6.04	1.64	159.17	9.3
MN-TH-0024	18	19	7477.30	2880.7	32.91	12.36	25.63	66.79	5.34	1873.7	1.08	926.7	283.35	105	6.39	1.56	146.91	8.6
MN-TH-0024	19	19.85	11564.03	4450.1	45.13	15.47	43.64	101.13	7.03	2853.2	1.24	1512.7	466.86	170	8.73	1.89	179.33	10.1
MN-TH-0025	0	1	7296.13	2837	32.87	10.87	23.31	66.36	5.41	1806.3	1.05	908.1	275.79	103.6	6.37	1.53	136.29	8.3
MN-TH-0025	1	2	9344.40	3700.9	33.37	11.88	24.44	68.24	5.5	2428.1	1.1	1058	364.88	109	6.45	1.58	148.37	9.1
MN-TH-0025	2	3	16402.98	6615.5	40.37	13.3	32.16	90.55	6.53	4467.3	1.42	1749.7	629.5	153.7	7.79	1.86	175.97	10.9
MN-TH-0025	3	4	8443.20	3463.9	15	5.5	12.33	34.22	2.54	2423.3	0.63	801.2	311.74	58.1	2.83	0.83	68.5	4.5
MN-TH-0025	4	5	5519.26	2268	10.74	4	9.23	26.11	1.92	1531.8	0.52	557.1	200.84	43.4	2.22	0.64	49.97	3.4
MN-TH-0025	5	6	7575.80	3062.7	20.66	7.35	17.14	47.19	3.48	1990.8	0.76	848.1	288.06	78.3	4.2	1.01	88.58	6
MN-TH-0025	6	7	13231.55	5194.2	48.78	15.5	40	108.57	7.68	3189.2	1.61	1741.2	540.89	181.1	10	2.16	196.62	12.2
MN-TH-0025	7	8	14545.52	5905.6	35.21	12.71	26.97	75.49	5.82	3984	1.37	1509	546.94	127.4	6.53	1.87	161.01	10.9
MN-TH-0025	8	9	12090.02	4907.1	25.3	9.05	20.18	56.19	4.31	3417.2	0.98	1194.6	450.57	96.5	4.87	1.28	120.21	7.7
MN-TH-0025	9	10	6368.77	2501.8	23.88	8.33	17.83	50.39	3.91	1643.2	0.88	747.1	239.21	79.5	4.92	1.21	103.69	6.9
MN-TH-0025	10	11	7973.59	3131.5	27.14	9.5	19.96	56.14	4.53	2134.9	1.02	884.7	304.61	90.5	5.32	1.31	122.71	7.8
MN-TH-0025	11	12	11802.14	4707.3	24.55	9.23	17.86	51.16	4.2	3533.6	0.96	1082.2	421.35	85.8	4.4	1.27	118.26	7.4

MN-TH-0025	12	13	6916.85	2729.7	18.64	6.71	14.71	39.77	3.08	1984.3	0.65	701.7	242.4	65	3.7	0.91	84.5	5.3
MN-TH-0025	13	14	8652.94	3499.3	17.18	6.05	14.36	40.04	2.86	2505	0.62	828.8	316.26	67.4	3.42	0.83	76.96	4.7
MN-TH-0025	14	15	26554.20	10000.01	34.2	10.92	33.46	93.3	5.53	8795.2	1	2430.9	921.87	176.6	6.88	1.55	143.98	8
MN-TH-0025	15	16	29180.52	10000.01	44.83	14.31	43.96	123.17	7.05	10000.01	1.27	3240.9	1000.01	225.8	8.96	2	182.56	11
MN-TH-0025	16	17	15789.40	6294.1	30.41	9.47	26.39	73.73	4.73	4655.2	0.9	1544.8	572.42	128.7	6.13	1.33	119.53	7.4
MN-TH-0025	17	18	19510.60	7908.8	31.81	10.85	25.69	74.68	5.24	5853.1	1.12	1774.5	685.06	129.5	6.08	1.62	133.65	9
MN-TH-0025	18	19	6446.97	2515.6	24.11	8.03	17.78	49.39	3.92	1715.7	0.84	739.2	234.82	78	4.7	1.15	99.82	6.6
MN-TH-0025	19	20	8344.18	3309.9	24.72	8.83	18.78	53.39	4.14	2297.3	0.89	880.4	314.24	85.2	4.98	1.28	107.71	7.1
MN-TH-0026	0	1	19355.23	8168.2	48.96	19.82	35.58	85.37	8.43	5536.9	1.52	1607.2	608.36	143.7	11.8	2.4	220.98	12.4
MN-TH-0026	1	2	9981.65	3995.2	35.3	13.66	27.49	65.22	5.9	2719.5	1.2	1021.5	350.46	109.8	8.19	1.65	150.22	9.1
MN-TH-0026	2	3	8338.38	3317.4	31.25	12.57	24.96	59.13	4.9	2183.5	1.08	923.9	303.96	102.2	7.24	1.51	130.84	8.5
MN-TH-0026	3	4	14124.26	5781.8	25.94	10.07	24.47	53.98	4.27	4128.6	1.05	1304.5	485.2	107.8	6.94	1.3	109.9	7.6
MN-TH-0026	5	6	5341.99	2077.1	24.67	9.3	18.45	43.37	4.09	1401.3	0.91	599.1	193.08	71.3	5.38	1.17	99.76	7
MN-TH-0026	6	7	5809.75	2275.3	27.89	10.85	21.33	50.91	4.61	1459.5	1.05	678.3	212.98	82.5	6.29	1.34	114.17	7.8
MN-TH-0026	7	8	6796.82	2686.1	28.73	11.37	22.09	52.65	4.91	1759.8	0.97	755.9	247.07	88.8	6.57	1.4	122.58	8
MN-TH-0026	8	9	6197.30	2437.2	24.38	9.78	18.21	44.3	4.07	1667.7	0.89	661.5	221.68	74.9	5.75	1.21	107.03	7
MN-TH-0026	9	10	8477.67	3337.3	32.65	10.26	22.18	59.41	6.82	2225.6	0.94	989.6	332.29	89.1	6.74	1.26	112.31	7
MN-TH-0026	10	11	5237.89	2044.8	25.79	9.57	19.9	48.18	4.11	1291.1	0.82	631.7	196.19	79.6	5.97	1.09	101.89	6.7
MN-TH-0026	12	13	9544.98	3689.4	39.13	14.41	32.15	75.69	6.09	2553.4	1.15	1077.2	343.05	128.8	9.07	1.7	160.92	9.5
MN-TH-0026	14	15	17258.26	7260.9	26.5	9.56	23.45	51.23	4.21	5312.2	0.79	1304	514.21	104	7.27	1.18	102.47	6.1
MN-TH-0026	17	18	15812.31	6290.3	30.33	11.59	25.97	59.42	4.99	5056.8	1.06	1268.9	494.14	108.7	8.1	1.41	123.12	7.6
MN-TH-0026	18	19	26400.04	10000.01	28.79	11.1	27.84	61.77	4.71	9588.9	0.86	1783.1	755.95	129.6	8.82	1.34	118.79	7.3
MN-TH-0026	19	19.9	8962.79	3549	26.85	9.51	21.19	50.44	4.21	2637.1	0.76	841	300.02	87.9	6.36	1.15	104.81	6.4
MN-TH-0027	0	1	12458.94	4914.7	50.16	19.38	35.14	86.22	8.23	3490.3	1.37	1244.5	415.32	132.1	11.37	2.1	203.76	11.5
MN-TH-0027	1	2	8663.84	3394.4	38.22	14.05	28.24	65.72	6.08	2325.8	1.05	939.5	301.24	106.2	8.6	1.7	149.72	9
MN-TH-0027	2	3	6247.28	2451	30.05	10.58	23.14	52.19	4.76	1565.1	0.83	744.1	229.71	87.6	6.93	1.26	114.54	6.8

