

MPG ACQUIRES CANADIAN REE PROJECT WITH UP TO 9.3% TREO AT SURFACE

Highlights

- MPG has secured the right to acquire a 100% interest in the Odyssey Rare Earth Element (REE) Project (Odyssey) in Labrador, Canada
- Odyssey is host to extensive, un-tested high-grade REE occurrences with up to 9.3% total rare earth oxide (TREO) assay results at surface highlighting drill-ready targets defined
- Presents MPG with an exciting opportunity to gain exposure to the burgeoning critical minerals sector
- MPG has a strong cash balance of over \$4M to aggressively work towards advancing key critical mineral projects complimentary to existing copper-gold assets in QLD.

Many Peaks Gold Limited (MPG or the Company) is pleased to announce it has entered into a binding agreement to secure an exclusive right to acquire a 100% interest in the Odyssey REE Project in central Labrador, Canada.

Odyssey REE Project - Summary

Located within the Red Wine intrusion complex (Red Wine REE District) of central Labrador and approximately 125km northeast of Churchill Falls community (Figure 4), Odyssey is host a mineralised system containing REE group compounds including neodymium - Nd_2O_3 , praseodymium - Pr_6O_{11} (NdPr) among others (Appendix B) and also hosts associated non-REE group metals including Niobium – Nb_2O_5 and Beryllium – BeO (Appendix A). Previous exploration identifies extensive anomalism on two mineralised trends within Odyssey:

- **Mann 2 Prospect** - a 2.6km long REE corridor host to multiple >4% TREO assay results within 1.9km extent
- **Michelin Prospect** - is a 1.2km long REE corridor of favourable lithology hosting multiple >1% TREO assay results across a 500m window of exposure on a sub-parallel trend 1.7km north of Mann 2

The Mann 2 and Michelin trends **total over 3 kilometres mineralised extent** and has drill ready targets supported with 143 previous surface rock and channel samples compiled to date **with 93 of 143 samples returning >1% TREO** (Figure 1). Better assay results from previous work includes:

- 9.3% TREO including 1.84% NdPr – Mann 2 West
- 8.4% TREO including 1.61% NdPr – Mann 2 West
- 6.4% TREO including 1.30% NdPr – Mann 2 West
- 5.2% TREO including 1.06% NdPr – Mann 2 Central
- 4.2% TREO including 0.92% NdPr – Mann 2 East
- 2.6% TREO including 0.64% NdPr – Michelin prospect

The Red Wine REE district is host to numerous REE, Niobium and Beryllium related occurrences and mineral deposits with previous resource estimations (non-JORC) located along trend from the Odyssey Project area at the Mann #1 (5km east of Odyssey) and Two Tom (20km east of Odyssey) project areas (Figure 3). **The Two Tom resource is estimated at 40.6Mt @ 1.18% TREO and 0.26% Nb_2O_5** , (2012, Daigle - Canadian NI 43-101)



MPG's Executive Chairman commented, "The Odyssey REE Project provides a highly prospective position with several walk-up drill targets defined within a district host to known high-grade TREO mineralisation and demonstrating scale for bulk tonnage potential. The opportunity identified by MPG to diversify into the critical minerals sector has been secured as part of the Company's ongoing business development activity, focused on delivering future growth by generating a pipeline of projects."

Mr Schwertfeger continued, "Our board and management team has significant North American operational and technical experience providing strong synergies for advancing projects in the Tier 1 jurisdictions of both Queensland and Labrador. Our team will continue working towards generating depth and diversity for a portfolio of mineral exploration assets to underpin growth and value add to the Company through cost effective mineral exploration and discovery."

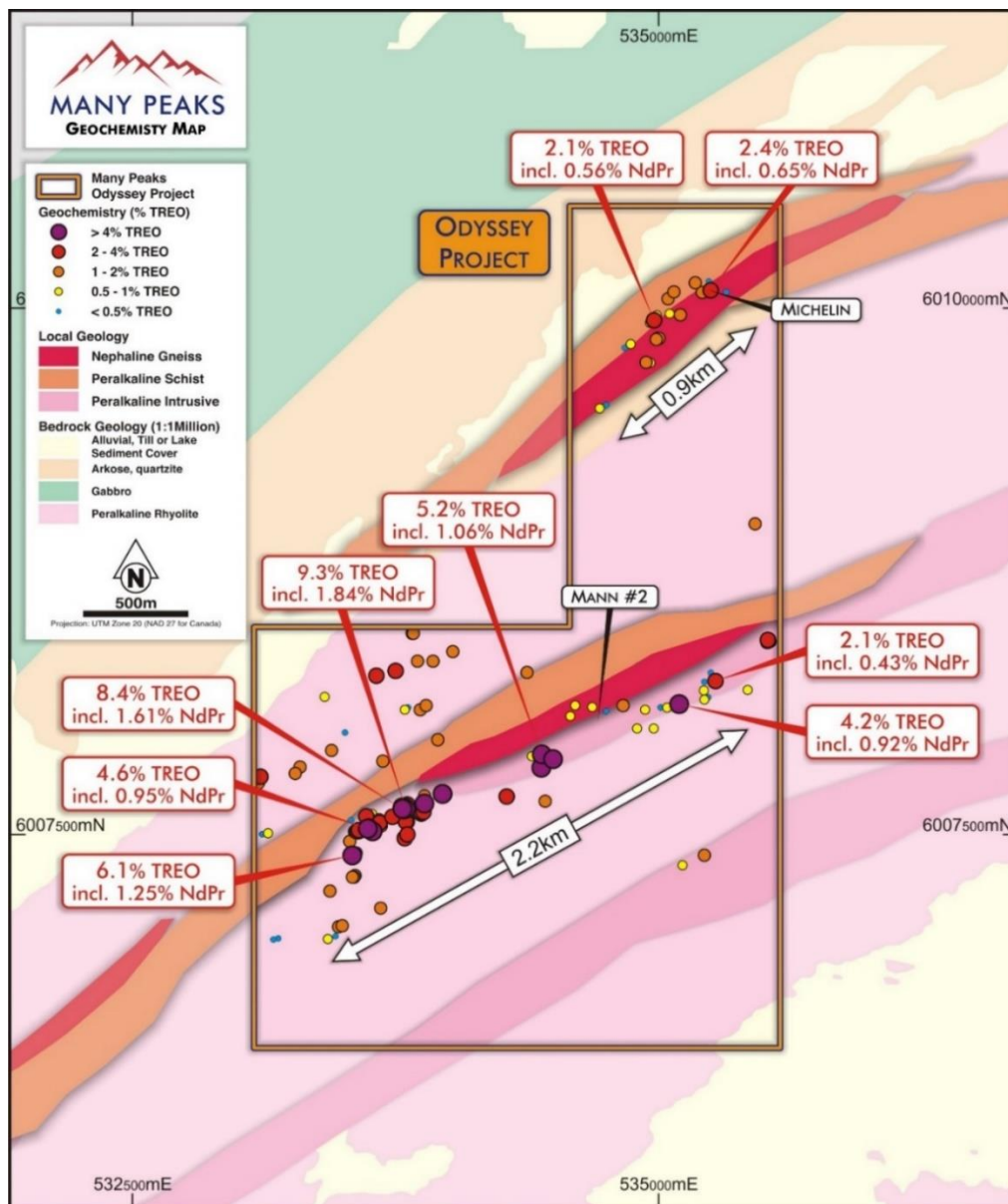


Figure 1: Odyssey Project area with historical rock chip locations on regional geology (modified from Wardle, 1993)

Odyssey REE Project - Local Geology

The Odyssey REE Project is host to various units of the Red Wine peralkaline complex with varying compositions generated from multiple phases of intrusive activity. The peralkaline intrusions and dikes and adjoining syenite bodies associated with mineralisation are each variably affected by deformation resulting primarily from the regional Grenville metamorphic event (gis.geosurv.gov.nl.ca., n.d.). The larger peralkaline intrusion in the Red Wine District is intruded by later stage syenite bodies, which following deformation were recrystallised as a

nepheline gneiss and a peralkaline schist material. The mineralised nepheline gneiss and adjoining peralkaline schists may represent an enveloping border phase in contact with adjacent volcanic rocks around the syenite rocks already strongly endowed with REE and Niobium rich minerals. During metamorphism (and related metasomatism) some remobilization of the ore minerals into fractures and shear zones also took place within these units increasing the tenor of mineralisation.

The two mineralised horizons at Odyssey known as the Mann 2 and Michelin prospects (Figure 1) are each associated with lenticular shaped syenite intrusions and structural zones further focusing favourable mineralogy.

The Mann 2 corridor is up to 2.6km long across the project area along the deformed margin of the peralkaline intrusion, believed to host late-stage lenticular syenite bodies and hosting >1% TREO results at surface along more than 2.2km of the 2.6km extent of the favourable litho-structural horizon. Mineralisation is identified on up to 90m widths across the favourable lithology mapped at surface however, there is no continuous surface sampling or drilling across the zone to define continuity of mineralisation across the mapped widths. Mineralisation remains open along strike and adjacent to the mapped corridor due to shallow glacial till cover in the area.

