

**Work Report of 2011 Diamond Drilling on the Clay-Howells Project , Clay
and Howells Townships, Porcupine Mining Division, Ontario, Canada**

NTS:

42G16

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Summary

Magnetite and Niobium (Nb) mineralization has been observed in carbonatite of the Clay-Howells Alkalic Rock Complex for more than 50 years (Sage, 1988). Shklanka (1968) estimated a non 43-101 compliant resource-of 10 million tonnes of Iron Ore for Clay-Howells Carbonatite.

Rare Earth Metals Inc. has focused on searching for economically significant rare earth element (REE) deposits throughout North America with superior existing infrastructure or potential infrastructure for mine development. Rare earth element production comes primarily from China and recent announcements of quota reductions to preserve resources have highlighted the need to seek alternative sources for these elements throughout the rest of the world.

The patent claims covering the main carbonatite deposit were acquired in 2009. Additional claims were staked shortly thereafter to cover the known extent of the Clay-Howells Alkalic Rock Complex.

An airborne radiometric and magnetic survey was flown in 2010. Thirteen magnetic anomalies were deemed significant and 8 of the 13 were drilled in 2011.

Drilling in 2010 on the Clay-Howells property delineated near surface REE - Nb mineralization over a strike length of 700 metres and to a vertical depth of up to 250 metres from the surface. Mineralization is hosted in a magnetite bearing carbonatite and geochemical analysis of the drill core show that the Clay-Howell Fe - REE deposit is light rare element (LREE) enriched.

Drilling activities in 2011 were conducted during the period February 28th to April 10th, 2011. Drilling targeted regional magnetic anomalies around the Clay-Howells Alkalic Complex. A total of 2154.5 metres of drill core and 235 samples were recovered from 8 diamond drill holes.

Mineralization was encountered in three holes: DDH CH-11-02, DDH CH-11-06 and DDH CH-11-08. DDH CH-11-02 intersected a number of massive magnetite bands that have elevated rare earth element (REE), niobium(Nb), and iron (Fe) mineralization, but otherwise REE's and Nb mineralization are not significant. The most significant intersection of REE mineralization is in DDH CH-11-08 that has an aggregate width of thirty metres of magnetite-bearing carbonatite at 57.2-73m, 94.17-101.62m and 141.1-144.43m depth intervals.

1.0 Introduction

1.1 Location, Access and Physiography

The Clay-Howells Property is located in northern Ontario, approximately 70 km north of the community of Kapuskasing (Figure 1). The mining claims and patents can be easily accessed by 4x4 pick-up truck using an all-weather access road from Kapuskasing and an abandoned logging road named CSR-8. CSR-8 was reconditioned to allow year round access to the property. Northern and north-eastern portions of property can also be accessed by boat by traveling down the Kapuskasing River from a boat launch located approximately 25km north of Kapuskasing along the all weather access road. Drilling activities were staged from a camp located at UTM coordinates 4213982E and 5522864N (Zone 17, NAD 83)

Relief over most of the property is gentle to moderate and generally does not exceed 7m – 8m. Bedrock exposure is very poor, with the majority of the outcrop located in the north – northeast portion of the property. Outcrops tend to be low-lying, rounded and separated by wide swaths of swamp or thick forest cover.

1.2 Property Summary and Claim Status

The Clay-Howells Property is owned 100% by Rare Earth Metals Inc. and is comprised of 56 contiguous mining claims and 44 patents (Figure 2). The details of each mining claim are listed in Table 1. Initial staking was conducted in 2009 after the rights to existing patents were secured.

2.0 Previous Work

2.1 Geological Work

Bennett et al. (1967a) completed the first geological work on the property with a reconnaissance mapping program of the Clay-Howells Alkalic Rock Complex. A K-Ar isotopic age of 1010 Ma was obtained by Gittins et al., as well in 1967. A B.Sc. thesis was completed by P. Chamois in 1977 and another isotopic age (Rb/Sr) of 1072 +/- 16 Ma was obtained by Bell and Blenkinsop in 1980.

2.2 Exploration Work

The first recorded exploration work on the property dates back to 1954 with the completion of an airborne electromagnetic survey by Lundberg Exploration Limited, and 2000 feet of drilling that was completed by a grubstake syndicate of Lundberg Employees (Sage 1988).

Six diamond drill holes, totalling 1124m was drilled by the Hopkins Township Syndicate in 1956. The target of the drilling was an aeromagnetic anomaly in the centre of Hopkins Township. The core was described as monzonite to gabbro with disseminated magnetite (ODM-GSC 1964a).

In 1957, the Chibougamau Mining and Smelting Company completed a ground magnetometer survey along with 3 diamond drill holes totalling 579.7m on the Spencer Option, located on the eastern portion of the Clay-Howells Alkalic Rock Complex. Only minor concentrations of magnetite were encountered in these holes (Sage 1988).

A second ground magnetometer survey and a further 936.7m (5 diamond drill holes) was drilled on another claim group located on the southeast portion of the Complex, known as the Bradley Option. Only minor concentrations of carbonate and hornblende, along with syenite, were intersected in these holes (Sage 1988).

A year later, the Mattagami Mining Company Limited, a subsidiary of the Pickands Mather Company, the Steel Company of Canada and Interlake Iron Corporation completed a ground magnetometer survey over the same aeromagnetic anomaly that was originally discovered by the Lundberg Exploration Limited. Upon completion of the survey, 4539m of drilling was conducted that outlined a northeast striking carbonatite body 1050m long and 90m wide (Sage, 1988).

At the same time that the Mattagami Mining Company Limited was outlining the magnetite carbonatite body (1958), Bewabik Minerals Limited completed two diamond drill holes totalling 827.2 m on claim S-78793. Only minor concentrations of magnetite were intersected (Sage 1988).

The most recent exploration work was conducted by Argor Explorations Limited in 1966. One diamond drill hole totalling 153m was completed on an airborne geophysical anomaly on the northwest portion of the complex, near the contact between the syenite and host gneisses. The drill hole intersected disseminated to massive pyrite and pyrrhotite, in association with paragneiss.

Rare Earth Metals acquired the patent rights around the carbonatite body in 2009, after a due diligence program consisting of re-sampling of old drill core stored at the Ministry of Northern Development and Mines in Timmins, ON.

During the period of January to March 2010, Rare Earth Metals completed a diamond drilling program on the main carbonatite body consisting of 5432.5 metres of drill core and 1825 samples from 18 drill holes (Penney and Nielsen, 2011).

A follow up airborne radiometric and magnetic Survey was flown to search for the presence of additional magnetite bearing carbonatite bodies and/or radiometric anomalies with potential to host rare earth element mineralization (Nielsen, 2011).

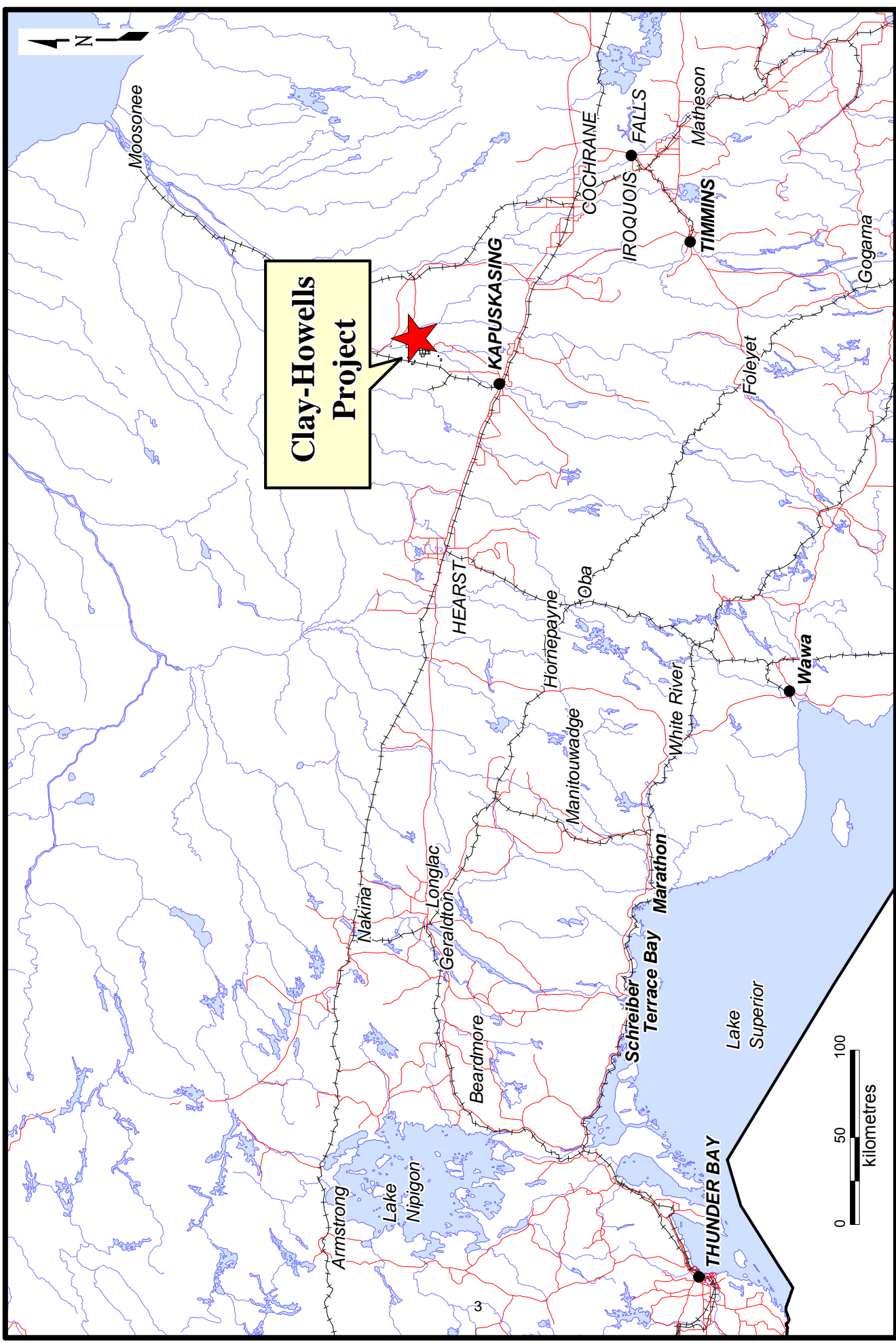


Figure 1 - General Location Map

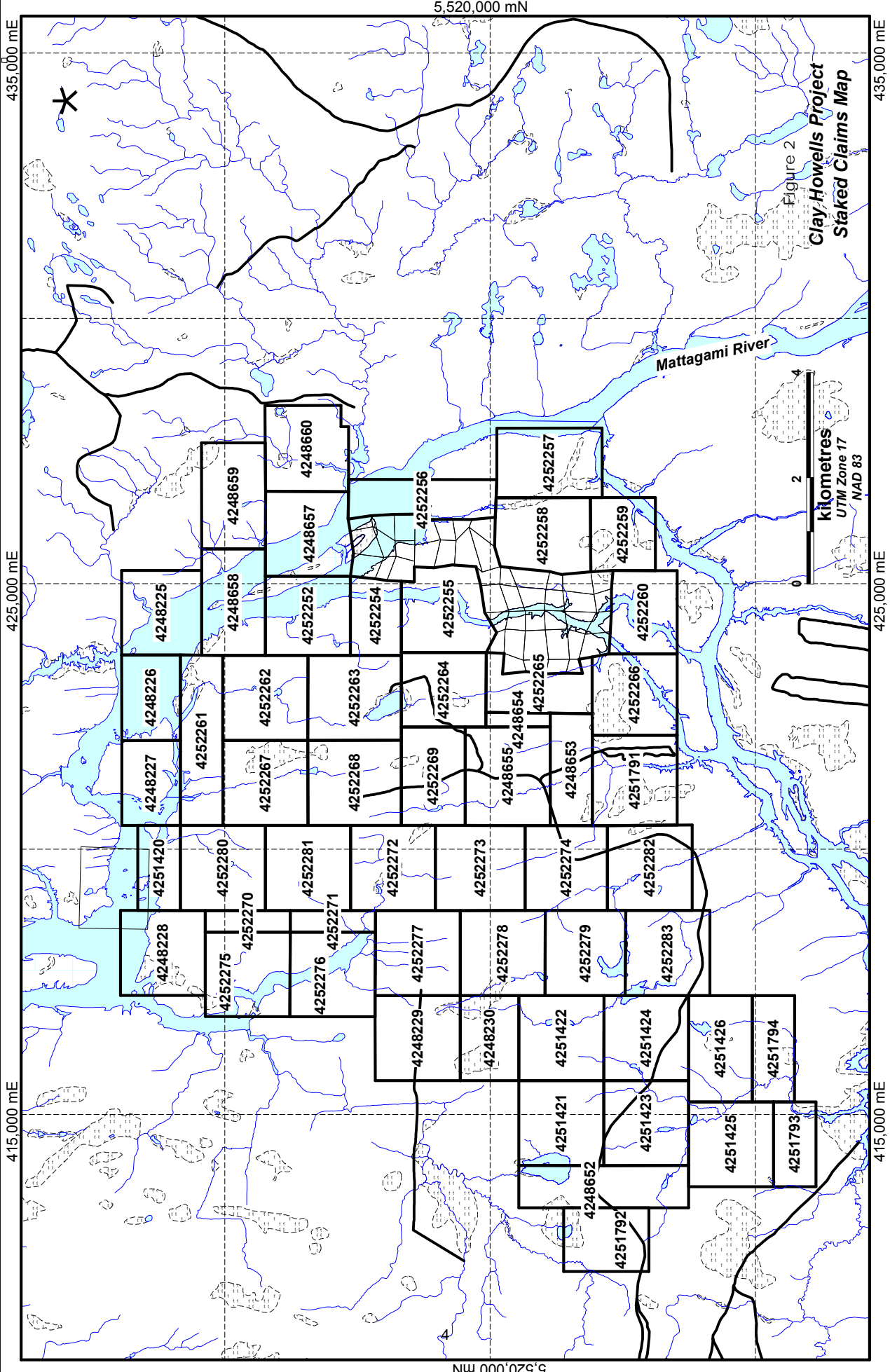


Figure 2

**Clay Howells Project
Staked Claims Map**

kilometres
UTM Zone 17
NAD 83

435,000 mE

425,000 mE

415,000 mE

5,520,000 mN

5,520,000 mN

435,000 mE

425,000 mE

415,000 mE

Mattagami River

- 4248227, 4248226, 4248225
- 4251420, 4252280, 4252261
- 4252267, 4252262, 4248659, 4248658, 4248657, 4248660
- 4252268, 4252263, 4252254, 4252256
- 4252269, 4252264, 4252255
- 4248655, 4248654, 4252265, 4252258, 4252257
- 4248663, 4251791, 4252266, 4252260
- 4251428, 4252270, 4252281, 4252272, 4252273
- 4252275, 4252270, 4252276, 4252271, 4252272, 4252273
- 4248228, 4252275, 4252270, 4252276, 4252271, 4252272, 4252273
- 4248229, 4252277, 4252278
- 4248230, 4252278
- 4251792, 4251421, 4251422, 4252279, 4252282
- 4251793, 4251423, 4251424, 4252283
- 4251425, 4251426
- 4251794, 4251793

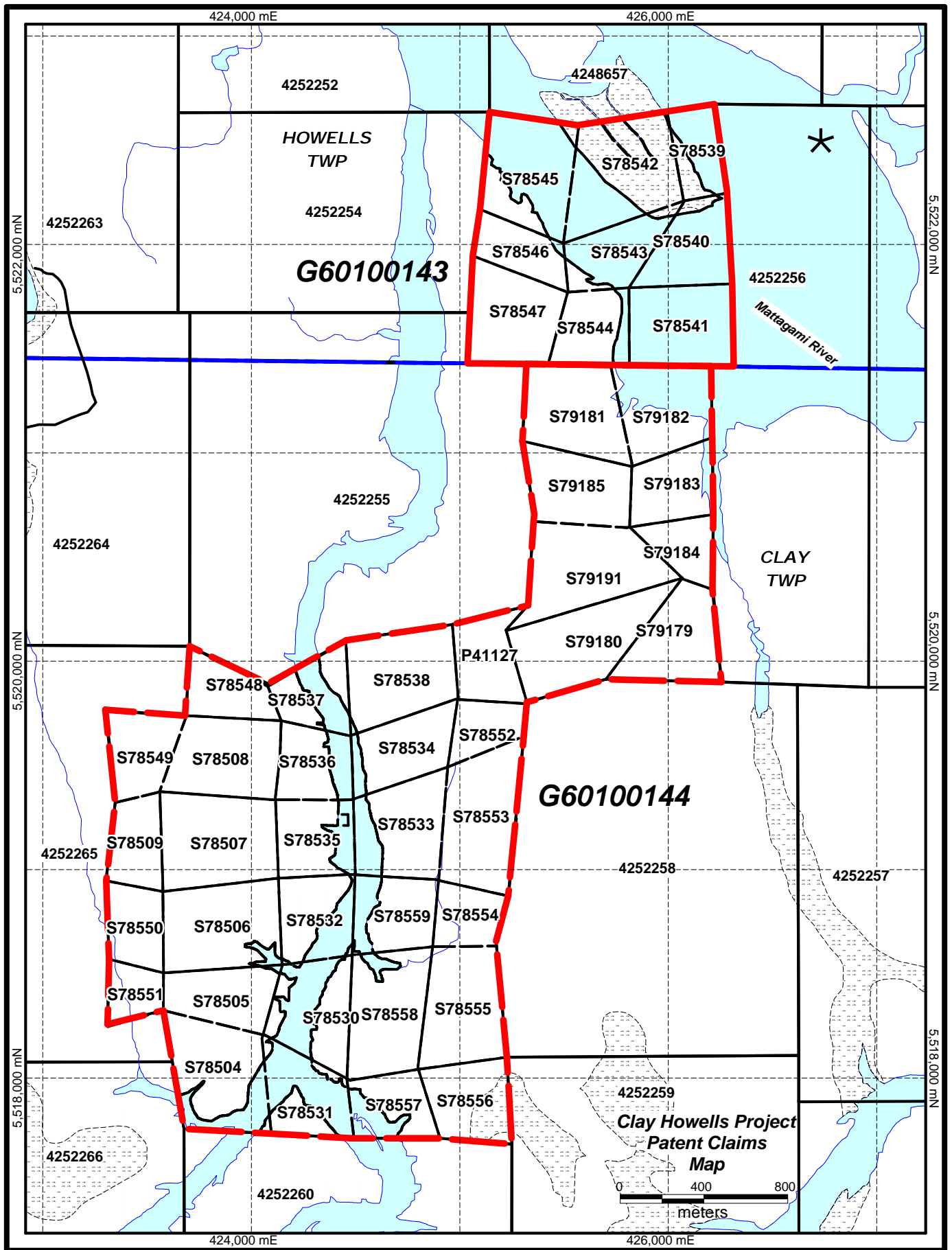


Figure 3
5

Table 1: List of staked claims.

Claim Number	Recording Date	Claim Due Date	Percent Option	Township/Area	Registered
4252257	7-Oct-09	7-Oct-11	100.00%	CLAY	Rare Earth Metals Inc.
4252258	7-Oct-09	7-Oct-11	100.00%	CLAY	Rare Earth Metals Inc.
4252265	7-Oct-09	7-Oct-11	100.00%	CLAY	Rare Earth Metals Inc.
4252252	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252254	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252255	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252256	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252262	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252263	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252264	7-Oct-09	7-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252259	8-Oct-09	8-Oct-11	100.00%	CLAY	Rare Earth Metals Inc.
4252260	8-Oct-09	8-Oct-11	100.00%	CLAY	Rare Earth Metals Inc.
4252266	8-Oct-09	8-Oct-11	100.00%	CLAY	Rare Earth Metals Inc.
4252273	8-Oct-09	8-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4252274	8-Oct-09	8-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4252278	8-Oct-09	8-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4252279	8-Oct-09	8-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4252282	8-Oct-09	8-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4252283	8-Oct-09	8-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4252261	8-Oct-09	8-Oct-11	100.00%	HOWELLS	Rare Earth Metals Inc.
4252267	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252268	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252269	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252270	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252271	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252272	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252275	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252276	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252277	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252280	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4252281	8-Oct-09	8-Oct-11	100.00%	MOWBRAY	Rare Earth Metals Inc.
4251421	22-Oct-09	22-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4251422	22-Oct-09	22-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4251423	22-Oct-09	22-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4251424	22-Oct-09	22-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.

4251425	22-Oct-09	22-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4251426	22-Oct-09	22-Oct-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4248652	18-Nov-09	18-Nov-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4248653	18-Nov-09	18-Nov-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4248654	18-Nov-09	18-Nov-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4248655	18-Nov-09	18-Nov-11	100.00%	HOPKINS	Rare Earth Metals Inc.
4248657	19-Jan-10	19-Jan-12	100.00%	HOWELLS	Rare Earth Metals Inc.
4248658	19-Jan-10	19-Jan-12	100.00%	HOWELLS	Rare Earth Metals Inc.
4251791	22-Feb-10	22-Feb-12	100.00%	HOPKINS	Rare Earth Metals Inc.
4251792	22-Feb-10	22-Feb-12	100.00%	HOPKINS	Rare Earth Metals Inc.
4251793	22-Feb-10	22-Feb-12	100.00%	HOPKINS	Rare Earth Metals Inc.
4251794	22-Feb-10	22-Feb-12	100.00%	HOPKINS	Rare Earth Metals Inc.
4248659	22-Feb-10	22-Feb-12	100.00%	HOWELLS	Rare Earth Metals Inc.
4248660	22-Feb-10	22-Feb-12	100.00%	HOWELLS	Rare Earth Metals Inc.
4251420	11-Jun-10	11-Jun-12	100.00%	MOWBRAY	Rare Earth Metals Inc.
4248230	25-Jun-10	25-Jun-12	100.00%	HOPKINS	Rare Earth Metals Inc.
4248225	25-Jun-10	25-Jun-12	100.00%	HOWELLS	Rare Earth Metals Inc.
4248226	25-Jun-10	25-Jun-12	100.00%	HOWELLS	Rare Earth Metals Inc.
4248227	25-Jun-10	25-Jun-12	100.00%	MOWBRAY	Rare Earth Metals Inc.
4248228	25-Jun-10	25-Jun-12	100.00%	MOWBRAY	Rare Earth Metals Inc.
4248229	25-Jun-10	25-Jun-12	100.00%	MOWBRAY	Rare Earth Metals Inc.

Table 2: List of patent claims.

Patent Claim	Township/Area
P41127	CLAY (M-0448)
S78504	CLAY (M-0448)
S78505	CLAY (M-0448)
S78506	CLAY (M-0448)
S78507	CLAY (M-0448)
S78508	CLAY (M-0448)
S78509	CLAY (M-0448)
S78530	CLAY (M-0448)
S78531	CLAY (M-0448)
S78532	CLAY (M-0448)
S78533	CLAY (M-0448)
S78534	CLAY (M-0448)
S78535	CLAY (M-0448)
S78536	CLAY (M-0448)
S78537	CLAY (M-0448)
S78538	CLAY (M-0448)
S78539	HOWELLS (G-0894)
S78540	HOWELLS (G-0894)
S78541	HOWELLS (G-0894)
S78542	HOWELLS (G-0894)
S78543	HOWELLS (G-0894)
S78544	HOWELLS (G-0894)

S78545	HOWELLS (G-0894)
S78546	HOWELLS (G-0894)
S78547	HOWELLS (G-0894)
S78548	CLAY (M-0448)
S78549	CLAY (M-0448)
S78550	CLAY (M-0448)
S78551	CLAY (M-0448)
S78552	CLAY (M-0448)
S78553	CLAY (M-0448)
S78554	CLAY (M-0448)
S78555	CLAY (M-0448)
S78556	CLAY (M-0448)
S78557	CLAY (M-0448)
S78558	CLAY (M-0448)
S78559	CLAY (M-0448)
S79179	CLAY (M-0448)
S79180	CLAY (M-0448)
S79181	CLAY (M-0448)
S79182	CLAY (M-0448)
S79183	CLAY (M-0448)
S79184	CLAY (M-0448)
S79185	CLAY (M-0448)
S79191	CLAY (M-0448)

3.0 Regional Geology

The Clay-Howells property is underlain by rocks of the Clay-Howells Alkalic Rock Complex (Table 3). The Clay-Howells Alkalic Rock Complex is described by Sage (1988) as a composite mushroom shaped intrusion within the Kapuskasing Sub-Province of the Superior Province of the Canadian Shield. The complex is Late Precambrian (Rb/Sr age of 1072 +/- 16 Ma) in age (Bell and Blenkinsop, 1980).

The Clay-Howells Alkalic Rock Complex is comprised of 2 broad types of silica over-saturated syenitic rocks intruding a sequence of Early Precambrian aged paragneisses and orthogneisses that have been regionally metamorphosed to the upper amphibolite - granulite facies typical of the Kapuskasing Sup-Province (Sage, 1988).

The first type is a coarse grained, grey – green, pyroxene syenite that occupies the centre of the complex and is the most abundant. The second type is a variably textured, red – brown, pyroxene syenite that is located along the margins of the Complex in contact with the host gneisses, and is commonly xenolithic (Sage, 1988).

A dike like magnetite bearing carbonatite intrudes the syenite in the south-east portion of the Complex. The Silico-carbonatite is contains 0 to 50% biotite, 10 to 80% magnetite, 20 to 55% carbonate, 10 to 20% aegirine-augite and approximately 5% apatite (Sage, 1988). Previous

4.0 Assessment Work Completed and Results

The following sections will detail the diamond drilling activities completed on the property in between February 28th and April 10th, 2011.

There are 15 accepted rare earth elements known as the lanthanides with atomic numbers 57 to 71 and are listed as follows: lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium.

Promethium is a synthetic element which does not occur naturally and therefore is not included in the assay report. Yttrium is considered a rare earth since it exhibits similar chemical properties.

It has been industry practice to report rare elements as a percentage oxide. The elements are initially reported from the lab in parts per million. The elements are converted to oxides with the following molecular formulas, La_2O_3 , Ce_2O_3 , Pr_2O_3 , Nd_2O_3 , Sm_2O_3 , Eu_2O_3 , Gd_2O_3 , Tb_2O_3 , Dy_2O_3 , Ho_2O_3 , Er_2O_3 , Tm_2O_3 , Yb_2O_3 , Lu_2O_3 , and Y_2O_3 . Rare earth oxides are reported as total rare earth oxides (TREO) which is a simple addition of the percentages of the above 15 components

Rare earth oxides are further classified as light rare earth oxides (LREO) which includes La_2O_3 , Ce_2O_3 , Pr_2O_3 , Nd_2O_3 and Sm_2O_3 , and heavy rare oxides (HREO) which includes Eu_2O_3 , Gd_2O_3 , Tb_2O_3 , Dy_2O_3 , Ho_2O_3 , Er_2O_3 , Tm_2O_3 , Yb_2O_3 , Lu_2O_3 , and Y_2O_3 .

As a rough measure of the value of an assay, heavy rare earth elements (HREO) are reported as a percentage of total rare earth oxides (TREO). All composite TREO values are reported as length weighted averages.

4.1 Drilling

Diamond drilling activities were conducted on the Clay-Howells Property from February 28th and April 10th, 2011. Landdrill International Inc. was contracted to carry out the drilling operations. Whisk Air Helicopters of Thunder Bay, Ontario, was contracted to provide helicopter support.

Drill hole locations and alignment were controlled using a Reflex Alignment Positioning System (APS). The attitude of the drill hole was tracked using a Reflex Maxibore II system which is not affected by strong magnetic fields. Maxibore surveys were completed by Rare Earth Metals Inc. employees.

Eight drill holes were completed to test strong aeromagnetic anomalies around the Clay-Howells Alkalic Rock Complex for carbonatite – magnetite hosted REE –Nb mineralization (Map 1). A

total of 2154.5 metres of core was recovered and 235 samples were collected. Table 4 contains a summary of the statistics for each hole. The Certificates of Analysis that contain the original lab results for each sample is located in Appendix E.

Table 4: Summary of drill hole statistics.

DDH ID	Easting	Northing	Claim / Patent Numbers	Start Date	End Date	Depth (m)	Angle	Azimuth	Samples Collected
CH-11-01	419805	5526025	4251420	28-Feb-11	4-Mar-11	201	-45	269.5	4
CH-11-02	425379	5521826	S78547	5-Mar-11	11-Mar-11	441	-45	68.5	75
CH-11-03	424209	5521003	4252255	12-Mar-11	15-Mar-11	240.45	-45	83.1	5
CH-11-04	423475	5520006	4252265	15-Mar-11	20-Mar-11	285	-45	144.4	6
CH-11-05	425423	5519471	4252258	21-Mar-11	23-Mar-11	177	-70	318	2
CH-11-06	425818	5519301	4252258	23/03/2011 - 01/04/2011	26/03/2011 - 03/04/2011	213	-88	135	24
CH-11-07	426857	5518486	4252257	27-Mar-10	30-Mar-10	342	-45	149.1	19
CH-11-08	424188	5518596	S78532	4-Apr-11	7-Apr-11	255	-45	148.1	100
<i>UTM Nad 83, Zone 17N</i>						Total	2154.5	Total	235

One hole was drilled on each setup (Cross Sections A – H, Map Pocket).

Table 5: Summary of mineralized intersections.

Hole	From (m)	To (m)	Interval (m)	TREO %	Fe2O3(T) %	HREO%	Nb2O5%
CH-11-02	269.00	295.90	26.9	0.12	51.55	6%	0.07
CH-11-06	82.5	89.4	6.9	0.57	18.33	11%	0.15
CH-11-08	57.2	73	15.8	0.67	48.41	2%	0.05
	and 94.17	117.65	23.48	0.46	33.48	4%	0.054

The highest TREO values returned were 0.67% over 15.8 metres from DDH CH-11-08 and 0.57% over 6.9 metres from DDH CH-11-06. The REE bearing intersection in DDH CH-11-08 is hosted by massive magnetite bands. The location of this hole suggests that this intersection is possibly related to a second lens of magnetite carbonatite mineralization.

CH-11-02 targeted a prominent bulls-eye magnetic high anomaly, north-northeast along strike from the main REE Magnetite Carbonatite Zone that was drilled in 2010. The elevated REE intersection in DDH CH-11-02 is also associated with Magnetite Carbonatite and progressively carbonatized melanocratic microsyenite and magnetite veining. The intersection is ~200m below the surface.

CH-11-06 targeted a magnetic high anomaly that is part of a ring structure along the south – east margin of the Clay Howells Alkalic Rock Complex. The REE bearing intersection includes an 85cm. wide semi-massive magnetite vein and associated carbonatized and fenitized syenite.

The concentration of heavy rare earth elements is variable throughout each of the holes. As a percentage of the TREO composition, the heavy rare earth oxides range from a low of 2% to a maximum of 11%. The REO intersections in each of the holes are LREE enriched. Cerium, Lanthanum, Neodymium comprise the majority of the REE composition.

Table 6: REO distribution of mineralized intersections.

Hole	CH-11-02	CH-11-06	CH-11-08	
From - To	269.0m to 295.9m	82.5m - 89.4m	57.2m - 73.0m	and 94.17m - 117.65m
Interval	26.9	6.9	15.8	23.48
La₂O₃	0.03	0.12	0.21	0.14
Ce₂O₃	0.06	0.25	0.33	0.22
Pr₂O₃	0.01	0.03	0.03	0.02
Nd₂O₃	0.02	0.09	0.08	0.06
Sm₂O₃	0.003	0.015	0.007	0.006
Eu₂O₃	0.0006	0.0029	0.0015	0.0014
Gd₂O₃	0.0016	0.0097	0.0031	0.0029
Tb₂O₃	0.0002	0.0013	0.0003	0.0003
Dy₂O₃	0.0009	0.0068	0.0015	0.0016
Ho₂O₃	0.0001	0.0012	0.0003	0.0003
Er₂O₃	0.0004	0.0034	0.0007	0.0007
Tm₂O₃	0.000049	0.0005	0.0001	0.0001
Yb₂O₃	0.00029	0.0029	0.0004	0.0006
Lu₂O₃	0.000043	0.00043	0.00006	0.00008
Y₂O₃	0.0035	0.035	0.0070	0.0084

4.1.1 Sample Methodology and Analytical Techniques

Core samples from the drilling sites were delivered from the drill site daily to Rare Earth Metals Inc. field camp. At the company’s core shed, drill core samples were taken at geologically significant intervals, typically over one and half meters. Core recovery was approximately 90 – 95%. The designated sample intervals were cut using a diamond saw or manual core splitter. One

half of the core was selected for geochemical analysis with the remaining half being placed back into the core box. Care was taken to ensure that neither half of the core represents a bias with respect to the nature and mineral content of the sample. The sample interval and methodology are consistent with industry standards. Drill core samples were packaged in “rice” bags and sealed with a unique security tag number that was recorded. The sealed rice bags were taken from camp to Kapuskasing by Rare Earth Metals Inc. employees and handed to Manitoulin Transport personnel for delivery to Activation Laboratories Ltd.’s (Actlabs) facility in Thunder Bay, Ontario for sample preparation, and then were forwarded on to Ancaster, Ontario for analysis. Samples were prepared 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. Accuracy and precision of the results is further tested by Activation Labs through the systematic inclusion of reference samples and duplicate samples. Actlabs is an ISO 17025 (Lab 266) and NELAP (lab E87979) accredited lab for specific registered tests. A breakdown of the elements and oxides measured within the analytical methods employed are as follows:

Fusion ICP OES: SiO₂, Al₂O₃, Fe₂O₃ (T), MnO, MgO, CaO, Na₂O, K₂O, TiO₂, P₂O₅, LOI, Sc, Be, V, Sr, Y, Zr and Ba

Fusion ICP-MS: Cr, Co, Ni, Cu, Zn, Ga, Ge, As, Rb, Mo, Ag, In, Sn, Sb, Cs, , Bi, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, W, Tl, Pb, Th, U.

Fusion XRF: Nb

4.2 Geology and Mineralization

4.2.1 Lithology

Lithologies observed in these eight holes are summarized in to nine units: Overburden, Interleaved/interbanded carbonatite and syenite, Carbonatite, Magnetite-bearing carbonatite, Interbanded syenite and magnetite, Massive magnetite, Syenite, Gabbro and Biotite-amphibole feldspar schist.

4.2.1.1 Feldspar (Biotite) Amphibole Schist

This is a dark green and grey white mottled schistose rock, composed of plagioclase feldspar (50%), green to dark green amphiboles (45%) and some dark biotite (5%). There is mm scale banding between amphiboles and feldspars. It is observed in DDH CH-11-08 in a fault zone, as strongly broken core. It is hypothesized that this rock might be faulted basement rock or it could be a basement xenolith captured by the syenite intrusion.

4.2.1.2 Gabbro

On fresh surface, biotite gabbro is dark grey to dark green in wet condition, and grey in dry condition. The rock is massive, medium to coarse grained, mostly equigranular and of homogeneous composition. It was encountered in DDH CH-11-01 in the northern part of the

alkalic syenite complex, close to the outer margin. Estimated modal composition of the rock consists of feldspars (40-50%), mafic minerals such as olivine (5%), amphiboles and pyroxene (35-40%), dark brown biotite (10-15%), and disseminated sulphides (pyrrhotite and pyrite: 2-3%). Locally, olivine may reach as high as 30%. Within the major gabbroic unit, a more leucocratic section of dioritic composition and more melanocratic interbeds of gabbro-pyroxenite composition are encountered in DDH CH-11-01 (124.15-150.5 metres interval).

In fault zones, the gabbro is hematitized or oxidized to reddish brown - dark brown-with relicts of less altered or unaltered greenish mafic minerals. For instance in the depth interval of 119.6-24.15 metres, the gabbro has been altered to hematite or goethite. Strong brecciation characterizes this zone with breccias fragments up to 4x5cm. There is also whitish cryptocrystalline or amorphous silica as cementing material between the fragments. In less oxidized parts, feldspars faintly alter to creamy white or pale yellowish brown clay. The gabbro unit within the syenitic complex is interpreted as a local enrichment of mafic minerals in the course of a syenitic magma crystallization. This suggestion is made in the absence of any reported sizable gabbroic body within the syenite ring complex of Clay Howells.

4.2.1.3 Syenite

This is by far the most abundant lithology in the area. It is encountered in all drill holes (CH-11-01 to CH-11-08). See Appendix D and F. It has varied compositional, textural and colour ranges. Texturally it is recognized as coarse grained syenite (referred to syenite throughout this report) and fine grained syenite (referred to microsyenite throughout the discussion). Compositionally, it is divided into syenite (to include the normal feldspar rich syenite proper) and melanocratic syenite to include syenite that is rich in mafic minerals, notably amphiboles in our case (Appendix D and F). On the basis of color, syenite is divided into grey syenite and pink syenite. The former contains mafic minerals set within a predominantly creamy or grey white feldspar composition, where as the later predominantly contains light pink to pink feldspars with subordinate similar mafic minerals. With increasing mafic mineral content the pink syenite attain an intermediate color between grey and pink shades. Leuco syenite that occurs occasionally in some drill holes (e.g. in hole # CH-11-07, 312-322m, depth interval.) is the grey syenite equivalent of the pink syenitic rock.

Syenite is a greyish to pinkish, medium to coarse grained rock, and commonly attains pegmatoid-like texture with the presence of large feldspar, amphibole and pyroxene crystals. Compositionally, it consists of feldspars (60-80%), mafic minerals such as amphiboles and pyroxene (20-30%) and biotite (2-5%). Microsyenite is the fine, and fine to medium grained equivalent of coarse grained syenite (or simply syenite). The content of feldspars and mafic minerals in microsyenite is similar as those in syenite. Coarse pink and creamy to grey white feldspar minerals may in places occur within this finer version of the syenite as irregular crystals or apophysis. This suggests that the coarse grained syenite is a later phase than the microsyenite.

Thin bands of pink syenite often occur within the grey syenite implying its late crystallization timing with respect to the grey syenite.

Melanocratic syenite is a granoblastic, greenish, medium to coarse grained rock type with a predominant amphibole composition (75-80%) and lesser amount of whitish feldspars (20-25%) and subordinate calcite (up to 5%). Calcite often occupies the interstitial boundaries of feldspar and amphibole crystals. Melanocratic microsyenite is the fine grained equivalent of the melanocratic syenite. It is rich in amphiboles as in the melanocratic syenite except that it contains lower content of feldspars (15-20%). Much of the drill core in DDH CH-11-02 contains these rock types (Appendix 3 and 4). Some amount of the melanocratic, medium to coarse grained syenite is observed in DDH CH-11-7 (295-336 metres depth interval). Massive magnetite veins/bands are often associated with these types of lithologies.

4.2.1.4 Massive Magnetite

This is a dark grey, massive, fine grained rock predominantly composed of magnetite and some green amphiboles. The core is very heavy implying the significant presence of magnetite. Iron sulphides like pyrrhotite and pyrite patches are common inside magnetite. Massive magnetite displays low radiometric count.

Massive magnetite ranges in thickness from mm scale to several metres. Thicker massive magnetite units were encountered in DDH CH-11-02 at 112.35-117m and 213-216.45 metres depth interval. In addition there are multiple horizons that contain massive magnetite bands intercalated with syenite. (Appendix D and F). Few thin bands/veins of massive magnetite were also observed in other holes (CH-11-03, 4, 06 and 07; see appendix D and F). Some of these massive magnetite bands have been oxidized to hematite losing their magnetic property (e.g. hematitized magnetite veinlets in DDH CH-11-04 at 169.6-185.65m depth interval).

4.2.1.5 Magnetite bearing Carbonatite

Magnetite bearing carbonatite is strongly magnetic, pepper and salt textured (dark grey and white spotted rock) composed of predominantly of magnetite (>20% to 75%) and appreciable calcite matrix (20-50%). This is mostly the host to the REE's mineralization observed. Magnetite bearing carbonatite is observed in DDH's CH-11-06 (84.05-84.90m), CH-11-08 (57.2-73m, 94.17-101.62m and 141.1-144.43m). With the exception of DDH CH-11-06, all magnetite bearing carbonatite is low in total radiometric counts. Niobium content is generally low in this rock unit implying the very low, or the absence of Nb phases such as pyrochlore that were observed in the 2010 drilling.

4.2.1.6 Carbonatite

Two varieties of this lithology were observed. One is weakly magnetic, medium to coarse grained, composed of carbonate and significant amount of silicates such as green amphiboles and biotite and some feldspars. It has variable colour depending the amount of calcite: pinkish and green mottled or whitish and green mottled. It can be referred as silico-carbonatite. It is observed in DDH CH-11-02 and DDH CH -08. The other type is a whitish, weakly magnetic, generally

medium grained rock with some spotting of dark grey fine magnetite, and lesser amount of green amphiboles and dark biotite; calcite is the dominant mineralogy with subordinate magnetite as much as 5-10%. It may either occur distinctively as a separate unit (e.g. in DDH CH-11-02 in the interval 406-408m) or interleaved or interbanded with syenite as in DDH CH-11-08 (Appendix D and F).