MN-TH-0027	7	8	5955.53	2219.9	44.28	15.18	34.77	80.13	6.79	1182.9	1.11	929.5	249.63	132.3	10.14	1.75	160.65	9.5
MN-TH-0027	9	10	5576.94	2114.8	33.59	12.51	24.58	58.72	5.46	1341.3	0.95	707.7	207.29	91.3	7.34	1.57	139.26	8.3
MN-TH-0027	11	12	9105.86	3483.3	46.5	15.82	37.56	90.51	7.9	2148.7	1.14	1244.4	363.93	144.8	10.82	1.75	162.16	9.3
MN-TH-0027	12	13	5393.23	2041	31.36	11.86	24.31	57.27	5.14	1270.2	0.97	716	208.57	93	7.03	1.32	123.72	7.4
MN-TH-0027	13	14	8080.60	3043	60.13	19.59	48.02	110.29	9.16	1534.4	1.3	1297.4	346.91	181.1	13.71	2.13	212.87	11.3
MN-TH-0027	14	15	7110.91	2685	47.51	17.21	34.59	84.06	7.54	1595.7	1.14	983.6	279.05	130.2	10.44	1.95	175.69	9.9
MN-TH-0027	15	16	5115.96	1935	35.83	12.82	26.72	64.88	5.53	1086.8	0.95	739	206.69	98.1	8.35	1.45	132.64	7.6
MN-TH-0030	0	1	9557.18	3709.8	45.44	17	32.24	79.12	7.71	2513.2	1.19	1082.6	342.06	119.2	10.31	1.87	179.01	10.1
MN-TH-0030	1	2	8260.30	3193.6	49.37	17.49	38.48	88.44	7.85	1853.8	1.35	1113.8	326.9	142.5	11.38	2.04	186.83	10.7
MN-TH-0030	3	4	7762.08	3018.4	44.06	16.78	33.76	77.78	7.29	1765.9	1.34	1028.3	301.84	127.1	10.16	2.11	173.85	10.8
MN-TH-0030	4	5	7762.71	3020.9	44.34	15.87	34.51	78.58	7.06	1704.6	1.23	1078.7	313.86	133.3	10.13	1.85	165.97	10.1
MN-TH-0031	0	1	7386.02	2951.5	36.88	13.45	28.15	68.69	5.82	1768.6	1.07	877	276.9	107.7	8.42	1.62	145.1	8.5
MN-TH-0031	1	2	7265.86	2889.2	36.45	13.72	26.62	65.31	6.01	1800.1	1.06	830.3	262.81	103.2	8.07	1.64	143.58	8.5
MN-TH-0031	2	3	7007.03	2815.5	30.74	11.89	24.42	56.69	5.05	1762.3	0.97	780.8	256.98	93.5	7.27	1.34	121.37	8
MN-TH-0031	5	6	6723.59	2692.3	23.87	8.92	19.58	45.55	3.83	1827.7	0.79	694.3	235.37	77.9	5.74	1.13	92.88	6.2
MN-TH-0031	6	7	8462.56	3437.1	22.37	8.97	17.89	41.57	3.56	2482.4	0.72	753.7	276.56	74	5.52	1.02	88.93	6
MN-TH-0031	12	13	7094.72	2754.6	47.24	17.74	34.45	81.91	7.71	1533.2	1.26	955.8	280.98	132.1	10.19	2.09	179.37	10.8
MN-TH-0031	13	14	5718.59	2349.9	12.87	4.29	11.59	24.83	2.1	1669.3	0.33	514.2	189.87	48	3.44	0.54	46.07	2.8
MN-TH-0033	0	1	7981.21	3188.9	34.06	12.68	27.34	64.51	5.48	1964.5	1.2	934.4	314.65	106.9	7.95	1.59	135	9.1
MN-TH-0033	1	2	12859.16	5273.7	39.33	15.86	28.93	67.54	6.84	3498.9	1.42	1255.6	473.2	118.8	8.87	1.89	168.86	10.2
MN-TH-0033	2	3	5898.92	2299.6	32.93	11.42	24.65	61.43	5.15	1343.8	0.98	764.8	242.05	100.9	7.45	1.55	126.21	8.1
MN-TH-0033	4	5	8927.30	3579	41.86	16.51	32.56	80.07	6.98	2049.1	1.39	1118.8	365.88	129.6	9.61	2.06	170.13	11.1
MN-TH-0033	5	6	18071.71	7274.8	78.94	28.73	69.12	156.21	12.69	4020.1	2.31	2376.7	769.01	277.5	18.55	3.52	310.78	18.7
MN-TH-0033	6	7	15405.14	6407.6	44.27	16.85	41.42	90.25	7.17	3731.7	1.46	1797.6	632.24	176.4	10.88	1.99	175.38	11.2
MN-TH-0033	7	8	19048.82	7857.8	56.55	22.49	51.22	115.15	9.48	4646.2	1.68	2236.8	769.83	224.8	14.18	2.72	232.01	13.9
MN-TH-0033	9	10	8590.20	3492.5	25.48	9.25	23.01	51.81	4.19	2277.6	0.89	904	328.43	97.6	6.29	1.13	101.18	6.4