The Michelin prospect is located 1.7km north of the Mann #2 mineralised corridor and is host to >1% TREO results in previous sampling along more than 900m of strike extent, which remains open in all directions. The two prospects comprise an aggregate 3 to 3.5km of strike extent of the REE mineralised horizons within the Red Wine REE district.

Mineralisation Style

The mineralisation of the Nepheline Gneiss and Peralkaline Schist units is not definitively described, but the metal content suggests minerals of columbite-tantalite series, as supported with preliminary metallurgical surveys of the Mann # 1 occurrence located just over 5km east. Variations in Be and Nb content from Mann #1 is evident at both Michelin and Mann #2 prospects, suggestive of a zonal distribution to mineralisation across the Red Wine REE district. Mineralogical and metallurgical study work is required for both the Mann #2 and Michelin prospects to define host mineralogy and mineral distribution at the Odyssey REE Project.

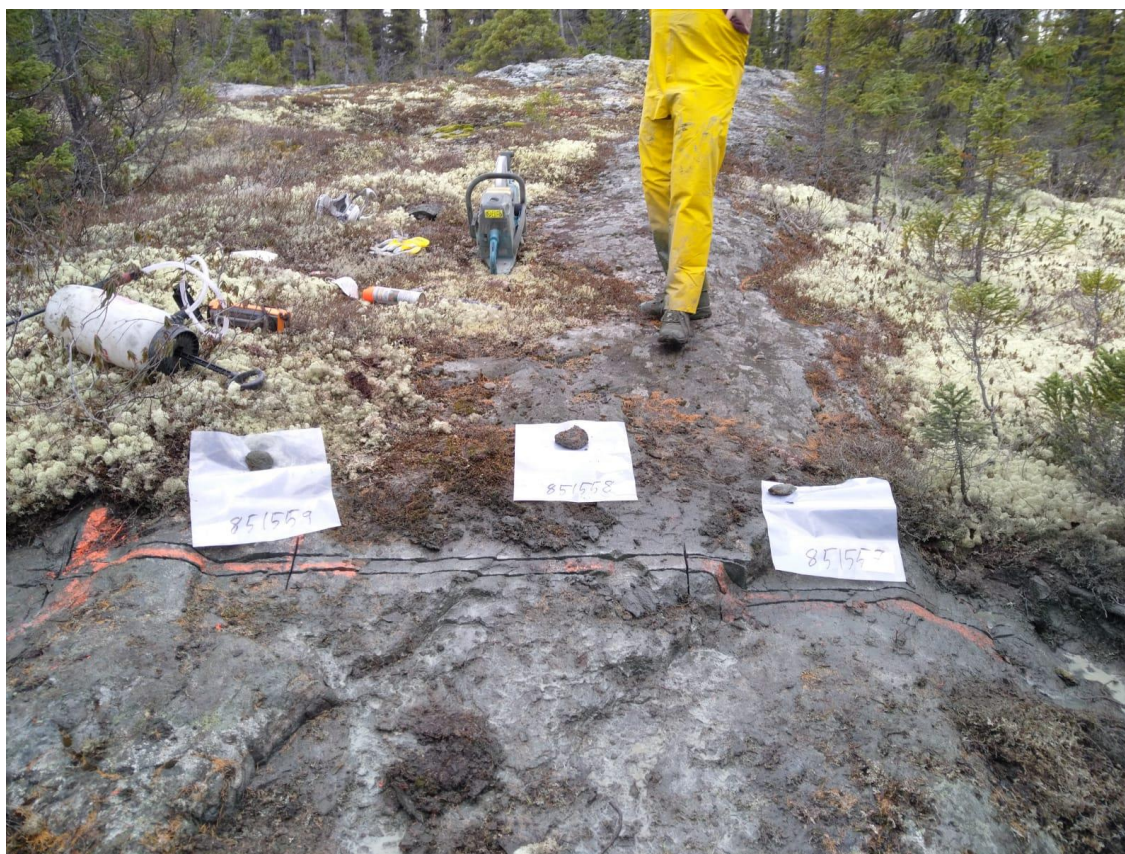


Figure 2: Outcropping nepheline gneiss at Odyssey REE Project, 2022 field verification sampling location (assays pending)

At the Mann 2 mineralised corridor 14 samples (of 143 historical samples reported) return >4% TREO values occurring in three clusters located across 1.9km extent (with shallow cover masking the mineralised corridor between each cluster of sampling). These clusters of sampling referred to as Mann West, Mann Central and Mann East targets are located within the more than 2.2km long Mann 2 prospect hosting 93 surface samples returning better than 1% TREO values which remains open in all directions.

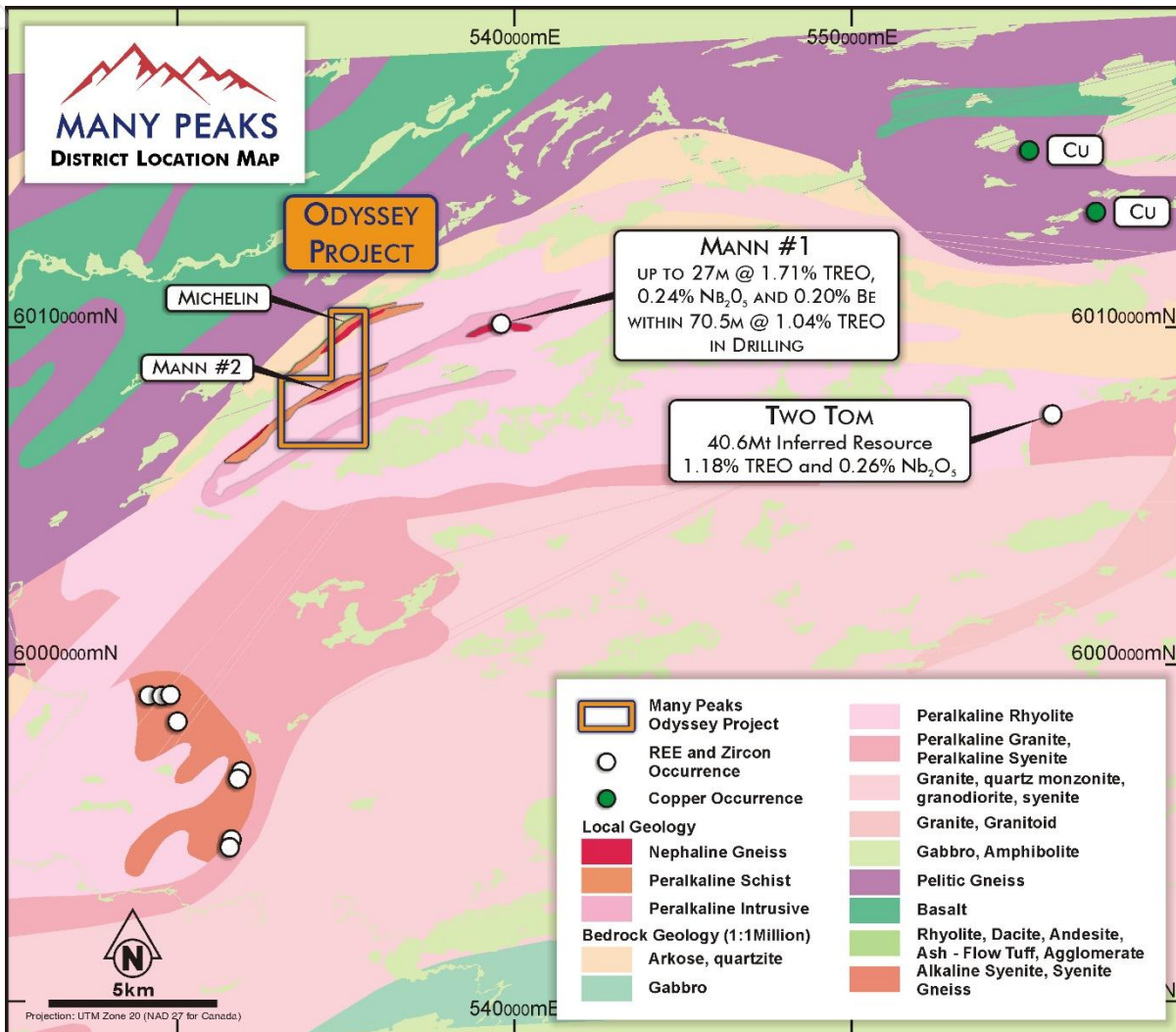


Figure 3: Regional Scale geology with other occurrence locations in the Red Wine REE District (modified from Wardle, 1993)

Exploration History & District Setting

Previous exploration in the Red Wine REE District is comprised of various mapping campaigns and ground/airborne geophysical surveys dating back to the mid 1950's through 1960's, where the district was initially identified through exploration for copper and uranium. Both the Michelin and Mann#2 occurrences were identified by 1961, and early exploration in the region focused on Niobium and Beryllium. In particular, the Mann #1 occurrence, located 5km northeast of the Odyssey Project's Mann #2 prospect was the focus of early drilling for Beryllium, in the 1960's, and follow-up programmes for Beryllium and Niobium in the mid 1980's, however, with no analysis work for REE's reported in these earlier exploration campaigns.

