Assessment Report for Geological Work

on the

Guano REE Project

at the

Shark Property,

Shark Claims 1 – 16	YC23168 to YC23183
Shark Claims 17 – 64	YC24131 to YC24178
Shark Claims 65 – 94	YC24327 to YC24356

In the

Watson Lake Mining District,

Yukon Territory

Property Centroid:	635699 / 6821145
REE Target Centroid:	637700 / 6820500
Camp Location:	636575 / 6821550

(NTS Mapsheets 105F/8, 9, and 10)

from

August 19, 2009 to August 25, 2009

for

True North Gems Inc.
(Owner)

by

David James Turner, P.Geo, M.Sc.

Mackevoy Geosciences Ltd.
(Operator)

March 18, 2010

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1. Introduction

The Shark Property (635699 mE / 6821145m N, Nad83, NTS Mapsheets 105F/8, 9, and 10) is located in the Ketza-Seagull District of southern Yukon. It consists of 94 contiguous mineral claims, 30 of which (Shark 65-94) are grouped as 'Guano Ridge' on the eastern margin of the property. The Shark claims, also known as the True Blue property, were staked cover a dark-blue aquamarine occurrence in 'Shark Bowl'. Guano Ridge was staked due to prospective geology for Colombian-style emerald mineralization, however, the skarn and dyke systems in the area also have potential for rare earth element (REE) mineralization.

The Guano Project is focused on this REE mineralization which occurs in skarn and dykes adjacent to a larger cogenetic Mississippian syenite. Exploration and academic studies in the late 1970's outlined a Th-U target along Guano Ridge (~2 km by 500 m). Pale blue beryl was discovered during this early exploration, which led to True North Gems' reinvestigation and staking of "Shark Bowl" and subsequent academic studies at UBC (Turner, 2006).

The fieldwork of 2009 was undertaken by Mackevoy Geosciences Ltd for True North to re-evaluate Guano Ridge for its REE potential. It was conducted under the support of the Yukon Mining Incentive Program (YMIP). Fieldwork was conducted by a 5 person crew from August 19 to August 25 (7 days, 35 person-days). The program was led by D. Turner (M.Sc., P.Geo.) with support from geologists B. Wilson, L. Arness, B. Quist and M. Burns.

Results from this fieldwork are promising with numerous anomalous and high grade assays for REEs (to 6.02 wt.% Rare Earth + Yttrium Oxides), Nb (to 2.52 wt.% Nb_2O_5), and Ta (to 0.51 wt.% Ta_2O_5). The Guano Ridge dyke swarm and skarn target was confirmed with mineralized outcrop occurring intermittently along ~750 m strike length across ~100 m and includes dykes up to ~5 m in thickness. Two new REE targets were identified: (1) the larger syenite body is prospective for a low grade – large tonnage system, while (2) a new garnet-allanite skarn was discovered far from Guano Ridge. Additional exploration and assessment of the REE-Nb-Ta mineralization is **strongly recommended**. Fieldwork should comprise detailed and systematic mapping and sampling of the three targets, wider geophysical and geochemical surveys. Parallel academic studies are also advised due to the specialized and complex nature of the mineralization observed to date.

2. Location and Accessibility

The Shark property is located 50 km south of Ross River in southern Yukon (Figure 1), at latitude 61º30'N and longitude 132º30'W, on mapsheets NTS 105F/8 and 9. It consists of 94 mineral claims registered with the Yukon Mining Recorder (Figure 2). The property is approximately 10 km southwest of the former Ketza River mine and its gravel airstrip. Year round access to the Shark claims is via helicopter from Ross River. A gravel road from the Robert Campbell Highway to the Ketza River mine site is usable during summer and fall and a 4x4 trail extends from the mine to the northern part of the Shark property. In summer 2009 (as well as 2004), True North's access to the property was by truck to the Ketza River airstrip, and then from the airstrip to the property via helicopter.

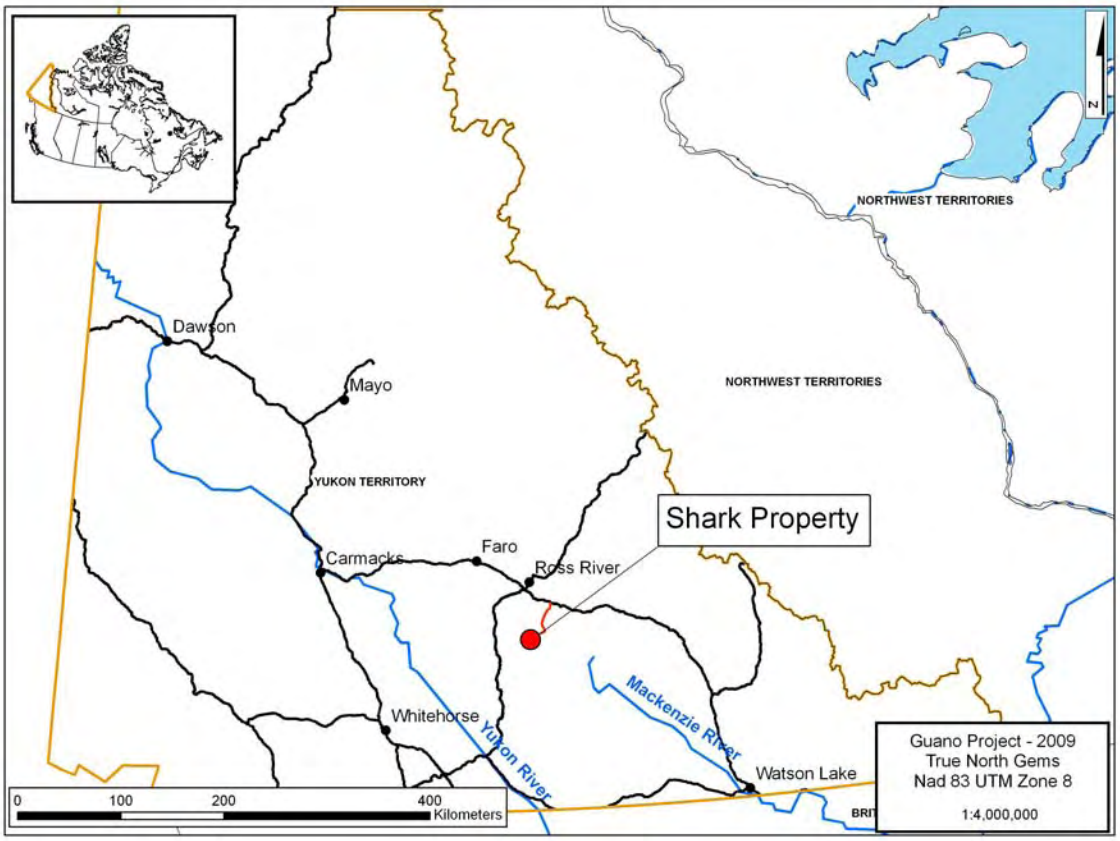

Figure 1. Shark Property Location Map.

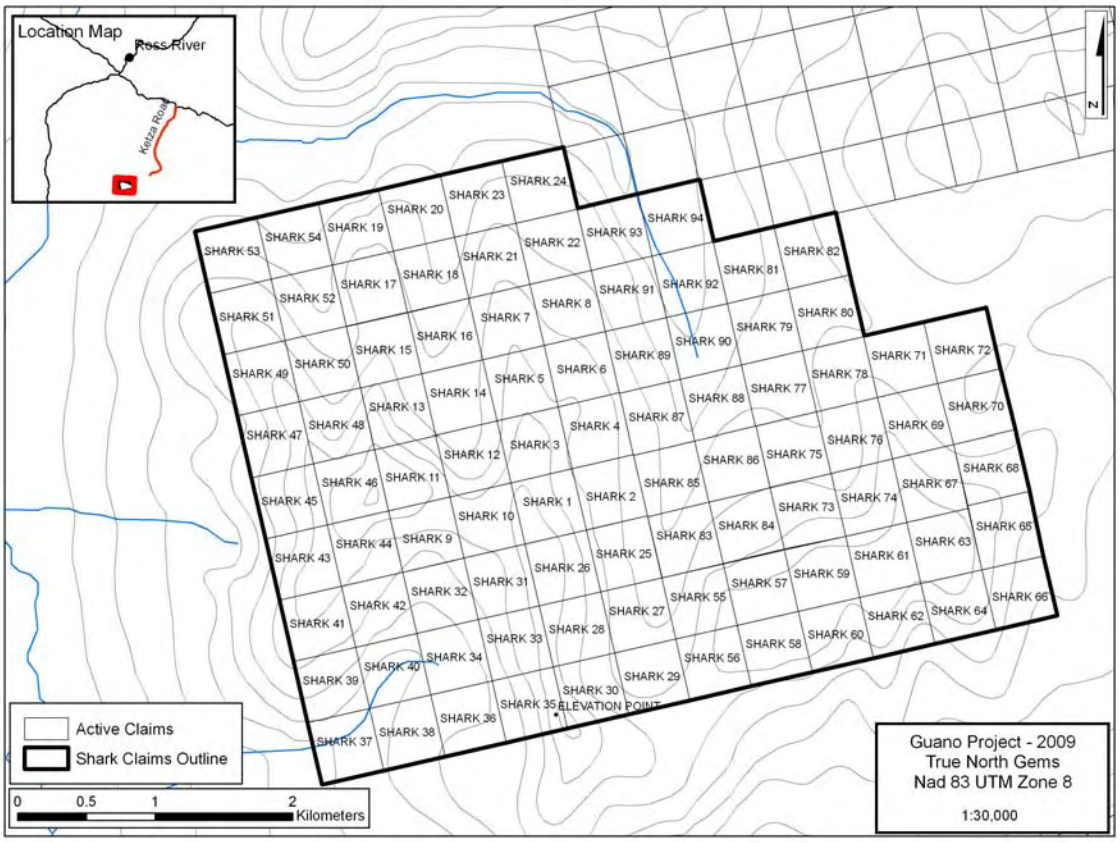

Figure 2. Shark Property Claim Map.

Table 1. Mineral Tenure of the Shark Property

Claim Name	Grant Numbers	Valid To
Shark 1 – 16	YC23168 to YC23183	March 30, 2013
Shark 17 – 64	YC24131 to YC24178	March 30, 2013
Shark 65 – 94	YC24327 to YC24356	March 30, 2010

*Data from Mining Recorder Website, January 1, 2010.

3. Geomorphology

The property is located within the Pelly Mountains on the southwest side of the Tintina Trench. It is in the headwaters of the McConnell River which is part of the Yukon River watershed. Local terrain consists of rugged mountains separated by wide glaciated valleys with fairly gentle floors. Valley bottoms are mostly covered by glaciofluvial outwash and are flanked by lateral moraines and moderate to steep hillsides (typically 20 to 50^{o}). The property is centred on a prominent west trending ridge with a series of north trending spurs. Outcrop is most abundant in cirques on the north side of the main ridge and in actively eroding creek cuts. Ice sheets covered the entire Pelly Mountain area during the Pleistocene and alpine glacial features such as cirques, tarn lakes and moraines are common.

Elevations on the property are between 1250 and 2150 m. Tree line is at about 1500 m. Vegetation ranges from scattered stunted spruce, balsam and willow at lower elevations giving way to buckbrush and moss and ultimately to lichen covered rock at higher elevations.

4. Property History

Considerable work has been done in the Ketza-Seagull District since the late 1960s. Exploration focused on lead-zinc veins, gold veins and manto deposits, uranium-rare earth element (REE) prospects, and volcanogenic massive sulphide mineralization (VMS) (Deklerk, 2002). Claims that once covered parts of the current Shark property are described in the following paragraphs.

In 1976, the Guano claims were staked by Ukon Joint Venture (Chevron Minerals Ltd. and Kerr Addison Mines Limited). Those claims covered the eastern portion of the present Shark property. They were explored for uranium and REE associated with skarns and veins developed peripheral to a Mississippian syenite stock. Work on the Guano claims in 1976 and 1977 included geological mapping, ground radiometrics, airborne radiometrics, and geochemical sampling (Archer and Onasick, 1976 and Archer, 1977). F. Chronic also completed a master's thesis at The University of British Columbia (UBC) on the Guano property. Relevant work from her thesis includes detailed geological mapping, assays and petrological studies (Chronic, 1979).

In the late 1980s the White and PS claims were staked by Mountain Province Mining Inc. to cover gold targets. Most of those claims were north of the Shark claims but some of them once covered

the eastern portion of the current Shark property. Exploration work done by Mountain Province focused on the northern portion of its claims and consisted of cursory inspections near Guano Ridge.

In 1988, B. Hall staked the Matthew claims to cover an area that included the southwestern corner of the Shark property. During the 1990s the Matthew claims expired and were replaced by the Mamu-Bravo-Kulan claims. Work done at that time on ground now covered by the Shark property included geological mapping, geochemical sampling, magnetometer surveys, and VLF-EM surveys (Doherty, 1996). Exploration during the 1990s was directed toward Kuroko type VMS mineralization.

5. Regional Geology

The Shark property is located within the Cassiar Platform, a displaced tectonic element comprised of Paleozoic miogeoclinal clastic and carbonate sedimentary rocks (Figure 3). These strata are overlain and interfingered with Mississippian felsic to mafic metavolcanic rocks which form the linear northwest trending Pelly Mountain volcanic belt (Gibson et al., 1999) believed to be deposited in a continental rift environment. Roughly coincident with the southwestern edge of the volcanic belt is a 32 km long string of Mississippian syenite intrusions, the largest of which is partially covered by the Shark claim block. This entire package of rocks was faulted and deformed during Late Paleozoic arc-continent collision, and intruded by Mid-Cretaceous plutons of intermediate composition (Tempelman-Kluit, 1981).

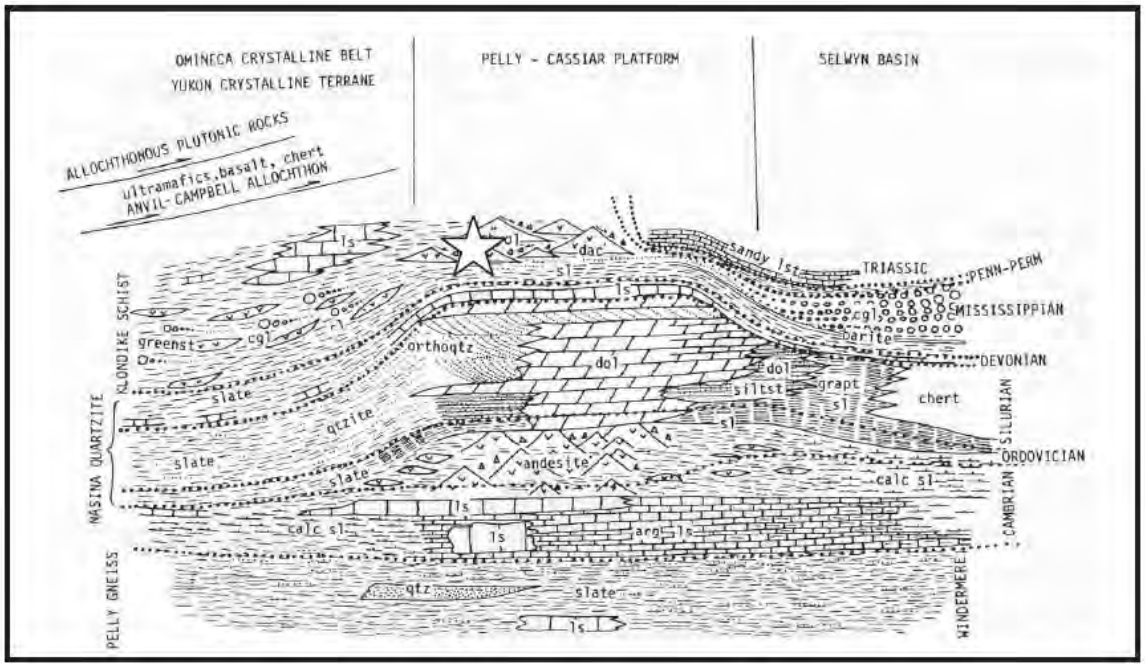

Figure 3. Schematic of a restored geological cross section in the Quiet Lake map area (NTS 105F) from Templeman-Kluit (1976). Star indicates approximate stratigraphic location of alkaline volcanics of the Pelly Mountain Volcanic Belt and their intrusive syenite equivalents.

The Ketza-Seagull District, in which the Shark property is located, is bounded on the northeast by the Tintina Fault (Figure 4). This regional scale, transcurrent fault extends across Yukon into Alaska and resulted in approximately 420 to 460 km of dextral offset in Early Tertiary times (Mortensen et al., 2000). This portion of the Cassiar Platform is structurally complex and has been divided into four northeast-directed thrust panels (Abbott, 1986). From northeast to southwest and from structurally lowest to highest, they are: the St. Cyr, Cloutier, Seagull-Porcupine, and McConnell thrust faults. A prominent feature is the nearby Ketza-Seagull Arch, which is described as a broad domal uplift in which strata of the Lower Cloutier thrust panel are exposed through the Seagull-Porcupine thrust. This feature is most likely related to one or more buried Cretaceous intrusions (Abbott, 1986). The Shark property is located just north of the McConnell thrust and immediately southwest of the Ketza-Seagull Arch.

The main lithologies in the Ketza-Seagull District are shown on Figure 4 and are described as follows: The oldest rocks are Lower Cambrian to Mississippian in age and consist dominantly of shale, limestone, dolomite, sandstone, quartzite and phyllite of the Cassiar Platform. The Mississippian metavolcanics (unit Mva) are described as the metamorphic equivalents of “dark clastic rocks, tuffaceous chert and felsic volcanic rocks” (Gordey and Makepeace, 2000). Those rocks are approximately coeval with and in part genetically linked with Mississippian syenite (unit My). These intrusives range from small plugs to 35 km^2 stocks. They typically consist of resistant, massive, medium to fine grained equigranular syenite (Gordey and Makepeace, 2000). The youngest rocks (units KqC) belong to the Cassiar Plutonic Suite, which ranges between 100 and 110 Ma (Mortensen, 1999). Typically they consist of grey weathering, equigranular, medium to coarse grained quartz monzonite and range from small stocks to batholith sized bodies. The closest documented Cretaceous intrusion to the Shark property is a stock located 9 km to the southwest.

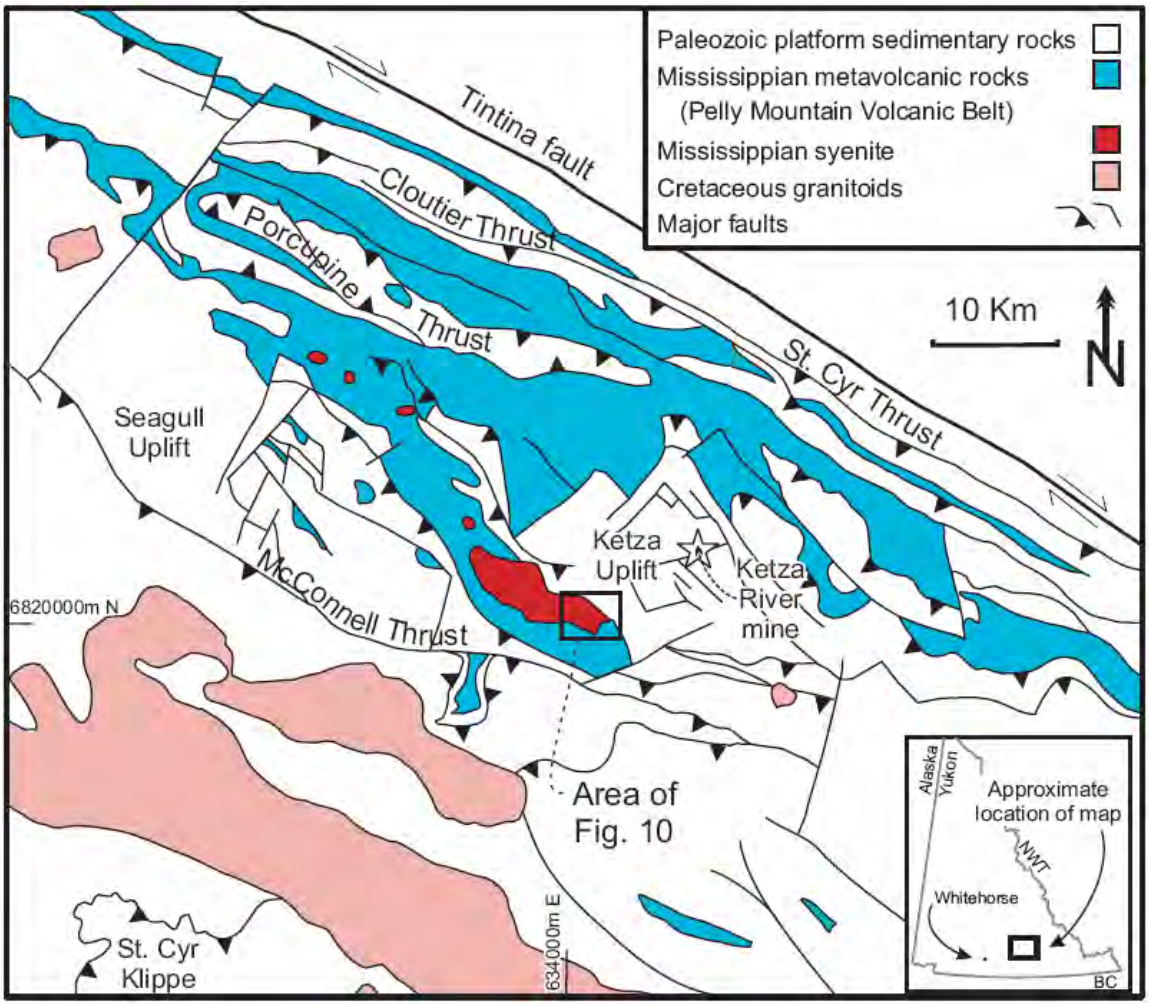

Figure 4. Simplified geological map of the Pelly Mountains within the Quiet Lake map sheet (NTS 105F) south of the Tintina Fault (From Turner 2006). Teeth on thrust faults indicate upper plate. Inset shows the general location within Yukon. The rectangle corresponds to the area shown in Figure 5.

6. Property Geology

The Shark property is underlain by three metasedimentary units (uCOs, SDc and uDMs), a metavolcanic unit (Mva) and a syenite stock (My) (Figure 5). Regionally the metasedimentary rocks are part of a conformable sequence but on the property a steep fault juxtaposes the Cambrian strata against Silurian to Mississippian rocks. Silurian shale, volcanic breccia, sandstone, and dolomite normally occur between units uCOs and SDc. The metavolcanics and syenite are slightly younger and are dated as Mississippian. Detailed descriptions of the property geology, especially of the syenite's petrology, are given in Turner (2006) and more concise descriptions can be found in Turner et al. (2007).

Relevant to the current mineral exploration is a more detailed description of the dyke swarm, veins and skarn in vicinity to Guano Ridge. Mineralized outcrop of this target occurs intermittently along ~750 m strike length across ~100 m and includes dykes up to ~5 m in thickness. Geophysical data suggests that this system extends further northwards and possibly to the south. Thus far, mapping has shown that the dykes are constrained to the western side of Guano Ridge.

Academic studies by Chronic (1979) describes the dykes as being cogenetic with the adjacent syenite, although the fault that separates Guano Ridge from the main body obscures the exact relationship between to the two igneous phases. The dykes were divided into two categories based on thin section petrography; melagranite dykes and mafic dykes. Dykes with characteristics intermediate to these 'end members' have also been noted. Both dykes have a weathering style that is very similar to the host rock they intrude making the mapping of these units difficult, especially on rainy days where reflective contrasts are masked. The dykes and metasomatic rocks of Guano Ridge are the hosts to the majority of the samples showing REE enrichment with lesser REE enrichment observed in the altered syenite further to the west.

The "**melagranite dykes**" are medium grained, greenish-grey, and have been observed up to 5 m in thickness with traceable strike lengths on the order of ~25 m. In some areas it is difficult to ascertain whether proximal dyke outcrops are continuations of the same dyke, separate dykes, or part of an anastamosing network. These dykes 'tend' to be more radioactive than their host rocks. Mineralogically, they have been described as comprising up to 70%

quartz, 60% orthoclase, 15% diopside, and 15% zircon. Later alteration phases include allanite and monazite as well as late veinlets of quartz-calcite-biotite-albite.

The "**mafic dykes**" are fine grained, dark green to black, and have been observed up to several meters in thickness but like the melagranite dykes, their strike length is difficult to determine. The mafic dykes are also typically more radioactive than their sedimentary host rocks. Mineralogically, the mafic dykes comprise up to 70% actinolite, 25% zircon, and lesser orthoclase, quartz, and calcite. Actinolite is thought to be secondary (one diopside grain was observed) while zircon and allanite have been observed to have formed around these grains, possibly suggesting considerable hydrothermal activity.

Fluorite-quartz-microcline-calcite veins, calcite-epidote-actinolite-quartz veins, and quartz-siderite-dolomite veins are all present in the Guano Ridge area. The fluorite bearing veins are also observed further the west within the syenite body itself and have been shown to host gem quality beryl as well as allanite and other rare element minerals. These are of post-intrusion metamorphic origin, as determined by Turner et al (2007). The siderite-dolomite-quartz veins of the eastern portion of the property are most probably associated the deformational event, but exhibit the simple mineralogy of elements derived from their sedimentary host rocks. Epidote-bearing veins are likely associated with contact metamorphism and metasomatism, and possibly with mineralogical changes concurrent with regional deformation.

Contact metamorphic rocks described by Chronic (1979) from the Guano Ridge area are varied and do not include the new garnet-allanite skarn identified to the west of the 2009 camp location. In the Guano Ridge area, F. Chronic divided contact metamorphic rocks into three units. Unit A was described as banded quartz-muscovite hornfels, Unit B as dark green diopside-phlogopite-calcite-tremolite-sphene skarn, and Unit C as pale green diopside-phlogopite-calcite skarn. No dykes have been observed in Unit A, however, metasomatic alteration is suggested to originate from fluids related to the "Bench Shear Zone". Unit B appears to be the most mineralogical diverse metasomatic unit, and was noted to contain minor amounts of garnet along with magnetite, sphene, apatite and 2 unidentified minerals. Brecciated rocks hosted in coarse calcite have been ascribed to Unit B, but may represent the infiltration of igneous carbonate (i.e., carbonatite). Unit C is the metamorphic rock furthest from the margin of the syenite and is most abundant on the east side of Guano Ridge (not investigated in 2009). It is mineralogically

simple, consisting of granoblastic calcite, diopside and phlogopite with only minor apatite and later alteration phases of chlorite and serpentinite.

Although the rocks of the Guano area have not changed over the last 30 years, the general understanding of alkaline rocks has vastly improved. Further, the scientific techniques used to study these types of rocks, such as stable isotope and trace element geochemistry, have substantially improved since the publication of F. Chronic's thesis in 1979. It is recommended that the Guano Ridge area be scientifically re-investigated using the historical information only as a guide to initial interpretations. It is likely that substantially different conclusions will be drawn from new academic research.

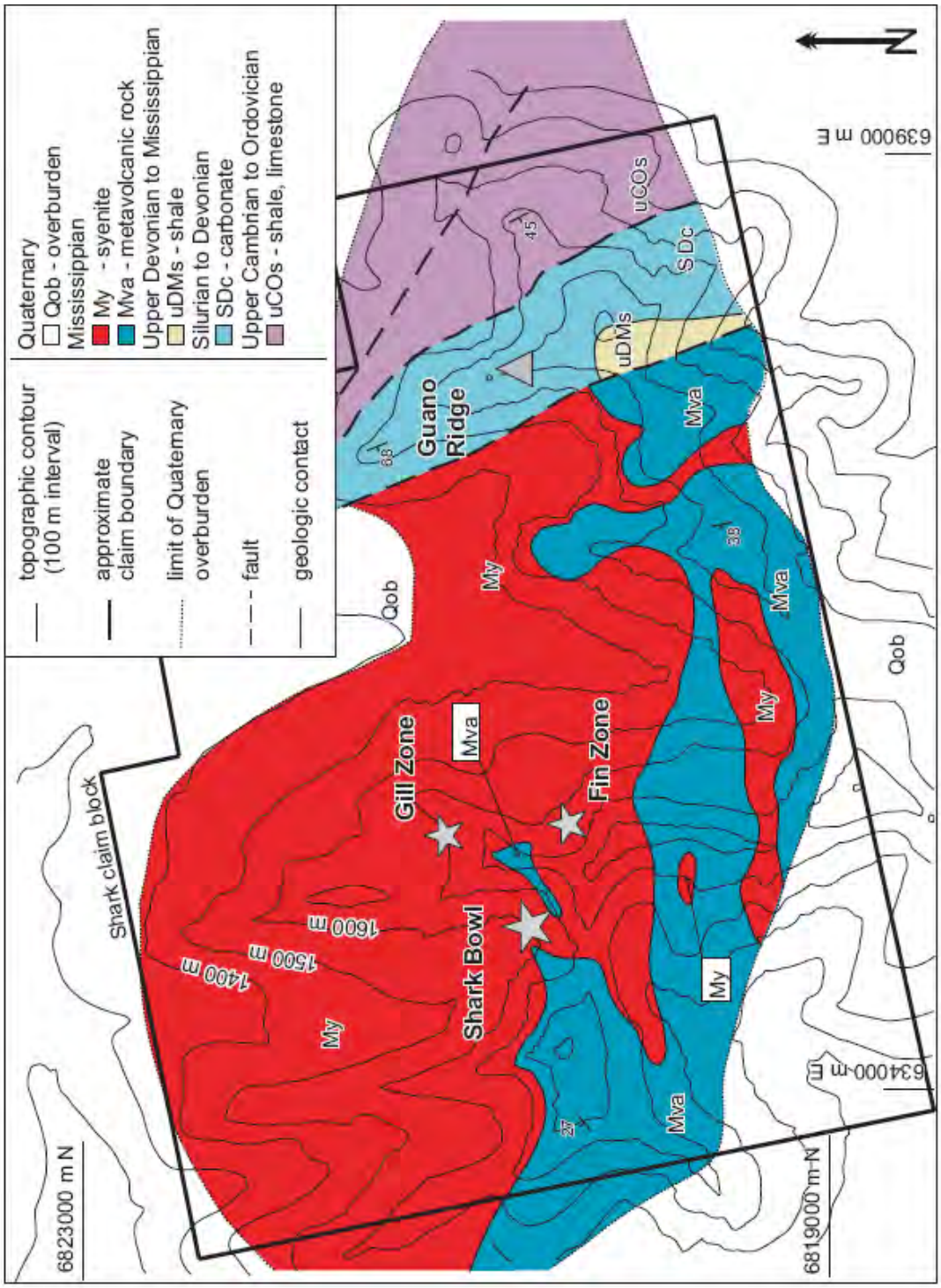

Figure 5. Geological map of the True Blue property (Shark Claim Block), Southern Yukon. Triangle indicates REE mineralization of Guano Ridge, and stars indicate locations of beryl mineralization.

Figure 6a. Google Earth display of the property bounds and relevant locations to REE mineralization from 2009 field program (1.5 times vertical exaggeration). View is looking SSW with McConnell River in the background.

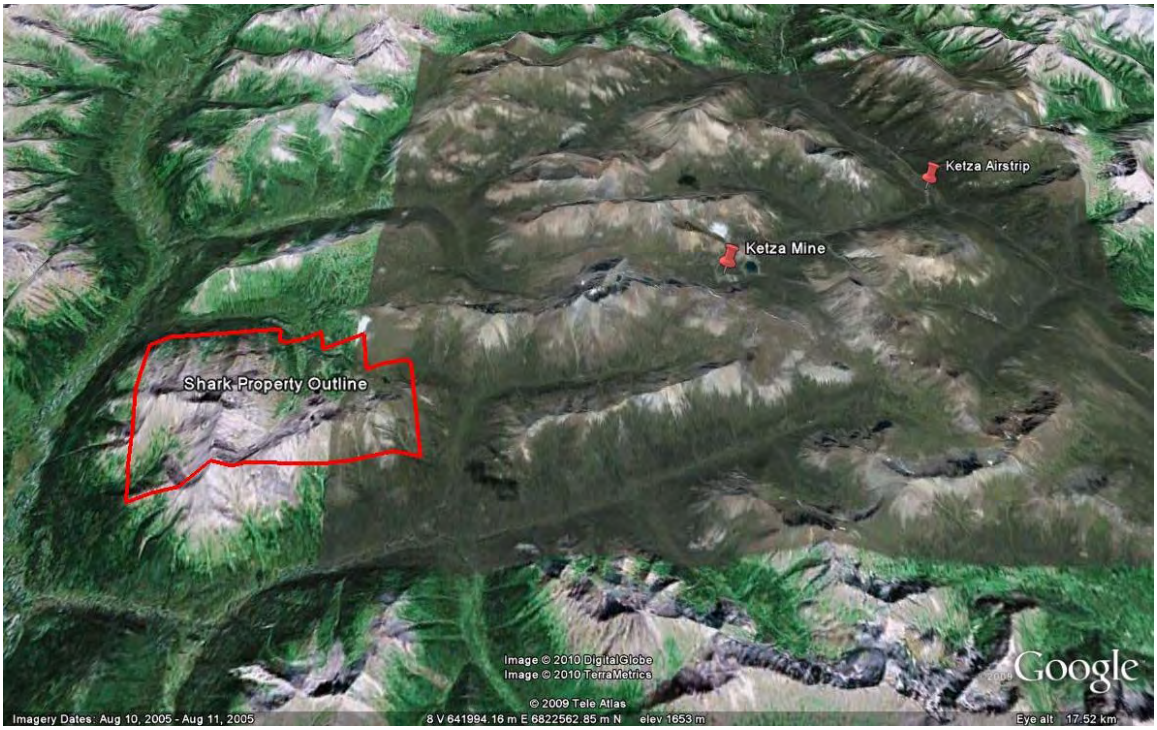

Figure 6b. Google Earth display of the property bounds and location of Ketza River Mine and Airstrip (1.5 times vertical exaggeration). View is looking N with Ketza River in the background.

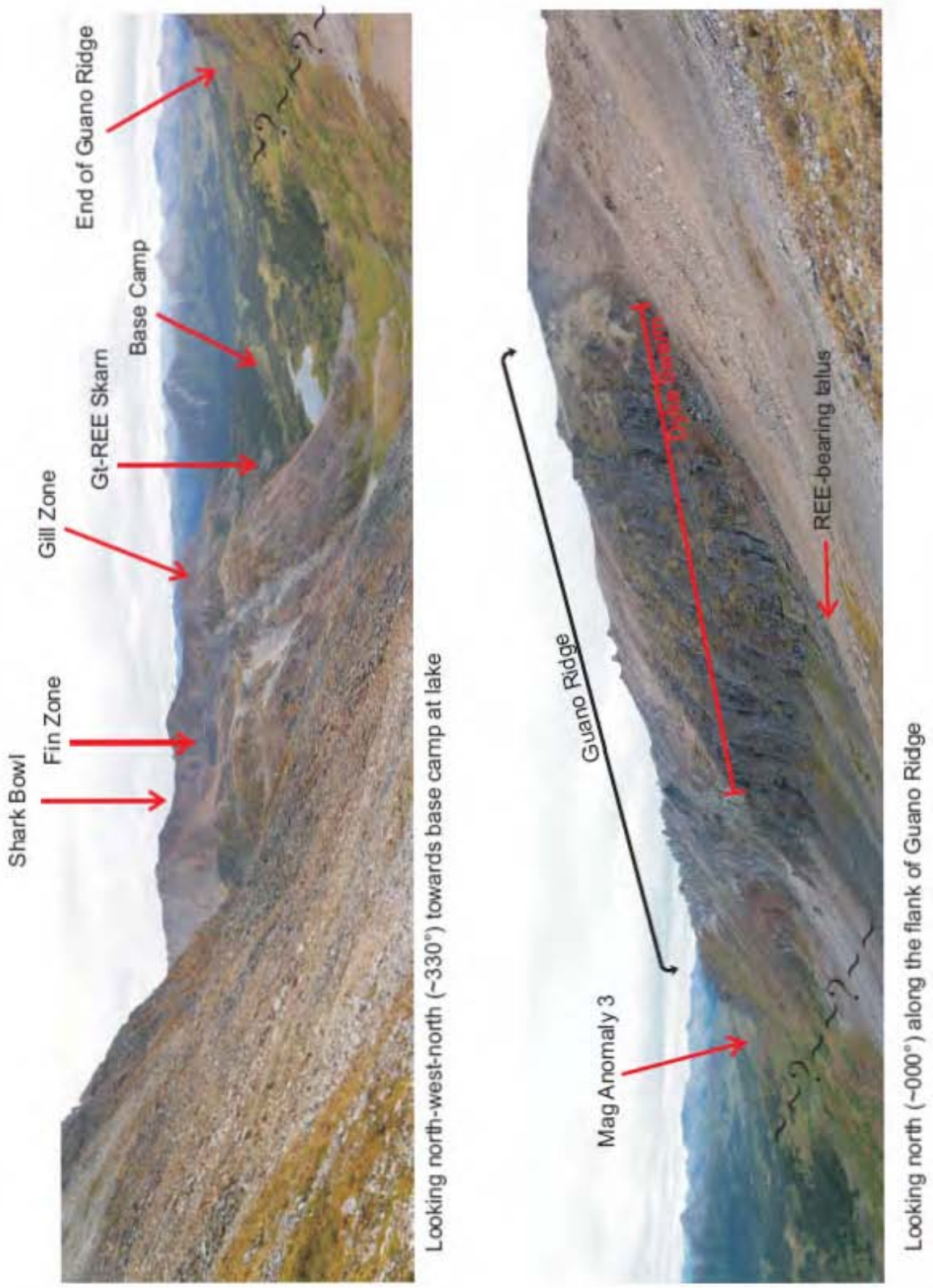

Figure 7. Panoramic views looking North from the head of Guano Ridge Basin.