MN-TH-0033	10	11	7642.85	2985.8	41.06	15.09	37.82	89.73	6.41	1581.6	1.17	1099.5	333.8	151.9	10.01	1.83	155.37	9
MN-TH-0033	11	12	9488.60	3550.7	71.85	22.92	65.61	152.79	11.18	1563.2	1.44	1676.1	453.48	247.5	17.21	2.63	244.94	12.8
MN-TH-0033	12	13	16628.83	6985.6	37.79	14.44	34.29	77.98	6.19	4317.7	1.3	1732.5	649.72	155.9	9.77	1.71	155.57	10.6
MN-TH-0033	13	14	12111.18	4743.8	68.74	24.44	63.63	143.43	10.66	2368.7	1.74	1835.4	542.09	244.8	16.51	2.73	250.85	14.9
MN-TH-0033	14	15	5921.55	2283.3	39.9	14.22	32.92	77.9	6.61	1125.5	1.15	902.6	263.19	126.3	8.78	1.68	156.43	9.1
MN-TH-0033	16	17	11875.17	4823	61.08	25.24	47.67	120.64	11.19	2394.1	2.15	1614.5	507.59	193.6	13.75	3.06	290.76	17.1
MN-TH-0033	17	18	20022.21	7966.2	91.91	32.97	80.06	182.15	14.73	4519	2.52	2636.4	832.06	321.2	21.33	3.86	355.56	21.2
MN-TH-0033	18	19	12375.71	5126.5	31.98	13.47	29.62	67.42	5.45	3187.1	1.27	1329.7	482.06	127.6	8.31	1.74	138.38	9.7
MN-TH-0033	19	19.9	9139.61	3716.7	34.17	13.55	30.61	69.88	5.72	2124.2	1.15	1135	378.68	125.4	8.62	1.7	142.76	9.5
MN-TH-0034	0	1	9098.32	3740.2	38.14	14.68	29.48	74.43	6.4	2155	1.14	1059.6	349.98	113.6	9.64	1.76	157.32	9.5
MN-TH-0034	1	2	5893.13	2282.5	42.19	16.63	30.12	77.52	7.19	1198.4	1.31	822.7	240.61	106.7	9.88	1.84	175.24	10.4
MN-TH-0035	0	1	5593.56	2212	33.18	10.88	12.27	15.59	5.23	1260.8	1.15	750.4	230.04	94.8	9.97	1.49	124.21	7.6
MN-TH-0035	1	2	9211.97	3897.4	37.73	12.78	3.5	0.04	6.02	2025.1	1.38	1198.1	390.19	113.9	13.15	1.82	148.05	8.8
MN-TH-0035	2	3	5506.34	2079.3	46.15	15.77	19.18	37.36	7.49	1034.3	1.58	872.7	244.64	124.8	12.68	2.11	183.88	10.3
MN-TH-0036	0	1	12268.67	5338.4	32.42	12.93	26.01	60.36	5.5	2942.4	1.13	1308.7	466.86	110.5	8.13	1.6	144.24	9.1
MN-TH-0036	1	2	11540.56	4739	51.62	18.32	41.43	94.55	7.94	2588	1.47	1453.3	453.83	159.6	12.1	2.22	208.75	12.1
MN-TH-0036	2	3	11075.89	4556.8	48.58	18	39.08	89.99	7.53	2499.6	1.42	1379.1	435.9	154.1	11.63	2.11	193.12	11.4
MN-TH-0036	3	4	7256.71	2988.7	30.15	11.1	25.53	55.54	4.68	1594	0.9	949.4	293.22	100.8	7.2	1.37	120.99	7.4
MN-TH-0036	5	6	6787.57	2819	16.72	6.65	13.92	30.4	2.76	1821	0.59	693.6	242.6	60.5	4.36	0.81	73.9	4.7
MN-TH-0036	12	13	7401.02	3084.6	23.91	9.3	19.19	42.47	3.86	1792.9	0.81	853.4	283.22	82.4	6.01	1.21	104.16	6.8
MN-TH-0036	13	14	5723.57	2240.9	37.2	13.81	27.6	63.73	6	1160	1.13	822.9	234.62	103.9	8.16	1.57	149.6	9
MN-TH-0036	14	15	8742.78	3521.9	48.54	18.34	37.2	87.58	7.57	1778.1	1.39	1238.1	360.02	146.5	10.92	2.21	187.04	11.7
MN-TH-0036	14	15	8385.15	3374.3	46.07	16.95	35.47	84.04	7.35	1703.1	1.35	1188.7	349.03	142.5	10.83	2.07	179.59	10.7
MN-TH-0036	15	16	5760.05	2274.3	34.82	12.51	27.85	68.07	5.28	1128.6	0.94	860.9	243.31	108.5	8.22	1.38	130.48	7.9
MN-TH-0036	19	19.65	6482.86	2578.2	36.06	14.08	29.22	69.64	5.78	1352.3	1.06	907.6	262.02	110.5	8.22	1.53	143.92	9
MN-TH-0037	0	1	7661.66	3061.8	37.39	14.54	27.17	64.87	6.33	1801	1.18	935.3	293.13	103.9	8.55	1.87	166.58	9.5

MN-TH-0037	1	2	11437.08	4741.7	33.25	12.67	25.32	59.12	5.38	3061.9	1.16	1147.9	409.45	102.2	8.37	1.72	138.49	9.2
MN-TH-0037	2	3	6227.35	2496.1	29.54	11.16	22.71	55.35	4.77	1435.1	0.94	786.2	242.94	91.6	7.11	1.35	119.1	7.7
MN-TH-0037	4	5	11514.60	4394.5	71.16	23.53	60.82	140.99	11.94	2224.8	1.81	1856.4	511.8	233.5	16.84	2.72	257.26	14.6
MN-TH-0037	9	10	7596.15	3130.2	22.52	9.65	16.36	41.1	4.04	1990.8	0.94	796.9	278.48	70.1	5.66	1.25	104.45	7.7

personal use only

PART C – Drilling Summary – all holes

Hole number	ANM_ID	Depth	Azi	Dip	Type	Survey	Datum	UTM_NORTE	UTM_LESTE	RL
MN-RC-0016	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474712.444	582835.909	264.6
MN-RC-0015	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474757.724	582814.287	265.6
MN-RC-0014	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474700.087	583014.957	280.4
MN-RC-0013	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474623.614	582888.319	270.2
MN-RC-0012	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474721.186	582920.192	271.3
MN-RC-0011	861559/2021	45	0	90	RC	GPS_M	UTM zone 22S	8474754.188	582915.699	269.1
MN-RC-0010	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474789.765	583112.037	283.1
MN-RC-0009	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474656.91	583140.23	278.2
MN-RC-0008	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474681.83	583325.06	263.8
MN-RC-0007	861559/2021	50	0	90	RC	GPS_M	UTM zone 22S	8474911.72	583068.9	267.5
MN-RC-0006	861559/2021	50	0	90	RC	GPS_M	UTM zone 22S	8474768.87	583085.99	281.4
MN-RC-0005	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474836.3	583054.25	281
MN-RC-0004	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474826.07	583123.53	273.9
MN-RC-0003	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474906.68	583008.77	263.2
MN-RC-0002	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474836.68	582961.27	270.1
MN-RC-0001	861559/2021	51	0	90	RC	GPS_M	UTM zone 22S	8474792.679	582904.583	269.4
MN-AC-0121	861559/2021	24	0	90	AC	GPS_M	UTM zone 22S	8474793.138	582524.013	263
MN-AC-0120	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8474992.825	582525.785	261.2
MN-AC-0119	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8475188.204	582524.82	259.1
MN-AC-0118	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8475359.314	582523.394	257
MN-AC-0117	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8474964.096	583431.278	263.3
MN-AC-0116	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8474991.364	583623.008	260.7
MN-TH-0038	861559/2021	16.3	0	90	TH	RTK	UTM zone 22S	8475094.088	582943.69	261.9
MN-TH-0037	861559/2021	12.85	0	90	TH	RTK	UTM zone 22S	8474890.295	583171.88	269.4
MN-AC-0115	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8474790.676	584325.609	257.8
MN-AC-0114	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474395.974	584323.392	259.4
MN-AC-0113	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8473993.526	584324.344	259.4
MN-AC-0112	861559/2021	27	0	90	AC	RTK	UTM zone 22S	8473592.357	583915.446	257.8
MN-TH-0036	861559/2021	19.65	0	90	TH	RTK	UTM zone 22S	8474912.456	583157.54	268.5
MN-TH-0035	861559/2021	19.75	0	90	TH	RTK	UTM zone 22S	8474941.2	583144.85	267.1
MN-AC-0111	861559/2021	20	0	90	AC	RTK	UTM zone 22S	8473992.346	583921.521	262
MN-AC-0110	861559/2021	30	0	90	AC	GPS_M	UTM zone 22S	8474391	583923	267
MN-AC-0109	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8474805.71	583921.801	260.9
MN-TH-0034	861559/2021	19.95	0	90	TH	RTK	UTM zone 22S	8474915.674	583123.513	268.5
MN-TH-0033	861559/2021	19.9	0	90	TH	RTK	UTM zone 22S	8474896.943	583127.537	269.7
MN-TH-0032	861559/2021	7.05	0	90	TH	RTK	UTM zone 22S	8474889.953	583126.238	270.2
MN-TH-0031	861559/2021	19.9	0	90	TH	RTK	UTM zone 22S	8474864.793	583148.397	271.3
MN-TH-0030	861559/2021	12.65	0	90	TH	RTK	UTM zone 22S	8474845.325	583155.113	272.2
MN-TH-0029	861559/2021	5.6	0	90	TH	RTK	UTM zone 22S	8474840.858	583148.746	272.4