4.2.1.7 Interbanded Syenite and Magnetite

This is a zone characterized by massive magnetite bands within syenite; separating the magnetite bands is difficult. It was pragmatic and useful to differentiate this zone from the barren syenite by highlighting the zone of intercalations as a separate unit. This may help to make a better interpretation if deep drilling or some other exploration methods are carried out in the future.

4.2.1.8 Interbanded Carbonatite and Syenite, Magnetite bearing Carbonatite and Syenite

This unit consists of interbands of carbonatite, magnetite bearing carbonatite within syenite or interwoven carbonatite and magnetite bearing carbonatite within syenite. These horizons also contain fragments of syenite or coarse relict feldspar crystals in them suggesting syenite largely altered to carbonatite through carbothermal processes. Carbonatites of this nature are well observable in DDH CH-11-08 (Appendix F and D). Either the carbonatitic horizons or the syenitic lithology may dominate within each section.

4.2.1.9 Overburden

This is the top most layer, occupying much of the alkali complex of Clay Howells. It is predominantly of pale grey colour and clay composition with some boulders of syenite at the base. It may range in thickness from 9 to 57m. Thicker overburden is near rivers (the thickest so far being around DDH CH-11-08). Away from rivers, overburden thickness does not exceed 20 metres, the average overburden thickness being 9-12 metres. In one instance (DDH CH-11-08), a weekly consolidated conglomeratic mudstone of about 7.5 metres thickness was encountered at a depth of 43.2-50.7 metres. This lithology consists of well rounded elliptical fragments of grey syenite and well rounded circular fragments of white limestone (Appendix D and F). It is fluvial in character possibly related to the nearby river systems.

4.2.2 Structures

Prominent fault structures were encountered in two of the eight holes: DDH CH-11-04 and CH-11-08. Fault structure in DDH CH-11-04 is detected at about 135.1-149.75m and 214.75-236.1m interval. Based on fracture planes within the fault system the fault plane is dipping 75-80° to the east. Several fault zones may intermittently extend as far as 193.1m depth based on the strong oxidation of feldspars and magnetite bands into hematite/goethite. Coarse grained syenite in the fault zone shows cataclastic feature. Otherwise the faults in this hole are barren.

The fault in DDH CH-11-8 is detected from about 166.5 metres depth down to the end of the hole (255 metres depth). In the first four metres of this fault (166.5-170.45m), pink syenite is strongly brecciated and moderately carbonatized. From 170.45 metres depth onwards, pink

syenite core is brecciated, oxidized and strongly broken. In places feldspars of the syenite have altered to whitish clay but the rock is mechanically competent. Several narrow massive magnetite and carbonatite bands that also show crushing fabric occur throughout the fault system.

Carbonatite and magnetite bearing carbonatite emplacement is interpreted to be controlled by fracture systems of variable orientation ranging from 05-60 degrees with respect to core axis. The most common fracture system and banding in carbonatites is about 40 degrees with respect to the core axis. This suggests that the syenite ring complex may dip sub-vertically outwardly. Since fracture orientation may change at short distances, reliable structural orientation of the carbonatites may only be deduced from second holes. If emplacement of mineralized carbonatites of the area are fracture controlled, a 50-metre downhole grid spacing between drill holes is not sufficient to outline the reliable deposit configuration. Any resource definition drilling should not be made larger than 50x25m grid spacing.

5.0 Conclusions and Recommendations

Diamond drilling was completed on the Clay Howells property to test the airborne magnetic anomalies outlined in the 2010 field season over the Clay-Howells Alkalic Rock Complex, a circular syenitic intrusion of about 113m². The 2010 airborne magnetic survey delineated a number of strong magnetic anomalies that mimic the circular structure of the intrusion of which 13 of them stand out as priority. Eight of the 13 occurrences were drill tested.

Eight drill holes, totalling 2154.5m were completed, and 235 samples were collected from the Clay-Howell's drilling campaign in 2011. Mineralization was encountered only in three holes: DDHs CH-11-02, CH-11-06 and CH-11-08. DDH CH-11-02 intersected a number of massive magnetite bands that have elevated REE's, Nb and Fe values; no significant REE's and Nb mineralization was intersected.

Magnetic anomalies underlying DDHs Ch-11-02 and 08 are explained by the presence of sizable units of massive magnetite, magnetite bearing carbonatite, or a number of thin interbanded massive magnetite and magnetite bearing carbonatite lithologies. The causes of the magnetic anomalies underlying the rest of the 2011 drilling (CH-11-01, 03, 04, 05, 06 and 07) have yet to be explained. There is no contrasting mineralogy to explain the distinct anomalies observed in airborne magnetic survey. It follows from this observation that the cause of the airborne magnetic anomalies maybe deep seated.

Further work on the Clay-Howells Property is warranted. An east – west basal till survey across the complex is recommended to assess the prospect of near-surface mineralization that may continue to be hidden by the thick clay overburden that covers most of the Clay-Howells Alkalic Rock Complex.

Ground geophysical surveys will help to resolve the large, broad magnetic anomalies delineated in the 2010 airborne survey in the southwest sector of the Complex.

References

- Bell, K. and Blenkinsop, J.
1980: Ages and Initial Sr-Sr ratios from Alkalic Complexes of Ontario; p. 16-23 *in* Geoscience Research Grant Program, Summary of Research 1979-1980; Ontario Geological Survey Miscellaneous Paper 93.
- Chamois, P.
1977: The Petrography and Chemistry of the Clay-Howells Alkalic Complex, Ontario; *unpublished* B.Sc. Thesis, Carleton University, Ottawa, 122p.
- Ferguson, S.
1971: Columbium (Niobium) Deposits of Ontario; Ontario Department of Mines and Northern Affairs, Mineral Resources Circular 14, p.32-33.
- Gittins, J., MacIntyre, R. and York, D.
1967: The Ages of Carbonatite Complexes in Eastern Canada; Canadian Journal Earth Science, Vol.4, p.651-655.
- Nielsen, P.
2011: Magnetic and Radiometric Airborne Survey of the Clay-Howells Property in the Porcupine Mining Division
- Penney, G. and Nielsen, P.
2011: Work Report of 2010 Diamond Drilling on the Clay-Howells Project , Clay and Howells Townships, Porcupine Mining Division, Ontario, Canada. Assessment report filed with Ministry of Northern Development and Mines.
- Sage, R.P.
1988: Geology of Carbonatite - Alkalic Rock Complexes in Ontario: Clay-Howells Alkalic Rock Complex, District of Cochrane; Ontario Geological Survey, Study 37, 104p.
- Shklanka, R.
1968: Iron Deposits of Ontario; Ontario Department of Mines, Mineral Resources Circular 11, p.110.

Statement of Qualifications

I, Glen T. Penney, do hereby certify that:

I am an employee of Rare Earth Metals Inc., a publicly listed company on the Vancouver Stock Exchange, with a business address of RR#2 3250, West Arthur St., Thunder Bay, Ont., P7C 4V1.

1. I graduated with a B. Sc. (Hons.) degree in Geology from Memorial University of Newfoundland and Labrador in St. John's, NL in 2001.
2. I have worked continuously in the mineral exploration industry since 2005 and have worked in various areas in Newfoundland and Labrador, Manitoba, Ontario and Saskatchewan.
3. I have no direct interests in the mineral licenses referenced in this report.
4. I have a direct interest in Rare Earth Metals Inc. through various stock option issuances.
5. I have authored this report based on involvement with the supervision and compilation of fieldwork on the referenced mineral licenses.

Signed and dated in Newfoundland, this 30th day of September, 2011.



Glen T. Penney

Rare Earth Metals Inc.

Paul E Nielsen, P.Geo
170 Inglewood Cr.
Thunder Bay, Ontario,
Canada, P7C 2E9
Telephone: 807-475-5934
Email: pnielsen@tbaytel.net

I, Paul Nielsen, do hereby certify that:

1. I am an independent geologist doing contract work for Rare Earth Metals Inc., and reside at 170 Inglewood Cr., Thunder Bay, ON.
2. I hold the following academic qualifications:
B.Sc. (Hons) Geology (1974), Lakehead University, Thunder Bay, Ontario, Canada
I am a member of the Association of Professional Geoscientists of Ontario (Member #1130).
I have worked in the mineral exploration industry throughout Canada including New Brunswick, Ontario, Manitoba, British Columbia and the Northwest Territories for more than 30 years as a geologist.
3. I am not aware of any material fact or material changes with respect to the subject matter of this report, the omission of which would make this report misleading.

Dated this 30th Day of September, 2011.

Respectfully Submitted



Paul E. Nielsen, P.Geo.

Appendix A – List of Personnel

Employee/Contractor	Man Days	Activities
Glen Penney <i>St. John's, NL (REM)</i>	50	Drilling Supervisor, Prospecting Supervisor, Core Logging, Data Compilation, Report Writing
Calvin Keats <i>Benton, NL (REM)</i>	53	Drilling Support, Camp Logistics
Paul Nielsen <i>Thunder Bay, ON (Paul Nielsen P.Geo Consulting)</i>	14	GIS Compilation - Support
Reg Felix <i>Bathurst, NB (Felix Geo-Consultants Inc.)</i>	7	Data Compilation, Supervision
Calvin Crocker <i>Benton, NL (REM)</i>	48	Expediting
Ayalew Gebru <i>Fredericton, NB</i>	41	Core Logging
Deon Humby <i>Benton, NL (REM)</i>	53	Core Splitter
Burt Nakogee <i>Kapuskasing, ON (REM)</i>	53	Labourer
Andy Sutherland <i>Kapuskasing, ON (REM)</i>	48	Labourer
Mike Chimlewski <i>Kapuskasing, ON (REM)</i>	16	Drill Helper/Monitor
Mark Williams <i>Moose Factory, ON (REM)</i>	43	Drill Helper/Monitor
Jeff Chevrier <i>Kapuskasing, ON (REM)</i>	7	Drill Helper/Monitor
Joshua Martin <i>Kapuskasing, ON (REM)</i>	13	Drill Helper/Monitor
Patrick Wheesk <i>Kapuskasing, ON (REM)</i>	13	Drill Helper/Monitor
Total	459	

Appendix B – List of Contractors

Contractor/Vendor	Location	Services & Products
Activation Laboratories	Ancaster, ON	Sample Analysis
Landrill International Ltd.	Timmons, ON	Diamond Drill Contractor
A.S.K Prospecting	Gander, NL	Field Supplies
Super 8 Hotel	Kapuskasing, ON	Accommodations
Wiskair Helicopters	Thunder Bay, ON	Helicopter Support
Stares Contracting	Thunder Bay, ON	Camp Logistical and Prospecting Support
Felix Geo-Consultants Inc.	Bathurst, NB	Data Compilation, Supervision
Paul Nielsen, PGeo Consulting	Thunder Bay, ON	GIS support
Porcupine Canvas	Timmins, ON	Camp Materials / Field Supplies
Manitoulin Transport	Kapuskasing, ON	Cartage Support
Nordic Rentals	Kapuskasing, ON	Equipment Rentals
Knowles Building Centre	Kapuskasing, ON	Camp Materials
A Tremblay Contracting	Kapuskasing, ON	Road Maintenance/Construction
Infosat Communications LP	Calgary, AB	Iridium Sat Phone Usage

Appendix C – Statement of Expenditures

Cost Item	Total Cost
Labour	\$182,040
Assay Lab Analyses	\$17,458
Wisk Air Helicopters	\$ 214,000
Ground Transportation	\$17,790
Equipment Rentals	\$6,613
Landrill Drilling Contract	\$325,745
Food & Accommodations	\$ 34,216
Supplies	\$ 8,379
Total	\$806,151

Appendix D – Drill Logs

Rare Earth Metals Inc
DIAMOND DRILL LOG

DDH Number Ch-11-02
Project Clay Howells
Length 441.00
Started 2011-03-05
Completed 2011-03-11
Easting 425379
Northing 5521826
Elevation 203

TESTS								
Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip

Logged By
Claim #(s)
Core Size
Target(s)
Contractor
Comments

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A.L. Gebru
S78547
NQ
Broad, Mag High along Mattigami River.
Landrill
-45 inclination, Azimuth 070.
75 samples taken

From	To	Description	Sample Number	From	To	Interval							
			845501	105.50	107.00	1.50	(see assay certificates for results)						
0.00	30.00	No CORE (OVERBURDON)	845502	107.00	108.50	1.50							
			845503	110.90	112.40	1.50							
30-	42.00	TRANSPORTED BOULDERS (OVERBURDEN)	845504	112.40	113.90	1.50							
			845505	113.90	115.40	1.50							
		Granite, syenite and other felsic pebble, cobble and boulders 1-7cm size - highly broken features	845506	115.40	117.00	1.60							
		41.6m mud - unlikely to represent insitu lithology, could be dropped from upper part.	845507	117.00	118.50	1.50							
			845508	131.50	133.00	1.50							
42.00	49.50	SYENITE	845509	133.00	134.50	1.50							
			845510	134.50	135.85	1.35							
		42-48m: Medium to coarse grained pepper and salt textured syenite; highly broken core; 2-12broken piece size)	845511	142.65	144.10	1.45							
			845512	144.10	145.60	1.50							
			845513	145.60	147.00	1.40							
49.50	54.50	MICROSYENITE	845514	147.00	148.20	1.20							
			845515	155.35	156.85	1.50							
		Fine grained, massive with introduced pink feldspars up to 10%	845516	156.85	158.35	1.50							
			845517	158.35	159.85	1.50							
54.50	57.75	SYENITE	845518	159.85	161.35	1.50							
			845519	161.35	162.85	1.50							
		Medium grained pepper and salt textured syenite consisting of about 40% feldspars and 60% mafics	845520	162.85	164.35	1.50							
			845521	213.00	214.50	1.50							
57.75	59.40	Microsyenite	845522	214.50	216.40	1.90							
			845523	220.20	222.00	1.80							
		more of aplitic texture, introduced pink feldspars (5-10%)	845524	233.50	235.00	1.50							
			845525	235.00	235.95	0.95							
59.40	66.80	SYENITE	845526	235.95	237.00	1.05							
			845527	237.00	238.70	1.70							
		Medium grained, massive, pepper and sault textured	845528	266.00	267.50	1.50							
			845529	267.50	269.00	1.50							
66.80	67.20	Microsyenite	845530	269.00	270.50	1.50							
			845531	270.50	272.00	1.50							
		more of aplitic texture, light pink with coarse dark green amphiboles (10%) in a finer ground mass	845532	272.00	274.5	2.50							
			845533	274.50	276.00	1.50							
67.20	112.35	SYENITE	845534	276.00	277.50	1.50							
			845535	277.50	279.00	1.50							
		67.2-69.9m: medium grained syenite, highly broken core	845536	279.00	280.50	1.50							
			845537	280.50	282.00	1.50							
		69.9-71.5m: very coarse grained up to 2.5x40mm size feldspar laths, some pink feldspars presnt; feldspar 80%; amphiboles- 20%	845538	282.00	284.15	2.15							
			845539	284.15	285.65	1.50							
			845540				Standard	OKA-1					

Rare Earth Metals Inc
DIAMOND DRILL LOG

DDH Number CH-11-08
Project Clay Howells
Length 255.00
Started 2011-04-03
Completed 2011-04-07
Easting 424188
Northing 5518596
Elevation 200

TESTS								
Depth	Azimuth	Dip	Depth	Azimuth	Dip	Depth	Azimuth	Dip
collar								
			See Separate Maxibore Survey File					

Logged By
Claim #(s)
Core Size
Target(s)
Contractor
Comments

Page 1 of 5
A.L. Gebru
S78532
NQ
Southern Lobe of Main Carbonatite Intrusion
Landrill

From	To	Description	Sample Number	From	To	Interval	Au ppb	Pt ppb	Pd ppb	Co ppm	Cu ppm	Ni ppm
0.00	42.00	OVERBURDEN (NO CORE)										
42.00	43.20	OVERBURDEN (MICROSYENITE BOULDERS)										
		Nonmagnetic, grey, fine to medium grained, massive, with subequal proportion of feldspars and mafics; feldspars faintly light pink										
43.20	50.70	UNCONSOLIDATED SEDIMENTS - CONGLOMERATIC	845636	50.7	57.2	6.5	(see assay certificates for results)					
		grey, weakly consolidated, conglomeratic; white limestone and medium grained syenite fragments up to 3x7cm size	845637	57.2	58.5	1.3						
		syenite fragments rounded to sub angular; limestone fragments up to 2-3cm diameter and often rounded; matrix sediment is mud but bears calcareous composition; no bedding observed; lithic conglomeratic fragments amount 10-15%	845638	58.5	60	1.5						
			845639	60	61.5	1.5						
			845641	61.5	63	1.5						
			845642	63	64.5	1.5						
50.70	57.20	MAGNETITE CARBONATITE - possibly not insitu	845643	64.5	66	1.5						
		Grey, fine grained (magnetite component), banded and spotted with white calcite (medium grained); loose friable sediment-like material intermitently which is either cutting from top (from the sediments) or sediment intercalation - implying carbonatite might not be insitu	845644	66	67.5	1.5						
		51-54m: 2.25m core loss	845645	67.5	69	1.5						
		54-57m: 2.2m core loss	845646	69	70.5	1.5						
		50.85m: magnetite banding @44 degrees	845647	70.5	72	1.5						
			845648	72	73	1						
			845649	73	75	2						
			845650	75	76.5	1.5						
			845651	76.5	78	1.5						
			845652	78	79.5	1.5						
			845653	79.5	81	1.5						
			845654	81	82.5	1.5						
57.20	73.00	MAGNETITE CARBONATITE	845655	82.5	84	1.5						
		dark grey, massive to banded, in places spotted and pepper and salt textured between magnetite and calcite rich composition reddish brown mineral (flouroapatite (?) upto 3% throughout); biotite alteration in places; relict syenite and carbonatized syenite in places; syenite sporadically magnetic due to some magnetite blubs/bands; green amphiboles and some biotite in the magnetite-calcite mottled carbonatite; magnetite component of carbonatite is fine grained, where as calcite is medium grained	845656	84	85.5	1.5						
		58.5-59.32: silicocarbonatite; relict original syenite feldspars (50%) present; calcite and magnetite occupy groundmass it appears magnetite-carbonate is replacing original syenite	845657	85.5	87	1.5						
		59.32-60.10m; strong dark biotite alteration in magnetite carbonatite; coarse biotite up to 3mm diameter	845658	87	88.5	1.5						
		59.8-60m: carbonatized syenite (pinkish red feldspar zone) fragment- possible relict from replacemnt by magnetite carbonatite	845659	88.5	90	1.5						
		65.70-66.5m: silico-carbonatite; original syenite feldspars present	845661	90	91.5	1.5						
		75.75-76.00m: irregular white calcite invasion of syenite (calcite metasomatism along grain boundaries replacing host minerals)	845662	91.5	93	1.5						
		79.60-80.45m: strong carbonatization, magnetite, calcite and dark elongate amphibole replacement; relict feldspars	845663	93	94.17	1.17						
			845664	94.17	96	1.83						
			845665	96	97.5	1.5						
			845666	97.5	99	1.5						

Appendix E – Drilling Sample Certificates of Analysis



Date Submitted: 25-Mar-11
Invoice No.: A11-2471
Invoice Date: 18-Apr-11
Your Reference: CH-11-02

Rare Earth Metal Inc.
3250 W Arthur Street
RR#2
Thunder Bay On P7C 4V1
Canada

ATTN: Mick Stares

CERTIFICATE OF ANALYSIS

2 Pulp samples and 73 Rock samples were submitted for analysis.

The following analytical packages were requested: Code 8-Nb2O5 - XRF Option XRF
Code 8-REE Assay Package Major Elements Fusion
ICP(WRA)/Trace Elements Fusion ICP/MS(WRA4B2)

REPORT **A11-2471**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Total includes all elements in % oxide to the left of total.

CERTIFIED BY :

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.

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Activation Laboratories Ltd. Report: A11-2471

Analyte Symbol	Nb2O5	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.003	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5
Analysis Method	FUS-XRF	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845501	0.100	33.61	11.91	35.31	0.824	1.91	5.98	5.28	1.90	2.137	0.13	0.10	99.09	4	5	161	260	20	60	10	980	32	1	< 5
845502	0.048	38.28	17.93	22.56	0.660	1.43	5.27	8.79	2.52	1.231	0.05	0.41	99.13	4	5	99	170	13	30	10	680	32	< 1	< 5
845503	0.022	48.48	15.79	11.38	0.627	2.19	8.07	7.10	2.39	0.292	0.11	1.66	98.07	5	7	46	110	10	40	< 10	380	25	1	< 5
845504	0.136	20.02	6.19	62.14	0.868	1.32	3.73	2.40	0.91	2.672	0.10	-0.16	100.2	3	2	205	130	26	50	20	< 30	25	< 1	< 5
845505	0.192	19.74	6.43	60.04	0.994	1.42	4.65	1.94	1.01	2.457	0.01	0.96	99.65	4	3	229	90	25	60	< 10	1500	37	1	< 5
845506	0.281	4.04	1.66	90.10	0.947	0.50	1.30	0.26	0.11	1.270	0.01	-0.39	99.82	2	< 1	235	60	40	80	50	1490	30	< 1	< 5
845507	0.025	52.47	14.96	10.51	0.543	2.41	7.87	6.97	2.63	0.285	0.11	1.62	100.4	5	4	43	90	12	50	20	420	24	< 1	< 5
845508	0.119	33.89	8.99	39.67	0.813	2.27	5.91	3.48	1.65	1.320	0.12	0.93	99.04	6	3	156	120	24	70	40	1000	30	1	< 5
845509	0.063	41.01	10.32	24.15	0.958	3.37	11.25	3.58	1.70	0.573	0.03	2.31	99.26	8	5	79	100	17	40	20	690	22	1	< 5
845510	0.081	40.58	11.95	26.03	0.822	2.53	7.70	4.04	1.97	0.882	0.06	2.63	99.21	5	5	108	80	17	40	40	700	29	1	< 5
845511	0.093	36.71	8.58	30.79	1.082	3.12	10.65	3.51	1.46	0.906	0.17	1.74	98.73	8	5	124	70	24	60	50	800	27	1	< 5
845512	0.115	37.14	9.50	30.21	1.000	2.90	10.12	3.41	1.55	0.872	< 0.01	1.66	98.38	7	6	121	40	21	50	40	710	26	1	< 5
845513	0.108	30.68	7.66	43.06	1.001	2.06	7.26	2.90	1.21	1.202	0.13	1.39	98.57	6	4	144	50	33	70	80	900	27	1	< 5
845514	0.180	18.96	4.71	65.07	1.012	1.30	4.45	1.83	0.74	1.551	< 0.01	-0.22	99.40	4	2	211	60	27	50	30	1170	32	1	< 5
845515	0.189	28.16	8.23	46.55	0.968	1.46	6.13	3.39	1.67	1.675	0.05	-0.16	98.13	2	3	216	130	21	50	20	1070	40	1	< 5
845516	0.266	16.39	3.70	67.57	1.097	1.52	4.44	1.30	0.62	2.529	0.18	-0.27	99.07	5	2	310	100	33	70	50	1310	41	1	< 5
845517	0.136	29.77	7.64	44.59	1.008	2.40	6.61	3.24	1.29	1.489	0.13	0.55	98.71	7	4	193	80	26	60	40	930	33	1	< 5
845518	0.089	34.38	8.97	36.68	0.931	2.44	8.50	3.79	1.52	0.502	0.17	0.76	98.64	7	5	95	50	19	40	30	680	22	< 1	< 5
845519	0.050	43.21	10.64	24.01	0.825	2.60	9.00	4.57	1.59	0.361	0.53	1.35	98.70	9	4	98	90	21	50	60	520	26	1	< 5
845520	0.102	34.20	8.43	35.61	1.044	2.87	9.76	2.89	1.38	1.054	0.06	1.63	98.91	6	4	145	100	22	50	40	810	29	1	< 5
845521	0.235	9.94	2.49	79.51	0.951	0.95	3.15	0.74	0.33	0.643	0.21	0.16	99.08	3	< 1	134	40	32	50	40	1100	21	1	< 5
845522	0.252	4.82	1.55	88.19	0.882	0.49	1.77	0.37	0.18	0.688	0.11	-0.02	99.04	2	< 1	139	60	35	60	60	980	21	1	< 5
845523	0.156	26.83	6.89	50.76	0.688	1.54	4.34	2.51	1.66	0.393	0.28	3.18	99.06	3	6	71	30	23	40	30	670	22	1	< 5
845524	0.257	6.69	1.69	82.85	0.836	0.58	3.37	0.36	0.19	1.033	0.82	0.79	99.22	2	< 1	192	60	40	90	100	1110	30	1	< 5
845525	0.274	1.87	1.87	88.95	0.871	0.39	2.15	0.22	0.11	0.507	0.57	-0.39	98.73	< 1	< 1	126	50	30	40	< 10	1130	19	1	< 5
845526	0.020	47.28	12.53	14.03	0.779	2.58	11.02	5.48	2.06	0.157	0.46	2.38	98.76	6	4	37	130	13	40	40	450	18	1	< 5
845527	0.191	9.94	2.57	74.86	0.826	0.86	4.73	0.79	0.43	0.431	1.24	0.31	96.99	3	< 1	92	70	30	50	40	960	17	1	< 5
845528	0.050	6.11	1.87	85.63	0.697	0.61	2.69	0.49	0.29	0.163	0.58	0.33	99.47	1	< 1	44	50	33	30	20	1260	7	< 1	< 5
845529	0.066	14.92	4.08	59.61	0.778	1.07	9.66	1.74	0.63	0.169	0.54	4.78	97.97	3	2	28	40	22	< 20	10	1010	13	< 1	< 5
845530	0.064	29.77	8.50	33.27	0.782	2.21	13.47	3.05	1.20	0.242	1.67	4.37	98.54	4	3	32	40	20	20	20	690	18	1	< 5
845531	0.095	25.18	6.12	44.96	0.843	2.17	12.13	2.12	0.80	0.466	1.07	2.82	98.69	4	2	58	40	25	30	40	830	18	1	< 5
845532	0.039	36.81	11.09	20.94	0.755	2.76	14.79	4.21	1.54	0.405	1.41	3.83	98.54	2	3	37	50	19	30	30	570	21	1	< 5
845533	0.050	36.72	9.83	24.12	0.787	2.68	13.66	3.99	1.39	0.401	1.65	2.66	97.88	4	4	37	50	19	30	30	630	20	1	< 5
845534	0.071	28.04	6.93	35.04	0.805	2.38	15.00	2.42	1.06	0.361	2.23	3.82	98.08	5	3	51	60	28	50	80	710	18	1	< 5
845535	0.076	29.23	7.30	31.68	0.801	2.37	16.13	2.51	1.09	0.409	2.60	4.19	98.31	4	5	54	60	27	50	70	710	20	1	< 5
845536	0.047	36.30	10.33	21.91	0.778	2.62	15.09	4.34	1.58	0.286	2.39	3.67	99.30	3	5	31	40	15	20	20	580	19	1	< 5
845537	0.122	27.87	8.47	43.41	0.775	1.57	8.40	3.19	1.13	0.430	1.38	1.43	98.06	2	6	42	50	20	20	20	880	26	1	< 5
845538	0.058	26.94	8.29	44.06	0.753	1.87	10.07	3.51	1.21	0.275	1.64	1.97	100.6	3	5	28	40	19	< 20	10	960	17	1	< 5
845539	0.045	2.11	0.89	92.74	0.734	0.21	2.40	0.13	0.10	0.127	0.45	0.25	100.2	< 1	< 1	39	50	29	< 20	< 10	1660	5	< 1	< 5
845540	0.527	6.45	1.86	4.12	0.800	2.17	43.67	0.44	0.75	0.233	2.53	32.19	95.20	3	< 1	203	< 20	2	< 20	< 10	450	13	1	6
845541	0.027	4.19	1.01	68.57	0.726	0.22	13.51	0.44	0.06	0.030	4.01	5.84	98.60	2	< 1	9	20	22	< 20	< 10	1210	7	< 1	< 5
845542	0.034	1.69	0.33	69.03	0.827	0.32	14.76	0.18	0.04	0.034	1.08	10.69	98.99	1	< 1	20	20	19	< 20	< 10	1150	4	< 1	< 5
845543	0.020	0.64	0.53	83.89	0.939	0.15	7.55	0.05	0.03	0.023	1.27	4.23	99.30	1	< 1	10	30	22	< 20	< 10	1080	3	< 1	< 5
845544	0.152	2.89	1.08	89.14	0.821	0.41	2.83	0.21	0.10	0.312	0.73	0.37	98.90	1	< 1	54	60	31	30	30	1120	10	< 1	< 5
845545	0.083	1.12	0.54	79.74	0.773	0.18	9.82	0.07	0.04	0.222	2.11	5.16	99.79	1	< 1	48	30	22	< 20	< 10	1060	6	< 1	< 5
845546	0.039	33.95	14.48	29.54	0.630	1.43	7.60	3.72	2.63	0.295	0.79	3.59	98.66	1	4	31	< 20	13	< 20	< 10	600	15	< 1	< 5
845547	0.198	3.82	1.52	80.89	0.835	0.23	5.72	0.36	0.16	0.987	0.67	3.16	98.34	< 1	< 1	116	40	25	30	< 10	1270	17	< 1	< 5
845548	0.118	3.97	1.40	89.98	0.828	0.17	1.78	0.38	0.21	0.390	0.73	-0.24	99.61	< 1	1	57	50	28	30	< 10	1260	10	< 1	< 5
845549	0.016	46.86	13.39	14.15	0.631	1.99	9.52	5.57	2.01	0.191	0.48	3.09	97.89	6	3	54	140	16	70	80	530	21	1	< 5
845550	0.049	26.34	9.17	46.44	0.629	0.96	6.09	2.72	1.42	0.209	0.94	4.51	99.43	2	1	51	30	47	220	300	810	17	1	< 5
845551	0.061	7.06	3.08	75.96	0.669	0.27	6.03	0.98	0.43	0.144	3.42	1.05	99.08	< 1	< 1	37	< 20	26	40	30	1510	9	1	< 5
845552	0.052	16.61	5.61	66.45	0.717	0.43	4.63	2.30	0.76	0.103	1.33	0.59	99.53	< 1	< 1	2								

Activation Laboratories Ltd. Report: A11-2471

Analyte Symbol	Nb2O5	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.003	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01		1	5	20	1	20	10	30	1	1	5
Analysis Method	FUS-XRF	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845553	0.051	10.57	6.73	59.70	0.658	0.41	9.01	0.90	1.06	0.102	5.98	2.30	97.43	< 1	1	72	20	24	< 20	20	2250	11	1	< 5
845554	0.078	12.82	5.02	65.00	0.679	0.41	6.27	1.45	0.67	0.264	2.57	2.87	98.02	< 1	2	48	30	23	30	10	800	12	1	< 5
845555	0.098	42.87	13.77	25.27	0.448	0.94	4.32	5.52	2.87	0.215	0.21	2.30	98.74	< 1	3	20	< 20	10	< 20	< 10	630	40	1	< 5
845556	0.070	31.57	13.80	37.57	0.498	0.63	3.73	5.90	2.21	0.178	0.62	1.28	97.99	< 1	2	21	< 20	13	< 20	< 10	770	17	< 1	< 5
845557	0.056	36.94	13.02	30.75	0.473	0.73	5.90	5.84	2.28	0.130	1.57	0.89	98.53	1	2	24	40	11	< 20	< 10	660	19	1	< 5
845558	0.049	9.21	4.40	78.75	0.715	0.27	1.97	1.71	0.66	0.154	0.52	0.32	98.68	< 1	< 1	41	20	27	20	30	3010	8	< 1	< 5
845559	0.070	1.27	0.86	92.28	0.798	0.15	2.18	0.14	0.06	0.182	1.08	-0.20	98.79	< 1	< 1	27	20	28	30	20	3990	6	< 1	< 5
845560	0.531	6.44	1.83	4.08	0.794	2.15	43.52	0.44	0.75	0.228	2.52	32.19	94.95	3	< 1	197	< 20	2	< 20	< 10	480	14	1	7
845561	0.102	3.76	1.35	77.49	0.830	0.18	8.28	0.44	0.15	0.269	1.53	3.74	98.01	< 1	< 1	46	< 20	25	30	20	390	18	< 1	< 5
845562	0.034	43.21	11.49	21.09	0.795	2.07	10.21	5.64	1.66	0.196	0.28	1.91	98.55	6	5	34	80	12	< 20	10	700	18	1	< 5
845563	0.045	35.30	9.48	33.09	0.734	1.54	9.78	4.77	1.49	0.196	1.34	0.99	98.71	4	3	40	80	14	< 20	< 10	850	17	1	< 5
845564	0.054	36.89	10.20	29.61	0.836	2.04	10.45	5.09	1.52	0.314	0.76	1.24	98.95	5	5	47	60	17	30	30	800	22	1	< 5
845565	0.032	40.99	11.40	22.69	0.804	2.31	11.61	5.41	1.67	0.242	0.91	1.46	99.51	6	5	28	60	16	30	30	640	20	< 1	< 5
845566	0.062	32.15	8.58	33.88	0.741	1.48	11.54	4.23	1.38	0.440	0.69	3.59	98.69	4	3	60	70	16	30	30	670	19	< 1	< 5
845567	0.081	3.79	1.21	75.38	0.862	0.40	8.12	0.30	0.12	0.157	0.85	3.59	94.78	1	< 1	34	30	31	40	50	2670	8	< 1	< 5
845568	0.040	31.53	8.26	34.60	0.823	1.42	10.86	4.01	1.30	0.221	0.65	4.18	97.86	6	4	49	80	17	30	30	1020	16	1	< 5
845569	0.062	4.46	1.46	76.52	0.793	0.16	8.12	0.57	0.19	0.086	2.01	3.46	97.84	1	< 1	27	20	22	20	< 10	1290	12	< 1	< 5
845570	0.064	24.46	6.78	51.77	0.808	1.12	8.01	3.25	0.90	0.195	1.25	0.78	99.33	3	2	40	40	22	50	40	1090	16	< 1	< 5
845571	0.039	37.86	10.57	24.03	0.768	2.05	11.83	5.16	1.61	0.297	1.20	2.81	98.17	5	5	46	50	16	50	50	800	22	1	< 5
845572	0.057	12.69	3.16	68.74	0.851	0.55	6.74	1.34	0.71	0.194	0.50	3.08	98.56	2	1	34	40	27	20	20	4210	12	< 1	< 5
845573	0.041	42.98	11.45	23.10	0.637	1.71	8.93	4.95	2.06	0.105	0.46	2.63	99.01	4	4	18	20	13	20	20	580	21	< 1	< 5
845574	0.069	3.16	0.78	67.71	0.790	1.43	12.56	0.30	0.11	0.319	1.06	9.61	97.82	2	< 1	63	40	22	40	30	1240	10	< 1	< 5
845575	0.054	15.76	4.69	45.40	0.832	0.99	17.12	1.58	0.71	0.186	1.86	9.43	98.57	2	1	35	30	19	50	40	990	16	1	< 5

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Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845501	135	587	11	377	12	0.8	< 0.2	22	< 0.5	4.3	158	< 0.4	37.1	88.2	10.8	38.4	6.2	1.36	3.8	0.5	2.9	0.6	1.7	0.32
845502	148	530	10	355	6	0.8	< 0.2	12	< 0.5	3.2	83	< 0.4	36.9	80.6	9.39	33.2	5.2	1.14	3.2	0.5	2.5	0.5	1.5	0.29
845503	148	1191	17	389	4	0.8	< 0.2	8	< 0.5	4.7	437	< 0.4	58.0	123	14.2	51.2	8.0	1.73	4.7	0.7	3.7	0.7	2.2	0.44
845504	50	500	5	202	29	< 0.5	< 0.2	16	< 0.5	2.0	128	< 0.4	38.4	78.3	8.66	29.4	4.4	0.90	2.6	0.4	2.0	0.4	1.2	0.20
845505	53	409	4	348	28	0.8	< 0.2	29	< 0.5	2.4	79	< 0.4	31.8	68.7	7.82	27.4	4.4	0.95	2.6	0.4	2.1	0.4	1.2	0.23
845506	8	84	< 2	128	38	0.8	< 0.2	33	< 0.5	< 0.5	< 3	< 0.4	12.5	22.0	2.39	8.0	1.2	0.27	0.8	0.1	0.6	0.1	0.3	0.06
845507	104	1553	17	188	4	< 0.5	< 0.2	5	< 0.5	3.0	532	< 0.4	74.5	155	17.1	60.4	9.2	2.10	5.3	0.7	3.8	0.7	2.2	0.37
845508	89	1069	12	317	14	0.9	< 0.2	18	< 0.5	2.3	261	< 0.4	66.9	138	15.2	51.9	7.6	1.79	4.5	0.6	3.3	0.6	1.7	0.29
845509	72	1104	21	546	12	1.2	< 0.2	13	< 0.5	2.9	168	< 0.4	87.6	175	19.5	68.2	10.4	2.49	6.3	0.9	4.8	0.9	2.8	0.50
845510	97	941	16	577	14	1.4	< 0.2	15	< 0.5	4.1	278	< 0.4	86.2	164	17.5	58.9	8.7	1.90	4.9	0.7	3.7	0.7	2.1	0.38
845511	75	888	21	546	17	1.4	< 0.2	15	< 0.5	2.5	105	< 0.4	145	264	27.8	94.3	13.4	3.00	7.6	1.0	5.2	1.0	2.9	0.51
845512	78	763	13	500	11	1.2	< 0.2	16	< 0.5	2.6	71	< 0.4	49.7	114	13.5	48.0	7.8	1.91	4.7	0.7	3.5	0.7	2.1	0.40
845513	71	598	6	278	13	1.6	< 0.2	21	< 0.5	2.6	114	< 0.4	44.8	97.3	11.2	40.4	6.0	1.41	3.4	0.5	2.4	0.4	1.4	0.27
845514	49	299	2	222	24	0.8	< 0.2	31	< 0.5	1.8	58	< 0.4	23.4	49.0	5.66	19.6	3.1	0.70	1.9	0.3	1.5	0.3	0.9	0.20
845515	74	861	8	537	22	1.3	< 0.2	25	< 0.5	1.7	527	< 0.4	52.6	108	11.8	40.8	6.1	1.45	3.6	0.5	2.7	0.5	1.6	0.30
845516	38	344	6	304	25	1.2	< 0.2	33	< 0.5	1.6	60	< 0.4	66.5	138	14.8	50.2	7.0	1.54	4.2	0.5	2.7	0.5	1.3	0.22
845517	75	644	10	318	14	1.1	< 0.2	22	< 0.5	2.9	297	< 0.4	72.6	151	16.9	57.6	7.8	1.81	4.5	0.6	3.0	0.6	1.6	0.29
845518	87	640	11	277	10	0.9	< 0.2	15	< 0.5	3.4	140	< 0.4	50.7	113	13.2	47.1	7.1	1.65	4.2	0.6	2.9	0.5	1.6	0.30
845519	68	1189	19	202	11	0.8	< 0.2	14	< 0.5	2.5	255	< 0.4	135	262	28.1	95.2	13.0	2.90	7.3	0.9	4.6	0.8	2.4	0.39
845520	59	791	12	255	15	0.8	< 0.2	18	< 0.5	2.1	92	< 0.4	62.8	130	14.7	51.4	7.9	1.91	4.5	0.6	3.2	0.6	1.9	0.35
845521	27	253	4	167	32	0.7	< 0.2	31	< 0.5	1.2	27	< 0.4	65.2	123	12.9	43.9	5.9	1.32	3.4	0.4	2.2	0.4	1.1	0.17
845522	17	154	< 2	118	32	0.7	< 0.2	32	< 0.5	0.7	10	< 0.4	36.6	69.6	7.29	24.7	3.4	0.70	1.8	0.2	1.1	0.2	0.6	0.08
845523	185	368	16	326	23	0.9	< 0.2	27	0.8	7.7	127	< 0.4	85.0	167	17.8	60.8	9.0	1.74	5.5	0.8	4.0	0.8	2.3	0.41
845524	18	479	12	100	31	0.7	< 0.2	28	< 0.5	0.8	24	< 0.4	139	286	31.2	107	14.5	3.25	8.6	1.0	4.6	0.8	1.9	0.23
845525	14	341	4	89	32	< 0.5	< 0.2	32	< 0.5	0.6	19	< 0.4	93.7	191	20.4	69.5	9.3	1.98	5.5	0.7	3.2	0.5	1.3	0.16
845526	98	1493	19	129	4	< 0.5	< 0.2	6	< 0.5	3.7	445	< 0.4	103	214	23.9	84.8	12.3	2.92	7.3	1.0	4.7	0.9	2.6	0.44
845527	22	714	15	85	30	< 0.5	< 0.2	20	< 0.5	1.1	67	< 0.4	169	352	38.5	134	17.5	3.88	10.2	1.2	5.5	0.9	2.3	0.28
845528	12	372	2	60	26	< 0.5	< 0.2	9	< 0.5	0.6	11	0.5	63.5	130	14.2	50.7	6.7	1.44	4.1	0.5	2.1	0.4	0.9	0.12
845529	31	2067	15	117	15	< 0.5	< 0.2	9	< 0.5	1.2	123	< 0.4	151	291	30.3	103	13.4	3.02	7.5	1.0	4.5	0.8	2.1	0.29
845530	51	2208	34	136	16	< 0.5	< 0.2	9	< 0.5	2.3	63	< 0.4	257	523	57.6	197	26.2	6.01	15.0	1.8	8.7	1.5	3.8	0.51
845531	37	1965	28	159	17	0.6	< 0.2	13	< 0.5	1.3	53	< 0.4	205	425	47.1	161	22.2	5.26	13.0	1.6	7.6	1.3	3.4	0.45
845532	76	2050	32	434	6	1.2	< 0.2	6	< 0.5	2.0	47	< 0.4	223	478	53.0	187	25.8	6.03	15.1	1.9	8.9	1.5	3.9	0.53
845533	66	1812	34	409	8	1.1	< 0.2	8	< 0.5	2.2	66	< 0.4	233	494	55.9	195	27.0	6.28	15.7	2.0	9.1	1.6	4.0	0.54
845534	54	2353	48	210	14	0.8	< 0.2	10	< 0.5	1.9	55	< 0.4	362	746	82.0	286	39.0	9.07	23.2	2.8	13.0	2.2	5.5	0.70
845535	56	2769	60	474	10	1.5	< 0.2	9	< 0.5	1.7	66	< 0.4	408	842	93.9	325	44.8	10.4	26.9	3.3	15.5	2.6	6.5	0.84
845536	84	2176	54	529	8	1.1	< 0.2	7	< 0.5	2.2	87	< 0.4	339	701	77.9	269	37.1	8.35	21.8	2.6	12.7	2.2	5.4	0.70
845537	63	1249	28	827	17	1.7	< 0.2	13	< 0.5	1.7	94	< 0.4	202	426	46.6	163	22.3	4.90	13.3	1.6	7.9	1.4	3.7	0.55
845538	72	1461	26	448	16	1.1	< 0.2	8	< 0.5	2.0	70	< 0.4	198	412	45.2	156	21.4	4.76	12.1	1.5	6.8	1.2	3.1	0.43
845539	11	619	< 2	86	18	0.5	< 0.2	4	< 0.5	< 0.5	< 3	< 0.4	56.3	118	12.6	42.8	5.3	1.18	2.9	0.3	1.4	0.2	0.6	0.09
845540	34	13090	59	98	15	< 0.5	< 0.2	< 1	< 0.5	0.8	2822	< 0.4	1080	1910	172	512	55.4	13.5	28.5	2.9	12.7	2.0	5.5	0.67
845541	9	3556	27	38	7	< 0.5	< 0.2	2	< 0.5	< 0.5	37	< 0.4	367	813	92.7	325	37.6	8.08	18.7	1.8	8.0	1.3	3.4	0.36
845542	14	4274	23	76	8	< 0.5	< 0.2	5	< 0.5	< 0.5	69	< 0.4	222	452	48.1	163	19.9	4.50	10.9	1.2	5.9	1.1	2.9	0.40
845543	3	2460	8	9	9	< 0.5	< 0.2	1	< 0.5	< 0.5	32	< 0.4	157	337	36.6	126	14.2	3.15	7.4	0.8	3.4	0.6	1.6	0.18
845544	9	578	7	68	26	< 0.5	< 0.2	13	< 0.5	< 0.5	< 3	< 0.4	103	216	23.3	80.2	10.1	2.36	6.1	0.7	3.4	0.6	1.4	0.16
845545	6	2892	21	32	16	< 0.5	< 0.2	5	< 0.5	< 0.5	36	< 0.4	218	456	49.2	172	20.5	4.66	13.0	1.4	6.3	1.1	2.7	0.31
845546	142	1664	16	79	9	< 0.5	< 0.2	5	< 0.5	5.1	177	< 0.4	127	267	29.2	101	13.0	2.98	7.3	0.9	4.2	0.7	2.0	0.29
845547	22	1663	11	64	26	< 0.5	< 0.2	17	< 0.5	0.5	22	< 0.4	145	286	29.6	98.7	12.4	2.96	7.4	0.9	4.2	0.7	1.8	0.22
845548	54	491	< 2	51	21	< 0.5	< 0.2	11	< 0.5	1.2	< 3	< 0.4	93.7	190	19.5	65.6	7.6	1.55	4.0	0.5	2.2	0.4	1.1	0.15
845549	85	1944	20	57	7	< 0.5	< 0.2	3	< 0.5	2.5	360	< 0.4	123	250	26.7	92.2	12.7	3.04	7.4	1.0	4.9	0.9	2.5	0.41
845550	81	1162	14	21	14	1.4	< 0.2	5	< 0.5	3.4	214	< 0.4	131	268	28.5	96.7	12.4	2.94	7.4	0.9	4.3	0.8	2.1	0.28
845551	26	1475	17	7	22	< 0.5	< 0.2	6	< 0.5	0.9	49	< 0.4	291	628	68.5	237	27.8	5.88	14.4	1.4	6.2	1.0	2.3	0.25
845552	32	1161	9	8	17	< 0.5	< 0.2	5	< 0.5	0.6	170	< 0.4	140	301	33.0	114	13.8	3.03	7.4	0.8	3.5	0.6	1.7	0.20