In 2010-11, Canada Rare Earths [TSX.V:LL] (formerly Rare Earth Metals [TSX-V: RA]) completed the first systematic exploration across the in the Red Wine intrusion complex for rare earth oxide minerals (Penney, 2011). Rare Earth Metals completed widespread rock chip sampling across multiple prospects including the Mann 2 and Michelin occurrences, with the focus of further exploration and follow-up drilling in late 2010 through 2011 shifting to the surrounding Two Tom, Mann #1 (Figure 3) and Duck Pond occurrences in the Red Wine REE District.

MPG has compiled 143 historical sample results within the Odyssey REE project area to date (refer to Figure 1 and Appendices A & B). Initial sampling within the Odyssey REE project returned favourable exploration results, with

65% of samples reported returning better than 1% TREO. In addition to the TREO content of the samples, several non-REE metals included in the mineralogy may have economic interest, including Niobium – Nb₂O₅ and Beryllium – BeO, requiring further metallurgical study work to identify beneficiation potential and economic viability.

The Red Wine REE District is host to more than a dozen REE, Zircon and Niobium occurrences, among which is included some historical minerals resource estimates. Notable projects in the district include:

- The Two Tom project is located along the same horizon in the Red Wine complex just over 20km east of Odyssey and is host to a resource estimation of 40.6M tonnes at 1.18% TREO, inclusive of 0.244% NdPr and additional contains 0.26% Nb₂O₅ (2012, Daigle) reported in compliance with Canadian National Instrument 43-101. The mineralised zone at the Two Toms project area covers approximately 1.3km extent of exploration comprised of 24 diamond holes totalling 5,469m drilled
- The Mann 1 project is located along the same horizon in the Red Wine complex just over 5km east of the Mann 2 occurrence at Odyssey REE project. Hosted within a riebeckite-bearing peralkaline syenite of the Red Wine intrusion suite. The neighbouring occurrence was the target of trenching and an initial six hole test in 2020, with previous exploration results including:
 - 44m @ 1.22% TREO, 0.16% Nb₂O₅, and 0.08% BeO in channel sampling (Rare Earth Metals, 2010A)
 - 27m @ 1.71% TREO, 0.24% Nb₂O₅, and 0.20% Be within 70.5m @ 1.04% TREO in drilling (Rare Earth Metals, 2010B)



Figure 4 | Location Map

Planned Work Programs

Initial planned work at the Odyssey Project will be to acquire higher resolution imagery and topographic control, to be sourced following a review of products available from satellite imagery and/or drone-based platforms.

Field work programmes to commence in the 2023 field season will include systematic channel sampling and rock chip sampling and prioritise targets for an initial drill test to better establish widths and continuity of the mineralised zone and acquire material for initial mineralogical studies for the project area.

The results of these initial work programmes over the coming year are anticipated to provide the Company with the technical information required to support a decision to proceed with an acquisition of the project and meet the conditions required to exercise the option to acquire the project (see Summary of Option Agreement below) should the Company elect to do so.

Summary of Option Agreement – Odyssey REE Project

MPG has entered into a binding agreement with Sans Peur Exploration Services Inc. (a company incorporated in Canada) and Tyrell Sutherland (together, the **Vendors**) to secure an exclusive right to acquire a 100% interest in the Odyssey REE Project in central Labrador, Canada (**Option Agreement**). Neither of the Vendors is a related party of the Company.

Pursuant to the terms of the Option Agreement, MPG has the right to acquire a 100% interest in the Odyssey REE Project. The material terms of the Option Agreement are set out below:

- To obtain an exclusive option to acquire a 100% interest in the Odyssey REE Project (**Option**) for 12 months (**Option Period**), MPG must:
 - pay the Vendors \$40,000 upon signing of Option Agreement; and
 - subject to shareholder approval, issue to the Vendors 300,000 fully paid ordinary MPG shares.
- During the Option Period MPG must meet a minimum A\$25,000 expenditure commitment on the Odyssey REE Project. If MPG does not satisfy this minimum expenditure requirement, MPG will be required to pay the Vendors that amount of cash that is equal to A\$25,000 less the funds actually expended by MPG on the Odyssey REE Project during the Option Period.
- The Option can only be exercised by MPG if, before the expiry of the Option Period, MPG:
 - gives notice to the Vendors of its intention to exercise the Option;
 - has expended a minimum of A\$150,000 on the Odyssey REE Project during the Option Period (inclusive of the minimum expenditure commitment)
 - issues 1,200,000 fully paid ordinary MPG shares to the Vendors;
 - pays the Vendors A\$40,000; and
 - grants the Vendors a 2.5% net smelter royalty in respect of any minerals from the area within the boundaries of the Odyssey Project.

References

Curtis, L.W., Currie, K.L. 1981. Geology and Petrology of the Red Wine Alkaline Complex, Central Labrador; Geological Survey of Canada Bulletin 294

Daigle, Paul, 2012, 20 January. Resource Estimate and Technical Report for the Two Tom REE Deposit of the Red Wine Complex, Labrador, Canada, www.sedar.com, Technical Report (Canadian NI 43-101), Filing date 26 January 2012 – Canada Rare Earth Corp.

gis.geosurv.gov.nl.ca. (n.d.). MODS Query Form. [online] Available at:

<https://gis.geosurv.gov.nl.ca/mods/ModsCard.asp?NMINOString=013L%2F01%2FNb+001> National Mineral Inventory Number: 013L/01/Nb 001 [Accessed 12 Dec. 2022]

Kerr, A., 2011. Rare-Earth-Element (REE) Mineralization in Labrador: A Review of known Environments and the Geological Context of Current Exploration Activity. Current Research (2011) Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 11-1, pages 109-143

Penney, G., Nielson, P., 2011, 15 January. Assessment Report on Prospecting Activities on Mineral Licenses of the Red Wine Project, Letitia – Shallow Lake – Bessie Lake Areas, Labrador. Published on https://gis.geosurv.gov.nl.ca/geofilePDFS/Batch2016/013L_0144.pdf Geofile No. 013L/0144 [Accessed 1 Nov. 2022]

Rare Earth Metals Inc., 2010A. Rare Earth Metals reports additional channel sampling results and discovery of new Heavy Rare Earth Element mineralisation at its Red Wine Property. TSX-V:RA release dated 10 August 2010 – available at www.sedar.com

Rare Earth Metals Inc., 2010B. Rare Earth Metals reports 1.71% TREO over 27.0 meters within 1.04% TREO over 70.5 meters from Latest drill hole results on Mann #1. TSX-V:RA release dated 19 October 2010, available at www.sedar.com

Wardle, R.J., 1993. Geology of the Naskaupi River Region, central Labrador (13NW), 1:500,000 scale. Newfoundland Department of Mines and Energy, Geological Survey Branch, Map 93-16

- Ends -

This announcement has been approved for release by the Board of Many Peaks Gold Limited

For further information please contact:

Travis Schwertfeger (Executive Chairman)

Many Peaks Gold Limited

T: +61 (8) 9480 0429

E: info@manypeaks.com.au

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Travis Schwertfeger, who is a Member of The Australian Institute of Geoscientists. Mr Schwertfeger is the Executive Chairman for the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Schwertfeger consents to their inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix A - Odyssey Project Rock Chip Sample Table – Descriptions and Geochem Summary

- Coordinates reported in NAD27 Datum, Zone 20N
- NdPr = Nd₂O₃ + Pr₆O₁₁ (neodymium + praseodymium)
- TREO (Total Rare Earth Oxides) includes the sum total of the Light Rare Earth Oxides (LREO) and Heavy Rare Earth Oxides (HREO)
- HREO includes: Eu₂O₃, Gd₂O₃, Tb₂O₃, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃ and Y₂O₃
- LREO includes: La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃ and Sm₂O₃