7. Current Mineral Exploration

7.1 Prospecting

The Guano Project was designed to follow up historical reports of REE-Th-U mineralization in the Guano area and REE minerals identified during academic studies of the dark blue aquamarine showing of Shark Bowl. A variety of samples were taken based on scintillometer response, geological affinity and hand sample mineralogy. Samples originated largely from local derived float at the base of Guano Ridge cliffs, but also from outcrop and local float of less definite origin. A total of 52 samples were submitted for geochemical analysis. There location details are given here whereas the discussion of the results is found later in the geochemistry section.

Three main targets were identified via prospecting during the 2009 exploration program: Guano Ridge, Camp Skarn, and Shark Bowl. Guano Ridge is defined as the region containing melagranite and mafic dykes and (likely) associated metasomatic rocks. It has a surficial extent measuring ~750 m in length and ~ 100 m in width although it remains poorly constrained. Shark Bowl is the defined as the bulk syenite which is potentially prospective for a low grade – large tonnage REE-Ta-Nb target. It has a surficial extent on the order of 10 km^2. The Camp Skarn is the new garnet-allanite showing identified ~1.5 km northwest of the Guano Ridge system, just west of the 2009 base camp. Its surficial extent is unknown, but has a strike length of at least ~75 m.

Samples 09BSW139 to 142 and 09DJT017 to 019 originated from the new garnet-allanite Camp Skarn while sample 09DJT009 originated from Shark Bowl. The rest of the samples are from the Guano Ridge area.

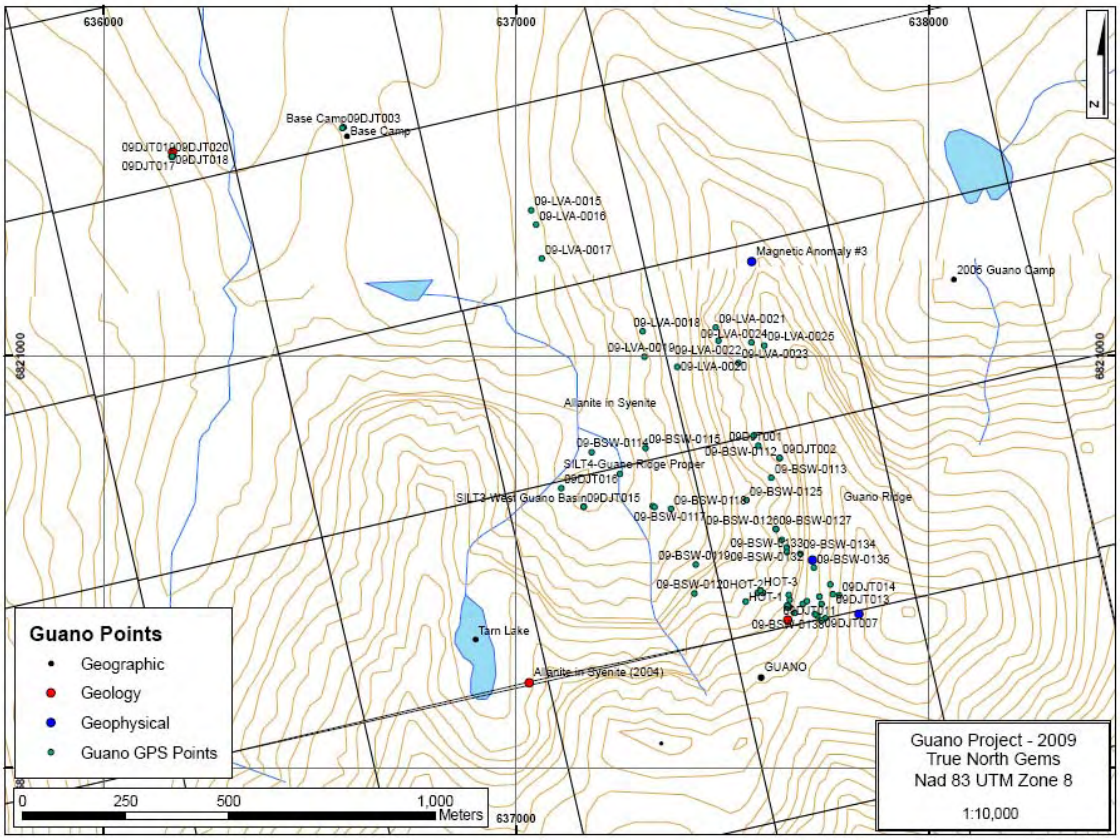

Figure 8. Sample Location Map

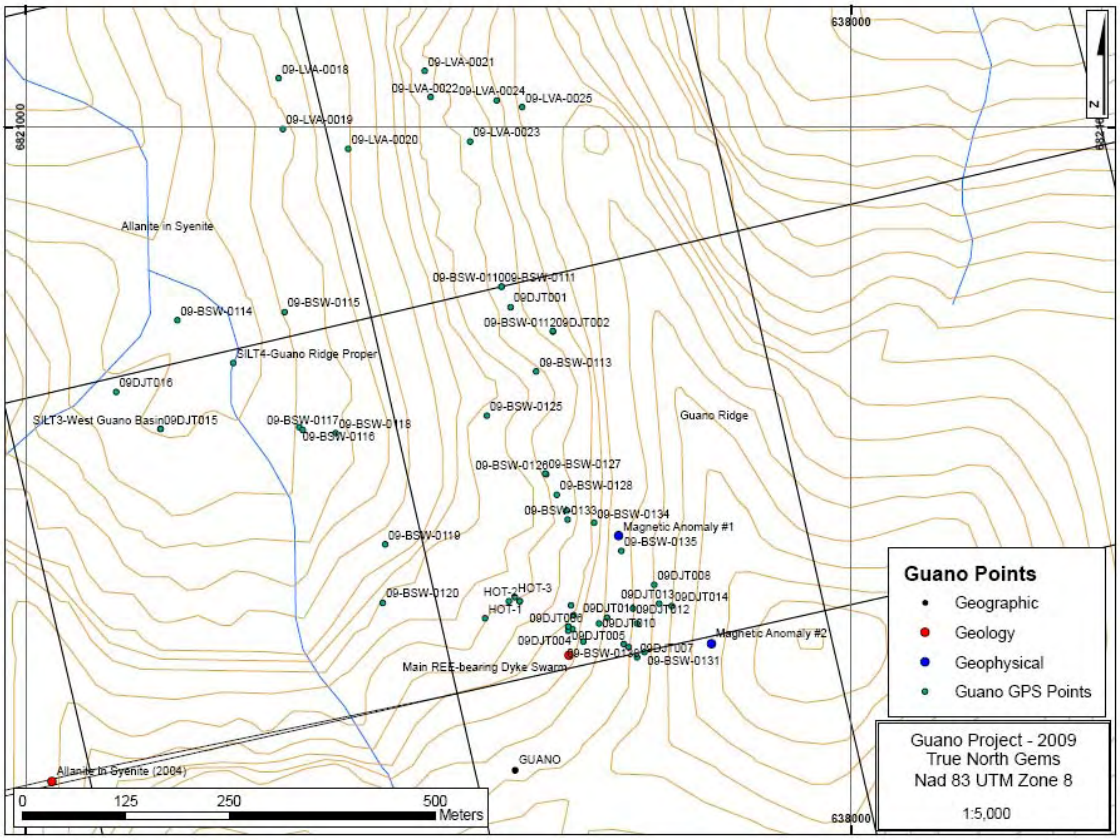

Figure 9. Sample Location Map for the Guano Ridge Area

Table 2. Sample Locations

Name	Easting_nad83	Northing_nad83	Type
09-BSW-0110	637577	6820806	Rock
09-BSW-0111	637577	6820806	Rock
09-BSW-0112	637639	6820751	Rock
09-BSW-0113	637619	6820703	Rock
09-BSW-0114	637184	6820765	Rock
09-BSW-0115	637314	6820775	Rock
09-BSW-0116	637332	6820635	Rock
09-BSW-0117	637336	6820632	Rock
09-BSW-0119	637436	6820493	Rock
09-BSW-0120	637433	6820422	Rock
09-BSW-0121	637599	6820424	Rock
09-BSW-0123	637664	6820407	Rock
09-BSW-0124	637661	6820419	Rock
09-BSW-0125	637559	6820649	Rock
09-BSW-0126	637631	6820578	Rock
09-BSW-0127	637630	6820579	Rock
09-BSW-0128	637644	6820553	Rock
09-BSW-0129	637663	6820390	Rock
09-BSW-0130	637676	6820375	Rock
09-BSW-0131	637750	6820362	Rock
09-BSW-0132	637656	6820534	Rock
09-BSW-0133	637657	6820523	Rock
09-BSW-0134	637689	6820519	Rock
09-BSW-0135	637722	6820485	Rock
09-BSW-0136	637741	6820397	Rock
09-BSW-0137	637731	6820368	Rock
09-BSW-0138	637725	6820372	Rock
09-BSW-0139	636166	6821483	Rock
09-BSW-0140	636166	6821483	Rock
09-BSW-0141	636166	6821483	Rock
09-BSW-0142	636166	6821483	Rock
09DJT001	637588	6820781	Rock
09DJT002	637639	6820752	Rock
09DJT003	636583	6821554	Rock
09DJT005	637658	6820393	Rock
09DJT006	637658	6820393	Rock
09DJT007	637741	6820356	Rock
09DJT008	637762	6820444	Rock
09DJT009	634778	6820802	Rock
09DJT010	637695	6820397	Rock
09DJT012	637736	6820415	Rock
09DJT013	637768	6820421	Rock
09DJT014	637783	6820418	Rock
09DJT015	637164	6820633	Rock
09DJT016	637110	6820678	Rock
09DJT017	636167	6821484	Rock
09DJT018	636167	6821484	Rock
09DJT019	636167	6821484	Rock
09-LVA-0020	637391	6820973	Rock
09-LVA-0023	637539	6820982	Rock
09-LVA-0024	637571	6821032	Rock
09-LVA-0025	637602	6821024	Rock
SILT1-Shark Bowl	634682	6820946	Silt
SILT2-Gill Zone Drainage	635203	6821517	Silt
SILT3-West Guano Basin	637164	6820633	Silt
SILT4-Guano Ridge Proper	637252	6820713	Silt

7.2 Geochemistry of REE Mineralization

Fifty-two rock samples and four (4) silt samples were submitted to ALS Chemex of Vancouver for geochemical assay. Samples were shipped by Mackevoy Geosciences staff in two batches from Whitehorse and subsequently from Victoria. Samples were received in early October and data was delivered by Chemex in late October. The analytical package chosen was MEMS81, which is described as a 38-element ICP MS technique with a fusion preparation to ensure complete dissolution of refractory minerals. This package also delivers a full suite of REE elements. Rock samples were crushed to 2 mm and then pulverized to 75 um. Silt samples were dried and screened to 180 um.

Sample reanalysis at ALS Chemex was undertaken on 5 pulp samples that reached the upper detection limit for various REEs, Th, U, Zr, and Nb. Two additional samples with lower and moderate REE values were chosen for reanalysis to cover the range of results.

Samples collected represent grab samples from locally sourced float or outcrop. The collection of samples was based on scintillometer response, igneous affinity (i.e., felsic dyke), and hand sample mineralogy. One chip sample from a dyke was taken across ~ 5 m of width (09BSW129). Sample 09DJT003, which yielded the highest overall grades of REE-Ta-Nb, was collected from the historical camp location of exploration conducted on the Guano prospect in the late 1970's. This rock sample was amongst other rock samples of local origin and is believed to be collected from the general area of Guano Ridge.

Silt samples were taken to assess the validity of using silt geochemistry for REE exploration purposes. One sample (Shark Bowl Silt) was taken from the interior of the syenite body where allanite and bastnaesite were previously identified in academic studies. Another sample (Gill Zone Silt) was also taken from the interior of the syenite body but in an area where no REE minerals had been identified although limited work had been conducted in this area. A third sample (Guano Ridge Proper) was taken from a drainage collecting from the main dyke swarm area and a fourth sample (West Guano Basin) was taken from an area draining the western side of the 'Guano Basin' that comprises mostly syenite.

The following tables describe geochemical assay results of REE, Nb, and Ta converted to weight percent oxides. Values range to 6.02 wt. % Total Rare Earth Oxides + Yttrium (TREO), 2.52 wt. % Niobium Oxide (Nb2O5) and 0.507 wt. % Tantalum Oxide (Ta2O5). Proportions of

HREE (Eu to Lu) compared to all REE+Y range from 2 to 31, indicating anomalous concentrations of heavies in certain samples. Uranium, thorium, and zirconium are included in the subsequent tables and full geochemical data can be found in the digital appendix.

Table 3. Geochemical assay results for selected elements from the Guano Project

Rock Sample	Location	Y_2O_3	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	TREO	Proportion Heavy REE (Eu to Lu) %	Nb_2O_5	Ta_2O_5
09BSW 110	Guano	0.002	0.007	0.009	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.022**	5	0.007	0.000
09BSW 111	Guano	0.001	0.004	0.005	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.013**	5	0.000	0.000
09BSW 112	Guano	0.006	0.008	0.017	0.002	0.006	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	**0.045**	10	0.006	0.001
09BSW 113	Guano	0.001	0.002	0.003	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.007**	4	0.000	0.000
09BSW 114	Guano	0.094	0.291	0.490	0.046	0.151	0.025	0.004	0.026	0.004	0.020	0.003	0.009	0.001	0.006	0.001	**1.171**	6	0.681	0.006
09BSW 115	Guano	0.033	0.145	0.234	0.022	0.064	0.009	0.001	0.008	0.001	0.004	0.001	0.002	0.000	0.002	0.000	**0.528**	4	0.491	0.005
09BSW 116	Guano	0.096	0.011	0.034	0.006	0.038	0.013	0.002	0.013	0.002	0.014	0.003	0.007	0.001	0.005	0.001	**0.246**	19	0.612	0.005
09BSW 117	Guano	0.094	0.011	0.033	0.005	0.029	0.011	0.001	0.012	0.002	0.013	0.003	0.007	0.001	0.006	0.001	**0.232**	20	0.755	0.008
09BSW 119	Guano	0.155	0.493	0.820	0.079	0.261	0.039	0.003	0.036	0.005	0.029	0.006	0.016	0.002	0.014	0.002	**1.959**	6	0.399	0.030
09BSW 120	Guano	0.088	0.119	0.257	0.027	0.090	0.017	0.002	0.015	0.002	0.012	0.002	0.007	0.001	0.006	0.001	**0.646**	8	0.411	0.015
09BSW 121	Guano	0.051	0.114	0.208	0.020	0.065	0.010	0.001	0.010	0.001	0.008	0.002	0.005	0.001	0.005	0.001	**0.502**	7	0.455	0.035
09BSW 122	Guano	0.029	0.259	0.418	0.038	0.111	0.013	0.001	0.012	0.001	0.005	0.001	0.003	0.000	0.002	0.000	**0.895**	3	0.063	0.002
09BSW 123	Guano	0.190	0.006	0.037	0.007	0.044	0.020	0.001	0.023	0.005	0.034	0.007	0.022	0.003	0.019	0.003	**0.421**	28	0.738	0.065
09BSW 124	Guano	0.087	0.172	0.341	0.036	0.122	0.022	0.002	0.021	0.003	0.016	0.003	0.009	0.001	0.007	0.001	**0.843**	7	0.515	0.031
09BSW 125	Guano	0.839	0.393	0.914	0.120	0.457	0.108	0.013	0.117	0.021	0.123	0.025	0.072	0.010	0.058	0.007	**3.278**	14	1.413	0.154
09BSW 126	Guano	0.070	0.094	0.221	0.026	0.089	0.015	0.001	0.015	0.002	0.012	0.002	0.007	0.001	0.006	0.001	**0.563**	8	1.127	0.024
09BSW 127	Guano	0.066	0.202	0.406	0.041	0.135	0.018	0.001	0.016	0.002	0.010	0.002	0.006	0.001	0.005	0.001	**0.913**	5	1.346	0.032
09BSW 128	Guano	0.021	0.034	0.064	0.006	0.021	0.004	0.000	0.004	0.001	0.003	0.001	0.002	0.000	0.002	0.000	**0.164**	8	0.085	0.004
09BSW 129	Guano	0.199	0.006	0.027	0.005	0.033	0.016	0.001	0.021	0.005	0.037	0.008	0.025	0.004	0.023	0.003	**0.416**	31	0.581	0.054
09BSW 130	Guano	0.069	0.095	0.181	0.018	0.064	0.011	0.001	0.011	0.002	0.010	0.002	0.006	0.001	0.005	0.001	**0.478**	8	0.233	0.021
09BSW 131	Guano	0.687	0.021	0.078	0.017	0.103	0.050	0.004	0.067	0.015	0.102	0.022	0.066	0.009	0.053	0.006	**1.301**	26	1.631	0.029
09BSW 132	Guano	0.031	0.061	0.118	0.012	0.042	0.008	0.001	0.007	0.001	0.005	0.001	0.003	0.000	0.003	0.000	**0.293**	7	0.112	0.005
09BSW 133	Guano	0.034	0.072	0.135	0.014	0.046	0.008	0.001	0.007	0.001	0.006	0.001	0.003	0.000	0.003	0.000	**0.332**	7	0.129	0.005
09BSW 134	Guano	0.066	0.137	0.257	0.025	0.086	0.015	0.001	0.013	0.002	0.012	0.002	0.007	0.001	0.006	0.001	**0.630**	7	0.230	0.009
09BSW 135	Guano	0.074	0.299	0.528	0.050	0.178	0.026	0.002	0.024	0.003	0.013	0.002	0.007	0.001	0.005	0.001	**1.215**	5	0.619	0.026
09BSW 136	Guano	0.092	0.168	0.324	0.033	0.118	0.020	0.002	0.019	0.003	0.017	0.004	0.010	0.002	0.010	0.001	**0.824**	8	0.478	0.036
09BSW 137	Guano	0.034	0.144	0.241	0.024	0.084	0.012	0.001	0.011	0.001	0.007	0.001	0.004	0.001	0.004	0.001	**0.569**	5	0.210	0.019
09BSW 138	Guano	0.038	0.212	0.435	0.046	0.161	0.027	0.002	0.023	0.002	0.010	0.002	0.004	0.000	0.004	0.001	**0.965**	5	0.511	0.055
09DJT 001	Guano	0.003	0.020	0.029	0.003	0.008	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.065**	3	0.011	0.000
09DJT 002	Guano	0.001	0.005	0.009	0.001	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**0.020**	4	0.002	0.000
09DJT 003	Guano	1.429	0.636	1.698	0.229	0.912	0.223	0.019	0.231	0.042	0.255	0.051	0.144	0.020	0.115	0.014	**6.018**	15	2.525	0.507
09DJT 005	Guano	0.215	0.754	1.365	0.154	0.519	0.082	0.007	0.077	0.009	0.042	0.008	0.023	0.003	0.021	0.003	**3.280**	6	0.635	0.063
09DJT 007	Guano	0.604	0.026	0.106	0.024	0.140	0.058	0.004	0.067	0.014	0.096	0.021	0.063	0.009	0.054	0.006	**1.293**	26	1.953	0.044
09DJT 008	Guano	0.258	0.262	0.501	0.049	0.160	0.031	0.004	0.031	0.005	0.036	0.009	0.029	0.005	0.032	0.005	**1.417**	11	0.672	0.032
09DJT 010	Guano	0.168	0.147	0.362	0.041	0.157	0.032	0.002	0.027	0.005	0.030	0.007	0.022	0.004	0.024	0.004	**1.031**	12	0.425	0.046
09DJT 012	Guano	0.310	0.487	0.942	0.106	0.352	0.068	0.007	0.067	0.011	0.064	0.013	0.036	0.005	0.029	0.004	**2.500**	9	0.964	0.056
09DJT 013	Guano	0.060	0.112	0.305	0.036	0.119	0.019	0.001	0.016	0.002	0.008	0.001	0.004	0.001	0.003	0.000	**0.687**	5	1.270	0.017
09DJT 014	Guano	0.009	0.025	0.058	0.007	0.022	0.003	0.000	0.003	0.000	0.001	0.000	0.001	0.000	0.001	0.000	**0.131**	5	0.157	0.002
09DJT 015	Guano	0.008	0.015	0.029	0.003	0.010	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.000	**0.073**	7	0.038	0.002
09DJT 016	Guano	0.018	0.089	0.128	0.011	0.033	0.004	0.000	0.005	0.001	0.002	0.000	0.001	0.000	0.001	0.000	**0.295**	4	0.218	0.002
09LVA 020	Guano	0.055	0.027	0.070	0.008	0.025	0.005	0.001	0.004	0.001	0.006	0.002	0.007	0.002	0.012	0.002	**0.227**	16	0.578	0.091
09LVA 023	Guano	0.075	0.279	0.452	0.038	0.108	0.015	0.002	0.016	0.002	0.009	0.002	0.005	0.001	0.004	0.001	**1.008**	4	0.655	0.010
09LVA 024	Guano	0.004	0.007	0.013	0.001	0.004	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	**0.033**	8	0.008	0.001
09LVA 025	Guano	0.414	0.277	0.609	0.066	0.261	0.055	0.006	0.062	0.011	0.072	0.015	0.045	0.007	0.038	0.005	**1.944**	13	0.373	0.073
09DJT 009	Shark Bowl	0.011	0.032	0.060	0.006	0.020	0.003	0.000	0.003	0.000	0.002	0.000	0.001	0.000	0.001	0.000	**0.142**	6	0.045	0.002
09BSW 139	Camp Skarn	0.053	0.720	0.894	0.071	0.189	0.018	0.002	0.022	0.002	0.008	0.002	0.006	0.001	0.005	0.001	**1.991**	2	0.042	0.001
09BSW 140	Camp Skarn	0.030	0.222	0.274	0.021	0.059	0.007	0.001	0.009	0.001	0.005	0.001	0.003	0.000	0.002	0.000	**0.638**	4	0.035	0.001
09BSW 141	Camp Skarn	0.004	0.007	0.011	0.001	0.003	0.001	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.000	0.000	**0.029**	8	0.033	0.002
09BSW 142	Camp Skarn	0.012	0.002	0.003	0.000	0.002	0.002	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	**0.029**	27	0.010	0.001
09DJT 017	Camp Skarn	0.178	0.306	0.377	0.033	0.090	0.012	0.002	0.017	0.003	0.022	0.006	0.020	0.003	0.020	0.003	**1.092**	9	0.028	0.003
09DJT 018	Camp Skarn	0.030	0.068	0.091	0.008	0.026	0.006	0.001	0.005	0.001	0.005	0.001	0.003	0.000	0.003	0.000	**0.249**	8	0.025	0.001
09DJT 019	Camp Skarn	0.081	0.009	0.014	0.001	0.007	0.006	0.001	0.010	0.002	0.013	0.002	0.004	0.000	0.002	0.000	**0.135**	27	0.044	0.001
Silt Sample																				
SILT 1-SHARK	Shark Bowl	0.017	0.023	0.047	0.005	0.017	0.003	0.000	0.004	0.001	0.003	0.001	0.002	0.000	0.002	0.000	**0.124**	9	0.042	0.002
SILT 2-GILL ZONE	Camp Skarn	0.013	0.021	0.035	0.004	0.014	0.003	0.000	0.003	0.000	0.002	0.000	0.001	0.000	0.001	0.000	**0.099**	9	0.029	0.001
SILT 3-WEST GUANO BASIN	Guano	0.010	0.016	0.028	0.003	0.010	0.002	0.000	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	**0.075**	9	0.021	0.001
SILT 4- GUANO RIDGE	Guano	0.009	0.013	0.022	0.002	0.008	0.002	0.000	0.002	0.000	0.001	0.000	0.001	0.000	0.001	0.000	**0.062**	8	0.021	0.001

all results reported as weight %

Table 4. Geochemical assay results above 1.5 wt % TREO

Sample	**09 DJT 003R**	**09 DJT 005R**	**09 BSW 125R**	**09 DJT 012R**	**09 BSW 139**	**09 BSW 119**	**09 LVA 025**
Y2O3	1.429	0.215	0.839	0.310	0.053	0.155	0.414
La2O3	0.636	0.754	0.393	0.487	0.720	0.493	0.277
Ce2O3	1.698	1.365	0.914	0.942	0.894	0.820	0.609
Pr2O3	0.229	0.154	0.120	0.106	0.071	0.079	0.066
Nd2O3	0.912	0.519	0.457	0.352	0.189	0.261	0.261
Sm2O3	0.223	0.082	0.108	0.068	0.018	0.039	0.055
Eu2O3	0.019	0.007	0.013	0.007	0.002	0.003	0.006
Gd2O3	0.231	0.077	0.117	0.067	0.022	0.036	0.062
Tb2O3	0.042	0.009	0.021	0.011	0.002	0.005	0.011
Dy2O3	0.255	0.042	0.123	0.064	0.008	0.029	0.072
Ho2O3	0.051	0.008	0.025	0.013	0.002	0.006	0.015
Er2O3	0.144	0.023	0.072	0.036	0.006	0.016	0.045
Tm2O3	0.020	0.003	0.010	0.005	0.001	0.002	0.007
Yb2O3	0.115	0.021	0.058	0.029	0.005	0.014	0.038
Lu2O3	0.014	0.003	0.007	0.004	0.001	0.002	0.005
TREO+Y	**6.018**	**3.280**	**3.278**	**2.500**	**1.991**	**1.959**	**1.944**
Proportion HREE (Eu to Lu / TREE * 100)	**15**	**6**	**14**	**9**	**2**	**6**	**13**
ThO2	0.569	0.044	0.504	0.086	0.021	0.114	0.114
U3O8	0.225	0.031	0.049	0.026	0.001	0.030	0.009
ZrO2	6.457	6.754	3.188	2.512	0.136	1.255	1.351
Nb2O5	2.525	0.635	1.413	0.964	0.042	0.399	0.373
Ta2O5	0.507	0.063	0.154	0.056	0.001	0.030	0.073

Note: All values given in wt % of the oxide, and 'R' denotes values derived from re-analysis. Samples with no 'R' did not undergo reanalysis.

Table 5. Geochemical assay results between 1 and 1.5 wt % TREO

Sample	**09 DJT 008**	**09 BSW 131R**	**09 DJT 007R**	**09 BSW 135**	**09 BSW 114**	**09 DJT 017R**	**09 DJT 010**	**09 LVA 023**
Y2O3	0.258	0.687	0.604	0.074	0.094	0.178	0.168	0.075
La2O3	0.262	0.021	0.026	0.299	0.291	0.306	0.147	0.279
Ce2O3	0.501	0.078	0.106	0.528	0.490	0.377	0.362	0.452
Pr2O3	0.049	0.017	0.024	0.050	0.046	0.033	0.041	0.038
Nd2O3	0.160	0.103	0.140	0.178	0.151	0.090	0.157	0.108
Sm2O3	0.031	0.050	0.058	0.026	0.025	0.012	0.032	0.015
Eu2O3	0.004	0.004	0.004	0.002	0.004	0.002	0.002	0.002
Gd2O3	0.031	0.067	0.067	0.024	0.026	0.017	0.027	0.016
Tb2O3	0.005	0.015	0.014	0.003	0.004	0.003	0.005	0.002
Dy2O3	0.036	0.102	0.096	0.013	0.020	0.022	0.030	0.009
Ho2O3	0.009	0.022	0.021	0.002	0.003	0.006	0.007	0.002
Er2O3	0.029	0.066	0.063	0.007	0.009	0.020	0.022	0.005
Tm2O3	0.005	0.009	0.009	0.001	0.001	0.003	0.004	0.001
Yb2O3	0.032	0.053	0.054	0.005	0.006	0.020	0.024	0.004
Lu2O3	0.005	0.006	0.006	0.001	0.001	0.003	0.004	0.001
TREO+Y	**1.417**	**1.301**	**1.293**	**1.215**	**1.171**	**1.092**	**1.031**	**1.008**
Proportion HREE (Eu to Lu / TREE * 100)	**11**	**26**	**26**	**5**	**6**	**9**	**12**	**4**
ThO2	0.114	0.521	0.569	0.026	0.080	0.016	0.075	0.066
U3O8	0.031	0.088	0.098	0.024	0.034	0.000	0.018	0.023
ZrO2	1.204	0.552	1.201	1.351	0.286	0.073	1.351	0.534
Nb2O5	0.672	1.631	1.953	0.619	0.681	0.028	0.425	0.655
Ta2O5	0.032	0.029	0.044	0.026	0.006	0.003	0.046	0.010

Note: All values given in wt % of the oxide, and 'R' denotes values derived from re-analysis. Samples with no 'R' did not undergo reanalysis.

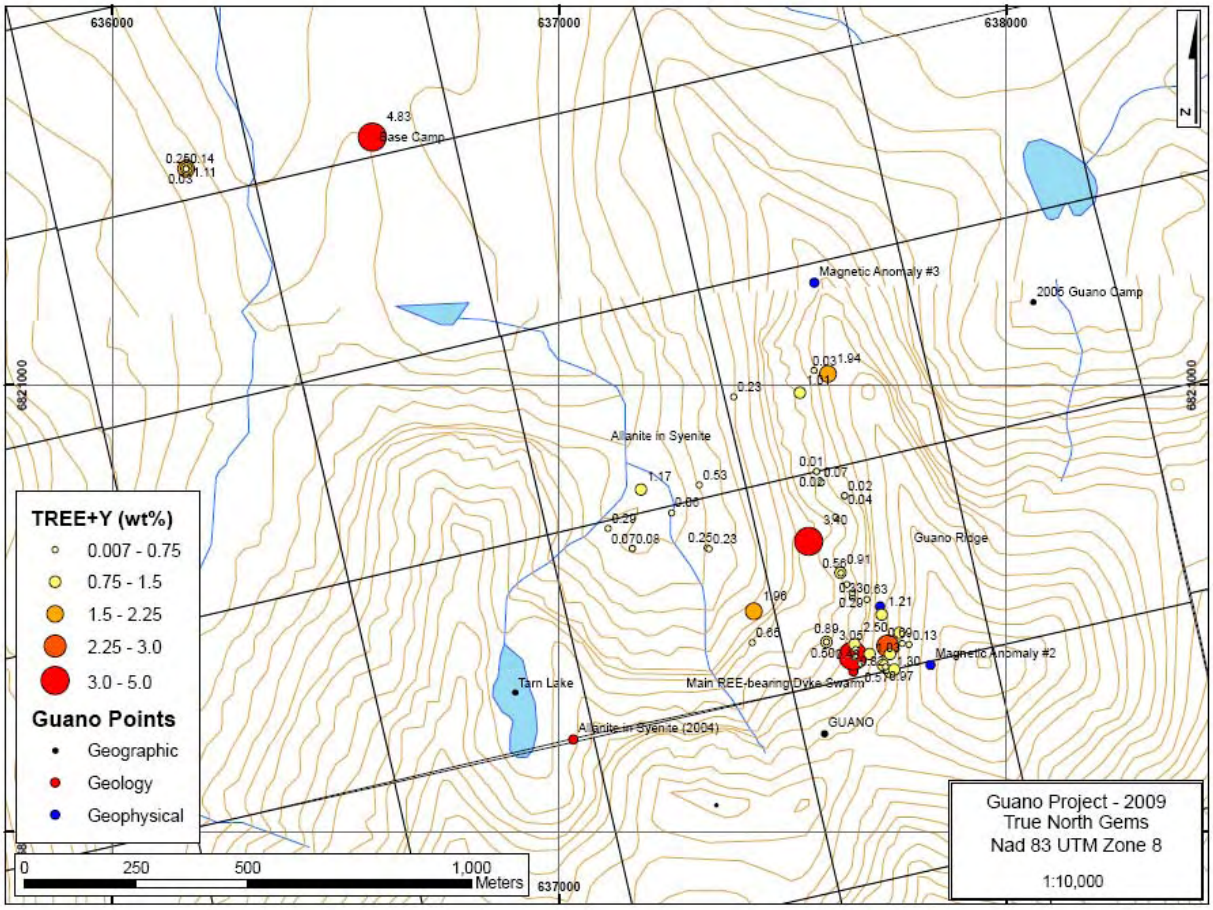

Figure 10. General TREE+Y geochemical results of the Guano Project at the Shark Property

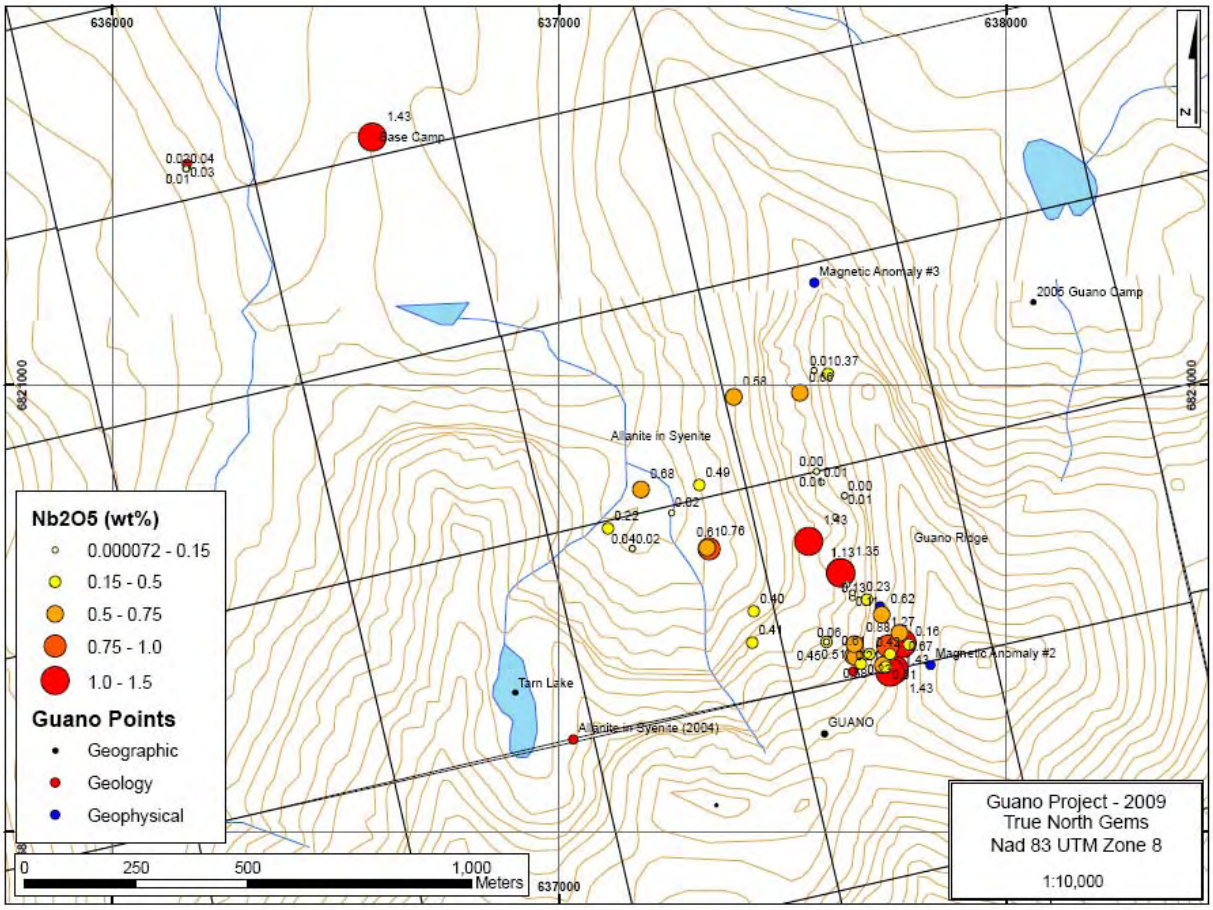

Figure 11. General Nb geochemical results of the Guano Project at the Shark Property

