



ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Assessment Report on Diamond Drilling performed on the Aley Carbonatite Property

TOTAL COST: \$926,262

AUTHOR(S): JEREMY CROZIER

SIGNATURE(S): Submitted Electronically

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-13 141, 10-0900126-0517, May 17, 2010

STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 4996687, August 26, 2011

YEAR OF WORK: 2011

PROPERTY NAME: Aley

CLAIM NAME(S) (on which work was done): 520262

COMMODITIES SOUGHT: Niobium

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Omineca

NTS / BCGS: 94B.041, 94B.042

LATITUDE: 56° 27' 0"

LONGITUDE: 123° 44' 0" (at centre of work)

UTM Zone: 10 **EASTING:** 454564.4 **NORTHING:** 6256632.07

OWNER(S): ALEY CORPORATION

MAILING ADDRESS: 15th Floor - 1040 W. Georgia St. Vancouver BC V6E 4H8

OPERATOR(S) [who paid for the work]: Taseko Mines Limited

MAILING ADDRESS: 15th Floor - 1040 W. Georgia St. Vancouver BC V6E 4H8

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. Do not use abbreviations or codes)

Niobium, carbonatite, Aley, drilling, fersmite, columbite, pyrochlore, metasomatism, mapping, Kechika, Palaeozoic, Skoki Formation, Road River Group, characterization.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

30113, 28733, 27991, 16484, 15721

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)	2km x 2km	520262	\$55,000
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core	4460m NQ Storage in between Mackenzie, 23 holes BC	520262	\$79,0338
Non-core			
RELATED TECHNICAL			
Sampling / Assaying		520262	\$80,924
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other			
		TOTAL COST	\$926,262

**Assessment Report on Diamond Drilling performed on the Aley
Carbonatite Property**

Located in the Omineca Mining District, British Columbia, Canada

NTS: 94B.041 & 94B.042

Located at Map Center at approximately
56° 27' N Latitude
123° 44' W Longitude
UTM NAD 83, Zone 10

Owner: Aley Corporation
Operator: Taseko Mines Limited through its wholly owned subsidiary, Aley Corporation

Tenure Numbers:
513258, 516635, 520172, 520261, 520262, 520263, 520264, 520265, 554104, 554107,
559138, 559535, 559540

Authors:
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November 20, 2011

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Summary

The Aley Property, owned by Aley Corporation, itself a wholly-owned subsidiary of Taseko Mines Limited ("Taseko"), is located in northeastern British Columbia within the Omineca Mining Division. The property comprises 104 contiguous mineral claims covering 5936 hectares in the headwaters of the Ospika River closely adjacent to Ospika Arm of Williston Lake. The Aley claims are centered on 56° 27' N 123° 44' W, NTS mapsheets 94B.041 and 94B.042. Exploration work was conducted during the period July 15 through September 3, 2010 and comprised a program of helicopter-supported exploration drilling, mapping and rock characterization. Taseko Mines Limited was the operator of the program.

Work reported on includes:

- i. A diamond drill program comprising a total meterage of 4,460m over 23 holes in the Central Zone at Aley. The objective of the drill program was the confirmation of previous exploration work undertaken by Cominco between 1985 and 1986. The program also sought to establish a better understanding of the deposit geometry as well as collection of sufficient sample material for metallurgical test work. While some metallurgical material was indeed collected, this remains in safe storage pending future analysis. As such, no assessment credit has been applied with respect to any element of metallurgical test work beyond the collection and bagging of the samples themselves. All such sample material remains in appropriate storage awaiting analysis once deemed appropriate,
- ii. 1312 (in addition to 75 duplicate, 75 standard reference and 25 blank) samples of sawn NQ-sized core obtained through diamond drilling were sent for assay analysis. Samples were assayed for Nb, Ta, U, Th and REE's as well as a standard multi-element suite, by Inspectorate Laboratories of Richmond, BC.
- iii. 88 rock samples collected from outcrop and 2007 drill core were submitted for whole-rock analysis as part of a geochemical characterization exercise. Interpretative work based on the results of such analysis, in consideration of observations made and understanding gained during geological core logging form the basis of the "Property Geology" section of this report. Such work is considered to represent a very significant contribution to understanding of this unusual deposit type, and of British Columbian geology.

Assessment credit has been applied through the BC online system based on a total expenditure of \$900,000, though the total value sought under this report is \$926,262. At approximately \$207 per meter, this work was clearly of very moderate cost when compared to similar exploration projects in BC. The relatively modest cost of the program may be explained as follows:

- iv. Ground conditions in 2010 target area were excellent, meaning that drilling was straightforward and that significant daily production was achievable.
- v. Weather conditions were highly favorable resulting in negligible standby and well-optimized overhead costs.
- vi. Equipment reliability was excellent, which served to assure optimal machine utilization.
- vii. Standby charges were avoided through the application of a 3-crew operational strategy, whereby two drill rigs were operated by two day crews, and one rig by a single night crew. This approach had the advantage that in cases where holes were completed at night time, the night crew simply withdrew several rod lengths, shut down and walked to the second rig to continue drilling. Given the speed of drilling and the shallow nature of the drill holes, otherwise significant standby costs were negated.

Location and Access

The Aley claims are located in the Omineca Mining District in northeastern BC (Figure 1), centered at 56°27'N and 123°44'W. The property derives its name from Aley Creek, a prominent valley located northeast of the claims. No other named topographic features on NTS topographic sheet 94B/05 (1:50,000 scale) occur on the property.

The property is situated approximately 30 km northeast of the head of the Ospika Arm of Williston Lake. Logging roads lead from Mackenzie, BC along the western margin of Williston Lake, around its northernmost tip, via the Tsay Keh Dene community, and down the east shore of the same lake to the former site of CANFOR's Ospika Camp. Direct access by air charter to the Ospika Camp is possible, and during the 2010 exploration season such services were provided by Tsayta Aviation of Fort St. James using Cessna 206 and Britten-Norman Islander aircraft. Barge access is also available from Mackenzie (approximately 90 km to the south on Williston Lake) for the purposes of movement of heavy equipment, though was not used by Taseko during the program that forms the basis of this report. Logging roads and a caterpillar trail constructed by Cominco in 1985 once provided rough surface access to the property, however due to the poor state of repair of this trail and in consideration of time consuming permitting process for its re-establishment, site access and equipment transport during the 2010 field season was effected by Bell 206 Jet Ranger and 407 helicopters. Helicopter access was conducted principally from the airstrip at Ospika Camp approximately 20 km from the claims as well as a staging site on a cut block 10 km from the claims

Recently-constructed logging roads under the operation of Canfor extend approximately 30 km beyond the Ospika Camp towards the property. These logging roads are proximal to the disused Cominco caterpillar trail which conditional upon permitting could be readily reopened, connecting the Ospika Camp to the road access previously made on the property. In 2005 (prior to the acquisition of Aley Corporation by Taseko Mines Limited), AllNorth Consultants of Prince George conducted a helicopter-supported survey of the access to the Aley claims via existing Canfor logging roads, upon which basis a route (on Aley claim blocks) connecting the logging roads to the disused trail was designed. The Allnorth road has been substantially modified from the previous trail in compliance with the current Forest Practices Code of British Columbia, and the Forest Road Engineering Guide for road construction. This work was presented by Allnorth in a detailed report entitled "Aley Property Exploration Road Survey" dated September 6, 2005 by Ken MacDonald, P.Geo. No assessment value derived from Allnorth's survey, design and reporting work has been associated with or declared as a component of the current report.

Physiography and Climate

Elevations range from 1,300 m in the creek valleys to the west and south of the claim blocks to 2,233 m on the ridge to the very east of the property known as the Saddle Zone. The topography primarily consists of steep mountainous terrain with U to V-shaped glacial valleys. Small creeks drain from several peaks that form a ridge along the centre of the property in all directions. Flows are seasonal depending on snow meltwater, rain, and winter freezing and avalanche trains are evident on some of the steeper slopes

Boreal forest covers the area below the tree line (~1600-m). Much of the central part of the claims lie above the tree line and these areas are dominated by alpine shrubs and grasses. The higher elevations are commonly covered with sparse grass, broken scree, and outcrop.

The northern boreal forest region is subjected to an extreme range of weather conditions throughout the year. Summers are short, from June to late September with variably dry to wet with local storms, which may give heavy rainfall or even snow at any time. Humidity ranges from very dry to humid. Autumn is short with the rapid onset of snowstorms and heavy rains starting in late September, which effectively ends the field season. Snow stays on the ground from October through early June and may remain all year in relatively shaded patches on the peaks on the property. As such, exploration is limited to the period from June to late September only.

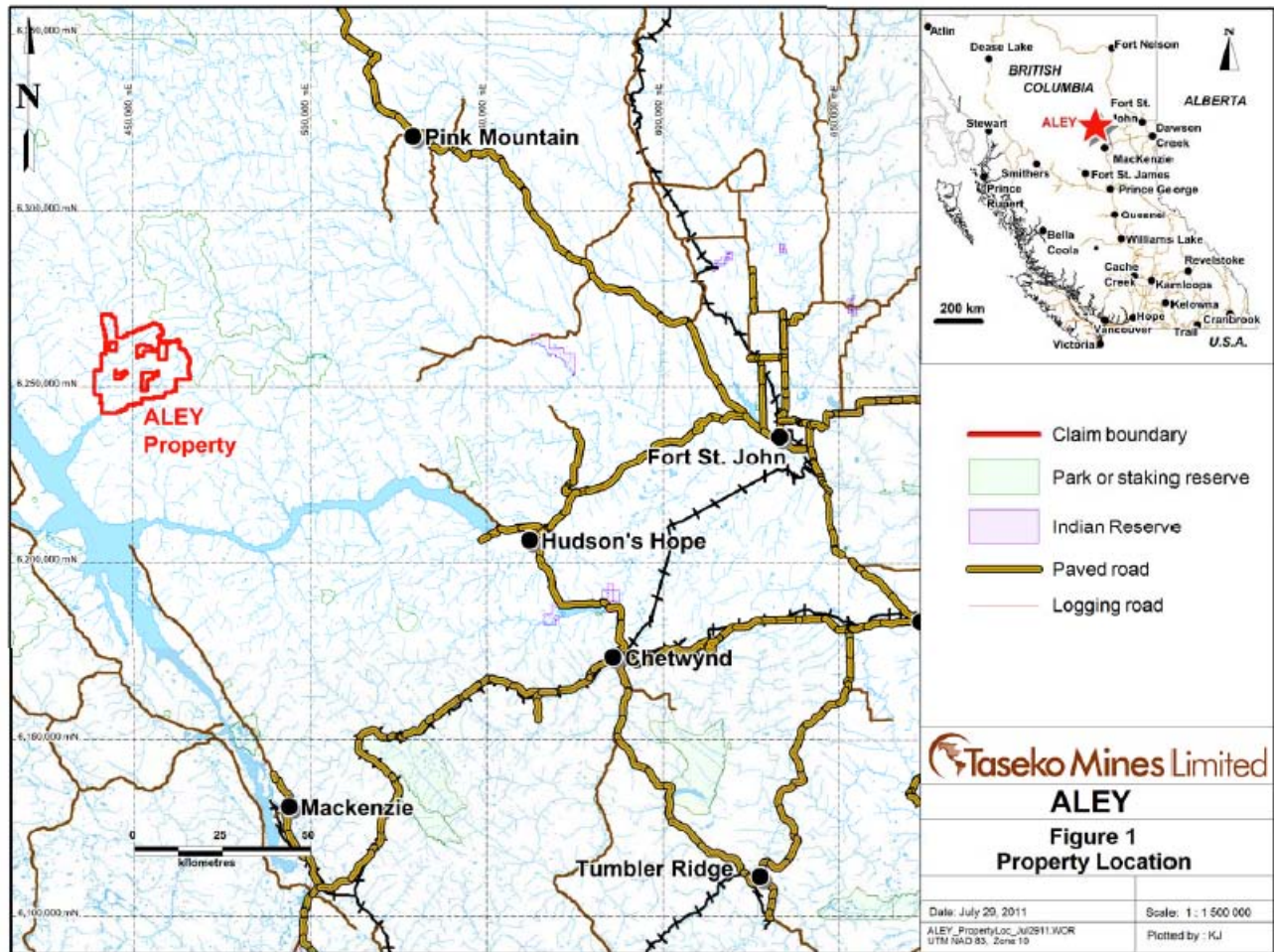


Figure 1 - Property Location Map

Claims

Taseko Mines Limited, through its wholly owned subsidiary Aley Corporation, is the 100% owner of the Aley mineral claims and was the operator of the programs described in this report. In the period July 15 through September 3, 2010, work was conducted on one of the thirteen mineral claims that together constitute the Aley property.

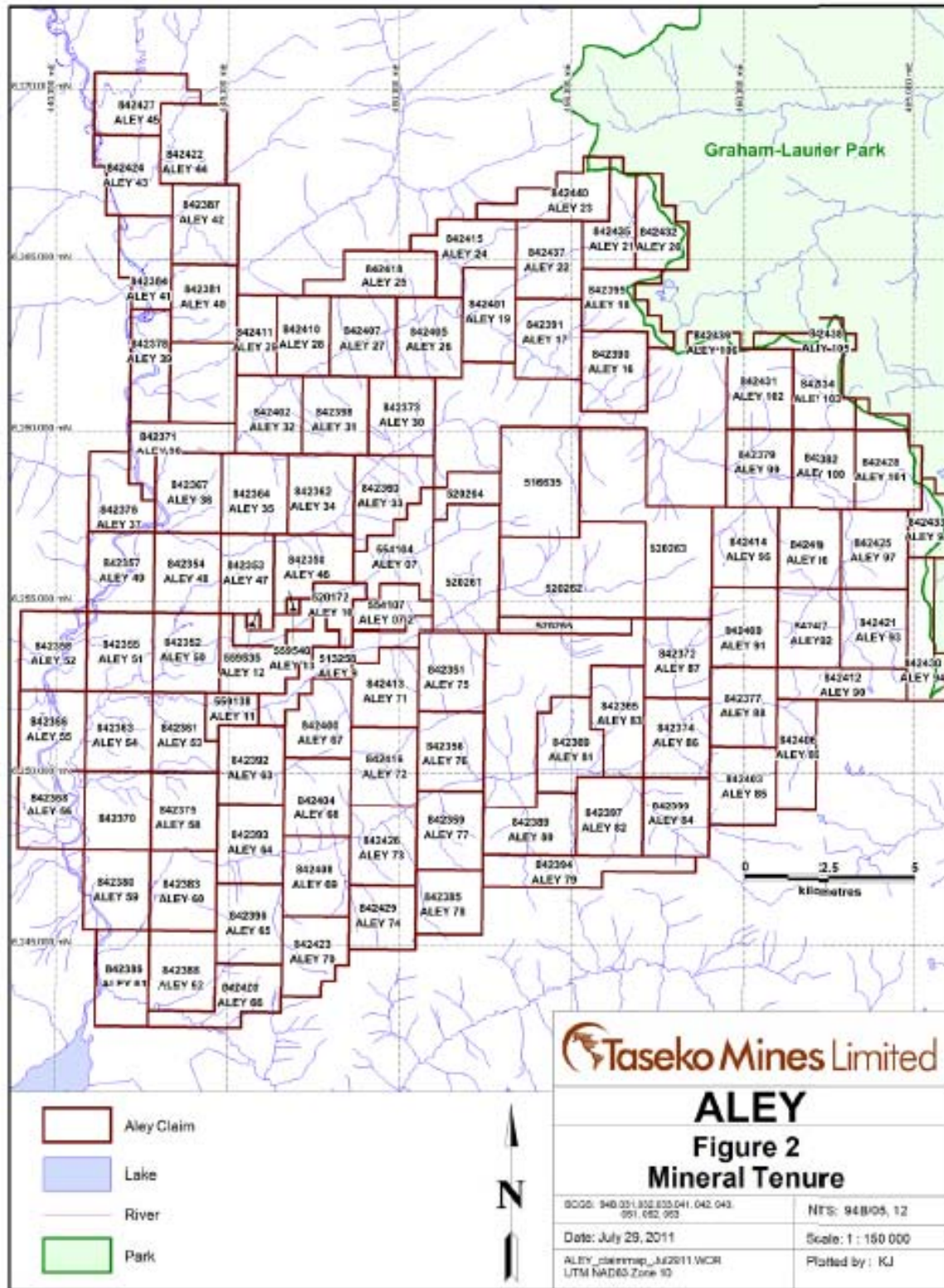


Figure 2 - Overview Claims Map

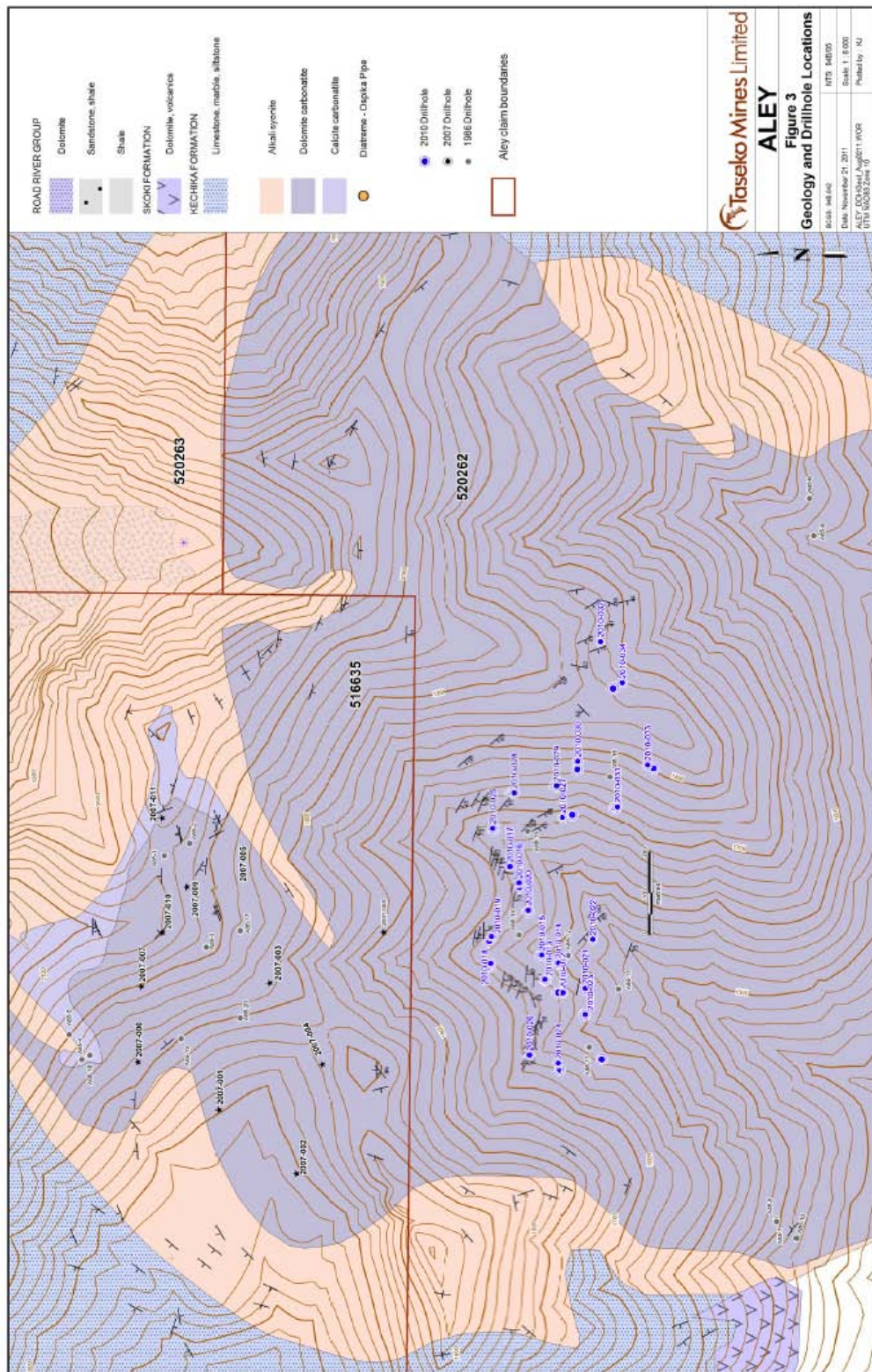


Figure 3 - Claims upon which work was conducted

A map of all claims relative to topography has been presented in Figure 2; drilling relative to claims and geology is presented in Figure 3. All figures have been included at their original scale within Appendix F for purposes of clarity. Table 1 provides a summary of claims upon which work was conducted and Table 2 a listing of claims to which assessment work has been applied.

Table 1 - Claims on which Work was conducted

Tenure Number	Total Holes Drilled on Claim	Drill Hole Numbers
520262	23	2010-11
		2010-12
		2010-13
		2010-14
		2010-15
		2010-16
		2010-17
		2010-18
		2010-19
		2010-20
		2010-21
		2010-22
		2010-23
		2010-24
		2010-25
		2010-26
		2010-27
		2010-28
		2010-29
		2010-30
		2010-31
		2010-32
		2010-33

Table 2 - Claims to which Work was Applied

Tenure Number	Tenure Type	Owner	Map Number	Good To Date	Status	Area
513258	Mineral	200960 (100%)	094B	2021/jan/31	GOOD	411.556
516635	Mineral	200960 (100%)	094B	2021/jan/32	GOOD	750.575
520172	Mineral	200960 (100%)	094B	2021/jan/33	GOOD	339.846
520261	Mineral	200960 (100%)	094B	2021/jan/34	GOOD	697.374
520262	Mineral	200960 (100%)	094B	2021/jan/35	GOOD	1072.953
520263	Mineral	200960 (100%)	094B	2021/jan/36	GOOD	1161.984
520264	Mineral	200960 (100%)	094B	2021/jan/37	GOOD	178.717
520265	Mineral	200960 (100%)	094B	2021/jan/38	GOOD	178.889
554104	Mineral	200960 (100%)	094B	2021/jan/39	GOOD	446.975
554107	Mineral	200960 (100%)	094B	2021/jan/40	GOOD	232.517
559138	Mineral	200960 (100%)	094B	2021/jan/41	GOOD	161.117
559535	Mineral	200960 (100%)	094B	2021/jan/42	GOOD	17.887
559540	Mineral	200960 (100%)	094B	2021/jan/43	GOOD	17.885

Exploration History

Cominco Ltd. (1985-1986)

Cominco Ltd. acquired the Aley property subsequent to an initiative in 1980 that was originally focused on the follow-up of regional base metals anomalies to the north of the property, at which time no other claims existed in the region. K.R. Pride followed the stratigraphy southeast from these anomalies and in so doing encountered what he suspected to be a carbonatite complex. Samples collected by Pride showed evidence of carbonatite including the presence of pyrochlore. In 1982, PC LeCouteur of Cominco visited the property to collect further samples and to assess the scale of the potential body. In October 1982, claims Aley 1 through Aley 4 (80 units in total) were staked in order to cover the carbonatite complex. Additional staking in 1986 added the claims Aley 5 through Aley 7 (32 units) and the final claim Aley 8 was added in March 1986 (20 units).

Field work commenced in 1983 and continued regularly through the 1986 field season. Metallurgical studies were conducted between 1983 and 1985. No exploration was undertaken between September 1986 and September 2004, when Aley Corporation acquired control of the mineral claims from Teck-Cominco.

Work performed by Cominco included

- i. The construction of 20-km bulldozer access trail from Ospika barge landing to the Aley camp (1984), now partially superseded by the recent logging roads and CANFOR's Ospika Camp.

- ii. The development of approximately 28 km of caterpillar trails to drill sites accessible by means of 4x4 Land Cruiser from a small camp located near the centre of the carbonatite plug.
- iii. The preparation orthophotographic base maps (1983).
- iv. Magnetometer surveys at both reconnaissance and detailed local grid scale (17 line-kilometers); scintillometer reconnaissance surveys.
- v. Geological mapping at a scale of 1:5,000 over claims Aley 1-7, and at a 1:500 scale in the case of exploration trenching.
- vi. Soil sampling on contour lines and along road banks.
- vii. Rock chip sampling of outcrops, talus, road cuts with outcrop/subcrop, and all trenches (5-m contiguous samples).
- viii. Diamond drilling in two campaigns totaling 3,046.36m over 19 holes in two areas of interest, namely the Saddle and Central Zones. NQ core was drilled in 1985 and BQ in 1986. All core was stored on site and sample preparation work was undertaken in the field.
- ix. An environmental baseline study was initiated during the 1985 and 1986 field seasons by Norelco.
- x. Metallurgical testing using gravity separation on a 4 ton bulk sample in 1983 and 1984. Some flotation testwork was carried out until 1991 with varying success.
- xi. Mineralogical studies conducted on samples throughout programs.

Cominco compiled reports for each field season outlining the work carried out and the results achieved. In these reports, Cominco provided preliminary estimates for the resource based on in-house analysis, suggesting 15 million tonnes in the Saddle Zone and 15 to 20 million tonnes in the Central Zone. The details of these estimates and the grade assumed have not been recovered from the Cominco files and are historic in nature. While there is no written record of why Cominco did not continue with work on the property, it is believed that activities were terminated as an element of the takeover of control of Cominco by Teck who owned 50% of the Niobec Operation in Quebec;

Following the acquisition of control of the mineral claims Aley Corporation in 2004, exploration efforts concentrated on trench sampling for metallurgical material and the confirmation of previous geology and drill hole collar locations. Trenches were opened by means of drilling and blasting in the vicinity of the previous Cominco trenches cut in 1985 and 1986. The purpose of these trenches was twofold, firstly to acquire material suitable for metallurgical testwork, and secondly to confirm the grades estimated by Cominco in the 1980's. The samples were collected from trenches in the Central Zone near to the location of CZ-85-6, CZ-85-6A and CZ-85-8, and in the Saddle Zone at SZ-84-4. In total, 912 kg of sample were gathered from the Aley site. During the same period, all of the major zones identified by Cominco in their previous work were visited and drill holes locations identified and logged using GPS. This work was carried out as a means by which to validate the previous mapping and survey work undertaken using conventional survey compass mapping, as compared to current GPS technology in order to identify any systematic errors in the mapping developed by Cominco. Aley Corporation reported a "reasonable correlation" between the Cominco sampling work and that of Aley Corporation and that in their view. GPS survey work verified the Cominco mapping as reasonable and suitable for continued exploration, with the recommendation of conducting a survey for future resource work.

In 2006, a geological review and compilation of previous drilling and trenching were performed by Dave Thomas of AMEC with the objective of evaluating the mineralization and planning the 2006 field program. The 2006 drilling program was postponed to 2007 to accommodate a study being carried out on mountain goat movements and allow more time for consultation with First Nations.

In 2006, some metallurgical test work continued on surface samples blasted from the Saddle and Central Zone trenches to which end approximately 1200 kg of material was worked on by PRA laboratories in Vancouver. Work carried out in 2006 also included a preliminary wildlife and environmental survey executed in conjunction with the Tsay Keh Dene First Nation. None of the 2006 activities have been included in the applied assessment value.

Taseko Mines Ltd. (2007)

Diamond drilling with a total meterage of 4,532 feet of NQ2 and BTW-sized core was undertaken over a total of 11 holes during the 2007 program at the Aley Property. The objective of the drill program was the confirmation of previous exploration work undertaken by Cominco between 1985 and 1986. The program also sought to establish a better understanding of the deposit geometry as well as collection of sufficient sample material for metallurgical test work. Drilling was conducted by Peak Drilling of Courtenay, BC and Full Force Drilling of Peachland, BC using a Hydracore prospector rig and a modified skid-mounted B20 with an Isuzu power pack, respectively.

Unlike the 1985 and 1986 programs during which the property was accessed by means of cat-trail, all access to the property in 2007 was undertaken by means of helicopter, this being due to the fact that critical portions of the former access roads had collapsed and that their re-establishment in accordance with modern standards, would have been time-consuming and expensive. All drilling was performed on 16' x 16' timber pads built in-situ utilizing timber purchased in Mackenzie. Where possible, pads were constructed on the old cat trails, which had the advantage of being relatively flat, though elsewhere such pads were erected on slopes of up to 45 degrees. Wherever possible, the pads were carefully dismantled and the material subsequently re-used. Reclamation of drill sites was undertaken upon completion of drilling.

All project personnel were accommodated at Canfor's Ospika camp, situated on the lower northern flank of the Ospika arm of Williston Lake. Core logging, splitting and sampling was also undertaken at this facility, making use of the extensive outbuildings that served this purpose well. Although skeleton core was initially placed in secure storage at the Ospika Camp (inside a locked and boarded-off trailer under the supervision of a watchman), core was in 2008 removed to a permanent storage facility at the Gibraltar Mine near Williams Lake BC, itself owned and operated by Taseko Mines Limited.

A total of 388 samples, 22 duplicates, 11 blanks and 23 standards (one derived from low grade Aley carbonatite and the other a Canmet standard, OKA-1) were sent for assay analysis. Assay samples were collected according to geological intervals or subintervals thereof, averaging approximately 3 m sampling lengths. Competent 30 cm core sections were also collected for wax immersion specific gravity samples every 8-10 m length. All samples were sawn on site and shipped to PRA Laboratories in Vancouver, BC for preparation and from there on to IPL for analysis. Analysis for Nb, Ta, U, and Th was performed together with the standard multi-element analysis. Duplicates for quality control were forwarded to Global Discovery Labs (Teck Cominco) for XRF analysis. The remaining sawn half core was stored on site at Canfor's Ospika camp and later transferred to a secure facility at Taseko's Gibraltar Mine.

Regional Geology

The Aley region lies within the Western Foreland belt of the Rocky Mountains which is characterized by Early to Middle Paleozoic deep water carbonates and shales (McLeish, 2011;

Figures 4a and 4b). These slope to off-shelf deep water strata, defining the paleogeographic Kechika Trough. In the Aley region, the north-south trending, 50 km wide trough is bound to the west by the Northern Rocky Mountain Trench (NRMT), which is host to an Eocene dextral strike-slip fault interpreted to have accommodated >400 km of dextral strike-slip displacement; and to the east by a facies boundary defined by the western limit of shallow water carbonates of the Macdonald Platform. North of 59 degrees N Latitude, the Kechika Trough widens into the Selwyn Basin. The trough terminates immediately south of the Aley region, where the facies boundary marking the east margin of the trough curves around to the west, and is truncated against the NRMT fault. Strata on the western side of the NRMT are: (1) lithologically similar Paleozoic continental margin sediments, (2) assigned to the Kechika formation, and (3) form part of the Cassiar terrane, a continental block of uncertain paleogeographic affinity

The Aley Creek area lies near the eastern limit of Paleozoic volcanism and coarse clastic sedimentation in the Foreland Belt. The Lady Laurier volcanics and westerly-derived Earn Group conglomerates, exposed to the immediate north and west of the Aley carbonatite, have been cited as evidence for tectonism in the mid-Paleozoic. Synmagmatic contractional deformation structures in continental margin strata that is host to the Aley carbonatite, suggesting that this activity was (1) at least in part the result of convergence along the parent margin and (2) associated with carbonatite emplacement (McLeish, 2011).

Property Geology

The Aley Carbonatite complex intrudes Cambrian to Ordovician sedimentary rocks of the Kechika (limestone), Skoki (dolomite to volcanoclastics) and Road River Group formations (clastic sedimentary rocks). The intrusion is ovoid in plan view with a diameter of approximately 2 km and surrounded by a fenite aureole up to 500 m thick that has previously been mapped as “amphibolite” (Pride, Cominco Ltd., 1987) and “syenite” (Mäder, 1986). The complex is predominantly composed of dolomite carbonatite (CD) with minor calcite carbonatite (CC). Texturally, relationships suggest that CD is metasomatic in origin while CC is interpreted to be primary. Three calcite carbonatite intrusions are identifiable within the drill holes, each with an associated cumulate phase. In approximate order of intersection, from top to bottom of the drill holes, these are (Chakhmouradian et al, 2010 and Kressall, 2011, as determined in conclusion from the work programs that form the basis of this assessment):

Primary Phases:

I. Magnetite-Apatite-Columbite Cumulate (CM) & Phlogopite-Magnetite Calcite Carbonatite (CC)

Heavy mineral cumulate separates (CM) are composed of densely packed magnetite (35-50 vol. %), apatite (25-35 vol. %), columbite (5 vol. %), phlogopite (0-15 vol. %) and zircon (up to 1.5 vol. %). Zircon is only identifiable by shortwave ultra-violet light (fluoresces yellow). Interstitial carbonate is predominantly calcite (up to approximately 10 vol. %). Fine- to medium-grained (up to ~5 mm diameter grains) magnetite is anhedral with a globular appearance. Phlogopite is fine-grained (<1 mm) and pinkish-brown in colour. Columbite can rarely be distinguished from magnetite due to its similar black colour and sub-metallic luster.

Phlogopite-magnetite-phyric CC, closely associated with CM, occurs at similar shallow depths. A sharp contact between CM and CC in some drillholes suggests an evolutionary

relationship between CM and CC. The unit is composed of calcite (65-75 vol. %), magnetite (5-25 vol. %), phlogopite (0-10 vol. %), apatite (7.5 to 15 vol. %), columbite (observed up to 2 vol. %) and zircon (trace). Magnetite is typically fine-grained (<1 mm) and has similar globular appearance as magnetite within CM. Phlogopite is typically fine-grained, pinkish-brown and occurs as disseminations. Large (up to 3 cm in diameter) brecciated massive magnetite occurs more rarely within CC (presumably fractured cumulate). Columbite is recognized by its black submetallic luster, hexagonal to octahedral shape in cross-section in core and is distinguished from magnetite by being non-magnetic. Magnetite and apatite are commonly concentrated in laminae within laminated CC.

II: Phoscorite (PH)

Phoscorite is composed of magnetite, apatite, olivine, interstitial calcite and abundant baddeleyite (ZrO₂). The unit is medium- to coarse-grained, with magnetite crystals as large as 1 cm in diameter, and can be differentiated from the mineralized CM by the subhedral to euhedral shape of magnetite, presence of olivine and absence of zircon. Rounded olivine crystals are commonly serpentinized, and are recognizable by their greenish-brown colour and very low hardness.

A niobate-barren phlogopite-magnetite-phyric CC also occurs in association with the phoscorite. Similarly, observed sharp contacts (e.g. at 2010-22-184.3 m) between CC and PH suggests a fractionation relationship between the two units. CC related to PH differs from CC related to CM by absence of zircon and columbite and the subhedral to euhedral shape of magnetite crystals.

III: Silicocarbonatite (CS)

CS refers to cumulates and calcitic carbonatites bearing blue sodic-amphibole. Fine- to medium-grained blue amphibole occurs as euhedral prismatic crystals with dipyrimid terminations within massive porphyritic and cumulate CS with magnetite, apatite, phlogopite and abundant zircon (0-5 vol. % locally). In laminated CS, the amphibole commonly forms blue 1-5 cm bands. A currently unidentified green mineral with the same crystal form as the blue amphibole is commonly observed within the CS, sometimes occurring within the core of the blue amphibole. Magnetite occurs as fine- to coarse-grained (up to 1 cm in diameter) subhedral to euhedral crystals. Black phlogopite commonly occurs as coarse-grained (up to 1 cm) or locally pegmatitic euhedral crystals. The unit appears to be a layered intrusion ranging from a magnetite-apatite-sodic amphibole cumulate devoid of calcite to an increased proportion of calcite in porphyritic layers, to an aphyric white calcite carbonatite (composed entirely of calcite). Early observations suggest that zircon may concentrate locally to specific CS phases. Black to pink octahedral pyrochlore has been observed within CS.

Metasomatic Phases:

IV: Dolomite carbonatite (CD)

CD is the most abundant and texturally variable lithology. The unit dominantly consists of dolomite (75-99%), apatite (1-20%), pyrite (1-5%), calcite (0-5%) and niobates (0-2%). Interpretation is that most, if not all CD is secondary after CM, CC, PH and CS.

Dolomitization is closely related to lamination of the complex, with laminated CD being the most abundant lithology in the complex. The lamination is generally defined by concentrated apatite laminae. Massive CD on the other hand tends to contain very little apatite. Partial chloritization and silicification of CD (up to 25 vol. %) suggest low grade metamorphism of the complex. Relict textures of the other lithologies (CM, CC, PH and CS) are observed within bands of the dolomite carbonatite. These include pseudomorphs after phenocrysts and cumulate minerals. Phlogopite is replaced dominantly by chlorite and dolomite, but also pyrite, silica, muscovite and monazite. Coarse-grained (up to 1 cm) chloritized phlogopite within CD is commonly associated with silicocarbonatite. Back-scatter electron imaging indicates that dark-grey submetallic pseudomorphs after magnetite are dominantly composed of dolomite with rutile inclusions occurring along cleavage planes. Pyrite commonly aggregates along the rim of the pseudomorphs.

Fersmite occurs as anhedral, octahedral and hexagonal polycrystalline pseudomorph up to 4 mm in diameter after columbite and pyrochlore concentrating within zircon-bearing apatite laminae. Fersmite is rarely recognizable within hand sample, but where visible it has a pale-yellow to pink colour and grainy texture. Two varieties of fersmite pseudomorphs are recognized at Aley: 1) Ti-enriched acicular yellow fersmite; and 2) subplatey lamellar Th-rich fersmite embedded in Th-poor fersmite. The two varieties of fersmite are only distinguishable using microscopic methods. Monazite also occurs in some pseudomorphs with fersmite, but is only identifiable by microscopic methods. Within the oxidized zone, fersmite needles are disaggregated and redispersed. Nb-mineralization within CD generally reflects associated primary mineralization. The most fersmite-rich CD is observed in the vicinity of CM and associated CC, whereas the least mineralized CD is observed in the vicinity of PH. Some fersmite is observed locally in CD associated with CS.

Although pyrite is observed within all lithologies, it is most abundant within dolomite carbonatite occurring as stringers, laminae, massive aggregates and to lesser extent as euhedral cubic disseminations. The greatest concentration of pyrite occurs with dolomitized CM bands .

The least common textural variety of CD is brecciated matrix-supported dolomite carbonatite observed within drillcore associated with localized fault zones that are dominated by rubble and gouge. Nb-mineralization has not yet been observed within brecciated zones.

Fault zones are generally around 10 to 15 meters wide but are thicker towards the surface. Faults are generally traceable between adjacent drillholes but displacement appears to be minor maintaining the CM-PH-CS sequence. Faults are likely associated with localized slumping of the complex. Some bands of sheared breccia within the dolomite carbonatite suggest that some ductile deformation must have followed brittle deformation.

V: Fenite (AM and AMX)

The fenite aureole has previously been referred to as a syenite (Mäder, 1986) and an amphibolite (Assessment report 16484). The fenite is texturally variable, ranging from dark- to greyish green in colour and composed of variable proportions of albite, quartz, arvedsonite, aegirine, calcite, apatite and accessory lorenzenite and rare-earth carbonates (Mäder, 1986). A fenitized conglomerate also occurs along the margins of the complex containing rounded clasts of amphibole-rich quartz syenite (?), metasomatized sedimentary rocks and quartzite.

Centimetre- to metre-scale fenite blocks also occur within the core of the complex (AMX). A fenite-block rich horizon is most commonly observed in the drillholes occurring between CM and PH or CS (when PH is not present). Aphyric to magnetite-phlogopite-phyric calcite carbonatite commonly occurs in contact with the fenite clast and as crosscutting veinlets. Black phlogopite rims (1-2 cm thick) occur between calcite and dark-green fenite core. Dolomitized fenite clasts are greyish purple in colour and contain abundant pyrite disseminated within the matrix.

The so-called amphibolite occurs in two phases. One is the massive amphibole-rich rock and the other a coarse breccia dominated by rounded amphibole-rich quartz syenite mixed with rounded clasts of amphibole-metasomatised Paleozoic sedimentary rocks, particularly pure early Cambrian quartzite that occurs some 1-km below the present surface. Pride (Pride, 1984) proposed that the amphibolite resulted from Mg and Fe metasomatisation that overprinted breccias of sedimentary rocks associated with the emplacement of the carbonatite, producing “fenitisation” as such bringing into question whether that the amphibolite indeed an intrusive rock.

Mäder (1986) observed that the rock had syenitic textures with original Na-amphiboles and the unusual petrochemistry that lead to quartz and albite dominance. This he termed quartz-albite syenite in order to distinguish it from the more common nepheline syenite normally associated with carbonatites. The rock in question had undergone extensive metasomatism that overprinted much of the original quartz-albite-arfvedsonite magmatic textures. Mader suggested that the metasomatism replaced albite and some arfvedsonite with aegirine and that quartz increased and sometimes recrystallised to form larger grains while residual albite reformed into finer grained albite aggregates.

The breccia comprises up to 30% xenoliths of quartzite and igneous rocks such as micro-syenite and albitite. Reaction rims caused by metasomatism rim the sedimentary clastics showing pervasive adsorption and formation of recrystallised quartz, albite, and secondary aegirine. Micro-syenite clasts are much less common. These too show reaction rims with similar mineralogy observed in the massive metasomatised syenite and in the sedimentary clasts.

2010 Geological Mapping

In 2009, and independently of Taseko, a five-week academically-oriented mapping campaign was conducted on the property by Duncan F. McLeish, Dr. Stephen T. Johnston of the University of Victoria and Mitch G. Mihalynuk of the MEMPR, with the objective of gaining a better understand the tectonic and structural controls on, and timing of, emplacement of carbonatites in the Canadian Cordillera. Observations from this work formed the basis of a M.Sc. thesis (McLeish, 2011). In 2010, and in follow up to the 2009 work of McLeish, a two-week mapping campaign by Duncan F. McLeish and Anton Chakhmouradian, and supported by Ryan Kressal (University of Manitoba) was conducted at the request of Taseko with the objective of providing a structural and petrographic basis within which to undertake the targeting exploration drilling that summer.

To this end, 88 rock samples collected from outcrop and 2007 drill core were submitted for whole-rock analysis as part of a geochemical characterization exercise. Interpretative work based on the results of such analysis, in consideration of observations made and understanding gained during geological core logging form the basis of the “*Property Geology*” section of this report. Such work is considered to represent a very significant contribution to understanding of this unusual deposit type,

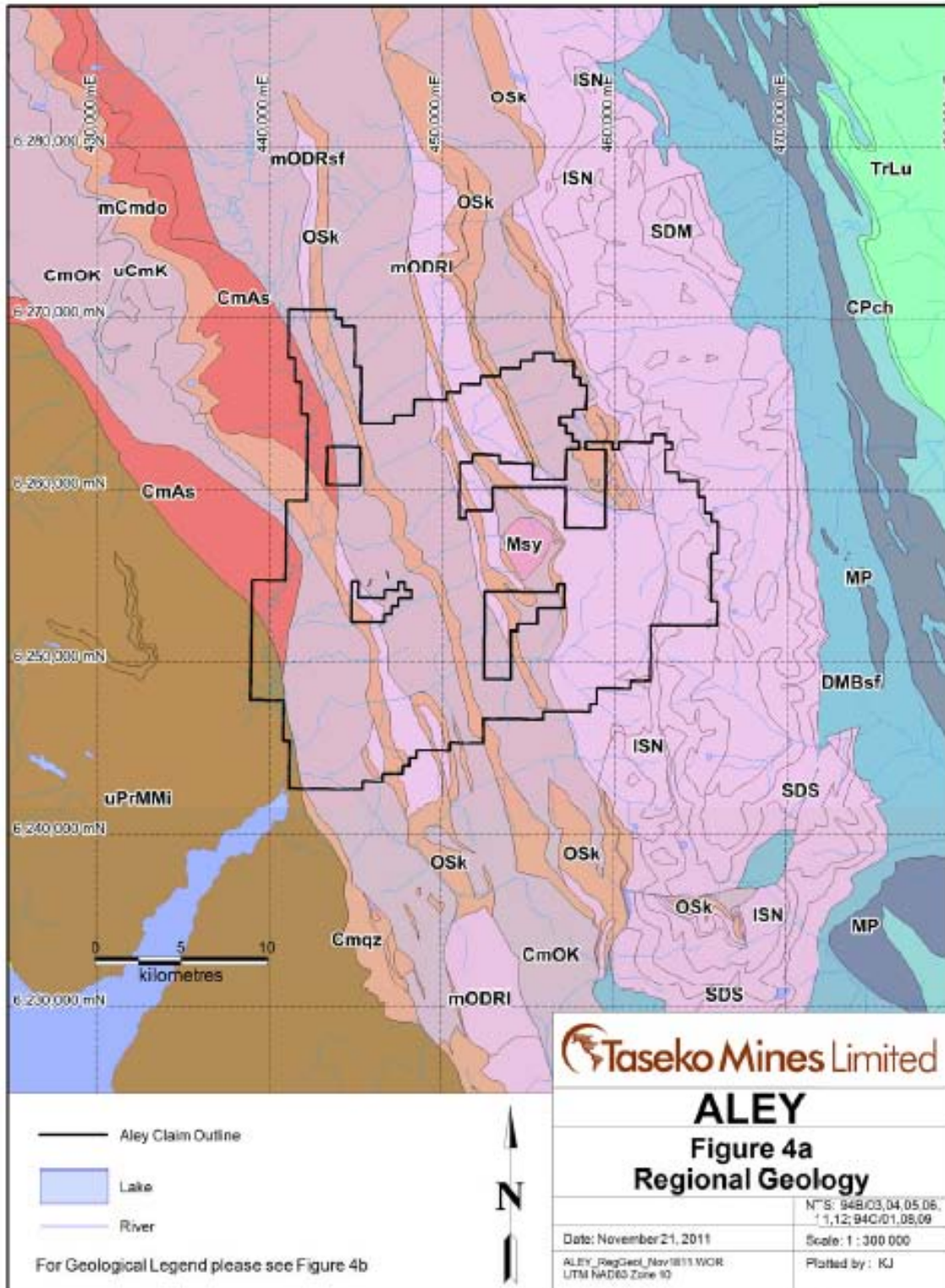


Figure 4a - Regional Geological Map



Figure 4b - Regional Geological Map- Legend

and of British Columbian geology, and served as significant guide in the orientation of the 2010 drilling program.

2010 Geological Mapping and Rock Characterization

In 2009, and independently of Taseko, a five-week academically-oriented mapping campaign was conducted on the property by Duncan F. McLeish, Dr. Stephen T. Johnston of the University of Victoria and Mitch G. Mihalynuk of the MEMPR, with the objective of gaining a better understanding of the tectonic and structural controls on, and timing of, emplacement of carbonatites in the Canadian Cordillera. Observations from this work formed the basis of a M.Sc. thesis (McLeish, 2011). In 2010, and in follow up to the 2009 work of McLeish, a two-week mapping campaign by Duncan F. McLeish and Anton Chakhmouradian, and supported by Ryan Kressal (University of Manitoba) was conducted at the request of Taseko with the objective of providing a structural and petrographic basis within which to undertake the targeting exploration drilling that summer.

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2010 Diamond Drilling

A diamond drill program comprising a total meterage of 4,460m over 23 holes (2010-012 through 2010-034) was undertaken by Taseko at the so-called “Central Zone” at Aley. All 2010 holes were drilled at similar azimuths (20° to 60°) and inclinations (-45° to -55°). Downhole surveys were performed on selected inclined holes using a Reflex survey tool, from which the data were corrected by Taseko personnel to remove magnetic interference. Geotechnical data were collected for all of the holes, with the exception of 2010-031 through 2010-034. Core from 1,178 drill runs was measured, and averaged 3.0m in length with 97% in recovery.

1312 samples (in addition to 75 duplicate, 75 standard reference samples and 25 blanks) of sawn NQ-sized core obtained through diamond drilling were sent for assay analysis. Samples were assayed for Nb, Ta, U, Th and REE's as well as a standard multi-element suite, by Inspectorate Laboratories of Richmond, BC.

Drilling was conducted by Blackhawk Drilling of Smithers, BC using a JT-2000 hydraulic drill rig. In a similar manner to the 2007 all drilling activities were undertaken by means of helicopter, this being due to the fact that critical portions of the former access roads had collapsed and that their re-establishment in accordance with modern standards, would have been time-consuming and expensive. All drilling was performed on 16' x 16' timber pads built in-situ. Where possible, pads were constructed on the old cat trails, which had the advantage of being relatively flat, though elsewhere such pads were erected on slopes of up to 45 degrees. Wherever possible, the pads were carefully dismantled and the material subsequently re-used. Reclamation of drill sites was undertaken upon completion of drilling. All project personnel were accommodated in the old lodge adjacent to the site of the former Ospika camp, situated on the lower northern flank of the Ospika

arm of Williston Lake. This facility is now under the management of Finlay River Outfitters, from whom basic accommodation and meals are available.

The objective of the drill program was the confirmation of previous exploration work undertaken by Cominco between 1985 and 1986. The program also sought to establish a better understanding of the deposit geometry as well as collection of sufficient sample material for metallurgical test work. While some metallurgical material was indeed collected, this remains in safe storage pending future analysis. As such, no assessment credit has been applied with respect to any element of metallurgical test work beyond the collection and bagging of the samples themselves. All such sample material remains in appropriate storage awaiting analysis once deemed appropriate,

Table 3 shows the UTM coordinates for each of the diamond drill hole collars as well as the total length of core in metres. Detailed geological logs, embodying geological observations as well as downhole survey information are attached in Appendix A. Sample logs for every hole are presented in Appendix B and assay Certificates are included in Appendix C.

Sample preparation, analysis and security

The 2010 drill core samples were transported by helicopter from the drill sites to the nearby Ospika Camp where the core was logged (in accordance with the system of codes laid out in the “*Property Geology*” section of the report) and samples laid out by company personnel. Samples were taken by cutting the drill core in half lengthwise using a diamond saw. Cores from the first six drill holes were split at Ospika and cores from the remaining 17 drill holes were split at the Gibraltar Mine, all under supervision of company personnel. The 2010 drill cores and split samples were trucked from Ospika to the Gibraltar Mine by commercial carrier. The half-core samples were tagged, bagged and shipped by commercial carrier to Inspectorate Exploration & Mining Services Ltd. (Inspectorate), Richmond, BC for preparation and analysis. The remaining half core is stored at the Gibraltar Mine near McLeese Lake BC, itself owned and operated by Taseko Mines Limited. Coarse rejects and pulp samples are stored at the Hunter Dickinson Inc warehouse facility in Port Kells, BC.

Samples from the 2010 drill program were dried and crushed to 70% passing 2 mm (10 mesh). Then 250 g sub-samples were split and pulverized to 95% passing 150 mesh (106 micron). The primary assay was performed by Inspectorate. Nb₂O₅ (%) was determined by multi-acid digestion with ICP finish (Inspectorate code: Nb₂O₅-AD3-OR-ICP); Ta (ppm) by 4 acid digestion with ICP finish (Inspectorate code: Ta-4A-LL-ICP). Th (ppm) by 4 acid digestion with ICP finish (Inspectorate code: Th-4A-LL-ICP); U (ppm) by 4 acid digestion with ICP finish (Inspectorate code: U-4A-OR-ICP); and REE group (ppm) by lithium borate fusion with ICP-MS finish (Inspectorate code: REE-LB-MS). The major components (Al₂O₃, BaO, CaO, Fe₂O₃, K₂O, MgO, MnO, Na₂O, P₂O₅, SiO₂, TiO₂ and LOI) were analyzed by lithium borate fusion with ICP finish, (Inspectorate code: WR-FS-ICP). Ag, Cu and additional 28 elements were measured by 4 acid digestion with ICP finish (Inspectorate code: 30-4A-TR). Assay methods and QAQC protocol are listed in Appendix D

Inline duplicates were assayed by the same lab using same method as the mainstream samples. The additional check assays were carried out by Acme. Nb, U, W, Mo and Sr were determined by phosphoric acid digestion with ICP finish (Acme code: 7KP). REE group and refractory elements were determined by lithium borate fusion with ICP-MS finish (Acme code: 4B02). Precious and base metals were measured by aqua regia digestion with ICP-MS finish.

Table 3 - Drill Hole Collars.

Hole ID	Core	UTM Zone 10 NAD 83		Elevation (metres)	Depth (metres)	Azimuth	Dip
		Easting	Northing				
2010-012	NQ	454,261.31	6,256,503.02	1,612.94	154.26	20	-55
2010-013	NQ	454,293.13	6,256,548.29	1,619.33	215.20	20	-55
2010-014	NQ	454,332.71	6,256,516.19	1,589.43	91.54	20	-55
2010-015	NQ	454,350.86	6,256,555.97	1,599.19	215.85	20	-55
2010-016	NQ	454,525.45	6,256,609.67	1,653.28	147.86	20	-55
2010-017	NQ	454,564.59	6,256,632.07	1,653.79	214.93	20	-55
2010-018	NQ	454,331.71	6,256,677.03	1,654.53	152.45	20	-55
2010-019	NQ	454,396.41	6,256,675.06	1,657.53	152.44	20	-55
2010-020	NQ	454,459.25	6,256,587.55	1,644.08	215.24	20	-50
2010-021	NQ	454,271.13	6,256,449.48	1,585.70	149.39	20	-55
2010-022	NQ	454,388.90	6,256,431.03	1,566.00	303.65	20	-55
2010-023	NQ	454,208.33	6,256,449.49	1,592.55	213.41	20	-55
2010-024	NQ	454,090.89	6,256,515.75	1,643.53	153.05	30	-55
2010-025	NQ	454,656.32	6,256,672.09	1,667.24	217.94	30	-45
2010-026	NQ	454,110.85	6,256,585.18	1,649.39	215.24	40	-55
2010-027	NQ	454,681.67	6,256,504.63	1,677.78	213.72	30	-45
2010-028	NQ	454,740.85	6,256,621.61	1,714.31	213.41	30	-45
2010-029	NQ	454,758.05	6,256,520.80	1,727.22	215.85	30	-45
2010-030	NQ	454,816.99	6,256,466.95	1,763.47	213.41	30	-45
2010-031	NQ	454,707.46	6,256,372.49	1,707.25	214.94	30	-45
2010-032	NQ	455,105.38	6,256,412.53	1,819.83	205.18	60	-50
2010-033	NQ	454,808.09	6,256,300.23	1,781.80	213.41	30	-45
2010-034	NQ	455,006.03	6,256,360.54	1,813.57	213.41	60	-50

Four different standards were used for QA/QC purposes, namely Aley-1, Aley-2, Aley-3 and OKA-1. These standards were inserted into the sample stream at a frequency of approximately one in every twenty samples. Ideally, standards were placed to match the anticipated grade range of the surrounding samples. These standards are in addition to those routinely analyzed by the analytical laboratories as an internal check. Standard performance was monitored and the results were compared with the expected value and range, as determined from the round-robin testing of the

standard. Nb₂O₅ assay results were monitored for QA/QC failures, that is, results outside the control limits, and re-analyzed as necessary.

Coarse granite and sand blanks were submitted with the regular half core samples in the field to test for possible sources of contamination during analyses. The laboratory was instructed to crush and prepare the samples in numerical order, so that an assessment of possible cross-contamination could be made.

Discussion and Conclusions

The 2010 exploration program focused on building an improved understanding of the geology of the Aley carbonatite confirmation of the 1985-1986 exploration drilling work undertaken by Cominco, to provide better understand the geometry of the deposit and to yield sufficient material for further metallurgical test work. As such, drill holes were located either in moderate proximity to existing Cominco holes or exploration trenches for purposes of confirmation, or between Cominco holes in order to test for continuity.

The following summary of the petrographic characteristics of the Aley carbonatites is based on both field observations made by Chakhmouradian and Kressall (2010) and McLeish (2011), and results of the detailed petrographic analysis of outcrop and drillcore material by Chakhmouradian and Kressall.

In accord with the findings of Cominco, two major modal types of carbonatite can be distinguished: calcite carbonatites and dolomite carbonatites, the latter making up the bulk of the Aley intrusive complex. Several different textural types of carbonatite can be recognized among both calcite and dolomite carbonatites, including

- Magnetite-Apatite-Columbite Cumulate (CM) and Phlogopite-Magnetite Calcite Carbonatite (CC)
- Phoscorite (PH)
- Silicocarbonatite (CS)
- Dolomite carbonatite (CD)
- Fenite (AM and AMX)

Of greatest significant to niobate mineralization is CM. Chakhmouradian and Kressall (2010) reported that the modal composition of carbonatite is important for constraining the distribution of Nb minerals, whereas color variations – in general - appear not to have any relation to mineralization. By far the most common accessory and, locally, major constituents of all carbonatites are apatite, phlogopite (euhedral crystals up to 5 cm across commonly replaced by chlorite, dolomite and, to lesser extent, muscovite) and pyrite (euhedral cubic and pyritohedral crystals up to 5 mm across commonly oxidized to a mixture of reddish-brown Fe oxi-hydroxides). The occurrence of pyrite is pervasive and can be confidently interpreted as subsolidus sulfide mineralization superposed over primary textures. For this reason, the presence or absence of pyrite has no bearing on the distribution of Nb minerals and those textural characteristics that result from the presence of oxidized pyrite in the rock (e.g., patchy reddish coloration) cannot be used as an exploration tool

The results of detailed petrographic study of polished thin sections show that very few of the textural characteristics and relations observed on the macro- or microscale are primary, i.e.

produced by crystallization from magma or such processes as magma-flow differentiation, intrusive brecciation, etc. These primary textural, structural and modal characteristics include:

- cumulate layers enriched in heavy minerals (predominantly apatite, magnetite and Nb phases) and containing a relatively small content of carbonate;
- porphyritic textures consisting of phlogopite phenocrysts immersed in a carbonate matrix
- xenoliths of country-rock material (sedimentary dolomites and fenites);
- enrichment of calcite carbonatite in mafic silicates (phlogopite, aegirine and richterite) near the contact with fenitic xenoliths;
- relict grains of dolomite in some laminated calcite carbonatites.

While brecciation was observed in both outcrop and drillcore, Chakhmouradian and Kressall (2010) noted that this could not be unambiguously interpreted as either a synemplacement (i.e. primary) or postemplacement texture.

There is overwhelming field and petrographic evidence that most of the primary characteristics of the carbonatites have been modified and, in some cases, obliterated by the postemplacement evolution of the Aley complex. This evolution involved at least two deformation events, lowgrade metamorphic overprint, and re-equilibration of the carbonatite with groundwater. The first deformation event involved stress-induced plastic flow of carbonate material, accompanied by its intrusive emplacement into dilated fissures in the fenitized country rock, brecciation of the country rock, grain-size reduction and development of lamination in the carbonatite in response to grain-size, grain-shape and density variations in the rock, fragmentation and alignment of apatite crystals, formation of lenticular inequigranular textures, and possibly, chemical re-equilibration of the primary minerals with a fluid. The subsequent deformation event produced folding in laminated carbonatites, ranging from isolated flexures to multiple tightly spaced folds.

Exhumation of the carbonatites and their re-equilibration with groundwater produced widespread oxidation of pyrite and decalcification of dolomite, which locally converted these rocks into an incompetent ochre-brown to reddish brown calcite-enriched material containing isolated fragments of carbonatite.

Assay results for all of the 2010 drill holes have been received and have been presented on the sections included in Appendix E. These holes intersected relatively consistent niobium mineralization of significant grade across an area measuring over 900m east-west and 350m north-south. Mineralized drill intercepts are in some cases in excess of 200m in length, the true widths of which will be determined by further delineation drilling. Niobium mineralization is, at an average drill spacing of approximately 150m relatively continuous and close to surface. The extent of niobium mineralization indicated by the 2010 drilling is currently undefined laterally and at depth.

Selected mineralized intercepts include 125.3m @ 0.53% Nb₂O₅ from 9.1m in hole 2010-012, 76.9m @ 0.67% Nb₂O₅ from 14.6m in hole 2010-014, 134.1m @ 0.70% Nb₂O₅ from 6.3m in hole 2010-021, 144.1m @ 0.57% Nb₂O₅ from 6.7m in hole 2010-022, 141.7m @ 0.82% Nb₂O₅ from 4.6m in hole 2010-023, 153.2m @ 0.52% Nb₂O₅ from 45.1m in hole 2010-030, and 207.3m @ 0.66% Nb₂O₅ from 6.1m in hole 2010-033.

The average unweighted grade by interval of all core samples from the 2010 drilling program, irrespective of rock-type, is 0.38% Nb₂O₅; when a cut-off grade of 0.20% Nb₂O₅ is applied (resulting in the exclusion of 470 of a total of 1311 samples), the average unweighted grade by interval, again irrespective of rock-type, rises to 0.54% Nb₂O₅. Preliminary evaluation of the drill data suggests,

subject to geological and grade continuity, the potential for a deposit in the order of 40Mt tonnes at an approximate grade of 0.5% Nb₂O₅.

Recommendations for further work

To facilitate a more detailed assessment of the property, the collection of further geological and geotechnical information is required. The proposed work program has been constrained by internal budgetary factors and has been prioritized in the interest of advancing data collection and analysis. An exploration program comprising the following priority elements is proposed:

- (i) Helicopter-supported exploration/resource drilling comprising approximately 17,000m of NQ-diameter diamond drill core across approximately 65 holes. This element of the program would have the objective of providing infill drill coverage for the purposes of resource definition, and has been laid out in consideration of the current geological and geostatistical understanding of the deposit. The diamond drilling program would also seek to test the potential continuation of niobium mineralization within the Central Zone in areas where it is currently unconstrained.
- (ii) Helicopter-supported geotechnical drilling, with the objective of collecting geotechnical and hydrogeological data at potential Tailings Storage locations, in accordance with standard industrial practices.
- (iii) Further geological interpretation and development of a more rigorous understanding of controls on niobium mineralization.

Statement of Costs

Exploration Work type	Comment	Days		Totals
Personnel (Name) / Position	Field Days (list actual days)*	Days	Rate	Subtotal*
Jeremy Crozier (Project Manager)	July 15 - September 3	40	\$700.00	\$28,000.00
Ryan Libke (Project Coordinator)	July 15 - September 3	42	\$260.00	\$10,920.00
Duncan McLeish (Project Geologist)	July 15 - August 23	39	\$260.00	\$10,140.00
Ryan Kressall (Project Geologist)	July 23 - September 3	43	\$260.00	\$11,180.00
Steve Dumma (L3 FAA/geotech)	July 23 - August 30	39	\$275.00	\$10,725.00
Ashley Nystrom (Technician)	August 12 - August 16	5	\$230.00	\$1,150.00
Chris Gallagher (Niton Operator)	August 16 - August 19	4	\$400.00	\$1,600.00
Barry Poole (Core Splitter)	August 12 - August 22	11	\$210.00	\$2,310.00
Kirk Miller (Core Splitter)	August 12 - August 20	9	\$210.00	\$1,890.00
Dwayne Pierre (Core Splitter)	August 12 - August 17	6	\$210.00	\$1,260.00
Jesse Collison (Project Coordinator)	August 21 - August 30	10	\$300.00	\$3,000.00
	<i>* dates listed include partial days worked and breaks within project</i>			
				\$82,175.00
				\$82,175.00
Office Studies	List Personnel (office only, do not include field days)			
Database compilation	Si Yuan Lee, Data Technician	2.0	\$200.00	\$400.00
	Ted Oliver, Database Manager	3.0	\$280.00	\$840.00
QAQC verification	Romeo Taras, Data Technician	3.0	\$240.00	\$720.00
Graphics and GIS	Katrina Jessen, Compiliation Geologist	1.0	\$240.00	\$240.00
	Alexandra Shaw, Lands geologist	1.0	\$220.00	\$220.00
QAQC Management	Eric Titley, Senior Geologist, QAQC	2.0	\$600.00	\$1,200.00
				\$3,620.00
				\$3,620.00
Diamond Drilling	No. of Holes, Size of Core and Metres	No.	Rate	Subtotal
Blackhawk Drilling Ltd.	4460 meters at NQ		total job	\$694,783.00
				\$694,783.00
				\$694,783.00
Other Operations	Clarify	Days	Rate	Subtotal
Nothing to declare				
				\$0.00
				\$0.00
Transportation	Clarify	No.	Rate	Subtotal
Helicopter	Yellowhead helicopters - provision of 1 x Bell 407 at an average rate of \$1850 per hour, plus fuel, plus GST including pilot and engineer, for a total of 121.4 hours, using 22153 litres of Jet-B		total job	\$357,432.00
Sample Transport	Transport of drill core from Ospika Camp to Inspectorate laboratories, Richmond		total job	\$15,378.00
Miscellaneous Airfares	Air Canada, WestJet and Pacific Coastal flights from Vancouver, Victoria and Winnipeg		total job	\$10,405.00
				\$383,215.00
				\$383,215.00
Accommodation & Food	Rates per day			
Finlay River Outfitters	Accommodation at former CANFOR Lodge		total job	\$32,481.00
				\$32,481.00
				\$32,481.00
Miscellaneous				
Field equipment purchase	Safety equipment, 2 x GPS, sample bags and tickets, tools, water supply equipment, first aid equipment		total job	\$11,361.00
				\$11,361.00
				\$11,361.00
Sample Analysis and Assay				
Inspectorate Laboratories			total job	\$123,480.00
				\$123,480.00
				\$123,480.00
<i>TOTAL Expenditures</i>				\$1,331,115.00
<i>METC Recovery</i>				-\$404,853.00
NET Expenditures				\$926,262.00

References

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Statements of Authors' Qualifications

I, Jeremy Crozier, hereby state:

1. That I am Exploration Manager for Taseko Mines Ltd., with offices located at 15th Floor, 1040 W. Georgia St. Vancouver, BC, V6E 4H8
2. That I am a graduate of the University of St.Andrews, Scotland (B.Sc., 1995) and have been employed as an exploration a geologist since that time. I subsequently earned an MSc degree from the University of the Orange Free State, South Africa (2001, part time) and an MBA from the Ecole des Hautes Etudes Commerciales, Montreal (2004).
3. That my experience has given me considerable knowledge in geological, geochemical and geophysical prospecting techniques as well as in the planning, execution and evaluation of exploration drilling programs.
4. That the accompanying Statement of Costs is an accurate statement of expenditures on the project.

November 22, 2011.

Jeremy Crozier

APPENDIX A
GEOLOGICAL LOGS

GEOLOGY LOG

 Hole ID 2010-012

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454261.31	6256503.02	1612.94	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	154.26		154.26		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	8.60	8.60
NQ	8.60	154.26	154.26

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor			
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	01/Aug/2010	
Drill Contractor		24/Jul/2010	25/Jul/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-012

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 8.60	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 8.60	-	TO 9.10	ROCK CODE	nICD	=	Min Style n	Fabric l	Texture i	Litho CD	Struct	
			MAIN COMMENTS	Cored talus. Mottled brown carbonatite. Mottles areas react strongly to HCl while bulk rock reacts weakly or not at all. Core angle is variable per rock fragment. Apatite and zircon content is variable between 10 and 25 vol. % and 0 and 0.1 vol. % respectively.							
			MINERALIZATION	Type	Value	Comments					
			Pyrite %		1.00	<input type="text"/>					
			ALTERATION	Type	Value	Comments					
			Calcite %		1.00	<input type="text"/>					
			STRUCTURE	Type	Intens	CA°	Comments				
			Laminations %		moderate		<input type="text"/>				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			W		15	0.1	<input type="text"/>				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
9.10 - **TO**
12.70

ROCK CODE

dlcCD

=

Min Style
d

Fabric
l

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Interval is composed of grey dolomite carbonatite laminae (up to 20 cm thick), dark brown decalcified laminae (up to 2 cm thick) and thin (generally less than 1 cm) dark laminae composed of oxidized pyrite and interstitial dolomite. Pyrite laminae is surrounded by "halo" of oxidized dolomite (up to 2 cm thick). Zircon occurs dominantly in apatite-rich laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Potential fersmite occurs as fine grained dark grey octahedral grains disseminated in discrete laminae. Grains do not have red streak.
Pyrite %	1.50	Mostly confined to thin laminae less than a centimetre thick within oxidized dolomite. Rarely, laminae occur as thick as 4 cm.

ALTERATION

Type	Value	Comments
Silica %	1.00	
Oxidation %	25.00	
Calcite %	25.00	

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	45	Composed of dolomite
Laminations %	strong	10	Core angle is generally low but varies up to 45 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
12.70 - **TO**
15.30

ROCK CODE mCD = **Min Style** **Fabric** **Texture** **Litho** **Struct**
 m f CD

MAIN COMMENTS Dolomite carbonatite is altered to brown incompetent mud. Incompetent brown rock makes up half of interval. Carbonatite has a mottled appearance. Grey material is composed of dolomite and brown pitted mottles are composed of calcite (reacts strongly to HCl). Carbonatite contains some clusters of phlogopite pseudomorphs. Zircon occurs dominantly in apatite laminae.

MINERALIZATION			Type	Value	Comments
	Pyrite %	1.00			

ALTERATION			Type	Value	Comments
	Silica %	1.00			
	Calcite %	15.00			

STRUCTURE				Type	Intens	CA°	Comments
	Laminations %	weak	60			Grey and brown lamiae oriented 60 to 90 degrees to core in places.	
	Veining %	weak	40			Dolomite veins up to 3 mm wide	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	S	15	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
15.30 - **TO**
16.90

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Interval is composed of dark grey dolomite laminae (1 to 5 cm thick) and dark brown secondary calcite (1-3 cm thick). Dark brown laminae reacts strongly to HCl. Oxidized areas are up to 20 cm thick. Weathered incoherent rock makes up the last ~2 meters of interval. Higher concentration of apatite and zircon at top of interval..

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Fine grained dark grey grains - do not streak red - Occur in grey dolomite carbonatite laminae rich in pyrite and pseudomorphs
Pyrite %	1.50	Oxidized and altered to yellow limonite. Occur dominantly in oxidized areas

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Oxidation of dolomite surrounding pyrites
Calcite %	25.00	Dark brown laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	40	Generally 40 but does increase to 60 in middle of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	15	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
16.90 - **TO**
19.30

ROCK CODE nlfCD = **Min Style** n **Fabric** l **Texture** f **Litho** CD **Struct**
MAIN COMMENTS Dark brown decalcified unit with a few fragments of coherent laminated dolomite carbonatite. Zircon is smaller in this interval and disseminated throughout.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.10	Oxidized pyrite visible in coherent dolomite carbonatite fragments. Most likely broken down in incoherent brown rock.

ALTERATION		
Type	Value	Comments
Oxidation %	80.00	

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	40	Primary texture lost due to alteration

MISCELLANEOUS			
Zone	HCL	Apatite	Zircon
OX	VS	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
19.30 - **TO**
21.80

ROCK CODE

gmCM

=

Min Style
g

Fabric
m

Texture
Litho
CM

Struct
MAIN COMMENTS

Highly magnetic fine- to medium-grained cumulate interval composed dominately of magnetite and apatite with visible accessory columbite and phlogopite. Small amount of calcitization occurs in last 50 cm of interval. Laminae of dolomite carbonatite dividing magnetite-apatite cumulate is void of apatite and zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.10	
Magnetite %	40.00	
Niobates %	3.00	Small (~0.5 mm) black nonmetallic grains likely columbite

ALTERATION

Type	Value	Comments
Calcite %	10.00	

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	40	thin centimetre-scale dolomite veins
Laminations %	weak	30	2-12 cm thick laminae of dolomite carbonatite separate massive magnetite-rich zones

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VS	30	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
21.80 - **TO**
25.09

ROCK CODE dlcCD = **Min Style** d **Fabric** l **Texture** c **Litho** CD **Struct**
MAIN COMMENTS Decalcified medium brown mottles are confined mostly to parallel mottles. Mottles are composed dominantly of calcite (reacts strongly to HCl). Apatite occurs as oriented laminae. Zircon occurs with apatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Red streak when scratched
Niobates %	0.10	Localized fine grained dark grey grains do not streak red when scratched - possibly fersmite pseudomorphs

ALTERATION

Type	Value	Comments
Oxidation %	10.00	
Calcite %	25.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	
Veining %	weak	80	Calcite along fractures (joints?)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
25.09 - **TO**
27.80

ROCK CODE nlcCD = **Min Style** n **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Bulk of interval is light grey dolomite carbonatite with thin (~2 cm) dark brown calcite laminae and thicker (~4-6 cm) dark grey dolomite carbonatite. Towards end of interval, dark brown decalcification occurs more irregularly near fractures. A few dark grey dolomite dark grey clasts (around 5 cm diameter) occur randomly in interval. Dark grey colour of dolomite is due to minute inclusions of most likely pyrite. Apatite occurs in crosscutting veins and oriented in dolomite carbonatite laminae.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.50	Fresh cores with oxidized rims

ALTERATION		
Type	Value	Comments
Oxidation %	10.00	
Calcite %	20.00	

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	40	Veins rimmed by dark brown calcite alteration
Laminations %	moderate	25	varies between 10 and 40 degrees

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	10	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	lcCD	=	Min Style	Fabric	Texture	Litho	Struct
27.80	-	30.05				I	c	CD	
		MAIN COMMENTS	Light grey to beige dolomite carbonatite with laminae of dark grey dolomite being altered to dark brown calcite . Major oxidation and minor brecciation at end of section near fracture (fault?). Zircon occurs within thin (up to 1 cm) apatite laminae.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	0.50	Confined to thin laminae				
		ALTERATION	Type	Value	Comments				
			Calcite %	15.00	Mostly of dark grey dolomite.				
			Oxidation %	30.00					
		STRUCTURE	Type	Intens	CA°	Comments			
			Laminations %	strong	40				
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			OX	M	20	0.25			

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
30.05 - **TO**
33.77

ROCK CODE bICD = **Min Style** b **Fabric** I **Texture** **Litho** CD **Struct**

MAIN COMMENTS Mottled light grey to beige laminated carbonatite with 10-20 cm thick intervals of extensive decalcification and oxidation. Apatite occurs as oriented aggregates in dolomite carbonatite. Zircon is concentrated locally.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized, streak red, disseminated and aggregated in decalcified-oxidized zones
Niobates %	0.10	Localized dark grey grains that do not streak red

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
33.77 - **TO**
36.26

ROCK CODE dICD = **Min Style** d **Fabric** I **Texture** **Litho** CD **Struct**
MAIN COMMENTS Fine-grained oxidized laminated light grey to beige dolomite carbonatite. Small patches of decalcification. Apatite-zircon laminae occurs associated with pyrite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible fersmite; dark grey to yellow without red streak; localized
Pyrite %	1.50	Fine to medium-grained oxidized pyrite with red streak

ALTERATION

Type	Value	Comments
Silica %	1.00	Minor laminae undergone silicification
Calcite %	5.00	reacts strongly to HCl
Oxidation %	35.00	beige to orange colour

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	15	Generally a low angle but varies up to 45 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
36.26 - **TO**
39.20

ROCK CODE

dICD

=

Min Style
d

Fabric
I

Texture
Litho
CD

Struct
MAIN COMMENTS

Grey to beige oxidized dolomite carbonatite. Medium grained pseudomorphs of fersmite most likely after pyrochlore. Few pockets of dark grey dolomite carbonatite reacts weakly to HCl and dark brown calcite mottles reacts strongly. Zircon concentrates in apatite laminae and with oriented apatite in dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Occur within thin oxidized dolomite laminae
Niobates %	1.00	Dark grey fersmite grains up to 2 mm diameter

ALTERATION

Type	Value	Comments
Calcite %	5.00	Decalcification occurs concordant and irregularly discordant to lamination
Oxidation %	20.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	VW		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
39.20 - **TO**
42.22

ROCK CODE

dICD

=

Min Style
d

Fabric
I

Texture
Litho
CD

Struct
MAIN COMMENTS

Thick mottled laminae (~10 cm thick) , thin decalcified brown laminae (~1-2 cm thick) and very thin (<1 cm) oxidized pyrite rich laminae. Dark grey and beige colors are likely the result of reaction with meteoric water. Dark grey niobates occur in low proportion disseminated in mottled laminae and concentrated in pyrite rich laminae. Apatite and zircon concentrate localised within the most strongly laminated fragments.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible fersmite pseudomorphs after pyrochlore: dark grey in colour, no red streak, fine grained
Pyrite %	1.50	Oxidized with fresh core - confined to thin laminae

ALTERATION

Type	Value	Comments
Calcite %	5.00	Dark brown mottled laminae - reacts strongly with HCl
Oxidation %		Surrounds oxidized pyrite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	60	dolomite veins up to 1.5 cm thick crosscuts lamination-dark grey dolomite and dark brown decalcification surrounds fracture; also at 40 and 80 degrees
Laminations %	moderate	10	Generally low but does vary up to 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	W	15	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
42.22 - **TO**
44.50

ROCK CODE bIfCD = **Min Style** b **Fabric** I **Texture** f **Litho** CD **Struct**
MAIN COMMENTS Highly fractured and altered rock to minor incoherent rock. Coherent rock contains strong decalcified laminae parallel to lamination. Zircon occurs within centimeter-scale apatite pods and as aggregates with pyrite.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Fine- to medium- grained, confined to laminae
Niobates %	0.10	possible fersmite, dark grey fine-grained, localized

ALTERATION

Type	Value	Comments
Calcite %	10.00	Concentrated near fractures
Oxidation %	30.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	
Veining %	moderate	25	Oxidized-pyrite infilled fracture

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	15	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
44.50 - **TO**
48.24

ROCK CODE

nmCDz

=

Min Style
n

Fabric
m

Texture
Litho
CD

Struct
z

MAIN COMMENTS

Weakly laminated to massive dolomite carbonatite. Visible displacement of fabric (~ 6 cm) along series of fractures. Faults crosscut brown decalcification mottles. Zircon and apatite occur together as laminar, unoriented swirls and as centimeter-scale aggregates.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.50	Oxidized, red streak

ALTERATION

Type	Value	Comments
Calcite %	20.00	
Oxidation %	20.00	
Silica %	1.00	Silicification of unknown mineral, localized

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	80	dolomite in-filled faults - visible displacement of carbonatite (5 cm) - faults crosscut dark brown mottles
Laminations %	very weak	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	25	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
48.24 - **TO**
51.34

ROCK CODE dlfCD = **Min Style** d **Fabric** l **Texture** f **Litho** CD **Struct**
MAIN COMMENTS Laminated 5 to cm thick intervals of massive dolomite carbonatite and pyrite-rich intervals. Thin (> 1 cm)apatite-rich laminae with disseminated zircon.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Possible fersmite: fine grained dark grey, no red steak. Occurs disseminated within massive dolomite and pyrite-rich dolomite
Pyrite %	0.50	Oxidized, red streak: stringers oriented parallel to lamination.

ALTERATION

Type	Value	Comments
Calcite %	5.00	

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	80	
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
51.34 - **TO**
53.60

ROCK CODE nliCD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light grey to beige dolomite carbonatite contains localized pseudomorphs after phlogopite, swirls of dark grey dolomite and slight decalcification localized to laminae and along fractures/veins. locaApatite occurs as thin strongly laminated thin bands and large randomly oriented aggregates. Zircons occurs disseminated within or near apatite laminae.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.50	Oxidized with some fresh cores: streaks red

ALTERATION		
Type	Value	Comments
Calcite %	10.00	
Oxidation %	10.00	

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	5	Generally low but varies up to 20 degrees on a 10s of centimeters scale
Veining %	strong	80	Veins have been decalcified

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	20	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
53.60 - **TO**
55.22

ROCK CODE

bIfCD

=

Min Style
b

Fabric
I

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Light grey dolomite carbonatite contains numerous brown pits that do not react to HCl. Carbonatite includes pods of dark grey carbonatite with a high concentration of phlogopite pseudomorphs and a few lens of oxidized pyrite. Apatite-rich laminae up to 5 cm wide with high concentration of disseminated zircon. Last 0.5 m of interval is composed of decalcified carbonatite with no visible apatite and zircon.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible fersmite: dark grey, octahedral, no streak. Occur in pyrite-rich laminae
Pyrite %	0.50	Fine- to medium grained.

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	As low as 10 degrees
Veining %	moderate	80	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
55.22 - **TO**
58.28

ROCK CODE

nlfgcd

=

Min Style
n

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Composed of ~10 cm laminae of light grey dolomite carbonatite laminae separated from dark grey dolomite laminae by dark brown calcitization and beige oxidation haloes and thin apatite- and zircon -rich laminae. Dark grey dolomite carbonatite contains a high abundance of dolomitized phlogopite (?). Dolomitized phlogopite (micro-phenocrysts) also occurs disseminated in light grey carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Disseminated pyrite follows lamination

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark brown "mottled" laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	10	Generally low but as high as 40 (towards top of interval)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
58.28 - **TO**
60.99

ROCK CODE

dlfcD

=

Min Style
d

Fabric
l

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Oxidized-mottled beige to light grey dolomite carbonatite containing oriented stringers of pyrite, apatite-zircon-rich laminae, microphenocrysts of dolomitized phlogopite and clots of dark grey dolomite carbonatite. Downhole pyrite occurs as laminae of various thickness (~0.5 to 10 cm).

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible fersmite: fine-grained, dark grey to yellow, no red streak, locally distributed
Pyrite %	2.00	Oxidized with some fresh cores

ALTERATION

Type	Value	Comments
Oxidation %	30.00	
Calcite %	1.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	45	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
60.99 - **TO**
63.37

ROCK CODE

nlfCD

=

Min Style
n

Fabric
l

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Weathered fine-grained grey to light pink dolomite carbonatite.. ~50 % of interval is rubble. Zircon occurs within thin apatite laminae within compenent rock. Within weathered carbonatite, zircon occurs disseminated and is void of apatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Massive oxidized pyrite aggregates, stringers and locally disseminated in "pods"

ALTERATION

Type	Value	Comments
Calcite %	5.00	
Oxidation %	30.00	Gives dolomite orange to pink colour

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Generally low but varies up to 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
63.37 - **TO**
65.94

ROCK CODE

dICD

=

Min Style
d

Fabric
I

Texture
Litho
CD

Struct
MAIN COMMENTS

Laminated grey, beige and pink dolomite carbonatite with minor decalcification. Bands of thin apatite laminae separated by dolomite carbonatite laminae and disseminated apatite in dolomite carbonatite. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Likely fersmite, dark grey to yellow, Occurs disseminated in mottled dolomite carbonatite laminae
Pyrite %	0.50	Disseminated within particular laminae; oxidized, some limonitized

ALTERATION

Type	Value	Comments
Calcite %	5.00	Dark brown laminae: reacts strongly to HCl
Oxidation %	20.00	Beige to orange to pink dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	generally low but varies up to 40 degrees
Veining %	moderate	80	dolomite (?) infilled fractures

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
65.94 - **TO**
68.50

ROCK CODE

dmCD

=

Min Style
d

Fabric
m

Texture
Litho
CD

Struct
MAIN COMMENTS

Dolomite carbonatite has a mottled-massive appearance; slightly decalcified with small pits and dark brown secondary calcite. Apatite occurs disseminated and as semi-oriented aggregates in dolomite carbonatite. A high concentration of disseminated zircon occurs in the last 10 cm of interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occur disseminated within particula laminae
Niobates %	0.10	dark grey to black, fine grained concentrates at end of interval; some show hexagonal shape - columbite being replaced by fersmite?

ALTERATION

Type	Value	Comments
Calcite %	10.00	discordant to lamination and concentrated along fractures
Oxidation %	20.00	Gives carbonatite pinkish colour

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	80	dolomite (?) infilled fracture
Laminations %	very weak	20	Difficult to observe without UV lamp

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
68.50 - **TO**
70.70

ROCK CODE

dlfcD

=

Min Style
d

Fabric
l

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Moderately weathered dolomite carbonatite; mottled with light grey dolomite, beige oxidized dolomite, dark brown decalcification and dark grey dolomite. Apatite and zircon concentrate in strong laminations up to a few centimeters thick.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Black to dark grey grains disseminated throughout - no red streak, possible columbite and/or fersmite
Pyrite %	5.00	Medium- to coarse-grained oxidized pyrite aggregates, concentrate near 80 degree fracture

ALTERATION

Type	Value	Comments
Calcite %	5.00	Along vugs
Oxidation %	20.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Core angle starts ~40 degrees but decreases in competent rock in bottom of interval.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
70.70 - **TO**
74.50

ROCK CODE glfCD = **Min Style** g **Fabric** l **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Laminated compenent intervals seperated by intervals of weather/decalcified carbonatite with porphyritic pseudomorphs afer phlogopite. Abundant pseudomorphs occur in dark grey dolomite pods. Apatite and zircon occur as semi-oriented to oriented aggregates in compenent rock but not visible in weathered rock. Zircon is ~1 vol. % of compenent rock.

MINERALIZATION

Type	Value	Comments
Magnetite %	2.00	unoriented pods and laminated massive aggregates over ~20 cm interval
Pyrite %	1.50	laminated oxidized pyrite
Niobates %		Columbite likely present in magnetite aggregates

ALTERATION

Type	Value	Comments
Oxidation %	50.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Strength of lamination increases down interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 74.50	-	TO 77.86	ROCK CODE	nICD	=	Min Style n	Fabric I	Texture	Litho CD	Struct	
			MAIN COMMENTS	Light grey to beige dolomite carbonatite with fractured intervals. Laminated stong laminations and large unoriented aggregates of apatite with associated disseminated zircon							
			MINERALIZATION	Type	Value	Comments					
				Niobates %	0.50	Possible fersmite in apatite laminae					
				Pyrite %	1.50	Fine grained oxidized pyrite occurs disseminated in particular dolomite laminae and coarser laminae occur almost entirely composed of pyrite					
			ALTERATION	Type	Value	Comments					
				Oxidation %	40.00	follows laminations					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	weak	10					
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	W	15	0.5				

FROM 77.86	-	TO 80.36	ROCK CODE	bmCD	=	Min Style b	Fabric m	Texture	Litho CD	Struct	
			MAIN COMMENTS	Light grey to beige oxidized dolomite carbonatite. A few apatite laminae and semi-oriented aggregates.							
			MINERALIZATION	Type	Value	Comments					
				Niobates %	0.10	fine-grained in strong localized laminations					
				Pyrite %	0.50	Fine-grained oxidized pyrites occurs disseminated and as stringers oriented parallel to lamination					
			ALTERATION	Type	Value	Comments					
				Oxidation %	50.00	Gives carbonatite mottled appearance					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	VS	2.5	0.1				

FROM 80.36	-	TO 82.57	ROCK CODE nICD	=	Min Style n	Fabric I	Texture	Litho CD	Struct								
			MAIN COMMENTS	Laminated light grey-beige-dark grey oxidized-weathered dolomite carbonatite with fractured intervals. Large apatite aggregates with disseminated zircon. Apatite aggregates become strongly laminated towards bottom of interval.													
			MINERALIZATION														
			ALTERATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Oxidation %</td> <td>60.00</td> <td></td> </tr> </tbody> </table>						Type	Value	Comments	Oxidation %	60.00			
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OX	VW	25	0.75														

FROM 82.57	-	TO 85.36	ROCK CODE nmfCD	=	Min Style n	Fabric m	Texture f	Litho CD	Struct								
			MAIN COMMENTS	Fractured dolomite carbonatite has mottled light grey-beige-dark brown appearance. Dark brown decalcification concentrates along fractures. Crenulated laminae and "veins" of apatite.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Highly oxidized medium-grained aggregates and laminae</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.00	Highly oxidized medium-grained aggregates and laminae		
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FROM 85.36	-	TO 88.95	ROCK CODE	bICD	=	Min Style b	Fabric I	Texture	Litho CD	Struct										
			MAIN COMMENTS	Light grey to beige laminated dolomite carbonatite with small "pods" of dark grey dolomite carbonatite. Thick (up to 30 cm) massive dolomite carbonatite separated by strongly laminated apatite with few unoriented aggregates of apatite.																
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OX	VW	10	0.25																	

FROM 88.95	-	TO 91.60	ROCK CODE	dICD	=	Min Style d	Fabric I	Texture	Litho CD	Struct										
			MAIN COMMENTS	Laminated medium grey dolomite carbonatite oxidized to light grey and beige. White apatite occurs as large unoriented aggregates and as weak crenulated laminae. Zircon concentrates in apatite aggregates.																
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Zone	HCL	Apatite	Zircon																	
OX	VW	20	0.5																	

FROM
91.60 - **TO**
95.24

ROCK CODE bICD = **Min Style** b **Fabric** I **Texture** **Litho** CD **Struct**

MAIN COMMENTS Massive dolomite carbonatite separated by apatite-zircon laminae. Pods of porphyritic-inequigranular dolomite carbonatite present (pseudomorphs composed dominantly of chlorite after phlogopite) Towards top of interval, apatite occurs as large unoriented aggregates. Downwards, lamination of apatite increases.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible dark grey fersmite in zircon-rich apatite laminae
Pyrite %	0.50	Fresh and oxidized pyrite disseminated throughout interval

ALTERATION

Type	Value	Comments
Silica %	1.00	+ chloritization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX		10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
95.24 - **TO**
96.42

ROCK CODE bmCM = **Min Style** b **Fabric** m **Texture** **Litho** CM **Struct**
MAIN COMMENTS Half of interval is composed of magnetite-apatite-phlogopite-zircon cumulate unit. Aggregates of apatite, magnetite and zircon and semi-oriented laminae of apatite with disseminated zircon

MINERALIZATION

Type	Value	Comments
Pyrite %	5.00	Thick (up to 10 cm) laminae of oxidized pyrite with interstitial dolomite
Magnetite %	20.00	Occurs as dominant mineral in cumulate unit
Niobates %	1.00	Columbite likely present with magnetite-apatite-zircon-phlogopite cumulate, but cannot observe; black and dark grey minerals observed below magnetite cumulate: likely columbite and fersmite

ALTERATION

Type	Value	Comments
Oxidation %	20.00	

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	25	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
96.42 - **TO**
100.13

ROCK CODE dICD = **Min Style** d **Fabric** I **Texture** **Litho** CD **Struct**
MAIN COMMENTS Light grey to beige laminated dolomite carbonatite with few laminae of porphyritic (pseudomorphs after phlogopite) dolomite carbonatite . Numerous thin laminae of apatite with disseminated zircon

MINERALIZATION

Type	Value	Comments
Pyrite %	0.25	Oxidized pyrite stringers
Niobates %	0.10	Dak grey fersmite observed with porphyritic laminae

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	
Veining %	weak	80	Pyrite infilled fracture

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
100.13 - **TO**
102.20

ROCK CODE dliCD = **Min Style** d **Fabric** l **Texture** i **Litho** CD **Struct**
MAIN COMMENTS Thin (~1 cm) apatite laminae with thicker (up to 10 cm) laminae composed of massive dolomite carbonatite, locally inequigranular. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Disseminated oxidized pyrite
Niobates %	0.10	Possible fersmite: dark grey near high concentrations of pyrite

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Follows laminae orientation

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
102.20 - **TO**
107.95

ROCK CODE dlpCCCD = **Min Style** d **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Laminated slightly oxidized medium grey dolomite carbonatite contains ~10 cm thick laminae of porphyritic dolomite carbonatite. Calcite carbonatite crosscuts the dolomite carbonatite (relatively concordant to lamination ~40 degrees) Apatite occurs as weak to strong laminations of various thickness. Zircon occurs disseminated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	
Niobates %	0.10	Pyrochlore present at ~1 % in calcite carbonatite,

ALTERATION

Type	Value	Comments
Oxidation %	10.00	follows lamination, decreases downhole
Calcite %	5.00	Small 10 cm laminae (or dyke)- reacts strongly to

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	20	
Veining %	moderate	40	Calcite carbonatite vein?

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	15	0.25

FROM 107.95	-	TO 110.63	ROCK CODE ICCCD	=	Min Style I	Fabric I	Texture	Litho CCCD	Struct									
			MAIN COMMENTS	Last 20 cm at end of interval is white calcite carbonatite and aggregate of phlogopite. Apatite occurs as weak to moderate laminations of thin to moderate thickness. Apatite occurs disseminated in apatite laminae. Calcite present.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.05</td> <td>Minor pyrochlore occurs in biotite clots</td> </tr> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Stringers parallel to laminae and disseminated in dolomite carbonatite</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.05	Minor pyrochlore occurs in biotite clots	Pyrite %	1.50	Stringers parallel to laminae and disseminated in dolomite carbonatite
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Zone	HCL	Apatite	Zircon															
H	M	10	0.5															

FROM 110.63	-	TO 115.10	ROCK CODE glCD	=	Min Style g	Fabric I	Texture	Litho CD	Struct									
			MAIN COMMENTS	Light to medium grey dolomite carbonatite. Apatites occurs as aggregates to moderately laminated. Zircon occurs disseminated in apatite aggregates and laminae.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Magnetite %</td> <td>2.50</td> <td>Forms aggregate with phlogopite</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Columbite likely present with magnetite.</td> </tr> </tbody> </table>						Type	Value	Comments	Magnetite %	2.50	Forms aggregate with phlogopite	Niobates %	0.10	Columbite likely present with magnetite.
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Zone	HCL	Apatite	Zircon															
H	W	15	0.25															

FROM 115.10	-	TO 120.12	ROCK CODE gxAMX	=	Min Style g	Fabric x	Texture	Litho AMX	Struct
			MAIN COMMENTS	Medium grey dolomite carbonatite with 10s of centimeter scale fenite xenoliths. scale Apatite is accumulated around fenite xenoliths.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.05	Possible pyrochlore: pinkish brown mineral occurs around fenite			
				Pyrite %	0.50	Thin laminae around fenite and stringers in dolomite carbonatite			
			ALTERATION	Type	Value	Comments			
				Amphibolite %	50.00	fenite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	7.5	0.25		

FROM 120.12	-	TO 125.55	ROCK CODE bICD	=	Min Style b	Fabric l	Texture	Litho CD	Struct
			MAIN COMMENTS	Laminated medium grey dolomite carbonatite with brecciated intervals up to 1 m and small intervals (<10 cm) of porphyritic dolomite carbonatite. Apatite occurs as weak to moderate laminations. Zircon occurs disseminated in apatite laminae.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.50	Likely fersmite within apatite laminae. High concentration of fine-medium grained yellow fersmite in porphyritic dolomite carbonatite			
				Pyrite %	1.00	Thin laminae of fine-grained pyrite and medium-coarse grained disseminated oxidized pyrite			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	40	Brecciated intervals do not show lamination		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	15	0.25		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 125.55	-	TO 128.97	ROCK CODE dICD	=	Min Style d	Fabric I	Texture	Litho CD	Struct
			MAIN COMMENTS	Apatite occurs as weak laminations. Zircon occurs disseminated in aptatite.fi					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.50	suspect very fine grained fersmite replacing pyrochlore			
				Pyrite %	3.00	Very fresh gold coloured pyrite cubes and aggregates			
			ALTERATION	Type	Value	Comments			
				Oxidation %	1.00	Minor oxidation of pyrite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	5	0.1		

FROM 128.97	-	TO 134.44	ROCK CODE dICD	=	Min Style d	Fabric I	Texture	Litho CD	Struct
			MAIN COMMENTS	Apatite occurs as aggregates to moderately laminations. Zircon occurs disseminated in apatite laminations and aggregates.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	1.00	very fine grained fersmite replacing pyrochlore			
				Pyrite %	2.00	fresh high lusture cubic aggregates			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	40	weak to moderate laminations of pyrite and apatite		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	15	0.25		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
134.44 - **TO**
137.06

ROCK CODE dmiCD = **Min Style** d **Fabric** m **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Mostly massive dolomite carbonatite with minor zones of weak laminations. Minor (2%) altered phlogopite phenocrysts (fine to medium grained) hosted in fine to very fine grained dolomite matrix. Apatite occurs as strong laminations up to a few centimetres thick and in aggregates. Fine grained zircon occurs disseminated in apatite laminations and aggregates and medium grained in phlogopite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.30	
Pyrite %	1.50	fresh and weather, fine-grained, gold to black oxidized pyrite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
137.06 - **TO**
142.19

ROCK CODE dmpCD = **Min Style** d **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Massive, fine grained dolomite carbonatite with distinct phlogopite phenocrysts (porphyritic) and coarse pyrite aggregates. Apatite occurs in weak to moderate laminations. Fine-grained zircon occurs disseminated in apatite laminae and associated with magnetite and medium-grained zircon in phlogopite-phryic laminae.