Sample No.	UTM_EAST	UTM_NORTH	Type	Description	Be ppm	Nb ₂ O ₅ %	LREO %	HREO %	NdPr %	TREO %
422501	533929	6008326	Float	2m x 2m angular, banded syenite, grey, green	354	0	1.6	0.1	0.31	1.6
422502	534375	6008274	Float	1m x 20cm, angular, banded syenite	462	0.01	1	0.1	0.27	1.1
422503	533640	6007599	Float	2m x 2m angular, vol with quartz veining, zinc	55	0.01	0.7	0.1	0.17	0.9
422504	533640	6007600	Float	30cm x 30cm, chlorite	1223	0.01	0.9	0.1	0.19	0.9
422505	533671	6007573	Outcrop	chlorite, amphibole, quartz veining	228	0	1	0.1	0.23	1.1
422506	533671	6007573	Outcrop	chlorite, amphibole, quartz veining	291	0.01	1.8	0.1	0.39	1.9
422507	533673	6007572	Outcrop	chlorite, amphibole, quartz veining	625	0	1.3	0.1	0.27	1.4
422508	533668	6007557	Outcrop	chlorite, amphibole, quartz veining	342	0.01	2.9	0.1	0.63	3.0
422509	533664	6007552	Outcrop	chlorite, amphibole, quartz veining	890	0	0.9	0.1	0.19	0.9
422510	533651	6007543	Outcrop	grey black syenite, chlorite, amphibole	1188	0	1.5	0.1	0.31	1.6
422511	533575	6007526	Outcrop	chlorite, amphibole, quartz veining	502	0.01	2.9	0.2	0.65	3.1
422512	533572	6007523	Outcrop	chlorite, amphibole, quartz veining, biotitic	1073	0.02	3.3	0.3	0.72	3.6
422513	533570	6007522	Outcrop	chlorite, amphibole, quartz veining, biotitic	942	0.02	1.8	0.1	0.41	1.9
422514	533567	6007523	Outcrop	chlorite, amphibole, quartz veining, biotitic	58	0	2.2	0.1	0.44	2.3
422515	533552	6007301	Outcrop	chlorite, amphibole	156	0.01	1.2	0	0.23	1.2
422516	533546	6007301	Outcrop	chlorite, amphibole	12	0	1	0.2	0.23	1.2
422517	533563	6007416	Outcrop	chlorite, amphibole	7	0	1.1	0.2	0.27	1.3
536628	533498	6007071	Float	chlorite boulder	547	0	1.3	0.1	0.25	1.4
536629	533169	6007004	Float	quartz float	1	0.02	0	0	0.00	0
536709	533537	6007570	Outcrop	Sample taken from v. Steep northward sloping ridge Volcanic (crystal Tuff) light to medium buff grey weathered surface with patchy orange iron oxide surface oxidation. Fresh surface is dark grey (very fine grained)	22	0.01	0.1	0	0.04	0.2
536803	533274	6007793	Float	Boulder	72	0.02	0.7	0.3	0.19	1
536804	533296	6007824	Float	syenite rubble angular	180	0.19	1.4	0.1	0.29	1.5
536805	533690	6007853	Float	syenite rubble angular	1216	0.39	1.7	0.1	0.45	1.8

Sample No.	UTM_EAST	UTM_NORTH	Type	Description	Be ppm	Nb ₂ O ₅ %	LREO %	HREO %	NdPr %	TREO %
536809	533144	6007509	Boulder	syenite boulder	246	0.06	0.7	0	0.16	0.8
536810	533109	6007782	Boulder	syenite boulder	554	0.78	2.1	0.1	0.46	2.2
536811	533446	6007902	Outcrop	syenite outcrop	17	0.03	1.1	0	0.18	1.1
536812	533952	6007953	Outcrop	syenite outcrop	120	0.13	1.3	0	0.26	1.3
536853	533098	6007748	Float	syenite rubble angular	497	0.29	1.7	0.1	0.38	1.8
536855	535216	6008188	Float	syenite boulder	63	0.16	0.6	0	0.12	0.6
536856	534977	6008007	Float	Syenite Boulder	15	0.04	0.5	0.1	0.11	0.5
536857	533412	6008156	Float	syenite boulder cluster	258	0.03	0.7	0.2	0.18	0.9
536858	533116	6007503	Float	volcanics	18	0.01	0.1	0	0.04	0.2
536860	533810	6008106	Outcrop	syenite 0tc 8x30 meters	40	0.06	0.2	0.1	0.06	0.3
536861	533895	6008116	Float	volcanic boulder	524	0.36	1.7	0.1	0.37	1.8
536908	534900	6008006	Float	1m x 1m banded syenite with white veining. High counts around veining	12	0.23	0.6	0	0.17	0.6
536909	534752	6008088	Float	vein o oxidized gossan carrying counts greenish rock with white feldspars or quartz	43	0.25	0.4	0	0.09	0.4
536910	534937	6008095	Float	semi angular, green, white, peach	48	0.02	0.6	0.1	0.16	0.8
536911	535011	6008107	Float	Fine grain banded syenite, looks the same as fl from Michelin	24	0.04	0.2	0	0.04	0.2
536912	535041	6008107	Outcrop	looks like altered syenite, brown colour	243	0.15	0.8	0.1	0.19	0.9
536913	535100	6008131	Float	Banded Syenite, 1mx1m boulder	39	0.5	4.2	0.1	0.92	4.2
536914	535424	6008189	Float	.5m x .5m feldsparized mafic volcanic	545	0.19	0.7	0.1	0.15	0.7
536915	535237	6008155	Outcrop	medium grain syenite	139	0.13	0.3	0.1	0.07	0.3
536916	535220	6008145	Outcrop	medium grain syenite	33	0.05	0.7	0	0.16	0.7
536917	535273	6008235	Float	coarse grain syenite, 1M x 2M	143	0.72	1.9	0.2	0.43	2.1
536918	535249	6008270	Float	Feldspar Mafic volcanic, 2.5M x 1.5M	33	0.04	0.3	0	0.05	0.4
536919	535219	6008227	Float	Albitic vein, coarse grain syenite, nothing in host rock, possible sub-crop	742	0.1	0.2	0	0.06	0.3
536971	534686	6008108	Float	2m x 2m Green mafic volcanics, silicified	119	0.07	0.7	0.1	0.21	0.9
536972	534582	6008066	Float	1m x 1m Green mafic volcanics	9	0.09	0.6	0.2	0.18	0.8
536973	534603	6008117	Float	.5m x .5m float banded syenite	23	0.05	0.7	0	0.14	0.8
536974	534833	6008117	Float	1m x 1m green volcanics, quartz veining	390	0.03	1.2	0.1	0.25	1.3
593570	535459	6008979	Float	1m x 1m, sub rounded, pink feldspar, Aegirine, not magnetic	484	0.21	1.8	0.1	0.37	1.8

Sample No.	UTM_EAST	UTM_NORTH	Type	Description	Be ppm	Nb ₂ O ₅ %	LREO %	HREO %	NdPr %	TREO %
593572	534022	6008374	Float	0.5m x 0.5m, sub rounded, banded, white and pink feldspar, fine grain amphibole	412	0.58	1	0.1	0.27	1
593573	533854	6008326	Float	1m x 1m, angular, banded syenite, white and pink feldspar, fine grain amphibole, 6 1m size angular to sub angular boulders in area	398	0.22	1.7	0.1	0.34	1.7
593574	533660	6008260	Float	2m x 1m, angular, mafic rock with pink feldspar, weakly magnetic	1101	0.59	1.9	0.1	0.49	2
593575	533751	6008283	Float	1.5m x 1.5m, angular, mafic, pink feldspar, 7 to 10 hot boulders in area	1091	0.55	1.9	0.1	0.48	2
593577	533834	6008459	Float	.25m x .25m, angular, looks like altered porphyry	1636	1.26	1.4	0.1	0.36	1.5
593578	533830	6008460	Float	1m x 1m, sub angular, brownish rock, white and pink feldspar, amphibole	1103	1.42	1.4	0.1	0.37	1.4
593579	533830	6008462	Float	1m x 1m, sub angular, brownish rock, white and pink feldspar, amphibole	576	1.25	1.4	0.1	0.37	1.5
593580	533510	6007987	Outcrop	feldspar vein, peachy colour, chip sample	75	0.21	0.2	0	0.05	0.2
593581	533867	6008096	Float	1m x .75m, angular, pink granite or feldspar vein, amphibole, biotitic, hematite, only one I seen like this	16	0.02	1.5	0	0.26	1.5
593582	533794	6008095	Outcrop	mafic volcanic , pretty dead	162	0.11	0.7	0.1	0.17	0.8
593583	534399	6007874	Outcrop	feldspar coarse grain, green and black amphibole veining	42	0.1	0.6	0.1	0.14	0.7
593584	534448	6007894	Float	1m x 1m, chlorite, amphibole, albite, biotitic	1513	0.21	4.9	0.3	1.06	5.2
593585	534443	6007829	Float	1m x 1m, chlorite, amphibole, albite, biotitic	258	0.27	4.5	0.3	1.02	4.8
593586	534501	6007870	Float	1m x .5m, sub rounded, chlorite, amphibole, albite, biotitic	8	0.12	3.8	0.2	0.79	4
593587	533735	6007590	Outcrop	Aegirine -chlorite schist	835	0.24	2.8	0.2	0.65	3
593588	533645	6007525	Outcrop	chlorite, amphibole, white feldspar, biotitic	1235	0.14	2.7	0.2	0.58	2.9
593589	533641	6007527	Outcrop	chlorite, amphibole, feldspar, zinc	618	0.37	4	0.2	0.84	4.2
593590	533555	6007518	Outcrop	chlorite, course and fine grain amphibole, white staining, little rust, nice constant counts between 9500 and 1500 all over outcrop	5	0.14	1.5	0.2	0.38	1.8
593591	533555	6007518	Outcrop	chlorite, amphibole (course and fine), white staining	14	0.14	1.2	0.1	0.28	1.3
593592	533612	6007593	Sub Crop	chlorite, amphibole, large boulders that fell off mountain, 3m x 3m	7	0.23	2.3	0.2	0.50	2.5