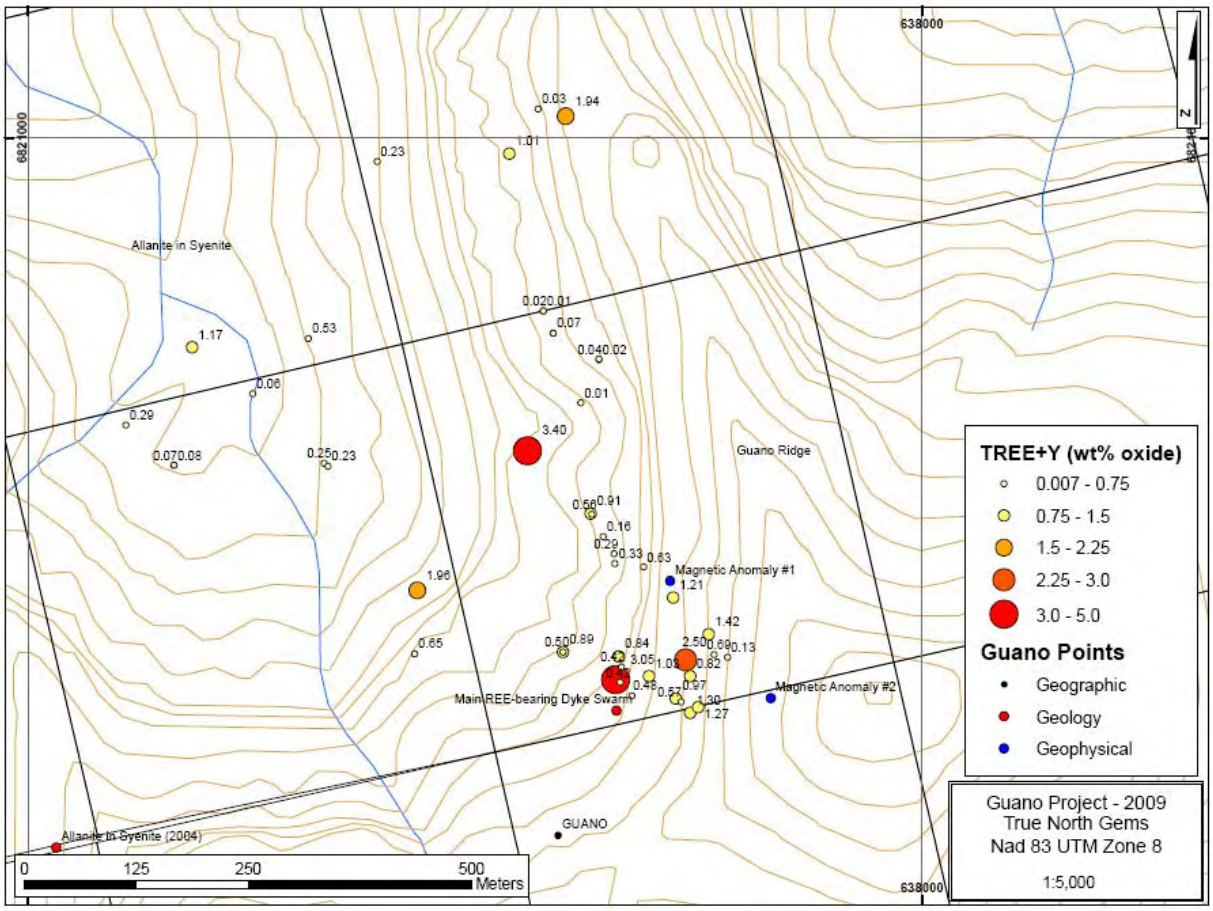

Figure 12. Rare earth element geochemical results of the Guano Ridge area

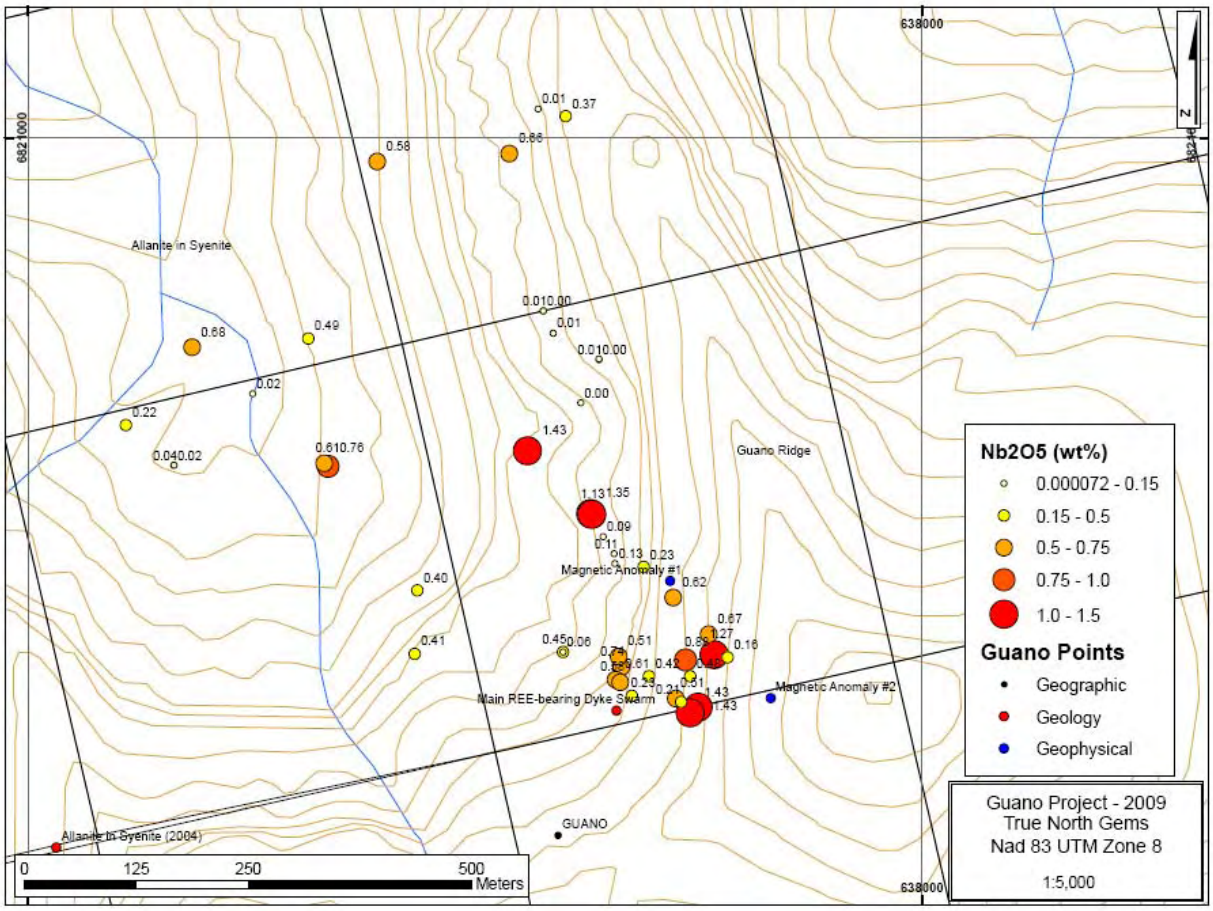

Figure 13. Niobium geochemical results of the Guano Ridge area

Assay results from the reconnaissance sampling and prospecting program at Guano are very promising. Twenty eight samples returned TREO values above 0.5 wt %, and of these 15 samples returned TREO values above 1 wt %. The highest TREO values returned from the sample suite were 6 wt % (09DJT003) and 3.3 wt % (09BSW125). It should be noted that sample 09DJT003, which yielded the highest overall grades of REE-Ta-Nb, was collected from the historical camp location of exploration conducted on the Guano prospect in the late 1970's. This sample was amongst other samples of local float and is believed to be collected from the general area.

Strongly anomalous Nb and Ta were also encountered with 31 samples grading over 0.2 wt % Nb_2O_5 and 19 samples above 0.025 wt % Ta_2O_5. The maximum Nb_2O_5 value was 2.5 wt. % (09DJT003) and maximum Ta_2O_5 value was 0.5 wt % (also 09DJT003). For reference (as of January 1, 2010) the Blue River Upper Fir carbonatite in central BC is undergoing feasibility studies with tonnage/grade data showing 11.30 million tonnes grading *198 grams per tonne* Ta_2O_5 (or ~0.024 wt. % Ta_2O_5) and *1,170 grams per tonne* Nb_2O_5 (or ~0.157 wt. % Nb_2O_5).

Interestingly, the proportion of HREE (Eu to Lu) weakly correlates with Nb content. This may indicate the presence of a HREE-Nb mineralizing event or perhaps the influence of Nb-REE mineral phases, such as fersmite (see section on x-ray investigations), fergusonite ($REENbO_4$) or aeschynite ($REETiNbO_6$).

Zirconium (Zr) content of the rocks is elevated, with values ranging up to 50,000 ppm (detection limit) but averaging ~6,000 ppm. Uranium (U) contents are variable, averaging ~200 ppm with one sample (09DJT003) reaching 1900 ppm. Thorium (Th) contents are also variable, averaging ~625 ppm and reaching 5,000 ppm. Zirconium, Th, and U all weakly to moderately correlate with TREE content.

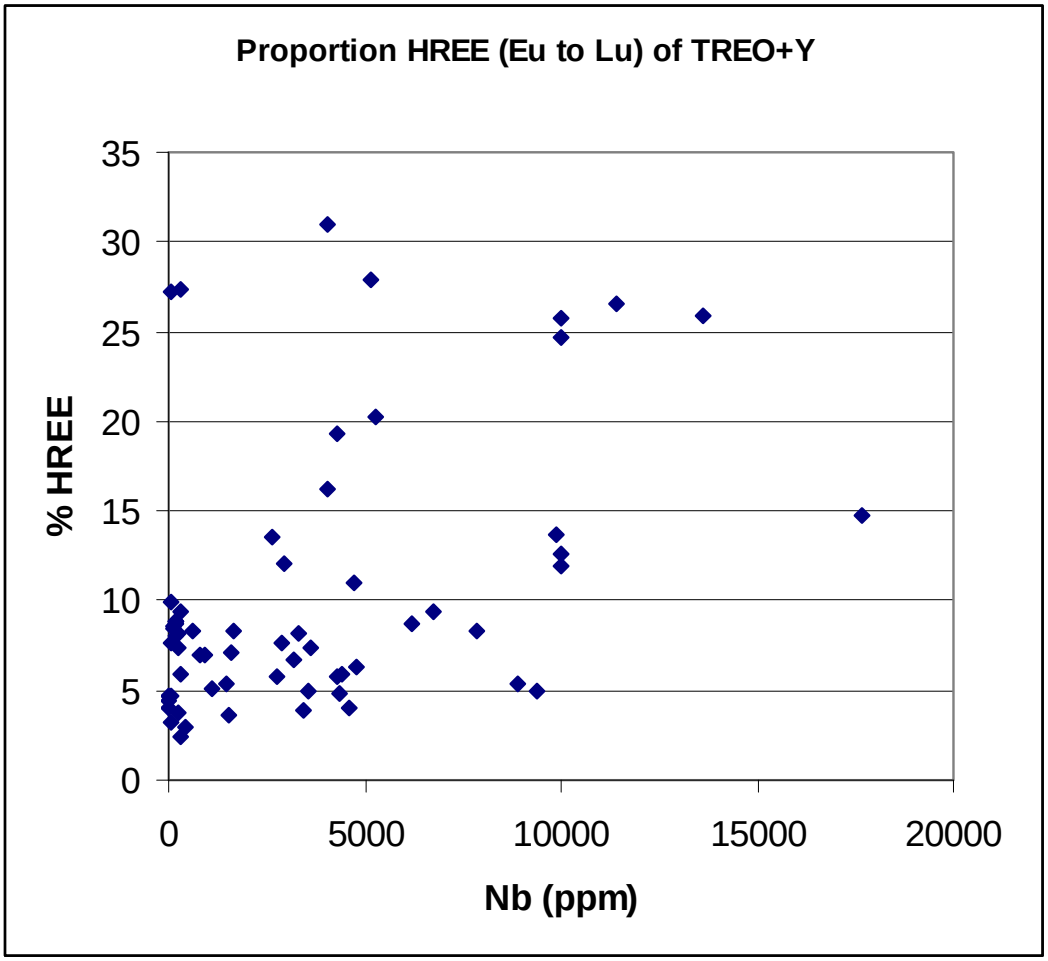

Figure 14. Proportion of HREE vs. Nb content

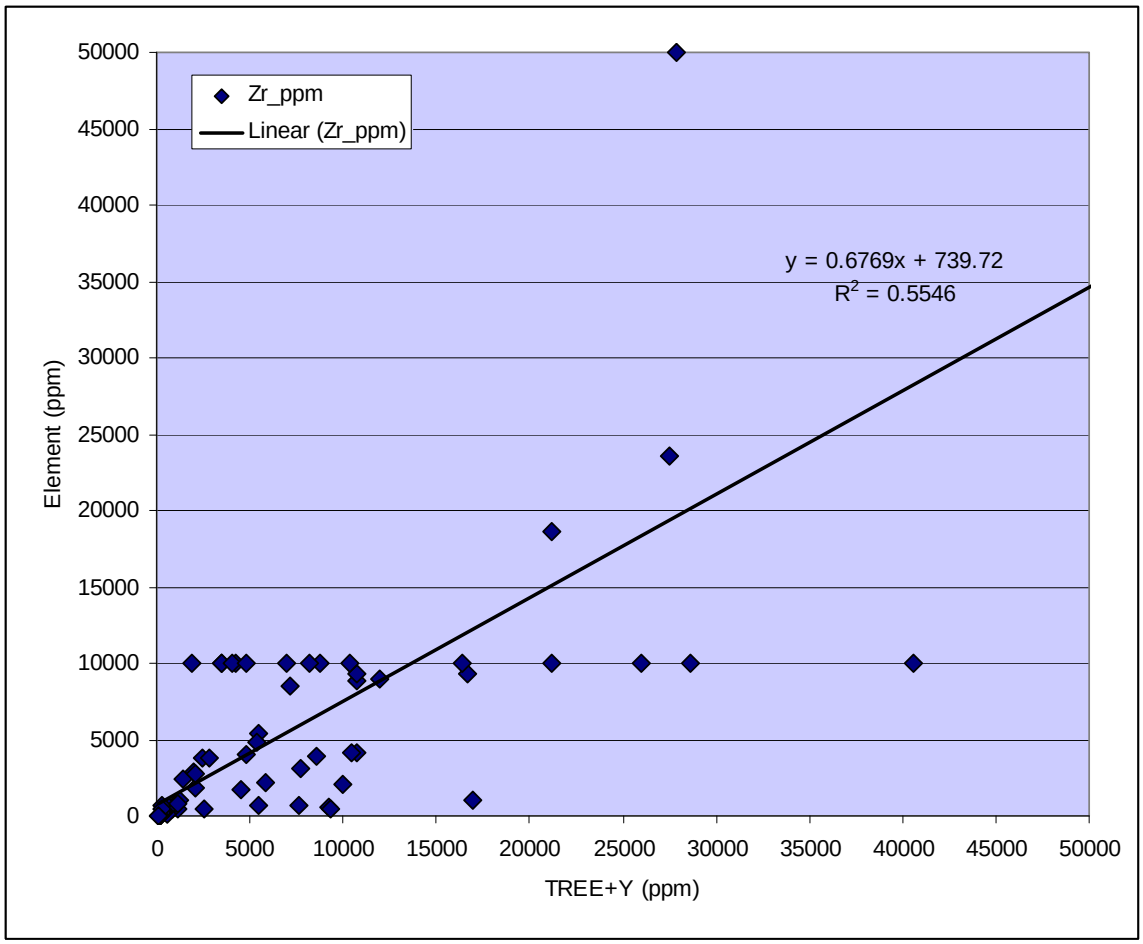

Figure 15. Correlation between TREE+Y content and Zirconium

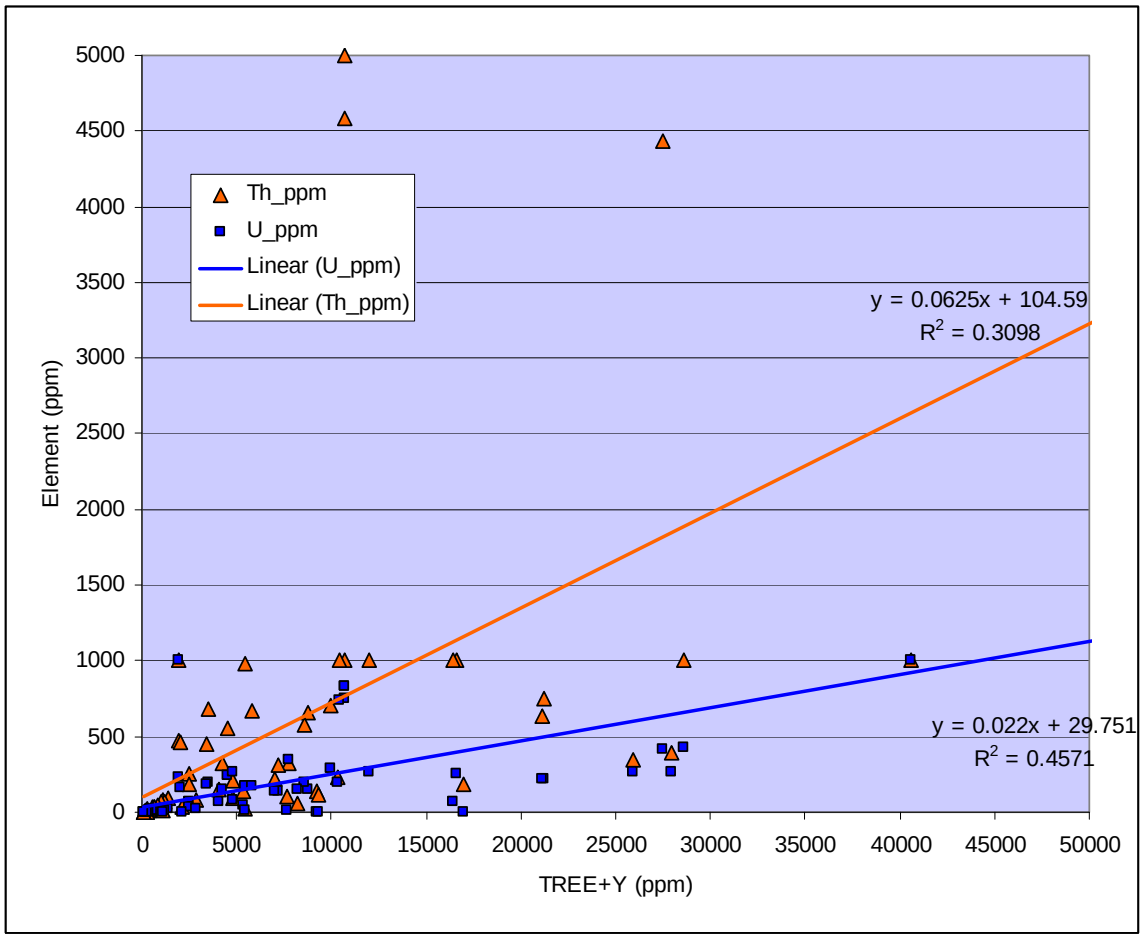

Figure 16. Correlation between TREE+Y content and thorium as well as uranium.

Barium (Ba) concentrations are quite variable and range from near detection limit (to 39.2 ppm) to above detection limit (10,000 ppm). No correlation exists between Ba and TREE content, as might be expected in some carbonatite related REE systems. However, this may be due to the geological variety of sampled material. Hafnium (Hf) concentrations range over three magnitudes of order and correlate well with Zr. This suggests that it is locked in with the main Zr mineral, zircon. Other possible economic metals such as Ag, Cu, Mo, Pb, Zn, Ni, and W do not show appreciable concentrations.

Again, the trends seen in this dataset are preliminary, as only a small sample suite was collected and included a variety of geological materials, such as dyke, skarn, syenite and metasediment. Extensive sampling is required to better assess the strength and geochemical nature of mineralization at the three main targets of the Guano Project: Guano Ridge, Camp Skarn, and Shark Bowl.

7.3 Discussion of Overlimit Reanalysis

Sample reanalysis at ALS Chemex was undertaken on 5 pulp samples that reached the upper detection limit for various REEs, Th, U, Zr, and Nb. Two additional samples with lower and moderate REE values were chosen for reanalysis to cover the range of analytical results.

Samples at upper detection limits (with elements):
09DJT 003 - Ce, Dy, Er, Gd, Pr, Sm, Y, and also over detection limit for: Nb, Th, U, Zr
09DJT 005 - Ce, Pr, and also over for Zr
09BSW 125 - Dy, Nb, and also over for Th and Zr
09BSW 131 - Nb, and also Th
09DJT 007 - Nb, and also Th

For the below limit samples, **DJT012** (~500 ppm Dy, Gd) and **DJT017** (decent REEs, but very low Th, U and Zr) were chosen for reanalysis. Sample BSW125 was close to detection limit on a number of REEs, so it was used to compare analytical accuracy near the detection limit. Two of the three samples that reached the upper limits of REE values saw increases in weight percents (wt. %) of the TREE+Y oxide. The one remaining REE overlimit sample saw a very slight decrease in wt. % TREE+Y oxide. All samples with elemental ranges under detection limits saw very good reproducibility on the suite of elements.

Table 6. Select Elements from Reanalysis and TREE/Nb Oxide Sums.

SAMPLE	Ce_ppm	Dy_ppm	Nb_ppm		TREE+Y (wt % ox.)	Nb_2O_5 (wt % ox.)
09DJT 003	10000	1000	10000		*4.833*	*1.431*
09DJT 003-ReRun	14500	2220	17650		**6.018**	**2.525**
09DJT 005	10000	339	4280		*3.051*	*0.612*
09DJT 005-ReRun	11650	365	4440		**3.280**	**0.635**
09DJT 007	951	801	10000		*1.297*	*1.431*
09DJT 007-ReRun	907	833	13650		**1.293**	**1.953**
09BSW 131	674	834	10000		*1.269*	*1.431*
09BSW 131-ReRun	669	886	11400		**1.301**	**1.631**
09BSW 125	8520	1000	10000		*3.404*	*1.431*
09BSW 125-ReRun	7800	1075	9880		**3.278**	**1.413**
09DJT 012	8180	509	6170		*2.495*	*0.883*
09DJT 012-ReRun	8040	556	6740		**2.500**	**0.964**
09DJT 017	3310	201	175.5		*1.106*	*0.025*
09DJT 017-ReRun	3220	193	198		**1.092**	**0.028**

MEMS81 vs. MEMS81-h Reanalysis Accuracy Plots

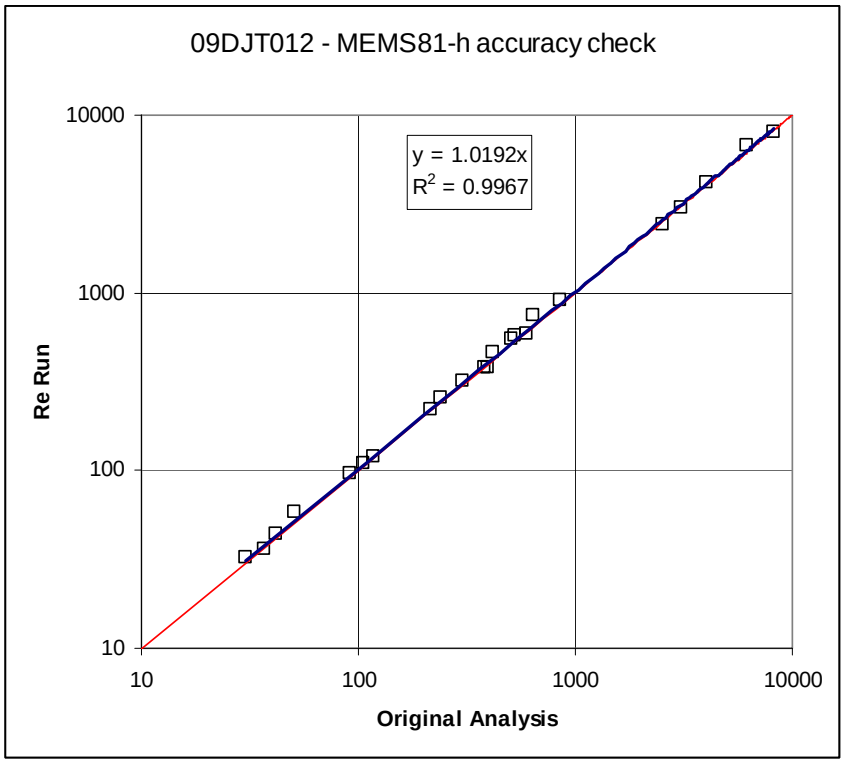

Figure 17. MEMS81-h accuracy check for 09DJT012 for all elements

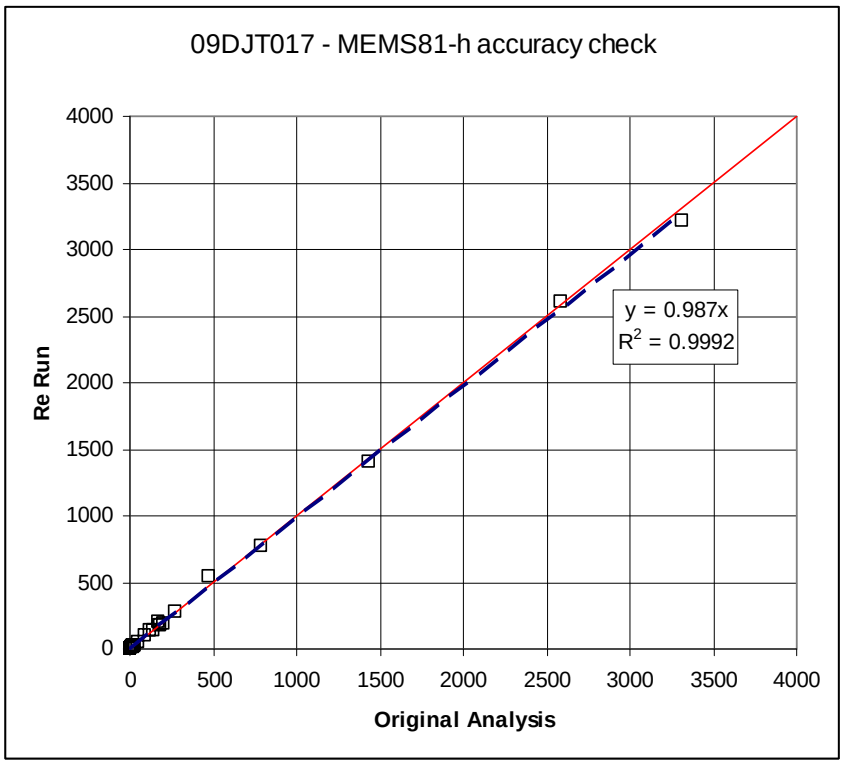

Figure 18. MEMS81-h accuracy check for 09DJT017 for all elements

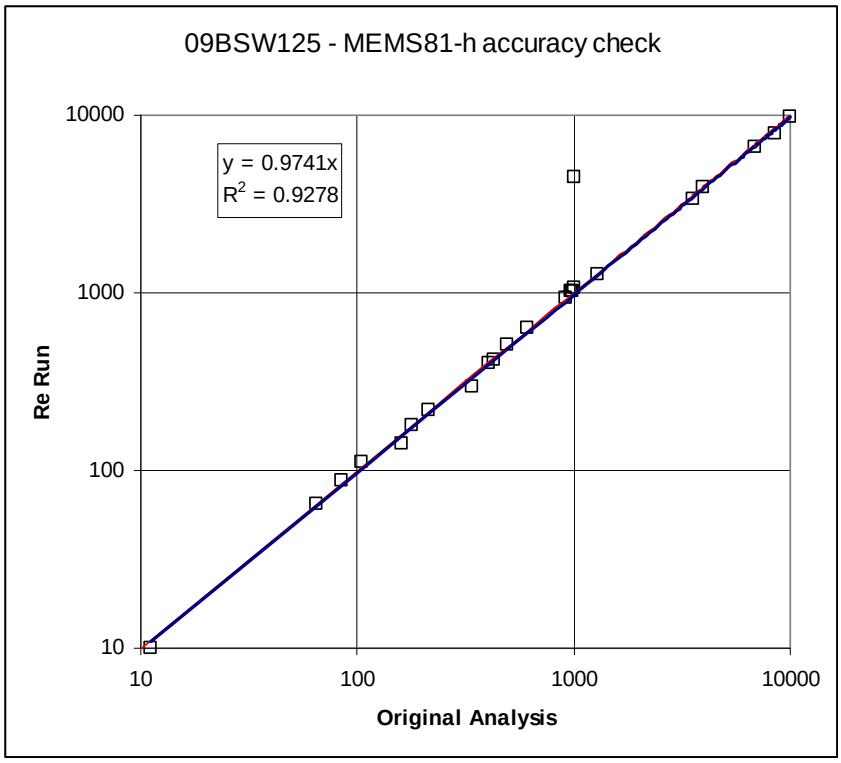

Figure 19. MEMS81-h accuracy check for 09BSW125 for all elements

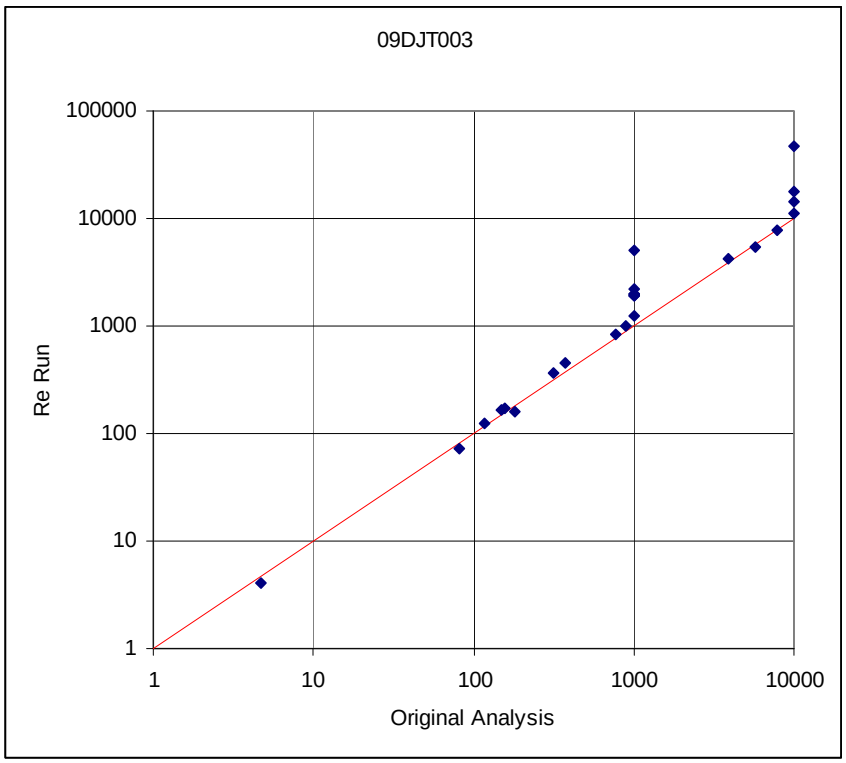

Figure 20. MEMS81-h accuracy check for 09DJT0103 for all elements

7.4 Geochemical Trends

Rare earth element geochemical data is commonly normalized to a baseline dataset to assess petrogenetic trends within the rocks. The most commonly used normalization dataset is the CI Chondrite, which is interpreted to represent the unfractionated bulk earth. This normalization removes the effect of differential cosmic abundance of the REEs that normally produces a 'zig zag' shape across the REEs. An unfractionated sample normalized to CI Chondrite would yield a flat line across the REE. Accordingly, any values other than a normalization of 1 (meaning sample = CI) will give clues to the geological history of a particular sample. Values below 1 indicate depletion of REE and values above 1 indicate enrichment in REE above the unfractionated bulk earth model. The rocks from the Guano project are anomalously enriched in all the REE, but show some peculiar trends.