MINERALIZATION

Type	Value	Comments
Magnetite %	1.00	locally disseminated medium to coarse grained magnetite
Pyrite %	5.00	laminated, disseminated, and aggregated fine grained pyrite. Very fresh.
Niobates %	0.60	very fine grained fersmite (pink, replacing pyrochlore octahedra) and fine to medium grained suspect columbite (hard, opaque, hexagonal grains with no streak)

ALTERATION

Type	Value	Comments
Oxidation %	1.00	minor pyrite oxidation but mostly very fresh

STRUCTURE

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
142.19 - **TO**
148.46

ROCK CODE dmiAMX = **Min Style** d **Fabric** m **Texture** i **Litho** AMX **Struct**

MAIN COMMENTS Fine grained dolomite carbonatite with amphibolite lenses. Locally porphyritic with altered phlogopite and pyrite phenocrysts. Locally weakly laminated but mostly massive. Apatite rims fenite (amphibolite) clasts and occurs as moderate laminae. Zircon occurs disseminated in dolomite carbonatite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Laregly pyrite poor
Magnetite %	0.00	
Niobates %	0.50	Fine grained yellow to pink fersmite occurs locally within the porphyritic zones

ALTERATION

Type	Value	Comments
Amphibolite %	15.00	Blocks and lenses of amphibolite; 10-20% of section. Brecciated "conglomeratic" unit of amphibolite.
Oxidation %	1.00	Rare oxidized pyrite

STRUCTURE

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	dICD	=	Min Style	Fabric	Texture	Litho	Struct										
148.46	- 154.26				d	I		CD											
		MAIN COMMENTS	Very weak to weakly laminated medium grey dolomite carbonatite with localized phenocrysts of altered phlogopite. Apatite occurs as aggregates to weak laminations. Zircon occurs disseminated predominantly in dolomite carbonatite.																
		MINERALIZATION	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Value</th> <th style="width: 70%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td style="text-align: center;">0.10</td> <td>Locally mineralized, Minor yellow to pink fine-grained fersmite in porphyritic lamina</td> </tr> <tr> <td>Pyrite %</td> <td style="text-align: center;">0.30</td> <td>Medium-grained pyrite aggregates</td> </tr> </tbody> </table>							Type	Value	Comments	Niobates %	0.10	Locally mineralized, Minor yellow to pink fine-grained fersmite in porphyritic lamina	Pyrite %	0.30	Medium-grained pyrite aggregates	
Type	Value	Comments																	
Niobates %	0.10	Locally mineralized, Minor yellow to pink fine-grained fersmite in porphyritic lamina																	
Pyrite %	0.30	Medium-grained pyrite aggregates																	
		ALTERATION																	
		STRUCTURE	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Intens</th> <th style="width: 10%;">CA°</th> <th style="width: 60%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Laminations %</td> <td style="text-align: center;">weak</td> <td style="text-align: center;">40</td> <td>Generally 40 but does vary to shallow angles</td> </tr> </tbody> </table>							Type	Intens	CA°	Comments	Laminations %	weak	40	Generally 40 but does vary to shallow angles		
Type	Intens	CA°	Comments																
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		MISCELLANEOUS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Zone</th> <th style="width: 15%;">HCL</th> <th style="width: 15%;">Apatite</th> <th style="width: 15%;">Zircon</th> <th style="width: 40%;"></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">H</td> <td style="text-align: center;">VW</td> <td style="text-align: center;">15</td> <td style="text-align: center;">0.1</td> <td></td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon		H	VW	15	0.1	
Zone	HCL	Apatite	Zircon																
H	VW	15	0.1																

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-013

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454293.13	6256548.29	1619.33	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	215.20		215.20		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	6.10	6.10
NQ	6.10	215.20	215.20

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor			
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	30/Jul/2010	
Drill Contractor		26/Jul/2010	28/Jul/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-013

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 6.10	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 6.10	-	TO 7.08	ROCK CODE	nlfqCD	=	Min Style n	Fabric l	Texture fg	Litho CD	Struct	
			MAIN COMMENTS	Loose dolomite carbonatite. Apatite occurs moderately laminated. Zircon occurs disseminated in apatite laminae.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	3.00	Fine-grained disseminated oxidized pyrite					
			ALTERATION	Type	Value	Comments					
				Oxidation %	60.00	Beige dolomite					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	weak		Core angle varies from rock fragment to rock fragment				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	VW	10	0.5				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
7.08 - **TO**
9.63

ROCK CODE dlfGCD = **Min Style** d **Fabric** l **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Oxidized light grey to beige laminated dolomite carbonatite. Cross lamination occurs at end of interval. Apatite occurs weakly to moderately laminated in irregular laminae. Zircon occurs disseminated in dolomite.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Laminated and disseminated oxidized pyrite.
Niobates %	0.10	Rare potential fersmite: dark grey, fine grained, no red streak

ALTERATION

Type	Value	Comments
Calcite %	2.50	few calcitized dark brown laminae
Oxidation %	50.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
9.63 - **TO**
14.63

ROCK CODE

liCD

=

Min Style
Fabric
Texture
Litho
Struct

l

i

CD

MAIN COMMENTS

Fine-grained light grey to beige slightly decalcified dolomite carbonatite with small intervals (<10 cm) of inequigranular dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated in apatite and dolomite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Potential fersmite occurs locally concentrated in laminae enriched in apatite laminae with pyrite
Pyrite %	2.00	Disseminated to weakly laminated oxidized pyrite

ALTERATION

Type	Value	Comments
Calcite %	1.00	Slight calcitization
Oxidation %	30.00	Beige to pink dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	10	Generally low but steepens to 20 degrees in places
Veining %	moderate	80	Dolomite infilled fracture

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
14.63 - **TO**
18.26

ROCK CODE liCDz = **Min Style** **Fabric** **Texture** **Litho** **Struct**
 i CD z

MAIN COMMENTS Light grey to beige laminated dolomite carbonatite with intervals of massive inequigranular dolomite carbonatite up to 20 cm thick. Visible cm-scale displacement along 80 degree fracture. Apatite occurs as weak to moderate irregularly spaced laminae. Zircon occurs disseminated in dolomite and apatite.

MINERALIZATION

Type	Value	Comments
Pyrite %		Oxidized pyrite occurs as fine grained disseminated grains and as medium grained aggregates up to 10 cm wide diameter.
Niobates %	0.10	Rare suspect fersmite: fine-grained, yellowish-grey

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Beige to pink: Generally follows lamination

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	80	In-filled fracture (dolomite?)
Laminations %	weak	10	Generally low but steepens to 25 degrees in places

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
18.26 - **TO**
19.08

ROCK CODE

gmCM

=

Min Style
g

Fabric
m

Texture
Litho
CM

Struct
MAIN COMMENTS

Magnetite-apatite-columbite cumulate unit with interstitial calcite and dolomite with calcite carbonatite laminae up to 5 cm thick. Magnetite and columbite occur concentrated in massive cumulate unit and disseminated in calcite carbonatite laminae. Zircon occurs disseminated within cumulate magnetite, apatite and columbite.

MINERALIZATION

Type	Value	Comments
Magnetite %	40.00	
Pyrite %	1.00	Oxidized fine-grained aggregates.
Niobates %	3.00	Fine grained columbite occurs aggregated with magnetite in cumulate and disseminated in calcite

ALTERATION

Type	Value	Comments
Calcite %	20.00	Primary calcite laminae
Oxidation %	10.00	

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	25	1.5

FROM
19.08

-

TO
22.61

ROCK CODE lfgCD = **Min Style** **Fabric** **Texture** **Litho** **Struct**
I fg CD

MAIN COMMENTS Oxidized light grey to pink dolomite carbonatite with slight decalcification. Apatite occurs weakly to moderately laminated. Zircon is concentrated near and within apatite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.50	Laminae up to 3 cm wide of oxidized pyrite and disseminated fine grained pyrite
Niobates %	0.10	Potential disseminated fine-grained dark grey fersmite

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Pink dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	80	Pyrite infilled fractue
Laminations %	weak	10	varies between 0 and 20 degees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 22.61	-	TO 27.51	ROCK CODE	nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Inequigranular to porphyritic (altered phlogopite) mottled (light grey to beige) dolomite carbonatite with intervals up to 20 cm of weakly laminated dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Zircon generally occurs disseminated throughout interval, but is locally concentrated in apatite and pyrite aggregates,						
			MINERALIZATION	Type	Value	Comments				
				Pyrite %	5.00	Massive fine- to medium-grained aggregates and disseminated fresh to oxidized pyrite				
			ALTERATION	Type	Value	Comments				
				Silica %	1.00	+ possible chloritization - irregular veining				
				Oxidation %	25.00					
			STRUCTURE	Type	Intens	CA°	Comments			
				Laminations %	weak	20	Not continuous lamination			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
				OX	VW	5	0.25			

FROM 27.51	-	TO 32.77	ROCK CODE	nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Inequigranular light grey to beige dolomite carbonatite with dark irregular clots typically surrounded by oxidized dolomite. Apatite occurs as unoriented aggregates.						
			MINERALIZATION	Type	Value	Comments				
				Pyrite %	1.00	Rare aggregates up to 5 cm diameter				
			ALTERATION	Type	Value	Comments				
				Oxidation %	20.00					
			STRUCTURE	Type	Intens	CA°	Comments			
				Veining %	moderate	80	dolomite			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
				OX	VW	7.5	0			

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nmiCD	=	Min Style	Fabric	Texture	Litho	Struct
32.77	-	37.85			n	m	i	CD	
		MAIN COMMENTS	High oxidation gives dolomite carbonatite mottled appearance: light grey to beige with clots of dark grey dolomite (after pyrite?). Apatite occurs locally aggregated. Apatite occurs as rare grain associated with apatite.						
		MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Pyrite %	0.50	Uncommon aggregates up to 1 cm diameter with fresh core and thin oxidized rim.				
		ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Oxidation %	65.00					
			Calcite %	1.00					
		STRUCTURE	<u>Type</u>	<u>Intens</u>	<u>CA°</u>	<u>Comments</u>			
			Veining %	moderate	80	Carbonate vein surrounded by calcitization			
		MISCELLANEOUS	<u>Zone</u>	<u>HCL</u>	<u>Apatite</u>	<u>Zircon</u>			
			OX	W	5	0.1			

FROM	TO	ROCK CODE	nliCD	=	Min Style	Fabric	Texture	Litho	Struct
37.85	-	42.69			n	l	i	CD	
		MAIN COMMENTS	Laminated light grey dolomite carbonatite with mete wide intervals of massive fine-grained to inequigranular (fine- to medium grained) dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated in apatite aggregates and laminae.						
		MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Pyrite %	1.00	Fine-gained aggregates up to 1 cm wide and few laminated stringers				
		ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Oxidation %	20.00	Concentration to laminated intervals				
		STRUCTURE	<u>Type</u>	<u>Intens</u>	<u>CA°</u>	<u>Comments</u>			
			Laminations %	weak	40	1 meter thick intervals seperated by 1 meter thick intervals of massive dolomite carbonatite			
		MISCELLANEOUS	<u>Zone</u>	<u>HCL</u>	<u>Apatite</u>	<u>Zircon</u>			
			OX	VW	5	0.25			

FROM
42.69 - **TO**
47.39

ROCK CODE dlfgcd = **Min Style** d **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Light grey to beige dolomite carbonatite. Apatite occurs weakly to moderately laminated concentrated more towards top of interval. Zircon occurs disseminated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Suspect fine-grained fersmite occurs disseminated locally within laminae of pophyritic dolomite carbonatite
Pyrite %	4.00	Oriented disseminated and stringers of fine-grained oxidized pyrite and aggregates (cm scale) of fresh pyrite.

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Gives beige colour to laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
47.39 - **TO**
50.04

ROCK CODE

dmfgCD

=

Min Style
d

Fabric
m

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Mottled (light grey to beige) massive to weakly laminated dolomite carbonatite with clots of dark grey dolomite carbonatite and weak laminae of pophyitic dolomite carbonatite. Apatite occurs aggregated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Suspect fine-grained pinkish yellow fersmite in pophyritic laminae (altered phlogopites)
Pyrite %	1.00	Fresh fine-gained massive aggregates generally around 1 cm but as large as 8 cm and some oxidized disseminated but oriented grains in weakly laminated intervals

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige mottles

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	0	Generally low when visible

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
50.04 - **TO**
52.28

ROCK CODE IpCD = **Min Style** **Fabric** **Texture** **Litho** **Struct**
 = I p CD

MAIN COMMENTS Laminated to swirly light to dark grey dolomite carbonatite with clots of dark grey porphyritic dolomite carbonatite (altered phlogopite). Altered phlogopites are black, soft and tabular. Apatite occurs aggregated to laminated. Zircon occurs disseminated, predominantly in apatite aggregates.

MINERALIZATION

Type	Value	Comments
Pyrite %	4.00	Occus aggregated in dark dolomite "clots" and disseminated and as stringers in light grey dolomite
Niobates %	0.50	Suspect fine-grained fersmite occurs in porphyritic dark grey aggregates and laminae

ALTERATION

Type	Value	Comments
Oxidation %	2.50	Beige dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Generally low but steepens to 40 degrees in places

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
52.28 - **TO**
56.13

ROCK CODE dmfgCD = **Min Style** d **Fabric** m **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Massive to weakly laminated light grey to pink dolomite carbonatite with few "clots" of dark grey dolomite carbonatite enriched in oxidized pyrite. Apatite occurs weakly to moderately laminated. Zircon occurs concentrated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Suspect yellowish grey fine-gained fersmite disseminated locally in small laminae.
Pyrite %	0.75	Fine-gained; occurs as disseminated, as laminated aggregates and as interstitial in-filled fractures (?)

ALTERATION

Type	Value	Comments
Calcite %	1.00	Dark brown irregular mottles
Oxidation %	70.00	Pink to beige dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Where present

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
56.13 - **TO**
58.48

ROCK CODE

dlfgCD

=

Min Style
d

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Weakly laminated to massive light grey to pink dolomite carbonatite. Apatite occurs moderately laminated. Zircon occurs disseminated in dolomite carbonatite to concentrated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Rare suspect fine-grained fersmite in uncommon laminae (rich in apatite and zircon) of porphyritic dolomite
Pyrite %	0.75	Disseminated aggregates up to 2-3 cm (generally < 1 cm)

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige to pink dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Generally ~40 degrees but does steepen to 60 degrees in places; becomes massive towards of end of interval (~ 1 m)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
58.48 - **TO**
63.25

ROCK CODE nmfgCD = **Min Style** n **Fabric** m **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Highly fractured light grey to beige mottled-massive dolomite carbonatite with relatively high amount of white dolomite-calcite veining. Apatite occurs weakly to moderately laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Disseminated and aggregated (up to 3 cm) fine-grained oxidized pyrite

ALTERATION

Type	Value	Comments
Calcite %	5.00	Veining and dark brown mottles react strongly to HCl
Oxidation %	50.00	Beige to pink dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	80	dolomite-calcite infilled fracture - some veins react to HCl

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
63.25 - **TO**
65.91

ROCK CODE mCD = **Min Style** **Fabric** **Texture** **Litho** **Struct**
 m CD

MAIN COMMENTS Mottled-massive to weakly laminated (small intervals less than 0 cm) light grey to beige dolomite carbonatite. Apatite occurs weakly to moderately laminated. Zircon occurs disseminated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Rare dark grey to pink fine-grained suspect fersmite
Pyrite %	1.50	Aggregates up to 5 cm and disseminated fine-grained fresh to oxidized pyrite

ALTERATION

Type	Value	Comments
Calcite %	0.50	Veining with dolomite
Oxidation %	50.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	70	Calcite-dolomite and pyrite infilled fractures- varies between 70 and 90 - some irregular shaped veining
Laminations %	very weak	20	Where present

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	12.5	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
65.91 - **TO**
66.69

ROCK CODE

gmfgCM

=

Min Style
g

Fabric
m

Texture
fg

Litho
CM

Struct
MAIN COMMENTS

First 40 cm of interval is massive oxidized (beige to pink) dolomite carbonatite. Remaining 70 cm consists of magnetite-apatite-columbite cumulate rock fragments in light grey to pink dolomite carbonatite. Zircon occurs disseminated within cumulate fragments.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fine-grained columbite occurs with magnetite
Magnetite %	25.00	Massive aggregates with apatite and columbite
Pyrite %	5.00	Fine-grained; disseminated and as aggregates up to 5 cm in massive carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	80.00	
Silica %	0.50	Minor silicification of massive carbonatite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	1.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
66.69 - **TO**
72.18

ROCK CODE nlfgrCD = **Min Style** n **Fabric** l **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Laminated light grey to beige dolomite carbonatite. Apatite occurs weakly to moderately laminated. Zircon occurs disseminated throughout interval but concentrates in apatite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.75	Thin laminae and stringers of fine grained oxidized pyrite and aggregates of fresher pyrite

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	very weak	45	Minor dolomite veining
Laminations %	moderate	40	Generally 40 but does increase to 60 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
72.18 - **TO**
76.14

ROCK CODE dliCD = **Min Style** d **Fabric** I **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Fractured light grey to beige laminaed dolomite carbonatite with small intervals of massive inequigranular and porphyritic dolomite carbonatite. Apatite occurs moderately laminated. Zircon occurs concentrated within apatite laminae (higher zircon concentration towards top of interval).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Disseminated and stringers of fine-grained oxidized pyrite
Niobates %	0.50	Localized disseminated suspect fine-grained fersmie

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	50	Varies between 40 and 60

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
76.14 - **TO**
80.23

ROCK CODE dlfCD = **Min Style** d **Fabric** l **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Laminated light grey to beige dolomite carbonatite with zones of moderate decalcification (pitted carbonatite and incompetent rock). Apatite occurs weakly to moderately laminated. Zircon occurs disseminated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.50	Mostly laminated fine-grained oxidized pyrite, some disseminated and larger aggregates (up to 3 cm)
Niobates %	0.25	Suspect fine-grained yellow-dark grey fersmite

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	50	50 to 60 degrees variation

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
80.23 - **TO**
82.19

ROCK CODE nmfgCD = **Min Style** n **Fabric** m **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Massive to weakly laminated light grey to beige dolomite carbonatite with rare pods of porphyritic dolomite carbonatite (altered phlogopite). Apatite occurs aggregated to moderately laminated with localized crenulations. Zircon occurs disseminated, concentrated near and within apatite aggregates.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.75	Oxidized stringers (< 1 mm thick)
Niobates %	0.05	Very rare suspect dark grey fersmite in pod of porphyritic dolomite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	
Veining %	moderate	55	50 to 60 degree veins of dolomite and oxidized pyrite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
82.19 - **TO**
83.13

ROCK CODE

gmCM

=

Min Style
g

Fabric
m

Texture
Litho
CM

Struct
MAIN COMMENTS

Magnetite-apatite-phlogopite-columbite cumulate occurs as xenoliths up to 30 cm within light grey to light pink dolomite carbonatite. Minor calcite occurs interstitially to cumulate phases. Zircon occurs disseminated throughout cumulate.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Occurs magnetite aggregates
Niobates %	2.00	Fine-grained columbite occurs with magnetite
Magnetite %	40.00	Large aggregates

ALTERATION

Type	Value	Comments
Calcite %	7.50	
Oxidation %	20.00	Beige dolomite and around magnetite aggregates

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
83.13 - **TO**
88.57

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light grey to beige moderately to weakly laminated dolomite carbonatite with few laminae of calcite carbonatite (1 to 5 cm thick - contains abundant phlogopite and Na-amphibole). Interval is locally porphyritic (altered phlogopites). Contains thin laminations of medium to dark grey dolomite carbonatite (< 3 cm) and apatite(white). Zircon occurs concentrated within apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Suspect fine-grained yellowish grey fersmite - locally disseminated
Pyrite %	1.50	Fine grained, occurs disseminated and as stringers to weak laminations.

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite
Calcite %	5.00	Calcite carbonatite laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Generally 20 but steepens to 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
88.57 - **TO**
96.19

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light grey to beige laminated dolomite carbonatite with laminae of dark grey dolomite carbonatite and clumps of altered phlogopite. Apatite occurs moderately laminated. Zircon occurs disseminated throughout interval but concentrated within apatite within apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Locally disseminated fine-grained fersmite - occurs in some porphyritic dolomite laminae
Pyrite %	1.00	thin oxidized laminae and disseminated fine grained - concentrated in porphyritic and dark grey dolomite laminae

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Variable between and 40 degrees; some swirly laminations

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 96.19	-	TO 98.49	ROCK CODE dlpCD	=	Min Style d	Fabric l	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Moderately fractured mottled-massive dolomite carbonatite. Altered phlogopite locally concentrated. Apatite occurs weakly to strongly laminated (strengthens downhole). Rare zircon occurs disseminated throughout interval.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.75</td> <td>Suspect fine-grained pyrochlore (pink) altered to fersmite (yellowish to dark grey) - typically with altered phlogopites</td> </tr> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Typically occur as fine-grained aggregates up to 3 cm diameter.</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.75	Suspect fine-grained pyrochlore (pink) altered to fersmite (yellowish to dark grey) - typically with altered phlogopites	Pyrite %	1.00	Typically occur as fine-grained aggregates up to 3 cm diameter.
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Zone	HCL	Apatite	Zircon															
OX	VW	12.5	0.1															

FROM 98.49	-	TO 102.13	ROCK CODE nlfgCD	=	Min Style n	Fabric l	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Light grey to beige laminated dolomite carbonatite with intervals of about 40 cm of massive dolomite. Interval contains uncommon alterer phlogopite (~1-2 vol. %). Apatite occurs moderately to strongly laminated. Apatite occurs disseminated within apatite laminae.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.00</td> <td>Few fine grained stringers in massive dolomite; mostly concentrated as lamine up to 3 cm thick</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	2.00	Few fine grained stringers in massive dolomite; mostly concentrated as lamine up to 3 cm thick		
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Zone	HCL	Apatite	Zircon														
OX	VW	7.5	0.25														

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 102.13	-	TO 106.01	ROCK CODE dmpCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct												
			MAIN COMMENTS	Massive dolomite carbonatite with distinct altered phlogopite (or magnetite) phenocrysts (up to 1 cm in diameter) rimmed by pyrite. Rare, very weak laminations; mostly massive and fabricless. Minor calcite occurs with magnetite. Apatite occurs aggregated (with magnetite and phenocrysts) to moderately laminated. Zircon occurs in high concentration in magnetite zone and in apatite laminae.																	
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.50</td> <td>pyrite abundant at top of section as aggregates (rimming phogopite); disseminated at bottom of section</td> </tr> <tr> <td>Magnetite %</td> <td>2.00</td> <td>Locally disseminated medium grained occurs with pseudomorph phenocrysts.</td> </tr> <tr> <td>Niobates %</td> <td>0.60</td> <td>Very fine grained pink to grey fersmite replacement of pyrochlore (?)</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	2.50	pyrite abundant at top of section as aggregates (rimming phogopite); disseminated at bottom of section	Magnetite %	2.00	Locally disseminated medium grained occurs with pseudomorph phenocrysts.	Niobates %	0.60	Very fine grained pink to grey fersmite replacement of pyrochlore (?)
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Zone	HCL	Apatite	Zircon																		
H	W	20	1																		

FROM 106.01	-	TO 107.62	ROCK CODE nmAMX	=	Min Style n	Fabric m	Texture fg	Litho AMX	Struct								
			MAIN COMMENTS	Dolomite carbonatite with large (up to 10cm) blocks of fenite (amphibolite). Largely barren and massive with very minor laminated zones which are potentially mineralized at low grade (?). Apatite occurs aggregated to weakly laminated. Zircon occurs clustered within apatite laminae.													
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Zone	HCL	Apatite	Zircon														
H	W	7.5	0.25														

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 107.62	-	TO 109.91	ROCK CODE dmpCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Fine grained dolomite carbonatite with fine to medium grained phlogopite phenocrysts (up to 1 cm) associated with zones of very fine grained niobate (fersmite) mineralization. Apatite occurs aggregated. Zircon occurs disseminated within dolomite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.00</td> <td>Fine grained pyrite occurring mostly in weak bands</td> </tr> <tr> <td>Niobates %</td> <td>0.50</td> <td>fine grained fersmite zones near top of section</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	2.00	Fine grained pyrite occurring mostly in weak bands	Niobates %	0.50	fine grained fersmite zones near top of section
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Zone	HCL	Apatite	Zircon															
H	VW	10	0.5															

FROM 109.91	-	TO 111.95	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Minor porphyritic sections (5cm) bearing phlogopite - appears largely barren. Apatite occurs disseminated in low concentrations (top 1 meter of interval) to moderately laminated (bottom 1 m of interval). Rare zircon occurs in dolomite carbonatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.10</td> <td>Possible fersmite - very rare</td> </tr> <tr> <td>Pyrite %</td> <td>0.25</td> <td>disseminated, fine grained</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.10	Possible fersmite - very rare	Pyrite %	0.25	disseminated, fine grained
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Zone	HCL	Apatite	Zircon															
H	VW	5	0.1															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 111.95	-	TO 116.00	ROCK CODE bmCD	=	Min Style b	Fabric m	Texture fg	Litho CD	Struct									
			MAIN COMMENTS	Minor sections of weakly banded phlogopite phenocrysts (porphyritic). Minor sections of inequigranular dolomite carbonatite with medium to coarse grains of dolomite. Apatite occurs weakly to strongly laminated. Zircon occurs as clusters within dolomite and apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>3.00</td> <td>Concentrated in banded phlogopite but also occurring as disseminated and aggregated</td> </tr> <tr> <td>Niobates %</td> <td>0.60</td> <td>Fine grained fersmite occurring mostly in banded phlogopite sections with minor disseminated fersmite in matrix</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	3.00	Concentrated in banded phlogopite but also occurring as disseminated and aggregated	Niobates %	0.60	Fine grained fersmite occurring mostly in banded phlogopite sections with minor disseminated fersmite in matrix
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Zone	HCL	Apatite	Zircon															
H	VW	7.5	0.1															

FROM 116.00	-	TO 119.09	ROCK CODE gmiAMX	=	Min Style g	Fabric m	Texture i	Litho AMX	Struct									
			MAIN COMMENTS	Distinct dark to medium grey mottled dolomite sections throughout with minor porphyritic (altered phlogopite bearing) bands. Apatite occurs aggregated to weakly laminated. Zircon occurs as clusters associated with apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.30</td> <td>Minor fersmite concentrated in rims of amphibolite block - possible minor disseminated fersmite</td> </tr> <tr> <td>Pyrite %</td> <td>3.00</td> <td>large (10cm) aggregates of pyrite as well as disseminated and laminated</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.30	Minor fersmite concentrated in rims of amphibolite block - possible minor disseminated fersmite	Pyrite %	3.00	large (10cm) aggregates of pyrite as well as disseminated and laminated
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Zone	HCL	Apatite	Zircon															
H	VW	5	0.25															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 119.09	-	TO 122.07	ROCK CODE dmCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Porphyritic to inequigranular; minor sections sections of light grey dolomite banding. Distinct coarse grained altered phlogopite phenocrysts Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated with apatite aggregates and laminae.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>aggregated and disseminated</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Minor very fine grained fersmite</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.50	aggregated and disseminated	Niobates %	0.10	Minor very fine grained fersmite
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Zone	HCL	Apatite	Zircon															
H	VW	7.5	0.5															

FROM 122.07	-	TO 124.31	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct								
			MAIN COMMENTS	Dark grey and mottled dolomite Apatite occurs aggregated. Zircon occurs disseminated throughout interval.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>fine grained aggregates</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.50	fine grained aggregates		
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			STRUCTURE														
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>VW</td> <td>10</td> <td>0.25</td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon	H	VW	10	0.25
Zone	HCL	Apatite	Zircon														
H	VW	10	0.25														

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 124.31	-	TO 126.52	ROCK CODE dmCD	=	Min Style d	Fabric m	Texture fg	Litho CD	Struct									
			MAIN COMMENTS	minor laminated sections; lamination defined by dolomite and apatite. Apatite occurs aggregated to weakly crenulated. Zircon occurs disseminated in dolomite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.75</td> <td>disseminated with minor pyrite bands</td> </tr> <tr> <td>Niobates %</td> <td>0.30</td> <td>fine grained disseminated fersmite</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.75	disseminated with minor pyrite bands	Niobates %	0.30	fine grained disseminated fersmite
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Zone	HCL	Apatite	Zircon															
H	VW	2.5	0.5															

FROM 126.52	-	TO 129.77	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Mottled dark grey to light grey color, Apatite occurs crenulated to weakly laminated. Zircon occurs clustered throughout interval.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td></td> <td>barren</td> </tr> <tr> <td>Pyrite %</td> <td>1.50</td> <td>occurred disseminated aggregates under 1cm</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %		barren	Pyrite %	1.50	occurred disseminated aggregates under 1cm
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Type	Intens	CA°	Comments															
Laminations %	weak	27	rare and weak, mostly massive															
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>VW</td> <td>5</td> <td>0.5</td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon	H	VW	5	0.5	
Zone	HCL	Apatite	Zircon															
H	VW	5	0.5															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 129.77	-	TO 131.83	ROCK CODE	bmpCD	=	Min Style b	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Massive to weakly laminated light to dark grey dolomite cabonatite, possible pyrochlore. Apatite occurs aggregated to weakly laminated. Zircon occurs clustered associated with apatite.						
			MINERALIZATION	Type	Value	Comments				
				Pyrite %	2.50	Fine-grained laminated aggregates				
				Niobates %	0.25	Suspect fine-grained reddish brown pyrochlore (possibly altered to fersmite) occur locally near phenocrysts				
			ALTERATION							
			STRUCTURE	Type	Intens	CA°	Comments			
				Laminations %	weak	40				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
				H	VW	17.5	0.25			

FROM 131.83	-	TO 137.13	ROCK CODE	dmiCD	=	Min Style d	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Dominantly massive inequigranular to slightly porphyritic dolomite carbonatite with few 50 cm increments of lamination. Apatite occurs crenulated to moderately laminated. Zircon occurs clustered in association with apatite.						
			MINERALIZATION	Type	Value	Comments				
				Niobates %	0.10	Rare reddish brown suspect pyrochlore replaced by fersmite				
				Pyrite %	1.00	Stringers and aggregates of fresh pyrite up to 1 cm diameter/thickness				
			ALTERATION	Type	Value	Comments				
				Silica %	1.00	with chloritization				
			STRUCTURE	Type	Intens	CA°	Comments			
				Laminations %	weak	80				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
				H	VW	12.5	0.5			

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 137.13	-	TO 141.00	ROCK CODE dmpCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Massive to very weakly laminated dolomite carbonatite with few increments (~10 cm) void of phenocrysts. Phenocrysts compose 15 -25 vol. % of interval. Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated throughout interval with clusters in association with apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.75</td> <td>Disseminated aggregates up to 1 cm</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Likely fersmite after pyrochlore: pinkish brown fine grained, disseminated locally</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.75	Disseminated aggregates up to 1 cm	Niobates %	0.10	Likely fersmite after pyrochlore: pinkish brown fine grained, disseminated locally
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Zone	HCL	Apatite	Zircon															
H	VW	12.5	0.75															

FROM 141.00	-	TO 142.08	ROCK CODE nmfgCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Mottled light grey to medium grey dolomite carbonatite. Apatite occurs weakly laminated.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Stringers and weak laminae up to 1 cm thick</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.50	Stringers and weak laminae up to 1 cm thick		
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Zone	HCL	Apatite	Zircon														
H	VW	7.5	0.1														

FROM
142.08 - **TO**
145.12

ROCK CODE dmfgCCCD = **Min Style** d **Fabric** m **Texture** fg **Litho** CCCD **Struct**

MAIN COMMENTS Mottled-massive light grey to medium-grey-porphyrific dolomite carbonatite with intervals of disseminated magnetite in cream calcite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	4.00	Disseminated to aggregated fine-grained pyrite
Niobates %	1.00	Suspect fine-grained fersmite after pyrochlore occurs disseminated locally black columbite likely occurs with magnetite
Magnetite %	5.00	Medim grained disseminated in calcite carbonatite.

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	40	pyrite (~5 mm)
Laminations %	very weak	40	laminated over short increments (~10 cm)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 145.12	-	TO 147.03	ROCK CODE nmfgCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Mottled massive to weakly laminated light to medium grey dolomite carbonatite. Short increments are inequigranular, but generally the interval is fine-grained equigranular. Dolomite carbonatite contains common altered phlogopite. Apatite occurs weakly laminated. Zircon occurs locally disseminated.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Localised aggregated up to 1 cm diameter</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.00	Localised aggregated up to 1 cm diameter		
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Zone	HCL	Apatite	Zircon														
H	VW	7.5	0.1														

FROM 147.03	-	TO 153.77	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct								
			MAIN COMMENTS	Mottled-massive to weakly laminated light to dark grey dolomite with common intervals (up to 10 cm but typically ~ 5 cm) of laminated dolomite carbonatite. A few laminae of medium- to coarse-grained cream dolomite carbonatite in laminated intervals concordant to fabric. Apatite occurs aggregated to moderately laminated. Zircon occurs as clusters (fine- to medium-grained) associated with apatite.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.75</td> <td>Aggregated with altered phlogopite phenocrysts</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.75	Aggregated with altered phlogopite phenocrysts		
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Zone	HCL	Apatite	Zircon														
H	VW	20	0.75														

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 153.77	-	TO 158.02	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct								
			MAIN COMMENTS	Massive inequigranular medium grey dolomite carbonatite with small intervals and clots of porphyritic carbonatite (phenocrysts = altered phlogopite) and no visible Nb-mineralization. Apatite occurs disseminated to aggregated.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Aggregated up to 3 cm but generally less than 1 cm.</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.00	Aggregated up to 3 cm but generally less than 1 cm.		
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Zone	HCL	Apatite	Zircon														
H	VW	5	0.1														

FROM 158.02	-	TO 160.95	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Massive to weakly laminated with phenocrysts of altered phlogopite. Apatite occurs aggregated. Zircon occurs as clusters associated with apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.50</td> <td>Aggregated up to 5 cm; and commonly forms rims around altered phlogopite</td> </tr> <tr> <td>Niobates %</td> <td>0.50</td> <td>Pale pink to yellow fersmite occurs locally disseminated with apatite, zircon and pseudomorphs (after magnetite? Or phloopite?)</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	2.50	Aggregated up to 5 cm; and commonly forms rims around altered phlogopite	Niobates %	0.50	Pale pink to yellow fersmite occurs locally disseminated with apatite, zircon and pseudomorphs (after magnetite? Or phloopite?)
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Zone	HCL	Apatite	Zircon															
H	VW	20	0.75															

FROM 160.95	-	TO 164.21	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct								
			MAIN COMMENTS	Mottled-massive to weakly laminated light to medium grey dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Rare zircon occurs associated with apatite.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Disseminated aggregates up to 3 cm diameter; and as uncommon fine-grained (<0.5 mm) oxidized-black pyrite (streaks red)</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.50	Disseminated aggregates up to 3 cm diameter; and as uncommon fine-grained (<0.5 mm) oxidized-black pyrite (streaks red)		
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Type	Intens	CA°	Comments														
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Zone	HCL	Apatite	Zircon														
H	VW	7.5	0														

FROM 164.21	-	TO 169.32	ROCK CODE dmCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Light- to medium-grey dolomite carbonatite with abundant phenocrysts of altered phlogopite. Niobates are concentrated towards top of interval. Apatite occurs aggregated to moderately laminated. Zircon occurs in clusters associated with apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.75</td> <td>Pinkish-brown fersmite after pyrochlore (?)</td> </tr> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Aggregaed up to 1 cm; commonly associated with altered phenocrysts</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.75	Pinkish-brown fersmite after pyrochlore (?)	Pyrite %	1.00	Aggregaed up to 1 cm; commonly associated with altered phenocrysts
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Zone	HCL	Apatite	Zircon															
H	VW	10	0.1															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 169.32	-	TO 173.63	ROCK CODE dlentCD	=	Min Style d	Fabric lent	Texture p	Litho CD	Struct												
			MAIN COMMENTS	10 to 20 cm intervals of disseminated magnetite in medium grey dolomite carbonatite with minor laminae of cream calcite carbonatite seperated by laminated to lenticular dolomite carbonatite. Apatite occurs aggregated. Apatite occurs disseminated associated with apatite.																	
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>1.50</td> <td>Pale yellow fersmite appears to be replacing pinkish-brown pyrochlore; concentrates around magnetite-rich intervals</td> </tr> <tr> <td>Magnetite %</td> <td>10.00</td> <td>Locally disseminated medium-grained magnetite</td> </tr> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Common laminated aggregates of pyrite in top 50 cm of interval.</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	1.50	Pale yellow fersmite appears to be replacing pinkish-brown pyrochlore; concentrates around magnetite-rich intervals	Magnetite %	10.00	Locally disseminated medium-grained magnetite	Pyrite %	0.50	Common laminated aggregates of pyrite in top 50 cm of interval.
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Zone	HCL	Apatite	Zircon																		
OX	W	12.5	0.5																		

FROM 173.63	-	TO 175.66	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct								
			MAIN COMMENTS	Mottled ("vein"-like)-massive light- to dark grey dolomite carbonatite with a few localized concentrations of altered phlogopite phenocrysts. Apatite occurs as aggregates. Zircon occurs disseminated concentrated in the top of interval.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.00</td> <td>Unoriented to weakly laminated aggregates up to 1 cm</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	2.00	Unoriented to weakly laminated aggregates up to 1 cm		
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			ALTERATION														
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Zone	HCL	Apatite	Zircon														
H	VW	12.5	0.5														

FROM	TO	ROCK CODE	nmCD	=	Min Style	Fabric	Texture	Litho	Struct								
175.66	-	180.29			n	m	i	CD									
		MAIN COMMENTS	Mottled light- to dark-grey inequigranular to locally porphyritic (altered phlogopite) dolomite carbonatite. Phenocrysts compose ~5 vol. % of rock. Apatite occurs aggregated. Zircon occurs disseminated throughout interval.														
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Aggregated up to 1 cm.</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	0.50	Aggregated up to 1 cm.		
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Zone	HCL	Apatite	Zircon														
H	VW	7.5	0.75														

FROM	TO	ROCK CODE	nICD	=	Min Style	Fabric	Texture	Litho	Struct									
180.29	-	188.02			n	l	i	CD										
		MAIN COMMENTS	Weakly laminated dolomite carbonatite separated 1 meter thick intervals of mottled-massive light to medium grey inequigranular dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Zircon occurs clustered in association with apatite.															
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Aggregated up to 1 cm and concentrated around altered phlogopite</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Fine grained pink fersmite (after pyrochlore?) occurs with apatite, zircon and pseudomorphs (after magnetite?)</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	0.50	Aggregated up to 1 cm and concentrated around altered phlogopite	Niobates %	0.10	Fine grained pink fersmite (after pyrochlore?) occurs with apatite, zircon and pseudomorphs (after magnetite?)
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Zone	HCL	Apatite	Zircon															
H	VW	7.5	0.75															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 188.02	-	TO 190.21	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct
			MAIN COMMENTS	Slightly-mottled massive to weakly laminated dolomite carbonatite with uncommon altered phlogopite and pyrite. Apatite occurs weakly to moderately aggregated. Zircon occurs as rare clusters.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Uncommon aggregates of pyrite up to 1 cm.			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	40	35 to 45 degrees		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	10	0.1		

FROM 190.21	-	TO 192.75	ROCK CODE nlpCD	=	Min Style n	Fabric l	Texture p	Litho CD	Struct
			MAIN COMMENTS	Porphyritic to inequigranular laminated light- to dark-grey dolomite carbonatite. Apatite occurs moderately laminated. Zircon occurs clusters associated with apatite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.75	Aggregated up to 1 cm - commonly associated with phenocrysts			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	30			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	7.5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	dICD	=	Min Style	Fabric	Texture	Litho	Struct									
192.75	-	195.90			d	l	i	CD										
		MAIN COMMENTS	Moderately laminated inequigranular to locally porphyritic (altered phlogopite) dolomite carbonatite with abundant aggregated pyrite. Apatite occurs aggregated to moderately laminated. Zircon occurs as clusters associated with apatite.															
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>4.00</td> <td>aggregated to laminated up to 5 cm.</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Rare pale pink, fine- to medium-grained fersmite (likely after pyrochlore)</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	4.00	aggregated to laminated up to 5 cm.	Niobates %	0.10	Rare pale pink, fine- to medium-grained fersmite (likely after pyrochlore)
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Zone	HCL	Apatite	Zircon															
OX	VW	7.5	0.75															

FROM	TO	ROCK CODE	dICD	=	Min Style	Fabric	Texture	Litho	Struct									
195.90	-	199.70			d	l	p	CD										
		MAIN COMMENTS	Mottled massive light- to medium-grey dolomite carbonatite with phenocrysts of altered phlogopite. Majority of phenocrysts appear to be mostly replaced by grey dolomite giving the carbonatite the mottled appearance. Apatite occurs disseminated to aggregated. Zircon occurs disseminated throughout entire interval.															
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Zone	HCL	Apatite	Zircon															
H	VW	5	0.25															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 199.70	-	TO 202.20	ROCK CODE dICD	=	Min Style d	Fabric l	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Dominatedly dark grey dolomite carbonatite with common laminae up to 5 cm of light grey dolomite carbonatite. Phenocrysts of altered phlogopite occurs dominantly within dark grey dolomite and are rimmed by pyrite. Apatite occurs aggregated to weakly laminated. Zircon occurs clustered throughout interval.														
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Zone	HCL	Apatite	Zircon															
H	VW	12.5	1															

FROM 202.20	-	TO 204.81	ROCK CODE dmCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Light- to medium-grey mottled to weakly-laminated porphyritic dolomite carbonatite. Altered phlogopite composes 5 % of the interval. Apatite occurs disseminated to weakly laminated. Zircon occurs clustered in associated with apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.10</td> <td>Locally concentrated fine-grained pink fersmite</td> </tr> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Aggregate to 2 cm around phenocrysts</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.10	Locally concentrated fine-grained pink fersmite	Pyrite %	1.50	Aggregate to 2 cm around phenocrysts
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Zone	HCL	Apatite	Zircon															
H	VW	10	0.25															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 204.81	-	TO 210.22	ROCK CODE dxCD	=	Min Style d	Fabric x	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Slightly brecciated dolomite carbonatite with intervals of lamination and phenocrysts (altered phlogopite). Apatite occurs aggregated to weakly laminated. Zircon occurs clustered in association with apatite.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.50</td> <td>Rare pink to pale-yellow fersmite locally disseminated with pyrite and altered pseudomorph</td> </tr> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Aggregated up to 2 cm and commonly form rims around altered phlogopite</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.50	Rare pink to pale-yellow fersmite locally disseminated with pyrite and altered pseudomorph	Pyrite %	1.50	Aggregated up to 2 cm and commonly form rims around altered phlogopite
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Zone	HCL	Apatite	Zircon															
H	VW	15	0.5															

FROM 210.22	-	TO 213.34	ROCK CODE nICD	=	Min Style n	Fabric l	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Laminated to massive dolomite carbonatite with mostly homogenous appearance containing very little pyrite and altered phlogopite. Interval has a few clots of dark grey dolomite carbonatite. Apatite occurs aggregated to moderately laminated. Rare zircon occurs disseminated.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.25</td> <td>Locally aggregate up to 3 cm and disseminated very fine-grained oxidized pyrite</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.25	Locally aggregate up to 3 cm and disseminated very fine-grained oxidized pyrite		
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Zone	HCL	Apatite	Zircon														
H	VW	7.5	0.1														

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	dmCD	=	Min Style	Fabric	Texture	Litho	Struct										
213.34	- 215.20				d	m	p	CD											
		MAIN COMMENTS	Porphyritic to inequigranular mottled light- and medium-grey dolomite carbonatite. Altered phlogopite phenocrysts composed ~ 10 vol % of interval. Apatite occurs aggregated. Zircon occurs disseminated throughout interval.																
		MINERALIZATION	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Value</th> <th style="width: 70%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td style="text-align: center;">0.50</td> <td>Suspect pink fine-grained fersmite (after pyrochlore?) - occurs in close proximity of altered phlogopite</td> </tr> <tr> <td>Pyrite %</td> <td style="text-align: center;">2.00</td> <td>Aggregated up to 1 cm</td> </tr> </tbody> </table>							Type	Value	Comments	Niobates %	0.50	Suspect pink fine-grained fersmite (after pyrochlore?) - occurs in close proximity of altered phlogopite	Pyrite %	2.00	Aggregated up to 1 cm	
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Zone	HCL	Apatite	Zircon																
H	VW	10	0.75																

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-014

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454332.71	6256516.19	1589.43	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	91.54		91.54		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	9.75	9.75
NQ	9.75	91.54	91.54

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
26.82	10.30	-56.00	16.1	6024	241.3	Reflex EZ-shot
109.12	16.90	-55.10	16.8	5895	319.1	Reflex EZ-shot
206.65	16.90	-55.70	13.2	5899	73.8	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	23/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	02/Aug/2010	
Drill Contractor			

SUMMARY

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GEOLOGY LEGEND

 Hole ID 2010-014

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 9.75	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 9.75	-	TO 14.63	ROCK CODE	nmCD	=	Min Style n	Fabric m	Texture f	Litho CD	Struct	
			MAIN COMMENTS	Calcitized to decalcified rubble. Aggregated apatite and abundant disseminated zircon occur within rubble.							
			MINERALIZATION								
			ALTERATION	Type	Value	Comments					
			<input type="text" value="Calcite %"/>		<input type="text" value="20.00"/>	<input type="text" value="Calcitization- some strong reaction to HCl"/>					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text" value="OX W 10 1"/>								

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
14.63 - **TO**
21.72

ROCK CODE nmfCD = **Min Style** n **Fabric** m **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Calcitized medium- to dark- brown dolomite carbonatite with few intervals (up to 5 cm; approx. 10 vol. % of interval) of oxidized to fresh dolomite carbonatite. Intervals up to 80 cm consist of rubble. Apatite occurs oriented to aggregated. Zircon occurs locally disseminated.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Oxidized to reddish brown; fine to medium grained

ALTERATION		
Type	Value	Comments
Calcite %	85.00	
Oxidation %	5.00	

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	strong	80	Consists of white dolomite.
Laminations %	weak	20	Remanant fabric visible in fresh dolomite

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	S	7.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
21.72 - **TO**
25.16

ROCK CODE nlfCD = **Min Style** n **Fabric** l **Texture** f **Litho** CD **Struct**
MAIN COMMENTS Light-grey to medium brown partially decalcified dolomite carbonatite. Around 40 % of rock is decalcified (no react with HCl). Apatite occurs weakly laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Form oxidized reddish brown unoriented aggregates

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige dolomite (minor)
Calcite %	10.00	Laminated dark brown bands up to 3 cm and few irregular mottles

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	15	Varies between 10 and 25 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
25.16 - **TO**
33.22

ROCK CODE nlcCDz = **Min Style** n **Fabric** l **Texture** c **Litho** CD **Struct** z

MAIN COMMENTS Calcitized to decalcified light-grey to dark-brown dolomite carbonatite. Fresh light-grey dolomite carbonatite only composed ~ 10 % of interval in laminae less than 5 cm. ~3 cm displacement is observed along in-filled dolomite vein/fault. Apatite occurs weakly laminated. Zircon occurs disseminated throughout the interval/

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.75	Disseminated to stringers of oxidized pyrite (reddish-brown)

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	beige dolomite
Calcite %	50.00	Dark grey (low calcitization: Weak reaction to HCl) to dark brown (high calcitization: strong reaction to HCl) dolomite laminae

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	80	Dolomite (~ 1 cm thick)
Laminations %	strong	40	Mostly 40 but does occur as low as 10 degrees.

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	2.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
33.22 - **TO**
38.35

ROCK CODE dmfCD = **Min Style** d **Fabric** m **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Mottled-massive to weakly laminated dolomite carbonatite with minor decalcification. A few irregular "mottles" of fresh dolomite remain up to 5 cm diameter. Apatite occurs weakly laminated to veined. Zircon occurs concentrated within apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Suspect fersmite occurs disseminated locally; dark grey fine-grained
Pyrite %	1.00	Disseminated fine- to medium-grained oxidized pyrite

ALTERATION

Type	Value	Comments
Calcite %	50.00	Dark grey (weak reaction to HCl) to dark brown (strong reaction to HCl) mottles
Oxidation %	20.00	Beige dolomite carbonatite "mottles"

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
38.35 - **TO**
44.92

ROCK CODE

glCD

=

Min Style
g

Fabric
l

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Mottled dark-brown to light-grey dolomite carbonatite with ~ 5 cm aggregates composed of magnetite (top 1 m of interval) or pyrite (bottom 5 m of interval). Calcite occurs interstitial to magnetite. Apatite occurs moderately laminated up to 3 cm. Zircon occurs disseminated throughout the interval and concentrates in magnetite-apatite cumulate

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Occurs disseminated, within irregular-shaped veins and as laminated aggregates up 8 cm with calcite matrix. Aggregates are likely after altered magnetite.
Magnetite %	1.00	Medium-grained aggregated laminae up to 4 cm with interstitial calcite and apatite
Niobates %	0.25	Fine-grained black columbite with magnetite

ALTERATION

Type	Value	Comments
Calcite %	65.00	Medium- to dark-brown (high calcitization)/ dark grey (low calcitization) follows lamination
Oxidation %	10.00	Beige dolomite typically occurs with fresh light-grey dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	10	Low angle irregular dolomite veins
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
44.92 - **TO**
48.17

ROCK CODE

glcCD

=

Min Style
g

Fabric
l

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Calcitized dark-grey dolomite carbonatite with aggregated laminae of magnetite cumulate and disseminated magnetite. Apatite occurs aggregated to moderately laminated. Zircon occurs disseminated throughout interval, but concentrates in magnetite-apatite cumulate

MINERALIZATION

Type	Value	Comments
Magnetite %	10.00	Cumulated up to 25 cm and locally disseminated in calcitized dolomite carbonatite.
Pyrite %	1.25	Stringers and laminae of oxidized pyrite follow lamination.
Niobates %	1.00	Fine-grained black columbite likely present with magnetite- cannot distinguish from magnetite

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Rusty orange color concentrated around magnetite
Calcite %	85.00	Dark-grey calcitization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	
Veining %	moderate	75	Oxidized pyrite less than 1 mm thick

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
48.17 - **TO**
50.80

ROCK CODE glcCDz = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct** z

MAIN COMMENTS Calcitized light-grey to medium-brown laminated dolomite carbonatite. Oxidized fault show reverse fault displacement. Apatite occurs weakly to moderately laminated. Zircon occurs associated with apatite throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Small stringers less than 1 cm parallel to fabric
Niobates %	0.10	Suspect yellowish to dark-grey fine-grained fersmite occurs near cream coloured dolomite

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Beige coloured dolomite and red to black tarnish on pyrite.
Calcite %	40.00	Dark grey (moderate calcitization) to dark brown (high calcitization) laminae

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	40	Crosscutting oxidation veins
Laminations %	moderate	30	Varies between 25 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
50.80 - **TO**
54.02

ROCK CODE gICD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Calcitized medium- to dark-brown laminated dolomite carbonatite with thin laminae (up to 5 cm) of magnetite-apatite cumulate phase and calcite carbonatite with disseminated fine-grained magnetite. Calcite occurs interstitial to magnetite and apatite in cumulate phase. Apatite occurs oriented to weakly laminated throughout interval. Zircon occurs locally concentrated with apatite and magnetite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Disseminated fine-grained oxidized pyrite
Niobates %	0.50	Black fine-grained colmbite likely occurs with magnetite
Magnetite %	10.00	Mostly occurs as medium-grained aggregates but also occurs disseminated fine-grained in calcite carbonatite

ALTERATION

Type	Value	Comments
Calcite %	85.00	

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	40	Oxidized pyrite
Laminations %	weak	10	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VS	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
54.02 - **TO**
60.36

ROCK CODE

nlentcCD

=

Min Style
n

Fabric
lent

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Highly weathered (calcitized to decalcified) medium-grey to dark-brown dolomite carbonatite. About 50 % of interval consists of rubble and loose rock fragments. Apatite occurs weakly laminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %		Fine-grained oxidized pyrite occur in unoriented clusters and as thin laminae (< 1 cm)

ALTERATION

Type	Value	Comments
Calcite %	60.00	Reacts moderately (dark-grey laminae) to strongly (dark-brown laminae) to HCl

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Some laminations have lenticular appearance thickening up to as much as 6 cm and then thinning out to less than 1 cm

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	10	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
60.36 - **TO**
66.12

ROCK CODE

gmcCM

=

Min Style
g

Fabric
m

Texture
c

Litho
CM

Struct
MAIN COMMENTS

Dominantly magnetite-apatite cumulate with intervals of mixed dolomite and calcite carbonatite (up to 50 cm). Dolomite carbonatite has been mostly decalcified. About 40 % of interval has been eroded to loose rock and rubble. Apatite occurs weakly laminated within dolomite carbonatite. Zircon occurs disseminated in relatively high concentration in both cumulate and dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Disseminated and stringers of pyrite
Niobates %	2.50	Black fine-grained columbite likely occurs with magnetite - difficult to differentiate from magnetite
Magnetite %	80.00	Cumulate with apatite

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Concentrated around magnetite intervals
Calcite %	20.00	Medium-brown dolomite carbonatite intervals

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Only visible in carbonatite phases

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	35	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
66.12 - **TO**
72.17

ROCK CODE nlfCD = **Min Style** n **Fabric** l **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Calcitized and decalcified light-grey to dark-brown laminated dolomite carbonatite. Around 30 % of interval near top has been weathered (decalcification) to rubble. Apatite occurs weakly laminated throughout interval. Zircon occurs disseminated throughout interval and concentrates with apatite in places.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Locally disseminated fine-grained oxidized pyrite

ALTERATION		
Type	Value	Comments
Calcite %	30.00	Dark brown laminae

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
	W	5	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
72.17 - **TO**
74.63

ROCK CODE glcCD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Dominantly laminated light-grey to medium brown dolomite carbonatite with intervals of magnetite-apatite cumulate 5 to 40 cm thick composing 20 % of interval. Calcite occurs interstitial to magnetite and apatite. Apatite occurs weakly laminated within dolomite carbonatite. Zircon concentrates in magnetite-apatite cumulate.

MINERALIZATION

Type	Value	Comments
Niobates %	0.75	Fine-grained black columbite likely occurs with magnetite
Magnetite %	7.50	Aggregated with apatite in cumulate laminae; medium-grained
Pyrite %	1.50	Oxidized pyrite occurs disseminated and as stringers throughout interval.

ALTERATION

Type	Value	Comments
Calcite %	30.00	Medium-brown laminae
Oxidation %	40.00	Rusty orange colour concentrated around magnetite.

STRUCTURE

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	15	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	ICD	=	Min Style	Fabric	Texture	Litho	Struct									
74.63	-					I	c	CD										
		MAIN COMMENTS	Calcitized light-grey to dark-brown dolomite carbonatite. Small intervals (< 2 mm) of coarse grained to inequigranular occur. Fractured-weathered intervals are concentrated around oxidized pyrite intervals. Apatite occurs weakly to moderately laminated. Zircon occurs disseminated throughout interval. No observed Nb mineralization.															
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.00</td> <td>Fine-grained oxidized pyrite occurs disseminated, as stringers and as aggregated laminae up to 3 cm thick.</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	2.00	Fine-grained oxidized pyrite occurs disseminated, as stringers and as aggregated laminae up to 3 cm thick.			
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		ALTERATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Calcite %</td> <td>60.00</td> <td>Dark grey (low calcitization: moderate HCl reaction) to dark brown (high calcitization: stronger HCl reaction)</td> </tr> <tr> <td>Oxidation %</td> <td>25.00</td> <td>Beige carbonatite</td> </tr> </tbody> </table>							Type	Value	Comments	Calcite %	60.00	Dark grey (low calcitization: moderate HCl reaction) to dark brown (high calcitization: stronger HCl reaction)	Oxidation %	25.00	Beige carbonatite
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Type	Intens	CA°	Comments															
Laminations %	moderate	30																
		MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>S</td> <td>10</td> <td>0.1</td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon	H	S	10	0.1	
Zone	HCL	Apatite	Zircon															
H	S	10	0.1															

FROM
79.27 - **TO**
86.42

ROCK CODE bmCD = **Min Style** b **Fabric** m **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Calcitized to slightly decalcified massive-mottled light-grey to dark brown dolomite carbonatite with irregularly spaced intervals of magnetite-apatite cumulate (10 to 25 cm). Apatite occurs weakly laminated within dolomite carbonatite (~ 2.5 vol. %). Zircon concentrates in magnetite-apatite cumulate.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fine-grained black columbite likely occurs with magnetite
Magnetite %	10.00	Medium-grained: within cumulate laminae with apatite.
Pyrite %	1.00	Disseminated fine- to medium-grained oxidized pyrite.

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Rusty orange concentrated around magnetite intervals.
Calcite %	60.00	Dark grey (Low calcitization: moderate reaction to HCl) to dark brown (high calcitization: strong reaction to HCl)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	30	
Veining %	weak	80	Dolomite ~ 1 cm thick

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 86.42	-	TO 91.54	ROCK CODE nlcCD	=	Min Style n	Fabric l	Texture c	Litho CD	Struct
			MAIN COMMENTS	Moderately calcitized light-grey to dark-brown dolomite carbonatite with no visible Nb mineralization. Apatite occurs weakly to moderately laminated. Zircon occurs disseminated throughout interval.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Oxidized fine- to medium-grained disseminated			
			ALTERATION	Type	Value	Comments			
				Calcite %	40.00	Dark brown dolomite (reacts strongly to HCl)			
				Oxidation %	40.00	Beige dolomite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	M	12.5	0		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-015

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454350.86	6256555.97	1599.19	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	215.85		215.85		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	18.72	18.72
NQ	18.72	215.85	215.85

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor			
Geology Logged By	Ryan Kressall		
Specific Gravity By	Ryan Kressall		
Geotech Logged By	Steve Dumma	03/Aug/2010	
Drill Contractor		30/Jul/2010	01/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-015

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 18.72	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct												
			MAIN COMMENTS	No rock																		
			MINERALIZATION																			
			ALTERATION																			
			STRUCTURE																			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon															
			<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																			

FROM 18.72	-	TO 18.90	ROCK CODE	dmfgCD	=	Min Style d	Fabric m	Texture fg	Litho CD	Struct												
			MAIN COMMENTS	End of casing																		
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>15.00</td> <td>Fine-grained disseminated oxidized-pyrite</td> </tr> <tr> <td>Niobates %</td> <td>0.50</td> <td>Suspect fersmites: fine-grained, yellowish to dark grey</td> </tr> </tbody> </table>								Type	Value	Comments	Pyrite %	15.00	Fine-grained disseminated oxidized-pyrite	Niobates %	0.50	Suspect fersmites: fine-grained, yellowish to dark grey		
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Niobates %	0.50	Suspect fersmites: fine-grained, yellowish to dark grey																				
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			STRUCTURE																			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon															
			<table border="1"> <tr> <td>OX</td> <td>W</td> <td>2.5</td> <td>0.1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>									OX	W	2.5	0.1							
OX	W	2.5	0.1																			

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
18.90 - **TO**
23.56

ROCK CODE

dlcCD

=

Min Style
d

Fabric
l

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Decalcified to calcitized light-grey to dark brown dolomite carbonatite. Decalcification predominates in top meter (weak reaction to HCl), while calcitization increase downwards. Apatite occurs aggregated to weakly laminated. Zircon occurs concentrated in apatite aggregates with fersmite (?).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.75	Oxidized pyrite occurs aggregated to weakly laminated.
Niobates %	0.25	Suspect dark-grey fine-grained fersmite occurs associated with zircon-rich apatite aggregates

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	10	Generally low: varies between 0 and 20 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
23.56 - **TO**
25.99

ROCK CODE

gmCD

=

Min Style
g

Fabric
m

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Calcitized dolomite carbonatite with intervals (10 to 25 cm) of magnetite-apatite cumulate and short intervals (~ 30 cm) of decalcification. Zircon concentrates in cumulate phases.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized aggregate less than 1 mm.
Magnetite %	15.00	Aggregated in cumulate phase with apatite: medium-grained
Niobates %	1.00	Black fine-grained columbite likely occurs within cumulate phase

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Concentrated around magnetite
Calcite %	30.00	Dark brown mottles

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
25.99 - **TO**
27.71

ROCK CODE glfgCD = **Min Style** g **Fabric** l **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Slightly calcitized dolomite carbonatite. Apatite occurs weakly to moderately laminated. Zircon concentrates with apatite.

MINERALIZATION

Type	Value	Comments
Magnetite %	2.50	Thin laminae and 5 cm irregular aggregate of massive magnetite(xenolith?)
Niobates %	0.10	Fine-grained dark-grey suspect fersmite occurs associated with apatite and zircon.
Pyrite %	1.00	Thin stringers (< 0.5 mm)

ALTERATION

Type	Value	Comments
Calcite %	10.00	Small medium- to dark-brown laminae
Oxidation %	30.00	Beige dolomite carbonatite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.1

FROM
27.71 - **TO**
30.95

ROCK CODE gICCCD = **Min Style** g **Fabric** l **Texture** c **Litho** CCCD **Struct**

MAIN COMMENTS Dolomite carbonatite with 20-30 cm intervals of associated magnetite-apatite (apatite = ~ 15 vol. %) cumulate and calcite carbonatite. Thin laminae of apatite occur within dolomite carbonatite. Zircon occurs disseminated in dolomite carbonatite (~0.1 vol. %) and cumulate (~0.25 %).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Thin stringers (< 0.5 mm) of oxidized pyrite
Niobates %	2.00	Fine-grained black columbite likely occurs with magnetite.
Magnetite %	40.00	Medium grained magnetite concentrated within cumulate phase

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige dolomite and rusty orange oxidation of magnetite and pyrite
Calcite %	20.00	Dark-brown laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	10	Visible only within dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	ICD	=	Min Style	Fabric	Texture	Litho	Struct									
30.95	-	35.15				I	c	CD										
MAIN COMMENTS Moderately calcitized light-grey to dark-brown dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Zircon occurs association with apatite. Phenocrysts of altered phlogopite concentrate locally.																		
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Zone	HCL	Apatite	Zircon															
OX	M	7.5	0.1															

FROM	TO	ROCK CODE	gmCM	=	Min Style	Fabric	Texture	Litho	Struct									
35.15	-	35.55			g	m		CM										
MAIN COMMENTS Cumsalte unit composed of magnetite, apatite and phlogopite with interstitial and associated laminae of calcite.																		
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OX	M	20	0.75															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 35.55	-	TO 42.43	ROCK CODE nlfCD	=	Min Style n	Fabric l	Texture f	Litho CD	Struct									
			MAIN COMMENTS	Calcitized to decalcified light-grey dolomite carbonatite. Calcitized decrease down interval and decalcification increases down interval. Apatite occurs weakly laminated. Zircon occurs disseminated throughout interval.														
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Zone	HCL	Apatite	Zircon															
OX	W	5	0.1															

FROM 42.43	-	TO 46.38	ROCK CODE nmfCD	=	Min Style n	Fabric m	Texture f	Litho CD	Struct								
			MAIN COMMENTS	Decalcified dolomite carbonatite. Rubble composes 50 % of interval. Pitted decalcified carbonatite composes remaining 50 %. Fine-grained apatite occurs disseminated throughout interval.													
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Zone	HCL	Apatite	Zircon														
OX	W	2.5	0														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
46.38 - **TO**
52.56

ROCK CODE mCD = **Min Style** **Fabric** **Texture** **Litho** **Struct**
 = m c CD

MAIN COMMENTS Moderately calcitized mottled light-grey to dark-brown dolomite carbonatite. ~ 50 % of interval consists of fragmented rocks. Apatite occurs weakly laminated. Zircon occurs associated with apatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Thin (< 1 mm) stringers of oxidized pyrite.
Niobates %	0.10	Suspect dark-grey fine-grained fersmite occurs associated with apatite and zircon.

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige to pink dolomite
Calcite %	40.00	Dark-brown mottles concentrates along fractures.

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	80	dolomite in-filled fracture
Laminations %	weak	20	weak lamination visible in small intervals: varies between 10 and 20 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
52.56 - **TO**
58.45

ROCK CODE glfgCD = **Min Style** g **Fabric** I **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite with a few mottles of dark brown calcitization. A interval of inequigranular dolomite carbonatite occurs between 57.9 to 58.3 m but generally the interval is fine-grained equigranular. A interval of dolomitized magnetite and altered phlogopite occurs at 53.2 to 53.4 m (dolomitized mgt-apt cumulate?).

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Potential black fine-grained columbite in "dolomitized mgt-apt cumulate"
Pyrite %	1.00	Oxidized pyrite stringers (< 1 mm)

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite
Calcite %	2.50	Uncommon dark brown mottles

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Not visible in inequigranular and "dolomitized mgt-apt cumulate"

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
58.45 - **TO**
66.88

ROCK CODE

glfgCD

=

Min Style
g

Fabric
I

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Weakly laminated to mottled-massive light-grey dolomite carbonatite. Apatite occurs aggregated to moderately laminated. Zircon occurs associated with apatite aggregates and laminae. Phenocrysts of altered phlogopite occur locally in laminae less than 5 cm.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Fine-grained yellowish to dark grey fersmite occurs locally disseminated within apatite aggregates with zircon.
Magnetite %	0.50	Rare clusters of fine-grained magnetite.
Pyrite %	1.00	Stringers of oxidized pyrite (< 0.5 mm)

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite
Calcite %	15.00	Dark brown laminae and mottles

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	40	Pyrite(?) - veins are source of high oxidation
Laminations %	weak	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 66.88	-	TO 68.64	ROCK CODE dICCCD	=	Min Style d	Fabric I	Texture fg	Litho CCCD	Struct									
			MAIN COMMENTS	Dominantly oxidized beige dolomite carbonatite with laminae of white calcite carbonatite (10 to 15 cm thick). Calcite carbonatite contain accessory altered phlogopite, magnetite and pink pyrochlore. Dolomite carbonatite is fine-grained equigranular. Apatite occurs moderately laminated up to 5 cm thick in higher concentration in dolomite carbonatite. Zircon occurs locally concentrated with apatite laminae.														
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Zone	HCL	Apatite	Zircon															
OX	S	5	0.25															

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
68.64 - **TO**
71.10

ROCK CODE

glCCCD

=

Min Style
g

Fabric
l

Texture
i

Litho
CCCD

Struct
MAIN COMMENTS

Laminated fine-grained beige dolomite carbonatite "interlayered" with white calcite carbonatite with aggregates of magnetite up to 20 cm with interstitial calcite. Laminations appear more strongly in calcite carbonatite. Apatite occurs strongly laminated in dolomite carbonatite in high proportion (~ 15 vol. % of rock) and oriented/disseminated in calcite carbonatite in lower porportion (~ 5 % of rock). Apatite occurs in variable amount with magnetite (5 to 40 vol. % of aggregates).

MINERALIZATION

Type	Value	Comments
Niobates %	1.50	Fine-grained pinkish brown pyrochlore in calcite carbonatite and black columbite likely present with magnetite
Pyrite %	1.50	Laminations of oxidized pyrite up to 3 cm thick
Magnetite %	15.00	Massive aggregates of medium-grained magnetite and fine-grained disseminations in calcite carbonatite

ALTERATION

Type	Value	Comments
Calcite %	40.00	Calcite carbonatite laminae
Oxidation %	30.00	Beige dolomite, magnetite and pyrite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
71.10 - **TO**
73.46

ROCK CODE dlfGCC = **Min Style** d **Fabric** l **Texture** fg **Litho** CC **Struct**
MAIN COMMENTS Beige to white calcite carbonatite laminated with mottled light-grey to beige dolomite carbonatite. Apatite occurs aggregated to weakly laminated Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs as 1 cm aggregates and as laminae up to 3 cm thick in dolomite carbonatite. In calcite carbonatite, oxidized pyrite occurs as fine-grained disseminations
Niobates %	0.75	Fine-grained pinkish brown pyrochlore occurs disseminated in calcite carbonatite.
Magnetite %	1.50	Fine-grained disseminated magnetite in calcite carbonatite

ALTERATION

Type	Value	Comments
Calcite %	50.00	Calcite carbonatite laminae
Oxidation %	30.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
73.46 - **TO**
75.62

ROCK CODE dICC = **Min Style** d **Fabric** l **Texture** p **Litho** CC **Struct**
MAIN COMMENTS White calcite carbonatite with microphenocrysts of magnetite. A small interval (~15 cm) of beige oxidized dolomite carbonatite occurs in the middle of the interval. Apatite occurs as thick (5 to 10 cm) laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Fine-grained oxidized pyrite occurs disseminated in calcite carbonatite. In the dolomite carbonatite, oxidized pyrite forms aggregates up to 2 cm.
Magnetite %	2.00	Fine-grained disseminated magnetite in calcite carbonatite
Niobates %	1.50	Fine-grained pinkish brown pyrochlore occurs disseminated in calcite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VS	7.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
75.62 - **TO**
79.63

ROCK CODE

dlfgCC

=

Min Style
d

Fabric
l

Texture
fg

Litho
CC

Struct
MAIN COMMENTS

White to beige partially-oxidized calcite carbonatite with minor bands of dark-brown decalcification and slight decalcification. Apatite occurs strongly laminated. Dolomite carbonatite starts to occur towards the bottom of the interval with interlayered laminations with calcite carbonatite

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Thin (< 0.5 mm) laminae of oxidized pyrite
Magnetite %	1.00	Fine-grained occurs disseminated within calcite carbonatite and in small (~5 cm) clusters

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige calcite
Calcite %	10.00	Bands of dark-brown calcitization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VS	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
79.63 - **TO**
98.61

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Laminated light-grey dolomite carbonatite with localized beige oxidization of dolomite and dark-brown decalcification. Locally the dolomite carbonatite has a fine- to medium-grained inequigranular texture (up to 5 cm thick). Apatite occurs aggregated to weakly laminated Zircon occurs dissemination throughout interval and concentrates within stronger apatite laminations

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Oxidized pyrite occurs disseminated, veined, laminated and as stringers; Fresh pyrite occurs locally disseminated
Niobates %	0.10	Localized dark-grey likely fersmite - no red streak

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige dolomite; follows lamination
Calcite %	5.00	Dark-brown mottles

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	
Veining %	weak	60	Oxidized pyrite vein (~ 1 mm thick)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	2.5	0.25

FROM 98.61	-	TO 100.15	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Dominantly fine- to medium-grained inequigranular dolomite carbonatite with small (<5cm) laminations of fine-grained equigranular and porphyritic (phenocrysts = altered phlogopite?) dolomite carbonatite. Apatite occurs oriented to moderately laminated.														
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Zone	HCL	Apatite	Zircon															
OX	VW	5	0															

FROM 100.15	-	TO 101.91	ROCK CODE blpCD	=	Min Style b	Fabric l	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Weakly laminated light-grey to beige dolomite carbonatite with phenocrysts of altered phlogopite (or magnetite?). Phenocrysts compose ~2.5 vol. % of rock. A 5 cm laminae enriched in altered magnetite (?) and phlogopite occurs within top 20 cm of interval with potential fersmite grains and high abundance of zircon. Apatite occurs moderately laminated. Zircon also occurs disseminated throughout interval.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.50</td> <td>Fine-grained dark-grey fersmite occurs with altered phenocrysts</td> </tr> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Disseminated and stringers of fine-grained oxidized pyrite</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.50	Fine-grained dark-grey fersmite occurs with altered phenocrysts	Pyrite %	1.00	Disseminated and stringers of fine-grained oxidized pyrite
Type	Value	Comments																
Niobates %	0.50	Fine-grained dark-grey fersmite occurs with altered phenocrysts																
Pyrite %	1.00	Disseminated and stringers of fine-grained oxidized pyrite																
			ALTERATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Oxidation %</td> <td>30.00</td> <td>Beige dolomite surrounds oxidation pyrite</td> </tr> </tbody> </table>						Type	Value	Comments	Oxidation %	30.00	Beige dolomite surrounds oxidation pyrite			
Type	Value	Comments																
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			STRUCTURE															
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>VW</td> <td>10</td> <td>0.5</td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon	OX	VW	10	0.5	
Zone	HCL	Apatite	Zircon															
OX	VW	10	0.5															

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
101.91	- 107.58	mCD	=	m	i	CD		
		MAIN COMMENTS	Weathered (oxidized and calcitized) light-grey dolomite carbonation. Interval is locally inequigranular with medium-grained grains being fresh white colour and interstitial fine-grained matrix being medium- to dark brown (oxidized and/or calcitized) Slight decalcification has occurs of some calcitized dolomite carbonatite has occurred. Apatite occurs oriented to weakly laminated. Zircon occurs disseminated throughout interval but concentrates with apatite in some areas but with no visibly obvious Nb mineralization.					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	0.50	Oxidized pyrite up to 1 mm disseminated throughout interval			
			Niobates %		Likely present in low concentration with zircon and apatite.			
		ALTERATION	Type	Value	Comments			
			Oxidation %	40.00	Beige dolomite			
			Calcite %	40.00	Dark grey (low calcitization: moderate reaction to HCl) to dark-brown (high calcitization: strong reaction to HCl)			
		STRUCTURE						
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	W	10	5		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 107.58	-	TO 111.32	ROCK CODE	nmfgCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct	
			MAIN COMMENTS	Massive to weakly laminated light grey dolomite carbonatite oxidized to beige. Oxidation and calcitization along grains boundaries gives rock vein-like appearance Apatite occurs aggregate to weakly laminated. Zircon occurs clustered within apatite laminae.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	2.50	Disseminated fine--grained oxidized pyrite					
			ALTERATION	Type	Value	Comments					
				Oxidation %	50.00	Beige dolomite					
				Calcite %	10.00	Dark-brown mottles of calcitization					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	W	15	0.1				

FROM 111.32	-	TO 116.13	ROCK CODE	nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct	
			MAIN COMMENTS	Slightly oxidized fine- to medium-grained inequigranular light-grey dolomite carbonatite. Oxidation gives carbonatite beige colour. Apatite occurs aggregated with pseudomorphs to weakly laminated. Zircon occurs fine- to medium grained disseminated throughout interval							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.00	Fine- to medium grained oxidized pyrite. Larger grains have fresh cores					
			ALTERATION	Type	Value	Comments					
				Oxidation %	45.00	Beige dolomite					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	VW	10	0.25				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
116.13 - **TO**
119.62

ROCK CODE bmpCD = **Min Style** b **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light- to medium grey porphyritic dolomite carbonatite (altered magnetite?) with some localized oxidation. Pseudomorphs occur with and are often rimmed by fresh pyrite. Apatite occurs aggregated with pseudomorphs to weakly laminated. Zircon occurs locally concentrated within apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Suspect fine-grained dark-grey fersmite locally concentrated (+ possible fresh columbite)
Pyrite %	7.50	Abundant around pseudomorphs

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	70	Dolomite ~ 1 cm thick veins

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
119.62 - **TO**
126.07

ROCK CODE

dmpCCCD

=

Min Style
d

Fabric
m

Texture
p

Litho
CCCD

Struct
MAIN COMMENTS

Mixed dolomite and calcite carbonatite. Calcite carbonatite hosts disseminated magnetite and fine- to medium-grained green to black phlogopite (plus likely colmbite). Dolomite carbonatite contains phenocrysts of altered phlogopite (~ 10 vol. % of unit) Apatite appears to occur interstitial with calcite to magnetite within calcite carbonatite. Within dolomite carbonatite, apatite occurs weakly laminated. Zircon occurs disseminated throughout interval. Blobs of finely disseminated magnetite in calcite carbonatite (dark grey) occurs in white calcite carbonatite with medium-grained magnetite. Medium-grained magnetite concentrates along contact between two calcite carbonatite phases.

MINERALIZATION

Type	Value	Comments
Niobates %	1.50	Most likely dominantly columbite in calcite carbonatite (black fine-grained); fine-grained pink pyrochlore is also visible in calcite carbonatite at lower grade.
Pyrite %	0.50	Locally disseminated fine-grained oxidized pyrite
Magnetite %	20.00	Occur very fine- to medium grained disseminated within calcite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Beige dolomite carbonatite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
126.07 - **TO**
129.40

ROCK CODE

bIfCM

=

Min Style
b

Fabric
I

Texture
f

Litho
CM

Struct
MAIN COMMENTS

Decalcified and oxidize dolomite carbonatite interlaminated with magnetite-apatite cumulate phases. Minor calcite occurs interstitial to magnetite and apatite and as thin laminae. Dolomite carbonatite is typically beige in colour (due to oxidation) with dark brown mottles (calcitization) Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite stringers and aggregates up to 2 cm in diameter
Magnetite %	20.00	Medium-grained magnetite aggregated in cumulate phase with apatite.
Niobates %	1.00	Likely fine-grained black columbite with magnetite

ALTERATION

Type	Value	Comments
Calcite %	5.00	Dark brown mottles
Oxidation %	50.00	Beige dolomite and rusty orange magneite-apatite cumulate

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	25	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 129.40	-	TO 138.05	ROCK CODE	nliCD	=	Min Style n	Fabric l	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Light-grey to beige inequigranular fine- to medium-grained dolomite carbonatite with intervals of fine-grained equigranular dolomite carbonatite. Interval contains localized altered phlogopite phenocrysts Apatite occurs oriented to weakly laminated. Zircon occurs disseminated throughout with few clusters occurring with apatite aggregates.															
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Fresh to oxidized aggregates and stringer. Towards bottom of interval, pyrite is more fresh</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	1.50	Fresh to oxidized aggregates and stringer. Towards bottom of interval, pyrite is more fresh			
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Zone	HCL	Apatite	Zircon																
	W	7.5	0.1																

FROM 138.05	-	TO 140.80	ROCK CODE	nmCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct												
			MAIN COMMENTS	corase grained aggregates of phlogopite and altered magnetite (?) in massive dolomite carbonatite																		
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td></td> </tr> <tr> <td>Magnetite %</td> <td>1.00</td> <td>Magnetite altered to pyrite and phlogopite</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Possible columbite in zones of altered magentite and phlogopite</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	1.50		Magnetite %	1.00	Magnetite altered to pyrite and phlogopite	Niobates %	0.10	Possible columbite in zones of altered magentite and phlogopite
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Zone	HCL	Apatite	Zircon																			
H	VW	5	0.5																			

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 140.80	-	TO 141.53	ROCK CODE dmCC	=	Min Style d	Fabric m	Texture p	Litho CC	Struct									
MAIN COMMENTS Massive calcite carbonatite with aggregates of magnetite and altered phlogopite - possible columbite. Apatite occurs aggregated. Zircon occurs disseminated throughout interval.																		
MINERALIZATION																		
<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Magnetite %</td> <td>4.00</td> <td>Very-fine grained to medium-grained disseminated magnetite</td> </tr> <tr> <td>Niobates %</td> <td>0.50</td> <td>Likely fine-grained columbite</td> </tr> </tbody> </table>										Type	Value	Comments	Magnetite %	4.00	Very-fine grained to medium-grained disseminated magnetite	Niobates %	0.50	Likely fine-grained columbite
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Zone	HCL	Apatite	Zircon															
H	S	15	0.1															

FROM 141.53	-	TO 148.20	ROCK CODE gxfgAMX	=	Min Style g	Fabric x	Texture fg	Litho AMX	Struct									
MAIN COMMENTS Large fenite xenoliths within dolomite carbonatite with calcite occurring as veins and disseminated within fenite. Apatite occurs locally disseminated within dolomite carbonatite. Zircon occurs disseminated within dolomitized fenite.																		
MINERALIZATION																		
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Zone	HCL	Apatite	Zircon															
H	W	2.5	0.25															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 148.20	-	TO 155.42	ROCK CODE nlfgCD	=	Min Style n	Fabric l	Texture fg	Litho CD	Struct
			MAIN COMMENTS	Weakly laminated light- to medium-grey dolomite carbonatite. Apatite defines mineral fabric as weak to moderate laminations					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Irregular aggregates			
			ALTERATION						
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	12.5	0.1		

FROM 155.42	-	TO 164.41	ROCK CODE mCD	=	Min Style	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Porphyritic to locally inequigranular light grey dolomite carbonatite. Very weakly laminated to aggregated apatite.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.20	possible columbite with phlogopite phenocrysts			
				Pyrite %	1.00	fine to medium grained aggregated			
			ALTERATION						
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	10	0.1		

FROM 164.41	-	TO 177.90	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct								
			MAIN COMMENTS	Light- to dark-grey inequigranular to locally porphyritic dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated throughout interval and concentrates with apatite. Potential Nb mineralization based on phenocrysts and zircon content but none observed.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Aggregated fine- to medium-grained fresh pyrite</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.50	Aggregated fine- to medium-grained fresh pyrite		
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Zone	HCL	Apatite	Zircon														
H	VW	10	0.5														

FROM 177.90	-	TO 186.62	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct								
			MAIN COMMENTS	Mottled-massive light- to dark-grey dolomite carbonatite with a few altered phlogopite phenocrysts (less than 1 vol. % of interval). Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated throughout interval.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Fresh locally disseminated fine-grained pyrite</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	0.50	Fresh locally disseminated fine-grained pyrite		
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Zone	HCL	Apatite	Zircon														
H	VW	5	0.1														

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 186.62	-	TO 201.02	ROCK CODE nmpCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Mottled-massive light- to dark-grey inequigranular to porphyritic dolomite carbonatite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.70	disseminated and veined fresh pyrite			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Veining %	moderate	35			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	5	0.1		

FROM 201.02	-	TO 215.85	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Fine- to medium-grained inequigranular light- to medium-grained dolomite with localized altered phlogopite phenocrysts.. Apatite occurs aggregate to weakly laminated. Fine- to medium grained zircon occurs disseminated throughout interval.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Disseminated fine-grained pyrite and aggregates up to 2.5 cm.			
			ALTERATION						
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	10	0.3		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-016

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454525.45	6256609.67	1653.28	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	147.86		147.86		Central 2
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	6.09	6.09
NQ	6.09	147.86	147.86

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
17.68	23.50	-55.20	12.2	5825	151.2	Reflex EZ-shot
48.16	23.50	-54.80	11.0	5641	270.2	Reflex EZ-shot
78.64	24.00	-54.90	9.2	5691	92.0	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By		05/Aug/2010	
Drill Contractor		01/Aug/2010	03/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-016

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 6.09	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 6.09	-	TO 10.65	ROCK CODE	blfgCD	=	Min Style b	Fabric l	Texture fg	Litho CD	Struct										
			MAIN COMMENTS	Highly oxidized light grey to beige laminated dolomite carbonatite. Apatite occurs moderately laminated. Zircon clusters within apatite laminae.																
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.75</td> <td>Very fine-grained pyrite occur oriented and concentrated within laminae.</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>Potential fersmite: fine- to very fine-grained dark-grey grains that do not streak red occur in associatation with zircon-rich apatite laminae</td> </tr> </tbody> </table>								Type	Value	Comments	Pyrite %	0.75	Very fine-grained pyrite occur oriented and concentrated within laminae.	Niobates %	0.10	Potential fersmite: fine- to very fine-grained dark-grey grains that do not streak red occur in associatation with zircon-rich apatite laminae
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OX	VW	5	0.25																	

FROM
10.65 - **TO**
12.18

ROCK CODE bICM = **Min Style** b **Fabric** I **Texture** **Litho** CM **Struct**

MAIN COMMENTS Intervals 10 to 30 cm thick of magnetite-apatite cumulate occur within laminated dolomite carbonatite. There are other intervals of similar size consisting of a dark-grey non-magnetic mineral (pseudomorph after magnetite?). Apatite occurs moderately laminated in dolomite carbonatite (~ 7.5 vol. %) and concentrated in cumulate phase (~40 vol. %). Zircon occurs disseminated in low concentration in both carbonatite and cumulate. Magnetite cumulates are areas of high oxidation and decalcification. Thin (< 2 cm thick) laminae of fine- to medium-grained dolomite carbonatite is observed as well (dolomitized magnetite-apatite cumulate?).

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fine-grained columbite likely occurs with magnetite.
Magnetite %	25.00	Occurs fine- to medium grained in cumulate intervals; undergone some oxidation
Pyrite %	1.00	Thin laminae (~1 mm thick) of oxidized pyrite

ALTERATION

Type	Value	Comments
Oxidation %	80.00	Beige dolomite and orange oxidation around magnetite
Calcite %	2.50	Minor calcite around magnetite cumulates

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	25	Observed only in dolomite carbonatite; Varies between 20 and 30 degrees.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	W	20	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
12.18 - **TO**
17.93

ROCK CODE nlfgcd = **Min Style** n **Fabric** l **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Light-grey to beige laminated dolomite carbonatite with dark brown laminae of calcitization. Apatite occurs strongly laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Stringers and concentrated in laminae: fine-grained oxidized
Niobates %	0.10	Possible very fine-grained dark grey fersmite in apatite laminae

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite: follows lamination
Calcite %	2.50	Dark-brown laminae (uncommon)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
17.93 - **TO**
22.71

ROCK CODE gliCCCD = **Min Style** g **Fabric** l **Texture** i **Litho** CCCD **Struct**

MAIN COMMENTS Laminated light grey to beige dolomite carbonatite with interlayered laminae of magnetite-rich cream calcite carbonatite and blobs of massive fine-grained magnetite. Dolomite is dominantly inequigranular and often medium- to dark grey (dolomitization of previous phase?). Slight calcitization and decalcification occurs along certain laminae. Apatite occurs moderately laminated in dolomite carbonatite and aggregated with magnetite in calcite carbonatite. Abundant zircon occurs disseminated in magnetite-apatite aggregates and in dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fne-grained columbite likely occurs with magnetite and apatite. Possible dark-grey fersmite may occur with apatite laminae in dolomite carbonatite.
Magnetite %	7.50	Fine- to medum grained magnetite occurs disseminated in calcite carbonatite, aggregated with and without apatite
Pyrite %	1.00	Fine-grained pyrite occurs disseminated and concentrated within specific laminae.

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
22.71 - **TO**
24.93

ROCK CODE nICD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**
MAIN COMMENTS Beige- to light-grey inequigranular dolomite carbonatite with uncommon medium-grey laminae. Apatite occurs strongly laminated.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.75	Oxidized thin (< 1 mm) pyrite stringers and laminae; Minor fresh pyrite aggregates up to 3 cm thick.

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	35	Varies between 30 and 45 degrees; contains localized crenulations.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
24.93 - **TO**
35.79

ROCK CODE

glpCD

=

Min Style
g

Fabric
l

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Slightly oxidized beige to light grey dolomite carbonatite with abundant intervals (15 to 50 cm thick) of magnetite-apatite cumulate. There are a few non-magnetic intervals of similar size consisting of medium- to dark-grey dolomite with abundant pyrite and apatite that may be dolomitized magnetite cumulates.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fine-grained columbite likely present with magnetite; Possibly black columbite or fersmite replacing columbite occur within medium- to dark-grey dolomite intervals.
Magnetite %	30.00	Medium grained magnetite forms aggregates with apatite.
Pyrite %	1.00	Fresh pyrite commonly occurs in dark-grey dolomite commonly forming a rim on altered magnetite (?)

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite (dominantly void of pyrite, magnetite and apatite)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
35.79 - **TO**
42.42

ROCK CODE ICD = **Min Style** **Fabric** **Texture** **Litho** **Struct**
 = I p CD

MAIN COMMENTS Light grey to beige laminated dolomite carbonatite with phenocrysts of dark-grey altered magnetite (?) locally concentrated and black altered phlogopite. Interval becomes massive and partially fragmented to brecciated towards bottom 2 ms of interval. Apatite occurs moderately laminated near top of interval which becomes weaker to aggregated towards bottom of interval. Zircon occurs clustered within apatite laminae.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.10	Possible fine-grained fersmite may occur with apatite laminae.: dark grey, no red streak.
Pyrite %	1.50	Fresh pyrite appears to be replacing phenocrysts - occurs as rim and associated with phenocrysts

ALTERATION		
Type	Value	Comments
Oxidation %	40.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	70	Veins of oxidized crude
Laminations %	moderate	30	Varies between 20 and 40 degrees; intensity of lamination decreases downhole.

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	10	0.1	

FROM
42.42 - **TO**
47.08

ROCK CODE glCD = **Min Style** g **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Clumps of magnetite-apatite cumulate within light-grey to beige weakly laminated dolomite carbonatite with minor calcite. Dolomite carbonatite occurs locally porphyritic to inequigranular. Inequigranular consists of white medium-grained dolomite within a medium-grey fine-grained dolomite groundmass. Porphyritic dolomite carbonatite consists of phenocrysts of altered magnetite (?) being replaced by pyrite. An aggregate of phlogopite-apatite and abundant zircon (~5 vol. %) occurs (~7.5 cm diameter) in the middle of the interval. This aggregate likely represents an altered biotitized magnetite-apatite cumulate. Apatite occurs weakly laminated in low concentration in dolomite carbonatite. Zircon occurs disseminated throughout but more concentrated in magnetite-apatite and phlogopite-apatite aggregates.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Fresh pyrite laminae up to 2 cm thick and occurs with altered magnetite (?)
Magnetite %	5.00	Fine- to medium-grained magnetite occurs with apatite.

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	15	2	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
47.08 - **TO**
49.18

ROCK CODE nlfgcd = **Min Style** n **Fabric** l **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Light-grey to dominantly beige dolomite carbonatite. Apatite occurs moderately laminated. Zircon locally concentrates with apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible fine-grained fersmite within zircon-rich apatite laminae.
Pyrite %	1.50	Fine-grained oxidized pyrite occurs concentrated with laminae.

ALTERATION

Type	Value	Comments
Oxidation %	80.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	35	varies between 30 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
49.18 - **TO**
52.58

ROCK CODE

dmiCD

=

Min Style
d

Fabric
m

Texture
i

Litho
CD

Struct
MAIN COMMENTS

Light- to dark-grey inequigranular to locally porphyritic dolomite carbonatite with mottles of beige dolomite. Interval is locally laminated. Porphyritic dolomite carbonatite contains brown to green (chloritized?) phlogopite phenocrysts and fine-grained disseminated fersmite. Apatite occurs oriented in dolomite carbonatite. Zircon concentrates in porphyritic dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained yellow fersmite after pyrochlore occurs within porphyritic dolomite carbonatite.
Pyrite %	0.50	Oxidized pyrite occurs as stringers (< 1 cm)

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
52.58 - **TO**
57.51

ROCK CODE dlpAMX = **Min Style** d **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Light-grey to beige porphyritic to inequigranular dolomite carbonatite with large (70 -80 cm) intervals of amphibolite/fenite xenoliths. Phenocrysts are altered phlogopite. Amphibolite/fenite is dark green to dark blue in colour composed of phlogopite, aegirine (?) and riebeckite. Apatite occurs weakly laminated within pophyritic dolomite carbonatite. Zircon concentrates with apatite in porphyritic dolomite. Inequigranular dolomite carbonatite is void of apatite and zircon.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.25	yellow likely fersmite disseminated in porphyritic dolomite carbonatite (fine-grained)
Pyrite %	0.50	Fine-grained fresh to oxidized aggregates (< 1 cm)

ALTERATION		
Type	Value	Comments
Amphibolite %	35.00	irregular shaped xenoliths

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	30	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	7.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
57.51	- 65.59	dIpCD	d	l	p	CD		
		MAIN COMMENTS	Light-grey to beige laminated dolomite carbonatite with phenocrysts of altered phlogopite. Small laminae (< 5 cm) of calcite carbonatite occur irregularly throughout interval with fresh brown to altered black phlogopite.					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	1.00	Oxidized fine-grained disseminated pyrite			
			Niobates %	0.50	Potential fine-grained fersmite grains - dark-grey to black occur with altered phlogopite			
		ALTERATION	Type	Value	Comments			
			Oxidation %	30.00	Beige dolomite			
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	strong	30			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	M				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
65.59 - **TO**
69.77

ROCK CODE dlpAMX = **Min Style** d **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Laminated porphyritic light grey to pinkish beige dolomite carbonatite with 1 meter interval of amphibolite/fenite xenolith with minor calcite veining. Phenocrysts are altered phlogopite. Apatite occurs strongly laminated in dolomite carbonatite. Zircon occurs disseminated throughout dolomite carbonatite but also clusters with particular apatite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Stringers (< 1 mm thick) in laminated dolomite carbonatite: oxidized. Fresh pyrite occurs locally disseminated in bottom half of interval.
Niobates %	0.10	Possible pink pyrochlore occurs with zircon and apatite in porphyritic dolomite.