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Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845553	57	2557	35	123	14	0.6	< 0.2	3	< 0.5	1.7	106	< 0.4	480	1030	117	410	48.5	10.2	25.1	2.6	11.2	1.8	4.1	0.45
845554	75	1804	30	206	16	< 0.5	< 0.2	8	< 0.5	2.2	111	< 0.4	304	633	68.0	232	28.1	5.66	14.9	1.8	8.4	1.5	3.9	0.48
845555	175	1412	14	2623	9	< 0.2	< 0.2	11	< 0.5	3.8	524	< 0.4	75.7	141	14.2	46.4	6.5	1.41	3.9	0.6	3.3	0.7	2.4	0.43
845556	156	1036	9	149	14	< 0.5	< 0.2	9	< 0.5	4.0	165	< 0.4	101	197	20.3	68.7	8.8	2.00	5.2	0.6	3.0	0.5	1.4	0.20
845557	97	1808	19	104	12	< 0.5	< 0.2	7	< 0.5	1.8	320	< 0.4	193	396	41.8	141	17.8	4.05	10.1	1.2	5.5	0.9	2.6	0.31
845558	38	561	< 2	13	19	< 0.5	< 0.2	5	< 0.5	1.1	51	< 0.4	74.0	146	15.0	49.9	5.9	1.23	3.1	0.4	1.7	0.3	0.8	0.09
845559	5	458	3	27	23	< 0.5	< 0.2	7	< 0.5	< 0.5	< 3	< 0.4	105	221	23.7	80.8	9.5	2.00	5.1	0.5	2.4	0.4	1.0	0.11
845560	35	13190	58	86	15	< 0.5	< 0.2	< 1	< 0.5	0.9	2806	< 0.4	1120	1940	172	500	54.3	13.0	28.5	2.9	13.0	2.1	5.5	0.70
845561	13	2263	16	240	17	< 0.5	< 0.2	9	< 0.5	< 0.5	26	< 0.4	201	409	42.9	144	16.8	3.34	9.4	1.0	4.7	0.9	2.4	0.29
845562	95	1341	16	198	7	0.5	< 0.2	7	< 0.5	2.4	222	< 0.4	82.5	175	19.1	67.0	9.8	2.29	6.0	0.8	4.2	0.8	2.5	0.43
845563	62	1822	21	68	12	< 0.5	< 0.2	6	< 0.5	1.5	246	< 0.4	177	368	39.6	136	18.3	4.22	10.8	1.3	6.3	1.1	3.1	0.43
845564	112	1171	23	341	14	0.9	< 0.2	11	< 0.5	2.4	94	< 0.4	148	305	32.4	109	15.4	3.46	9.8	1.3	6.5	1.2	3.4	0.56
845565	102	1202	23	237	9	0.7	< 0.2	7	< 0.5	2.3	95	< 0.4	139	289	31.5	109	15.7	3.59	9.7	1.2	6.3	1.1	3.2	0.50
845566	71	2239	22	64	15	< 0.5	< 0.2	8	< 0.5	1.5	267	< 0.4	164	323	33.4	112	15.3	3.66	9.1	1.2	5.8	1.1	3.0	0.45
845567	9	2281	10	82	20	0.6	< 0.2	7	< 0.5	< 0.5	34	< 0.4	148	295	30.5	105	12.3	2.91	7.2	0.8	3.9	0.7	1.9	0.23
845568	87	2213	21	232	12	0.8	< 0.2	6	< 0.5	2.5	242	< 0.4	160	315	32.9	110	14.7	3.31	8.6	1.1	5.7	1.0	3.1	0.50
845569	15	2296	14	208	14	0.6	< 0.2	7	< 0.5	< 0.5	36	< 0.4	205	434	46.5	160	18.7	3.96	9.8	1.1	4.9	0.8	2.2	0.28
845570	47	1392	14	87	15	< 0.5	< 0.2	8	< 0.5	1.4	129	< 0.4	141	302	32.4	112	13.9	3.12	7.6	0.9	4.2	0.7	2.2	0.32
845571	105	1585	29	157	12	0.6	< 0.2	8	< 0.5	3.0	169	< 0.4	203	395	40.9	138	18.8	4.17	11.6	1.4	7.3	1.3	3.7	0.56
845572	33	1620	9	89	16	0.6	< 0.2	7	< 0.5	0.7	67	< 0.4	108	218	22.9	76.5	9.7	2.04	5.3	0.6	3.1	0.6	1.6	0.24
845573	87	1830	19	253	12	0.7	< 0.2	8	< 0.5	1.6	386	< 0.4	119	224	22.9	75.9	10.6	2.40	6.4	0.8	4.2	0.8	2.4	0.38
845574	9	2625	23	20	17	< 0.5	< 0.2	8	< 0.5	< 0.5	43	< 0.4	239	463	46.7	158	18.9	4.56	12.8	1.4	6.3	1.2	3.1	0.39
845575	35	4672	31	81	16	< 0.5	< 0.2	7	< 0.5	1.4	143	< 0.4	342	664	68.3	225	26.3	6.10	15.2	1.7	8.2	1.4	3.7	0.48

Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845501	2.6	0.47	5.9	21.2	4	0.6	7	7.5	2.6
845502	2.3	0.42	6.1	11.6	3	0.8	5	5.5	1.3
845503	3.7	0.67	6.8	5.0	3	0.7	9	8.4	1.6
845504	1.6	0.29	3.0	11.8	3	< 0.1	< 5	4.7	0.6
845505	1.9	0.34	5.4	27.8	3	0.2	< 5	4.5	1.0
845506	0.4	0.07	1.6	29.0	1	0.1	< 5	1.7	0.4
845507	2.8	0.46	2.8	4.0	3	0.4	10	10.1	1.5
845508	2.0	0.33	4.9	25.0	4	0.4	10	9.9	2.9
845509	3.9	0.68	7.4	13.6	4	0.3	11	8.7	0.9
845510	2.8	0.52	8.0	19.8	4	0.4	11	10.0	2.4
845511	3.8	0.68	7.0	23.5	5	0.4	14	12.4	3.0
845512	3.1	0.55	6.1	28.1	3	0.5	8	7.9	2.2
845513	2.4	0.47	3.6	26.5	3	0.5	10	6.1	2.6
845514	1.6	0.32	3.1	25.7	3	0.3	< 5	5.9	2.4
845515	2.2	0.39	8.0	49.1	3	0.4	11	10.1	8.4
845516	1.6	0.29	3.9	34.6	3	0.3	16	18.9	4.5
845517	2.3	0.43	4.2	29.4	3	0.4	9	10.1	3.6
845518	2.5	0.46	3.7	19.3	3	0.5	7	8.7	6.1
845519	2.8	0.47	2.9	12.6	3	0.4	10	12.0	3.6
845520	2.6	0.50	3.2	24.3	3	0.4	8	6.2	2.5
845521	1.1	0.19	2.1	21.8	2	0.2	5	10.5	1.2
845522	0.6	0.10	1.5	16.7	2	0.1	< 5	6.2	1.6
845523	3.4	0.63	7.7	27.9	10	0.7	6	14.6	4.2
845524	1.3	0.18	1.3	21.0	3	0.2	17	21.6	1.1
845525	0.8	0.11	1.0	23.7	2	< 0.1	< 5	15.7	0.8
845526	3.2	0.57	2.2	2.5	3	0.4	8	9.2	0.8
845527	1.6	0.22	1.1	14.4	3	0.2	< 5	25.6	1.0
845528	0.8	0.11	1.1	2.1	< 1	0.1	< 5	5.7	0.3
845529	1.9	0.27	1.9	5.3	3	0.1	7	8.1	0.7
845530	3.0	0.47	2.1	11.2	3	0.3	10	26.4	0.8
845531	2.7	0.41	2.3	12.2	3	0.2	7	23.7	0.5
845532	3.3	0.53	5.7	8.1	3	0.3	6	27.5	0.8
845533	3.5	0.54	5.9	9.8	3	0.3	7	30.5	0.9
845534	4.0	0.58	2.7	10.9	3	0.4	9	49.9	0.9
845535	4.7	0.67	5.7	12.2	3	0.6	17	63.8	2.5
845536	4.4	0.61	5.7	8.9	3	0.4	10	53.9	1.5
845537	3.5	0.59	11.7	14.3	3	0.3	7	40.2	5.1
845538	2.6	0.41	7.9	10.4	3	0.4	8	23.9	1.5
845539	0.5	0.08	1.5	6.9	3	< 0.1	7	2.2	0.2
845540	4.0	0.59	0.6	16.6	3	0.2	43	50.7	25.1
845541	1.8	0.23	0.9	4.6	3	< 0.1	16	5.5	0.4
845542	2.3	0.33	2.2	6.7	2	< 0.1	17	6.4	1.2
845543	0.9	0.12	0.2	2.3	3	< 0.1	7	1.8	0.1
845544	0.8	0.11	0.8	7.4	2	< 0.1	< 5	13.5	0.6
845545	1.6	0.17	0.4	3.2	< 1	< 0.1	7	12.8	0.4
845546	1.9	0.29	1.2	5.3	3	0.4	5	10.5	0.4
845547	1.1	0.15	0.9	11.8	2	< 0.1	5	11.6	0.6
845548	1.0	0.15	1.5	4.7	3	0.1	< 5	4.6	0.8
845549	2.7	0.44	1.1	1.6	3	0.4	11	10.8	0.9
845550	1.8	0.27	0.3	3.7	3	0.8	13	10.8	0.6
845551	1.3	0.15	< 0.2	2.1	3	0.2	< 5	9.6	0.3
845552	1.2	0.18	0.2	2.1	2	0.2	< 5	6.9	0.3

Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845553	2.2	0.27	2.0	5.4	3	0.1	6	19.2	1.4
845554	2.9	0.45	4.3	8.8	3	0.1	< 5	17.1	2.2
845555	3.2	0.57	42.2	43.8	4	0.5	23	28.2	26.6
845556	1.3	0.19	2.4	11.6	3	0.5	8	8.9	3.3
845557	1.9	0.26	1.5	6.2	3	0.4	9	15.4	1.0
845558	0.5	0.07	0.2	2.4	3	0.2	< 5	4.1	0.2
845559	0.5	0.06	0.4	2.2	3	< 0.1	< 5	5.4	0.2
845560	4.2	0.59	0.5	10.9	5	0.2	50	50.3	25.3
845561	1.7	0.24	2.3	8.7	3	< 0.1	< 5	5.5	0.7
845562	3.3	0.58	3.1	4.2	3	0.4	7	7.5	0.8
845563	2.8	0.41	1.2	4.6	3	0.3	9	13.4	0.9
845564	3.8	0.65	5.1	10.1	3	0.5	9	18.5	2.4
845565	3.5	0.59	3.1	5.4	3	0.5	8	17.9	1.3
845566	2.8	0.45	0.9	6.4	4	0.3	8	12.7	1.1
845567	1.3	0.17	1.3	1.8	3	0.1	8	3.5	0.6
845568	3.2	0.51	3.8	4.8	3	0.3	15	11.4	1.3
845569	1.7	0.22	2.9	5.6	3	< 0.1	< 5	6.4	0.7
845570	2.0	0.31	1.2	4.6	3	0.3	8	9.0	1.1
845571	3.8	0.59	2.3	6.5	4	0.6	14	17.5	2.2
845572	1.5	0.24	1.6	2.8	4	0.2	8	5.3	1.0
845573	2.7	0.46	3.7	6.1	4	0.3	10	9.9	1.8
845574	2.1	0.25	0.4	1.2	< 1	< 0.1	11	7.5	0.5
845575	2.9	0.40	1.2	2.2	3	0.2	14	10.1	0.9

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Quality Control																									
Analyte Symbol	Nb2O5	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	0.003	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5	
Analysis Method	FUS-XRF	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
NIST 694 Meas		11.21	1.89	0.74	0.011	0.35	43.40	0.88	0.55	0.116	30.23					1669									
NIST 694 Cert		11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2					1740									
DNC-1 Meas		46.93	18.63	9.98	0.149	10.01	11.33	1.88	0.23	0.487	0.05			31		155	270	58	250	100					
DNC-1 Cert		47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070			31		148.0	270.0	57.0	247	100.0					
GBW 07113 Meas		71.71	12.79	3.14	0.138	0.14	0.58	2.43	5.36	0.281	0.03			5	4	< 5									
GBW 07113 Cert		72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500			5.00	4.00	5.00									
LKSD-3 Meas																	80	32	50	40				26	
LKSD-3 Cert																	87.0	30.0	47.0	35.0				27.0	
TDB-1 Meas																	230		80	340	160				
TDB-1 Cert																	251		92	323	155				
OKA-1 Meas	0.533																								
OKA-1 Cert	0.529																								
W-2a Meas		52.48	15.25	10.75	0.168	6.25	10.94	2.21	0.62	1.072	0.12			35	< 1	273	80	44	70	110	70	18	2	< 5	
W-2a Cert		52.4	15.4	10.7	0.163	6.37	10.9	2.14	0.626	1.06	0.130			36.0	1.30	262	92.0	43.0	70.0	110	80.0	17.0	1.00	1.20	
SY-4 Meas		49.53	20.32	6.21	0.106	0.50	8.00	6.95	1.67	0.286	0.12			1	3	< 5									
SY-4 Cert		49.9	20.69	6.21	0.108	0.54	8.05	7.10	1.66	0.287	0.131			1.1	2.6	8.0									
CTA-AC-1 Meas																		< 1		60					
CTA-AC-1 Cert																		2.72		54.0					
BIR-1a Meas		47.94	15.61	11.39	0.173	9.62	13.40	1.82	0.02	0.975	0.01			44	< 1	341	370	53	160	130	70	15		< 5	
BIR-1a Cert		47.96	15.50	11.30	0.175	9.700	13.30	1.82	0.030	0.96	0.021			44	0.58	310	370	52	170	125	70	16		0.44	
NCS DC86312 Meas																									
NCS DC86312 Cert																									
VS-N Meas	0.101																								
VS-N Cert	0.10																								
NCS DC70014 Meas																		25	70	2590	7400	25			
NCS DC70014 Cert																		26.2	70.9	2600.00	7400.00	25.2			
NCS DC70009 (GBW07241) Meas																		30	3	< 20	980	90	16	11	70
NCS DC70009 (GBW07241) Cert																		30	3.7	2.8	960.000	100.000	16.5	11.2	69.9
OREAS 100a (Fusion) Meas																		17		170					
OREAS 100a (Fusion) Cert																		18.1		169					
OREAS 101a (Fusion) Meas																		47		430					
OREAS 101a (Fusion) Cert																		48.8		434					
JR-1 Meas																		< 20	< 1	< 20	< 10	17		17	
JR-1 Cert																		2.83	0.83	1.67	2.68	16.1		16.3	
SX18-01 Meas	0.695																								
SX18-01 Cert	0.695																								
SX18-04 Meas	1.338																								
SX18-04 Cert	1.32																								
SX18-05 Meas	0.978																								
SX18-05 Cert	0.973																								
SX58-04 (DH 5804) Meas	0.373																								
SX58-04 (DH 5804) Cert	0.369																								
BCR-2 Meas		54.22	13.35	13.79		3.51	7.09	3.15	1.81	2.251	0.36			33		438									
BCR-2 Cert		54.1	13.5	13.8		3.59	7.12	3.16	1.79	2.26	0.35			33		416									
845515 Orig	0.189	28.14	8.23	46.51	0.967	1.46	6.11	3.39	1.66	1.689	0.05	-0.16	98.05	2	3	217	130	22	50	20	1070	41	1	< 5	
845515 Dup	0.189	28.18	8.23	46.60	0.970	1.46	6.15	3.39	1.67	1.660	0.06	-0.16	98.21	2	3	215	120	20	40	20	1080	39	1	< 5	
845530 Orig	0.064	29.77	8.50	33.27	0.782	2.21	13.47	3.05	1.20	0.242	1.67	4.37	98.54	4	3	32	40	20	20	690	18	1	< 5		
845530 Split	0.065	29.55	8.55	33.11	0.778	2.24	13.44	3.01	1.19	0.245	1.71	4.16	97.97	4	3	32	40	21	20	30	700	20	1	< 5	
845532 Orig	0.038	36.70	11.07	20.91	0.754	2.75	14.74	4.20	1.54	0.401	1.40	3.83	98.29	2	3	36	50	18	30	30	580	21	1	< 5	
845532 Dup	0.040	36.92	11.11	20.96	0.755	2.77	14.83	4.22	1.55	0.409	1.43	3.83	98.78	2	3	38	50	19	30	30	570	21	1	< 5	
845561 Orig	0.102	3.76	1.35	77.49	0.830	0.18	8.28	0.44	0.15	0.269	1.53	3.74	98.01	< 1	< 1	46	< 20	25	30	20	390	18	< 1	< 5	
845561 Split	0.102	3.75	1.36	77.68	0.827	0.18	8.17	0.44	0.16	0.274	1.54	3.59	97.97	< 1	< 1	48	< 20	24	30	20	< 30	17	< 1	< 5	

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Quality Control																								
Analyte Symbol	Nb2O5	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.003	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5
Analysis Method	FUS-XRF	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS

Method Blank Method																	< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	
Blank																									
Method Blank Method	< 0.003																								
Blank																									

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Quality Control																									
Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
NIST 694 Meas																									
NIST 694 Cert																									
DNC-1 Meas		145	16	32					1.2		99		4.1			5.1		0.59							
DNC-1 Cert		144.0	18.0	38					0.96		118		3.6			5.20		0.59							
GBW 07113 Meas		40	45	395							478														
GBW 07113 Cert		43.0	43.0	403							506														
LKSD-3 Meas	77				< 2	2.3		3	1.3	2.5			52.5	97.9		44.8	8.2	1.47			0.9	5.1			
LKSD-3 Cert	78.0				2.00	2.70		3.00	1.30	2.30			52.0	90.0		44.0	8.00	1.50			1.00	4.90			
TDB-1 Meas	21												18.2	42.8		24.4		1.98							
TDB-1 Cert	23												17	41		23		2.1							
OKA-1 Meas																									
OKA-1 Cert																									
W-2a Meas	20	194	20	83	< 2	< 0.5			3.0	0.9	164	< 0.4	11.5	25.0		12.9	3.3	1.08			0.6	3.8	0.8	2.2	0.33
W-2a Cert	21.0	190	24.0	94.0	0.600	0.0460			0.790	0.990	182	0.0300	10.0	23.0		13.0	3.30	1.00			0.630	3.60	0.760	2.50	0.380
SY-4 Meas		1200	117	538							335														
SY-4 Cert		1191	119	517							340														
CTA-AC-1 Meas													2190	3340		1140	168	45.4	127	15.0					
CTA-AC-1 Cert													2176	3326		1087	162	46.7	124	13.9					
BIR-1a Meas		109	14	13					0.7		< 3		< 0.1	2.0		2.3	1.1	0.51	1.9						
BIR-1a Cert		110	16	18					0.58		6		0.63	1.9		2.5	1.1	0.55	2.0						
NCS DC86312 Meas													2350	190		1560			225	34.3	183	35.7	96.4	14.4	
NCS DC86312 Cert													2360.000	190.000		1600.000			225.0	34.6	183.00	35.70	96.2	15.1	
VS-N Meas																									
VS-N Cert																									
NCS DC70014 Meas					270	16.7			180		80.3	45.9	89.2	9.98	37.4	7.8	1.65	7.0	1.1	6.3	1.2	3.4	0.53		
NCS DC70014 Cert					270.000	16.7			180.000		80.3	45.3	87.0	10.8	39.9	8.0	1.8	7.4	1.1	6.7	1.3	3.5	0.57		
NCS DC70009 (GBW07241) Meas	503					1.9	1.3	1700	4.7	43.5			25.5	64.1	8.08	32.3	12.7	0.11	14.7	3.3	20.8	4.3	12.9	2.32	
NCS DC70009 (GBW07241) Cert	500.00					1.8	1.3	1701.000	3.1	41			23.7	60.3	7.9	32.9	12.5	0.16	14.8	3.3	20.7	4.5	13.4	2.2	
OREAS 100a (Fusion) Meas					22								264	470	45.3	144	23.4	3.50	21.9	3.6	22.5	4.8	14.2	2.31	
OREAS 100a (Fusion) Cert					24.1								260	463	47.1	152	23.6	3.71	23.6	3.80	23.2	4.81	14.9	2.31	
OREAS 101a (Fusion) Meas					20								805	1360	128	386	49.5	7.89		5.4	31.6	6.5	18.9	2.95	
OREAS 101a (Fusion) Cert					21.9								816	1396	134	403	48.8	8.06		5.92	33.3	6.46	19.5	2.90	
JR-1 Meas	248				3	< 0.5	< 0.2	3	1.7	20.9		0.7	20.7	49.0	5.90	22.8	5.8	0.27			1.1			0.70	
JR-1 Cert	257				3.25	0.031	0.028	2.86	1.19	20.8		0.56	19.7	47.2	5.58	23.3	6.03	0.30			1.01			0.67	
SX18-01 Meas																									
SX18-01 Cert																									
SX18-04 Meas																									
SX18-04 Cert																									
SX18-05 Meas																									
SX18-05 Cert																									
SX58-04 (DH 5804) Meas																									
SX58-04 (DH 5804) Cert																									
BCR-2 Meas		339	33	170							671														
BCR-2 Cert		346	37	188							683														
845515 Orig	75	868	8	532	22	1.4	< 0.2	25	5.0	1.7	527	< 0.4	53.8	110	12.1	41.6	6.3	1.48	3.6	0.5	2.8	0.5	1.6	0.30	
845515 Dup	73	855	8	541	21	1.3	< 0.2	24	< 0.5	1.7	527	< 0.4	51.4	106	11.6	39.9	6.0	1.43	3.5	0.5	2.6	0.5	1.5	0.29	
845530 Orig	51	2208	34	136	16	< 0.5	< 0.2	9	< 0.5	2.3	63	< 0.4	257	523	57.6	197	26.2	6.01	15.0	1.8	8.7	1.5	3.8	0.51	
845530 Split	55	2239	32	134	16	0.5	< 0.2	10	< 0.5	2.4	61	< 0.4	278	562	59.2	204	27.1	6.25	16.4	2.0	9.3	1.6	4.1	0.56	
845532 Orig	75	2045	32	431	6	1.2	< 0.2	6	< 0.5	2.0	47	< 0.4	224	481	53.5	187	25.8	6.03	15.2	1.9	9.0	1.5	3.8	0.53	
845532 Dup	76	2054	33	436	6	1.2	< 0.2	6	< 0.5	2.0	47	< 0.4	222	474	52.4	186	25.8	6.02	15.0	1.9	8.9	1.5	3.9	0.54	
845561 Orig	13	2263	16	240	17	< 0.5	< 0.2	9	< 0.5	< 0.5	26	< 0.4	201	409	42.9	144	16.8	3.34	9.4	1.0	4.7	0.9	2.4	0.29	
845561 Split	12	2236	16	188	16	< 0.5	< 0.2	8	< 0.5	< 0.5	25	< 0.4	203	420	43.6	147	17.0	3.51	9.2	1.0	4.9	0.9	2.4	0.32	

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Quality Control																								
Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
Method Blank Method	< 2				< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5		< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05
Blank																								
Method Blank Method																								
Blank																								

Quality Control									
Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
NIST 694 Meas									
NIST 694 Cert									
DNC-1 Meas	2.1								
DNC-1 Cert	2.0								
GBW 07113 Meas									
GBW 07113 Cert									
LKSD-3 Meas	2.9	0.42	4.5	0.7	2			11.0	4.7
LKSD-3 Cert	2.70	0.400	4.80	0.700	2.00			11.4	4.60
TDB-1 Meas	3.3							2.7	
TDB-1 Cert	3.4							2.7	
OKA-1 Meas									
OKA-1 Cert									
W-2a Meas	2.1	0.29	2.1	0.5	1	< 0.1		2.3	0.6
W-2a Cert	2.10	0.330	2.60	0.500	0.300	0.200		2.40	0.530
SY-4 Meas									
SY-4 Cert									
CTA-AC-1 Meas	10.9	1.09	1.4	2.6				23.6	4.3
CTA-AC-1 Cert	11.4	1.08	1.13	2.65				21.8	4.4
BIR-1a Meas	1.7	0.24	0.5				< 5		
BIR-1a Cert	1.7	0.3	0.60				3		
NCS DC86312 Meas	87.5	12.1						25.8	
NCS DC86312 Cert	87.79	11.96						23.6	
VS-N Meas									
VS-N Cert									
NCS DC70014 Meas	3.3	0.48					27200		
NCS DC70014 Cert	3.3	0.50					27200.00		
NCS DC70009 (GBW07241) Meas	15.9	2.25			2200			28.1	
NCS DC70009 (GBW07241) Cert	14.9	2.4			2200.00			28.3	
OREAS 100a (Fusion) Meas	14.9	2.10						50.6	138
OREAS 100a (Fusion) Cert	14.9	2.26						51.6	135
OREAS 101a (Fusion) Meas	18.2	2.48					< 5	35.8	421
OREAS 101a (Fusion) Cert	17.5	2.66					19	36.6	422
JR-1 Meas	4.7	0.71	4.2	1.8	2	1.6	21	26.7	9.3
JR-1 Cert	4.55	0.71	4.51	1.86	1.59	1.56	19.3	26.7	8.88
SX18-01 Meas									
SX18-01 Cert									
SX18-04 Meas									
SX18-04 Cert									
SX18-05 Meas									
SX18-05 Cert									
SX58-04 (DH 5804) Meas									
SX58-04 (DH 5804) Cert									
BCR-2 Meas									
BCR-2 Cert									
845515 Orig	2.2	0.40	8.0	49.6	3	0.3	11	10.5	8.6
845515 Dup	2.2	0.38	8.0	48.6	3	0.4	11	9.7	8.2
845530 Orig	3.0	0.47	2.1	11.2	3	0.3	10	26.4	0.8
845530 Split	3.3	0.50	2.3	11.8	4	0.3	9	27.4	0.9
845532 Orig	3.2	0.52	5.7	8.1	3	0.3	7	27.6	0.8
845532 Dup	3.4	0.53	5.6	8.1	3	0.3	6	27.5	0.8
845561 Orig	1.7	0.24	2.3	8.7	3	< 0.1	< 5	5.5	0.7
845561 Split	1.8	0.25	2.1	5.7	2	< 0.1	< 5	5.5	0.8

Quality Control									
Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS

Method Blank Method
Blank

< 0.1	< 0.04	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.1	< 0.1
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Method Blank Method
Blank



Date Submitted: 08-Apr-11
Invoice No.: A11-2884
Invoice Date: 28-Apr-11
Your Reference: CH-11-D2

Rare Earth Metal Inc.
3250 W Arthur Street
RR#2
Thunder Bay On P7C 4V1
Canada

ATTN: Mick Stares

CERTIFICATE OF ANALYSIS

2 Pulp samples and 58 Rock samples were submitted for analysis.

The following analytical packages were requested:

REPORT	A11-2884	Code 1A1 Au - Fire Assay INAA
		Code 8-Nb2O5 - XRF Option XRF
		Code 8-REE Assay Package Major Elements Fusion
		ICP(WRA)/Trace Elements Fusion ICP/MS(WRA4B2)

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Notes:

*If value exceeds upper limit we recommend reassay by fire assay gravimetric Code 1A3.
Total includes all elements in % oxide to the left of total.

CERTIFIED BY :

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.
Quality Control

ACTIVATION LABORATORIES LTD.

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Activation Laboratories Ltd. Report: A11-2884

Analyte Symbol	Au	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	ppb	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5
Analysis Method	FA-AA	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845576		59.28	16.90	6.23	0.165	0.60	2.75	5.37	6.01	1.018	0.19	1.09	99.60	18	2	< 5	< 20	2	< 20	20	80	21	1	< 5
845577		45.81	8.74	27.57	0.860	2.72	7.92	2.62	3.19	1.270	0.44	-0.36	100.8	18	1	76	110	12	50	< 10	320	24	2	< 5
845578		54.79	8.75	12.97	0.796	2.94	11.79	2.89	3.36	0.340	0.68	1.55	100.8	21	4	25	50	8	30	10	220	18	2	< 5
845579		58.48	16.02	9.78	0.253	0.53	3.02	4.84	5.92	0.730	0.15	0.90	100.6	17	4	< 5	< 20	1	< 20	< 10	160	27	2	< 5
845580		6.43	1.82	4.11	0.792	2.12	43.09	0.44	0.73	0.228	2.48	32.26	94.50	3	< 1	201	< 20	2	< 20	10	460	15	2	5
845581		42.67	15.77	10.19	0.146	9.07	10.61	2.39	1.46	1.125	0.34	6.89	100.7	16	1	127	90	51	100	50	60	13	1	< 5
845582		46.70	18.93	10.04	0.139	6.90	9.88	3.14	1.56	1.408	0.44	1.78	100.9	17	1	152	100	40	70	30	100	17	1	< 5
845583		44.27	20.83	7.06	0.080	4.21	10.59	2.77	1.88	1.200	0.34	7.39	100.6	16	2	134	80	17	30	< 10	< 30	16	< 1	< 5
845584		46.35	18.21	10.84	0.155	9.04	8.56	2.95	1.36	0.921	0.33	2.11	100.8	11	< 1	89	100	53	110	80	120	15	1	< 5
845585		58.61	16.58	8.06	0.194	1.00	3.27	5.09	5.63	1.300	0.37	0.63	100.7	12	2	8	< 20	5	< 20	210	230	23	1	< 5
845586		57.27	15.98	7.10	0.182	1.07	2.93	4.94	5.96	1.174	0.35	1.86	98.82	12	2	12	< 20	4	< 20	< 10	80	22	1	< 5
845587	< 5	58.61	16.56	6.66	0.163	0.60	1.89	4.85	6.29	1.202	0.36	1.61	98.79	12	3	12	< 20	4	< 20	10	70	24	2	< 5
845588	< 5	50.28	13.43	18.65	0.116	0.12	0.66	2.29	8.58	1.185	0.39	3.68	98.38	12	2	48	< 20	7	< 20	< 10	120	20	1	< 5
845589	< 5	58.04	16.49	6.04	0.313	0.79	3.48	4.37	6.75	0.194	0.14	2.51	99.12	4	4	< 5	< 20	4	< 20	20	110	21	2	< 5
845590		69.24	15.13	1.96	0.024	0.89	2.16	4.94	2.70	0.247	0.06	2.02	99.37	3	1	26	< 20	5	< 20	10	40	19	< 1	< 5
845591		58.27	14.94	8.77	0.282	0.44	3.68	5.06	5.56	0.643	0.11	1.02	98.77	12	3	< 5	< 20	< 1	< 20	< 10	150	30	2	< 5
845592		58.39	15.30	9.03	0.251	0.39	3.11	5.18	5.87	0.679	0.12	1.19	99.52	15	3	< 5	< 20	1	< 20	< 10	160	28	2	< 5
845593		60.48	14.74	7.07	0.283	0.37	3.86	6.00	5.10	0.569	0.14	1.23	99.85	9	5	< 5	< 20	2	< 20	300	330	32	2	< 5
845594		59.17	13.95	6.65	0.317	0.98	6.43	4.77	5.27	0.436	0.21	1.64	99.82	3	4	< 5	< 20	1	< 20	10	120	33	2	< 5
845595		57.55	16.85	7.45	0.168	1.09	4.10	5.46	4.17	1.094	0.40	0.86	99.18	17	3	9	< 20	5	< 20	20	130	24	2	< 5
845596		45.37	7.23	23.74	1.089	2.48	11.13	2.90	2.00	1.278	1.27	0.45	98.94	19	12	27	< 20	7	< 20	50	520	35	4	5
845597		55.99	11.54	11.17	0.561	1.17	6.19	4.71	4.63	0.627	0.19	1.24	98.03	17	8	49	20	8	< 20	30	370	25	2	< 5
845598		6.91	1.70	53.43	1.418	0.43	16.97	0.42	0.29	0.967	11.65	1.13	95.32	19	< 1	93	30	8	< 20	110	1590	77	12	26
845599		52.86	8.85	10.85	0.473	1.77	6.89	4.11	4.51	0.370	1.31	5.47	97.46	5	13	13	< 20	4	< 20	80	390	39	3	5
845600		6.31	1.77	4.00	0.781	2.11	42.73	0.42	0.71	0.224	2.52	32.20	93.77	3	< 1	194	< 20	1	< 20	10	540	15	2	6
845601		58.67	11.55	7.60	0.392	1.33	4.82	4.55	5.32	0.470	0.24	3.14	98.08	9	9	48	20	8	< 20	10	230	31	2	< 5
845602		34.79	6.75	22.63	0.841	2.43	11.74	3.31	3.32	0.563	5.16	6.19	97.73	10	4	57	30	14	< 20	170	720	26	2	< 5
845603		50.01	7.63	15.74	1.157	2.38	12.51	3.16	3.38	0.483	0.99	1.04	98.48	15	11	51	100	12	40	40	550	23	2	< 5
845604		47.63	10.92	16.52	1.535	3.18	10.71	2.20	4.60	0.423	0.34	1.10	99.15	16	10	69	120	15	50	1330	1500	26	1	< 5
845605		45.59	11.78	17.94	1.651	3.65	10.87	1.91	4.63	0.402	0.25	1.04	99.71	19	9	73	140	17	60	40	800	22	1	< 5
845606		49.54	8.77	18.95	1.343	2.95	11.76	2.82	3.39	0.417	0.22	0.37	100.5	17	9	70	110	13	40	20	630	20	2	< 5
845607		50.31	4.65	18.10	1.090	2.14	14.92	3.52	1.99	0.335	1.54	0.71	99.31	15	9	42	80	8	20	< 10	500	20	3	< 5
845608		53.76	8.62	12.62	0.707	2.06	10.06	3.88	4.24	0.208	1.08	2.00	99.23	10	7	26	50	5	< 20	< 10	300	24	3	< 5
845609		52.93	8.22	13.23	0.691	1.65	11.18	3.93	3.88	0.285	1.35	1.56	98.92	15	4	26	50	6	30	10	290	23	3	< 5
845610		50.17	7.33	12.66	0.594	1.96	11.67	3.57	3.88	0.332	2.22	4.29	98.68	13	5	9	< 20	4	< 20	< 10	190	25	3	< 5
845611		57.62	13.39	8.11	0.266	1.08	4.25	5.33	4.82	0.805	0.44	2.24	98.35	13	5	7	< 20	4	< 20	< 10	160	36	2	< 5
845612		59.22	13.24	6.53	0.264	0.47	4.82	5.46	4.86	0.372	0.42	2.18	97.83	4	6	< 5	< 20	< 1	< 20	< 10	140	39	3	< 5
845613		59.60	14.18	6.38	0.259	0.57	4.17	5.34	5.48	0.483	0.19	1.25	97.89	9	4	< 5	< 20	2	< 20	< 10	130	27	2	< 5
845614		55.79	13.16	10.91	0.347	1.38	5.55	5.06	4.59	1.472	0.56	1.33	100.1	21	4	11	< 20	6	< 20	10	200	26	2	< 5
845615		53.72	14.94	11.81	0.265	2.02	5.06	5.08	4.02	1.791	0.85	1.03	100.6	28	2	23	< 20	10	< 20	10	140	23	2	< 5
845616		57.30	12.94	10.08	0.350	1.10	5.43	5.27	4.56	0.974	0.48	1.27	99.75	15	7	10	< 20	4	< 20	10	170	31	3	< 5
845617		56.07	15.52	9.95	0.283	1.02	4.09	4.92	4.97	1.216	0.32	0.62	98.98	19	2	< 5	< 20	5	< 20	< 10	150	22	2	< 5
845618		59.77	14.65	7.67	0.281	0.43	3.51	5.91	5.22	0.499	0.09	1.12	99.15	6	4	< 5	< 20	1	< 20	< 10	130	29	2	< 5
845619		52.76	14.05	9.99	0.344	1.89	4.16	5.31	5.41	0.738	0.32	4.54	99.50	15	2	6	< 20	4	< 20	< 10	170	23	2	< 5
845620		6.42	1.78	4.07	0.802	2.13	43.73	0.44	0.72	0.225	2.47	32.16	94.94	3	< 1	203	< 20	1	< 20	200	570	15	2	< 5
845621		50.05	14.49	13.69	0.451	1.97	6.72	4.60	3.98	1.704	0.82	1.08	99.57	16	1	28	< 20	10	< 20	10	250	25	2	< 5
845622		57.99	17.18	6.27	0.204	0.89	4.79	5.35	4.71	0.672	0.25	1.11	99.43	8	1	< 5	< 20	4	< 20	80	150	23	1	< 5
845623		51.11	12.89	13.34	0.469	1.56	8.22	3.74	4.76	0.963	1.49	0.83	99.37	6	2	18	< 20	8	< 20	< 10	250	23	2	< 5
845624		48.66	13.24	8.09	0.426	2.43	8.18	3.78	5.40	0.413	0.62	6.53	97.78	2	2	7	< 20	4	< 20	< 10	130	25	2	< 5
845625		55.01	14.26	9.68	0.344	1.20	6.61	4.12	5.72	0.504	0.82	1.08	99.35	4	2	11	< 20	5	< 20	< 10	140	22	2	< 5
845626		54.38	14.06	9.74	0.373	1.27	7.22	4.29	5.33	0.316	1.20	1.33	99.50	3	2	10	< 20	6	< 20	< 10	140	22	2	< 5
845627		58.18	15.99	7.14	0.277	0.59	4.98	4.38	6.84	0.168	0.29	1.04	99.87	2	2	6	< 20	3	< 20	< 10	110	23	2	< 5