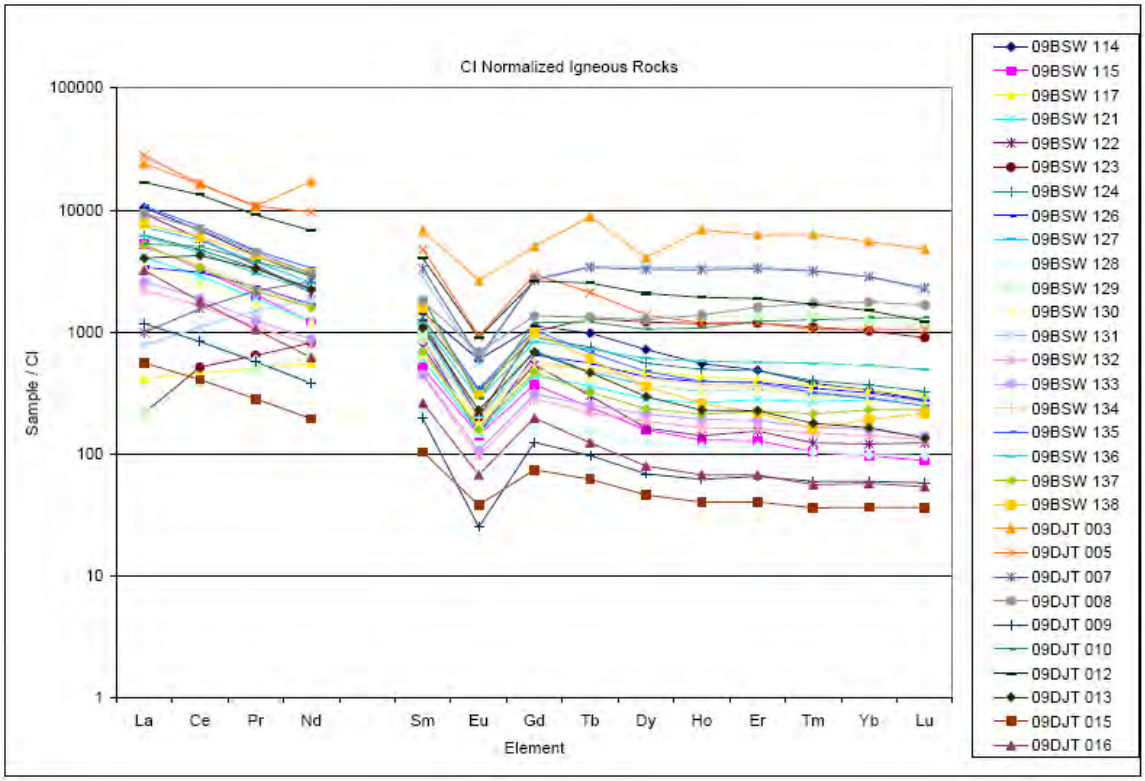

Figure 21. REE Normalized diagram of igneous rocks from the Guano Project

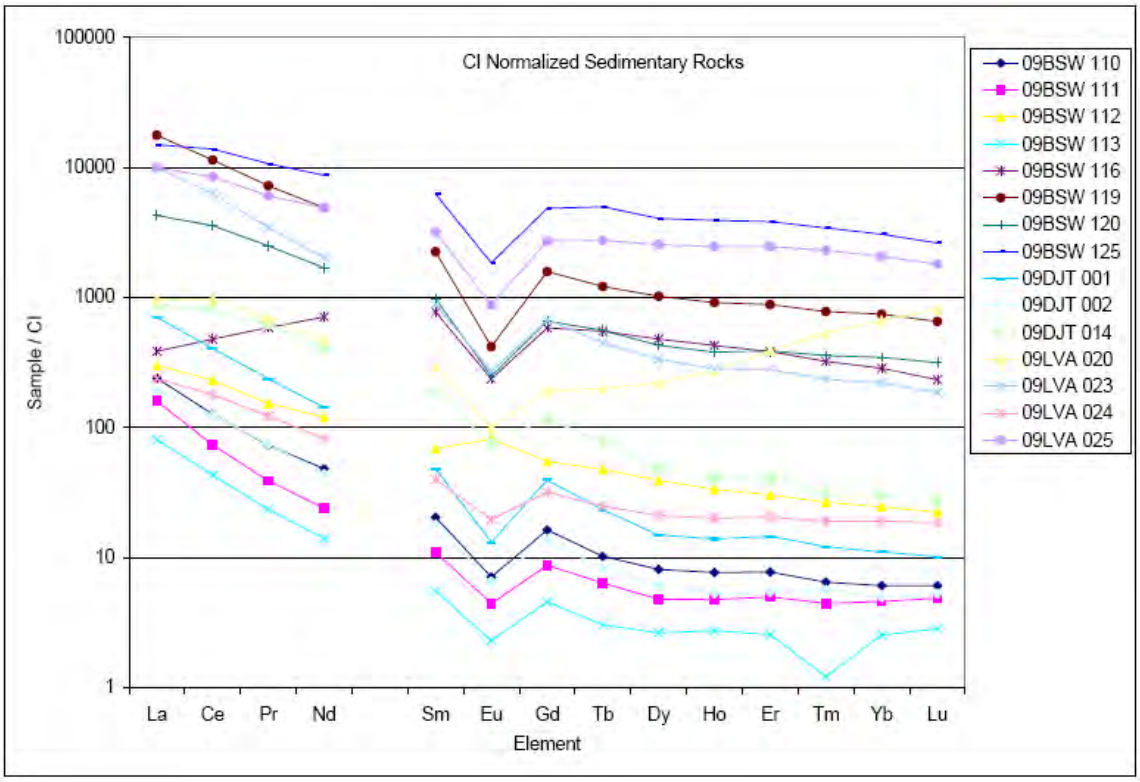

Figure 22. REE Normalized diagram of stratified (sedimentary or possibly skarn) rocks from the Guano Project

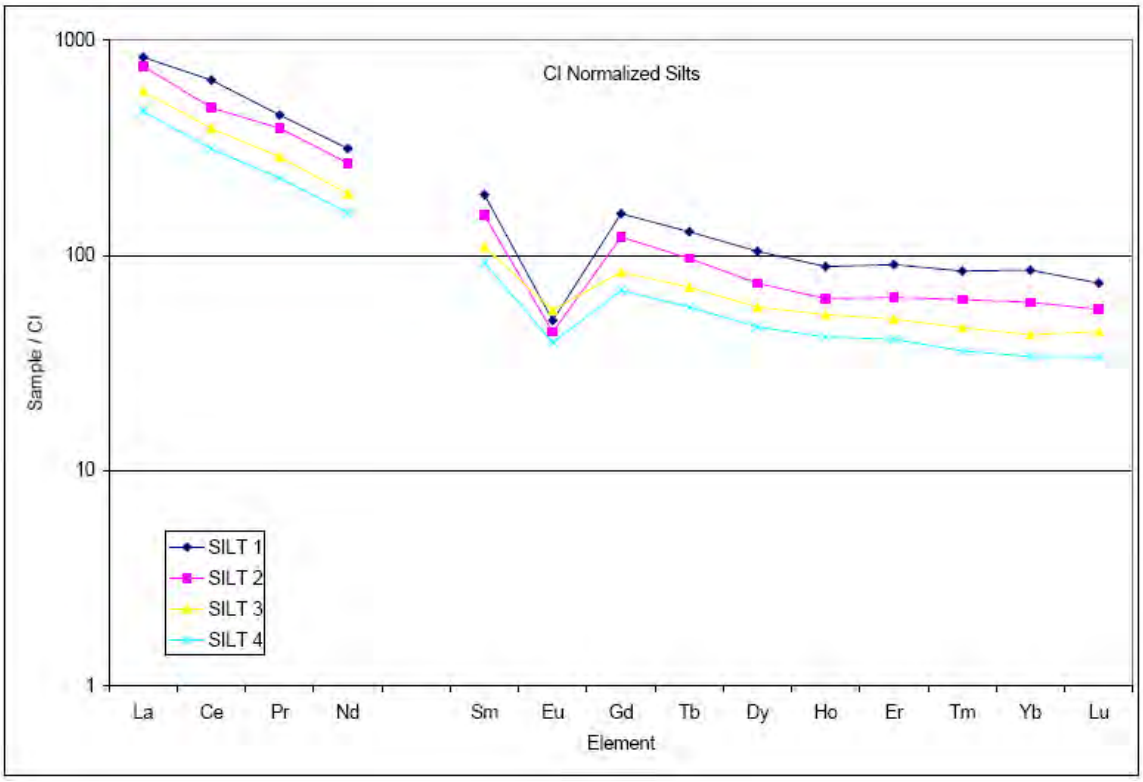

Figure 23. REE Normalized diagram of silt samples from the Guano Project

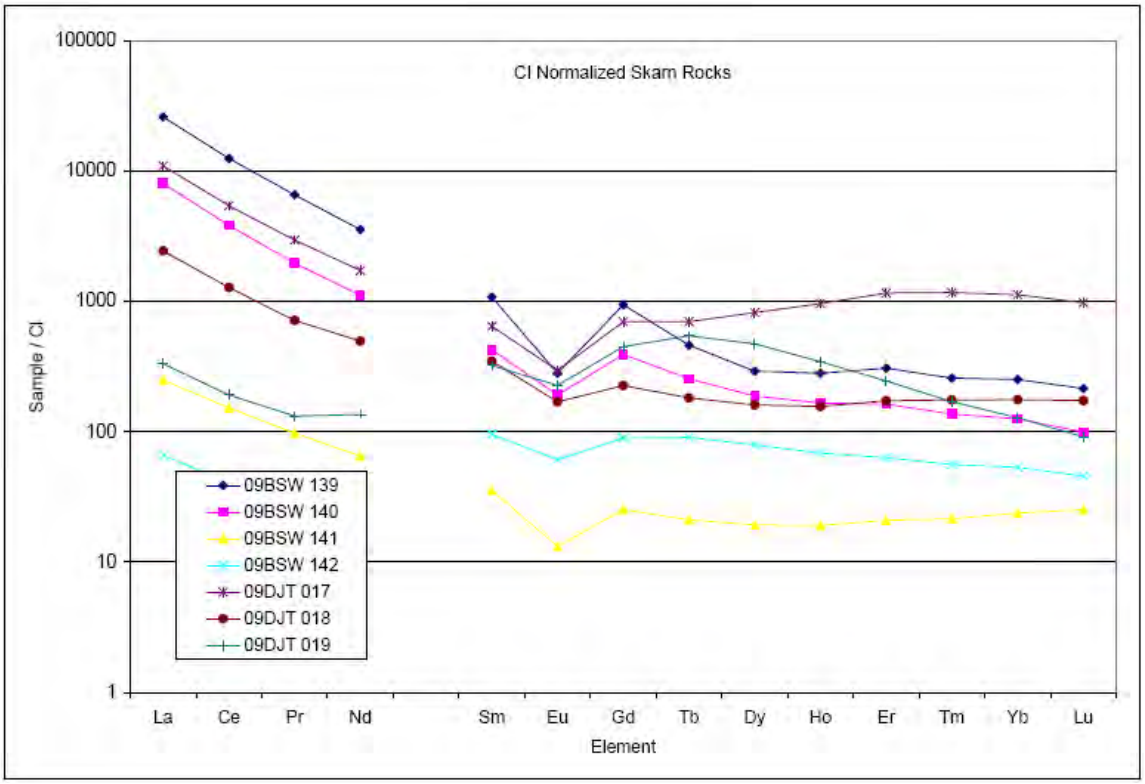

Figure 24. REE Normalized diagram of skarn samples from the Guano Project

As a bulk observation, the rare earth element profiles show that samples originating from the Guano Project are preferentially enriched in the light REEs and show enrichments up to ~30,000 times the CI chondritic value. Nearly all samples show a negative Eu anomaly, attesting to the REE's likely association with a fractionated igneous body undergoing early crystallization of plagioclase. Heavy rare earth element slopes are typical, generally shallowly decreasing from Gd onwards to Lu.

The more peculiar geochemical trends include samples 09LVA020 (sedimentary), 09DJT019 (skarn), 09BSW142 (skarn), 09DJT017 (skarn), 09BSW125 (skarn/sedimentary), 09DJT007 (igneous), 09BSW133 (igneous), and 09DJT003 (igneous). These samples show anomalous heavy rare earth enrichment patterns with positive slopes from Gd onwards or at a minimum a local upward concentration from Eu to Dy (such as in sample 09DJT019).

The trends in REE profiles from rocks of the Guano Project suggest that several styles of REE mineralization are present, each with their own petrogenetic and mineralogical implications. Additional studies are required to sort out the geological importance and economic significance of these features.

7.5 Silt Geochemistry

Silt samples show elevated TREE (including Y) and Nb values. Interestingly, the Guano Ridge area that hosts the felsic dyke swarm and exhibits the highest grab sample assays returned the lowest TREE value of 523 ppm (and 144 ppm Nb), which suggests that either the REE-bearing material is not being transported effectively to the streams or that this should be used as a weighted baseline from a drainage that is partially mineralized. The highest TREE response (1047 ppm TREE and 294 ppm Nb) came from Shark Bowl where the outcrop is dominantly syenite with lesser xenoliths. This value prompts a systematic sampling of the bulk syenite to assess the viability of a bulk tonnage mining scenario. These numbers create an effective baseline for comparing further silt geochemical data.

Table 7. Silt Sample Results

SAMPLE	TREE+Y (ppm)	Th (ppm)	U (ppm)	Zr (ppm)	Nb (ppm)	Ta (ppm)
SILT 1-SHARK	1047.18	70.4	13.85	767	294	17
SILT 2-GILL	837.05	46.2	13.1	494	199.5	11.9
SILT 3-W GUANO BASIN	638.63	28.9	8.64	580	144	8.7
SILT 4- GUANO RIDGE PROPER	523.64	37.6	13.35	357	144.5	6

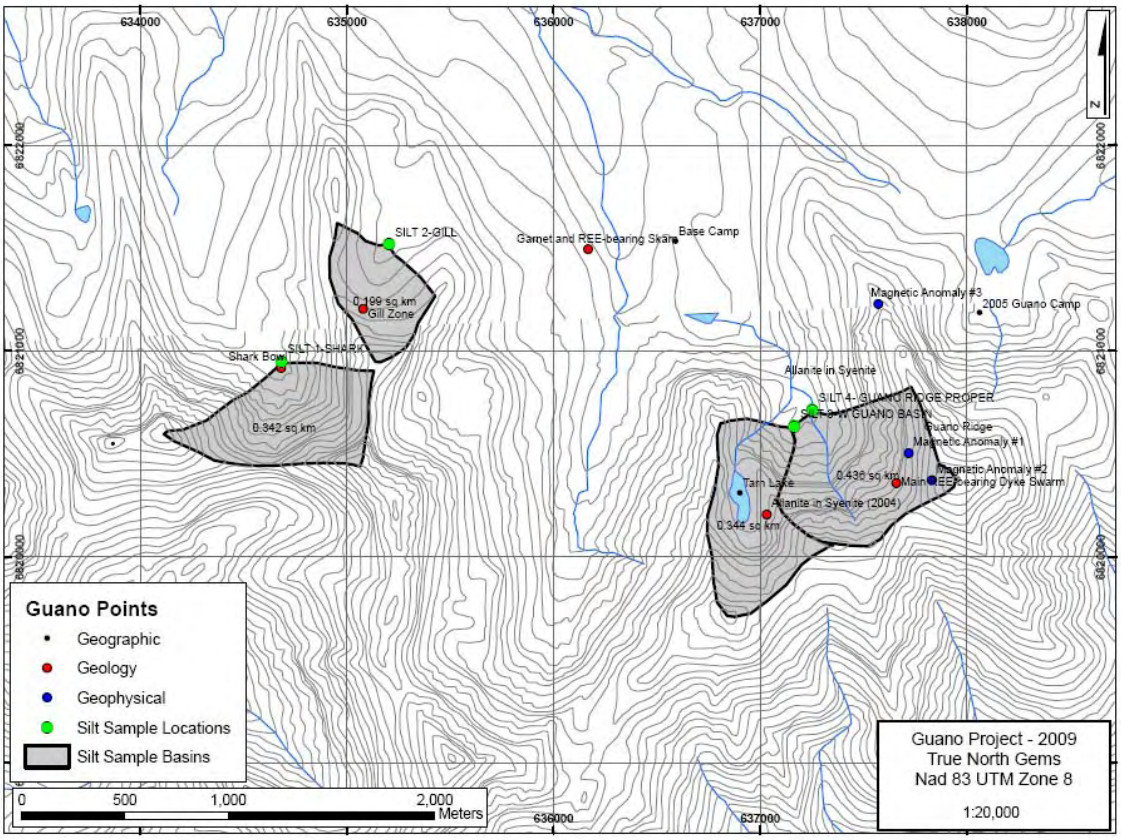

Figure 25. Drainages for silt samples collected during the 2009 Guano Project.

7.6 Scintillometer Survey

The Rare Earth Elements (REE's) are often accompanied by significant amounts of Uranium (U) and Thorium (Th). Both of these elements are significant sources of natural radioactivity, making their detection in rock samples possible by the use of a scintillometer. These devices non-selectively detect radioactivity from a variety of sources and give a readout in 'Counts Per Second' (cps). The three most dominant sources of radioactivity in natural samples are Th, U, and K.

It was previously known that at the Shark Property a REE and Th skarn had been mapped alongside the flank of Guano Ridge and that the allanite in the beryl bearing quartz veins of Shark Bowl contained some Th. Consequently, the scintillometer was used as a tool to hone in on rocks that had significant Th (and U), and therefore might also contain significant REE's.

Each day of field work was accompanied by the scintillometer and several background levels for different rocks types were established. In general, the igneous rock types showed the highest background readings. The syenite showed variable background values, likely due to its heterogeneity. Areas with anomalous readings of radioactivity depended on the local host rocks, however, any values above 500 cps were considered weakly anomalous and those above 1000 cps were strongly anomalous. Rocks found in the main dyke swarm reached values of up to 8000 cps.

Table 8. Background Scintillometer Values

Rock Type	**Background CPS**
Limestone	50
Silty metasediments	100
Metavolcanics	200
Syenite	200 – 400

Many samples that showed high radioactivity also had moderate to strong REE enrichment. However, it should be noted that many samples with REE enrichment did not show

any radioactivity above background. This was observed for allanite in quartz veins, allanite (?) in nodules within ‘dykes’, and allanite-garnet skarn.

A field portable XRF analyzer was also used on the Guano Project to assess the REE content of samples, primarily to assess elemental content of collected samples by field staff after a day of traverse. The hand held unit was particularly useful due to the fact that there was not always a positive correlation between scintillometer response and REE content. This was noted after on first day of prospecting when a fan of the REE-bearing mineral allanite did not show any additional response on the scintillometer over the low background of ~200 cps. Unfortunately, the pXRF unit does not provide quantitative REE analyses and only the presence of elevated REEs can be detected using peak locations of the most abundant REEs (normally La, Ce and Nd). This lack of correlation was seen in the section on geochemistry of the samples where the scatter plots show that although a rough correlation between the REEs and Th or U, radioactivity is not a ubiquitous signature of the REE mineralization.

7.7 X-Ray Investigations

Encouraging geochemical results from the Guano suite of rocks prompted more detailed investigations of sample mineralogy, as the host of REE mineralization is an important variable for metallurgy. Seven samples were submitted to the UBC x-ray laboratory at the Department of Earth and Ocean Sciences for Rietveld refinement of powder X-ray diffraction data. The samples submitted comprise a variety of mineralization styles, mineralization intensity, and proportion of HREE.

Table 9. Samples Submitted for Rietveld Refinement

Sample	TREO + Y (wt %)	% HREE (Eu to Lu)	Nb2O5 (wt %)	Ta2O5 (wt %)	Field Comments
09 BSW 125	3.278	14	1.413	0.154	Local Float. Scint reading 2000 to 4000 cps. Black and white (mostly black) fine to coarse grained carbonate rich – variable pyrite up to 2% in places.
09 BSW 129	0.416	**31**	0.581	0.054	Outcrop. At base of steep area. Hot area with 1500 – 5000 cps, orange brown weathering, tan to dark green medium grained rock on fresh surface. Area sampled is 5 – 7 m along the slope. Dyke?
09 BSW 131	1.301	26	1.631	0.029	Local Float. Mostly fine grained (dyke?) tan coloured, some coarse grained areas, very hot – 6000 to 7000 cps. Numerous ½ m sized and smaller boulders.
09 DJT 003	**6.018**	15	**2.525**	**0.507**	"HOT" rock found at camp from historical geo camp. Non descript grey rock with minor banding, likely metavolcanic in origin or possibly chill margin of dyke.
09 DJT 005	3.280	6	0.612	0.059	Local float at base of outcrop. Medium to coarse grained intrusive with heavy alteration. Weathered surface shows "white porcelain" squares while fresh surface shows lavender colour and powdery texture of same mineral. Abundant quartz amongst dark green to black matrix.
09 DJT 007	1.293	26	1.953	0.044	Small hot (~5000 cps) dyke cutting metaseds and volcanics. Less quartz than dykes at cliff base. Of note are abundant stringers and fluid infiltration.
09 DJT 009	0.142	6	0.045	0.002	Local float. Allanite dominant quartz vein in syenite for bulk analysis from Shark Bowl. Historical bastnaesite identified in thin section from same area.

* %HREE defined as: Sum of oxides from Eu through Lu / TREO
** Maximum values shown in **bold**.

Table 10. Results of Rietveld quantitative phase analysis (wt.%) sorted according to abundance and rare metal content. Rock name as derived from mineralogy and assay results for the samples are also given.

Mineral	Ideal Formula	09DJT-003	09DJT-005	09DJT-007	09DJT-009	09BSW-125	09BSW-129	09BSW-131
General mineral phases sorted by overall phase abundance								
Quartz	SiO_2	23.6	38.2	77.1	19.6	26	48.8	74
Plagioclase	$NaAlSi_3O_8 – CaAl_2Si_2O_8$				68.3		7.7	
Diopside	$CaMg(CO_3)_2$	39	4.7			6	4	
Actinolite	$Ca_2(Mg,Fe^{2+})_5Si_8O_{22}(OH)_2$	7.9	6.3			12.8	16.3	
Andradite/Almandine	$Ca_3Fe^{3+}{}_2Si_3O_{12}$ / $Fe_3{}^{2+}Al_2(SiO_4)_3$		2.5			32.9		
Calcite	$CaCO_3$		3.4	11	1.2	2.6	0.8	14
K-feldspar	$KAlSi_3O_8$		15.5				17.1	
Muscovite	$KAl_2AlSi_3O_{10}(OH)_2$			7	4.5			8.6
Fluorite	CaF_2		7.9					
Ankerite / Dolomite	$Ca(Fe^{2+},Mg,Mn)(CO_3)_2$ / $CaMg(CO_3)_2$			1.4	3.7			1.2
Pyrite	FeS_2				0.3	1.5		
Magnetite	$Al_2Si_2O_5(OH)_4$				1.8			
Titanite	$CaTiSiO_5$					1.5		
Talc	$Mg_3Si_4O_{10}(OH)_2$						1.4	
Kaolinite	$Al_2Si_2O_5(OH)_4$				0.6			
Pollucite	$(Cs,Na)[AlSi_2O_6]$ nH_2O		0.5					
Siderite	$Fe^{2+}CO_3$					0.4		
Rare metal bearing mineral phases sorted by overall phase abundance								
Allanite (Ce)	$(Ce,Ca,Y)_2(Al,Fe^{2+},Fe^{3+})_3(SiO_4)_3(OH)$	16.6	10.2			10.9		
Zircon	$ZrSiO_4$	9.7	10.8	1.8		5.4	3.9	0.5
Fersmite	$(Ca,Ce,Na)(Nb,Ta,Ti)_2(O,OH,F)_6$	1.9						
Baddeleyite	ZrO_2	1.3						
Hydroxylapatite	$Ca_5(PO_4)_3(OH)$							1.2
Tazheranite	$(Zr,Ti,Ca)O_2$			0.4				0.4
Columbite				0.6				
Monazite (Ce)	$(Ce,La,Nd,Th)PO_4$			0.5				
Xenotime (Y)	YPO_4			0.3				
Total		100	100	100	100	100	100	100
Rock name by mineralogy		Skarn	Altered felsic dyke	Altered felsic dyke	Altered syenite	Skarn	Altered felsic dyke	Altered felsic dyke
TREO+Y (wt%) by assay		6.018	3.280	1.293	0.142	3.278	0.416	1.301

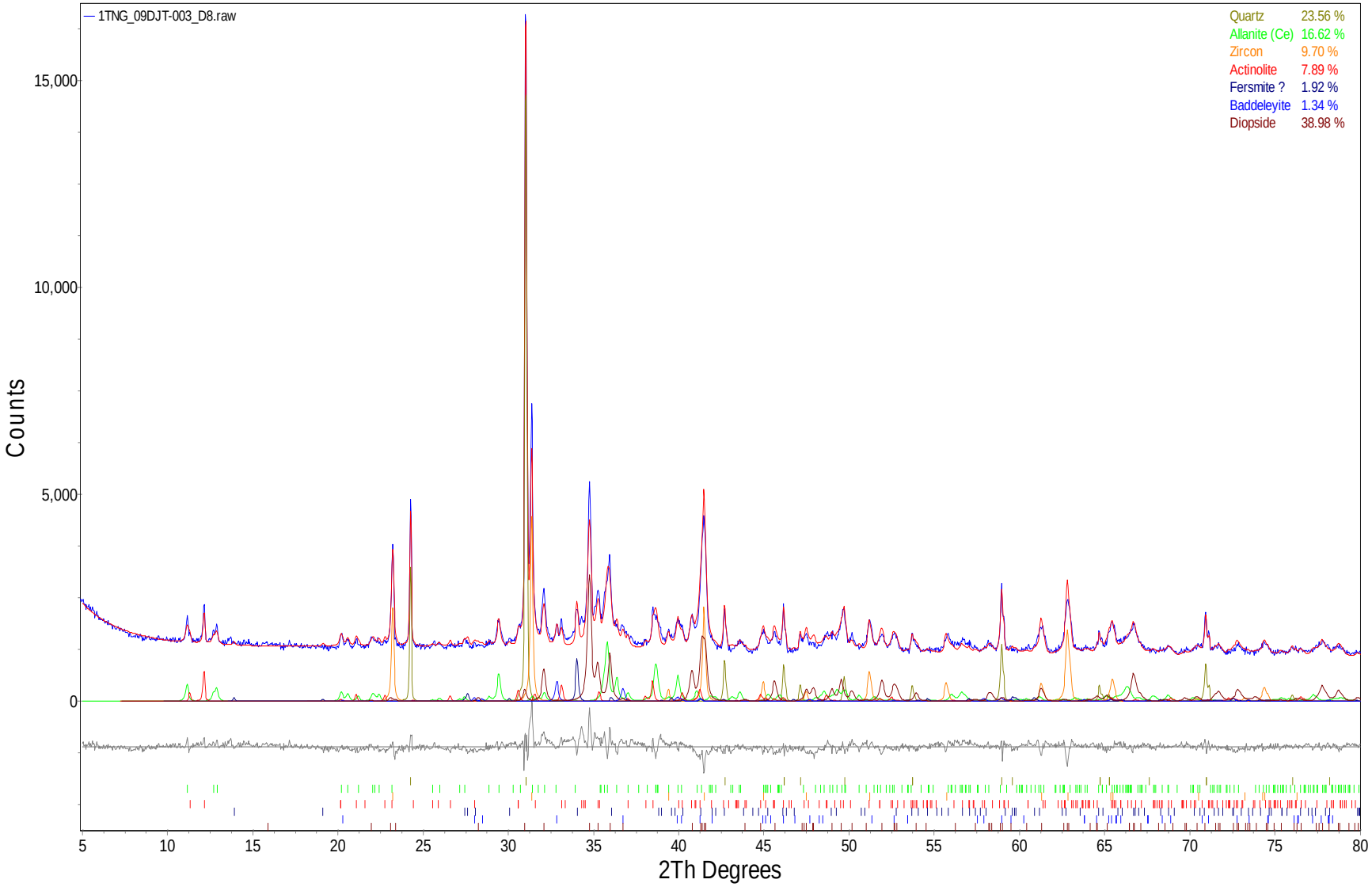

Figure 26. Rietveld refinement plot of sample True North Gems "09DJT-003" (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

The Rietveld method results have identified the following minerals which are believed to contain the majority of the rare earth elements and niobium, reported by modal percent in each sample: allanite-(Ce) (up to 16.6%), zircon (up to 10.8%), fersmite (up to 1.9%), baddeleyite (up to 1.3%), hydroxylapatite (up to 1.2%), columbite (up to 0.6%), monazite-(Ce) (up to 0.5%), tazheranite (up to 0.4%), and xenotime-(Y) (up to 0.3%). Fersmite and columbite are the main niobium and tantalum enriched minerals. Thus far, REE bearing minerals are hosted primarily in silicates (e.g., allanite), however, phosphates (e.g., monazite) and oxides (e.g., fersmite) have also been determined to be present. Bastnaesite was confirmed in earlier petrographic studies of the altered syenite, however, it was not detected in the samples sent for powder X-ray analysis. Interestingly, the proportion of HREE from assay results negatively correlates with zircon content, however, the implications of this observation are not yet known.

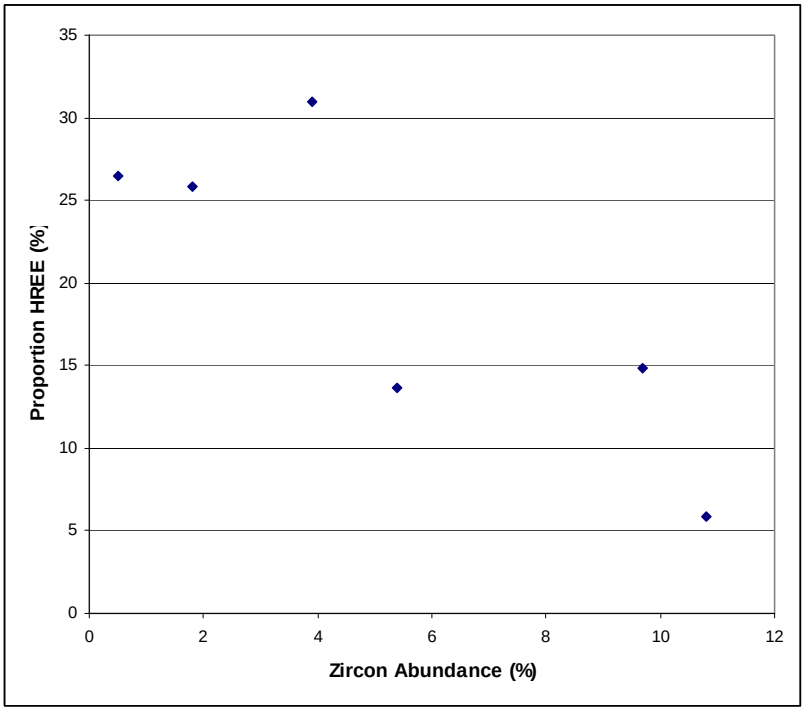

Figure 27. Zircon abundance versus proportion of HREE in sample.

The following are **rock names** appended to the samples based on mineralogy, hand sample description, and field setting.

09DJT003: diopside-quartz-allanite (zircon-actinolite) **skarn**;
09DJT005: quartz-kfeldspar-zircon-allanite (fluorite-actinolite-almandine) **altered felsic dyke**;
09DJT007: quartz-calcite-muscovite (zircon-ankerite) **altered felsic dyke**;
09DJT009: albite-quartz-muscovite-ankerite (magnetite) **altered syenite**;
09BSW125: andradite-quartz-actinolite-allanite (diopside-zircon) **skarn**;
09BSW129: quartz-kfeldspar-actinolite-plagioclase (diopside-zircon) **altered felsic dyke**;
09BSW131: quartz-calcite-muscovite–dolomite **altered felsic dyke**.

Additional mineralogical and petrographic studies are required on future samples to further define the ore characteristics and nature of mineralization at the Shark Property for all styles of mineralization.

One sample (09DJT006) of dyke with an unidentified white porcelain-like mineral and a deep purple mineral received cursory X-ray mineral ID techniques. The purple mineral showed high REE and Zr content via portable XRF analysis and was subsequently determined to be fluorite via powder X-ray diffraction. REE and Zr content, consequently, were likely due to the background levels in the host rock. The white porcelainous material was determined to be zircon.

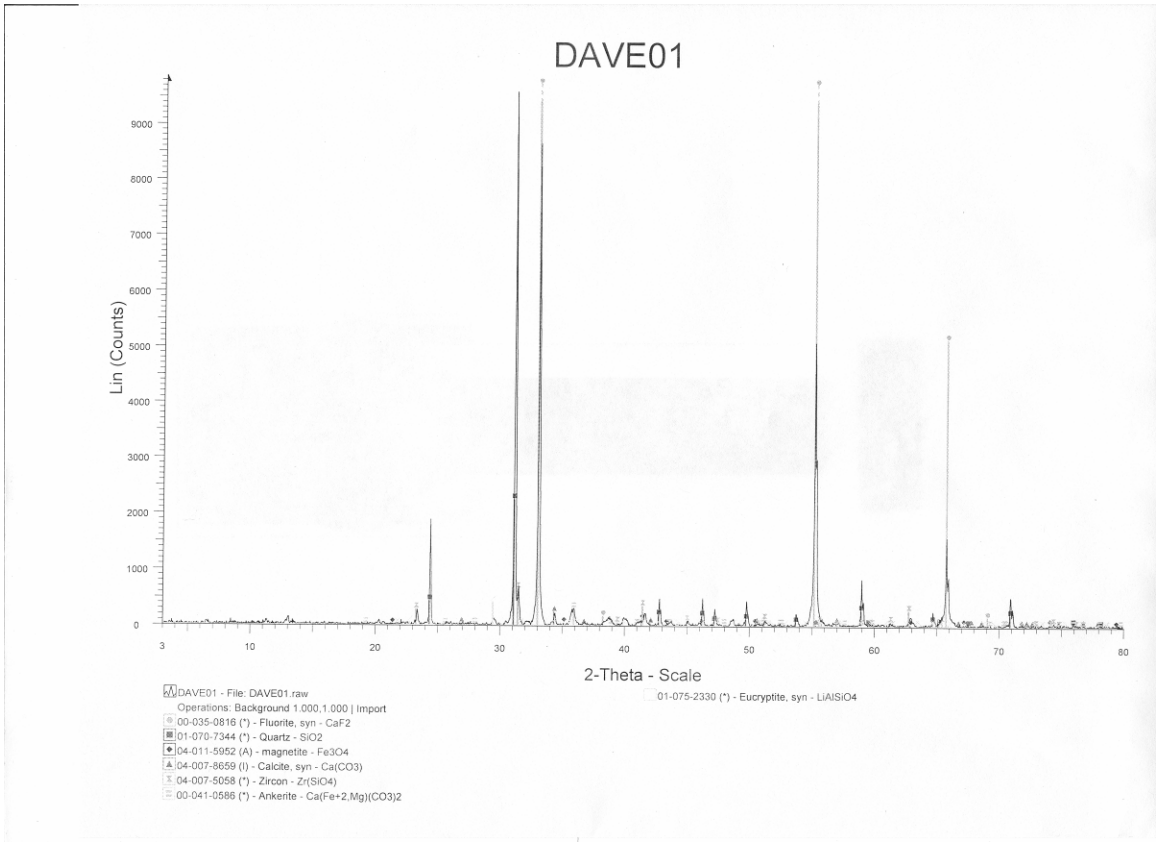

Figure 28. P-XRD spectra for deep purple coloured fluorite from Guano Ridge dyke.

7.8 Magnetometer Survey

A reconnaissance magnetometer survey was conducted over several days at the Guano Project in order to assess the response of the rocks comprising Guano Ridge. The magnetometer used was GPS-enabled, allowing a non-conventional survey in an area where difficult topography and abundant cliffs would have made a grid-based survey very difficult.

No base station was used at the Guano project during the GPS-enabled magnetometer survey. Accordingly, QA/QC checks of the magnetometer survey data was performed by tracing the same path near camp both on the way out in and on the way in. In the 5 areas of ~25 m^2 checked, each showed an average variance of ~75 nT. It is pertinent to restate the minimum value of 53,426 nT and maximum values of >100,000 nT at the Guano project, indicating a total range of 46,574 nT. Consequently, diurnal variation would not likely have a significant impact on the results of the ground magnetics survey. In any case, future systematic surveys should include a base station for correction. Appendix E also shows diurnal variation in the closest stationary observatory, located at Sitka and operated by the USGS.

A total of 46,514 spot points of sufficient signal and location quality were recorded over an area of approximately ~0.5 km^2. Two separate zones of high magnetic response were identified and correlate with abundant magnetite float on the surface. The most prominent zone is at the south end of guano ridge and comprises two isolated mag-high spots with an intermediate area of elevated magnetic response. The northern anomaly shows a local spike and a broad elevated response running in a N-S direction. All three anomalous areas showed magnetic responses above 100,000 nT, which is the upper limit of the GSM-19WV Overhauser Magnetometer. The signal quality of these sampling points was recorded as being low and thus the points were filtered out from the final dataset.

The southern magnetic anomalies correlate well with surficial float of magnetite bearing skarn-like rocks that include abundant calcite, epidote and light brown micas (likely phlogopite). These rocks are in and amongst the dyke swarm, indicating a probable relationship between intrusive activity and magnetic response.

The northern magnetic anomaly is represented by a strong magnetically responsive area at the edge of the survey area, followed by a tail that runs to the south as observed along the ridge line. Moderately mineralized float of altered metasedimentary origin (?) returned REE values up to ~2 % TREO (09LVA025).

At present, it is difficult to determine whether or not magnetic response can be used to target REE mineralization. A systematic ground magnetometer survey should be carried out to better delineate the responsive lithologies and possible structures. This will help determine what, if any, relationships are present between REE mineralization and magnetic character.