ALTERATION

Type	Value	Comments
Calcite %	15.00	Calcitization of amphibolite
Amphibolite %	35.00	Composed dominantly of green aegirine, blue riebeckite and minor phlogopite.; reacts moderately to HCl

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	30	Only in dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
69.77 - **TO**
80.37

ROCK CODE dlpAMX = **Min Style** d **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Interval consists of dark green and dolomitized amphibolite/fenite xenoliths in laminated dolomite carbonatite. Dolimitization of xenoliths preserved concentric texture of amphibolite/fenite: cores are more beige oxidized color, rims are white. Phenocrysts consist of altered phlogopite. Apatite occurs weakly to strongly laminated. Zircon occurs clustered with apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Possible fine-grained pyrochlore occurs disseminated in porphyritic dolomite carbonatite; dark grey fine-grained fersmite may occur with zircon-rich apatite laminae

ALTERATION

Type	Value	Comments
Amphibolite %	25.00	Xenoliths 25 to 50 cm partially to completely dolomitized.
Oxidation %	30.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

FROM
80.37 - **TO**
92.58

ROCK CODE nmfgCD = **Min Style** n **Fabric** m **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Interval is dominantly composed of dolomitized amphibolite/fenite, light-grey to beige in colour. Dolomitization preserves ovoid texture of amphibolite/fenite. Carbonatite is dominantly fine-grained but is locally porphyritic with phenocrysts of altered phlogopite. Porphyritic dolomite carbonatite appears to be the boundary between amphibolite clasts and host dolomite carbonatite. Apatite occurs strongly laminated throughout interval. Zircon concentrates with apatite in porphyritic dolomite carbonatite. Phlogopite concentrates in the core of some amphibolite/fenite xenoliths.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Potential fine-grained dark-grey fersmite grains occur disseminated locally.
Pyrite %	0.50	Fine-grained disseminated oxidized pyrite.

ALTERATION

Type	Value	Comments
Dolomite %	75.00	Of amphibolite/fenite xenoliths.

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

FROM 92.58	-	TO 96.52	ROCK CODE nmfgAM	=	Min Style n	Fabric m	Texture fg	Litho AM	Struct									
			MAIN COMMENTS	Fine-grained green to dark blue amphibolite/fenite composed of green aegirine, blue riebeckite and black phlogopite. Calcite occurs as veins within amphibolite/fenite and within the fine-grained groundmass. Apatite occurs as veins crosscutting fenite zones with calcite. Zircon occurs disseminated throughout fenite. Amphibolite/fenite is oxidized to brown towards end of interval.														
			MINERALIZATION															
			ALTERATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Oxidation %</td> <td>20.00</td> <td>Brown fenite</td> </tr> <tr> <td>Amphibolite %</td> <td>95.00</td> <td></td> </tr> </tbody> </table>						Type	Value	Comments	Oxidation %	20.00	Brown fenite	Amphibolite %	95.00	
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Zone	HCL	Apatite	Zircon															
OX	M	2.5	0.5															

FROM 96.52	-	TO 102.21	ROCK CODE nxfgCD	=	Min Style n	Fabric x	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Fragmented fine-grained light grey dolomite carbonatite with infilled fractures of dark brown calcite. Interval is largely broken up to loose rock fragments and rubble. Dolomite carbonatite fragments are relatively homogeneous with only oxidized pyrite as an accessory mineral. The occasional apatite grain occurs within dark-brown calcite "matrix".													
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Zone	HCL	Apatite	Zircon														
OX	M	1	0														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
102.21 - **TO**
110.82

ROCK CODE nmfgCD = **Min Style** n **Fabric** m **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite that has undergone high amount of oxidation and slight calcitization and decalcification. A small 10 cm interval of magnetite-apatite cumulate occurs as 106.74 m. A dark-grey pophyritic dolomite carbonatite occurs adjacent to magnetite; likely dolomitized magnetite-apatite cumulate. Some intervals have been completely decalcified to rubble. (up to 30 cm intervals). There are a few small laminae (< 5 cm) of inequigranular dolomite carbonatite. Apatite occurs weakly to moderately laminated. Zircon is concentrated with apatite and magnetite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Disseminated aggregates (up to 1 cm) of oxidized pyrite
Niobates %		None observed

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark-brown mottles
Oxidation %	70.00	Beige dolomite and around magnetite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	Few laminae of inequigranular dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	1

FROM
110.82 - **TO**
119.37

ROCK CODE nmAMX = **Min Style** n **Fabric** m **Texture** i **Litho** AMX **Struct**

MAIN COMMENTS Relatively unaltered to completed dolomitized amphibolite/fenite. Dolomitized fenite is dominantly inequigranular to porphyritic. Phenocrysts consist of altered phlogopite. Small interval of laminated dolomite carbonatite. Dolomitization preserves ovoid texture of amphibolite/fenite. Apatite occurs aggregated within porphyritic segments and laminated within laminated dolomite carbonatite. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Likely fine-grained yellow fersmite occurs within pophyritic segments of interval.
Pyrite %	0.50	Disseminated and oriented within laminated dolomite carbonatite: fine-grained, oxidized

ALTERATION

Type	Value	Comments
Dolomite %	60.00	Of amphibolite/fenite
Amphibolite %	30.00	Up to 50 cm intervals composed of green aegirine and blue riebeckite.

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	45	Only locally present.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
119.37	- 133.67	nlpCD	n	l	p	CD		
		MAIN COMMENTS	Dominantly beige to dark-brown weathered dolomite carbonatite. Light-grey to medium-grey colour of fresh dolomite carbonatite is locally preserved. Phenocrysts consist of altered phlogopite. Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated throughout interval.					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	1.00	Fine-grained oxidized pyrite occurs disseminated throughout interval.			
		ALTERATION	Type	Value	Comments			
			Oxidation %	85.00	Beige dolomite			
			Calcite %	20.00	Dark-brown mottling			
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	weak	20			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	W	7.5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
133.67 - **TO**
137.00

ROCK CODE nmiAMX = **Min Style** n **Fabric** m **Texture** i **Litho** AMX **Struct**

MAIN COMMENTS Amphibolite/fenite that has been calcitized and dolomitized to various degrees. Ovoid texture of amphibolite/fenite is preserved by dolomitization. Much of dolomitized fenite has inequigranular texture. Apatite occurs aggregated in dolomitized amphibolite/fenite. Zircon occurs disseminated throughout interval.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.50	Uncommon irregular aggregates up to 2 cm thick of oxidized pyrite

ALTERATION		
Type	Value	Comments
Dolomite %	50.00	Of fenite
Amphibolite %	40.00	Relatively unaltered fenite consists of green aegirine, blue riebeckite and black phlogopite; matrix has slightly calcitized
Calcite %	10.00	Of fenite matrix: moderate reaction to HCl

STRUCTURE

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	7.5	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 137.00	-	TO 145.15	ROCK CODE nmcCD	=	Min Style n	Fabric m	Texture c	Litho CD	Struct
			MAIN COMMENTS	Highly weathered dominantly beige to dark brown dolomite. Interval contains minor dolomitized amphibolite/fenite (~15 vol. %), interpreted based on ovoid texture seen in amphibolite/fenite. Apatite occurs weakly laminated in dolomite carbonatite and as rims on dolomitized amphibolite/fenite. Riebeckite forms irregular aggregates and veins up to 2 cm thick.. Phenocrysts of altered dark grey magnetite (?) occurs localized.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Fine-grained oxidized pyrite occurs disseminated in dolomite carbonatite			
			ALTERATION	Type	Value	Comments			
				Calcite %	15.00	Dark-brown mottles			
				Oxidation %	70.00	Beige dolomite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	12.5	0.1		

FROM 145.15	-	TO 147.86	ROCK CODE nxfgCD	=	Min Style n	Fabric x	Texture fg	Litho CD	Struct
			MAIN COMMENTS	Dominantly light-grey highly fractured dolomite. Fractures are infilled by pyrite and white dolomite(?). Apatite occurs locally laminated and concentrated along fractures. Zircon occurs fine- to medium grained disseminated throughout interval.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Fine- to medium-grained pyrite occurs locally concentrated in aggregates and stringers.			
			ALTERATION	Type	Value	Comments			
				Oxidation %	20.00	Beige dolomite concentrated along fractures concentrated around pyrite.			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	5	0.25		



GEOLOGY LOG

Log by

Date

Hole ID

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-017

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454564.59	6256632.07	1653.79	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	214.93		214.93		Central 2
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	6.09	6.09
NQ	6.09	214.93	214.93

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
47.24	21.40	-54.20	12.4	5943	135.5	Reflex EZ-shot
138.68	20.00	-55.20	13.5	5807	64.0	Reflex EZ-shot
169.16	20.40	-54.80	13.2	5354	129.5	Reflex EZ-shot
199.64	20.00	-54.80	16.3	5558	177.5	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	08/Aug/2010	
Drill Contractor		03/Aug/2010	05/Aug/2010

SUMMARY

--

GEOLOGY LEGEND

 Hole ID 2010-017

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

Log by

Date

Hole ID

FROM	TO	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho	Struct	
0.00	-							CASE		
		MAIN COMMENTS	No rock							
		MINERALIZATION								
		ALTERATION								
		STRUCTURE								
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			

FROM
6.09 - **TO**
10.25

ROCK CODE dliCCCD = **Min Style** d **Fabric** l **Texture** i **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite-apatite cumulate phases make up 30 to 40 cm intervals composing ~20 % of entire interval. Apatite also occurs weakly laminated within dolomite carbonatite. Zircon concentrates within magnetite-apatite cumulate phases, Calcite carbonatite forms a 20 cm thick laminae. Calcite carbonatite contains a high content of disseminated magnetite, brown phlogopite and pinkish brown pyrochlore. Minor porphyritic dolomite carbonatite occurs near calcite carbonatite (phenocrysts =altered phlogopite). Dolomite carbonatite varies between fine-grained equigranular to inequigranular to porphyritic.

MINERALIZATION

Type	Value	Comments
Niobates %	2.00	Fine-grained pinkish brown pyrochlore observed in calcite carbonatite; fine-grained yellowish grey fersmite observed in porphyritic dolomite carbonatite; fine-grained columbite likely occurs with magneite
Magnetite %	10.00	Occurs in cumulate phases and finely-grained disseminated in calcite carbonatite
Pyrite %	1.50	Fine-grained oxidized pyrite occurs disseminated in dolomite carbonatite; Fresh pyrite occurs in calcite carbonatite (possibly replacing magnetite).

ALTERATION

Type	Value	Comments
Calcite %	10.00	Calcite carbonatite
Oxidation %	40.00	Beige dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	varies between 20 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
10.25 - **TO**
18.82

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Massive to weakly laminated light grey to brown dolomite carbonatite with localized occurrences of phenocrysts (dark grey altered to dolomitized magnetite?). Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated and locally concentrated with some apatite aggregates.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Up to 1 mm oxidized stringers
Niobates %	0.75	Fine-grained yellowish grey secondary fersmite

ALTERATION

Type	Value	Comments
Oxidation %	70.00	Beige to pink dolomite
Calcite %	2.50	Dark brown mottles - react strongly to HCl

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Generally varies 20 to 30 degrees but does locally steepen to as high as 70 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.5

FROM
18.82 - **TO**
21.44

ROCK CODE gmiCD = **Min Style** g **Fabric** m **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Interval is dominantly composed of magnetite-apatite (apatite =15 vol.%) cumulate, partially dolomitized to dark grey dolomite carbonatite. A 30 cm interval of light grey to beige laminated dolomite carbonatite occurs between ~20.8 and 21.1 m. Apatite occurs laminated within dolomite carbonatite. Zircon occurs disseminated in cumulate phases and decalcified laminae in dolomite carbonatite. Localized brown to altered-black phlogopite phenocrysts occur

MINERALIZATION

Type	Value	Comments
Pyrite %	0.75	Fresh to oxidized stringers within laminated carbonatite and fine-grained disseminations in medium- to dark grey dolomite carbonatite.
Niobates %	1.50	Rare fine-grained pink pyrochlore in dark-grey dolomite carbonatite; Disseminated yellowish fersmite with phlogopite phenocrysts; and fine-grained columbite likely occurs with magnetite.
Magnetite %	40.00	Medium grained magnetite concentrates in cumulate phase

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige to pink dolomite and minor oxidation around magnetite.

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	12.5	Localized in dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
21.44 - **TO**
28.10

ROCK CODE nliCD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Inequigranular to locally porphyritic light-grey to beige dolomite carbonatite. Phenocrysts appear to altered to dolomitized magnetite (dark grey) and altered phlogopite (black). A network of healed fractures occur locally throughout interval. Apatite occurs oriented to moderately laminated. Zircon occurs disseminated throughout interval with minor clusters within apatite laminae. A minor clast of what appears to be altered magnetite (< 3 cm thick) occurs at around 23.3 m. Clay minerals appear to accumulate along fractures

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite stringers (<1 mm)

ALTERATION		
Type	Value	Comments
Oxidation %	20.00	Beige dolomite
Silica %	2.50	Along veins and silicification of dolomite matrix

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	30	Not visible in fractured areas

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
28.10 - **TO**
30.54

ROCK CODE glfgCD = **Min Style** g **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Laminated light-grey dolomite carbonatite with clasts of amphibolite/fenite and magnetite-apatite-phlogopite cumulate. Dolomite carbonatite is generally fine-grained inequigranular with minor localized phenocrysts (altered magnetite) and inequigranular dolomite texture. Apatite occurs moderately laminated within dolomite carbonatite and concentrates along the fringes of amphibolite/fenite xenolith. Zircon concentrates with magnetite and apatite.

MINERALIZATION		Type	Value	Comments
Magnetite %	20.00	Medium-grained magnetite		
Pyrite %	0.50	Disseminated fresh pyrite occurs with phenocrysts and magnetite; stringers and laminae of fresh pyrite		

ALTERATION		Type	Value	Comments
Oxidation %	5.00	Minor beige dolomite		

STRUCTURE		Type	Intens	CA°	Comments
Laminations %	weak	25			

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
OX	W	20	0.75		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
30.54 - **TO**
34.82

ROCK CODE

dlpCD

=

Min Style
d

Fabric
I

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Mixed porphyritic and inequigranular dolomite carbonatite - inequigranular sections are devoid of apatite whereas porphyritic sections are apatite rich (15%). Altered phlogopite phenocrysts; possible enrichment of niobates in bottom half of section.

MINERALIZATION

Type	Value	Comments
Niobates %	0.30	Possible fine grained fersmite (altered pyrochlore) and columbite
Pyrite %	0.50	Minor pyrite after magnetite (?)
Magnetite %	1.00	Minor magnetite occurring in 10cm aggregates

ALTERATION

Type	Value	Comments
Calcite %	0.50	Calcite rims around magnetite aggregates

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	15	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
34.82 - **TO**
37.70

ROCK CODE bliAMX = **Min Style** b **Fabric** l **Texture** i **Litho** AMX **Struct**
MAIN COMMENTS Weak to moderately laminated inequgranular mixed carbonatite with fenite blocks (up to 20 cm in size). Apatite concentrated in banded sections of mixed carbonatite matrix; lower apatite concentration around fenite blocks. Niobate mineralization occurs in apatite rich bands

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	minor banded pyrite
Magnetite %	0.50	minore magnetite in calcite carbonaite
Niobates %	0.20	as fersmite after pyrochlore and possible rare primary pyrochlore

ALTERATION

Type	Value	Comments
Amphibolite %	50.00	large fenite blocks locally brecciated
Calcite %	3.00	calcite concentrated around fenite blocks

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
37.70 - **TO**
48.60

ROCK CODE bICCCD = **Min Style** b **Fabric** l **Texture** p **Litho** CCCD **Struct**
MAIN COMMENTS Banded mixed calcite and dolomite carbonatite. Large sections of composed of phlogoptite phenocrysts, calcite, and pyrochlore. Minor section of fenite occurs as bands. Apatite strongly laminated.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	fersmite after pyrochlore and primary pyrochlore
Pyrite %	0.50	Minor, fresh, and disseminated fine grains
Magnetite %	1.00	occurs locally in calcite carbonatite

ALTERATION

Type	Value	Comments
Amphibolite %	5.00	minor fenite bands 5cm
Calcite %	20.00	calcite occurs as bands generally near fenite sections

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	10	0.25

FROM 48.60	-	TO 51.29	ROCK CODE nlfgAMX	=	Min Style n	Fabric l	Texture fg	Litho AMX	Struct
			MAIN COMMENTS	Section of large fenite blocks (up to 40cm) with mixed carbonatite. Barren..					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	2.00	occurs near fenite blocks and disseminated in calcite rich matrix. Fresh.			
			ALTERATION	Type	Value	Comments			
				Calcite %	10.00	occurs in matrix around fenite			
				Amphibolite %	40.00	Large chloritized(?) blocks.			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	W	15	0.1		

FROM 51.29	-	TO 61.14	ROCK CODE dmiCD	=	Min Style d	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Massive fine grained dolomite carbonatite with ovoid lenses of coarser grained dolomite. Localized minor intervals of mottled calcitized carbonatite and porphyritic (phlogopite bearing) carbonatite (approx. 20cm in length). Laminated and aggregated section of apatite					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.20	Minor fersmite in porphyritic dolomite			
				Pyrite %	2.00	Occurs as aggregate			
			ALTERATION	Type	Value	Comments			
				Oxidation %	20.00	Beige carbonatite			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	30	Present only in porphyritic laminae		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	7.5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
61.14 - **TO**
70.10

ROCK CODE nlpAMX = **Min Style** n **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Light-grey to beige laminated to locally brecciated (alteration texture?) dolomite carbonatite with clasts of fenite (~ 15 cm intervals). Interval is locally inequigranular to porphyritic. Top meter of interval is moderately weathered (oxidized and decalcified). Phenocrysts are composed of dark grey pseudomorphs (after magnetite?) and black pseudomorphs after phlogopite. Dark grey pseudomorphs are commonly associated and rimmed by pyrite. Apatite occurs aggregated in breccia and strongly laminated within dolomite carbonatite.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Fresh pyrite occurs with dark grey pseudomorphs and as pyrite-chlorite veinlets up to 2 cm thick

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	beige dolomite - decreases down interval
Amphibolite %	5.00	Blocks of fenite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	strong	60	Not visible in fenite or brecciated dolomite carbonatite

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
70.10 - **TO**
87.35

ROCK CODE

gmiCM

=

Min Style
g

Fabric
m

Texture
i

Litho
CM

Struct
MAIN COMMENTS

Magnetite cumulate unit with mixed calcite/dolomite matrix. Dolomite dominates at top half of section; matrix switches to predominantly calcite at 79.5m. Apatite occurs as disseminated aggregates around magnetite grains. Small brecciated section at base of interval; magnetite altered to hematite (?)

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	minor pyrite
Magnetite %	55.00	Coarse grained magnetite cumulates
Niobates %	2.50	suspect fersmite after pyrochlore or columbite as well as primary columbite (non-magnetic hexagonal opaques)

ALTERATION

Type	Value	Comments
Oxidation %	0.50	minor oxidation along fracture zones
Calcite %	20.00	primary calcite matrix at bottom of section

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 87.35	-	TO 93.41	ROCK CODE dxCD	=	Min Style d	Fabric x	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Intensely brecciated dolomite carbonatite - coarse grained dolomite breccia clasts suspended in a matrix of fine grained dolomite carbonatite. Minor sections of porphyritic (altered phlogopite) carbonatite and fine grained massive dolomite carbonatite. Apatite as irregular aggregates in brecciated sections and weakly laminated in fine grained sections														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.40</td> <td>Suspect columbite (after pyrochlore?) and fersmite occurring as fine, disseminated grains</td> </tr> <tr> <td>Pyrite %</td> <td>0.50</td> <td>fine grained aggregates in brecciated section of interval</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.40	Suspect columbite (after pyrochlore?) and fersmite occurring as fine, disseminated grains	Pyrite %	0.50	fine grained aggregates in brecciated section of interval
Type	Value	Comments																
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Pyrite %	0.50	fine grained aggregates in brecciated section of interval																
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Type	Value	Comments																
Oxidation %	5.00	beige iron staining in fracture zones																
			STRUCTURE															
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td></td> <td>VW</td> <td>7.5</td> <td>0.5</td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon		VW	7.5	0.5	
Zone	HCL	Apatite	Zircon															
	VW	7.5	0.5															

FROM 93.41	-	TO 120.42	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Massive inequigranular dolomite carbonatite with locally brecciate dolomite sections (10cm long). Minor fenite blocks concentrated at start of interval. Apatite disseminated through interval - no visible mineral fabric														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.00</td> <td>fresh to oxidized as aggregates and bands</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	2.00	fresh to oxidized as aggregates and bands			
Type	Value	Comments																
Pyrite %	2.00	fresh to oxidized as aggregates and bands																
			ALTERATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Dolomite %</td> <td>10.00</td> <td>dolomitization of fenite (?)</td> </tr> <tr> <td>Oxidation %</td> <td>40.00</td> <td>abundant iron oxide staining concentrated along fractures but also pervasive in localized sections</td> </tr> </tbody> </table>						Type	Value	Comments	Dolomite %	10.00	dolomitization of fenite (?)	Oxidation %	40.00	abundant iron oxide staining concentrated along fractures but also pervasive in localized sections
Type	Value	Comments																
Dolomite %	10.00	dolomitization of fenite (?)																
Oxidation %	40.00	abundant iron oxide staining concentrated along fractures but also pervasive in localized sections																
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			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>VW</td> <td>12.5</td> <td>0.1</td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon	H	VW	12.5	0.1	
Zone	HCL	Apatite	Zircon															
H	VW	12.5	0.1															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 120.42	-	TO 137.52	ROCK CODE	nxcCD	=	Min Style n	Fabric x	Texture c	Litho CD	Struct	
			MAIN COMMENTS	Extremely variable brecciated, massive, and weakly laminated dolomite carbonaite. All sections appear barren and moderately to highly calcitized. Low apatite content (disseminated) and very low zircon.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.00	disseminated and as bands - all highly oxidized					
			ALTERATION	Type	Value	Comments					
				Oxidation %	70.00	heavily oxidized and calcitized throughout					
				Calcite %		calcitization - see above - not able to differentiate from oxidized sections					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				H	M	2.5	0.1				

FROM 137.52	-	TO 159.67	ROCK CODE	nxcCD	=	Min Style n	Fabric x	Texture c	Litho CD	Struct	
			MAIN COMMENTS	Strongly calcitized and decalcified light-grey to beige dolomite carboantite. Interval is mostly brecciated with small intervals of lamination. Apatite occurs as aggregates and veins interstitial to dolomite clasts (of breccia). Zircon concentrates locally with apatite. Phenocrysts of altered phlogopite occurs locally.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.00	Fine-grained oxidized pyrite occurs disseminated throughout interval.					
			ALTERATION	Type	Value	Comments					
				Calcite %	70.00	Dark brown alteration					
				Oxidation %	30.00	Beige dolomite					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	moderate	40	Localized: fabric preserved by apatite				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	S	10	0.25				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
159.67 - **TO**
168.50

ROCK CODE

gxCCCD

=

Min Style
g

Fabric
x

Texture
p

Litho
CCCD

Struct
MAIN COMMENTS

Dominantly dolomite carbonatite, massive to locally brecciated, with intervals up to 1 m thick of magnetite-apatite cumulate and intense oxidation (to yellowish orange colour). Apatite occurs aggregated with magnetite (~ 15 % of cumulate phase). No apatite occurs in brecciated dolomite carbonatite. Zircon concentrates within magnetite-apatite cumulate and occurs disseminated within dolomite carbonatite (~ 0.1 vol. %). Interval has undergone intense localized decalcification around what seems to be the magnetite-apatite cumulate phase (also point of high oxidation).

MINERALIZATION

Type	Value	Comments
Magnetite %	10.00	Medium-grained magnetite aggregated with apatite
Pyrite %	1.00	Pyrite occurs as aggregated stringers: fresh core with oxidized rim
Niobates %	1.00	Likely fine-grained columbite occurs with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	70.00	Concentrated around magnetite
Calcite %	1.00	Minor dark brown mottles

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nxCD	=	Min Style	Fabric	Texture	Litho	Struct
168.50	- 173.68				n	x	p	CD	
		MAIN COMMENTS	Brecciated light-grey dolomite carbonatite with dark-brown calcitized and oxidized matrix. Apatite occurs disseminated to aggregated within calcitized matrix.						
		MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Pyrite %	1.00	Disseminated fine-grained oxidized pyrite				
		ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Oxidation %	15.00	Orange colour along brecciated fragment boundaries				
			Calcite %	15.00	Dark brown matrix				
		STRUCTURE							
		MISCELLANEOUS	<u>Zone</u>	<u>HCL</u>	<u>Apatite</u>	<u>Zircon</u>			
			OX	W	7.5	0			

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
173.68 - **TO**
177.71

ROCK CODE

gmCM

=

Min Style
g

Fabric
m

Texture
c

Litho
CM

Struct
MAIN COMMENTS

Highly oxidized and calcitized cumulate unit with few preserved areas of magnetite-apatite cumulate up to 10 cm. Most of interval is composed of hematized magnetite and rubble. Apatite occurs aggregated. Zircon occurs disseminated.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Hematite after magnetite is also present (likely > 50 % of interval).
Niobates %	1.50	Fine-grained columbite likely present with magnetite: Likely secondary Nb mineralization in oxidized cumulate
Pyrite %	1.50	Oxidized aggregates of pyrite

ALTERATION

Type	Value	Comments
Calcite %	50.00	Dark brown intervals (occurs commonly with oxidation)
Oxidation %	80.00	Orange to red alteration

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	5	0.25

FROM 177.71	-	TO 181.99	ROCK CODE nmcCD	=	Min Style n	Fabric m	Texture c	Litho CD	Struct
MAIN COMMENTS Brecciated to massive light-grey dolomite carbonatite with phenocrysts of altered phlogopite. Apatite occurs aggregated within brecciated segment and oriented within porphyritic dolomite carbonatite.									
MINERALIZATION									
ALTERATION									
	Type	Value	Comments						
	Calcite %	20.00	Dark brown mottling						
	Oxidation %	20.00	Beige to orange dolomite						
STRUCTURE									
MISCELLANEOUS									
	Zone	HCL	Apatite	Zircon					
		M	7.5	0					

FROM 181.99	-	TO 190.10	ROCK CODE nmpCC	=	Min Style n	Fabric m	Texture p	Litho CC	Struct
MAIN COMMENTS Altered porphyritic calcite carbonatite that has undergone various degrees of oxidation and decalcification. Apatite occurs aggregated. Zircon occurs disseminated in higher concentration in highly weathered calcite carbonatite. Calcite carbonatite contains a high abundance of phlogopite, chloritized to various degrees. Some chloritized phlogopite occur as clumps up to 10 cm thick.									
MINERALIZATION									
	Type	Value	Comments						
	Niobates %	0.75	Yellowish altered grains - fersmite after pyrochlore?						
	Magnetite %	2.00	Disseminated fine-grained magnetite.						
ALTERATION									
	Type	Value	Comments						
	Oxidation %	30.00	Concentrated along fractures						
STRUCTURE									
	Type	Intens	CA°	Comments					
	Veining %	moderate	70	Crosscutting calcite vein (reacts strongly to HCl)					
MISCELLANEOUS									
	Zone	HCL	Apatite	Zircon					
	OX	VS	5	0.5					

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 190.10	-	TO 195.43	ROCK CODE nmfgCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct
			MAIN COMMENTS	Massive to slightly brecciated light-grey dolomite carbonatite with localized occurrence of phenocrysts of altered phlogopite and altered magnetite. Apatite occurs as disseminated aggregates. Zircon occurs concentrated with apatite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Disseminated oxidized aggregates up to 1 mm in diameter and rimming altered magnetite.			
			ALTERATION	Type	Value	Comments			
				Oxidation %	10.00	Orange dolomite			
				Calcite %	10.00	Dark brown along fractures and matrix in brecciated area			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	1.5	0.75		

FROM
195.43 - **TO**
204.15

ROCK CODE gmiCM = **Min Style** g **Fabric** m **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Dominantly magnetite-apatite-phlogopite cumulate mixed with dolomite and calcite carbonatite. Dolomite carbonatite dominates towards top half of interval, while calcite carbonatite dominates bottom half. Magnetite-apatite cumulate has been extensively oxidized and weathered in places to hematite (rusty orange colour, non-magnetic). Dolomite carbonatite towards top of interval has a series of fractures. Carbonatite is largely porphyritic with phenocrysts of altered phlogopite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.25	Rare stringer of fresh to oxidized pyrite
Magnetite %	40.00	Occurs massively (fine-grained) and disseminated within calcite carbonatite (fine- to medium-grained), and aggregated with apatite
Niobates %	1.50	Suspect yellow fine-grained fersmite in porphyritic carbonatite; black fine-grained columbite likely occurs with magnetite.

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark-brown calcitization concentrates along fractures of dolomite carbonatite.

STRUCTURE

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 204.15	-	TO 210.19	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct									
MAIN COMMENTS Moderately calcitized light-grey to medium-brown dolomite carbonatite. Interval is inequigranular to locally porphyritic. Phenocrysts consist of altered phlogopite (or magnetite). Apatite occurs disperse throughout interval. Zircon occurs disseminated.																		
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Zone	HCL	Apatite	Zircon															
OX	M	7.5	0.1															

FROM 210.19	-	TO 214.93	ROCK CODE dmiCD	=	Min Style d	Fabric m	Texture i	Litho CD	Struct									
MAIN COMMENTS Slightly calcitized inequigranular medim-grey dolomite carbonatite. Apatite occurs disseminated to aggregate. Zircon occurs locally disseminated. Phenocrysts of altered phlogopite and magnetite (?) occur locally.																		
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OX	W	7.5	0.5															



GEOLOGY LOG

Log by

Date

Hole ID

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-018

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454331.71	6256677.03	1654.53	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	152.45		152.45		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	6.09	6.09
NQ	6.09	152.45	152.45

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
21.34	21.20	-56.90	13.1	5734	160.3	Reflex EZ-shot
51.82	22.70	-56.90	12.8	5719	53.5	Reflex EZ-shot
82.30	23.20	-57.00	12.7	5738	116.8	Reflex EZ-shot
112.78	23.70	-57.20	13.5	5730	295.6	Reflex EZ-shot
143.26	23.70	-57.20	14.7	5694	152.5	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	09/Aug/2010	
Drill Contractor		04/Aug/2010	06/Aug/2010

SUMMARY

--

GEOLOGY LEGEND

 Hole ID 2010-018

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

FROM 0.00	-	TO 6.09	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 6.09	-	TO 12.09	ROCK CODE	dmpCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct	
			MAIN COMMENTS	Light-grey dolomite carbonatite. Phenocrysts consist of dolomitized phlogopite (?). Apatite occurs disseminated to weakly laminated. Zircon occurs disseminated throughout interval.							
			MINERALIZATION	Type	Value	Comments					
			Niobates %		0.10	Rare suspect fine-grained yellow fersmite - shows some similarities to limonitized pyrite					
			Pyrite %		2.00	Fine-grained oxidized pyrite (some show yellow colour of limonite) occurs disseminated and as stringers.					
			ALTERATION	Type	Value	Comments					
			Oxidation %		10.00	Beige dolomite - concentrated around oxidized pyrite stringers					
			Calcite %		10.00	Localized dark brown calcitization of dolomite					
			STRUCTURE	Type	Intens	CA°	Comments				
			Laminations %		weak	40	Visible in apatite laminae and weathered pyrite stringers				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			OX		W	5	0.1				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
12.09 - **TO**
15.43

ROCK CODE dmfgCD = **Min Style** d **Fabric** m **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Slightly decalcified light- to medium grey dolomite carbonaite. Apatite occurs aggregated to weakly laminated.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Rare suspect fine-grained yellow to dark-grey fersmite: greater potential in top 1.5 m of interval
Pyrite %	0.50	Oxidized fine-grained pyrite occurs disseminated and in stringers. Looks as though much of pyrite has weathered away leaving small equant and elongated cavities

ALTERATION

Type	Value	Comments
Calcite %	5.00	Dark brown mottles of calcitization
Oxidation %	2.50	Minor beige-coloured dolomite concentrated along veins

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	
Veining %	weak	10	Fracture infilled secondary minerals (clay minerals?). Thinner Irregular infilled factures occur off main fracture (at 80 degrees)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
15.43 - **TO**
25.57

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Moderately calcitized to decalcified porphyritic light-grey dolomite carbonatite. Phenocrysts are composed of dolomitized magnetite (?). Apatite occurs oriented to weakly laminated. Zircon occurs disseminated.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Few suspect pink- to yellow fine-grained fersmite: one pink grained is rimmed by zircon
Pyrite %	1.50	Fine-grained oxidized pyrite occurs disseminated and commonly associated (sometimes as rims) with phenocrysts.

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige to pink dolomite
Calcite %	25.00	Dark brown segment ~ 1.25 m and small irregular mottles. Calcitization follows lamination in first 1.5 m of interval

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
25.57 - **TO**
33.54

ROCK CODE nliCD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey to medium-brown dolomite carbonatite with laminated to ovoid texture: similar to texture observed commonly in fenite but composed entirely of dolomite of different colours (generally pink, medium-grey and medium-brown). Dolomite is locally fine- to medium-grained inequigranular. A single 10 cm segment of green to blue fenite occurs at around 29.1 m. Apatite occurs dispersed throughout dolomite carbonatite and forms rims around ovoid dolomite and fenite block.

MINERALIZATION		
Type	Value	Comments
Pyrite %	2.00	Stringers and aggregates up to 1 cm thick of oxidized pyrite occurs disseminated throughout laminated dolomite carbonatite. Ovoid dolomite is void of pyrite.

ALTERATION		
Type	Value	Comments
Dolomite %	45.00	of fenite blocks?
Amphibolite %	5.00	Single coarse-grained rounded block occurs adjacent to medium-grey to medium-brown ovoid dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	35	Varies between 30 and 40 in laminated dolomite and conforms to ovoid dolomite and rounded fenite block

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	7.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
33.54 - **TO**
41.28

ROCK CODE

gmiAMX

=

Min Style
g

Fabric
m

Texture
i

Litho
AMX

Struct
MAIN COMMENTS

Interval is composed of about 50 % fenite blocks in dolomite carbonatite. Dolomite carbonatite has ovoid texture similar to ovoid texture observed in fenite. Interval is locally inequigranular to porphyritic with a high concentration of dark-grey dolomitized magnetite (?) phenocrysts in the last 20 cm of interval. Apatite occurs aggregated.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Yellowish grey fine-grained fersmite (after pyrochlore?) occurs near fenite-carbonatite boundary in carbonatite
Pyrite %	0.50	Uncommon fine-grained stringers and aggregates of oxidized pyrite occur locally

ALTERATION

Type	Value	Comments
Calcite %	15.00	Blue fenite (riebeckite?) reacts moderately to HCl: calcitized fenite?
Dolomite %	45.00	of fenite blocks?
Amphibolite %	50.00	Green to blue rounded blocks

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	2.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
41.28 - **TO**
47.59

ROCK CODE dmpCD = **Min Style** d **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Dominantly massive to locally porphyritic light-grey to beige dolomite carbonatite. Phenocrysts are composed of dolomitized phlogopite (?) and a high abundance of oxidized pyrite. Interval has minor localized fragmented to brecciated texture. Medium-brown dolomite infills fractures between light-pink dolomite carbonatite blocks. Apatite occurs dispersed throughout dolomite carbonatite. Zircon occurs disseminated throughout interval.

MINERALIZATION		
Type	Value	Comments
Pyrite %	3.50	Disseminated to oriented fine-grained fresh to highly oxidized pyrite. Some oxidized pyrites appear to be weathered out leaving small pits in rock
Niobates %	0.10	Suspect highly-weathered fine-grained yellow grains: may just be limonite after pyrite

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige to pink dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	30	Only locally present on a scale of 10 to 20 cm

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	12.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	ICD	=	Min Style	Fabric	Texture	Litho	Struct								
47.59	- 64.52					I		CD									
MAIN COMMENTS Laminated to ovoid texture light-grey to beige dolomite carbonatite. Interval is inequigranular to locally porphyritic. Phenocrysts consist of dolomitized magnetite (?) - partially altered to pyrite. Apatite occurs disperse to weakly laminated in laminated dolomite carbonatite. Zircon occurs in small clusters in porphyritic segments. No Nb-mineralization observed.																	
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	VW	5	0.25														

FROM	TO	ROCK CODE	nmiCD	=	Min Style	Fabric	Texture	Litho	Struct									
64.52	- 72.00				n	m	i	CD										
MAIN COMMENTS Dominantly massive-mottled light-grey to dark-grey dolomite carbonatite with minor blue fenite at top of interval and minor small intervals with blobs of calcite (visible with UV lamp but with weak reaction to HCl). Interval is generally inequigranular with uncommon phenocrysts of altered phlogopite. Apatite occurs weakly laminated. Zircon occurs disseminated.																		
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Zone	HCL	Apatite	Zircon															
OX	W	7.5	0.1															

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
72.00 - **TO**
78.33

ROCK CODE

gmiAMX

=

Min Style
g

Fabric
m

Texture
i

Litho
AMX

Struct
MAIN COMMENTS

Most of interval consists of fenite blocks set within massive inequigranular carbonatite. Light-grey dolomite carbonatite dominates towards top of interval. Cream calcite carbonatite is more common towards bottom of interval, commonly as veins up to 10 cm thick in fenite blocks. Dolomite carbonatite is dominantly inequigranular with localized phenocrysts of altered black phlogopite. Calcite carbonatite are composed almost entirely of calcite with some dark-grey fragments of fenite (?) with pyrite alteration. Apatite occurs dispersed throughout interval. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Disseminated fine-grained to aggregated up to 1 cm: dominantly oxidized, minor fresh pyrite
Niobates %	0.10	Pale-yellow to grey fine-grained fersmite occur near contact with fenite

ALTERATION

Type	Value	Comments
Silica %	1.00	Minor silicification
Dolomite %	15.00	Of fenite blocks to medium-grey colour
Amphibolite %	70.00	Green to blue blocks dolomitized to various degrees

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	M	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
78.33 - **TO**
95.12

ROCK CODE nmiAMX = **Min Style** n **Fabric** m **Texture** i **Litho** AMX **Struct**

MAIN COMMENTS Interval is composed of light-grey porphyritic to inequigranular dolomite carbonatite with large (30 to 75 cm) blocks of fenite. Phenocrysts consist of black altered phlogopite and dolomitized dark-grey magnetite (?). Apatite occurs dispersed to weakly laminated in dolomite carbonatite. Fenite is void of apatite. Zircon occurs disseminated in dolomite carbonatite and in lower concentration in fenite. No observed Nb-mineralization.

MINERALIZATION		Type	Value	Comments
	Pyrite %		1.50	Disseminated to aggregated.

ALTERATION		Type	Value	Comments
	Amphibolite %		15.00	Dark-greenish grey to bluish green fenite blocks occur irregularly throughout interval
	Silica %		1.00	Minor silicification of matrix
	Oxidation %		2.00	Beige to pink dolomite

STRUCTURE

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	OX		VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
95.12 - **TO**
103.53

ROCK CODE

dmpCD

=

Min Style
d

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Dominantly porphyritic to locally inequigranular (~ 30 cm intervals) light-grey dolomite carbonatite. Phenocrysts consist of fine-grained altered phlogopite and pyrite aggregates. Apatite occurs dispersed in dolomite carbonatite and decreases in concentration from top of interval. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Disseminated fresh pyrite occurs with altered phlogopite
Niobates %	1.00	Suspect fine-grained pinkish-grey to black hard octahedral crystals: may be pyrochlore. Downhole where inequigranular texture increases, grains appear more likely pale-pink to yellowish grey fersmite pseudomorphs

ALTERATION

Type	Value	Comments
Silica %	2.50	Localized silicification of matrix

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
103.53 - **TO**
110.91

ROCK CODE

dmiAMX

=

Min Style
d

Fabric
m

Texture
i

Litho
AMX

Struct
MAIN COMMENTS

Inequigranular light-grey to beige dolomite carbonatite with blocks of partially dolomitized fenite. Apatite occurs aggregated. Zircon occurs disseminated throughout interval. A aggregate of a metallic non-magnetic dark-grey mineral occurs at about 104.75 m. Streak is dark grey; may be altered magnetite.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Larger aggregates up to 2-3 cm of fresh pyrite concentrate within dolomitized fenite: smaller aggregates up to 1 cm occur within inequigranular dolomite carbonatite
Niobates %	0.25	Suspect rare yellow grains occurring in inequigranular dolomite carbonatite: possibly fermsite

ALTERATION

Type	Value	Comments
Amphibolite %	35.00	Bluish grey to dark green blocks dolomitized to various extents
Dolomite %	15.00	Of fenite clasts - to medium-grey colour
Silica %	2.00	Minor silicification of matrix
Oxidation %	20.00	Beige dolomite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	2.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 110.91	-	TO 119.69	ROCK CODE dmpCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Dominantly porphyritic to locally inequigranular light-grey dolomite carbonatite. Phenocrysts are composed of altered phlogopite with abundant pyrite. Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated throughout interval.														
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Zone	HCL	Apatite	Zircon															
OX	VW	10	0.75															

FROM 119.69	-	TO 127.86	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Dominantly inequigranular light-grey to beige dolomite carbonatite with few pods of porphyritic dolomite carbonatite. Uncommon phenocrysts consist of altered phlogopite. Carbonatite is essentially composed of only dolomite with disseminated apatite and uncommon oxidized pyrite. Apatite aggregates in porphyry segments. A large ~2 m segment of partially decalcified dolomite carbonatite occurs at around 123 m.													
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OX	VW	2.5	0														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
127.86 - **TO**
138.54

ROCK CODE

nmpCD

=

Min Style
n

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Dominantly porphyritic light-grey dolomite carbonatite with intervals (20 to 200 cm) of fine-grained equigranular carbonatite. Phenocrysts consist of fine- to coarse grained altered phlogopite: grain size increases down interval. There also appears to be aggregates of coarse-grained dark-grey altered magnetite (?). Apatite occurs dispersed to weakly laminated within dolomite carbonatite. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.75	Fine-grained fresh pyrite aggregates with altered phlogopite and magnetite

ALTERATION

Type	Value	Comments
Silica %	1.00	Localized silicification
Oxidation %	10.00	Beige to pink dolomite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
138.54 - **TO**
143.72

ROCK CODE

dmpCCCD

=

Min Style
d

Fabric
m

Texture
p

Litho
CCCD

Struct
MAIN COMMENTS

Porphyritic white to light-grey dominantly calcite carbonatite. Phenocrysts consist of magnetite and phlogopite. Phlogopite is altered to chlorite (?) towards top of interval. Where dolomite carbonatite, magnetite appears to have been dolomitized (dark grey non-magnetic metallic grains). Apatite occurs dispersed to aggregated. Zircon occurs disseminated.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Medium-grained phenocrysts occur disseminated throughout interval. Slightly dolomitized within dolomite carbonatite.
Niobates %	0.50	Fine-grained columbite likely occurs with magnetite
Pyrite %	1.50	Aggregates with magnetite and phlogopite.

ALTERATION

Type	Value	Comments
Silica %	5.00	occurs with green chloritization of matrix

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	S	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
143.72 - **TO**
145.92

ROCK CODE dmpAMX = **Min Style** d **Fabric** m **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Porphyritic light-grey dolomite carbonatite with large 1 m long block of fenite. Phenocrysts consist of altered phlogopite (dominant towards top of interval) and altered magnetite (dark grey, non-magnetic, metallic) rimmed by pyrite. Apatite occurs aggregated to weakly laminated. Zircon concentrates with apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Localized fine-grained pale pink pyrochlore to fine-grained pale yellow fersmite (needle-like replacement of pyrochlore). Fersmite is dominant Nb-mineral towards bottom of interval.
Pyrite %	1.25	Occurs aggregated with altered magnetite (?), often forming rims around pseudomorphs.

ALTERATION

Type	Value	Comments
Amphibolite %	50.00	Green to blue fenite block with abundant phlogopite.

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Only locally present

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nmiCD	=	Min Style	Fabric	Texture	Litho	Struct
145.92	- 149.47				n	m	i	CD	
		MAIN COMMENTS	Dominantly inequigranular to locally porphyritic dolomite carbonaite. Phenocrysts consists of altered phlogopite and commonly have a vein-like or interstitial appearance. "Blobs" of fine-grained equigranular dolomite carbonaite occur irregularly up to ~ 1 m long. Apatite occurs dispersed throughout dolomite carbonatite. Zircon occurs associated with apatite. No observed Nb minerals, but texture and mineralogy indicate possible Nb-mineralization.						
		MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Pyrite %	1.50	Fine-grained pyrite aggregates occur with altered phlogopite - appear to be replacing phlogopite				
		ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Silica %	1.00	Localized silicification of matrix				
		STRUCTURE	<u>Type</u>	<u>Intens</u>	<u>CA°</u>	<u>Comments</u>			
			Laminations %	weak	40	Only locally present in fine-grained equigranular			
		MISCELLANEOUS	<u>Zone</u>	<u>HCL</u>	<u>Apatite</u>	<u>Zircon</u>			
			H	VW	7.5	0.5			

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE		=	Min Style	Fabric	Texture	Litho	Struct												
149.47	- 152.45	dmpAMX			d	m	p	AMX													
		MAIN COMMENTS	1 meter block of fenite within porphyritic white calcite carbonatite. Phenocrysts consist of dominantly phlogopite (chloritized to various degrees) magnetite and dark grey mineral (altered magnetite?). Apatite occurs aggregated with phlogopite and altered magnetite(?). Zircon occurs disseminated in calcite carbonatite.																		
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Zone	HCL	Apatite	Zircon																		
H	VS	5	0.5																		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID **2010-019**

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454396.41	6256675.06	1657.53	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	152.44		152.44		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	4.57	4.57
NQ	4.57	152.44	152.44

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
18.29	21.20	-54.40	7.9	5645	275.8	Reflex EZ-shot
48.77	23.80	-53.70	7.9	5695	315.8	Reflex EZ-shot
109.73	24.50	-53.80	7.8	5728	16.3	Reflex EZ-shot
140.21	22.60	-54.20	8.3	5774	204.7	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	10/Aug/2010	
Drill Contractor		05/Aug/2010	07/Aug/2010

SUMMARY

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GEOLOGY LEGEND

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 4.57	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				

FROM 4.57	-	TO 16.82	ROCK CODE	nlcCD	=	Min Style n	Fabric l	Texture c	Litho CD	Struct	
			MAIN COMMENTS	Partially calcitized and oxidized laminated light-grey to dark-brown dolomite carbonatite with clasts (5 to 100 cm) of dark-grey dolomite carbonatite (altered fenite?). Altered phlogopite and dolomitized magnetite (?) occur locally throughout interval. Apatite occurs weakly to moderately laminated in light-grey dolomite carbonatite. Dark-grey dolomite carbonatite (composed ~20 % of interval) is devoid of apatite. Zircon occurs disseminated throughout interval.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	0.50	Oxidized pyrite occurs disseminated					
			ALTERATION	Type	Value	Comments					
				Calcite %	25.00	Dark-brown mottling					
				Oxidation %	15.00	Beige dolomite to weathered yellow intervals (limonite?)					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	moderate	40	40 degrees at top of hole; ~ m down the lamination varies between 20 and 70 degrees; strength of lamination decreases towards bottom of hole to massive				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	W	7.5	0.1				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
16.82 - **TO**
42.25

ROCK CODE dmfgAMX = **Min Style** d **Fabric** m **Texture** fg **Litho** AMX **Struct**

MAIN COMMENTS Dominantly mottled-massive to laminated light- to medium-grey dolomite carbonatite with large blocks (~1 m) of fenite. Altered phlogopite phenocrysts occur locally (~1 vol. % of interval). Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated throughout interval. Fenite and dark-grey dolomite is devoid of apatite and zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occurs disseminated to locally oriented
Niobates %	0.10	Localized disseminated fine-grained yellowish dark grey fersmite occurs in laminated porphyry

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark brown mottles and calcitization of fenite blocks
Dolomite %	10.00	Dark-grey blocks - secondary dolomite after fenite (?)
Amphibolite %	30.00	Dark green to bluish grey blocks ~ 1 m in length. Matrix is partially calcitized (reacts moderately to HCL)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Only locally present and measurable

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
42.25 - **TO**
61.67

ROCK CODE gcrenfCD = **Min Style** g **Fabric** cren **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Partially decalcified light-grey dolomite carbonatite shows crenulated lamination with minor intervals of massive dolomite carbonatite (up to 1 m) Interval is heavily pitted possibly due to decalcification or the oxidization and removal of Fe-minerals. Apatite occurs moderately laminated throughout interval. Zircon concentrates locally with apatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Rare visible fine-grained light-grey fersmite occur in clusters with apatite and zircon concentrations
Pyrite %	1.00	Oxidized pyrite occurs disseminated throughout interval.

ALTERATION

Type	Value	Comments
Calcite %	2.00	Dark-brown calcitization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	Typically 40 degrees (minor variations to 30 degrees) -steepens in last meter to 80 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	dIfCD	=	Min Style	Fabric	Texture	Litho	Struct									
61.67	- 72.35				d	l	f	CD										
		MAIN COMMENTS	Domiantly laminated dolomite carbonatite with localized crenulations. Interval contains a few segments of rubble and fragmented rock. Apatite occurs oriented to strongly laminated. Zircon occurs disseminated throughout interval. No Nb-mineralization observed.															
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Type	Intens	CA°	Comments															
Laminations %	strong	65	Steep (varier between 50 to 70 degrees)															
		MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>VW</td> <td>7.5</td> <td>0.1</td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon	OX	VW	7.5	0.1	
Zone	HCL	Apatite	Zircon															
OX	VW	7.5	0.1															

FROM	TO	ROCK CODE	nmfCD	=	Min Style	Fabric	Texture	Litho	Struct								
72.35	- 76.71				n	m	f	CD									
		MAIN COMMENTS	75 % of inteval is composed of rubble and weathered rock fragments. Competant fragments of massive dolomite carbonatite is light-grey to beige and inequigranlar. Dolomite carbonatite contains a few remnants of dolomitized phenocrysts (phlogopite or magnetite?). Apatite occurs aggregated. No zircon observed in compenant rock.														
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Fine-grained oxidized pyrite occurs disseminated throughout competent rock.</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	0.50	Fine-grained oxidized pyrite occurs disseminated throughout competent rock.		
Type	Value	Comments															
Pyrite %	0.50	Fine-grained oxidized pyrite occurs disseminated throughout competent rock.															
		ALTERATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Oxidation %</td> <td>75.00</td> <td>Beige dolomite and weathered rubble.</td> </tr> </tbody> </table>							Type	Value	Comments	Oxidation %	75.00	Beige dolomite and weathered rubble.		
Type	Value	Comments															
Oxidation %	75.00	Beige dolomite and weathered rubble.															
		STRUCTURE															
		MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>VW</td> <td>5</td> <td>0</td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon	OX	VW	5	0
Zone	HCL	Apatite	Zircon														
OX	VW	5	0														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
76.71 - **TO**
82.44

ROCK CODE glfCD = **Min Style** g **Fabric** l **Texture** f **Litho** CD **Struct**
MAIN COMMENTS Laminated to weakly crenulated light-grey to medium-brown dolomite carbonatite. Apatite occurs aggregated to weakly laminated. Fine- to medium grained zircon occurs associated with apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained black octahedral grains with pale yellow inclusions occur clustered within apatite laminae- possibly fersmite replacing columbite (or pyrochlore?)
Pyrite %	1.50	Stringers and aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark-brown calcitization

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	20	Network of fractures infilled with secondary Fe-oxidized minerals
Laminations %	weak	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.25

FROM
82.44 - **TO**
87.42

ROCK CODE mfCM = **Min Style** **Fabric** **Texture** **Litho** **Struct**
m f CM

MAIN COMMENTS Highly weathered interval interpreted to be weathered magnetite cumulate based on similarities in colour and density to weathered cumulate units in past holes (where magnetite was still present). Calcitized laminated dolomite carbonatite is recognizable towards end of interval. Interval reacts moderately to HCl in places indicating either presence of primary calcite or calcitization as a precursor to decalcification. Apatite occurs aggregated within weathered rock and laminated within competent dolomite carbonatite. Zircon occurs disseminated and concentrated within vein.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.25	Oxidized pyrite aggregates observed in dolomite carbonatite at end of interval

ALTERATION

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	weak	30	Zircon-rich vein
Laminations %	weak	40	Only recognizable in dolomite carbonatite at end of interval.

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	10	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
87.42 - **TO**
101.06

ROCK CODE gmfCD = **Min Style** g **Fabric** m **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Mottled-massive light-grey to dark-brown dolomite carbonatite that has undergone various degrees of calcitization followed by decalcification. Calcitization gives the interval a brecciated appearance - calcitization concentrates along the clast boundaries. Remnants of dolomitized phenocrysts (phlogopite?) occur locally. Apatite occurs aggregated within massive dolomite carbonatite. Laminated dolomite carbonatite is devoid of apatite. Zircon occurs in clusters associated with apatite aggregates.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.10	Pale-yellow to pale-pink fine-grained possible fersmite and pyrochlore occurs disseminated locally in associated with apatite aggregates.
Pyrite %	1.00	Oxidized pyrite occurs disseminated, as aggregates (up to 1cm), thin stringers and within oxidized veins.

ALTERATION		
Type	Value	Comments
Calcite %	25.00	Dark-brown mottles of calcitization
Oxidation %	50.00	Beige to pink dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	70	Vein of oxidized pyrite

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	7.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
101.06 - **TO**
104.77

ROCK CODE gmiCD = **Min Style** g **Fabric** m **Texture** i **Litho** CD **Struct**
MAIN COMMENTS Massive-mottled inequigranular light-grey to medium-brown dolomite carbonatite. Apatite occurs aggregated to weakly laminated. No zircons were observed in interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible fine-grained columbite with magnetite phenocrysts
Magnetite %	0.50	Minor medium-grained magnetite phenocrysts occur locally
Pyrite %	0.75	Oxidized pyrite aggregates up to 1 cm in diameter; fine-grained needles ~ 3 mm long occurs locally

ALTERATION

Type	Value	Comments
Calcite %	30.00	Medium-brown calcitization

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0

FROM 104.77 - **TO** 114.94

ROCK CODE gICD = **Min Style** g **Fabric** I **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Dominantly altered light-grey to medium-brown fine- to medim-grained inequigranular dolomite carbonatite with fenite blocks (50 to 100 cm) and black irregular aggregates up to 10 cm thick. Black aggregate are interpreted as altered magnetite-phlogopite aggregates based on medium- to coarse-grained texture, associated with zircon and apatite and hexagonal crystal shape of phlogopite. Recognizable altered phlogopite phenocrysts concentrate locally. Apatite occurs aggregated to weakly laminated. Fine- to medium-grained Zircon occurs concentrated with apatite and black aggregates and with altered phlogopite phenocrysts.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized aggregates and stringers of pyrite
Niobates %	0.75	Likely columbite with altered magnetite aggregates

ALTERATION

Type	Value	Comments
Calcite %	2.50	Minor localized reaction to HCl
Oxidation %	70.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	55	Locally observable

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
114.94 - **TO**
117.37

ROCK CODE

dcrenfCD

=

Min Style
d

Fabric
cren

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Locally calcitized to decalcified laminated dolomite carbonatite with crenulations. Fine-grained altered phlogopite concentrate locally. Apatite occurs as weak laminations. Zircon occurs as small clusters.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite aggregates up to 1 cm.
Niobates %	0.50	Pale-yellow to dark grey fine-grained likely fersmite occurs locally disseminated

ALTERATION

Type	Value	Comments
Oxidation %	80.00	Beige to orange dolomite discolouration
Calcite %	10.00	Dark brown mottling

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
117.37 - **TO**
119.46

ROCK CODE nmpCD = **Min Style** n **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS White- to dark-grey dolomite carbonatite with clusters of altered phlogopite phenocrysts. Coarse-grained phlogopite has been dolomitized to various extents. Last meter of interval has steep crenulated lamination. Apatite occurs as uncommon aggregates. Zircon concentrates within crenulated beige- to dark-grey dolomite carbonatite in last meter of interval. No Nb-mineralization observed.

MINERALIZATION

Type	Value	Comments
Pyrite %		No pyrite observed?
Niobates %	0.10	Rare pale-yellow fine grain: possible pyrochlore or fersmite

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	80	Only observed in last meter: varies between 70 to 85 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	2.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 119.46	-	TO 124.71	ROCK CODE dmpCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Porphyritic to locally inequigranular dolomite carbonatite. Phenocrysts consist of fine- to medium-grained altered phlogopite. Grain size of phlogopite decreases downhole. Apatite occurs dispersed to aggregate. Zircon occurs disseminated.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.10	Pale-yellow to light-grey fine grains: possible fersmite (?)			
				Pyrite %	1.00	Oxidized pyrite occurs disseminated to aggregated			
			ALTERATION	Type	Value	Comments			
				Oxidation %	75.00	Beige to pink dolomite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	12.5	0.1		

FROM 124.71	-	TO 130.54	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Fine- to medium-grained inequigranular to locally porphyritic light-grey to pink dolomite carbonatite. Locally phenocrysts consist of fine-grained altered phlogopite. Altered phlogopite also form massive localized lens ~ 2 cm thick. Apatite occurs aggregated. Zircon occurs in clusters associated with apatite aggregates. No Nb-mineralization observed.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Oxidized pyrite occurs disseminated and as aggregates up to 1 cm			
			ALTERATION	Type	Value	Comments			
				Silica %	0.50	Minor silicification of matrix			
				Oxidation %	50.00	Beige to pink dolomite carbonatite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
					VW	10	0.5		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
130.54 - **TO**
141.04

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Massive to weakly laminated porphyritic light-grey to beige dolomite carbonatite with localized fine- to medium-grained inequigranular texture. Intervals has been partially decalcified and oxidized. Phenocrysts consist of black altered phlogopite dolomitized to various extents; and dark grey medium-grained altered magnetite (?). Altered magnetite (?) occurs as aggregated clumps up to ~3 cm thick. Minor chloritization of phlogopite occurs towards bottom of interval (green colour). Apatite occurs weakly to moderately laminated. Zircon occurs associated with apatite laminae.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.25	Fine-grained pale-yellow to dark grey grains: potential fersmite (?)
Pyrite %	2.00	Oxidized pyrite occurs disseminated throughout interval

ALTERATION		
Type	Value	Comments
Calcite %	5.00	Localized dark-brown mottling: reacts strongly to HCl
Oxidation %	65.00	Beige to pink dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 20 and 40 degrees

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	5	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
141.04 - **TO**
143.99

ROCK CODE

dmiCD

=

Min Style
d

Fabric
m

Texture
i

Litho
CD

Struct
MAIN COMMENTS

Low recovery from interval: significant portion consists of rubble (decalcification?). Compentant rock is dominantly fine- to medium-grained inequigranular dolomite carbonatite with a small interval (~30 cm) of fine-grained equigranular texture. Apatite occurs weakly laminated. Minor chloritization of matrix and altered phlogopites is observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occurs disseminated throughout interval: some pyrite has needle-like shape (~ 3 mm long)
Niobates %	0.50	Pale yellow fine-grained: potential secondary fersmite (?) - occurs disseminated locally

ALTERATION

Type	Value	Comments
Calcite %	30.00	Dark-brown calcitization (moderate reaction to HCl)
Oxidation %	40.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	30	Varies between 20 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
143.99 - **TO**
148.18

ROCK CODE dmpCD = **Min Style** d **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige porphyritic to locally inequigranular fine- to medium-grained dolomite carbonatite. Phenocrysts consist of black altered phlogopite and dark-grey dolomitized magnetite (?). Apatite occurs aggregated to weakly laminated. No visible Nb-mineralization observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Disseminated to aggregated oxidized pyrite; abundant needles of oxidized pyrite (?) occurs toward end of interval
Niobates %	0.25	Pale-pink to pale-yellow fine- to medium-grained: potential fersmites?

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Pink dolomite
Silica %	1.00	Minor silicification of matrix

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Locally present

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
148.18	- 152.44	dliCD	d	l	i	CD		
		MAIN COMMENTS	Dominantly inequigranular to locally porphyritic light grey to beige dolomite carbonatite. Phenocrysts consist of black altered phlogopite Apatite occurs aggregated to weakly laminated. Zircon occurs disseminated.					
		MINERALIZATION	Type	Value	Comments			
			Niobates %	0.10	Localized fine-grained pale-yellow grains towards top of interval: likely fersmite			
			Pyrite %	0.75	Disseminated fine-grained oxidized pyrite			
		ALTERATION	Type	Value	Comments			
			Silica %	1.00	Minor silicification of matrix			
			Oxidation %	80.00	Beige to pink dolomite			
		STRUCTURE	Type	Intens	CA°	Comments		
			Veining %	moderate	85	Apatite vein		
			Laminations %	moderate	35	Varies between 30 and 40 degrees		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	VW	7.5	0.1		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-020

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454459.25	6256587.55	1644.08	20.00	-50.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	215.24		215.24		Central 2
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	3.66	3.66
NQ	3.66	215.24	215.24

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
23.16	18.70	-55.00	14.1	5556	22.8	Reflex EZ-shot
84.12	19.00	-54.80	9.4	5570	329.9	Reflex EZ-shot
114.60	16.80	-54.70	9.5	5766	315.6	Reflex EZ-shot
145.08	15.30	-54.80	7.5	5802	231.4	Reflex EZ-shot
206.04	16.80	-54.80	6.3	5732	84.4	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	11/Aug/2010	
Drill Contractor		08/Aug/2010	10/Aug/2010

SUMMARY

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GEOLOGY LEGEND

 Hole ID 2010-020

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 3.66	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				

FROM 3.66	-	TO 18.34	ROCK CODE	glfCD	=	Min Style g	Fabric l	Texture f	Litho CD	Struct	
			MAIN COMMENTS	Large portions of interval are composed of rubble and fragmented rocks. Interval is composed of light-grey to oxidized-beige laminated dolomite carbonatite. Minor intervals (~10 cm) of inequigranular dolomite carbonatite occur irregularly. Apatite occurs as strong laminations. Zircon occurs disseminated throughout interval.							
			MINERALIZATION	Type	Value	Comments					
				Niobates %	0.10	Minor potential fesmite: fine-grained, dark grey, no red streak, concentrate in thin laminae (~2-3 cm).					
				Pyrite %	1.50	Fine to medium-grained oxidized pyrite concentrates in oxidized laminae					
			ALTERATION	Type	Value	Comments					
				Oxidation %	50.00	Beige dolomite					
				Calcite %	1.50	Uncommon dark-brown mottling reacts to HCl					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	strong	40					
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	VW	5	0.1				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
18.34 - **TO**
31.05

ROCK CODE

bmcCDz

=

Min Style
b

Fabric
m

Texture
c

Litho
CD

Struct
z

MAIN COMMENTS

Small laminae of dark-grey dolomite carbonatite (concentrated zircon) Complex faulted blocks occur at ~ 30 cm. Faults dip at ~60 degrees and two fault strikes appear to be approximately orthogonal to each other. Apatite occurs moderately laminated. Zircon occurs disseminated throughout but concentrates locally within apatite-pyrite laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.75	Fine-grained oxidized pyrite occurs concentrated within laminae.
Niobates %	0.10	Potential fersmite: dark-grey, fine-grained, no red streak occur in oxidized pyrite-apatite-zircon-rich laminae

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige oxidation concentrates around pyrite-rich laminae
Calcite %	45.00	Dark-brown calcitization of dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	Varies between 10 and 35

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
31.05 - **TO**
40.86

ROCK CODE nICD = **Min Style** n **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Calcitized to decalcified dolomite carbonatite with interval that appears to be weathered magnetite cumulate at ~35 m. Cumulate consists of a ~ 5 cm diameter "nugget" of massive magnetite void of apatite or zircon. A remnants of altered phlogopite are observed in isolated laminae in calcitized dolomite carbonatite. Apatite occurs moderately to strongly laminated. Zircon occurs concentrated in apatite laminae. No obvious Nb-mineralization observed.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.50	Oxidized stringers and thin laminae (< 1 cm)

ALTERATION		
Type	Value	Comments
Oxidation %	35.00	Beige dolomite concentrates around pyrite stringers and laminae
Calcite %	55.00	Medium- to dark-brown dolomite (moderate to strong calcitization)

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	7.5	0.1	

FROM
40.86 - **TO**
48.92

ROCK CODE glcCCCD = **Min Style** g **Fabric** l **Texture** c **Litho** CCCD **Struct**

MAIN COMMENTS 50 % of interval consists of rubble. Competant rock is dominantly composed of calcitized light-grey to dark-brown dolomite carbonatite. Last 1 m of interval consists of interlaminated dolomite and magnetite-bearing calcite carbonatite. A small (< 5 cm) magnetite-apatite cumulate unit occurs at the end of the interal (~ 48.85 m). Some of the weathered rubble is magnetic (weathered magnetite cumulate?). Apatite occurs weakly to moderately laminated within dolomite and calcite carbonatites and aggregated with magnetite. Zircon occurs locally concentrated within dark-grey lamiane (dolomite and apatite?) and within magnetite cumulate. Calcite carbonatite is devoid of zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Oxidized oyrite: fine-grained disseminations to thin stringers.
Niobates %	0.75	Fine-grained columbite likely occurs with magnetite in cumulate, calcite carbonatite and in rubble.
Magnetite %	5.00	Fine- to medium grained disseminated in calcite carbonatite to aggregated in small cumulate unit.

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	Observed in dolomite and calcite carbonatite: varies between 20 and 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	M	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
48.92 - **TO**
53.54

ROCK CODE nlcCD = **Min Style** n **Fabric** l **Texture** c **Litho** CD **Struct**
MAIN COMMENTS Weathered light-grey laminated to locally massive dolomite carbonatite- various degrees of calcitization, oxidation and decalcification. Apatite occurs moderately laminated. Zircon occurs locally concentrated within apatite laminae No Nb-mineralization observed..

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occurs as small (< 2 cm long) stringers and as discordant veins

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite
Calcite %	40.00	Dark brown calcitization of dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Highly variable between 20 and 60 degrees
Veining %	weak	70	1 cm thick dolomite veins dip at 70 degrees - smaller irregular veins have no preferred orientation; oxidized pyrite veins occur at 50 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
53.54 - **TO**
54.57

ROCK CODE gmfCM = **Min Style** g **Fabric** m **Texture** f **Litho** CM **Struct**
MAIN COMMENTS Highly weathered interval composed of magnetite-apatite cumulate. Unit is principally composed of apatite, magnetite, phloopite and Fe-oxidization products. No calcite or dolomite is present.

MINERALIZATION

Type	Value	Comments
Niobates %	2.50	Likely black columbite occurs with magnetite.
Magnetite %	45.00	Fine- to medium-grained magnetite aggregates with apatite.
Pyrite %		Not observed but likely present (highly oxidized)

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Orange hematite after magnetite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	40	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
54.57 - **TO**
66.58

ROCK CODE

dlfgCD

=

Min Style
d

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Interval is composed of fine-grained to locally porphyritic light-grey to beige dolomite carbonatite. Interval has been calcitized to decalcified to various degrees. Localized phenocrysts consists of dark-rey dolomitized phlogopite or magnetite and black chloritized phlogoptite. Greenish-blue clasts (~ 5 cm diameter) occur ~ 63 m (fenite xenoliths?). occur Apatite occurs oriented (in areas of lower concentration) to moderately laminated. Zircon occurs disseminated throughout interval. A higher concentration of apatite and zircon occurs near greenish blue xenolith.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occur concentrated in oxidized laminae
Magnetite %	0.10	Rare medium-grained magnetite grain in dolomite carbonatite
Niobates %	0.50	Possible fersmite after pyrochlore of pyrochlore: fine-grained yellowish grey to black grains occur near fenite (?) clasts; fine-grained light- to medium-grey octahedral grains occur with phenocrysts

ALTERATION

Type	Value	Comments
Calcite %	25.00	Dark-brown mottling of dolomite (calcitization)
Amphibolite %	2.50	Possible fenite occurs at ~ 63 m - does not have typical ovoid texture of fenites though.
Oxidation %	75.00	Beige dolomite concentrates around oxidized pyrite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	Steeper (45 degrees) towards top of interval and decreases to 5 degrees at end of interval (25 is the most consistant angle).

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
66.58 - **TO**
70.21

ROCK CODE blpCCCD = **Min Style** b **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Interval is composed of magnetite-apatite cumulate interlaminated with calcite and dolomite carbonatite. Cumulate composed around 50 % of interval. Calcite is the dominate carbonatite phase. Greenish-blue clasts similar to those observed in 54.57-66.58 m interval occur irregularly in interval. The clasts are non-magnetic and contain a high proportion o phlogopite (altered magnetie cumulate?). A ~20 cm interval of medium-grey dolomite carbonatite occurs at the end of the interval with abundant phenocrysts of magnetite and phloopite. Apatite occurs strongly laminated in dolomite and calcite carbonatite and aggregated with magnetite in cumulate. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Thin laminae of fresh to oxidized pyrite in calcite carbonatite
Niobates %	1.50	Pale-pink pyrochlore and yellowish-black fersmite in medium-grey dolomite-carbonatite; likely black columbite occurs with magnetite in cumulate and calcite carbonatite
Magnetite %	35.00	Medium-grained magnetite occurs aggregated with apatite and occurs disseminated in calcite-carbonatite and in medium-grey dolomite carbonatite

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	~25 degrees towards top of interval; steepens towards bottom of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VS		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
70.21 - **TO**
74.76

ROCK CODE dlpAMX = **Min Style** d **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Large clasts of fenite (1 to 2 m) occur within laminated calcite and dolomite carbonatite. Dolomite carbonatite is light-grey to pink with phenocrysts of dolomitized phlogopite. Apatite occurs laminated within carbonatite. Zircon occurs disseminated throughout carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Pale-yellow fine-grained fersmite in calcite and dolomite carbonatites
Pyrite %	0.50	Fine-grained fresh pyrite in calcite carbonatite and fenite clasts; fine-grained oxidized pyrite occurs in dolomite carbonatite in association with phlogopite

ALTERATION

Type	Value	Comments
Amphibolite %	60.00	Blue to green fenite blocks
Oxidation %	40.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	15	Varies between 10 and 20 degrees - only visible in carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.1

FROM
74.76 - **TO**
79.40

ROCK CODE dlpCCCD = **Min Style** d **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite-apatite cumulate occurs as laminae ~ 75 cm thick in laminated calcite carbonatite. Magnetite-apatite cumulate contains interstitial calcite. Dolomite carbonatite only occurs in the top 15 cm of interval. Magnetite and apatite occur as strong laminations in calcite carbonatite. Calcite carbonatite contains high abundance of phlogopite, magnetite, and zircon. Magnetite-apatite cumulate is devoid of zircon (?). Interval contains a few greenish-blue clasts adjacent to magnetite cumulate (altered magnetite-apatite cumulate?).

MINERALIZATION

Type	Value	Comments
Magnetite %	15.00	Medium-grained magnetite occurs aggregated with apatite; fine-grained occur concentrated in laminae of calcite carbonatite
Pyrite %		None observed (?)
Niobates %	1.00	Fine-grained pale-pink pyrochlore in calcite carbonatite and likely black columbite aggregated with magnetite.

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	35	Only visible in carbonatite: decreases from 40 to 25 degrees downhole.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	25	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
79.40 - **TO**
83.57

ROCK CODE

blpCD

=

Min Style
b

Fabric
l

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Weakly laminated dark-grey to beige dolomite carbonatite with interlamination of massive carbonatite devoid of phenocrysts and porphyritic dolomite carbonatite. Porphyritic laminae are enriched in apatite and zircon. Phenocrysts consist of dark grey altered phlogopite and possible magnetite. A single clump of porphyritic dolomite contains magnetite at ~ 82.25 m (poor lamination).

MINERALIZATION

Type	Value	Comments
Magnetite %	0.50	Minor fine- to medium grained magnetite occurs in single porphyry laminae
Pyrite %	0.50	Aggregated to stringers up to 1 cm:oxidized pyrite
Niobates %	0.75	Fine-grained, pale-yellow to grey fersmite occurs in porphyry

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	25	Generally 25 but varies up to 75 degrees. Observed to steepen from 40 to 75 degrees within 10 centimetres.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
83.57 - **TO**
90.73

ROCK CODE gICD = **Min Style** g **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Magnetite-bearing laminated dolomite carbonatite. Magnetite and apatite are mostly concentrated into 1 to 1.5 m intervals (dolomitized magnetite-apatite cumulates?). Calcite carbonatite occurs localized. Apatite occurs laminated within dolomite carbonatite. Magnetite and altered phloopite occur as phenocrysts in laminated dolomite carbonatite. Fresh phloopite occurs in uncommon calcite carbonatite. Zircon occurs disseminated in laminated dolomite carbonatite. Magnetite-apatite unit is devoid of zircon (?).

MINERALIZATION

Type	Value	Comments
Magnetite %	10.00	Fine- to medium grained occur concentrated with apatite and disseminated within dolomite carbonatite.
Pyrite %	1.00	Aggregates of fresh pyrite occur disseminated throughout interval. Fine-grained oxidized pyrite occur within thin laminae.
Niobates %	0.75	Black columbite likely occurs associated with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Beige to pink dolomite concentrates around thin laminae enriched in pyrite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 20 and 40 degrees but most consistently ~30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
90.73 - **TO**
94.31

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Interval is composed of interlaminated fine-grained equigranular dolomite carbonatite and porphyritic dolomite carbonatite. Porphyritic dolomite carbonatite is composed of phenocrysts of altered phlogopite and dolomitized magnetite with abundant apatite and zircon. CAUTION: BOX DROPPED ON MTN (92.43-96.42 m)

MINERALIZATION

Type	Value	Comments
Pyrite %	0.75	Fine-grained oxidized pyrite occurs in fine-grained and porphyritic dolomite; occurs locally disseminated.
Niobates %	0.50	Fine-grained, pale-yellow to grey - potential fersmite in porphyry laminae.

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige to pink dolomite around porphyry and pyrite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	45	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
94.31 - **TO**
96.42

ROCK CODE

dmpCD

=

Min Style
d

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Massive porphyritic dolomite carbonatite with ~ 50 cm dark grey aphyric dolomite carbonatite. Last 20 cm of interval consists of rubble. Phenocrysts of altered phloopite occur unevenly distributed throughout dolomite carboantite Apatite occurs aggregated. Zircon occur disseminated and veined. CAUTION: BOX DROPPED ON MTN (92.43-96.42 m)

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Yellowish to dark grey "grainy" fersmite (?) occurs disseminated throuhout
Pyrite %	1.00	Disseminated fine-grained oxidized pyrite

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	40	Fracture infilled with dominatly zircon (visible with UV) in dark-grey dolomite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
96.42 - **TO**
104.82

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated light-grey to pink porphyritic to locally inequianular dolomite carbonatite with minor intervals up to 1 m of aphyric dolomite carbonatite. Phenocrysts consist of dolomitized magnetite, commonly rimmed by fresh pyrite. Apatite occurs moderately to strongly laminated. Zircon occurs disseminated but occurs more concentrated near top of interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.75	Fine-grained oxidized pyrite occurs disseminated and as stringers (up to 1 cm long); fresh pyrite rims phenocrysts
Niobates %	0.10	Potential fersmite - dark-grey, fine-grained, colorless streak

ALTERATION

Type	Value	Comments
Oxidation %	45.00	Beie to pink dolomite concentrates around pyrite aggregates

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Generally low but doe locally vary up to 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
104.82 - **TO**
111.08

ROCK CODE dlpAMX = **Min Style** d **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Fenite blocks (50 to 100 cm) within laminated mixed calcite and dolomite carbonatite. Calcite carbonatite is white to pink in colour with abundant disseminated magnetite and zircon. Dolomite carbonatite is light-grey to beige with abundant fresh pyrite and phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite (?). Apatite occurs moderately laminated to rims around fenite clasts. Aptite occurs much greater abundance in calcite carbonatite than dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Pale-pink and pale- yellow to grey, fine-grained: possibly fersmite or pyrochlore in calcite carbonatite
Pyrite %	1.00	Fresh pyrite in dolomite carbonatite
Magnetite %	2.50	Medium-grained disseminations in calcite carbonatite.

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige to pink calcite and dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
111.08 - **TO**
116.57

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated light-grey to beige dolomite carbonatite with phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite (?). Dark-grey phenocrysts occur commonly associated with pyrite which commonly forms rims around phenocrysts. Apatite occurs moderately laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Pinkish grey, fine-grained: possibly fersmite or pyrochlore
Pyrite %	2.00	Fresh pyrite occurs associated with phenocrysts, often forming rims

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 15 and 60 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

FROM 116.57 - **TO** 129.60

ROCK CODE dlpAMX = **Min Style** d **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Fenite blocks (~1 to 2 m) within interlaminated calcite and dolomite carbonatite. Calcite carbonatite is white to pink in colour contained fine-grained disseminated magnetite and phlogopite. Some dolomite carbonatite has ovoid texture (similar to fenites) and may represent dolomitization of fenite blocks. Apatite occurs laminated within laminated carbonatite and aggregated within "dolomitized fenite". Fenite is void of apatite. Zircon occurs disseminated within laminated carbonatite.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.25	Pale-pink, fine-grained: Likely pyrochlore in calcite carbonatite; yellowish-grey, fine-grained in dolomite carbonatite: possibly fersmite
Pyrite %	0.50	Fresh pyrite occurs aggregate with altered phlogopite and dark-grey phenocrysts in dolomite carbonatite

ALTERATION		
Type	Value	Comments
Amphibolite %	35.00	Green- to blue fenite blocks
Oxidation %	10.00	Pink and beige carbonatite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	35	Only observed in carbonatite: 30 to 40 degrees

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
129.60 - **TO**
144.52

ROCK CODE

dmfgCD

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Min Style
d

Fabric
m

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Dominantly fine-grained equigranular to locally porphyritic dolomite carbonatite with a small interval (~15 cm) of magnetite-apatite cumulate (void of zircon). Phenocrysts consist of altered phlogopite and possibly dolomitized magnetite (?). Apatite occurs aggregated to moderately laminated. Zircon occurs locally disseminated with porphyry.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Pyrite occurs concentrated within porphyry often forming aggregates with and rims on phenocrysts
Magnetite %	2.50	Medium-grained magnetite occurs aggregated with apatite.
Niobates %	0.25	Fine-grained pale-yellow likely fersmite occurs disseminated with porphyry; Black columbite likely occurs with magnetite cumulate

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Only locally present; shows minor variation to 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
144.52 - **TO**
146.77

ROCK CODE

gmpAMX

=

Min Style
g

Fabric
m

Texture
p

Litho
AMX

Struct
MAIN COMMENTS

Large block of fenite occurs within porphyritic dolomite carbonatite. Phenocrysts consist of black altered phlogopite. Top of the interval has a brecciated appearance with dark-grey clasts of dolomite carbonatite floating in a matrix of dark-grey dolomite carbonatite. Light-grey carbonatite has a high concentration of apatite aggregates. No zircon observed.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Pale-pink to yellow fine grained fersmite (after pyrochlore?) occurs near fenite contacts
Pyrite %	1.00	Fresh pyrite occurs aggregated

ALTERATION

Type	Value	Comments
Amphibolite %	70.00	

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
146.77 - **TO**
157.26

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Interlamination between dominant fine-grained aphyric light-grey to beige dolomite carbonatite and thin laminae of dolomite carbonatite. Greenish-blue clasts occur at ~154 m (ferrite or altered magnetite? Resembles clasts at ~63 m)

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite forms aggregates and stringers within aphyric dolomite carbonatite:
Niobates %	0.25	Black fine-grained hexagonal to octahedral (?) columbite occurs within porphyry laminae; paler yellower grains with similar octahedral to hexagonal shape occur with columbite - likely fersmite

ALTERATION

Type	Value	Comments
Oxidation %	75.00	Beige to pink dolomite - mostly affects aphyric dolomite carbonatite
Amphibolite %	2.50	Possible ferrite clasts, greenish blue, ~ 4 cm diameter

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	65	varies between 60 and 70 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
157.26 - **TO**
168.09

ROCK CODE blpAMX = **Min Style** b **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Interval is dominantly composed of fenite. Dolomite carbonatite is the dominant carbonate phase with intervals of aphyric and porphyry. Aphyric calcite carbonatite forms only small (< 10 cm) laminae "crosscutting" fenite. Phenocrysts in dolomite carbonatite consist of black to dark-grey altered phlogopite. Apatite occurs laminated within dolomite carbonatite (~20 vol. %). Zircon occurs concentrated in high abundance (~ 1 vol. %) in porphyritic dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Locally concentrated oxidized pyrite - occurs disseminated and as stringers
Niobates %	0.10	Pale-yellow to dark grey fersmite grains occur in dolomite carbonatite with high abundance of phenocrysts

ALTERATION

Type	Value	Comments
Amphibolite %	70.00	Green to blue fenite blocks with abundant phlogopite
Oxidation %	10.00	Beige dolomite; concentrated around pyrite stringers

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	Only visible in carbonatite; varies between 25 and 35 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	VW	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
168.09 - **TO**
184.18

ROCK CODE nlpCD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Weakly laminated light-grey to beige dolomite carbonatite porphyritic to fine-grained equigranular with minor inequigranular interval. Laminae and clots of dark-grey dolomite carbonatite increases down the interval. Phenocrysts consist of fine-grained black altered phlogopite commonly associated with oxidized pyrite. Apatite occurs weakly to moderately laminated. Zircon occurs concentrated with porphyry. No Nb-mineralization observed.

MINERALIZATION		Type	Value	Comments
	Pyrite %		1.75	Fine-grained disseminations to aggregates up to 1 cm - oxidized pyrite

ALTERATION		Type	Value	Comments
	Amphibolite %		0.50	Small greenish blue clast (fenite or altered magnetite?)
	Calcite %		5.00	Dark-brown mottlin (calcitization)
	Oxidation %		80.00	Beige dolomite
	Silica %		2.50	Minor silicification of matrix

STRUCTURE		Type	Intens	CA°	Comments
	Laminations %		weak	60	Varies between 50 and 70 degrees

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	OX		W	2.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
184.18 - **TO**
187.80

ROCK CODE

gICM

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Min Style
g

Fabric
I

Texture
i

Litho
CM

Struct
MAIN COMMENTS

Dominantly magnetite-apatite cumulate with laminae (~7.5 cm) of light-grey to beige dolomite carbonatite. Dolomite carbonatite is void of magnetite but contains thin laminae of pyrite. Top 1 m of interval has been highly weathered (decalcified and oxidized). Towards the middle of the interval, magnetite-apatite cumulate and dolomite carbonatite occur as thin (< 3 cm) interlamination. Apatite occurs laminated within dolomite carbonatite (~ 20 vol %). Zircon concentrates within magnetite-apatite cumulate.

MINERALIZATION

Type	Value	Comments
Magnetite %	45.00	Fine- to medium-grained magnetite occurs aggregated with apatite
Pyrite %	0.50	Thin laminations of fresh to oxidized pyrite occurs within dolomite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Beige dolomite and orange hematite on magnetite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Not always visible and very irregular (swirly) boundaries

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	30	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
187.80 - **TO**
200.00

ROCK CODE

ICD

=

Min Style
Fabric
Texture
Litho
Struct

I

p

CD

MAIN COMMENTS

Dominantly laminated porphyritic to inequigranular dolomite carbonatite. Intervals of inequigranular dolomite carbonatite are massive. Phenocrysts are comprised of black altered phlogopite and dark-grey dolomitized magnetite (?). A fenite block (~20 cm) occurs at ~194 m. Dolomitized fenite appears to occur right after fenite with swirly texture (red to brown in colour). Apatite occurs aggregated throughout interval, for the most part with phenocrysts and inequigranular dolomite. Fine- to medium-grained zircon occurs disseminated throughout interval. Very fine-grained disseminations of zircon concentrate in apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Pale-yellow to dark-grey fine-grained fersmite in porphyry
Pyrite %	1.00	Fine-grained pyrite aggregates occurs commonly with phenocrysts; commonly form aggregates with and rims on dark grey phenocrysts (dolomitized magnetite?)

ALTERATION

Type	Value	Comments
Oxidation %	35.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	50	
Veining %	moderate	50	Dolomite vein orthogonal to lamination

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nlfCD	=	Min Style	Fabric	Texture	Litho	Struct
200.00	- 215.24				n	l	f	CD	
		MAIN COMMENTS	Decalcification of dolomite carbonatite decreases downhole but calcitization increases. Fine-grained altered phlogopites occur towards the top of interval. Apatite occurs weakly laminated. Zircon occurs disseminated throughout interval. No Nb-mineralization observed.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	1.50	Fine-grained oxidized pyrite occurs disseminated throughout interval.				
		ALTERATION	Type	Value	Comments				
			Oxidation %	80.00	Beige to pink dolomite				
			Calcite %	25.00	Dark-brown calcitization				
		STRUCTURE	Type	Intens	CA°	Comments			
			Laminations %	moderate	25	Varies between 20 and 35 degrees			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			OX	W	7.5	0.1			

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-021

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454271.13	6256449.48	1585.70	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	149.39		149.39		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	4.57	4.57
NQ	4.57	149.39	149.39

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
15.24	27.60	-56.00	13.4	5050	50.4	Reflex EZ-shot
137.16	26.30	-57.70	15.1	5921	356.0	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By		12/Aug/2010	
Drill Contractor		08/Aug/2010	10/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-021

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

Log by

Date

Hole ID

FROM	TO	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho	Struct	
0.00	-							CASE		
		MAIN COMMENTS	No rock.							
		MINERALIZATION								
		ALTERATION								
		STRUCTURE								
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>			

FROM
4.57 - **TO**
9.27

ROCK CODE gmpCM = **Min Style** g **Fabric** m **Texture** p **Litho** CM **Struct**

MAIN COMMENTS Magnetite-apatite cumulate and magneite-phyric dolomite carbonatite Top meter of interval consists of rubble composed of magnetite-bearing dolomite. Interval from ~ 6.25 - 7.5 m consists of magnetite-phyric dolomite carbonatite The remainder of the interval is composed of fine-grained magnetite aggregated with apatite with thin laminae of light- to medium-grey dolomite carbonatite. The dark-grey fine-grained magnetite-apatite unit becomes progressively less magnetic in the last 30 cm of the interval but appears essentially the same; apatite content may increase (?). Medium- to coarse-grained phlogopite is common towards the end of ther interval. Apatite concentrates with fine-grained magnetite and is moderately laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	2.00	Black columbite likely occurs with magnetite
Magnetite %	45.00	Medium-grained magnetite disseminated in dolomite; fine-grained magnetite aggregated with apatite

ALTERATION

Type	Value	Comments
Calcite %	2.50	Dark brown - minor calcitization of dolomite
Oxidation %	10.00	pink dolomite & orange hematite (?) around magnetit

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	45	Dolomite veins occur at 40, 50 and 75 degrees
Laminations %	very weak	30	Locally observed

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
9.27 - **TO**
11.27

ROCK CODE glfgCD = **Min Style** g **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Light-grey to pink laminated dolomite carbonatite with a small interval (< 5 cm) of magnetite-apatite cumulate. Two other intervals appear to possibly represent altered magnetite-apatite cumulate. One at the beginning of the interval is dark grey (~10 cm) and rich in laminated apatite - may be dolomitized magnetite-apatite similar to 4.57-9.27 interval. The last 20 cm of the interval is composed of dark brown weathered product rich in phlogopite and magnetic in places - likely represents weathered cumulate phase.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Fine-grained disseminated oxidized pyrite and stringers following lamination
Magnetite %	1.50	Occurs in small cumulate with apatite and in weathered interval at end of interval (last 20 cm)

ALTERATION		
Type	Value	Comments
Oxidation %	50.00	Beige to pink dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	20	Generally around 20, varies up to 40 degrees also cross laminations occur

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	12.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
11.27 - **TO**
15.43

ROCK CODE nlpCD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite with localized phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite (?). Phenocrysts appear to be partially dolomitized (dolomite inclusions). Apatite occurs weakly to moderately laminated. Zircon occurs disseminated throughout interval. No Nb-mineralization observed.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Fine-grained fresh pyrite occurs disseminated throughout interval; oxidized pyrite occurs as stringers up to 3 cm long

ALTERATION		
Type	Value	Comments
Oxidation %	45.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	10	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
15.43 - **TO**
22.16

ROCK CODE glpCD = **Min Style** g **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige laminated dolomite carbonatite with ~1 m long intervals of magnetite-apatite cumulate. A highly weathered interval of magnetite-apatite cumulate occurs at ~ 12 m. Phenocrysts consist fine- to medium-grained black altered phlogopite and dark grey dolomitized magnetite (?). Apatite occurs moderately laminated in dolomite carbonatite. Zircon occurs concentrated in magnetite-apatite cumulate.

MINERALIZATION		Type	Value	Comments
	Niobates %		1.00	Black columbite likely occurs with magnetite
	Magnetite %		20.00	Aggregated with apatite
	Pyrite %		1.00	Fine-grained oxidized pyrite occurs disseminated throughout intervals. Cores are commonly fresh.

ALTERATION		Type	Value	Comments
	Calcite %		5.00	Dark-brown calcitization concentrates around magnetite-apatite cumulate.
	Oxidation %		50.00	Beige dolomite

STRUCTURE		Type	Intens	CA°	Comments
	Laminations %		moderate	10	

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	OX		W		0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
22.16 - **TO**
36.83

ROCK CODE

gmfCD

=

Min Style
g

Fabric
m

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Light-grey to dark-brown dolomite carbonatite with dominantly swirly and ovoid texture. Weakly laminated texture occurs locally. Ovoid texture may be indicative of dolomitized fenite (?). A minor interval of calcite carbonatite occurs at ~ 27 m. Apatite occurs aggregated to concentric in ovoid textured dolomite carbonatite and as strong laminations in laminated dolomite carbonatite. Zircon occurs in disseminated in higher concentrations in apatite aggregates of ovoid texture dolomite carbonatite (dominantly near top of interval..

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained black hexagonal to octahedral columbite (?) observed in ovoid textured dolomite at top of interval. Columbite also likely occurs with magnetite.
Pyrite %	1.50	Oxidized pyrite occurs as disseminations, stringers and unoriented aggregates
Magnetite %	1.00	Small (<5 cm) aggregates with apatite occur irregularly throughout interval.

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	Localized texture is shallow towards top of interval (~10 degrees) but steepens to 40 degrees towards bottom of hole

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
36.83 - **TO**
51.53

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Weakly laminated to crenulated light-grey to dark-brown dolomite carbonatite. Lamination becomes weaker towards end of interval. Porphyry are confined to thin laminae (generally < 3 cm) with phenocrysts of dark-grey dolomitized phlogopite and/or magnetite (lots of inclusions of dolomite grains). Apatite occurs weakly laminated throughout interval. Zircon occurs concentrated within localized apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Fine-grained dark-grey to grainy pale-yellow fersmite (after columbite?) occur within thin apatite-zircon-rich laminae.
Pyrite %	1.50	Fine- to medium grained oxidized pyrite occur concentrated within laminae.

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite - generally surrounds oxidized pyrite
Calcite %	12.50	Dark-brown calcitization generally follows lamination

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	
Veining %	strong	70	Calcite veins locally concentrated around 49.25 m

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
51.53 - **TO**
54.38

ROCK CODE bIfCD = **Min Style** b **Fabric** I **Texture** f **Litho** CD **Struct**

MAIN COMMENTS Highly oxidized and decalcified dolomite carbonatite with short intervals (~5 - 10 cm) of magnetite-apatite cumulate. Apatite occurs laminated within less altered dolomite carbonatite (not visible in highly altered dolomite carbonatite). Zircon occurs concentrated in magnetite-apatite cumulate and in small concentrations in dark-grey apatite laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Black columbite likely occurs with magnetite; possible columbite occurs within thin porphyry laminae
Magnetite %	10.00	Fine-grained magnetite occurs aggregated with apatite
Pyrite %	1.00	Thin stringers and laminae of oxidized pyrite

ALTERATION

Type	Value	Comments
Oxidation %	70.00	Pink coloured dolomite and orange oxidation around magnetite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	Varies between 10 and 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	20	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
54.38 - **TO**
58.47

ROCK CODE dlpCCCD = **Min Style** d **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Interval is composed of interlaminated dolomite and calcite carbonatite. Dolomite is the more dominant phase. Phenocrysts consist of medium-grained magnetite and dark-grey dolomitized magnetite (where not magnetic and always in dolomite) and are observed in dolomite and calcite carbonatite. A 4 cm lens of magnetite-apatite cumulate (?) occurs at the very top of the interval. Apatite occurs weakly laminated within dolomite and calcite carbonatite. Zircon occurs disseminated throughout.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs as fine-grained dissemination
Magnetite %	2.50	Fine- to medium-grained magnetite occurs locally disseminated
Niobates %	0.50	Black columbite likely occurs with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	35.00	Beige dolomite and calcite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Varies between 15 and 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
58.47 - **TO**
62.26

ROCK CODE glcCD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Interval is composed of predominately rubble. Some rubble is composed of magnetite-apatite aggregate (no zircon or phlogopite observed). Some rock fragments have pophyritic texture with phenocrysts of alteed phlogopite. Apatite occurs weakly t strongly laminated in composite rock fragments. Zircon occurs disseminated throughout in dolomite carbonatite. Rock fragments have been oxidized to calcitized to various extents.