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Analyte Symbol	Au	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	ppb	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5
Analysis Method	FA-AA	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845628		41.16	8.68	25.82	0.720	1.31	14.79	2.40	2.15	0.751	2.21	0.32	100.3	7	3	27	< 20	11	< 20	20	360	35	3	< 5
845629		41.95	9.79	11.72	0.810	1.08	16.59	2.70	3.83	0.286	0.48	9.38	98.62	7	2	11	< 20	5	< 20	10	280	31	3	6
845630		69.86	15.26	1.82	0.022	0.86	1.81	4.96	2.59	0.239	0.08	1.80	99.30	3	1	27	< 20	5	< 20	< 10	30	19	< 1	< 5
845631		54.85	13.81	9.65	0.416	0.88	7.54	3.70	5.63	0.165	0.39	1.89	98.92	4	2	7	< 20	5	< 20	20	150	23	2	< 5
845632		51.66	12.38	13.51	0.578	1.23	10.29	3.60	4.38	0.286	0.79	1.42	100.1	6	3	13	< 20	7	< 20	10	240	26	2	< 5
845633		53.85	17.15	6.83	0.328	0.65	5.42	6.11	5.72	0.167	0.32	1.43	97.99	3	3	< 5	< 20	3	< 20	< 10	140	31	1	< 5
845634		52.44	15.77	8.97	0.417	0.68	6.51	5.55	5.31	0.228	0.50	1.43	97.81	4	4	6	< 20	4	< 20	< 10	190	31	2	< 5
845635		53.97	17.73	6.40	0.213	0.52	3.94	4.96	7.32	0.313	0.68	1.87	97.93	< 1	2	< 5	< 20	3	< 20	10	120	32	1	< 5

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Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845576	108	259	22	169	6	0.7	< 0.2	2	< 0.5	0.8	1728	< 0.4	80.3	144	13.3	46.5	7.4	4.12	5.5	0.8	4.4	0.8	2.3	0.33
845577	58	378	37	132	8	0.6	< 0.2	2	0.5	< 0.5	1400	< 0.4	143	308	33.3	128	20.2	4.16	13.0	1.7	9.1	1.7	4.4	0.62
845578	71	516	54	162	< 2	0.7	< 0.2	2	< 0.5	< 0.5	1493	< 0.4	231	479	49.6	185	27.8	5.10	18.4	2.5	12.3	2.2	6.0	0.86
845579	114	220	60	550	5	2.3	< 0.2	4	< 0.5	< 0.5	1308	< 0.4	165	314	31.1	113	17.9	3.82	13.4	1.9	10.7	2.1	5.8	0.83
845580	35	12950	58	89	15	0.6	< 0.2	< 1	< 0.5	0.9	2822	< 0.4	1090	1990	168	499	54.9	13.3	29.7	3.0	13.0	2.0	5.2	0.69
845581	32	853	16	89	< 2	0.5	< 0.2	1	< 0.5	1.3	755	< 0.4	55.6	97.4	9.60	35.5	5.7	1.61	4.4	0.6	3.0	0.5	1.4	0.21
845582	36	1088	15	109	< 2	0.6	< 0.2	1	< 0.5	1.7	885	< 0.4	49.0	94.7	9.49	35.0	5.6	1.73	4.5	0.6	3.2	0.6	1.6	0.23
845583	45	1140	13	109	< 2	0.5	< 0.2	1	< 0.5	2.8	785	< 0.4	50.5	93.1	8.80	31.4	5.4	1.68	4.0	0.6	2.8	0.5	1.3	0.20
845584	44	968	12	100	< 2	0.6	< 0.2	2	< 0.5	2.9	758	< 0.4	43.1	78.8	7.84	29.0	4.6	1.40	3.3	0.5	2.4	0.5	1.3	0.18
845585	99	224	31	147	3	0.8	< 0.2	2	< 0.5	0.6	1791	< 0.4	78.7	150	15.5	59.7	10.3	4.38	8.0	1.2	6.2	1.2	3.2	0.48
845586	112	187	32	155	3	0.7	< 0.2	2	< 0.5	1.0	1631	< 0.4	79.4	153	15.3	57.4	9.9	4.05	8.2	1.2	6.4	1.2	3.4	0.49
845587	115	210	38	223	< 2	1.1	< 0.2	2	< 0.5	0.7	1636	< 0.4	95.1	182	17.8	64.3	11.1	4.60	9.0	1.5	8.2	1.5	4.0	0.57
845588	180	90	66	127	4	0.6	< 0.2	6	3.4	< 0.5	511	< 0.4	106	214	22.3	84.5	18.8	6.35	23.8	4.2	19.5	2.9	5.6	0.62
845589	193	828	24	316	< 2	1.4	< 0.2	3	0.6	2.0	1827	< 0.4	118	232	23.2	82.8	12.1	3.17	7.6	1.0	4.9	0.9	2.8	0.45
845590	55	669	4	100	< 2	< 0.5	< 0.2	< 1	< 0.5	1.1	894	< 0.4	16.5	31.7	3.29	12.6	2.2	0.62	1.4	0.2	0.8	0.1	0.3	< 0.05
845591	92	844	69	738	24	3.2	< 0.2	1	< 0.5	< 0.5	1355	< 0.4	380	605	54.7	186	27.9	3.65	20.1	2.6	14.4	2.8	7.7	1.11
845592	100	212	50	549	7	2.2	< 0.2	2	< 0.5	< 0.5	1122	< 0.4	164	314	31.5	115	18.8	2.97	13.3	1.9	10.3	2.0	5.6	0.84
845593	184	874	58	564	21	2.3	< 0.2	4	< 0.5	< 0.5	919	< 0.4	323	567	51.9	177	26.2	4.20	17.3	2.4	11.8	2.2	6.3	0.98
845594	160	1716	102	1654	28	6.4	< 0.2	4	< 0.5	0.7	745	< 0.4	415	667	58.0	190	28.2	4.43	20.6	3.1	16.9	3.5	10.3	1.61
845595	92	702	45	450	7	1.9	< 0.2	2	< 0.5	1.0	2915	< 0.4	163	294	27.3	96.9	14.6	5.47	10.3	1.5	8.4	1.6	4.5	0.67
845596	50	560	243	1249	160		< 0.2	5	0.5	0.7	260	< 0.4	1070	2010	209	745	117	16.1	78.9	10.3	52.6	9.5	25.7	3.66
845597	167	1227	78	870	9	3.8	< 0.2	8	< 0.5	1.8	1655	< 0.4	306	600	59.5	210	33.7	5.80	23.3	3.4	17.3	3.2	8.5	1.37
845598	19	2285	1207	376	28	2.5	< 0.2	28	0.6	< 0.5	213	0.5	4610	9980	1040	3780	609	132	409	55.3	275	48.5	125	15.5
845599	238	527	209	3502	9		< 0.2	17	1.2	0.8	544	0.4	784	1450	140	487	76.0	12.0	51.3	7.0	39.4	7.7	24.4	4.21
845600	35	12800	57	88	15	0.7	< 0.2	< 1	< 0.5	0.9	2738	< 0.4	1100	1980	165	501	54.7	13.0	30.1	2.9	12.6	2.0	5.3	0.69
845601	218	668	116	2526	10		< 0.2	10	< 0.5	0.8	921	< 0.4	341	646	61.7	214	33.4	5.39	22.3	3.2	19.5	4.4	14.3	2.54
845602	335	1624	130	546	5	2.7	< 0.2	6	< 0.5	13.4	957	< 0.4	585	1250	132	479	71.3	13.6	46.1	6.3	32.0	5.7	14.8	2.01
845603	148	1467	104	1043	2		< 0.2	14	< 0.5	1.0	1862	< 0.4	326	721	76.6	280	48.8	8.73	33.4	4.6	23.8	4.6	13.0	2.14
845604	156	1602	99	499	3	2.7	< 0.2	21	2.0	1.7	2657	0.6	218	501	56.1	223	47.6	11.8	30.0	4.3	21.9	4.1	11.1	1.78
845605	165	1883	84	320	3	1.9	< 0.2	17	< 0.5	2.3	2940	0.4	165	394	45.9	192	43.3	10.9	26.2	3.7	19.4	3.5	9.7	1.57
845606	142	1406	64	696	< 2	3.0	< 0.2	16	< 0.5	1.0	1802	< 0.4	131	317	36.6	148	30.0	6.32	19.1	2.8	15.1	2.9	8.6	1.49
845607	94	1089	125	891	< 2	1.0	< 0.2	9	< 0.5	< 0.5	475	< 0.4	399	841	90.2	341	58.7	9.51	39.2	5.5	27.9	5.2	15.0	2.55
845608	178	898	85	715	3	1.3	< 0.2	8	< 0.5	0.6	927	< 0.4	352	736	75.7	275	43.6	6.03	29.5	3.9	19.3	3.6	10.3	1.63
845609	157	983	104	526	< 2	1.3	< 0.2	7	< 0.5	< 0.5	800	< 0.4	419	878	92.4	337	53.0	6.96	34.5	4.6	23.1	4.2	12.5	1.95
845610	127	866	184	267	< 2	< 0.5	< 0.2	5	< 0.5	< 0.5	399	< 0.4	595	1200	123	444	69.8	9.14	50.8	7.0	36.9	7.2	20.3	3.03
845611	190	424	52	384	5	1.7	< 0.2	4	< 0.5	1.8	1201	< 0.4	256	492	47.7	168	25.7	3.67	16.8	2.3	12.1	2.2	6.0	0.90
845612	171	407	100	1300	7		< 0.2	4	< 0.5	0.6	392	< 0.4	758	1370	129	415	53.0	4.89	33.8	4.1	20.6	4.0	11.2	1.67
845613	176	1000	48	350	32	1.5	< 0.2	3	< 0.5	0.9	1808	< 0.4	201	381	37.4	129	19.7	3.81	13.1	1.8	9.9	1.9	5.3	0.84
845614	146	880	79	469	6	2.0	< 0.2	5	0.7	1.9	2243	< 0.4	296	567	55.6	201	31.5	5.73	22.6	3.2	16.7	3.1	8.5	1.27
845615	83	620	49	215	4	1.1	< 0.2	2	< 0.5	1.3	3368	< 0.4	173	321	31.5	115	17.7	5.53	13.5	1.9	10.0	1.9	5.3	0.73
845616	134	987	102	996	5	4.2	< 0.2	5	< 0.5	1.8	1470	< 0.4	489	891	84.5	291	43.0	6.16	29.4	4.0	21.3	4.0	11.6	1.77
845617	83	779	30	219	7	1.1	< 0.2	2	< 0.5	1.2	6391	< 0.4	100	185	18.9	68.5	11.1	6.66	8.1	1.1	5.9	1.1	3.1	0.45
845618	120	502	64	935	4	4.2	< 0.2	4	0.9	0.9	1124	< 0.4	440	791	74.5	254	34.6	4.15	22.3	2.8	14.1	2.7	7.6	1.19
845619	116	522	60	236	10	0.9	< 0.2	4	< 0.5	3.6	1334	0.4	397	624	54.1	170	19.2	4.64	13.4	2.0	11.4	2.4	6.4	0.71
845620	34	12980	58	87	15	0.6	< 0.2	< 1	< 0.5	0.9	2792	< 0.4	1080	1990	164	490	53.9	13.0	28.3	2.8	12.5	2.0	5.2	0.69
845621	83	1424	50	352	10	1.6	< 0.2	2	< 0.5	2.3	2807	< 0.4	228	461	46.7	172	25.0	5.95	16.7	2.2	11.0	2.0	5.3	0.72
845622	83	1480	21	164	7	0.8	< 0.2	1	< 0.5	1.1	3732	< 0.4	90.0	169	17.1	62.7	9.7	4.92	6.5	0.9	4.4	0.8	2.2	0.33
845623	127	722	59	395	10	1.8	< 0.2	3	< 0.5	1.7	918	< 0.4	263	534	55.5	204	31.1	3.93	20.9	2.9	13.7	2.5	6.9	0.94
845624	151	715	68	2684	5		< 0.2	2	< 0.5	2.7	950	< 0.4	891	1290	106	312	29.2	5.30	21.2	2.5	13.3	2.7	7.8	1.24
845625	132	853	41	325	7	1.7	< 0.2	2	< 0.5	1.2	1089	< 0.4	229	433	42.7	153	22.1	3.60	15.1	1.9	9.5	1.7	4.8	0.67
845626	135	864	46	350	6	1.7	< 0.2	2	< 0.5	1.7	826	< 0.4	296	533	51.4	183	24.6	3.81	17.5	2.1	10.8	1.9	5.4	0.73
845627	194	1481	29	364	5	1.8	< 0.2	2	< 0.5	1.7	1320	< 0.4	143	286	29.2	104	15.2	2.62	9.8	1.3	6.5	1.2	3.4	0.53

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Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845628	73	1283	98	752	12	2.4	< 0.2	8	< 0.5	1.3	417	< 0.4	532	1090	116	428	60.4	9.29	40.4	4.8	22.9	4.0	10.4	1.46
845629	123	1095	79	503	6	2.8	< 0.2	5	0.9	2.0	859	0.6	1470	2080	181	518	45.5	6.76	30.1	3.2	16.7	3.3	9.0	1.26
845630	63	661	4	99	< 2	0.5	< 0.2	< 1	< 0.5	1.2	919	< 0.4	22.0	41.3	4.28	16.4	2.6	0.69	1.7	0.2	0.8	0.2	0.4	0.05
845631	173	1324	40	489	4	2.8	< 0.2	3	< 0.5	2.1	1479	< 0.4	194	387	38.9	142	20.5	2.99	13.8	1.8	8.8	1.7	4.8	0.75
845632	152	1290	57	614	4	1.4	< 0.2	4	< 0.5	2.3	1467	< 0.4	300	614	63.8	231	32.5	4.11	19.9	2.6	12.6	2.3	6.7	1.01
845633	232	1854	32	504	6	2.8	< 0.2	4	1.9	2.9	1663	< 0.4	184	354	35.0	124	16.8	3.21	11.6	1.4	7.2	1.3	3.8	0.58
845634	226	1642	43	608	7	3.1	< 0.2	6	< 0.5	2.6	1392	< 0.4	259	500	50.9	179	25.2	4.14	16.2	2.0	9.8	1.8	5.2	0.76
845635	312	1188	22	366	8	2.1	< 0.2	3	< 0.5	2.7	868	< 0.4	138	261	25.4	87.0	11.8	2.40	8.1	1.0	5.0	1.0	2.8	0.41

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Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
845576	2.1	0.36	3.3	3.9	2	0.3	16	10.0	2.2	0.014
845577	4.1	0.72	3.4	4.2	< 1	0.1	6	7.0	0.8	0.019
845578	5.6	0.91	4.6	3.4	2	0.2	10	20.4	3.3	0.011
845579	5.5	0.87	9.9	5.0	< 1	0.2	23	13.9	1.9	0.019
845580	4.1	0.61	0.5	12.5	< 1	0.2	46	51.2	25.2	0.534
845581	1.4	0.22	2.0	1.8	2	0.2	13	3.6	0.8	0.007
845582	1.5	0.22	2.5	2.1	2	0.2	14	4.8	0.9	0.007
845583	1.2	0.21	2.6	2.0	2	< 0.1	6	4.2	0.6	0.005
845584	1.1	0.18	2.1	1.8	2	0.4	18	4.2	0.8	0.005
845585	3.2	0.52	4.0	3.8	1	0.2	21	6.3	1.1	0.014
845586	3.1	0.51	3.5	3.7	1	0.3	12	8.6	1.7	0.014
845587	3.6	0.56	5.0	3.9	6	0.2	12	13.8	1.5	0.015
845588	3.4	0.48	2.6	6.2	22	0.7	5	41.0	1.4	0.048
845589	3.9	0.78	6.5	3.0	2	0.3	22	26.6	1.7	0.009
845590	0.3	0.05	2.6	0.1	< 1	0.3	12	3.2	0.4	0.005
845591	7.1	1.21	13.4	4.1	< 1	0.3	13	22.0	3.5	0.018
845592	5.7	1.02	9.4	2.9	2	0.4	13	12.8	2.7	0.014
845593	6.7	1.30	12.6	9.7	1	0.3	21	17.7	5.5	0.028
845594	10.3	1.61	24.5	85.1	1	0.4	43	37.3	24.9	0.148
845595	4.1	0.68	8.3	5.3	1	0.2	26	17.4	2.9	0.016
845596	22.4	3.64	18.9	24.0	1	0.1	8	104	9.9	0.111
845597	9.8	1.75	19.5	12.8	2	0.5	68	37.9	6.6	0.038
845598	76.6	9.44	7.8	5.6	2	0.3	59	1880	55.0	0.182
845599	30.1	5.08	47.6	80.8	13	0.3	47	116	88.0	0.233
845600	4.0	0.60	0.6	10.4	< 1	0.2	64	50.1	26.0	0.536
845601	18.6	3.46	37.1	30.7	7	0.4	28	48.3	22.2	0.079
845602	11.0	1.61	5.7	17.4	12	1.1	40	89.3	61.2	0.218
845603	15.1	2.71	23.9	13.0	2	0.4	35	83.6	10.2	0.053
845604	13.0	2.32	11.2	5.9	1	0.6	149	138	3.0	0.060
845605	11.4	2.13	6.7	4.7	< 1	0.6	60	106	2.0	0.066
845606	12.6	2.48	16.9	8.1	1	0.3	25	48.0	4.5	0.056
845607	18.7	3.50	3.7	11.8	3	0.1	22	90.9	11.8	0.034
845608	12.8	2.44	6.8	8.7	3	0.2	18	48.6	8.4	0.024
845609	14.3	2.60	2.7	6.7	3	0.3	12	40.2	4.5	0.019
845610	18.9	3.09	2.3	4.5	13	0.2	8	79.6	4.4	0.021
845611	5.9	1.06	8.8	8.3	2	0.4	13	24.0	3.4	0.024
845612	10.5	1.88	19.3	12.7	3	0.3	12	63.8	7.1	0.037
845613	5.6	1.04	8.1	9.9	2	0.3	19	21.7	3.2	0.020
845614	8.0	1.28	10.9	14.8	2	0.5	19	29.2	3.3	0.038
845615	4.3	0.69	4.8	5.0	1	0.3	18	12.8	2.1	0.014
845616	11.8	2.01	19.2	17.4	4	0.7	19	52.9	11.3	0.042
845617	3.1	0.49	4.2	5.6	1	0.2	19	16.9	3.9	0.017
845618	8.1	1.47	16.3	4.7	1	0.3	19	42.0	4.7	0.019
845619	3.5	0.48	5.3	4.3	1	0.6	13	22.8	2.5	0.018
845620	3.9	0.62	0.5	14.0	< 1	0.2	63	54.0	26.3	0.532
845621	4.5	0.76	7.9	17.4	< 1	0.2	43	11.1	2.5	0.058
845622	2.1	0.38	3.7	7.5	< 1	0.2	18	6.2	1.9	0.021
845623	6.1	1.06	8.2	15.0	1	0.2	23	16.0	4.0	0.038
845624	8.2	1.40	40.6	9.1	< 1	0.3	17	33.1	5.4	0.044
845625	4.4	0.84	7.4	8.8	< 1	0.3	22	12.5	2.6	0.025
845626	5.0	0.94	7.6	7.6	< 1	0.3	31	17.5	3.5	0.021
845627	3.6	0.65	7.6	9.1	< 1	0.3	17	14.3	4.2	0.023

Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
845628	9.2	1.64	8.1	24.6	1	0.2	17	86.9	11.8	0.055
845629	7.6	1.36	11.5	11.7	2	0.5	159	54.1	5.3	0.037
845630	0.3	0.05	2.5	0.2	< 1	0.3	10	3.0	0.5	< 0.003
845631	5.4	1.03	10.2	10.0	< 1	0.5	18	17.2	5.1	0.023
845632	7.2	1.39	13.7	15.7	< 1	0.3	18	24.5	7.5	0.036
845633	4.2	0.73	9.8	13.9	< 1	0.5	34	25.1	7.7	0.029
845634	5.1	0.91	11.8	16.6	< 1	0.4	26	31.5	8.6	0.041
845635	2.6	0.42	6.7	43.4	1	0.4	31	17.7	21.3	0.058

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Quality Control																										
Analyte Symbol	Au	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As		
Unit Symbol	ppb	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
Detection Limit	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5		
Analysis Method	FA-AA	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS		
DH-1a Meas																										
DH-1a Cert																										
TAN-1 Meas																										
TAN-1 Cert																										
NIST 694 Meas		11.35	1.90	0.74	0.011	0.34	42.87	0.85	0.54	0.115	30.24					1658										
NIST 694 Cert		11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2					1740										
DNC-1 Meas		46.95	18.59	9.87	0.148	9.96	11.43	1.88	0.22	0.482	0.06			31		155			250	90	50					
DNC-1 Cert		47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070			31		148.0	270.0	57.0	247	100.0	70.0					
GBW 07113 Meas		72.61	12.80	3.24	0.141	0.14	0.59	2.53	5.44	0.277	0.04			5	4	< 5										
GBW 07113 Cert		72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500			5.00	4.00	5.00										
LKSD-3 Meas																		80	31	50	30	130		23		
LKSD-3 Cert																	87.0	30.0	47.0	35.0	152			27.0		
TDB-1 Meas																	230			90	320	150				
TDB-1 Cert																	251			92	323	155				
OKA-2 Meas																										
OKA-2 Cert																										
AC-E Meas																										
AC-E Cert																										
OKA-1 Meas																										
OKA-1 Cert																										
W-2a Meas		52.49	15.42	10.73	0.167	6.24	11.04	2.20	0.62	1.064	0.12			35	< 1	278	90	44	70	110	80	18	2	< 5		
W-2a Cert		52.4	15.4	10.7	0.163	6.37	10.9	2.14	0.626	1.06	0.130			36.0	1.30	262	92.0	43.0	70.0	110	80.0	17.0	1.00	1.20		
SY-4 Meas		49.57	20.32	6.11	0.107	0.50	8.08	6.92	1.64	0.279	0.12			< 1	3	< 5										
SY-4 Cert		49.9	20.69	6.21	0.108	0.54	8.05	7.10	1.66	0.287	0.131			1.1	2.6	8.0										
CTA-AC-1 Meas																			< 1		50	< 30				
CTA-AC-1 Cert																		2.72			54.0	38.0				
BIR-1a Meas		47.94	15.40	11.28	0.172	9.59	13.51	1.81	0.02	0.950	< 0.01			44	< 1	340	370	53	170	120	50	15		< 5		
BIR-1a Cert		47.96	15.50	11.30	0.175	9.700	13.30	1.82	0.030	0.96	0.021			44	0.58	310	370	52	170	125	70	16		0.44		
NCS DC86312 Meas																										
NCS DC86312 Cert																										
VS-N Meas																										
VS-N Cert																										
NCS DC86302 Meas		73.75	14.97	0.59	0.034	0.06	0.64	4.63	3.84	0.012	0.01					1404										
NCS DC86302 Cert		73.99	14.86	0.593	0.036	0.069	0.584	4.67	3.89	0.016	0.013					1315										
NCS DC70014 Meas																			25	70	2620	7400	26			
NCS DC70014 Cert																			26.2	70.9	2600.00	7400.00	25.2			
NCS DC70009 (GBW07241) Meas																		30	3	< 20	900	90	16	11	72	
NCS DC70009 (GBW07241) Cert																		30	3.7	2.8	960.000	100.000	16.5	11.2	69.9	
OREAS 100a (Fusion) Meas																			17		160					
OREAS 100a (Fusion) Cert																			18.1		169					
OREAS 101a (Fusion) Meas																			49		430					
OREAS 101a (Fusion) Cert																			48.8		434					
OREAS 101b (Fusion) Meas																			46	< 20	400					
OREAS 101b (Fusion) Cert																			47	9	416					
JR-1 Meas																			< 20	< 1	< 20	< 10	< 30	17	3	16
JR-1 Cert																		2.83	0.83	1.67	2.68	30.6	16.1	1.88	16.3	
NCS DC86318 Meas		66.93	14.00	2.36	0.056	0.08	0.53	0.60	5.55	0.177	< 0.01															
NCS DC86318 Cert		66.90	14.26	2.24	0.052	0.11	0.29	0.66	5.52	0.17	0.020															
SARM 3 Meas		51.69	13.30	9.97	0.728	0.24	3.17	8.12	5.39	0.491																
SARM 3 Cert		52.40	13.64	9.91	0.77	0.28	3.22	8.37	5.51	0.48																
USZ 25-2006 Meas																										

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Quality Control																									
Analyte Symbol	Au	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	
Unit Symbol	ppb	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	5	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5	
Analysis Method	FA-AA	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
USZ 25-2006 Cert																									
USZ 44-2007 Meas		70.15	10.86		0.061		2.17	3.33	3.63	0.301															
USZ 44-2007 Cert		71.38	10.93		0.060		2.03	3.46	3.20	0.31															
SX58-04 (DH 5804) Meas																									
SX58-04 (DH 5804) Cert																									
DMMAS 111 Meas																								1400	
DMMAS 111 Cert																								1450	
BCR-2 Meas		54.38	13.46	13.88		3.54	7.21	3.22	1.80	2.278	0.35			33		446									
BCR-2 Cert		54.1	13.5	13.8		3.59	7.12	3.16	1.79	2.26	0.35			33		416									
CDN-GS-P2 Meas	216																								
CDN-GS-P2 Cert	214.00																								
845589 Orig	< 5																								
845589 Dup	< 5																								
845590 Orig		68.73	15.19	1.96	0.024	0.91	2.26	5.02	2.70	0.248	0.06	2.02	99.12	3	1	26	< 20	5	< 20	10	40	19	< 1	< 5	
845590 Dup		69.75	15.07	1.96	0.023	0.87	2.05	4.87	2.70	0.247	0.05	2.02	99.61	3	1	26	< 20	5	< 20	10	40	20	< 1	< 5	
845607 Orig		50.09	4.64	18.11	1.090	2.13	14.86	3.49	1.98	0.336	1.54	0.71	98.97	15	9	42	80	7	20	< 10	500	20	3	< 5	
845607 Dup		50.54	4.66	18.08	1.091	2.16	14.98	3.55	2.00	0.334	1.54	0.71	99.65	15	10	42	90	8	20	10	500	20	3	< 5	
845622 Orig		57.65	17.05	6.23	0.202	0.89	4.75	5.34	4.69	0.661	0.25	1.11	98.82	8	1	< 5	< 20	3	< 20	150	190	22	1	< 5	
845622 Dup		58.33	17.30	6.31	0.205	0.90	4.83	5.37	4.74	0.683	0.26	1.11	100.0	9	1	< 5	< 20	4	< 20	20	110	23	1	< 5	
845635 Orig		53.97	17.73	6.40	0.213	0.52	3.94	4.96	7.32	0.313	0.68	1.87	97.93	< 1	2	< 5	< 20	3	< 20	10	120	32	1	< 5	
845635 Split		53.95	18.33	6.58	0.220	0.54	3.98	5.06	7.55	0.325	0.71	1.84	99.09	< 1	2	< 5	< 20	2	< 20	10	120	33	1	< 5	
Method Blank Method Blank	< 5																								
Method Blank Method Blank																	< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	
Method Blank Method Blank																	< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	
Method Blank Method Blank																	< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	

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Quality Control																								
Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
DH-1a Meas																								
DH-1a Cert																								
TAN-1 Meas																								
TAN-1 Cert																								
NIST 694 Meas																								
NIST 694 Cert																								
DNC-1 Meas		142	16	34					1.0		99		3.6			4.8		0.57						
DNC-1 Cert		144.0	18.0	38					0.96		118		3.6			5.20		0.59						
GBW 07113 Meas			41	47	411						492													
GBW 07113 Cert			43.0	43.0	403						506													
LKSD-3 Meas	76				< 2	2.9		2	1.6	2.3			45.9	87.0		42.4	7.7	1.37		0.9	4.7			
LKSD-3 Cert	78.0				2.00	2.70		3.00	1.30	2.30			52.0	90.0		44.0	8.00	1.50		1.00	4.90			
TDB-1 Meas	21												16.6	39.2		23.8		1.91						
TDB-1 Cert	23												17	41		23		2.1						
OKA-2 Meas																								
OKA-2 Cert																								
AC-E Meas																								
AC-E Cert																								
OKA-1 Meas																								
OKA-1 Cert																								
W-2a Meas	19	196	18	85	< 2	< 0.5			0.9	0.9	167	< 0.4	10.5	22.7		12.6	3.2	1.07		0.6	3.7	0.8	2.3	0.36
W-2a Cert	21.0	190	24.0	94.0	0.600	0.0460			0.790	0.990	182	0.0300	10.0	23.0		13.0	3.30	1.00		0.630	3.60	0.760	2.50	0.380
SY-4 Meas		1193	115	570							333													
SY-4 Cert		1191	119	517							340													
CTA-AC-1 Meas													2160	3330		1110	163	44.5	125	14.5				
CTA-AC-1 Cert													2176	3326		1087	162	46.7	124	13.9				
BIR-1a Meas		109	14	14					0.8		4			2.0		2.4	1.1	0.51	1.9					
BIR-1a Cert		110	16	18					0.58		6			1.9		2.5	1.1	0.55	2.0					
NCS DC86312 Meas													2380	177		1580			226	34.5	184	35.7	96.4	14.4
NCS DC86312 Cert													2360.000	190.000		1600.000			225.0	34.6	183.00	35.70	96.2	15.1
VS-N Meas																								
VS-N Cert																								
NCS DC86302 Meas																								
NCS DC86302 Cert																								
NCS DC70014 Meas					270	16.6			180		80.3	44.7	87.8	9.78	37.2	7.7	1.73	7.2	1.1	6.2	1.2	3.4	0.53	
NCS DC70014 Cert					270.000	16.7			180.000		80.3	45.3	87.0	10.8	39.9	8.0	1.8	7.4	1.1	6.7	1.3	3.5	0.57	
NCS DC70009 (GBW07241) Meas	503					1.9	1.3	1700		42.7		23.1	58.9	7.65	31.7	12.3	0.12	14.4	3.2	20.2	4.2	12.7	2.30	
NCS DC70009 (GBW07241) Cert	500.00					1.8	1.3	1701.000		41		23.7	60.3	7.9	32.9	12.5	0.16	14.8	3.3	20.7	4.5	13.4	2.2	
OREAS 100a (Fusion) Meas					23								259	449	45.9	144	23.3	3.50	19.7	3.6	21.9	4.7	14.0	2.30
OREAS 100a (Fusion) Cert					24.1								260	463	47.1	152	23.6	3.71	23.6	3.80	23.2	4.81	14.9	2.31
OREAS 101a (Fusion) Meas					21								789	1400	126	389	50.2	7.94		5.7	31.6	6.5	18.9	2.97
OREAS 101a (Fusion) Cert					21.9								816	1396	134	403	48.8	8.06		5.92	33.3	6.46	19.5	2.90
OREAS 101b (Fusion) Meas					20								748	1340	119	366	47.3	7.52		5.2	30.3	6.3	18.1	2.86
OREAS 101b (Fusion) Cert					20.9								789	1331	127	378	48	7.77		5.37	32.1	6.34	18.7	2.66
JR-1 Meas	251				3	< 0.5	< 0.2	3	1.5	20.9		0.8	19.4	46.3	5.76	23.2	5.9	0.28	5.4	1.0	6.3	1.4		0.71
JR-1 Cert	257				3.25	0.031	0.028	2.86	1.19	20.8		0.56	19.7	47.2	5.58	23.3	6.03	0.30	5.06	1.01	5.69	1.11		0.67
NCS DC86318 Meas			17480										1870	435	725	3320	1660	18.3	2070	472	3040	581	1670	274
NCS DC86318 Cert			17010										1960	430	740	3430	1720	18.91	2095	470	3220	560	1750	270
SARM 3 Meas		4682	20	11070							410													
SARM 3 Cert		4565	22	11119							450													
USZ 25-2006 Meas													18800	30200	2650	8380	893	210						

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Quality Control																									
Analyte Symbol	Rb	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	2	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	
Analysis Method	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
USZ 25-2006 Cert													19300	29000	2800	8800	900	211.00							
USZ 44-2007 Meas		261	1128	15650							96														
USZ 44-2007 Cert		158	1102	15800							95														
SX58-04 (DH 5804) Meas																									
SX58-04 (DH 5804) Cert																									
DMMAS 111 Meas																									
DMMAS 111 Cert																									
BCR-2 Meas		346	33	173							689														
BCR-2 Cert		346	37	188							683														
CDN-GS-P2 Meas																									
CDN-GS-P2 Cert																									
845589 Orig																									
845589 Dup																									
845590 Orig	55	677	4	99	< 2	< 0.5	< 0.2	< 1	< 0.5	1.1	891	< 0.4	15.9	31.6	3.29	13.0	2.1	0.64	1.4	0.2	0.8	0.1	0.3	< 0.05	
845590 Dup	56	661	4	101	< 2	0.8	< 0.2	< 1	< 0.5	1.2	896	< 0.4	17.2	31.8	3.29	12.3	2.3	0.60	1.5	0.2	0.8	0.1	0.3	< 0.05	
845607 Orig	93	1086	124	898	< 2	1.1	< 0.2	9	< 0.5	< 0.5	474	< 0.4	393	828	88.9	337	58.1	9.36	39.2	5.5	27.3	5.2	14.5	2.48	
845607 Dup	95	1092	126	884	< 2	0.8	< 0.2	9	< 0.5	< 0.5	476	< 0.4	405	854	91.6	344	59.3	9.67	39.2	5.5	28.5	5.3	15.4	2.63	
845622 Orig	81	1475	21	162	7	0.9	< 0.2	1	< 0.5	1.1	3716	< 0.4	88.5	166	16.9	62.9	9.7	4.82	6.4	0.9	4.4	0.8	2.2	0.32	
845622 Dup	85	1484	21	167	7	0.8	< 0.2	1	< 0.5	1.1	3747	< 0.4	91.6	171	17.4	62.6	9.7	5.02	6.6	0.9	4.4	0.8	2.2	0.33	
845635 Orig	312	1188	22	366	8	2.1	< 0.2	3	< 0.5	2.7	868	< 0.4	138	261	25.4	87.0	11.8	2.40	8.1	1.0	5.0	1.0	2.8	0.41	
845635 Split	316	1216	24	374	8	1.9	< 0.2	3	< 0.5	2.7	898	< 0.4	142	261	25.1	88.7	11.9	2.30	7.8	1.0	5.2	1.0	2.7	0.39	
Method Blank Method Blank																									
Method Blank Method Blank	< 2				< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5		< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1		< 0.1	< 0.1	< 0.05	
Method Blank Method Blank	< 2				< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5		< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	
Method Blank Method Blank	< 2				< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5		< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	

Quality Control										
Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
DH-1a Meas								892		
DH-1a Cert								910		
TAN-1 Meas				2370						
TAN-1 Cert				2360						
NIST 694 Meas										
NIST 694 Cert										
DNC-1 Meas	1.9									
DNC-1 Cert	2.0									
GBW 07113 Meas										
GBW 07113 Cert										
LKSD-3 Meas	2.7	0.40	4.3	0.7	< 1			10.4	4.3	
LKSD-3 Cert	2.70	0.400	4.80	0.700	2.00			11.4	4.60	
TDB-1 Meas	3.4							3.0		
TDB-1 Cert	3.4							2.7		
OKA-2 Meas								27400		
OKA-2 Cert								28900.000		
AC-E Meas										0.016
AC-E Cert										0.016
OKA-1 Meas										0.529
OKA-1 Cert										0.529
W-2a Meas	2.1	0.29	2.4	0.5	< 1	0.1	8	2.2	0.5	
W-2a Cert	2.10	0.330	2.60	0.500	0.300	0.200	9.30	2.40	0.530	
SY-4 Meas										
SY-4 Cert										
CTA-AC-1 Meas	10.6	1.06	1.3	2.5				22.8	4.4	
CTA-AC-1 Cert	11.4	1.08	1.13	2.65				21.8	4.4	
BIR-1a Meas	1.7	0.27	0.5				< 5			
BIR-1a Cert	1.7	0.3	0.60				3			
NCS DC86312 Meas	87.6	12.0						25.9		
NCS DC86312 Cert	87.79	11.96						23.6		
VS-N Meas										0.099
VS-N Cert										0.10
NCS DC86302 Meas										
NCS DC86302 Cert										
NCS DC70014 Meas	3.3	0.48					27200			
NCS DC70014 Cert	3.3	0.50					27200.00			
NCS DC70009 (GBW07241) Meas	15.8	2.21			2200	2.7		29.4		
NCS DC70009 (GBW07241) Cert	14.9	2.4			2200.00	1.8		28.3		
OREAS 100a (Fusion) Meas	14.8	2.07						50.4	135	
OREAS 100a (Fusion) Cert	14.9	2.26						51.6	135	
OREAS 101a (Fusion) Meas	18.4	2.50						35.7	422	
OREAS 101a (Fusion) Cert	17.5	2.66						36.6	422	
OREAS 101b (Fusion) Meas	17.7	2.43						37.4	397	
OREAS 101b (Fusion) Cert	17.6	2.58						37.1	396	
JR-1 Meas	4.7		4.4	1.9	1	1.6	20	26.8	9.0	
JR-1 Cert	4.55		4.51	1.86	1.59	1.56	19.3	26.7	8.88	
NCS DC86318 Meas	1780	250								
NCS DC86318 Cert	1840	260.0								
SARM 3 Meas										
SARM 3 Cert										
USZ 25-2006 Meas										

Quality Control										
Analyte Symbol	Yb	Lu	Hf	Ta	W	Tl	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.1	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
USZ 25-2006 Cert										
USZ 44-2007 Meas										
USZ 44-2007 Cert										
SX58-04 (DH 5804) Meas										0.368
SX58-04 (DH 5804) Cert										0.369
DMMAS 111 Meas										
DMMAS 111 Cert										
BCR-2 Meas										
BCR-2 Cert										
CDN-GS-P2 Meas										
CDN-GS-P2 Cert										
845589 Orig										
845589 Dup										
845590 Orig	0.3	0.05	2.6	0.1	< 1	0.3	12	3.2	0.4	0.005
845590 Dup	0.3	0.05	2.7	0.1	< 1	0.3	12	3.3	0.4	0.005
845607 Orig	18.2	3.43	4.0	11.8	3	0.2	22	91.6	11.6	0.034
845607 Dup	19.3	3.58	3.3	11.9	3	0.1	21	90.2	12.1	0.034
845622 Orig	2.1	0.36	3.7	7.4	< 1	0.2	22	6.0	1.8	0.022
845622 Dup	2.2	0.39	3.7	7.5	< 1	0.2	14	6.3	1.9	0.021
845635 Orig	2.6	0.42	6.7	43.4	1	0.4	31	17.7	21.3	0.058
845635 Split	2.5	0.40	7.1	43.7	< 1	0.4	30	17.7	21.0	0.057
Method Blank Method Blank										
Method Blank Method Blank	< 0.1	< 0.04	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.1	< 0.1	
Method Blank Method Blank	< 0.1	< 0.04	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.1	< 0.1	
Method Blank Method Blank	< 0.1	< 0.04	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.1	< 0.1	
Method Blank Method Blank										< 0.003



Date Submitted: 14-Apr-11
Invoice No.: A11-3003
Invoice Date: 04-May-11
Your Reference: CH-11-D3

Rare Earth Metal Inc.
3250 W Arthur Street
RR#2
Thunder Bay On P7C 4V1
Canada

ATTN: Mick Stares

CERTIFICATE OF ANALYSIS

5 Pulp samples and 95 Rock samples were submitted for analysis.

The following analytical packages were requested: Code 8-Nb2O5 - XRF Option XRF
Code 8-REE Assay Package Major Elements Fusion
ICP(WRA)/Trace Elements Fusion ICP/MS(WRA4B2)

REPORT **A11-3003**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Total includes all elements in % oxide to the left of total.