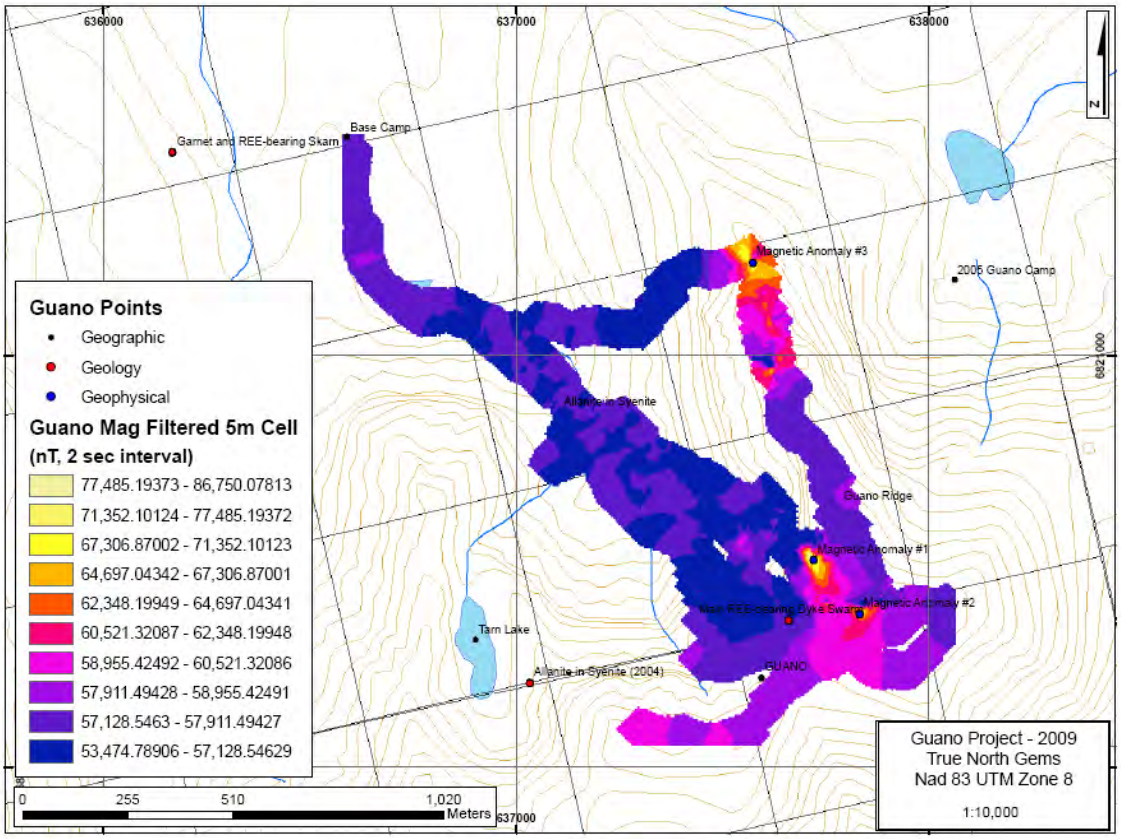

Figure 29. Results of reconnaissance-scale magnetometer survey. Data contoured using kriging and a 5 m cell.

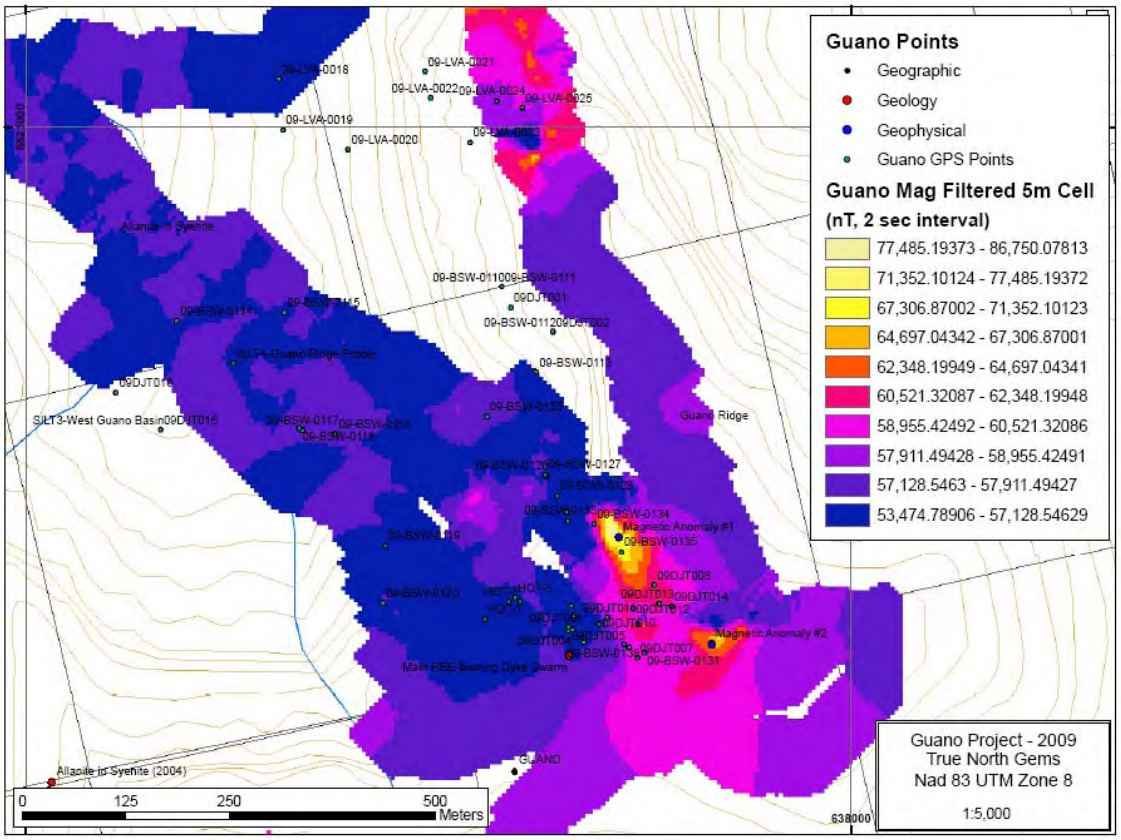

Figure 30. Results of reconnaissance-scale magnetometer survey with sample locations. Data contoured using kriging and a 5 m cell.

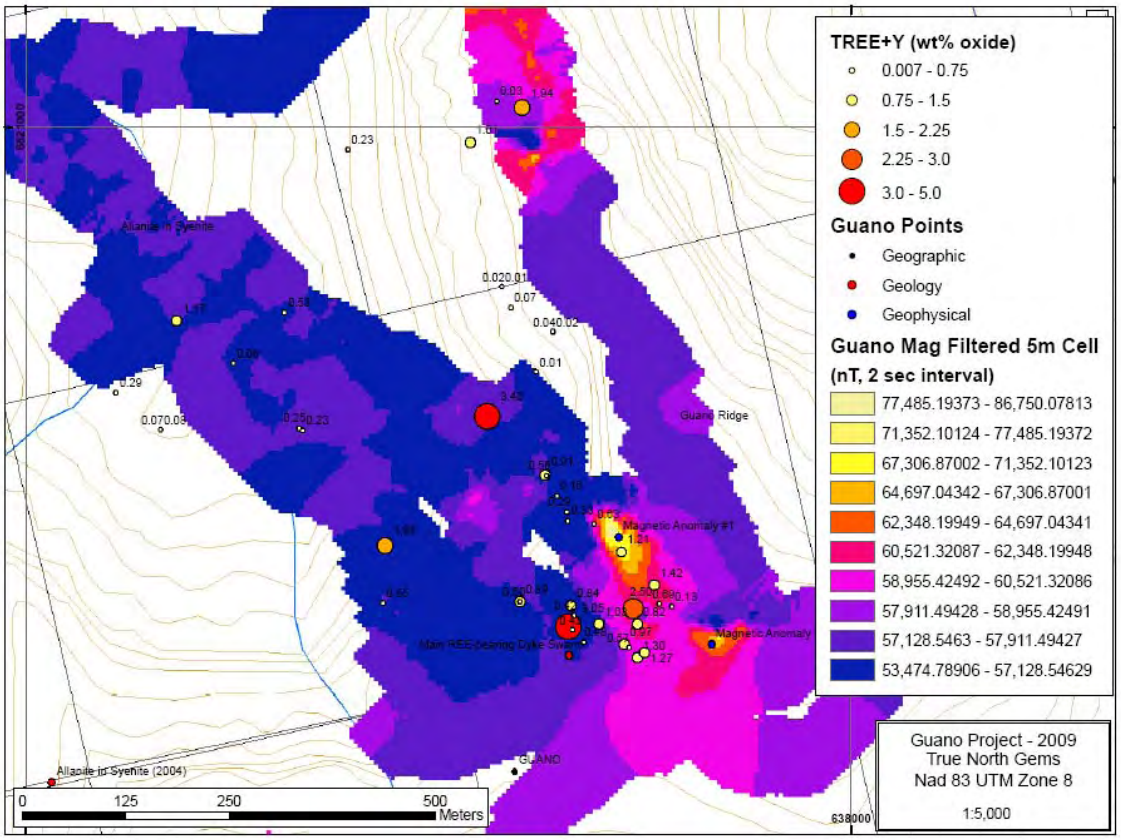

Figure 31. Results of reconnaissance-scale magnetometer survey with sample results. Data contoured using kriging and a 5 m cell.

8. Conclusions and Recommendations

Results from preliminary work in 2009 warrant further exploration on the Guano Project. Strong assay results of REE (up to 6.018 wt. % TREO+Y), Ta (up to 0.507 wt. % Ta2O5) and Nb (up to 2.525 wt. % Nb2O5) from both altered felsic dykes and skarn rocks make this underexplored target attractive for additional discoveries. Prospecting and initial mineralogical and geochemical investigations confirmed the existence of multiple styles of mineralization. These styles of elevated REEs include syenite-hosted, dyke swarms, skarn, and possible enrichment via hydrothermal alteration. Mineral hosts for rare earth elements have thus far been determined to include allanite, fersmite, monazite, xenotime, and bastnaesite as well as zircon and baddeleyite. Columbite and fersmite are the primary Nb and Ta mineral hosts. The relative importance and geographic extents of each of the styles of mineralization has yet to be accurately determined.

The following are recommended to better assess the mineralization present at the Shark Property:

- Systematically map:
    - the dyke swarm and associated metasomatic rocks of Guano Ridge and examine the area to the south of the ridge for the possibility of additional (mineralized) dykes
    - the new garnet-allanite skarn identified in 2009
- Investigate / prospect:
    - the remainder of Guano Ridge, including the north end of the ridge
    - the periphery of the syenite to the south and north of the main body
    - along strike of the new garnet-allanite skarn
- Systematically conduct:
    - a magnetometer survey of the eastern portion of the Shark Property, possibly with VLF collection to determine presence and location of fault structures

    - a sampling program of the main syenite body to determine the bulk tonnage potential of the system
    - a soil survey across Guano Ridge where topographically accessible
    - a soil survey within Shark Bowl where topographically accessible
    - a silt survey including various points along all drainages around the peripheries of the Shark Property
- Compile historical data available from the records associated with the CPA minfile occurrence and integrate with other historical results of the Guano area.
- Conduct additional mineralogical and petrographic studies for all styles of mineralization. Isotopic studies of the carbonate phases would also give insight to the role of any carbonatitic fluids at Guano Ridge.

The execution of these recommendations will lead to a greater understanding of the geological settings, overall surficial grade distribution, and mineralogical characteristics of each prospective zone (Guano Ridge Dyke Swarm and Skarn, Camp Skarn, and Shark Bowl Syenite). This will provide the necessary framework from which to make decisions on the nature of more comprehensive exploration, such as trenching, diamond drilling and airborne geophysical surveys. If the program were conducted early enough in Yukon's exploration season (e.g., late May to late June) it would be feasible to return in late summer (late August) for additional field work such as trenching and enhanced sampling/mapping/prospecting programs and possible drilling of the Guano Ridge prospect.

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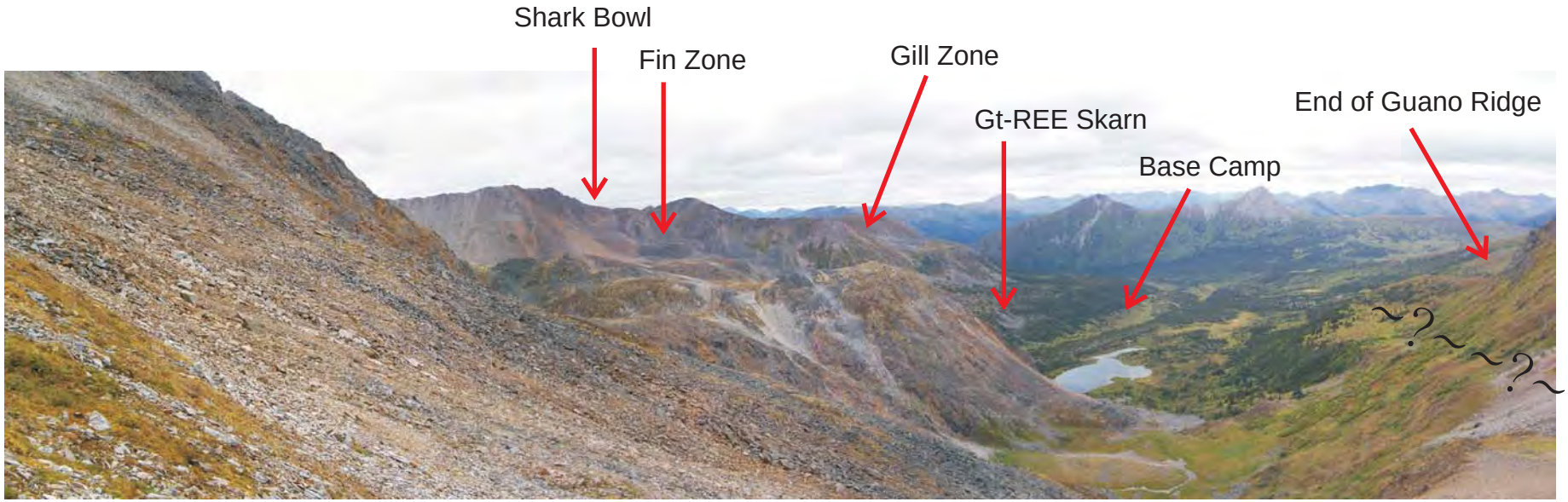
10. Statement of Qualifications

I, David J. Turner, professional geoscientist, with business address in Vancouver, British Columbia and residential address in Victoria, British Columbia, do hereby certify that:

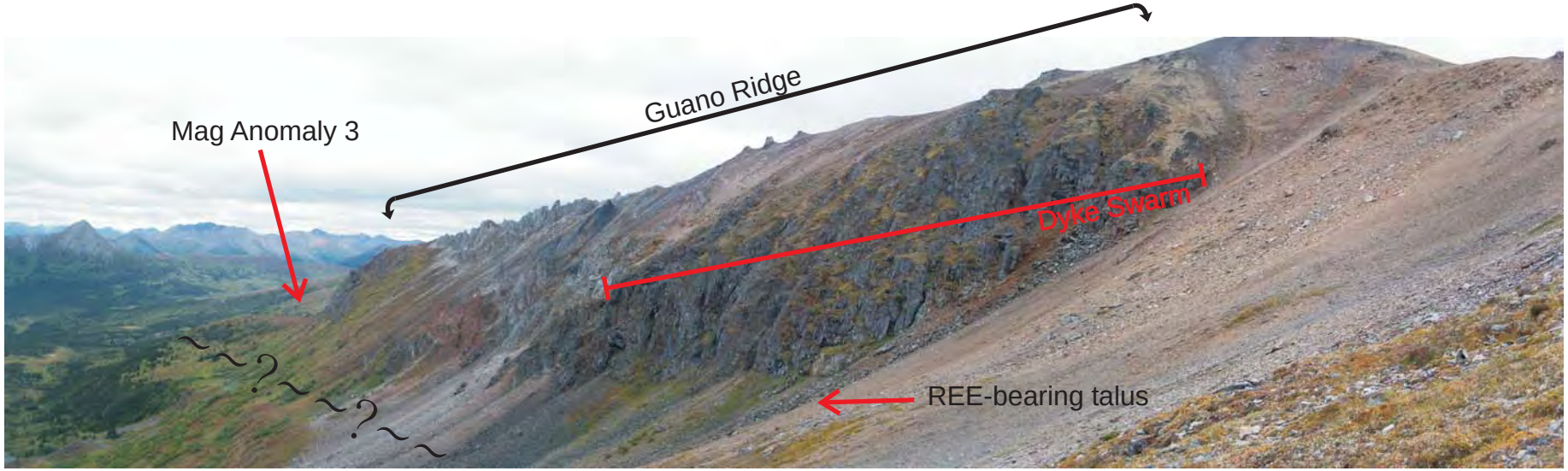
1. I am a partner of Mackevoy Geosciences Ltd.
2. I graduated from the University of Victoria in 2003 with a B.Sc. in Earth and Ocean Sciences / Geography.
3. I graduated from the University of British Columbia in 2006 with a M.Sc. in Geological Sciences.
4. I registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientist of British Columbia in August of 2009 (Licence Number 33785)
5. From 2003 to present, I have been actively engaged in mineral exploration, primarily in Yukon Territory but also in British Columbia, Northwest Territories, Mexico, and Greenland.
6. I personally participated in the fieldwork described in this report and was involved in the writing of this report.

David J. Turner, M.Sc., P.Geo.

Appendix A – Panoramic Photographs of the Guano Ridge area



Looking north-west-north (~330°) towards base camp at lake



Looking north (~000°) along the flank of Guano Ridge

Appendix B – Daily Diary and Field Notes

Daily Diary and Field Notes for Rock Samples and GPS Points

taken at

Guano Project, Shark Property, Yukon Territory

for

True North Gems Inc.

by

Mackevoy Geosciences Ltd.

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Summary

Shark Property – Guano Ridge
NTS Mapsheets 105F/8, 9, and 10

Property Centroid: 635699 / 6821145
REE Target Centroid: 637700 / 6820500
Camp Location: 636575 / 6821550

Date Range: August 19, 2009 to August 25, 2009 (7 days, 35 person-days)

Description of Guano Project:

The Guano Project is focused on REE-Th mineralization that has been described as occurring in a skarn adjacent to a Mississippian syenite stock. Exploration and minor academic studies in the late 1970's outlined a Th-U target along Guano Ridge. Pale blue beryl was discovered by D. Eaton of Archer Cathro during early exploration, which subsequently led to True North Gems' reinvestigation of the area in 2003. The Shark Claims were staked to cover an abundance of dark blue gem quality beryl in "Shark Bowl". Later in 2003, additional claims were staked to cover Guano Ridge as it had the potential to host Columbian Style beryl mineralization. Two years of field work were accompanied with academic studies by D. Turner as his M.Sc. project under the supervision of Prof. L. Groat at UBC.

The fieldwork of 2009 was undertaken by Mackevoy Geosciences Ltd for True North Gems to re-evaluate Guano Ridge for its REE potential. It was conducted under the support of the Yukon Mining Incentive Program (YMIP) as the successful application number 09-135.

People on Project:

David Turner	Crew Chief	DJT	M.Sc., P.Geo.
Brad Wilson	Senior Geologist	BSW	M.Sc.
Laurel Arness	Geologist	LVA	B.Sc.
Bev Quist	Junior Geologist	BCQ	B.Sc. Student
Mike Burns	Junior Geologist	MGB	B.Sc. Student

Daily Diary

Day 1 – August 19, 2009

Move in day with helicopter to Guano Camp site at 636575 / 6821550. Used Capital Helicopters of Whitehorse and shared helicopter costs with another project not associated with True North Gems' exploration program at Guano.

Load 1: DJT, BSW, BCQ to Camp Site
Load 2: Sling Load
Load 3: Sling Load
Load 4: MGB and LVA to Camp Site

Day 2 – August 20, 2009

Bad weather day, rain all day

Team traversed together into the base of Guano Ridge with a focus on assessing dark brown spire – main objectives were to conduct a scintillometer survey and to familiarize the team with the various rock types. Located a number of rock types (syenite, siliceous dykes, metasediments) that kick on scintillometer, located allanite in talus slope above camp.

Day 3 – August 21, 2009

Bad weather day, rain all day

Team traversed together back to base of Guano Ridge, continuing along the base of cliffs assessing the talus using the scintillometer and Niton handheld XRF. Also conducted concurrent magnetometer survey. Continued to identify rock types with radioactivity. Determined that there was not always a positive association between scintillometer response and spot-checking of REE presence via XRF.

Day 4 – August 22, 2009

Bad weather day, rain all day

Team traversed together back to base of Guano Ridge, continuing along the base of cliffs assessing the talus using the scintillometer and Niton handheld XRF. Also conducted concurrent magnetometer survey. Continued to identify rock types with radioactivity. Further confirmed that there was not always a positive association between scintillometer response and spot-checking of REE presence via XRF.

Day 5 – August 23, 2009

Moderate weather day, intermittent rain throughout the day

Team traversed together to west of camp towards Shark Bowl to assess allanite-bearing quartz veins in syenite and prospect the lowlands between Base Camp and plateau west of Gill Zone. Two silt samples taken (one from Shark Bowl, one from Gill Zone) to compare against Guano Ridge response.

Significant Events: Discovered garnet skarn just west of creek west of camp, sampled allanite bearing quartz veins in Shark Bowl area and confirmed the absence of radioactivity in these REE-bearing rocks.

Day 6 – August 24, 2009

"Good" weather day, no rain until the late afternoon.

- LVA and BCQ reconnaissance prospecting and scinting from North end of Guano Ridge south towards dyke swarm.
- DJT and BSW solo prospecting into and through separate cliffs above boulder trains of 'white porcelain' rock and other 'hot' rocks.
- MGB mag survey from north end of Guano Ridge south to the tops of the dyke swarm, and to infill mag high holes.

Significant Events:

The good weather allowed for better assessment of the various rock types at the base of the cliffs near the main dyke swarm and up the chutes through the swarm. 'Hot' rocks and those that previously showed REE enrichment were noted to be much more abundant in the talus than previously noted. Dykes were found in multiple locations in outcrop, showing a variety of orientations but typically striking ~N-S and dipping from ~45 to vertical.

Elevated radioactivity was detected at the north end of Guano Ridge in numerous metasediment boulders with associated elevated REE values.

Magnetometer surveying confirmed the isolation of the two southern anomalies, discovered a new strong magnetic zone at the North end of Guano Ridge and located another weak anomaly halfway along the ridge. A few holes remained in the magnetometer survey area due to extreme topography.

Day 7 – August 25, 2009

Bad weather day, heavy rain until just leaving camp – SNOW ON PEAKS.

Mob out day, and DJT and BSW visit the garnet-REE skarn. Used Trans-North's 206 to mob out to the Ketza Strip. 2 sling loads and 2 internal loads for a total of 1.9 hours.

Significant Events:

The garnet-allanite(?) skarn zone was located by DJT and BSW to the west of camp and numerous samples were taken. This area strongly deserves detailed mapping to determine the full extent of the skarn zone and to discern its origin (roof pendant? xenolith? true skarn contact?).

Transcribed Field Notes

Brad Wilson

August 20, 2009 (BSW 110 to 113)

Field Notes Label	Field Entry / Description
09-BSW-0110	Float, variable grain size, fine to coarse grained, carbonate (calcite + ankerite), amber mica, greenish mineral or altered mineral.
09-BSW-0111	Outcrop. Orange (rusty) – brown weathering greenish grey fresh rock. Medium grained carbonate with coarse grained sections in the outcrop. There are numerous 1 – 4 cm vugs lined with dolomite ? and minor quartz crystals. Same location as 09-BSW-0110
09-BSW-0112	Outcrop. Very rusty weathering rock. Fine to medium grained greenish grey siliceous rock with ~5% sulphide (py)
09-BSW-0113	Very Local Float (outcrop uphill). Very rusty massive and granular sulphides, Pyrite and pyrrhotite and others?

August 21, 2009 (BSW 114 to 124)

09-BSW-0114	Float in valley bottom. Scint reading of 800 cps. Radioactive rock, fine grained, uninteresting rock. Dark grey overall with patches of dark brown mottled with dark grayish green.
09-BSW-0115	Float. Same as 0114 but scint reading of 1100 cps
09-BSW-0116	Float. Carbonate (dolomite?) rich, similar to 0114, scint reading of 2000 cps nearby on boulder, rock is 1000 cps.
09-BSW-0117	Float. Scint reading up to 600 cps. Dark grey dyke 4-5 cm thick cutting at a very low angle fine grained banded seds (cherty, light green). Py-qtz-carb extension veins up to 1.5 cm thick cut dyke and extend only a few cm into seds. Sigmoidal veinlets. Photo taken.
09-BSW-0118	**No Sample**. Area with numerous large (0.5 to 2 m) sized boulders with high scint counts. Mustard dark coloured and fine grained but one has abundant carb and mm-cm sized amber mica.
09-BSW-0119	Float sample. Mottled grayish green and rusty orange/brown rock. Tiny rusty brown spots and tiny quartz (?) veinlets and quartz ?
09-BSW-0120	Float. Fine grained slightly banded (sed looking?) greenish grey with euhedral pyrite up to ½ cm. Scint reading of 1200 cps.
HOT 1	Zebra vein – same as 0117
09-BSW-0121	Float samples. Scint reading of 1600 cps. Medium to coarse grained igneous rock, mostly black with whitish grains and bands rich with coarse quartz. Porcelainous white grains up to 4 mm abundant and Niton shows lots of Zr.
09-BSW-0122	Float samples. Areas of 2 – 10 m blades of black allanite (?) in dark greenish grey fine grained rock. Second area with nodule 2-3 cm across with **blades of allanite**. Same locality as 0121 – **not radioactive at all.**
09-BSW-0123	Outcrop. ½ m wide dyke rock near vertical with irregular contact – chilled margin on one side, other side obscured. Mottled dark grey green and brown

	grey possible feldspars, fine to medium grained, with quartz at base of outcrop. Scint reading up to 2000 cps.
09-BSW-0124	Outcrop. Niton shows REE, scint reading of 1200 to 2500 cps. Irregular contact ~165/70E with metaseds. Lower contact hidden but is a least 3 m thick at sample site – heterogeneous fine to coarse grained rock – mostly black with white (qtz?) grains locally to 20% of rock.

August 22, 2009 (BSW 125 to 131)

09-BSW-0125	Float. Scint reading 2000 to 4000 cps. Black and white (mostly black) fine to coarse grained carbonate rich – variable pyrite up to 2% in places.
09-BSW-0126	Outcrop. Dyke 20 cm wide, 1500 cps. Light grey siliceous medium grained. Second similar (point 0127) dyke ~5 m lower at base of outcrop. Dyke oriented at 170/65W, cps of 1500.
09-BSW-0127	Outcrop. Dyke, 20 cm wide, cps of 2200.
09-BSW-0128	Outcrop. Dyke? Massive dark rock at base of cliff, possible intrusive? Quartz magnetite chlorite heterogeneous grain size – very coarse to fine grained with tension gashes, CPS at background.
09-BSW-0129	Outcrop. At base of steep area. Hot area with 1500 – 5000 cps, orange brown weathering, tan to dark green medium grained rock on fresh surface. Area sampled is 5 – 7 m along the slope. Not sure if this is dyke or not.
09-BSW-0130	Outcrop. Dyke? 1.5 m wide? Hard to tell. Medium grained, dark grey and with minerals with 'salt and pepper' look.
09-BSW-0131	Float. Mostly fine grained (dyke?) tan coloured, some coarse grained areas, very hot – 6000 to 7000 cps. Numerous ½ m sized and smaller boulders.

August 24, 3009 (BSW 132 to 138)

09-BSW-0132	Cliff outcrop. Dyke? Very broken part of cliff. Quartz feldspar altered dark mineral, intrusive? rock, minor sulphide.
09-BSW-0133	Broken outcrop in cliff. Dyke? or coarser grained band in volcanics? Black rock cliffs, very similar to "0132" but 50% or more dark grey green mineral.
09-BSW-0134	Broken outcrop on cliff. Dyke? or coarser grained portion of wall?? Very similar to "133". ½ cm veinlet composed of carbonate and dark purple fluorite.
09-BSW-0135	Broken outcrop above cliff. "Speckle Rock?" Medium to coarse grained dark grayish green rock with white and earthy brown grains. (some of the grains look like white 'speckles'). Found a crystal face on one of the brownish grains. In contact with the dark green epidote bearing banded sed? volc? Happy rock?
09-BSW-0136	Good outcrop. Obscured with lichen and moss and steep ground – dyke? upper contact is mostly visible, lower contact obscured – dyke at least 3 m thick, contact undulates somewhat. There may be another dyke below feeding into this one. 135/40S. Medium to coarse grained igneous rock. More than 60% dark green mineral, white (qtz?) and fluorite (purple), and brown interstitial mineral (REE?). Some banding defined by grain size, several cross-cutting veins. 1 – 4 cm wide, mostly quartz but one vein has quartz, galena, sphalerite, fluorite, carbonate and ??
09-BSW-0137	Good outcrop. Dyke 2 – 3 cm thick 030/90, GPS position indicates ~25 m in length, goes under vegetation and talus to S and either is faulted or changes orientation to the N. Similar to "0136" nearby – Fluorite exposed in veinlet.

09-BSW-0138	Outcrop. Dyke ~ 40 – 50 cm wide. Variable strike and dip, but approximately perpendicular to “0137” above and dips vertical. Similar material as well.

August 25, 2009 (BSW 139 to 141)

09-BSW-0139	Local Float/Subcrop Skarn. Red/brown garnet coarse grained 40-50%, fine grained material 40 – 50% with black grains to 3 cm by 0.8 cm, up to 10%, very heterogeneous and altered. High REE peaks noted with Niton.
09-BSW-0140	Local Float/subcrop skarn. Heterogeneous yellow green and grey green patches m to cm across. Some red brown garnet patches to 10%. Black specks mm scale to lath like patches o 1 cm by 3 mm. Porous weathered surface, high REEs via Niton.
09-BSW-0141	Outcrop/local float. Intrusive? Prob altered sed? Light grayish fine to medium grained rock. Possible intrusive porphyry with light coloured phenos to 1 cm. All three samples from 0139 Location.
09-BSW-0142	Not in notes, however, would be from this same area of skarning.

David Turner

August 20, 2009 (DJT 001 to 003)

Field Notes Label	Field Entry / Description
09-DJT-001	Odd dark grey float near odd Fe-Mg carbonate outcrop. Possible siderite, possible pyrite, rusty sulfides and carbonates. Possible feldspar?
09-DJT-002	5 cm thick horizon of blocky carbonate with tabular altered mineral, possibly marcasite. Outside of horizon is a rind of micaceous fine to coarse grained minerals with no preferred orientation.
09-DJT-003	"HOT" rock found at camp from historical geo camp. Non descript grey rock with minor banding, likely metavolcanic in origin.

August 21, 2009 (DJT 004 to 008)

09-DJT-004	Medium grained dyke just N of BSW0123. CPS up to 4000. Quartz and feldspar phenos and black mineral (?). local wall rock w/o dyke also hot, so fluid infiltration likely. No sample taken.
09-DJT-005	Float near base of outcrop. Medium to coarse grained intrusive with heavy alteration. Weathered surface shows "white porcelain" squares while fresh surface shows lavender colour and powdery texture of same mineral. Abundant quartz amongst dark green to black matrix. Niton #133 on white porcelain mineral.
09-DJT-006	(@005) Small piece of float similar to DJT005 but with a large clot of REE-bearing deep purple mineral. Possibly 2 good cleavages close to 90 but rock exhibits fractures too. Niton spectra #134. **NOTE**: XRD on Purple Mineral later identified as fluorite.
09-DJT-007	Small hot (~5000 cps) dyke cutting metaseds and volcanics. Less quartz than dykes at cliff base. Niton shows high Zr and possible low REEs. Of note are abundant stringers and fluid infiltration.
09-DJT-008	30 cm wide quartz rich dyke cutting nodular chert with minor carbonate. Dyke is quartz dominant with minor black minerals. Orientation is 047/subvert. Took 3 Niton spots: Core – Margin – Host. Margin shows highest REE. | dyke | margin | altered host |

August 23, 2009 (DJT 009 and Silt 1+2)

Silt #1	Silt from Shark Bowl
Silt #2	Silt from Gill Zone
09-DJT-009	Local float. Allanite dominant quartz vein in syenite for bulk analysis from Shark Bowl.

	Note: It is hard to assess the REE potential of the Shark Bowl area because of the erratic distribution of allanite. However, allanite is more abundant than beryl, AND REE minerals were found within the syenite via previous thin section work.

August 24, 2009 (DJT 010 to 016 and Silt 3+4)

09-DJT-010	Siliceous dyke in outcrop within cliffs. Sharp contact with country rocks, which comprise dark green weathering volcanics (?). Small pink crystals in dyke may be the "fresh-surface equivalent" of the 'porcelain rock' Dyke width is ~1 m and strikes ~135/60 but either has irregular intrusion orientation w.r.t. bedding and/or has been subsequently deformed.
09-DJT-011	Further upslope, but essentially same as DJT010. "Speckle Rock" dyke in outcrop, orientation of 140/60 and ~75 cm wide. NO SAMPLE taken
09-DJT-012	Siliceous dyke in outcrop similar to 010 and 011 but less speckles. Sample taken shows some banding, but less than what can be seen in float down fellow. Sample has ellipsoid quartz near margin, suggesting deformation concentrated at the margin of dyke. This is also seen in outcrop of other dykes where abundant slickensides denote the dyke margin. Dyke here strikes ~180/subvert.
09-DJT-013	Dyke rock cutting dark green metavolcanics (?) but in float. This example is VERY siliceous but with more black minerals and finer grained near margin.
09-DJT-014	Odd rock with abundant black prismatic minerals. pseudo hexagonal outlines and a moderate basal cleavage, sometimes striations along the length of the crystal… tourmaline? "Host" rock is dark green and quite soft but does not effervesce, however, there are rare small carb pods.
09-DJT-015	Ordinary dark grey coarse grained syenite test sample.
09-DJT-016	Siliceous dyke from local float, has long fine grained 'lath shaped' patches and areas of fine grained fluorite.
Silt #3	Drains west part of Guano Ridge bowl from creek below perched lake
Silt #4	From area draining Guano Ridge proper. Not too much silt and bench above that might catch fines.

August 25, 2009 (DJT 017 to 020)

09-DJT-017	Subcrop/local float, same location for 017 to 020. Medium to coarse grained red-brown garnet skarn with large laths of black mineral up to 5 cm each but in a much larger clot. Kicks VERY HIGH in REEs with Niton Some patches of light green to white, and some small white stringers cutting sample.
09-DJT-018	Subcrop/local float, same location for 017 to 020. Very similar to '017' but finer grained garnet and black mineral. Also present are small pods of calcite and rare dark green (diopside?) mineral. Blacks kick REE.
09-DJT-019	Subcrop/local float, same location for 017 to 020. Dark brown coarse garnet skarn with patches of calcite and light green mineral (diopside?) cut by stringers of white. No REEs by Niton, but too coarse to assess 'net sample'.
09-DJT-020	Subcrop/local float, same location for 017 to 020. Dark green to grey with pink patches → syenite? medium to fine grained and altered. Kicked nicely REEs, likely from small disseminated black grains. Note: Did not assay, hold for petrography.

Laurel Arness

August 24, 2009 (LVA 015 to 025)

Note: Field notes indicate Aug 23, but was actually the 24th.