MINERALIZATION		
Type	Value	Comments
Magnetite %	5.00	Medium-grained aggregate wih apatite
Pyrite %	1.00	Stringers and thin laminations (~1 mm) of oxidized pyrite

ALTERATION		
Type	Value	Comments
Calcite %	20.00	Dark-brown mottling (calcitization)
Oxidation %	40.00	Beige to pink dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	20	Measured on few competant rock fragments

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	7.5	0.1	

FROM
62.26 - **TO**
82.19

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Interval is composed dominantly of light-grey to beige dolomite carbonatite. Interval is dominantly laminated but does contain swirly texture. Interval contains common pods and laminae of dark-grey dolomite carbonatite enriched in apatite +/- zircon and phenocrysts of dark-grey dolomitized magnetite (?). Black hexagonal grains identified as columbite occur in dark-grey pods and laminae. Apatite occurs aggregated to moderately laminated, becoming more aggregated towards bottom of interval. Zircon occurs disseminated throughout interval.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs as stringers and concentrated within laminae.
Niobates %	0.25	Fine-grained black hexagonal grains occur within dark-grey laminae and pods: suspect columbite

ALTERATION		
Type	Value	Comments
Oxidation %	70.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	20	Lamination is generally low (15 to 30 degrees) but steepens to as much 60 degrees

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	5	0.1	

FROM 82.19	-	TO 85.69	ROCK CODE nmfCD	=	Min Style n	Fabric m	Texture f	Litho CD	Struct
			MAIN COMMENTS	Top meter of interval is composed of decalcified dolomite carbonatite weathered to dark-brown gouge followed by rubbly rock. Interval becomes competent in the last meter of interval. Localized phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite (?) occur within a small pod and thin laminae (likely similar to pods and laminae of interval 62.26 to 82.19). Apatite occurs aggregated to weakly laminated. No Nb-mineralization identified					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Aggregates of oxidized pyrite			
			ALTERATION	Type	Value	Comments			
				Oxidation %	80.00	Pink dolomite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	2.5	0		

FROM 85.69	-	TO 89.51	ROCK CODE gliCM	=	Min Style g	Fabric l	Texture i	Litho CM	Struct
			MAIN COMMENTS	Interval is composed magnetite-apatite cumulate interlaminated with dolomite and calcite carbonatite. Dolomite carbonatite is more dominant than calcite carbonatite. Calcite carbonatite lamina (~5 cm) contains disseminated magnetite. Small grey laminae (< 3 cm) of dolomite carbonatite contain dark-grey phenocrysts. Magnetite-apatite cumulate composes about 50 % of interval. Magnetite-apatite cumulate contains interstitial calcite. Apatite occurs laminated within dolomite carbonatite. Zircon occurs disseminated within magnetite-apatite cumulate in high concentration.					
			MINERALIZATION	Type	Value	Comments			
				Magnetite %	20.00	Fine- to medium-grained magnetite occurs aggregated with apatite; fine-grained magnetite occurs disseminated in calcite carbonatite lamina			
				Pyrite %	0.75	Thin laminae of oxidized pyrite (~0.5 mm)			
			ALTERATION	Type	Value	Comments			
				Oxidation %	50.00	Beige dolomite and pink calcite; rusty orange around some magnetite			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	M	30	0.5		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
89.51 - **TO**
93.51

ROCK CODE

nlfgcd

=

Min Style
n

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Oxidized and partially decalcified light-grey to beige dolomite carbonatite. Apatite occurs moderately laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Fine-grained pyrite occurs disseminated to concentrated within laminae.

ALTERATION

Type	Value	Comments
Calcite %	2.50	Uncommon dark-brown mottling (calcitization) - generally follows laminaion
Oxidation %	60.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	2.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
93.51 - **TO**
100.31

ROCK CODE nmcCD = **Min Style** n **Fabric** m **Texture** c **Litho** CD **Struct**
MAIN COMMENTS Mottled light-grey to dark-brown dolomite carbonatite. Laminations are weak and localized. Dark-brown mottles generally follow a swirly texture. Apatite form weak laminae. No zircon observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs disseminated to aggregated

ALTERATION

Type	Value	Comments
Calcite %	70.00	Medium- to dark-brown calcitization
Oxidation %	25.00	Beige dolomite intermixed with calcitization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Only locally measureable

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	1.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
100.31 - **TO**
105.81

ROCK CODE

bmfGCD

=

Min Style
b

Fabric
m

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Dominantly light-grey fine-grained dolomite carbonatite. From ~103 to ~105 carbonatite has been moderately decalcified (brown in colour, pitted, no reaction to HCl). Apatite occurs as rare laminae in fine-grained dolomite carbonatite and concentrates in localized aggregates with zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occurs as aggregates, stringers and thin laminae. Fine-grained disseminated pyrite occurs in apatite aggregates with suspect pyrochlore
Niobates %	0.10	Suspect fine-grained black pyrochlore (or columbite) occurs within apatite aggregates - octahedral shape, do not streak red, occur with oxidized pyrite

ALTERATION

Type	Value	Comments
Calcite %	5.00	Uncommon dark-brown mottling (calcitization)
Oxidation %	10.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	Only locally measurable

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
105.81 - **TO**
109.89

ROCK CODE gmcCD = **Min Style** g **Fabric** m **Texture** c **Litho** CD **Struct**
MAIN COMMENTS Light-grey to dominantly dark-brown dolomite carbonatite. Dark brown mottling follows a swirly texture. Apatite occurs weakly laminated. Zircon occurs concentrated within medium-grey apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Suspect fine-grained black pyrochlore in zircon-rich apatite aggregate
Pyrite %	1.25	Pyrite aggregates up to 2 cm occur locally concentrated

ALTERATION

Type	Value	Comments
Calcite %	80.00	Dark-brown calcitization (reacts strongly to HCl)
Oxidation %	10.00	Beige dolomite and high oxidation of pyrite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	5	0.25

FROM
109.89 - **TO**
119.68

ROCK CODE

glfgCCCD

=

Min Style
g

Fabric
I

Texture
fg

Litho
CCCD

Struct

MAIN COMMENTS

Laminated light-grey to dark-brown dolomite carbonatite with a 15 cm interval of calcite carbonatite and magnetite-apatite cumulate at ~111.70 m. Magnetite-apatite cumulate contains interstitial calcite. Apatite occurs moderately laminated in dolomite carbonatite. Zircon occurs disseminated in magnetite-apatite cumulate and concentrated with medium-grey apatite aggregates.

MINERALIZATION

Type	Value	Comments
Magnetite %	2.50	Medium-grained magnetite aggregated with apatite
Niobates %	0.10	Occur with apatite aggregates and lenses with zircon: octahedral, dark-grey grains, do not streak read - fersmite (?)
Pyrite %	1.50	Thin laminae of oxidized pyrite; fine-grained oxidized pyrite occurs disseminated in apatite aggregates with fersmite (?) and zircon

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark-brown calcitization - irregular mottling
Oxidation %	25.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	M	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
119.68 - **TO**
131.73

ROCK CODE

dlpCD

=

Min Style
d

Fabric
l

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Light-grey to dark-brown dolomite carbonaite with large intervals (1 to 2 m) of decalcified carbonatite. Pophyritic texture occurs locally. The last 2 m of interval consist dominantly of rubble. Phenocrysts are composed of fine- to medium-grained dark-grey dolomitized magnetite (?) and fine-grained black grains (identified as pyrochlore and/or columbite). Apatite occurs moderately laminated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.75	Fine-grained black grains, octahedral and hexagonal, occur within porphyry; likely pyrochlore and columbite
Pyrite %	1.25	Fine-grained oxidized pyrite occurs disseminated most commonly within porphyry

ALTERATION

Type	Value	Comments
Calcite %	30.00	Dark brown calcitization; follows fractures in places giving carbonatite brecciated appearance
Oxidation %	70.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	60	Calcite vein
Laminations %	weak	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 131.73	-	TO 140.42	ROCK CODE dlpCD	=	Min Style d	Fabric l	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Laminated light-grey to beige dolomite carbonatite with lenses of dark-grey dolomite carbonatite (fine-grained disseminaed black mineral with dolomite?). Phencrysts consist of altered phlogopite (dolomitized to various exents). Apatite occurs moderately laminaed. Zircon occurs disseminated.														
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.25</td> <td>Dark-grey fine-grained likely fersmite occurs disseminated with altered phlogopite and pyrite</td> </tr> <tr> <td>Pyrite %</td> <td>1.75</td> <td>Oxidized pyrite occurs disseminated to aggregated.</td> </tr> </tbody> </table>						Type	Value	Comments	Niobates %	0.25	Dark-grey fine-grained likely fersmite occurs disseminated with altered phlogopite and pyrite	Pyrite %	1.75	Oxidized pyrite occurs disseminated to aggregated.
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Type	Intens	CA°	Comments															
Laminations %	moderate	30																
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>VW</td> <td>7.5</td> <td>0.1</td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon	OX	VW	7.5	0.1	
Zone	HCL	Apatite	Zircon															
OX	VW	7.5	0.1															

FROM 140.42	-	TO 146.15	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Massive ligh-grey to beige dolomite carbonatite with small intervals (< 5 cm in length) of inequigranular dolomite. Locally small (< 1 cm) dark grains of dolomite occur - appear to possibly be dolomitized grains (?).													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Fine- to medium-grained disseminated fresh core pyrite with oxidized rim; Small 1 cm stringers of oxidized pyrite</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.00	Fine- to medium-grained disseminated fresh core pyrite with oxidized rim; Small 1 cm stringers of oxidized pyrite		
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Oxidation %	20.00	Beige dolomite concentrated around pyrite stringers															
			STRUCTURE														
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>VW</td> <td></td> <td></td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon	OX	VW		
Zone	HCL	Apatite	Zircon														
OX	VW																

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 146.15	-	TO 149.39	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Mottled-massive fine- to medium-grained light-grey to medium brown dolomite carbonatite. Interval becomes calcitized and moderately laminated towards end of interval. Inequigranular dolomite carbonatite is void of apatite, zircon and pyrite. Apatite occurs laminated within calcitized laminated dolomite of interval.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Occurs as oxidized aggregates in calcitized carbonatite			
			ALTERATION	Type	Value	Comments			
				Calcite %	30.00	Dark-brown calcitization towards bottom of interval			
				Oxidation %	50.00	Beige mottling of dolomite			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	30	Measured at bottom of interval/hole		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	M	2.5	0		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-022

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454388.90	6256431.03	1566.00	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	303.65		303.65		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	6.70	6.70
NQ	6.70	303.65	303.65

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	15/Aug/2010	
Drill Contractor		10/Aug/2010	12/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-022

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 6.70	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				

FROM 6.70	-	TO 18.92	ROCK CODE	lfgCD	=	Min Style	Fabric I	Texture fg	Litho CD	Struct	
			MAIN COMMENTS	Light-grey to beige dolomite carbonatite. Up to 8 m, the interval is dominantly composed of rubble. The remainder of the interval is composed of fractured laminaed dolomite carbonatite. Apatite occurs weakly laminated. Zircon occurs disseminated throughou interval.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.50	Fine-grained pyrite occurs disseminated - locally oxidized					
			ALTERATION	Type	Value	Comments					
				Calcite %	2.50	Minor dark-brown calcitization					
				Oxidation %	15.00	Beige dolomite - concentrated around oxidized pyrite					
			STRUCTURE	Type	Intens	CA°	Comments				
				Veining %	moderate	40	Medium-grey dolomite vein crosscuts lamination; also quartz vein crosscuts at 60 degrees				
				Laminations %	moderate	10					
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	W	5	0.1				

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct									
18.92	- 21.29	blpCD	b	l	p	CD										
MAIN COMMENTS Massive medium-grey dolomite carbonatite is present in contact with light-grey laminated dolomite carbonatite (see lamination section below). Dark-grey metallic-looking phenocrysts (dolomite with rutile inclusions?) occur concentrated locally with pyrite and minor phlogopite in laminae from 2 to 25 cm thick. Apatites occurs dispersed to moderately laminated. Zircon occurs disseminated.																
MINERALIZATION <table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Generally fresh-pyrite occurs aggregated with dark-grey phenocrysts</td> </tr> <tr> <td>Niobates %</td> <td>0.10</td> <td>fine-grained grainy textured pinkish fersmite locally concentrated with dark-grey phenocrysts and pyrite</td> </tr> </tbody> </table>								Type	Value	Comments	Pyrite %	1.50	Generally fresh-pyrite occurs aggregated with dark-grey phenocrysts	Niobates %	0.10	fine-grained grainy textured pinkish fersmite locally concentrated with dark-grey phenocrysts and pyrite
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Zone	HCL	Apatite	Zircon													
H	VW	5	0.25													

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct								
21.29	- 23.83	nmpCD	n	m	p	CD									
MAIN COMMENTS Interval is dominantly composed of fine-grained pyrite aggregated with fine- to coarse-grained dark-grey euhedral (cubic to hexagonal). Dark-grey grains may be dolomitized magnetite (have same appearance but not magnetic). Pyrite-rich intervals (~0.5 to 1.5 m) are separated by laminated porphyritic light-grey dolomite carbonatite with locally concentrated phenocrysts of the same dark-grey mineral. Apatite occurs aggregated with pyrite and "dolomitized magnetite". Abundant zircon occurs disseminated throughout interval. No Nb-mineralization observed, though columbite may be present in pyrite-rich intervals.															
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Zone	HCL	Apatite	Zircon												
H	VW	20	0.75												

FROM 23.83 - **TO** 26.96

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated light-grey dolomite carbonatite with dark-grey intervals (5 to 50 cm). Most of the dark-coloured intervals consist of magnetite +/- abundant apatite. Small veins of dolomite carbonatite occur within magnetite-rich zones, some containing abundant fine-grained brown phlogopite. The first interval at ~25 contains no magnetite but contains abundant pyrite aggregated with dark-grey dolomitized magnetite (?) as observed in previous interval. Apatite occurs aggregated with magnetite in some of the magnetite-rich zones and occurs laminated within dolomite carbonatite. Apatite also occurs as moderate laminations in dolomite carbonatite. Zircon occurs disseminated and is present in larger concentrations in magnetite-apatite-rich intervals.

MINERALIZATION

Type	Value	Comments
Niobates %	0.75	Likely columbite present with magnetite
Magnetite %	10.00	Fine- to medium-grained Aggregated with apatite and disseminated in high concentration locally within dolomite carbonatite laminae
Pyrite %	3.00	Aggregated with dark-grey dolomitized magnetite (?) and as thin laminae (~ 1 mm thick)

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	Observed in dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	15	0.5

FROM
26.96 - **TO**
32.22

ROCK CODE

bICD

=

Min Style
b

Fabric
l

Texture
p

Litho
CD

Struct

MAIN COMMENTS

Light-to medium-grey dolomite carbonatite with localized phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite (?). Porphyritic laminae is interlaminated with fine-grained dolomite carbonatite (with stringers of pyrite). Minor magnetite and unidentified mica occurs within one of the porphyritic intervals at ~27.5 m. Apatite occurs moderately laminated within fine-grained dolomite and aggregated within porphyry. Zircon occurs concentrated within porphyry.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Occurs aggregated within porphyry and as thin stringers within fine-grained dolomite
Magnetite %	0.50	Fine-grained magnetite occurs concentrated within a single laminae
Niobates %	0.50	Fine-grained pale-yellow grainy fersmite occurs within porphyritic laminae

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	Varies between 20 and 40, but generally towards lower end

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.25

FROM 32.22 - **TO** 42.04

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Interlamination between light-grey and dark-grey phases gives the interval a banded appearance. "Bands" are about 0.5 to 1 cm in size. Dark-grey bands consist of dominantly dark-grey dolomitized magnetite (described in previous intervals) + pyrite + black altered phlogopite (fine-grained) + apatite + abundant zircon or magnetite + phlogopite + apatite + abundant zircon. Porphyritic dolomite carbonatite occurs commonly adjacent to dark bands and as isolated laminae. Phencrysts consist of magnetite or dark-grey dolomitized magnetite and phlogopite. Apatite occurs strongly laminated within laminated sections. Zircon occurs concentrated within porphyry and dark bands.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Aggregated with dark-grey dolomitized magnetite in dark-bands and porphyry and as thin stringers within fine-grained dolomite
Niobates %	50.00	Likely fine-grained columbite occurs with magnetite.
Magnetite %	5.00	Fined-grained occurs aggregated with apatite within single dark grey band and disseminated within some porphyry laminae

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	40	Massive pyrite ~ 2 cm thick crosscuts lamination
Laminations %	weak	45	Highly variable: 20 to 50 degrees - shallower angle towards top of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
42.04 - **TO**
49.66

ROCK CODE

gmpCD

=

Min Style
g

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite with porphyritic clots and irregular dark-grey clots of similar composition to dark-grey bands of previous interval ~ 5 to 30 cm in length). Dark-clots consist of dark-grey dolomitized magnetite (?) + apatite + pyrite + abundant zircon. Phenocrysts in porphyry consist dominantly of black altered phlogopite. Dolomitization of phlogopite is common. Apatite occurs aggregated throughout interval. Zircon occurs disseminated in high concentration within dark clots.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Abundant fine-grained pale-yellow to dark-grey fersmite occurs disseminated within porphyric clots.
Pyrite %	1.00	Aggregates up to ~ 0.5 mm common in porphyry, minor pyrite aggregated in dark clots and irregular veining

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	80	Mostly irregular quartz veining - but generally steep ~ 80 degrees
Laminations %	very weak		no measurable orientation: bends around clasts

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
49.66 - **TO**
58.95

ROCK CODE dmpCD = **Min Style** d **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Porphyritic to medium- to fine-grained equigranular dolomite carbonatite. Carbonatite is dominantly light-grey but medium-grained occurs vein-like (irregularly, no measurable orientation) giving the interval a mottled appearance in places. Phenocrysts consist of fine-grained black altered phlogopite commonly associated with disseminated pyrite and occur locally concentrated. Inequigranular texture becomes more common in the last 2 m of interval. Apatite occurs aggregated to weakly laminated. Zircon occurs locally concentrated in porphyry with apatite. Inequigranular dolomite carbonatite is void of apatite and zircon.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Fine-grained pale-pink octahedral pyrrhlore or fersmite occurs with porphyry: Observed more towards top of interval
Pyrite %	0.75	Disseminated to aggregate fine-grained pyrite

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Only locally observed
Veining %	weak	60	Qtz vein

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.1

FROM
58.95 - **TO**
70.99

ROCK CODE

dmpCD

= **Min Style** **Fabric** **Texture** **Litho** **Struct**
d m p CD

MAIN COMMENTS

Mottled-massive light-grey to dark-grey dolomite carbonatite - dark-grey dolomite carbonatite occurs as clasts, vein-like (interstitial to fine-grained light grey dolomite), and locally interlaminated. Swirl-like textures are also common between the two phases. The dark-grey dolomite grades into porphyritic dolomite carbonatite. Phenocrysts consist of fine- to medium-grained black altered phlopite. Locally associated are clumps of dark-grey dolomitized magnetite. Apatite occurs clustered within dark-grey and porphyry clasts. Apatite occurs in lower concentration in fine-grained dolomite as moderate laminations. Zircon concentrates in dark-coloured clasts.

MINERALIZATION

Type	Value	Comments
Niobates %	0.75	Fine-grained pale-yellow to dark-grey fersmite occurs disseminated within porphyry phase
Pyrite %	1.50	Occurs aggregated within dark-grey dolomite phase and as irregular veins associated with dark-grey phase

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Only localized observable

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
70.99 - **TO**
79.92

ROCK CODE

gmpCD

=

Min Style
g

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite with dark-grey to porphyritic clasts. Dark-coloured clasts are composed of dark-grey dolomitized magnetite, altered phlogopite, apatite (localized bands), pyrite and abundant zircon. Apatite occurs laminated in dolomite carbonatite. Apatite occurs as moderate laminae near dark-grey clasts. Zircon occurs disseminated in dark-grey clasts.

MINERALIZATION

Type	Value	Comments
Niobates %	0.75	Fine-grained pale-pink pyrochlore of fersmite occur disseminated within dark-grey clasts.
Pyrite %	1.75	Aggregated with dolimitized magnetite (?) and as thin laminations (<0.5 cm) in short laminated intervals (~10 cm)

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Beige dolomite occurs locally

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	25	Only locally observed: varies between 20 and 30 degrees
Veining %	moderate	80	Quartz vein (~ 0.5 cm thick)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
79.92 - **TO**
90.24

ROCK CODE nlpCD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite. Small intervals at ~85.5 m and ~88.7 m show a crenulated texture that is oriented similar to the rest of the lamination of the interval. Localized phenocrysts consist of fine-grained altered phlogopite and dark-grey dolomitized magnetite (?). Apatite occurs strongly laminated. Zircon occurs locally concentrated with apatite in places (more towards top of interval)..No Nb-mineralization observed.

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.50	Thin stringers (< 0.5 mm)

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	40	Varies between 30 and 60 degrees throughout interval: crenulations are at 60 degrees
Veining %	weak	30	Dolomite vein (~1 cm thick) crosscuts lamination - best observed with UV

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	VW	10	0.1	

FROM
90.24 - **TO**
94.18

ROCK CODE dICD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Magnetite-bearing dolomite and calcite carbonatite. Calcite to dolomite ratio is ~50:50. Magnetite occurs mostly as fine-grained along with fine-grained brown phlogopite disseminations in light-grey to beige dolomite carbonatite and white calcite carbonatite. Calcite carbonatite contains a higher abundance of magnetite than the dolomite carbonatite. Magnetite also occurs aggregated with little apatite in high concentration in calcite carbonatite at ~ 91.25 m. A ~2 m interval of mottled-weakly laminated dolomite carbonatite separates the aggregated magnetite from ~ 0.75 m interval of magnetite-bearing (disseminated) calcite carbonatite. The dolomite carbonatite is composed of intermixed light grey dolomite carbonatite (essentially void of other minerals) and dark-grey to porphyritic aggregates. Dark-grey phase is composed of dominantly apatite with phenocrysts of black altered phlogopite (minor fresh phlogopite) and abundant zircon. Apatite occurs oriented in calcite; moderately laminated within dolomite; and aggregated in porphyry clasts

MINERALIZATION

Type	Value	Comments
Pyrite %	0.25	Minor disseminated pyrite
Magnetite %	10.00	Aggregated and disseminated in calcite carbonatite; disseminated in lower concentrations in dolomite carbonatite
Niobates %	1.00	Fine-grained grainy pale-pink to dark grey grains (typically octahedral) - potential fersmite and/or pyrochlore; colmbite is likely to occur in associated with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	15	Varies between 10 and 20 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
94.18	- 98.64	nmpCD	n	m	p	CD		
		MAIN COMMENTS	Light- to medium-grey dolomite carbonatite with phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite. Light-grey aphyric dolomite occurs irregularly intermixed with medium-grey porphyritic dolomite. Proportion of dark-grey porphyritic dolomite carbonatite increases with a higher abundance of dark-grey dolomitized magnetite and abundant aggregated pyrite. Apatite occurs as moderate laminations from 1 to ~5 cm in thickness. Zircon occurs associated with thin laminae and dark-grey apatite aggregates/clasts occur at end of interval. No Nb-mineralization observed.					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	2.00	Occur as small (< 1 cm) stringers and aggregates within dark-grey apatite clasts and disseminated within larger porphyry portion that makes up top half of interval			
		ALTERATION	Type	Value	Comments			
			Oxidation %	15.00	Beige dolomite: occurs locally			
		STRUCTURE						
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	VW	5	0.25		

FROM
98.64 - **TO**
105.49

ROCK CODE glpCCCD = **Min Style** g **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite-bearing calcite carbonatite is interlaminated with dolomite carbonatite void of magnetite. Magnetite occurs disseminated to aggregated within calcite carbonatite. Dolomite carbonatite contains localized phenocrysts of black altered phlogopite and dark-grey dolomitized magnetite. Magnetite occurs aggregated with apatite in ~15 cm intervals in the last half of the interval along with minor mica (phlogopite?). Apatite occurs laminaed within dolomite carbonatite. Zircon occurs concentrated within magnetite-apatite aggregates.

MINERALIZATION

Type	Value	Comments
Magnetite %	20.00	Fine-grained magnetite occurs disseminated to aggregated within calcite carbonatite; aggregates with apatite
Pyrite %	0.25	Fine-grained pyrite occurs with magnetite.
Niobates %	1.00	Fine-grained suspect columbite occurs in porphyry with dolomitized magnetite: Columbite also likely occurs with magnetite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	Generally low but does steepen up to 50 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
105.49 - **TO**
111.77

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Calcitized and oxidized dolomite carbonatite with localized dark-grey apatite-rich laminae. Phenocrysts of black altered phlogopite occur within dolomite carbonatite. Dark-grey dolomitized magnetite occur within dark-grey apatite laminae. Alteration decreases downhole. Apatite occurs moderately laminated.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Occurs aggregated with dolomitized magnetite
Niobates %	0.10	Fine-grained pale-pink fersmite (?) occurs disseminated within dark-grey laminae

ALTERATION

Type	Value	Comments
Calcite %	20.00	Dark-brown calcitization
Oxidation %	25.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
111.77 - **TO**
118.12

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Magnetite occurs aggregated with apatite in ~10 - 20 cm intervals. Some intervals contain brown fine-grained phlogopite. There are also intervals of similar size consisting of dark-grey dolomitized magnetite (?) and pyrite with apatite. This intervals are seperated by light-grey to beige fine-grained to porphyritic dolomite carbonatite. Porphyritic dolomite occurs as laminae 2 to 10 cm in thickness with phenocrysts of black altered phlogopite. Apatite occurs as moderate laminations in dolomite carbonatite. Zircon occurs concentrated with magnetite-apatite phase and dark-grey interval.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Columbite likely occurs with magnetite.
Magnetite %	15.00	Fine-grained magnetite occurs aggregated with apatite
Pyrite %	1.00	Aggregates with dark-grey dolomitized magnetite

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	25	varies between 20 and 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
118.12 - **TO**
130.22

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Strongly laminated dolomite carbonatite with laminae (1 to 20 cm) of light-grey aphryic dolomite, porphyritic dolomite and dolomitized magnetite-apatite. Zircon concentrates with dolomitized magnetite-apatite lamine.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Rare pale-pink fersmite (?) occurs in dark-grey laminae (dolomitized mgt-apt)
Pyrite %	1.00	Aggregates with dolomitized magnetite

ALTERATION

Type	Value	Comments
Oxidation %	2.50	Beige dolomite near fractures

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	20	Generally low angle but does steepen to as much as 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
130.22 - **TO**
134.06

ROCK CODE nlpAMX = **Min Style** n **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Interlaminated dominantly light-grey aphyric dolomite carbonatite with porphyritic dolomite carbonaite and dark-grey apatite-zircon-rich laminae. Phenocrysts consist of altered phlogopite and occur within both porphyritic dolomite and apatite laminae. A ~0.75 m interval of fenite occurs at the very beginning of the interval. Zircon occurs concentrate within apatite laminae. No Nb-mineralization observed

MINERALIZATION			Type	Value	Comments
	Pyrite %	1.00	Occur aggregated with porphyry and dark-grey apatite laminae		

ALTERATION			Type	Value	Comments
	Oxidation %	2.50	Locally concentrated beige dolomite		
	Amphibolite %	25.00	Dark green fenite with abundant phlogopite - reacts moderately to HCl - calcite present in matrix?		

STRUCTURE			Type	Intens	CA°	Comments
	Laminations %	weak	10	Generally low, varies from 0 to 20 degrees		

MISCELLANEOUS			Zone	HCL	Apatite	Zircon
	OX	VW	10	0.5		

FROM
134.06 - **TO**
139.09

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Magnetite occurs aggregated with apatite with abundant zircon (cumulate phase) and minor phlogopite in 10 to 20 cm intervals. Another 10 cm interval composed of dark-grey dolomitized magnetite, aggregated pyrite and black medium-grained grains (possibly columbite). Inbetween these intervals is laminated dolomite carbonatite, fine-grained aphyric to porphyritic. Phencrysts consist of altered black altered phlogopite and dark-grey dolomitized magnetite aggregated with apatite. Zircon occurs concentrated throughout most of interval with fresh and dolomitized magnetite-apatite cumulates.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Medium-grained magnetite aggregated with apatite and minor phlogopite
Pyrite %	1.50	Abundant in dolomitized magnetite-apatite cumulate; < cm aggregates in dolomite carbonatite
Niobates %	1.00	Black fine- to medium-grained columbite within dolomitized magnetite-apatite cumulate; also likely occurs with fresh magnetite; pale-pink fersmite observed in small porphyry laminae.

ALTERATION

Type	Value	Comments
Oxidation %	5.00	localized beige dolomite; and of magnetite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	Highly variable from 20 to 70 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	20	1

FROM 139.09 - **TO** 144.77

ROCK CODE blpAMX = **Min Style** b **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS ~0.5 to 1 m fenite blocks within dolomite carbonatite. Phenocrysts of altered phlogopite occur locally confined to laminae (1 to 20 cm). Small 1 cm laminae look to be composed essentially of only apatite with accessory phlogopite and zircon. 20 cm intervals contain abundant apatite laminae (~15 vol. %) but zircon (~0.25 vol %) and phlogopite occur disseminated throughout interval along with medium-grained dolomitized magnetite (rimmed by pyrite). No Nb-mineralization

MINERALIZATION		
Type	Value	Comments
Niobates %	0.10	Localized porphyritic laminae contain minor fine-grained fersmite: pale-pink, grainy texture, octahedral form
Pyrite %	1.00	Aggregated with dolomitized magnetite

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige dolomite surrounds fenite clasts
Amphibolite %	30.00	Dark-green to bluish grey

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	30	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	VW	12.5	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
144.77 - **TO**
159.77

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated dominantly fine-grained aphyric dolomite carbonatite with porphyritic intervals up to 5 cm composed dominantly of apatite and altered phlogopite and dolomitized magnetite. Most of interval is composed of oxidized and decalcified to rubble dolomite carbonatite. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained pale-pink to grey, grainy, octahedral shape: fersmite in apatite-phlogopite laminae
Pyrite %	1.50	Fine-grained within apatite-phlogopite laminae; stringers and veins within weathered segments

ALTERATION

Type	Value	Comments
Oxidation %	75.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Generally 20 but does shallow to ~ 5 degrees
Veining %	moderate	80	Oxidized pyrite vein

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	VW	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
159.77 - **TO**
163.48

ROCK CODE nlpAMX = **Min Style** n **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS ~10 cm and ~50 cm fenite clasts within laminated porphyritic light-grey to beige dolomite carbonatite. Phencrysts consist of altered phlogopite. Apatite occurs laminated throughout dolomite carbonatite. Fenite is void of apatite.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Disseminated with porphyry; and as small pods and irregular veinlets

ALTERATION		
Type	Value	Comments
Amphibolite %	40.00	Medium-green fenite clasts with abundant phlogopite. Larger clast reacts moderately to HCl indicating likely calcite in matrix

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	M	7.5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
163.48 - **TO**
173.26

ROCK CODE

gmpCD

=

Min Style
g

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Interval is composed principally of light-grey porphyritic dolomite carbonatite with phenocrysts of altered phlogopite. Abundance of phenocrysts increases downhole. Up to 169 m the interval is dominantly fine-grained dolomite with localized fine- to medium-grained inequigranular and porphyritic texture. A small 10 cm interval of aggregated magnetite (no apatite) with medium-grained disseminated zircon occurs at ~168 m.

MINERALIZATION

Type	Value	Comments
Magnetite %	2.50	Medium-grained aggregate with dolomite groundmass
Niobates %	0.50	Likely fine-grained columbite occurs with magnetite
Pyrite %	1.00	Occur as disseminated needles in zone adjacent to porphyry (altered phlogopite?)

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Measured at end of interval; only locally observed in interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
173.26 - **TO**
181.01

ROCK CODE

nmCD

=

Min Style
n

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Dominantly massive fine-grained to locally porphyritic (altered phlogopite) light-grey to beige dolomite carbonatite. Small localized (~ 5 cm) medium-grey porphyritic with dolomitized magnetite to inequigranular dolomite carbonatite occurs. Apatite occurs aggregated throughout interval. Zircon occurs disseminated throughout interval. No Nb-mineralization observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Pyrite occurs as needles similar to previous interval (~1 to 2 cm long)

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Minor irregular oxidation surrounding pyrite needles

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	Only locally observed

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	2.5	0.25

FROM 181.01 - **TO** 184.77

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Magnetite occurs disseminated locally with calcite and dolomite carbonatite and aggregated with apatite (cumulate phase) within dominantly laminated dolomite carbonatite. Magnetite-bearing dolomite carbonatite occurs at the beginning of the interval. Magnetite-bearing calcite carbonatite occurs near the end of the interval but becomes progressively dolomitized (more dolomite, less calcite, less magnetized) to the very end of the interval. 10 cm magnetite-apatite cumulate occur throughout middle of interval. Zircon occurs concentrated within dolomite carbonatite. Cumulate has low zircon content.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Likely fine-grained columbite occurs with magnetite
Pyrite %	0.75	Aggregated with dolomitized magnetite (locally concentrated throughout interval).
Magnetite %	10.00	Disseminated to aggregated (with apatite) fine- to medium grained magnetite

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige dolomite

STRUCTURE

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	10	0.5

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct									
184.77	- 187.81	nlpCD	n	l	p	CD										
MAIN COMMENTS Light-grey to beige partially calcitized dolomite carbonatite: fractured and fragmented rock in places. Phenocrysts consist of fine-grained black altered phlogopite. Apatite occurs aggregated throughout interval. Zircon is rare. No observed Nb-mineralization.																
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FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct									
187.81	- 197.63	nmpCD	n	m	p	CD										
MAIN COMMENTS Mottled-massive light-grey to beige dolomite carbonatite. Phenocrysts consist of altered phlogopite. Only a few intervals (~10 to 75 cm, but generally ~10-20 cm) of aphyric inequigranular dolomite occur. Apatite occurs disseminated. Zircon occurs in higher concentration in inequigranular dolomite carbontite. No Nb-mineralization																
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Zone	HCL	Apatite	Zircon													
H	W	5	0.25													

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 197.63	-	TO 207.15	ROCK CODE miCD	=	Min Style m	Fabric i	Texture CD	Litho CD	Struct								
MAIN COMMENTS Mottled-massive light-grey to dark-grey dolomite carbonatite. Dark-grey dolomite is inequigranular and appears to vein the fine-grained equigranular dolomite carbonatite. Apatite occurs aggregated. Apatite and zircon occur concentrated in inequigranular dolomite. Apatite occurs in a smaller concentration in fine-grained dolomite. No Nb-mineralization observed.																	
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Zone	HCL	Apatite	Zircon														
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FROM 207.15	-	TO 225.73	ROCK CODE bmiCD	=	Min Style b	Fabric m	Texture i	Litho CD	Struct									
MAIN COMMENTS Light- to medium-grey dolomite carbonatite with small amount of altered phlogopite (~ 1 %) that clusters with pyrite in massive dolomite carbonatite and with apatite within thin laminae. Apatite occurs moderately laminated throughout the interval but aggregates with zircon in porphyry sections (both within dolomite and thin apatite laminae).																		
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Zone	HCL	Apatite	Zircon															
H	VW	12.5	0.5															

FROM 225.73	-	TO 240.85	ROCK CODE gmfgCD	=	Min Style g	Fabric m	Texture fg	Litho CD	Struct									
MAIN COMMENTS																		
Interval is composed of dominantly weathered dolomite carbonatite weathered to rubble in places. A large competent segment of massive light-grey dolomite carbonatite occurs between ~227.5 and ~232.0 m. Apatite occurs aggregated (~10 cm in size) with localized porphyry. Phenocrysts consist of dark-grey dolomitized magnetite (?) and black altered (including dolomitization) phlogopite. Apatite occurs in lesser concentration in weathered carbonatite. Interval becomes progressively more laminated towards bottom of interval (including apatite).																		
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H	W	10	0.5															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	gICD	=	Min Style	Fabric	Texture	Litho	Struct												
240.85	- 247.25				g	l	p	CD													
		MAIN COMMENTS	Fine- to medium-grained magnetite occurs locally disseminated within dolomite and calcite carbonatite. The first 2 m of the interval consist of laminated light-grey dolomite carbonatite with lamiae. Minor dolomitized magnetite occur throughout interval in dolomie carbonatite. Apatite occurs aggregated to weakly laminated throughtout interval. Zircon concentrates towards the end of the interval with the last magnetite-apatite aggregate.																		
		MINERALIZATION	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Value</th> <th style="width: 70%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Magnetite %</td> <td>5.00</td> <td>Fine- to coarse grained magnetite occurs loclly disseminated and commonly associated wih apatite</td> </tr> <tr> <td>Niobates %</td> <td>0.50</td> <td>Fine-grained columbite likely occurs with magnetite</td> </tr> <tr> <td>Pyrite %</td> <td>0.50</td> <td>Form aggregates commonly with dolomitized magnetite</td> </tr> </tbody> </table>							Type	Value	Comments	Magnetite %	5.00	Fine- to coarse grained magnetite occurs loclly disseminated and commonly associated wih apatite	Niobates %	0.50	Fine-grained columbite likely occurs with magnetite	Pyrite %	0.50	Form aggregates commonly with dolomitized magnetite
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Niobates %	0.50	Fine-grained columbite likely occurs with magnetite																			
Pyrite %	0.50	Form aggregates commonly with dolomitized magnetite																			
		ALTERATION	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Value</th> <th style="width: 70%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Oxidation %</td> <td>0.50</td> <td>Minor oxidation around magnetite</td> </tr> </tbody> </table>							Type	Value	Comments	Oxidation %	0.50	Minor oxidation around magnetite						
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		STRUCTURE	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Intens</th> <th style="width: 10%;">CA°</th> <th style="width: 60%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Laminations %</td> <td>weak</td> <td>40</td> <td>Steepens to 70 degrees towards end of interval</td> </tr> </tbody> </table>							Type	Intens	CA°	Comments	Laminations %	weak	40	Steepens to 70 degrees towards end of interval				
Type	Intens	CA°	Comments																		
Laminations %	weak	40	Steepens to 70 degrees towards end of interval																		
		MISCELLANEOUS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Zone</th> <th style="width: 15%;">HCL</th> <th style="width: 15%;">Apatite</th> <th style="width: 15%;">Zircon</th> <th style="width: 40%;"></th> </tr> </thead> <tbody> <tr> <td>H</td> <td>M</td> <td>12.5</td> <td>0.5</td> <td></td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon		H	M	12.5	0.5			
Zone	HCL	Apatite	Zircon																		
H	M	12.5	0.5																		

FROM 247.25	-	TO 254.20	ROCK CODE nmpCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite with intervals (~30 cm) of dolomitized magnetite-apatite aggregates. Dolomitized magnetite-apatite aggregates are concentrated towards the top of the interval. Towards the end of the interval, inequigranular white dolomite carbonatite occurs more frequently in the same size of interval. Apatite occurs as dark-grey strong laminations with altered phlogopite and aggregated with dolomitized magnetite. Zircon occurs locally concentrated with porphyry. No Nb-mineralization observed					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Small aggregates (< 1 cm) and laminations of fresh pyrite			
				Magnetite %	0.50	Minor magnetite occurs within one of porphyry intervals.			
			ALTERATION	Type	Value	Comments			
				Silica %	1.00	Minor silica veining			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	30	Only locally observable		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	10	0.25		

FROM 254.20	-	TO 256.50	ROCK CODE nmCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Massive white fine- to medium grained inequigranular dolomite carbonatite with slight light-grey mottling of dolomite. Dolomite carbonatite is void of other minerals					
			MINERALIZATION						
			ALTERATION						
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
					VW	0	0		

FROM
256.50 - **TO**
265.44

ROCK CODE gmCCCD = **Min Style** g **Fabric** m **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite occurs in aggregates with apatite and dark-green grains with minor interstitial calcite. Dark-green grains fluoresce the same as dolomite (deep purple colour). Aggregates are ~20 cm thick. Occurring interlaminated with aggregates are porphyritic calcite carbonatite with phenocrysts of fine-grained phlogopite, magnetite and dark-green grains similar to those in aggregates described above. Calcite carbonatite are ~3 to 15 cm thick and occur only with aggregates at the top of the interval. The remainder of the interval is composed of light-grey dolomite with clasts of magnetite-apatite aggregates containing abundant phlogopite. Textures are variable within clast from very fine-grained magnetic to medium-grained magnetite (with apatite) and variable degrees of magnetism (variable extents of dolomitization?). Clasts that are not magnetic are lighter in colour (i.e. dark grey or dark blue). Veins of dolomite crosscut clasts. Some clasts contain interstitial calcite. Zircon concentrates with magnetite-apatite aggregate clasts that do not contain noticeable calcite.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Likely columbite occurs with magnetite; also possible fine-grained black pyrochlore or columbite observed in calcite carbonatite
Pyrite %	1.00	occurs aggregated within magnetite-apatite aggregate clasts.
Magnetite %	15.00	Most commonly aggregated with apatite but also disseminated within calcite carbonatite.

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	0	Interlamination between cumulate and calcite carbonatite at top of interval.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nmfgCD	=	Min Style	Fabric	Texture	Litho	Struct
265.44	- 269.53				n	m	fg	CD	
		MAIN COMMENTS	First meter of interval is essentially the same white dolomite carbonatite at 254.2-256.50 m, but becomes oxidized and calcitized. After a meter of alteration, the interval becomes mottled light- to medium grey with coarse grained phenocrysts of altered phlogopite. Apatite occurs as large aggregates (~10 cm) with abundant zircon in mottled section of interval. No Nb-mineralization observed.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	1.00	Occurs aggregated (up to 1 cm) in mottled section of interval.				
		ALTERATION	Type	Value	Comments				
			Calcite %	10.00	Localized dark-brown calcitization - occurs with oxidation				
			Oxidation %	5.00	Localized beige dolomite				
		STRUCTURE							
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
					10	0.5			

FROM 269.53 - **TO** 278.50

ROCK CODE b1fCCCD = **Min Style** b **Fabric** l **Texture** f **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite occurs aggregated with dark-green grain (fluoresces like dolomite - deep purple). Interstitial dolomite and calcite also occurs within magnetite aggregates. Magnetite aggregates contain variable apatite from ~2.5 to 25 vol. %. Magnetite aggregates contain abundant zircon. Dolomite carbonatite contains no apatite or zircon. Magnetite aggregates range in size from 20 to 100 cm and contacts are conformable to lamination (likely laminae, not clasts).

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Occurs aggregated with dark-grey dolomitized magnetite
Niobates %	1.00	Fine-grained columbite likely to occur with magnetite
Magnetite %	10.00	Medium-grained occur aggregated with dark-green dolomite (?) and apatite with abundant zircon

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark-brown mottling
Oxidation %	25.00	Beige to pink oxidation of dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	90	1 cm thick beige dolomite vein
Laminations %	moderate	30	Observed in dolomite and at contacts with magnetite aggregates

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	12.5	0.75

FROM 278.50 - **TO** 295.29

ROCK CODE nmpCD = **Min Style** n **Fabric** m **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Locally porphyritic light-grey dolomite carbonatite intermixed with white dolomite carbonatite. Phencrysts consist of fine-grained black altered (including dolomitization) phlogopite. White carbonatite is void of accessory minerals. Apatite occurs aggregated to weakly laminated within light-grey dolomite carbonatite. Zircon occurs locally disseminated. A small (~ 30 cm) magnetite-apatite-[dark green dolomite?] clasts occurs as at ~283.5 m. Core is fine-grained green rimmed by medium-grained metallic grey magnetite. Apatite aggregate extends well beyond magnetite (another 10 cm). The whole clast is enriched in zircon.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Minor colmbite may occur with magnetite clast.
Pyrite %	0.75	Occurs as irregular veins (<0.5 mm thick) in porphyry
Magnetite %	0.50	Minor magnetite clast

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Minor beige dolomite occurs locally near fractures

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	Generally low but variable - appears to change direction within small interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.2

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
295.29	- 303.65	dICCCD	d	l	p	CCCD	
		MAIN COMMENTS	Interval is composed of interlamination of magnetite-bearing calcite carbonatite and porphyritic dolomite carbonatite (0.5 to 1 m intervals). Phenocrysts consist of altered phlogopite and dark-grey dolomitized magnetite. Mottled light to dark-grey dolomite carbonatite grades into calcitized carbonatite at ~297 m. An interval of dark-green dolomite (same as described in previous intervals, fluoresces deep purple) occurs ~298 m. White to beige dolomite carbonatite crosscuts at ~299 and then becomes the dominant phase containing magnetite-apatite clasts with phlogopite. After ~300.5 m the interval returns to interlamination between magnetite-bearing calcite carbonatite and porphyritic dolomite carbonatite. Another white-beige dolomite vein (~15 cm) occurs at 301.5 m. Abundant black phlogopite occurs within calcite carbonatite. Apatite aggregates locally with magnetite (not all magnetite). Zircon occurs concentrated in apatite aggregates.				
		MINERALIZATION	Type	Value	Comments		
			Niobates %	1.50	Fine-grained columbite likely occurs with magnetite		
			Magnetite %	25.00	Fine- to medium-grained magnetite occurs disseminated within calcite carbonatite and aggregated with apatite in clasts.		
			Pyrite %	0.50	Pyrite occurs aggregated with dark-grey dolomitized magnetite		
		ALTERATION	Type	Value	Comments		
			Oxidation %	5.00	Minor beige dolomite		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	moderate	50		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			H	S	15	0.5	

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-023

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454208.33	6256449.49	1592.55	20.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	213.41		213.41		Central 2
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	4.57	4.57
NQ	4.57	213.41	213.41

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
121.92	26.80	-57.00	5.2	5893	17.1	Reflex EZ-shot
152.40	26.70	-57.50	5.3	5880	265.8	Reflex EZ-shot
182.88	25.40	-57.70	4.6	5907	16.7	Reflex EZ-shot
213.36	24.50	-58.30	7.8	5916	342.2	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	18/Aug/2010	
Drill Contractor		11/Aug/2010	12/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-023

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 4.57	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct												
			MAIN COMMENTS	No. rock.																		
			MINERALIZATION																			
			ALTERATION																			
			STRUCTURE																			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon															
			<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																			

FROM 4.57	-	TO 12.20	ROCK CODE	nlpCD	=	Min Style n	Fabric l	Texture p	Litho CD	Struct	
			MAIN COMMENTS	Interval is composed dominantly of rubble with fracturd competant intrvals not exceding 0.75 m. Facies is laminated to locally massive dolomite carbonatite; light-grey to beige in colour. Localized phenocrysts (to laminae in laminated and in clusters in massive) consist of altered phlogopite associated with pyrite. Few dark grey clots occur within rubble (at ~11 m) - resemble dolomitized magnetite from other holes. Apatite occurs aggregated to weakly laminated. Aggregates occur near dark-grey clots. Zircon occur clustered with apatite aggregates. No Nb-mineralization observed.							
			MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>					
				Pyrite %	1.25	Occurs disseminated, aggregated and as stringers: dominantly oxidized, may contain fresh core					
			ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>					
				Oxidation %	90.00	Beige dolomite					
			STRUCTURE	<u>Type</u>	<u>Intens</u>	<u>CA°</u>	<u>Comments</u>				
				Laminations %	moderate	50	Shallows to 20 degrees towards end of interval				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	VW	5	0.1				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
12.20 - **TO**
28.23

ROCK CODE glpCCCD = **Min Style** g **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Interval consists dominantly of rubble with intervals no larger than 1.25 m of competent rock. Fresh dolomite is dark-grey in colour oxidized to beige. Dolomite contains localized phenocrysts of black altered phlogopite. Phlogopite-chlorite veining occurs at ~14.25 m. Dark-grey dolomitized magnetite occurs aggregated with apatite in laminae 1 to 5 cm thick. Pink calcite carbonatite occurs laminated with magnetite laminae with minor apatite. Apatite occurs aggregated. Zircon occurs with magnetite and apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Locally observed with some apatite aggregates - fine-grained, black, octahedral columbite (?) - also likely to occur with magnetite
Pyrite %	2.00	Commonly aggregated with dolomitized magnetite; disseminated; mostly oxidized - becomes fresher to bottom of interval
Magnetite %	1.00	Occur fine-grained interlaminated with calcite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
28.23 - **TO**
30.83

ROCK CODE nliCD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Highly oxidized dolomite carbonatite, light-grey to beige Interval contains about 25 % rubble Apatite occurs laminated in aggregates with dark-grey magnetite and dolomitized magnetite and oxidized pyrite. Zircon occurs disseminated throughout interval. No Nb-mineralization observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Disseminated to aggregated to dolomitized magnetite. Oxidized
Niobates %	0.50	Fine-grained columbite likely occurs with magneite
Magnetite %	5.00	Bands (2 to 10 cm) of medium-grained magnetite aggregated with apatite -

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	15	Steepens to 50 degrees in places

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.1

FROM
30.83 - **TO**
37.76

ROCK CODE gICM = **Min Style** g **Fabric** l **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Interval is dominated by magnetite cumulate with variable proportions of apatite (from ~1 to 30 vol. %). Cumulate contains abundant medim-grained phlogopite, uncommon zircon and dolomite groundmass. Cumulate is interlaminated with light-grey dolomite carbonatite and medium-grey dolomite carbonatite mottled to beige. Apatite occurs weakly laminated and in swirls in medium-grey-beige mottled dolomite carbonatite. Light-grey massive dolomite carbonatite is void of apatite. Zircon occurs locally concentrated within cumulate. Very fine-grained dark-green phase with disseminated magnetite and/or phlogopite is often observed between dolomite and magnetite cumulate units. Cumulate units range in size from 10 cm to 2 m. Carbonatite laminae range from ~2 to 50 cm. Dolomite carbonatite also occurs as veins in cumulate.

MINERALIZATION	Type	Value	Comments
	Pyrite %	1.00	Fresh pyrite occur locally aggregated with magnetite in cumulate
	Magnetite %	30.00	Medium-grained magnetite in cumulate units
	Niobates %	2.00	Fine-grained columbite likely occurs with magnetite

ALTERATION	Type	Value	Comments
	Oxidation %	15.00	Beige dolomite

STRUCTURE	Type	Intens	CA°	Comments
	Laminations %	moderate	35	Varies between 20 and 50 degrees

MISCELLANEOUS	Zone	HCL	Apatite	Zircon
	H	VW	20	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
37.76 - **TO**
41.13

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS First meter of interval has massive appearance - void of apatite and zircon. Apatite laminae with dark-grey dolomitized magneite give rock banded appearance for remainder of interval. A few unoriented aggregates of apatite and dolomitized magnetite with abundant zircon occur towards the end of the interval. Zircon occurs concentrated in dark-grey bands.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Pale-yellow to grey fine-grained fersmite within dark-grey bands
Pyrite %	1.00	Fresh pyrite occurs aggregated with dark-grey dolomitized magnetite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	35	Steepens to 60 degrees in places

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
41.13 - **TO**
52.21

ROCK CODE gICM = **Min Style** g **Fabric** I **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Interval is composed of interlayered magnetite-apatite cumulate and laminated light-grey dolomite carbonatite (50:50 ratio). Cumulate phases are always less than 1 m thick. White calcite to beige dolomite veins and laminae occur commonly in contact with cumulate. A ~20 cm interval of phlogopite-phryic dolomite carbonatite occurs at ~242 m (non-magnetic). Non-magnetic dark-green fine-grained phase (also observed in 30.49-37.76 interval) occurs irregularly throughout cumulate phases. Apatite form thin dark-grey laminae (likely with dolomitized magnetite). Zircon occurs associated with apatite and concentrates within cumulate phases.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Pale-pink fine-grained octahedral grains observed in phlogopite-phryic dolomite carbonatite: possible pyrochlore: fine-grained columbite likely occurs with magnetite.
Pyrite %	1.50	Occurs aggregated with magnetite and confined to dark-grey laminae in dolomite carbonatite
Magnetite %	25.00	Medium-grained: aggregated with apatite

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 20 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	17.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
52.21 - **TO**
54.88

ROCK CODE

blpCD

=

Min Style
b

Fabric
l

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Weakly laminated light-grey dolomite carbonatite with common dark-grey clasts or weak laminations. Apatite occurs aggregated with dark-laminations (zircon-bearing) and in light-colored aggregates (zircon-free). Apparent phenocrysts consist of fine-grained oxidized pyrite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Fresh to oxidized; locally concentrated; crosscutting veins
Niobates %	0.10	Fine-grained dark-grey grains in weak dark-grey laminae: possibly fersmite

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	60	Thin (< 1 mm) pyrite veins; variable oxidized - occur locally spaced ~ 5 cm
Laminations %	very weak	10	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
54.88 - **TO**
60.10

ROCK CODE glpCD = **Min Style** g **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Interval is composed dominantly of light-grey dolomite carbonatite with dark-grey clasts. Clasts are composed of dolomitized magnetite (?), apatite, pyrite and black pyrochlore (?). Some clasts contain some medium-grained magnetite (looks the same as dolomitized magnetite). Light-grey dolomite contains thin (< 2 cm) laminae of d. grey apatite aggregates with abundant zircon. A larger clast (or possible laminae) of porphyritic dolomite carbonatite at ~ 58 m consists dominantly of altered phlogopite (dolomitized to some extent). Localized phenocrysts of altered phlogopite and fine-grained magnetite occur for the last meter. Localized aggregates of zircon-rich apatite occur within porphyry.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained black octahedrals in dark-grey clasts - likely pyrochlore of combite
Magnetite %	1.00	Rare dark-grey clasts contain magnetite aggregated with apatite; fine-grained phenocrysts in porphyry with altered phlogopite
Pyrite %	5.00	Fresh pyrite occurs aggregated w. d. grey dolomitized magnetite and altered phlogopite- aggregates are up to 10 cm in size with the largest occur with dolomite porphyry

ALTERATION
STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	7.5	0.25

FROM
60.10 - **TO**
64.26

ROCK CODE bICM = **Min Style** b **Fabric** I **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Magnetite-apatite cumulate with minor phlogopite occurs interlaminated with dark-grey laminated dolomite carbonatite. Apatite appears laminated within cumulate. Calcite occurs interstitial to magnetite within cumulate. Cumulate composed ~50 % of interval. Cumulates are 2 to 50 cm in thickness. Apatite occurs oriented in lower concentration in the dolomite carbonatite. Dark-grey laminae within dolomite carbonatite is composed principally of apatite (+ dolomitized magnetite?)

MINERALIZATION

Type	Value	Comments
Magnetite %	20.00	Medium-grained magnetite occurs aggregated with apatite
Pyrite %	2.00	Aggregated within dolomite carbonatite and 1 cm thick vein
Niobates %	1.00	Fine-grained columbite likely occurs with magnetite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	80	1 cm vein of pyrite crosscuts cumulate
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	S	15	0.75

FROM
64.26 - **TO**
80.74

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated dolomite carbonatite with dark-grey bands composed of dolomitized magnetite, pyrite and apatite with abundant zircon. Bands are from 1 to 50 cm in thickness. The dark-grey band at the very end of the interval is composed of magnetite within fine-grained medium-green matrix (same as in 41.13-52.21 m interval). Apatite concentrates in the fringes of the magnetite-bearing band where the band becomes progressively less magnetic (dolomitized magnetite?). Phenocrysts within dolomite carbonatite consist of black altered phlogopite that seem to be locally concentrated. Short coarse grained intervals occur irregular in interval ~1-2 m thick..

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Pale-pink to medium-grey, fine-grained, octahedral fersmite in dark-bands
Pyrite %	2.00	Aggregates within dark-grey bands and as massive pyrite laminae up to 1 cm thick
Magnetite %	2.50	Medium-grained magnetite aggregated with apatite in single band at end of interval

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Beige dolomite - locally concentrated

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	65	Uncommon pyrite veins - observed towards bottom of interval
Laminations %	weak	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.5

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
80.74	- 87.71	blpCD	b	l	p	CD		
		MAIN COMMENTS	Frequent thin (generally 1-3 cm, rarely up to 10 cm) dark-grey laminae composed dominantly of apatite (+ dolomitized magnetite?) with abundant zircon give dolomite carbonatite banded appearance. Dolomite is light-grey in colour and fine-grained.					
		MINERALIZATION	Type	Value	Comments			
			Niobates %	0.75	Fine-grained pale-pink grainy-textured fersmite occurs disseminated within dark-grey bands (observable in larger laminae)			
			Pyrite %	1.50	Aggregated with dark-bands and as small stringers (<1 cm) within dolomite			
		ALTERATION						
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	moderate	40	Varies between 30 and 50 degrees within interval		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			H	VW	12.5	0.5		

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
87.71	- 95.36	bICD	b	l	i	CD		
		MAIN COMMENTS	Dominantly light-grey dolomite carbonatite with thin (~1-3 cm thick) dark-grey apatite bands (also likely dolomitized magnetite?). Non-magnetic dark-grey clasts composed of pyrite, dolomitized magnetite, apatite and abundant zircon occur irregularly throughout interval.					
		MINERALIZATION	Type	Value	Comments			
			Niobates %	0.50	Fine-grained black octahedral grains in apatite bands and aggregates with dolomitized magnetite - likely pyrochlore or columbite			
			Pyrite %	2.00	Aggregated with dolomitized dark-grey magnetite			
		ALTERATION						
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	moderate	20	varies between 15 to 20 degrees		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			H	VW	12.5	0.5		

FROM
95.36 - **TO**
98.76

ROCK CODE

gICM

=

Min Style
g

Fabric
I

Texture

Litho
CM

Struct

MAIN COMMENTS

Interval is dominantly composed of magnetite-apatite cumulate (1 to 2 m thick) with minor fine- to coarse grained phlogopite interlaminated with light grey laminated dolomite carbonatite. Dolomite carbonatite contains thin dark-grey laminae composed principally of apatite. Zircon occurs associated with apatite.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fine-grained columbite likely occurs with magnetite
Pyrite %	2.00	Aggregates with magnetite in higher concentration near dolomite contact
Magnetite %	35.00	Medium-grained magnetite aggregates with apatite in cumulate phase

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	50	Generally ~50 degrees in dolomite, but steepens to 70 or 80 degrees near contacts with cumulate

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
98.76 - **TO**
102.81

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS 10 cm to 1 m scale banded between laminated light-grey dolomite carbonatite and dark-grey bands composed principally of dark-grey metallic mineral, phlogopite and apatite. Dark-bands are non-metallic and react moderately to HCl. Veins of white dolomite crosscut dark-bands. Apatite occurs strongly laminated within dolomite carbonatite (~5 vol. %). Zircon occurs concentrated within dark-bands. Interval contains a single aggregate of magnetite and localized phenocrysts of magnetite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Likely fine-grained columbite occurs with magnetite
Magnetite %	1.00	Fine-grained localized disseminations and single aggregation within dolomite carbonatite
Pyrite %	1.50	Veined, and confined to thin laminae

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	Generally low: varies from 10 to 40 degrees
Veining %	moderate	70	Veined pyrite (<0.5 mm thick)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nICD	=	Min Style	Fabric	Texture	Litho	Struct								
102.81	- 131.10				n	l	p	CD									
		MAIN COMMENTS	Laminated to swirly textured light-grey dolomite carbonatite with large dark-grey clasts composed of apatite, dolomitized magnetite and abundant apatite. Phenocrysts of black altered phlogopite and dark grey dolomitized magnetite (?) concentrate locally within laminae varying 1 to 5 cm in thickness. Zircon concentrates with dark-grey apatite aggregates.No Nb-mineralization observed.														
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H	VW	10	0.25														
FROM	TO	ROCK CODE	nmfgCD	=	Min Style	Fabric	Texture	Litho	Struct								
131.10	- 133.83				n	m	fg	CD									
		MAIN COMMENTS	Ovoid texture within dolomite carbonatite. Core is composed of dolomite carbonatite. Rim is composed magnetite. Apatite occurs is localized aggregates. Possible dolomitized fenite?														
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Zone	HCL	Apatite	Zircon														
H	VW	10	0														

FROM 133.83	-	TO 142.85	ROCK CODE nmpCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct								
			MAIN COMMENTS	Mottled-massive to locally laminated dolomite carbonatite. Dark-grey bands and porphyritic dolomite occur locally. Dark-grey bands are composed dominantly of apatite with dark-grey dolomitized magnetite (?) and abundant zircon. Localized phenocrysts consist of altered phlogopite. No Nb-mineralization observed.													
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Zone	HCL	Apatite	Zircon														
H	VW	10	0.5														

FROM 142.85	-	TO 148.93	ROCK CODE nlpAMX	=	Min Style n	Fabric l	Texture p	Litho AMX	Struct								
			MAIN COMMENTS	Light-grey laminated dolomite carbonatite with fenite clasts 5 to 50 cm thick. Interval is locally porphyritic to inequigranular. Phenocrysts consist of black altered phlogopite locally concentrated. Dark-grey laminae in dolomite consist of dolomite, apatite and dark-grey dolomitized magnetite. A few ~3 cm laminae contain magnetite aggregated with apatite. Apatite occur moderately laminate (white and dark-grey laminae). Zircon occurs within dark-grey laminae. No Nb-mineralization observed.													
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Zone	HCL	Apatite	Zircon														
H	M	10	0.1														

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
148.93	- 169.36	blpCD	b	l	p	CD	
MAIN COMMENTS Light- to medium-grey interlaminated dolomite carbonatite, locally porphyritic. Phenocrysts of altered phlogopite occur commonly with apatite laminae (little zircon). Phenocrysts occur in both shades of dolomite. A single "band" of biotitization occurs at 157.25 m (possible fenite?). No Nb-mineralization observed.							
MINERALIZATION							
	Type	Value	Comments				
	Niobates %	0.10	Minor fine-grained pale-yellow to grey fersmite with apatite and altered phlogopite				
	Pyrite %	1.50	Large aggregates of pyrite (up to 1 cm) and stringers associated with altered phlogopite				
ALTERATION							
	Type	Value	Comments				
	Amphibolite %	1.00	Single "band" of black biotitization at ~157.25 m				
STRUCTURE							
	Type	Intens	CA°	Comments			
	Laminations %	moderate	15	Variable between 10 and 20 degrees			
MISCELLANEOUS							
	Zone	HCL	Apatite	Zircon			
	OX	VW	10	0			

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
169.36	- 173.42	nlpCD	n	l	p	CD	
MAIN COMMENTS Mottled-massive to weakly laminated light-grey to dark-grey dolomite carbonatite with dark-grey bands (~5 cm) consisting of dark-grey dolomitized magnetite and apatite. Common zircon occurs with apatite. No Nb-mineralization observed.							
MINERALIZATION							
	Type	Value	Comments				
	Pyrite %	1.50	Occurs aggregated with dark-grey dolomitized magnetite and as thin laminae (~0.5 mm)				
ALTERATION							
STRUCTURE							
	Type	Intens	CA°	Comments			
	Laminations %	moderate	20				
MISCELLANEOUS							
	Zone	HCL	Apatite	Zircon			
	H	VW	10	0.1			

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
173.42 - **TO**
202.51

ROCK CODE nlpCD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Interval is composed dominantly of light- to medium-grey laminated dolomite carbonate. Phenocrysts of altered phlogopite occur locally concentrated and are generally confined to laminae (1 to 30 cm thick). Phlogopite is commonly rimmed by pyrite. Small porphyry laminae are composed essentially of apatite, altered phlogopite and common zircon. The larger porphyry laminae are composed of apatite and altered phlogopite with common zircon with a dolomite groundmass. No Nb-mineralization observed

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.75	Fresh pyrite occurs commonly aggregated with phlogopite and as separate pyrite commonly associated with medium-grey laminae

ALTERATION

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	30	

MISCELLANEOUS			
Zone	HCL	Apatite	Zircon
H	VW	5	0.25

FROM 202.51 - **TO** 208.80

ROCK CODE bmiCD = **Min Style** b **Fabric** m **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Dominantly massive light-grey dolomite carbonatite locally porphyritic to inequigranular fine- to medium-grained. Phenocrysts consist of black altered phlogopite associated with apatite aggregates. Inequigranular segments are void of apatite and zircon. Mica phenocrysts have red to yellow colour towards bottom of interval occurring commonly with inequigranular segments. Medium-grey splotches occur irregularly throughout interval with apatite - looks like a carbonate but fluoresces white. Zircon occurs in association with apatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained pale-pink grainy occur with porphyry and apatite laminae
Pyrite %	2.50	Commonly aggregated with phlogopite and as uncommon massive pyrite aggregates and laminae

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	85	Irregular pyrite vein (~ 1 mm thick);
Laminations %	very weak	10	Varies between 5 and 20 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	gICD	=	Min Style	Fabric	Texture	Litho	Struct										
208.80	- 213.41				g	l	p	CD											
		MAIN COMMENTS	Dominantly porphyritic light-grey dolomite carbonatite wih segments (0.2 to 0.5 m) of massive aphrylic dolomite carbonatite. Aggregated apatite and zircon concentrate within porphyry. Apatite commonly aggregates with altered phlogopite and fersmite.																
		MINERALIZATION	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Type</th> <th style="width: 10%;">Value</th> <th style="width: 70%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Aggregated frequently with phlogopite; uncommon veins</td> </tr> <tr> <td>Niobates %</td> <td>1.00</td> <td>Fine-grained yellow grainy fersmite occurs with phlogopite and apatite aggregates; also occurs disseminated with porphyry</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	1.50	Aggregated frequently with phlogopite; uncommon veins	Niobates %	1.00	Fine-grained yellow grainy fersmite occurs with phlogopite and apatite aggregates; also occurs disseminated with porphyry	
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Zone	HCL	Apatite	Zircon																
H	VW																		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-024

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454090.89	6256515.75	1643.53	30.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	153.05		153.05		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	7.32	7.32
NQ	7.32	153.05	153.05

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
26.82	27.40	-57.60	15.9	5568	357.7	Reflex EZ-shot
87.78	27.10	-58.50	13.9	5885	129.3	Reflex EZ-shot
153.01	23.30	-58.60	16.5	5784	115.7	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	19/Aug/2010	
Drill Contractor		13/Aug/2010	14/Aug/2010

SUMMARY

GEOLOGY LEGEND

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 7.32	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct						
			MAIN COMMENTS	No rock.												
			MINERALIZATION													
			ALTERATION													
			STRUCTURE													
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon									
			<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>													

FROM 7.32	-	TO 17.00	ROCK CODE	blcCD	=	Min Style b	Fabric l	Texture c	Litho CD	Struct		
			MAIN COMMENTS	Laminated dolomite carbonatite is light-grey to dark-brown in colour. Apatite occurs as moderately lamination in dolomite carbonatite typically ~1- 5 cm thick. Apatite laminae seem to be areas of high weathering - surrounded by calcitization and commonly contain pits of decalcification (?). A single larger lamina (~10 cm thick) of apatite at around 15 m is aggregated with dark-grey non-metallic mineral (dolomitized magnetite?).								
			MINERALIZATION	Type	Value	Comments						
					Niobates %	0.25	Potential fine-grained grey fersmite observed with apatite-dolomitized magnetite aggregates.					
					Pyrite %	1.50	Oxidized pyrite occurs commonly associated with apatite laminae. Fresh pyrite occurs disseminaed and as stringers in less weathered dolomite carbonatite					
			ALTERATION	Type	Value	Comments						
					Calcite %	25.00	Dark-brown calcitization concentrates around apatite laminae and dolomite veins					
			STRUCTURE	Type	Intens	CA°	Comments					
					Veining %	moderate	60	Common veins up to 1 cm thick of dolomite - surrounded by decalcification				
					Laminations %	weak	20	Weakens towards bottom of interval				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon					
					OX	M	10	0.1				

FROM
17.00 - **TO**
23.66

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Laminated dolomite carbonatite is dominantly light-grey to dark-grey in colour. Frequent dark-grey bands are composed of principally apatite, dolomite and very fine-grained dark-grey non-magnetitic non-fluorescent mineral (dolomitized magnetite?). Pale-pink fersmite is observed in the larger bands. Larger bands (~ 10 cm) are composed of [magnetite + apatite + minor pyrite] or [pyrite + d. grey metallic mineral + apatite]. Zircon occurs associated with magnetite and apatite bands. Zircon occurs associated with apatite and magnetite.

MINERALIZATION

Type	Value	Comments
Magnetite %	7.50	Aggregated with apatite in larger bands (~10 cm)
Niobates %	1.50	Fine-grained octahedral pale-pink grainy-textured fersmite observed in larger d. grey bands.
Pyrite %	2.50	Fine-grained fresh pyrite (locally oxidized; sometimes oxidized rims on fresh) occur disseminated and as aggregates up to 0.5 mm in dolomite; massive pyrite aggregates with dark-grey metallic mineral (dolomitized magnetite?)

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Generally low ~20 degrees but steepens to 70 degrees locally.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0.5

FROM
23.66 - **TO**
39.75

ROCK CODE glpCD = **Min Style** g **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated dolomite carbonatite is light-grey to dark-grey with dark-grey aggregates. Dark-grey aggregates compose ~20 % of interval. Dark-grey aggregates up to ~10 cm diameter consist of dark-grey dolomitized magnetite (?), apatite, pyrite, abundant zircon and uncommon fersmite grains. At the end of interval, 5 cm dark-grey aggregate consists of magneite, apatite, minor pyrite and zircon. Apatite occurs as white laminations within laminated dolomite carbonatite and commonly with < 2 cm dark-grey bands (dolomitized magnetite?) within dolomite. Zircon occurs associated with dark-grey aggregates and bands. Altered phlogopite associated with apatite and oxidized pyrite give interval porphyritic appearance. Interval has been oxidized to decalcified (decalcified) to various extents locally.

MINERALIZATION		
Type	Value	Comments
Pyrite %	2.50	Aggregated with apatite and dolomitized magnetite; and fine-grained disseminations in dolomite carbonatite.
Niobates %	0.50	Fine-grained yellow to dark-grey fersmite (octahedral) observed on fringes of d. grey aggregates

ALTERATION		
Type	Value	Comments
Oxidation %	45.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	20	Generally low around 20 but steepens locally to ~ 40 degrees

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	10	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
39.75 - **TO**
50.04

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Laminated dolomite carbonatite is light-grey to beige in colour with dark-grey bands. Dark-bands consist of apatite, dark-grey non-magnetic mineral (dolomitized magnetite?), pyrite and common zircon. Dark bands make up about 45 % of interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Minor fine-grained pale-yellow to grey fersmite within d. grey bands
Pyrite %	1.50	Occur as stringers within dark-grey bands and disseminated within dolomite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	10	Low angle between 0 and 20 degrees
Veining %	weak	60	Single dolomite vein (~ 1 mm thick) observed rimmed by dark-brown alteration (weak reaction to HCl)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
50.04 - **TO**
57.14

ROCK CODE glpCCCD = **Min Style** g **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Laminated dolomite carbonatite is light-grey in colour with thin (< 1 cm) dark-grey bands and dark-grey aggregates. Mineralization is banded to aggregated. Dark-grey aggregates are composed of magnetite, minor apatite, minor phlogopite and abundant zircon and compose ~5 % of interval. Dark-grey bands consist of apatite, dark-grey metallic mineral (dolomitized magnetite?) and zircon and sometimes contain magnetite. Thin magnetite-bearing calcite carbonatite unit ~ 7.5 cm thick occurs at ~ 51 m. White apatite laminae (void of zircon) occur within light-grey dolomite. Localized phenocrysts consist of altered phlogopite.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Minor fine-grained yellow to d. grey fersmite within d. grey bands observed; likely columbite associated with magnetite.
Magnetite %	5.00	Medium-grained magnetite occurs aggregated and banded; fine-grained magnetite occurs disseminated within calcite carbonatite.
Pyrite %	2.00	Stringers and laminae associated with d. grey bands

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	15	Low angle between 10 and 20 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
57.14 - **TO**
63.11

ROCK CODE dlpCD = **Min Style** d **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Laminated dolomite carbonaite is light grey in colour with dark-grey bands composed of dark-grey metallic grains (dolomitized magnetite?), apatite, dolomite, pyrite and common zircon. Dark-bands composed ~10-15 % of interval. Localized phenocrysts consist of black octahedral grains altered to yellow (fernsmitite replacing pyrochlore?) and oxidized pyrite.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Fine-grained pyrite occurs disseminated with porphyry; as stringers within aphyric laminae; and aggregated (up to 2 cm) within dark-grey bands
Niobates %	1.00	Observed locally disseminated in porphyry

ALTERATION

Type	Value	Comments
Oxidation %	2.50	Beige dolomite concentrated around healed fractures

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	10	Generally low angle ~ 10 degrees; steepens to 40 degrees towards end of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
63.11 - **TO**
67.94

ROCK CODE glfgCD = **Min Style** g **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Laminated dolomite carbonatite is light grey with dark-grey bands composed of apatite, dark-grey metallic mineral (dolomitized magnetite?), black altered phlogopite and common zircon. Dark-grey aggregates are composed of dark-grey metallic mineral, dolomite, variable pyrite, sometimes altered phlogopite and common zircon; with apatite rim. Dark-grey aggregates composed ~ 2.5 % of interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Aggregated with dark-grey mineral in bands and irregular aggregates; thick laminae up to 2 cm; single vein observed (~ 1mm thick)
Niobates %	0.10	Fine-grained yellow to dark-grey fersmite and fine-grained black columbite (or pyrochlore?) observed in dark-grey aggregates

ALTERATION

Type	Value	Comments
Oxidation %	2.50	Localized beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	70	Small pyrite vein
Laminations %	weak	30	Varies between 20 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	15	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
67.94 - **TO**
87.66

ROCK CODE

bICD

 = **Min Style**
b

Fabric
I

Texture
Litho
CD

Struct
MAIN COMMENTS

Laminated dolomite carbonatite is light grey to beige with thin dark-bands (generally < 2.5 cm but as large as 5 cm) composed of apatite, dolomitized magnetite, zircon and fersmite. Thicker (5-10 cm) dark-colored bands are composed of aggregated magnetite and apatite with little zircon. Dark-bands compose ~20 % of interval. Minor white magnetite-bearing calcite carbonatite laminae occur sporadically throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Occurs aggregated within dark-bands; disseminated and as stringers within dolomite carbonatite - some grains are oxidized, while others are fresh
Magnetite %	5.00	Medium-grained bands of magnetite aggregated with apatite
Niobates %	0.25	Fine-grained yellow to dark-grey, grainy texture occur within d. bands

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Beige dolomite occurs locally
Calcite %	1.00	Thin calcite carbonatite laminae (magnetite-bearing)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	VW	10	0.1

FROM
87.66 - **TO**
89.65

ROCK CODE bcrenpCCCD

= **Min Style** b **Fabric** cren **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS White, pink and yellow bands of calcite carbonatite are interlaminated and crenulated within dolomite carbonatite. Magnetite occurs within thin laminae up to 5 cm associated with calcite carbonatite - thicker laminae consist of magnetite disseminated within calcite while thinner are essentially composed entirely of magnetite. Fine-grained brown phlogopit occurs disseminated with magnetite in calcite carbonatite. Apatite occurs as strong laminations that follow crenulations. Zircon occurs concentrated with magnetite laminae. Cream calcite carbonatite laminae void of accessory minerals (~ 2 cm thick) occur interlaminated with calcite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Fine-grained black to yellow pyrochlore - replaced by partially by fersmite (Nb ₂ O ₅ (Niton) % = ~ 1.7 wt % in places - concentrated near magnetite and visible pyrochlore)
Magnetite %	12.50	Fine- to medium-grained magnetite occurs disseminated in calcite carbonatite and aggregated in thin laminae (< 1 cm)
Pyrite %	0.50	Fresh pyrite occurs locally aggregated with magnetite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	0	Lamination is low ~ 0 degrees: crenulations core angle = ~ 30 degrees)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
89.65 - **TO**
105.82

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite with infrequent d. grey bands composed of magnetite (larger bands ~5 to 10 cm), apatite, zircon . White magnetite-bearing calcite carbonatite laminae occur towards top of interval. Smaller laminae (<3 cm) are non-magnetic and contain dark-grey metallic mineral, apatite, zircon and visible fersmite. Light-grey dolomite contains thin laminae of white apatite (no-zircon).

MINERALIZATION

Type	Value	Comments
Magnetite %	2.50	Aggregated with apatite in larger d. grey bands and disseminated within thin calcite laminae
Pyrite %	1.50	Occur aggregated within d. grey laminae and as stringers within dolomite carbonatite.
Niobates %	0.75	Fine-grained yellowish grey fersmite observed with smaller bands; possible fersmite & columbite (pyrochlore) observed with magnetite and within calcite laminae

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Varies between 15 and 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	15	0.5

FROM 105.82	-	TO 111.61	ROCK CODE blfgAMX	=	Min Style b	Fabric l	Texture fg	Litho AMX	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite with dark-grey bands composed of dark-grey metallic mineral, apatite, black altered phlogopite, pyrite and zircon (~ 5 to 10 % of interval).					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.10	Fine-grained yellow to dark-grey fersmite occurs within dark-coloured bands			
				Pyrite %	1.50	Aggregated with dark-grey metallic mineral in dark-coloured bands; aggregates (< 1 cm) and stringers within dolomite carbonatite			
			ALTERATION	Type	Value	Comments			
				Amphibolite %	10.00	Fine-grained dark-grey to coarse-grained black (phlogopite) clasts			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	10			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	7.5	0.5		

FROM 111.61	-	TO 115.25	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Massive light-grey dolomite carbonatite with localized weak lamination. Uncommon altered black phlogopite occurs locally with apatite laminae (< 1 cm thick).					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Rare aggregates and fine-grained disseminations			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Veining %	moderate	40	Dolomite veins rimmed by apatite		
				Laminations %	very weak	10	Only locally observed		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	5	0		

FROM	TO	ROCK CODE	nlpCD	=	Min Style	Fabric	Texture	Litho	Struct								
115.25	- 124.39				n	l	p	CD									
		MAIN COMMENTS	Laminated dolomite carbonatite is light-grey with black phenocrysts of altered phlogopite associated with pyrite. Apatite occurs moderately laminated to aggregated "swirls" within dolomite carbonatite. Zircon is rare. No Nb-mineralization observed.														
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Zone	HCL	Apatite	Zircon														
H	VW	12.5	0.1														
FROM	TO	ROCK CODE	nlpCD	=	Min Style	Fabric	Texture	Litho	Struct								
124.39	- 139.53				n	l	p	CD									
		MAIN COMMENTS	Laminated dolomite carbonatite is light-grey and porphyritic to locally inequigranular. Dark-coloured bands (1 to 10 cm thick) are composed of black altered phlogopite, pyrite, apatite and dolomite. Phlogopite is altered to dolomite in places. Pyrite composes massive laminae up to 2 cm thick in places; more common towards top of interval. Dark bands are barren (confirmed by Niton XRF). Zircon occurs disseminated throughout interval.														
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Zone	HCL	Apatite	Zircon														
		10	0.25														

FROM 139.53	-	TO 143.41	ROCK CODE nmpAMX	=	Min Style n	Fabric m	Texture p	Litho AMX	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite with clasts of green fenite 0.5 to 1 m thick. Fenite becomes progressively grey in colour downhole along with increase in calcite in the matrix (calcitized-reacts strongly to HCl). Calcite veins are also present within fenite blocks., rimmed by phlogopite. Phenocrysts within dolomite carbonatite are comprised of fine-to medium-grained black altered phlogopite (some dolomitization). Apatite occurs aggregated within dolomite carbonatite. Zircon occurs disseminate within calcite carbonatite. Apatite forms a rim on calcitized fenite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Aggregates up to 1cm occur disseminated throughout dolomite carbonatite.			
			ALTERATION	Type	Value	Comments			
				Amphibolite %	60.00	Green to light-grey (calcitized)			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
					M	5	0.1		

FROM 143.41	-	TO 147.34	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Mottled textured dolomite carbonatite light- to medium grey. Medium-grey dolomite occurs commonly vein-like to light-grey dolomite. Apatite occurs as aggregates. Zircon occurs disseminated. Uncommon irregular bands or aggregates of coarse-grained dolomite carbonatite contains clay-like yellow mineral (after phlogopite?) and aggregates of pyrite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Typically < 0.5 mm aggregates (but up to ~2.5 cm) occur with light-grey coarse-grained dolomite			
			ALTERATION						
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nlpCD	=	Min Style	Fabric	Texture	Litho	Struct
147.34	- 153.05				n	l	p	CD	
		MAIN COMMENTS	Laminated dolomite carbonatite is light-grey with localized phenocrysts of black altered phlogopite. Abundant apatite occurs as swirly-like laminations. Zircon occurs disseminated throughout						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	1.25	Fine-grained pyrite occurs associated with phlogopite; commonly aggregated together.				
		ALTERATION							
		STRUCTURE	Type	Intens	CA°	Comments			
			Laminations %	moderate	40				
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			H	VW	25	0.1			

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-025

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454656.32	6256672.09	1667.24	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	217.94		217.94		Central 3
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	3.05	3.05
NQ	3.05	217.94	217.94

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
32.31	34.80	-46.50	14.0	5616	84.7	Reflex EZ-shot
138.99	36.40	-48.20	13.9	5748	72.6	Reflex EZ-shot
214.58	34.90	-48.50	9.3	5757	196.8	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	21/Aug/2010	
Drill Contractor		14/Aug/2010	16/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-025

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho	Struct
0.00	- 3.05							CASE	
		MAIN COMMENTS							
		MINERALIZATION							
		ALTERATION							
		STRUCTURE							
		MISCELLANEOUS							
		Zone	HCL	Apatite	Zircon				

FROM	TO	ROCK CODE	nmCD	=	Min Style	Fabric	Texture	Litho	Struct
3.05	- 18.66				n	m	c	CD	
		MAIN COMMENTS							
		White to dark-grey dolomite carbonatite with bands of dark-brown calcitization (reacts to HCl). Locally the carbonatite is fractured and brecciated, increasing downhole. Rubble composes ~50 % of interval. Dark-brown calcitization infills fractures and forms matrix to brecciated dolomite carbonatite clasts. In places the matrix is fine-grained and dark-green. The dark-green matrix reacts moderately to HCl. Apatite occurs oriented to moderately laminated in dolomite carbonatite and is locally concentrated throughout interval. Zircon occurs disseminated throughout interval, but in higher concentration in brecciated carbonatite. Dark-grey to black fine-grained phase (~10 cm thick) occur between 10.5 and 11.0 m. Dark-coloured phase appears to be filling fractures between brecciated dolomite carbonatite clasts and appears to have undergone minor calcitization. Dark-coloured phase contains abundant very-fine grained disseminated pyrite.							
		MINERALIZATION							
		Type	Value	Comments					
		Pyrite %	1.50	Fine-grained oxidized pyrite occurs disseminated and as stringers within dolomite carbonatite.					
		ALTERATION							
		Type	Value	Comments					
		Oxidation %	20.00	Orange dolomite - occurs mostly near fractures					
		Calcite %	50.00	Dark brown laminae, mottles and matrix (to breccia)					
		STRUCTURE							
		Type	Intens	CA°	Comments				
		Laminations %	weak	10	At top of interval - 40 degrees - shallows to 10 degrees within 1 m - disappears within rubble (within next 2 m)				
		MISCELLANEOUS							
		Zone	HCL	Apatite	Zircon				
		OX	W	10	0.25				

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
18.66	-	nmfgAMX	n	m	fg	AMX		
		MAIN COMMENTS	Green fenite (generally ~ 50 cm clasts) occurs within light-grey dolomite carbonatite. Numerous white calcite carbonatite veins crosscut the fenite and occurs within the matrix of the fenite. Black altered crystals of phlogopite (?) occur clustered within fenite and occasionally within calcite veins. Apatite occurs dispersed within dolomite carbonatite. There is a ~20 cm interval at ~19.75 m where dark-brown calcitization crosscuts dolomite in numerous veins (0.5 to 1 cm) plus a larger vein of green "fenite" (~2.5 cm).					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	0.50	Oxidized stringers within dolomite carbonatite.			
		ALTERATION	Type	Value	Comments			
			Oxidation %	10.00	Orange dolomite clasts			
			Amphibolite %	40.00	Medium-green fine-grained fenite (?) with phlogopite and calcite appears intrusive into dolomite carbonatite (?)			
			Calcite %	20.00	Dark-brown mottling focuses on green fenite			
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	weak	20	Only locally observed		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	S	5	0		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
22.31 - **TO**
33.15

ROCK CODE nlcAMX = **Min Style** n **Fabric** l **Texture** c **Litho** AMX **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite is laminated to locally brecciated. Dark-brown calcitization occurs interlaminated with dolomite carbonatite and as the matrix to short brecciated segments (<10 cm). Apatite occurs aggregated to weakly laminated with dolomite carbonatite. Zircon occurs disseminated throughout dolomite carbonatite. Between ~28.6 and 31 m, the interval has almost entirely been calcitized. Remnant aggregated to weakly laminated apatite stand out in this area.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Oxidized pyrite occurs as aggregates and stringers within dolomite carbonatite

ALTERATION

Type	Value	Comments
Calcite %	70.00	Dark-brown laminae and matrix (breccia)
Amphibolite %	5.00	Medium-green fenite has ovoid texture
Oxidation %	10.00	Beige mottling in dolomite carbonatite - concentrates around oxidized pyrite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Only locally observed
Veining %	weak	40	Dark-brown veins of dark-brown calcitization vary between 20 and 60 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
33.15 - **TO**
34.95

ROCK CODE

nmfgAMX

=

Min Style
n

Fabric
m

Texture
fg

Litho
AMX

Struct
MAIN COMMENTS

Dark-green to light grey fenite with minor white dolomite carbonatite. Fenite has ovoid texture. Fenite is greenish-grey in core, has black phlogopite-rich rim than medium-grey margin near dolomite carbonatite contact. Greenish-grey core reacts to HCl - contains some calcite. Apatite occurs weakly laminated within dolomite carbonatite. Zircon occurs disseminated within dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.25	Minor oxidized aggregates within dolomite carbonatite; also observed in smaller quantities in fenite

ALTERATION

Type	Value	Comments
Amphibolite %	65.00	Dark-green to light grey compose two separate segments in interval seperated by dolomite carbonatite - one is ~1.1 m, one is ~15 cm
Calcite %	5.00	Minor calcitization concentrated along laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	30	Only locally observed; may just be contact between fenite and dolomite carbonatite
Veining %	moderate	35	Calcite veins (~0.5 mm) measured in fenite - 30 and 40 degrees, but may be much more variable

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.1

FROM
34.95 - **TO**
45.52

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Laminated dolomite carbonatite is light-grey in colour and locally brecciated. Matrix to the breccia is fine-grained dark-grey to black in colour. Magnetite-bearing calcite carbonatite occurs ~40 m and 40.5 m. Magnetite is fine- to medium-grained and occurs mostly as aggregates (with phlogopite) within calcite semi-oriented to lamination. Apatite occurs dispersed to moderately laminated within dolomite carbonatite. Zircon occurs disseminated within dolomite carbonatite. No Nb-mineralization observed. Niton XRF indicates Nb-mineralization (0.4 to 0.68 wt. % Nb2O5) in highly weathered bands (brown in colour, weak reaction to HCl). Zircon concentrated within these mineralized zones.

MINERALIZATION

Type	Value	Comments
Niobates %		Not observed, but present in small amount based on Nito XRF analysis
Magnetite %	2.50	Fine- to medium-grained magnetite aggregates occur concentrated with calcite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Beige dolomite mottling
Calcite %	30.00	Dark-brown mottling within dolomite carbonatite and commonly associated with dark-grey breccia matrix

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	60	Dolomite vein up to ~ 3 cm thick parallel to fine-grained black vein crosscut calcitization(~42 m) Veins of white fluorescent unknown mineral occur within dolomite carbonatite (unmeasured)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
45.52 - **TO**
47.84

ROCK CODE

nmpCCCD

=

Min Style
n

Fabric
m

Texture
p

Litho
CCCD

Struct
MAIN COMMENTS

Greenish grey rock resembles "fenite" from 17.67 to 22.31 m interval. Rock reacts moderately to HCl. Under UV only white irregular blobs in rock fluoresce bright pink and can be confirmed as calcite. Phlogopite occurs as fine- to medium-grained phenocrysts associated mostly with calcite blobs. Apatite and zircon occur dispersed throughout interval. Groundmass appears to be composed of greenish grey fine-grained equant dolomite (fluoresces deep purple colour under UV) with interstitial calcite (fluoresces bright pink under UV).

MINERALIZATION

Type	Value	Comments
Pyrite %	0.00	No pyrite observed?

ALTERATION
STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
47.84 - **TO**
55.74

ROCK CODE nICD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite is laminated to locally crenulated (~48.25 m). At ~54.25 m, calcitized dolomite carbonatite grades into greenish grey rock described in previous interval. Calcite occurs as veins within dark-grey mineral. A few coarse grained dolomite laminae (-5 cm) occur concordant to lamination. Apatite occurs laminated with in dolomite carbonatite and dark-grey rock; where crenulated, apatite follows crenulations. Zircon occurs dispersed throughout dolomite carbonatite and dark-grey rock.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occurs concentrated within highly altered laminae and in ~0.5 cm aggregates with coarse grained lamnae

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite mottling; occurs in both dolomite carbonatite and light-grey rock

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	70	Calcite veins within dark-grey rock - crosscut lamination; calcitized veins crosscut dolomite at 70 degrees - veins are observed to be orthogonal to each other in places; white fluoresce vein observed with UV crosscuts coarse-grained laminae at 60 degrees
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	7.5	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
55.74 - **TO**
66.30

ROCK CODE

nmCD

=

Min Style
n

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS
MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs disseminated throughout interval and as small (< 1.5 cm) stringers

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite
Calcite %	45.00	Dark-brown calcitization concentrates as veins

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	35	
Veining %	moderate	80	Coarse-grained dolomite veins ~ 2.5 cm thick; Calcitization forms veins at ~30 degrees throughout interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	12.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nxCD	=	Min Style	Fabric	Texture	Litho	Struct
66.30	-	100.06			n	x	c	CD	
		MAIN COMMENTS	50 % of interval is composed of rubble. The remainder of the interval is composed of dolomite carbonatite breccia composed of dolomite carbonatite clasts within a calcitized matrix. The matrix is places is light-grey in colour. Apatite occurs dispersed within dolomite carbonatite clasts. Cavity occurs between 84.75 and 87.2 m.						
		MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Pyrite %	1.00	Oxidized aggregates up to 1 cm occur within dolomite clasts and in calcite matrix				
		ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>				
			Calcite %	75.00	Dark brown calcitized breccia matrix; some rubble is entirely composed of calcite.				
		STRUCTURE	<u>Type</u>	<u>Intens</u>	<u>CA°</u>	<u>Comments</u>			
			Veining %	moderate	40	White fluorescent (white as well) mineral - veins ~ 0.5 mm			
		MISCELLANEOUS	<u>Zone</u>	<u>HCL</u>	<u>Apatite</u>	<u>Zircon</u>			
			OX	S	7.5	0.25			

FROM
100.06 - **TO**
115.30

ROCK CODE nICD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite with magnetite-bearing bands (22 and 65 cm). Magnetite occurs within a fine-grained dark-green matrix with minor apatite. Dark-green matrix does not react to HCl and fluoresces deep purple (indicating likely dolomite). Other dark-coloured non-magnetic bands are composed of altered phlogopite, pyrite apatite and dolomite and abundant zircon. These bands are 1 to 15 cm in size and compose ~ 5 % of interval. Apatite occurs aggregated within dolomite carbonatite. Low Nb-mineralization was observed in either magnetic or non-magnetic bands using Niton (~0.10 wt. % and ~0.07 wt % Nb2O5 respectively).

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Form oxidized aggregates up to 1 cm within dolomite carbonatite and fresh to oxidized aggregates within non-magnetic bands

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige dolomite; concentrated often around non-magnetic dark-coloured bands - oxidized pyrite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	10	0.25	

FROM 115.30 - **TO** 132.93

ROCK CODE nICD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite with localized porphyry. Porphyry actually consists of laminated aggregates of apatite with altered phlogopite and abundant zircon within dolomite carbonaite. Niton XRF indicates that generally these bands of apatite and altered phlogopite are near barren (< 0.17 wt. Nb2O5). One band at ~117 m composed of apatite, dark-grey unknown and yellowish fersmite (?) has a Nb2O5 concentration of 0.6 wt %. No Nb-mineralization was observed elsewhere. Interval becomes progressively more oxidized towards bottom of interval (i.e. towards breccia).