Sample No.	UTM_EAST	UTM_NORTH	Type	Description	Be ppm	Nb ₂ O ₅ %	LREO %	HREO %	NdPr %	TREO %
593593	533624	6007545	Outcrop	chlorite, amphibole, up from last sample, high background of 500 to 700, sample off face off cliff	5	0.04	2.7	0.5	0.61	3.3
593594	533619	6007540	Sub Crop	chlorite, coarse grain amphibole, albite, off edge of cliff face	378	0.22	4.1	0.4	0.95	4.6
593595	533559	6007308	Outcrop	chlorite Aegirine, amphibole gneiss	20	0.1	0.9	0.1	0.22	1
593596	533546	6007413	Float	.25m x .25m, Aegirine and chlorite	330	0.22	6	0.1	1.25	6.1
593597	533439	6007236	Outcrop	Aegirine and chlorite	269	0.09	1.2	0.1	0.26	1.3
593598	533533	6007472	Outcrop	Aegirine and chlorite, really green	22	0.03	1	0.1	0.22	1
593647	535220	6007405	Outcrop	chlorite schist angular 2m x 1m exposed	218	0.44	1.3	0.1	0.30	1.4
593648	535111	6007360	Outcrop	chlorite schist angular 2m x 1m exposed	29	0.02	0.1	0	0.03	0.2
593649	535114	6007357	Outcrop	chlorite schist angular 2m x 1m exposed	9	0	0.6	0	0.09	0.6
593650	533680	6007154	Float	chlorite schist boulder 2m x 2m	11	0	0.9	0.6	0.28	1.5
593715	533480	6007065	Float	Chlorite Schist Boulder	334	0.01	1.6	0.1	0.31	1.7
593718	533192	6007010	Float	oxidised float rock	-1	0.04	0	0.1	0.01	0.1
593851	533429	6007006	Float	syenite granite .5 m x .5 m flat angular	58	0.06	0.3	0.2	0.09	0.5
593852	533435	6007008	Float	syenite granite amphiboles angular	16	0.01	0.2	0	0.06	0.2
593853	533465	6007019	Float	syenite granite amphiboles angular	12	0	0.2	0	0.05	0.2
593854	534463	6007662	Float	chlorite schist veining 1 m x 1 m	124	0.14	1.3	0.1	0.31	1.4
593855	534279	6007686	Float	chlorite schist veining pink feldspar oxidised 1m x 1m	420	0.06	2.1	0.1	0.40	2.3
593856	533808	6007507	Outcrop	layered granite gneiss pink feldspar quartz amphibole	187	0.06	2.9	0.2	0.63	3.1
593857	533794	6007489	Outcrop	layered granite gneiss pink feldspar quartz amphibole	353	0.11	1.8	0.1	0.35	2
593859	533873	6007605	Float	chlorite schist angular, w/ amphiboles	69	0.89	3.5	0.2	0.80	3.8
593860	533883	6007614	Float	chlorite schist angular, w/ amphiboles	195	0.11	1.9	0.2	0.43	2
593861	533871	6007614	Float	chlorite schist angular, w/ amphiboles	104	0.12	2.6	0.2	0.57	2.8
593862	533889	6007659	Float	chlorite schist angular, w/ amphiboles	4901	0.65	4.7	0.4	1.04	5.1
593863	533886	6007659	Float	chlorite schist angular, w/ amphiboles	100	0.09	0.9	0.1	0.22	1
593864	533887	6007687	Float	chlorite schist angular, w/ amphiboles	184	0.05	1.5	0.1	0.32	1.6
593865	533975	6007704	Float	Aegirine chlorite schist oxidised amphiboles	1935	0.86	6	0.4	1.30	6.4
593866	533676	6007563	Outcrop	Aegirine chlorite schist oxidised amphiboles	27	0.54	1.9	0.1	0.44	2
593867	533682	6007545	Outcrop	Aegirine chlorite schist oxidised amphiboles	4	0.09	1.4	0.1	0.37	1.5
593868	533805	6007567	Float	Aegirine chlorite schist oxidised amphiboles	5	0.17	1.8	0.2	0.46	2
593869	533790	6007630	Outcrop	aegirine chlorite schist w/ amphibole	856	0.76	6.3	0.4	1.27	6.6

Sample No.	UTM_EAST	UTM_NORTH	Type	Description	Be ppm	Nb ₂ O ₅ %	LREO %	HREO %	NdPr %	TREO %
593870	533784	6007635	Outcrop	Aegirine chlorite schist w/ amphibole	2068	1.02	7.9	0.4	1.61	8.4
593871	533805	6007637	Outcrop	Aegirine chlorite schist oxidised amphiboles	1252	0.18	1.5	0.1	0.34	1.6
593872	533804	6007633	Outcrop	Aegirine chlorite schist w/ amphibole	1622	0.68	2.8	0.2	0.61	3
593873	533800	6007635	Outcrop	Aegirine chlorite schist w/ amphibole	345	1.03	5.4	0.3	1.17	5.8
593874	533806	6007649	Outcrop	Aegirine chlorite schist oxidised amphiboles	1908	0.65	2.9	0.2	0.69	3.1
593875	533802	6007631	Outcrop	Aegirine chlorite schist w/ amphibole	703	0.51	3	0.2	0.62	3.2
593876	533783	6007642	Outcrop	Aegirine chlorite schist oxidised amphiboles	1088	1.15	8.8	0.5	1.84	9.3
593877	533798	6007567	Float	chlorite schist angular amphiboles oxidised	560	0.18	1.5	0.1	0.36	1.6
593878	533791	6007641	Outcrop	chlorite schist amphiboles minor rust layering	513	0.32	7.3	0.4	1.53	7.6
593879	533798	6007567	Float	chlorite schist angular amphiboles oxidised	1033	0.09	1.8	0.1	0.40	2
593986	535530	6008422	Float	1m x 1m, angular, syenite, white and pink feldspars	749	0.05	1.6	0.1	0.31	1.7
593992	535505	6008420	Outcrop	white and pink feldspar	434	0.05	0.6	0	0.12	0.6
593993	535516	6008417	Outcrop	feldspar, Aegirine, cherry red colour	95	0.31	1.5	0.1	0.42	1.6
593994	535520	6008431	Outcrop	white and pink feldspar, Aegirine, cherry red colour	2073	0.08	1.9	0.1	0.40	2.0
593995	535522	6008416	Outcrop	pink feldspar, Aegirine, cherry red colour	50	0.1	1.1	0.1	0.30	1.2
593996	535530	6008426	Outcrop	pink feldspar, Aegirine, cherry red colour, little oxidised	770	0.07	0.7	0	0.15	0.7
593997	535539	6008434	Outcrop	white and pink feldspar, Aegirine	96	0.19	0.3	0	0.08	0.3
599401	534979	6009950	Float	Green volcanics, white staining, 2m x 2m, float boulder, no magnetics	46	0.1	2	0.1	0.56	2.1
599402	534979	6009949	Float	Green volcanics, white staining, no magnetics	94	0.43	0.8	0	0.23	0.9
599403	535053	6009977	Outcrop	Green volcanics, outcrop on hillside	798	0.87	0.6	0	0.16	0.7
599404	534994	6009970	Float	Green volcanics, brown and pink veins, bedding	36	0.22	0.4	0.1	0.12	0.5
599405	535045	6010049	Outcrop	Green volcanics, pink staining, outcrop	340	0.09	1.7	0.1	0.40	1.7
599406	535077	6010085	Outcrop	Green volcanics, pink staining, outcrop	133	0.53	0.8	0	0.15	0.8
599407	535074	6010082	Outcrop	Green volcanics with blue mineral. Maybe molly or hematite, outcrop	446	0.85	1.4	0.1	0.41	1.5
599408	535238	6010130	Outcrop	Green volcanics with hematite or molly	11	0.01	0.3	0	0.06	0.3
599409	535176	6010124	Float	Green volcanics, brown and pink veins, hematite	854	0.2	1.3	0.1	0.33	1.4
599414	535104	6009973	Outcrop	green volcanics with pinkish and quartz veins. Maybe old trench 2 to 3 meters long	108	0.59	1.4	0.1	0.46	1.5
599415	535236	6010085	Float	angular float 1/2m x 1/2m green, pink volcanics	25	0.38	0.8	0.1	0.26	0.8
599416	535250	6010092	Float	angular float 1.5m x 1.5m green grey silicified gneiss	751	0.6	2.5	0.1	0.65	2.6
599417	535322	6010079	Outcrop	oxidised banded volcanics	24	0.58	0.4	0	0.10	0.4