Field Notes Label	Field Entry / Description
09-LVA-0015	Metaseds, rusty, no scintillometer response (float)
09-LVA-0016	Less rusty metasediments, pyrite/sulphides fine grained. No Scint Response. (float)
09-LVA-0017	Metaseds, fine grained sulphides with no scint response but just below treacherous outcrop
09-LVA-0018	Metaseds, fine grained, in outcrop, no scint response, more siliceous
09-LVA-0019	Niton of the metasediments, no REE peaks
09-LVA-0020	Metasediments with scintillometer kick @ 2500 cps. Niton #164, La and Ce response **(SAMPLE TAKEN)** but btwn unresponsive metaseds. Niton #165/166/167 possibly has a La/Ce kick, but significant scatter/background. Note that #164 was from Rustier area of metased. Note that background level of scint has increased to ~150 cps as compared to 100 cps at 09LVA0015
09-LVA-0021	Outcrop, background to 100 cps, completely dead calcareous metaseds but moving to south up to 1000 in short distance. Niton of non-kick calcareous (#170): shows no REE. Calcareous rock with scint kicks on Niton: #171 Vein of 2500 cps but no REEs. #172 on veins shows 2500 cps but no REE. #173 on rock face of veins shows small REE kick. #174 on rock face shows small REE kick. #175 shows too much background. No sample taken as outcrop was difficult to obtain rock from.
09-LVA-0022	Niton #178: No REE peaks
09-LVA-0023	2 rusty patches with nodules (3-4 cm and 2-3 cms) that bled out to form a rust trail 20 cm long. Scint response was 1600 cps in a diffuse aureole around the rusty zone. Niton #180 shows small La/Ce peaks in aureole Niton #182 shows no REE in rusty zone Niton #183 in metaseds shows no REE Nearby more rusty stuff up to 2700 cps. Lots of pyrite present in greenish metaseds, also see abundant euhedral pyrite. Niton #184 shows REE kick in metaseds – **SAMPLE TAKEN**
09-LVA-0024	Greenish metaseds with large-ish glassier crystals and biotite crystals up to 2 mm. Scintillometer shows cps up to 3000. Potential dyke or possible right beside contact? Rocks are weathering in layers and darker rocks are running up the mtn slope. **SAMPLE TAKEN** with high radioactivity but no REE in Niton spectra.
09-LVA-0025	Very rusty/oxidized metaseds with CPS up to 4000. Same look as in 0024 above. **SAMPLE TAKEN**. Niton #191 shows prominent REE peaks.

	Niton #192 on very rusty patch did not kick and did not show REE

Location Tables

BSW Locations

Name	Easting_nad83	Northing_nad83	Type	Sampled
09-BSW-0110	637577	6820806	Rock	Yes
09-BSW-0111	637577	6820806	Rock	Yes
09-BSW-0112	637639	6820751	Rock	Yes
09-BSW-0113	637619	6820703	Rock	Yes
09-BSW-0114	637184	6820765	Rock	Yes
09-BSW-0115	637314	6820775	Rock	Yes
09-BSW-0116	637332	6820635	Rock	Yes
09-BSW-0117	637336	6820632	Rock	Yes
09-BSW-0118	637376	6820628	Waypoint	No
09-BSW-0119	637436	6820493	Rock	Yes
09-BSW-0120	637433	6820422	Rock	Yes
09-BSW-0121	637599	6820424	Rock	Yes
09-BSW-0123	637664	6820407	Rock	Yes
09-BSW-0124	637661	6820419	Rock	Yes
09-BSW-0125	637559	6820649	Rock	Yes
09-BSW-0126	637631	6820578	Rock	Yes
09-BSW-0127	637630	6820579	Rock	Yes
09-BSW-0128	637644	6820553	Rock	Yes
09-BSW-0129	637663	6820390	Rock	Yes
09-BSW-0130	637676	6820375	Rock	Yes
09-BSW-0131	637750	6820362	Rock	Yes
09-BSW-0132	637656	6820534	Rock	Yes
09-BSW-0133	637657	6820523	Rock	Yes
09-BSW-0134	637689	6820519	Rock	Yes
09-BSW-0135	637722	6820485	Rock	Yes
09-BSW-0136	637741	6820397	Rock	Yes
09-BSW-0137	637731	6820368	Rock	Yes
09-BSW-0138	637725	6820372	Rock	Yes
09-BSW-0139	636166	6821483	Rock	Yes
09-BSW-0140	636166	6821483	Rock	Yes
09-BSW-0141	636166	6821483	Rock	Yes
09-BSW-0142	636166	6821483	Rock	Yes

DJT Locations

Name	Easting_nad83	Northing_nad83	Type	Sampled
09DJT001	637588	6820781	Rock	Yes
09DJT002	637639	6820752	Rock	Yes
09DJT003	636583	6821554	Rock	Yes
09DJT004	637658	6820388	Scint	No
09DJT005	637658	6820393	Rock	Yes
09DJT006	637658	6820393	Rock	Yes
09DJT007	637741	6820356	Rock	Yes
09DJT008	637762	6820444	Rock	Yes
09DJT009	634778	6820802	Rock	Yes
09DJT010	637695	6820397	Rock	Yes
09DJT011	637705	6820404	Waypoint	No
09DJT012	637736	6820415	Rock	Yes
09DJT013	637768	6820421	Rock	Yes
09DJT014	637783	6820418	Rock	Yes
09DJT015	637164	6820633	Rock	Yes
09DJT016	637110	6820678	Rock	Yes
09DJT017	636167	6821484	Rock	Yes
09DJT018	636167	6821484	Rock	Yes
09DJT019	636167	6821484	Rock	Yes
09DJT020	636167	6821484	Rock	No
SILT1-Shark Bowl	634682	6820946	Silt	Yes
SILT2-Gill Zone Drainage	635203	6821517	Silt	Yes
SILT3-West Guano Basin	637164	6820633	Silt	Yes
SILT4-Guano Ridge Proper	637252	6820713	Silt	Yes

LVA Locations

Name	Easting_nad83	Northing_nad83	Type	Sampled
09-LVA-0015	637037	6821353	Waypoint	No
09-LVA-0016	637049	6821318	Waypoint	No
09-LVA-0017	637063	6821236	Waypoint	No
09-LVA-0018	637307	6821059	Waypoint	No
09-LVA-0019	637312	6820997	Waypoint	No
09-LVA-0020	637391	6820973	Rock	Yes
09-LVA-0021	637484	6821068	Waypoint	No
09-LVA-0022	637491	6821036	Waypoint	No
09-LVA-0023	637539	6820982	Rock	Yes
09-LVA-0024	637571	6821032	Rock	Yes
09-LVA-0025	637602	6821024	Rock	Yes

Cruano Project

Aug 20, 2009

09-DJT-001

- odd dark grey float near old Fe-Mg carbonate outcrop. Possible siderite, possible pyrite, rusty sulfides and carbonates. Possible feldspar?

09-DJT-002

- 637639 / 6820752 ±2
- ~5cm thick horizon of black carbonate with tabular altered mineral, possibly marcasite. Outside of horizon is a rind of micaceous fine to coarse grained minerals with no preferred orientation.

09-DJT-003

- "Hot" rock found @ camp from historical gas camp. Non descript grey rock with minor layering, likely meta volcanic in origin

09-DJT-004

- 637652 / 6820388
- Medium grained dyke just N of BSW 023. CPS up to 4000 Qtz and feldspar phenos and black mineral (?). Local wall rock w/o dykes also hot, so fluid infiltration likely.

Aug 22

09-DJT-005

- 637652 / 6820393 ±4

Float near base of outcrop

- Medium to coarse grained intrusive with heavy alteration. Weathered surface shows "white porcelain" squares while fresh surface shows lavender colour and powdery texture. Abundant quartz, amongst dark green to black matrix.

Spectra # 133 (white porcelain quartz)

09-DJT-006 (@ 005)

Small piece of float similar to 005 but with a large clot of REE-bearing deep purple mineral. Possibly 2 good cleavages close to 90° but rock exhibits fractures too.

Spectra II 134 by LVA

* XRD this sample.

09-DJT-007
637741/6820 356 ±4
Small hot (~5000 cps) dyke cutting metaseds + volcanics. Less qtz than dykes at cliff base. Niton shows 4Zr and possible low REEs. Of note are abundant stringers and fluid infiltration

S

09-DJ7-008

637762 / 6820404 ±2

30 cm wide qtz rich dyke cutting modular chert with minor carbonate. Dyke is Qtz-dominant with minor black minerals. ~~Alt~~

Take 3 Niton spots: Core Dyke Margin and Host Rock

Strike 047/Subvert

← REE Bearing

Traverse day to West of camp along creek and flank of slope. Continued into Gill Zone and Shark Bowl to known allanite showings alongside beryl

Guano Sill #1 - Shark Bowl
634682 / 6820746

Guano Sill #2 - Gill Zone
635203 / 6821517

09-DJT-009
634778 6820802
- Allanite dominant quartz vein in syenite for bulk analysis from Shark Bowl

* Note: It is hard to assess the REE potential of the Shark Bowl area b/c of erratic distribution of allanite. However, allanite is more abundant than beryl.

09-DST-010

- 637695 / 6820397 ± 3
- Siliceous dyke in outcrop w/in cliffs. Sharp contact with country rocks, which comprise dark green weathering volcanics (?). Small pink crystals in dyke may be the "fresh-surface equivalent of the "porcelain rock"
- Dyke width ~ 1 m and strikes ~ 135/60 but either has irregular intrusion orientation w.r.t. bedding and/or has been subsequently deformed

09-DST-011 NO SAMPLE

637705 / 6820404

- farther upslope, but essentially same as DST010.

"Speckle Rock" in outcrop ~140 / 60, ~75 cm wide

09 DST 012
- 637736 / 6820415
- Siliceous dyke in o/c similar to 010 and 011 but less speckles. Sample taken shows some banding, but less than what can be seen in float down below. Sample has ellipsoid quartz near margin, suggesting deformation concentrated at margin of dyke. This is also seen in outcrop of other dykes where abundant slickensides denote the dyke margin.

- Striking ~180 / subvertical

09 DST 13
637768 / 6820421 ±3
- Dyke rock cutting dark green metavolcanic(?) but in float. This example is VERY siliceous but with more black minerals and finer grained near margin

09 DJT 14
- 637783 / 6820418 ±2
- Odd rock with abundant black prismatic minerals. Pseudo hexagonal outlines and a moderate basal cleavage, sometimes striations along the length of the crystal.
tourmaline?
"Host" rock is dark green and quite soft but does not effervesce, however, there are rare small carb pods.

09 - DJT - 15
- 637164 6820633
- Coarse grained syenite
test sample

09 - DJT - 16
- 637110 6820678
- Siliceous dyke from float, has long fine grained 'lath shaped' patches and areas of fine grained fluorite.

Silt #3

- Drains W part of Guano Ridge basin from creek below lake

Silt #4

- from area draining Guano Ridge... not much silt and bench above that might catch it.

017 to 020 from same location

09-DJT-017
- 636168 / 6821484
- Subcrop / Local float red-brown
- Medium to coarse grained garnet skarn with large laths of black mineral up to 5 cm each but in a much larger clot. Kicks VERY HIGH in REEs w/ Niton. Some patches of light green to white, and some small white stringers cutting sample.

09-DJT-018
- @ 017
- Very similar to '017' but finer grained garnet and black min. Also present are small pods of calcite and rare dark green (diop?) Minerals. Blacks kicks REE

09-DJT-019
- @ 017 coarse
- Dark brown garnet skarn with patches of calcite and light green min (diop?) cut by stringers of white. No REEs by Niton, but too coarse to not sample.

09-DJT-020

- @ 017 

- Dark green to grey with pink patches → Syenite? Medium to fine grained and altered. Kicked nicely in REE's, likely from small disseminated black grains.

GUANO - Aug 20/09

09-BSW-0110 - float.
Variable grain size - fine-crs grained, carbonate (calcite + ankerite), amber mica, greenish mineral or altered mineral,
8V, 0637577. 6820806, el 1693m

09-BSW-0111 - o/c
orange (rusty orange)-brown weathering, greenish grey fresh RK - med grained carbonate w crg coarse grd sections. In o/c there are numerous 1-4 cm vugs lined with dolomite? + minor qtz xls
Same location as 09-BSW-0110

09-BSW-0112 o/c.
very rusty weathering rk.
Fn-g med grd greenish grey siliceous rock w ≈ 5% sulphides - py
08, 637638, 6820751, 1735m

09-BSW-0113 - very local float - o/c uphill 5-7 m
very rusty massive + granular sulphides - py + po + others?

AUG 21/09 Guano Yukon

Sint reading 800 cps
09-BSW-0114 - float in valley bottom Radioactive RK fingrd uninteresting RK, DK grey overall patches of DK brown mottled w DK greyish green.
8V, 637184, 6820765 NAD83, 1510m

09-BSW-0115 - float.
Same as 0114.
8V, 637314, 6820775, 1527m
Sint reading 1100 cps

09-BSW-0116 - float - dolomite? carbonate-rich.
similar to 0114.
sint reading 2000 cps nearby 1000 cps on RK, large boulder.
8V, 637332, 6820635, 1535m

09-BSW-0117 - Float
sint reading - upto 600 cps.
Dark grey dyke 4-5 cm thick cutting at a very low angle fine grd banded seds (cherty) (light green) py-carb (80-20%) extention veins upto 1.5 cm thick cut dyke and extend only a few cm into seds - syngmoidal veinlets
Yukon

panied by a coding according to Strunz chemical-structural

09-~~B,S,W~~ no sample

09-BSW-~~00~~0118 - area w numerous large (½-2m) sized boulders ~~to~~ w high sint counts. ~~on~~ Mustard dark colored + fngred, but one has abundant crsb + mm-cm sized, amber mica.

09-BSW-0119- Float sample
Mottled greyish green + rusty orange/brown RK. tiny rusty brown spots + tiny qtz[?] veinlets + qtz?
8V, 637435, 6820493, 1600m NAD 83

09-BSW-0120 - Float
fn grnd slightly banded (sed-looking?) greenish grey. w rare euhedral py upto ½cm
8V, 637433, 6820422, 1641m
sint reading 1200 cps

"HOT-1" zebra vein - same as 0117

sint reading 1600 cps

09-BSW-0121 - Float sample
Med-coarse ~~fn~~ grnd Igneous RK - Mostly black w whitish grains - and ~~bnd~~ bands rich w course qtz. Porcelinous white grains? upto 4mm, abundant - Niton shows lots of Zirconium!
8V, 637599, 6820424, 1695m

09-BSW-0122- Float sample
areas of 2-10m blades of black Allanite(?) ~~and~~ in dark greenish grey fn grnd rock, second area w radial 2-3cm across w blades of allanite. Same locality as 0121 - not radioactive at all.

09-BSW-0123 - o/c!!! dyke rock ½m wide near vertical w irregular contact - chilled margin on one side - other side obscured. Mottled Dk grey green + brown grey possible feldspars & fn-med grd - w qtz & at base of o/c. - ≈ sint reading up to 2000 cpm
8V, 637664, 6820407, 1730m

Rite in the Rain

09-BSW-0124 - o/c !!!. Niton shows RCK scint reading - 1200-2500 cps.
irregular contact 165/70 E w Meta seds
lower contact hidden but is at least 3m thick at sample site - heterogeneous fn - coarse gnd Rk - mostly black w white (qtz?) grains locally to 20%.
8V 637661, 6820419, 1728m

AUG 22/09 Gnaro Ridge

"09-BSW-0125" Float - ~~scint~~
Scint reading 2000-4000cps.
Black + white (mostly black) fn-course gnd carbonate rich - variable pyrite up to 2% in places. 8V, 637559, 6820649 1652m

"09-BSW-0126" o/c - Dyke 20cm wide
≈1500 cps ltgrey siliceous med-gnd.
8V, 637631, 6820578 1704
second similar dyke ≈ 5m lower at base of o/c. Niton reading on lower Dyke 170/65W Dyke orientation "0127"
1500 cps

09-BSW-0127 - Dyke - 20cm wide
This has Niton reading
cps - upto ~~2000 cps~~ 2200 cps.

09-BSW-0128 - o/c Dyke? Massive Dark rock at base of cliff. possible intrusive?
Qtz - Magnetite - chlorite - ~~hetero~~ heterogeneous grain size - vg coarse to fn gnd. w fenition gashes - cps - background. Niton readings

09-BSW-0129 - oc at base of steep area - hot area w 1500-5000 cps. orange brown weathering, tan + dk green med gnd Rk on fresh surface area sampled is 5-7m along the slope. Not sure if this is dyke or not.
1½m wide?

09-BSW-0130 - o/c - Dyke? host to ~~feld~~ med grd, dk grey + white minerals. "salt + pepper look"

"09-BSW-0131" Float.
mostly fngd (dyke?) tan coloured
Some crs grd areas very hvt 6-7000 cps
8V, 637750, 6820362, 1821m
numerous ~~the~~ 1/2 m sized and smaller
boulders.

AUG 24/09 Guano Camp

"09-BSW-0132" cliff o/c. Dyke?
~~very~~ very broken part of cliff.
~~Rhyolite qtz-feldspar~~ qtz-feldspar-altered
dark mineral - intrusive? Rk. minor
sulphide, 8V, 637656, 6820534, 1720m

"09-BSW-0133" broken o/c in cliff
Dyke? or courser grd band in vole?
black rock cliffs. very similar to "0132"
but 50% or more dark grey green mineral
8V, 637657, 6820523, 1758m

"09-BSW-0134" broken o/c on cliff
Dyke? or courser-grd portion of wall??
very similar to "0133" accent for a
1/2 cm veinlet composed of carbonate
and dark purple fluorite.
8V, 637689, 6820519, 1785m. NAD 85

"09-BSW-0135" broken o/c above
cliff "speckle rock?" med-crs grd.
Dk greyish green Rk w white + earthy brown
grains (some of the grains look like
white "speckles") ~~at least~~ found
a crystal face on one of the brownish
grains. In contact w the Dk green
epidote bearing banded sed? vole?
Happy Rock??
08V, 637722, 6820485, 1812m

"09-BSW-0136" good o/c obscured in lichen + moss + steep ground dyke? upper contact is mostly visible lower contacts obscured - dyke atleast 3m thick. contact undulates some what There may be another dyke below feeding into this one. 135/40S med-course gnd ~~=~~ igneous Rk. >60 Dk green mineral, white (qtz?) + fluorite? (purple), + brown interstitial mineral (REE?)

Some banding defined by grainsize several X cutting ~~vein~~ veins. 1-4cm wide mostly qtz but one vein has Qtz, galena, sphalerite, fluorite, carbonate + ??

8V, 637741, 6820397, 1821m

09-BSW-0137" good o/c dyke 2-3m thick 030/90 GPS position ± 25m extent. goes under veg + talus to S and either is faulted or changes orientation to the N. - similar to "0136" nearby - Fluorite (purple) exposed in gullet

08V, 637731, 6820368, 1821m.

extent of Dyke is from point "003 → 008"

"09-BSW-0138" o/c - dyke ~40-50cm wide - variable strike + dip, but is approx ⊥ to "0137" above + dips ~~vertical~~ vertical. similar material as well.

CUANO camp Aug 25/09

Skarn area West of camp

"09-BSW-0139" "skarn" local float/subcrop Red/brown garnet course grained 40-50% fine grnd lt yell/green material 40-50% with black grains to 3cm × 0.8cm. ~ upto 10% very heterogenious + altered, high REE's via Niton

09-BSW-0140 "skarn" local float/subcrop heterogenious. yellow green and grey green patches mm to cm across. - some red brown garnet patches to 10%.

Black specks mm scale + lath like patches to 1cm × 3mm. - ~~Rough~~ Porous weathered surface - high REE's via Niton

"09-BSW-0141" Intrusive? Prob - altered sed.
lt greyish fine-Med grained Rock
Possible intrusive porphyry
w/ ~~lt~~ lt colored phenos to ~~1cm~~ 1cm.

all three Samples Same
location "0139"

AUG 23 GAUANO

09-LVA-0015 → metaseds, rusty, no scintillometer action. (float)

09-LVA-0016 → less rusty metaseds pyrite/sulphides, fine grained. No scint action (float)

09-LVA-0017 → metased: fg sulphides, no scint. (float, but just below treacherous o/c)

09-LVA-0018 → metaseds. Fg, o/c no scint, more siliceous

09-LVA-0019
↳ niton metaseds rusty
no REE kick

*09-LVA-0020 → metaseds scint kick @ 2500 counts/sec
Niton → #164 La/Ce kick
shown unresponsive other metaseds

* From 09-LVA-0015 → 09-LVA-0020 background has gone from 100 counts/s to 150/200 counts/s.

→ sample taken.
Niton #165 → maybe La/Ce kick but too much background (small kick)
Niton #166 → too much background
Niton #167 → too much background.

→ #164 → taken in rusty oxidized area.
(potential REE fluid flow from elsewhere)

09-LVA-0021 O/C.
background to 100 counts/sec.
completely dead calcareous metased. (Left) → to R 1000 counts/sec.
Niton → calcareous (non scint kick)
#170 Broken kick but no REE
→ calcareous (scint kick)
#171 (above crack-vein (fluid was present)) → no REE kick, 2500 c/sec scint kick
#172 - on crack-vein
↳ 2500 counts/sec scint kick
↳ no reliable REE kick
#173 - same rock face as #171, 172
small REE kick, and some background
#174 - same rock face as #171 → 173
- small REE kick,
#175 → too much background.
No sample b/c in O/C, not able to get one.

09-LVA-0022 - #178 - too much background

09-LVA-0023 -
2 Rusty patches in nodules that bled out
nodule ~ 3-4cm, 2-3cm
rust trail = 20 cm long.
Scint high 1600 counts/sec in aureole

around rusty zone.
Niton #180 → in aureole small La/Ce kick → lots of background
#182 → in rusty zone, no REE
#183 → in rest of metaseds, no REE
No sample, boulder
→ near by → more rusty stuff →
2700 counts/sec
lots of pyrite present → greenish metaseds
↳ pyrite motherload → euhedries
#184 → rusty zone in pyrite → REE kick!
Sample taken.

09-LVA-0024 metaseds
3000 counts/s (greenish, larger glassier crystals)
(4mm)
large biotite crystals (2mm).
Siliceous - potential dyke? or right beside contact
weathering in layers
sample taken → Niton → no REE's
darker rocks running vertical up main slope.

09-LVA-0025 very rusty/oxidized metaseds
4000 counts/sec
- Same look as in 0024 above -
sample taken Niton #191 → REE motherload
very rusty patch to left. did not kick
Niton #192 → rock face O/C no REE, high Ba

Appendix C – Rietveld Refinement Report from UBC

QUANTITATIVE PHASE ANALYSIS OF SEVEN POWDER SAMPLES USING THE RIETVELD METHOD AND X-RAY POWDER DIFFRACTION DATA.

(Project: Guano - Yukon Territory)

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December 9, 2009

EXPERIMENTAL METHOD

The seven samples of **Project Guano – Yukon Territory** were reduced to the optimum grain-size range for quantitative X-ray analysis (<10 μm) by grinding under ethanol in a vibratory McCrone Micronising Mill for 7 minutes. Step-scan X-ray powder-diffraction data were collected over a range 3-80°2θ with CoKa radiation on a Bruker D8 Focus Bragg-Brentano diffractometer equipped with an Fe monochromator foil, 0.6 mm (0.3°) divergence slit, incident- and diffracted-beam Soller slits and a LynxEye detector. The long fine-focus Co X-ray tube was operated at 35 kV and 40 mA, using a take-off angle of 6°.

RESULTS

The X-ray diffractograms were analyzed using the International Centre for Diffraction Database PDF-4 using Search-Match software by Siemens (Bruker). X-ray powder-diffraction data of the samples were refined with Rietveld program Topas 3 (Bruker AXS). The results of quantitative phase analysis by Rietveld refinements are given in Table 1. These amounts represent the relative amounts of crystalline phases normalized to 100%. The Rietveld refinement plots are shown in Figures 1 – 7.

Table 1. Results of quantitative phase analysis (wt.%)

Mineral	**Ideal Formula**	**09DJT-003**	**09DJT-005**	**09DJT-007**	**09DJT-009**	**09BSW-125**	**09BSW-129**	**09BSW-131**
Quartz	SiO_2	23.6	38.2	77.1	19.6	26.0	48.8	74.0
Talc ?	$Mg_3Si_4O_{10}(OH)_2$						1.4	
Kaolinite ?	$Al_2Si_2O_5(OH)_4$				0.6			
Muscovite	$KAl_2AlSi_3O_{10}(OH)_2$			7.0	4.5			8.6
Plagioclase	$NaAlSi_3O_8 – CaAl_2Si_2O_8$				68.3		7.7	
K-feldspar	$KAlSi_3O_8$		15.5				17.1	
Actinolite	$Ca_2(Mg,Fe^{2+})_5Si_8O_{22}(OH)_2$	7.9	6.3			12.8	16.3	
Calcite	$CaCO_3$		3.4	11.0	1.2	2.6	0.8	14.0
Ankerite / Dolomite	$Ca(Fe^{2+},Mg,Mn)(CO_3)_2$ / $CaMg(CO_3)_2$			1.4	3.7			1.2
Siderite ?	$Fe^{2+}CO_3$					0.4		
Pyrite	FeS_2				0.3	1.5		
Magnetite	$Al_2Si_2O_5(OH)_4$				1.8			
Titanite ?	$CaTiSiO_5$					1.5		
Zircon	$ZrSiO_4$	9.7	10.8	1.8		5.4	3.9	0.5
Baddeleyite	ZrO_2	1.3						
Tazheranite ?	$(Zr,Ti,Ca)O_2$			0.4				0.4
Fluorite	CaF_2		7.9					
Allanite (Ce)	$(Ce,Ca,Y)_2(Al,Fe^{2+},Fe^{3+})_3(SiO_4)_3(OH)$	16.6	10.2			10.9		
Fersmite ?	$(Ca,Ce,Na)(Nb,Ta,Ti)_2(O,OH,F)_6$	1.9						
Pollucite ?	$(Cs,Na)[AlSi_2O_6]\ nH_2O$		0.5					
Monazite (Ce) ?	$(Ce,La,Nd,Th)PO_4$			0.5				
Columbite ?				0.6				
Xenotime (Y)	YPO_4			0.3				
Andradite/Almandine	$Ca_3Fe^{3+}{}_2Si_3O_{12}$ / $Fe_3{}^{2+}Al_2(SiO_4)_3$		2.5			32.9		
Diopside	$CaMg(CO_3)_2$	39.0	4.7			6.0	4.0	
Hydroxylapatite	$Ca_5(PO_4)_3(OH)$							1.2
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0

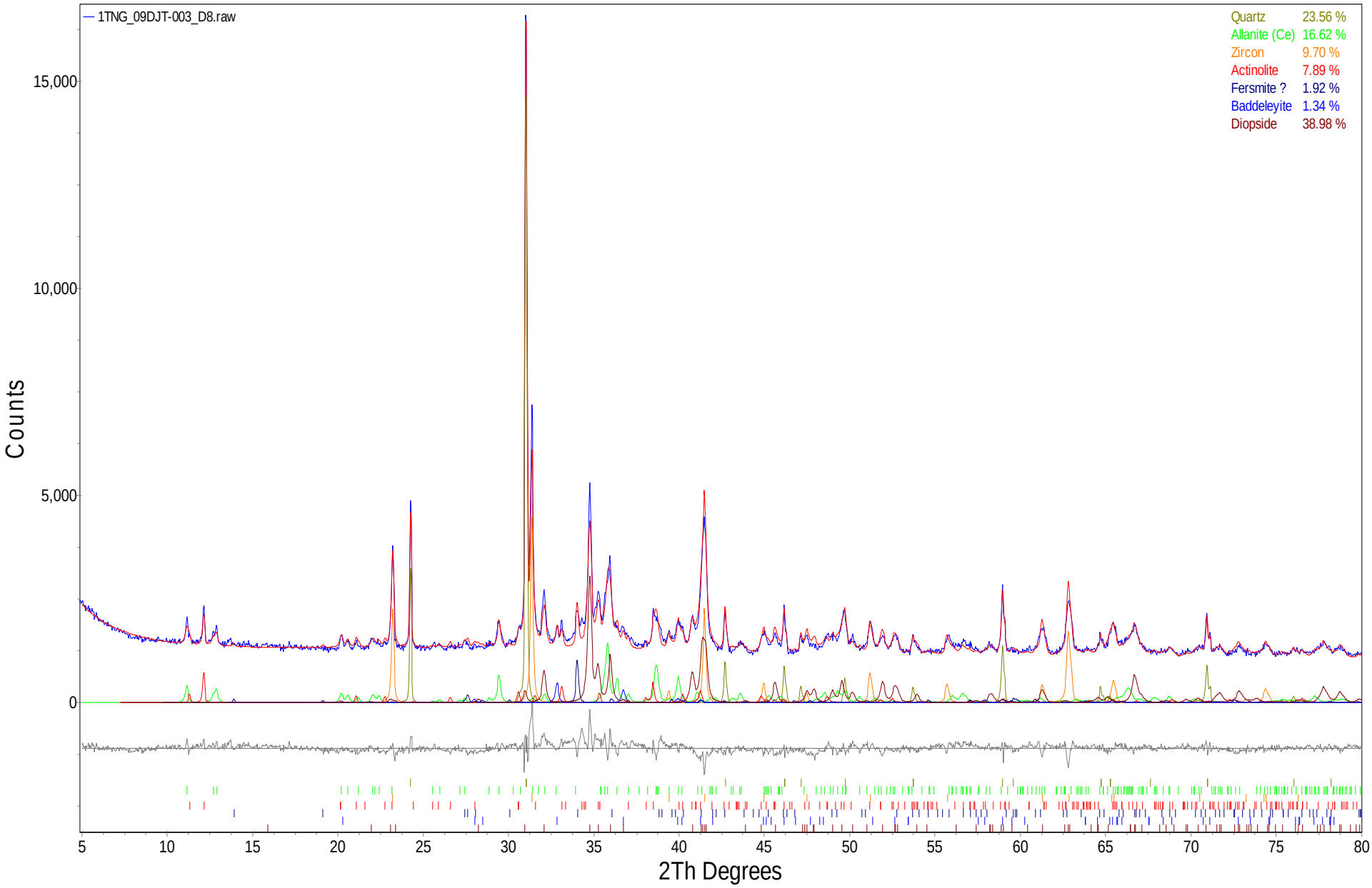

Figure 1. Rietveld refinement plot of sample **True North Gems "09DJT-003"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

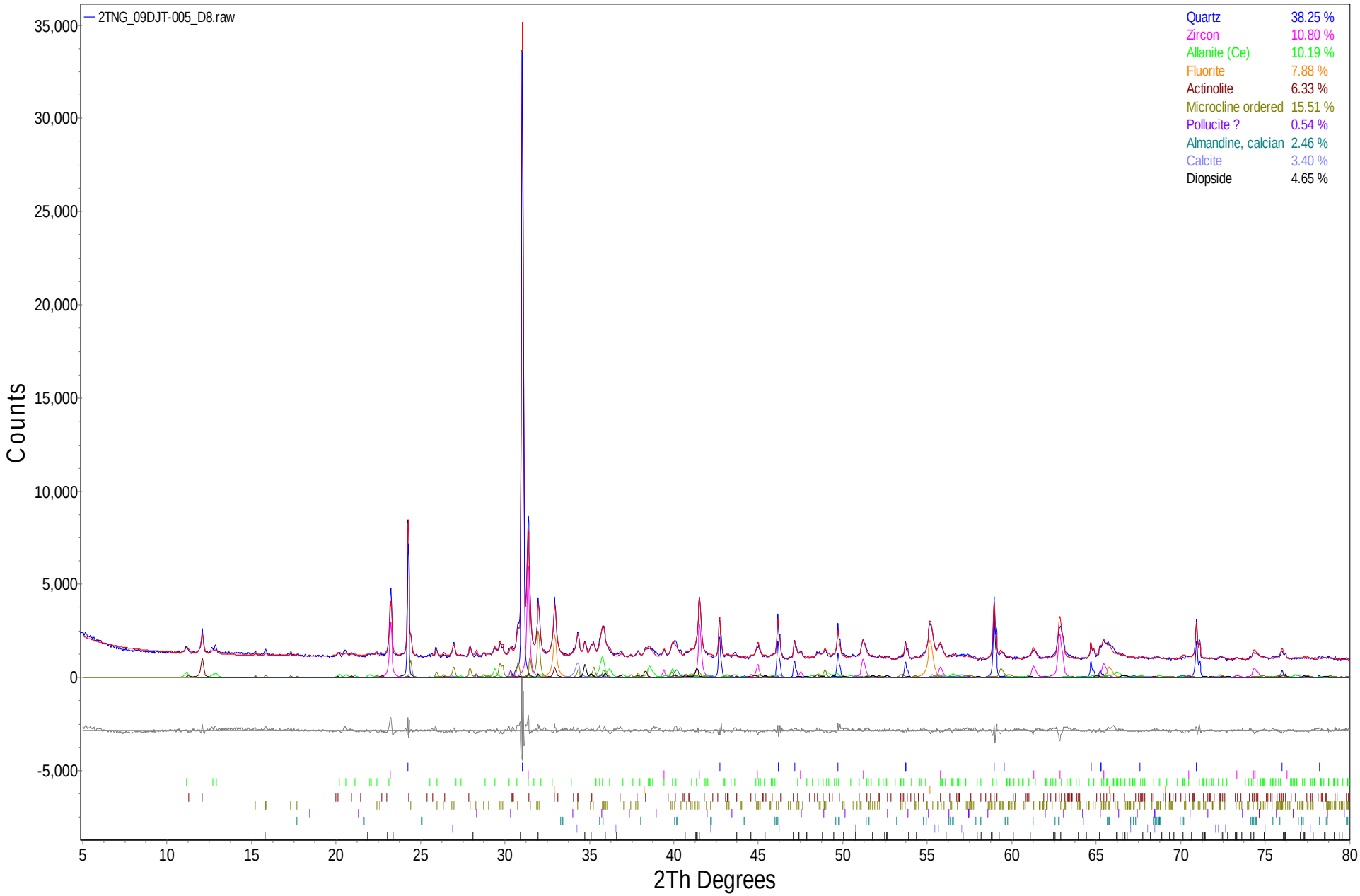

Figure 2. Rietveld refinement plot of sample **True North Gems "09DJT-005"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

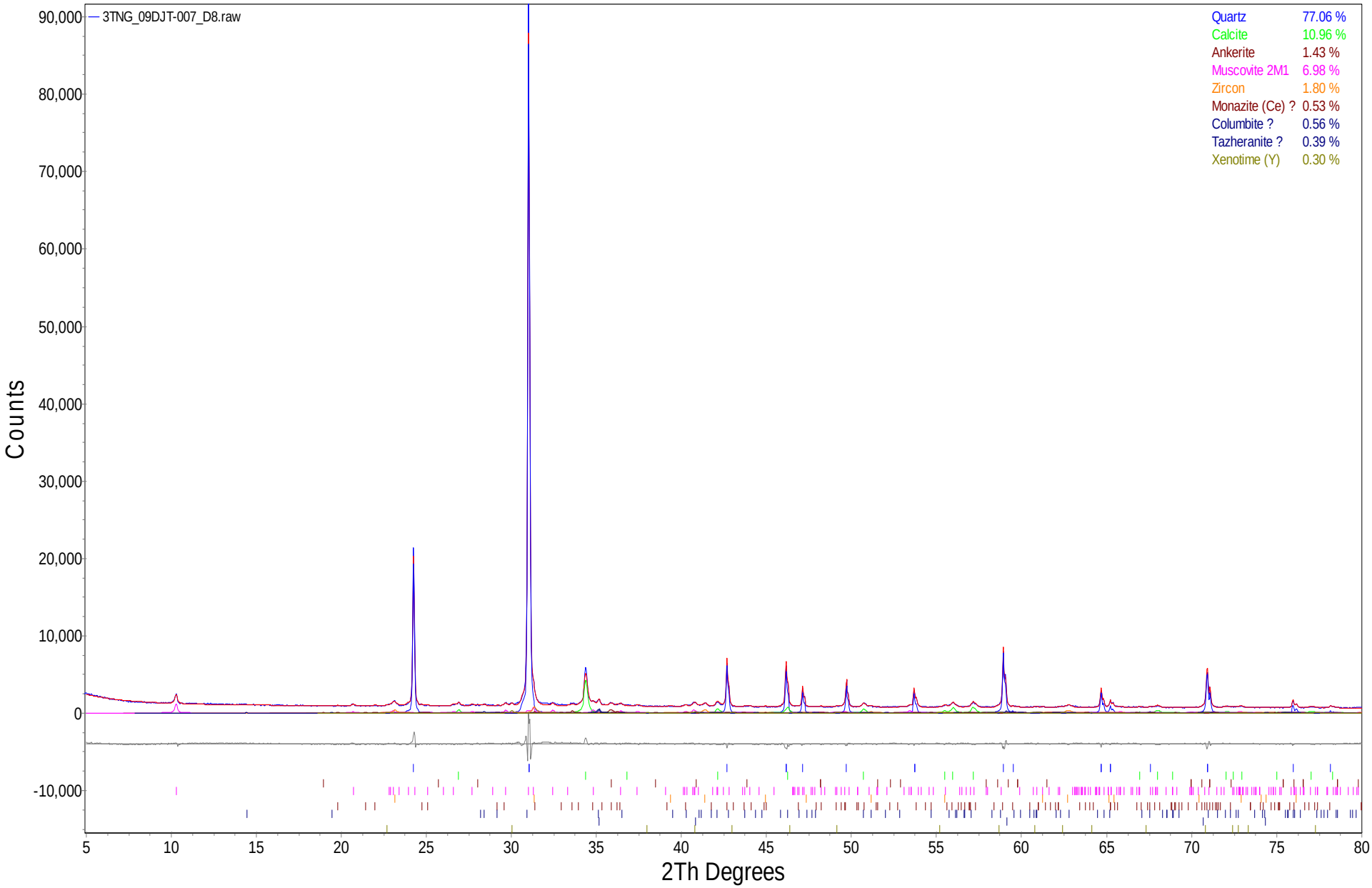

Figure 3. Rietveld refinement plot of sample **True North Gems "09DJT-007"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