MINERALIZATION		
Type	Value	Comments
Niobates %	0.10	Only observed in one band at ~117 with dark-grey metallic unknown - yellowish, fine-grained: likely fersmite
Pyrite %	1.75	Mostly as aggregates (up to 1 cm) associated with apatite

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	VW	15	0.25	

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct								
132.93	- 135.39	nxfgCD	n	x	fg	CD									
		MAIN COMMENTS	Dolomite carbonatite clasts within a grey to medium-green matrix (does not react to HCl). Within the first 15 cm, the matrix is oxidized to a pink colour. From ~134.4 to 135 m dolomite is more fractured than brecciated. At ~135 m, there is a 15 cm interval of sheared (?) and fractured breccia. This area is enriched in apatite, dark-grey metallic, and zircon. Fractures are oriented at ~35 degrees												
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H	VW	12.5	0.75												

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct								
135.39	- 146.80	nICD	n	l	fg	CD									
		MAIN COMMENTS	Light-grey dolomite carbonaite is locally laminated to massive. Massive intervals are around 1-2 m long intervals. Apatite occurs weakly to strongly laminated and commonly aggregated with dark-grey metallic unknown (dolomitized magnetite?), pyrite (commonly aggregated to d. grey metallic unknown) and zircon. No Nb-mineralization observed.												
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H	VW	5	0.1												

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nmCD	=	Min Style	Fabric	Texture	Litho	Struct
146.80	-				n	m	c	CD	
		MAIN COMMENTS	Light-grey dolomite carbonatite with crosscutting calcitization. Interval is composed of ~25 % rubble. Apatite occurs moderately laminated throughout the interval. Zircon occurs disseminated throughout interval. Abundant joints observed at ~50 degrees and 70 degrees in competent rock.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	0.50	Localized aggregates and stringer of oxidized pyrite				
		ALTERATION	Type	Value	Comments				
			Calcite %	10.00	Dark-brown calcitization concentrates near joints				
		STRUCTURE	Type	Intens	CA°	Comments			
			Veining %	moderate	70	Some joints infilled with calcite			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			H	W	10	0.25			

FROM 155.28 - **TO** 176.84

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonate with common bands of Nb-mineralization (identified by Niton XRF: up to 2.4 wt. % Nb2O5). Some bands contain black altered phlogopite and pyrite aggregated with zircon. Localized porphyry bands containing altered phlogopite, pyrite and zircon within dolomite are not mineralized (~0.1 Nb2O5). One highly oxidized/weathered pod (~7.5 cm) at ~157.3 m is mineralized (~0.71 Nb2O5). Apatite occurs aggregated to moderately laminated throughout interval. Zircon occurs associated with apatite. Nb-minerals are not observed in dark-grey fine-grained bands (cryptic Nb-mineralization). Calcitization increases towards the end of the interval (towards magnetite-bearing calcite carbonatite).

MINERALIZATION		
Type	Value	Comments
Pyrite %	2.00	Fresh pyrite occurs as weak laminations and stringers within light-grey dolomite carbonatite; fine-grained pyrite occurs aggregated with altered phlogopite

ALTERATION		
Type	Value	Comments
Calcite %	10.00	Dark-brown calcitization - concentrates towards bottom of interval (towards magnetite-bearing calcite carbonatite).
Oxidation %	1.00	Minor oxidation concentrated ~157.3 m - original texture or lithology unknown

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	VW	25	1	

FROM
176.84 - **TO**
183.61

ROCK CODE blpCCCD = **Min Style** b **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Interlamination between magnetite-bearing calcite carbonatite and light-grey dolomite carbonatite. Magnetite-bearing calcite carbonatite forms ~ 1 m wide intervals separated by 10 to 30 cm intervals of dolomite carbonatite. Fine-grained to medium-grained magnetite occurs aggregated within calcite groundmass. Concentration varies between laminae (10 to 80 vol. % of units). Minor phlogopite occurs within calcite carbonatite. Calcitization concentrates towards top of interval. Near contacts with dolomite carbonatite, ground mass is medium-green in colour and fluoresces dark purple (dolomite?) A band of dark-green dolomite (?) occurs at ~182.5 m. Apatite occurs with magnetite in calcite carbonatite (low concentration), zircon was only observed in dolomite carbonatite. Low Nb-mineralization observed (Niton XRF - 0.05 to 0.25 wt. % Nb2O5)

MINERALIZATION		
Type	Value	Comments
Pyrite %	0.50	Minor fresh pyrite occurs with magnetite
Niobates %	0.10	Likely columbite occurring with magnetite
Magnetite %	50.00	Fine- to coarse-grained magnetite occurs within calcite carbonatite

ALTERATION		
Type	Value	Comments
Calcite %	25.00	Dark-brown calcitization occurs towards top of interval
Oxidation %	2.50	Beige dolomite to pink calcite - occurs near contacts between calcite-carbonatite and dolomite carbonatite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	S	5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 183.61	-	TO 192.40	ROCK CODE dmCD	=	Min Style d	Fabric m	Texture p	Litho CD	Struct									
			MAIN COMMENTS	Light-grey dolomite carbonatite with phenocrysts of black altered phlogopite. Concentration of altered phlogopite increases down interval (towards calcite carbonatite). Apatite occurs dispersed throughout interval.														
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Zone	HCL	Apatite	Zircon															
H	VW	15	0.1															

FROM 192.40	-	TO 198.89	ROCK CODE dmpCC	=	Min Style d	Fabric m	Texture p	Litho CC	Struct												
			MAIN COMMENTS	White calcite carbonatite contains disseminated magnetite, apatite and phenocrysts of phlogopite. A few intervals (~20 cm) contain dolomite and altered phlogopite. Apatite occurs aggregated to weakly laminated within dolomite. No zircon observed. No Nb-mineralization observed.																	
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H	VS	7.5	0																		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	dmpCD	=	Min Style	Fabric	Texture	Litho	Struct								
198.89	- 206.60				d	m	p	CD									
		MAIN COMMENTS	Light-grey dolomite carbonatite with phenocrysts of black altered phlogopite. Apatite occurs aggregated. No niobates observed. Niton XRF indicates a small interval (~205 -206 m) with cryptic Nb-mineralization.														
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H	VW	7.5	0.1														
FROM	TO	ROCK CODE	nmCD	=	Min Style	Fabric	Texture	Litho	Struct								
206.60	- 217.94				n	m	fg	CD									
		MAIN COMMENTS	White massive dolomite carbonatite. Apatite occurs dispersed to weakly laminated. Zircon occurs disseminated throughout interval. Phenocrysts of black altered phlogopite form clots (~2.5 cm) and occur locally.														
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		ALTERATION															
		STRUCTURE															
		MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>VW</td> <td>5</td> <td>0.1</td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon	H	VW	5	0.1
Zone	HCL	Apatite	Zircon														
H	VW	5	0.1														

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-026

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454110.85	6256585.18	1649.39	40.00	-55.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	215.24		215.24		Central 1
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	3.05	3.05
NQ	3.05	215.24	215.24

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
32.31	36.40	-56.30	10.9	5735	139.0	Reflex EZ-shot
129.84	39.30	-56.60	11.3	5780	62.2	Reflex EZ-shot
215.19	36.90	-57.00	12.0	5768	15.4	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	23/Aug/2010	
Drill Contractor		15/Aug/2010	16/Aug/2010

SUMMARY

--

GEOLOGY LEGEND

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 3.05	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No Rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				

FROM 3.05	-	TO 17.07	ROCK CODE	nICD	=	Min Style n	Fabric l	Texture c	Litho CD	Struct	
			MAIN COMMENTS	Light grey to dark-brown dolomite carbonatite has been extensively weathered and fragmented. Dark-brown calcitization is concentrated to laminae. No Nb-mineralization observed. Apatite occurs strongly laminated. Zircon occurs locally associated with apatite laminae.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.50	Oxidized pyrite concentrated within laminae					
			ALTERATION	Type	Value	Comments					
				Oxidation %	15.00	Beige dolomite - localized around pyrite-rich laminae					
				Calcite %	35.00	Dark-brown calcitization (reacts strongly to HCl) - generally follows lamination					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	moderate	30	30 degrees until ~8m where is steepens to 60 degrees				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	M	7.5	0.1				

FROM
17.07

-

TO
32.67

ROCK CODE

bICD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct

MAIN COMMENTS

Laminated light-grey to beige dolomite carbonatite with irregularly spaced d. grey bands (10 to 25 cm). D. grey bands are composed of magnetite, apatite, interstitial dolomite and pyrite in variable concentrations. The lower the magnetite proportion, the higher the pyrite proportion. In smaller bands, d. grey non-magnetic mineral appears in place of magnetite. Apatite occurs aggregated to strong d. grey laminations (with oxidized pyrite, zircon and d. grey mineral: ~ 1 cm).

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Aggregated with apatite: fine- to medium-grained, d. grey
Niobates %	0.75	Fine-grained pinkish brown pyrochlore observed in bands with less magnetite; columbite likely occurs with magnetite
Pyrite %	2.00	Occurs aggregated with magnetite and apatite; also within thin d. grey apatite laminae

ALTERATION

Type	Value	Comments
Oxidation %	80.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	50	Varies from 70 degrees at top of interval to locally 20 degrees in places; 50 degrees is most common
Veining %	weak	50	Pink calcite vein (~2 cm thick) occurs concordant to lamination - crosscuts magnetite-apatite band

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.25

FROM
32.67 - **TO**
41.46

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite. Localized phenocrysts consist of fine- to medium-grained black altered phlogopite commonly associated with apatite laminae and aggregates (up to 10 cm diameter). Apatite occurs as strong d. grey laminations (generally < 1 cm thick) with oxidized pyrite and fersmite. Zircon occurs disseminated throughout interval. Mineralization occurs banded on a small scale; fersmite observed in apatite laminae up to 2 cm thick.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.50	Pale-yellow to d. grey fine-grained fersmite observed in apatite laminae and with localized porphyry
Pyrite %	1.00	Fine-grained oxidized pyrite occurs with apatite laminae

ALTERATION		
Type	Value	Comments
Oxidation %	35.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	strong	40	Relatively consistent

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	7.5	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
41.46 - **TO**
58.34

ROCK CODE bICD = **Min Style** b **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite with steep core angle with localized ovoid texture. Interval contains rare phenocrysts of fine-grained black altered phlogopite. Apatite occurs as weak to strong d. grey laminations with pyrite, d. grey unknown mineral and common zircon. Rare d. grey bands up to 5 cm thick consist of apatite, pyrite, d. grey metallic unknown and a black mineral identified as columbite (no zircon though).

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Fresh to localized oxidized pyrite occurs disseminated to concentrated within laminae up to 5 cm thick.
Niobates %	0.10	Fine-grained black mineral observed in d. grey bands identified as columbite (?)

ALTERATION		
Type	Value	Comments
Oxidation %	60.00	Beige dolomite localized around pyrite-rich laminae

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	70	Generally ~ 70 degrees but does shallow to 50 degrees in places and interval also appears massive in places

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	5	0.25	

FROM 58.34	-	TO 73.90	ROCK CODE bICD	=	Min Style b	Fabric I	Texture p	Litho CD	Struct
			MAIN COMMENTS	Interval is highly fractured and consists of fragmented rock to rubble up to 73.9 m. Light-grey to beige dolomite carbonatite contains localized phenocrysts of black altered phlogopite (dolomitization of phenocrysts observed) associated with apatite and pyrite. A 10 cm pyrite-rich band occurs at ~ 71.5 m (aggregated with apatite, minor d. grey mineral, phlogopite and apatite: only obvious potential mineralized zone. No niobates observed).					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	2.50	Fresh to oxidized fine-grained pyrite stringers and aggregates occur associated with apatite laminae- 10 cm band at 71.5 m composed of ~70 % pyrite			
			ALTERATION	Type	Value	Comments			
				Oxidation %	50.00	Beige dolomite - follows lamination			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	50			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	5	0.1		

FROM 73.90	-	TO 81.31	ROCK CODE blpCD	=	Min Style b	Fabric I	Texture p	Litho CD	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite with dark-grey bands composed of apatite, pyrite, black-altered phlogopite, dark-grey metallic mineral and abundant zircon. Bands compose about 7.5 % of interval. No niobates observed in these bands. Apatite occurs as thin (<0.5) strong laminations with dolomite carbonatite (void of zircon).					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.25	Aggregated with d. grey apatite bands and as irregular veins (no measurable orientation)			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	25	Between 15 and 30 degrees		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	12.5	0.5		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
81.31 - **TO**
83.46

ROCK CODE

bICCCD

=

Min Style
b

Fabric
l

Texture
p

Litho
CCCD

Struct
MAIN COMMENTS

Light-grey dolomite carbonaite interlaminated with magnetite-bearing calcite carbonatite. Apatite forms strong d. grey laminations within dolomite carbonatite with pyrite and d. grey mineral. Magnetite occurs with apatite as sheared (?) laminae within calcite carbonatite - contact between calcite and magnetite-apatite is jagged. Magneite also occurs locally disseminate within calcite carbonatite. Clasts of oxidized magnetite occur within dolomite carbonatite towards end of interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.75	Fine-grained fresh pyrite occurs disseminated throughout interval
Niobates %	1.50	Pinkish-brown pyrochlore observed disseminated with magnetite in calcite carbonatite
Magnetite %	10.00	Occurs aggregated with apatite and disseminated within calcite carbonatite; fine- to medium grained

ALTERATION

Type	Value	Comments
Oxidation %	2.50	Of magnetite-clasts within dolomite carbonatite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	12.5	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
83.46 - **TO**
98.24

ROCK CODE

bmCD

=

Min Style
b

Fabric
m

Texture
p

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite with phenocrysts of medium-grained black altered phlogopite. Groundmass is commonly fine- to medium-grained inequigranular. Dark bands are composed of apatite, pyrite and altered phlogopite. The bands compose ~ 2.5 % of interval, occurring more frequently towards end of interval. No niobates observed in bands or in dolomite carbonatite porphyry. Apatite occurs as thin (<1 cm) laminations within dolomite carbonatite; white to dark-grey. Zircon occurs associated with darker-coloured apatite laminations.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Fresh pyrite occurs aggregated within d. grey bands and disseminated with altered phlogopite throughout interval.

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	10	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
98.24 - **TO**
103.51

ROCK CODE

nmpAMX

=

Min Style
n

Fabric
m

Texture
p

Litho
AMX

Struct
MAIN COMMENTS

White magnetite-bearing phlogopite-phryic calcite carbonatite is the dominant phase of interval, occurring between 102.25 and 103.5 m. The first half of interval is dominated by fenite clasts veined by beige calcite carbonatite. Green fenite grades into medium-grey colour towards grey dolomite carbonatite. Clasts of massive phlogopite occurs at ~ 101 m in dolomite carbonatite. Contact between grey dolomite carbonatite and white magnetite-bearing calcite carbonatite is irregular with veins of grey dolomite penetrating into calcite carbonatite. At contacts between calcite and dolomite carbonatite, magnetite becomes demagnetized and less dark in colour (dolomitization of magnetite?). Apatite occurs aggregated within dolomite carbonatite. Zircon occurs concentrated at contacts between calcite and dolomite carbonatite. No Nb-mineralization observed.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Fine-grained - disseminated within calcite carbonatite
Pyrite %	0.75	Aggregates < 1 cm occur within dolomite and calcite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Beige dolomite mottling
Amphibolite %	30.00	Bluish green fenite clasts (~0.3 to 1 m thick) with phlogopite near contacts with calcite carbonatite.

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	2.5	0.5

FROM 103.51	-	TO 119.16	ROCK CODE blpCD	=	Min Style b	Fabric l	Texture p	Litho CD	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite with phenocrysts of medium-grained black altered phlogopite. Groundmass is commonly fine- to medium-grained inequigranular (occurs on meter-wide scale). Sharp contacts (~40 degrees measured at ~108.4 m) occur between inequigranular and fine-grained dolomite. Dark bands (<2.5 mm) are composed of apatite, pyrite and altered phlogopite. Irregular fine-grained dark-grey clasts (~15 cm) occur at ~108.75 m with visible apatite occurring dispersed within. Dark-grey metallic mineral aggregates at contact between clasts and dolomite carbonatite. The bands compose ~ 2.5 % of interval, occurring more frequently towards end of interval. No niobates observed in bands or in dolomite carbonatite porphy. Apatite occurs as thin (<1 cm) laminations within dolomite carbonatite; white to dark-grey. Zircon occurs associated with darker-coloured apatite laminations.No niobates observed, but dark-bands and clasts show potential for mineralization.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Fine-grained pyrite occurs associated with phlogopite			
			ALTERATION						
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	35	Locally observed.		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	VW	10	0.25		

FROM 119.16	-	TO 127.48	ROCK CODE nmAMX	=	Min Style n	Fabric m	Texture	Litho AMX	Struct
			MAIN COMMENTS	Large fenite clasts (up to 2.5 m thick) occur within massive inequigranular dolomite carbonatite. Calcite veins up to 2.5 cm crosscut fenite blocks. Smaller fenite clasts contain dolomite within matrix (likely secondary alteration). Phlogopite accumulates near contact between fenite and calcite. Rare apatite occurs dispersed within dolomite carbonatite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Aggregates up to 1 cm within dolomite carbonatite - locally concentrated			
			ALTERATION	Type	Value	Comments			
				Amphibolite %	60.00	Light-grey to dark-green fenite clasts up to 2.5 m thick			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	M	1	0		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
127.48 - **TO**
136.44

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite with phenocrysts of medium-grained black altered phlogopite. Groundmass is commonly fine- to medium-grained inequigranular. Dark bands (up to 5 cm) are composed of apatite, pyrite and altered phlogopite. The bands compose ~ 2.5 % of interval, occurring more frequently towards end of interval. No niobates observed in bands or in dolomite carbonatite porphyry. Apatite occurs aggregated to moderately laminated within dolomite carbonatite; white to dark-grey. Zircon occurs associated with darker-coloured apatite laminations.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Occurs aggregated with dark-grey apatite laminae

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	Interval becomes more massive towards end of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VS	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
136.44 - **TO**
155.25

ROCK CODE nmpAMX = **Min Style** n **Fabric** m **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Light-grey to dark-green fenite clasts (10 cm to ~2 m thick) within laminated porphyritic light-grey dolomite carbonatite. Phlogopite-phryic calcite carbonatite veins (< 5 cm) crosscut fenite blocks. Light-grey fenite clasts contain abundant dolomite in matrix (evidence of dolomitization?). Apatite occurs as dark-grey laminations aggregated with black altered phlogopite, pyrite and common zircon. Apatite also commonly occurs aggregated along the fringes of fenite blocks. No niobates observed in dark laminae of dolomite carbonatite. Medium-sized (< 5 cm) veins of pyrite and altered phlogopite with interstitial dolomite matrix occur within dolomite carbonatite porphyry.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.25	Occur aggregated with d. grey apatite veins within dolomite carbonatite and within

ALTERATION

Type	Value	Comments
Amphibolite %	75.00	

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	40	30 to 50 degrees - roughly concordant to lamination - composed of pyrite, black altered phlogopite and minor dolomite - have similar appearance as fenite
Laminations %	weak	10	Only observed in dolomite carbonatite - variable on cm-scale - 10 to 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
155.25 - **TO**
165.89

ROCK CODE nlpCC = **Min Style** n **Fabric** l **Texture** p **Litho** CC **Struct**

MAIN COMMENTS Dominantly white calcite-carbonatite with phenocrysts of medium-grained phlogopite and magnetite. Medium-green fenite blocks occur in higher concentration towards last 3 m of interval. Laminae of green fenite occur within calcite carbonatite (calcitization of fenite clasts?). Aphyric beige dolomite carbonatite occurs between ~161.2 and 162.2 m. Smaler veins occur within fenite (at ~ 165.3 m). Apatite occurs oriented in calcite carbonatite and along the contacts between dolomite and fenite. No zircon observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Commonly associated with phlogopite in calcite carbonatite
Magnetite %	1.00	Fine- to medium-grained magnetite occurs disseminated within calcite carbonatite

ALTERATION

Type	Value	Comments
Amphibolite %	10.00	Medium-green with black phlogopite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	15	Varies between 10 and 20 degrees
Veining %	moderate	60	Beige dolomite vein (~2.5 cm) at around 165.3 m

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VS	5	0

FROM
165.89 - **TO**
171.26

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite porphyritic with phenocrysts of medium-grained black altered phlogopite to locally fine- to medium-grained inequigranular. Dark bands are composed of apatite, pyrite, altered phlogopite and visible fine- to medium-grained fersmite. The bands compose ~ 5 % of interval, occurring more frequently towards end of interval. . Zircon occurs associated with darker-coloured apatite laminations. Calcite carbonatite laminae (~ 2.5 cm thick) occur with a strongly banded interval at ~ 169.1 m. Core angle changes towards end of interval to steep crenulation. Laminated apatite follows crenulation. Fine-grained dark-grey veins (dolomite?) crosscut local crenulation.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine- to medium grained yellow fersmite observed within dark-cloured apatite bands with altered phlogopite
Pyrite %	1.00	Aggregates and stringers (< 1 cm) within dolomite carbonatite; commonly associated with apatite and altered phlogopite

ALTERATION

Type	Value	Comments
Silica %	1.00	Minor quartz vein

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	30	Dark grey dolomite(?) veins ~ 1 cm thick crosscut crenulations
Laminations %	moderate	50	Lamination becomes steeply crenulated at ~169.6 m --85 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
171.26 - **TO**
177.91

ROCK CODE nmAM = **Min Style** n **Fabric** m **Texture** **Litho** AM **Struct**

MAIN COMMENTS Medium-green fenite with common ovoid texture - rimmed by grayish green to blue. Fenite is crosscut by calcite veins up to 10 cm thick. Phlogopite crystals typically concentrate around the margins of the contacts between calcite and fenite. Fenite reacts moderately to HCl indicating some calcitization of the matrix. Apatite occurs as thin laminae (< 1 cm) within thicker calcite veins.

MINERALIZATION		
Type	Value	Comments
Niobates %	0.10	Minor pale-pink pyrochlore occurs with apatite laminae in calcite-carbonatite vein
Pyrite %		No pyrite observed.

ALTERATION		
Type	Value	Comments
Amphibolite %	90.00	

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	70	Calcite veins crosscut fenite at various angle but generally steep angle for thin (< 1 cm) veins - The thick 10 cm vein crosscuts at ~20 degrees

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	M	1	0	

FROM
177.91

TO
185.89

ROCK CODE

blpAMX

=

Min Style
b

Fabric
l

Texture
p

Litho
AMX

Struct

MAIN COMMENTS

Dark-green fenite blocks occur within dominantly within porphyritic white calcite carbonatite. Phenocrysts consist of black medium-grained phlogopite and minor magnetite. Beige aphyric calcite carbonatite (~ 2.5 cm thick) crosscutte fenite blocks. Phlogopite accumulates at contact between fenite and calcite. Dolomite carbonatite occurs sporadically throughout interval (~ 1 m segments) dominantly towards top of interval. Near dolomite-calcite contact, magnetite within calcite becomes non-magnetic and lighter grey in colour. Apatite occurs moderately laminated with calcite and dolomite carbonaite. Zircon occurs disseminated within dolomite and calcite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Suspect pinkish brown phlogopite occur within phlogopite-rich bands within calcite carbonatite - Suspect fine-grained pale-pink fersmite occurs within apatite bands in dolomite carbonatite
Pyrite %	0.25	Occurs commonly aggregated with phlogopite in calcite carbonatite in small proportion and aggregated with dark-grey metallic mineral (after magnetite?).

ALTERATION

Type	Value	Comments
Amphibolite %	25.00	Dark-green blocks

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	Generally low but steepens to 60 degrees towards end of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	S	7.5	0.1

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct								
185.89	- 196.16	blpCD	b	l	p	CD									
MAIN COMMENTS Light-grey weakly laminated to massive dolomite carbonatite with phenocrysts of medium-grained black altered phlogopite. Groundmass is commonly fine- to medium-grained inequigranular. Dark bands are composed of apatite, pyrite and altered phlogopite. The bands compose ~ 2.5 % of interval, occurring more frequently towards top of interval. No niobates observed in bands or in dolomite carbonatite porphyry. Apatite occurs as weakly within dolomite carbonatite form in light-coloured spots or laminations. Zircon occurs associated with apatite. No niobates observed.															
MINERALIZATION															
<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.75</td> <td>Fine-grained pyrite occurs commonly aggregated with altered phlogopite phenocrysts</td> </tr> </tbody> </table>								Type	Value	Comments	Pyrite %	1.75	Fine-grained pyrite occurs commonly aggregated with altered phlogopite phenocrysts		
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Type	Intens	CA°	Comments												
Laminations %	weak	50	varies between 40 and 60 degrees												
MISCELLANEOUS															
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Zone	HCL	Apatite	Zircon												
H	VW	10	0.25												

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct								
196.16	- 209.80	nlpAMX	n	l	p	AMX									
MAIN COMMENTS Medium-green to light-grey fenite blocks (~30 - 150 cm) within weakly laminated-porphyritic dolomite carbonatite. Phenocrysts consist of black altered phlogopite. Minor beige phlogopite-pyrite calcite veins crosscut fenite blocks. Apatite occurs dispersed throughout interval. Zircon concentrates near contact with fenite and calcite carbonatite.															
MINERALIZATION															
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Type	Value	Comments													
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ALTERATION															
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Zone	HCL	Apatite	Zircon												
H	W	5	0.1												

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 209.80	-	TO 215.24	ROCK CODE nmfgAM	=	Min Style n	Fabric m	Texture fg	Litho AM	Struct
			MAIN COMMENTS	Medium-green fenite with common ovoid texture - rimmed by grayish green to blue. Fenite is crosscut by calcite veins up to 2.5 cm thick. A ~20 cm interval of aphyric dolomite carbonaite occurs at ~ 213.5 m (the two contacts appear to be orthogonal to each other (30 and 60 degree core angles) Phlogopite crystals typically concentrate around the margins of the contacts between calcite and fenite. Apatite occurs dispersed within dolomite carbonatite. Zircon is present within fenite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.25	Minor pyrite aggregates observed within medium-grey fenite			
			ALTERATION	Type	Value	Comments			
				Amphibolite %	85.00	Dark-green to light grey			
			STRUCTURE	Type	Intens	CA°	Comments		
				Veining %	strong	65	Calcite veins crosscut fenite between 60 and 70 degrees		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H	W	1	0.1		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-027

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454681.67	6256504.63	1677.78	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	213.72		213.72		Central 3
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	3.45	3.45
NQ	3.45	213.72	213.72

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
4.27	30.10	-46.70	12.3	5708	18.2	Reflex EZ-shot
213.66	28.60	-47.70	16.8	5778	16.3	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	24/Aug/2010	
Drill Contractor		18/Aug/2010	19/Aug/2010

SUMMARY

--

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

Log by

Date

Hole ID

FROM 0.00	-	TO 3.45	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No Rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 3.45	-	TO 24.67	ROCK CODE	bIfCD	=	Min Style b	Fabric I	Texture f	Litho CD	Struct	
			MAIN COMMENTS	Light grey dolomite carbonatite with weak lamination. Niton XRF indicates that bands of high decalcification have the highest Nb-mineralization (0.47 to 0.7 Nb wt. %). These zones are uncommon with the most evident one occurring at ~13.2 m - 13.8 m. This zone is rich is aggregated to laminated apatite and oxidized pyrite with common zircon and may represent a weathered magnetite cumulate phase (?). Apatite occurs aggregated to weakly laminaed throughout entire interval, often forming dark-grey (~1 cm laminae) rich in oxidized pyrite and zircon. Niton XRF indicates that these dark-grey laminae may be a minor source of Nb-mineralization - interval shows slight increase in Nb wt. % where laminae are present (from <0.1 to ~0.2 wt. %).							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.50	Oxidized pyrite concentrated to laminae with apatite and locally disseminated					
				Niobates %	0.10	Possible fersmite grains in decalcified mineralized bands- dark-grey to black, fine-grained, octahedral, does not streak red					
			ALTERATION	Type	Value	Comments					
				Oxidation %	50.00	Concentrates mostly around dark-grey laminations (apatite + pyrite)					
			STRUCTURE	Type	Intens	CA°	Comments				
				Laminations %	weak	40					
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	W	7.5	0.25				

FROM
24.67 - **TO**
46.08

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Light-grey to dark-brown dolomite carbonatite. Apatite occurs dispersed within dolomite carbonatite. Niton XRF indicates that mineralization is generally low (< 0.1 Nb wt. %) but with bands of Nb-mineralization up to 0.77 Nb. Wt. % (generally 0.25 - 0.30 wt. %). These zones are calcitized (dark-brown) but remnant d. grey mineral is observed in some aggregated with apatite and abundant zircon is observed with UV light. These zones may represent calcitized magnetite cumulate phases (?). In areas of high calcitization, dispersed and laminated apatite stand out.

MINERALIZATION

Type	Value	Comments
Niobates %		No observed but likely present on small scale as indicated by Niton XRF
Pyrite %	1.50	Fine-grained oxidized pyrite occurs disseminated and as stringers

ALTERATION

Type	Value	Comments
Calcite %	75.00	Dark-brown calcitization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Only locally observed
Veining %	moderate	80	~1 cm thick fresh calcite veins crosscut calcitized dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.25

FROM
46.08

TO
63.17

ROCK CODE

nliCD

=

Min Style
n

Fabric
l

Texture
i

Litho
CD

Struct

MAIN COMMENTS

Light-grey to beige laminated dolomite carbonatite with small interval of medium green to blue fenite clast occurring between 52.1 m and 52.5 m. and at ~62.25 m. The fenite clast reacts moderately to HCl indicating calcite in the fenite matrix. Niton XRF indicates this interval to be all < 0.1 Nb wt. %. Porphyritic to inequigranular laminae up to 10 cm thick occur locally. Porphyritic laminae consist of phlogopite phenocrysts, abundant bands of apatite, stringers of oxidized pyrite and frequent zircon. Other bands of similar size contain apatite, dark-grey unknown mineral, disseminated pyrite, common zircon and interstitial clay minerals (weathering product).

MINERALIZATION

ALTERATION

Type	Value	Comments
Calcite %	15.00	Dark-brown mottling
Amphibolite %	2.50	Medium-green core with bluish grey rim - core lookings be composed of fine-grained green acicular mineral (aegirine or arvedsonite?).

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	60	Generally weak lamination but becomes strong locally, most notably near fenite clasts

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.75

FROM
63.17 - **TO**
72.56

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Light-grey to dark-brown dolomite carbonatite with localized laminae of porphyritic and inequigranular (fine- to medium-grained) dolomite carbonatite.. Local phenocrysts of black altered phlogopite occur associated with strongly laminated apatite. Inequigranular dolomite carbonatite laminae contains only minor dispersed apatite and no zircon. Dark-grey bands consist of apatite, altered phlogopite, dark-grey unknown mineral and abundant zircon. Niton XRF indicate zones of cryptic Nb-enrichment. Nb wt. % in these zones rise to ~0.15 Nb wt. % from ~0.05 Nb wt. % over ~ 20 cm interval. No niobates are observed in these zones and no obvious textural differences were observed from low-mineralization to higher-mineralization zone.

MINERALIZATION	Type	Value	Comments
	Pyrite %	1.00	Occur as thin (<0.25 mm) oxidized laminae associated with apatite laminae; and locally concentrated aggregates up to 1 cm

ALTERATION	Type	Value	Comments
	Calcite %	20.00	Dark brown calcitization - generally follows lamination (forms laminae up to 2.5 cm thick)
	Oxidation %	35.00	Beige dolomite - typically surrounds thin pyrite-rich laminae

STRUCTURE	Type	Intens	CA°	Comments
	Laminations %	moderate	40	
	Veining %	weak	80	Veins of ~1 cm calcitization crosscut lamination

MISCELLANEOUS	Zone	HCL	Apatite	Zircon
	OX	M	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
72.56 - **TO**
79.31

ROCK CODE nliCD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite. Inequigranular dolomite carbonatite occurs as uncommon laminae up to 2.5 cm thick. Apatite occurs aggregated locally with black altered phlogopite and oxidized pyrite. Apatite also occurs as strong laminations within dolomite carbonatite. Niton XRF indicates this zone to have low Nb-mineralization (0.04 to 0.08 Nb wt. %).

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Fresh to oxidized pyrite aggregates up to 0.5 cm in size.

ALTERATION		
Type	Value	Comments
Calcite %	10.00	Dark-brown calcitization mottles and rare laminae
Oxidation %	55.00	Beige dolomite occurs mottled with light-grey dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	60	
Veining %	weak	85	Fine- to coarse grained-dolomite carbonatite crosscuts lamination

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
H	VW	5	0	

FROM
79.31 - **TO**
92.53

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Light-grey to dark-brown dolomite carbonatite. Most of dolomite carbonatite has been replaced by dark-brown calcitization. A few short intervals retain original light-grey colour of dolomite carbonatite. Interval is locally inequigranular. Finer-grained appear to altered to dark-brown calcite first, giving the interval a localized brecciated appearance. A medium-grey fine-grained blob (~25 cm diameter) occurs at ~ 89.5 m. Fine-grained phlogopite, pyrite and zircon accumulate at boundary. Apatite occurs aggregated to weakly laminated within dolomite carbonatite. Zircon occurs locally concentrated. Niton XRF indicates the zone to contain low Nb-mineralization (< 0.1 Nb wt. %) but with one ~10 cm band at ~ 85.9 m that contains 0.68 Nb wt. %. Original texture of the small band is mostly destroyed by calcitization but abundant aggregated apatite and zircon are observed with UV; and remnant d. grey mineral is observed within calcitized matrix.

MINERALIZATION	Type	Value	Comments
	Pyrite %	1.50	

ALTERATION	Type	Value	Comments
	Calcite %	80.00	Dark-brown calcitization - has completely replaced dolomite is most of interval.
	Oxidation %	10.00	Gives dolomite beige colour

STRUCTURE	Type	Intens	CA°	Comments
	Veining %	moderate	80	Calcite veins (<0.5 cm) - generally ~80 degrees but as shallow as 60 degrees in places
	Laminations %	weak	50	Only locally observed due to high calcitization of interval

MISCELLANEOUS	Zone	HCL	Apatite	Zircon
	H	M	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	nmiCD	=	Min Style	Fabric	Texture	Litho	Struct
92.53	- 105.81				n	m	i	CD	
		MAIN COMMENTS	Medium-grey to beige mottled medium- to fine-grained inequigranular dolomite carbonatite in contact with fine-grained white dolomite carbonatite. Sharp contact occurs at 96.68 m (~60 degrees). Fine-grained dolomite appears to grade back into inequigranular dolomite at ~100.5 m. Between 101.5 and 103.25 m interval includes d. grey semi-brecciated dolomite unit - looks to possibly be dolomitized fenite. Niton XRF indicates the entire interval to have low Nb-mineralization - <0.01 to 0.08 Nb wt. %.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	1.25	Oxidized aggregates up to 1 cm				
		ALTERATION	Type	Value	Comments				
			Calcite %	5.00	D. brown mottling				
			Oxidation %	20.00	Beige dolomite				
			Amphibolite %	2.50	D. grey fine-grained clasts up to ~7.5 cm				
		STRUCTURE	Type	Intens	CA°	Comments			
			Veining %	moderate	60	Veins of inequigranular up to 2 cm within fine-grained dolomite			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			H	W	1	0			

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
105.81	- 110.21	blfgCD	b	l	fg	CD		
		MAIN COMMENTS	Light-grey to pink dolomite carbonatite. Apatite occur moderately to strongly laminated commonly with dark-grey unknown mineral, oxidized pyrite and abundant zircon. Niton XRF indicate a relative increase in Nb-mineralization in this interval (Nb wt. % = 0.06 to 0.18 throughout entire interval).					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	1.50	Oxidized pyrite occurs concentrated to laminae as stringers, disseminated, aggregated and as thin laminae			
		ALTERATION	Type	Value	Comments			
			Calcite %	5.00	Dark-brown calcitization concentrates to laminae (<2.5 cm)			
			Oxidation %	70.00	Beige to pink dolomite - generally follows lamination (around pyrite stringers and laminations)			
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	moderate	30	varies 20 to 40 degrees		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	W	10	0.5		

FROM
110.21

TO
125.13

ROCK CODE bICM = **Min Style** b **Fabric** I **Texture** **Litho** CM **Struct**

MAIN COMMENTS Magnetite-apatite cumulate form bands (5 to 100 cm thick) within laminated light-grey dolomite carbonatite. Magnetite-apatite cumulate bands contain various proportions of apatite to magnetite, contain clusters of zircon and sometimes contain minor interstitial calcite along with dolomite. Dolomite carbonatite contains abundant apatite laminae. Disseminated zircon occur with dolomite carbonatite. Magnetite occurs disseminated in dolomite carbonatite at contact with cumulate in places. Niton XRF indicates the cumulates to be mineralized (up to 0.95 Nb wt. %); dolomite carbonatite have values between 0.10 and 0.25 Nb wt%.

MINERALIZATION

Type	Value	Comments
Magnetite %	35.00	Aggregated with apatite and less commonly disseminated with dolomite carbonatite: fine- to medium-grained
Pyrite %	0.10	Uncommon oxidized pyrite in dolomite carbonatite
Niobates %	1.50	Black fine-grained columbite likely occurs with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Reddish colour concentrates around magnetite cumulate

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 10 and 40 degrees
Veining %	moderate	40	Dolomite veins (1 to 2.5 cm) crosscut cumulate phase locally

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	25	0.75

FROM
125.13 - **TO**
131.62

ROCK CODE

bIFCC

=

Min Style
b

Fabric
I

Texture
f

Litho
CC

Struct

MAIN COMMENTS

Light-grey to beige dolomite carbonatite with greenish-gray fenite blocks (20 and 60 cm thick). Between the 2 fenite blocks at ~128.83 m, a small magnetite-apatite cumulate occurs. Another occurs at ~130.6 m. Apatite occurs as strong laminations within dolomite carbonatite. Zircon occurs associated with apatite laminae. Lamination converges around small clasts (4 to 10 cm) within interval (composed of bluish grey mineral, phlogopite and calcite) - possibly fenite. Phlogopite is dominantly mineral in small 4 cm clast whereas it forms the rim of larger clasts. One clast is composed magnetite-phlogopite calcite carbonatite. Altered phlogopite occurs as irregular veins semi-parallel to lamination within dolomite carbonatite. Nb-mineralization appears to occur in fine-grained dark-grey laminae (<2.5 cm thick) composed of apatite, dark-grey unknown and oxidized pyrite based on Niton XRF analysis. No niobates observed.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Occurs aggregated with apatite within cumulate clasts and disseminated (fine-grained) within calcite carbonatite clast
Pyrite %	0.50	Oxidized stringers occur locally.

ALTERATION

Type	Value	Comments
Amphibolite %	15.00	Greenish-grey with ovoid texture - darker coloured rims

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	60	Dolomite vein (< 0.5 mm) crosscuts lamination
Laminations %	moderate	10	Generally low ~ 10 degrees - steepens to ~ 60 degrees around clasts

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
131.62 - **TO**
147.82

ROCK CODE

nlfgcd

=

Min Style
n

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite grades into pinkish dolomite carbonatite (high oxidation). Weak crenulation occurs at ~141.75 - 142.5 m. Zone of crenulation shows increase in oxidization (indicating by pinkish tint) and decalcification. Black altered phlogopite phenocrysts occur locally. Apatite occurs strongly laminated to crenulated associated with zircon and dark-grey laminae (pyrite and dark-grey unknown). Niton XRF indicate this interval to be of low Nb-mineralization (<0.13 Nb wt. %) - likely occurs v. fine-grained within dark-grey laminae.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Oxidized pyrite aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Calcite %	1.00	Rare dark-brown mottling of dolomite
Oxidation %	60.00	Pink dolomite and abundant oxidation of pyrite
Amphibolite %	1.00	Rare dark-grey clast ~ 10 cm

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Generally ~ 30 degrees - core angle of crenulations is steep ~ 85 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
147.82 - **TO**
151.14

ROCK CODE

gmfgCD

=

Min Style
g

Fabric
m

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Dark-grey unknown and pyrite occur as aggregates (~10-15 cm) with apatite and zircon within light-grey massive dolomite carbonatite. Apatite occurs dispersed to weakly oriented within dolomite carbonatite. Niton XRF indicate aggregates contain Nb-mineralization up to 1.07 Nb wt. %. Aggregates may be altered magnetite-apatite aggregates.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Pale-pink fine-grained fersmite observed along the fringes of one of the aggregates
Pyrite %	3.50	Aggregated with d. grey mineral (replacement of magnetite?) - less commonly disseminated in dolomite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Beige dolomite - concentrated around aggregates

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
151.14 - **TO**
175.18

ROCK CODE nlpAMX = **Min Style** n **Fabric** l **Texture** p **Litho** AMX **Struct**

MAIN COMMENTS Medium to light-green fenite (generally 10 to 100 cm thick intervals) with phlogopite occurs interlaminated with dolomite carbonatite (contact at ~ 40 degrees). Fenite blocks commonly react moderately to HCl (calcite present within matrix). Magnetite to black altered phlogopite occur as phenocrysts within dolomite carbonatite near contact with fenite. A large interval of porphyritic dolomite carbonatite occurs between 163.5 and 164.25 m (phenocrysts = black altered phlogopite). Apatite occurs laminated within dolomite carbonatite. Zircon is rare.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.75	Oxidized pyrite occurs concentrated within laminae

ALTERATION

Type	Value	Comments
Amphibolite %	30.00	Medium-green to light-green occurs within core of fenite blocks - towards dolomite contact, fenite becomes medium- to light greyish blue in colour
Calcite %	1.00	Minor calcitization concentrated around thin calcite veins

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	10	Thin (~0.25 mm) calcite veins - surrounded by calcitization
Laminations %	moderate	30	Varies between 40 and 20 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	2.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
175.18 - **TO**
188.00

ROCK CODE

nmAM

=

Min Style
n

Fabric
m

Texture
Litho
AM

Struct
MAIN COMMENTS

Green fenite crosscut by abundant calcite veins (0.1 to 5 cm thick) and uncommon dolomite veins. Fenite reacts moderately to HCl (calcitized?). Veins are oriented at 30, 40 and 60 degrees. Phlogopite commonly accumulates near contact between calcite veins and fenite. No apatite observed. Zircon observed in fenite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Oxidized aggregates within dolomite veins.

ALTERATION

Type	Value	Comments
Calcite %	5.00	Dark-brown veins crosscut calcite veins; localized

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	0	0.25

FROM 188.00 - **TO** 193.78

ROCK CODE blcAMX = **Min Style** b **Fabric** l **Texture** c **Litho** AMX **Struct**

MAIN COMMENTS Highly calcitized and weathered dolomite carbonatite with few segments showing original colour (light-grey) of dolomite. Towards end of interval, a bluish-green unit shows; possibly fenite (?). Nb-mineralized bands occur within weathered dolomite carbonatite as indicating by Niton XRF (0.88 and 0.99 Nb wt. %). UV indicate this small (~5 cm) intervals to contain abundant apatite and zircon. Dark-grey unknown can also be recognized in less weathered spots within mineralized intervals. Apatite occurs moderately laminated in unmineralized calcitized dolomite carbonatite.

MINERALIZATION		
Type	Value	Comments
Niobates %		Not observed but present based on Niton XRF analysis
Pyrite %	0.50	Oxidized aggregates up to 1 cm

ALTERATION		
Type	Value	Comments
Amphibolite %	10.00	bluish green segmets; occur at 192.75 and between 196.25 -196.75 m - veined extensively by calcite; fenite reacts moderately to HCl
Calcite %	60.00	Dark-brown calcitization - replaces dolomite extensively

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	20	Only locally observed

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	12.5	0.5	

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
193.78	- 213.72	nmfgCD	n	m	fg	CD		
		MAIN COMMENTS	Dominantly porphyritic light-grey dolomite carbonatite with localized intervals (meters wide) of fine-grained equigranular dolomite carbonatite. A pink fine- to medium-grained dolomite carbonatite (~0.5 m) occurs at ~212.8 m (possible dyke?). Pitted within inequigranular dolomite indicate weathering out of pyrite crystals (and likely leaching of Fe into dolomite). At contact occurs abundant black altered phogopite and pyrite. Apatite occurs aggregated with porphyry. Fine-grained equigranular segments have very little apatite. Niton XRF indicate interval to be relatively barren with the highest Nb reading being 0.08 wt. % Nb. No niobates are observed.					
		MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>			
			Pyrite %	1.50	Aggregated up to 1 cm; locally oxidized			
		ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>			
			Calcite %	5.00	Dark-brown mottling occurs irregularly through interval			
			Oxidation %	25.00	Pink dolomite - strongest near inequigranular dolomite, but occurs locally elsewhere where pyrite is present abundantly			
		STRUCTURE	<u>Type</u>	<u>Intens</u>	<u>CA°</u>	<u>Comments</u>		
			Laminations %	weak	30	Only locally observed		
		MISCELLANEOUS	<u>Zone</u>	<u>HCL</u>	<u>Apatite</u>	<u>Zircon</u>		
			OX	W	7.5	0.1		

End of Hole

End of Hole

GEOLOGY LOG

Hole ID 2010-028

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454740.85	6256621.61	1714.31	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	213.41		213.41		Central 3
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	3.05	3.05
NQ	3.05	213.41	213.41

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor			
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By	Steve Dumma	25/Aug/2010	
Drill Contractor			

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-028

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 3.05	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 3.05	-	TO 6.30	ROCK CODE	nmfgCD	=	Min Style n	Fabric m	Texture fg	Litho CD	Struct	
			MAIN COMMENTS	Interval composed of dolomite carbonatite talus - massive to laminated and light-grey to oxidized beige in colour with minor calcitization.							
			MINERALIZATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>					
				Pyrite %	1.50	Fine-grained generally oriented oxidized pyrite confined to laminae (< 2.5 cm)					
			ALTERATION	<u>Type</u>	<u>Value</u>	<u>Comments</u>					
				Calcite %	5.00	Dark brown mottling					
				Oxidation %	10.00	Beige dolomite - follow lamination - surrounds pyrite-bearing laminae					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								
				OX	W	7.5	0.25				

FROM
6.30

TO
23.05

ROCK CODE

gliCD

=

Min Style
g

Fabric
l

Texture
i

Litho
CD

Struct

MAIN COMMENTS

Light-grey weakly laminated dolomite carbonatite locally weathered to various extents (generally oxidation and calcitization). Rubble composes ~40 % of interval. Dark-grey to black aggregates (2-5 cm) and dark-grey bands up to 10 cm thick are potential areas of Nb-mineralization composing ~ 10 % of the interval. Aggregates are common within rubble and in places contain magnetite, but mostly consist of hematite (streaks red) . The bands are composed of apatite, oxidized pyrite, dark-grey unknown and abundant zircon. The aggregates and bands mark an area of high oxidation and weathering.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Likely fine-grained columbite occurs associated with magnetite
Magnetite %	1.00	Minor medium-grained magnetite aggregates in rubble; likely was present in higher abundance previously but has been altered to hematite
Pyrite %	1.00	Oxidized pyrite occurs associated with d. grey bands and to a lesser degree disseminated within dolomite carbonatite

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite and hematite associated with magnetite aggregates
Calcite %	15.00	Dark brown calcitization - mottling and some laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Generally 30 degrees but shallows to 10 degrees locally

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
23.05 - **TO**
25.87

ROCK CODE

nmiCD

=

Min Style
n

Fabric
m

Texture
i

Litho
CD

Struct
MAIN COMMENTS

White medium-grained dolomite within f. grained beige to medium-grey dolomite groundmass. The groundmass is commonly calcitized and oxidized. Haloes of oxidation commonly form around medium-grained dolomite. Apatite forms as yellow aggregates, commonly associated with medium-grained dolomite; sometimes forming "clasts" of apatite and medium-grained dolomite within a fine-grained dolomite groundmass. No zircon observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Form oxidized aggregates up to 3 cm diameter

ALTERATION

Type	Value	Comments
Silica %	5.00	Silicification of matrix common
Oxidation %	50.00	Common beige dolomite in groundmass
Calcite %	30.00	Dark-brown calcitization - concentrates on fine-grained matrix dolomite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
25.87 - **TO**
30.09

ROCK CODE

glfgCD

=

Min Style
g

Fabric
I

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Dominantly composed of laminated medium-grey to beige dolomite carbonatite. Localized bands of fine- to medium-grained inequigranular dolomite occur sporadically throughout interval. Apatite form d. grey fine-grained aggregates to weak bands with d. grey unknown, pyrite and zircon (<2.5 cm in diameter). No niobates observed. Black phlogopite aggregates (<2.5 cm) occur within fractures within dolomite carbonatite; veins extend from aggregates into dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Generally oxidized pyrite - may have fresh core - < 1 cm aggregates

ALTERATION

Type	Value	Comments
Calcite %	2.50	d. brown mottling
Oxidation %	30.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
30.09 - **TO**
43.61

ROCK CODE

gmiCD

=

Min Style
g

Fabric
m

Texture
i

Litho
CD

Struct
MAIN COMMENTS

Medium-grained white dolomite within fine-grained light-grey to beige fine-grained dolomite. Weathering concentrates on the fine-grained matrix. Calcitization commonly forms rims on medium-grained dolomite. Decalcification removes the matrix leaving high-relief medium-grained dolomite. Uncommon d. grey aggregates (~2.5 cm) occur sporadically throughout interval. Aggregates contain apatite and unidentified fine-grained grey mineral (s). No zircon observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Form oxidized aggregates u to 2 cm in inequigranular dolomite; occur disseminated within locally laminated fine-grained segments

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite in matrix; and concentrated around disseminated pyrite
Calcite %	15.00	Dark-brown mottling; forms common rims around medim-grained dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	30	Locally observed

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	1.5	0

FROM
43.61 - **TO**
62.10

ROCK CODE gmfCCCD = **Min Style** g **Fabric** m **Texture** f **Litho** CCCD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite has been weathered extensively (obliviates original texture of carbonatite). 47.8 to 62.1 m is composed almost entirely of rubble. Localized brecciated to fractured dolomite contains calcitization infilling fractures. Calcite carbonatite is observed between ~ 49.8 0 and 50.35 m: contains bands of fine-grained magnetite and disseminated yellow fersmite. Apatite forms d. grey aggregates (5-10 cm) with unidentified grey mineral and abundant zircon (no niobates identified). Niton XRF indicate this interval may be modestly mineralized (0.18 & 0.29 Nb wt %: random checks).

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Yellow fine-grained fersmite observed within calcite carbonatite
Magnetite %	0.50	Fine-grained magnetite occurs as bands within calcite carbonatite
Pyrite %	1.00	Fine-grained oxidized pyrite occurs confined to laminae

ALTERATION

Type	Value	Comments
Calcite %	20.00	Locally dark-brown mottling
Oxidation %	40.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	40	Dolomite veins (~0.5 mm) measured at 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.75

FROM
62.10 - **TO**
79.37

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Interval is dominantly fine-grained dolomite carbonatite.. Medium-grained white dolomite occurs locally within fine-grained light-grey to beige dolomite groundmass. Rubble occurs between 68.9 and 72.3 m. Bands (~5 - 25 cm thick) composed of magnetite (or non-magnetic d. grey or hematite alteration product), apatite, common zircon +/- phlogopite. Between 63.1 and 63.35 m (just before magnetite band), magnetite occurs disseminated within laminated fine-grained dolomite carbonatite. Rare phenocrysts within interval consist of black altered phlogopite (fine- to medium-grained).

MINERALIZATION

Type	Value	Comments
Magnetite %	2.50	Occurs aggregates with apatite within bands: fine- to medium grained
Niobates %	1.00	Likely columbite occurs with magnetite bands
Pyrite %	1.00	Form oxidized aggregates up to 0.5 cm - within dolomite

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige dolomite; high around banded magnetite
Calcite %	20.00	Dark-brown mottling increases towards the end of the interval

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	50	Observed also at 30 degrees locally; also dipping in opposite directions within same competent piece of core

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
79.37 - **TO**
86.49

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Laminated fine- to medium-grained dolomite carbonatite. Medium-grained dolomite are white in colour; groundmass is medium-grey to beige in colour. Interval contains abundant sporadic rubble. Dark-grey bands (2.5 to 5 cm) occur sporadically throughout interval, composed ~5 % of interval. Larger bands (towards 5 cm) contain disseminated magnetite within a dolomite matrix. Smaller bands contain dark-grey unknown mineral within dolomite. Apatite accumulates along the fringes of the bands. Zircon occurs disseminated within bands. Inequigranular dolomite contains uncommon dispersed apatite and no zircon.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Fine-grained columbite likely occurs with magnetite in d. grey bands
Pyrite %	1.50	Aggregates and stringers of oxidized pyrite (up to ~2 cm) within dolomite carbonatite
Magnetite %	1.50	Within d. grey dolomite band

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Beige dolomite
Calcite %	15.00	Dark-brown mottling; commonly follow lamination

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	2.5	0.1

FROM
86.49

TO
106.54

ROCK CODE

blfgAMX

=

Min Style
b

Fabric
l

Texture
fg

Litho
AMX

Struct

MAIN COMMENTS

Fenite clasts (10 to 50 cm) occur within laminated to locally massive light-grey dolomite carbonatite with common oxidation and calcitization of matrix. Rubble composes ~50 % of interval. A medium-green fenite clast at 87.14 to 87.59 m contains phlogopite megacrysts and shows a weak lamination (~75 degree core angle) concordant to crosscutting veins of dolomite (up to 1 cm thick) extending from host massive dolomite carbonatite. Other clasts are typically 10 to 20 cm, showing the typically ovoid texture of fenite. The core of the clasts is commonly calcitized dark-brown. White calcite forms rims around d. green to d. brown core. Localized ~10 cm bands of inequigranular dolomite occur throughout interval. Apatite occurs laminated within uncommon d. grey fine-grained bands (5 to 10 cm) with pyrite and visible fersmite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Occur disseminated within d. grey bands (fresh to oxidized); typically confined to laminae as aggregates <0.5 cm in size
Niobates %	0.10	Fine-grained yellow fersmite occurs disseminated within d. grey bands

ALTERATION

Type	Value	Comments
Amphibolite %	10.00	Dark-green to dark-brown (calcitized) with abundant phlogoite (typically near contact with calcite veins.
Calcite %	5.00	Dark-brown calcitization - mostly of fenite - ovoid texture retained
Oxidation %	30.00	Beige dolomite - generally around pyrite-rich laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	15	
Veining %	moderate	40	Dolomite veins (~1 cm) crosscuts dolomite carbonatite and fenite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.25

FROM	TO	ROCK CODE	nmiCD	=	Min Style	Fabric	Texture	Litho	Struct									
106.54	- 115.85				n	m	i	CD										
		MAIN COMMENTS	~ 50 % of interval is composed of rubble - more dominantly towards top of interval. White medium-grained dolomite occurs within fine-grained medium-grey to beige dolomite groundmass. Groundmass is preferentially altered and weathered (calcitized and oxidized). Apatite occurs dispersed throughout dolomite. No zircon observed. No observed potential Nb-mineralization.															
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Fine-grained oxidized pyrite occurs disseminated - oxidized dolomite commonly surrounds pyrite</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	1.00	Fine-grained oxidized pyrite occurs disseminated - oxidized dolomite commonly surrounds pyrite			
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		MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>VW</td> <td>5</td> <td>0</td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon	OX	VW	5	0	
Zone	HCL	Apatite	Zircon															
OX	VW	5	0															

FROM	TO	ROCK CODE	gmiCM	=	Min Style	Fabric	Texture	Litho	Struct								
115.85	- 118.90				g	m	i	CM									
		MAIN COMMENTS	Interval composed of cumulated magnetite with little apatite and no observed zircon. Dolomite occurs interstitial to magnetite. The last 30 cm of the interval have been extensively oxidized. Niton XRF did not detect any Nb in interval (below detection limit).														
		MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Magnetite %</td> <td>60.00</td> <td>Fine- to medium grained cumulate (?) with interstitial dolomite</td> </tr> </tbody> </table>							Type	Value	Comments	Magnetite %	60.00	Fine- to medium grained cumulate (?) with interstitial dolomite		
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Zone	HCL	Apatite	Zircon														
OX	VW	10	0														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
118.90 - **TO**
123.90

ROCK CODE

blfgCD

=

Min Style
b

Fabric
I

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Dark grey bands (20 to 30 cm) composed of apatite, magnetite, dark-grey non-magnetic unknown and interstitial dolomite with laminated light-grey dolomite carbonatite. D. grey bands compose ~25 % of interval. Minor medium-grained phenocrysts of dark-grey unknown mineral occur commonly associated with apatite banding and abundant zircon. No niobates observed in bands.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Stringers to thin laminae (<0.25 cm thick)
Magnetite %	5.00	Medium-grained magnetite occurs aggregated within d. grey bands with d. grey unknown and apatite.

ALTERATION

Type	Value	Comments
Oxidation %	35.00	Beige laminated dolomite; orange halo occurs around some dark-grey magnetite-bearing bands

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	35	Measured 30 and 40 degrees throughout interval.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.5

FROM
123.90 - **TO**
137.82

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige porphyritic to inequigranular dolomite carbonatite with d. grey bands and aggregates from 5 to ~ 40 cm (more commonly towards 5 cm). Bands consist of dominantly dark-grey unknown with abundant zircon. Apatite aggregates around the rim of the bands. Apatite forms white (~1cm) laminae within dolomite carbonatite. Localized phenocrysts consist of black altered phlogopite, magnetite and d. grey unknown mineral. No niobates observed.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.75	Oxidized stringers and aggregates up to 2 cm.
Magnetite %	0.50	Uncommon localized medium-grained phenocrysts

ALTERATION		
Type	Value	Comments
Calcite %	2.50	D. brown mottling, concentrates towards end of interval (towards magnetite cumulate)

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	15	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
137.82 - **TO**
139.18

ROCK CODE gmiCM = **Min Style** g **Fabric** m **Texture** i **Litho** CM **Struct**
MAIN COMMENTS Highly oxidized magnetite cumulate unit with low apatite content and common zircon. Dolomite occurs interstitially and as a individual ~5 cm band (interlamination?). Calcite occurs as crosscutting veins.

MINERALIZATION

Type	Value	Comments
Magnetite %	80.00	Fine- to medium-grained magnetite occurs aggregates

ALTERATION

Type	Value	Comments
Calcite %	30.00	Dark-brown mottling within cumulate
Oxidation %	50.00	Orange colour around magnetite (likely hematite forming)

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	30	Calcite vein (~0.25 cm)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	M	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
139.18 - **TO**
150.49

ROCK CODE glcCD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Light-grey to beige dolomite carbonatite with localized intervals of inequigranular massive dolomite (up to 20 cm, but generally less than 5 cm in thickness). Uncommon d. grey aggregates (<5 cm) composed of apatite, d. grey unknown and abundant zircon compose ~1.5 % of interval. No niobates identified in aggregate. Apatite occurs as strong laminations in laminated segment, but is not present in inequigranular dolomite.

MINERALIZATION		Type	Value	Comments
	Pyrite %		1.00	Fine-grained oxidized pyrite occurs confined to laminae

ALTERATION		Type	Value	Comments
	Oxidation %		45.00	Beige dolomite
	Calcite %		10.00	Mottles up to 1.5 cm and matix to medium-grained dolomite.

STRUCTURE		Type	Intens	CA°	Comments
	Laminations %		moderate	25	Steepens to 50 degrees towards end of interval

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	OX		M	2.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
150.49 - **TO**
152.99

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Dark-grey band (~25 cm) composed of magnetite, apatite and common zircon occurs at top of interval within laminated light-grey to beige dolomite carbonatite. Other potential mineralized zones < 10 cm are zones of high oxidation and contain abundant apatite and pyrite. No niobates observed in bands.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized aggregates up to 0.5 cm
Magnetite %	2.50	Fine- to medium-grained magnetite occurs disseminated within d. grey band

ALTERATION

Type	Value	Comments
Oxidation %	45.00	Beige dolomite in laminated carbonatite; and concentrated around apatite-pyrite bands

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 20 and 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 152.99	-	TO 195.70	ROCK CODE nmpCD	=	Min Style n	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Dominantly porphyritic to locally inequigranular (up to 2 m intervals) dolomite carbonatite; weakly laminated to massive. Phenocrysts consist of black fine- to medium-grained altered phlogopite. Contact between porphyritic and inequigranular appears to be gradational but is commonly obscured by d. brown calcitization bands. Pristine dolomite is medium-grey in colour; Interval has been extensively oxidized to light-grey to beige. Apatite occurs aggregates to weakly laminated, commonly associated with altered phlogopite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Fresh to locally oxidized fine-grained pyrite aggregates with altered phlogopite and confined to laminae where present			
			ALTERATION	Type	Value	Comments			
				Calcite %	10.00	Localized bands of dark-brown calcitization ~ 10 cm thick			
				Oxidation %	75.00	Common light-grey to beige dolomie			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	10	Generally low ~ 10 degrees, but locally steepens to 20 and 30 degrees		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	5	0.1		

FROM
195.70 - **TO**
201.22

ROCK CODE gliCM = **Min Style** g **Fabric** l **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Cumulate phase is composed of magnetite, apatite (~10 %), common zircon in a fine-grained medium-green dolomite matrix. Pink calcite veins crosscut cumulate. Niton XRF indicates a low Nb-mineralization within this interval: 0.06 - 0.14 Nb wt. %

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Fine-grained columbite likely occurs with magnetite
Magnetite %	65.00	Fine- to medium-grained magnetite occurs dominantly aggregated within dolomite groundmass; less commonly disseminated within dolomite
Pyrite %	0.25	Veined pyrite concordant to lamination

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	
Veining %	weak	70	Pink calcite irregular veins u to 2.5 cm thick

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
201.22 - **TO**
203.71

ROCK CODE glcCD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Highly calcitized to oxidized dolomite carbonatite with minor disseminated and aggregated (~5 cm) magnetite. Some magnetite aggregates have been demagnetized to dark grey unknown mineral. Magnetite aggregates mark areas of high oxidation. Gouge to rubble occurs between ~203 -203.4 m (possible fault?). Apatite occurs moderately laminated and aggregated with magnetite (magnetic and altered). Zircon occurs concentrated with magnetite.

MINERALIZATION

Type	Value	Comments
Magnetite %	1.00	Medium-grained: mostly disseminated but also aggregates - more aggregate likely existed previously but have been oxidized and altered (dolomitized?)
Pyrite %	1.75	Stringers follow lamination

ALTERATION

Type	Value	Comments
Oxidation %	65.00	Orange colour; concentrates around magnetite aggregates
Calcite %	25.00	Medium to dark-brown mottling of interval - generally follows lamination

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.5

FROM 203.71 - **TO** 208.87

ROCK CODE bliCM = **Min Style** b **Fabric** l **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Magnetite-apatite cumulate (5-20 % apatite) occurs interlaminated with 10-50 cm intervals of laminated dolomite carbonatite. Cumulate has common d. green matrix hat weathers to beige colour (oxidized?). Cumulate is crosscut by 20 cm vein of calcite at 207.6 m (50 degree contact). Zirco observed concentrated at contact between dolomite and magnetite cumulate. Niton XRF indicates Nb-mineralization is < 0.15 Nb wt. % across entire interval.

MINERALIZATION		
Type	Value	Comments
Magnetite %	20.00	Fine- to medium-grained magnetite occurs aggregates with minor apatite within d. green matrix
Pyrite %	0.50	Aggregates up to 0.5 cm within dolomite carbonatite

ALTERATION		
Type	Value	Comments
Calcite %	10.00	Dark-brown mottling
Oxidation %	40.00	Beige dolomite and orange colour around magnetite (hematitization)

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	80	2.5 cm calcite vein - fracture infilled by calcite - prismatic calcite crystals observed on walls of fracture
Laminations %	moderate	40	

MISCELLANEOUS			
Zone	HCL	Apatite	Zircon
OX	VW	17.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 208.87	-	TO 213.41	ROCK CODE blpCD	=	Min Style b	Fabric l	Texture p	Litho CD	Struct
			MAIN COMMENTS	Interval grades from top to bottom from porphyritic to inequigranular (~209.8 m) to fine-grained (210.85) and becomes extensively calcitized towards end of interval (at ~212.20 m). Phencrysts consist of fine- to medium-grained black altered phlogopite. Dark-grey bands (2- 10 cm thick) consist of apatite, dark grey unknown with abundant zircon. Niton XRF indicates the zone to be relatively unmineralized: < 0.05 Nb wt. %.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.50	Oxidized aggregates (< 0.5 cm) and stringers			
			ALTERATION	Type	Value	Comments			
				Calcite %	7.50	Dark-brown mottling - concentrates towards end of interval			
				Oxidation %	50.00	Beige dolomite -commonly follows fractures - higher towards to of interval (porphyry)			
			STRUCTURE	Type	Intens	CA°	Comments		
				Veining %	moderate	80	Calcite vein (<0.5 cm)		
				Laminations %	weak	40	Only locally observed		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	5	0.25		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-029

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454758.05	6256520.80	1727.22	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	215.85		215.85		Central 3
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	4.49	4.49
NQ	4.49	215.85	215.85

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
35.97	29.00	-45.70	4.8	5591	14.6	Reflex EZ-shot
112.17	22.90	-46.60	7.6	5713	84.5	Reflex EZ-shot
212.75	23.50	-47.50	8.2	5702	113.3	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Ryan Kressall		
Geotech Logged By	Steve Dumma	26/Aug/2010	
Drill Contractor		18/Aug/2010	19/Aug/2010

SUMMARY

GEOLOGY LEGEND

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 4.49	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No Rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 4.49	-	TO 17.29	ROCK CODE	blfgCD	=	Min Style b	Fabric l	Texture fg	Litho CD	Struct	
			MAIN COMMENTS	Light-grey to beige dolomite carbonatite. Apatite occurs laminated within dolomite carbonatite. Zircon occurs concentrated in thick apatite bands with pyrite. Fine grained medium-grained aggregates contained apatite and abundant zircon occur sporadically throughout interval (~ 1% of interval).							
			MINERALIZATION	Type	Value	Comments					
				Niobates %	0.25	Fine-grained black soft octahedral grains within apatite bands- do not streak red - fersmite after pyrochlore?					
				Pyrite %	1.75	Oxidized pyrite occurs mostly confined to laminae and apatite bands in small aggregates (<0.5 cm) and stringers					
			ALTERATION	Type	Value	Comments					
				Oxidation %	50.00	Beige dolomite					
				Calcite %	10.00	Dark-brown mottling					
			STRUCTURE	Type	Intens	CA°	Comments				
				Veining %	weak		Dark-green to black irregular veins infilled fracturs within dolomite at ~8.70 m - no preferred orientation				
				Laminations %	moderate	30	Steepens to 40 degrees in places				
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
				OX	W	5	0.25	<input type="text"/>			

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
17.29 - **TO**
26.83

ROCK CODE glfgCD = **Min Style** g **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Same as above interval (4.59 - 17.29 m), but with large (5-25 cm) sporadically spaced magnetite-apatite cumulate bands. Bands compose ~ 10 % of interval. Apatite occurs weakly laminated within dolomite carbonatite. Zircon concentrates within cumulate bands.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Fine- to medium grained aggregates with apatite
Pyrite %	1.00	Oxidized fine-grained pyrite occurs dominantly confined to thin laminae with apatite
Niobates %	0.50	Likely columbite occurs with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite - rust around magnetite cumulates
Calcite %	5.00	Dark-brown mottling - generally follows laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	15	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
26.83 - **TO**
31.92

ROCK CODE blfgCD = **Min Style** b **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Phencrysts consist of fine-grained black altered phlogopite, locally distributed. Altered phlogopite accumulates with in ~20 cm band of apatite with visible fersmite. Besides the single apatite band, apatite occurs dispersed in low concentration within dolomite carbonatite. No zircon was observed. A fine-grained dark-grey vein (~1.5 cm thick) crosscuts lamination at steep angle at ~ 28.3 m. Under UV, the vein fluoresces light-pink to deep purple: indicating that the vein may consist of apatite-rich dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Fine-grained yellow to d. grey fersmite within apatite band
Pyrite %	0.50	Fine-grained oxidized stringers follow orientation: commonly associated with phlogopite

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	85	Dark-grey dolomite (?) vein
Laminations %	weak	15	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 31.92	-	TO 38.04	ROCK CODE nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Medium-grained white dolomite within fine-grained light-grey to beige dolomite carbonatite. Apatite occurs dispersed throughout interval.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Oxidized pyrite aggregates up to 0.5 cm			
			ALTERATION	Type	Value	Comments			
				Oxidation %	30.00	Fine-grained beige dolomite within matrix			
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	5	0		

FROM 38.04	-	TO 42.23	ROCK CODE blfgCD	=	Min Style b	Fabric l	Texture fg	Litho CD	Struct
			MAIN COMMENTS	Light-grey to beige dolomite carbonatite. Apatite occurs weakly laminated within dolomite and as small d. grey (~1.5 cm) aggregates to bands with abundant zircon, oxidized pyrite and d. grey unknown.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	0.50	Oxidized fine-grained pyrite occur locally disseminated and as common stringers			
			ALTERATION	Type	Value	Comments			
				Oxidation %	30.00	Beige to pink dolomite			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	30			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	15	0.75		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
42.23 - **TO**
44.58

ROCK CODE

blfgCD

=

Min Style
b

Fabric
I

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Similar to interval 17.29 m - 26.83 m, with large (15-25 cm) sporadically spaced magnetite-apatite cumulate bands. Dolomite occurs interstitial to magnetite-apatite aggregates. Bands compose ~ 30 % of interval. Apatite occurs weakly laminated within dolomite carbonatite. Zircon concentrates within cumulate bands. Apatite and zircon occur laminated and disseminated within dolomite carbonatite respectively.

MINERALIZATION

Type	Value	Comments
Magnetite %	25.00	Fine- to medium-grained magnetite occurs aggregates wih apatite in bands
Niobates %	1.00	Columbite likely occurs with magnetite
Pyrite %	1.00	Oxidized pyrite occurs concentrated to thin laminae (<2.5 cm)

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite
Calcite %	2.50	Dark-brown mottling

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	45	Varies between 40 and 50 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	17.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE		=	Min Style	Fabric	Texture	Litho	Struct									
44.58	- 47.58	bifgCD			b	l	fg	CD										
		MAIN COMMENTS	Light-grey to beige laminated dolomite carbonatite to locally inequigranular massive. Apatite occurs moderately laminated within dolomite carbonatite; sometimes forming bands with dark grey dolomite (fluoresces dark purple). Band compose ~2.5 % of interval . Zircon occurs disseminated throughout interval. No niobates observed.															
		MINERALIZATION	<table border="1" style="width: 100%;"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Thin oxidized stringers</td> </tr> </tbody> </table>							Type	Value	Comments	Pyrite %	1.50	Thin oxidized stringers			
Type	Value	Comments																
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Oxidation %	30.00	Beige dolomite - typically surrounds pyrite stringers																
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Type	Intens	CA°	Comments															
Laminations %	moderate	30	Steepens up to 40 degrees															
		MISCELLANEOUS	<table border="1" style="width: 100%;"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td>W</td> <td>10</td> <td>0.1</td> </tr> </tbody> </table>							Zone	HCL	Apatite	Zircon	OX	W	10	0.1	
Zone	HCL	Apatite	Zircon															
OX	W	10	0.1															

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 47.58	-	TO 60.59	ROCK CODE bliCD	=	Min Style b	Fabric l	Texture i	Litho CD	Struct
			MAIN COMMENTS	Interval consists dominantly inequigranular dolomite carbonatite to laminated dolomite. Interval has been extensively oxidized. Near highly oxidized and weathered zones, black altered phlogopite and abundant apatite is observed (potential mineralized band?). Apatite occurs laminated within laminated dolomite. Zircon grains are rare.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.25	Stringers and aggregates accumulate within laminated segments			
			ALTERATION	Type	Value	Comments			
				Oxidation %	75.00	Beige to red dolomite carbonatite - concentrates at highly weathered fractures.			
				Amphibolite %	2.50	Small (<2.5 cm) d. green clasts occur clustered at ~59.8 m			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	75	Locally observed		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
60.59	- 66.11	nmAMX	n	m		AMX	
		MAIN COMMENTS	D. green clasts (20 to 25 cm) of fenite occur within weakly laminated dolomite carbonatite. Inequigranular dolomite is common towards top of interval. Dolomite shows common ovoid texture (dolomitized fenite?). Apatite occurs as steep laminations with abundant zircon. No niobates observed.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	0.75	Small oxidized aggregates (<0.5 cm) occur concentrated to laminae and common near fenite clasts		
		ALTERATION	Type	Value	Comments		
			Amphibolite %	15.00	D. green clasts 20 to 25 cm - typically highly oxidized		
			Oxidation %	50.00	Beige dolomite and extensive red weathering near fenite clasts		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	weak	85	General measurement; lamination distorts around fenite clasts	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			OX	W	20	0.75	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
66.11 - **TO**
74.83

ROCK CODE gmfgCD = **Min Style** g **Fabric** m **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Medium-grey to beige massive to weakly laminated dolomite carbonatite with uncommon dark-grey aggregates (<2.5 cm) contains apatite and abundant zircon (compose ~ 1.5 % of interval).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Fine-grained oxidized pyrite occurs disseminated throughout interval.

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige dolomite
Calcite %	10.00	Dark-brown mottling (calcitization)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	40	Only locally observed

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	2.5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
74.83 - **TO**
85.38

ROCK CODE nlpCD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey to pink locally porphyritic dolomite carbonaite. Apatite occurs strongly laminated with porphyry with abundant zircon. Phenocrysts consist of black altered phlogopite (dolomitization observed) and dark-grey unknown mineral (dolomitized magnetite?). Potential fine-grained fersmite (d. grey) occurs with apatite and porphyry.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	F. grained d. grey potential fersmite observed within porphyry
Pyrite %	2.00	Oxidized pyrite aggregates occur associated with phenocrysts

ALTERATION

Type	Value	Comments
Oxidation %	45.00	Beige to pink dolomite
Calcite %	5.00	D. brown mottling (calcitization)

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	80	Secondary calcite along walls of fracture (~0.5 cm thick)
Laminations %	moderate	45	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
85.38 - **TO**
90.85

ROCK CODE

nlcCD

=

Min Style
n

Fabric
l

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite has been extensively calcitized to dark-brown. Numerous secondary calcite veins crosscut fabric (prismatic calcite along walls of fractures). Apatite occurs strongly laminated, commonly with abundant zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized aggregates observed within less altered laminated dolomite carbonatite

ALTERATION

Type	Value	Comments
Calcite %	70.00	Dark-brown calcitization - follows laminae and replaces entire segments up to 60 cm
Oxidation %	20.00	Beige dolomite - follows lamination and generally surrounds oxidized pyrite aggregates

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	80	~0.5 cm secondary calcite vein
Laminations %	strong	50	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
90.85	- 107.08	glfgCD	= g	l	fg	CD		
		MAIN COMMENTS	Medium-grey to beige laminated dolomite carbonatite with uncommon dark-grey aggregates (<2.5 cm) contains apatite and abundant zircon and oxidized pyrite. Aggregates compose ~ 1% of interval. Apatite also occurs as white laminae within dolomite.					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	2.00	Most commonly as oxidized aggregates up to 0.5 cm - Rare aggregates up to 2.5 cm			
		ALTERATION	Type	Value	Comments			
			Calcite %	20.00	Dark-brown mottling (calcitization) - extensive between 103.30 m and 105.61 m			
			Oxidation %	50.00	Beige dolomite - follows lamination and generally forms around oxidized pyrite aggregates			
		STRUCTURE	Type	Intens	CA°	Comments		
			Veining %	moderate	50	Veins of soft white mineral (fine-grained) at 50-60 degrees - fluoresces white -		
			Laminations %	moderate	50	60 degrees at top of interval; shallows to 40 degrees towards end of interval		
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	W	5	0.25		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
107.08 - **TO**
112.26

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Fine-grained phenocrysts of black altered phlogopite occur within light-grey to beige dolomite. Pale-pink to d. grey fersmite is observed in white dolomite bands (up to 15 cm) with abundant phlogopite phenocrysts. Intervals of gouge occur up to 50 cm thick. Apatite occurs aggregated to weakly laminated.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized aggregates up to 0.5 cm
Niobates %	0.50	Fine-grained fersmite occurs disseminated within white dolomite bands

ALTERATION

Type	Value	Comments
Calcite %	2.50	Minor dark-brown mottling (calciization)
Oxidation %	50.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	50	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
112.26 - **TO**
121.25

ROCK CODE nlfgrCD = **Min Style** n **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Medium-grey laminated dolomite carbonatite oxidized to light-grey and beige. D. brown calcitization occurs irregularly throughout interval. Black altered phlogopite veining (<1 cm) occurs between 118.20 and 118.60 m (concordant to lamination). Apatite occurs as localized strong laminations with abundant zircon associated with phlogopite veins. Apatite laminations also occur within calcitized segments. No niobates observed.

MINERALIZATION		Type	Value	Comments
	Pyrite %		0.50	Generally small oxidized aggregates (<0.5 cm) within dolomite carbonatite - rare up to 2.5 cm aggregates

ALTERATION		Type	Value	Comments
	Calcite %		25.00	D. brown mottling (calcitization)
	Oxidation %		45.00	Beige dolomite
	Amphibolite %		2.50	Uncommon bluish-grey clasts occur clustered at ~118.0 m and at ~119.7 m

STRUCTURE		Type	Intens	CA°	Comments
	Laminations %		moderate	60	Generally steep but shallows to as low as 45 degrees locally
	Veining %		weak	45	Phlogopite veining concordant to lamination

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	OX		M	5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct									
121.25	- 130.49	nIAMX	n	l		AMX										
MAIN COMMENTS Light-grey to beige dominantly laminated dolomite carbonatite. Towards top of interval, dolomite is more massive and inequigranular. Apatite occurs moderately laminated within dolomite carbonatite and to a lesser extent around fringes of fenite clasts. Zircon concentrates with fenite clasts																
MINERALIZATION																
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Zone	HCL	Apatite	Zircon													
OX	VW	10	0.25													

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct									
130.49	- 139.94	nmiCD	n	m	i	CD										
MAIN COMMENTS Light-grey dolomite carbonatite with localized zones of no oxidation (fresh pyrite) and zones of oxidation and calcitization. The bands of alteration are on a scale of ~10 to 30 cm. Medium-grained dolomite occurs within a fine-grained groundmass. Apatite occurs as aggregates up to 15 cm. No zircon observed																
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Zone	HCL	Apatite	Zircon													
	M	10	0													

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
139.94	- 151.04	nlfCD	n	l	f	CD	
		MAIN COMMENTS	Highly weathered interval of laminated dolomite carbonatite, locally inequigranular to porphyritic. Localized phenocrysts consist of black altered phlogopite. Apatite occurs aggregated to weakly laminated. A single d. grey to black clots composed of phlogopite occurs at ~151.5 m: veins of black altered phlogopite (?) extend into dolomite carbonatite.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	0.50	Aggregates up to 0.5 cm		
		ALTERATION	Type	Value	Comments		
			Calcite %	5.00	Uncommon dark-brown calcitization		
			Oxidation %	80.00	Beige to pink dolomite		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	weak	15	Shallow core angle: 10 - 20 degrees	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			OX	W	5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
151.04 - **TO**
154.60

ROCK CODE

nmiAMX

=

Min Style
n

Fabric
m

Texture
i

Litho
AMX

Struct
MAIN COMMENTS

Clasts (10 to 30 cm) of bluish grey fenite occur within inequigranular to fractured dolomite carbonatite. Black phlogopite form common aggregates within fenite clasts and clots/veins within dolomite carbonatite. Calcitization is focused on fenite clasts (to medium-brown colour; reacts to HCl). Apatite occurs dispersed in dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Rare oxidized aggregates up to 0.5 mm

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite - concentrates mostly to fractured dolomite towards end of interval and groundmass to inequigranular
Silica %	2.50	Silicification occurs interstitial to medium-grained dolomite
Amphibolite %	30.00	Bluish-grey fenite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
154.60 - **TO**
172.47

ROCK CODE nxiCD = **Min Style** n **Fabric** x **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Similar to above but without fenite blocks. White medium-grained dolomite grains occur within a fine-grained beige to light-grey dolomite groundmass. Dolomite becomes increases fractured to locally brecciated towards end of interval. Apatite occurs as large fractured clasts and weak laminations. Dark-brown calcitization concentrates to groundmass of inequigranular dolomite and matrix to breccia. Minor greyish blue dolomite observed in brecciated/fractured clasts. A medium-green fine-grained 5 cm vein crosscuts local breccia at ~5 cm. The vein is calcitic (reacts moderately to HCl). 15-20 cm greenish blue bands or clasts occur between 166.54 and 167.07

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Oxidized aggregates up to 1 cm

ALTERATION		
Type	Value	Comments
Oxidation %	50.00	Beige dolomite
Calcite %	50.00	Dark-brown calcitization of groundmass (inequigranular) and matrix (breccia)

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	30	Medium-green fine-green calcitic vein (~5 cm) at 154.95 m

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	15	0	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
172.47	- 193.52	nliCD	n	l	i	CD	
		MAIN COMMENTS	Localized bands (~ 5 - 10 cm) of medium- to fine-grained inequigranular dolomite occur within laminated dolomite. The interval has been largely calcitized - follows lamination and of groundmass to medium-grained white dolomite. A fresh light-grey dolomite interval occurs between 188.14-189.37 m. Apatite occurs aggregated to strongly laminated. No zircon observed.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	0.75	Aggregates up to 0.5 cm - generally oxidized except in pristine 188.14-189.37 interval		
		ALTERATION	Type	Value	Comments		
			Oxidation %	25.00	Beige dolomite		
			Calcite %	70.00	Dark-brown calcitization - extensive, generally follows laminationj		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	weak	10	Strong towards top of interval (where measured) - becomes weak to massive towards bottom of interval	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			OX		10	0	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
193.52	- 206.71	bliCD	b	I	i	CD		
		MAIN COMMENTS	Localized bands (~ 5 - 10 cm) of medium- to fine-grained inequigranular dolomite are common towards top of interval. Bands of high calcitization become more common towards botom of interval. Theseel bands of potential Nb-mineralization (?) have been extensively calcitized to dark-brown medium-grained calcitic grains with yellow clay like matrix. Bands are 2.5 to 30 cm. A large band ~ 30 cm still retains d. grey colour and apatite visible with UV.					
		MINERALIZATION	Type	Value	Comments			
			Pyrite %	1.25	Occurs as oxidized aggregates up to 0.5 cm occuring in small clusters in dolomite			
		ALTERATION	Type	Value	Comments			
			Oxidation %	30.00	Beige dolomite			
			Calcite %	5.00	Dark-brwon calcitization concentrated toward medium-grained bands			
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	moderate	20			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			OX	M	2.5	0		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE		=	Min Style	Fabric	Texture	Litho	Struct
206.71	- 215.85	nxcCD			n	x	c	CD	
		MAIN COMMENTS	Light-grey laminated dolomite carbonatite becomes progressively brecciated towards bottom of interval. Clasts are <0.5 to 7.5 cm in diameter. Matrix of breccia is dark-brown calcitization (reacts to HCl). Localized medium-grained dolomite (inequigranular texture) occur within calcitized groundmass. Apatite and zircon occur locally within laminated segments.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	0.50	Irregular oxidized aggregates up to 0.5 cm				
		ALTERATION	Type	Value	Comments				
			Oxidation %	50.00	Beige dolomite				
			Calcite %	50.00	Dark-brown calcitization - matrix to breccia and groundmass to medium-grained dolomite - irregular mottles				
		STRUCTURE	Type	Intens	CA°	Comments			
			Laminations %	weak	20	Present towards top of interval.			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			OX		1.5	0.1			

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID **2010-030**

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454816.99	6256466.95	1763.47	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	213.41		213.41		Central 3
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	3.05	3.05
NQ	3.05	213.41	213.41

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
39.62	31.90	-47.60	11.7	5805	272.1	Reflex EZ-shot
112.78	31.90	-47.60	11.7	5805	272.1	Reflex EZ-shot
213.36	31.90	-47.60	11.7	5805	272.1	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor		29/Aug/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumba		
Geotech Logged By	Ryan Libke	29/Aug/2010	
Drill Contractor		20/Aug/2010	21/Aug/2010

SUMMARY

--

GEOLOGY LEGEND

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 3.05	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 3.05	-	TO 3.67	ROCK CODE	nmiCD	=	Min Style n	Fabric m	Texture i	Litho CD	Struct	
			MAIN COMMENTS	Talus composed dominantly of massive light-grey dolomite carbonatite. Talus cotais variable apatite proportion, 1 to 20 %. No zircon observed though.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.00	Disseminated fine-grained oxidized pyrite					
			ALTERATION	Type	Value	Comments					
				Oxidation %	30.00	Beige dolomite					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text" value="OX VW 10 0"/>								

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
3.67 - **TO**
11.19

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Highly fragmented dolomite carboatite. Interval is locally variable between fine- to medium-grained inequigranular to fine-grained on a 10s cm scale. Uncommon localized phenocrysts consist of black altered phlogopite. Apatite form laminae (up to 5 cm) with d. grey dolomite (fluoresces dark purple) and occasional altered phlogopite. No zircon observed.

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Common oxidized aggregates up to 1 cm; rare fresh aggregate

ALTERATION

Type	Value	Comments
Calcite %	1.00	Occurs as d. brown calcitized veins
Oxidation %	60.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	40	Dark-brow calcitized veins occur at 40 ad 60 degrees
Laminations %	moderate	25	Varies between 20 ad 30 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	7.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
11.19 - **TO**
26.33

ROCK CODE glfgCD = **Min Style** g **Fabric** l **Texture** fg **Litho** CD **Struct**

MAIN COMMENTS Light-grey dominantly fine-grained dolomite carbonatite oxidized to beige and pink. Interval contains similar d.grey apatite-bearing bands (up to 5 cm) as previous interval. Interval also contains magnetite-apatite cumulate clasts and d. grey apatite-bearing clasts (dolomitized cumulate clasts?) up to 5 cm. Magnetite clasts composed ~1 % of interval. D. grey clasts compose ~1.5 % Apatite also occurs as thin laminations (<0.5 mm) within laminated dolomite.

MINERALIZATION		Type	Value	Comments
	Niobates %		0.25	Black fine-grained columbite (?) observed along fringes of bands
	Magnetite %		0.50	Medium-grained magnetite occurs aggregated with apatite
	Pyrite %		1.25	Very-fine grained pyrite occurs dissemination; Aggregates and stringers up to 0.5 cm occur concentrated locally

ALTERATION		Type	Value	Comments
	Oxidation %		70.00	Beige to pink oxidation of dolomite

STRUCTURE		Type	Intens	CA°	Comments
	Laminations %		moderate	15	Varies between 10 and 20 degrees

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
		OX	VW	15	0.25

FROM
26.33 - **TO**
29.43

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct

MAIN COMMENTS

Laminated dolomite carbonatite with 5 to 20 cm bands of magnetite-apatite cumulate. Zircon concentrates at contact of cumulate band with dolomite vein.. Apatite occurs as thin d. grey laminations (< 1.5 cm) within dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Likely fine-grained columbite occurs with magnetite
Magnetite %	5.00	Medium-grained magnetite aggregates with apatite in cumulate bands
Pyrite %	0.50	Form small aggregates and stringers (<0.5 cm) - often weathered out - leaving small pits

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	20	Medium-grained dolomite vein (~2 cm) crosscuts cumulate band
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	17.5	0.5

FROM 29.43	-	TO 37.88	ROCK CODE	blfgCD	=	Min Style b	Fabric l	Texture fg	Litho CD	Struct									
			MAIN COMMENTS	Light grey dolomite carbonatite oxidized to beige with irregularly space d. grey bands with fine-grained oxidized pyrite and black altered phlogopite and commonly associated with thin (<1 cm) apatite laminations locally present throughout interval. A 5 cm white band of apatite enriched in oxidized pyrite, zircon and suspect fersmite occurs at ~36.9 m.															
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Niobates %</td> <td>0.25</td> <td>Suspect grey fine-grained fersmite observed in thick apatite band with abundant zircon and oxidized pyrite</td> </tr> <tr> <td>Pyrite %</td> <td>1.75</td> <td>Generally occur as fine-grained disseminations associated with banding; one large (~3.5 cm diameter) oxidized aggregate occurs at ~36.65 m</td> </tr> </tbody> </table>							Type	Value	Comments	Niobates %	0.25	Suspect grey fine-grained fersmite observed in thick apatite band with abundant zircon and oxidized pyrite	Pyrite %	1.75	Generally occur as fine-grained disseminations associated with banding; one large (~3.5 cm diameter) oxidized aggregate occurs at ~36.65 m
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Zone	HCL	Apatite	Zircon																
OX	VW	7.5	0.25																

FROM 37.88	-	TO 45.07	ROCK CODE	bmiCD	=	Min Style b	Fabric m	Texture i	Litho CD	Struct									
			MAIN COMMENTS	Massive to weakly laminated mottled light-grey to beige dolomite. Apatite occurs dispersed in massive dolomite and as rare d. grey bands (~5 cm) in locally laminated dolomite.															
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Zone	HCL	Apatite	Zircon																
OX	VW	5	0																

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
45.07 - **TO**
64.02

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey laminated to locally massive dolomite carbonatite. 1 to 5 cm d. grey bands compose ~5 % of interval. Bands are very fine- to fine-grained composed dominantly of apatite (observed with UV). Most bands contain visible fine-grained black altered phlogopite, zircon (UV) and yellow fersmite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Fine-grained pyrite (fresh to oxidized) occur commonly with apatite bands; oxidized aggregates up to 2.5 mm occur in laminated dolomite
Niobates %	0.50	Yellow to grey in colour, grainy texture occurs in zircon-rich apatite grey bands - identified as fersmite

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite - oxidation follows lamination

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.75

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
64.02 - **TO**
66.82

ROCK CODE

gmCD

=

Min Style
g

Fabric
m

Texture
Litho
CD

Struct
MAIN COMMENTS

Apatite forms aggregates (up to 10 cm) with d. grey dolomite within massive to weakly laminated light-grey to beige dolomite carbonatite with visible pale-pink fersmite. Aggregates compose ~20 % of interval. Laminations appear to cross at ~66.65 m. Interval becomes progressively more oxidized further down the interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.75	Pale pink fine-grained fersmite observed in apatite aggregates
Pyrite %	1.50	Locally concentrated oxidized aggregates up to 1 cm.

ALTERATION
STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	20	Only locally observed - cross-lamination with 40 degrees core angle at ~66.65 m

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
		12.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
66.82 - **TO**
82.04

ROCK CODE

bIfCD

=

Min Style
b

Fabric
I

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Light-grey laminated dolomite carbonatite has been oxidized and weathered (decalcification) locally to various extents. Rubble and gouge occur irregularly through interval. Common bands and lenses (up to 5 cm) are comprised of apatite + d.grey unknown + pyrite or apatite + phlogopite (altered) with common zircon. Single magnetite-apatite band occurs at ~71.65 m. Apatite also occurs as localized swirls in dolomite (observed near mgt band).
Laminations steepens towards end of interval with abundant apatite laminae an oxidized pyrite aggregates. Dolomite becomes pink colour here (high oxidation)

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite form aggregates up to 1 cm - a large concentration of pyrite occurs at the end of the interval where the lamination steepens
Magnetite %	1.00	Single band of aggregated medium-grained magnetite with apatite

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige dolomite; pink dolomite in last 70 cm of interval

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	Varies between 20 and 40 degrees; steepens in last 80 cm to 65 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

FROM
82.04 - **TO**
86.80

ROCK CODE dlpCC = **Min Style** d **Fabric** l **Texture** p **Litho** CC **Struct**

MAIN COMMENTS Magnetite-bearing calcite carbonatite is in sharp contact with dolomite carbonatite. Contact measured at 70 degrees at top of interval, at 80 degrees at bottom of interval. Light-grey dolomite vein (12 cm; top contact: 10 degrees; bottom contact: 20 degrees) crosscuts calcite at 84.57 m. Pyrite accumulates at contact. Dolomitization extends into calcite carbonatite near contact (looks similar to calcite carbonatite, but does not react to HCl, UV= dark purple and magnetite is not magnetic). Between and 83.89 and 84.26 m, carbonatite does not react to HCl, contains abundant pyrite and has been extensively oxidized to pink. Calcite carbonatite is a greenish grey colour in places (follows laminations and has weaker reaction to HCl). Apatite occurs laminated within calcite carbonatite. Zircon occurs disseminated within calcite carbonatite.

MINERALIZATION

Type	Value	Comments
Magnetite %	15.00	Medium-grained dolomite occurs disseminated within calcite carbonatite.
Pyrite %	1.25	Rare aggregates (up to 0.5 cm) within calcite carbonatite - concentrate in oxidized interval and near dolomite vein

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	70	
Veining %	strong	15	12 cm dolomite vein crosscuts calcite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	20	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
86.80 - **TO**
104.02

ROCK CODE nlpCD = **Min Style** n **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Steeply laminated light-grey dolomite carbonatite. Lamination is locally visible where apatite and oxidized pyrite is present. A large massive aggregate (~25 cm) of pyrite occurs at 101.91 m. Dark-grey unknown (dolomitized magnetite) occurs commonly with apatite laminae. Zircon occurs disseminated through interval (locally concentrated).

MINERALIZATION

Type	Value	Comments
Pyrite %	2.00	Fresh pyrite forms large 25 cm aggregate and sometimes form laminae with apatite (up 2 cm thick); oxidized pyrite occurs as thin stringers (parallel to lamination);

ALTERATION

Type	Value	Comments
Oxidation %	25.00	Oxidized beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	70	Steep: varies between 60 and 80 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
104.02 - **TO**
121.95

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**
MAIN COMMENTS Apatite, d. grey unknown (dolomitized magnetite?), pyrite, black altered phlogopite and abundant zircon in various proportions form large aggregates (or bands) 10 to 30 cm. Bands comprise ~20 % of interval.