Sample No.	UTM_EAST	UTM_NORTH	Type	Description	Be ppm	Nb ₂ O ₅ %	LREO %	HREO %	NdPr %	TREO %
599418	534960	6009935	Outcrop	angular oxidised banded volcanics. More float in area from 1500 - 4000 cps	48	0.51	0.9	0	0.26	0.9
599419	534996	6009869	Float	4m x 4m angular boulder, banded volcanics. High counts in vein	113	0.67	0.5	0	0.14	0.5
599420	534996	6009869	Float	4m x 4m angular boulder, banded volcanics. High counts in vein	77	0.44	0.5	0	0.16	0.6
599421	535002	6009860	Float	1m x 1m gneiss	980	1.39	1.4	0.1	0.35	1.5
599422	534962	6009745	Outcrop	Red, green silicified, Very magnetic. Maybe sedimentary?	1396	1.23	0.7	0	0.21	0.7
599451	535209	6010080	sub- crop	Greenish volcanics, subcrop	70	0.75	1	0	0.24	1.1
599453	534868	6009834	Float	Green volcanics, quartz, sericite, took sample from 1700 cps reading. Could not get in high count spot. No mag.	280	0.26	0.5	0.1	0.14	0.6
599454	534840	6009815	Float	4M x 3M boulder, green volcanics with pinkish veins. No mag.	49	0.23	0.2	0	0.04	0.2
599455	534990	6009856	Float	Green volcanic gneiss with quartz and maybe some dark mineral, heavy, no mag. 3M x3M	1230	1.07	1.5	0.1	0.34	1.6
599456	534943	6009746	Float	green volcanic, sericite, some dark mineral, 0.5m x 0.5m	1129	0.48	1.5	0	0.37	1.6
599457	534751	6009543	Float	semi angular boulder with pinkish veins and cross cutting quartz veins. Green to lime green in colour. High counts only in pink vein. Very hard. Dark mineral.	294	0.2	0.4	0	0.08	0.4
599458	534722	6009527	Float	semi angular boulder with pink and green veins. 1m x 1m	472	0.45	0.6	0	0.14	0.6

personal use only

Appendix B - Odyssey Project Rock Chip Sample Table – Geochem REE Detail

Sample No.	TREO %	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm
422501	1.6	4433	7886	776	2286	293	25	141	14	54	7	15	1	6	1	236
422502	1.1	2005	5184	613	2135	427	37	222	21	66	8	16	2	7	1	292
422503	0.9	1794	3648	394	1306	238	24	183	28	143	26	71	9	46	6	834
422504	0.9	2158	4643	440	1470	191	16	112	14	59	9	21	2	11	1	302
422505	1.1	2568	5147	529	1796	267	27	173	19	75	11	27	3	18	2	358
422506	1.9	4468	8857	887	2998	415	40	273	30	119	17	38	4	21	2	557
422507	1.4	3589	6682	665	2018	271	25	136	15	61	10	23	3	13	2	278
422508	3	7295	14618	1402	4852	677	63	414	40	135	16	30	3	13	2	500
422509	0.9	2099	4361	459	1470	230	22	141	17	71	11	26	3	15	2	343
422510	1.6	3730	7370	756	2356	385	38	254	29	116	17	37	4	19	2	545
422511	3.1	7342	14249	1426	5097	641	52	371	46	220	37	93	11	53	6	1258
422512	3.6	8714	16583	1583	5634	829	68	581	74	319	47	102	12	52	6	1547
422513	1.9	4152	8980	905	3161	455	38	264	30	124	18	43	5	22	3	584
422514	2.3	6087	11019	1079	3301	434	34	198	22	87	14	33	4	18	2	427
422515	1.2	3084	5945	571	1738	232	19	112	12	48	7	18	2	10	1	224
422516	1.2	2486	4815	538	1808	284	30	204	32	184	36	99	13	71	9	1120
422517	1.3	2627	5528	622	2088	304	28	188	30	170	35	98	14	74	9	1109
536628	1.4	3812	6682	620	1901	238	20	137	21	81	12	29	3	14	1	436
536629	<0.1	41	73	7	26	7	1	10	5	18	4	11	2	10	1	117
536709	0.2	344	682	79	276	45	2	37	7	41	9	27	4	29	5	251
536803	1	1372	3157	387	1528	320	39	297	52	310	61	169	22	120	14	1907
536804	1.5	3753	7198	684	2228	304	26	166	16	57	7	15	2	8	1	226
536805	1.8	3354	8329	950	3581	669	60	349	29	88	9	14	1	6	1	366
536809	0.8	1912	3710	371	1213	161	12	80	6	19	3	5	1	4	1	83
536810	2.2	5266	10798	1061	3546	542	44	293	20	48	4	5	1	3	0	135
536811	1.1	3284	5516	474	1341	102	6	64	6	32	7	20	3	18	3	198

Sample No.	TREO %	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm
536812	1.3	3565	6326	607	1948	252	20	145	12	44	5	11	1	7	1	169
536853	1.8	4398	8648	872	2893	376	32	206	19	70	9	18	2	10	1	310
536855	0.6	1314	2850	289	942	112	6	43	4	20	3	10	2	14	2	130
536856	0.5	1098	2285	239	847	143	14	90	12	62	11	32	4	24	3	381
536857	0.9	1572	3341	373	1446	297	31	234	35	186	35	95	13	67	8	1186
536858	0.2	289	634	78	304	61	6	47	8	46	10	29	4	30	5	292
536860	0.3	480	1107	126	471	94	7	68	11	62	13	41	6	43	6	420
536861	1.8	4222	8501	851	2881	500	44	270	25	83	9	12	1	5	0	366
536908	0.6	932	3132	356	1388	266	21	106	8	30	5	12	2	12	2	157
536909	0.4	800	2002	193	658	107	10	57	6	23	3	9	1	8	1	103
536910	0.8	1513	3108	348	1225	194	22	156	26	140	26	73	10	54	7	820
536911	0.2	464	909	96	320	52	5	32	4	20	3	10	2	14	2	105
536912	0.9	1994	4140	435	1493	240	17	131	13	51	8	19	2	15	2	262
536913	4.2	10485	21497	2151	7068	630	40	204	8	31	5	12	2	9	1	207
536914	0.7	1536	3304	331	1151	186	13	101	11	49	8	23	3	21	3	276
536915	0.3	532	1351	149	551	111	9	75	10	51	10	27	4	25	4	317
536916	0.7	1525	3648	365	1248	173	12	69	5	20	3	7	1	6	1	104
536917	2.1	4199	9483	961	3383	635	61	431	50	216	33	76	9	48	6	1063
536918	0.4	1108	1671	143	404	44	3	30	4	18	3	10	2	12	2	110
536919	0.3	549	1241	128	451	75	7	54	7	36	7	21	3	18	2	182
536971	0.9	1536	3513	426	1645	268	25	169	25	145	29	83	12	65	8	907
536972	0.8	1196	2924	370	1446	261	27	183	29	164	33	91	12	68	8	983
536973	0.8	2287	3587	343	1075	130	12	77	8	38	6	16	2	12	2	211
536974	1.3	3342	5995	585	1901	263	27	194	23	93	13	26	3	13	2	417
593570	1.8	4902	8660	831	2823	353	32	213	20	69	8	14	1	6	1	291
593572	1	1841	4705	573	2158	459	45	260	22	62	7	14	2	11	2	267

Sample No.	TREO %	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm
593573	1.7	4832	8378	809	2554	301	27	182	17	59	7	13	1	5	1	241
593574	2	4281	9582	1023	3872	623	59	364	33	99	10	16	1	6	1	386
593575	2	4386	9680	1022	3756	579	54	330	30	97	11	19	2	8	1	389
593577	1.5	2909	7112	814	2823	617	57	318	27	66	6	10	1	4	1	243
593578	1.4	2709	6707	801	2858	655	62	347	28	67	5	7	1	2	0	235
593579	1.5	2674	6830	808	2928	666	62	346	28	65	5	7	1	2	0	226
593580	0.2	569	1182	117	372	64	6	32	3	8	1	2	0	2	0	36
593581	1.5	4398	7776	704	1901	132	8	34	2	11	2	5	1	4	1	81
593582	0.8	1794	3599	393	1283	223	22	145	19	95	18	45	6	32	5	542
593583	0.7	1255	2960	332	1116	201	19	115	16	86	18	53	8	49	7	527
593584	5.2	12314	25428	2573	8013	1133	113	763	92	327	42	75	7	27	3	1321
593585	4.8	11048	23094	2416	7768	1160	116	775	94	337	46	89	9	43	5	1335
593586	4	9852	19532	1933	5995	785	70	455	56	222	33	69	7	33	4	1054
593587	3	6579	14372	1498	4981	771	74	474	48	180	24	48	5	20	2	734
593588	2.9	6685	13512	1365	4421	671	66	469	57	249	38	77	8	36	4	1257
593589	4.2	10262	20146	2030	6415	968	93	643	70	266	35	66	6	26	3	994
593590	1.8	3389	7653	857	2963	555	53	372	51	243	44	115	15	74	10	1327
593591	1.3	2862	6461	661	2111	322	27	167	20	83	14	34	4	22	3	397
593592	2.5	6016	11682	1178	3861	543	50	355	43	185	30	72	9	45	6	780
593593	3.3	6896	13512	1389	4759	847	87	681	104	551	108	287	37	202	26	3146
593594	4.6	10004	20637	2187	7290	1155	102	737	94	454	83	214	27	141	18	2555