CERTIFIED BY :

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.
Quality Control



ACTIVATION LABORATORIES LTD.

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Activation Laboratories Ltd. Report: A11-3003

Analyte Symbol	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5	2
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845636	25.11	6.91	29.80	1.979	2.04	15.24	1.72	2.61	0.189	1.65	11.59	98.86	4	1	17	< 20	5	< 20	< 10	320	15	1	< 5	85
845637	4.35	1.44	57.53	2.460	1.07	15.98	0.15	0.78	0.016	1.26	11.52	96.55	4	< 1	15	< 20	6	< 20	< 10	210	11	1	< 5	31
845638	36.70	14.27	21.37	0.754	2.03	6.32	3.21	6.33	0.101	1.20	5.84	98.12	1	2	20	< 20	4	< 20	< 10	340	25	2	< 5	220
845639	2.35	0.83	55.22	2.645	1.71	17.45	0.11	0.47	0.020	0.87	14.69	96.38	2	< 1	20	< 20	7	< 20	< 10	800	14	2	< 5	27
845640	6.46	1.78	4.05	0.789	2.13	44.14	0.43	0.73	0.227	2.43	32.26	95.42	3	< 1	205	< 20	< 1	< 20	10	480	11	1	6	34
845641	0.53	0.29	63.95	2.718	1.10	15.57	0.08	0.05	0.004	0.73	12.86	97.88	3	< 1	21	< 20	5	< 20	< 10	60	9	< 1	< 5	< 2
845642	1.12	0.50	57.43	2.761	1.53	17.15	0.13	0.15	0.006	1.00	14.09	95.86	2	< 1	21	< 20	6	< 20	< 10	590	16	2	< 5	7
845643	32.46	16.36	25.12	1.289	1.51	4.34	4.11	3.78	0.057	1.05	6.60	96.67	2	3	10	< 20	4	< 20	40	230	27	2	7	130
845644	6.46	2.94	48.30	2.627	1.53	18.22	0.70	0.96	0.022	1.16	13.40	96.31	2	< 1	12	< 20	5	< 20	< 10	620	11	1	10	40
845645	0.80	0.17	60.03	3.076	1.03	17.85	0.06	0.02	0.008	0.88	13.24	97.16	3	< 1	19	< 20	6	< 20	< 10	500	7	< 1	8	< 2
845646	5.69	1.86	49.20	2.747	2.99	17.38	0.25	0.70	0.014	1.26	14.09	96.19	3	< 1	20	< 20	5	< 20	< 10	390	16	2	13	46
845647	6.41	2.28	39.07	2.018	1.54	23.07	0.31	1.11	0.014	1.83	17.57	95.21	3	< 1	10	< 20	4	< 20	< 10	290	21	2	10	63
845648	3.58	1.39	60.59	2.483	1.96	13.94	0.13	0.70	0.007	0.75	10.97	96.50	2	< 1	21	< 20	7	< 20	< 10	370	17	2	< 5	33
845649	43.69	16.03	17.12	0.617	0.91	4.98	3.69	7.12	0.034	0.22	4.71	99.13	3	3	10	40	2	< 20	< 10	130	21	1	< 5	200
845650	48.11	16.19	8.72	0.324	0.53	7.03	2.83	9.11	0.102	0.24	6.51	99.70	2	1	9	< 20	2	< 20	< 10	100	24	1	< 5	248
845651	49.53	15.00	5.40	0.429	1.08	7.98	1.72	9.64	0.058	0.23	7.53	98.60	< 1	< 1	< 5	40	1	< 20	< 10	120	21	< 1	< 5	240
845652	48.14	16.61	5.08	0.220	0.44	8.38	3.36	8.97	0.153	0.30	7.35	99.02	< 1	3	11	< 20	< 1	< 20	< 10	70	22	< 1	< 5	239
845653	43.21	16.99	8.21	0.244	0.61	9.43	3.70	7.80	0.329	0.55	8.22	99.30	1	4	20	30	3	< 20	< 10	110	22	1	< 5	229
845654	45.23	15.81	13.71	0.492	0.82	5.54	3.13	8.36	0.194	0.19	5.30	98.78	2	3	16	< 20	3	< 20	< 10	160	23	1	< 5	236
845655	51.44	17.22	6.03	0.251	0.62	5.25	2.50	9.85	0.082	0.15	5.63	99.00	< 1	2	7	50	1	< 20	< 10	90	24	1	< 5	240
845656	48.02	17.58	9.36	0.337	0.87	4.79	3.70	8.96	0.296	0.20	4.92	99.04	< 1	3	15	< 20	3	< 20	< 10	160	24	1	< 5	247
845657	48.51	17.32	12.49	0.536	0.90	3.09	3.68	9.11	0.295	0.29	3.03	99.25	1	3	12	30	3	< 20	< 10	220	23	1	< 5	243
845658	28.79	10.97	28.44	1.054	1.83	10.39	3.10	4.85	0.025	0.49	8.03	97.97	3	2	12	< 20	3	< 20	< 10	430	17	1	< 5	140
845659	38.71	13.41	21.14	0.743	1.19	7.10	3.10	6.51	0.035	1.10	4.80	97.83	2	1	12	< 20	2	< 20	< 10	200	21	1	< 5	169
845660	15.40	1.10	5.56	0.528	1.20	22.33	0.37	0.53	0.317	12.02	2.15	61.50	99	9	447	< 20	< 1	< 20	< 10	180	458	106	282	19
845661	46.92	16.91	12.83	0.528	0.82	3.78	4.13	8.22	0.048	0.54	3.12	97.85	1	2	8	< 20	2	< 20	< 10	150	22	1	< 5	194
845662	51.84	19.90	6.49	0.366	0.46	2.34	5.31	8.51	0.036	0.14	2.65	98.02	1	3	< 5	40	1	< 20	< 10	100	22	1	< 5	197
845663	47.65	16.61	12.86	0.589	0.95	3.77	4.15	7.89	0.041	0.32	2.95	97.79	1	3	8	< 20	2	< 20	< 10	160	22	1	< 5	213
845664	4.07	1.43	46.17	1.414	1.42	23.15	0.18	0.82	0.102	1.41	16.60	96.75	2	< 1	35	< 20	4	< 20	650	730	15	2	8	42
845665	0.46	0.10	53.76	2.775	1.66	20.24	0.11	< 0.01	0.004	0.27	16.73	96.11	3	< 1	17	< 20	5	< 20	< 10	350	15	2	5	< 2
845666	14.48	5.57	42.33	1.910	1.73	14.98	1.56	1.97	0.010	0.86	11.21	96.61	2	< 1	11	< 20	5	< 20	< 10	350	16	1	< 5	64
845667	2.22	1.07	72.07	2.486	1.18	10.07	0.07	0.43	0.007	0.13	7.10	96.83	< 1	< 1	25	< 20	9	< 20	< 10	340	11	1	< 5	22
845668	30.02	11.75	35.43	1.269	1.18	5.66	3.17	4.44	0.063	0.26	4.33	97.57	1	4	15	< 20	5	< 20	< 10	200	27	< 1	< 5	162
845669	50.70	18.52	9.62	0.406	0.68	2.32	4.51	8.17	0.068	0.38	2.59	97.95	< 1	2	9	< 20	2	< 20	< 10	130	21	< 1	< 5	219
845670	68.98	15.59	2.06	0.024	0.99	2.11	5.35	2.18	0.249	0.09	1.39	99.02	3	1	32	90	6	20	< 10	40	20	< 1	< 5	54
845671	46.03	16.65	12.36	0.474	1.06	5.18	2.92	7.50	0.067	0.53	4.74	97.50	2	3	10	< 20	2	< 20	< 10	120	19	1	< 5	202
845672	45.30	17.56	6.40	0.218	0.42	8.67	4.70	8.01	0.187	0.36	6.61	98.43	< 1	3	15	20	1	< 20	< 10	80	20	< 1	< 5	219
845673	11.83	3.28	14.42	0.534	0.77	36.58	0.64	1.94	0.271	3.84	23.58	97.69	1	< 1	41	< 20	3	< 20	20	140	11	< 1	< 5	74
845674	9.85	3.28	34.32	1.285	1.49	25.29	0.41	1.76	0.146	1.69	18.05	97.58	2	< 1	25	< 20	4	< 20	< 10	210	13	1	< 5	62
845675	50.78	20.91	6.75	0.211	0.35	3.10	7.20	7.46	0.079	0.18	1.70	98.71	< 1	3	7	< 20	1	< 20	< 10	80	21	< 1	< 5	202
845676	43.15	15.37	8.25	0.440	0.65	11.46	4.45	6.42	0.082	2.01	5.70	97.97	2	3	12	< 20	1	< 20	< 10	100	16	1	< 5	186
845677	8.91	2.85	45.64	2.064	1.56	18.67	0.59	1.00	0.036	2.24	12.52	96.09	4	< 1	15	< 20	5	< 20	< 10	300	17	2	< 5	39
845678	2.14	0.42	57.25	2.170	1.32	17.56	0.15	0.07	0.022	0.57	13.87	95.54	5	< 1	6	< 20	5	< 20	< 10	380	11	2	< 5	2
845679	1.17	0.19	52.58	1.897	0.94	22.81	0.08	0.01	0.016	0.45	16.88	97.02	6	< 1	16	< 20	4	< 20	< 10	360	8	< 1	< 5	< 2
845680	15.55	1.10	5.71	0.535	1.22	23.00	0.35	0.50	0.319	11.73	1.26	61.28	96	8	470	< 20	< 1	< 20	< 10	180	421	98	261	19
845681	8.50	2.20	30.07	1.312	1.67	28.07	0.37	1.27	0.321	1.63	20.59	96.00	5	< 1	52	< 20	5	< 20	< 10	220	14	1	< 5	50
845682	13.62	4.98	14.25	0.493	0.84	33.74	1.14	2.19	0.302	3.10	22.84	97.48	4	< 1	26	< 20	2	< 20	10	140	11	< 1	< 5	76
845683	45.34	15.60	8.72	0.297	0.76	8.68	3.03	7.91	0.325	1.64	4.92	97.22	1	2	25	20	5	< 20	< 10	100	23	1	< 5	215
845684	45.06	14.91	10.26	0.347	0.75	8.53	2.44	8.60	0.204	0.89	6.41	98.40	< 1	1	15	20	3	< 20	< 10	80	23	< 1	< 5	195
845685	47.62	17.16	8.17	0.287	0.53	5.97	4.30	8.41	0.213	0.67	4.23	97.56	< 1	2	12	< 20	3	< 20	< 10	90	20	< 1	< 5	222
845686	32.80	11.75	13.34	0.476	1.03	16.95	2.36	5.52	0.243	2.43	10.94	97.84	1	2	23	< 20	3	< 20	< 10	140	18	1	< 5	15

Activation Laboratories Ltd. Report: A11-3003

Analyte Symbol	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	1	1	5	20	1	20	10	30	1	1	5	2
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845688	41.16	12.87	7.89	0.220	0.72	14.21	1.52	8.66	0.250	1.35	9.76	98.62	< 1	< 1	32	< 20	4	< 20	< 10	90	23	< 1	< 5	240
845689	47.12	15.07	7.29	0.197	0.89	9.39	2.07	9.36	0.227	1.20	6.29	99.12	< 1	1	28	< 20	5	< 20	30	70	21	< 1	< 5	226
845690	42.09	11.69	8.01	0.325	1.13	15.12	1.67	7.88	0.234	1.81	8.65	98.60	2	2	50	< 20	5	< 20	< 10	90	23	1	< 5	199
845691	45.15	13.65	7.03	0.225	0.60	12.54	1.78	8.62	0.124	1.03	8.06	98.81	2	1	31	< 20	2	< 20	420	330	24	1	< 5	220
845692	40.51	13.48	7.16	0.303	0.45	14.99	2.53	7.50	0.088	0.64	11.12	98.77	< 1	1	13	< 20	1	< 20	< 10	80	19	< 1	< 5	198
845693	50.87	18.63	9.23	0.339	0.44	2.20	5.48	8.02	0.118	0.29	1.78	97.39	< 1	3	8	< 20	2	< 20	< 10	90	19	< 1	< 5	211
845694	32.47	12.03	18.82	0.761	0.81	13.59	2.82	5.61	0.104	0.28	10.71	98.00	1	2	14	< 20	3	< 20	< 10	170	21	1	< 5	160
845695	49.26	17.51	8.01	0.233	0.41	5.27	3.97	9.04	0.127	0.15	4.17	98.16	< 1	1	13	< 20	2	< 20	< 10	70	25	1	< 5	230
845696	48.09	16.84	8.31	0.409	0.58	6.05	3.54	8.69	0.086	0.25	4.81	97.65	< 1	2	8	30	2	< 20	< 10	90	22	1	< 5	215
845697	18.96	6.80	33.61	1.311	4.51	13.83	0.69	3.31	0.053	0.57	14.06	97.69	2	< 1	14	< 20	5	< 20	< 10	250	21	2	< 5	94
845698	12.48	3.58	58.36	1.364	1.34	10.53	0.32	1.96	0.040	0.88	7.27	98.11	< 1	< 1	21	< 20	7	< 20	< 10	250	17	2	< 5	52
845699	37.61	11.96	7.63	0.441	0.63	17.98	1.55	7.59	0.099	1.62	12.20	99.31	1	< 1	7	< 20	3	< 20	20	190	18	1	< 5	162
845700	15.74	1.09	5.69	0.538	1.22	23.14	0.35	0.51	0.322	11.84	1.31	61.76	101	8	461	< 20	< 1	< 20	< 10	180	835	192	413	20
845701	39.46	14.59	11.20	0.459	0.75	12.54	3.99	5.94	0.061	1.01	8.40	98.41	< 1	< 1	10	< 20	2	< 20	< 10	130	17	1	< 5	166
845702	39.95	13.85	9.71	0.439	0.58	12.70	2.84	7.02	0.072	1.33	8.83	97.31	1	< 1	8	< 20	1	< 20	< 10	90	21	2	< 5	157
845703	21.89	6.32	20.74	0.942	1.03	24.43	0.98	3.47	0.062	1.04	17.04	97.93	3	< 1	19	< 20	3	< 20	10	200	20	2	< 5	88
845704	45.31	12.35	13.16	0.538	0.84	9.65	1.99	7.61	0.092	0.88	5.23	97.65	5	2	19	< 20	3	< 20	< 10	110	26	2	< 5	188
845705	35.19	12.41	13.63	0.464	1.18	15.29	1.81	5.91	0.108	3.34	8.31	97.66	2	1	16	< 20	2	< 20	< 10	140	24	1	< 5	192
845706	41.59	18.01	10.80	0.426	0.89	8.51	5.34	5.07	0.071	3.09	3.71	97.52	< 1	2	7	< 20	2	< 20	< 10	110	22	1	< 5	162
845707	18.61	6.64	21.26	0.938	1.40	25.45	0.99	2.97	0.070	2.90	17.20	98.43	2	< 1	15	< 20	2	< 20	< 10	190	22	2	< 5	89
845708	19.90	6.80	22.99	1.179	1.69	22.00	0.77	3.78	0.073	1.88	15.98	97.05	2	< 1	15	< 20	3	< 20	< 10	180	26	2	< 5	127
845709	25.82	8.45	29.00	1.226	1.52	13.74	1.08	5.05	0.038	0.64	10.86	97.42	< 1	< 1	10	< 20	4	< 20	< 10	200	24	2	< 5	187
845710	70.14	15.41	1.63	0.018	0.66	2.23	4.76	3.14	0.225	0.10	0.92	99.23	2	1	21	< 20	5	< 20	10	< 30	19	< 1	< 5	68
845711	46.84	15.73	8.16	0.382	0.47	8.13	3.25	8.66	0.073	0.47	6.89	99.06	< 1	1	< 5	< 20	2	< 20	< 10	90	22	1	< 5	249
845712	39.70	13.67	16.15	0.606	0.85	9.55	2.79	7.19	0.076	0.41	8.15	99.13	< 1	1	10	< 20	2	< 20	< 10	120	24	1	< 5	224
845713	36.66	13.37	17.68	0.619	1.02	10.65	2.27	6.80	0.078	1.38	8.44	98.97	< 1	1	13	< 20	3	< 20	< 10	150	23	1	< 5	239
845714	34.96	13.32	17.35	0.611	1.16	12.54	2.33	6.64	0.114	1.93	9.26	100.2	< 1	1	15	< 20	4	< 20	< 10	190	31	2	< 5	305
845715	46.01	16.28	6.95	0.371	0.44	8.75	3.51	8.92	0.026	0.20	7.95	99.42	< 1	2	< 5	30	1	< 20	< 10	60	19	1	< 5	245
845716	45.49	15.17	13.47	0.484	1.35	6.11	1.36	9.32	0.055	0.21	6.81	99.83	< 1	< 1	10	< 20	3	< 20	< 10	90	23	1	< 5	241
845717	53.79	17.03	3.98	0.171	0.31	5.55	2.69	11.12	0.044	0.02	5.48	100.2	< 1	1	< 5	30	< 1	< 20	< 10	30	17	< 1	< 5	280
845718	44.92	14.52	8.56	0.309	3.13	7.51	1.16	9.93	0.109	0.29	10.33	100.8	< 1	< 1	8	< 20	2	< 20	< 10	70	20	< 1	< 5	263
845719	41.77	13.49	10.54	0.430	3.07	9.29	0.86	8.66	0.098	0.49	11.49	100.2	< 1	< 1	18	30	3	< 20	< 10	70	22	1	< 5	213
845720	15.83	1.11	5.68	0.535	1.22	22.70	0.36	0.53	0.320	12.46	1.83	62.58	101	8	457	< 20	1	< 20	< 10	180	828	192	403	20
845721	6.34	1.65	6.74	0.968	14.92	26.08	0.15	1.38	0.005	0.28	40.18	98.70	1	< 1	< 5	< 20	< 1	< 20	20	< 30	6	< 1	< 5	22
845722	31.94	10.78	19.53	0.660	4.87	10.50	0.69	6.55	0.088	0.44	14.24	100.3	2	< 1	17	< 20	3	< 20	< 10	140	19	1	< 5	146
845723	38.66	13.69	10.79	0.423	0.92	13.84	1.78	6.84	0.024	0.42	12.43	99.83	< 1	1	6	< 20	< 1	< 20	830	600	15	< 1	< 5	184
845724	40.95	15.69	14.96	0.504	1.22	8.60	2.09	6.53	0.070	0.38	8.82	99.83	< 1	5	11	< 20	2	< 20	< 10	110	17	1	< 5	181
845725	38.33	14.22	15.78	0.468	1.64	9.84	1.92	6.70	0.074	1.05	9.14	99.15	< 1	3	17	< 20	3	< 20	< 10	140	18	1	< 5	173
845726	46.23	14.74	11.55	0.289	3.09	4.49	1.37	8.60	0.032	0.27	8.06	98.73	< 1	1	5	< 20	2	< 20	< 10	170	24	1	< 5	191
845727	47.70	14.32	6.44	0.172	2.93	6.66	1.42	9.35	0.019	0.80	10.19	100.00	< 1	< 1	< 5	< 20	< 1	< 20	< 10	60	22	1	< 5	193
845728	39.31	13.86	15.77	0.353	3.16	7.79	0.96	6.70	0.111	0.65	11.40	100.1	< 1	< 1	21	< 20	4	< 20	< 10	220	27	1	< 5	198
845729	47.38	15.68	10.65	0.240	2.41	5.07	1.26	9.32	0.017	0.51	8.14	100.7	1	1	9	< 20	2	< 20	< 10	100	21	1	< 5	194
845730	69.36	15.01	1.96	0.020	0.88	2.53	4.70	2.55	0.231	0.08	2.54	99.86	3	1	25	< 20	5	< 20	20	< 30	18	< 1	< 5	58
845731	24.78	8.53	17.78	0.340	6.60	14.79	0.46	4.19	0.026	0.95	21.80	100.2	1	< 1	15	< 20	2	< 20	< 10	90	15	< 1	< 5	106
845732	11.43	3.39	7.19	0.452	12.89	26.24	0.20	2.32	0.013	2.30	33.63	100.1	2	< 1	13	< 20	2	< 20	20	< 30	12	< 1	< 5	51
845733	8.12	1.62	5.34	0.424	15.10	28.72	0.09	1.36	0.009	2.06	37.62	100.5	3	< 1	27	< 20	< 1	< 20	< 10	< 30	7	< 1	< 5	27
845734	6.57	1.63	4.80	0.410	15.46	28.40	0.09	1.27	0.007	0.66	40.22	99.52	2	< 1	13	< 20	< 1	< 20	10	< 30	7	< 1	< 5	25
845735	51.10	17.47	10.89	0.244	1.21	1.75	0.98	10.98	0.042	0.17	4.53	99.36	< 1	2	7	< 20	3	< 20	< 10	110	22	1	< 5	233

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Analyte Symbol	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845636	4390	114	155	50	1.1	< 0.2	2	< 0.5	2.3	1382	< 0.4	456	1020	117	458	76.9	21.0	50.9	6.5	30.6	5.1	11.6	1.25	6.2
845637	7333	49	164	148	1.1	< 0.2	2	6.4	0.7	759	< 0.4	737	1580	162	526	57.0	13.7	29.2	3.1	14.5	2.3	5.8	0.63	3.7
845638	3683	74	456	147	2.4	< 0.2	2	1.3	8.4	3713	0.4	961	1710	165	541	66.4	16.0	38.0	4.2	19.5	3.1	7.3	0.75	3.9
845639	10990	62	20	39	< 0.5	< 0.2	2	1.8	1.7	704	< 0.4	2120	3350	293	845	66.6	13.6	27.4	2.9	13.4	2.4	6.3	0.85	4.7
845640	12170	58	89	15	0.6	< 0.2	< 1	< 0.5	0.9	2703	< 0.4	1060	1910	164	502	54.4	13.1	26.4	2.7	12.7	2.0	5.1	0.65	4.0
845641	10520	47	6	36	< 0.5	< 0.2	< 1	< 0.5	< 0.5	495	< 0.4	1270	1990	173	501	39.9	8.19	16.1	1.6	7.5	1.3	3.7	0.49	2.6
845642	12330	53	13	116	0.6	< 0.2	< 1	< 0.5	< 0.5	1137	< 0.4	2830	4260	359	1010	74.5	14.5	28.9	2.6	11.6	2.0	5.4	0.77	4.3
845643	4899	33	142	125	0.9	< 0.2	< 1	0.5	6.8	4609	< 0.4	2390	3470	288	807	58.2	10.5	19.3	1.5	6.6	1.1	2.9	0.41	2.3
845644	11100	29	12	30	< 0.5	< 0.2	< 1	< 0.5	2.7	1628	< 0.4	782	1630	160	498	43.5	9.01	16.3	1.7	7.5	1.4	3.8	0.52	2.8
845645	8876	30	27	36	< 0.5	< 0.2	< 1	< 0.5	< 0.5	75	< 0.4	544	1230	125	396	35.6	7.98	14.8	1.8	8.9	1.6	4.1	0.49	2.7
845646	10760	64	14	102	0.6	< 0.2	2	5.9	3.1	2692	< 0.4	2320	3560	301	849	62.2	12.3	27.3	2.9	14.6	2.7	7.2	0.91	4.7
845647	12270	101	181	108	1.2	< 0.2	< 1	< 0.5	2.2	1203	< 0.4	3140	4540	375	1050	84.2	18.0	43.4	4.8	23.8	4.0	9.8	1.17	6.2
845648	10450	71	13	182	0.7	< 0.2	< 1	< 0.5	1.5	1418	< 0.4	2450	3940	341	979	76.8	16.7	39.6	3.9	20.3	3.3	8.2	0.80	3.8
845649	2382	28	310	48	1.3	< 0.2	2	< 0.5	4.6	2049	< 0.4	297	475	44.3	139	16.8	4.50	10.6	1.4	6.8	1.1	2.7	0.31	1.8
845650	1839	30	356	10	1.4	< 0.2	2	< 0.5	3.6	1949	< 0.4	209	356	35.0	119	16.9	4.46	10.6	1.4	6.6	1.1	2.8	0.34	1.9
845651	2510	36	1200	11		< 0.2	< 1	< 0.5	2.8	2982	< 0.4	433	682	64.1	202	23.5	5.92	12.7	1.6	7.9	1.4	3.6	0.45	2.6
845652	2093	25	415	5	1.5	< 0.2	2	3.2	2.9	1890	< 0.4	226	355	33.5	110	14.2	3.66	8.2	1.0	5.1	0.9	2.4	0.32	1.9
845653	2114	41	559	2	1.9	< 0.2	2	2.0	4.4	2004	< 0.4	229	400	40.5	142	22.3	6.19	14.5	1.8	8.5	1.5	3.6	0.44	2.4
845654	1936	38	303	8	1.1	< 0.2	2	< 0.5	4.2	1807	< 0.4	326	582	58.3	193	25.6	6.73	15.4	1.9	9.2	1.5	3.5	0.41	2.1
845655	1528	24	379	5	1.4	< 0.2	2	< 0.5	4.1	2552	< 0.4	177	303	30.1	103	14.8	3.93	9.0	1.1	5.4	0.9	2.2	0.27	1.5
845656	1879	36	685	5	2.5	< 0.2	1	< 0.5	5.2	2462	< 0.4	245	426	43.6	151	23.0	6.21	14.2	1.7	8.3	1.3	3.2	0.37	2.0
845657	1950	37	453	11	1.6	< 0.2	1	< 0.5	4.6	3285	< 0.4	299	518	52.3	177	26.6	7.12	16.7	2.1	9.6	1.5	3.4	0.36	1.8
845658	4542	45	205	36	1.0	< 0.2	2	< 0.5	3.7	1612	1.5	461	817	81.9	274	40.4	11.3	26.3	3.2	13.9	2.1	4.7	0.47	2.5
845659	3807	39	320	93	1.2	< 0.2	3	< 0.5	3.9	2367	< 0.4	448	873	89.4	301	37.6	9.34	20.6	2.4	11.1	1.7	3.9	0.41	2.2
845660	7585	2677	433	3	1.8	< 0.2	2	1.6	< 0.5	1127	2.0	53100	127000	15400	58400	9500	2340	5080	480	1510	144	196	17.2	87.3
845661	2576	30	117	70	0.6	< 0.2	1	< 0.5	4.6	2602	< 0.4	404	736	74.9	248	31.7	7.80	17.4	1.9	8.5	1.3	2.9	0.29	1.4
845662	1579	43	157	16	0.7	< 0.2	1	< 0.5	4.4	2472	< 0.4	436	752	75.2	251	35.9	9.28	21.1	2.4	10.8	1.6	3.7	0.36	1.7
845663	2138	44	154	38	0.6	< 0.2	1	< 0.5	5.1	2453	< 0.4	557	934	87.1	280	36.3	9.17	20.5	2.4	11.1	1.7	4.0	0.40	2.0
845664	8279	98	132	43	0.7	< 0.2	4	< 0.5	1.0	1456	< 0.4	2010	2920	245	728	69.3	15.7	33.2	3.6	19.8	3.6	9.8	1.25	6.8
845665	12100	59	420	59	1.7	< 0.2	< 1	< 0.5	< 0.5	971	< 0.4	2910	4200	344	965	68.6	13.6	25.7	2.3	11.5	2.1	6.3	0.96	5.9
845666	9065	72	396	49	2.0	< 0.2	< 1	< 0.5	1.6	1997	< 0.4	1790	2790	244	726	68.6	15.1	30.5	3.2	16.5	2.8	6.7	0.84	4.9
845667	9078	38	9	13	< 0.5	< 0.2	< 1	< 0.5	0.6	2159	< 0.4	1360	2110	190	602	80.2	19.4	37.4	3.0	12.0	1.7	3.7	0.42	2.4
845668	3109	38	133	19	0.6	< 0.2	2	1.7	5.5	2334	< 0.4	512	834	78.4	251	34.5	8.24	18.8	2.1	9.8	1.6	3.8	0.46	2.5
845669	1314	25	66	5	< 0.5	< 0.2	1	< 0.5	5.6	2157	< 0.4	282	453	42.6	138	18.5	4.76	11.0	1.3	6.1	1.0	2.3	0.25	1.2
845670	747	4	99	< 2	< 0.5	< 0.2	< 1	< 0.5	1.2	740	< 0.4	16.7	32.8	3.88	14.7	2.5	0.77	1.5	0.2	0.7	0.1	0.3	< 0.05	0.3
845671	2557	45	189	45	0.8	< 0.2	3	< 0.5	5.0	3289	< 0.4	581	963	87.5	272	32.4	7.65	17.3	2.1	10.5	1.8	4.1	0.53	2.9
845672	2036	34	118	4	< 0.5	< 0.2	< 1	< 0.5	3.5	2278	< 0.4	268	420	39.3	127	17.3	4.62	10.8	1.4	7.1	1.3	3.1	0.37	2.0
845673	6292	69	173	14	0.7	< 0.2	< 1	< 0.5	1.4	748	< 0.4	498	883	87.8	304	42.0	11.0	25.8	3.1	15.0	2.6	6.7	0.84	4.9
845674	8986	48	192	62	1.0	< 0.2	< 1	< 0.5	1.4	857	< 0.4	1400	2110	180	524	43.0	9.02	18.1	1.7	9.4	1.7	5.2	0.67	3.9
845675	1250	12	314	11	1.1	< 0.2	2	< 0.5	5.6	1724	< 0.4	130	203	19.0	58.7	6.7	1.53	3.4	0.4	2.4	0.4	1.2	0.19	1.2
845676	3397	49	152	36	0.7	< 0.2	1	< 0.5	6.0	2501	< 0.4	672	1050	93.9	292	31.5	7.40	15.9	1.8	9.7	1.8	4.9	0.69	4.1
845677	11950	175	335	20	1.6	< 0.2	< 1	< 0.5	1.7	1239	< 0.4	2420	3830	339	1010	96.8	21.4	45.5	5.0	31.0	6.7	19.9	2.60	13.4
845678	11470	79	1972	4		< 0.2	< 1	3.2	< 0.5	516	< 0.4	1560	2660	247	773	79.2	17.9	36.1	3.3	16.2	2.7	7.2	0.97	6.3
845679	8254	101	1720	4		< 0.2	< 1	< 0.5	< 0.5	343	< 0.4	1030	1680	152	475	55.8	14.3	32.2	3.8	18.8	3.3	8.9	1.22	8.1
845680	7462	2638	430	2	1.8	< 0.2	1	< 0.5	< 0.5	1136	2.1	51600	124000	15000	56800	9360	2300	5090	471	1490	142	201	17.3	87.3
845681	10740	87	582	6	2.3	< 0.2	< 1	< 0.5	1.4	1158	< 0.4	1330	2200	203	635	68.0	16.0	32.9	3.3	16.6	2.9	8.2	1.16	7.7
845682	6695	74	138	7	0.6	< 0.2	< 1	< 0.5	6.3	1173	< 0.4	459	809	81.5	275	34.6	8.93	21.5	2.7	13.7	2.6	6.8	1.04	7.0
845683	2721	26	591	9	2.4	< 0.2	< 1	< 0.5	7.0	5923	< 0.4	267	443	42.0	144	16.2	3.92	10.6	1.3	5.9	1.0	2.8	0.36	2.1
845684	2808	24	801	9	3.2	< 0.2	< 1	< 0.5	4.1	4462	< 0.4	274	469	43.2	146	14.7	3.43	8.9	1.0	4.9	0.8	2.6	0.33	1.8
845685	1967	21	215	27	0.8	< 0.2	1	0.5	7.5	4672	< 0.4	213	318	27.9	93.3	10.0	2.41	6.7	0.8	4.1	0.7	2.0	0.27	1.6
845686	4256	36	268	9	1.0	< 0.2	< 1	< 0.5	5.9	2436	< 0.4	321	572	55.4	198	23.0	5.79	14.3	1.6	8.1	1.3	3.8	0.50	2.7
845687	5680	69	153	25	1.0	< 0.2	1	< 0.5	3.7															

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Analyte Symbol	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845688	2422	28	838	< 2	3.6	< 0.2	< 1	< 0.5	3.6	2388	< 0.4	110	200	20.6	77.9	11.0	3.03	8.2	1.1	5.7	1.1	3.1	0.46	2.5
845689	1557	19	867	< 2	3.7	< 0.2	< 1	< 0.5	4.1	2692	< 0.4	62.2	126	13.8	56.0	8.4	2.33	6.0	0.8	4.0	0.7	2.1	0.31	1.9
845690	2596	47	601	< 2	3.7	< 0.2	< 1	< 0.5	2.8	2369	< 0.4	230	401	38.8	142	18.8	4.48	13.6	1.7	9.4	1.7	4.8	0.73	4.4
845691	2100	22	788	< 2	3.3	< 0.2	2	< 0.5	3.2	2580	< 0.4	117	210	20.9	78.2	10.7	2.65	7.1	0.9	4.7	0.9	2.5	0.35	2.2
845692	2746	24	636	8	2.7	< 0.2	< 1	< 0.5	3.6	3036	< 0.4	235	373	34.4	119	13.4	3.25	8.7	0.9	4.8	0.9	2.5	0.35	2.2
845693	1367	12	152	22	0.6	< 0.2	< 1	< 0.5	4.2	6365	< 0.4	353	530	45.6	144	12.2	2.54	7.1	0.6	2.6	0.5	1.2	0.16	0.9
845694	5822	31	403	16	1.6	< 0.2	1	< 0.5	3.5	2808	< 0.4	618	993	88.8	290	28.4	6.65	16.1	1.5	7.1	1.2	2.9	0.35	2.1
845695	1752	11	322	3	1.2	< 0.2	< 1	< 0.5	3.2	2057	< 0.4	188	305	27.5	92.3	9.8	2.35	5.7	0.6	2.7	0.5	1.1	0.15	0.9
845696	2805	17	523	13	2.1	< 0.2	< 1	< 0.5	4.1	3131	< 0.4	434	659	57.4	178	14.9	3.09	8.6	0.8	3.4	0.6	1.6	0.22	1.3
845697	1965	36	157	26	0.7	< 0.2	< 1	< 0.5	4.8	1437	< 0.4	969	1550	147	477	38.3	8.08	21.7	1.8	7.6	1.3	3.5	0.48	2.8
845698	4657	28	1581	36		< 0.2	< 1	< 0.5	2.6	1000	0.6	1130	1620	145	440	32.4	6.68	19.4	1.4	6.4	1.1	3.1	0.46	2.7
845699	3423	48	279	7	1.3	< 0.2	< 1	< 0.5	3.8	2694	< 0.4	404	631	59.1	210	26.5	6.89	18.5	2.1	10.7	1.9	5.2	0.64	3.6
845700	7625	2658	438	< 2	2.0	< 0.2	< 1	< 0.5	< 0.5	1121	2.2	52700	127000	14300	57200	8810	2220	4740	460	1520	143	181	16.8	93.7
845701	3776	37	138	6	0.6	< 0.2	1	< 0.5	6.7	2708	< 0.4	394	661	70.3	263	34.5	8.75	22.6	2.3	10.3	1.5	3.5	0.43	2.3
845702	4146	44	137	15	0.6	< 0.2	< 1	< 0.5	4.7	2979	< 0.4	577	955	99.6	355	41.7	10.4	28.6	2.7	12.0	1.7	4.3	0.49	2.5
845703	7245	52	894	16	4.3	< 0.2	2	< 0.5	4.0	1512	< 0.4	773	1280	129	453	48.0	11.5	31.1	3.0	12.7	2.1	5.5	0.71	4.0
845704	2330	26	2478	16		< 0.2	2	< 0.5	3.9	2334	< 0.4	488	770	74.0	249	23.5	5.32	14.8	1.3	6.0	1.0	2.8	0.42	3.0
845705	2528	47	568	< 2	2.5	< 0.2	< 1	< 0.5	6.3	1316	< 0.4	299	505	53.1	201	26.9	7.41	19.9	2.3	11.3	1.9	5.2	0.70	4.3
845706	3150	33	272	11	1.2	< 0.2	1	< 0.5	5.9	1733	< 0.4	700	1110	109	368	34.8	7.40	20.4	1.9	7.9	1.3	3.2	0.43	2.3
845707	6714	69	769	482	3.0	< 0.2	< 1	< 0.5	4.1	1196	0.6	1330	1890	180	566	50.0	11.1	32.5	3.1	14.2	2.4	6.4	0.86	4.9
845708	7607	66	1191	33		< 0.2	< 1	< 0.5	5.6	1248	< 0.4	1260	1920	188	608	51.2	11.0	32.6	2.7	12.0	2.0	5.7	0.80	4.6
845709	7531	43	549	92	3.1	< 0.2	1	0.6	6.6	1517	< 0.4	972	1430	138	433	33.0	6.70	20.0	1.6	7.4	1.5	4.1	0.59	3.7
845710	747	2	100	< 2	< 0.5	< 0.2	< 1	< 0.5	1.4	956	< 0.4	13.6	25.9	2.95	11.8	1.9	0.60	1.3	0.1	0.5	< 0.1	0.2	< 0.05	0.1
845711	2881	29	776	16	3.6	< 0.2	< 1	< 0.5	4.2	2170	< 0.4	491	748	70.1	231	20.7	4.80	13.2	1.2	6.2	1.1	3.0	0.42	2.3
845712	3500	25	343	12	1.5	< 0.2	< 1	< 0.5	5.1	1908	< 0.4	431	671	63.7	211	19.5	4.44	12.6	1.2	5.6	1.0	2.5	0.35	2.1
845713	3326	32	134	9	0.7	< 0.2	1	< 0.5	5.6	2061	< 0.4	507	805	79.0	262	25.6	5.78	16.0	1.4	6.9	1.2	3.3	0.45	2.4
845714	3056	44	318	3	1.5	< 0.2	2	< 0.5	6.9	1697	< 0.4	410	659	64.6	226	24.5	6.15	17.0	1.8	9.5	1.7	4.7	0.65	3.7
845715	3092	22	374	9	1.5	< 0.2	< 1	< 0.5	3.9	2209	< 0.4	383	566	50.9	167	16.1	3.87	10.1	1.0	4.7	0.8	2.1	0.31	1.7
845716	1514	15	165	4	0.6	< 0.2	< 1	< 0.5	3.7	1950	< 0.4	186	308	30.1	103	10.9	2.79	7.3	0.7	3.7	0.6	1.5	0.18	1.1
845717	1511	13	215	< 2	0.8	< 0.2	< 1	< 0.5	2.5	2182	< 0.4	150	229	21.5	73.9	8.4	2.15	5.7	0.6	2.9	0.5	1.2	0.16	1.0
845718	824	28	598	< 2	2.3	< 0.2	< 1	< 0.5	3.0	1772	< 0.4	219	347	33.5	116	14.2	3.74	10.1	1.2	6.4	1.1	2.9	0.39	2.3
845719	1389	30	1120	< 2		< 0.2	< 1	< 0.5	2.9	2129	< 0.4	348	575	56.3	199	22.7	5.67	14.0	1.5	7.3	1.2	3.3	0.42	2.6
845720	7695	2663	440	< 2	1.9	< 0.2	< 1	< 0.5	< 0.5	1117	2.1	56000	129000	15100	59900	9330	2320	5040	468	1530	144	213	18.2	89.2
845721	133	48	190	< 2	0.8	< 0.2	< 1	< 0.5	< 0.5	247	< 0.4	334	548	54.9	194	26.0	7.06	17.7	2.1	10.9	2.0	5.8	0.84	5.0
845722	954	33	296	6	1.2	< 0.2	< 1	< 0.5	2.5	1490	< 0.4	392	642	63.4	220	24.3	5.91	15.4	1.6	7.5	1.3	3.7	0.50	3.1
845723	3681	23	582	< 2	2.6	< 0.2	3	< 0.5	5.2	1786	< 0.4	272	441	43.8	152	17.2	4.25	11.3	1.1	5.2	0.9	2.4	0.31	1.9
845724	2785	14	55	< 2	< 0.5	< 0.2	< 1	< 0.5	4.9	2143	< 0.4	210	369	37.0	135	14.3	3.43	8.9	0.8	3.6	0.6	1.5	0.18	1.0
845725	2649	22	113	7	< 0.5	< 0.2	< 1	< 0.5	5.3	2025	< 0.4	262	466	44.8	154	18.2	4.48	8.5	1.1	5.5	0.9	2.3	0.29	1.7
845726	429	18	292	5	0.5	< 0.2	< 1	< 0.5	5.2	2148	< 0.4	228	401	38.7	133	15.8	4.21	7.4	1.0	5.0	0.8	1.8	0.22	1.4
845727	663	28	203	6	< 0.5	< 0.2	< 1	< 0.5	2.4	2375	< 0.4	362	659	66.0	232	26.6	6.36	12.4	1.5	7.3	1.1	2.5	0.29	1.8
845728	550	24	302	6	< 0.5	< 0.2	1	< 0.5	6.9	2055	< 0.4	264	508	51.0	179	21.5	5.29	9.7	1.2	6.4	1.0	2.2	0.27	1.8
845729	447	31	1292	3		< 0.2	< 1	< 0.5	4.9	2054	< 0.4	196	377	38.0	136	19.3	4.74	9.8	1.3	7.0	1.1	3.4	0.37	2.5
845730	541	3	103	< 2	< 0.5	< 0.2	< 1	< 0.5	2.1	730	< 0.4	11.0	22.8	2.75	10.4	1.9	0.55	1.1	0.1	0.5	< 0.1	0.2	< 0.05	0.1
845731	390	29	295	< 2	< 0.5	< 0.2	1	< 0.5	2.4	755	< 0.4	137	294	31.5	114	15.9	4.09	8.9	1.2	6.9	1.2	3.3	0.41	2.6
845732	493	95	164	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	450	< 0.4	441	868	91.7	339	49.6	13.7	28.5	3.9	23.2	4.0	10.6	1.38	7.0
845733	373	98	277	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	246	0.4	294	592	62.8	231	37.1	11.2	24.6	3.5	21.7	3.9	10.9	1.44	8.1
845734	180	77	133	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	204	< 0.4	276	556	57.4	210	31.3	9.32	20.4	2.9	16.6	2.9	8.2	1.03	6.3
845735	384	19	366	4	0.6	< 0.2	< 1	< 0.5	5.0	2733	< 0.4	162	289	28.2	96.8	12.7	3.15	5.9	0.9	4.6	0.7	1.7	0.22	1.2