MINERALIZATION

Type	Value	Comments
Niobates %	1.00	Pale-yellow grained fine-grained fersmite observed in bands
Pyrite %	1.75	Commonly aggregate within mineralized bands - also occur as rare aggregates in dolomite up to 1 cm diameter

ALTERATION

Type	Value	Comments
Silica %	0.50	Minor silicification of matrix observed
Calcite %	1.00	White pods and stringers (1.5 cm) of calcite occur locally concentrated- likely secondary calcite infilled vugs and fractures

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	35	Appears to be cross-laminated in places (i.e. 110.93) - may actually be due to fault displacement(?)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	15	0.75

FROM
121.95 - **TO**
129.95

ROCK CODE blpCCCD = **Min Style** b **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite and apatite aggregates occur laminated within calcite carbonatite. Magnetite-apatite calcite occurs as 10 to 75 cm intervals within light-grey dolomite carbonatite. Magnetite-apatite calcite compose ~40 % of interval Within magnetite-bearing intervals, carbonate matrix towards contact with dolomite, does not react HCl and intervals become less magnetic (dolomitization of calcite carbonatite?). Apatite occurs aggregated within dolomite carbonatite. Within calcite carbonatite, fine-grained brown phlogopite also occurs disseminated. Pale-pink fine-grained pyrochlore is observed in calcite and yellowish fersmite observed in dolomite. Fersmite occurs within dark-grey bands up to 10 cm with apatite, dark-grey unknown metallic, dolomite, pyrite and common zircon. This bands likely represent dolomitized magnetite-bearing calcite carbonatite. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Niobates %	1.50	Pale-pink octahedral suspect pyrochlore observed in magnetite-bearing calcite; yellow grainy-textured fersmite observed in dark-coloured bands in dolomite
Pyrite %	1.25	Fresh pyrite occurs commonly aggregated with d. grey unknown metallic mineral (dolomitized magnetite?)
Magnetite %	15.00	Fine- to medium-grained magnetite occurs disseminated to aggregated with apatite within calcite carbonatite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	M	15	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
129.95 - **TO**
144.21

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS 1 to 15 cm d. grey bands occur within light-grey dolomite. Bands consist variable proportions of apatite, pyrite, d. grey unknown metallic mineral, black altered phlogopite abundant zircon and yellow fersmite. Lamination steepens and becomes weakly crenulated (best observed with UV) between ~136.1 and 137.8

MINERALIZATION

Type	Value	Comments
Niobates %	1.50	Fine-grained yellow grainy fersmite observed in bands
Pyrite %	2.00	Fresh pyrite occurs aggregated within bands

ALTERATION

Type	Value	Comments
Amphibolite %	2.50	Clasts (up to 20 cm) of dark-grey to black fenite (?) occur between 131.40 and 132.5 m; larger clasts have ovoid texture; pyrite and d. grey mineral in core with black altered phlogopite rim

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	40	Generally ~40 degrees; steepens locally to ~70 degrees and becomes weakly laminated between 136.1 and 137.8 m

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	20	1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct										
144.21	- 149.81	gmpCD	g	m	p	CD											
		MAIN COMMENTS	Dominantly ovoid to swirly (?) textured dolomite carbonatite with strong lamination (shear like) occurring at ~147.69 m. Altered phlogopite phenocrysts accumulate locally Fine- to coarse grained phenocrysts of altered phlogopite accumulate locally in this shear zone with apatite.														
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H	VW	5	0.1														

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct								
149.81	- 157.70	blpCD	b	l	p	CD									
		MAIN COMMENTS	Thin (< 2.5 cm) d. grey bands occur within light-grey laminated dolomite. Aggregates (up to 10 cm) occur where lamination not present. Bands consist variable proportions of apatite, pyrite, d. grey unknown metallic mineral, black altered phlogopite abundant zircon and yellow fersmite. Lamination is variable but generally steep core angle.; interval is massive with d. grey aggregates between 155 and 156 m. No niobates identified in bands or aggregates												
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H	VW	10	0.5												

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	gmCD	=	Min Style	Fabric	Texture	Litho	Struct								
157.70	- 163.72				g	m		CD									
		MAIN COMMENTS	Mottled-massive to weakly laminated (or swirly?) light-grey to beige dolomite carbonatite. Aggregates (10-15 cm) are composed dominantly of pyrite with d. grey metallic unknown, apatite and abundant zircon. Aggregates compose ~7.5 % of interval. No niobates observed within aggregates														
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H	VW	5	0.5														

FROM	TO	ROCK CODE	nmiCD	=	Min Style	Fabric	Texture	Litho	Struct								
163.72	- 176.97				n	m	i	CD									
		MAIN COMMENTS	Massive light-grey dolomite carbonatite transitions from fine-grained equigranular to locally porphyritic. Minor phenocrysts consists of black altered phlogopite. Interval contains large intervals of red oxidation (~167.7 - 168.7 m and ~171.8-175.7 m). pyrite occurs as fine grained oxidized needles near porphyry (dolomitized phlogopite?). Uncommon apatite occurs dispersed in dolomite. Zircon occurs locally concentrated.														
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Zone	HCL	Apatite	Zircon														
H	VW	2.5	0.25														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
176.97 - **TO**
186.20

ROCK CODE

gmiCD

=

Min Style
g

Fabric
m

Texture
i

Litho
CD

Struct
MAIN COMMENTS

Medium-grey fine- to medium-grained dolomite carbonatite oxidized to beige Highly oxidized zone occurs between ~179.5 - 184.0 m. Aggregates (up to ~10 cm) of apatite with abundant zircon occur within dolomite - difficult to observe without UV. Some weak laminations of apatite occur with d. grey unknown mineral and pyrite. No niobates observed in aggregates or apatite laminations

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Oxidized aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige to pink oxidation of dolomite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW		

FROM 186.20 - **TO** 198.30

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Laminated light-grey dolomite carbonatite has been intensively calcitized to dark-brown. Vugs occur locally. Local medium-grained dolomite grains observed within calcitized matrix - bands up to 10 cm. Bands (up to 10 cm) of magnetite-apatite cumulate (with abundant zircon) to apatite + d.grey mineral +/- altered phlogopite occur sporadically throughout interval - comprise ~ 2.5 % of interval. Apatite occurs moderately laminated.

MINERALIZATION		Type	Value	Comments
	Niobates %		0.10	Columbite likely occurs with magnetite and possibly in other apatite bands with dark-grey unknown mineral
	Pyrite %		1.00	Oxidized aggregates up to 1 cm observed in less calcitized dolomite
	Magnetite %		1.00	Magnetite occurs aggregated with apatite in single cumulate band (~10 cm)

ALTERATION		Type	Value	Comments
	Oxidation %		20.00	Beige dolomite
	Calcite %		70.00	D. brown calcitization - generally follows lamination or locally within fractures

STRUCTURE		Type	Intens	CA°	Comments
	Veining %		moderate	30	Secondary calcite veins (up to 1.5 cm thick)
	Laminations %		moderate	10	Varies between 5 and 20 degrees

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	H		S	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 198.30	-	TO 203.50	ROCK CODE blcAMX	=	Min Style b	Fabric l	Texture c	Litho AMX	Struct												
MAIN COMMENTS Fenite blocks (up to 50 cm) occur within laminated light-grey to dark-brown dolomite carbonatite. Beige calcite crosscuts fenite blocks. Rare d. grey bands (< 1 cm) composed dominantly of apatite with common zircon occur in dolomite. No niobates observed.																					
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	S	5	0.1																		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
203.50	- 208.30	bliCD	b	I	i	CD	
		MAIN COMMENTS	Laminated light-grey to beige dolomite carbonatite with bands of inequigranular dolomite (< 5 cm) and uncommon d.grey bands (< 2.5 cm) of apatite, d. grey mineral, oxidized pyrite and common zircon. No niobates observed.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	1.25	Oxidized pyrite occurs disseminated and as aggregates and stringers throughout interval		
		ALTERATION	Type	Value	Comments		
			Oxidation %	80.00	Beige dolomite - oxidized veins crosscut dolomite		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	moderate	40		
			Veining %	moderate	30	Brown veins focal point of oxidation occur at 30 and 40 degrees (roughly orthoogonal to each other) - likely joints of faults	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			H	W	10	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
208.30	- 213.41	dIpCD	d	l	p	CD	
		MAIN COMMENTS	Laminated light-grey to beige dolomite carbonatite with phenocrysts of black altered phlogopite and magnetite and bands of inequigranular dolomite (< 5 cm). Magnetite becomes the dominant phenocrysts towards bottom of interval. No niobates observed. Apatite occurs laminated throughout interval. Zircon occurs associated with apatite.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	1.00	Oxidized pyrite occurs as small needles (length <0.5cm) and as aggregates up to 1 cm with magnetite phenocrysts		
			Niobates %	0.10	Columbite may occur with magnetite		
			Magnetite %	2.50	medium-grained phenocrysts disseminated within dolomite		
		ALTERATION	Type	Value	Comments		
			Oxidation %	60.00	Beige to orange dolomite concentrates to laminae		
			Calcite %	1.50	Minor dark-brown calcitization; generally follows lamination		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	moderate	20	Generally between 10 and 20 degrees	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			H	W	15	0.1	

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-031

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454707.46	6256372.49	1707.25	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	214.94		214.94		Central 3
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	5.77	5.77
NQ	5.77	214.94	214.94

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
206.04	35.00	-48.50	5.8	5800	161.2	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor			
Geology Logged By	Ryan Kressall		
Specific Gravity By	Steve Dumma		
Geotech Logged By			
Drill Contractor		21/Aug/2010	22/Aug/2010

SUMMARY

GEOLOGY LEGEND

 Hole ID 2010-031

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 5.77	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No Rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 5.77	-	TO 6.09	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct								
			MAIN COMMENTS	Talus composed of dolomite carbonatite and unknown d. brown rock (metasediment?) with thin (< 0.5 mm) dolomite veins.														
			MINERALIZATION	Type	Value	Comments												
			<table border="1"> <tr> <td>Pyrite %</td> <td>1.00</td> <td colspan="5">Oxidized pyrite aggregates <0.5 cm</td> </tr> </table>								Pyrite %	1.00	Oxidized pyrite aggregates <0.5 cm					
Pyrite %	1.00	Oxidized pyrite aggregates <0.5 cm																
			ALTERATION															
			STRUCTURE															
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon											
			<table border="1"> <tr> <td></td> <td></td> <td>1.5</td> <td>0</td> <td colspan="3"></td> </tr> </table>											1.5	0			
		1.5	0															

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
6.09 - **TO**
23.68

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Light-grey to beige dolomite carbonatite. Light to medium-grey bands (< 5 cm) are dominantly composed of apatite with common zircon and oxidized pyrite (other minerals not identified; too fine grained). No niobates identified in bands. Minor swirl texture occurs at ~13 m (observed in apatite).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Small aggregates and stringers (<0.5 mm) occur concentrated

ALTERATION

Type	Value	Comments
Oxidation %	50.00	Beige dolomite
Calcite %	1.00	Minor dark-brown mottles (calcitization)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.1

FROM
23.68 - **TO**
27.02

ROCK CODE gliCM = **Min Style** g **Fabric** l **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Dominantly phase is magnetite cumulate bands with minor apatite and common zircon. Bands are 20 to 90cm thick interlaminated with dolomite and calcite carbonatite. Dolomite is the dominant carbonatite phase. Calcite carbonatite occurs as a 30 cm laminae at 25.2 m. Calcite contains dispersed apatite and disseminated fine-grained magnetite, phlogopite and honey-brown pyrochlore. Calcite also occurs commonly interstitial to magnetite. Apatite laminae occur within dolomite carbonatite.

MINERALIZATION		Type	Value	Comments
	Pyrite %		0.25	Minor oxidized pyrite observed within calcite and dolomite carbonatites
	Magnetite %		55.00	Massive magnetite cumulates aggregated with minor apatite
	Niobates %		2.50	Fine-grained honey-brown octahedral pyrochlore identified in calcite carbonatite; columbite likely occurs aggregated with magnetite

ALTERATION		Type	Value	Comments
	Oxidation %		15.00	Beige dolomite and calcite
	Calcite %		20.00	Dark-brown calcitization occurs dominantly around magnetite-bearing bands - follow laminae

STRUCTURE		Type	Intens	CA°	Comments
	Laminations %		moderate	40	
	Veining %		moderate	20	Dolomite veins (2 - 15 cm) crosscut magnetite cumulate

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
	OX		M	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
27.02 - **TO**
42.32

ROCK CODE

bliCD

 = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**
MAIN COMMENTS

This interval is similar to the previous interval (23.68 to 27.02 m) but more dominantly composed of dolomite carbonatite. Magnetite bands compose ~20 % of interval and apatite is more abundant in some bands (up to 35 vol. %). Magnetite cumulate bands are 2 to 30 cm in thickness. Magnetite also occurs locally disseminated within dolomite carbonatite. Apatite occur as weak laminae within dolomite carbonatite, d. grey to white in colour.
:Localized ovoid texture observed in dolomite at ~39.20- 39.30 m: Thin dark-grey laminae of apatite are concentric and interlayered with dolomite layers around beige dolomite core.

MINERALIZATION

Type	Value	Comments
Magnetite %	12.50	Massive magnetite cumulates aggregated with apatite; rarely disseminated within dolomite
Niobates %	1.00	Columbite likely occurs with magnetite
Pyrite %	1.00	Occurs as oxidized stringers and aggregates most typically confined to laminae

ALTERATION

Type	Value	Comments
Calcite %	10.00	Dark-brown calcitization concentrates in bands (~2.5 to 25 cm thick) within dolomite carbonatite
Oxidation %	60.00	Beige dolomite - typically follows laminae and follows laminae

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	15	Generally low 10 to 20 degrees) - steep core angle (70 degrees) observed with disseminated magnetite (at ~35 m)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
42.32 - **TO**
48.69

ROCK CODE

blfgCD

=

Min Style
b

Fabric
l

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Light-grey to beige dolomite carbonatite similar to the dolomite observed in the last two intervals (23.68-42.32: no magnetite bands though). Apatite occurs as medium-grey laminae with common zircon. (other minerals are too fine-grained to identify).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized fine-grained pyrite stringers occur typically confined to laminae; surrounding my oxidized dolomite
Magnetite %	0.50	3 cm aggregate of magnetite-apatite observed at ~48.1 m with halo of oxidation in surrounding dolomite

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Beige dolomite; follows laminae and typically surrounds pyrite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	Steepens to 70 degrees around small magnetite aggregate
Veining %	weak	50	Calcite veins (<0.5 cm) - surrounded by calcitization

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
48.69 - **TO**
63.20

ROCK CODE nlfCD = **Min Style** n **Fabric** l **Texture** fg **Litho** CD **Struct**
MAIN COMMENTS Weakly laminated light-grey dolomite carbonatite with low concentration of apatite laminae and no observed zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Oxidized aggregates up to 0.5 cm occur locally concentrated

ALTERATION

Type	Value	Comments
Oxidation %	60.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	30	Measured at 20 and 40 degrees at two different places (respectively going downhole)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	2.5	0

FROM
63.20 - **TO**
79.81

ROCK CODE gmiCD = **Min Style** g **Fabric** m **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Fine-grained grades into medium- to fine-grained inequigranular dolomite. Apatite occurs as large aggregates up to 10 cm. Common d. grey irregular shaped aggregates (1-2.5 cm are composed of fine-grained black altered phlogopite and oxidized pyrite within a dolomite groundmass. Towards bottom of interval, aggregates contain more apatite and black altered phlogopite. One "blob" at ~65.85 m contains coarse grained dolomite grains occurring as parallel needles (possibly pseudomorphs after phlogopite?). At ~79.7 m, d. grey vein- like apatite (~1.5 cm thick), crosscutting dolomite (oriented at ~85 degrees). Lamination becomes present towards bottom of interval.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Fine-grained oxidized pyrite occurs locally disseminated; oxidized aggregates up to 2 cm diameter (weathered out in places)

ALTERATION		
Type	Value	Comments
Oxidation %	20.00	Bands (~1 cm) of strong oxidation (beige "veins" crosscutting each other at 20, 50 and 60 degrees); minor oxidation of dolomite matrix

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	weak	85	D. grey "vein" enriched in apatite and pyrite at ~79.7 m
Laminations %	weak	15	Only locally observed (more present towards end of interval) -measured at ~78.10 m

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	VW	10	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
79.81 - **TO**
87.58

ROCK CODE bICD = **Min Style** b **Fabric** I **Texture** **Litho** CD **Struct**
MAIN COMMENTS Light-grey dolomite carbonatite oxidized to pink. Apatite occurs as grey laminae (<2.5 cm) with pyrite, d. grey unknown, abundant zircon and uncommonly with magnetite. No niobates observed in laminae.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Likely columbite occurs with magnetite
Magnetite %	0.50	Rare magnetite-apatite bands (< 2 cm): medium-grained
Pyrite %	1.50	Oxidized aggregates (< 0.5 cm) occur locally concentraed to lamine

ALTERATION

Type	Value	Comments
Calcite %	5.00	Reddish brown mottling - calcitization combined with oxidation
Oxidation %	50.00	Beige to pink dolomite - follows lamination

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	50	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.5

FROM
87.58 - **TO**
119.97

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Interval is dominantly composed of light grey oxidized to pink dolomite carbonatite similar to previous interval (79.81 - 87.58), but interval contains large bands of magnetite-apatite cumulate (5 to 25 cm thick). Cumulates compose ~7.5 % of interval. Dolomite carbonatite contains abundant grey apatite laminae with common zircon. Zircon occurs concentrated within cumulate bands. White dolomite rims (~1.5 cm thick) occur around magnetite cumulates Cross-laminated occurs at ~114.7 between different cumulate bands(?) - one 75 degree CA and one a 85 degree CA. Calcite pod occurs with one cumulate band at ~114.7 m. Common localized inequigranular bands (~5 cm) occur throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.75	Fine-grained oxidized pyrite occurs locally disseminated and as stringers confined to laminae
Niobates %	0.50	Columbite likely occurs with magnetite
Magnetite %	3.50	Fine- to medium-grained magnetite occurs aggregated with apatite

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige to pink dolomite
Calcite %	2.50	Minor dark-brown calcitization

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	10	Interval starts at low core angle (~10 degrees); progressively steepens through interval to ~70 degrees (at 114.7 m) than shallows to ~50 degrees for remainder of interval
Veining %	moderate	40	Minor secondary calcite veins (infilled fractures - crystalized from wall of fracture) - ~ 1 cm thick

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	17.5	0.75

FROM
119.97 - **TO**
123.59

ROCK CODE dlpCCCD = **Min Style** d **Fabric** l **Texture** p **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite-bearing calcite carbonatite in contact with dolomite carbonaite. Magnetite, phlogopite and oxidized pyrite occurs disseminated to aggregated within calcite carbonatite. Calcite carbonatite looks similar to calcite carbonatite observed in hole # 2010-030. Contact (between CC and CD) measured at 40 degrees at top of interval and 75 degrees at ~121 m. Apatite occurs aggregated with magnetite within calcite carbonatite. Zircon occurs disseminated within calcite carbonatite. Magnetite cumulate (with minor apatite) lens and laminae occur at ~122.75 m. The larger (deeper) laminae erodes into brown gouge which composes remainder of interval. No niobates observed in calcite carbonatite (possible columbite aggregated with magnetite though).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized aggregates up to 0.5 cm within dolomite carbonatite; aggregated with magnetite in calcite carbonatite
Magnetite %	10.00	Fine- to medium-grained magnetite occurs disseminated to aggregated with calcite carbonatite - aggregated in laminae/lens ~121 m
Niobates %	0.10	Likely columbite occurs with magnetite cumulate

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	60	Observed in dolomite carbonatite

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	S	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
123.59 - **TO**
131.96

ROCK CODE

gmfCD

=

Min Style
g

Fabric
m

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Top half of interval dominantly consists of fragmented rock to rubble. Light-grey fine- to medium-grained inequigranular dolomite carbonatite becomes dominantly competent rock at ~ 128 m. The entire interval is highly weathered, dominantly oxidized and decalcified with minor calcitization. Aggregates consist of variable proportions of oxidized pyrite, apatite, d. grey unknown and abundant zircon. No niobates observed in aggregates (highly weathered) Apatite also occurs irregularly aggregated and veined (?) throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Oxidized pyrite occurs mostly aggregated with apatite and d. grey unknown mineral; also occurs locally concentrated as small aggregates (<0.5 cm)

ALTERATION

Type	Value	Comments
Calcite %	1.00	Minor dark-brown mottling (calcitization)
Oxidation %	70.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	Only observed at very end of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
131.96 - **TO**
135.98

ROCK CODE glcCD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Interval has almost been entirely calcitized. Few weakly laminated to aggregated apatite visible in calcitized dolomite. In places where dolomite carbonatite has not been as calcitized, dolomite is light-grey and fine-grained. Lamination is only locally recognizable (where apatite remains and at contact between light-grey dolomite and calcitized). Magnetite-apatite cumulate bands show locally through calcitization.

MINERALIZATION		
Type	Value	Comments
Magnetite %	1.50	Occurs aggregated with apatite; observed locally within highly calciized dolomite
Pyrite %	1.00	Small (<0.5 cm)oxidized aggregates observed where calcitization is not too intense

ALTERATION		
Type	Value	Comments
Calcite %	90.00	Dark-brown calcitization

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	50	localized dolomite veins (<0.5 cm thick)
Laminations %	weak	40	Steepens to 80 degrees locally where calcitization is the most intense

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	S	10	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct									
135.98	- 152.07	gcrenfgCD	= g	cren	fg	CD										
MAIN COMMENTS Crenulations are observed dominantly throughout intervals. Few intervals show lamination without crenulation at the same steep angle (139.83-140.53 m and 149.96-152.07 m). Aggregates consist of apatite, dark-grey unknown, oxidized pyrite and minor black altered phlogopite. Niobates not observed. Phenocrysts of black altered phlogopite occur locally.																
MINERALIZATION <table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Oxidized pyrite occurs aggregated up to 1 cm</td> </tr> </tbody> </table>								Type	Value	Comments	Pyrite %	1.00	Oxidized pyrite occurs aggregated up to 1 cm			
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Oxidation %	20.00	Pink dolomite occur locally														
STRUCTURE <table border="1"> <thead> <tr> <th>Type</th> <th>Intens</th> <th>CA°</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Laminations %</td> <td>moderate</td> <td>80</td> <td>Mostly crenulated</td> </tr> </tbody> </table>								Type	Intens	CA°	Comments	Laminations %	moderate	80	Mostly crenulated	
Type	Intens	CA°	Comments													
Laminations %	moderate	80	Mostly crenulated													
MISCELLANEOUS <table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>OX</td> <td></td> <td>10</td> <td>0.5</td> </tr> </tbody> </table>								Zone	HCL	Apatite	Zircon	OX		10	0.5	
Zone	HCL	Apatite	Zircon													
OX		10	0.5													

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
152.07 - **TO**
154.63

ROCK CODE

ncrenvCD

=

Min Style
n

Fabric
cren

Texture
v

Litho
CD

Struct
MAIN COMMENTS

Coarse-grained dolomite occurs as veins within crenulated fine-grained dolomite carbonatite. Coarse grained dolomite veins are composed euohedral tabular grains with interstitial brown and yellow weathering products (likely clays and oxidation products respectively). Apatite occurs crenulated. Zircon occurs disseminated throughout interval.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Uncommon fresh pyrite aggregates up to 0.5 cm

ALTERATION

Type	Value	Comments
Oxidation %	10.00	Oxidation concentrates near coarse-grained veins

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	70	crenulations
Veining %	strong	80	difficult to measure due to variabilitybut always steep (near 80 degrees)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
154.63	- 164.11	nIcAMX	n	I	c	AMX	
		MAIN COMMENTS	Dark-green fenite class (up to 60 cm) within laminated (possibly ovoid textured) to inequigranular dolomite (dolomitized fenite?). Apatite occurs strongly laminated with dolomite. Zircon occurs associated with apatite. Minor greenish blue clots occur within dolomite up to 2.5 cm diameter. Coarse grained dolomite lenses occur locally.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	0.75	Minor oxidized pyrite aggregates with dolomite (<0.5 cm)		
		ALTERATION	Type	Value	Comments		
			Calcite %	10.00	Dark-brown calcitizatin within ovoid textured dolomite		
			Amphibolite %	25.00	Dark-green fenite with black phlogopite and calcite with greyish blue rim		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	weak	40	Locally variable within centimeters from 40 to 80 degrees; observed within dolomite	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			OX	M	10	0.75	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
164.11 - **TO**
171.57

ROCK CODE

ncrencCD

=

Min Style
n

Fabric
cren

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Interval has almost been entirely calcitized. Crenulations can locally be observed. Coarse-grained dolomite is more resistant to calcitization than fine-grained dolomite giving the interval a locally brecciated appearance. A fault is labeled ~166.46 where rubble and loose rock is dominant.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs disseminated (fine-grained) to aggregated (up to 1 cm)

ALTERATION

Type	Value	Comments
Calcite %	70.00	Dark-brown calcitization
Oxidation %	15.00	Yellow color is highly weathered rock (limonite?)

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	60	Secondary calcite veins - also at 20 degrees
Laminations %	moderate	80	Crenulated

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
171.57 - **TO**
183.55

ROCK CODE

ICD

=

Min Style
Fabric
Texture
Litho
Struct

I

CD

MAIN COMMENTS

Dominantly laminated light-grey dolomite carbonatite with a short interval of inequigranular massive dolomite carbonatite (175.89-176.62 m). Contact between inequigranular and laminated at top appears brecciated at ~40 degrees. At bottom, contact is at ~70 degrees, sharper and less brecciated. Apatite occurs laminated within laminated dolomite carbonatite. Inequigranular dolomite is void of apatite. Between 176.62 and 177.56, interval is highly fractured. Dolomite has localized ovoid texture, with high-relief apatite concentric around weathered dolomite core (diameter = ~5 to 10 cm)..

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Oxidized aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Calcite %	2.50	Minor d. brown mottling (calcitization)
Oxidation %	20.00	Red dolomite - more common towards top of interval.

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	70	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	7.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 183.55	-	TO 190.30	ROCK CODE nmcCD	=	Min Style n	Fabric m	Texture c	Litho CD	Struct												
			MAIN COMMENTS	Interval has almost been entirely calcitized. Crenulations can be observed towards end of interval. Coarse-grained dolomite is more resistant to calcitization than fine-grained dolomite giving the interval a locally brecciated appearance. Apatite occurs laminated within dolomite forming dark-grey bands. Zircon occurs associated with apatite.																	
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Fine grained disseminations to aggregated up to 1 cm</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.00	Fine grained disseminations to aggregated up to 1 cm						
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Zone	HCL	Apatite	Zircon																		
OX	M	7.5	0.5																		

FROM 190.30	-	TO 195.67	ROCK CODE nlfgCD	=	Min Style n	Fabric l	Texture fg	Litho CD	Struct								
			MAIN COMMENTS	Light-grey to beige dolomite carbonatite. Apatite occurs weakly laminated.													
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.00</td> <td>Oxidized aggregates up to 0.5 cm</td> </tr> </tbody> </table>						Type	Value	Comments	Pyrite %	1.00	Oxidized aggregates up to 0.5 cm		
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Type	Intens	CA°	Comments														
Laminations %	weak	75															
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Zone	HCL	Apatite	Zircon														
OX	W	10	0.1														

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
195.67 - **TO**
210.23

ROCK CODE nlfGAMX = **Min Style** n **Fabric** l **Texture** fg **Litho** AMX **Struct**
MAIN COMMENTS Fenite clasts within dolomite carbonatite (similar to previous interval); light-grey, weakly laminated. Clots of phlogopite (altered?) + pyrite occur in associated with fenite clasts.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Fresh to oxidized aggregates up to 0.5 cm

ALTERATION

Type	Value	Comments
Amphibolite %	7.50	Dark-green to bluish grey clasts; grey commonly rims d. green; clasts are 2.5 to 25 cm in thickness; smaller grey clasts react to HCl
Oxidation %	15.00	Beige to orange dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	65	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	10	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 210.23	-	TO 214.94	ROCK CODE blfgCD	=	Min Style b	Fabric I	Texture fg	Litho CD	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite (similar to previous intervals 19043-210.23 m) but with 30 cm d grey band composed of apatite, d. grey unknown, black altered phlogopite and abundant zircon occurring at ~213.1 m. ~2.5 cm clot of clay occurs ~212.2 m.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.50	Fresh pyrite occurs locally aggregated up to 1 cm - uncommon laminae and stringers			
				Niobates %	0.10	Fine-grained pale-pink pyrochlore (or fersmite) observed in d. grey band in relatively low abundance			
			ALTERATION	Type	Value	Comments			
				Oxidation %	10.00	Beige dolomite			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	30	65 degrees (at top) shallows to 30 degrees through interval		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				H		12.5	0.25		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-032

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	455105.38	6256412.53	1819.83	60.00	-50.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	205.18		205.18		Central 4
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	2.60	2.60
NQ	2.60	205.18	205.18

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
103.63	60.50	-47.60	6.7	5817	108.0	Reflex EZ-shot
205.13	58.30	-49.50	7.2	6629	281.6	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Ryan Libke		
Geotech Logged By			
Drill Contractor		22/Aug/2010	23/Aug/2010

SUMMARY

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 2.60	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No Rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 2.60	-	TO 3.05	ROCK CODE	mfCD	=	Min Style	Fabric m	Texture f	Litho CD	Struct	
			MAIN COMMENTS	Talus fragments are composed dolomite carbonatite. Some fragments are porphyritic with altered phlogopite. Apatite occurs aggregated.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.00	Oxidized pyrite up to 0.5 cm					
			ALTERATION	Type	Value	Comments					
				Calcite %	20.00	Dark-brown calcitization - reacts strongly to HCl					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								
				OX	M	5	0.1				

FROM
3.05 - **TO**
20.86

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Interval is composed dominantly of laminated dolomite carbonatite. Pristine carbonatite is light-grey but variable oxidation and calcitization gives laminae variable colours of d. brown, beige and red. Apatite occurs as thin laminae (typically up to 0.5 cm). A few larger bands (~ 2.5 to 5 cm) of apatite are aggregated with d. grey unknown mineral. Interval is highly weathered though and no niobates can be observed in band. Zircon occurs associated with apatite.
5-10 cm medium-grained dolomite bands occur typically spaced at ~ 15 cm but do occur spaced greater than 100 cm in places. Medium-grained dolomite is commonly situated within a d. brown calcitized matrix, commonly giving the inequigranular band a brecciated appearance. Inequigranular bands are void of apatite and zircon.
Magnetite-apatite cumulate clasts occur within dolomite carbonatite and in adjacent rubble at ~12.25 m. Clasts are ~ 10 cm in diameter and contain abundant zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Oxidized pyrite occurs mostly confined to thin laminae (~1 mm thick); also as common stringers
Magnetite %	2.50	2 magnetite-apatite aggregated occur at ~12.25 m; magnetite is fine- to medium-grained, subhedral to euhedral
Niobates %	0.10	Likely columbite with magnetite; also potential in larger apatite bands.

ALTERATION

Type	Value	Comments
Calcite %	25.00	Dark-brown calcitization occurs as thin laminae (<0.5 cm) and as matrix to medium-grained dolomite
Oxidation %	40.00	Beige to pink dolomite laminae

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	75	~2.5 cm medium-grey dolomite vein crosscuts fabric at ~ 15.30 m
Laminations %	strong	20	Most commonly 20 degrees; observed at 40 degrees locally

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	W	12.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
20.86 - **TO**
36.82

ROCK CODE

bIfCD

=

Min Style
b

Fabric
I

Texture
f

Litho
CD

Struct
MAIN COMMENTS

Highly weathered light-grey to pink dolomite carbonatite with irregularly spaced bands (typically 1 to 7.5 cm) composed of magnetite or d. grey unknown mineral; apatite, dolomite and abundant zircon. Larger bands (> 5 cm) consist of magnetite while smaller bands (<5 cm) consist of d. grey mineral. A larger magnetite-apatite cumulate band occurs between 31.54 and 32.01 m. Dominant texture of dolomite is laminated but contains localized intervals of brecciated dolomite within d. brown calcitized vein. Vein crosscuts apatite laminae (observed with UV lamp). Veins are highly calcitized and vary in size from ~1.5 cm to > 50 cm. A 20 cm clot of phlogopite and chlorite occurs at ~ 33.20 m. Phlogopite appears to be radiating from the walls of a possible vein.

MINERALIZATION

Type	Value	Comments
Magnetite %	5.00	Magnetite aggregated with apatite
Pyrite %	1.50	Oxidized pyrite occur locally concentrated to laminae in fine-grained disseminations to aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Calcite %	20.00	Dark-brown mottling of dolomite
Oxidation %	40.00	Yellow to pink dolomite - generally follows laminae

STRUCTURE

Type	Intens	CA°	Comments
Veining %	strong	45	Calcitized vein measured at ~25.0 m
Laminations %	moderate	25	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	W	5	0.5

FROM
36.82 - **TO**
87.20

ROCK CODE blvCD = **Min Style** b **Fabric** l **Texture** v **Litho** CD **Struct**

MAIN COMMENTS Interval is dominantly composed of laminated light- to medium-grey dolomite carbonatite, oxidized to various extents (to pink and orange). Apatite occurs thin laminae with common zircon within laminated dolomite carbonatite. Uncommon ~2.5 cm greenish grey bands occur within dolomite. Dolomite carbonatite is locally brecciated with light-grey dolomite clasts and d. brown calcitized matrix. Dolomite is massive and void of apatite near brecciated intervals. Brecciated veined intervals are irregularly spaced and are typically 0.5 to 1.5 m thick. Inequigranular dolomite with medium-grained white dolomite in a light-grey to dark-brown calcitized matrix occur irregular generally as small bands (<5 cm). A larger band (~25 cm) occurs at ~61.1 m. Inequigranular dolomite crosscuts apatite laminae - probably represents a intrusive dyke. Contact between laminated and inequigranular is fine-grained dolomite void of apatite (~ 5 cm thick).

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Oxidized pyrite occurs dominantly as thin laminae (<0.25 cm), stringers and common aggregates (<0.5 cm)

ALTERATION		
Type	Value	Comments
Calcite %	10.00	D. brown calcitization occurs commonly as matrix to medium-grained dolomite and to brecciated intervals.
Oxidation %	35.00	Beige to pink dolomite - locally concentrated
Amphibolite %	1.00	D. green fenite clasts (< 5 cm diameter) occur locally concentrated - commonly rimmed by apatite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	strong	80	Two measured at ~80 degrees right next each but dip opposite directions (calcitized dolomite; fresh dolomite observed)
Laminations %	moderate	20	Generally ~ 20 degrees - 40 degrees observed near top of interval

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	7.5	0.25	

FROM
87.20 - **TO**
99.45

ROCK CODE IAMX = **Min Style** Fabric I **Texture** **Litho** AMX **Struct**

MAIN COMMENTS Interval is dominantly composed of dolomite and fenite clasts within medium-brown to yellow (oxidized around fenite clasts?) calcitized matrix. Where there is little clasts in the intrusive dolomite phase, the white dolomite is not calcitized and contains black altered phlogopite phenocrysts. Clasts compose ~ 80 % of breccia. Pristine matrix is composed of fine- to medium-grained dolomite and phlogopite can be observed (note:observed near fenite clast at ~98.6 m). Laminated dolomite carbonatite occurs locally with thin apatite laminae (<0.5 cm) with common zircon. Fenite clasts are observed in laminated dolomite carbonatite as well - deflects lamination. Steep contact between white inequigranular dolomite and larger fenite clast can be observed at ~98.85 m. Fenite clasts are included within white dolomite matrix and become progressively less dark coloured away from fenite clast (dark-green to light-grey).

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Oxidized stringers and aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Pink dolomite
Calcite %	20.00	Dark-brown calciaton - commonly breccia matrix
Amphibolite %	5.00	D. green fenite clasts (2 to 20 cm);common apatite rim; commonly calcitized

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	30	Calcitized veins measured at ~30 degrees -variable dip directions
Laminations %	moderate	20	Only locally observed; steep 80 degree lamination observed between 97.6 and 98.8 m.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
		5	0.1

FROM 99.45 - **TO** 103.45

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Dolomite carbonatite is light-grey oxidized to pink and orange pascal colours. Medium-grained magnetite occurs disseminated within pink and orange dolomite. Bands (~1-3 cm) composed of apatite and d. grey unknown mineral occur locally concentrated near disseminated magnetite. At the very end of the interval, a 10 cm band composed of black altered phlogopite with interstitial dolomite and abundant zircon occurs. Apatite occurs as localized laminae within dolomite carbonatite. A localized breccia occurs with fenite clasts at ~101.5 to 102.2. Dolomite clasts may be dolomitized fenite clasts.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Possible columbite with magnetite and apatite-d. grey mineral (dolomitized magnetite) bands
Magnetite %	0.50	Medium-grained disseminations within orange and pink dolomite
Pyrite %	1.00	Oxidized fine-grained pyrite occurs locally disseminated - commonly weathered out leaving pits

ALTERATION

Type	Value	Comments
Calcite %	5.00	Dark-brown calcitization generally follows laminae
Oxidation %	60.00	Orange and pink dolomite
Amphibolite %	5.00	30 cm fenite clast occurs at ~102.20 m; ovoid texture: medium-green core with black rim

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	W	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 103.45	-	TO 124.00	ROCK CODE blvCD	=	Min Style b	Fabric I	Texture v	Litho CD	Struct
			MAIN COMMENTS	Interval is essentially the same as 36.82 to 87.20 - laminated dolomite carbonatite with intervals of brecciated dolomite carbonatite. Apatite forms thin laminae - commonly associated with fine-grained black altered phlogopite and zircon.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.25	Oxidized pyrite occurs as aggregates (up to 1 cm) and stringers			
			ALTERATION	Type	Value	Comments			
				Oxidation %	60.00	Beige to pink dolomite			
				Calcite %	15.00	D. brown intervals up to 10 cm and matrix to breccia (calcitization)			
			STRUCTURE	Type	Intens	CA°	Comments		
				Veining %	moderate	30	D. brown veins/dykes - measured irregular shaped contact		
				Laminations %	strong	25			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	10	0.25		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	IcAMX	=	Min Style	Fabric	Texture	Litho	Struct
124.00	-	132.16				I	c	AMX	
		MAIN COMMENTS	D.green to grey fenite clasts occur within laminated dolomite carbonatite. Interval has a brecciated appearance between ~126 to 129.1 m. Clasts have similar appearance to fenite clasts but are composed of dolomite - may actually be dolomitized clasts. Dark-grey inequigranular dolomite veins observed (up to 5 cm thick) - relatively concordant with lamination. Common apatite bands with oxidized pyrite, d. grey unknown and common zircon occur irregularly throughout interval (up to 5 cm).						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	1.25	Oxidized aggregates up to 1 cm				
		ALTERATION	Type	Value	Comments				
			Calcite %	5.00	Irregular d. grey mottling (calcitization) - also commonly along dolomite clast (or dolomitized fenite) edges				
			Oxidation %	30.00	Beige to pink dolomite				
			Amphibolite %	25.00	D. green to grey clasts (up to ~30 cm)				
		STRUCTURE	Type	Intens	CA°	Comments			
			Veining %	moderate	20	Inequigranular dolomite up to 5 cm - commonly calcitized			
			Laminations %	moderate	20				
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			OX	M	10	0.25			

FROM
132.16 - **TO**
153.08

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Similar to previous laminated intervals but with less brecciated intervals and more common inequigranular veins. Inequigranular veins are 1 to 30 cm wide and commonly calcitized around medium-grained dolomite.
D. grey bands are composed of apatite, d. grey mineral, oxidized pyrite, sometimes altered phlogopite and common zircon and compose ~ 15 % of interval. No niobates identified in bands. A 20 thick magnetite-apatite cumulate occurs next to gouge at 135.4 m.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.00	Stringers and aggregates up to 1 cm

ALTERATION		
Type	Value	Comments
Oxidation %	40.00	Beige to pink dolomite
Calcite %	25.00	D. brown calcitization is commonly associated with inequigranular dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	strong	10	Inequigranular veins up to 30 cm
Laminations %	moderate	20	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	15	0.25	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
153.08 - **TO**
164.39

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS D. brown calcitization obviates most of texture. Few areas of lamination, brecciation and medium-grained dolomite can be observed. Calcitization concentrates to matrix of inequigranular dolomite and breccia. Gouge and rubble intervals are common. A fault is labeled at ~162.53 m.
A ~15 cm magnetite-apatite cumulate band occurs at ~161.59 m.
Apatite occurs aggregated to weakly laminated with associated zircon.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Uncommon oxidized pyrite aggregates up to 0.5 cm; laminations composed almost entirely of oxidized pyrite up to 1 cm
Magnetite %	5.00	Medium-grained magnetite aggregated with apatite in ~ 15 cm band at ~161.59
Niobates %	0.50	Columbite likely occurs with magnetite

ALTERATION

Type	Value	Comments
Calcite %	70.00	Dark-brown calcitization makes up entire rock in places
Oxidation %	15.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	moderate	10	Inequigranular dolomite veins up to 2.5 cm; Secondary calcite vein (~0.5 cm) at 80 degrees
Laminations %	weak	20	Only locally observed

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.25

FROM 164.39 - **TO** 192.30

ROCK CODE bliCD = **Min Style** b **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Common inequigranular dolomite veins occur within white to light-grey dolomite carbonatite. Phenocrysts of black altered phlogopite are observed locally. Frequent crosscutting calcitization "veins" give localized areas brecciated appearance. Apatite forms common bands (~ 2.5 cm) with dark-grey unknown mineral. In brecciated intervals, apatite occurs aggregated with common zircon. Calcite carbonatite with disseminated magnetite occurs at ~176.75 m (~10 cm thick); crosscut by calcitization. Possible fault with displacement observed at ~169.6 m - infilled by secondary calcite; measured at 80 degrees. Fault labeled at 189.02 m. Cave in labeled at 191.07.

MINERALIZATION		
Type	Value	Comments
Magnetite %	0.10	Fine-grained magnetite occurs locally disseminated within calcite carbonatite
Pyrite %	0.75	Oxidized pyrite occurs locally disseminated - commonly associated with black altered phlogopite

ALTERATION		
Type	Value	Comments
Oxidation %	30.00	Beige to pink dolomite
Calcite %	25.00	Dark-brown calcitization occurs commonly associated with inequigranular dolomite veins

STRUCTURE			
Type	Intens	CA°	Comments
Veining %	moderate	20	Inequigranular dolomite (up to 10 cm thick) is concordant to lamination
Laminations %	moderate	20	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	10	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 192.30	-	TO 205.18	ROCK CODE blpCD	=	Min Style b	Fabric l	Texture p	Litho CD	Struct
			MAIN COMMENTS	Dominantly light-grey dolomite carbonatite, locally porphyritic with phenocrysts of fine-grained black altered phlogopite. Inequigranular dolomite composes ~5 % of interval and locally brecciates dolomite. Inequigranular dolomite is commonly calcitized (d. brown). Bands within laminated dolomite is composed of apatite, oxidized pyrite, black altered phlogopite +/- zircon. Magnetite-apatite cumulate with abundant zircon occurs between 199.73 and 200.27 m - apatite occur oriented (at ~70 degrees) within cumulate. Cumulate is concordant with laminated dolomite - contact at 20 degrees.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	1.00	Likely columbite occurs with magnetite			
				Magnetite %	15.00	Medium-grained magnetite occurs aggregated with apatite within cumulate phase			
				Pyrite %	1.00	Oxidized aggregates up to 1 cm			
			ALTERATION	Type	Value	Comments			
				Oxidation %	30.00	Beige dolomite			
				Calcite %	10.00	Dark-brown calcitization - associated with inequigranular veins and matrix to breccia			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	20			
				Veining %	weak	50	Inequigranulat veins at various angles - measured at 5, 50 and 80 degrees - up to 10 cm thick		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	M	15	0.5		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID 2010-033

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	454808.09	6256300.23	1781.80	30.00	-45.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	213.41		213.41		Central 4
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	5.64	5.64
NQ	5.64	213.41	213.41

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
213.36	42.30	-48.40	5.9	5698	318.7	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall		
Geology Logged By	Ryan Kressall		
Specific Gravity By	Ryan Libke		
Geotech Logged By			
Drill Contractor		25/Aug/2010	27/Aug/2010

SUMMARY

--

GEOLOGY LEGEND

 Hole ID 2010-033

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

FROM 0.00	-	TO 5.64	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No rock.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 5.64	-	TO 6.10	ROCK CODE	nmCASE	=	Min Style n	Fabric m	Texture	Litho CASE	Struct	
			MAIN COMMENTS	Weathered talus of light-grey dolomite carbonatite.							
			MINERALIZATION	Type	Value	Comments					
				Pyrite %	1.00	Oxidized pyrite - disseminated					
			ALTERATION	Type	Value	Comments					
				Calcite %	10.00	D.brown mottles (calcitization)					
				Oxidation %	10.00	Orange dolomite					
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								
				OX	VW	5	0.1				

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
6.10 - **TO**
27.44

ROCK CODE glcCD = **Min Style** g **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Light-grey laminated dolomite. Aggregates are composed of magnetite and apatite with abundant zircon (concentrates along boundary between dolomite and magnetite). Aggregates are 1 - 60 cm thick and compose ~15 % of interval. White calcite laminae (~1 - 2.5 cm thick) occur commonly with magnetite aggregates. Aggregates are abundant between 9.68 and 25.79 m. Between 25.79 and 27.44 m, aggregates are minor and only ~ 1 - 2.5 cm thick

MINERALIZATION

Type	Value	Comments
Magnetite %	10.00	Magnetite occurs aggregated with apatite
Niobates %	1.00	Likely columbite occurs with magnetite
Pyrite %	1.50	Oxidized; locally disseminated and aggregates up to 1 cm

ALTERATION

Type	Value	Comments
Calcite %	30.00	Dark-brown calcitization -follow laminae and concentrates around cumulate clasts
Amphibolite %	1.00	Minor greyish blue ~ 2.5 clots occurs at ~16.1 m - possibly fenite (?)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	
Veining %	moderate	60	Greyish blue 3 cm vein (or laminae) occurs at ~16.2 m - includes laminae of l. grey dolomite - similar clots appear elsewhere

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
27.44 - **TO**
41.97

ROCK CODE

blcCD

=

Min Style
b

Fabric
l

Texture
c

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite. Similar to previous interval, but aggregates (2 to 30 cm) are mostly non-magnetite. Minor amount of clasts contain magnetite, but majority are composed of apatite, black phlogopite, zircon and visible pinkish brown pyrochlore. Clasts compose ~ 10 % of interval. Localized inequigranular dolomite bands occur within calcitized intervals (~3 cm thick),.

MINERALIZATION

Type	Value	Comments
Pyrite %	0.50	Oxidized pyrite aggregates up to 1 cm and minor disseminated fine-grained pyrite
Magnetite %	0.50	Minor magnetite occurs aggregated with apatite within small clasts (<2.5 cm)
Niobates %	1.00	Pinkish-brown suspect pyrochlore (?) observed in phlogopite-bearing clasts

ALTERATION

Type	Value	Comments
Calcite %	50.00	Large intervals of calcitization occur between 30.63-32.82 m and 35.68-38.48 m
Oxidation %	25.00	Beige to pink laminated dolomite

STRUCTURE

Type	Intens	CA°	Comments
Veining %	weak	40	Minor secondary calcite veins
Laminations %	moderate	35	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	7.5	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
41.97 - **TO**
58.17

ROCK CODE

bICD

=

Min Style
b

Fabric
I

Texture
Litho
CD

Struct
MAIN COMMENTS

Light grey laminated dolomite carbonatite. 1 -20 cm bands are composed of aggregated magnetite and apatite with common zircon. Larger bands (> 10 cm) contain interstitial calcite. Bands compose ~ 5 % of interval (more abundant and larger towards top of interval). Apatite occurs as thin laminae within dolomite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.25	Likely columbite with magnetite
Pyrite %	1.00	Fresh pyrite occurs with uncommon altered magnetite; occurs locally concentrated to laminae
Magnetite %	3.50	Occurs aggregated with apatite; fine to medium grained

ALTERATION

Type	Value	Comments
Oxidation %	45.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	7.5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
58.17 - **TO**
61.13

ROCK CODE

bceniCD

=

Min Style
b

Fabric
cren

Texture
i

Litho
CD

Struct
MAIN COMMENTS

Light-grey crenulated dolomite carbonatite with steep core angle. Bands (< 2.5 cm) are composed of laminated apatite, dark-grey unknown (not-magnetic), pyrite and common zircon. No niobates identified in bands but interval has high potential.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Fine-grained;aggregated with d. grey unknown

ALTERATION

Type	Value	Comments
Oxidation %	15.00	Yellow stained dolomite (?)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	strong	75	crenulations (between 70 and 80 degrees)

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.25

FROM
61.13 - **TO**
65.63

ROCK CODE glpCD = **Min Style** g **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS White to light-grey dolomite carbonatite with clasts (2 to 50 cm) of magnetite-apatite cumulate with abundant calcite veinlets (<0.5 mm). Cumulate contains abundant zircon and phlogopite. Localized magnetite floaters" occur within calcite veins. Light grey laminated dolomite carbonatite. Veins extend from dolomite host rock. Clasts compose ~ 40 % of interval. Porphyritic light-grey dolomite carbonatite is more dominant towards bottom of interval, in gradational contact with clasts (may represent dolomitized cumulate phase). Phenocrysts consist of d. grey unknown mineral. Apatite occurs oriented within porphyritic dolomite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Common aggregates up to 0.5 cm within porphyry
Magnetite %	25.00	Magnetite occurs aggregated with apatite; commonly associated with calcite
Niobates %	1.50	Fine-grained honey-brown pyrochlore identified in porphyry columbite likely present with magnetite

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	25	Locally observed; measured at top of interval

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
		20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
65.63 - **TO**
70.78

ROCK CODE bIpCD = **Min Style** b **Fabric** I **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey laminated dolomite carbonatite. Bands (2.5 to 5 cm) are composed of non-magnetic unknown mineral, pyrite, apatite, zircon and identified pale-pink fersmite. Bands compose ~2.5 % of interval. Apatite occurs weakly laminated within dolomite. Porphyritic dolomite occurs near top of interval with phenocrysts of fine-grained black altered phlogopite, d. grey unknown and uncommon magnetite. Minor blobs of calcite occur within porphyry. Weakly crenulated interval occurs between ~68.2 and 69.0 m. Interval is highly silicified - follows "crenulation"

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Fresh pyrite aggregates up to 1 cm - commonly aggregated within bands w/ d. grey unknown mineral
Magnetite %	0.10	Minor fine-grained magnetite occurs disseminated within porphyry
Niobates %	0.50	Fine-grained pale pink fersmite observed in bands with apatite and d. grey unknown mineral

ALTERATION

Type	Value	Comments
Silica %	3.50	D. grey silicification in crenulated interval
Oxidation %	50.00	Beige dolomite occurs towards bottom of interval

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	50	Measured at end of interval; core angle of crenulations: 40 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
70.78 - **TO**
78.02

ROCK CODE

blfgCD

=

Min Style
b

Fabric
I

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

White to beige dolomite carbonatite occurs interlaminated with magnetite-apatite cumulate (1-100 cm) and with common clasts (~5-10 cm). Cumulate composes ~ 40 % of interval. Minor calcite laminae (<1.5 cm) occur in interval.

MINERALIZATION

Type	Value	Comments
Niobates %	1.50	Likely columbite occurs with magnetite
Pyrite %	1.00	Minor oxidized pyrite
Magnetite %	30.00	Magnetite occurs aggregated with apatite

ALTERATION

Type	Value	Comments
Oxidation %	20.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
	VW	20	0.75

FROM
78.02

TO
88.41

ROCK CODE

blpCCCD

=

Min Style
b

Fabric
l

Texture
p

Litho
CCCD

Struct

MAIN COMMENTS

Contact occurs at 78.02 between previous interval banded dolomite carbonatite and banded laminated dolomite and calcite carbonatite. Contact is sharp between two banded phases with ~ 1 cm medium-green dolomite occur at the contact (70 degrees). Contact may actually be a fault. Dips of two banded phases are in different directions. Bands are 0.5 to 60 cm thick, composed of magnetite, apatite, zircon and medium-green dolomite matrix. Magnetite is typically disseminated with med-green dolomite matrix. Apatite occurs laminated throughout interval. Localized crenulation occurs as ~74.10 m. Laminated CCCD grades into pink-oxidized massive dolomite locally between 79.47-80.33 m and 84.04-85.11 m. Intervals contain abundant oxidized pyrite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.00	Localized fine-grained needles in oxidized zones
Magnetite %	10.00	Fine- to medium-grained magnetite occurs disseminated within d. grey dolomite matrix

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	30	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	20	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
88.41 - **TO**
98.37

ROCK CODE gliCD = **Min Style** g **Fabric** l **Texture** i **Litho** CD **Struct**
MAIN COMMENTS Light-grey dolomite carbonatite. Magnetite aggregates (5 to 25 cm) compose ~7.5 % of interval.. Apatite occurs laminated within dolomite. Zircon occurs associated with magnetite. Calcite occurs commonly associated with magnetite.

MINERALIZATION

Type	Value	Comments
Magnetite %	7.50	Medium-grained massive magnetite clasts
Pyrite %	1.50	Oxidized stringers fresh aggregates up to 3 cm
Niobates %	1.00	Likely columbite occurs with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Pink dolomite
Calcite %	10.00	Common d. grey calcitization occurs associated with magnetite (alteration of calcite?)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	45	Locally observed

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	10	0.5

FROM
98.37 - **TO**
109.50

ROCK CODE

gliCD

=

Min Style
g

Fabric
l

Texture
i

Litho
CD

Struct

MAIN COMMENTS

Laminated light-grey dolomite similar to previous interval but with larger clasts (5 to 50 cm) of magnetite-apatite. Zircon occurs with cumulate clasts. Clasts compose ~ 20 % of interval. Laminated dolomite has very little apatite laminae.

MINERALIZATION

Type	Value	Comments
Magnetite %	12.50	Occur aggregated with apatite medium-grained
Niobates %	1.00	Likely columbite occurs with magnetite
Pyrite %	1.50	Fresh pyrite occurs commonly associated magnetite; oxidized pyrite occurs disseminated within laminated dolomite

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige dolomite
Calcite %	10.00	Dark-brown calcitization concentrates around cumulate clasts

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	40	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.5

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
109.50 - **TO**
112.30

ROCK CODE gmiCM = **Min Style** g **Fabric** m **Texture** i **Litho** CM **Struct**

MAIN COMMENTS Dominantly magnetite-apatite cumulate with more magnetite than apatite. Common phlogopite occurs with magnetite. Zircon occurs commonly within cumulate. Dolomite carbonatite (laminated) occurs as 15 to 30 cm laminations.

MINERALIZATION

Type	Value	Comments
Magnetite %	40.00	Medium-grained magnetite occurs aggregated with apatite
Pyrite %	1.50	Oxidized pyrite occurs with magnetite
Niobates %	2.50	Columbite likely occurs with magnetite

ALTERATION

Type	Value	Comments
Calcite %	20.00	Dark-brown calcitization concentrates toward end of interval

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	Measured contact between dolomite and cumulate

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	W	15	0.5

FROM
112.30 - **TO**
120.02

ROCK CODE blcCD = **Min Style** b **Fabric** l **Texture** c **Litho** CD **Struct**

MAIN COMMENTS Light-grey to d. brown calcitized dolomite carbonatite. Interval has localized ovoid texture at ~ 115.5 m: rounded light-grey dolomite core with calcitized rim. Apatite occurs as laminae up 3.5 cm thick with d. grey unknown mineral and common zircon. Magnetite-apatite cumulate with abundant zircon composes last 60 cm of interval.

MINERALIZATION		Type	Value	Comments
Pyrite %	1.50	Fine-grained oxidized pyrite occurs locally disseminated; aggregated up to 0.5 cm		
Magnetite %	10.00	Medium-grained magneite occurs aggregated with apatite		
Niobates %	1.00	Columbite likely occurs with magnetite		

ALTERATION		Type	Value	Comments
Calcite %	30.00	D. brown mottling (calcitization)		
Oxidation %	20.00	Beige to pink dolomite		

STRUCTURE		Type	Intens	CA°	Comments
Laminations %	moderate	40			

MISCELLANEOUS		Zone	HCL	Apatite	Zircon
OX	M	7.5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	liCD	=	Min Style	Fabric	Texture	Litho	Struct
120.02	-	139.45				I	i	CD	
		MAIN COMMENTS	Localized inequigranular dolomite bands (~5 cm) occur within laminated light-grey dolomite carbonatite. Inequigranular dolomite comprises medium-grained dolomite carbonatite within a calcitized matrix. Localized phenocrysts of black altered phlogopite occur between 128.84 and 129.56 m. Apatite occur as d. grey bands (~7.5 cm) aggregated with d. grey unknown mineral and altered phlogopite.						
		MINERALIZATION	Type	Value	Comments				
			Pyrite %	1.00	Oxidized aggregates up to 0.5 cm				
		ALTERATION	Type	Value	Comments				
			Calcite %	20.00	D. brown calcitization				
			Oxidation %	10.00	Beige dolomite				
		STRUCTURE	Type	Intens	CA°	Comments			
			Laminations %	weak	50				
			Veining %	moderate	70	White secondary calcite veins (up to 1 cm)			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon			
			OX	M	5	0.1			

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 139.45	-	TO 143.64	ROCK CODE nmcCD	=	Min Style n	Fabric m	Texture c	Litho CD	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite has been extensively calcitized (dark-brown) to locally decalcified (pitted surface). Apatite occurs aggregated. No zircon observed.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Oxidized aggregates up to 0.25 cm			
			ALTERATION	Type	Value	Comments			
				Calcite %	80.00	Dark-brown calcitization			
			STRUCTURE	Type	Intens	CA°	Comments		
				Veining %	moderate	60	Thin (<0.25 cm) secondary calcite veins		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	S	5	0		

FROM 143.64	-	TO 149.81	ROCK CODE gICD	=	Min Style g	Fabric l	Texture	Litho CD	Struct
			MAIN COMMENTS	Light-grey dolomite carbonatite. 2.5 - 10 cm aggregates are composed of apatite, dark-grey unknown mineral and abundant zircon. No niobates identified					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.25	Oxidized pyrite occurs locally disseminated			
			ALTERATION	Type	Value	Comments			
				Oxidation %	50.00	beige dolomite			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	40			
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	W	5	0.1		

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
149.81 - **TO**
155.78

ROCK CODE gliCCCD = **Min Style** g **Fabric** l **Texture** i **Litho** CCCD **Struct**

MAIN COMMENTS Magnetite-apatite cumulate clasts (7.5 to 1 m) within dolomite carbonatite. Clasts compose ~ 30 % of interval. Abundant zircon occur within cumulate phase. Porphyritic calcite to dolomite carbonatite occurs in the last 40 cm. Calcite occurs as patches within dolomite carbonatite (dolomitization of calcite carbonatite?). Calcite contains fine-grained phenocrysts of magnetite and brown phlogopite. Dolomite contains non-magnetic dark-grey fine-grained phenocrysts.

MINERALIZATION		
Type	Value	Comments
Niobates %	1.00	Likely columbite occurs wih magnetite
Magnetite %	15.00	Magnetite occurs aggregated with apatite in clasts; disseminated withn calcite-dolomite carbonatite

ALTERATION		
Type	Value	Comments
Oxidation %	20.00	Beige dolomite

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	40	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	12.5	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
155.78 - **TO**
163.90

ROCK CODE

blfgCD

=

Min Style
b

Fabric
I

Texture
fg

Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite with irregularly-spaced dark-grey bands and white inequigranular dolomite bands. Dark-grey bands (up to 5 cm) are composed of apatite, black altered phlogopite, d. grey unknown and abundant zircon. Dark-grey bands compose ~5 %of interval.

MINERALIZATION

Type	Value	Comments
Niobates %	0.50	Yellow fine-grained suspect fersmite within d. grey bands
Pyrite %	1.00	Fresh to oxidized pyrite occurs locally concentrated to laminae

ALTERATION

Type	Value	Comments
Oxidation %	30.00	Beige to pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	moderate	20	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
163.90 - **TO**
166.09

ROCK CODE

glCD

=

Min Style
g

Fabric
I

Texture
Litho
CD

Struct
MAIN COMMENTS

Light-grey dolomite carbonatite. 2.5 - 10 cm clasts are composed of apatite, magnetite, abundant zircon and interstitial dolomite. Clasts compose ~ 10 % of interval. Apatite also occurs weakly laminated within dolomite carbonatite.

MINERALIZATION

Type	Value	Comments
Magnetite %	7.50	Aggregated with apatite
Pyrite %	0.50	Fresh aggregated upto 0.25 cm
Niobates %	1.00	Columbite likely occurs with magnetite

ALTERATION

Type	Value	Comments
Oxidation %	40.00	Beige dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	20	Best viewed in apatite under UV

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.25

FROM 166.09	-	TO 171.07	ROCK CODE bmiCD	=	Min Style b	Fabric m	Texture i	Litho CD	Struct												
			MAIN COMMENTS	Light- to medium-grey mottled dolomite carbonatite with uncommon d. grey apatite <2.5 cm bands (with common pyrite). Apatite also occurs as white laminae. Minor medium-grained dolomite laminae (<2 cm) occur occasionally throughout interval.																	
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th colspan="4">Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>0.50</td> <td colspan="4">Occurs commonly associated with d. grey apatite bands</td> </tr> </tbody> </table>						Type	Value	Comments				Pyrite %	0.50	Occurs commonly associated with d. grey apatite bands			
Type	Value	Comments																			
Pyrite %	0.50	Occurs commonly associated with d. grey apatite bands																			
			ALTERATION																		
			STRUCTURE	<table border="1"> <thead> <tr> <th>Type</th> <th>Intens</th> <th>CA°</th> <th colspan="3">Comments</th> </tr> </thead> <tbody> <tr> <td>Laminations %</td> <td>moderate</td> <td>30</td> <td colspan="3"></td> </tr> </tbody> </table>						Type	Intens	CA°	Comments			Laminations %	moderate	30			
Type	Intens	CA°	Comments																		
Laminations %	moderate	30																			
			MISCELLANEOUS	<table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>H</td> <td>VW</td> <td>10</td> <td>0.1</td> <td colspan="2"></td> </tr> </tbody> </table>						Zone	HCL	Apatite	Zircon			H	VW	10	0.1		
Zone	HCL	Apatite	Zircon																		
H	VW	10	0.1																		

FROM 171.07	-	TO 181.00	ROCK CODE gmiCD	=	Min Style g	Fabric m	Texture i	Litho CD	Struct												
			MAIN COMMENTS	Mottled-massive light-grey to beige dolomite carbonatite with d.grey aggregates (up to 10 cm) composed of apatite, dolomite, black altered phlogopite, pyrite and commonly abundant zircon. Aggregates compose ~ 5 % of interval.																	
			MINERALIZATION	<table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th colspan="4">Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>2.00</td> <td colspan="4">Aggregated up to 5 cm associated with apatite</td> </tr> </tbody> </table>						Type	Value	Comments				Pyrite %	2.00	Aggregated up to 5 cm associated with apatite			
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Zone	HCL	Apatite	Zircon																		
OX	VW	15	0.25																		

FROM 181.00	-	TO 186.94	ROCK CODE bliCD	=	Min Style b	Fabric l	Texture i	Litho CD	Struct
			MAIN COMMENTS	Dominantly laminated light-grey dolomite carbonatite with large interval of massive inequigranular dolomite carbonatite (between 182.35 - 183.20 m). Apatite occurs as d. grey bands (1 to 7.5 cm) with black altered phlogopite and suspect fersmite. Bands compose ~3.5 % of interval. Localized 17 cm interval of crenulated dolomite occurs at ~186.81 m. Crenulated dolomite has been oxidized to orange and pink colours.					
			MINERALIZATION	Type	Value	Comments			
				Niobates %	0.25	Pale yellow to pink fine-grained fersmite within d. grey bands with apatite			
				Pyrite %	1.50	Fresh to oxidized stringers (~1 cm long)			
			ALTERATION	Type	Value	Comments			
				Oxidation %	10.00	Beige to pink dolomite - commonly surrounds pyrite stringers			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	moderate	10	Locally observed; crenulations measured at 45 degrees		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	12.5	0.5		

FROM 186.94	-	TO 195.31	ROCK CODE gmiCD	=	Min Style g	Fabric m	Texture i	Litho CD	Struct
			MAIN COMMENTS	Massive-mottled light- to medium-grey dolomite carbonatite with uncommon 2.5 to 10 cm clasts composed of apatite, black altered phlogopite, and pale-yellow fersmite. Apatite occurs dispersed in dolomite.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.25	Fresh pyrite occurs commonly aggregated with clasts.			
				Niobates %	0.25	Fine-grained pale-yellow fersmite observed in apatite clasts.			
			ALTERATION						
			STRUCTURE						
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	6.5	0.25		

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 195.31	-	TO 213.41	ROCK CODE gmpCD	=	Min Style g	Fabric m	Texture p	Litho CD	Struct
			MAIN COMMENTS	Inequigranular dolomite carbonatite (similar to previous interval) occurs interlayered with porphyritic oxidized pink dolomite carbonatite. Phenocrysts consist of black altered phlogopite commonly associated with oxidized pyrite. Minor clots of white fine-grained dolomite occur within inequigranular dolomite. 5 - 10 cm clasts consist of apatite and black altered phlogopite. No niobates identified in clasts.					
			MINERALIZATION	Type	Value	Comments			
				Pyrite %	1.00	Oxidized fine-grained pyrite occurs commonly associated with phenocrysts; rare aggregates up to 2 cm			
			ALTERATION	Type	Value	Comments			
				Amphibolite %	5.00	Dark-green fenite clast (~25 cm) occurs at ~20.3 m			
				Oxidation %	50.00	Pink dolomite composes porphyry			
			STRUCTURE	Type	Intens	CA°	Comments		
				Laminations %	weak	70	Locally observed at ~200.75 - parallels nearby contact between inequigranular and porphyry		
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
				OX	VW	12.5	0.25		

End of Hole

End of Hole

GEOLOGY LOG

 Hole ID **2010-034**

GENERAL INFORMATION

Coordinate System	Easting	Northing	Elevation	Collar Azimuth	Collar Dip
ST. PL Nad 83	455006.03	6256360.54	1813.57	60.00	-50.00
Start Depth	Final Depth	Proposed Depth	Final Length	Rig	Area
0.00	213.41		213.41		Central 4
Operator	Year				
Taseko	2010				

DRILLING BIT SIZE

Bit Size	From	To	Length
NW (Casing)	0.00	2.49	2.49
NQ	2.49	213.41	213.41

DOWN HOLE SURVEY

Depth	Azimuth	Dip	Temp °C	Mag.	Roll	Method
30.48	61.80	-55.50	7.4	5660	318.7	Reflex EZ-shot
106.68	58.90	-56.60	8.0	5780	218.6	Reflex EZ-shot
213.36	62.30	-58.50	11.5	5837	110.2	Reflex EZ-shot

PROFESSIONAL / TECHNICIAN

	Name	Start Date	End Date
Collar Surveyor	Ryan Kressall	02/Sep/2010	
Geology Logged By	Ryan Kressall		
Specific Gravity By	Ryan Libke		
Geotech Logged By			
Drill Contractor		26/Aug/2010	27/Aug/2010

SUMMARY

--

ROCK CODE

MIN STYLE	
Abbr.	Description
n	barren
d	disseminated
g	aggregated
b	banded

FABRIC	
Abbr.	Description
x	brecciated
l	laminated
f	decalcified
v	veined
p	porphyritic
m	massive

TEXTURE	
Abbr.	Description
f	decalcified
p	porphyritic
v	veined

LITHO	
Abbr.	Description
CASE	Casing
OVBN	Overburden
OXID	Oxide
AM	Amphibolite
CC	Calcite Carbonatite
CD	Dolomite Carbonatite
CCCD	Mixed Calcite and Dolomite Carbonatite
AMX	Amphibole and Mixed Carbonatite
CM	Carbonatite Cumulate

STRUCT	
Abbr.	Description
z	fault
e	strained
s	shear zone
y	dyke

MISCELLANEOUS:

ZONE	
Abbr.	Description
OX	Oxide
S	Supergene
H	Hypogene

HCL	
Abbr.	Description
VW	very weak
W	weak
M	moderate
S	strong
VS	very strong

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM 0.00	-	TO 2.49	ROCK CODE	CASE	=	Min Style	Fabric	Texture	Litho CASE	Struct	
			MAIN COMMENTS	No Rocl.							
			MINERALIZATION								
			ALTERATION								
			STRUCTURE								
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon				
			<input type="text"/>								

FROM 2.49	-	TO 26.58	ROCK CODE	bliCD	=	Min Style b	Fabric l	Texture i	Litho CD	Struct										
			MAIN COMMENTS	Light grey dolomite carbonatite. Interval is composed of fractured weathered rock from 2.49 - 5.13 m. D. grey bands (0.5 to 10 cm thick) are composed of apatite, d. grey metallic mineral, pyrite, abundant zircon and common fine-grained fersmite. D. grey bands compose ~3.5 % of interval. 2 black altered phlogopite clots (~15 cm) occur at ~23.3 m and 24.4 m. Clots are predominantly phlogopite with minor pyrite. The later clot contains abundant unidentified golden-brown mica.																
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Type	Intens	CA°	Comments																	
Laminations %	moderate	35	Measured between 30 and 40 degrees																	
			MISCELLANEOUS	Zone	HCL	Apatite	Zircon													
			<input type="text"/>																	
			<input type="text"/>																	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
26.58 - **TO**
34.65

ROCK CODE

gmCD

=

Min Style
g

Fabric
m

Texture
Litho
CD

Struct
MAIN COMMENTS

Massive-mottled light- to medium-grey dolomite carbonatite. Contact at top of interval: measured at 35 degrees, displaced 5 cm by fault (65 degrees). Aggregates (2 to 10 cm diameter) of apatite with pyrite and d. grey unknown mineral compose ~ 5% of interval. No niobates identified in aggregates. Coarse-grained dolomite clots (upto 5 cm) occur commonly after 34.04m.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.50	Occurs most commonly aggregated with apatite and d. grey unknown mineral

ALTERATION

Type	Value	Comments
Oxidation %	7.50	Beige dolomite; minor oxidized pyrite; more common towards bottom of interval.

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	1.5	0

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
34.65 - **TO**
111.24

ROCK CODE nmiCD = **Min Style** n **Fabric** m **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Oxidized to calcitized light-grey dolomite carbonatite. ~1 m wide intervals that are not calcitized are light-grey to pink and are massive to locally laminated. Uncommon aggregates (~2.5 - 15 cm) of apatite, black altered phlogopite, pyrite and common zircon are observed locally within non-calcitized dolomite. No niobates identified in aggregates. Weak laminae of apatite are also observed within dolomite. Clots of medium- to coarse-grained dolomite are observed locally throughout interval (~2.5 % of interval).

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.50	Oxidized aggregates and stringers up to 1 cm; confined to laminae

ALTERATION		
Type	Value	Comments
Calcite %	0.00	D. brown calcitization occurs locally;commonly concentrated around medium- to coarse-grained dolomite clots
Oxidation %	20.00	Beige to pink dolomite;observed in non-calcitized intervals - commoly follows laminae

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	weak	30	Relatively constant throughout interval where observed locally
Veining %	weak	70	Minor thin calcitized veins occur occasionally throughtout interval

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	M	5	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
111.24 - **TO**
119.16

ROCK CODE

gmiCD

=

Min Style
g

Fabric
m

Texture
i

Litho
CD

Struct
MAIN COMMENTS

Interval is dominantly light-grey fine-grained dolomite carbonatite containing aggregates (5-10 cm) of apatite with oxidized pyrite, zircon and yellow fersmite(?). Aggregates compose ~5 % of interval and are best observed with UV light.
 Clots of medium-grained medium-grey to beige dolomite occurs commonly between 111.24 and 116.20 m. Contacts between fine- and medium-grained dolomite is gradational. Medium-grained dolomite is devoid of apatite.
 Vuggy interval observed at 113.8 - 114.2 m

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Pale-yellow suspect fine-grained fersmite observed in apatite aggregates
Pyrite %	1.25	Locally concentrated aggregates up to 0.5 cm - commonly weathered out

ALTERATION

Type	Value	Comments
Calcite %	1.00	Locally d. brown mottling (calcitization)
Oxidation %	15.00	Beige to pink dolomite - common in medium-grained dolomite

STRUCTURE
MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	VW	5	0.1

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct
119.16	- 128.05	nlfgcd	n	l	fg	CD	
		MAIN COMMENTS	Light-grey dolomite carbonatite. Contact between massive dolomite with aggregated apatite and laminated dolomite observed at 119.16 (with UV lamp). Apatite occurs as thin laminae (generally < 1 cm) with common zircon. Some thicker apatite laminae upto 2.5 cm observed with d. grey unidentified mineral. No niobates identified.				
		MINERALIZATION	Type	Value	Comments		
			Pyrite %	1.25	Oxidized aggregates and stringers up to 0.5 cm - commonly weathered out.		
		ALTERATION	Type	Value	Comments		
			Oxidation %	10.00	Pink dolomite - commonly surrounds oxidized and weathered-out pyrite		
			Calcite %	1.50	Uncommon d. brown mottling (calcitization)		
		STRUCTURE	Type	Intens	CA°	Comments	
			Laminations %	moderate	0	Observed at 0 to 5 degrees; best observed with UV	
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon	
			OX	VW	10	0.5	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
128.05 - **TO**
141.85

ROCK CODE gliCD = **Min Style** g **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbnatite. Common aggregates (2.5 to 7.5 cm) are composed of magnetite, apatite, oxidized pyrite and uncommon zircon. Magnetite in some aggregates appears to be altered to non-magnetic d. grey mineral. Aggregates compose ~ 1% of interval, being more prominent towards top of interval. Bands (< 2.5 cm) of calcitization are observed sporadically throughout interval.

MINERALIZATION		
Type	Value	Comments
Pyrite %	1.25	Oxidized aggregates up to 0.5 cm occur locally confined to laminae (?)

ALTERATION		
Type	Value	Comments
Calcite %	2.50	Common d. brown bands of calcitization
Oxidation %	30.00	Beige to pink dolomite - commonly follows laminae

STRUCTURE			
Type	Intens	CA°	Comments
Laminations %	moderate	10	

MISCELLANEOUS				
Zone	HCL	Apatite	Zircon	
OX	W	10	0.1	

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
141.85 - **TO**
151.68

ROCK CODE nliCD = **Min Style** n **Fabric** l **Texture** i **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite extensively calcitized to d. brown. Bands (1-5 cm) of medium-grained dolomite occur sporadically throughout interval (composes ~ 2.5 % of interval). Calcitization occurs commonly around medium-grained dolomite, commonly forming matrix to "floating" dolomite grains. Common fine-grained black altered phlogopite occurs Apatite occurs locally aggregated with common zircon. Magnetite occurs within a medium-grained dolomite band at ~143.9 m along with oxidized pyrite.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Oxidized aggregates up to 0.5 cm occur locally throughout interval; needles of oxidized pyrite occurs at the end of the interval (150.5 m to 151.68 m)
Magnetite %	0.50	Medium-grained magnetite occur locally at ~143.9 m with red oxidation products (hematite?)

ALTERATION

Type	Value	Comments
Calcite %	30.00	Extensive calcitization between 146.5 and 150.4 m.
Oxidation %	30.00	Pink dolomite

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	very weak	30	
Veining %	moderate	17.5	Medium-grained dolomite "bands" typically occur at ~ 17.5 degrees

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
OX	M	5	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct												
151.68	- 155.49	nlfGAMX	n	l	fg	AMX													
MAIN COMMENTS Light grey dolomite carbonatite with d. green to blue clasts of fenite. Fenite clasts are mostly ~10 cm thick but clast is 70 cm (at 114.15 m). Clasts are commonly crosscut by dolomite veins (1 to 3 cm thick). Clasts (2.5 to 10 cm) Apatite occurs as weakly laminated aggregates. Black altered phlogopite occur locally throughout interval containing abundant zircon and frequently aggregated with apatite.																			
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Zone	HCL	Apatite	Zircon																
OX	VW	10	0.25																

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
155.49 - **TO**
184.08

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite with localized phenocrysts of fine-grained black altered phlogopite. Bands consist of weakly to strongly laminated apatite aggregates with black altered phlogopite, pyrite, zircon and yellowish grey fersmite (?). D. grey unidentified mineral identified in some bands. Bands compose ~7.5 % of interval. Apatite also occurs as thin white weak to locally "swirly" laminae within dolomite.
A 20 cm dark-band composed essentially of fine-grained altered phlogopite and dolomite occurs at ~161.5 m.

MINERALIZATION

Type	Value	Comments
Pyrite %	1.25	Most commonly aggregated with altered phlogopite; isolated aggregates (up to 0.5 cm) do occur within dolomite though
Niobates %	0.10	Yellowish grey fine-grained suspect fersmite observed in weak apatite bands.

ALTERATION

Type	Value	Comments
Oxidation %	5.00	Beige to pink dolomite:more common towards top of interval (above ~164 m)

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	50	Measured at 20 degrees at top of interval; 50 degrees at bottom of interval.

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	12.5	0.5

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct												
184.08	- 194.09	blpCCCD	b	l	p	CCCD													
<p>MAIN COMMENTS Light-grey dolomite carbonatite occurs interlaminated with magnetite-bearing white calcite carbonatite. Two intervals of calcite carbonatite occur: ~186.7- 187.3 m and 193.8 - 194.0 m. Fine-grained magnetite and brown phlogopite occurs as disseminations within apatite bands (up to 2.5 cm) in calcite carbonatite. Gradational boundary (~7.5 cm and ~ 2.5 cm for former and later calcite laminae) observed - magnetite becomes d. grey in colour towards dolomite and non-magnetite; pyrite concentration increases. Thin bands (up to 2.5 cm) composed of apatite, d. grey unknown mineral and apatite occur sporadically throughout interval - likely altered magnetite bands. No niobates identified in bands. A single d. grey clast (~30 cm) composed of fine-grained dolomite and black altered phlogopite (fenite?) occurs at ~ 184.35 m. The clast is commonly rimmed by ~ 0.5 cm of pyrite.</p>																			
<p>MINERALIZATION</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Value</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Pyrite %</td> <td>1.50</td> <td>Localized aggregates and stringers up to 1 cm; common in d. grey bands and in gradational boundary between dolomite and calcite</td> </tr> <tr> <td>Magnetite %</td> <td>2.50</td> <td>Occurs within apatite bands within calcite carbonatite</td> </tr> <tr> <td>Niobates %</td> <td>0.50</td> <td>Honey-brown fine-grained pyrochlore observed in calcite carbonatite. Potential columbite may occur with magnetite</td> </tr> </tbody> </table>								Type	Value	Comments	Pyrite %	1.50	Localized aggregates and stringers up to 1 cm; common in d. grey bands and in gradational boundary between dolomite and calcite	Magnetite %	2.50	Occurs within apatite bands within calcite carbonatite	Niobates %	0.50	Honey-brown fine-grained pyrochlore observed in calcite carbonatite. Potential columbite may occur with magnetite
Type	Value	Comments																	
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<p>ALTERATION</p>																			
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Type	Intens	CA°	Comments																
Laminations %	moderate	50	varies between 40 and 60 degrees																
<p>MISCELLANEOUS</p> <table border="1"> <thead> <tr> <th>Zone</th> <th>HCL</th> <th>Apatite</th> <th>Zircon</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>M</td> <td>12.5</td> <td>0.25</td> </tr> </tbody> </table>								Zone	HCL	Apatite	Zircon	H	M	12.5	0.25				
Zone	HCL	Apatite	Zircon																
H	M	12.5	0.25																

GEOLOGY LOG

 Log by

 Date

 Hole ID
FROM
194.09 - **TO**
207.40

ROCK CODE blpCD = **Min Style** b **Fabric** l **Texture** p **Litho** CD **Struct**

MAIN COMMENTS Light-grey dolomite carbonatite with localized phenocrysts of black altered phlogopite. Dark-grey bands (up to 7.5 cm) are comprised of apatite, black altered phlogopite, pyrite and common zircon. Bands compose ~2.5 % of interval. Apatite also occurs as white aggregates with common zircon within dolomite.

MINERALIZATION

Type	Value	Comments
Niobates %	0.10	Suspect fersmite - yellow grey, fine-grained common within d. grey bands
Pyrite %	1.50	Aggregates and stringers up to 2 cm; commonly associated with apatite bands and phlogopite phenocrysts

ALTERATION

STRUCTURE

Type	Intens	CA°	Comments
Laminations %	weak	25	

MISCELLANEOUS

Zone	HCL	Apatite	Zircon
H	VW	10	0.25

GEOLOGY LOG

 Log by

 Date

 Hole ID

FROM	TO	ROCK CODE	Min Style	Fabric	Texture	Litho	Struct	
207.40	- 213.41	blAMX	b	I		AMX		
		MAIN COMMENTS	Light- to medium-grained dolomite carbonatite with d. green clasts of fenite (0.15 to 1 m). White calcite with fine-grained brown phlogopite occurs at contact with fenite. Common fine- to medium-grained black altered phlogopite occur sporadically throughout interval (~1 % of interval). Dark-grey bands (1-5 cm) within dolomite carbonatite. are comprised of apatite, black altered phlogopite and pyrite. Band comprise ~ 2.5 % of interval. Similar bands are observed in dolomite near fenite clasts but contain very-fine-grained magnetite. Apatite also comprise thin white laminations (< 1 cm) within dolomite carbonatite. 5 cm black altered phlogopite lens with abundant pinkish grey mineral occurs at ~213.5 m (fenite?).					
		MINERALIZATION	Type	Value	Comments			
			Niobates %	0.25	Suspect fersmite within d. grey apatite bands - pink to yellow			
			Magnetite %	0.10	Very-fine-grained magnetite occurs within			
		ALTERATION	Type	Value	Comments			
			Amphibolite %	35.00	D. green fenite core with black phlogopite rim (ovoid texture) with abundant pyrite			
		STRUCTURE	Type	Intens	CA°	Comments		
			Laminations %	moderate	25			
		MISCELLANEOUS	Zone	HCL	Apatite	Zircon		
			H	M	7.5	0.1		

End of Hole

End of Hole

APPENDIX B
SAMPLE LOGS

ALEY - DRILL SAMPLE LOG

Hole ID 2010-012

Sampler RK

Pg 1 of 1

Sign _____ Date 31-Jul-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-012_0-9.1	0	9.1	NS		0
875600	9.1	12.7	MS		3
875601	12.7	15.3	MS		3
875602	15.3	16.9	MS		3
875603	16.9	19.3	MS		3
875604	19.3	21.8	MS		3
875605			BL	Granite	3
875606	21.8	25.09	MS		3
875607	25.09	27.8	MS		3
875608	27.8	30.5	MS		3
875609	30.5	33.77	MS		3
875610			ST	Aley3	3
875611	33.77	36.26	MS		3
875612	36.26	39.2	MS		3
875613	39.2	42.22	MS		3
875614	42.22	44.5	MS		3
875615	44.5	48.24	MS		3
875616	48.24	51.34	MS		3
875617	51.34	53.6	MS		3
875618	53.6	55.22	MS		3
875619	55.22	58.28	MS		3
875620			DX		3
875621	58.28	60.99	MS		3
875622	60.99	63.37	MS		3
875623	63.37	65.94	MS		3
875624	65.94	68.5	MS		3
875625	68.5	70.7	MS		3
875626	70.7	74.5	MS		3
875627	74.5	77.86	MS		3
875628	77.86	80.36	MS		3
875629	80.36	82.57	MS		3
875630			ST	Aley3	3
875631	82.57	85.36	MS		3
875632	85.36	88.95	MS		3
875633	88.95	91.6	MS		3
875634	91.6	95.24	MS		3
875635	95.24	96.42	MS		3
875636	96.42	100.13	MS		3
875637	100.13	102.2	MS		3
875638	102.2	107.95	MS		3
875639	107.95	110.63	MS		3
875640			DX		3
875641	110.63	115.1	MS		3
875642	115.1	120.12	MS		3
875643	120.12	125.55	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875644	125.55	128.97	MS		3
875645	128.97	134.44	MS		3
875646	134.44	137.06	MS		3
875647	137.06	142.19	MS		3
875648	142.19	148.46	MS		3
875649	148.46	154.26	MS		3

Total: BL-1 DP-0 MS-45 NS-1 ST-2 DX-2

ALEY - DRILL SAMPLE LOG

Hole ID 2010-013

Sampler RK

Pg 1 of 1

Sign _____ Date 04-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-013_0-7.08	0	7.08	NS		0
875650			ST	Aley3	3
875651	7.08	9.63	MS		3
875652	9.63	14.63	MS		3
875653	14.63	18.26	MS		3
875654	18.26	19.08	MS		3
875655	19.08	22.61	MS		3
875656	22.61	27.51	MS		3
875657	27.51	32.77	MS		3
875658	32.77	37.85	MS		3
875659	37.85	42.69	MS		3
875660			DX		3
875661	42.69	47.39	MS		3
875662	47.39	50.04	MS		3
875663	50.04	52.28	MS		3
875664	52.28	56.13	MS		3
875665	56.13	58.48	MS		3
875666	58.48	63.25	MS		3
875667	63.25	65.91	MS		3
875668	65.91	66.69	MS		3
875669	66.69	72.18	MS		3
875670			ST	Aley3	3
875671	72.18	76.14	MS		3
875672	76.14	80.23	MS		3
875673	80.23	82.19	MS		3
875674	82.19	83.13	MS		3
875675	83.13	88.57	MS		3
875676	88.57	96.19	MS		3
875677	96.19	98.49	MS		3
875678	98.49	102.13	MS		3
875679	102.13	106.1	MS		3
875680			DX		3
875681	106.1	107.62	MS		3
875682	107.62	109.91	MS		3
875683	109.91	111.95	MS		3
875684	111.95	116	MS		3
875685	116	119.09	MS		3
875686	119.09	122.07	MS		3
875687	122.07	124.31	MS		3
875688			BL	Granite	3
875689	124.31	126.52	MS		3
875690			ST	OKA-1	3
875691	126.52	129.77	MS		3
875692	129.77	131.83	MS		3
875693	131.83	137.13	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875694	137.13	141	MS		3
875695	141	147.03	MS		3
875696	147.03	153.77	MS		3
875697	153.77	158.02	MS		3
875698	158.02	160.95	MS		3
875699	160.95	164.21	MS		3
875700			DX		3
875701	164.21	169.32	MS		3
875702	169.32	173.63	MS		3
875703	173.63	175.66	MS		3
875704	175.66	180.29	MS		3
875705	180.29	188.02	MS		3
875706	188.02	192.75	MS		3
875707	192.75	195.9	MS		3
875708	195.9	199.7	MS		3
875709	199.7	204.81	MS		3
875710			ST	Aley1	3
875711	204.81	210.22	MS		3
875712	210.22	213.34	MS		3
875713	213.34	215.2	MS		3

Total: BL-1 DP-0 MS-56 NS-1 ST-4 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-014

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler RK

Pg 1 of 1

Sign _____

Date 04-Aug-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-014_0-14.63	0	14.63	NS		0
875714	14.63	19.16	MS		3
875715	19.16	21.72	MS		3
875716	21.72	25.16	MS		3
875717	25.16	28.16	MS		3
875718	28.16	31.13	MS		3
875719	31.13	33.22	MS		3
875720			DX		3
875721	33.22	35.62	MS		3
875722	35.62	38.35	MS		3
875723	38.35	41.21	MS		3
875724	41.21	44.92	MS		3
875725	44.92	48.17	MS		3
875726	48.17	50.8	MS		3
875727	50.8	54.02	MS		3
875728	54.02	57.65	MS		3
875729	57.65	60.36	MS		3
875730			ST	Aley2	3
875731	60.36	63.77	MS		3
875733	63.77	66.12	MS		3
875732			BL	Granite	3
875734	66.12	69.51	MS		3
875735	69.51	72.17	MS		3
875736	72.17	74.63	MS		3
875737	74.63	77.08	MS		3
875738	77.08	79.27	MS		3
875739	79.27	81.71	MS		3
875740			DX		3
875741	81.71	84.21	MS		3
875742	84.21	86.42	MS		3
875743	86.42	88.85	MS		3
875744	88.85	91.54	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method

Total: BL-1 DP-0 MS-27 NS-1 ST-1 DX-2

ALEY - DRILL SAMPLE LOG

Hole ID 2010-015

Sampler RK

Pg 1 of 1

Sign _____ Date 05-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-015_0-18.9	0	18.9	NS		0
875745	18.9	23.56	MS		3
875746	23.56	25.99	MS		3
875747	25.99	27.71	MS		3
875748	27.71	30.95	MS		3
875749	30.95	35.15	MS		3
875750			ST	Aley1	3
875751	35.15	38.37	MS		3
875752	38.37	42.43	MS		3
875753	42.43	46.38	MS		3
875754	46.38	49.47	MS		3
875755	49.47	52.56	MS		3
875756	52.56	55.5	MS		3
875757	55.5	58.45	MS		3
875758	58.45	62.43	MS		3
875759	62.43	66.46	MS		3
875760			DX		3
875761	66.46	68.64	MS		3
875762	68.64	71.1	MS		3
875763			BL	Granite	3
875764	71.1	73.46	MS		3
875765	73.46	75.62	MS		3
875766	75.62	79.63	MS		3
875767	79.63	82.9	MS		3
875768	82.9	86.19	MS		3
875769	86.19	89.61	MS		3
875770			ST	OKA-1	3
875771	89.61	92.92	MS		3
875772	92.92	95.89	MS		3
875773	95.89	98.61	MS		3
875774	98.61	101.91	MS		3
875775	101.91	104.82	MS		3
875776	104.82	107.58	MS		3
875777	107.58	111.32	MS		3
875778	111.32	116.32	MS		3
875779	116.32	119.62	MS		3
875780			DX		3
875781	119.62	122.9	MS		3
875782	122.9	126.07	MS		3
875783			BL	Granite	3
875784	126.07	129.4	MS		3
875785	129.4	133.57	MS		3
875786	133.57	138.05	MS		3
875787	138.05	140.8	MS		3
875788	140.8	143.83	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875789	143.83	148.2	MS		3
875790			ST	Aley3	3
875791	148.2	151.83	MS		3
875792	151.83	155.42	MS		3
875793	155.42	158.48	MS		3
875794	158.48	161.87	MS		3
875795	161.87	164.41	MS		3
875796	164.41	167.78	MS		3
875797	167.78	171.86	MS		3
875798	171.86	175.15	MS		3
875799	175.15	177.9	MS		3
875800			DX		3
875801	177.9	182.7	MS		3
875802	182.7	186.62	MS		3
875803	186.62	191.37	MS		3
875804	191.37	196.15	MS		3
875805	196.15	201.02	MS		3
875806	201.02	205.36	MS		3
875807	205.36	210.34	MS		3
875808	210.34	215.85	MS		3

Total: BL-2 DP-0 MS-56 NS-1 ST-3 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-016

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler RK

Pg 1 of 1

Sign _____ Date 06-Aug-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-016_0-6.09	0	6.09	NS		0
875809	6.09	10.65	MS		3
875810			ST	Aley2	3
875811	10.65	12.18	MS		3
875812	12.18	15	MS		3
875813	15	17.93	MS		3
875814	17.93	20.23	MS		3
875815	20.23	22.71	MS		3
875816	22.71	24.93	MS		3
875817	24.93	27.94	MS		3
875818			BL	Granite	3
875819	27.94	31.37	MS		3
875820			DX		3
875821	31.37	35.79	MS		3
875822	35.79	39.04	MS		3
875823	39.04	42.42	MS		3
875824	42.42	47.08	MS		3
875825	47.08	49.18	MS		3
875826	49.18	52.58	MS		3
875827	52.58	57.51	MS		3
875828	57.51	61.61	MS		3
875829	61.61	65.59	MS		3
875830			ST	Aley1	3
875831	65.59	69.77	MS		3
875832	69.77	73.07	MS		3
875833	73.07	76.3	MS		3
875834	76.3	80.37	MS		3
875835	80.37	83.77	MS		3
875836	83.77	87.08	MS		3
875837	87.08	92.58	MS		3
875838	92.58	96.52	MS		3
875839	96.52	102.21	MS		3
875840			DX		3
875841	102.21	106.09	MS		3
875842	106.09	110.82	MS		3
875843	110.82	113.68	MS		3
875844	113.68	117.06	MS		3
875845	117.06	119.37	MS		3
875846	119.37	124.39	MS		3
875847	124.39	128.08	MS		3
875848	128.08	133.67	MS		3
875849	133.67	137	MS		3
875850			ST	OKA-1	3
875851	137	141.36	MS		3
875852	141.36	145.15	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875853	145.15	147.86	MS		3

Total: BL-1 DP-0 MS-39 NS-1 ST-3 DX-2

ALEY - DRILL SAMPLE LOG

Hole ID 2010-017

Sampler RK

Pg 1 of 1

Sign _____ Date 08-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-017_0-6.09	0	6.09	NS		0
875854	6.09	10.25	MS		3
875855	10.25	15.06	MS		3
875856	15.06	18.82	MS		3
875857	18.82	21.44	MS		3
875858	21.44	24.36	MS		3
875859	24.36	28.1	MS		3
875860			DX		3
875861	28.1	30.54	MS		3
875862	30.54	34.82	MS		3
875863	34.82	37.7	MS		3
875864	37.7	40.68	MS		3
875865	40.68	43.93	MS		3
875866	43.93	48.6	MS		3
875867	48.6	51.29	MS		3
875868	51.29	54.55	MS		3
875869	54.55	57.96	MS		3
875870			ST	Aley2	3
875871	57.96	61.14	MS		3
875872	61.14	65.55	MS		3
875873	65.55	70.1	MS		3
875874	70.1	74.91	MS		3
875875	74.91	78.35	MS		3
875876	78.35	82.4	MS		3
875877			BL	Granite	3
875878	82.4	84.85	MS		3
875879	84.85	87.35	MS		3
875880			DX		3
875881	87.35	93.41	MS		3
875882	93.41	97.98	MS		3
875883	97.98	102.37	MS		3
875884	102.37	106.89	MS		3
875885	106.89	111.28	MS		3
875886	111.28	115.79	MS		3
875887	115.79	120.42	MS		3
875888	120.42	124.14	MS		3
875889	124.14	128.92	MS		3
875890			ST	Aley1	3
875891	128.92	133.15	MS		3
875892	133.15	137.52	MS		3
875893	137.52	143.1	MS		3
875894	143.1	147.87	MS		3
875895	147.87	152.61	MS		3
875896	152.61	156.13	MS		3
875897	156.13	159.67	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875898	159.67	162.15	MS		3
875899	162.15	165.15	MS		3
880250			DX		3
880251	165.15	168.5	MS		3
880252	168.5	173.68	MS		3
880253	173.68	177.71	MS		3
880254	177.71	181.99	MS		3
880255	181.99	185.78	MS		3
880256	185.78	190.5	MS		3
880257	190.5	195.42	MS		3
880258	195.42	198.26	MS		3
880259	198.26	201.82	MS		3
880260			ST	OKA-1	3
880261	201.82	204.15	MS		3
880262	204.15	206.85	MS		3
880263	206.85	210.19	MS		3
880264	210.19	214.93	MS		3