For personal use only

For personal use only

MN-TH-0028	861559/2021	3.5	0	90	TH	RTK	UTM zone 22S	8474845.428	583149.08	272.3
MN-TH-0027	861559/2021	19.9	0	90	TH	RTK	UTM zone 22S	8474816.057	583199.375	271.3
MN-TH-0026	861559/2021	19.9	0	90	TH	RTK	UTM zone 22S	8474841.432	583199.264	270.6
MN-AC-0108	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475187.781	584324.259	253.3
MN-AC-0107	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475590.37	583923.019	249.1
MN-AC-0106	861559/2021	32	0	90	AC	RTK	UTM zone 22S	8475194.88	583923.883	256.3
MN-AC-0105	861559/2021	15	0	90	AC	RTK	UTM zone 22S	8475040	583171.316	262.9
MN-AC-0104	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8475039	583072.667	263.2
MN-AC-0103	861559/2021	22	0	90	AC	RTK	UTM zone 22S	8474989	582324.061	258.7
MN-AC-0102	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8475590	582381.059	247.2
MN-TH-0025	861559/2021	20	0	90	TH	RTK	UTM zone 22S	8474864.063	583197.991	269.9
MN-TH-0024	861559/2021	19.85	0	90	TH	RTK	UTM zone 22S	8474879.539	583141.128	270.7
MN-TH-0023	861559/2021	17.5	0	90	TH	RTK	UTM zone 22S	8474890.345	583196.625	268.9
MN-TH-0022	861559/2021	13	0	90	TH	RTK	UTM zone 22S	8474916.198	583197.073	267.6
MN-TH-0021	861559/2021	6	0	90	TH	RTK	UTM zone 22S	8474939.374	583196.664	266.5
MN-TH-0020	861559/2021	12.2	0	90	TH	RTK	UTM zone 22S	8474917.246	583223.083	267
MN-TH-0019	861559/2021	9.1	0	90	TH	RTK	UTM zone 22S	8474891.384	583224.221	268
MN-TH-0018	861559/2021	8.3	0	90	TH	RTK	UTM zone 22S	8474841.646	583224.353	269.6
MN-TH-0017	861559/2021	13	0	90	TH	RTK	UTM zone 22S	8474816.671	583223.17	270.6
MN-AC-0101	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476195.982	582322.036	246.6
MN-AC-0100	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476392.181	582322.89	245.9
MN-AC-0099	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476643.075	582325.465	243.2
MN-AC-0098	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476593.446	582522.701	245.2
MN-AC-0097	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476391.932	582524.627	246.2
MN-AC-0096	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476190.213	582525.753	246.8
MN-AC-0095	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476194.708	583035.529	243.5
MN-AC-0094	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8475984.289	582927.993	248.7
MN-AC-0093	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8475794.351	582924.414	251.5
MN-AC-0092	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8475788.326	582727.865	252
MN-AC-0091	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8475993.245	582725.361	249.1
MN-AC-0090	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8476190.716	582724.749	243.4
MN-AC-0089	861559/2021	22	0	90	AC	RTK	UTM zone 22S	8474243.745	583840.747	263.7
MN-AC-0088	861559/2021	18	0	90	AC	RTK	UTM zone 22S	8474844.228	582824.614	267
MN-AC-0087	861559/2021	22	0	90	AC	RTK	UTM zone 22S	8475593.782	582823.784	254.7
MN-AC-0086	861559/2021	22	0	90	AC	RTK	UTM zone 22S	8475191.526	582825.016	260.9
MN-AC-0085	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475090.432	583221.151	260
MN-AC-0084	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475138.356	583173.816	257.2
MN-AC-0083	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8475139.616	583073.468	259
MN-AC-0082	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475142.792	582979.347	260.6
MN-AC-0081	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475043.185	582973.937	263.2
MN-AC-0080	861559/2021	31	0	90	AC	RTK	UTM zone 22S	8475092.247	582863.392	262.1
MN-AC-0079	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8475039.768	582865.005	263.2

For personal use only

MN-AC-0078	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475051.152	582777.323	262.9
MN-AC-0077	861559/2021	25	0	90	AC	RTK	UTM zone 22S	8475249.237	583072.85	253.8
MN-AC-0076	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475400.098	582925.244	257.5
MN-AC-0075	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475400.876	582718.525	258.4
MN-AC-0074	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475576.351	583001.822	254.3
MN-AC-0073	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475693.152	582904.587	252.7
MN-AC-0072	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8474846.204	583177.607	271.3
MN-AC-0071	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8474941.181	583220.762	266.1
MN-AC-0070	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8474944.714	583125.244	267.1
MN-AC-0069	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474946.918	583029.55	266.5
MN-AC-0068	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8474944.822	582917.818	265.7
MN-AC-0067	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474946.978	582825.765	264.8
MN-AC-0066	861559/2021	25	0	90	AC	RTK	UTM zone 22S	8475282.778	583168.439	244.9
MN-AC-0065	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475292.493	583020.647	256.3
MN-AC-0064	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475395.301	583017.868	255.9
MN-AC-0063	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475342.021	583073.344	253.5
MN-AC-0062	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475338.175	583166.675	247.8
MN-AC-0061	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8475449.831	583169.017	244.6
MN-AC-0060	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475445.391	583075.875	253.3
MN-AC-0059	861559/2021	27	0	90	AC	RTK	UTM zone 22S	8474901.474	582968.923	268.1
MN-AC-0058	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8474898.521	582870.026	266.4
MN-AC-0057	861559/2021	23	0	90	AC	RTK	UTM zone 22S	8474892.756	582769.271	254.3
MN-AC-0056	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474887.642	582678.706	264.3
MN-AC-0055	861559/2021	26.1	0	90	AC	RTK	UTM zone 22S	8474851.309	582916.996	269.5
MN-AC-0054	861559/2021	19	0	90	AC	RTK	UTM zone 22S	8474844.228	582823.614	267
MN-TH-0016	861559/2021	8.9	0	90	TH	RTK	UTM zone 22S	8474843.813	582769.803	266
MN-TH-0015	861559/2021	17	0	90	TH	RTK	UTM zone 22S	8474845.805	582678.521	264.6
MN-TH-0014	861559/2021	9.4	0	90	TH	RTK	UTM zone 22S	8474881.092	583250.929	267.9
MN-TH-0013	861559/2021	17	0	90	TH	GPS_M	UTM zone 22S	8474864.03	583218.646	279.9
MN-TH-0012	861559/2021	8.5	0	90	TH	RTK	UTM zone 22S	8475364.201	583124.705	249.9
MN-TH-0011	861559/2021	8.25	0	90	TH	RTK	UTM zone 22S	8475419.062	583124.141	250.5
MN-TH-0010	861559/2021	7.95	0	90	TH	RTK	UTM zone 22S	8475391.764	583121.25	250.3
MN-TH-0009	861559/2021	14.95	0	90	TH	RTK	UTM zone 22S	8475096.282	583059.78	261.2
MN-TH-0008	861559/2021	9.5	0	90	TH	RTK	UTM zone 22S	8475092.715	583031.001	261.5
MN-TH-0007	861559/2021	14.65	0	90	TH	RTK	UTM zone 22S	8475092.882	582998.892	261.7
MN-TH-0006	861559/2021	14	0	90	TH	RTK	UTM zone 22S	8475067.018	582950.205	262.5
MN-TH-0005	861559/2021	14.7	0	90	TH	RTK	UTM zone 22S	8475091.027	582948.127	262
MN-TH-0004	861559/2021	14.05	0	90	TH	RTK	UTM zone 22S	8475114.845	582951.423	261.3
MN-TH-0003	861559/2021	14.6	0	90	TH	RTK	UTM zone 22S	8474866.389	583173.292	270.5
MN-TH-0002	861559/2021	7.3	0	90	TH	RTK	UTM zone 22S	8474862.561	583126.514	272.1
MN-TH-0001	861559/2021	14	0	90	TH	RTK	UTM zone 22S	8474880.733	583143.511	270.5
MN-AC-0053	861559/2021	31	0	90	AC	RTK	UTM zone 22S	8474852.158	582720.863	265.1