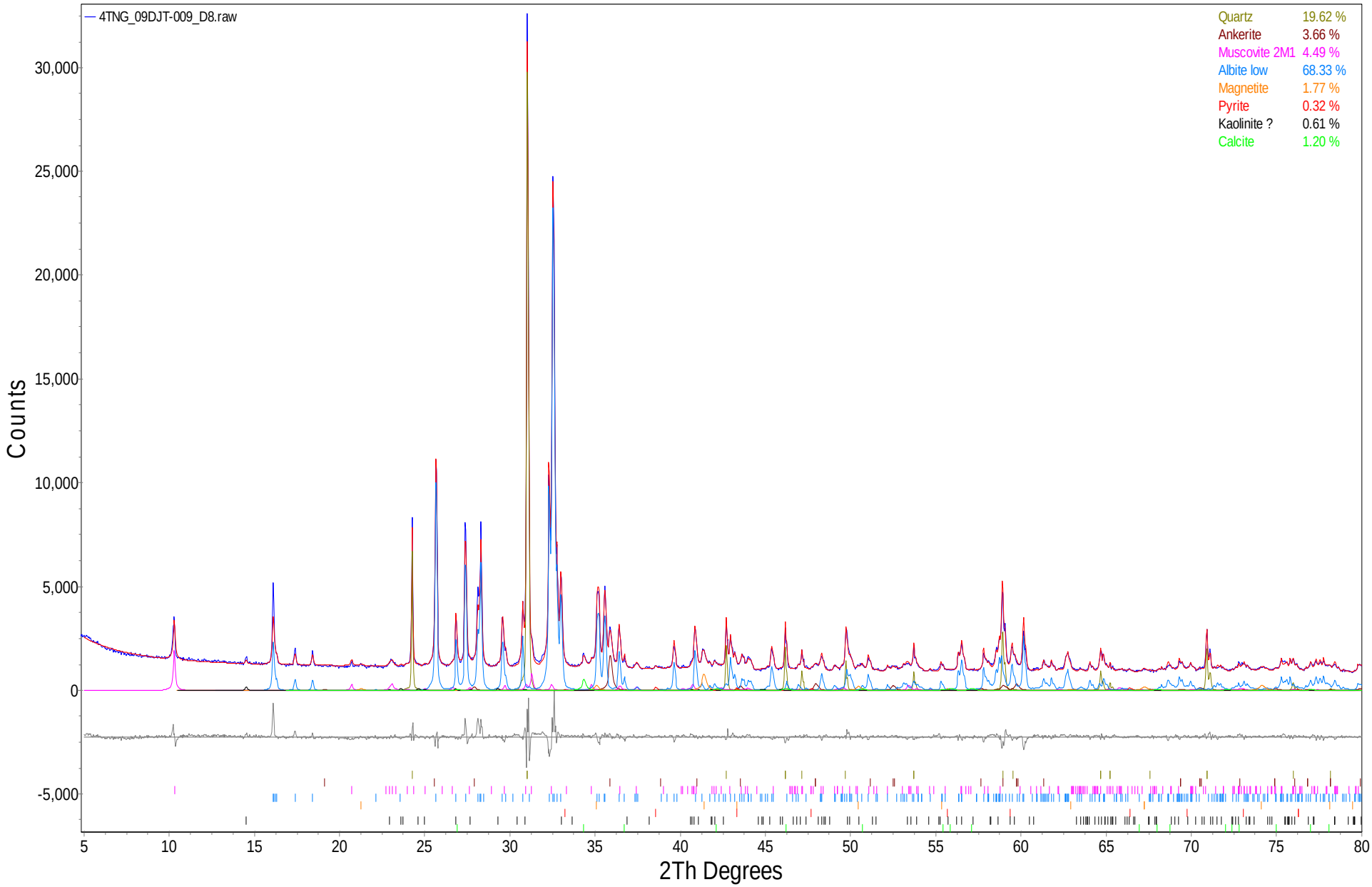

Figure 4. Rietveld refinement plot of sample **True North Gems "09DJT-009"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

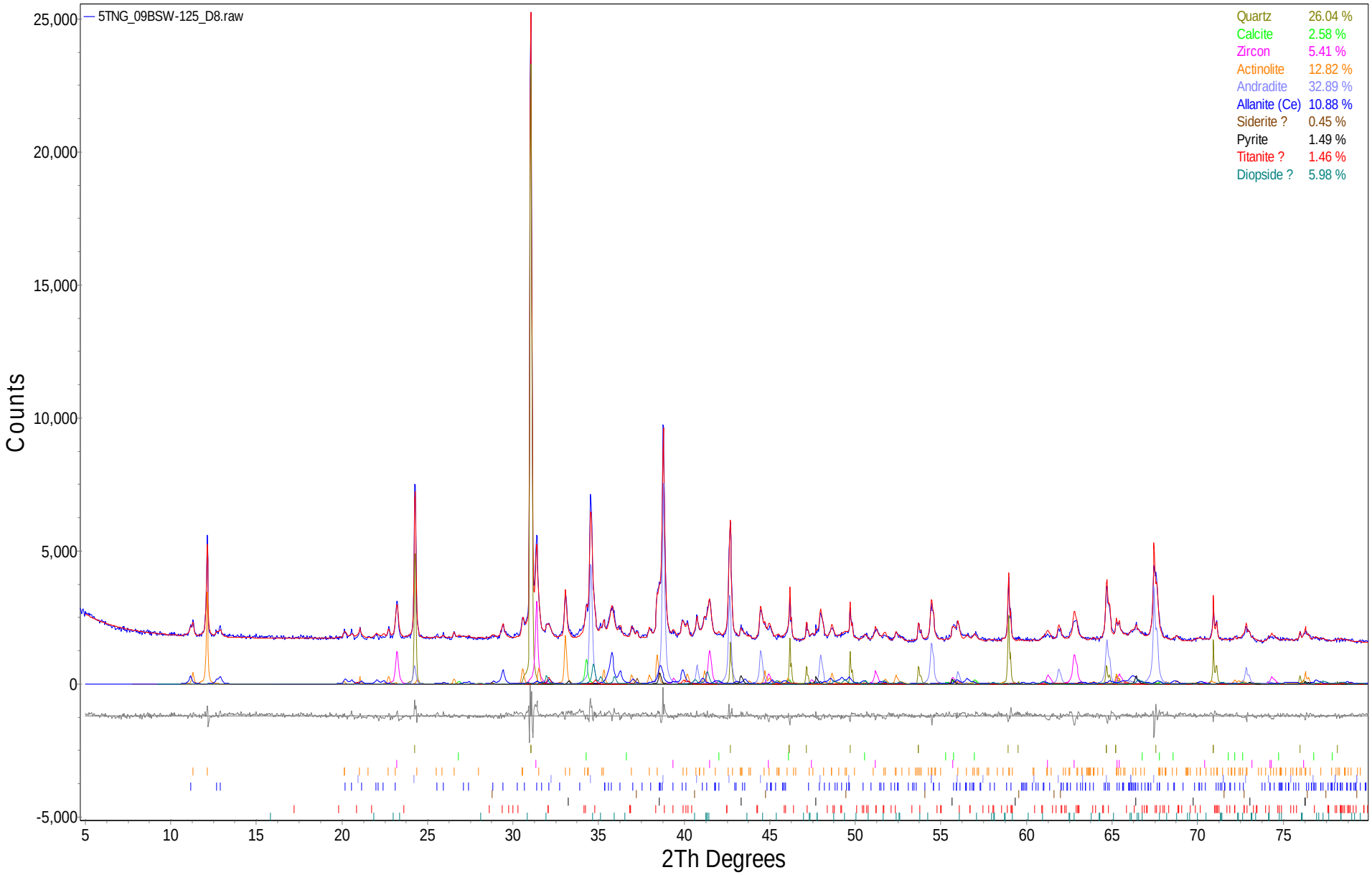

Figure 5. Rietveld refinement plot of sample **True North Gems "09BSW-125"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

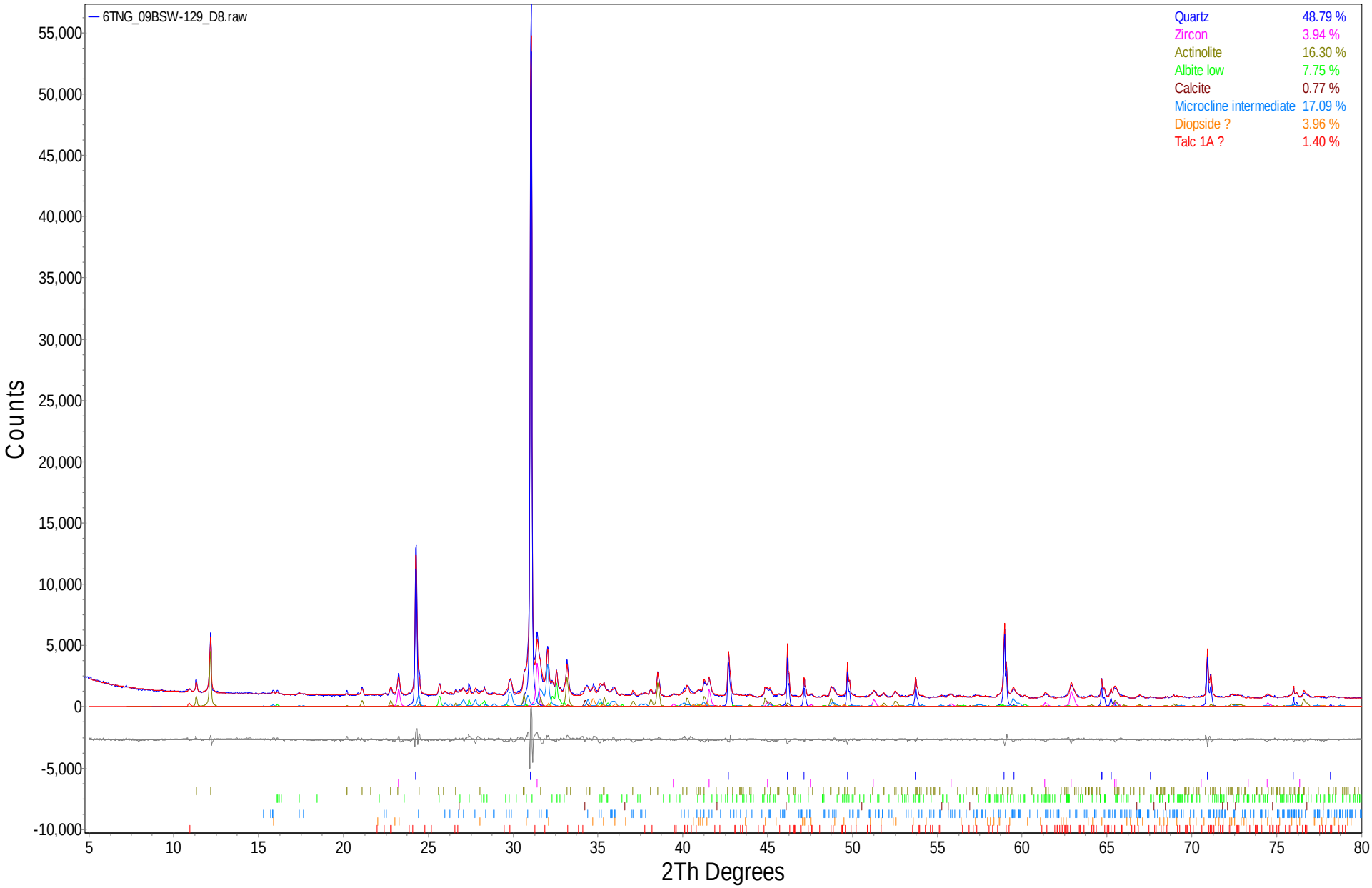

Figure 6. Rietveld refinement plot of sample **True North Gems "09BSW-129"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

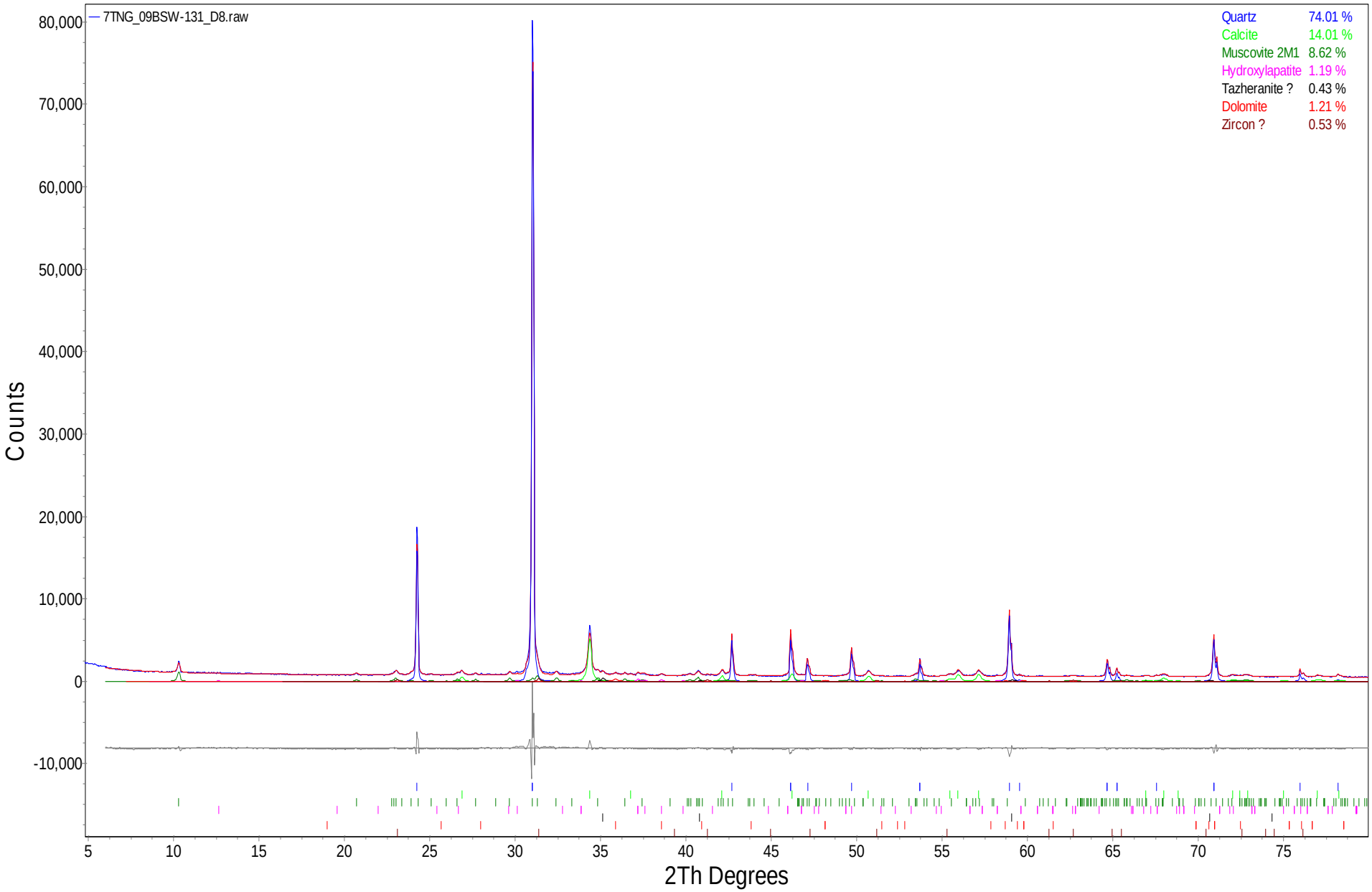

Figure 7. Rietveld refinement plot of sample **True North Gems "09BSW-131"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

Appendix D – Raw Geochemical Data

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To: TRUE NORTH GEMS
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

Finalized Date: 28-OCT-2009
Account: THR

CERTIFICATE VA09113858

Project: GUANO

P.O. No.:

This report is for 28 Rock samples submitted to our lab in Vancouver, BC, Canada on 25-SEP-2009.

The following have access to data associated with this certificate:

ACCOUNTS PAYABLE	DAVID TURNER	BONNIE WESTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81	38 element fusion ICP-MS	ICP-MS

To: **TRUE NORTH GEMS**
ATTN: ACCOUNTS PAYABLE
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 28-OCT-2009
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Project: GUANO

CERTIFICATE OF ANALYSIS VA09113858

Sample Description	Method	WEI-21	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Recvd Wt.	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	1	0.5	0.5	0.5	10	0.01	5	0.05	0.03	0.03	0.1	0.05	0.2	0.01
DJT 012		7.36	13	385	8180	3.3	10	2.66	7	509	301	50.4	74.8	522	383	105.0
DJT 017		1.48	<1	81.9	3310	1.0	<10	0.10	<5	201	185.0	16.55	58.2	138.5	13.5	52.3
DJT 018		1.52	1	41.4	781	2.2	<10	0.25	<5	39.4	27.6	9.52	44.9	44.9	61.8	8.51
DJT 019		1.40	<1	91.6	117.0	2.9	<10	0.92	5	116.0	39.2	12.75	38.5	89.2	17.3	18.80
LVA 020		2.54	3	369	596	5.6	20	0.18	6	54.7	62.4	5.59	7.0	38.2	906	14.95
LVA 023		3.32	13	585	3860	15.1	10	0.66	115	82.7	44.9	15.30	26.4	134.5	71.5	15.45
LVA 024		1.08	<1	156.5	110.0	3.8	30	0.21	<5	5.18	3.27	1.11	5.3	6.35	6.1	1.10
LVA 025		0.86	3	234	5200	5.2	10	0.10	10	629	395	49.5	43.6	542	228	134.5
BSW 110		1.26	<1	5660	77.8	19.6	20	2.13	98	2.00	1.24	0.40	5.4	3.25	0.6	0.42
BSW 111		1.48	<1	41.5	45.2	4.4	<10	0.02	<5	1.18	0.80	0.25	0.6	1.74	0.2	0.26
BSW 112		0.84	<1	>10000	141.5	32.2	560	0.07	46	9.66	4.87	4.60	29.2	10.95	6.0	1.83
BSW 113		1.58	<1	180.5	26.5	145.5	<10	<0.01	867	0.65	0.41	0.13	0.3	0.91	0.2	0.15
BSW 116		0.86	11	1590	294	9.0	<10	2.18	24	118.0	61.5	13.35	8.5	116.5	30.1	23.4
BSW 117		1.02	13	1250	283	9.1	40	2.43	78	117.5	65.0	10.55	18.2	106.0	53.2	23.5
BSW 119		1.62	5	1075	7000	2.5	10	1.33	8	252	141.5	23.6	71.2	316	165.0	50.0
BSW 127		1.16	29	2150	3470	3.1	10	0.64	<5	89.8	54.0	11.10	33.5	140.0	76.3	17.85
BSW 130		1.12	3	587	1545	17.7	<10	2.76	9	89.4	54.6	9.81	33.4	98.6	286	18.15
BSW 132		1.76	1	662	1005	2.0	10	1.55	8	45.5	25.7	5.44	40.2	56.4	92.1	8.92
BSW 133		1.68	2	810	1155	2.6	10	2.58	25	52.1	29.9	5.97	39.8	61.4	101.0	10.50
BSW 134		1.64	4	823	2190	1.1	10	0.76	25	103.0	57.4	11.15	52.2	116.0	119.5	20.2
BSW 135		5.02	15	124.5	4510	1.5	20	0.16	117	116.5	61.1	19.15	51.9	206	330	21.5
BSW 136		5.58	6	438	2770	1.2	20	0.75	<5	149.0	90.1	15.80	53.7	166.0	382	31.4
BSW 137		2.26	3	544	2060	3.4	10	1.67	7	57.7	35.7	8.94	46.2	92.6	355	11.55
BSW 138		1.18	8	189.0	3710	5.2	20	1.62	<5	87.9	34.7	17.20	56.9	198.5	439	14.15
BSW 139		3.60	1	39.2	7630	1.2	10	0.11	<5	71.6	49.0	15.75	76.7	187.0	24.6	15.30
BSW 140		4.96	1	185.0	2340	2.4	10	0.32	<5	46.2	26.0	10.75	52.8	77.8	15.9	9.05
BSW 141		0.52	<1	169.5	93.3	1.1	10	0.10	<5	4.74	3.34	0.74	32.6	5.02	17.3	1.04
BSW 142		2.46	<1	1095	24.9	2.5	<10	0.16	<5	19.45	10.10	3.43	32.3	17.75	11.4	3.73

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500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

Finalized Date: 28-OCT-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09113858

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	5	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
DJT 012		4010	30.2	<2	6170	3100	<5	10	847	396	595	118	79.9	418	90.9	635
DJT 017		2590	24.0	<2	175.5	787	<5	26	273	8.7	95.2	12	448	20.9	25.2	117.0
DJT 018		576	4.26	<2	172.5	226	<5	6	66.2	10.7	51.4	11	176.5	6.9	6.55	33.1
DJT 019		78.5	2.24	<2	305	61.8	<5	5	12.20	23.4	47.5	29	137.5	9.6	19.60	7.12
LVA 020		231	20.0	<2	4040	218	<5	34	65.0	4.9	43.8	19	22.4	744	7.22	>1000
LVA 023		2380	4.59	6	4580	927	6	6	322	31.9	130.0	35	115.0	84.4	16.20	583
LVA 024		56.4	0.46	<2	56.6	37.7	<5	<5	11.40	9.0	5.92	21	28.6	8.3	0.90	9.97
LVA 025		2360	44.5	<2	2610	2240	7	<5	564	5.9	472	39	96.7	598	99.4	>1000
BSW 110		56.9	0.15	<2	50.8	22.1	38	<5	6.80	186.5	3.02	1	119.0	1.5	0.37	10.20
BSW 111		37.9	0.12	<2	2.5	11.0	6	<5	3.62	0.8	1.63	<1	42.8	0.2	0.23	0.70
BSW 112		71.7	0.55	<2	45.0	54.9	254	7	14.25	4.0	10.20	17	521	5.0	1.72	13.75
BSW 113		19.2	0.07	<2	0.5	6.4	29	<5	2.18	1.8	0.82	<1	13.8	<0.1	0.11	0.27
BSW 116		91.6	5.74	<2	4280	324	8	<5	54.6	137.5	114.5	33	62.9	39.7	19.90	465
BSW 117		97.5	7.62	14	5280	252	41	5	46.5	87.3	97.6	7	31.2	64.8	17.95	472
BSW 119		4200	16.10	11	2790	2240	10	12	673	73.6	333	51	22.1	243	43.9	>1000
BSW 127		1720	6.11	<2	9410	1160	<5	13	349	65.3	153.5	7	34.3	261	16.95	326
BSW 130		808	6.27	<2	1630	546	8	8	157.5	166.0	96.7	92	144.5	172.5	15.10	150.0
BSW 132		522	3.20	3	782	361	<5	5	102.5	116.0	65.1	66	42.5	41.5	7.82	180.5
BSW 133		611	3.44	<2	902	397	<5	15	115.5	242	66.1	93	65.3	39.3	9.04	81.9
BSW 134		1170	6.46	2	1610	741	<5	8	215	316	126.0	57	60.4	71.0	17.35	135.0
BSW 135		2550	6.10	<2	4330	1530	<5	13	431	6.5	225	125	150.5	213	24.4	226
BSW 136		1435	12.15	<2	3340	1010	<5	228	281	237	175.0	136	91.6	298	26.0	225
BSW 137		1225	5.69	<2	1470	724	<5	43	201	61.8	101.0	116	139.5	154.5	11.55	93.9
BSW 138		1810	5.28	<2	3570	1380	<5	84	390	97.5	230	188	61.8	452	21.6	52.0
BSW 139		6140	5.27	<2	292	1620	<5	9	606	5.5	159.0	11	947	10.7	16.60	180.5
BSW 140		1895	2.44	<2	246	509	<5	24	181.5	9.0	62.8	14	1080	9.2	9.17	17.35
BSW 141		58.8	0.62	<2	228	29.7	<5	<5	9.02	8.9	5.24	4	506	13.6	0.76	19.65
BSW 142		15.6	1.12	<2	71.3	21.2	<5	13	3.31	23.3	14.15	9	624	10.5	3.26	4.57

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500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

Finalized Date: 28-OCT-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09113858

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	0.05	5	1	0.5	0.03	5	2
DJT 012		<0.5	41.6	215	<5	37	2520	241	97	>10000
DJT 017		<0.5	28.8	3.95	18	3	1435	180.5	47	474
DJT 018		<0.5	4.32	2.20	<5	2	233	28.3	41	2710
DJT 019		<0.5	4.19	3.07	<5	5	482	20.6	60	772
LVA 020		<0.5	13.25	>1000	38	14	436	107.5	250	>10000
LVA 023		<0.5	5.82	193.5	12	8	594	35.5	227	3950
LVA 024		<0.5	0.47	2.73	68	2	33.2	3.07	95	251
LVA 025		<0.5	57.0	72.6	16	17	3260	334	68	>10000
BSW 110		<0.5	0.16	2.15	17	1	12.7	0.98	48	43
BSW 111		<0.5	0.11	0.55	<5	1	8.8	0.74	35	4
BSW 112		<0.5	0.66	2.25	241	2	49.5	3.96	220	233
BSW 113		<0.5	0.03	1.48	<5	1	4.8	0.41	15	<2
BSW 116		<0.5	7.99	164.0	22	19	755	46.0	55	1820
BSW 117		<0.5	9.06	236	152	34	744	53.1	47	2870
BSW 119		<0.5	19.30	251	74	30	1220	120.0	283	9290
BSW 127		<0.5	7.56	347	<5	41	518	46.3	36	3050
BSW 130		<0.5	7.47	69.8	16	7	545	44.8	58	>10000
BSW 132		<0.5	3.64	36.6	<5	14	247	22.8	65	3760
BSW 133		<0.5	4.08	26.9	6	5	268	25.5	192	3790
BSW 134		<0.5	7.94	43.4	<5	6	518	48.4	251	4830
BSW 135		<0.5	7.90	200	<5	15	585	45.8	83	>10000
BSW 136		<0.5	13.70	137.0	<5	5	728	85.1	1350	>10000
BSW 137		<0.5	5.25	78.7	<5	3	264	36.9	70	>10000
BSW 138		<0.5	3.97	150.0	<5	4	297	30.9	241	>10000
BSW 139		<0.5	6.36	5.19	7	2	414	40.4	26	1010
BSW 140		<0.5	3.37	5.97	<5	2	235	20.2	56	699
BSW 141		<0.5	0.53	2.66	<5	1	28.6	3.82	14	682
BSW 142		<0.5	1.38	0.84	<5	1	92.9	8.58	40	450

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Finalized Date: 28-OCT-2009
Account: THR

CERTIFICATE VA09113859

Project: GUANO

P.O. No.:

This report is for 4 Other samples submitted to our lab in Vancouver, BC, Canada on 25-SEP-2009.

The following have access to data associated with this certificate:

ACCOUNTS PAYABLE	DAVID TURNER	BONNIE WESTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81	38 element fusion ICP-MS	ICP-MS

To: **TRUE NORTH GEMS**
ATTN: ACCOUNTS PAYABLE
500-602 W HASTINGS ST
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This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 28-OCT-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09113859

Sample Description	Method	WEI-21	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Recvd Wt.	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	1	0.5	0.5	0.5	10	0.01	5	0.05	0.03	0.03	0.1	0.05	0.2	0.01
SILT 1-SHARK		0.22	1	618	399	4.9	10	7.16	14	25.7	14.50	2.81	35.8	31.1	20.6	4.85
SILT 2-GILL		0.14	1	644	297	6.0	30	4.48	16	18.25	10.20	2.48	27.3	24.2	12.8	3.44
SILT 3-W GUANO BASIN		0.10	<1	1140	238	8.1	20	5.58	14	14.15	8.10	3.13	36.1	16.65	14.7	2.90
SILT 4- GUANO RIDGE PROPER		0.18	<1	1395	191.0	25.7	50	5.62	83	11.45	6.53	2.22	22.5	13.70	8.6	2.28

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Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	5	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
SILT 1-SHARK		197.0	1.83	21	294	143.0	10	22	41.6	105.5	28.3	16	148.5	17.0	4.65	70.4
SILT 2-GILL		179.0	1.38	6	199.5	122.5	13	14	36.1	84.0	22.7	13	200	11.9	3.50	46.2
SILT 3-W GUANO BASIN		137.0	1.09	24	144.0	88.1	13	28	26.6	138.0	16.20	13	85.3	8.7	2.57	28.9
SILT 4- GUANO RIDGE PROPER		110.5	0.83	18	144.5	71.9	50	217	21.2	132.0	13.70	10	79.0	6.0	2.08	37.6

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Project: GUANO

CERTIFICATE OF ANALYSIS VA09113859

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	0.05	5	1	0.5	0.03	5	2
SILT 1-SHARK		<0.5	2.09	13.85	19	6	137.0	13.75	90	767
SILT 2-GILL		<0.5	1.54	13.10	42	4	105.0	9.76	75	494
SILT 3-W GUANO BASIN		<0.5	1.14	8.64	54	9	76.1	6.90	112	580
SILT 4- GUANO RIDGE PROPER		<0.5	0.89	13.35	153	9	69.9	5.46	809	357

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To: TRUE NORTH GEMS
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

Finalized Date: 28-OCT-2009
Account: THR

CERTIFICATE VA09111061

Project: GUANO

P.O. No.:

This report is for 24 Rock samples submitted to our lab in Vancouver, BC, Canada on 7-OCT-2009.

The following have access to data associated with this certificate:

LEE GROAT	DAVID TURNER	BONNIE WESTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81	38 element fusion ICP-MS	ICP-MS

To: **TRUE NORTH GEMS**
ATTN: BONNIE WESTON
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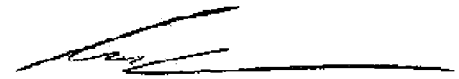
This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 28-OCT-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09111061

Sample Description	Method	WEI-21	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Recvd Wt.	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho
	Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	1	0.5	0.5	0.5	10	0.01	5	0.05	0.03	0.03	0.1	0.05	0.2	0.01
09DJT 001		0.28	<1	7670	249	41.0	30	2.63	369	3.68	2.34	0.74	5.1	7.87	3.0	0.76
09DJT 002		2.68	<1	2810	76.8	149.0	<10	0.78	613	1.50	0.87	0.37	2.0	2.72	0.3	0.29
09DJT 003		0.36	<1	539	>10000	3.9	<10	0.19	12	>1000	>1000	148.5	120.5	>1000	765	376
09DJT-005		1.58	<1	306	>10000	1.3	10	1.93	33	339	190.5	52.0	97.1	590	1140	64.7
09DJT-007		0.54	<1	1060	951	2.0	40	1.53	14	801	528	34.5	39.2	534	127.0	176.5
09DJT-008		1.08	<1	225	4280	3.0	30	6.88	<5	310	256	38.5	36.5	269	142.5	75.1
09DJT-009		1.34	<1	116.5	511	0.9	10	0.57	<5	16.85	10.45	1.41	38.5	24.7	24.0	3.37
09DJT-010		0.16	<1	2590	3090	12.9	10	0.54	56	259	196.0	15.85	39.0	238	972	58.8
09DJT-013		1.08	<1	1880	2600	10.4	20	3.10	21	72.5	36.1	12.85	27.0	136.0	40.4	12.45
09DJT-014		0.94	<1	3960	497	19.2	20	6.42	49	11.90	6.49	4.25	27.4	23.3	9.1	2.20
09DJT-015		2.82	<1	474	249	2.1	<10	3.80	8	11.30	6.44	2.14	36.4	14.70	13.9	2.19
09DJT-016		0.68	<1	502	1095	1.4	10	0.88	5	19.55	10.70	3.78	24.7	39.1	8.8	3.66
09BSW 114		1.76	2	160.5	4180	4.8	30	0.80	<5	176.5	77.8	33.4	34.4	222	34.2	30.0
09BSW 115		2.10	<1	370	2000	4.4	10	0.23	14	38.7	20.6	8.03	27.1	73.3	38.1	7.07
09BSW 120		1.32	<1	267	2190	4.0	<10	0.64	31	105.5	62.3	14.00	84.2	131.5	86.8	20.8
09BSW 121		2.02	<1	358	1775	1.5	10	1.06	14	69.2	44.6	8.32	54.6	87.5	501	14.30
09BSW 122		1.22	<1	149.0	3570	8.6	20	0.08	5	40.0	24.6	9.09	34.9	107.5	15.2	7.69
09BSW 123		1.68	<1	3280	315	19.0	10	0.50	<5	297	189.0	11.25	14.6	201	450	63.8
09BSW 124		2.08	<1	832	2910	6.8	10	0.55	25	136.5	76.8	18.70	50.9	179.0	174.5	26.9
09BSW 125		1.66	<1	190.5	8520	11.5	10	0.64	59	>1000	614	104.0	72.7	966	409	214
09BSW 126		1.56	<1	897	1890	3.5	10	0.34	9	105.0	61.9	8.11	37.5	128.5	91.7	21.3
09BSW 128		1.38	<1	447	549	3.3	<10	2.98	31	30.1	18.40	3.84	40.2	33.3	64.8	6.22
09BSW 129		2.28	<1	2980	232	3.2	20	0.53	9	325	221	8.38	18.8	182.0	381	72.4
09BSW 131		1.34	<1	1365	674	1.1	40	0.62	8	834	548	32.1	34.9	537	52.4	185.5

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To: **TRUE NORTH GEMS**
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

Finalized Date: 28-OCT-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09111061

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	5	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
09DJT 001		166.5	0.25	<2	75.3	65.4	158	104	22.1	184.5	7.13	1	131.0	1.2	0.84	19.10
09DJT 002		45.7	0.13	<2	13.4	20.2	218	16	6.93	65.8	2.66	1	35.3	0.6	0.30	5.89
09DJT 003		5680	117.5	<2	>10000	7880	<5	67	>1000	4.7	>1000	82	236	3850	319	>1000
09DJT-005		6630	25.8	<2	4280	4410	<5	97	>1000	86.6	703	155	268	483	76.2	348
09DJT-007		234	56.6	<2	>10000	1195	11	22	202	36.1	491	10	124.5	351	122.0	>1000
09DJT-008		2230	40.9	<2	4700	1375	13	17	418	7.6	266	77	129.0	259	47.7	>1000
09DJT-009		277	1.42	3	318	173.0	<5	7	52.8	20.7	28.8	7	45.5	17.5	3.49	74.1
09DJT-010		1250	32.2	<2	2970	1345	15	20	351	69.2	278	27	41.8	380	43.6	661
09DJT-013		956	3.30	<2	8880	1020	14	10	306	117.5	160.0	21	146.0	139.5	16.70	670
09DJT-014		209	0.67	<2	1100	188.0	23	12	57.2	248	27.5	13	329	18.1	2.80	82.1
09DJT-015		132.0	0.89	8	266	88.7	<5	8	26.2	209	15.30	8	38.4	13.4	2.23	29.8
09DJT-016		761	1.32	7	1525	281	<5	29	97.2	223	38.6	23	205	12.3	4.45	258
09BSW 114		2480	6.78	2	4760	1295	39	5	394	28.7	214	10	20.9	47.5	35.3	701
09BSW 115		1240	2.16	<2	3430	551	<5	9	188.5	3.6	75.0	96	112.0	37.3	8.74	554
09BSW 120		1015	7.77	2	2870	774	11	11	232	37.7	144.5	79	101.5	126.0	20.2	985
09BSW 121		971	6.71	<2	3180	553	<5	51	175.0	218	89.1	114	82.5	290	13.00	328
09BSW 122		2210	3.03	<2	442	952	<5	12	328	2.7	111.0	18	145.0	17.4	10.80	105.5
09BSW 123		51.1	22.1	2	5160	373	6	9	59.5	81.8	176.0	9	24.4	533	46.3	677
09BSW 124		1470	7.99	<2	3600	1045	<5	10	310	43.9	188.0	71	72.3	257	27.1	313
09BSW 125		3550	64.6	<2	>10000	3990	<5	8	994	11.2	926	340	167.5	1300	180.0	>1000
09BSW 126		804	6.70	<2	7880	767	<5	10	219	47.5	131.0	6	58.6	197.5	20.0	209
09BSW 128		287	2.37	2	596	176.5	<5	<5	55.0	171.5	32.5	79	46.3	33.5	5.49	97.5
09BSW 129		51.7	28.1	<2	4060	282	<5	13	46.3	61.2	138.5	5	17.4	444	46.5	445
09BSW 131		184.0	54.9	<2	>10000	844	10	21	137.5	33.0	417	8	127.0	242	125.5	>1000

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VANCOUVER BC V6B 1P2

Finalized Date: 28-OCT-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09111061

Sample Description	Method	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81	ME-MS81
	Analyte	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	0.05	5	1	0.5	0.03	5	2
09DJT 001		<0.5	0.30	9.23	53	3	25.3	1.78	204	86
09DJT 002		<0.5	0.14	1.75	13	5	11.0	0.80	17	12
09DJT 003		<0.5	155.5	>1000	22	180	>10000	888	120	>10000
09DJT-005		<0.5	25.9	264	<5	14	1675	170.5	63	>10000
09DJT-007		<0.5	78.1	835	228	56	4870	458	68	9360
09DJT-008		<0.5	42.3	266	37	82	2030	283	125	8910
09DJT-009		<0.5	1.47	11.30	<5	6	89.5	9.56	21	1080
09DJT-010		<0.5	31.1	148.5	5	44	1325	210	118	>10000
09DJT-013		<0.5	4.40	178.0	134	28	470	26.3	154	2210
09DJT-014		<0.5	0.77	22.0	310	6	74.8	4.90	319	434
09DJT-015		<0.5	0.89	5.93	<5	6	59.9	5.86	66	580
09DJT-016		<0.5	1.38	67.8	<5	8	141.0	9.20	643	466
09BSW 114		<0.5	9.37	286	136	33	741	53.7	120	2120
09BSW 115		<0.5	2.55	244	17	12	261	15.55	148	1760
09BSW 120		<0.5	8.84	167.5	8	18	690	55.9	86	5380
09BSW 121		<0.5	6.60	149.5	<5	3	399	44.6	273	>10000
09BSW 122		<0.5	3.03	11.10	34	5	230	19.35	80	671
09BSW 123		<0.5	27.1	201	18	121	1495	164.0	26	>10000
09BSW 124		<0.5	9.85	139.0	<5	26	686	59.1	38	8470
09BSW 125		<0.5	84.7	425	9	160	6880	495	42	>10000
09BSW 126		<0.5	8.52	261	<5	43	553	51.0	28	4030
09BSW 128		<0.5	2.56	26.7	<5	13	167.0	15.85	104	2460
09BSW 129		<0.5	33.4	182.0	47	34	1570	205	50	>10000
09BSW 131		<0.5	79.1	739	184	51	5350	454	55	4110

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Finalized Date: 8-NOV-2009
Account: THR

CERTIFICATE VA09125275

Project: GUANO

P.O. No.:

This report is for 5 Rock samples submitted to our lab in Vancouver, BC, Canada on 4-NOV-2009.