Total: BL-1 DP-0 MS-54 NS-1 ST-3 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-018

Sampler RK

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Sign _____ Date 09-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-018_0-6.09	0	6.09	NS		0
880265	6.09	9.14	MS		3
880266	9.14	12.19	MS		3
880267	12.19	15.43	MS		3
880268	15.43	18.19	MS		3
880269	18.19	21.34	MS		3
880270			DX		3
880271	21.34	25.57	MS		3
880272	25.57	29.87	MS		3
880273	29.87	33.54	MS		3
880274	33.54	37.7	MS		3
880275	37.7	41.28	MS		3
880276	41.28	44.21	MS		3
880277	44.21	47.59	MS		3
880278	47.59	51.83	MS		3
880279	51.83	55.15	MS		3
880280			ST	Aley3	3
880281	55.15	60.31	MS		3
880282	60.31	64.52	MS		3
880283	64.52	68.61	MS		3
880284	68.61	72	MS		3
880285	72	78.33	MS		3
880286	78.33	82.32	MS		3
880287	82.32	86.39	MS		3
880288	86.39	91.58	MS		3
880289	91.58	95.12	MS		3
880290			DX		3
880291	95.12	99.96	MS		3
880292	99.96	103.53	MS		3
880293	103.53	107.68	MS		3
880294	107.68	110.91	MS		3
880295	110.91	115.46	MS		3
880296	115.46	119.69	MS		3
880297	119.69	123.76	MS		3
880298	123.76	127.86	MS		3
880299	127.86	131.1	MS		3
880300			ST	Aley1	3
880301	131.1	134.64	MS		3
880302	134.64	138.5	MS		3
880303	138.5	140.85	MS		3
880305	140.85	143.72	MS		3
880304			BL	Granite	3
880306	143.72	145.92	MS		3
880307	145.92	149.47	MS		3
880308	149.47	152.45	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method

Total: BL-1 DP-0 MS-39 NS-1 ST-2 DX-2

ALEY - DRILL SAMPLE LOG

Hole ID 2010-019

Sampler RK

Pg 1 of 1

Sign _____ Date 10-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-019_0-4.57	0	4.57	NS		0
880309	4.57	8.46	MS		3
880310			DX		3
880311	8.46	12.58	MS		3
880312	12.58	16.82	MS		3
880313	16.82	20.91	MS		3
880314	20.91	25.25	MS		3
880315	25.25	29.35	MS		3
880316	29.35	33.54	MS		3
880317	33.54	38.04	MS		3
880318	38.04	42.25	MS		3
880319	42.25	45.73	MS		3
880320			ST	Aley2	3
880321	45.73	49.44	MS		3
880322	49.44	52.62	MS		3
880323	52.62	57.29	MS		3
880324	57.29	61.67	MS		3
880325	61.67	65.74	MS		3
880326	65.74	69.55	MS		3
880327	69.55	72.35	MS		3
880328	72.35	76.68	MS		3
880329	76.68	79.27	MS		3
880330			DX		3
880331	79.27	82.44	MS		3
880332	82.44	87.44	MS		3
880333	87.44	89.63	MS		3
880334	89.63	92.1	MS		3
880335	92.1	96.07	MS		3
880336	96.07	101.06	MS		3
880337	101.06	104.77	MS		3
880338	104.77	108.36	MS		3
880339	108.36	111.67	MS		3
880340			ST	Aley3	3
880341	111.67	114.94	MS		3
880342			BL	Granite	3
880343	114.94	117.37	MS		3
880344	117.37	119.46	MS		3
880345	119.46	124.71	MS		3
880346	124.71	127.57	MS		3
880347	127.57	130.54	MS		3
880348	130.54	134.15	MS		3
880349	134.15	137.2	MS		3
880350			DX		3
880351	137.2	141.04	MS		3
880352	141.04	143.99	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
880353	143.99	148.18	MS		3
880354	148.18	152.44	MS		3

Total: BL-1 DP-0 MS-40 NS-1 ST-2 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-020

Sampler RK

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Sign _____ Date 12-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-020_0-3.66	0	3.66	NS		0
880355	3.66	6.64	MS		3
880356	6.64	9.72	MS		3
880357	9.72	12.81	MS		3
880358	12.81	18.34	MS		3
880359	18.34	22.59	MS		3
880360			ST	Aley2	3
880361	22.59	26.84	MS		3
880362	26.84	31.05	MS		3
880363	31.05	35.14	MS		3
880364	35.14	38.04	MS		3
880365	38.04	40.86	MS		3
880366	40.86	44.68	MS		3
880367	44.68	48.92	MS		3
880368	48.92	53.54	MS		3
880369	53.54	55.54	MS		3
880370			DX		3
880371	55.54	60.07	MS		3
880372	60.07	63.03	MS		3
880373	63.03	66.58	MS		3
880374	66.58	70.21	MS		3
880375	70.21	74.76	MS		3
880376	74.76	76.66	MS		3
880377	76.66	79.4	MS		3
880378	79.4	83.47	MS		3
880379	83.47	87.2	MS		3
880380			ST	Aley1	3
880381	87.2	90.73	MS		3
880382			BL	Granite	3
880383	90.73	94.31	MS		3
880384	94.31	96.42	MS		3
880385	96.42	99.1	MS		3
880386	99.1	101.81	MS		3
880387	101.81	104.82	MS		3
880388	104.82	108.39	MS		3
880389	108.39	111.08	MS		3
880390			DX		3
880391	111.08	113.88	MS		3
880392	113.88	116.57	MS		3
880393	116.57	120.05	MS		3
880394	120.05	123.78	MS		3
880395	123.78	126.83	MS		3
880396	126.83	129.6	MS		3
880397	129.6	132.64	MS		3
880398	132.64	135.81	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
880399	135.81	139.02	MS		3
875350			ST	OKA-1	3
875351	139.02	142.07	MS		3
875352	142.07	144.52	MS		3
875353	144.52	146.77	MS		3
875354	146.77	150.04	MS		3
875355	150.04	153.58	MS		3
875356	153.58	157.26	MS		3
875357	157.26	161.21	MS		3
875358	161.21	164.38	MS		3
875359	164.38	168.09	MS		3
875360			DX		3
875361	168.09	172.22	MS		3
875362	172.22	176.21	MS		3
875363	176.21	180.14	MS		3
875364	180.14	184.18	MS		3
875365	184.18	187.8	MS		3
875366	187.8	190.85	MS		3
875367	190.85	193.83	MS		3
875368	193.83	196.95	MS		3
875369	196.95	200	MS		3
875370			ST	Aley1	3
875371	200	203.97	MS		3
875372	203.97	207.32	MS		3
875373	207.32	211.81	MS		3
875374	211.81	215.24	MS		3

Total: BL-1 DP-0 MS-62 NS-1 ST-4 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-021

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler

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Sign _____

Date 13-Aug-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-021_0-4.57	0	4.57	NS		0
875375	4.57	6.26	MS		3
875376	6.26	9.27	MS		3
875377	9.27	11.27	MS		3
875378	11.27	15.43	MS		3
875379	15.43	17.61	MS		3
875380			DX		3
875381	17.61	20.16	MS		3
875382	20.16	22.16	MS		3
875383	22.16	25.27	MS		3
875384	25.27	27.44	MS		3
875385			BL	Granite	3
875386	27.44	31.06	MS		3
875387	31.06	34	MS		3
875388	34	36.83	MS		3
875389	36.83	39.97	MS		3
875390			ST	Aley2	3
875391	39.97	43.14	MS		3
875392	43.14	46.35	MS		3
875393	46.35	49.02	MS		3
875394	49.02	51.53	MS		3
875395	51.53	54.38	MS		3
875396	54.38	58.47	MS		3
875397	58.47	62.26	MS		3
875398	62.26	65.5	MS		3
875399	65.5	68.83	MS		3
874900			DX		3
874901	68.83	71.67	MS		3
874902	71.67	75.08	MS		3
874903	75.08	78.89	MS		3
874904	78.89	82.19	MS		3
874905	82.19	85.68	MS		3
874906	85.68	89.51	MS		3
874907	89.51	93.51	MS		3
874908	93.51	97.56	MS		3
874909	97.56	101.31	MS		3
874910			ST	OKA-1	3
874911	101.31	105.81	MS		3
874912	105.81	109.89	MS		3
874913	109.89	113.65	MS		3
874914	113.65	116.35	MS		3
874915	116.35	119.68	MS		3
874916	119.68	122.68	MS		3
874917	122.68	125.9	MS		3
874918	125.9	128.85	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
874919	128.85	131.74	MS		3
844921	131.74	134.65	MS		3
874920			DX		3
844922	134.65	137.67	MS		3
844923	137.67	140.42	MS		3
874924	140.42	143.29	MS		3
875925	143.29	146.15	MS		3
875926	146.15	149.39	MS		3

Total: BL-1 DP-0 MS-46 NS-1 ST-2 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-022

Sampler RK

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Sign _____ Date 16-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-022_0-6.7	0	6.7	NS		0
874927	6.7	9.91	MS		3
874928	9.91	13.39	MS		3
874929	13.39	16.13	MS		3
874930			ST	Aley3	3
874931	16.13	18.92	MS		3
874932	18.92	21.29	MS		3
874933	21.29	23.83	MS		3
874934	23.83	26.96	MS		3
874935	26.96	29.83	MS		3
874936	29.83	32.22	MS		3
874937	32.22	35.45	MS		3
874938	35.45	38.41	MS		3
874939	38.41	42.04	MS		3
874940			DX		3
874941	42.04	46.03	MS		3
874942	46.03	49.66	MS		3
874943	49.66	52.83	MS		3
874944	52.83	55.85	MS		3
874945	55.85	58.95	MS		3
874946	58.95	62.03	MS		3
874947	62.03	65.12	MS		3
874948	65.12	68.22	MS		3
874949	68.22	70.99	MS		3
874950			ST	OKA-1	3
874951	70.99	73.97	MS		3
874952	73.97	77.09	MS		3
874953	77.09	79.92	MS		3
874954	79.92	83.47	MS		3
874955	83.47	86.5	MS		3
874956	86.5	90.24	MS		3
874957	90.24	94.18	MS		3
874958	94.18	98.64	MS		3
874959	98.64	101.26	MS		3
874960			DX		3
874961	101.26	103.48	MS		3
874962			BL	Granite	3
874963	103.48	105.49	MS		3
874964	105.49	108.54	MS		3
874965	108.54	111.77	MS		3
874966	111.77	115.06	MS		3
874967	115.06	118.92	MS		3
874968	118.92	121.96	MS		3
874969	121.96	125.22	MS		3
874970			ST	Aley2	3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
874971	125.22	127.48	MS		3
874972	127.48	130.22	MS		3
874973	130.22	134.06	MS		3
874974	134.06	136.43	MS		3
874975	136.43	139.09	MS		3
874976	139.09	144.77	MS		3
874977	144.77	147.73	MS		3
874978	147.73	150.81	MS		3
874979	150.81	153.81	MS		3
874980			DX		3
874981	153.81	156.8	MS		3
874982	156.8	159.77	MS		3
874983	159.77	163.48	MS		3
874984	163.48	166.88	MS		3
874985	166.88	169.96	MS		3
874986	169.96	173.26	MS		3
874987	173.26	177.28	MS		3
874988	177.28	181.01	MS		3
874989	181.01	184.77	MS		3
874990			ST	Aley1	3
874991	184.77	187.81	MS		3
874992	187.81	190.85	MS		3
874993	190.85	194.69	MS		3
874994	194.69	198.07	MS		3
874995	198.07	201.12	MS		3
874996	201.12	204.18	MS		3
874997	204.18	207.15	MS		3
874998	207.15	210.21	MS		3
874999	210.21	213.36	MS		3
875000			DX		3
875001	213.36	216.51	MS		3
875002	216.51	219.66	MS		3
875003	219.66	222.75	MS		3
875004	222.75	225.73	MS		3
875005	225.73	228.68	MS		3
875006	228.68	232.73	MS		3
875007	232.73	238.59	MS		3
875008	238.59	240.85	MS		3
875009	240.85	244	MS		3
875010			ST	Aley2	3
875011	244	247.25	MS		3
875012	247.25	250.74	MS		3
875013	250.74	254.2	MS		3
875014	254.2	256.5	MS		3
875015	256.5	259.49	MS		3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-022

Sampler RK

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Sign _____ Date 16-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875016	259.49	261.96	MS		3
875017	261.96	265.44	MS		3
875018	265.44	269.53	MS		3
875019	269.53	272.6	MS		3
875020			DX		3
875021	272.6	275.84	MS		3
875022			BL	Granite	3
875023	275.84	278.5	MS		3
875024	278.5	281.43	MS		3
875025	281.43	285.36	MS		3
875026	285.36	289.32	MS		3
875027	289.32	292.11	MS		3
875028	292.11	295.29	MS		3
875029	295.29	297.74	MS		3
875030			ST	OKA-1	3
875031	297.74	301.57	MS		3
875032	301.57	303.65	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method

Total: BL-2 DP-0 MS-93 NS-1 ST-6 DX-5

ALEY - DRILL SAMPLE LOG

Hole ID 2010-023

Sampler RK

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Sign _____ Date 18-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-023_0-4.57	0	4.57	NS		0
875033	4.57	9.14	MS		3
875034	9.14	12.19	MS		3
875035	12.19	15.24	MS		3
875036	15.24	18.29	MS		3
875037	18.29	20.73	MS		3
875038	20.73	23.47	MS		3
875039	23.47	28.22	MS		3
875040			DX		3
875041	28.22	30.83	MS		3
875042	30.83	32.89	MS		3
875043	32.89	35.32	MS		3
875044	35.32	37.76	MS		3
875045	37.76	41.13	MS		3
875046	41.13	43.95	MS		3
875047	43.95	47.04	MS		3
875048	47.04	49.58	MS		3
875049	49.58	52.21	MS		3
875050			ST	Aley3	3
875051	52.21	54.88	MS		3
875052	54.88	57.52	MS		3
875053	57.52	60.1	MS		3
875054	60.1	64.26	MS		3
875055			BL	Granite	3
875056	64.26	67.51	MS		3
875057	67.51	70.71	MS		3
875058	70.71	73.89	MS		3
875059	73.89	77.65	MS		3
875060			DX		3
875061	77.65	80.74	MS		3
875062	80.74	84.39	MS		3
875063	84.39	87.71	MS		3
875064	87.71	90.24	MS		3
875065	90.24	92.74	MS		3
875066	92.74	95.36	MS		3
875067	95.36	98.76	MS		3
875068	98.76	102.81	MS		3
875069	102.81	106.31	MS		3
875070			ST	OKA-1	3
875071	106.31	109.55	MS		3
875072	109.55	112.82	MS		3
875073	112.82	116.76	MS		3
875074	116.76	118.9	MS		3
875075	118.9	121.88	MS		3
875076	121.88	124.26	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875077	124.26	126.6	MS		3
875078	126.6	131.1	MS		3
875079	131.1	133.83	MS		3
875080			DX		3
875081	133.83	136.69	MS		3
875082	136.69	139.94	MS		3
875083	139.94	142.85	MS		3
875084	142.85	146.34	MS		3
875085	146.34	148.93	MS		3
875086	148.93	152.44	MS		3
875087	152.44	155.49	MS		3
875088	155.49	158.54	MS		3
875089	158.54	161.59	MS		3
875090			ST	Aley2	3
875091	161.59	164.63	MS		3
875092	164.63	169.36	MS		3
875093	169.36	173.42	MS		3
875094	173.42	176.38	MS		3
875095	176.38	179.57	MS		3
875096	179.57	182.67	MS		3
875097	182.67	185.98	MS		3
875098	185.98	189.76	MS		3
875099	189.76	193.02	MS		3
875100			DX		3
875101	193.02	196.45	MS		3
875102	196.45	199.52	MS		3
875103	199.52	202.51	MS		3
875104	202.51	205.32	MS		3
875105	205.32	208.8	MS		3
875106	208.8	211.04	MS		3
875107	211.04	213.41	MS		3

Total: BL-1 DP-0 MS-67 NS-1 ST-3 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-024

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler

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Sign _____

Date 20-Aug-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-024_0-7.32	0	7.32	NS		0
875108	7.32	10.45	MS		3
875109	10.45	13.42	MS		3
875110			ST	Aley1	3
875111	13.42	17	MS		3
875112	17	19.48	MS		3
875113	19.48	23.66	MS		3
875114	23.66	26.36	MS		3
875115	26.36	29.1	MS		3
875116	29.1	31.78	MS		3
875117	31.78	34.98	MS		3
875118	34.98	37.43	MS		3
875119	37.43	39.75	MS		3
875120			DX		3
875121	39.75	43.32	MS		3
875122	43.32	46.72	MS		3
875123	46.72	50.04	MS		3
875124	50.04	53.42	MS		3
875125	53.42	57.14	MS		3
875126	57.14	60.09	MS		3
875127	60.09	63.11	MS		3
875128	63.11	65.66	MS		3
875129	65.66	67.94	MS		3
875130			ST	Aley2	3
875131	67.94	70.97	MS		3
875132	70.97	74.48	MS		3
875133	74.48	77.85	MS		3
875134	77.85	81.14	MS		3
875135	81.14	84.4	MS		3
875136	84.4	87.66	MS		3
875137	87.66	89.65	MS		3
875138			BL	Granite	3
875139	89.65	92.91	MS		3
875140			DX		3
875141	92.91	96.25	MS		3
875142	96.25	99.51	MS		3
875143	99.51	102.75	MS		3
875144	102.75	105.82	MS		3
875145	105.82	108.76	MS		3
875146	108.76	111.61	MS		3
875147	111.61	115.25	MS		3
875148	115.25	118.29	MS		3
875149	118.29	121.24	MS		3
875150			ST	OKA-1	3
875151	121.24	124.39	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875152	124.39	127.44	MS		3
875153	127.44	130.49	MS		3
875154	130.49	133.54	MS		3
875155	133.54	136.59	MS		3
875156	136.59	139.53	MS		3
875157	139.53	143.41	MS		3
875158	143.41	147.34	MS		3
875159	147.34	150.2	MS		3
875160			DX		3
875161	150.2	153.05	MS		3

Total: BL-1 DP-0 MS-47 NS-1 ST-3 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-025

Sampler RK

Pg 1 of 1

Sign _____ Date 22-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-025_0-3.05	0	3.05	NS		0
875162	3.05	6.41	MS		3
875163	6.41	10.2	MS		3
875164	10.2	14.02	MS		3
875165	14.02	18.66	MS		3
875166	18.66	22.31	MS		3
875167	22.31	26.12	MS		3
875168	26.12	29.55	MS		3
875169	29.55	33.15	MS		3
875170			ST	Aley1	3
875171	33.15	36.43	MS		3
875172	36.43	39.19	MS		3
875173	39.19	42.35	MS		3
875174	42.35	45.52	MS		3
875175	45.52	47.84	MS		3
875176	47.84	51.76	MS		3
875177	51.76	55.74	MS		3
875178	55.74	58.62	MS		3
875179	58.62	61.86	MS		3
875180			DX		3
875181	61.86	66.3	MS		3
875182	66.3	69.47	MS		3
875183	69.47	71.9	MS		3
875184	71.9	75	MS		3
875185	75	78.05	MS		3
875186	78.05	81.1	MS		3
875187	81.1	84.75	MS		3
S_2010-025_84.75-87	84.75	87.2	NS		0
875188	87.2	90.25	MS		3
875189	90.25	93.29	MS		3
875190			ST	Aley3	3
875191	93.29	96.34	MS		3
875192	96.34	100.06	MS		3
875193	100.06	103.08	MS		3
875194	103.08	106.14	MS		3
875195	106.14	108.78	MS		3
875196	108.78	111.79	MS		3
875197	111.79	115.3	MS		3
875198	115.3	118.86	MS		3
875199	118.86	122.43	MS		3
875200			DX		3
875201	122.43	125.98	MS		3
875202	125.98	128.99	MS		3
875203	128.99	132.93	MS		3
875204	132.93	135.39	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875205	135.39	138.44	MS		3
875206	138.44	141.47	MS		3
875207	141.47	144.52	MS		3
875208	144.52	146.8	MS		3
875209	146.8	149.99	MS		3
875210			ST	OKA-1	3
875211	149.99	152.48	MS		3
875212	152.48	155.28	MS		3
875213	155.28	157.5	MS		3
875214	157.5	160.37	MS		3
875215	160.37	163.51	MS		3
875216	163.51	166.46	MS		3
875217			BL	Granite	3
875218	166.46	170.01	MS		3
875219	170.01	173.34	MS		3
875220			DX		3
875221	173.34	176.84	MS		3
875222	176.84	179.49	MS		3
875223	179.49	183.61	MS		3
875224	183.61	186.55	MS		3
875225	186.55	189.3	MS		3
875226	189.3	192.4	MS		3
875227	192.4	195.52	MS		3
875228	195.52	198.89	MS		3
875229	198.89	202.18	MS		3
875230			ST	Aley2	3
875231	202.18	206.6	MS		3
875232	206.6	209.77	MS		3
875233	209.77	212.99	MS		3
875234	212.99	215.49	MS		3
875235	215.49	217.94	MS		3

Total: BL-1 DP-0 MS-66 NS-2 ST-4 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-026

Sampler RK

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Sign _____ Date 23-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-026_0-3.05	0	3.05	NS		0
875236	3.05	6.61	MS		3
875237	6.61	10.07	MS		3
875238	10.07	13.39	MS		3
875239	13.39	17.07	MS		3
875240			DX		3
875241	17.07	20.12	MS		3
875242	20.12	23.17	MS		3
875243			BL	Granite	3
875244	23.17	26.22	MS		3
875245	26.22	29.27	MS		3
875246	29.27	32.67	MS		3
875247	32.67	35.54	MS		3
875248	35.54	38.41	MS		3
875249	38.41	41.46	MS		3
875250			ST	OKA-1	3
875251	41.46	44.92	MS		3
875252	44.92	47.99	MS		3
875253	47.99	51.19	MS		3
875254	51.19	54.36	MS		3
875255	54.36	58.34	MS		3
875256	58.34	61.69	MS		3
875257	61.69	64.9	MS		3
875258	64.9	68	MS		3
875259	68	71.05	MS		3
875260			DX		3
875261	71.05	73.9	MS		3
875262	73.9	77.66	MS		3
875263	77.66	81.31	MS		3
875264	81.31	83.46	MS		3
875265	83.46	86.52	MS		3
875266	86.52	89.58	MS		3
875267	89.58	92.45	MS		3
875268	92.45	95.51	MS		3
875269	95.51	98.24	MS		3
875270			ST	Aley3	3
875271	98.24	103.51	MS		3
875272	103.51	106.6	MS		3
875273	106.6	109.8	MS		3
875274	109.8	112.89	MS		3
875275	112.89	116	MS		3
875276	116	119.16	MS		3
875277	119.16	123.1	MS		3
875278	123.1	127.48	MS		3
875279	127.48	130.45	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
875280			DX		3
876281	130.45	133.68	MS		3
875282	133.68	136.44	MS		3
875283	136.44	140.24	MS		3
875284	140.24	143.94	MS		3
875285	143.94	148.17	MS		3
875286	148.17	151.79	MS		3
875287	151.79	155.25	MS		3
875288	155.25	157.9	MS		3
875289	157.9	161.24	MS		3
875290			ST	Aley2	3
875291	161.24	163.66	MS		3
875292	163.66	165.89	MS		3
875293	165.89	168.61	MS		3
875294	168.61	171.26	MS		3
875295	171.26	174.57	MS		3
875296	174.57	177.91	MS		3
875297	177.91	181.71	MS		3
875298	181.71	185.89	MS		3
875299	185.89	189.63	MS		3
875300			DX		3
875301	189.63	192.8	MS		3
875302	192.8	196.16	MS		3
875303	196.16	200.6	MS		3
875304	200.6	205.17	MS		3
875305	205.17	209.8	MS		3
875306	209.8	212.58	MS		3
875307	212.58	215.25	MS		3

Total: BL-1 DP-0 MS-64 NS-1 ST-3 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-027

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler

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Sign _____

Date 29-Aug-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-027_0-3.45	0	3.45	NS		0
912536	3.45	7.14	MS		3
912537	7.14	10.56	MS		3
912538	10.56	13.49	MS		3
912539	13.49	17.43	MS		3
912540			DX		3
912541	17.43	21.06	MS		3
912542	21.06	24.67	MS		3
912543	24.67	28.21	MS		3
912544	28.21	31.48	MS		3
912545	31.48	35.01	MS		3
912546	35.01	38	MS		3
912547	38	41.75	MS		3
912548	41.75	46.08	MS		3
912549	46.08	49.61	MS		3
912550			ST	Aley2	3
912551	49.61	52.99	MS		3
912552	52.99	56.52	MS		3
912553	56.52	59.83	MS		3
912554	59.83	63.17	MS		3
912555	63.17	66.32	MS		3
912556	66.32	69.39	MS		3
912557	69.39	72.56	MS		3
912558	72.56	75.95	MS		3
912559	75.95	79.31	MS		3
912560			DX		3
912561	79.31	82.67	MS		3
912562	82.67	85.66	MS		3
912563	85.66	88.9	MS		3
912564	88.9	92.53	MS		3
912565	92.53	96.03	MS		3
912566	96.03	99.55	MS		3
912567	99.55	102.85	MS		3
912568	102.85	105.31	MS		3
912569	105.31	107.72	MS		3
912571	107.72	110.21	MS		3
912572	110.21	113.78	MS		3
912570			ST	OKA-1	3
912573	113.78	117.26	MS		3
912574	117.26	121.07	MS		3
912575			BL	Granite	3
912576	121.07	125.13	MS		3
912577	125.13	128.26	MS		3
912578	128.26	131.62	MS		3
912579	131.62	135.61	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912580			DX		3
912581	135.61	139.63	MS		3
912582	139.63	143.71	MS		3
912583	143.71	147.82	MS		3
912584	147.82	151.14	MS		3
912585	151.14	154.51	MS		3
912586	154.51	158.02	MS		3
912587	158.02	161.43	MS		3
912588	161.43	164.7	MS		3
912589	164.7	168.36	MS		3
912590			ST	Aley1	3
912591	168.36	171.88	MS		3
912592	171.88	175.18	MS		3
912593	175.18	178.32	MS		3
912594	178.32	181.53	MS		3
912595	181.53	184.8	MS		3
912596	184.8	188	MS		3
912597	188	191.76	MS		3
912598	191.76	194.51	MS		3
912599	194.51	198.07	MS		3
912600			DX		3
912601	198.07	201.6	MS		3
912602	201.6	205.2	MS		3
912603	205.2	208.61	MS		3
912604	208.61	211.67	MS		3
912605	211.67	213.72	MS		3

Total: BL-1 DP-0 MS-62 NS-1 ST-3 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-028

Sampler RK

Pg 1 of 1

Sign _____ Date 02-Sep-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-028_0-3.05	0	3.05	NS		0
912750			ST	Aley1	3
912751	3.05	6.3	MS		3
912752	6.3	11.3	MS		3
912753	11.3	14.3	MS		3
912754	14.3	17.8	MS		3
912755	17.8	20.34	MS		3
912756	20.34	23.05	MS		3
912757	23.05	25.87	MS		3
912758	25.87	30.09	MS		3
912759	30.09	33.54	MS		3
912760			DX		3
912993	33.54	36.97	MS		3
912994	36.97	40.4	MS		3
912995	40.4	43.61	MS		3
912996	43.61	47.33	MS		3
912997	47.33	51.01	MS		3
912998	51.01	54.88	MS		3
912999			BL	Granite	3
912833	54.88	58.45	MS		3
912834	58.45	62.1	MS		3
912835	62.1	65.49	MS		3
912836	65.49	69.15	MS		3
912837	69.15	72.64	MS		3
912838	72.64	76.22	MS		3
912839	76.22	79.37	MS		3
912840			DX		3
912841	79.37	82.88	MS		3
912842	82.88	86.49	MS		3
912843	86.49	89.74	MS		3
912844	89.74	92.97	MS		3
912845	92.97	95.95	MS		3
912846	95.95	99.45	MS		3
912847	99.45	102.78	MS		3
912848	102.78	106.54	MS		3
912849	106.54	109.76	MS		3
907550			ST	OKA-1	3
907551	109.76	112.8	MS		3
907552	112.8	115.85	MS		3
907553	115.85	118.9	MS		3
907554	118.9	121.53	MS		3
907555	121.53	123.9	MS		3
907556	123.9	127.39	MS		3
907557	127.39	130.91	MS		3
907558	130.91	134.3	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
907559	134.3	137.82	MS		3
907560			DX		3
907561	137.82	139.18	MS		3
907562	139.18	142.96	MS		3
907563	142.96	146.44	MS		3
907564	146.44	150.49	MS		3
907565	150.49	152.99	MS		3
907566	152.99	155.58	MS		3
907567	155.58	158.54	MS		3
907568	158.54	161.59	MS		3
907569	161.59	164.63	MS		3
907570			ST	Aley1	3
907571	164.63	167.68	MS		3
907572	167.68	170.73	MS		3
907573	170.73	173.78	MS		3
907574	173.78	176.83	MS		3
907575	176.83	179.88	MS		3
907576	179.88	182.93	MS		3
907577	182.93	185.98	MS		3
907578	185.98	189.02	MS		3
907579	189.02	192.07	MS		3
907580			DX		3
907581	192.07	195.7	MS		3
907582	195.7	198.4	MS		3
907583	198.4	201.22	MS		3
907584	201.22	203.71	MS		3
907585	203.71	206.82	MS		3
907586	206.82	208.87	MS		3
907587	208.87	213.4	MS		3

Total: BL-1 DP-0 MS-65 NS-1 ST-3 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-029

Sampler RK

Pg 1 of 1

Sign _____ Date 02-Sep-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-029_0-4.49	0	4.49	NS		0
912919	4.49	7.63	MS		3
912920			DX		3
912921	7.63	10.74	MS		3
912922	10.74	13.7	MS		3
912923	13.7	17.29	MS		3
912924	17.29	20.5	MS		3
912925			BL	Granite	3
912926	20.5	23.78	MS		3
912927	23.78	26.83	MS		3
912928	26.83	29.33	MS		3
912929	29.33	31.92	MS		3
912930			ST	Aley2	3
912931	31.92	35.1	MS		3
912932	35.1	38.04	MS		3
912933	38.04	42.23	MS		3
912934	42.23	44.58	MS		3
912935	44.58	47.58	MS		3
912936	47.58	50.82	MS		3
912937	50.82	53.9	MS		3
912938	53.9	57.27	MS		3
912939	57.27	60.59	MS		3
912940			DX		3
912941	60.59	63.41	MS		3
912942	63.41	66.11	MS		3
912943	66.11	69	MS		3
912944	69	71.8	MS		3
912945	71.8	74.83	MS		3
912946	74.83	78.45	MS		3
912947	78.45	82.03	MS		3
912948	82.03	85.38	MS		3
912949	85.38	88.16	MS		3
912950			ST	Aley3	3
912951	88.16	90.85	MS		3
912952	90.85	94.83	MS		3
912953	94.83	98.83	MS		3
912954	98.83	102.8	MS		3
912955	102.8	107.08	MS		3
912956	107.08	109.59	MS		3
912957	109.59	112.26	MS		3
912958	112.26	115.24	MS		3
912959	115.24	118.29	MS		3
912960			DX		3
912961	118.29	121.25	MS		3
912962	121.25	124.39	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912963	124.39	127.59	MS		3
912964	127.59	130.49	MS		3
912965	130.49	133.76	MS		3
912966	133.76	137.1	MS		3
912967	137.1	139.94	MS		3
912968	139.94	143.21	MS		3
912969	143.21	146.5	MS		3
912970			ST	OKA-1	3
912971	146.5	151.04	MS		3
912972	151.04	154.6	MS		3
912973	154.6	158.21	MS		3
912974	158.21	161.87	MS		3
912975	161.87	165.48	MS		3
912976	165.48	169.09	MS		3
912977	169.09	172.47	MS		3
912978	172.47	175.98	MS		3
912979	175.98	179.52	MS		3
912980			DX		3
912981	179.52	182.9	MS		3
912982	182.9	186.43	MS		3
912983	186.43	189.83	MS		3
912984	189.83	193.52	MS		3
912985	193.52	196.8	MS		3
912986	196.8	200.15	MS		3
912987	200.15	203.3	MS		3
912988	203.3	206.71	MS		3
912989	206.71	209.76	MS		3
912990			ST	Aley2	3
912991	209.76	212.8	MS		3
912992	212.8	215.85	MS		3

Total: BL-1 DP-0 MS-65 NS-1 ST-4 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-030

Sampler RK

Pg 1 of 1

Sign _____ Date 27-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-030_0-3.67	0	3.67	NS		0
875308	3.67	7.42	MS		3
875309	7.42	11.19	MS		3
875310			ST	Aley2	3
875311	11.19	14.49	MS		3
875312	14.49	17.39	MS		3
875313	17.39	20.42	MS		3
875314	20.42	23.57	MS		3
875315	23.57	26.33	MS		3
875316	26.33	29.43	MS		3
875317	29.43	32.26	MS		3
875318	32.26	35.11	MS		3
875319	35.11	37.88	MS		3
875320			DX		3
875321	37.88	41.34	MS		3
875322	41.34	45.07	MS		3
875323	45.07	48.34	MS		3
875324	48.34	51.63	MS		3
875325	51.63	54.88	MS		3
875326	54.88	57.93	MS		3
875327	57.93	60.98	MS		3
875328	60.98	64.02	MS		3
875329	64.02	66.82	MS		3
875330			ST	Aley1	3
875331	66.82	69.89	MS		3
875332	69.89	72.84	MS		3
875333	72.84	75.72	MS		3
875334	75.72	78.77	MS		3
875335	78.77	82.04	MS		3
875336	82.04	84	MS		3
875337	84	86.18	MS		3
875338	86.18	89.25	MS		3
875339	89.25	92.49	MS		3
875340			DX		3
875341	92.49	95.49	MS		3
875342	95.49	98.49	MS		3
875343	98.49	101.04	MS		3
875344	101.04	104.02	MS		3
875345	104.02	106.99	MS		3
875346	106.99	110.01	MS		3
875347	110.01	113	MS		3
875348	113	115.95	MS		3
875349	115.95	119.09	MS		3
912500			DX		3
912501	119.09	121.95	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912502	121.95	124.73	MS		3
912503	124.73	126.73	MS		3
912504			BL	Granite	3
912505	126.73	129.25	MS		3
912506	129.25	132.19	MS		3
912507	132.19	135.5	MS		3
912508	135.5	138.48	MS		3
912509	138.48	141.32	MS		3
912510			ST	Aley3	3
912511	141.32	144.21	MS		3
912512	144.21	147.14	MS		3
912513	147.14	149.81	MS		3
912514	149.81	153.51	MS		3
912515	153.51	157.17	MS		3
912516	157.17	160.27	MS		3
912517	160.27	163.13	MS		3
912518	163.13	166.88	MS		3
912519	166.88	170.39	MS		3
912520			DX		3
912521	170.39	173.95	MS		3
912522	173.95	176.97	MS		3
912523	176.97	180.16	MS		3
912524	180.16	183.09	MS		3
912525	183.09	186.2	MS		3
912526	186.2	189.22	MS		3
912527	189.22	192.17	MS		3
912528	192.17	195.12	MS		3
912529	195.12	198.3	MS		3
912530			ST	Aley2	3
912531	198.3	200.83	MS		3
912532	200.83	203.5	MS		3
912533	203.5	208.3	MS		3
912534	208.3	211.64	MS		3
912535	211.64	213.41	MS		3

Total: BL-1 DP-0 MS-69 NS-1 ST-4 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-031

Sampler RK

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Sign _____ Date 30-Aug-10

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-031_0-6.09	0	6.09	NS		0
912606	6.09	9.66	MS		3
912607	9.66	13.12	MS		3
912608	13.12	16.37	MS		3
912609	16.37	20.04	MS		3
912610			ST	Aley1	3
912611	20.04	23.68	MS		3
912612	23.68	27.02	MS		3
912613	27.02	30	MS		3
912614			BL	Granite	3
912615	30	33.15	MS		3
912616	33.15	36.13	MS		3
912617	36.13	39.06	MS		3
912618	39.06	42.32	MS		3
912619	42.32	45.59	MS		3
912620			DX		3
912621	45.59	48.69	MS		3
912622	48.69	52.35	MS		3
912623	52.35	55.96	MS		3
912624	55.96	59.36	MS		3
912625	59.36	63.2	MS		3
912626	63.2	66.66	MS		3
912627	66.66	69.96	MS		3
912628	69.96	73.21	MS		3
912629	73.21	76.49	MS		3
912630			ST	Aley2	3
912631	76.49	79.81	MS		3
912632	79.81	83.76	MS		3
912633	83.76	87.58	MS		3
912634	87.58	90.77	MS		3
912635	90.77	94.16	MS		3
912636	94.16	97.55	MS		3
912637	97.55	100.75	MS		3
912638	100.75	103.95	MS		3
912639	103.95	107.21	MS		3
912640			DX		3
912641	107.21	110.47	MS		3
912642	110.47	113.61	MS		3
912643	113.61	116.84	MS		3
912644	116.84	119.97	MS		3
912645	119.97	123.59	MS		3
912646	123.59	127.82	MS		3
912647	127.82	131.96	MS		3
912648	131.96	135.98	MS		3
912649	135.98	139.85	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912650			ST	Aley1	3
912651	139.85	143.04	MS		3
912652	143.04	146.09	MS		3
912653	146.09	149.21	MS		3
912654	149.21	152.07	MS		3
912655	152.07	154.63	MS		3
912656	154.63	157.65	MS		3
912657	157.65	160.72	MS		3
912658	160.72	164.11	MS		3
912659	164.11	167.86	MS		3
912660			DX		3
912661	167.86	171.57	MS		3
912662	171.57	175.61	MS		3
912663	175.61	179.78	MS		3
912664	179.78	183.55	MS		3
912665	183.55	187.01	MS		3
912666	187.01	190.3	MS		3
912667	190.3	193	MS		3
912668	193	195.67	MS		3
912669	195.67	199.07	MS		3
912670			ST	Aley2	3
912671	199.07	202.57	MS		3
912672	202.57	205.96	MS		3
912673	205.96	210.23	MS		3
912674	210.23	212.58	MS		3
912675	212.58	214.94	MS		3

Total: BL-1 DP-0 MS-62 NS-1 ST-4 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-032

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler

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Sign _____

Date 30-Aug-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-032_0-3.05	0	3.05	NS		0
912676	3.05	6.06	MS		3
912677	6.06	9.04	MS		3
912678	9.04	11.97	MS		3
912679	11.97	15.04	MS		3
912680			DX		3
912681	15.04	17.99	MS		3
912682	17.99	20.86	MS		3
912683	20.86	24.2	MS		3
912684	24.2	27.44	MS		3
912685	27.44	30.54	MS		3
912686	30.54	33.54	MS		3
912687	33.54	36.82	MS		3
912688	36.82	40.26	MS		3
912689	40.26	43.68	MS		3
912690			ST	Aley1	3
912691	43.68	47.17	MS		3
912692	47.17	50.61	MS		3
912693	50.61	54.05	MS		3
912694	54.05	57.6	MS		3
912695	57.6	60.98	MS		3
912696	60.98	64.19	MS		3
912697	64.19	67.56	MS		3
912698	67.56	70.85	MS		3
912699	70.85	74.16	MS		3
912700			DX		3
912701	74.16	77.34	MS		3
912702	77.34	80.68	MS		3
912703	80.68	84.02	MS		3
912704	84.02	87.2	MS		3
912705	87.2	90.23	MS		3
912706	90.23	93.27	MS		3
912707	93.27	96.49	MS		3
912708	96.49	99.45	MS		3
912709	99.45	103.45	MS		3
912710			ST	Aley3	3
912711	103.45	106.71	MS		3
912712	106.71	110.5	MS		3
912713	110.5	113.75	MS		3
912714	113.75	117.04	MS		3
912715	117.04	120.51	MS		3
912716	120.51	124	MS		3
912717	124	127.37	MS		3
912718	127.37	129.71	MS		3
912719	129.71	132.16	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912720			DX		3
912721	132.16	135.74	MS		3
912722	135.74	139.16	MS		3
912723	139.16	142.58	MS		3
912724	142.58	146.13	MS		3
912725	146.13	149.61	MS		3
912726	149.61	153.08	MS		3
912727	153.08	155.86	MS		3
912728	155.86	158.68	MS		3
912729	158.68	161.41	MS		3
912730			ST	Aley1	3
912731	161.41	164.39	MS		3
912732	164.39	167.5	MS		3
912733	167.5	170.63	MS		3
912734	170.63	173.78	MS		3
912735	173.78	176.83	MS		3
912736	176.83	179.88	MS		3
912737	179.88	182.93	MS		3
912738	182.93	185.98	MS		3
912739	185.98	189.17	MS		3
912740			DX		3
912741	189.17	192.3	MS		3
912742	192.3	195.42	MS		3
912743	195.42	198.57	MS		3
912744	198.57	201.8	MS		3
912745			BL	Granite	3
912746	201.8	205.18	MS		3

Total: BL-1 DP-0 MS-63 NS-1 ST-3 DX-4

ALEY - DRILL SAMPLE LOG

Hole ID 2010-033

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler RK

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Sign _____ Date 01-Sep-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-033_0-5.64	0	6.1	NS		0
912747	6.1	9.69	MS		3
912748	9.69	13.1	MS		3
912749	13.1	16.68	MS		3
912851	16.68	20.65	MS		3
912850			ST	Aley1	3
912852	20.65	23.97	MS		3
912853	23.97	27.44	MS		3
912854	27.44	31.09	MS		3
912855	31.09	35.65	MS		3
912856	35.65	38.49	MS		3
912857	38.49	41.97	MS		3
912858	41.97	45.22	MS		3
912859	45.22	48.43	MS		3
912860			DX		3
912861	48.43	51.75	MS		3
912862	51.75	55.07	MS		3
912863	55.07	58.17	MS		3
912864	58.17	61.13	MS		3
912865	61.13	63.39	MS		3
912866			BL	Granite	3
912867	63.39	65.63	MS		3
912868	65.63	68.14	MS		3
912869	68.14	70.78	MS		3
912870			ST	Aley2	3
912871	70.78	74.46	MS		3
912872	74.46	78.02	MS		3
912873	78.02	81.42	MS		3
912874	81.42	84.73	MS		3
912875	84.73	88.41	MS		3
912876	88.41	91.46	MS		3
912877	91.46	94.51	MS		3
912878	94.51	98.37	MS		3
912879	98.37	100.73	MS		3
912880			DX		3
912881	100.73	103.66	MS		3
912882	103.66	106.46	MS		3
912883	106.46	109.5	MS		3
912884	109.5	112.3	MS		3
912885	112.3	116.08	MS		3
912886	116.08	120.02	MS		3
912887	120.02	123.45	MS		3
912888	123.45	126.84	MS		3
912889	126.84	130.13	MS		3
912891	130.13	133.2	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912890			ST	OKA-1	3
912892	133.2	136.13	MS		3
912893	136.13	139.45	MS		3
912894	139.45	143.64	MS		3
912895	143.64	146.6	MS		3
912896	146.6	149.81	MS		3
912897	149.81	152.81	MS		3
912898	152.81	155.78	MS		3
912899	155.78	159.89	MS		3
912900			DX		3
912901	159.89	163.9	MS		3
912902	163.9	166.09	MS		3
912903	166.09	168.69	MS		3
912904	168.69	171.07	MS		3
912905	171.07	174.44	MS		3
912906	174.44	177.84	MS		3
912907	177.84	181	MS		3
912908	181	184.06	MS		3
912909	184.06	186.94	MS		3
912910			ST	Aley1	3
912911	186.94	189.72	MS		3
912912	189.72	192.56	MS		3
912913	192.56	195.31	MS		3
912914	195.31	198.92	MS		3
912915	198.92	202.52	MS		3
912916	202.52	206.47	MS		3
912917	206.47	210.15	MS		3
912918	210.15	213.94	MS		3

Total: BL-1 DP-0 MS-64 NS-1 ST-4 DX-3

ALEY - DRILL SAMPLE LOG

Hole ID 2010-034

QC Code		Method	
BL	Blank	0	Not Sampled
DP	Duplicate	1	RC Chips
MS	Regular Mainstream	2	Sawn 1/2 Core
NS	Not Sampled	3	Split 1/2 Core
DX	Duplicate in-line	4	Whole Core
ST	Standard	5	1/4 Core

Sampler RK

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Sign _____ Date 02-Sep-10

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
NS_2010-034_0-2.49	0	2.49	NS		0
912761	2.49	5.1	MS		3
912762	5.1	8.67	MS		3
912763	8.67	12.2	MS		3
912764	12.2	15.7	MS		3
912765	15.7	19.32	MS		3
912766	19.32	22.82	MS		3
912767	22.82	26.58	MS		3
912768	26.58	30.49	MS		3
912769	30.49	34.65	MS		3
912770			ST	Aley2	3
912771	34.65	39.63	MS		3
912772	39.63	42.68	MS		3
912773	42.68	45.73	MS		3
912774	45.73	48.78	MS		3
912775	48.78	51.83	MS		3
912776	51.83	54.88	MS		3
912777	54.88	57.93	MS		3
912778	57.93	60.96	MS		3
912779	60.96	64.02	MS		3
912780			DX		3
912781	64.02	67.07	MS		3
912782	67.07	70.12	MS		3
912783	70.12	73.17	MS		3
912784	73.17	76.22	MS		3
912785	76.22	79.27	MS		3
912786	79.27	82.32	MS		3
912787	82.32	85.37	MS		3
912788	85.37	88.41	MS		3
912789	88.41	91.46	MS		3
912790			ST	Aley1	3
912791	91.46	94.51	MS		3
912792	94.51	97.56	MS		3
912793	97.56	100.61	MS		3
912794	100.61	103.66	MS		3
912795	103.66	106.71	MS		3
912796	106.71	111.24	MS		3
912797	111.24	115.22	MS		3
912798	115.22	119.16	MS		3
912799	119.16	122.15	MS		3
912800			DX		3
912801	122.15	125.1	MS		3
912802	125.1	128.05	MS		3
912803	128.05	131.62	MS		3
912804	131.62	134.94	MS		3

Sample Number	Interval (ft)		Sample Information		
	From	To	QC Code	Standard	Method
912805	134.94	138.56	MS		3
912806	138.56	141.85	MS		3
912807	141.85	145.27	MS		3
912808	145.27	148.62	MS		3
912809	148.62	151.68	MS		3
912810			ST	Aley3	3
912811	151.68	155.49	MS		3
912812	155.49	159.07	MS		3
912813	159.07	162.59	MS		3
912814	162.59	166.2	MS		3
912815	166.2	169.87	MS		3
912816	169.87	173.66	MS		3
912817	173.66	177.25	MS		3
912818	177.25	180.61	MS		3
912819	180.61	184.08	MS		3
912820			DX		3
912821	184.08	186.49	MS		3
912822	186.49	189.02	MS		3
912823			BL	Granite	3
912824	189.02	191.43	MS		3
912825	191.43	194.09	MS		3
912826	194.09	197.43	MS		3
912827	197.43	200.78	MS		3
912828	200.78	203.99	MS		3
912829	203.99	207.4	MS		3
912830			ST	Aley1	3
912831	207.4	210.3	MS		3
912832	210.3	213.41	MS		3

Total: BL-1 DP-0 MS-64 NS-1 ST-4 DX-3

APPENDIX C
ASSAY CERTIFICATES

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,897.393	Central 1	Azimuth	20 °	Date Start	24-Jul-10
Laboratory	Inspectorate	Northing	7,710,479.998		Inclination	-55 °	Date End	25-Jul-10
File No.	10-360-03506-01	Elevation	491.625		Length	154.26 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	9.10	9.10	Not Sampled							CASE	Not Sampled
9.10	12.70	3.56	875600	0.60	19.44	104.7	5.1	0.211	0.013	dlcCD	1/2 Core Split
12.70	15.30	2.60	875601	0.78	15.93	78.1	4.1	0.847	0.015	mCD	1/2 Core Split
15.30	16.90	1.60	Not Sampled								Not Sampled
16.90	19.30	2.40	875603	0.58	0.11	133.5	5.9	0.850	0.014	nlfCD	1/2 Core Split
19.30	21.80	2.50	875604	1.59	0.41	215.9	9.3	0.755	0.009	gmCM	1/2 Core Split
Blank	Granite		875605	0.03	1.95	11.0	4.8	0.034	0.002		Quality Control
21.80	25.09	3.30	875606	0.36	9.32	88.0	2.2	0.184	0.008	dlcCD	1/2 Core Split
25.09	27.80	2.70	875607	0.20	3.42	56.3	1.6	0.176	0.005	nlcCD	1/2 Core Split
27.80	30.50	2.70	875608	0.45	2.39	181.0	4.3	0.242	0.012	lcCD	1/2 Core Split
30.50	33.77	3.30	875609	0.55	18.69	362.9	5.5	0.255	0.015	blcCD	1/2 Core Split
Standard	Aley3		875610	0.79	7.89	300.5	8.2	0.207	0.011		Quality Control
33.77	36.26	2.50	875611	0.52	85.85	305.1	10.4	0.240	0.018	dICD	1/2 Core Split
36.26	39.20	2.90	875612	0.35	57.33	262.8	8.6	0.290	0.014	dICD	1/2 Core Split
39.20	42.22	3.00	875613	0.67	21.6	193.7	3.9	0.197	0.012	dICD	1/2 Core Split
42.22	44.50	2.30	875614	1.15	1.78	280.8	4.8	0.234	0.014	blfCD	1/2 Core Split
44.50	48.24	3.70	875615	0.67	0.87	250.0	5.0	0.241	0.019	nmCDz	1/2 Core Split
48.24	51.34	3.10	875616	0.33	7.58	105.6	2.6	0.207	0.012	dlfCD	1/2 Core Split
51.34	53.60	2.30	875617	0.29	5.86	129.8	2.6	0.321	0.011	nliCD	1/2 Core Split
53.60	55.22	1.60	875618	0.75	4.5	196.2	9.9	0.184	0.014	blfCD	1/2 Core Split
55.22	58.28	3.10	875619	0.30	8.71	113.2	2.8	0.217	0.011	nlfCD	1/2 Core Split
Duplicate	Previous		875620	0.28	8.14	115.3	2.7	0.205	0.011		Quality Control
58.28	60.99	2.70	875621	0.54	26.26	193.3	5.7	0.225	0.013	dlfCD	1/2 Core Split
60.99	63.37	2.40	875622	0.48	25.91	179.2	8.9	0.223	0.011	nlfCD	1/2 Core Split
63.37	65.94	2.60	875623	0.38	15.18	154.4	2.4	0.141	0.011	dICD	1/2 Core Split
65.94	68.50	2.60	875624	0.20	4.42	129.4	2.9	0.474	0.012	dmCD	1/2 Core Split
68.50	70.70	2.20	875625	0.52	1.26	190.8	5.1	0.333	0.015	dlfCD	1/2 Core Split
70.70	74.50	3.80	875626	1.39	0.53	192.1	10.5	0.295	0.016	glfCD	1/2 Core Split
74.50	77.86	3.40	875627	0.38	21.97	129.9	3.6	0.225	0.010	nICD	1/2 Core Split
77.86	80.36	2.50	875628	0.22	4.12	87.8	2.4	0.284	0.009	bmCD	1/2 Core Split
80.36	82.57	2.20	875629	0.84	1.63	258.9	5.3	0.255	0.020	nICD	1/2 Core Split
Standard	Aley3		875630	0.82	30.54	295.1	9.1	0.230	0.010		Quality Control
82.57	85.36	2.80	875631	0.18	5.6	141.6	1.8	0.287	0.011	nmfCD	1/2 Core Split
85.36	88.95	3.60	875632	0.74	22.17	180.8	5.2	0.235	0.011	blcCD	1/2 Core Split
88.95	91.60	2.60	875633	1.18	28.92	151.9	10.4	0.269	0.016	dICD	1/2 Core Split
91.60	95.24	3.60	875634	0.42	12.95	106.9	2.5	0.181	0.009	blcCD	1/2 Core Split
95.24	96.42	1.20	875635	0.83	30.87	216.2	14.0	0.194	0.012	bmCM	1/2 Core Split
96.42	100.13	3.70	875636	0.30	8.14	40.9	5.5	0.123	0.005	dICD	1/2 Core Split
100.13	102.20	2.10	875637	0.76	29.53	172.9	11.2	0.226	0.010	dliCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,897.393	Central 1	Azimuth	20 °	Date Start	24-Jul-10
Laboratory	Inspectorate	Northing	7,710,479.998		Inclination	-55 °	Date End	25-Jul-10
File No.	10-360-03506-01	Elevation	491.625		Length	154.26 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
102.20	107.95	5.80	875638	0.35	14.15	75.3	6.0	0.166	0.008	dIpCCCD	1/2 Core Split
107.95	110.63	2.70	875639	0.69	15.68	148.2	8.5	0.209	0.013	ICCCD	1/2 Core Split
Duplicate	Previous		875640	0.65	16.68	150.9	9.0	0.207	0.013		Quality Control
110.63	115.10	4.50	875641	0.47	10	90.0	3.1	0.181	0.007	glCD	1/2 Core Split
115.10	120.12	5.00	875642	0.30	20.5	115.0	6.4	0.141	0.008	gxAMX	1/2 Core Split
120.12	125.55	5.40	875643	0.28	30.54	155.9	12.6	0.145	0.010	bICD	1/2 Core Split
125.55	128.97	3.40	875644	0.40	29.85	156.7	6.1	0.140	0.007	dICD	1/2 Core Split
128.97	134.44	5.50	875645	0.61	16.11	161.9	4.8	0.204	0.012	dICD	1/2 Core Split
134.44	137.06	2.60	875646	0.26	100.54	139.5	113.4	0.355	0.012	dmiCD	1/2 Core Split
137.06	142.19	5.10	875647	0.29	59.1	116.5	73.5	0.221	0.010	dmpCD	1/2 Core Split
142.19	148.46	6.30	875648	0.30	12.61	97.5	7.8	0.223	0.008	dmiAMX	1/2 Core Split
148.46	154.26	5.80	875649	0.21	55.66	171.1	45.2	0.302	0.012	dICD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
9.10	134.44	125.34		0.534	16	153.7	6	0.292	0.011		
70.70	96.42	25.72	Incl.	0.691	13	157.4	6	0.262	0.012		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,906.952	Central 1	Azimuth	20 °	Date Start	26-Jul-10
Laboratory	Inspectorate	Northing	7,710,493.880		Inclination	-55 °	Date End	28-Jul-10
File No.	10-360-03524-01	Elevation	493.571		Length	215.20 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	7.08	7.10	Not Sampled							CASE	Not Sampled
Standard	Aley3		875650	0.78	29.52	283.5	7.8	0.211	0.009		Quality Control
7.08	9.63	2.60	875651	0.43	19.04	102.2	4.0	0.191	0.008	dlfgCD	1/2 Core Split
9.63	14.63	5.00	875652	0.54	35.74	173.6	4.6	0.225	0.012	liCD	1/2 Core Split
14.63	18.26	3.60	875653	0.35	23.53	105.0	3.3	0.151	0.010	liCDz	1/2 Core Split
18.26	19.08	0.80	875654	1.17	0.81	300.7	5.8	0.163	0.008	gmCM	1/2 Core Split
19.08	22.61	3.50	875655	0.43	40.53	174.5	5.7	0.199	0.012	lfgCD	1/2 Core Split
22.61	27.51	4.90	875656	0.59	67.51	309.0	18.1	0.283	0.026	nmiCD	1/2 Core Split
27.51	32.77	5.30	875657	0.02	0.43	237.4	1.4	0.587	0.012	nmiCD	1/2 Core Split
32.77	37.85	5.10	875658	0.01	0.22	46.7	1.0	0.333	0.004	nmiCD	1/2 Core Split
37.85	42.69	4.80	875659	0.17	2.13	97.0	2.5	0.361	0.012	nliCD	1/2 Core Split
Duplicate	Previous		875660	0.18	2.25	95.4	2.6	0.360	0.013		Quality Control
42.69	47.39	4.70	875661	0.54	12.28	137.3	8.1	0.261	0.017	dlfgCD	1/2 Core Split
47.39	50.04	2.60	875662	0.34	7.27	99.2	3.9	0.228	0.010	dmfgCD	1/2 Core Split
50.04	52.28	2.20	875663	0.74	20.55	158.5	10.8	0.302	0.017	lpCD	1/2 Core Split
52.28	56.13	3.90	875664	0.39	11.36	157.7	6.4	0.294	0.012	dmfgCD	1/2 Core Split
56.13	58.48	2.30	875665	0.32	3.49	59.0	1.4	0.161	0.007	dlfgCD	1/2 Core Split
58.48	63.25	4.80	875666	0.46	12.44	150.3	4.2	0.238	0.013	nmfgCD	1/2 Core Split
63.25	65.91	2.70	875667	0.69	10.49	100.4	4.2	0.228	0.011	mCD	1/2 Core Split
65.91	66.69	0.80	875668	1.43	0.62	172.8	6.6	0.259	0.009	gmfgCM	1/2 Core Split
66.69	72.18	5.50	875669	0.46	6.73	71.0	3.6	0.210	0.008	nifgCD	1/2 Core Split
Standard	Aley3		875670	0.79	6.55	264.3	7.8	0.209	0.009		Quality Control
72.18	76.14	4.00	875671	0.40	1.48	72.8	4.2	0.168	0.007	dliCD	1/2 Core Split
76.14	80.23	4.10	875672	0.36	16.2	40.7	6.6	0.173	0.007	dlfCD	1/2 Core Split
80.23	82.19	2.00	875673	0.22	11.98	33.1	5.7	0.156	0.005	nmfgCD	1/2 Core Split
82.19	83.13	0.90	875674	0.59	1.79	159.2	64.9	0.210	0.007	gmCM	1/2 Core Split
83.13	88.57	5.40	875675	0.47	1.27	76.4	8.4	0.243	0.009	dlpCD	1/2 Core Split
88.57	96.19	7.60	875676	0.49	16.58	118.8	5.6	0.175	0.008	dlpCD	1/2 Core Split
96.19	98.49	2.30	875677	0.33	21.9	72.0	13.8	0.229	0.009	dlpCD	1/2 Core Split
98.49	102.13	3.60	875678	0.36	32.29	114.6	33.3	0.171	0.009	nifgCD	1/2 Core Split
102.13	106.10	4.00	875679	0.33	89.11	116.4	120.9	0.236	0.011	dmpCD	1/2 Core Split
Duplicate	Previous		875680	0.32	87.51	119.5	112.5	0.232	0.011		Quality Control
106.10	107.62	1.50	875681	0.35	11.61	95.7	10.4	0.214	0.010	nmAMX	1/2 Core Split
107.62	109.91	2.30	875682	0.36	13.1	158.2	5.9	0.321	0.016	dmpCD	1/2 Core Split
109.91	111.95	2.00	875683	0.13	2.16	108.1	2.3	0.338	0.010	nmCD	1/2 Core Split
111.95	116.00	4.00	875684	0.37	14.43	145.4	5.3	0.193	0.010	bmCD	1/2 Core Split
116.00	119.09	3.10	875685	0.37	13.01	226.8	27.4	0.190	0.013	gmiAMX	1/2 Core Split
119.09	122.07	3.00	875686	0.22	23.43	133.6	19.7	0.321	0.013	dmCD	1/2 Core Split
122.07	124.31	2.20	875687	0.27	23.4	130.7	8.4	0.248	0.010	nmCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,906.952	Central 1	Azimuth	20 °	Date Start	26-Jul-10
Laboratory	Inspectorate	Northing	7,710,493.880		Inclination	-55 °	Date End	28-Jul-10
File No.	10-360-03524-01	Elevation	493.571		Length	215.20 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
Blank	Granite		875688	<0.01	1.77	11.1	4.5	0.022	0.002		Quality Control
124.31	126.52	2.20	875689	0.41	81.04	282.9	26.9	0.197	0.011	dmCD	1/2 Core Split
Standard	OKA-1		875690	0.53	1.97	62.9	31.9	0.330	0.007		Quality Control
126.52	129.77	3.30	875691	0.29	25.47	157.3	7.0	0.204	0.010	nmiCD	1/2 Core Split
129.77	131.83	2.10	875692	0.11	28.89	177.1	14.7	0.241	0.011	bmpCD	1/2 Core Split
131.83	137.13	5.30	875693	0.10	3.9	84.4	2.9	0.221	0.009	dmiCD	1/2 Core Split
137.13	141.00	3.90	875694	0.09	42.36	68.8	49.7	0.165	0.009	dmpCD	1/2 Core Split
141.00	147.03	6.00	875695	0.08	6.87	111.9	3.5	0.248	0.009	dmfgCCCD	1/2 Core Split
147.03	153.77	6.70	875696	0.05	16.27	108.3	3.4	0.519	0.012	nmiCD	1/2 Core Split
153.77	158.02	4.20	875697	0.04	10.46	53.0	2.7	0.357	0.007	nmCD	1/2 Core Split
158.02	160.95	2.90	875698	0.03	17.1	161.9	10.0	0.303	0.011	nmCD	1/2 Core Split
160.95	164.21	3.30	875699	0.14	3.46	74.0	4.8	0.428	0.009	nmCD	1/2 Core Split
Duplicate	Previous		875700	0.14	3.38	79.0	4.8	0.421	0.008		Quality Control
164.21	169.32	5.10	875701	0.36	57.73	356.1	22.8	0.214	0.014	dmCD	1/2 Core Split
169.32	173.63	4.30	875702	0.06	4.41	77.2	2.9	0.271	0.008	dientCD	1/2 Core Split
173.63	175.66	2.00	875703	0.04	14.89	94.5	4.1	0.231	0.012	nmCD	1/2 Core Split
175.66	180.29	4.60	875704	0.01	6.22	182.7	1.9	0.217	0.011	nmCD	1/2 Core Split
180.29	188.02	7.70	875705	0.02	11.67	81.3	9.0	0.231	0.011	niCD	1/2 Core Split
188.02	192.75	4.70	875706	0.07	6.68	81.0	4.3	0.150	0.009	nlpCD	1/2 Core Split
192.75	195.90	3.20	875707	0.09	148.61	127.0	144.4	0.140	0.014	diCD	1/2 Core Split
195.90	199.70	3.80	875708	0.03	13.4	100.3	11.6	0.178	0.011	diCD	1/2 Core Split
199.70	204.81	5.10	875709	0.04	45.27	99.9	41.5	0.207	0.012	dmCD	1/2 Core Split
Standard	Aley1		875710	0.41	26.2	170.9	12.0	0.204	0.010		Quality Control
204.81	210.22	5.40	875711	0.08	72.92	262.2	68.5	0.187	0.019	dxCD	1/2 Core Split
210.22	213.34	3.10	875712	0.17	3.07	114.6	10.4	0.103	0.012	niCD	1/2 Core Split
213.34	215.20	1.90	875713	0.19	12.89	210.4	11.1	0.188	0.012	dmCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Analytical Results					
From	To	Int.	Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %
7.08	27.51	20.43	0.511	39	190.2	8	0.216	0.014
42.69	126.52	83.83	0.420	18	117.9	15	0.233	0.010

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,919.105	Central 1	Azimuth	10.3 °	Date Start	
Laboratory	Inspectorate	Northing	7,710,484.222		Inclination	-56 °	Date End	
File No.	10-360-03477-01	Elevation	484.459		Length	91.54 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
0.00	14.63	14.60	Not Sampled							CASE	Not Sampled
14.63	19.16	4.50	875714	1.05	29.53	172.5	13.5	0.266	0.018	nmfCD	1/2 Core Split
19.16	21.72	2.60	875715	0.62	20.28	119.5	9.8	0.295	0.015	nmfCD	1/2 Core Split
21.72	25.16	3.40	875716	0.28	7.84	141.1	3.0	0.173	0.010	nlfCD	1/2 Core Split
25.16	28.16	3.00	875717	0.53	11.06	142.4	4.3	0.202	0.013	nlcCDz	1/2 Core Split
28.16	31.13	3.00	875718	0.53	14.61	106.3	3.7	0.233	0.013	nlcCDz	1/2 Core Split
31.13	33.22	2.10	875719	0.62	17.55	126.9	5.6	0.416	0.015	nlcCDz	1/2 Core Split
Duplicate	Previous		875720	0.63	15.54	125.7	5.7	0.404	0.015		Quality Control
33.22	35.62	2.40	875721	0.25	9.08	72.4	2.2	0.169	0.008	dmfCD	1/2 Core Split
35.62	38.35	2.70	875722	0.47	1.45	47.7	4.3	0.191	0.009	dmfCD	1/2 Core Split
38.35	41.21	2.90	875723	0.35	2.86	96.8	4.4	0.273	0.010	glCD	1/2 Core Split
41.21	44.92	3.70	875724	0.61	0.57	74.4	6.2	0.254	0.010	glCD	1/2 Core Split
44.92	48.17	3.20	875725	0.70	2.08	105.1	2.8	0.166	0.007	glcCD	1/2 Core Split
48.17	50.80	2.60	875726	0.37	9.38	75.5	2.4	0.158	0.008	glcCDz	1/2 Core Split
50.80	54.02	3.20	875727	0.90	3.57	109.2	13.1	0.266	0.012	glCD	1/2 Core Split
54.02	57.65	3.60	875728	0.67	2.49	98.6	18.0	0.220	0.010	nlentcCD	1/2 Core Split
57.65	60.36	2.70	875729	0.42	0.15	43.8	2.8	0.184	0.009	nlentcCD	1/2 Core Split
Standard	Aley2		875730	0.69	6.7	183.5	2.3	0.225	0.012		Quality Control
60.36	63.77	3.40	875731	1.53	6.21	193.7	21.6	0.232	0.008	gmcCM	1/2 Core Split
63.77	66.12	2.40	875733	1.61	1	187.5	14.8	0.264	0.009	gmcCM	1/2 Core Split
Blank	Granite		875732	0.01	1.82	8.5	4.4	0.019	0.002		Quality Control
66.12	69.51	3.40	875734	1.25	9.27	194.4	17.0	0.277	0.012	nlfCD	1/2 Core Split
69.51	72.17	2.70	875735	0.77	0.81	88.8	6.1	0.295	0.012	nlfCD	1/2 Core Split
72.17	74.63	2.50	875736	0.67	2.74	88.2	10.2	0.173	0.006	glcCD	1/2 Core Split
74.63	77.08	2.50	875737	0.46	17.06	66.5	3.8	0.143	0.006	ICD	1/2 Core Split
77.08	79.27	2.20	875738	0.34	13.57	57.0	3.1	0.133	0.006	ICD	1/2 Core Split
79.27	81.71	2.40	875739	0.47	14.84	63.1	6.5	0.137	0.006	bmCD	1/2 Core Split
Duplicate	Previous		875740	0.47	14.28	62.9	6.3	0.136	0.006		Quality Control
81.71	84.21	2.50	875741	0.35	17.82	61.0	5.1	0.135	0.006	bmCD	1/2 Core Split
84.21	86.42	2.20	875742	0.78	35.02	119.4	12.3	0.187	0.007	bmCD	1/2 Core Split
86.42	88.85	2.40	875743	0.41	28.82	101.9	5.9	0.206	0.007	nlcCD	1/2 Core Split
88.85	91.54	2.70	875744	0.53	25.58	135.8	6.9	0.174	0.009	nlcCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
14.63	91.54	76.91		0.671	11	110.4	8	0.226	0.010		
41.21	74.63	33.42	Incl.	0.865	4	115.4	11	0.234	0.009		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,924.516	Central 1	Azimuth	10.3 °	Date Start	30-Jul-10
Laboratory	Inspectorate	Northing	7,710,496.391		Inclination	-56 °	Date End	01-Aug-10
File No.	10-360-03460-01	Elevation	487.433		Length	215.85 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	18.90	18.90	Not Sampled							CASE	Not Sampled
18.90	23.56	4.70	875745	0.72	19.05	101.1	5.3	0.281	0.011	dlcCD	1/2 Core Split
23.56	25.99	2.40	875746	1.52	88.66	112.4	26.9	0.319	0.012	gmCD	1/2 Core Split
25.99	27.71	1.70	875747	0.52	16.22	63.2	8.6	0.206	0.006	glfgCD	1/2 Core Split
27.71	30.95	3.20	875748	0.87	27.83	61.6	10.0	0.264	0.008	glCCCD	1/2 Core Split
30.95	35.15	4.20	875749	0.81	6.09	49.1	3.3	0.414	0.010	ICD	1/2 Core Split
Standard	Aley1		875750	0.43	18.26	121.6	7.8	0.236	0.009		Quality Control
35.15	38.37	3.20	875751	0.43	23.47	117.7	7.8	0.253	0.010	nlfCD	1/2 Core Split
38.37	42.43	4.10	875752	0.40	14	84.1	2.3	0.225	0.010	nlfCD	1/2 Core Split
42.43	46.38	4.00	875753	0.25	11.25	57.6	4.6	0.191	0.009	nmfCD	1/2 Core Split
46.38	49.47	3.10	875754	0.66	<0.05	36.4	2.6	0.215	0.010	mCD	1/2 Core Split
49.47	52.56	3.10	875755	0.62	12.44	54.1	5.7	0.221	0.008	mCD	1/2 Core Split
52.56	55.50	2.90	875756	0.27	10.26	32.9	4.3	0.160	0.006	glfgCD	1/2 Core Split
55.50	58.45	3.00	875757	0.24	1.18	26.3	0.8	0.133	0.004	glfgCD	1/2 Core Split
58.45	62.43	4.00	875758	0.26	20.47	49.6	2.7	0.131	0.004	glfgCD	1/2 Core Split
62.43	66.46	4.00	875759	0.39	4.41	40.7	2.2	0.185	0.005	glfgCD	1/2 Core Split
Duplicate	Previous		875760	0.42	4.33	43.1	2.3	0.186	0.005		Quality Control
66.46	68.64	2.20	875761	0.28	1.21	27.1	1.5	0.152	0.007	dlCCCD	1/2 Core Split
68.64	71.10	2.50	875762	0.87	0.34	75.7	3.2	0.216	0.009	glCCCD	1/2 Core Split
Blank	Granite		875763	<0.01	1.79	6.7	3.0	0.020	0.002		Quality Control
71.10	73.46	2.40	875764	0.55	14.14	84.1	2.9	0.200	0.009	dlfgCC	1/2 Core Split
73.46	75.62	2.20	875765	0.63	0.2	95.6	2.0	0.175	0.009	dlCC	1/2 Core Split
75.62	79.63	4.00	875766	0.67	0.55	81.2	5.4	0.194	0.009	dlfgCC	1/2 Core Split
79.63	82.90	3.30	875767	0.39	77.83	153.2	10.8	0.192	0.010	blfgCD	1/2 Core Split
82.90	86.19	3.30	875768	0.74	39.68	132.1	9.2	0.204	0.007	blfgCD	1/2 Core Split
86.19	89.61	3.40	875769	0.57	38	137.1	19.9	0.226	0.014	blfgCD	1/2 Core Split
Standard	OKA-1		875770	0.53	1.55	37.2	21.8	0.328	0.008		Quality Control
89.61	92.92	3.30	875771	0.37	66.8	142.5	11.7	0.206	0.010	blfgCD	1/2 Core Split
92.92	95.89	3.00	875772	<0.01	119.88	177.2	24.3	0.175	0.011	blfgCD	1/2 Core Split
95.89	98.61	2.70	875773	0.73	43.57	178.9	14.3	0.291	0.014	blfgCD	1/2 Core Split
98.61	101.91	3.30	875774	0.36	39.8	69.2	12.0	0.215	0.008	blpCD	1/2 Core Split
101.91	104.82	2.90	875775	0.51	94.87	220.1	14.5	0.216	0.015	mCD	1/2 Core Split
104.82	107.58	2.80	875776	0.03	4.74	35.9	1.2	0.166	0.007	mCD	1/2 Core Split
107.58	111.32	3.70	875777	0.27	50.96	195.8	11.5	0.313	0.012	nmfgCD	1/2 Core Split
111.32	116.32	5.00	875778	0.16	6.32	105.2	3.4	0.310	0.014	nmiCD	1/2 Core Split
116.32	119.62	3.30	875779	0.05	18.01	46.3	1.4	0.252	0.011	bmpCD	1/2 Core Split
Duplicate	Previous		875780	0.05	16.17	39.0	1.3	0.256	0.010		Quality Control
119.62	122.90	3.30	875781	0.16	0.76	33.1	3.0	0.229	0.008	dmpCCCD	1/2 Core Split
122.90	126.07	3.20	875782	0.05	7.63	39.9	5.1	0.178	0.008	dmpCCCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,924.516	Central 1	Azimuth	10.3 °	Date Start	30-Jul-10
Laboratory	Inspectorate	Northing	7,710,496.391		Inclination	-56 °	Date End	01-Aug-10
File No.	10-360-03460-01	Elevation	487.433		Length	215.85 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
Blank	Granite		875783	<0.01	2.09	9.7	4.3	0.020	0.002		Quality Control
126.07	129.40	3.30	875784	0.15	20.3	90.7	12.9	0.232	0.009	blfCM	1/2 Core Split
129.40	133.57	4.20	875785	0.12	3.75	115.2	9.6	0.290	0.012	nliCD	1/2 Core Split
133.57	138.05	4.50	875786	0.07	2.35	92.6	14.4	0.310	0.011	nliCD	1/2 Core Split
138.05	140.80	2.80	875787	0.02	7.49	27.8	4.9	0.189	0.008	nmCD	1/2 Core Split
140.80	143.83	3.00	875788	0.07	2.56	51.0	10.5	0.254	0.010	gxfgAMX	1/2 Core Split
143.83	148.20	4.40	875789	0.14	4.72	77.4	25.9	0.313	0.005	gxfgAMX	1/2 Core Split
Standard	Aley3		875790	0.79	0.94	166.0	7.3	0.216	0.010		Quality Control
148.20	151.83	3.60	875791	0.35	0.09	26.6	3.5	0.616	0.012	nifgCD	1/2 Core Split
151.83	155.42	3.60	875792	0.24	0.75	49.4	5.6	0.872	0.012	nifgCD	1/2 Core Split
155.42	158.48	3.10	875793	0.05	10.24	42.6	16.7	0.269	0.010	mCD	1/2 Core Split
158.48	161.87	3.40	875794	0.11	0.12	16.0	4.6	0.264	0.009	mCD	1/2 Core Split
161.87	164.41	2.50	875795	0.06	0.26	38.0	1.7	0.272	0.010	mCD	1/2 Core Split
164.41	167.78	3.40	875796	0.05	0.24	63.8	2.1	0.271	0.012	nmiCD	1/2 Core Split
167.78	171.86	4.10	875797	0.02	4.22	74.4	2.4	0.557	0.011	nmiCD	1/2 Core Split
171.86	175.15	3.30	875798	0.03	2.99	159.9	4.3	0.466	0.013	nmiCD	1/2 Core Split
175.15	177.90	2.80	875799	0.07	5.57	73.0	15.2	0.267	0.014	nmiCD	1/2 Core Split
Duplicate	Previous		875800	0.07	3.11	64.5	14.1	0.264	0.014		Quality Control
177.90	182.70	4.80	875801	0.04	0.12	47.1	1.5	0.252	0.009	nmiCD	1/2 Core Split
182.70	186.62	3.90	875802	0.04	0.48	42.0	4.1	0.225	0.012	nmiCD	1/2 Core Split
186.62	191.37	4.80	875803	0.02	2.36	58.7	2.8	0.225	0.011	nmpCD	1/2 Core Split
191.37	196.15	4.80	875804	0.05	1.28	76.3	3.3	0.252	0.013	nmpCD	1/2 Core Split
196.15	201.02	4.90	875805	0.02	1.11	78.6	2.8	0.263	0.012	nmpCD	1/2 Core Split
201.02	205.36	4.30	875806	0.06	<0.05	34.7	1.2	0.148	0.010	nmCD	1/2 Core Split
205.36	210.34	5.00	875807	0.05	0.24	70.9	3.6	0.249	0.014	nmCD	1/2 Core Split
210.34	215.85	5.50	875808	0.03	0.7	140.5	4.7	0.258	0.014	nmCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
18.90	104.82	85.92		0.551	29	90.3	8	0.232	0.009		
18.90	35.15	16.25	Incl.	0.872	28	77.5	9	0.367	0.010		
68.64	86.19	17.55	Incl.	0.638	24	105.6	6	0.197	0.009		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,977.535	Central 2	Azimuth	23.5 °	Date Start	01-Aug-10
Laboratory	Inspectorate	Northing	7,710,513.262		Inclination	-55.2 °	Date End	03-Aug-10
File No.	10-360-03480-01	Elevation	503.918		Length	147.86 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	6.09	6.10	Not Sampled							CASE	Not Sampled
6.09	10.65	4.60	875809	0.54	17.84	107.2	4.6	0.212	0.009	blfgCD	1/2 Core Split
Standard	Aley2		875810	0.73	50.02	195.7	2.2	0.219	0.011		Quality Control
10.65	12.18	1.50	875811	0.84	0.92	145.0	2.8	0.257	0.008	blCM	1/2 Core Split
12.18	15.00	2.80	875812	0.35	3.34	79.7	1.7	0.212	0.007	nlfgrCD	1/2 Core Split
15.00	17.93	2.90	875813	0.53	14.9	150.6	3.5	0.249	0.010	nlfgrCD	1/2 Core Split
17.93	20.23	2.30	875814	0.80	5.65	150.7	3.8	0.192	0.008	gliCCCD	1/2 Core Split
20.23	22.71	2.50	875815	1.07	0.88	119.7	1.8	0.366	0.009	gliCCCD	1/2 Core Split
22.71	24.93	2.20	875816	0.42	11.81	115.2	4.8	0.353	0.010	nICD	1/2 Core Split
24.93	27.94	3.00	875817	0.76	43.36	138.2	18.4	0.270	0.009	glpCD	1/2 Core Split
Blank	Granite		875818	0.01	2.05	11.5	5.1	0.028	0.002		Quality Control
27.94	31.37	3.40	875819	0.75	24.5	129.4	21.2	0.223	0.006	glpCD	1/2 Core Split
Duplicate	Previous		875820	0.79	22.3	127.7	22.8	0.220	0.006		Quality Control
31.37	35.79	4.40	875821	1.06	5.47	117.1	14.5	0.261	0.007	glpCD	1/2 Core Split
35.79	39.04	3.20	875822	0.61	27.34	170.2	3.0	0.179	0.008	ICD	1/2 Core Split
39.04	42.42	3.40	875823	0.43	53.8	138.9	16.4	0.201	0.008	ICD	1/2 Core Split
42.42	47.08	4.70	875824	1.45	34.66	169.0	27.0	0.199	0.013	glCD	1/2 Core Split
47.08	49.18	2.10	875825	0.37	8.64	123.8	6.8	0.223	0.009	nlfgrCD	1/2 Core Split
49.18	52.58	3.40	875826	0.85	57.21	131.8	36.8	0.155	0.009	dmiCD	1/2 Core Split
52.58	57.51	4.90	875827	0.24	21.78	78.9	10.9	0.267	0.009	dIpAMX	1/2 Core Split
57.51	61.61	4.10	875828	0.29	14.31	107.9	5.5	0.221	0.011	dIpCD	1/2 Core Split
61.61	65.59	4.00	875829	0.25	18.62	107.8	8.0	0.189	0.010	dIpCD	1/2 Core Split
Standard	Aley1		875830	0.40	16.36	96.4	6.9	0.222	0.010		Quality Control
65.59	69.77	4.20	875831	0.30	36.84	121.2	11.3	0.150	0.009	dIpAMX	1/2 Core Split
69.77	73.07	3.30	875832	0.64	8.11	138.3	3.4	0.135	0.008	dIpAMX	1/2 Core Split
73.07	76.30	3.20	875833	0.43	5.58	117.0	4.5	0.147	0.008	dIpAMX	1/2 Core Split
76.30	80.37	4.10	875834	0.31	9.62	62.9	2.9	0.085	0.004	dIpAMX	1/2 Core Split
80.37	83.77	3.40	875835	0.25	17.27	62.4	12.1	0.155	0.009	nmfgrCD	1/2 Core Split
83.77	87.08	3.30	875836	0.19	86.64	142.4	36.0	0.184	0.009	nmfgrCD	1/2 Core Split
87.08	92.58	5.50	875837	0.26	9.08	59.5	5.5	0.140	0.007	nmfgrCD	1/2 Core Split
92.58	96.52	3.90	875838	0.18	26.12	72.3	54.4	0.106	0.006	nmfgrAM	1/2 Core Split
96.52	102.21	5.70	875839	0.22	102.17	105.0	14.4	0.144	0.007	nxfgrCD	1/2 Core Split
Duplicate	Previous		875840	0.12	26.03	63.7	8.8	0.115	0.005		Quality Control
102.21	106.09	3.90	875841	0.16	86.47	99.1	40.3	0.184	0.009	nmfgrCD	1/2 Core Split
106.09	110.82	4.70	875842	0.43	88.13	292.6	19.9	0.263	0.009	nmfgrCD	1/2 Core Split
110.82	113.68	2.90	875843	1.74	142.1	1043.4	18.7	0.248	0.010	nmAMX	1/2 Core Split
113.68	117.06	3.40	875844	0.23	88.57	186.0	44.4	0.351	0.008	nmAMX	1/2 Core Split
117.06	119.37	2.30	875845	0.30	150.24	254.5	71.5	0.264	0.011	nmAMX	1/2 Core Split
119.37	124.39	5.00	875846	0.15	132.08	283.4	52.2	0.440	0.013	nlpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,977.535	Central 2	Azimuth	23.5 °	Date Start	01-Aug-10
Laboratory	Inspectorate	Northing	7,710,513.262		Inclination	-55.2 °	Date End	03-Aug-10
File No.	10-360-03480-01	Elevation	503.918		Length	147.86 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
124.39	128.08	3.70	875847	0.22	48.63	205.6	11.5	0.213	0.010	nlpCD	1/2 Core Split
128.08	133.67	5.60	875848	0.15	73.62	153.4	20.0	0.250	0.010	nlpCD	1/2 Core Split
133.67	137.00	3.30	875849	0.09	15.71	128.3	6.5	0.299	0.010	nmiAMX	1/2 Core Split
Standard	OKA-1		875850	0.54	2.32	57.3	30.8	0.324	0.008		Quality Control
137.00	141.36	4.40	875851	0.25	153.42	310.2	30.6	0.265	0.014	nmcCD	1/2 Core Split
141.36	145.15	3.80	875852	0.36	90.41	211.1	17.6	0.188	0.011	nmcCD	1/2 Core Split
145.15	147.86	2.70	875853	0.36	0.32	59.0	10.9	0.184	0.009	nxfCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
6.09	80.37	74.28		0.599	21	121.5	10	0.222	0.009		
17.93	52.58	34.65	Incl.	0.832	27	138.4	16	0.256	0.009		
106.09	119.37	13.28		0.639	111	420.5	35	0.323	0.009		