MN-AC-0052	861559/2021	32	0	90	AC	RTK	UTM zone 22S	8474791.049	582772.799	267
MN-AC-0051	861559/2021	33	0	90	AC	RTK	UTM zone 22S	8475190.626	582824.947	260.9
MN-AC-0050	861559/2021	32	0	90	AC	RTK	UTM zone 22S	8475294.443	582926.569	258.5
MN-AC-0049	861559/2021	32	0	90	AC	RTK	UTM zone 22S	8475403.387	582818.411	258
MN-AC-0048	861559/2021	32	0	90	AC	RTK	UTM zone 22S	8475495.578	582722.374	256.2
MN-AC-0047	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475492.637	582925.784	256.1
MN-AC-0046	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8475593.12	582823.057	254.7
MN-AC-0045	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8475694.437	582723.131	253.1
MN-DD-0017	861559/2021	71.3	180	70	DD	RTK	UTM zone 22S	8475242.809	583723.343	255.5
MN-DD-0016	861559/2021	60	180	70	DD	RTK	UTM zone 22S	8475639.501	583594.222	248.7
MN-DD-0015	861559/2021	60.15	90	70	DD	RTK	UTM zone 22S	8474348.845	582194.899	259.6
MN-DD-0014	861559/2021	57.4	90	70	DD	RTK	UTM zone 22S	8473979.787	582318.359	260.8
MN-DD-0013	861559/2021	42.15	180	70	DD	RTK	UTM zone 22S	8475546.485	583109.966	252.6
MN-DD-0012	861559/2021	67.3	90	70	DD	RTK	UTM zone 22S	8474757.709	582319.89	261.3
MN-DD-0011	861559/2021	64.9	180	70	DD	RTK	UTM zone 22S	8475596.753	582722.788	255.9
MN-DD-0010	861559/2021	72.6	90	60	DD	RTK	UTM zone 22S	8475191.661	582736.262	262.2
MN-DD-0009	861559/2021	60.1	90	70	DD	RTK	UTM zone 22S	8474996.289	582736.044	264.9
MN-DD-0008	861559/2021	60.35	270	70	DD	RTK	UTM zone 22S	8474879.264	583163.239	271.7
MN-DD-0007	861559/2021	58.1	180	70	DD	RTK	UTM zone 22S	8474896.439	582943.906	269.5
MN-DD-0006	861559/2021	61.1	90	70	DD	RTK	UTM zone 22S	8474775.486	582867.363	272.7
MN-DD-0005	861559/2021	60.15	90	65	DD	RTK	UTM zone 22S	8474801.351	582690.521	266.8
MN-DD-0004	861559/2021	60.15	75	70	DD	RTK	UTM zone 22S	8474532.635	582709.12	266.7
MN-DD-0003	861559/2021	37.85	250	70	DD	RTK	UTM zone 22S	8474668.477	583204.076	275.8
MN-DD-0002	861559/2021	57.15	250	70	DD	RTK	UTM zone 22S	8474754.972	583205.867	274.7
MN-DD-0001	861559/2021	68	250	70	DD	RTK	UTM zone 22S	8474758.589	583388.206	269.8
MN-AC-0044	861559/2021	29	0	90	AC	GPS_M	UTM zone 22S	8474528.365	582608.921	258.5
MN-AC-0043	861559/2021	24	0	90	AC	GPS_M	UTM zone 22S	8474538.043	582802.456	254.5
MN-AC-0042	861559/2021	19	0	90	AC	RTK	UTM zone 22S	8473952.696	583422.551	260
MN-AC-0041	861559/2021	12	0	90	AC	RTK	UTM zone 22S	8473837.925	583854.302	262.9
MN-AC-0040	861559/2021	32	0	90	AC	RTK	UTM zone 22S	8474024.08	583848.536	264.1
MN-AC-0039	861559/2021	24	0	90	AC	RTK	UTM zone 22S	8474241.312	583835.018	264.9
MN-AC-0038	861559/2021	12	0	90	AC	RTK	UTM zone 22S	8474594.749	583113.475	276.7
MN-AC-0037	861559/2021	15	0	90	AC	RTK	UTM zone 22S	8474453.017	583130.973	272.1
MN-AC-0036	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8474347.803	583108.859	269
MN-AC-0035	861559/2021	26	0	90	AC	GPS_M	UTM zone 22S	8474167.034	583421.732	249.5
MN-AC-0034	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474489.649	583828.195	265
MN-AC-0033	861559/2021	27	0	90	AC	RTK	UTM zone 22S	8474711.591	583815.675	261.8
MN-AC-0032	861559/2021	19	0	90	AC	GPS_M	UTM zone 22S	8474329.84	583652.43	257
MN-AC-0031	861559/2021	24	0	90	AC	RTK	UTM zone 22S	8474340.093	583528.894	265.9
MN-AC-0030	861559/2021	17	0	90	AC	RTK	UTM zone 22S	8474248.236	583429.134	266.5
MN-AC-0029	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8474342.716	583430.642	267.3
MN-AC-0028	861559/2021	20	0	90	AC	RTK	UTM zone 22S	8474450.708	583427.169	268

For personal use only

MN-AC-0027	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474552.037	583432.182	268.2
MN-AC-0026	861559/2021	21	0	90	AC	RTK	UTM zone 22S	8474647.684	583430.971	267.9
MN-AC-0025	861559/2021	17	0	90	AC	RTK	UTM zone 22S	8474786.631	583528.755	265.4
MN-AC-0024	861559/2021	24	0	90	AC	RTK	UTM zone 22S	8474880.922	583252.195	267.8
MN-AC-0023	861559/2021	31	0	90	AC	RTK	UTM zone 22S	8474785.801	583241.251	270.9
MN-AC-0022	861559/2021	21	0	90	AC	RTK	UTM zone 22S	8474780.457	583425.734	267
MN-AC-0021	861559/2021	27	0	90	AC	RTK	UTM zone 22S	8475394.872	583122.632	250.3
MN-AC-0020	861559/2021	27	0	90	AC	RTK	UTM zone 22S	8474782.913	583336.435	268.8
MN-AC-0019	861559/2021	19	0	90	AC	RTK	UTM zone 22S	8475305.547	583122.725	250.3
MN-AC-0018	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8475190.602	583025.617	257.9
MN-AC-0017	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8475084.701	583029.968	263.6
MN-AC-0016	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8475091.835	582943.83	261.8
MN-AC-0015	861559/2021	4	0	90	AC	RTK	UTM zone 22S	8474813.982	582796.361	267
MN-AC-0014	861559/2021	20	0	90	AC	RTK	UTM zone 22S	8474797.912	582733.61	265.8
MN-AC-0013	861559/2021	25	0	90	AC	RTK	UTM zone 22S	8474993.321	582831.901	265.7
MN-AC-0012	861559/2021	25	0	90	AC	RTK	UTM zone 22S	8474991.998	582943.686	264.3
MN-AC-0011	861559/2021	23	0	90	AC	RTK	UTM zone 22S	8475173.617	583125.37	255.1
MN-AC-0010	861559/2021	28	0	90	AC	RTK	UTM zone 22S	8475091.902	583134.602	260.6
MN-AC-0009	861559/2021	26	0	90	AC	RTK	UTM zone 22S	8474988.193	583033.667	264.8
MN-AC-0008	861559/2021	13	0	90	AC	RTK	UTM zone 22S	8474988.001	583129.979	265.1
MN-AC-0007	861559/2021	15	0	90	AC	RTK	UTM zone 22S	8474879.92	583143.538	270.5
MN-AC-0006	861559/2021	17	0	90	AC	RTK	UTM zone 22S	8474779.246	583139.681	276.1
MN-AC-0005	861559/2021	30	0	90	AC	RTK	UTM zone 22S	8474231.863	583038.06	265.5
MN-AC-0004	861559/2021	29	0	90	AC	RTK	UTM zone 22S	8474136.202	582935.609	265.8
MN-AC-0003	861559/2021	22	0	90	AC	RTK	UTM zone 22S	8474139.898	583041.135	265.9
MN-AC-0002	861559/2021	25	0	90	AC	RTK	UTM zone 22S	8474143.281	583094.85	266.4
MN-AC-0001	861559/2021	25	0	90	AC	RTK	UTM zone 22S	8474326.955	583032.862	266.7