The following have access to data associated with this certificate:

LEE GROAT	DAVID TURNER	BONNIE WESTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	ICP-MS

To: TRUE NORTH GEMS
ATTN: BONNIE WESTON
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 8-NOV-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09125275

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
09DJT 003		14500	2220	1260	165.0	2000	821	447	5420	126.0	17650	7820	1955	4	1925	73
09DJT-005		11650	365	200.0	57.3	665	1180	70.1	6430	27.7	4440	4450	1320	83	703	139
09DJT-007		907	833	547	37.2	578	126	183.0	221	56.5	13650	1200	204	33	501	10
09BSW 125		7800	1075	632	110.5	1015	400	219	3350	65.0	9880	3920	1025	10	930	299
09BSW 131		669	886	577	33.8	582	52	195.0	179	55.3	11400	887	142.0	31	432	8

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Finalized Date: 8-NOV-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09125275

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
09DJT 003		4150	369	>5000	171.0	1905	160	11250	1010	47800
09DJT-005		516	78.3	389	27.6	264	13	1690	182.5	>50000
09DJT-007		358	125.0	>5000	81.5	828	52	4760	477	8890
09BSW 125		1265	181.5	4430	87.8	416	141	6610	512	23600
09BSW 131		237	130.0	4580	82.1	745	47	5410	467	4090

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Finalized Date: 8-NOV-2009
Account: THR

CERTIFICATE VA09125279

Project: GUANO

P.O. No.:

This report is for 2 Rock samples submitted to our lab in Vancouver, BC, Canada on 4-NOV-2009.

The following have access to data associated with this certificate:

ACCOUNTS PAYABLE	DAVID TURNER	BONNIE WESTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND-02	Find Sample for Addn Analysis

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-MS81h	High grade REE by fusion/ICPMS	ICP-MS

To: **TRUE NORTH GEMS**
ATTN: ACCOUNTS PAYABLE
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Signature:

Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 8-NOV-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09125279

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	3	0.3	0.2	0.2	0.3	1	0.05	3	0.05	1	0.5	0.2	1	0.2	5
DJT 012		8040	556	318	58.4	579	379	110.0	4150	32.6	6740	3020	909	380	588	119
DJT 017		3220	193.0	178.5	16.9	144.0	14	51.7	2610	23.8	198	771	283	9	99.8	11

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Finalized Date: 8-NOV-2009
Account: THR

Project: GUANO

CERTIFICATE OF ANALYSIS VA09125279

Sample Description	Method	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h	ME-MS81h
	Analyte	Ta	Tb	Th	Tm	U	W	Y	Yb	Zr
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.05	0.3	0.05	0.3	5	3	0.2	10
DJT 012		460	96.3	756	43.6	219	36	2440	256	18600
DJT 017		23.7	25.8	142.5	28.2	3.9	<5	1400	176.5	540

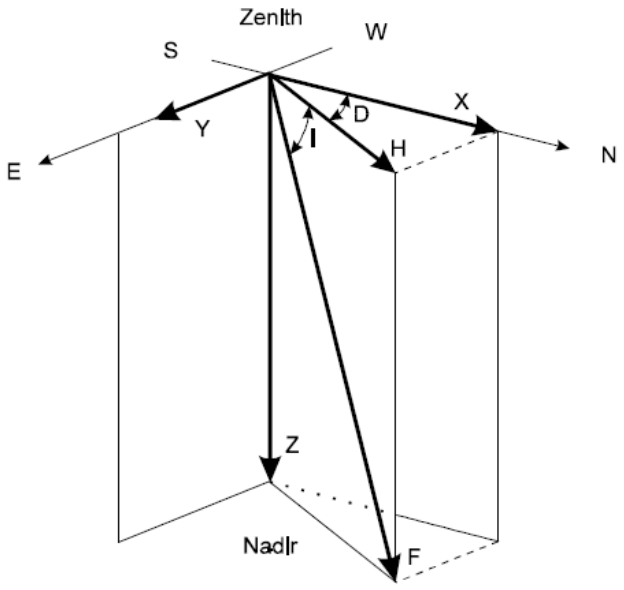
Appendix E – Base Station Magnetic Data from INTERMAGNET

Base Station Magnetic Data from INTERMAGNET

Data is presented from Aug 20 to Aug 25, the window within which magnetic data was collected. The Sitka observatory in Alaska was chosen for comparison as it is the closest points, followed by the Yellowknife (NWT) and College (AK) observatories. This data shows a common broad ~ -20 nT low in the evenings, as well as a ~ -75 nT hour long depression around 9 am on the first two survey days.

"The results presented here rely on data collected at magnetic observatories. We thank the national institutes that support them and INTERMAGNET for promoting high standards of magnetic observatory practice. (www.intermagnet.org)"

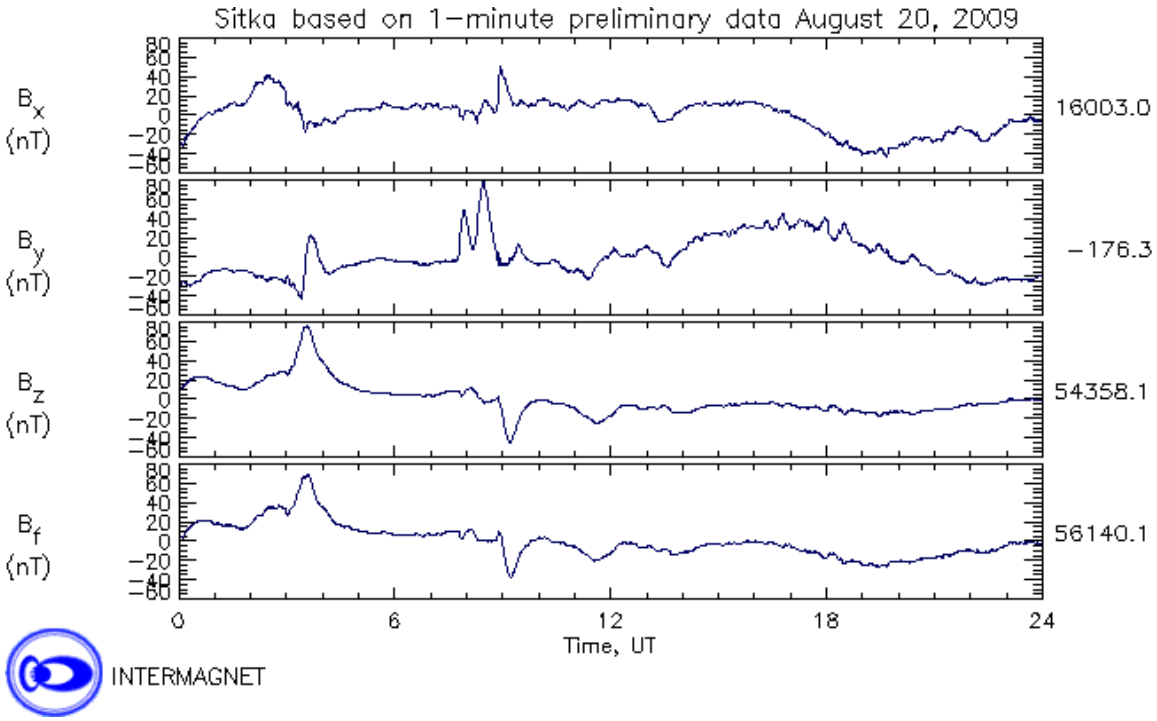
Observatory:
USGS - Sitka, AK
57.1 / 224.7
24 meters ASL

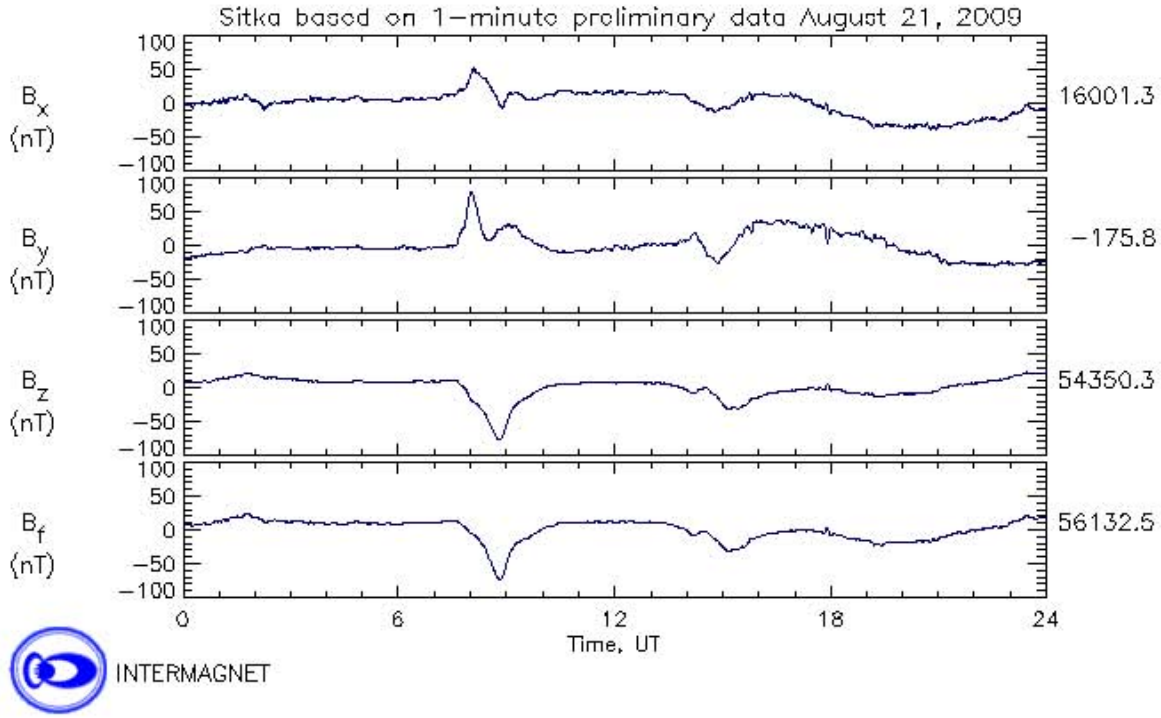


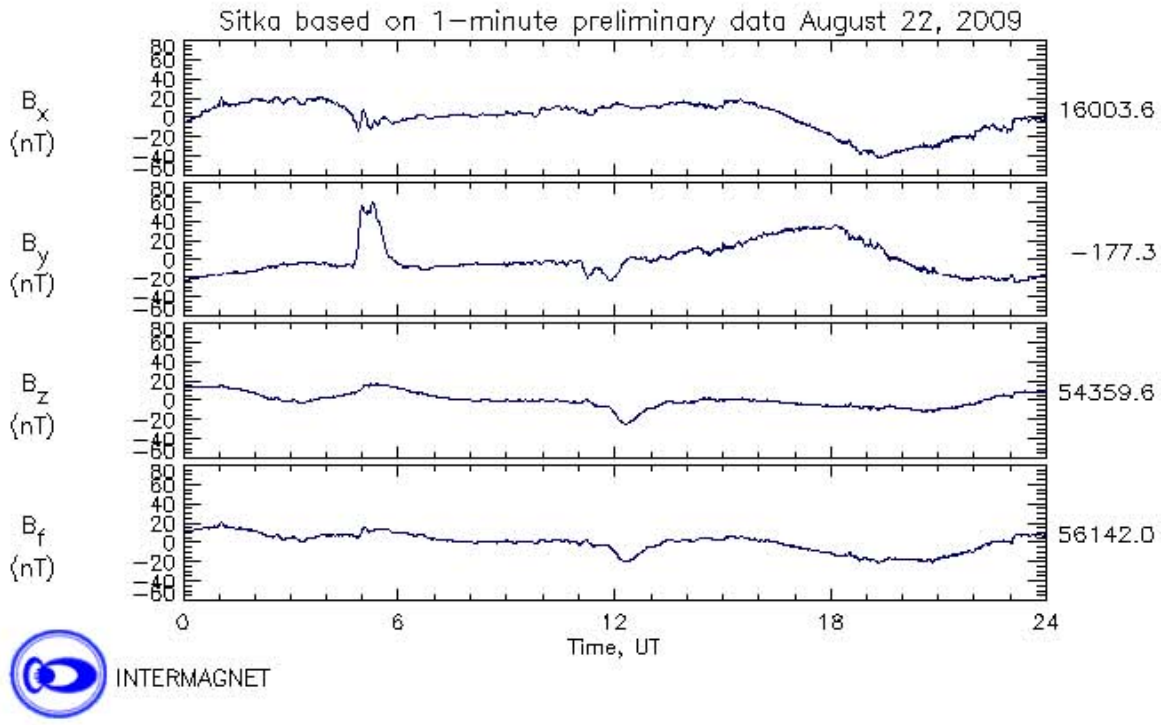
D - Declination
Y - East-West Component
I - Inclination
Z - Vertical Intensity
H - Horizontal Intensity
F - Total Intensity
X - North-South Component

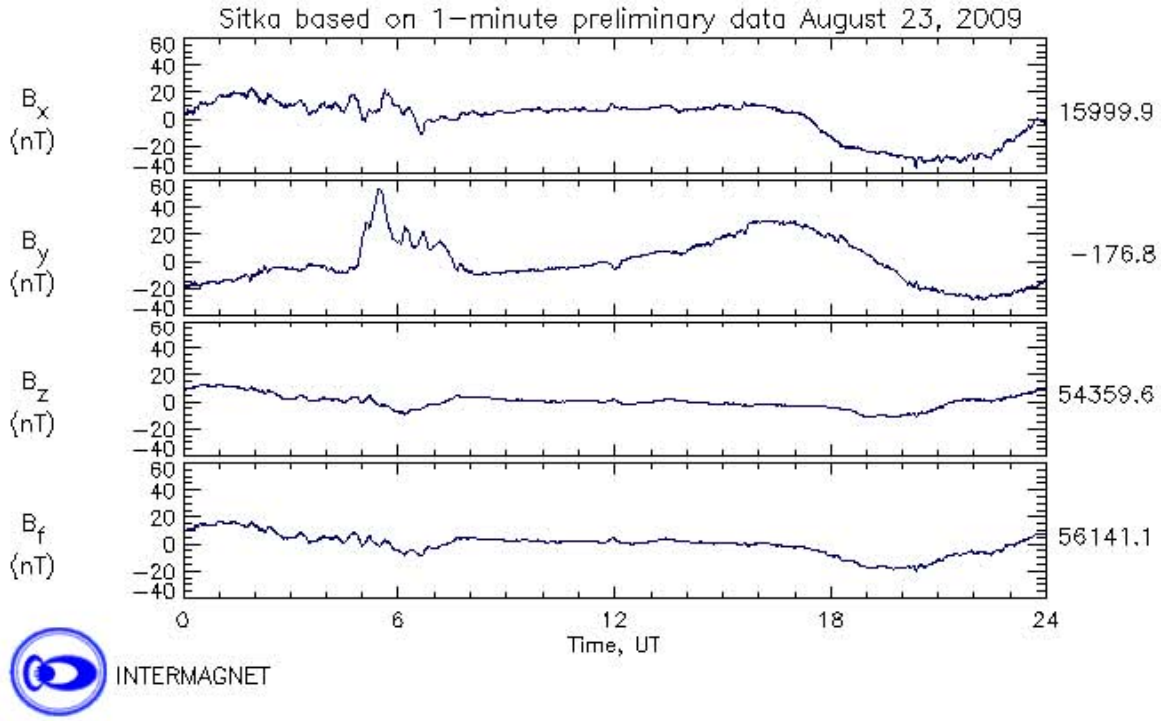
N - Geographic North
S - South
E - East
W- West

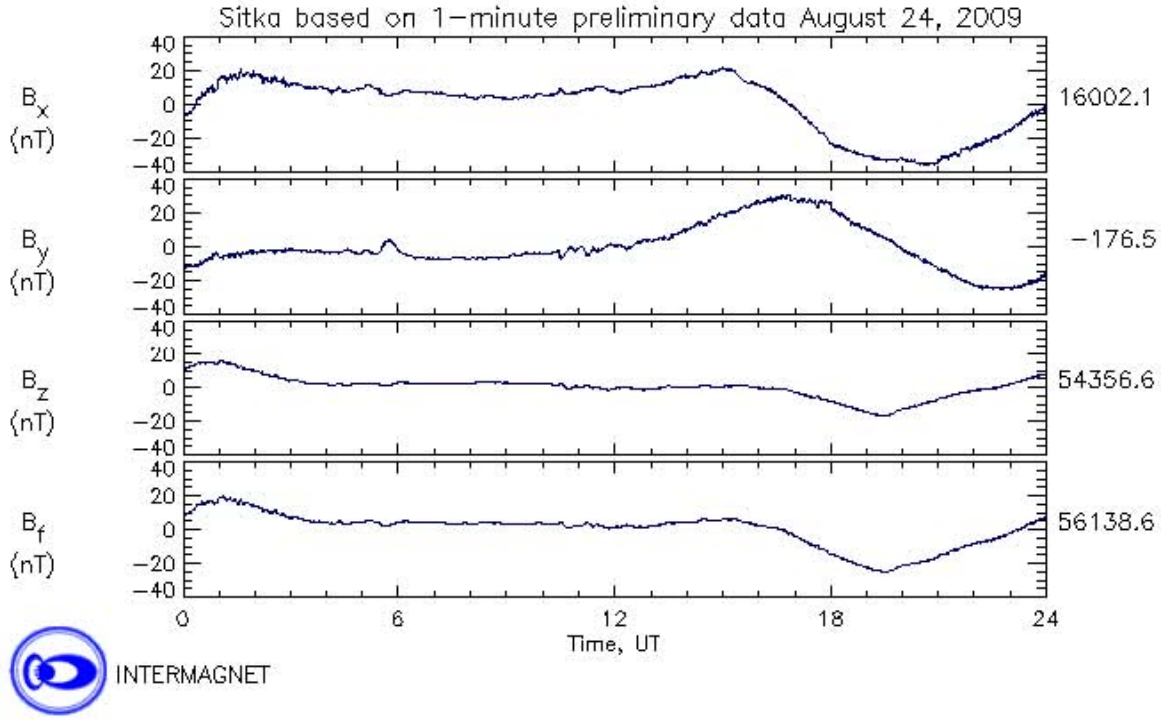
Figure 1 - Geomagnetic Components




Sitka based on 1-minute preliminary data August 21, 2009
B_x (nT)
B_y (nT)
B_z (nT)
B_f (nT)
16001.3
-175.8
54350.3
56132.5
100
50
0
-50
-100
0
6
12
18
24
Time, UT
INTERMAGNET


Sitka based on 1-minute preliminary data August 22, 2009
B_x (nT)
B_y (nT)
B_z (nT)
B_f (nT)
16003.6
-177.3
54359.6
56142.0
80
60
40
20
0
-20
-40
-60
0
6
12
18
24
Time, UT
INTERMAGNET


Sitka based on 1-minute preliminary data August 23, 2009
B_x (nT)
B_y (nT)
B_z (nT)
B_f (nT)
15999.9
-176.8
54359.6
56141.1
60
40
20
0
-20
-40
0
6
12
18
24
Time, UT
INTERMAGNET


Sitka based on 1-minute preliminary data August 24, 2009
B_x (nT)
B_y (nT)
B_z (nT)
B_f (nT)
16002.1
-176.5
54356.6
56138.6
40
20
0
-20
-40
0
6
12
18
24
Time, UT
INTERMAGNET

Appendix F – Project Expenditures

QL26431

2009 Expenditure Statements
Shark 1-94 (YC23168-YC24178, YC24327-YC24356) Renewals

Field Work -includes prospecting and rock/soil sampling, August 19-25, 2009	$	25,202.01
Geochemical Analysis - October/November 2009	$	2,584.94
Mineralogical Analysis - December 2009	$	1,400.00
Report Preparation - December 2009	$	3,806.25
Total Expenditures	**$**	**32,993.20**

Work Expenditures by Claim (please see attached figure):

Claim Name	Grant #		Expenditures per Claim
SHARK 5	YC23172	$	538.94
SHARK 12	YC23179	$	1,077.89
SHARK 61	YC24175	$	1,077.89
SHARK 73	YC24335	$	4,870.10
SHARK 74	YC24336	$	15,149.24
SHARK 75	YC24337	$	2,165.58
SHARK 76	YC24338	$	3,243.47
SHARK 77	YC24339	$	1,626.63
SHARK 89	YC24351	$	2,704.52
SHARK 90	YC24352	$	538.94
Total		**$**	**32,993.20**

Yukon
Energy, Mines and Resources

QUARTZ MINING ACT FORM 4 SECTION 56

APPLICATION FOR A CERTIFICATE OF WORK

Version française

Office Date Stamp

I, True North Gems Inc. ,

of Vancouver, BC

Phone 604-687-8055

make oath and say that:

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work, on the following mineral claim(s): (Here list claims on which work was actually done by number and name)

SHARK 5 (YC 23172), SHARK 12 (YC 23179), SHARK 61 (YC 24175), SHARK 73-77 (YC 24335 - YC 24339), SHARK 89 (YC 24351), and SHARK 90 (YC 24352)

situated at NW of White Creek Claim sheet No. 105F07, 08, 09, 10

in the Watson Lake Mining District, to the value of at least $32,993.20 dollars,

since the 30th day of March 20 09,

to represent the following mineral claims under the authority of Grouping Certificate No. 1 .
(Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

SHARK 1-64 (YC 23168 - YC 24178) ⇒ 2 year renewal

SHARK 65-94 (YC 24327 - YC 24356) ⇒ 5 year renewal

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 56).

Please see attached.

Sworn before me at Vancouver, BC this 12th day of March 2010.

VICTORIA A. STEEVES
DuMOULIN BLACK LLP
BARRISTER & SOLICITOR
10th FLOOR-595 HOWE STREET
VANCOUVER, B.C. CANADA
V6C 2T5

Notary Public

Bonnie Weston
Owner or Authorized Agent

Access to Information and Protection of Privacy Act
... personal information requested on this form is collected under the authority of and used for the purpose of administering the *Quartz Mining Act*. Questions about the collection of this information can be directed to the Mining Recorders Office, Mineral Resources, Department of Energy, Mines and Resources, Yukon Government, Box 2703, Whitehorse, Yukon Territory, Y1A 2C6 (867) 667-3190

YG(6749QL)F9 04/2003

2009 Expenditure Statements
Shark 1-94 (YC23168-YC24178, YC24327-YC24356) Renewals

Field Work	$	25,202.01
-includes prospecting and rock/soil sampling, August 19-25, 2009		
Geochemical Analysis - October/November 2009	$	2,584.94
Mineralogical Analysis - December 2009	$	1,400.00
Report Preparation - December 2009	$	3,806.25
Total Expenditures	**$**	**32,993.20**

Work Expenditures by Claim (please see attached figure):

Claim Name	Grant #		Expenditures per Claim
SHARK 5	YC23172	$	538.94
SHARK 12	YC23179	$	1,077.89
SHARK 61	YC24175	$	1,077.89
SHARK 73	YC24335	$	4,870.10
SHARK 74	YC24336	$	15,149.24
SHARK 75	YC24337	$	2,165.58
SHARK 76	YC24338	$	3,243.47
SHARK 77	YC24339	$	1,626.63
SHARK 89	YC24351	$	2,704.52
SHARK 90	YC24352	$	538.94
Total		**$**	**32,993.20**

Yukon
Energy, Mines and Resources

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QUARTZ MINING ACT FORM 12 SECTION 55

APPLICATION TO GROUP MINERAL CLAIMS

Office Date Stamp

Watson Lake MINING DISTRICT

I, (We) the undersigned owners or agent(s) of the owners of following mineral claims.

(Additional sheets or an appendix may be used) (Claim names and grant numbers to be listed in sequence eg. TOM 1-40, YC10001 - YC10040)

GRANT NUMBER	CLAIM NAME	MAP SHEET
YC23168-YC24356	SHARK 1-94	105F09

Give notice of intention to group the said claims for the performance of work and do hereby apply under the provisions of section 55 of the *Quartz Mining Act* for a certificate in form 6.

I (We) hereby certify that the above claims are adjoining as shown on the attached sketch

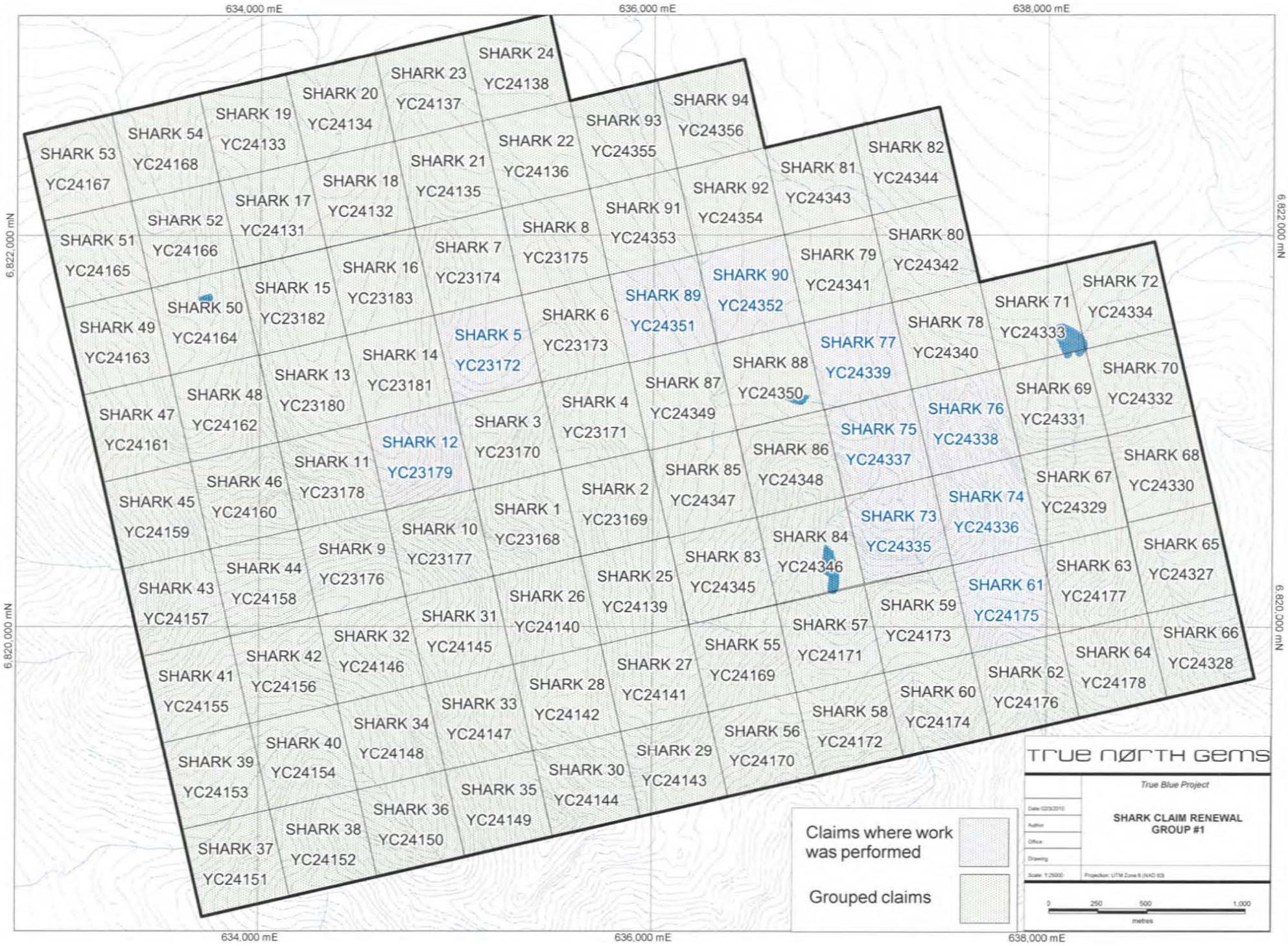
Dated at Vancouver

This 12th day of March, 2010

Bonnie Weston
Applicant(s)

Access to Information and Protection of Privacy Act

The personal information requested on this form is collected under the authority of and used for the purpose of administering the *Quartz Mining Act*. Questions about the collection and use of this information can be directed to the Mining Recorders Office, Mineral Resources, Department of Energy, Mines and Resources, Yukon Government, Box 2703, Whitehorse, Yukon Territory, Y1A 2C6 (867) 667-3190


634,000 mE
636,000 mE
638,000 mE
6,822,000 mN
6,820,000 mN
SHARK 53 YC24167
SHARK 54 YC24168
SHARK 19 YC24133
SHARK 20 YC24134
SHARK 23 YC24137
SHARK 24 YC24138
SHARK 94 YC24356
SHARK 93 YC24355
SHARK 22 YC24136
SHARK 21 YC24135
SHARK 18 YC24132
SHARK 17 YC24131
SHARK 52 YC24166
SHARK 51 YC24165
SHARK 82 YC24344
SHARK 81 YC24343
SHARK 92 YC24354
SHARK 91 YC24353
SHARK 8 YC23175
SHARK 7 YC23174
SHARK 16 YC23183
SHARK 15 YC23182
SHARK 50 YC24164
SHARK 49 YC24163
SHARK 80 YC24342
SHARK 79 YC24341
SHARK 90 YC24352
SHARK 89 YC24351
SHARK 6 YC23173
SHARK 5 YC23172
SHARK 14 YC23181
SHARK 13 YC23180
SHARK 48 YC24162
SHARK 47 YC24161
SHARK 72 YC24334
SHARK 71 YC24333
SHARK 78 YC24340
SHARK 77 YC24339
SHARK 88 YC24350
SHARK 87 YC24349
SHARK 4 YC23171
SHARK 3 YC23170
SHARK 12 YC23179
SHARK 11 YC23178
SHARK 46 YC24160
SHARK 45 YC24159
SHARK 70 YC24332
SHARK 69 YC24331
SHARK 76 YC24338
SHARK 75 YC24337
SHARK 86 YC24348
SHARK 85 YC24347
SHARK 2 YC23169
SHARK 1 YC23168
SHARK 10 YC23177
SHARK 9 YC23176
SHARK 44 YC24158
SHARK 43 YC24157
SHARK 68 YC24330
SHARK 67 YC24329
SHARK 74 YC24336
SHARK 73 YC24335
SHARK 84 YC24346
SHARK 83 YC24345
SHARK 25 YC24139
SHARK 26 YC24140
SHARK 31 YC24145
SHARK 32 YC24146
SHARK 42 YC24156
SHARK 41 YC24155
SHARK 65 YC24327
SHARK 63 YC24177
SHARK 61 YC24175
SHARK 59 YC24173
SHARK 57 YC24171
SHARK 55 YC24169
SHARK 27 YC24141
SHARK 28 YC24142
SHARK 33 YC24147
SHARK 34 YC24148
SHARK 40 YC24154
SHARK 39 YC24153
SHARK 66 YC24328
SHARK 64 YC24178
SHARK 62 YC24176
SHARK 60 YC24174
SHARK 58 YC24172
SHARK 56 YC24170
SHARK 29 YC24143
SHARK 30 YC24144
SHARK 35 YC24149
SHARK 36 YC24150
SHARK 38 YC24152
SHARK 37 YC24151
Claims where work was performed
Grouped claims
TRUE NORTH GEMS
True Blue Project
SHARK CLAIM RENEWAL GROUP #1
Date: 02/3/2010
Author
Office
Drawing
Scale: 1:25000
Projection: UTM Zone 9 (NAD 83)
0
250
500
1,000
metres