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Analyte Symbol	Lu	Hf	Ta	W	Ti	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
845636	0.78	2.9	6.7	4	0.3	21	53.0	2.4	0.054
845637	0.52	3.3	9.0	< 1	0.2	< 5	63.5	3.8	0.061
845638	0.50	6.0	23.8	2	1.0	17	102	7.0	0.051
845639	0.65	1.3	2.9	< 1	0.1	21	20.1	1.2	0.039
845640	0.57	0.6	18.0	< 1	0.2	49	50.0	25.2	0.531
845641	0.36	0.3	0.4	< 1	< 0.1	< 5	8.0	0.2	0.026
845642	0.60	1.3	0.4	< 1	0.1	30	17.9	0.3	0.033
845643	0.34	2.4	4.3	1	1.0	66	40.3	1.3	0.021
845644	0.40	0.5	0.9	< 1	0.3	23	49.1	0.4	0.081
845645	0.37	1.2	0.2	< 1	< 0.1	22	76.6	0.3	0.075
845646	0.60	0.6	0.4	< 1	0.4	21	31.5	0.8	0.063
845647	0.81	2.3	8.2	< 1	0.3	27	22.8	4.9	0.066
845648	0.48	0.4	0.6	< 1	0.3	14	33.1	0.4	0.018
845649	0.27	4.5	13.8	1	0.6	11	25.9	2.2	0.024
845650	0.28	4.6	76.6	2	0.4	33	39.8	38.1	0.104
845651	0.39	8.5	43.8	1	0.4	29	36.5	23.1	0.054
845652	0.28	4.2	15.4	1	0.3	12	22.9	6.0	0.030
845653	0.35	6.1	18.2	1	0.3	13	54.1	4.9	0.039
845654	0.30	4.3	18.8	1	0.4	12	46.5	3.5	0.044
845655	0.21	4.8	86.2	1	0.4	33	43.4	50.5	0.092
845656	0.27	8.4	29.5	1	0.5	19	63.8	13.1	0.048
845657	0.24	5.9	13.6	2	0.5	14	73.4	2.4	0.037
845658	0.35	2.8	13.8	1	0.4	24	25.5	2.4	0.028
845659	0.29	4.5	21.3	2	0.4	10	35.7	3.9	0.043
845660	11.2	12.2	10.8	8	< 0.1	38	29000	225	0.062
845661	0.18	1.6	16.0	1	0.5	12	69.5	3.0	0.030
845662	0.22	2.2	15.4	2	0.4	17	89.3	4.0	0.028
845663	0.26	1.9	22.6	1	0.5	19	82.5	5.0	0.050
845664	0.92	1.5	6.7	< 1	0.1	40	64.9	1.7	0.042
845665	0.89	2.5	0.6	< 1	< 0.1	18	35.7	0.2	0.040
845666	0.66	1.5	3.1	< 1	0.2	16	63.3	2.0	0.055
845667	0.31	0.2	0.3	< 1	< 0.1	15	209	0.4	0.013
845668	0.34	3.3	7.1	< 1	0.4	22	46.4	1.8	0.027
845669	0.16	1.1	10.7	< 1	0.4	13	34.4	1.3	0.021
845670	< 0.04	2.5	0.1	< 1	0.3	8	2.7	0.4	< 0.003
845671	0.39	4.4	11.6	< 1	0.4	18	50.4	2.0	0.029
845672	0.26	1.6	12.1	1	0.4	12	32.9	1.7	0.029
845673	0.71	2.3	4.8	< 1	0.1	11	24.5	1.5	0.029
845674	0.57	0.9	1.4	< 1	0.2	9	13.0	1.0	0.051
845675	0.18	4.9	56.0	< 1	0.6	19	13.0	20.9	0.086
845676	0.61	1.8	25.0	< 1	0.7	17	27.5	9.2	0.046
845677	1.70	2.4	2.2	< 1	0.2	10	200	1.2	0.074
845678	0.95	7.5	0.7	< 1	< 0.1	9	95.7	0.2	0.128
845679	1.23	7.3	1.2	< 1	< 0.1	6	23.7	0.1	0.114
845680	11.3	12.6	5.0	2	< 0.1	38	29100	221	0.061
845681	1.25	3.5	2.0	< 1	0.2	9	56.2	0.7	0.081
845682	1.13	1.3	4.0	< 1	0.2	12	17.4	1.1	0.039
845683	0.36	7.5	15.4	< 1	0.5	9	15.8	2.7	0.034
845684	0.30	9.5	11.5	< 1	0.4	6	9.6	2.1	0.290
845685	0.25	2.7	23.9	< 1	0.6	9	9.0	5.6	0.038
845686	0.42	2.8	12.5	< 1	0.4	6	12.4	1.7	0.042
845687	0.80	2.0	9.5	< 1	0.4	7	14.9	1.2	0.054

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Analyte Symbol	Lu	Hf	Ta	W	Ti	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
845688	0.40	9.9	19.9	< 1	0.3	< 5	5.2	1.5	0.038
845689	0.33	8.3	11.7	< 1	0.3	< 5	6.0	2.8	0.029
845690	0.75	6.9	6.0	< 1	0.3	8	11.6	3.5	0.026
845691	0.38	9.7	12.0	< 1	0.3	22	5.6	4.1	0.024
845692	0.37	7.1	11.6	< 1	0.4	8	7.6	2.2	0.029
845693	0.15	1.8	11.3	< 1	0.6	8	12.8	2.6	0.037
845694	0.33	3.3	10.4	< 1	0.4	9	8.0	1.1	0.048
845695	0.13	4.2	13.0	< 1	0.3	< 5	8.7	1.1	0.035
845696	0.21	6.3	10.6	< 1	0.4	7	10.1	1.2	0.030
845697	0.44	1.3	3.6	< 1	0.2	< 5	6.5	1.0	0.077
845698	0.45	41.4	2.1	< 1	< 0.1	8	14.6	0.4	0.029
845699	0.51	3.0	18.2	< 1	0.2	22	14.6	6.3	0.038
845700	13.2	16.8	5.3	< 1	< 0.1	45	28300	221	0.063
845701	0.31	1.4	15.9	< 1	0.3	14	11.8	4.7	0.099
845702	0.37	1.7	20.3	< 1	0.2	11	16.6	4.9	0.070
845703	0.69	7.5	4.8	< 1	0.2	17	13.1	3.8	0.090
845704	0.61	10.0	13.8	< 1	0.2	14	17.3	13.4	0.045
845705	0.74	4.8	7.5	< 1	0.3	9	21.7	5.0	0.051
845706	0.34	3.4	15.2	< 1	0.2	6	19.1	3.0	0.043
845707	0.79	5.1	2.0	< 1	0.2	12	27.6	3.8	0.048
845708	0.70	7.3	7.7	< 1	0.4	16	13.3	14.0	0.075
845709	0.52	6.1	30.4	< 1	0.6	20	5.8	19.0	0.072
845710	< 0.04	2.6	< 0.1	< 1	0.2	10	2.3	0.3	< 0.003
845711	0.35	11.0	40.4	< 1	0.3	18	9.6	19.1	0.051
845712	0.34	5.2	17.5	< 1	0.4	7	5.7	3.7	0.045
845713	0.38	1.8	15.6	< 1	0.4	6	9.9	2.0	0.054
845714	0.57	4.7	39.6	< 1	0.4	7	10.8	4.4	0.084
845715	0.26	5.2	16.3	< 1	0.4	6	7.8	1.8	0.030
845716	0.18	2.5	22.5	< 1	0.3	6	4.9	3.5	0.043
845717	0.15	2.8	13.6	< 1	0.2	6	5.8	4.2	0.022
845718	0.35	7.8	36.5	< 1	0.3	11	7.4	16.4	0.046
845719	0.40	14.0	25.5	< 1	0.2	7	7.9	6.5	0.034
845720	13.4	17.1	5.2	< 1	< 0.1	43	28200	224	0.063
845721	0.89	3.7	2.1	< 1	< 0.1	< 5	8.1	1.1	0.007
845722	0.50	5.2	10.4	< 1	0.1	< 5	5.8	2.2	0.054
845723	0.31	7.1	86.1	< 1	0.4	54	8.7	40.8	0.105
845724	0.15	1.0	13.9	< 1	0.5	< 5	4.0	2.6	0.047
845725	0.23	1.4	17.0	< 1	0.7	7	8.3	3.3	0.047
845726	0.24	3.8	42.1	< 1	0.7	7	10.2	9.3	0.075
845727	0.29	2.8	12.3	< 1	0.6	< 5	10.1	2.0	0.030
845728	0.25	4.2	32.1	< 1	0.8	5	10.6	2.4	0.068
845729	0.47	13.8	22.7	< 1	0.7	6	16.0	5.7	0.040
845730	< 0.04	2.4	< 0.1	< 1	0.3	7	< 0.1	0.3	< 0.003
845731	0.45	3.1	10.2	< 1	0.4	< 5	4.1	2.5	0.048
845732	1.03	1.7	0.9	< 1	0.2	6	134	2.2	0.013
845733	1.24	1.5	0.6	< 1	< 0.1	< 5	37.2	2.1	0.009
845734	0.94	2.0	2.1	< 1	< 0.1	< 5	6.4	2.0	0.007
845735	0.18	4.7	17.2	< 1	0.6	< 5	14.4	2.3	0.041

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Quality Control																										
Analyte Symbol	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb		
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		
Detection Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5	2		
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS		
DH-1a Meas																										
DH-1a Cert																										
TAN-1 Meas																										
TAN-1 Cert																										
NIST 694 Meas	11.72	1.94	0.76	0.012	0.35	43.06	0.91	0.57	0.120	30.20					1675											
NIST 694 Cert	11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2					1740											
DNC-1 Meas	47.16	18.56	9.82	0.147	9.98	11.43	1.92	0.23	0.491	0.06			31		157	270	57	250	90							
DNC-1 Cert	47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070			31		148.0	270.0	57.0	247	100.0							
GBW 07113 Meas	71.16	12.45	3.25	0.141	0.14	0.59	2.35	5.33	0.279	0.05			5	4	< 5											
GBW 07113 Cert	72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500			5.00	4.00	5.00											
LKSD-3 Meas																80	31	50	30	130			23	73		
LKSD-3 Cert																87.0	30.0	47.0	35.0	152			27.0	78.0		
OKA-2 Meas																										
OKA-2 Cert																										
AC-E Meas																										
AC-E Cert																										
OKA-1 Meas																										
OKA-1 Cert																										
W-2a Meas	52.54	15.33	10.71	0.166	6.27	10.85	2.19	0.64	1.074	0.13			35	< 1	272	90	44	70	110	80	18	2	< 5	19		
W-2a Cert	52.4	15.4	10.7	0.163	6.37	10.9	2.14	0.626	1.06	0.130			36.0	1.30	262	92.0	43.0	70.0	110	80.0	17.0	1.00	1.20	21.0		
SY-4 Meas	49.48	20.83	6.21	0.107	0.51	8.01	7.02	1.70	0.289	0.14			< 1	3	7											
SY-4 Cert	49.9	20.69	6.21	0.108	0.54	8.05	7.10	1.66	0.287	0.131			1.1	2.6	8.0											
CTA-AC-1 Meas																		< 1		50						
CTA-AC-1 Cert																		2.72		54.0						
BIR-1a Meas	47.95	15.23	11.38	0.173	9.59	13.57	1.83	0.02	0.964	0.02			44	< 1	335	370	53	170	120	60	15		< 5			
BIR-1a Cert	47.96	15.50	11.30	0.175	9.700	13.30	1.82	0.030	0.96	0.021			44	0.58	310	370	52	170	125	70	16		0.44			
NCS DC86312 Meas																										
NCS DC86312 Cert																										
VS-N Meas																										
VS-N Cert																										
NCS DC70014 Meas																	25	70	2620	7400	25					
NCS DC70014 Cert																	26.2	70.9	2600.00	7400.00	25.2					
NCS DC70009 (GBW07241) Meas																30	3		900	100	16	11	72	503		
NCS DC70009 (GBW07241) Cert																30	3.7		960.000	100.000	16.5	11.2	69.9	500.00		
OREAS 100a (Fusion) Meas																	17		160							
OREAS 100a (Fusion) Cert																	18.1		169							
OREAS 101a (Fusion) Meas																	49		430							
OREAS 101a (Fusion) Cert																	48.8		434							
JR-1 Meas																	< 20		< 20	< 10	17	3	16	251		
JR-1 Cert																	2.83		1.67	2.68	16.1	1.88	16.3	257		
NCS DC86318 Meas																										
NCS DC86318 Cert																										
USZ 25-2006 Meas																										
USZ 25-2006 Cert																										
SX58-04 (DH 5804) Meas																										
SX58-04 (DH 5804) Cert																										
BCR-2 Meas	53.41	13.16	13.73		3.50	7.23	3.01	1.79	2.237	0.36			33		436											
BCR-2 Cert	54.1	13.5	13.8		3.59	7.12	3.16	1.79	2.26	0.35			33		416											
845650 Orig	48.08	16.21	8.69	0.323	0.53	6.99	2.84	9.14	0.102	0.24	6.51	99.65	2	1	9	< 20	2	< 20	< 10	90	24	1	< 5	248		
845650 Dup	48.15	16.18	8.75	0.324	0.52	7.07	2.83	9.08	0.103	0.24	6.51	99.76	2	1	9	< 20	2	< 20	< 10	100	24	1	< 5	248		
845667 Orig	2.23	1.06	72.22	2.490	1.18	10.12	0.07	0.42	0.007	0.12	7.10	97.03	< 1	< 1	25	< 20	9	< 20	< 10	340	11	1	< 5	23		
845667 Dup	2.22	1.07	71.93	2.481	1.18	10.03	0.07	0.43	0.007	0.14	7.10	96.64	< 1	< 1	25	< 20	9	< 20	< 10	330	11	1	< 5	22		

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Quality Control																									
Analyte Symbol	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5	2	
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
845685 Orig	47.62	17.16	8.17	0.287	0.53	5.97	4.30	8.41	0.213	0.67	4.23	97.56	< 1	2	12	< 20	3	< 20	< 10	90	20	< 1	< 5	222	
845685 Split	48.96	18.09	8.66	0.296	0.55	5.73	4.48	8.61	0.236	0.67	4.64	100.9	< 1	2	11	< 20	2	< 20	< 10	90	20	< 1	< 5	220	
845695 Orig	49.26	17.51	8.01	0.233	0.41	5.27	3.97	9.04	0.127	0.15	4.17	98.16	< 1	1	13	< 20	2	< 20	< 10	70	25	1	< 5	230	
845695 Split	49.37	17.74	8.01	0.233	0.41	5.22	4.01	9.13	0.128	0.14	4.77	99.16	< 1	1	12	< 20	2	< 20	< 10	70	24	< 1	< 5	218	
845697 Orig	19.05	6.80	33.56	1.315	4.51	13.87	0.69	3.33	0.053	0.57	14.06	97.81	2	< 1	15	< 20	5	< 20	< 10	250	22	2	< 5	96	
845697 Dup	18.87	6.80	33.66	1.307	4.51	13.78	0.68	3.28	0.052	0.57	14.06	97.57	2	< 1	13	< 20	5	< 20	< 10	250	21	2	< 5	93	
845714 Orig	35.20	13.29	17.52	0.613	1.16	12.63	2.35	6.66	0.114	1.95	9.26	100.8	1	1	15	< 20	4	< 20	< 10	190	32	2	< 5	309	
845714 Dup	34.71	13.35	17.19	0.608	1.15	12.44	2.32	6.63	0.114	1.91	9.26	99.68	< 1	1	14	< 20	3	< 20	< 10	200	31	2	< 5	300	
845725 Orig	38.33	14.22	15.78	0.468	1.64	9.84	1.92	6.70	0.074	1.05	9.14	99.15	< 1	3	17	< 20	3	< 20	< 10	140	18	1	< 5	173	
845725 Split	38.91	14.55	15.75	0.473	1.66	9.67	1.94	6.74	0.072	1.05	9.26	100.1	< 1	3	17	< 20	2	< 20	< 10	120	17	< 1	< 5	165	
845735 Orig	51.10	17.47	10.89	0.244	1.21	1.75	0.98	10.98	0.042	0.17	4.53	99.36	< 1	2	7	< 20	3	< 20	< 10	110	22	1	< 5	233	
845735 Split	51.26	17.42	10.96	0.253	1.26	1.83	0.98	10.98	0.044	0.18	4.77	99.94	< 1	2	9	< 20	3	< 20	< 10	120	21	1	< 5	230	
Method Blank Method																< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	< 2	
Blank																									
Method Blank Method																									
Blank																									

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Quality Control																								
Analyte Symbol	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
DH-1a Meas																								
DH-1a Cert																								
TAN-1 Meas																								
TAN-1 Cert																								
NIST 694 Meas																								
NIST 694 Cert																								
DNC-1 Meas	144	16	33					1.0		100		3.6			4.8		0.57							1.9
DNC-1 Cert	144.0	18.0	38					0.96		118		3.6			5.20		0.59							2.0
GBW 07113 Meas	39	44	388							472														
GBW 07113 Cert	43.0	43.0	403							506														
LKSD-3 Meas				< 2	2.9		2	1.6	2.3			50.5	87.0		42.4	7.7	1.37		0.9	4.7				2.7
LKSD-3 Cert				2.00	2.70		3.00	1.30	2.30			52.0	90.0		44.0	8.00	1.50		1.00	4.90				2.70
OKA-2 Meas																								
OKA-2 Cert																								
AC-E Meas																								
AC-E Cert																								
OKA-1 Meas																								
OKA-1 Cert																								
W-2a Meas	196	19	87	< 2	< 0.5			0.9	0.9	168	< 0.4	10.5	22.7		12.6	3.2	1.07		0.6	3.7	0.8	2.1	0.33	2.1
W-2a Cert	190	24.0	94.0	0.600	0.0460			0.790	0.990	182	0.0300	10.0	23.0		13.0	3.30	1.00		0.630	3.60	0.760	2.50	0.380	2.10
SY-4 Meas	1200	118	565							337														
SY-4 Cert	1191	119	517							340														
CTA-AC-1 Meas												2160	3330		1110	163	44.5	125	14.5					10.6
CTA-AC-1 Cert												2176	3326		1087	162	46.7	124	13.9					11.4
BIR-1a Meas	109	14	13					0.8		4	0.8	2.0		2.4	1.1	0.51	1.9							1.7
BIR-1a Cert	110	16	18					0.58		6	0.63	1.9		2.5	1.1	0.55	2.0							1.7
NCS DC86312 Meas												2380	177		1580			226	34.5	184	35.7	96.4	14.4	87.6
NCS DC86312 Cert												2360.000	190.000		1600.000			225.0	34.6	183.00	35.70	96.2	15.1	87.79
VS-N Meas																								
VS-N Cert																								
NCS DC70014 Meas				270	16.6			167		80.3	42.6	83.6		37.2	7.7	1.64	7.2	1.1	6.2	1.2	3.4	0.53	3.3	
NCS DC70014 Cert				270.000	16.7			180.000		80.3	45.3	87.0		39.9	8.0	1.8	7.4	1.1	6.7	1.3	3.5	0.57	3.3	
NCS DC70009 (GBW07241) Meas					1.9	1.3	1700		42.7		23.1	58.9	7.65	31.7	12.3		14.4	3.2	20.2		12.7	2.30	15.8	
NCS DC70009 (GBW07241) Cert					1.8	1.3	1701.000		41		23.7	60.3	7.9	32.9	12.5		14.8	3.3	20.7		13.4	2.2	14.9	
OREAS 100a (Fusion) Meas				23							246	449	43.7	144	23.3	3.50		3.6	21.9	4.7	14.0	2.30	14.8	
OREAS 100a (Fusion) Cert				24.1							260	463	47.1	152	23.6	3.71		3.80	23.2	4.81	14.9	2.31	14.9	
OREAS 101a (Fusion) Meas				21							789	1400	126	389	50.2	7.94		5.4	31.6	6.5	18.9	2.97	18.4	
OREAS 101a (Fusion) Cert				21.9							816	1396	134	403	48.8	8.06		5.92	33.3	6.46	19.5	2.90	17.5	
JR-1 Meas				3	< 0.5	< 0.2	3	1.0	20.9		0.8	19.4	46.3	5.76	23.2	5.9	0.27		1.0			4.1	0.71	4.7
JR-1 Cert				3.25	0.031	0.028	2.86	1.19	20.8		0.56	19.7	47.2	5.58	23.3	6.03	0.30		1.01			3.61	0.67	4.55
NCS DC86318 Meas												1900	406	703	3310	1640	18.0	2180	476	3100	571	1650	279	1670
NCS DC86318 Cert												1960	430	740	3430	1720	18.91	2095	470	3220	560	1750	270	1840
USZ 25-2006 Meas												18700	29200	2760	8690	884	206							
USZ 25-2006 Cert												19300	29000	2800	8800	900	211.00							
SX58-04 (DH 5804) Meas																								
SX58-04 (DH 5804) Cert																								
BCR-2 Meas	339	32	165							670														
BCR-2 Cert	346	37	188							683														
845650 Orig	1839	30	352	10	1.4	< 0.2	2	< 0.5	3.6	1951	< 0.4	207	354	34.8	117	17.0	4.49	10.8	1.4	6.6	1.1	2.7	0.35	1.9
845650 Dup	1839	31	360	10	1.4	< 0.2	2	< 0.5	3.6	1947	< 0.4	210	358	35.3	120	16.9	4.43	10.5	1.4	6.7	1.1	2.8	0.34	1.9
845667 Orig	9049	38	10	14	< 0.5	< 0.2	< 1	< 0.5	0.6	2154	< 0.4	1380	2160	194	614	81.7	19.8	37.7	3.0	12.1	1.7	3.8	0.43	2.4
845667 Dup	9108	38	9	13	< 0.5	< 0.2	< 1	< 0.5	0.6	2164	< 0.4	1340	2060	185	590	78.6	18.9	37.2	3.0	11.8	1.7	3.6	0.42	2.4

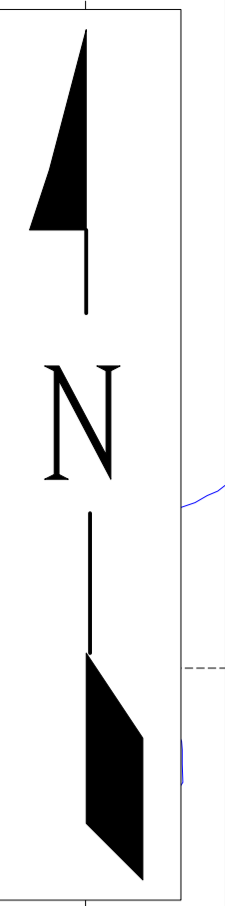
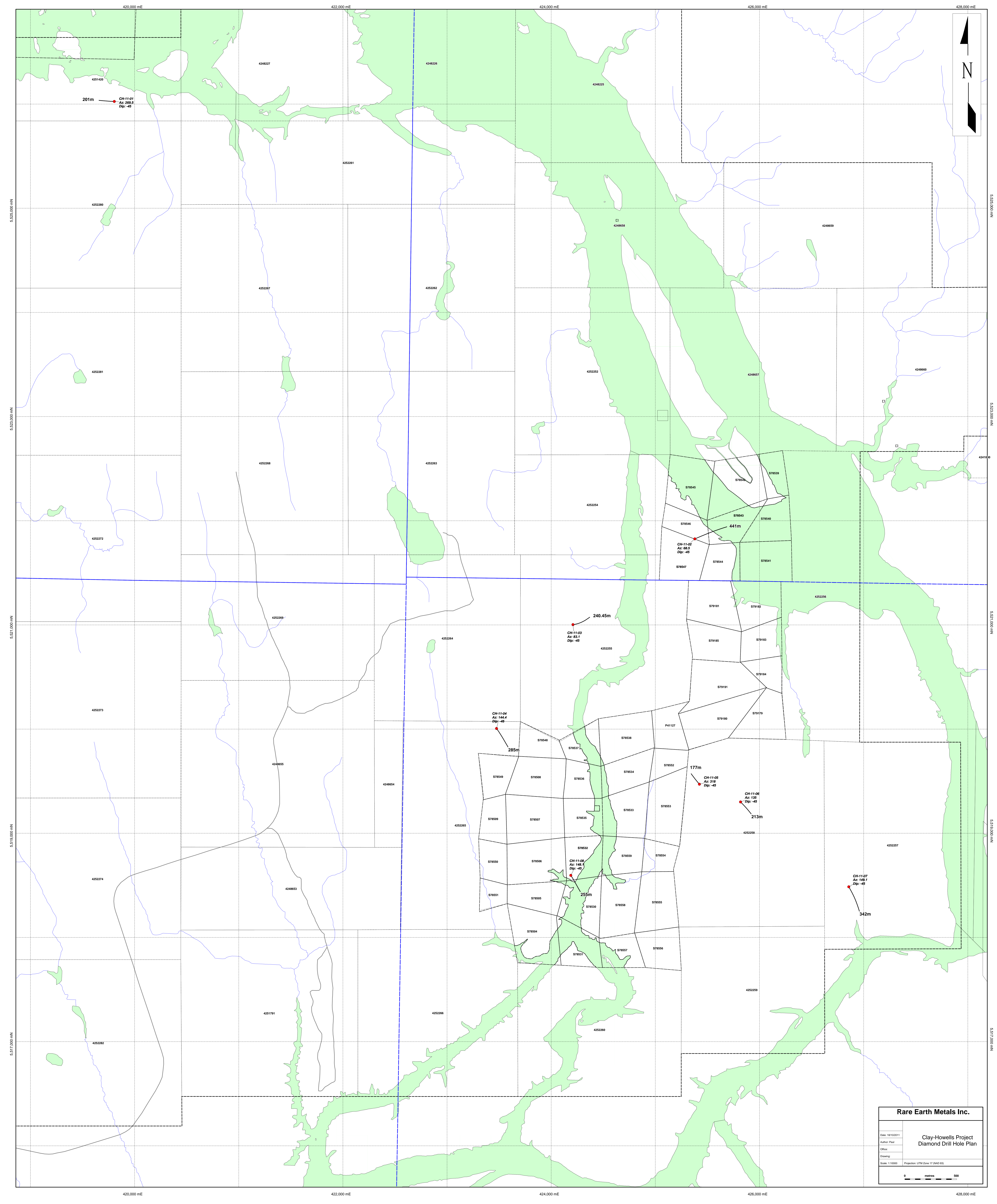
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Quality Control																									
Analyte Symbol	Sr	Y	Zr	Mo	Ag	In	Sn	Sb	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	2	4	2	0.5	0.2	1	0.5	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	
Analysis Method	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
845685 Orig	1967	21	215	27	0.8	< 0.2	1	0.5	7.5	4672	< 0.4	213	318	27.9	93.3	10.0	2.41	6.7	0.8	4.1	0.7	2.0	0.27	1.6	
845685 Split	1955	21	227	29	< 0.5	< 0.2	< 1	< 0.5	7.6	4820	< 0.4	222	336	29.6	92.6	10.0	2.28	6.4	0.7	3.8	0.7	1.9	0.25	1.5	
845695 Orig	1752	11	322	3	1.2	< 0.2	< 1	< 0.5	3.2	2057	< 0.4	188	305	27.5	92.3	9.8	2.35	5.7	0.6	2.7	0.5	1.1	0.15	0.9	
845695 Split	1748	12	325	4	0.5	< 0.2	< 1	< 0.5	3.0	2069	< 0.4	196	320	29.0	92.2	9.3	2.27	5.5	0.6	2.6	0.4	1.0	0.13	0.8	
845697 Orig	1970	36	157	26	0.7	< 0.2	< 1	< 0.5	4.8	1417	< 0.4	969	1540	146	474	38.5	8.18	22.3	1.9	7.6	1.3	3.5	0.48	2.9	
845697 Dup	1960	36	157	25	0.7	< 0.2	< 1	< 0.5	4.8	1458	< 0.4	969	1560	149	480	38.1	7.99	21.1	1.7	7.6	1.3	3.4	0.48	2.8	
845714 Orig	3049	43	334	3	1.7	< 0.2	2	< 0.5	6.8	1708	< 0.4	417	664	65.5	227	25.0	6.13	17.3	1.9	9.5	1.7	4.8	0.64	3.7	
845714 Dup	3063	44	301	3	1.3	< 0.2	1	< 0.5	6.9	1686	< 0.4	403	654	63.8	225	24.1	6.17	16.6	1.8	9.5	1.7	4.7	0.66	3.6	
845725 Orig	2649	22	113	7	< 0.5	< 0.2	< 1	< 0.5	5.3	2025	< 0.4	262	466	44.8	154	18.2	4.48	8.5	1.1	5.5	0.9	2.3	0.29	1.7	
845725 Split	2712	22	104	7	< 0.5	< 0.2	< 1	< 0.5	5.1	2126	< 0.4	254	447	43.2	148	17.4	4.40	7.6	1.0	5.4	0.9	2.1	0.27	1.5	
845735 Orig	384	19	366	4	0.6	< 0.2	< 1	< 0.5	5.0	2733	< 0.4	162	289	28.2	96.8	12.7	3.15	5.9	0.9	4.6	0.7	1.7	0.22	1.2	
845735 Split	388	19	388	2	0.7	< 0.2	< 1	< 0.5	5.0	2763	< 0.4	157	278	27.1	98.2	12.1	3.27	6.0	0.8	4.3	0.7	1.8	0.20	1.1	
Method Blank Method				< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5		< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	
Blank																									
Method Blank Method																									
Blank																									

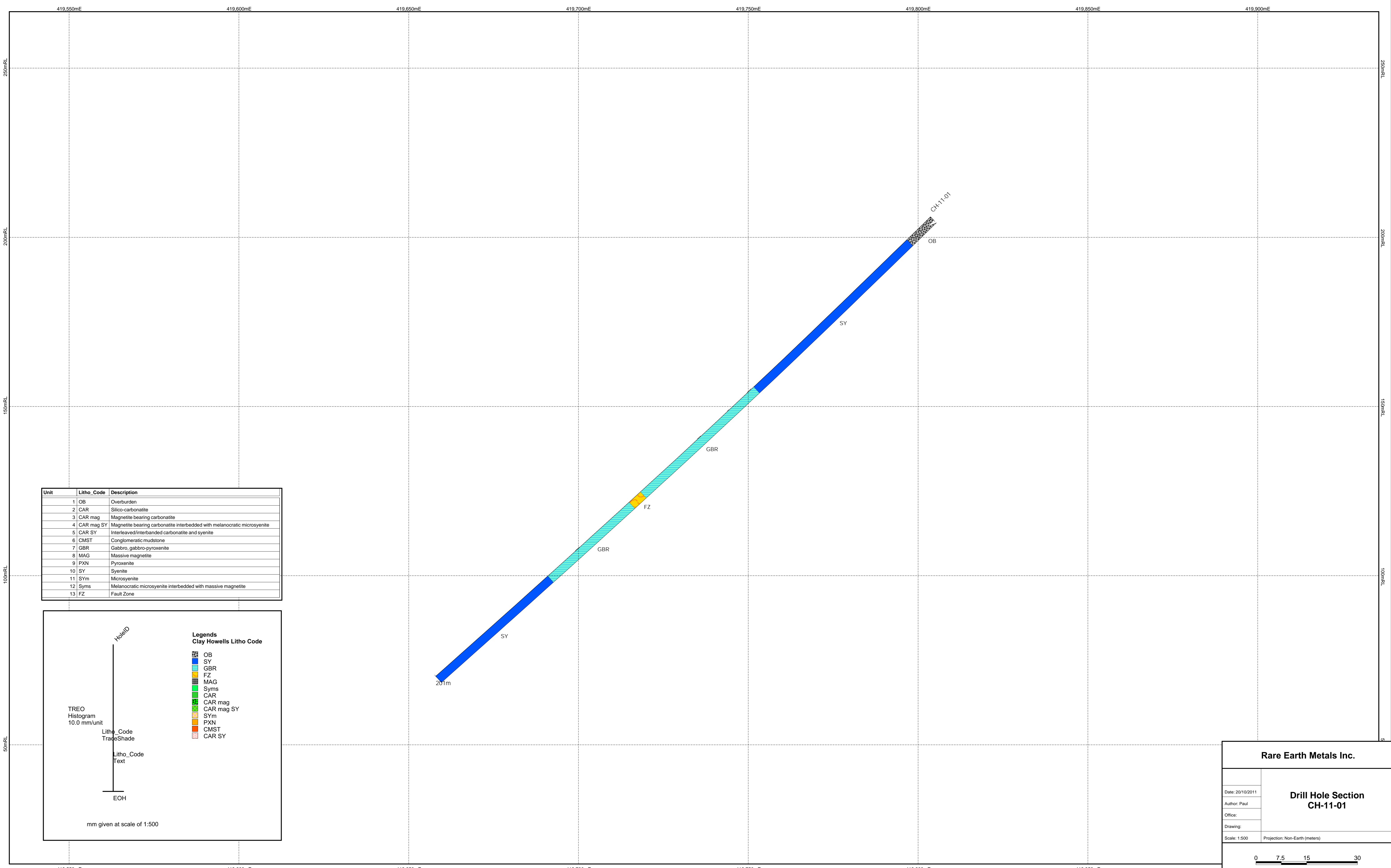
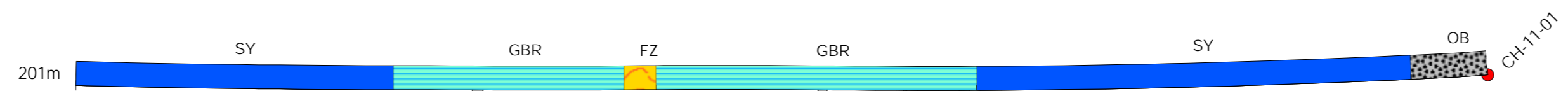
Quality Control									
Analyte Symbol	Lu	Hf	Ta	W	Tl	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
DH-1a Meas							933		
DH-1a Cert							910		
TAN-1 Meas			2340						
TAN-1 Cert			2360						
NIST 694 Meas									
NIST 694 Cert									
DNC-1 Meas									
DNC-1 Cert									
GBW 07113 Meas									
GBW 07113 Cert									
LKSD-3 Meas	0.40	4.1	0.7	< 1			10.4	4.3	
LKSD-3 Cert	0.400	4.80	0.700	2.00			11.4	4.60	
OKA-2 Meas							28500		
OKA-2 Cert							28900.000		
AC-E Meas									0.017
AC-E Cert									0.016
OKA-1 Meas									0.535
OKA-1 Cert									0.529
W-2a Meas		2.2	0.5	< 1	< 0.1	8	2.2	0.5	
W-2a Cert		2.60	0.500	0.300	0.200	9.30	2.40	0.530	
SY-4 Meas									
SY-4 Cert									
CTA-AC-1 Meas	1.06	1.3	2.5				22.8	4.0	
CTA-AC-1 Cert	1.08	1.13	2.65				21.8	4.4	
BIR-1a Meas	0.24	0.5				< 5			
BIR-1a Cert	0.3	0.60				3			
NCS DC86312 Meas	12.0						25.9		
NCS DC86312 Cert	11.96						23.6		
VS-N Meas									0.102
VS-N Cert									0.10
NCS DC70014 Meas	0.48					27200			
NCS DC70014 Cert	0.50					27200.00			
NCS DC70009 (GBW07241) Meas	2.21			2200			29.4		
NCS DC70009 (GBW07241) Cert	2.4			2200.00			28.3		
OREAS 100a (Fusion) Meas	2.07						50.4	135	
OREAS 100a (Fusion) Cert	2.26						51.6	135	
OREAS 101a (Fusion) Meas	2.50						35.7	422	
OREAS 101a (Fusion) Cert	2.66						36.6	422	
JR-1 Meas		4.4	1.9	1	1.6	20	26.8	9.0	
JR-1 Cert		4.51	1.86	1.59	1.56	19.3	26.7	8.88	
NCS DC86318 Meas	259								
NCS DC86318 Cert	260.0								
USZ 25-2006 Meas									
USZ 25-2006 Cert									
SX58-04 (DH 5804) Meas									0.367
SX58-04 (DH 5804) Cert									0.369
BCR-2 Meas									
BCR-2 Cert									
845650 Orig	0.28	4.6	75.7	2	0.4	32	39.3	37.9	0.103
845650 Dup	0.28	4.6	77.5	2	0.4	33	40.3	38.4	0.104
845667 Orig	0.31	0.2	0.3	< 1	< 0.1	14	218	0.4	0.014
845667 Dup	0.31	0.2	0.3	< 1	< 0.1	15	201	0.4	0.012

Quality Control									
Analyte Symbol	Lu	Hf	Ta	W	Tl	Pb	Th	U	Nb2O5
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Detection Limit	0.04	0.2	0.1	1	0.1	5	0.1	0.1	0.003
Analysis Method	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-XRF
845685 Orig	0.25	2.7	23.9	< 1	0.6	9	9.0	5.6	0.038
845685 Split	0.23	2.5	25.2	< 1	0.6	9	8.5	5.5	0.038
845695 Orig	0.13	4.2	13.0	< 1	0.3	< 5	8.7	1.1	0.035
845695 Split	0.12	4.0	12.9	< 1	0.3	< 5	7.8	1.0	0.034
845697 Orig	0.44	1.3	3.6	< 1	0.2	< 5	6.5	1.0	0.078
845697 Dup	0.45	1.3	3.6	< 1	0.2	< 5	6.5	1.0	0.076
845714 Orig	0.57	5.0	40.1	< 1	0.4	7	10.9	4.3	0.084
845714 Dup	0.57	4.4	39.1	< 1	0.4	7	10.7	4.4	0.084
845725 Orig	0.23	1.4	17.0	< 1	0.7	7	8.3	3.3	0.047
845725 Split	0.25	1.4	16.5	< 1	0.6	6	8.0	3.1	0.046
845735 Orig	0.18	4.7	17.2	< 1	0.6	< 5	14.4	2.3	0.041
845735 Split	0.16	4.8	17.8	< 1	0.7	< 5	14.5	2.4	0.043
Method Blank Method Blank	< 0.04	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.1	< 0.1	
Method Blank Method Blank									< 0.003

Appendix F – Drill Hole Plan and Cross Sections



Rare Earth Metals Inc.	
Date: 18/10/2011	Clay-Howells Project Diamond Drill Hole Plan
Author: Paul	
Office:	
Drawing:	
Scale: 1:10000	Projection: UTM Zone 17 (NAD 83)



Unit	Litho Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic microsyenite
5	CAR SY	Interleaved/interbanded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive magnetite
13	FZ	Fault Zone

HoleID

TREO
Histogram
10.0 mm/unit

Litho_Code
TradeShade

Litho_Code
Text

EOH

mm given at scale of 1:500

Legends
Clay Howells Litho Code

- OB
- SY
- GBR
- FZ
- MAG
- Syms
- CAR
- CAR mag
- CAR mag SY
- SYm
- PXN
- CMST
- CAR SY

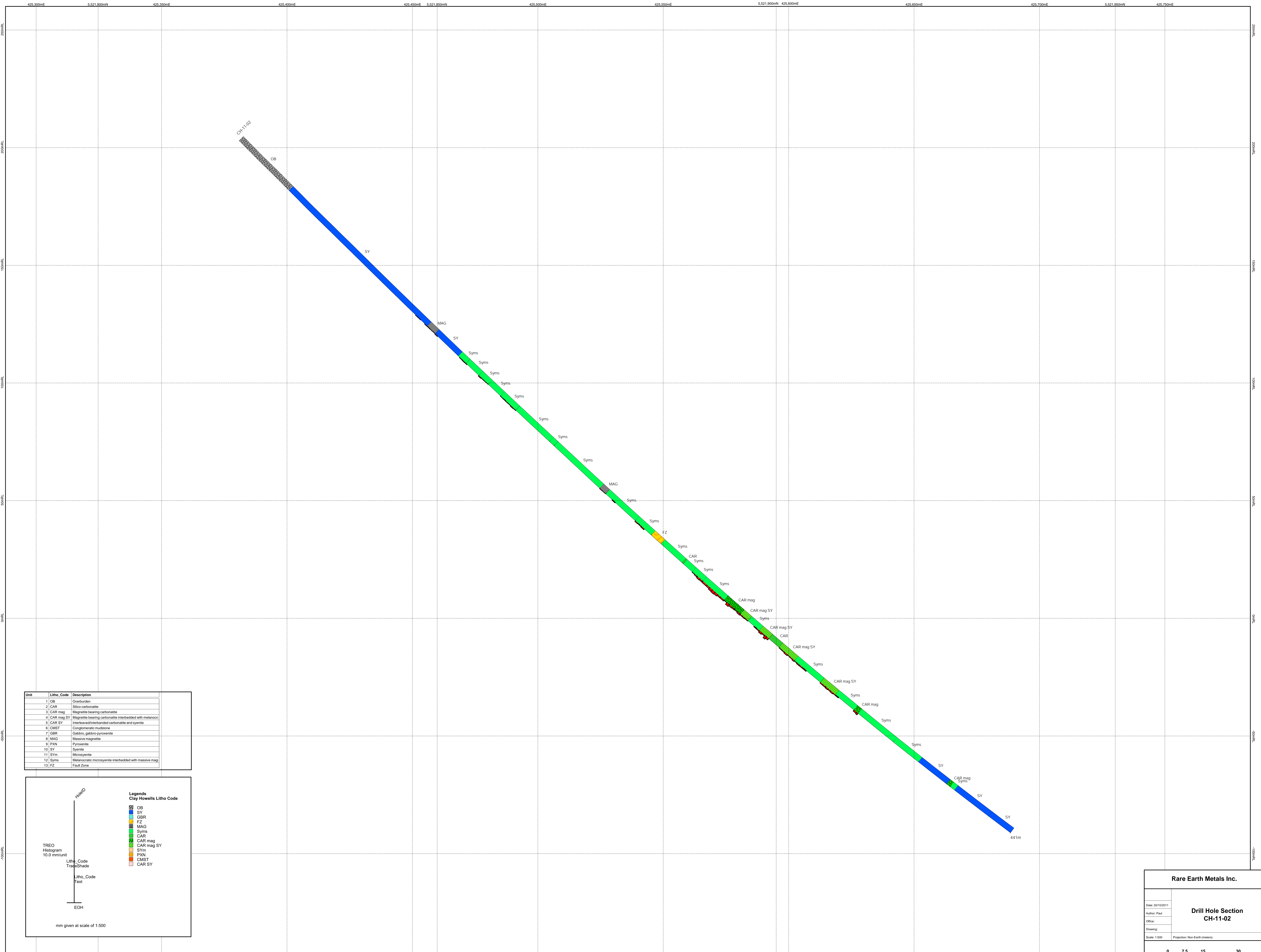
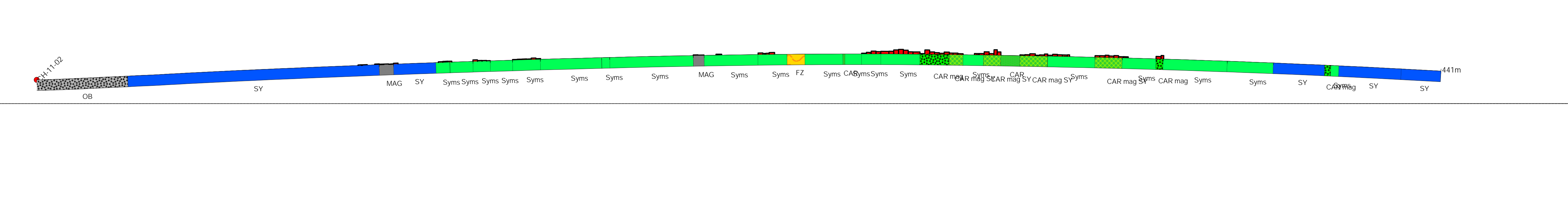
Rare Earth Metals Inc.