For personal use only

Appendix 2:

JORC Code, 2012 Edition- Section 1 – Mundo Novo Niobium, REE Project

Section 1 Sampling Techniques and Data

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

<i>Sampling techniques</i>	<p>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.</p>	<p>This release refers specifically to drilling on the to-be-acquired Concession (861559/2021). Other performed work included soil sampling (3,072 samples), rock chipping (20 samples), ground magnetic surveys, and petrology (with XRF characterisation). Some of this work is presented in diagrams and briefly documented but is not detailed within the body of the report.</p> <p>All reviewed sampling practices conform to standard industry practice.</p> <p>Soil sampling (for 170 samples immediately above the carbonatite) was carried out following a regular grid containing 3 N-S lines and 3 E-W lines, spaced 400 meters apart and positioned in the centre of the area. Each line was sampled on 100-metre centres. 500g soils were taken at ~50cm depth in the 'B' horizon.</p> <p>Few rock chips (20 samples) were collected, mainly as float, which was regarded as possibly representative of the underlying material, as outcrop is rare beyond the core of the carbonatite (forming a local topographic high).</p> <p>Four hundred (400) metres of open trenching was completed adjacent the core of the carbonatite.</p> <p>All samples were submitted to an accredited laboratory (SGS) utilising an analytical method suitable for the target commodities (Phosphorous, Niobium, and REE).</p>																														
	<p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p>	<p>The soil and drill sampling complies with standard industry practice; all samples are considered representative and as described.</p>																														
	<p>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</p>	<p>The bulk sampling by trenching and auger rig allows the company to obtain sufficient samples to formally identify the minerals and their weathering and enrichment states.</p> <p>All surface sample locations are photographed, and representative samples are captured in chip trays. Reserve material is preserved for most samples should it be required for future use.</p> <p>The same is true for all drilling methods. In standard approaches, a 3kg sample from each metre interval drilled is pulverised to produce a 30g charge for assaying purposes (detailed below). Representative material for each metre is captured and photographed in chip trays.</p>																														
<i>Drilling techniques</i>	<p>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., 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).</p>	<p>Drilling involve aircore, reverse circulation diamond and deep auger.</p>																														
		<table border="1"> <thead> <tr> <th>Tipo-Sondagem^α</th> <th>Abrev.^α</th> <th>Quant.-Furos^α</th> <th>Metres^α</th> <th>Analysis-(SGS)^α</th> </tr> </thead> <tbody> <tr> <td>Air-Core^α</td> <td>AC^α</td> <td>121^α</td> <td>3,041^α</td> <td>2,080^α</td> </tr> <tr> <td>Circulação Reversa^α</td> <td>RC^α</td> <td>16^α</td> <td>807^α</td> <td>805^α</td> </tr> <tr> <td>Diamantada^α</td> <td>DD^α</td> <td>17^α</td> <td>1,019^α</td> <td>678^α</td> </tr> <tr> <td>Tubo (Auger)^α</td> <td>Helicoidal-TH^α</td> <td>38^α</td> <td>511^α</td> <td>500^α</td> </tr> <tr> <td>TOTAL^α</td> <td>186^α</td> <td>5,378^α</td> <td>4,063^α</td> <td></td> </tr> </tbody> </table>	Tipo-Sondagem ^α	Abrev. ^α	Quant.-Furos ^α	Metres ^α	Analysis-(SGS) ^α	Air-Core ^α	AC ^α	121 ^α	3,041 ^α	2,080 ^α	Circulação Reversa ^α	RC ^α	16 ^α	807 ^α	805 ^α	Diamantada ^α	DD ^α	17 ^α	1,019 ^α	678 ^α	Tubo (Auger) ^α	Helicoidal-TH ^α	38 ^α	511 ^α	500 ^α	TOTAL^α	186^α	5,378^α	4,063^α	
Tipo-Sondagem ^α	Abrev. ^α	Quant.-Furos ^α	Metres ^α	Analysis-(SGS) ^α																												
Air-Core ^α	AC ^α	121 ^α	3,041 ^α	2,080 ^α																												
Circulação Reversa ^α	RC ^α	16 ^α	807 ^α	805 ^α																												
Diamantada ^α	DD ^α	17 ^α	1,019 ^α	678 ^α																												
Tubo (Auger) ^α	Helicoidal-TH ^α	38 ^α	511 ^α	500 ^α																												
TOTAL^α	186^α	5,378^α	4,063^α																													
		<p>Auger: SD-400 model, with a 70 hp MWM 4cc engine, mounted on an unmarked Volkswagen 13-180 model truck. Capable of drilling to 20m. Twenty (20) cm auger bit used.</p>																														

For personal use only

For personal use only

<p><i>Drill sample recovery</i></p>	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p>	<p>AC Drilling: N-S and E-W orthogonal exploratory research drilling, initially with semi-detail 50 x 100m spacing and finalised in regional exploration at 400 x 400m spacing. Most Auger holes terminate at around 20 or 30m depth. RC drilling is clustered around the edge of the Carbonatite core and separated by ~50m. The grid is irregular but maintains the appearance of uniformity because of the way it is concentrated. All RC holes terminate at a depth of either 50 or 51 metres.</p> <p>All vertical holes (Appendix 1), including auger holes, were primarily sampled on metre intervals and rarely as 2-metre composites. Inclined holes were generally sampled at two-metre intervals or geological intervals (see Appendix 1). At each hole's completion, recoveries were measured. The percentage must be greater than 70% for the entire hole. If the percentage is less than 70%, EDEM (the Project Owner) could request a twin hole.</p> <p>No twin holes were drilled unless they were part of the QAQC program.</p> <p>Recoveries were paid according to the reduction factors below, the same being applied to maneuvers:</p> <p>R ≥90% 1.00 90% > R ≥ 80% 0.95 80% > R ≥70% 0.90 R < 70% 0.00</p> <p>Wet samples were noted on the geological logs.</p> <p>The helical auger is not routinely used in mineral exploration, as the rod moves up and down through the uncoated hole, which can cause contamination. However, it is used like the mechanical auger, with the advantage of being faster and cheaper.</p> <p>Auger holes were advanced 20 to 30cm at a time, after which side contamination was removed before the next advance could proceed. This process was repeated until 1 meter of advancement was completed.</p>
	<p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p>	<p>Most air holes were dry on development, and each metre was systematically cleared after being drilled, providing maximum recovery and minimising contamination risk.</p> <p>Dust escaping from the tops of cyclones, connections or piping, or the mouth of the sample bag was also recorded and corrected on identification.</p> <p>The larger sample sizes (150kg) with Auger Drilling must be homogenised using canvas and subsequently quartered. Homogenisation and quartering must continue successively until the desired sample volume, around 20 to 30kg, is reached.</p>
	<p>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.</p>	<p>The samples were almost all dry drilled, as most drilled depths were less than 50 metres, and the air packs for RC and AC could hold back any water.</p> <p>The Competent Person has not undertaken any analysis of sample bias caused by loss or gain of fines or coarse material.</p> <p>The auger can drill samples up to 1m wide to a maximum depth of 20m and collect large-volume samples (150 kg), mitigating bias due to nugget effects.</p>
<p><i>Logging</i></p>	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p>	<p>All holes were geologically logged throughout the development length and in sufficient detail to support mineral resource studies (particularly for Phosphate, where estimation work has taken place).</p> <p>The data is likely sufficient to support estimation work in other commodities, including Niobium and REE.</p> <p>All holes, including Auger Drilling, have been chip trayed and photographed.</p>

For personal use only

Sub-sampling techniques and sample preparation

The total length and percentage of the relevant intersections logged.