Sample No.	TREO %	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm
593595	1	2416	4570	486	1691	197	16	120	17	91	18	51	7	37	4	573
593596	6.1	15246	30710	3045	9413	1120	83	408	32	103	12	25	3	12	2	381
593597	1.3	3296	6289	631	1936	260	22	136	17	71	12	28	3	17	2	370
593598	1	2240	4926	512	1680	228	18	111	14	58	10	23	3	14	2	265
593647	1.4	3096	6425	687	2274	332	34	244	30	127	20	48	6	31	4	637
593648	0.2	366	645	68	241	43	5	33	5	25	5	13	2	12	2	140
593649	0.6	1900	2801	240	612	33	2	17	1	3	0	1	0	1	0	11
593650	1.5	1525	3968	557	2204	494	58	471	97	604	125	358	53	297	36	4094
593715	1.7	4586	7960	748	2309	293	25	157	21	84	12	29	3	14	1	413
593718	0.1	101	199	16	64	23	2	34	12	66	15	43	7	38	5	403
593851	0.5	568	1327	179	735	184	24	179	35	193	37	99	12	70	9	1001
593852	0.2	552	1118	128	453	56	5	32	3	10	1	2	0	1	0	30
593853	0.2	486	1004	113	405	51	4	29	2	8	1	2	0	1	0	24
593854	1.4	3354	6646	710	2368	332	29	186	17	66	10	26	3	18	3	329
593855	2.3	6462	10540	948	3079	359	34	302	40	174	26	58	6	27	3	811
593856	3.1	7400	14741	1510	4782	644	52	408	52	205	30	62	7	31	4	909
593857	2	5383	9213	884	2624	368	34	241	31	137	21	45	5	22	3	648
593859	3.8	8515	18057	1885	6112	879	83	535	64	278	46	104	13	63	8	1274
593860	2	4656	9434	1002	3266	407	36	228	32	162	32	82	10	54	7	975
593861	2.8	6474	13144	1341	4351	593	57	402	54	249	39	94	10	46	5	1322
593862	5.1	11388	24199	2465	7967	1206	123	858	99	398	56	111	11	50	6	1944
593863	1	2158	4692	513	1680	279	29	198	27	121	20	50	6	35	5	584
593864	1.6	3753	7604	782	2426	371	38	259	32	149	25	59	7	38	5	749
593865	6.4	15364	30341	3141	9821	1507	147	1063	114	434	55	107	11	47	5	1860
593866	2	5078	9618	980	3383	420	37	242	24	95	14	31	4	19	2	462
593867	1.5	3272	6928	782	2881	335	28	172	17	75	12	32	4	23	3	330
593868	2	4504	8783	971	3581	394	31	207	28	149	32	98	14	79	10	1024
593869	6.6	16771	31938	2960	9716	1171	112	849	97	382	52	109	11	51	6	1867
593870	8.4	20876	40783	3818	12247	1751	175	1268	139	498	62	120	12	50	5	2116
593871	1.6	3730	7334	759	2601	347	33	233	26	97	13	25	2	11	1	418
593872	3	6990	14127	1365	4724	674	68	499	57	211	27	50	5	21	2	961
593873	5.8	13722	27639	2658	9063	1287	132	927	101	367	47	93	9	40	4	1582
593874	3.1	6990	14127	1498	5424	799	79	566	63	225	28	51	5	22	2	951

Sample No.	TREO %	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm
593875	3.2	7858	15355	1438	4794	666	66	477	53	194	25	49	5	22	2	876
593876	9.3	22635	44468	4555	13880	1971	191	1406	167	634	84	166	16	73	8	2737
593877	1.6	3659	7198	780	2788	312	24	165	19	97	19	54	7	38	5	560
593878	7.6	18648	36975	3516	11781	1589	156	1140	124	421	49	90	8	34	4	1702
593879	2	4762	9115	909	3138	448	42	287	32	127	18	38	4	20	2	616
593986	1.7	4504	8157	753	2379	327	31	204	27	117	18	41	5	24	3	603
593992	0.6	1489	2911	284	944	159	15	103	13	50	7	15	2	9	1	239
593993	1.6	2381	7334	894	3289	696	59	377	41	150	21	49	6	32	5	702
593994	2	4832	9324	952	2998	453	42	274	33	129	17	36	4	19	2	606
593995	1.2	2193	5884	646	2333	413	34	195	19	65	9	19	2	11	2	307
593996	0.7	1642	3415	341	1142	179	16	105	13	51	7	18	2	13	2	270
593997	0.3	527	1290	156	632	157	14	90	10	38	5	13	2	10	1	184
599401	2.1	4023	10036	1143	4479	798	60	362	19	42	3	5	1	5	1	201
599402	0.9	1525	3906	486	1785	333	28	164	12	38	5	13	2	12	2	201
599403	0.7	1407	3132	364	1248	213	18	100	7	21	3	6	1	5	1	104
599404	0.5	708	2297	267	959	176	13	90	10	50	10	32	5	31	5	334
599405	1.7	3823	8243	843	3161	509	41	281	24	81	10	22	3	12	1	381
599406	0.8	2193	3796	381	1154	158	13	87	7	26	3	7	1	5	1	118
599407	1.5	2498	6719	822	3231	597	48	297	21	66	7	15	2	9	1	337
599408	0.3	602	1339	150	443	37	2	23	3	17	4	13	2	14	2	117
599409	1.4	3049	6203	723	2543	445	40	269	23	74	8	13	1	5	1	297
599414	1.5	2029	6682	888	3721	829	65	383	23	53	4	8	1	6	1	241
599415	0.8	959	3906	518	2088	455	36	206	14	38	4	10	1	9	1	188
599416	2.6	5524	12407	1353	5109	967	78	477	29	72	6	10	1	6	1	311
599417	0.4	704	1658	217	780	155	10	72	7	29	5	17	2	16	3	173
599418	0.9	1618	4238	547	2065	369	28	166	10	27	3	6	1	5	1	137
599419	0.5	927	2408	306	1102	197	14	81	6	20	3	8	1	8	1	105

Sample No.	TREO %	La ₂ O ₃ ppm	CeO ₂ ppm	Pr ₆ O ₁₁ ppm	Nd ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Ho ₂ O ₃ ppm	Er ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Y ₂ O ₃ ppm
599420	0.6	782	2506	326	1260	250	19	109	9	33	5	14	2	9	1	179
599421	1.5	3471	6891	766	2706	521	44	284	22	68	7	13	1	7	1	300
599422	0.7	1243	3341	431	1633	329	28	163	12	32	3	8	1	9	1	140
599451	1.1	2522	5000	540	1878	343	29	167	11	29	3	5	1	3	0	127
599453	0.6	1101	2666	306	1096	215	18	121	12	48	8	20	3	19	3	250
599454	0.2	352	857	91	299	49	4	24	3	14	3	10	2	13	2	93
599455	1.6	3694	7211	764	2659	521	45	292	23	66	7	11	1	6	1	276
599456	1.6	3741	7432	808	2846	485	36	217	13	36	3	6	1	4	0	140
599457	0.4	856	1769	186	623	109	9	63	7	37	7	24	4	30	5	244
599458	0.6	1572	3059	329	1036	159	14	79	6	18	2	3	0	1	0	69

personal use only

Appendix C - Odyssey Project, 2012 JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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 (e.g., submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> o Geochemical sampling reported is a combination of cut channels, chip samples and select samples from outcrop, along with chip samples from transported float or boulders where outcrop is not available. <p>Reported samples within the Odyssey Project were submitted to Activation Laboratories Ltd.'s (ActLab) sample preparation facility in Thunder Bay, Ontario for analysis using a lithium metaborate/tetraborate fusion method. An analytical package including the analysis of major oxides by ICP-OES and a suite of 43 trace elements by ICP-MS was implemented. Niobium was determined by XRF</p>
Drilling techniques	<p><i>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).</i></p>	<ul style="list-style-type: none"> o No Reported Drilling
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> o No Reported Drilling
Logging	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> o No drill results for project included in this report
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all cores taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></p>	<ul style="list-style-type: none"> o No drill results for project included in this report

Criteria	JORC Code explanation	Commentary
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
Quality of assay data and laboratory tests	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><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.</i></p>	<ul style="list-style-type: none"> ○ Assaying and Laboratory procedures reported are completed by certified independent labs and considered to be appropriate and in accordance with best practices for the type and style of mineralisation being assayed for. ○ No geophysical tools, spectrometers, or handheld XRF instruments have been used in the reported exploration results to determine chemical composition at a semi-quantitative level of accuracy. ○ No audit completed and no data to support a review of QC procedures for historical results available to the Company at the time of this report.
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> ○ No drill results for project included in this report. ○ No use of drilling (and as such no twin holes) on the property to date. ○ reported samples taken from historical reports and maps available for download from the Newfoundland and Labrador Department of Industry, Energy and Technology, with limited field verification work completed to date. ○ No adjustment to data is made in the reported results
Location of data points	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> ○ No drill results for project included in this report. Locations of reported samples taken from historical reports and maps available for download from the Newfoundland and Labrador Department of Industry, Energy and Technology, with limited field verification work completed to date. ○ Reported results are reported in the NAD27 datum, Zone 20 projection ○ Topographic control is not yet defined for the project
Data spacing and distribution	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<ul style="list-style-type: none"> ○ No systematic spacing of data is applied previous early stage surface sampling, were sampling appears to be constrained to available outcrop and boulder fields for the purpose of assessing potential for mineralisation. No reported results are expected to be relied on to quantify mineralisation or underpin a future resource estimation are included in this report.
Orientation of data in relation to geological structure	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<ul style="list-style-type: none"> ○ Orientation of sampling and structural controls on mineralisation yet to be assessed
Sample security	<i>The measures taken to ensure sample security.</i>	<ul style="list-style-type: none"> ○ No new sample results by the company, or exploration results expected to be relied on to quantify mineralisation or underpin a future resource estimation are included in this report.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> ○ An initial reconnaissance site visit has been completed to confirm sample locations of historical sampling and initiate a verification sampling process. Previous sampling work was found to be well monumented in several locations, and reconcile to within error of handheld GPS units for locations