**Drill Hole Section
CH-11-01**

Date: 20/10/2011
 Author: Paul
 Office:
 Drawing:

Scale: 1:500 Projection: Non-Earth (meters)

0 7.5 15 30
metres



Unit	Litho Code	Description
1	OB	Overburden
2	CAR	Silica-carbonate
3	CAR mag	Magnetite-bearing carbonatite
4	CAR mag SY	Magnetite-bearing carbonatite interbedded with melanocrystic syenite
5	CAR SY	Interbedded fractured carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-syenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	Syms	Microsyenite
12	Syms	Melanocrystic microsyenite interbedded with massive mag
13	FZ	Fault Zone

Legends

Clay Howells Litho Code

- OB
- SY
- GBR
- FZ
- MAG
- Syms
- CAR
- CAR mag
- CAR mag SY
- Sym
- PXN
- CMST
- CAR SY

TREO Histogram 10.0 mm/unit

Litho Code Trace

Litho Code Test

EOH

mm given at scale of 1:500

Rare Earth Metals Inc.

Date: 20/10/2011

Author: Paul

Office:

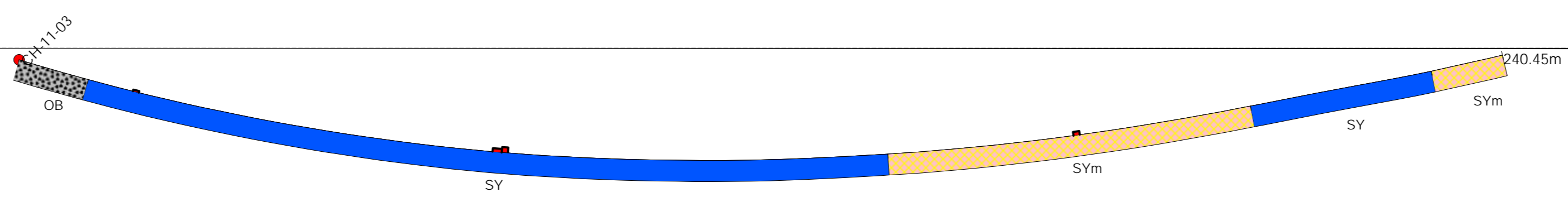
Drawing:

Scale: 1:500

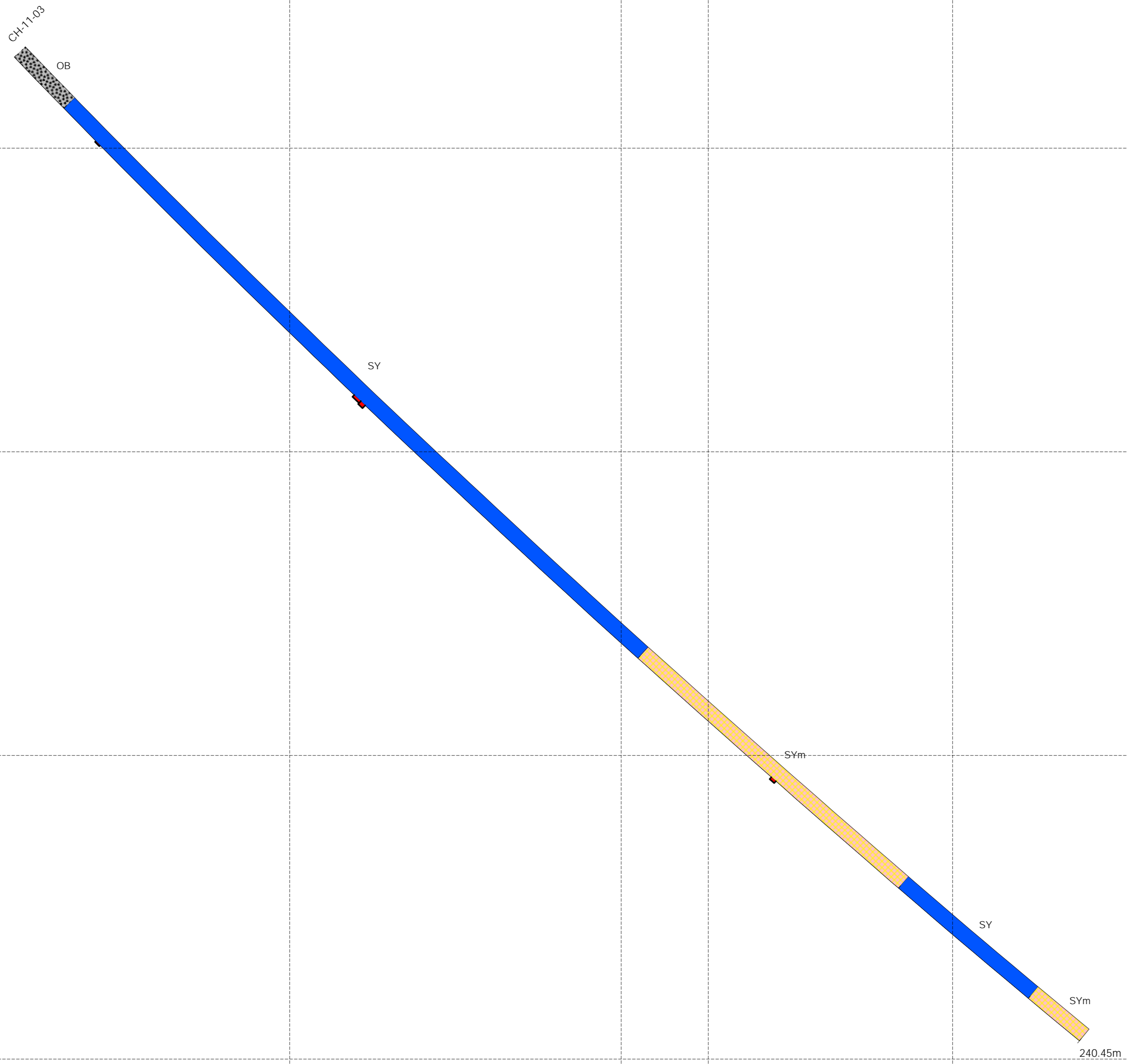
Projection: Non-Earth (metres)

Drill Hole Section
CH-11-02

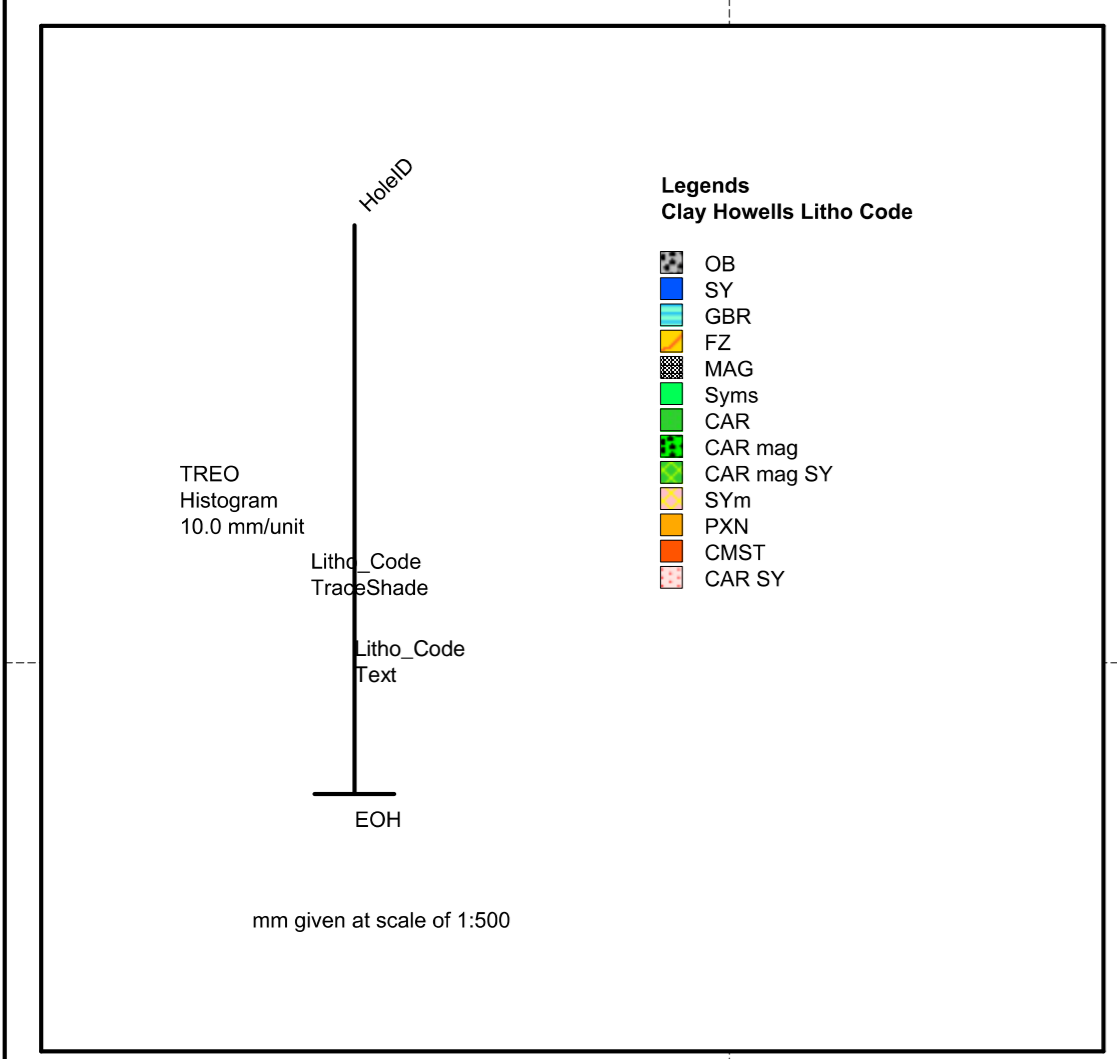
0 7.5 15 30 metres



424.150mE 5.521.000mN 424.200mE 424.250mE 424.300mE 5.521.050mN 424.350mE 424.400mE 5.521.100mN 424.450mE



Unit	Litho. Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic microsyenite
5	CAR SY	Interleaved/interbedded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive magnetite
13	FZ	Fault Zone



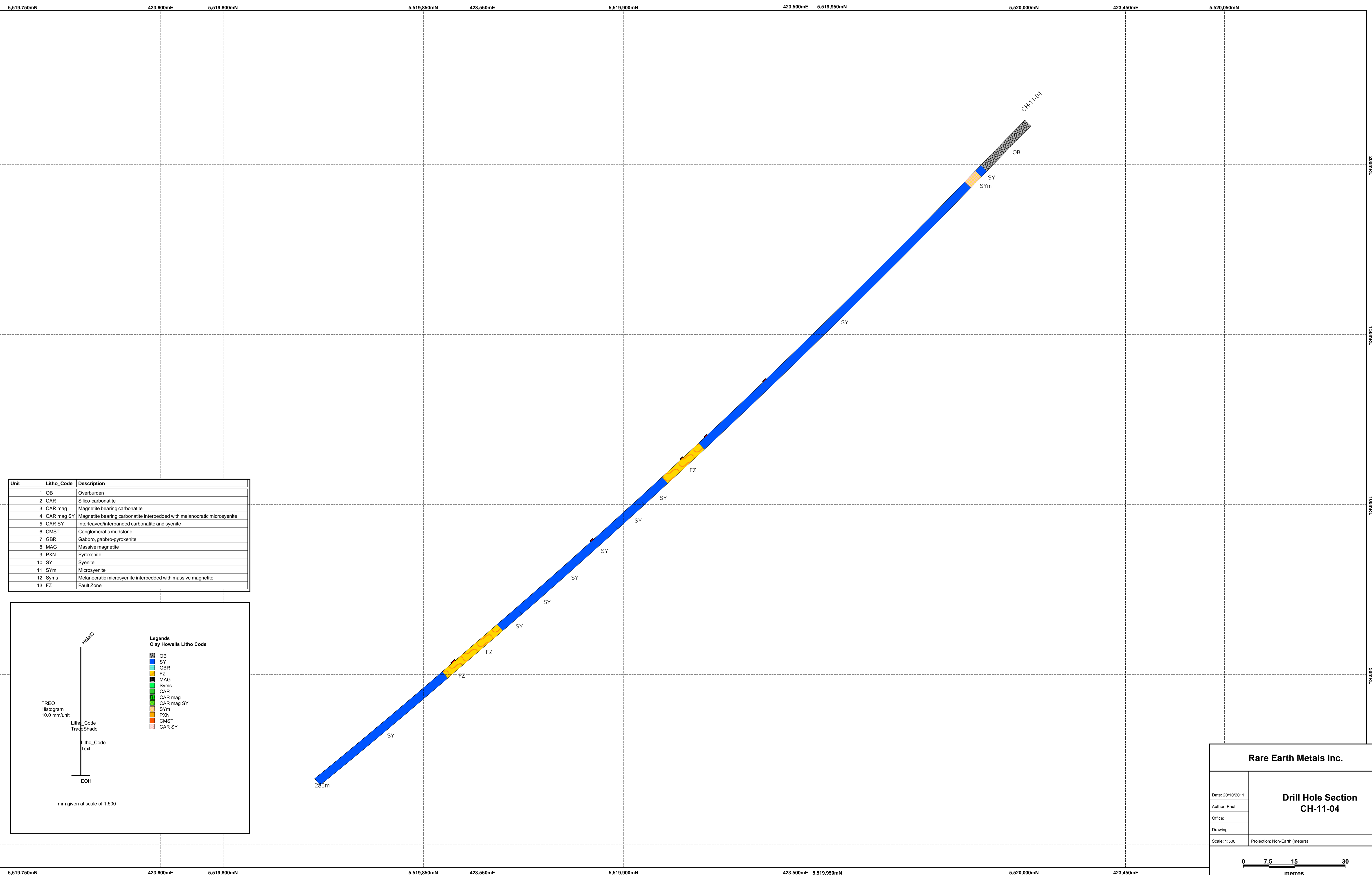
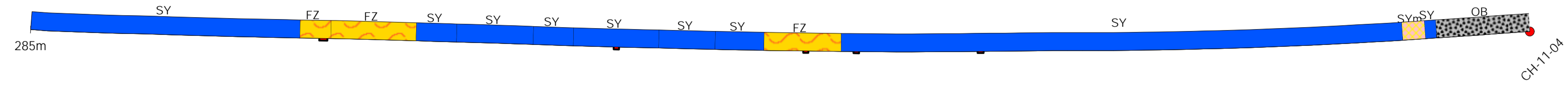
Rare Earth Metals Inc.

Drill hole Section CH-11-03

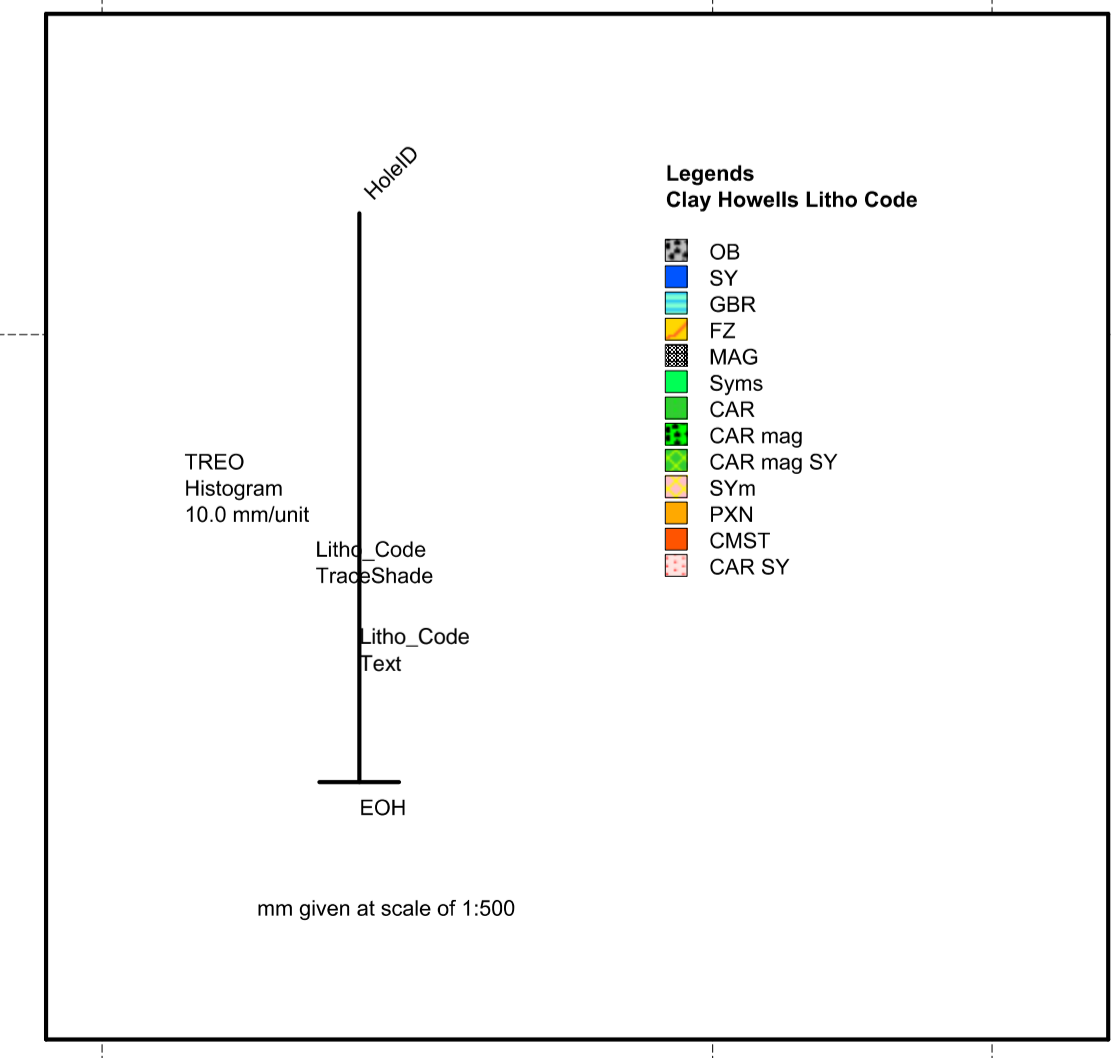
Date: 20/10/2011
 Author: Paul
 Office:
 Drawing:
 Scale: 1:500 Projection: Non-Earth (meters)

0 7.5 15 30 metres

424.150mE 5.521.000mN 424.200mE 424.250mE 424.300mE 5.521.050mN 424.350mE 424.400mE 5.521.100mN



Unit	Litho_Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic microsyenite
5	CAR SY	Interleaved/interbedded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive magnetite
13	FZ	Fault Zone

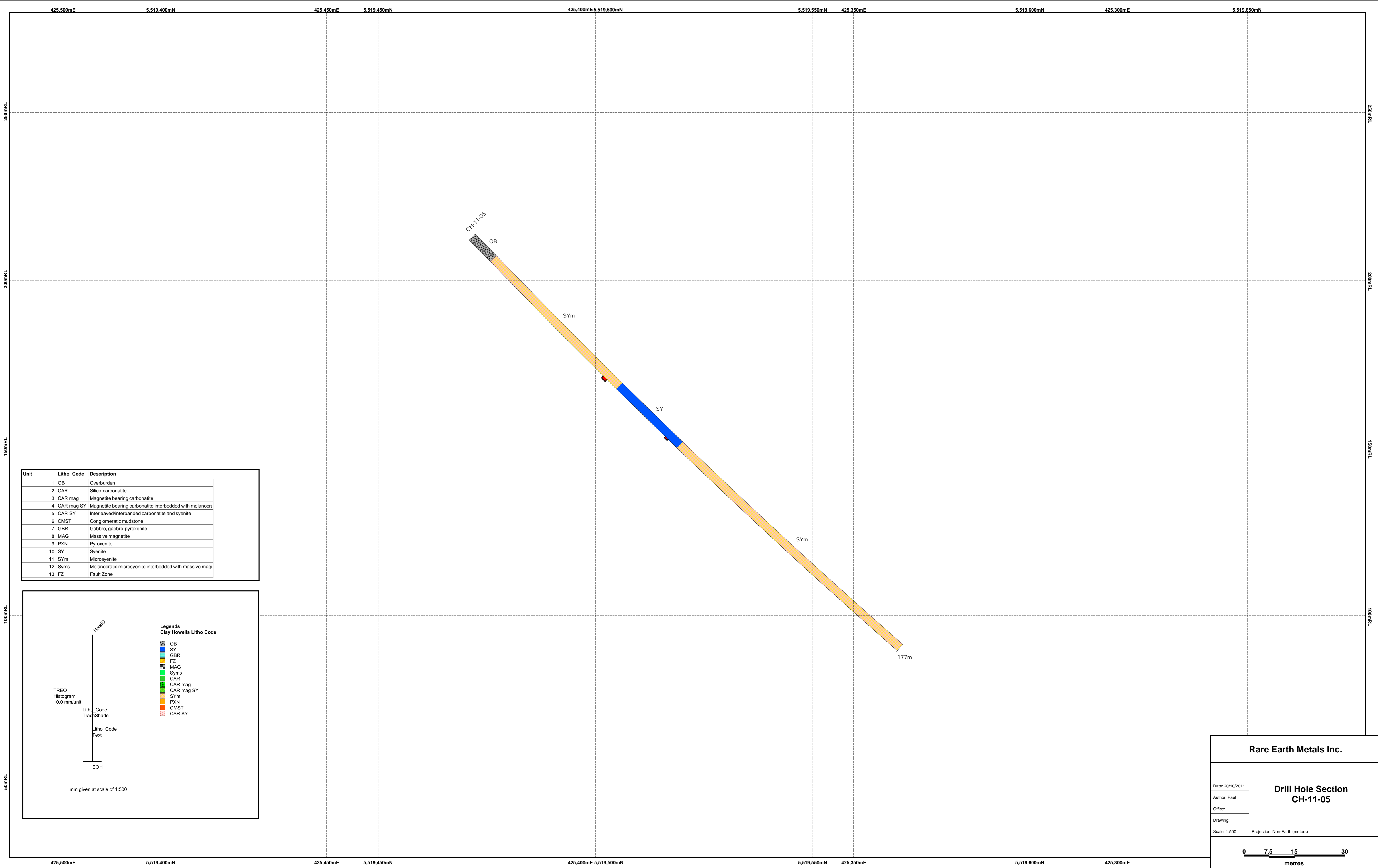
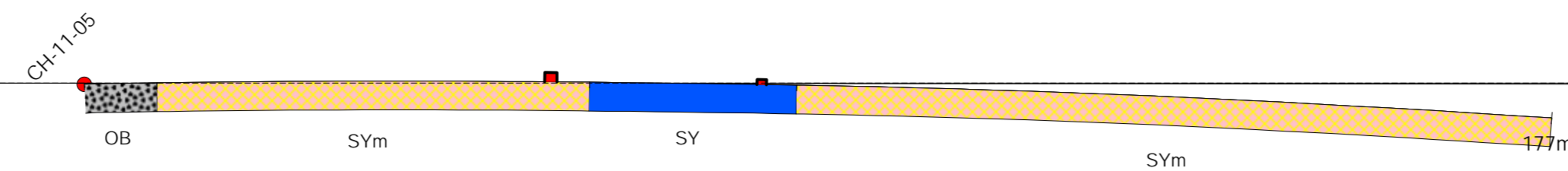


Rare Earth Metals Inc.

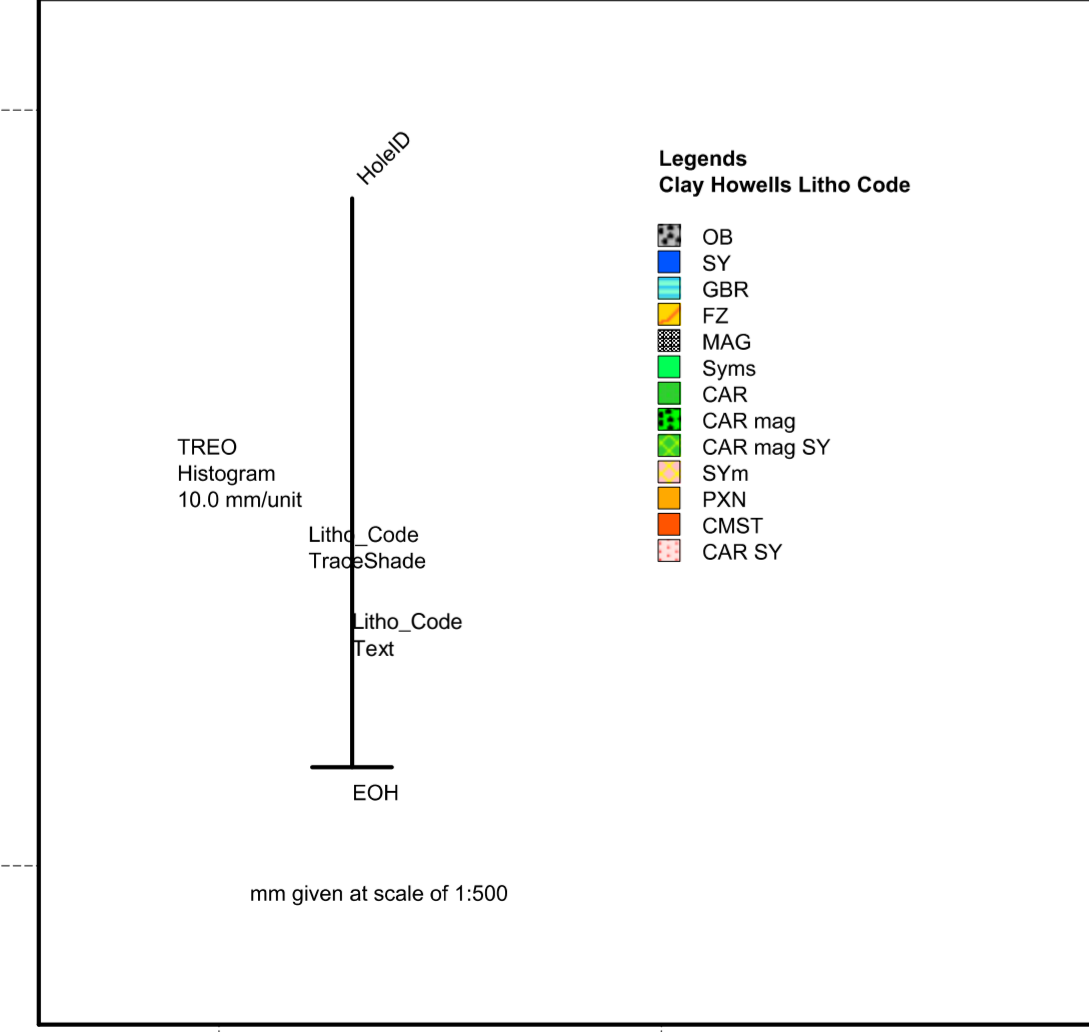
Drill Hole Section CH-11-04

Date: 20/10/2011
 Author: Paul
 Office:
 Drawing:
 Scale: 1:500 Projection: Non-Earth (meters)

0 7.5 15 30
metres



Unit	Litho_Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic
5	CAR SY	Interleaved/interbedded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive mag
13	FZ	Fault Zone

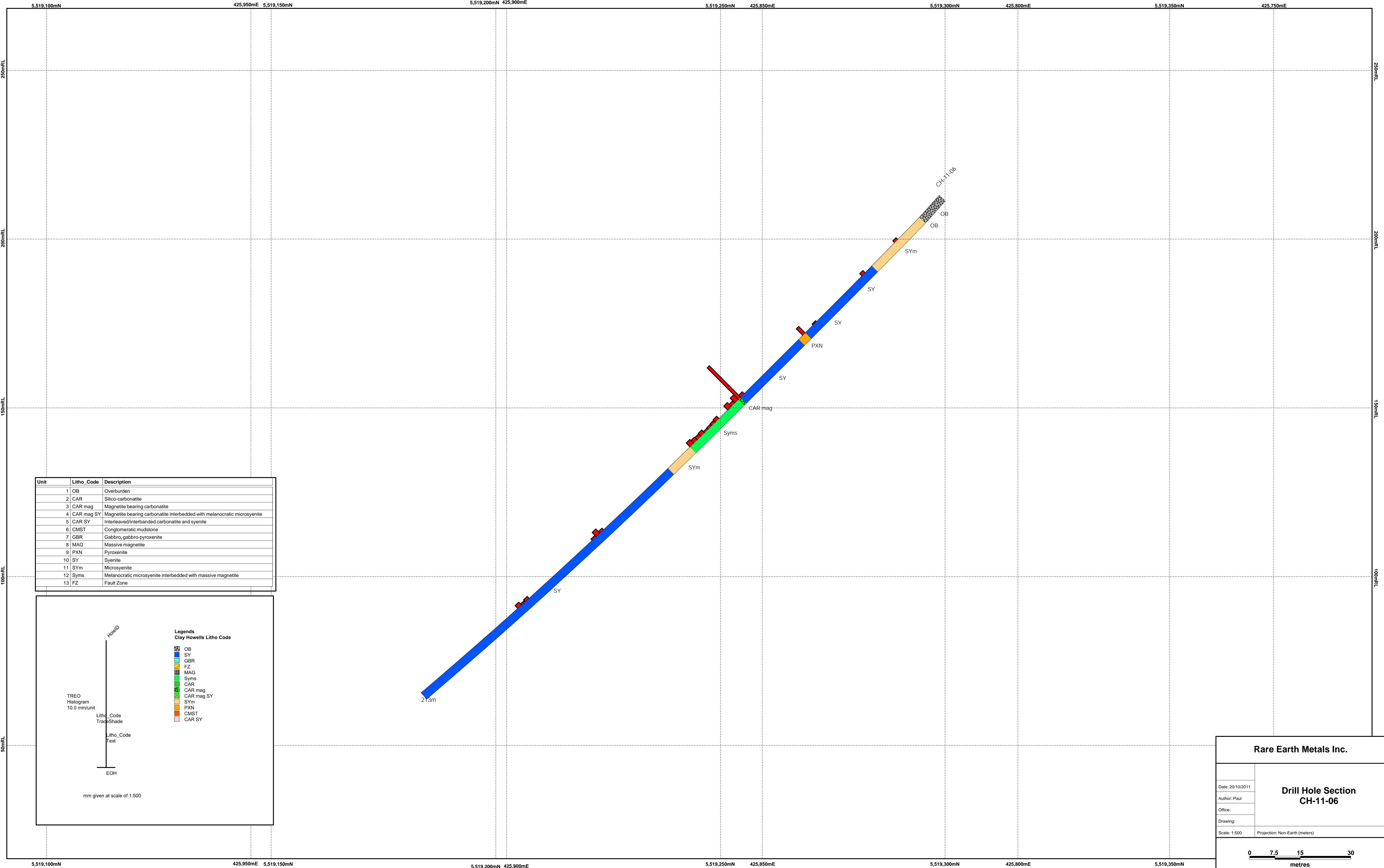
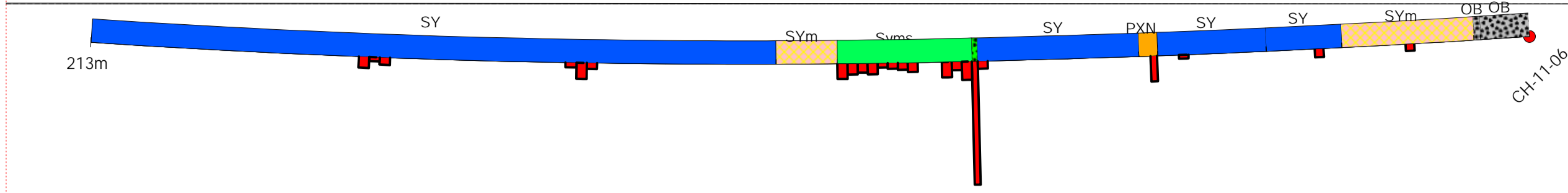


Rare Earth Metals Inc.

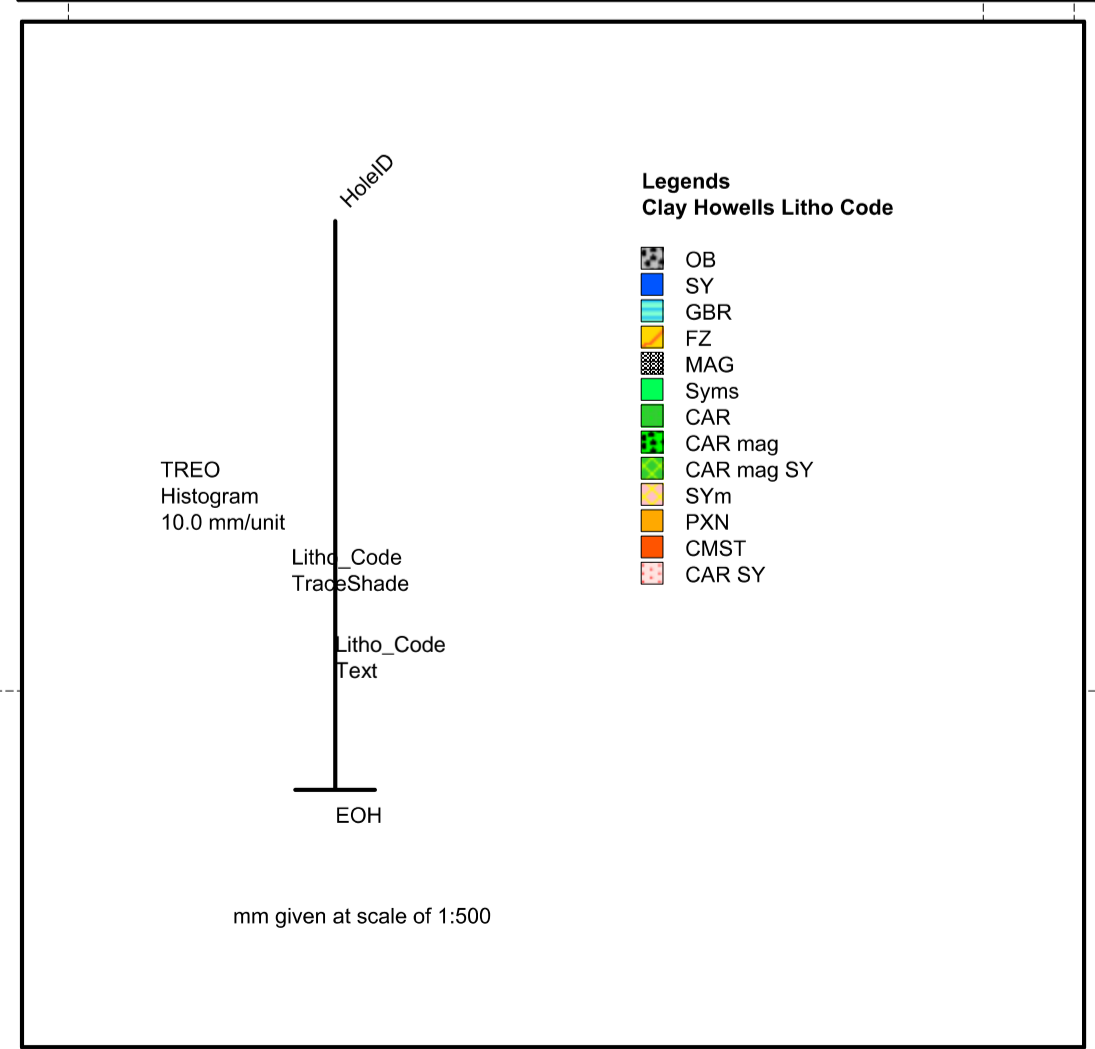
**Drill Hole Section
CH-11-05**

Date: 20/10/2011
 Author: Paul
 Office:
 Drawing:
 Scale: 1:500 Projection: Non-Earth (meters)

0 7.5 15 30
metres



Unit	Litho_Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic microsyenite
5	CAR SY	Interleaved/interbedded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive magnetite
13	FZ	Fault Zone

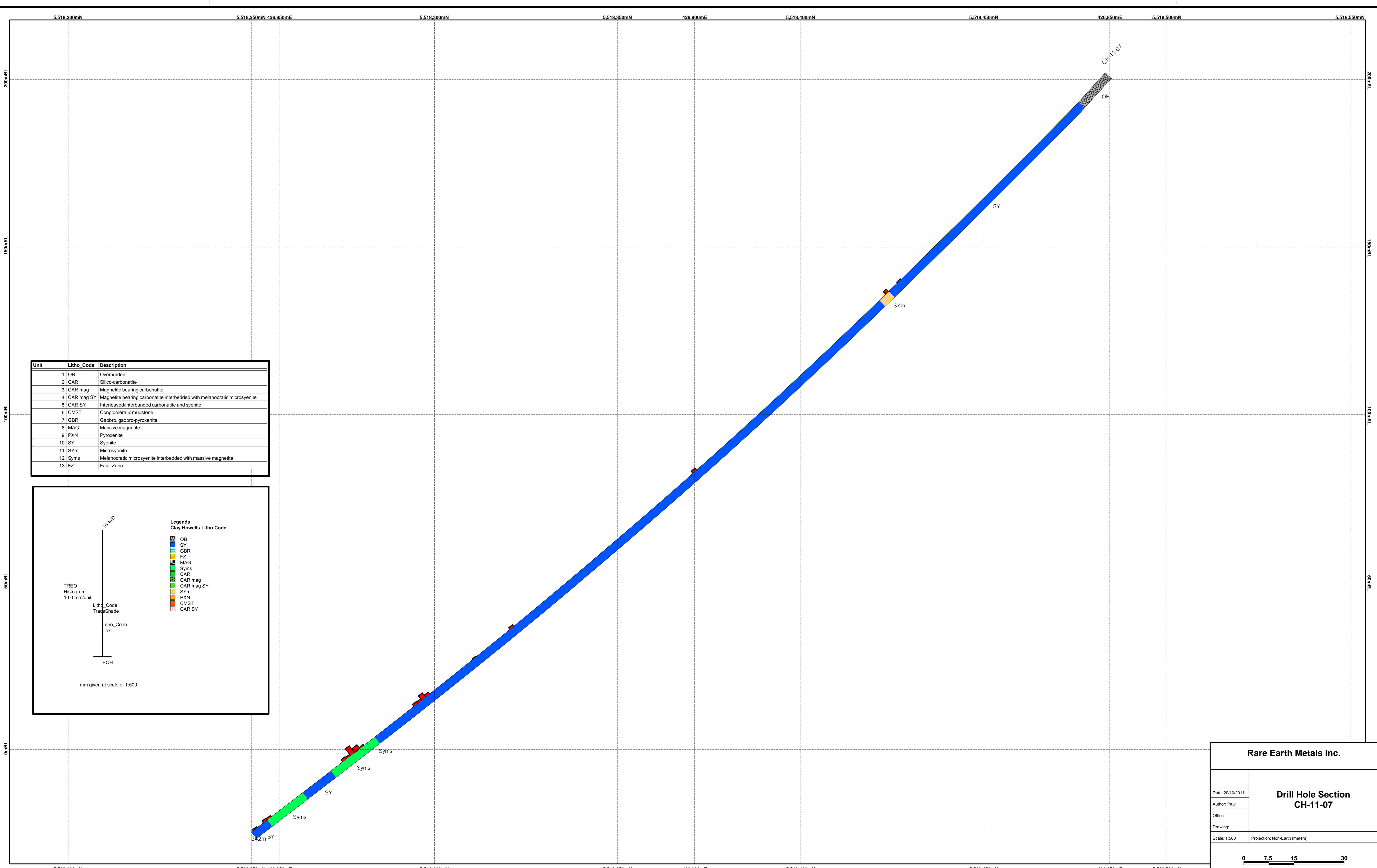
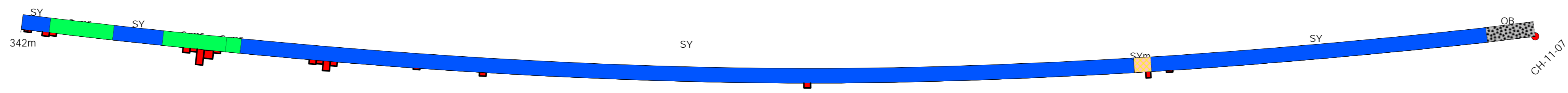


Rare Earth Metals Inc.