All holes were sampled and logged through their developed length.

If core, whether cut or sawn and whether quarter, half or all cores taken.

Half core was cut and submitted for analysis.

If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.

AC and RC were rotary split and reduced to a representative 3kg for further sub sampling and assay. All holes were dry sampled.

For all sample types, the nature, quality and appropriateness of the sample preparation technique.

The sample preparation techniques described below for the chosen analytical methods were appropriate for all sample types, whether soils, or drill spoil.

Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.

Soil sampling: seven duplicates collected. Except for Auger, three categories of control samples were used in all drilling methods: Blank (BLK), Duplicate (DUP) and Standard (PAD). Auger produced Duplicate samples only.

The two standard levels were used: 8% and 18% P₂O₅. Validate samples were within a margin of error of 2% of the value, passing 94% of samples. The Competent Person is not aware of the use of these standards for Niobium and REE currently.

EDEM used four labs, two as umpires on their work: the EDEM laboratory, Terra, Biotec, and SGS with the latter providing the most consistent and accurate results. Hence its adoption across the research effort at Mundo Novo.

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.

The field crew, including a geologist, sample use a mechanical ager to dig to ~50cm depth and lift a sample from 'B' soil horizon, ensuring sample representativity, and bag the sample, collecting approximately 3 kilograms of material for assay.

Duplicate and blank samples are created in the field, and the assays are compared according to the internal QAQC protocols.

Whether sample sizes are appropriate to the grain size of the material being sampled.

Approximately 0.5 kilograms of material is collected from each soil sampling location.

Grain size does not affect the result.

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.

Chemical analysis according to the ICP95A/IMS95A method. The SGS Geosol Laboratory ICP95A methods cover the determination of 11 main oxides and 5 elements by lithium metaborate fusion (ICP OES); IMS95A covers 36 elements by fusion with lithium metaborate (ICP MS) and PHY01E – LOI, loss on fire due to calcination of the sample at 1000°C.

17.1) ICP95A				
Determinação por Fusão com Metaborato de Lítio - ICP OES				
	Ba	CaO	Cr2O3	PM-000033
Al2O3 0,01 - 75 (%)	10 - 100000 (ppm)	0,01 - 60 (%)	0,01 - 10 (%)	
Fe2O3 0,01 - 75 (%)	K2O 0,01 - 25 (%)	MgO 0,01 - 30 (%)	MnO 0,01 - 10 (%)	
Na2O 0,01 - 30 (%)	P2O5 0,01 - 25 (%)	SiO2 0,01 - 90 (%)	Sr 10 - 100000 (ppm)	
TiO2 0,01 - 25 (%)	V 5 - 10000 (ppm)	Zn 5 - 10000 (ppm)	Zr 10 - 100000 (ppm)	

17.2) IMS95A				
Determinação por Fusão com Metaborato de Lítio - ICP MS				
	Cd	Cs	Cu	PM-000033
Ce 0,1 - 10000 (ppm)	Co 0,05 - 1000 (ppm)	0,05 - 1000 (ppm)	5 - 10000 (ppm)	
Dy 0,05 - 1000 (ppm)	Er 0,05 - 1000 (ppm)	Eu 0,05 - 1000 (ppm)	Ga 0,1 - 10000 (ppm)	
Gd 0,05 - 1000 (ppm)	Hf 0,05 - 500 (ppm)	Ho 0,05 - 1000 (ppm)	La 0,1 - 10000 (ppm)	
Lu 0,05 - 1000 (ppm)	Mo 2 - 10000 (ppm)	Nb 0,05 - 1000 (ppm)	Nd 0,1 - 10000 (ppm)	
Ni 5 - 10000 (ppm)	Pr 0,05 - 1000 (ppm)	Rb 0,2 - 10000 (ppm)	Sm 0,1 - 1000 (ppm)	
Sn 0,3 - 1000 (ppm)	Ta 0,05 - 10000 (ppm)	Tb 0,05 - 1000 (ppm)	Th 0,1 - 10000 (ppm)	
Tl 0,5 - 1000 (ppm)	Tm 0,05 - 1000 (ppm)	U 0,05 - 10000 (ppm)	W 0,1 - 1000 (ppm)	
Y 0,05 - 10000 (ppm)	Yb 0,1 - 1000 (ppm)			

17.3) PHY01E	
LOI (Loss on Ignition) - Perda ao fogo por calcinação da amostra a 1000°C	
LOI	PM-000033
-45 - 100 (%)	

• Determinação de Perda ao Fogo (LOI) por Gravimetria - 1000°C
 • Perda ao fogo por calcinação a 1000°C.

Auger samples were dispatched to the EDEM laboratory in Goiânia, ground in a hammer mill, and then subjected to sieving, with around 95% passing through the 50# mesh.

The Federal University of Goiás was engaged to complete geochemical characterisation studies using X-ray diffraction, the Rietveld method, and X-ray fluorescence on several samples.

For personal use only

	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Laboratory-standard XRF and petrology on diamond and RC samples confirmed the mineralogy and geology of the Mondo Novo Carbonatite. PXRF was not used in the field.
<i>Verification of sampling and assaying</i>	Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	The assay data included in this report has been subject to industry-standard QAQC quality control and does not contain any known bias. To confirm the accuracy of the analysis and sample handling, both field and lab blanks and duplicate samples are used. Duplicate accuracy for the soils is positive and satisfactory since $R^2 > 0.9$ for the analysed elements.
	The verification of significant intersections by either independent or alternative company personnel.	No verification was undertaken, and the data has been accepted at face value.
	The use of twinned holes.	The use of twin holes is to be confirmed.
<i>Location of data points</i>	Discuss any adjustment to assay data.	Assay data for Nb and REE were converted to their oxide equivalent using the following reference (https://www.jcu.edu.au/advanced-analytical-centre/resources/element-to-stoichiometric-oxide-conversion-factors). Calculated oxide values were then considered in all subsequent work. For example, after converting to its oxide equivalent, Nb was regarded as Nb ₂ O ₅ – niobium pentoxide and interpreted as such. All REEs were similarly converted to their oxide equivalent. The values for all REE oxides were summed to calculate the total rare earth oxide or TREO. Sc and Pm were excluded from the calculation. All blanks, standards and incomplete assay fields were also excluded.
	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.	All holes are georeferenced with DGPS (RTK).
	Specification of the grid system used.	The grid system used at Mundo Novo Niobium and REE Project is Sirgas 2000/UTM Zone 22S.
<i>Data spacing and distribution</i>	Quality and adequacy of topographic control.	Topographic control was generated based on aerial survey data with a photogrammetric drone associated with a Copernicus digital terrain model—Sentinel-2 Satellite—in areas of closed vegetation. Both were georeferenced with DGPS (RTK) according to the coordinates of the registered drilling holes.
	Data spacing for reporting of Exploration Results.	Magnetic and radiometric imagery provided a clear outline of the intrusion. Due to the limited availability of outcropping rock, appropriately spaced soil sampling was employed. Drilling was then conducted, targeting areas with elevated geochemistry identified through soil sampling and trenching. All chosen spacings for all work stages were appropriate for the explored target-style.
	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.	EDEM conducted a Phosphate Mineral Resource Estimate (MRE) for the Mundo Novo Carbonatite, utilising the same drilling and surface samples referenced in this report. The quality of the work is sufficient to support reliable Mineral Resource Estimates.
<i>Orientation of data in relation to geological structure</i>	Whether sample compositing has been applied.	No sample compositing has been applied.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No orientation bias has been detected at this stage. The concentric nature of the carbonatite mineralogy and geochemistry, combined with the effects of lateritic deep weathering, has redistributed many target elements, likely minimizing any potential bias.