Section 2 - Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p>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> <p>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.</p>	<ul style="list-style-type: none"> ○ The Company holds an exclusive option [subject to shareholder approval] to acquire a 100% interest in a single licence No. 034380M, comprised of 28 claims totalling an area of approximately 7km² ○ With shareholder approval, the exercise of option to acquire the project will remain subject to i) completing \$150,000 work commitment by 7 November 2023, ii) paying consideration for exercise of option totalling 1,200,000 fully paid ordinary shares in MPG and \$40,000 cash with iii) issue of a 2.5% net smelter return royalty deed over the property. ○ The property is accessible via float plane or helicopter from Happy Valley-Goose Bay, or Churchill Falls Labrador. Nearest road access is 38km west of the Odyssey project, where a maintained road extends 130km north from the town of Churchill Falls
Exploration done by other parties	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<ul style="list-style-type: none"> ○ 1950's the Seal Lake belt was prospected by Frobisher Limited and Kennco Explorations for Copper and Uranium, with mapping and prospecting of the Mann 2 occurrence completed by Frobisher Ltd in 1957. No economically viable discoveries reported. ○ 1959-61, Rio Canex optioned the project from Kennco and complete extensive trenching, detailed geology mapping, beryllometer survey, mineralogical and metallurgical studies for Beryllium recovery to concentrate. Four holes drilled (East of Odyssey) totalling 1,383 feet of drilling and estimated an exploration target for 5Mt of BeO-Nb, with no assay work for REE's ○ 1961, Brummer J.J. and Mann, E.L. publish initial description of the Mann #2 Occurrence, prospected for Niobium and Thorium following field work from 1957. ○ Late 1960's Rio Tinto completed 17 drillholes at Mann #1 (east of Odyssey) also focused on Beryllium potential, and reduced the estimate for resource potential at Mann #1 to 2.25Mt ranging from 0.35% to 0.40% BeO. ○ 1967-1970 Airborne radiometric surveys commissioned over portions of the red wine alkaline complex by Brinex, which identified several radioactive anomalies with subsequent ground reconnaissance including mapping, scintillometer surveys and metallurgical testing exploring for uranium, with only trace amounts reported. ○ 1973, Geological Survey of Canada published 1:250,000 scale geology, followed by more detailed mapping by Marten in 1978. ○ 1981, Newfoundland government geologist Geological survey of Canada published Bulletin 294 with Geology and petrology of the Red Wine Alkaline Complex, central Labrador by Curtis, L.W. and Currie, K.L. ○ 1981, Newfoundland government reconnaissance mapping campaign completed by Miller and in 1983, Newfoundland and Labrador Province Department of Mines and Energy, Mineral Development Division publish 1:100k geology by Ty Thomas, A and Hibbs, D. ○ 1985-86 Cuvier Mines explored a larger area overlapping the Odyssey Project area and focussed on Beryllium exploration and completed a summary compilation of previous work on the properties ○ 2009-11 Rare Earth Metals Inc. (RA) staked claims across a broader area in the Red

Personal use only

Criteria	JORC Code explanation	Commentary
		<p>Wine District targeting REE potential and initiated the first systematic exploration efforts assessing the REE potential of the district. In 2010 RA contracted Aeroquest Ltd. of Mississauga, Ontario to complete a low level airborne radiometric and magnetics survey over the Red Wine Property totalling 2,806 line kilometres at 100 meter line spacing (data not found). In 2010-11 RA completed surface sampling over the present day Odyssey project and surrounding areas, advancing drilling on multiple prospects excluding occurrences within the Odyssey Project, and advanced the Two Tom project to an inferred mineral resource estimation under Canadian NI-43-101.</p>
<p>Geology</p>	<p>Deposit type, geological setting, and style of mineralisation.</p>	<ul style="list-style-type: none"> ○ The Property is situated within the Central Mineral Belt of Labrador, proximal to the northern margin of the Grenville Structural Province. It is underlain by peralkaline volcanic and porphyritic rocks of the Letitia Lake Group and cogenetic peralkaline and alkaline plutonic rocks of the Arc Lake and Red Wine Intrusive Suites (~1.3 Ga). The Letitia Lake Group and the associated intrusive rocks are bound on the north by terrestrial to shallow marine sedimentary rocks, basaltic flows and gabbro sills of the Seal Lake Group (1.0 to 1.2 Ga) and to the south by granitoid rocks of the Trans-Labrador batholith (1.65 Ga) (Belik 1996). ○ The Odyssey project is located at what represents the aphophyses of the Red Wine Alkaline complex, where several lenticular masses may represent metamorphosed dyke phases of the complex (Curtis, 1981). The lenticular masses are composed of Nepheline Gneiss and Pyroxene schists associated with pegmatites in contact with lenticular peralkaline intrusions/dikes. ○ Peralkaline igneous rocks are a tiny part of the spectrum of igneous rocks, but they are very distinctive. The high molecular values of $(K_2O + Na_2O)/Al_2O_3$ in these magmas favours crystallization of Na-bearing amphiboles (arfvedsonite, riebeckite) or pyroxenes (aegirine), and they may also be silica-undersaturated, containing nepheline or other feldspathoid minerals. Peralkaline magmas are commonly enriched in REE, Y, Zr, Nb, Hf, Ta, and in fluorine (F); they may also be enriched in incompatible elements, such as U, Th, Rb, Cs, Pb, and Be. (Kerr, 2011)
<p>Drill hole Information</p>	<p><i>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:</i></p> <p><i>easting and northing of the drill hole collar</i></p> <p><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></p> <p><i>dip and azimuth of the hole</i></p> <p><i>down hole length and interception depth</i></p> <p><i>hole length.</i></p> <p><i>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.</i></p>	<ul style="list-style-type: none"> ○ No drilling results are included in this report for the project, and no previous drilling results have been identified to date for the project area from previous exploration.
<p>Data aggregation methods</p>	<p><i>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</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation</i></p>	<ul style="list-style-type: none"> ○ No upper or lower cut-offs are applied to the reported soil results, and no significant intercepts reported in relation to RC drilling.

Persons using unauthorised copies of this report may be liable to a claim for damages or other legal action.

Criteria	JORC Code explanation	Commentary
	<p><i>should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> No metal equivalent reporting is applicable to this announcement *TREO (Total Rare Earth Oxides) includes the sum total of the Light Rare Earth Oxides (LREO) and Heavy Rare Earth Oxides (HREO) <p>HREO includes: Eu₂O₃, Gd₂O₃, Tb₂O₃, Dy₂O₃, Ho₂O₃, Er₂O₃, Tm₂O₃, Yb₂O₃, Lu₂O₃ and Y₂O₃ LREO includes: La₂O₃, CeO₂, Pr₆O₁₁, Nd₂O₃ and Sm₂O₃ NdPr referenced in this report is the sum of the LREO's: Pr₆O₁₁ and Nd₂O₃</p>
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	<ul style="list-style-type: none"> No new exploration results in relation to the project area are included in this report.
Diagrams	<p><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.</i></p>	<ul style="list-style-type: none"> Included in body of report as deemed appropriate by the competent person
Balanced reporting	<p><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.</i></p>	<ul style="list-style-type: none"> All rock chip locations that could be digitised and validated at the time of reporting are included in their entirety in included diagrams Historic rock chip results from the Odyssey project totalling 143 located samples with results identified as at the time of reporting from historical reports range from <0.1% TREO values in 2 samples to peak values of 9.3% TREO outlined in the report. Within the historical dataset, results range from <0.1% TREO to 9.3% TREO and for the cut-offs illustrated in Figure 1, 13.3% of samples are under 0.5% TREO and 60.8% of reported samples are >1% TREO No upper or lower cut-offs are applied to reporting.
Other substantive exploration data	<p><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.</i></p>	<ul style="list-style-type: none"> Public domain geophysical datasets are available for the project, but the relatively low resolution of datasets is not meaningful and material for the current stage of exploration in follow-up to current level of mapping and surface geochemistry work subsequently completed. Historical reports indicate additional sampling and airborne geophysical survey work in addition to reported information may be available for the datasets, but no sources for data have been identified by the Company as at the time of reporting. No bulk density, or groundwater tests have been completed on areas related to the reported exploration results.
Further work	<p><i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> Proposed work is outlined in this report. Included in body of report as deemed appropriate by the competent person