**Drill Hole Section
CH-11-06**

Date: 20/10/2011
 Author: Paul
 Office:
 Drawing:
 Scale: 1:500 Projection: Non-Earth (meters)

0 7.5 15 30
metres



Unit	Litho_Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic microsyenite
5	CAR SY	Interleaved/interbedded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive magnetite
13	FZ	Fault Zone

Legends

Clay Howells Litho Code

- OB
- SY
- GBR
- FZ
- MAG
- Syms
- CAR
- CAR mag
- CAR mag SY
- SYm
- PXN
- CMST
- CAR SY

TREO
Histogram
10.0 mm/unit

Litho_Code
TracShade

Litho_Code
Text

ECH

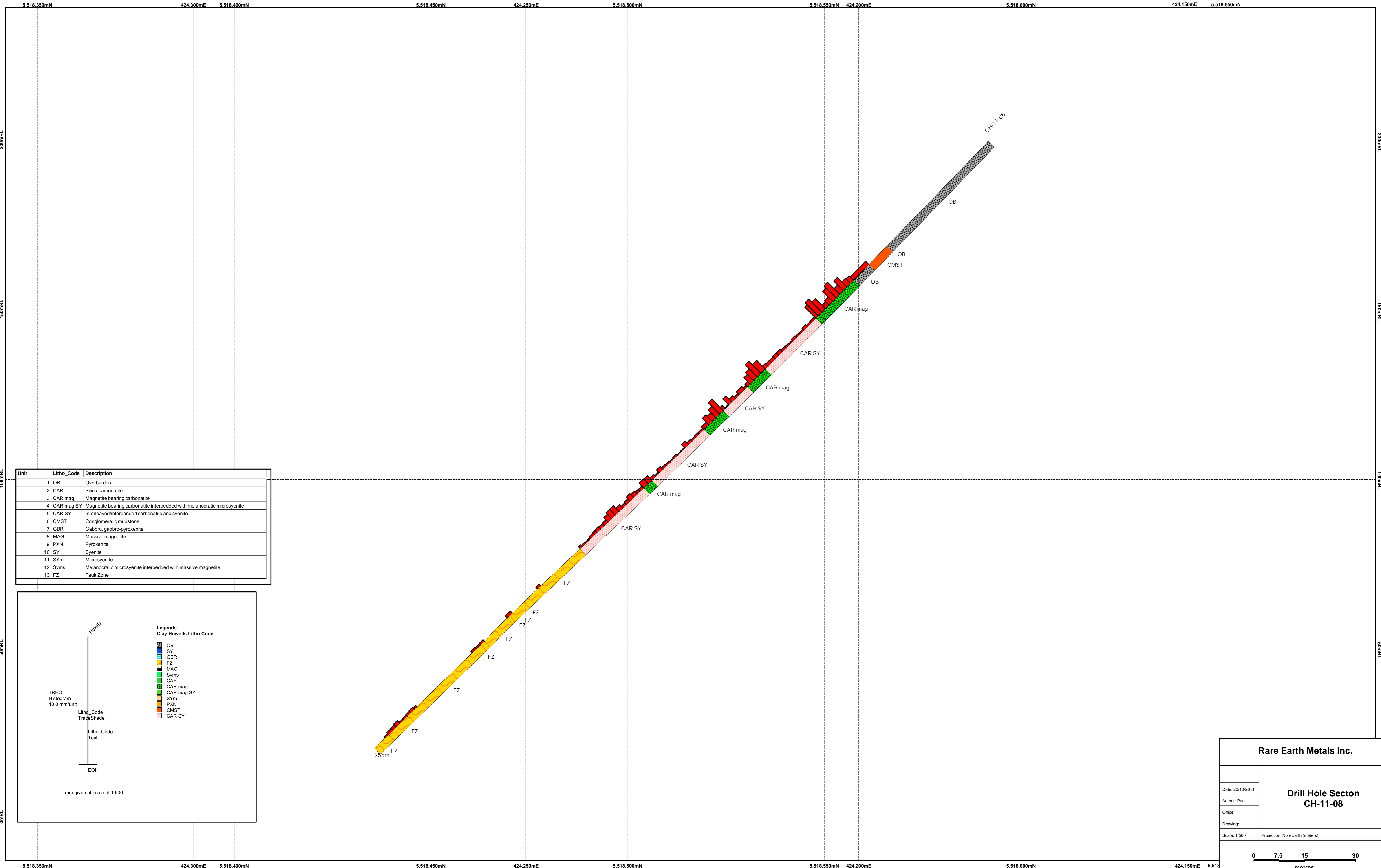
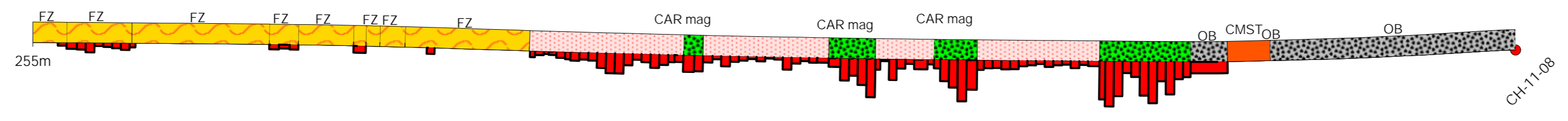
mm given at scale of 1:500

Rare Earth Metals Inc.

**Drill Hole Section
CH-11-07**

Date: 20/10/2011
 Author: Paul
 Office:
 Drawing:
 Scale: 1:500 Projection: Non-Earth (meters)

0 7.5 15 30
metres



Unit	Litho_Code	Description
1	OB	Overburden
2	CAR	Silico-carbonatite
3	CAR mag	Magnetite bearing carbonatite
4	CAR mag SY	Magnetite bearing carbonatite interbedded with melanocratic microsyenite
5	CAR SY	Interleaved/interbanded carbonatite and syenite
6	CMST	Conglomeratic mudstone
7	GBR	Gabbro, gabbro-pyroxenite
8	MAG	Massive magnetite
9	PXN	Pyroxenite
10	SY	Syenite
11	SYm	Microsyenite
12	Syms	Melanocratic microsyenite interbedded with massive magnetite
13	FZ	Fault Zone

Legends

Clay Howells Litho Code

- OB
- SY
- GBR
- FZ
- MAG
- Syms
- CAR
- CAR mag
- CAR mag SY
- SYm
- PXN
- CMST
- CAR SY

TREO Histogram
10.0 mm/unit

Litho_Code Trace
Shade

Litho_Code Text

EOH

mm given at scale of 1:500

Rare Earth Metals Inc.

Date: 20/10/2011

Author: Paul

Office:

Drawing:

Scale: 1:500

Projection: Non-Earth (meters)

Drill Hole Section CH-11-08

0 7.5 15 30 metres

Appendix G – Drill Hole Surveys

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-01		0	44.9
ch-11-01		3	-44.4
ch-11-01		6	-44.3
ch-11-01		9	-44.2
ch-11-01		12	-44
ch-11-01		15	-44.2
ch-11-01		18	-44.2
ch-11-01		21	-44.1
ch-11-01		24	-44.1
ch-11-01		27	-44
ch-11-01		30	-44.2
ch-11-01		33	-44.1
ch-11-01		36	-44.1
ch-11-01		39	-44
ch-11-01		42	-43.9
ch-11-01		45	-43.9
ch-11-01		48	-43.9
ch-11-01		51	-43.8
ch-11-01		54	-43.7
ch-11-01		57	-43.7
ch-11-01		60	-43.7
ch-11-01		63	-43.5
ch-11-01		66	-43.4
ch-11-01		69	-43.3
ch-11-01		72	-43.2
ch-11-01		75	-43.2
ch-11-01		78	-43.2
ch-11-01		81	-43.1
ch-11-01		84	-43.1
ch-11-01		87	-43.1
ch-11-01		90	-43
ch-11-01		93	-42.9
ch-11-01		96	-42.8
ch-11-01		99	-42.9
ch-11-01		102	-42.8
ch-11-01		105	-42.6
ch-11-01		108	-42.5
ch-11-01		111	-42.6
ch-11-01		114	-42.5
ch-11-01		117	-42.6
ch-11-01		120	-42.5
ch-11-01		123	-42.5
ch-11-01		126	-42.4
ch-11-01		129	-42.3
ch-11-01		132	-42.4
ch-11-01		135	-42.3
ch-11-01		138	-42.3
ch-11-01		141	-42.3
ch-11-01		144	-42.2
ch-11-01		147	-42.2

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-01	150	-42.1	274.7
ch-11-01	153	-42	274.7
ch-11-01	156	-41.9	274.5
ch-11-01	159	-41.9	274.6
ch-11-01	162	-42	274.8
ch-11-01	165	-42	274.9
ch-11-01	168	-41.9	275.1
ch-11-01	171	-41.9	275.1
ch-11-01	174	-41.8	274.9
ch-11-01	177	-41.8	275
ch-11-01	180	-41.8	275.2
ch-11-01	183	-41.7	275.3
ch-11-01	186	-41.8	275.5
ch-11-01	189	-41.7	275.6
ch-11-01	192	-41.8	275.7
ch-11-01	195	-41.8	275.8
ch-11-01	198	-41.6	276
ch-11-02	0	-44.1	68.5
ch-11-02	3	-45.7	68.1
ch-11-02	6	-45.2	67.6
ch-11-02	9	-45.7	67.4
ch-11-02	12	-44.6	67.2
ch-11-02	15	-44.2	67.1
ch-11-02	18	-44.2	67
ch-11-02	21	-44.8	67
ch-11-02	24	-45.1	67
ch-11-02	27	-45.1	67
ch-11-02	30	-45.3	67
ch-11-02	33	-45.2	67
ch-11-02	36	-45.2	67
ch-11-02	39	-45.2	66.9
ch-11-02	42	-44.9	66.7
ch-11-02	45	-44.5	66.5
ch-11-02	48	-44.2	66.5
ch-11-02	51	-44.3	66.7
ch-11-02	54	-44.4	66.8
ch-11-02	57	-44.5	66.8
ch-11-02	60	-44.3	66.9
ch-11-02	63	-44.3	67
ch-11-02	66	-44.3	67.1
ch-11-02	69	-44.6	67.1
ch-11-02	72	-44.5	67.1
ch-11-02	75	-44.5	67.1
ch-11-02	78	-44.5	67.2
ch-11-02	81	-44.4	67.2
ch-11-02	84	-44.4	67.3
ch-11-02	87	-44.3	67.3
ch-11-02	90	-44.3	67.3
ch-11-02	93	-44.2	67.4
ch-11-02	96	-44.2	67.4

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-02	99	-44.1	67.5
ch-11-02	102	-44	67.5
ch-11-02	105	-44	67.5
ch-11-02	108	-43.9	67.4
ch-11-02	111	-44	67.5
ch-11-02	114	-43.9	67.5
ch-11-02	117	-44	67.6
ch-11-02	120	-43.8	67.7
ch-11-02	123	-43.8	67.7
ch-11-02	126	-43.8	67.7
ch-11-02	129	-43.7	67.7
ch-11-02	132	-43.5	67.8
ch-11-02	135	-43.4	67.8
ch-11-02	138	-43.3	67.8
ch-11-02	141	-43.4	67.9
ch-11-02	144	-43.3	67.9
ch-11-02	147	-43.3	67.9
ch-11-02	150	-43.4	67.9
ch-11-02	153	-43.3	67.9
ch-11-02	156	-43.2	67.9
ch-11-02	159	-43.2	67.9
ch-11-02	162	-43.1	67.9
ch-11-02	165	-43.1	68
ch-11-02	168	-43	68.1
ch-11-02	171	-42.9	68.2
ch-11-02	174	-42.9	68.2
ch-11-02	177	-42.8	68.2
ch-11-02	180	-42.9	68.2
ch-11-02	183	-42.9	68.2
ch-11-02	186	-42.9	68.2
ch-11-02	189	-42.9	68.2
ch-11-02	192	-42.9	68.2
ch-11-02	195	-43	68.2
ch-11-02	198	-43	68.3
ch-11-02	201	-43	68.4
ch-11-02	204	-42.9	68.5
ch-11-02	207	-42.7	68.6
ch-11-02	210	-42.6	68.7
ch-11-02	213	-42.6	68.7
ch-11-02	216	-42.4	68.8
ch-11-02	219	-42.4	68.8
ch-11-02	222	-42.8	68.8
ch-11-02	225	-42.3	68.9
ch-11-02	228	-42.3	68.9
ch-11-02	231	-42.1	68.9
ch-11-02	234	-42.1	68.9
ch-11-02	237	-42	69.1
ch-11-02	240	-42	69.2
ch-11-02	243	-42	69.2
ch-11-02	246	-41.9	69.3

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-02	249	-41.9	69.3
ch-11-02	252	-42	69.4
ch-11-02	255	-41.9	69.5
ch-11-02	258	-41.9	69.5
ch-11-02	261	-41.8	69.6
ch-11-02	264	-41.9	69.6
ch-11-02	267	-41.7	69.7
ch-11-02	270	-41.6	69.8
ch-11-02	273	-41.4	69.9
ch-11-02	276	-41.4	70
ch-11-02	279	-41.2	70.1
ch-11-02	282	-41.1	70.2
ch-11-02	285	-41.1	70.3
ch-11-02	288	-41	70.3
ch-11-02	291	-41	70.4
ch-11-02	294	-41	70.4
ch-11-02	297	-40.9	70.5
ch-11-02	300	-40.8	70.6
ch-11-02	303	-40.7	70.6
ch-11-02	306	-40.6	70.7
ch-11-02	309	-40.5	70.7
ch-11-02	312	-40.5	70.7
ch-11-02	315	-40.5	70.7
ch-11-02	318	-40.5	70.8
ch-11-02	321	-40.4	70.8
ch-11-02	324	-40.3	70.8
ch-11-02	327	-40.1	70.9
ch-11-02	330	-40	71
ch-11-02	333	-39.9	71
ch-11-02	336	-39.8	71
ch-11-02	339	-39.7	71.1
ch-11-02	342	-39.7	71.1
ch-11-02	345	-39.6	71.2
ch-11-02	348	-39.4	71.2
ch-11-02	351	-39.4	71.3
ch-11-02	354	-39.3	71.4
ch-11-02	357	-39.3	71.4
ch-11-02	360	-39.3	71.5
ch-11-02	363	-39.2	71.5
ch-11-02	366	-39.2	71.6
ch-11-02	369	-39.1	71.6
ch-11-02	372	-38.9	71.7
ch-11-02	375	-38.8	71.7
ch-11-02	378	-38.7	71.7
ch-11-02	381	-38.5	71.8
ch-11-02	384	-38.4	71.8
ch-11-02	387	-38.4	71.9
ch-11-02	390	-38.3	72
ch-11-02	393	-38.2	72.1
ch-11-02	396	-38.1	72.1

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-02	399	-38	72.2
ch-11-02	402	-38	72.2
ch-11-02	405	-37.9	72.3
ch-11-02	408	-37.8	72.3
ch-11-02	411	-37.7	72.4
ch-11-02	414	-37.6	72.4
ch-11-02	417	-37.5	72.5
ch-11-02	420	-37.4	72.5
ch-11-02	423	-37.3	72.6
ch-11-02	426	-37.2	72.7
ch-11-02	429	-37.1	72.7
ch-11-02	432	-37.1	72.8
ch-11-02	435	-37	72.8
ch-11-02	441	-36.8	72.9
ch-11-03	0	-44.9	83.1
ch-11-03	3	-44.9	82.8
ch-11-03	6	-44.6	82.3
ch-11-03	9	-44.8	82
ch-11-03	12	-44.8	81.7
ch-11-03	15	-44.7	81.2
ch-11-03	18	-44.7	80.7
ch-11-03	21	-44.6	80.1
ch-11-03	24	-44.5	79.7
ch-11-03	27	-44.5	79.3
ch-11-03	30	-44.4	78.8
ch-11-03	33	-44.4	78.3
ch-11-03	36	-44.3	78
ch-11-03	39	-44.3	77.7
ch-11-03	42	-44.2	77.2
ch-11-03	45	-44.1	76.7
ch-11-03	48	-44	76.2
ch-11-03	51	-44.1	75.9
ch-11-03	54	-44	75.3
ch-11-03	57	-43.9	75
ch-11-03	60	-43.9	74.4
ch-11-03	63	-43.8	73.9
ch-11-03	66	-43.8	73.7
ch-11-03	69	-43.8	73.3
ch-11-03	72	-43.8	72.7
ch-11-03	75	-43.7	72.2
ch-11-03	78	-43.7	71.6
ch-11-03	81	-43.6	71.1
ch-11-03	84	-43.5	70.6
ch-11-03	87	-43.4	70.2
ch-11-03	90	-43.3	69.6
ch-11-03	93	-43.2	69.3
ch-11-03	96	-43.1	68.8
ch-11-03	99	-43	68.5
ch-11-03	102	-43	68.1
ch-11-03	105	-43.1	67.6

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-03	108	-43	67.2
ch-11-03	111	-42.9	66.9
ch-11-03	114	-42.9	66.6
ch-11-03	117	-42.8	66.1
ch-11-03	120	-42.8	65.6
ch-11-03	123	-42.6	65.1
ch-11-03	126	-42.5	64.6
ch-11-03	129	-42.6	64.2
ch-11-03	132	-42.4	63.8
ch-11-03	135	-42.2	63.4
ch-11-03	138	-42.1	63.2
ch-11-03	141	-42	63.1
ch-11-03	144	-41.9	62.7
ch-11-03	147	-41.8	62.4
ch-11-03	150	-41.9	61.9
ch-11-03	153	-41.7	61.4
ch-11-03	156	-41.7	61.1
ch-11-03	159	-41.5	60.6
ch-11-03	162	-41.5	60.2
ch-11-03	165	-41.4	59.8
ch-11-03	168	-41.3	59.3
ch-11-03	171	-41.2	58.9
ch-11-03	174	-41.1	58.5
ch-11-03	177	-41.1	58.2
ch-11-03	180	-40.9	57.8
ch-11-03	183	-40.8	57.3
ch-11-03	186	-40.7	56.9
ch-11-03	189	-40.6	56.6
ch-11-03	192	-40.6	56.3
ch-11-03	195	-40.6	56
ch-11-03	198	-40.4	55.7
ch-11-03	201	-40.3	55.4
ch-11-03	204	-40.2	55.3
ch-11-03	207	-40.2	55.2
ch-11-03	210	-39.9	55.3
ch-11-03	213	-40	55.6
ch-11-03	216	-39.8	55.8
ch-11-03	219	-39.7	56
ch-11-03	222	-39.6	55.8
ch-11-03	225	-39.5	55.3
ch-11-03	228	-39.4	54.7
ch-11-03	231	-39.2	54
ch-11-03	234	-39.1	53.8
ch-11-03	237	-39	53.6
ch-11-03	240	-38.7	53.3
ch-11-04	0	-45.7	144.4
ch-11-04	3	-45.4	144.2
ch-11-04	6	-45.2	144
ch-11-04	9	-45.5	143.8
ch-11-04	12	-45.9	144.2

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-04	15	-45.7	144.4
ch-11-04	18	-45.9	144.5
ch-11-04	21	-45.9	144.1
ch-11-04	24	-45.8	144.2
ch-11-04	27	-45.7	144.6
ch-11-04	30	-45.6	144.9
ch-11-04	33	-45.5	145
ch-11-04	36	-45.5	145.1
ch-11-04	39	-45.4	145.2
ch-11-04	42	-45.2	145.3
ch-11-04	45	-45.3	145.6
ch-11-04	48	-45.2	145.9
ch-11-04	51	-45.1	145.8
ch-11-04	54	-45	145.9
ch-11-04	57	-45	146.2
ch-11-04	60	-44.9	146.5
ch-11-04	63	-44.9	146.6
ch-11-04	66	-44.8	146.8
ch-11-04	69	-44.8	146.9
ch-11-04	72	-44.7	146.9
ch-11-04	75	-44.7	147.2
ch-11-04	78	-44.6	147.3
ch-11-04	81	-44.6	147.6
ch-11-04	84	-44.4	147.8
ch-11-04	87	-44.3	148.1
ch-11-04	90	-44.3	148.3
ch-11-04	93	-44.2	147.9
ch-11-04	96	-44.2	147.5
ch-11-04	99	-44	147.4
ch-11-04	102	-44	147.5
ch-11-04	105	-43.9	147.6
ch-11-04	108	-43.8	147.6
ch-11-04	111	-43.7	147.5
ch-11-04	114	-43.6	147.7
ch-11-04	117	-43.5	147.6
ch-11-04	120	-43.5	147.7
ch-11-04	123	-43.4	148.2
ch-11-04	126	-43.3	148.4
ch-11-04	129	-43.2	148.6
ch-11-04	132	-43.1	148.7
ch-11-04	135	-43	148.6
ch-11-04	138	-42.9	148.8
ch-11-04	141	-43	149
ch-11-04	144	-42.8	148.9
ch-11-04	147	-42.5	148.9
ch-11-04	150	-42.7	149.2
ch-11-04	153	-42.6	149.2
ch-11-04	156	-42.6	149.2
ch-11-04	159	-42.4	149.4
ch-11-04	162	-41.9	149.6

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-04	165	-42.3	149.5
ch-11-04	168	-42.2	149.5
ch-11-04	171	-42.2	149.5
ch-11-04	174	-42	149.3
ch-11-04	177	-41.9	149.5
ch-11-04	180	-41.9	149.7
ch-11-04	183	-41.8	149.6
ch-11-04	186	-41.7	149.8
ch-11-04	189	-41.7	150.1
ch-11-04	192	-41.5	150.3
ch-11-04	195	-41.4	150.1
ch-11-04	198	-41.4	149.9
ch-11-04	201	-41.1	150
ch-11-04	204	-41	149.8
ch-11-04	207	-40.9	149.7
ch-11-04	210	-40.9	149.7
ch-11-04	213	-40.9	149.9
ch-11-04	216	-40.7	149.7
ch-11-04	219	-40.7	149.7
ch-11-04	222	-40.6	149.9
ch-11-04	225	-40.7	149.6
ch-11-04	228	-40.8	149.3
ch-11-04	231	-40.7	149.1
ch-11-04	234	-40.8	149.1
ch-11-04	237	-40.8	149.4
ch-11-04	240	-40.6	149.1
ch-11-04	243	-40.6	149.3
ch-11-04	246	-40.4	149.6
ch-11-04	249	-40.4	149.6
ch-11-04	252	-40.2	149.5
ch-11-04	255	-40.2	149.5
ch-11-04	258	-40	150
ch-11-04	261	-40	150
ch-11-04	264	-39.8	149.6
ch-11-04	267	-39.8	149.5
ch-11-04	270	-39.6	149.7
ch-11-04	273	-39.5	150.1
ch-11-04	276	-39.4	150
ch-11-04	279	-39.3	150.4
ch-11-04	285	-38.5	152.4
ch-11-05	0	-45.1	318
ch-11-05	3	-44.7	319.5
ch-11-05	6	-45.7	319.7
ch-11-05	9	-46.1	319.6
ch-11-05	12	-45.9	319.7
ch-11-05	15	-45.8	319.8
ch-11-05	18	-45.8	319.9
ch-11-05	21	-45.7	320
ch-11-05	24	-45.6	320.1
ch-11-05	27	-45.5	320.1

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-05	30	-45.5	320.3
ch-11-05	33	-45.4	320.3
ch-11-05	36	-45.3	320.4
ch-11-05	39	-45	320.5
ch-11-05	42	-45.1	320.6
ch-11-05	45	-45	320.7
ch-11-05	48	-45	320.8
ch-11-05	51	-44.9	320.8
ch-11-05	54	-44.8	320.9
ch-11-05	57	-44.7	321
ch-11-05	60	-44.7	321.1
ch-11-05	63	-44.6	321.1
ch-11-05	66	-44.5	321.2
ch-11-05	69	-44.4	321.2
ch-11-05	72	-44.3	321.3
ch-11-05	75	-44.3	321.3
ch-11-05	78	-44.2	321.3
ch-11-05	81	-44.1	321.4
ch-11-05	84	-44.1	321.5
ch-11-05	87	-44	321.5
ch-11-05	90	-43.9	321.7
ch-11-05	93	-43.9	321.7
ch-11-05	96	-43.8	321.8
ch-11-05	99	-43.6	321.9
ch-11-05	102	-43.6	322
ch-11-05	105	-43.5	322.1
ch-11-05	108	-43.3	322.2
ch-11-05	111	-43.3	322.3
ch-11-05	114	-43.2	322.4
ch-11-05	117	-43.1	322.5
ch-11-05	120	-43	322.6
ch-11-05	123	-42.9	322.7
ch-11-05	126	-42.8	322.8
ch-11-05	129	-42.7	322.9
ch-11-05	132	-42.6	323
ch-11-05	135	-42.5	323.1
ch-11-05	138	-42.4	323.3
ch-11-05	141	-42.3	323.4
ch-11-05	144	-42.2	323.4
ch-11-05	147	-42.1	323.5
ch-11-05	150	-42	323.6
ch-11-05	153	-41.9	323.7
ch-11-05	156	-41.9	323.7
ch-11-05	159	-41.7	323.8
ch-11-05	162	-41.6	323.9
ch-11-05	165	-41.5	324
ch-11-05	168	-41.5	324
ch-11-05	171	-41.5	324.1
ch-11-05	177	-41.2	324.2
ch-11-06	0	-48.2	135

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-06	6	-48.2	135
ch-11-06	9	-46.3	135
ch-11-06	12	-45.7	135.2
ch-11-06	15	-45.5	135.4
ch-11-06	18	-45.4	135.5
ch-11-06	21	-45.4	135.5
ch-11-06	24	-45.4	135.6
ch-11-06	27	-45.4	135.7
ch-11-06	30	-45.3	135.8
ch-11-06	33	-45.3	135.8
ch-11-06	36	-45.5	135.9
ch-11-06	39	-45.1	136
ch-11-06	42	-45.2	136.1
ch-11-06	45	-44.9	136.2
ch-11-06	48	-45	136.3
ch-11-06	51	-45.1	136.4
ch-11-06	54	-45.1	136.5
ch-11-06	57	-45	136.6
ch-11-06	60	-44.9	136.7
ch-11-06	63	-44.9	136.8
ch-11-06	66	-44.9	136.9
ch-11-06	69	-44.8	136.9
ch-11-06	72	-44.8	137
ch-11-06	75	-44.8	137.1
ch-11-06	78	-44.9	137.1
ch-11-06	81	-44.8	137.2
ch-11-06	84	-44.8	137.3
ch-11-06	87	-44.6	137.4
ch-11-06	90	-44.6	137.5
ch-11-06	93	-44.6	137.7
ch-11-06	96	-44.5	137.7
ch-11-06	99	-44.4	137.9
ch-11-06	102	-44.4	138
ch-11-06	105	-44.3	138.1
ch-11-06	108	-44.3	138.2
ch-11-06	111	-44.3	138.4
ch-11-06	114	-44	138.5
ch-11-06	117	-44	138.6
ch-11-06	120	-43.9	138.8
ch-11-06	123	-43.7	138.9
ch-11-06	126	-43.6	139
ch-11-06	129	-43.5	139.1
ch-11-06	132	-43.4	139.3
ch-11-06	135	-43.2	139.4
ch-11-06	138	-43.2	139.5
ch-11-06	141	-43.1	139.6
ch-11-06	144	-42.9	139.7
ch-11-06	147	-42.8	139.8
ch-11-06	150	-42.8	139.9
ch-11-06	153	-42.7	140

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-06	156	-42.7	140.1
ch-11-06	159	-42.6	140.3
ch-11-06	162	-42.5	140.4
ch-11-06	165	-42.1	140.6
ch-11-06	168	-42.2	140.7
ch-11-06	171	-42	140.8
ch-11-06	174	-41.9	141
ch-11-06	177	-41.8	141.1
ch-11-06	180	-41.6	141.2
ch-11-06	183	-41.5	141.3
ch-11-06	186	-41.4	141.4
ch-11-06	189	-41.3	141.5
ch-11-06	192	-41.1	141.7
ch-11-06	195	-41	141.8
ch-11-06	198	-41	141.9
ch-11-06	201	-40.8	142
ch-11-06	204	-40.7	142.1
ch-11-06	207	-40.7	142.3
ch-11-06	210	-40.7	142.4
ch-11-06	213	-40.5	142.6
ch-11-07	0	-47.5	149.1
ch-11-07	12	-47.5	149.1
ch-11-07	15	-45.3	150.1
ch-11-07	18	-45.4	150.2
ch-11-07	21	-45.3	150.2
ch-11-07	24	-45.2	150.3
ch-11-07	27	-45.2	150.4
ch-11-07	30	-45	150.5
ch-11-07	33	-45	150.6
ch-11-07	36	-45	150.7
ch-11-07	39	-44.9	150.7
ch-11-07	42	-44.9	150.8
ch-11-07	45	-44.7	150.9
ch-11-07	48	-44.8	151
ch-11-07	51	-44.7	151.1
ch-11-07	54	-44.7	151.2
ch-11-07	57	-44.7	151.3
ch-11-07	60	-44.7	151.4
ch-11-07	63	-44.6	151.5
ch-11-07	66	-44.5	151.6
ch-11-07	69	-44.5	151.7
ch-11-07	72	-44.5	151.7
ch-11-07	75	-44.5	151.9
ch-11-07	78	-44.5	152
ch-11-07	81	-44.4	152.1
ch-11-07	84	-44.3	152.2
ch-11-07	87	-44.1	152.4
ch-11-07	90	-44.2	152.5
ch-11-07	93	-44.1	152.7
ch-11-07	96	-44	152.8

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-07	99	-43.8	152.9
ch-11-07	102	-43.8	153
ch-11-07	105	-43.6	153.2
ch-11-07	108	-43.6	153.3
ch-11-07	111	-43.6	153.4
ch-11-07	114	-43.5	153.5
ch-11-07	117	-43.4	153.7
ch-11-07	120	-43.3	153.7
ch-11-07	123	-43.2	153.8
ch-11-07	126	-43.1	153.9
ch-11-07	129	-43	154
ch-11-07	132	-43	154.1
ch-11-07	135	-42.9	154.3
ch-11-07	138	-42.9	154.4
ch-11-07	141	-42.7	154.6
ch-11-07	144	-42.6	154.7
ch-11-07	147	-42.4	154.9
ch-11-07	150	-42.3	155
ch-11-07	153	-42.2	155.2
ch-11-07	156	-42.2	155.3
ch-11-07	159	-42	155.5
ch-11-07	162	-41.9	155.6
ch-11-07	165	-41.8	155.9
ch-11-07	168	-41.7	156.1
ch-11-07	171	-41.6	156.3
ch-11-07	174	-41.6	156.4
ch-11-07	177	-41.3	156.6
ch-11-07	180	-41.3	156.7
ch-11-07	183	-41.2	156.9
ch-11-07	186	-41.1	157.1
ch-11-07	189	-41	157.2
ch-11-07	192	-40.9	157.4
ch-11-07	195	-40.6	157.6
ch-11-07	198	-40.7	157.7
ch-11-07	201	-40.6	157.9
ch-11-07	204	-40.5	158
ch-11-07	207	-40.4	158.2
ch-11-07	210	-40.3	158.3
ch-11-07	213	-40.3	158.4
ch-11-07	216	-40.2	158.5
ch-11-07	219	-40.5	158.6
ch-11-07	222	-40.1	158.8
ch-11-07	225	-40	158.9
ch-11-07	228	-39.9	159
ch-11-07	231	-39.7	159.2
ch-11-07	234	-39.6	159.3
ch-11-07	237	-39.6	159.4
ch-11-07	240	-39.4	159.6
ch-11-07	243	-39.3	159.7
ch-11-07	246	-39.1	159.8

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-07	249	-39	159.9
ch-11-07	252	-38.9	160.1
ch-11-07	255	-38.9	160.2
ch-11-07	258	-38.8	160.3
ch-11-07	261	-38.7	160.4
ch-11-07	264	-38.6	160.5
ch-11-07	267	-38.5	160.7
ch-11-07	270	-38.5	160.8
ch-11-07	273	-38.3	160.9
ch-11-07	276	-38.2	161
ch-11-07	279	-38.2	161.2
ch-11-07	282	-38.2	161.3
ch-11-07	285	-38	161.4
ch-11-07	288	-37.9	161.5
ch-11-07	291	-37.8	161.6
ch-11-07	294	-37.8	161.7
ch-11-07	297	-37.7	161.8
ch-11-07	300	-37.6	161.9
ch-11-07	303	-37.6	162
ch-11-07	306	-37.6	162.1
ch-11-07	309	-37.6	162.2
ch-11-07	312	-37.5	162.3
ch-11-07	315	-37.5	162.4
ch-11-07	318	-37.5	162.4
ch-11-07	321	-37.4	162.5
ch-11-07	324	-37.4	162.7
ch-11-07	327	-37.3	162.8
ch-11-07	330	-37.3	162.9
ch-11-07	333	-37.2	163
ch-11-07	336	-37.2	163.1
ch-11-07	339	-37.2	163.1
ch-11-07	342	-37.1	163.2
ch-11-08	0	-48.9	148.1
ch-11-08	0	-48.9	148.1
ch-11-08	3	-46.8	146.6
ch-11-08	3	-46.8	146.6
ch-11-08	6	-45.7	145.8
ch-11-08	6	-45.7	145.8
ch-11-08	9	-45.4	145.8
ch-11-08	9	-45.4	145.8
ch-11-08	12	-45.7	145.9
ch-11-08	12	-45.7	145.9
ch-11-08	15	-46.1	146.3
ch-11-08	15	-46.1	146.3
ch-11-08	18	-46.1	146.5
ch-11-08	18	-46.1	146.5
ch-11-08	21	-45.9	146.6
ch-11-08	21	-45.9	146.6
ch-11-08	24	-45.7	146.8
ch-11-08	24	-45.7	146.8

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-08	27	-45.7	147
ch-11-08	27	-45.7	147
ch-11-08	30	-45.8	147.3
ch-11-08	30	-45.8	147.3
ch-11-08	33	-45.7	147.6
ch-11-08	33	-45.7	147.6
ch-11-08	36	-45.8	147.8
ch-11-08	36	-45.8	147.8
ch-11-08	39	-45.9	147.9
ch-11-08	39	-45.9	147.9
ch-11-08	42	-45.9	147.9
ch-11-08	42	-45.9	147.9
ch-11-08	45	-46.1	147.9
ch-11-08	45	-46.1	147.9
ch-11-08	48	-46.1	148.2
ch-11-08	48	-46.1	148.2
ch-11-08	51	-45.8	148.5
ch-11-08	51	-45.8	148.5
ch-11-08	54	-45.6	149.2
ch-11-08	54	-45.6	149.2
ch-11-08	57	-45.6	149.5
ch-11-08	57	-45.6	149.5
ch-11-08	60	-45.5	149.5
ch-11-08	60	-45.5	149.5
ch-11-08	63	-45.5	149.7
ch-11-08	63	-45.5	149.7
ch-11-08	66	-45.1	149.9
ch-11-08	66	-45.1	149.9
ch-11-08	69	-45.3	149.9
ch-11-08	69	-45.3	149.9
ch-11-08	72	-45.2	150
ch-11-08	75	-45.2	150
ch-11-08	78	-45.2	150
ch-11-08	81	-45.1	149.9
ch-11-08	84	-45.1	149.8
ch-11-08	87	-45	149.8
ch-11-08	90	-44.9	149.9
ch-11-08	93	-44.8	149.9
ch-11-08	96	-44.7	150
ch-11-08	99	-44.7	150.1
ch-11-08	102	-44.7	150.2
ch-11-08	105	-44.6	150.2
ch-11-08	108	-44.7	150.2
ch-11-08	111	-44.6	150.3
ch-11-08	114	-44.5	150.3
ch-11-08	117	-44.5	150.3
ch-11-08	120	-44.4	150.3
ch-11-08	123	-44.4	150.4
ch-11-08	126	-44.4	150.4
ch-11-08	129	-44.3	150.5

2011 Drill Hole Surveys

Hole_ID	From	Dip	Azimuth
ch-11-08	132	-44.3	150.5
ch-11-08	135	-44.2	150.6
ch-11-08	138	-44.1	150.7
ch-11-08	141	-44	150.8
ch-11-08	144	-43.8	150.8
ch-11-08	147	-43.7	150.9
ch-11-08	150	-43.6	150.9
ch-11-08	153	-43.7	150.9
ch-11-08	156	-43.6	150.9
ch-11-08	159	-43.6	151
ch-11-08	162	-43.6	151
ch-11-08	165	-43.6	151.1
ch-11-08	168	-43.6	151.2
ch-11-08	171	-43.5	151.3
ch-11-08	174	-43.4	151.2
ch-11-08	177	-43.3	151.2
ch-11-08	180	-43.4	151.2
ch-11-08	183	-43.4	151.2
ch-11-08	186	-43.5	151.2
ch-11-08	189	-43.5	151
ch-11-08	192	-43.7	151
ch-11-08	195	-43.7	150.9
ch-11-08	198	-43.9	150.8
ch-11-08	201	-43.8	150.6
ch-11-08	204	-43.9	150.4
ch-11-08	207	-48.8	150.2
ch-11-08	210	-43.9	150.1
ch-11-08	213	-44	150.1
ch-11-08	216	-44.1	150.1
ch-11-08	219	-44.1	150
ch-11-08	222	-44.4	150
ch-11-08	225	-44.2	149.9
ch-11-08	228	-44.3	149.9
ch-11-08	231	-44.4	149.9
ch-11-08	234	-44.5	149.9
ch-11-08	237	-44.5	149.9
ch-11-08	240	-44.3	149.9
ch-11-08	243	-44.2	149.9
ch-11-08	246	-44.2	149.9
ch-11-08	249	-44.2	149.8
ch-11-08	252	-44.2	149.8
ch-11-08	255	-44.3	149.7