	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.	No bias has been determined.
<i>Sample security</i>	The measures taken to ensure sample security.	A geologist collected the samples, packages them together, and transports them to the sample dispatch or laboratory once they are chosen.
<i>Audits or reviews</i>	The results of any audits or reviews of sampling techniques and data.	A final Audit of the Bulk samples was performed by the companies Chief Geologist. No other audits were conducted

Section 2 Reporting of Exploration Results

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

<i>Mineral tenement and land tenure status</i>	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.	<p>Empresa de Desenvolvimento e Mineração (EDEM), the project's current owner, aims to produce multi-nutrient phosphate from the CARBONATITE, altered superficially. It has a significant content of P₂O₅, K₂O, MgO, CaO, and Silica, as well as micronutrients such as Mn and Zn. It is a natural fertiliser.</p> <p>The concession, ANM Process nº 861.559/2021, which covers 1,705 hectares, is granted and in good standing with the relevant government authorities, and there are no known impediments to operating in the project area. The concession is located 6 kilometers east of Mundo Novo – Goiás and 430 kilometers of Goiânia capital.</p>
<i>Exploration done by other parties</i>	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.	The concession will be transferred to Summit Minerals (or a wholly owned local subsidiary) upon completion of the acquisition. No impediments are known or expected by the Company to prevent the transfer occurring.
	Acknowledgment and appraisal of exploration by other parties.	Limited historical mining has been completed within the tenement, with only recent exploration targeting mainly Phosphate and, subsequently, Niobium and Rare Earth Element mineralisation. Until EDEM, no systematic modern exploration has been attempted across the area.
<i>Geology</i>	Deposit type, geological setting, and style of mineralisation.	<p>The Mundo Novo Alkaline Complex (MNAC) lies in the northern section of the Goiás Alkaline Province (GAP), a region characterised by Late Cretaceous alkaline magmatism along the northern margin of the Paraná Basin. This magmatism is associated with the NE–SW Trans-Brazilian Lineament and was influenced by the Trindade mantle plume. The alkaline intrusions were emplaced into orthogneiss and granites of the Goiás Magmatic Arc and overlying basalts and sedimentary rocks of the Paraná Basin.</p> <p>The MNAC occupies the contact zone between the Goiás Magmatic Arc and the Araguaia Belt, with its boundaries clearly defined by the Trans-Brazilian Lineament. Like most alkaline rock occurrences of the GAP, the MNAC intruded a dilatant zone developed along an N30°W lineament, reflecting the tectonic controls on its magmatic evolution.</p> <p>EDEM discovered the Mundo Novo carbonatite intrusion in 2021, identifying the significant potential for phosphate and other fertilising elements. The target region concentrates P₂O₅, K₂O, MgO, CaO, Nb, and ETR in both the soil and rocks. The chemical anomalies are distributed preferentially concentrically around the carbonatite intrusion.</p>

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:

Tipo Sondagem ^α	Abrev. ^α	Quant. Furos ^α	Metres ^α	Analysis (SGS) ^α
Air-Core ^α	AC ^α	121 ^α	3,041 ^α	2,080 ^α
Circulação Reversa ^α	RC ^α	16 ^α	807 ^α	805 ^α
Diamantada ^α	DD ^α	17 ^α	1,019 ^α	678 ^α
Trado (Auger) ^α	TH ^α	38 ^α	511 ^α	500 ^α
TOTAL^α	186^α	5,378^α	4,063^α	

Additionally, 2,902 soil and saprolite samples, 170 grid soil samples, 20 rock samples, and trenching over 400 metres with large-volume sampling have been taken.

<ul style="list-style-type: none"> easting and northing of the drill hole collar 	All collars were surveyed using digital GPS using the Sirgas 2000 datum (UTM Z22S) (see Appendix 1).
<ul style="list-style-type: none"> elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	All collars were surveyed using digital GPS using the Sirgas 2000 datum (UTM Z22S) (See Appendix 1).
<ul style="list-style-type: none"> dip and azimuth of the hole 	Most holes were developed vertically (see Appendix 1).
<ul style="list-style-type: none"> down hole length and interception depth 	Reported drilling results (Nb ₂ O ₅ ≥ 0.4% & TREO ≥ 5,000ppm) are presented in Appendix 1. TREO numbers are elevated from surface and decrease within the transition zone to fresher Carbonatite at depth.
<ul style="list-style-type: none"> hole length. 	See the collar file in Appendix 1.

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.

The Competent Person has not considered the EDEM MRE for the Mundo Novo Phosphate Resource, as he believes it to be of secondary importance to Summit Minerals, which is interested in the carbonatite's established shallow Niobium and Rare Earth potential.

Data aggregation methods

In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.

The assay data semantics included in this report are described and explained within the report.

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 assay data semantics included in this report are described and explained within the report.

The assumptions used for any reporting of metal equivalent values should be clearly stated.

No metal equivalent values were used in this report apart from the summing of the oxide values for all Rare Earth Elements.

Relationship between mineralisation widths and intercept lengths

These relationships are particularly important in the reporting of Exploration Results.

These shallow, substantial widths and grades of REE and Niobium mineralisation are encouraging and define Mundo Novo as a development opportunity on completion of additional test work.

If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.

The rare earth and niobium mineralisation is vertically stratified due to the overprinting effects of lateritic weathering, resulting in deep weathering profiles that often extend to depths of over 30 meters and as much as 50 meters.

If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').

Downhole lengths are, thus, actual width.

For personal use only

For personal use only

<i>Diagrams</i>	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate plans are included within this release.
<i>Balanced reporting</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 avoiding misleading reporting of Exploration Results.	The reporting level is balanced and appropriate for early-stage consideration of EDEM's completed work. The results obtained justify further work on the project.
<i>Other substantive exploration data</i>	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	To the Company's knowledge, no material exploration data or information has been omitted from this Release. The Company continues to complete a thorough geological review of all available data as part of its due diligence.
<i>Further work</i>	The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	Summit re-affirms its commitment to exploration across its project portfolio in Australia and Canada. Summit geologists are testing and reviewing the points of interest (interpreted targets, mapping extensions to the identified pegmatites) on its other projects. Drilling will subsequently be completed on the Mundo Novo Carbonatite upon completion of the due diligence and acquisition process.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Suitable diagrams are provided. All information in the announcement will be updated as Summit finalises it before being released to the market.

For personal use only



info@summitminerals.com.au



L1/389 Oxford Street Mount Hawthorn WA 6016



www.summitminerals.com.au