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length			Drill Hole Information		
Logged By	Ryan Kressall		Easting	653,989.390	Central 2	Azimuth	21.4 °		Date Start	03-Aug-10	
Laboratory	Inspectorate		Northing	7,710,520.203		Inclination	-54.2 °		Date End	05-Aug-10	
File No.	10-360-03360-01		Elevation	504.076		Length	214.93 Metres		Operator	Taseko	
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	6.09	6.10	Not Sampled							CASE	Not Sampled
6.09	10.25	4.20	875854	1.05	7.47	154.5	4.8	0.212	0.009	dliCCCD	1/2 Core Split
10.25	15.06	4.80	875855	0.36	2.77	80.1	1.6	0.159	0.007	dlpCD	1/2 Core Split
15.06	18.82	3.80	875856	1.10	21.71	131.8	8.5	0.188	0.009	dlpCD	1/2 Core Split
18.82	21.44	2.60	875857	1.93	<0.05	137.4	10.6	0.229	0.005	gmiCD	1/2 Core Split
21.44	24.36	2.90	875858	0.18	2.63	101.2	3.9	0.584	0.006	nliCD	1/2 Core Split
24.36	28.10	3.70	875859	0.28	70.65	201.4	64.2	0.413	0.011	nliCD	1/2 Core Split
Duplicate	Previous		875860	0.28	69.36	212.4	67.5	0.410	0.011		Quality Control
28.10	30.54	2.40	875861	0.54	10.45	136.9	17.0	0.247	0.008	glfgCD	1/2 Core Split
30.54	34.82	4.30	875862	0.21	71.95	123.4	98.3	0.279	0.011	dlpCD	1/2 Core Split
34.82	37.70	2.90	875863	0.25	11.4	147.0	9.8	0.281	0.007	bliAMX	1/2 Core Split
37.70	40.68	3.00	875864	0.11	16.84	64.6	11.7	0.134	0.007	blCCCD	1/2 Core Split
40.68	43.93	3.20	875865	0.24	11.6	112.6	8.5	0.132	0.007	blCCCD	1/2 Core Split
43.93	48.60	4.70	875866	0.30	2.18	261.2	32.1	0.170	0.010	blCCCD	1/2 Core Split
48.60	51.29	2.70	875867	0.17	17.27	94.1	12.5	0.123	0.006	nlfAMX	1/2 Core Split
51.29	54.55	3.30	875868	0.28	44.57	231.9	20.9	0.145	0.009	dmiCD	1/2 Core Split
54.55	57.96	3.40	875869	0.24	8.18	154.0	8.3	0.261	0.009	dmiCD	1/2 Core Split
Standard	Aley2		875870	0.68	40.32	224.0	2.5	0.224	0.012		Quality Control
57.96	61.14	3.20	875871	0.19	16.36	135.1	17.5	0.232	0.010	dmiCD	1/2 Core Split
61.14	65.55	4.40	875872	0.75	32.38	381.5	11.5	0.216	0.015	nlpAMX	1/2 Core Split
65.55	70.10	4.50	875873	0.49	23.34	141.5	16.6	0.186	0.008	nlpAMX	1/2 Core Split
70.10	74.91	4.80	875874	0.71	111.89	596.1	8.6	0.113	0.004	gmiCM	1/2 Core Split
74.91	78.35	3.40	875875	0.29	42.09	222.7	12.4	0.105	0.005	gmiCM	1/2 Core Split
78.35	82.40	4.10	875876	0.50	2.16	585.4	28.4	0.141	0.006	gmiCM	1/2 Core Split
Blank	Granite		875877	<0.01	3.61	16.1	4.4	0.017	0.002		Quality Control
82.40	84.85	2.40	875878	0.87	0.58	836.1	5.4	0.171	0.007	gmiCM	1/2 Core Split
84.85	87.35	2.50	875879	0.46	3.58	480.3	30.0	0.135	0.006	gmiCM	1/2 Core Split
Duplicate	Previous		875880	0.45	3.18	507.2	32.2	0.135	0.006		Quality Control
87.35	93.41	6.10	875881	0.15	75.75	231.4	50.1	0.178	0.010	dxCD	1/2 Core Split
93.41	97.98	4.60	875882	0.10	4.85	117.5	7.0	0.132	0.008	nmCD	1/2 Core Split
97.98	102.37	4.40	875883	0.13	28.35	54.0	19.6	0.462	0.012	nmCD	1/2 Core Split
102.37	106.89	4.50	875884	0.17	28.99	146.5	21.4	0.135	0.009	nmCD	1/2 Core Split
106.89	111.28	4.40	875885	0.15	132.63	281.4	71.4	0.243	0.014	nmCD	1/2 Core Split
111.28	115.79	4.50	875886	0.13	99.2	133.4	46.3	0.178	0.010	nmCD	1/2 Core Split
115.79	120.42	4.60	875887	0.17	40.14	90.4	11.4	0.106	0.008	nmCD	1/2 Core Split
120.42	124.14	3.70	875888	0.06	52.02	164.8	22.5	0.169	0.015	nxcCD	1/2 Core Split
124.14	128.92	4.80	875889	0.22	23.74	109.8	9.0	0.254	0.010	nxcCD	1/2 Core Split
Standard	Aley1		875890	0.48	29.89	151.5	9.6	0.210	0.009		Quality Control
128.92	133.15	4.20	875891	0.28	20.05	126.4	12.7	0.220	0.012	nxcCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,989.390	Central 2	Azimuth	21.4 °	Date Start	03-Aug-10
Laboratory	Inspectorate	Northing	7,710,520.203		Inclination	-54.2 °	Date End	05-Aug-10
File No.	10-360-03360-01	Elevation	504.076		Length	214.93 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
133.15	137.52	4.40	875892	0.17	62.83	178.2	13.7	0.272	0.011	nxcCD	1/2 Core Split
137.52	143.10	5.60	875893	0.23	68.09	215.2	11.6	0.220	0.011	nxcCD	1/2 Core Split
143.10	147.87	4.80	875894	0.15	1.72	139.6	5.2	0.153	0.007	nxcCD	1/2 Core Split
147.87	152.61	4.70	875895	0.09	1.11	146.2	6.3	0.414	0.012	nxcCD	1/2 Core Split
152.61	156.13	3.50	875896	0.07	4.21	77.7	3.9	0.267	0.009	nxcCD	1/2 Core Split
156.13	159.67	3.50	875897	0.13	3.96	202.0	5.8	0.308	0.014	nxcCD	1/2 Core Split
159.67	162.15	2.50	875898	0.05	8.83	126.4	7.5	0.276	0.016	gxCCCD	1/2 Core Split
162.15	165.15	3.00	875899	0.09	17.62	109.2	10.3	0.154	0.013	gxCCCD	1/2 Core Split
Duplicate	Previous		880250	0.09	21.04	120.0	10.5	0.156	0.013		Quality Control
165.15	168.50	3.30	880251	0.09	8.05	225.7	4.8	0.283	0.016	gxCCCD	1/2 Core Split
168.50	173.68	5.20	880252	0.03	0.72	136.1	2.4	0.164	0.008	nxCD	1/2 Core Split
173.68	177.71	4.00	880253	0.08	8.7	81.9	11.8	0.146	0.009	gmCM	1/2 Core Split
177.71	181.99	4.30	880254	0.02	2.69	200.4	3.7	0.279	0.015	nmcCD	1/2 Core Split
181.99	185.78	3.80	880255	0.01	2.4	128.9	6.8	0.322	0.015	nmpCC	1/2 Core Split
185.78	190.50	4.70	880256	0.03	0.19	95.7	7.3	0.232	0.014	nmpCC	1/2 Core Split
190.50	195.42	4.90	880257	0.15	3.21	88.6	3.5	0.127	0.008	nmfgCD	1/2 Core Split
195.42	198.26	2.80	880258	0.08	2.52	107.8	3.5	0.184	0.008	gmiCM	1/2 Core Split
198.26	201.82	3.60	880259	0.21	24.35	116.9	10.6	0.224	0.013	gmiCM	1/2 Core Split
Standard	OKA-1		880260	0.53	26.09	54.9	29.0	0.396	0.008		Quality Control
201.82	204.15	2.30	880261	0.11	21.08	77.5	7.8	0.143	0.008	gmiCM	1/2 Core Split
204.15	206.85	2.70	880262	0.04	2.36	128.5	2.7	0.263	0.010	nmiCD	1/2 Core Split
206.85	210.19	3.30	880263	0.04	15.42	77.0	5.0	0.241	0.013	nmiCD	1/2 Core Split
210.19	214.93	4.70	880264	0.52	2.01	123.3	9.2	0.157	0.009	dmiCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
6.09	30.54	24.45		0.744	17	133.6	16	0.356	0.008		
6.09	21.44	15.35	Incl.	0.996	8	122.7	6	0.192	0.008		
61.14	87.35	26.21		0.582	36	441.8	16	0.154	0.007		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,918.323	Central 1	Azimuth	21.2 °	Date Start	04-Aug-10
Laboratory	Inspectorate	Northing	7,710,533.209		Inclination	-56.9 °	Date End	06-Aug-10
File No.	10-360-03413-01	Elevation	504.302		Length	152.45 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	6.09	6.10	Not Sampled							CASE	Not Sampled
6.09	9.14	3.10	880265	0.29	74.31	328.0	8.5	0.191	0.010	dmpCD	1/2 Core Split
9.14	12.19	3.00	880266	0.12	40.68	117.7	14.5	0.219	0.010	dmpCD	1/2 Core Split
12.19	15.43	3.20	880267	0.09	55.07	93.9	19.0	0.185	0.008	dmfgCD	1/2 Core Split
15.43	18.19	2.80	880268	0.10	66.69	60.2	25.2	0.221	0.008	dmpCD	1/2 Core Split
18.19	21.34	3.10	880269	0.20	138.79	86.9	43.7	0.244	0.012	dmpCD	1/2 Core Split
Duplicate	Previous		880270	0.21	139.43	87.1	41.7	0.235	0.011		Quality Control
21.34	25.57	4.20	880271	0.10	61.15	65.9	30.7	0.286	0.011	dmpCD	1/2 Core Split
25.57	29.87	4.30	880272	0.16	79.52	180.7	53.6	0.181	0.011	nliCD	1/2 Core Split
29.87	33.54	3.70	880273	0.05	60.63	55.9	22.9	0.145	0.007	nliCD	1/2 Core Split
33.54	37.70	4.20	880274	0.05	54.4	89.1	20.5	0.343	0.011	gmiAMX	1/2 Core Split
37.70	41.28	3.60	880275	0.06	44.59	84.7	30.3	0.305	0.006	gmiAMX	1/2 Core Split
41.28	44.21	2.90	880276	0.04	69.22	97.9	36.3	0.256	0.011	dmpCD	1/2 Core Split
44.21	47.59	3.40	880277	<0.01	5.19	22.3	2.7	0.228	0.009	dmpCD	1/2 Core Split
47.59	51.83	4.20	880278	0.04	9.5	31.1	2.5	0.442	0.011	ICD	1/2 Core Split
51.83	55.15	3.30	880279	0.02	10.96	24.4	3.1	0.174	0.007	ICD	1/2 Core Split
Standard	Aley3		880280	0.72	0.49	302.6	9.5	0.222	0.010		Quality Control
55.15	60.31	5.20	880281	0.02	17.48	34.0	5.7	0.294	0.010	ICD	1/2 Core Split
60.31	64.52	4.20	880282	0.08	13.22	84.0	6.9	0.326	0.010	ICD	1/2 Core Split
64.52	68.61	4.10	880283	0.11	25.21	137.1	16.6	0.993	0.009	nmiCD	1/2 Core Split
68.61	72.00	3.40	880284	0.06	21.26	48.6	9.8	0.926	0.012	nmiCD	1/2 Core Split
72.00	78.33	6.30	880285	0.13	42.14	146.6	16.6	0.270	0.008	gmiAMX	1/2 Core Split
78.33	82.32	4.00	880286	0.05	12.82	80.3	7.9	0.483	0.010	nmiAMX	1/2 Core Split
82.32	86.39	4.10	880287	0.34	72.21	208.7	20.5	0.224	0.013	nmiAMX	1/2 Core Split
86.39	91.58	5.20	880288	0.07	42.57	82.9	43.2	0.332	0.008	nmiAMX	1/2 Core Split
91.58	95.12	3.50	880289	0.07	134.38	106.3	116.2	0.324	0.010	nmiAMX	1/2 Core Split
Duplicate	Previous		880290	0.07	111.31	100.8	108.8	0.329	0.011		Quality Control
95.12	99.96	4.80	880291	0.62	25.22	340.8	13.3	0.256	0.013	dmpCD	1/2 Core Split
99.96	103.53	3.60	880292	0.05	20.96	118.7	13.6	0.346	0.009	dmpCD	1/2 Core Split
103.53	107.68	4.20	880293	0.04	8.09	100.6	5.0	0.540	0.005	dmiAMX	1/2 Core Split
107.68	110.91	3.20	880294	0.08	47.71	102.6	16.8	0.296	0.007	dmiAMX	1/2 Core Split
110.91	115.46	4.50	880295	0.05	4.57	130.7	4.1	0.233	0.019	dmpCD	1/2 Core Split
115.46	119.69	4.20	880296	0.05	42.73	108.4	22.2	0.256	0.029	dmpCD	1/2 Core Split
119.69	123.76	4.10	880297	0.04	1.36	72.7	2.5	0.138	0.011	nmCD	1/2 Core Split
123.76	127.86	4.10	880298	0.04	1.58	251.8	4.5	0.336	0.017	nmCD	1/2 Core Split
127.86	131.10	3.20	880299	0.06	2.78	53.8	3.2	0.149	0.012	nmpCD	1/2 Core Split
Standard	Aley1		880300	0.47	24.31	158.6	9.8	0.225	0.011		Quality Control
131.10	134.64	3.50	880301	0.02	0.69	52.0	1.2	0.114	0.009	nmpCD	1/2 Core Split
134.64	138.50	3.90	880302	0.03	2.49	77.9	1.8	0.249	0.012	nmpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length				Drill Hole Information	
Logged By	Ryan Kressall		Easting	653,918.323	Central 1	Azimuth	21.2 °			Date Start	04-Aug-10
Laboratory	Inspectorate		Northing	7,710,533.209		Inclination	-56.9 °			Date End	06-Aug-10
File No.	10-360-03413-01		Elevation	504.302		Length	152.45 Metres			Operator	Taseko
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
138.50	140.85	2.30	880303	0.02	0.36	85.0	5.7	0.276	0.013	dmpCCCD	1/2 Core Split
140.85	143.72	2.90	880305	<0.01	2.4	60.2	6.9	0.223	0.010	dmpCCCD	1/2 Core Split
Blank	Granite		880304	<0.01	1.69	8.8	4.4	0.021	0.003		Quality Control
143.72	145.92	2.20	880306	0.01	8.62	30.1	13.5	0.157	0.009	dmpAMX	1/2 Core Split
145.92	149.47	3.60	880307	<0.01	1.49	44.3	1.2	0.218	0.013	nmiCD	1/2 Core Split
149.47	152.45	3.00	880308	<0.01	0.15	45.7	4.7	0.189	0.010	dmpAMX	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,938.036	Central 1	Azimuth	21.2 °	Date Start	05-Aug-10
Laboratory	Inspectorate	Northing	7,710,532.801		Inclination	-54.4 °	Date End	07-Aug-10
File No.	10-360-03413-01	Elevation	505.216		Length	152.44 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	4.57	4.60	Not Sampled							CASE	Not Sampled
4.57	8.46	3.90	880309	0.82	52.7	108.4	14.4	0.233	0.009	nIcCD	1/2 Core Split
Duplicate	Previous		880310	0.83	42.52	68.1	13.3	0.243	0.010		Quality Control
8.46	12.58	4.10	880311	0.46	10.76	85.9	5.3	0.237	0.010	nIcCD	1/2 Core Split
12.58	16.82	4.20	880312	0.27	14.25	97.4	7.2	0.268	0.012	nIcCD	1/2 Core Split
16.82	20.91	4.10	880313	0.02	7.44	38.9	6.7	0.181	0.006	dmfgAMX	1/2 Core Split
20.91	25.25	4.30	880314	0.07	13.08	66.6	8.2	0.240	0.010	dmfgAMX	1/2 Core Split
25.25	29.35	4.10	880315	0.12	8.27	34.5	4.5	0.131	0.006	dmfgAMX	1/2 Core Split
29.35	33.54	4.20	880316	0.15	13.15	67.3	6.5	0.154	0.007	dmfgAMX	1/2 Core Split
33.54	38.04	4.50	880317	0.14	9.48	44.0	3.7	0.280	0.004	dmfgAMX	1/2 Core Split
38.04	42.25	4.20	880318	0.10	16.69	71.7	3.7	0.248	0.007	dmfgAMX	1/2 Core Split
42.25	45.73	3.50	880319	0.12	14.96	88.9	6.5	0.259	0.006	gcrenfCD	1/2 Core Split
Standard	Aley2		880320	0.67	6.83	174.1	2.2	0.220	0.012		Quality Control
45.73	49.44	3.70	880321	0.08	0.59	33.1	2.1	0.156	0.006	gcrenfCD	1/2 Core Split
49.44	52.62	3.20	880322	0.26	0.55	56.4	4.0	0.403	0.010	gcrenfCD	1/2 Core Split
52.62	57.29	4.70	880323	0.30	4.75	61.6	4.6	0.294	0.010	gcrenfCD	1/2 Core Split
57.29	61.67	4.40	880324	0.16	3.11	50.5	3.6	0.471	0.008	gcrenfCD	1/2 Core Split
61.67	65.74	4.10	880325	0.23	17.06	150.6	9.0	0.181	0.009	dlfCD	1/2 Core Split
65.74	69.55	3.80	880326	0.05	6.09	64.4	2.3	0.303	0.009	dlfCD	1/2 Core Split
69.55	72.35	2.80	880327	0.10	5.11	73.3	3.3	0.301	0.009	dlfCD	1/2 Core Split
72.35	76.68	4.30	880328	<0.01	2.43	29.0	2.6	0.770	0.009	nmfCD	1/2 Core Split
76.68	79.27	2.60	880329	0.28	1.59	64.4	4.0	0.327	0.011	glfCD	1/2 Core Split
Duplicate	Previous		880330	0.31	1.8	66.8	4.5	0.327	0.011		Quality Control
79.27	82.44	3.20	880331	0.34	4.05	90.9	4.5	0.574	0.013	glfCD	1/2 Core Split
82.44	87.44	5.00	880332	0.07	29.23	76.9	13.3	0.324	0.012	mfCM	1/2 Core Split
87.44	89.63	2.20	880333	0.05	4.93	140.5	8.1	0.407	0.009	gmfCD	1/2 Core Split
89.63	92.10	2.50	880334	0.03	14.96	137.5	6.6	1.456	0.012	gmfCD	1/2 Core Split
92.10	96.07	4.00	880335	0.10	3.81	112.5	4.5	0.885	0.011	gmfCD	1/2 Core Split
96.07	101.06	5.00	880336	0.15	13.37	44.4	8.3	0.333	0.008	gmfCD	1/2 Core Split
101.06	104.77	3.70	880337	0.06	0.5	43.7	1.1	0.088	0.004	gmiCD	1/2 Core Split
104.77	108.36	3.60	880338	0.12	11.99	53.4	6.1	0.094	0.006	glCD	1/2 Core Split
108.36	111.67	3.30	880339	0.22	7.28	271.3	6.5	0.122	0.006	glCD	1/2 Core Split
Standard	Aley3		880340	0.76	38.11	290.2	8.7	0.214	0.010		Quality Control
111.67	114.94	3.30	880341	0.11	13.65	117.2	5.8	0.403	0.009	glCD	1/2 Core Split
Blank	Granite		880342	<0.01	1.77	9.3	4.2	0.024	0.002		Quality Control
114.94	117.37	2.40	880343	0.11	36.97	152.7	8.3	0.406	0.015	dcrenfCD	1/2 Core Split
117.37	119.46	2.10	880344	0.10	17.27	42.9	4.9	0.151	0.006	nmpCD	1/2 Core Split
119.46	124.71	5.20	880345	0.02	5.27	85.4	2.9	0.252	0.011	dmpCD	1/2 Core Split
124.71	127.57	2.90	880346	0.05	8.67	180.9	4.3	0.517	0.016	nmiCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length				Drill Hole Information	
Logged By	Ryan Kressall		Easting	653,938.036	Central 1	Azimuth	21.2 °			Date Start	05-Aug-10
Laboratory	Inspectorate		Northing	7,710,532.801		Inclination	-54.4 °			Date End	07-Aug-10
File No.	10-360-03413-01		Elevation	505.216		Length	152.44 Metres			Operator	Taseko
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
127.57	130.54	3.00	880347	0.02	8.5	139.0	6.1	0.489	0.013	nmiCD	1/2 Core Split
130.54	134.15	3.60	880348	0.04	59.68	76.8	26.6	0.192	0.010	dlpCD	1/2 Core Split
134.15	137.20	3.00	880349	0.05	94.82	134.6	37.5	0.246	0.013	dlpCD	1/2 Core Split
Duplicate	Previous		880350	0.05	11.88	135.9	34.9	0.268	0.015		Quality Control
137.20	141.04	3.80	880351	0.07	100.98	272.1	32.6	0.179	0.017	dlpCD	1/2 Core Split
141.04	143.99	3.00	880352	0.30	31.22	348.9	6.8	0.438	0.017	dmiCD	1/2 Core Split
143.99	148.18	4.20	880353	0.02	4.25	88.4	4.9	0.261	0.010	dmpCD	1/2 Core Split
148.18	152.44	4.30	880354	0.18	26.76	209.0	7.2	0.213	0.012	dliCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,957.437	Central 2	Azimuth	18.7 °	Date Start	08-Aug-10
Laboratory	Inspectorate	Northing	7,710,506.330		Inclination	-55 °	Date End	10-Aug-10
File No.	10-360-03268-01	Elevation	501.115		Length	215.24 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.66	3.70	Not Sampled							CASE	Not Sampled
3.66	6.64	3.00	880355	0.25	3.19	92.7	6.5	0.148	0.008	glfCD	1/2 Core Split
6.64	9.72	3.10	880356	0.71	9.52	133.3	29.6	0.239	0.012	glfCD	1/2 Core Split
9.72	12.81	3.10	880357	0.49	5.33	158.6	15.4	0.186	0.013	glfCD	1/2 Core Split
12.81	18.34	5.50	880358	0.25	2.35	51.9	5.2	0.178	0.007	glfCD	1/2 Core Split
18.34	22.59	4.20	880359	0.36	4.51	122.7	9.6	0.224	0.011	bmcCDz	1/2 Core Split
Standard	Aley2		880360	0.74	2.01	166.4	47.9	0.214	0.012		Quality Control
22.59	26.84	4.20	880361	0.37	3.04	82.0	7.8	0.197	0.008	bmcCDz	1/2 Core Split
26.84	31.05	4.20	880362	0.35	3.04	85.6	5.2	0.168	0.008	bmcCDz	1/2 Core Split
31.05	35.14	4.10	880363	0.78	5.28	128.8	<0.1	0.218	0.013	nlCD	1/2 Core Split
35.14	38.04	2.90	880364	0.61	3.4	123.7	31.3	0.200	0.012	nlCD	1/2 Core Split
38.04	40.86	2.80	880365	0.55	3.04	159.4	7.8	0.185	0.014	nlCD	1/2 Core Split
40.86	44.68	3.80	880366	0.71	3.52	81.1	0.1	0.173	0.010	glcCCCD	1/2 Core Split
44.68	48.92	4.20	880367	0.57	3.3	118.2	17.6	0.249	0.009	glcCCCD	1/2 Core Split
48.92	53.54	4.60	880368	0.65	3.25	73.7	<0.1	0.185	0.011	nlcCD	1/2 Core Split
53.54	55.54	2.00	880369	2.74	26.12	270.7	58.0	0.270	0.010	gmfCM	1/2 Core Split
Duplicate	Previous		880370	2.80	25.01	275.6	55.7	0.266	0.010		Quality Control
55.54	60.07	4.50	880371	0.47	2.27	93.5	0.7	0.149	0.008	dlfgCD	1/2 Core Split
60.07	63.03	3.00	880372	0.51	3.43	105.2	12.9	0.188	0.009	dlfgCD	1/2 Core Split
63.03	66.58	3.50	880373	0.32	14.87	103.4	68.5	0.180	0.009	dlfgCD	1/2 Core Split
66.58	70.21	3.60	880374	0.29	348.6	152.9	38.0	0.134	0.006	blpCCCD	1/2 Core Split
70.21	74.76	4.60	880375	0.15	48.99	93.2	99.4	0.129	0.008	dlpAMX	1/2 Core Split
74.76	76.66	1.90	880376	0.23	180.83	135.9	31.1	0.191	0.009	dlpCCCD	1/2 Core Split
76.66	79.40	2.70	880377	0.24	35.97	62.7	103.0	0.158	0.008	dlpCCCD	1/2 Core Split
79.40	83.47	4.10	880378	1.11	62.79	139.7	105.6	0.199	0.010	blpCD	1/2 Core Split
83.47	87.20	3.70	880379	0.20	158.87	84.2	40.1	0.144	0.008	glCD	1/2 Core Split
Standard	Aley1		880380	0.45	8.2	135.4	25.7	0.196	0.010		Quality Control
87.20	90.73	3.50	880381	0.29	101.44	90.2	131.9	0.180	0.010	glCD	1/2 Core Split
Blank	Granite		880382	<0.01	3.59	7.4	2.5	0.015	0.002		Quality Control
90.73	94.31	3.60	880383	0.25	47.62	90.3	22.0	0.159	0.009	blpCD	1/2 Core Split
94.31	96.42	2.10	880384	0.66	27.77	184.2	41.4	0.175	0.011	dmpCD	1/2 Core Split
96.42	99.10	2.70	880385	0.17	29.95	76.4	70.9	0.186	0.009	dlpCD	1/2 Core Split
99.10	101.81	2.70	880386	0.16	12.08	138.5	27.3	0.179	0.011	dlpCD	1/2 Core Split
101.81	104.82	3.00	880387	0.60	11.5	275.3	40.9	0.168	0.010	dlpCD	1/2 Core Split
104.82	108.39	3.60	880388	0.50	4.83	255.4	1.5	0.139	0.008	dlpAMX	1/2 Core Split
108.39	111.08	2.70	880389	0.51	36	257.3	10.3	0.181	0.007	dlpAMX	1/2 Core Split
Duplicate	Previous		880390	0.47	35	250.2	10.1	0.180	0.007		Quality Control
111.08	113.88	2.80	880391	0.37	10.43	188.8	58.3	0.192	0.008	dlpCD	1/2 Core Split
113.88	116.57	2.70	880392	0.42	13	294.0	124.6	0.195	0.010	dlpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length			Drill Hole Information		
Logged By	Ryan Kressall		Easting	653,957.437	Central 2	Azimuth	18.7 °		Date Start	08-Aug-10	
Laboratory	Inspectorate		Northing	7,710,506.330		Inclination	-55 °		Date End	10-Aug-10	
File No.	10-360-03268-01		Elevation	501.115		Length	215.24 Metres		Operator	Taseko	
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
116.57	120.05	3.50	880393	0.22	16.13	70.9	36.0	0.156	0.008	dIpAMX	1/2 Core Split
120.05	123.78	3.70	880394	0.27	6.8	91.6	12.7	0.168	0.009	dIpAMX	1/2 Core Split
123.78	126.83	3.00	880395	0.25	5.05	94.2	10.8	0.196	0.006	dIpAMX	1/2 Core Split
126.83	129.60	2.80	880396	0.13	16.77	62.1	33.0	0.118	0.006	dIpAMX	1/2 Core Split
129.60	132.64	3.00	880397	0.35	41.22	200.0	134.2	0.194	0.014	dmfgCD	1/2 Core Split
132.64	135.81	3.20	880398	0.26	32.37	66.3	59.7	0.193	0.009	dmfgCD	1/2 Core Split
135.81	139.02	3.20	880399	0.19	25.9	74.4	119.4	0.162	0.007	dmfgCD	1/2 Core Split
Standard	OKA-1		875350	0.54	25.1	45.1	0.6	0.321	0.008		Quality Control
139.02	142.07	3.00	875351	0.17	8.04	86.9	31.5	0.189	0.008	dmfgCD	1/2 Core Split
142.07	144.52	2.50	875352	0.22	18.67	108.2	75.2	0.156	0.011	dmfgCD	1/2 Core Split
144.52	146.77	2.20	875353	0.67	110.89	344.5	222.4	0.234	0.017	gmpAMX	1/2 Core Split
146.77	150.04	3.30	875354	0.18	15.24	93.1	31.9	0.484	0.011	blpCD	1/2 Core Split
150.04	153.58	3.50	875355	0.59	36.94	196.8	138.9	0.406	0.011	blpCD	1/2 Core Split
153.58	157.26	3.70	875356	0.72	11.34	413.4	68.1	0.198	0.009	blpCD	1/2 Core Split
157.26	161.21	4.00	875357	0.17	15.74	83.6	25.8	0.133	0.007	blpAMX	1/2 Core Split
161.21	164.38	3.20	875358	0.35	70.52	189.2	128.3	0.247	0.010	blpAMX	1/2 Core Split
164.38	168.09	3.70	875359	0.28	17.79	110.7	52.2	0.160	0.008	blpAMX	1/2 Core Split
Duplicate	Previous		875360	0.28	17.53	111.8	59.6	0.164	0.009		Quality Control
168.09	172.22	4.10	875361	0.20	20.45	153.0	83.9	0.301	0.013	nlpCD	1/2 Core Split
172.22	176.21	4.00	875362	0.07	7.34	94.7	37.7	0.335	0.007	nlpCD	1/2 Core Split
176.21	180.14	3.90	875363	0.12	20.26	146.6	101.9	0.586	0.011	nlpCD	1/2 Core Split
180.14	184.18	4.00	875364	0.65	36.38	195.3	88.2	0.474	0.015	nlpCD	1/2 Core Split
184.18	187.80	3.60	875365	0.41	51.06	73.0	13.6	0.236	0.007	glCM	1/2 Core Split
187.80	190.85	3.00	875366	0.49	7.08	118.8	5.8	0.555	0.010	ICD	1/2 Core Split
190.85	193.83	3.00	875367	0.45	2.98	56.0	2.2	0.170	0.008	ICD	1/2 Core Split
193.83	196.95	3.10	875368	0.05	24.25	126.3	58.3	0.192	0.010	ICD	1/2 Core Split
196.95	200.00	3.10	875369	0.03	5.92	107.4	14.9	0.293	0.008	ICD	1/2 Core Split
Standard	Aley1		875370	0.48	8.08	129.7	23.8	0.180	0.010		Quality Control
200.00	203.97	4.00	875371	0.05	12.44	48.1	76.6	0.155	0.009	nlfCD	1/2 Core Split
203.97	207.32	3.30	875372	0.06	8.9	65.6	77.5	0.236	0.010	nlfCD	1/2 Core Split
207.32	211.81	4.50	875373	0.02	4.57	112.9	31.1	0.343	0.009	nlfCD	1/2 Core Split
211.81	215.24	3.40	875374	0.25	2.92	66.5	2.2	0.123	0.008	nlfCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length			Drill Hole Information		
Logged By	Ryan Kressall		Easting	653,957.437	Central 2	Azimuth	18.7 °		Date Start	08-Aug-10	
Laboratory	Inspectorate		Northing	7,710,506.330		Inclination	-55 °		Date End	10-Aug-10	
File No.	10-360-03268-01		Elevation	501.115		Length	215.24 Metres		Operator	Taseko	
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
Drill Hole Selected Interval - Weighted Average Analytical Results											
Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
3.66	70.21	66.55		0.546	24	110.9	15	0.192	0.010		
31.05	55.54	24.49	Incl.	0.822	6	123.6	12	0.211	0.011		
79.40	116.57	37.17		0.446	47	168.0	57	0.174	0.009		
144.52	164.38	19.86		0.434	38	212.9	93	0.346	0.010		
180.14	193.83	13.69		0.507	27	115.6	31	0.487	0.010		

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length			Drill Hole Information		
Logged By	Ryan Kressall		Easting	653,900.542	Central 1	Azimuth	27.6 °		Date Start	08-Aug-10	
Laboratory	Inspectorate		Northing	7,710,463.719		Inclination	-56 °		Date End	10-Aug-10	
File No.	10-360-03430-01		Elevation	483.321		Length	149.39 Metres		Operator	Taseko	
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	4.57	4.60	Not Sampled							CASE	Not Sampled
4.57	6.26	1.70	875375	0.09	13.29	31.8	1.7	0.170	0.005	gmpCM	1/2 Core Split
6.26	9.27	3.00	875376	2.07	1.7	114.7	10.8	0.313	0.010	gmpCM	1/2 Core Split
9.27	11.27	2.00	875377	0.90	1.18	59.7	6.9	0.308	0.006	glfgCD	1/2 Core Split
11.27	15.43	4.20	875378	0.33	12.48	78.1	2.8	0.264	0.008	nlpCD	1/2 Core Split
15.43	17.61	2.20	875379	0.96	15.9	93.2	8.6	0.248	0.010	glpCD	1/2 Core Split
Duplicate	Previous		875380	0.94	15.8	91.0	8.2	0.250	0.010		Quality Control
17.61	20.16	2.60	875381	0.57	26.37	107.3	5.0	0.256	0.012	glpCD	1/2 Core Split
20.16	22.16	2.00	875382	1.15	0.8	166.8	13.8	0.217	0.010	glpCD	1/2 Core Split
22.16	25.27	3.10	875383	0.53	19.28	140.3	4.1	0.183	0.009	gmfCD	1/2 Core Split
25.27	27.44	2.20	875384	1.80	1.66	81.8	3.4	0.287	0.014	gmfCD	1/2 Core Split
Blank	Granite		875385	0.15	0.18	35.2	0.6	0.032	0.002		Quality Control
27.44	31.06	3.60	875386	0.56	12.77	115.3	2.7	0.236	0.009	gmfCD	1/2 Core Split
31.06	34.00	2.90	875387	0.37	7.51	59.5	1.6	0.158	0.007	gmfCD	1/2 Core Split
34.00	36.83	2.80	875388	0.75	21.88	139.9	2.7	0.202	0.009	gmfCD	1/2 Core Split
36.83	39.97	3.10	875389	0.31	3.92	67.0	1.0	0.195	0.008	blpCD	1/2 Core Split
Standard	Aley2		875390	0.76	2.25	152.4	2.0	0.227	0.012		Quality Control
39.97	43.14	3.20	875391	0.77	13.31	161.3	3.9	0.234	0.014	blpCD	1/2 Core Split
43.14	46.35	3.20	875392	0.34	5.93	93.6	1.4	0.152	0.009	blpCD	1/2 Core Split
46.35	49.02	2.70	875393	0.36	16.4	145.5	2.1	0.187	0.011	blpCD	1/2 Core Split
49.02	51.53	2.50	875394	0.50	17	91.5	4.4	0.171	0.008	blpCD	1/2 Core Split
51.53	54.38	2.90	875395	1.82	1.33	120.5	6.3	0.289	0.012	blfCD	1/2 Core Split
54.38	58.47	4.10	875396	0.79	0.19	119.8	2.5	0.194	0.010	dlpCCCD	1/2 Core Split
58.47	62.26	3.80	875397	0.62	21.24	151.0	3.6	0.199	0.010	glcCD	1/2 Core Split
62.26	65.50	3.20	875398	0.37	10.29	73.5	2.0	0.174	0.009	blCD	1/2 Core Split
65.50	68.83	3.30	875399	0.44	8.75	97.4	2.4	0.249	0.011	blCD	1/2 Core Split
Duplicate	Previous		874900	0.43	9.18	96.6	2.9	0.233	0.011		Quality Control
68.83	71.67	2.80	874901	0.52	8.66	130.9	2.7	0.324	0.013	blCD	1/2 Core Split
71.67	75.08	3.40	874902	0.64	11.51	198.2	3.4	0.289	0.021	blCD	1/2 Core Split
75.08	78.89	3.80	874903	0.44	12.71	286.8	7.0	0.184	0.020	blCD	1/2 Core Split
78.89	82.19	3.30	874904	0.25	4.4	212.7	2.1	0.273	0.013	blCD	1/2 Core Split
82.19	85.68	3.50	874905	0.74	12.14	180.1	4.1	0.220	0.013	nmfCD	1/2 Core Split
85.68	89.51	3.80	874906	2.00	0.12	140.6	5.8	0.293	0.012	gliCM	1/2 Core Split
89.51	93.51	4.00	874907	0.50	19.45	102.2	2.1	0.181	0.010	nifgCD	1/2 Core Split
93.51	97.56	4.00	874908	0.49	14.72	129.4	3.2	0.350	0.013	nmcCD	1/2 Core Split
97.56	101.31	3.80	874909	0.51	0.22	87.0	4.8	0.268	0.016	nmcCD	1/2 Core Split
Standard	OKA-1		874910	0.55	10.76	40.7	31.2	0.323	0.008		Quality Control
101.31	105.81	4.50	874911	0.42	0.25	88.5	4.4	0.447	0.016	bmfgCD	1/2 Core Split
105.81	109.89	4.10	874912	0.54	0.06	72.4	3.2	0.293	0.016	gmcCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,900.542	Central 1	Azimuth	27.6 °	Date Start	08-Aug-10
Laboratory	Inspectorate	Northing	7,710,463.719		Inclination	-56 °	Date End	10-Aug-10
File No.	10-360-03430-01	Elevation	483.321		Length	149.39 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
109.89	113.65	3.80	874913	0.55	0.13	87.5	5.5	0.265	0.013	glfgCCCD	1/2 Core Split
113.65	116.35	2.70	874914	0.48	1.16	55.2	2.9	0.292	0.008	glfgCCCD	1/2 Core Split
116.35	119.68	3.30	874915	0.41	0.45	26.9	2.5	0.254	0.009	glfgCCCD	1/2 Core Split
119.68	122.68	3.00	874916	0.77	0.38	34.1	7.8	0.258	0.011	dlpCD	1/2 Core Split
122.68	125.90	3.20	874917	0.67	0.34	32.4	7.3	0.229	0.008	dlpCD	1/2 Core Split
125.90	128.85	2.90	874918	0.76	0.07	23.1	5.3	0.215	0.009	dlpCD	1/2 Core Split
128.85	131.74	2.90	874919	1.30	0.41	32.2	8.3	0.311	0.018	dlpCD	1/2 Core Split
Duplicate	Previous		874920	1.31	0.09	33.5	8.5	0.288	0.018		Quality Control
131.74	134.65	2.90	874921	0.90	0.12	25.1	6.4	0.256	0.012	dlpCD	1/2 Core Split
134.65	137.67	3.00	874922	0.76	1.4	50.6	6.4	0.242	0.012	dlpCD	1/2 Core Split
137.67	140.42	2.80	874923	0.56	2.79	132.9	3.9	0.172	0.011	dlpCD	1/2 Core Split
140.42	143.29	2.90	874924	0.22	<0.05	7.3	1.1	0.112	0.004	nmCD	1/2 Core Split
143.29	146.15	2.90	874925	0.25	0.16	19.5	0.9	0.133	0.005	nmCD	1/2 Core Split
146.15	149.39	3.20	874926	0.11	0.37	44.8	0.9	0.155	0.004	nmiCD	1/2 Core Split
Standard	OKA-1		874950A	0.53	9	38.5	28.0	0.332	0.008		Quality Control

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
6.26	140.42	134.16		0.702	7	106.6	4	0.275	0.012		
6.26	27.44	21.18	Incl.	0.982	11	104.5	6	0.284	0.010		
51.53	62.26	10.73	Incl.	1.004	8	131.0	4	0.231	0.011		
119.68	137.67	17.99	Incl.	0.855	1	33.0	7	0.263	0.012		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,936.470	Central 1	Azimuth	20 °	Date Start	10-Aug-10
Laboratory	Inspectorate	Northing	7,710,458.448		Inclination	-55 °	Date End	12-Aug-10
File No.	10-360-03294-01	Elevation	477.317		Length	303.65 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	6.70	6.70	Not Sampled							CASE	Not Sampled
6.70	9.91	3.20	874927	0.34	15.13	217.1	3.7	0.287	0.012	lfgCD	1/2 Core Split
9.91	13.39	3.50	874928	0.35	21.26	171.0	2.9	0.219	0.009	lfgCD	1/2 Core Split
13.39	16.13	2.70	874929	0.38	40.88	150.9	2.4	0.138	0.009	lfgCD	1/2 Core Split
Standard	Aley3		874930	0.76	34.21	248.5	7.5	0.192	0.008		Quality Control
16.13	18.92	2.80	874931	0.33	29.61	170.2	2.8	0.163	0.009	lfgCD	1/2 Core Split
18.92	21.29	2.40	874932	0.56	8.82	148.7	5.1	0.263	0.010	blpCD	1/2 Core Split
21.29	23.83	2.50	874933	1.09	63.55	149.1	27.6	0.262	0.012	nmpCD	1/2 Core Split
23.83	26.96	3.10	874934	0.69	30.31	146.3	15.5	0.201	0.009	blpCD	1/2 Core Split
26.96	29.83	2.90	874935	0.43	13.28	117.9	7.7	0.227	0.010	blCD	1/2 Core Split
29.83	32.22	2.40	874936	0.38	41.05	228.8	52.5	0.208	0.013	blCD	1/2 Core Split
32.22	35.45	3.20	874937	1.47	19.45	182.2	6.6	0.276	0.011	blCD	1/2 Core Split
35.45	38.41	3.00	874938	1.46	18.32	232.6	13.4	0.293	0.015	blCD	1/2 Core Split
38.41	42.04	3.60	874939	0.75	35.15	158.6	24.0	0.205	0.013	blCD	1/2 Core Split
Duplicate	Previous		874940	0.74	32.9	156.2	22.0	0.200	0.012		Quality Control
42.04	46.03	4.00	874941	0.38	16.32	174.4	11.9	0.161	0.009	gmpCD	1/2 Core Split
46.03	49.66	3.60	874942	0.80	30.38	329.1	13.7	0.145	0.015	gmpCD	1/2 Core Split
49.66	52.83	3.20	874943	0.29	15.57	314.2	11.8	0.157	0.013	dmpCD	1/2 Core Split
52.83	55.85	3.00	874944	0.20	26.86	417.2	15.1	0.222	0.016	dmpCD	1/2 Core Split
55.85	58.95	3.10	874945	0.29	80.6	331.9	18.6	0.160	0.012	dmpCD	1/2 Core Split
58.95	62.03	3.10	874946	0.38	22.16	306.8	10.2	0.144	0.015	dmpCD	1/2 Core Split
62.03	65.12	3.10	874947	0.46	52.34	632.0	30.2	0.230	0.021	dmpCD	1/2 Core Split
65.12	68.22	3.10	874948	0.34	9.71	298.9	9.1	0.297	0.013	dmpCD	1/2 Core Split
68.22	70.99	2.80	874949	0.25	7.88	161.9	7.2	0.483	0.011	dmpCD	1/2 Core Split
Standard	OKA-1		874950	0.51	0.26	44.8	25.4	0.318	0.007		Quality Control
70.99	73.97	3.00	874951	0.58	6.21	179.1	3.3	0.301	0.010	gmpCD	1/2 Core Split
73.97	77.09	3.10	874952	0.93	31.89	145.6	15.9	0.300	0.012	gmpCD	1/2 Core Split
77.09	79.92	2.80	874953	1.21	38.16	225.2	21.4	0.566	0.016	gmpCD	1/2 Core Split
79.92	83.47	3.50	874954	0.44	6.72	238.5	9.4	0.274	0.012	nlpCD	1/2 Core Split
83.47	86.50	3.00	874955	0.30	2.73	131.1	3.9	0.262	0.008	nlpCD	1/2 Core Split
86.50	90.24	3.70	874956	0.43	3.51	117.6	3.6	0.171	0.008	nlpCD	1/2 Core Split
90.24	94.18	3.90	874957	0.80	<0.05	130.7	6.6	0.222	0.009	dlCD	1/2 Core Split
94.18	98.64	4.50	874958	0.48	14.77	156.5	7.8	0.164	0.010	nmpCD	1/2 Core Split
98.64	101.26	2.60	874959	1.09	27.12	144.3	10.9	0.188	0.010	glpCCCD	1/2 Core Split
Duplicate	Previous		874960	1.06	27.32	159.2	10.9	0.189	0.010		Quality Control
101.26	103.48	2.20	874961	1.23	29.96	144.2	10.2	0.195	0.006	glpCCCD	1/2 Core Split
Blank	Granite		874962	0.02	2.17	9.5	3.1	0.020	0.002		Quality Control
103.48	105.49	2.00	874963	0.51	1.78	81.1	2.4	0.131	0.006	glpCCCD	1/2 Core Split
105.49	108.54	3.10	874964	0.57	<0.05	87.9	4.8	0.160	0.008	blpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,936.470	Central 1	Azimuth	20 °	Date Start	10-Aug-10
Laboratory	Inspectorate	Northing	7,710,458.448		Inclination	-55 °	Date End	12-Aug-10
File No.	10-360-03294-01	Elevation	477.317		Length	303.65 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
108.54	111.77	3.20	874965	0.45	6.63	105.7	4.0	0.137	0.008	blpCD	1/2 Core Split
111.77	115.06	3.30	874966	0.73	21.66	102.6	9.0	0.206	0.008	blCD	1/2 Core Split
115.06	118.92	3.90	874967	0.73	9.21	86.8	2.8	0.181	0.010	blCD	1/2 Core Split
118.92	121.96	3.00	874968	0.48	13.66	110.9	4.1	0.165	0.008	blpCD	1/2 Core Split
121.96	125.22	3.30	874969	0.50	3.2	72.4	1.3	0.140	0.006	blpCD	1/2 Core Split
Standard	Aley2		874970	0.73	4.44	166.6	2.2	0.209	0.011		Quality Control
125.22	127.48	2.30	874971	0.34	3.02	91.5	2.2	0.256	0.007	blpCD	1/2 Core Split
127.48	130.22	2.70	874972	0.47	1.76	92.0	1.8	0.136	0.007	blpCD	1/2 Core Split
130.22	134.06	3.80	874973	0.40	29.88	98.5	36.0	0.163	0.008	nlpAMX	1/2 Core Split
134.06	136.43	2.40	874974	0.54	3.29	167.1	8.7	0.165	0.009	blpCD	1/2 Core Split
136.43	139.09	2.70	874975	0.77	3.4	142.7	8.9	0.538	0.011	blpCD	1/2 Core Split
139.09	144.77	5.70	874976	0.27	17.84	142.7	16.0	0.215	0.009	blpAMX	1/2 Core Split
144.77	147.73	3.00	874977	0.49	5.85	131.3	6.1	0.133	0.009	blpCD	1/2 Core Split
147.73	150.81	3.10	874978	0.39	6.78	197.2	5.4	0.112	0.009	blpCD	1/2 Core Split
150.81	153.81	3.00	874979	0.18	6.88	200.1	5.5	0.384	0.007	blpCD	1/2 Core Split
Duplicate	Previous		874980	0.18	2.77	116.2	4.7	0.389	0.007		Quality Control
153.81	156.80	3.00	874981	0.14	26.72	67.4	26.9	0.139	0.006	blpCD	1/2 Core Split
156.80	159.77	3.00	874982	0.21	77.19	65.6	30.0	0.108	0.006	blpCD	1/2 Core Split
159.77	163.48	3.70	874983	0.20	98.96	116.4	42.4	0.139	0.007	nlpAMX	1/2 Core Split
163.48	166.88	3.40	874984	0.15	29.42	43.1	20.3	0.167	0.005	gmpCD	1/2 Core Split
166.88	169.96	3.10	874985	0.07	24.34	52.0	9.4	0.131	0.006	gmpCD	1/2 Core Split
169.96	173.26	3.30	874986	0.12	56.43	121.0	23.7	0.324	0.010	gmpCD	1/2 Core Split
173.26	177.28	4.00	874987	0.10	29.08	56.9	20.2	0.709	0.007	nmCD	1/2 Core Split
177.28	181.01	3.70	874988	0.10	13.69	67.3	6.8	0.254	0.006	nmCD	1/2 Core Split
181.01	184.77	3.80	874989	0.16	82.11	75.2	74.2	0.134	0.007	blpCD	1/2 Core Split
Standard	Aley1		874990	0.45	21.61	139.0	9.1	0.184	0.009		Quality Control
184.77	187.81	3.00	874991	0.10	137.07	96.6	32.9	0.218	0.008	nlpCD	1/2 Core Split
187.81	190.85	3.00	874992	0.38	53.14	187.4	18.4	0.290	0.008	nmpCD	1/2 Core Split
190.85	194.69	3.80	874993	0.15	147.22	371.4	63.7	0.591	0.011	nmpCD	1/2 Core Split
194.69	198.07	3.40	874994	0.11	121.43	253.2	76.1	0.271	0.011	nmpCD	1/2 Core Split
198.07	201.12	3.10	874995	0.04	8.31	100.0	7.9	0.801	0.007	miCD	1/2 Core Split
201.12	204.18	3.10	874996	0.17	3.79	105.5	3.7	0.491	0.009	miCD	1/2 Core Split
204.18	207.15	3.00	874997	0.12	9.67	54.8	6.4	0.177	0.004	miCD	1/2 Core Split
207.15	210.21	3.10	874998	0.42	70	141.7	60.6	0.180	0.009	bmiCD	1/2 Core Split
210.21	213.36	3.20	874999	0.14	2.73	70.3	2.4	0.274	0.005	bmiCD	1/2 Core Split
Duplicate	Previous		875000	0.13	2.35	67.7	2.2	0.278	0.005		Quality Control
213.36	216.51	3.10	875001	0.15	27.39	117.6	17.4	0.276	0.008	bmiCD	1/2 Core Split
216.51	219.66	3.20	875002	0.06	21.19	98.2	8.1	0.456	0.008	bmiCD	1/2 Core Split
219.66	222.75	3.10	875003	0.03	7.45	193.1	8.4	0.879	0.009	bmiCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,936.470	Central 1	Azimuth	20 °	Date Start	10-Aug-10
Laboratory	Inspectorate	Northing	7,710,458.448		Inclination	-55 °	Date End	12-Aug-10
File No.	10-360-03294-01	Elevation	477.317		Length	303.65 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
222.75	225.73	3.00	875004	0.10	2.7	153.4	2.0	0.951	0.009	bmiCD	1/2 Core Split
225.73	228.68	3.00	875005	0.35	3.88	150.8	4.8	0.272	0.013	gmfgCD	1/2 Core Split
228.68	232.73	4.00	875006	0.18	4.2	148.2	4.4	0.171	0.013	gmfgCD	1/2 Core Split
232.73	238.59	5.90	875007	0.10	39.48	229.1	11.0	0.177	0.015	gmfgCD	1/2 Core Split
238.59	240.85	2.30	875008	0.16	39.25	171.0	14.7	0.130	0.011	gmfgCD	1/2 Core Split
240.85	244.00	3.20	875009	0.10	12.59	103.8	8.1	0.162	0.009	glCD	1/2 Core Split
Standard	Aley2		875010	0.71	<0.05	168.2	2.3	0.207	0.011		Quality Control
244.00	247.25	3.20	875011	0.16	10.9	171.2	4.4	0.230	0.016	glCD	1/2 Core Split
247.25	250.74	3.50	875012	0.09	15.45	168.4	5.7	0.222	0.013	nmpCD	1/2 Core Split
250.74	254.20	3.50	875013	0.10	5.03	244.2	5.0	0.234	0.011	nmpCD	1/2 Core Split
254.20	256.50	2.30	875014	0.13	1.48	93.8	1.2	0.151	0.009	nmCD	1/2 Core Split
256.50	259.49	3.00	875015	0.15	2.28	137.9	6.5	0.223	0.014	gmCCCD	1/2 Core Split
259.49	261.96	2.50	875016	0.04	5.16	114.1	6.7	0.214	0.010	gmCCCD	1/2 Core Split
261.96	265.44	3.50	875017	0.07	8.35	75.4	4.7	0.188	0.009	gmCCCD	1/2 Core Split
265.44	269.53	4.10	875018	0.08	9.42	244.0	7.6	0.230	0.017	nmfgCD	1/2 Core Split
269.53	272.60	3.10	875019	0.15	60.49	181.8	42.7	0.317	0.012	bifCCCD	1/2 Core Split
Duplicate	Previous		875020	0.15	65.22	191.9	45.0	0.319	0.013		Quality Control
272.60	275.84	3.20	875021	0.09	6.3	107.1	4.8	0.137	0.006	bifCCCD	1/2 Core Split
Blank	Granite		875022	<0.01	2.28	10.0	2.9	0.022	0.002		Quality Control
275.84	278.50	2.70	875023	0.12	4.89	67.5	7.0	0.111	0.005	bifCCCD	1/2 Core Split
278.50	281.43	2.90	875024	0.07	2.77	251.7	6.0	0.280	0.016	nmpCD	1/2 Core Split
281.43	285.36	3.90	875025	0.11	1.83	148.8	4.4	0.238	0.014	nmpCD	1/2 Core Split
285.36	289.32	4.00	875026	0.11	1.06	51.7	1.6	0.110	0.007	nmpCD	1/2 Core Split
289.32	292.11	2.80	875027	0.18	1.26	90.4	1.6	0.119	0.006	nmpCD	1/2 Core Split
292.11	295.29	3.20	875028	0.06	3.06	186.8	4.2	0.237	0.012	nmpCD	1/2 Core Split
295.29	297.74	2.40	875029	0.06	5.13	157.3	19.1	0.308	0.014	dICCCD	1/2 Core Split
Standard	OKA-1		875030	0.52	0.34	50.4	30.3	0.317	0.007		Quality Control
297.74	301.57	3.80	875031	0.08	29.8	67.7	16.6	0.208	0.008	dICCCD	1/2 Core Split
301.57	303.65	2.10	875032	0.02	1.75	60.2	7.9	0.223	0.013	dICCCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
6.70	150.81	144.11		0.571	19	181.9	11	0.236	0.010		
21.29	49.66	28.37	Incl.	0.821	29	192.6	18	0.224	0.012		
90.24	103.48	13.24	Incl.	0.822	15	144.3	8	0.191	0.009		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,881.414	Central 2	Azimuth	26.8 °	Date Start	11-Aug-10
Laboratory	Inspectorate	Northing	7,710,463.539		Inclination	-57 °	Date End	12-Aug-10
File No.	10-360-03316-01	Elevation	485.410		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	4.57	4.60	Not Sampled							CASE	Not Sampled
4.57	9.14	4.60	875033	0.37	291.3	25.6	5.0	0.118	0.010	nlpCD	1/2 Core Split
9.14	12.19	3.00	875034	0.40	71.14	11.8	4.8	0.354	0.018	nlpCD	1/2 Core Split
12.19	15.24	3.10	875035	0.78	143.78	25.9	13.4	0.255	0.009	glpCCCD	1/2 Core Split
15.24	18.29	3.00	875036	1.02	159.64	33.9	13.7	0.306	0.014	glpCCCD	1/2 Core Split
18.29	20.73	2.40	875037	0.65	289.38	18.4	2.9	0.312	0.014	glpCCCD	1/2 Core Split
20.73	23.47	2.70	875038	0.46	183.83	12.8	1.7	0.294	0.012	glpCCCD	1/2 Core Split
23.47	28.22	4.80	875039	0.76	175	21.1	6.9	0.219	0.011	glpCCCD	1/2 Core Split
Duplicate	Previous		875040	0.79	186	20.4	7.3	0.215	0.011		Quality Control
28.22	30.83	2.60	875041	1.06	230.2	17.2	5.0	0.207	0.010	nliCD	1/2 Core Split
30.83	32.89	2.10	875042	2.10	228.37	<0.2	35.0	0.206	0.007	glCM	1/2 Core Split
32.89	35.32	2.40	875043	3.09	179.07	0.5	31.5	0.360	0.013	glCM	1/2 Core Split
35.32	37.76	2.40	875044	2.08	230.96	38.8	18.9	0.297	0.010	glCM	1/2 Core Split
37.76	41.13	3.40	875045	0.57	183.9	13.5	7.4	0.225	0.010	blpCD	1/2 Core Split
41.13	43.95	2.80	875046	1.23	200.71	57.1	22.9	0.170	0.007	glCM	1/2 Core Split
43.95	47.04	3.10	875047	0.50	143.63	18.3	5.5	0.153	0.008	glCM	1/2 Core Split
47.04	49.58	2.50	875048	1.16	408.05	<0.2	13.5	0.257	0.013	glCM	1/2 Core Split
49.58	52.21	2.60	875049	1.39	483.46	67.4	22.5	0.192	0.009	glCM	1/2 Core Split
Standard	Aley3		875050	0.78	336.95	2.4	9.9	0.198	0.009		Quality Control
52.21	54.88	2.70	875051	0.36	244.61	14.4	4.8	0.168	0.011	blpCD	1/2 Core Split
54.88	57.52	2.60	875052	0.73	228.06	15.9	5.7	0.204	0.011	glpCD	1/2 Core Split
57.52	60.10	2.60	875053	0.73	282.67	12.1	4.6	0.180	0.014	glpCD	1/2 Core Split
60.10	64.26	4.20	875054	1.20	244.41	<0.2	5.3	0.202	0.010	blCM	1/2 Core Split
Blank	Granite		875055	0.01	10.03	1.5	4.3	0.018	0.002		Quality Control
64.26	67.51	3.20	875056	0.34	319.91	7.6	4.8	0.191	0.012	blCD	1/2 Core Split
67.51	70.71	3.20	875057	0.63	289.18	17.5	8.3	0.173	0.021	blCD	1/2 Core Split
70.71	73.89	3.20	875058	0.80	318.08	28.8	41.0	0.324	0.037	blCD	1/2 Core Split
73.89	77.65	3.80	875059	0.99	358.54	18.4	10.2	0.216	0.015	blCD	1/2 Core Split
Duplicate	Previous		875060	1.03	330.15	18.2	10.5	0.216	0.016		Quality Control
77.65	80.74	3.10	875061	0.62	406.65	7.0	4.6	0.351	0.016	blCD	1/2 Core Split
80.74	84.39	3.70	875062	0.53	232.36	7.4	6.1	0.184	0.012	blpCD	1/2 Core Split
84.39	87.71	3.30	875063	0.40	146.19	25.1	11.6	0.151	0.009	blpCD	1/2 Core Split
87.71	90.24	2.50	875064	0.72	173.45	14.7	20.0	0.192	0.010	blCD	1/2 Core Split
90.24	92.74	2.50	875065	0.79	230.61	32.6	39.4	0.197	0.014	blCD	1/2 Core Split
92.74	95.36	2.60	875066	0.61	137.1	6.6	8.2	0.229	0.013	blCD	1/2 Core Split
95.36	98.76	3.40	875067	1.20	119.52	17.9	5.8	0.201	0.007	glCM	1/2 Core Split
98.76	102.81	4.00	875068	2.59	239.88	26.9	35.0	0.231	0.009	blCD	1/2 Core Split
102.81	106.31	3.50	875069	1.49	163.38	8.7	6.2	0.131	0.012	nliCD	1/2 Core Split
Standard	OKA-1		875070	0.54	65.47	39.6	33.6	0.320	0.007		Quality Control

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,881.414	Central 2	Azimuth	26.8 °	Date Start	11-Aug-10
Laboratory	Inspectorate	Northing	7,710,463.539		Inclination	-57 °	Date End	12-Aug-10
File No.	10-360-03316-01	Elevation	485.410		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
106.31	109.55	3.20	875071	0.35	100.16	7.1	3.1	0.168	0.009	nICD	1/2 Core Split
109.55	112.82	3.30	875072	0.43	74.24	4.8	4.0	0.135	0.006	nICD	1/2 Core Split
112.82	116.76	3.90	875073	0.54	129.56	10.4	4.1	0.176	0.012	nICD	1/2 Core Split
116.76	118.90	2.10	875074	1.20	194.07	12.5	7.0	0.224	0.012	nICD	1/2 Core Split
118.90	121.88	3.00	875075	0.25	77.76	4.8	3.4	0.189	0.008	nICD	1/2 Core Split
121.88	124.26	2.40	875076	0.36	53.94	4.2	2.8	0.143	0.006	nICD	1/2 Core Split
124.26	126.60	2.30	875077	0.83	118.92	9.6	5.6	0.193	0.012	nICD	1/2 Core Split
126.60	131.10	4.50	875078	0.60	154.14	7.1	5.5	0.247	0.014	nICD	1/2 Core Split
131.10	133.83	2.70	875079	0.35	86.65	3.3	2.3	0.243	0.009	nmfgCD	1/2 Core Split
Duplicate	Previous		875080	0.35	84.52	3.4	2.3	0.240	0.008		Quality Control
133.83	136.69	2.90	875081	0.32	66.05	3.0	2.2	0.128	0.007	nmpCD	1/2 Core Split
136.69	139.94	3.20	875082	0.39	79.84	9.5	11.6	0.131	0.007	nmpCD	1/2 Core Split
139.94	142.85	2.90	875083	0.30	66.29	2.9	2.1	0.108	0.006	nmpCD	1/2 Core Split
142.85	146.34	3.50	875084	0.32	49.77	1.9	1.6	0.136	0.005	nlpAMX	1/2 Core Split
146.34	148.93	2.60	875085	0.12	49.28	1.9	1.6	0.131	0.008	nlpAMX	1/2 Core Split
148.93	152.44	3.50	875086	0.14	77.99	14.1	25.1	0.136	0.008	blpCD	1/2 Core Split
152.44	155.49	3.10	875087	0.21	107.54	13.7	3.6	0.102	0.007	blpCD	1/2 Core Split
155.49	158.54	3.00	875088	0.21	49.46	9.9	10.0	0.098	0.006	blpCD	1/2 Core Split
158.54	161.59	3.10	875089	0.23	122.57	1.1	2.6	0.121	0.008	blpCD	1/2 Core Split
Standard	Aley2		875090	0.75	222.14	1.5	2.6	0.224	0.012		Quality Control
161.59	164.63	3.00	875091	0.21	66.35	<0.2	0.8	0.116	0.005	blpCD	1/2 Core Split
164.63	169.36	4.70	875092	0.18	118.47	21.4	24.8	0.128	0.008	blpCD	1/2 Core Split
169.36	173.42	4.10	875093	0.62	206.38	15.5	5.3	0.171	0.013	nlpCD	1/2 Core Split
173.42	176.38	3.00	875094	0.42	193.57	13.1	5.0	0.134	0.010	nlpCD	1/2 Core Split
176.38	179.57	3.20	875095	0.43	217.56	23.7	5.7	0.146	0.011	nlpCD	1/2 Core Split
179.57	182.67	3.10	875096	0.34	212.97	10.9	3.8	0.167	0.011	nlpCD	1/2 Core Split
182.67	185.98	3.30	875097	0.32	128.12	4.7	3.1	0.162	0.009	nlpCD	1/2 Core Split
185.98	189.76	3.80	875098	0.19	354.57	6.1	5.5	0.217	0.014	nlpCD	1/2 Core Split
189.76	193.02	3.30	875099	0.73	459.29	58.8	19.1	0.246	0.018	nlpCD	1/2 Core Split
Duplicate	Previous		875100	0.72	450.01	58.5	18.9	0.237	0.017		Quality Control
193.02	196.45	3.40	875101	0.41	253.09	17.7	10.6	0.292	0.018	nlpCD	1/2 Core Split
196.45	199.52	3.10	875102	0.15	425.27	173.9	219.2	0.164	0.020	nlpCD	1/2 Core Split
199.52	202.51	3.00	875103	0.15	309.13	73.7	99.1	0.224	0.018	nlpCD	1/2 Core Split
202.51	205.32	2.80	875104	0.33	91.07	6.5	5.8	0.666	0.014	bmiCD	1/2 Core Split
205.32	208.80	3.50	875105	0.15	62.34	22.8	10.0	1.065	0.017	bmiCD	1/2 Core Split
208.80	211.04	2.20	875106	6.75	165.99	47.2	39.2	0.412	0.021	glCD	1/2 Core Split
211.04	213.41	2.40	875107	0.41	178.59	99.9	113.2	0.258	0.014	glCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,881.414	Central 2	Azimuth	26.8 °	Date Start	11-Aug-10
Laboratory	Inspectorate	Northing	7,710,463.539		Inclination	-57 °	Date End	12-Aug-10
File No.	10-360-03316-01	Elevation	485.410		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
4.57	146.34	141.77		0.820	195	15.3	10	0.225	0.011		
12.19	106.31	94.12	Incl.	1.006	236	18.8	13	0.241	0.012		
169.36	196.45	27.09		0.434	255	18.5	7	0.201	0.013		
202.51	213.41	10.90		1.609	116	40.4	37	1.207	0.016		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,845.447	Central 1	Azimuth	30 °	Date Start	13-Aug-10
Laboratory	Inspectorate	Northing	7,710,483.374		Inclination	-55 °	Date End	14-Aug-10
File No.	10-360-03507-01	Elevation	500.948		Length	153.05 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	7.32	7.30	Not Sampled							CASE	Not Sampled
7.32	10.45	3.10	875108	0.29	7.1	109.2	1.6	0.153	0.010	blcCD	1/2 Core Split
10.45	13.42	3.00	875109	0.27	5.14	189.2	2.1	0.347	0.016	blcCD	1/2 Core Split
Standard	Aley1		875110	0.44	23.97	168.7	9.8	0.206	0.011		Quality Control
13.42	17.00	3.60	875111	0.33	12.03	101.9	2.1	0.140	0.010	blcCD	1/2 Core Split
17.00	19.48	2.50	875112	0.70	38.72	168.4	8.4	0.201	0.011	bliCD	1/2 Core Split
19.48	23.66	4.20	875113	0.28	15.35	123.1	4.6	0.231	0.011	bliCD	1/2 Core Split
23.66	26.36	2.70	875114	0.29	11.58	138.3	5.2	0.204	0.013	glpCD	1/2 Core Split
26.36	29.10	2.70	875115	0.74	37.38	170.0	14.4	0.261	0.018	glpCD	1/2 Core Split
29.10	31.78	2.70	875116	0.34	25.49	191.0	7.2	0.297	0.017	glpCD	1/2 Core Split
31.78	34.98	3.20	875117	0.53	20.11	164.0	3.0	0.219	0.019	glpCD	1/2 Core Split
34.98	37.43	2.50	875118	0.46	28.1	129.5	6.8	0.187	0.010	glpCD	1/2 Core Split
37.43	39.75	2.30	875119	0.66	28.3	157.7	9.1	0.214	0.012	glpCD	1/2 Core Split
Duplicate	Previous		875120	0.65	26.5	161.3	8.7	0.204	0.012		Quality Control
39.75	43.32	3.60	875121	0.44	19.85	116.0	3.6	0.175	0.010	blfgCD	1/2 Core Split
43.32	46.72	3.40	875122	0.46	8.99	99.4	2.3	0.192	0.010	blfgCD	1/2 Core Split
46.72	50.04	3.30	875123	0.41	19.83	107.8	2.8	0.170	0.009	blfgCD	1/2 Core Split
50.04	53.42	3.40	875124	0.49	1.86	127.1	4.3	0.161	0.010	glpCCCD	1/2 Core Split
53.42	57.14	3.70	875125	0.39	10	86.4	3.4	0.199	0.009	glpCCCD	1/2 Core Split
57.14	60.09	3.00	875126	0.40	13.38	119.7	4.4	0.209	0.010	dipCD	1/2 Core Split
60.09	63.11	3.00	875127	0.36	9.22	79.8	2.9	0.199	0.009	dipCD	1/2 Core Split
63.11	65.66	2.50	875128	0.39	21.02	113.0	3.6	0.154	0.008	glfgCD	1/2 Core Split
65.66	67.94	2.30	875129	0.33	16.69	117.0	7.2	0.154	0.009	glfgCD	1/2 Core Split
Standard	Aley2		875130	0.72	1	137.7	2.5	0.215	0.013		Quality Control
67.94	70.97	3.00	875131	0.27	5.8	62.4	3.4	0.118	0.006	bICD	1/2 Core Split
70.97	74.48	3.50	875132	0.44	8.44	91.1	2.8	0.143	0.008	bICD	1/2 Core Split
74.48	77.85	3.40	875133	0.55	15.32	105.1	5.2	0.170	0.010	bICD	1/2 Core Split
77.85	81.14	3.30	875134	0.34	8.04	105.7	3.1	0.146	0.009	bICD	1/2 Core Split
81.14	84.40	3.30	875135	0.33	11.59	65.1	4.3	0.131	0.007	bICD	1/2 Core Split
84.40	87.66	3.30	875136	0.44	10.66	76.2	3.9	0.175	0.009	bICD	1/2 Core Split
87.66	89.65	2.00	875137	0.74	0.52	45.5	2.5	0.197	0.008	crenpCCC	1/2 Core Split
Blank	Granite		875138	0.02	1.52	12.0	5.9	0.018	0.002		Quality Control
89.65	92.91	3.30	875139	0.54	16.57	92.6	11.3	0.168	0.008	blfgCD	1/2 Core Split
Duplicate	Previous		875140	0.52	16.91	90.4	11.4	0.161	0.008		Quality Control
92.91	96.25	3.30	875141	0.41	15.64	103.6	6.9	0.155	0.007	blfgCD	1/2 Core Split
96.25	99.51	3.30	875142	0.30	15.62	99.0	4.5	0.155	0.010	blfgCD	1/2 Core Split
99.51	102.75	3.20	875143	0.56	14.1	123.8	2.9	0.150	0.008	blfgCD	1/2 Core Split
102.75	105.82	3.10	875144	0.88	31.89	221.3	6.5	0.199	0.013	blfgCD	1/2 Core Split
105.82	108.76	2.90	875145	0.28	9.76	99.5	5.7	0.136	0.009	blfgAMX	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information			
Logged By	Ryan Kressall		Easting	653,845.447	Central 1	Azimuth	30 °	Date Start	13-Aug-10		
Laboratory	Inspectorate		Northing	7,710,483.374		Inclination	-55 °	Date End	14-Aug-10		
File No.	10-360-03507-01		Elevation	500.948		Length	153.05 Metres	Operator	Taseko		
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
108.76	111.61	2.80	875146	0.42	29.67	198.3	18.5	0.146	0.013	bifgAMX	1/2 Core Split
111.61	115.25	3.60	875147	0.15	2.52	65.1	2.4	0.099	0.007	nmiCD	1/2 Core Split
115.25	118.29	3.00	875148	0.17	46.33	113.2	64.2	0.148	0.008	nlpCD	1/2 Core Split
118.29	121.24	2.90	875149	0.15	72.73	363.1	106.0	0.203	0.019	nlpCD	1/2 Core Split
Standard	OKA-1		875150	0.53	5.94	56.6	32.8	0.321	0.008		Quality Control
121.24	124.39	3.20	875151	0.13	23.82	191.9	32.5	0.174	0.011	nlpCD	1/2 Core Split
124.39	127.44	3.00	875152	0.17	105.81	284.3	136.1	0.205	0.016	nlpCD	1/2 Core Split
127.44	130.49	3.10	875153	0.16	25.65	174.1	20.0	0.216	0.012	nlpCD	1/2 Core Split
130.49	133.54	3.00	875154	0.15	29.1	124.0	35.2	0.374	0.011	nlpCD	1/2 Core Split
133.54	136.59	3.10	875155	0.28	23.16	208.3	19.4	0.305	0.016	nlpCD	1/2 Core Split
136.59	139.53	2.90	875156	0.14	51.66	133.5	25.8	0.188	0.013	nlpCD	1/2 Core Split
139.53	143.41	3.90	875157	0.15	13.14	122.9	9.0	0.134	0.010	nmpAMX	1/2 Core Split
143.41	147.34	3.90	875158	0.12	2.06	155.2	3.8	0.266	0.009	nmiCD	1/2 Core Split
147.34	150.20	2.90	875159	0.07	22.49	169.4	25.9	0.372	0.016	nlpCD	1/2 Core Split
Duplicate	Previous		875160	0.06	22.45	174.1	25.5	0.385	0.015		Quality Control
150.20	153.05	2.90	875161	0.03	11.82	316.8	15.3	0.717	0.028	nlpCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
7.32	111.61	104.29		0.436	16	119.3	5	0.188	0.010		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,017.214	Central 3	Azimuth	30 °	Date Start	14-Aug-10
Laboratory	Inspectorate	Northing	7,710,532.661		Inclination	-45 °	Date End	16-Aug-10
File No.	10-360-03533-01	Elevation	508.175		Length	217.94 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.05	3.00	Not Sampled							CASE	Not Sampled
3.05	6.41	3.40	875162	0.21	27.11	103.7	9.0	0.273	0.011	nmCD	1/2 Core Split
6.41	10.20	3.80	875163	0.34	38.6	218.7	11.4	0.279	0.020	nmCD	1/2 Core Split
10.20	14.02	3.80	875164	0.18	5.02	136.4	3.5	0.162	0.016	nmCD	1/2 Core Split
14.02	18.66	4.60	875165	0.15	14.62	58.8	4.6	0.091	0.006	nmCD	1/2 Core Split
18.66	22.31	3.60	875166	0.07	12.43	29.3	4.3	0.096	0.006	nmfgAMX	1/2 Core Split
22.31	26.12	3.80	875167	0.23	7.52	78.3	3.6	0.126	0.007	nIcAMX	1/2 Core Split
26.12	29.55	3.40	875168	0.34	9.1	151.6	4.8	0.129	0.010	nIcAMX	1/2 Core Split
29.55	33.15	3.60	875169	0.15	8.5	129.4	5.2	0.257	0.015	nIcAMX	1/2 Core Split
Standard	Aley1		875170	0.39	20.87	157.8	9.9	0.199	0.010		Quality Control
33.15	36.43	3.30	875171	0.12	5.44	41.4	3.6	0.097	0.006	nmfgAMX	1/2 Core Split
36.43	39.19	2.80	875172	0.19	59.7	191.0	22.4	0.271	0.014	blcCD	1/2 Core Split
39.19	42.35	3.20	875173	0.22	171.76	225.1	31.8	0.132	0.009	blcCD	1/2 Core Split
42.35	45.52	3.20	875174	0.15	9.08	94.9	4.7	0.125	0.009	blcCD	1/2 Core Split
45.52	47.84	2.30	875175	0.06	20.43	45.9	25.6	0.101	0.007	hmpCCCD	1/2 Core Split
47.84	51.76	3.90	875176	0.17	1.43	43.7	1.8	0.149	0.006	nIcCD	1/2 Core Split
51.76	55.74	4.00	875177	0.17	10.93	63.7	7.3	0.110	0.006	nIcCD	1/2 Core Split
55.74	58.62	2.90	875178	0.40	3.35	130.3	6.4	0.139	0.008	nmCD	1/2 Core Split
58.62	61.86	3.20	875179	0.14	46.99	268.8	6.7	0.227	0.011	nmCD	1/2 Core Split
Duplicate	Previous		875180	0.14	44.21	272.5	7.1	0.224	0.012		Quality Control
61.86	66.30	4.40	875181	0.24	122.7	271.7	109.4	0.112	0.007	nmCD	1/2 Core Split
66.30	69.47	3.20	875182	0.14	47.68	104.0	15.9	0.632	0.011	nxCD	1/2 Core Split
69.47	71.90	2.40	875183	0.07	67.52	172.4	33.9	0.225	0.015	nxCD	1/2 Core Split
71.90	75.00	3.10	875184	0.12	8.7	270.7	7.8	0.204	0.018	nxCD	1/2 Core Split
75.00	78.05	3.00	875185	0.05	5.96	117.3	5.2	0.257	0.016	nxCD	1/2 Core Split
78.05	81.10	3.00	875186	0.06	6.84	195.6	5.3	0.276	0.017	nxCD	1/2 Core Split
81.10	84.75	3.70	875187	0.04	1.64	242.1	7.6	0.363	0.018	nxCD	1/2 Core Split
84.75	87.20	2.50	Not Sampled							nxCD	Not Sampled
87.20	90.25	3.00	875188	0.09	17.62	122.6	13.5	1.654	0.022	nxCD	1/2 Core Split
90.25	93.29	3.00	875189	0.31	26.95	417.7	15.5	0.593	0.020	nxCD	1/2 Core Split
Standard	Aley3		875190	0.80	30.29	290.4	8.4	0.219	0.011		Quality Control
93.29	96.34	3.00	875191	0.17	65.97	261.4	13.5	0.602	0.014	nxCD	1/2 Core Split
96.34	100.06	3.70	875192	0.08	22.42	46.8	15.0	0.991	0.009	nxCD	1/2 Core Split
100.06	103.08	3.00	875193	0.20	160.94	143.5	138.0	0.152	0.009	nIcCD	1/2 Core Split
103.08	106.14	3.10	875194	0.04	9.53	43.5	10.5	0.636	0.007	nIcCD	1/2 Core Split
106.14	108.78	2.60	875195	0.26	130.66	170.2	50.8	0.344	0.016	nIcCD	1/2 Core Split
108.78	111.79	3.00	875196	0.10	126.94	137.3	99.3	0.249	0.012	nIcCD	1/2 Core Split
111.79	115.30	3.50	875197	0.13	64.61	155.7	27.5	0.499	0.013	nIcCD	1/2 Core Split
115.30	118.86	3.60	875198	0.32	13.6	144.1	9.5	0.291	0.011	nIcCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,017.214	Central 3	Azimuth	30 °	Date Start	14-Aug-10
Laboratory	Inspectorate	Northing	7,710,532.661		Inclination	-45 °	Date End	16-Aug-10
File No.	10-360-03533-01	Elevation	508.175		Length	217.94 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
118.86	122.43	3.60	875199	0.03	9.19	70.6	9.5	0.271	0.008	nICD	1/2 Core Split
Duplicate	Previous		875200	0.03	9.25	76.9	9.6	0.280	0.008		Quality Control
122.43	125.98	3.50	875201	0.02	3.73	145.0	4.4	0.243	0.011	nICD	1/2 Core Split
125.98	128.99	3.00	875202	0.12	6.98	191.8	15.4	0.276	0.016	nICD	1/2 Core Split
128.99	132.93	3.90	875203	0.08	13.88	143.8	11.9	0.317	0.014	nICD	1/2 Core Split
132.93	135.39	2.50	875204	0.47	12.79	255.1	28.3	0.408	0.015	nxfgcd	1/2 Core Split
135.39	138.44	3.10	875205	0.14	0.62	88.5	3.4	0.178	0.007	nICD	1/2 Core Split
138.44	141.47	3.00	875206	0.20	0.59	76.2	3.5	0.175	0.008	nICD	1/2 Core Split
141.47	144.52	3.10	875207	0.04	0.28	48.0	1.0	0.075	0.004	nICD	1/2 Core Split
144.52	146.80	2.30	875208	0.11	2.34	107.6	5.6	0.385	0.011	nICD	1/2 Core Split
146.80	149.99	3.20	875209	0.16	2.22	69.1	3.9	0.154	0.006	nmCD	1/2 Core Split
Standard	OKA-1		875210	0.53	36.01	43.1	27.9	0.318	0.008		Quality Control
149.99	152.48	2.50	875211	0.05	1.16	54.1	2.7	0.495	0.005	nmCD	1/2 Core Split
152.48	155.28	2.80	875212	0.29	3	138.1	5.5	0.297	0.009	nmCD	1/2 Core Split
155.28	157.50	2.20	875213	0.58	5.77	128.8	8.7	0.204	0.012	bICD	1/2 Core Split
157.50	160.37	2.90	875214	0.10	1.08	68.2	2.1	0.213	0.007	bICD	1/2 Core Split
160.37	163.51	3.10	875215	0.34	4.82	102.6	4.7	0.326	0.009	bICD	1/2 Core Split
163.51	166.46	3.00	875216	0.45	6.3	77.0	5.8	0.825	0.016	bICD	1/2 Core Split
Blank	Granite		875217	<0.01	1.41	10.0	3.9	0.027	0.002		Quality Control
166.46	170.01	3.50	875218	0.32	4.91	148.8	5.8	0.401	0.012	bICD	1/2 Core Split
170.01	173.34	3.30	875219	0.32	16.58	196.8	21.4	0.145	0.015	bICD	1/2 Core Split
Duplicate	Previous		875220	0.30	17.3	201.7	22.0	0.137	0.014		Quality Control
173.34	176.84	3.50	875221	0.23	93.94	189.9	94.2	0.176	0.012	bICD	1/2 Core Split
176.84	179.49	2.70	875222	0.19	102.91	188.2	81.7	0.159	0.008	blpCCCD	1/2 Core Split
179.49	183.61	4.10	875223	0.16	21.85	147.8	187.7	0.173	0.010	blpCCCD	1/2 Core Split
183.61	186.55	2.90	875224	0.38	6.63	138.1	5.4	0.179	0.009	dmCD	1/2 Core Split
186.55	189.30	2.80	875225	0.26	186.1	237.7	110.8	0.162	0.011	dmCD	1/2 Core Split
189.30	192.40	3.10	875226	0.15	105.62	196.9	63.6	0.236	0.010	dmCD	1/2 Core Split
192.40	195.52	3.10	875227	0.15	0.3	39.6	10.9	0.150	0.011	dmpCC	1/2 Core Split
195.52	198.89	3.40	875228	0.11	8.97	67.8	13.9	0.138	0.009	dmpCC	1/2 Core Split
198.89	202.18	3.30	875229	0.02	9.32	41.3	3.6	0.204	0.008	dmpCD	1/2 Core Split
Standard	Aley2		875230	0.75	44.04	183.7	2.3	0.218	0.013		Quality Control
202.18	206.60	4.40	875231	0.02	10.12	33.8	5.6	0.147	0.008	dmpCD	1/2 Core Split
206.60	209.77	3.20	875232	0.07	2.03	72.0	2.5	0.127	0.007	nmCD	1/2 Core Split
209.77	212.99	3.20	875233	0.27	17.6	160.3	6.3	0.179	0.009	nmCD	1/2 Core Split
212.99	215.49	2.50	875234	0.17	25.34	203.6	12.9	0.270	0.007	nmCD	1/2 Core Split
215.49	217.94	2.40	875235	0.32	34.39	282.0	18.2	0.209	0.011	nmCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,851.320	Central 1	Azimuth	40 °	Date Start	15-Aug-10
Laboratory	Inspectorate	Northing	7,710,504.580		Inclination	-55 °	Date End	16-Aug-10
File No.	10-360-03558-01	Elevation	502.734		Length	215.24 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.05	3.00	Not Sampled							CASE	Not Sampled
3.05	6.61	3.60	875236	0.44	15	73.0	4.0	0.222	0.009	nICD	1/2 Core Split
6.61	10.07	3.50	875237	0.51	34	162.0	6.0	0.204	0.008	nICD	1/2 Core Split
10.07	13.39	3.30	875238	0.51	29	124.0	4.0	0.188	0.007	nICD	1/2 Core Split
13.39	17.07	3.70	875239	0.41	14	74.0	4.0	0.250	0.007	nICD	1/2 Core Split
Duplicate	Previous		875240	0.35	13	72.0	4.0	0.248	0.007		Quality Control
17.07	20.12	3.10	875241	0.64	19	103.0	6.0	0.229	0.008	blCD	1/2 Core Split
20.12	23.17	3.10	875242	0.49	24	107.0	9.0	0.191	0.007	blCD	1/2 Core Split
Blank	Granite		875243	0.01	2	9.0	4.0	0.017	0.002		Quality Control
23.17	26.22	3.00	875244	0.42	140	135.0	32.0	0.173	0.010	blCD	1/2 Core Split
26.22	29.27	3.10	875245	0.31	11	71.0	3.0	0.167	0.006	blCD	1/2 Core Split
Standard	OKA-1		285051	0.51	21	53.0	28.0	0.318			Quality Control
29.27	32.67	3.40	875246	0.65	25	140.0	4.0	0.204	0.008	blCD	1/2 Core Split
32.67	35.54	2.90	875247	0.49	15	124.0	3.0	0.168	0.008	blpCD	1/2 Core Split
35.54	38.41	2.90	875248	0.36	39	61.0	16.0	0.176	0.009	blpCD	1/2 Core Split
38.41	41.46	3.10	875249	0.36	49	85.0	14.0	0.187	0.010	blpCD	1/2 Core Split
Duplicate	Previous		875250	0.34	63	81.0	17.0	0.193	0.010		Quality Control
41.46	44.92	3.50	875251	0.37	16	115.0	4.0	0.155	0.008	blCD	1/2 Core Split
44.92	47.99	3.10	875252	0.48	11	91.0	5.0	0.174	0.006	blCD	1/2 Core Split
47.99	51.19	3.20	875253	0.37	17	117.0	5.0	0.175	0.008	blCD	1/2 Core Split
51.19	54.36	3.20	875254	0.65	37	196.0	15.0	0.211	0.010	blCD	1/2 Core Split
54.36	58.34	4.00	875255	0.46	15	128.0	4.0	0.194	0.011	blCD	1/2 Core Split
58.34	61.69	3.30	875256	0.16	8	56.0	3.0	0.186	0.006	blCD	1/2 Core Split
61.69	64.90	3.20	875257	0.11	42	108.0	9.0	0.153	0.006	blCD	1/2 Core Split
64.90	68.00	3.10	875258	0.17	148	127.0	71.0	0.262	0.007	blCD	1/2 Core Split
68.00	71.05	3.00	875259	0.09	121	117.0	96.0	0.236	0.009	blCD	1/2 Core Split
Duplicate	Previous		875260	0.11	117	119.0	95.0	0.239	0.009		Quality Control
71.05	73.90	2.90	875261	0.16	103	335.0	59.0	0.314	0.015	blCD	1/2 Core Split
73.90	77.66	3.80	875262	0.40	79	348.0	64.0	0.257	0.015	blpCD	1/2 Core Split
77.66	81.31	3.70	875263	0.26	124	291.0	92.0	0.262	0.017	blpCD	1/2 Core Split
81.31	83.46	2.10	875264	0.83	3	368.0	23.0	0.191	0.010	blCCCD	1/2 Core Split
83.46	86.52	3.10	875265	0.82	165	254.0	153.0	0.266	0.012	bmCD	1/2 Core Split
Standard	Aley1		285052	0.40	24	158.0	10.0	0.209			Quality Control
86.52	89.58	3.10	875266	0.11	19	38.0	7.0	0.433	0.010	bmCD	1/2 Core Split
89.58	92.45	2.90	875267	0.06	102	143.0	88.0	0.294	0.017	bmCD	1/2 Core Split
92.45	95.51	3.10	875268	0.01	10	52.0	5.0	0.215	0.009	bmCD	1/2 Core Split
95.51	98.24	2.70	875269	0.20	91	112.0	48.0	0.254	0.014	bmCD	1/2 Core Split
Duplicate	Previous		875270	0.18	85	106.0	45.0	0.237	0.013		Quality Control
98.24	103.51	5.30	875271	0.09	58	109.0	21.0	0.280	0.005	nmpAMX	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	653,851.320	Central 1	Azimuth	40 °	Date Start	15-Aug-10
Laboratory	Inspectorate	Northing	7,710,504.580		Inclination	-55 °	Date End	16-Aug-10
File No.	10-360-03558-01	Elevation	502.734		Length	215.24 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
103.51	106.60	3.10	875272	0.06	109	50.0	115.0	0.206	0.010	blpCD	1/2 Core Split
106.60	109.80	3.20	875273	0.08	86	66.0	59.0	0.280	0.010	blpCD	1/2 Core Split
109.80	112.89	3.10	875274	0.01	32	10.0	46.0	0.249	0.010	blpCD	1/2 Core Split
112.89	116.00	3.10	875275	0.03	87	21.0	134.0	0.221	0.011	blpCD	1/2 Core Split
116.00	119.16	3.20	875276	0.05	82	40.0	73.0	0.231	0.012	blpCD	1/2 Core Split
119.16	123.10	3.90	875277	0.05	7	37.0	8.0	0.196	0.005	nmAMX	1/2 Core Split
123.10	127.48	4.40	875278	0.03	24	35.0	21.0	0.650	0.006	nmAMX	1/2 Core Split
127.48	130.45	3.00	875279	0.08	18	169.0	21.0	0.223	0.015	blpCD	1/2 Core Split
Duplicate	Previous		875280	0.10	19	165.0	20.0	0.244	0.015		Quality Control
130.45	133.68	3.20	875281	0.10	3	44.0	3.0	0.300	0.009	blpCD	1/2 Core Split
133.68	136.44	2.80	875282	0.08	1	22.0	2.0	0.280	0.007	blpCD	1/2 Core Split
136.44	140.24	3.80	875283	0.06	4	29.0	6.0	0.280	0.004	nmpAMX	1/2 Core Split
140.24	143.94	3.70	875284	0.07	3	40.0	5.0	0.085	0.006	nmpAMX	1/2 Core Split
143.94	148.17	4.20	875285	0.09	16	597.0	18.0	0.121	0.030	nmpAMX	1/2 Core Split
Standard	Aley2		285053	0.69	45	192.0	2.0	0.229			Quality Control
148.17	151.79	3.60	875286	0.07	12	42.0	9.0	0.127	0.007	nmpAMX	1/2 Core Split
151.79	155.25	3.50	875287	0.09	19	97.0	9.0	0.184	0.011	nmpAMX	1/2 Core Split
155.25	157.90	2.70	875288	0.06	41	21.0	34.0	0.181	0.011	nlpCC	1/2 Core Split
157.90	161.24	3.30	875289	0.08	89	102.0	145.0	0.200	0.012	nlpCC	1/2 Core Split
Duplicate	Previous		875290	0.08	82	91.0	143.0	0.191	0.012		Quality Control
161.24	163.66	2.40	875291	0.11	123	81.0	136.0	0.145	0.007	nlpCC	1/2 Core Split
163.66	165.89	2.20	875292	0.36	197	222.0	234.0	0.203	0.012	nlpCC	1/2 Core Split
165.89	168.61	2.70	875293	0.28	191	314.0	81.0	0.208	0.014	blpCD	1/2 Core Split
168.61	171.26	2.60	875294	0.09	16	69.0	16.0	0.111	0.009	blpCD	1/2 Core Split
171.26	174.57	3.30	875295	0.11	49	91.0	45.0	0.104	0.006	nmAM	1/2 Core Split
174.57	177.91	3.30	875296	0.04	17	27.0	15.0	0.060	0.004	nmAM	1/2 Core Split
177.91	181.71	3.80	875297	0.13	32	94.0	28.0	0.194	0.010	blpAMX	1/2 Core Split
181.71	185.89	4.20	875298	0.18	13	108.0	61.0	0.163	0.011	blpAMX	1/2 Core Split
185.89	189.63	3.70	875299	0.25	82	246.0	57.0	0.200	0.013	blpCD	1/2 Core Split
Duplicate	Previous		875300	0.26	89	233.0	64.0	0.201	0.013		Quality Control
189.63	192.80	3.20	875301	0.06	111	123.0	127.0	0.198	0.014	blpCD	1/2 Core Split
192.80	196.16	3.40	875302	0.05	93	142.0	109.0	0.254	0.013	blpCD	1/2 Core Split
196.16	200.60	4.40	875303	0.07	23	107.0	27.0	0.284	0.010	nlpAMX	1/2 Core Split
200.60	205.17	4.60	875304	0.07	45	178.0	42.0	0.331	0.017	nlpAMX	1/2 Core Split
205.17	209.80	4.60	875305	0.13	63	120.0	63.0	0.194	0.008	nlpAMX	1/2 Core Split
209.80	212.58	2.80	875306	0.06	49	102.0	58.0	0.161	0.005	nmfgAM	1/2 Core Split
212.58	215.24	2.70	875307	0.10	122	112.0	150.0	0.156	0.008	nmfgAM	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information			
Logged By	Ryan Kressall		Easting	653,851.320	Central 1	Azimuth	40 °	Date Start	15-Aug-10		
Laboratory	Inspectorate		Northing	7,710,504.580		Inclination	-55 °	Date End	16-Aug-10		
File No.	10-360-03558-01		Elevation	502.734		Length	215.24 Metres	Operator	Taseko		
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
Drill Hole Selected Interval - Weighted Average Analytical Results											
Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
3.05	58.34	55.29		0.466	29	112.5	8	0.194	0.008		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,025.429	Central 3	Azimuth	30 °	Date Start	18-Aug-10
Laboratory	Inspectorate	Northing	7,710,481.728		Inclination	-45 °	Date End	19-Aug-10
File No.	10-360-03576-01	Elevation	511.387		Length	213.72 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.45	3.40	Not Sampled							CASE	Not Sampled
3.45	7.14	3.70	912536	0.33	26.56	107.5	4.2	0.281	0.010	blfCD	1/2 Core Split
7.14	10.56	3.40	912537	0.30	35.19	93.4	4.8	0.156	0.009	blfCD	1/2 Core Split
10.56	13.49	2.90	912538	0.64	9.82	135.1	2.6	0.158	0.011	blfCD	1/2 Core Split
13.49	17.43	3.90	912539	0.42	6.06	176.8	2.4	0.127	0.017	blfCD	1/2 Core Split
Duplicate	Previous		912540	0.43	6.6	192.2	2.5	0.135	0.017		Quality Control
17.43	21.06	3.60	912541	0.20	7.33	102.5	3.8	0.158	0.024	blfCD	1/2 Core Split
21.06	24.67	3.60	912542	0.50	30.54	308.5	3.8	0.147	0.017	blfCD	1/2 Core Split
24.67	28.21	3.50	912543	0.12	0.76	134.3	2.5	0.187	0.023	blcCD	1/2 Core Split
28.21	31.48	3.30	912544	0.25	0.43	80.8	2.2	0.116	0.016	blcCD	1/2 Core Split
31.48	35.01	3.50	912545	0.31	9.9	330.8	6.3	0.193	0.038	blcCD	1/2 Core Split
35.01	38.00	3.00	912546	0.23	1.41	112.8	2.3	0.204	0.015	blcCD	1/2 Core Split
38.00	41.75	3.80	912547	0.54	4.29	130.4	3.1	0.170	0.013	blcCD	1/2 Core Split
41.75	46.08	4.30	912548	0.43	22	125.5	20.6	0.191	0.010	blcCD	1/2 Core Split
46.08	49.61	3.50	912549	0.22	10.38	117.3	6.8	0.158	0.017	nliCD	1/2 Core Split
Standard	Aley2		912550	0.68	41.62	153.8	2.3	0.228	0.012		Quality Control
49.61	52.99	3.40	912551	0.19	8.95	85.0	4.0	0.147	0.010	nliCD	1/2 Core Split
52.99	56.52	3.50	912552	0.37	10.7	102.6	3.6	0.199	0.012	nliCD	1/2 Core Split
56.52	59.83	3.30	912553	0.18	4.52	128.8	3.0	0.208	0.011	nliCD	1/2 Core Split
59.83	63.17	3.30	912554	0.14	10.18	85.3	2.6	0.248	0.010	nliCD	1/2 Core Split
63.17	66.32	3.10	912555	0.30	20.19	107.4	7.6	0.299	0.010	blcCD	1/2 Core Split
66.32	69.39	3.10	912556	0.27	10.71	101.7	8.9	0.180	0.011	blcCD	1/2 Core Split
69.39	72.56	3.20	912557	0.21	40.41	113.2	15.6	0.142	0.008	blcCD	1/2 Core Split
72.56	75.95	3.40	912558	0.21	30.47	114.6	13.3	0.121	0.006	nliCD	1/2 Core Split
75.95	79.31	3.40	912559	0.23	3.98	99.0	2.8	0.133	0.010	nliCD	1/2 Core Split
Duplicate	Previous		912560	0.22	3.78	97.6	2.6	0.129	0.011		Quality Control
79.31	82.67	3.40	912561	0.17	18.23	168.7	5.5	0.123	0.013	blcCD	1/2 Core Split
82.67	85.66	3.00	912562	0.04	1.29	76.9	2.8	0.174	0.009	blcCD	1/2 Core Split
85.66	88.90	3.20	912563	0.15	12.36	316.8	4.5	0.319	0.024	blcCD	1/2 Core Split
88.90	92.53	3.60	912564	0.26	1.33	129.0	2.4	0.156	0.015	blcCD	1/2 Core Split
92.53	96.03	3.50	912565	0.18	1.28	70.8	2.3	0.193	0.008	nmiCD	1/2 Core Split
96.03	99.55	3.50	912566	0.07	0.75	51.9	0.6	0.083	0.006	nmiCD	1/2 Core Split
99.55	102.85	3.30	912567	0.08	3.14	64.3	2.7	0.174	0.015	nmiCD	1/2 Core Split
102.85	105.31	2.50	912568	0.10	1.83	66.0	3.9	0.473	0.037	nmiCD	1/2 Core Split
105.31	107.72	2.40	912569	0.56	5.54	72.3	3.1	0.351	0.018	blfgCD	1/2 Core Split
107.72	110.21	2.50	912571	0.39	6.65	260.0	5.4	0.378	0.019	blfgCD	1/2 Core Split
110.21	113.78	3.60	912572	1.04	8	227.6	4.1	0.268	0.010	blCM	1/2 Core Split
Standard	OKA-1		912570	0.53	41.64	52.8	26.8	0.323	0.007		Quality Control
113.78	117.26	3.50	912573	1.17	0.16	158.2	3.9	0.245	0.008	blCM	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,025.429	Central 3	Azimuth	30 °	Date Start	18-Aug-10
Laboratory	Inspectorate	Northing	7,710,481.728		Inclination	-45 °	Date End	19-Aug-10
File No.	10-360-03576-01	Elevation	511.387		Length	213.72 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
117.26	121.07	3.80	912574	1.55	0.46	138.6	6.2	0.317	0.010	blCM	1/2 Core Split
Blank	Granite		912575	0.02	1.68	10.9	3.6	0.023	0.002		Quality Control
121.07	125.13	4.10	912576	1.45	0.44	160.5	9.2	0.321	0.009	blCM	1/2 Core Split
125.13	128.26	3.10	912577	0.56	44.6	166.2	20.3	0.279	0.012	blfCC	1/2 Core Split
128.26	131.62	3.40	912578	0.59	3.88	178.7	24.6	0.296	0.009	blfCC	1/2 Core Split
131.62	135.61	4.00	912579	0.45	5.05	173.7	5.4	0.222	0.013	nlfGCD	1/2 Core Split
Duplicate	Previous		912580	0.44	5.54	187.3	5.1	0.215	0.012		Quality Control
135.61	139.63	4.00	912581	0.26	5.48	194.8	5.7	0.207	0.016	nlfGCD	1/2 Core Split
139.63	143.71	4.10	912582	0.25	10.41	367.2	9.9	0.295	0.036	nlfGCD	1/2 Core Split
143.71	147.82	4.10	912583	0.18	1.34	108.8	3.2	0.270	0.008	nlfGCD	1/2 Core Split
147.82	151.14	3.30	912584	1.05	13.24	148.6	3.7	0.202	0.010	gmfgCD	1/2 Core Split
151.14	154.51	3.40	912585	0.20	5.49	58.5	4.3	0.150	0.006	nlpAMX	1/2 Core Split
154.51	158.02	3.50	912586	0.41	55.08	111.9	63.1	0.291	0.008	nlpAMX	1/2 Core Split
158.02	161.43	3.40	912587	0.25	11.45	98.9	8.3	0.288	0.009	nlpAMX	1/2 Core Split
161.43	164.70	3.30	912588	0.22	1.36	50.4	2.4	0.130	0.006	nlpAMX	1/2 Core Split
164.70	168.36	3.70	912589	0.16	7.41	89.8	4.3	0.135	0.008	nlpAMX	1/2 Core Split
Standard	Aley1		912590	0.40	23.57	160.3	9.7	0.201	0.010		Quality Control
168.36	171.88	3.50	912591	0.50	5.74	139.7	3.3	0.745	0.007	nlpAMX	1/2 Core Split
171.88	175.18	3.30	912592	0.24	15.34	61.7	8.2	0.222	0.006	nlpAMX	1/2 Core Split
175.18	178.32	3.10	912593	0.37	8.47	125.3	6.3	0.518	0.007	nmAM	1/2 Core Split
178.32	181.53	3.20	912594	0.27	3.14	60.4	5.4	0.227	0.007	nmAM	1/2 Core Split
181.53	184.80	3.30	912595	0.21	20.98	47.2	4.4	0.155	0.004	nmAM	1/2 Core Split
184.80	188.00	3.20	912596	0.09	13.31	45.9	8.8	0.288	0.005	nmAM	1/2 Core Split
188.00	191.76	3.80	912597	0.86	4.57	133.1	9.7	0.492	0.008	blcAMX	1/2 Core Split
191.76	194.51	2.80	912598	0.24	54.88	128.1	10.6	0.259	0.008	blcAMX	1/2 Core Split
194.51	198.07	3.60	912599	0.11	10.67	17.1	7.2	1.038	0.006	nmfgCD	1/2 Core Split
Duplicate	Previous		912600	0.10	11.51	17.0	7.6	1.048	0.006		Quality Control
198.07	201.60	3.50	912601	0.10	0.11	83.1	4.7	0.487	0.013	nmfgCD	1/2 Core Split
201.60	205.20	3.60	912602	0.06	9.04	105.0	7.0	0.724	0.010	nmfgCD	1/2 Core Split
205.20	208.61	3.40	912603	0.11	4.66	57.8	5.2	0.189	0.007	nmfgCD	1/2 Core Split
208.61	211.67	3.10	912604	0.06	38.59	93.9	27.6	0.303	0.010	nmfgCD	1/2 Core Split
211.67	213.72	2.10	912605	0.10	30.88	105.9	29.0	0.398	0.010	nmfgCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
3.45	46.08	42.63		0.357	13	154.1	5	0.181	0.017		
105.31	135.61	30.30		0.905	8	170.9	9	0.346	0.012		
110.21	125.13	14.92	Incl.	1.312	2	170.4	6	0.331	0.009		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,043.110	Central 3	Azimuth	30 °	Date Start	
Laboratory	Inspectorate	Northing	7,710,517.535		Inclination	-45 °	Date End	
File No.	10-360-03594-01	Elevation	522.521		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.05	3.00	Not Sampled							CASE	Not Sampled
Standard	Aley1		912750	0.43	21.85	168.7	10.1	0.229	0.009		Quality Control
3.05	6.30	3.20	912751	0.37	25.34	155.1	3.5	0.203	0.008	nmfgCD	1/2 Core Split
6.30	11.30	5.00	912752	0.33	29.38	245.0	5.0	0.163	0.010	gliCD	1/2 Core Split
11.30	14.30	3.00	912753	0.37	49.52	347.2	6.8	0.220	0.012	gliCD	1/2 Core Split
14.30	17.80	3.50	912754	0.67	18.44	248.8	7.2	0.258	0.012	gliCD	1/2 Core Split
17.80	20.34	2.50	912755	0.52	11.32	227.7	5.4	0.205	0.011	gliCD	1/2 Core Split
20.34	23.05	2.71	912756	0.40	0.24	337.1	7.8	0.275	0.014	gliCD	1/2 Core Split
23.05	25.87	2.80	912757	0.29	1.15	424.2	2.6	0.334	0.008	nmiCD	1/2 Core Split
25.87	30.09	4.20	912758	0.30	42.04	409.4	22.3	0.175	0.019	glfgCD	1/2 Core Split
30.09	33.54	3.40	912759	0.65	9.85	355.5	7.1	0.295	0.019	gmiCD	1/2 Core Split
Duplicate	Previous		912760	0.09	9.93	362.5	7.0	0.306	0.017		Quality Control
33.54	36.97	3.40	912993	0.08	1.75	306.9	3.1	0.379	0.012	gmiCD	1/2 Core Split
36.97	40.40	3.40	912994	<0.01	0.14	593.0	3.5	0.371	0.013	gmiCD	1/2 Core Split
40.40	43.61	3.20	912995	0.36	7.58	280.7	5.1	0.327	0.011	gmiCD	1/2 Core Split
43.61	47.33	3.70	912996	0.36	6.71	290.1	5.1	0.314	0.010	gmfCCCD	1/2 Core Split
47.33	51.01	3.70	912997	0.98	11.06	254.6	16.7	0.322	0.015	gmfCCCD	1/2 Core Split
51.01	54.88	3.90	912998	0.87	25.65	261.1	12.1	0.339	0.013	gmfCCCD	1/2 Core Split
Blank	Granite		912999	<0.01	1.81	11.7	4.0	0.023	0.002		Quality Control
54.88	58.45	3.60	912833	<0.01	20.9	343.7	9.7	0.276	0.013	gmfCCCD	1/2 Core Split
58.45	62.10	3.60	912834	0.51	10.08	182.8	5.3	0.239	0.011	gmfCCCD	1/2 Core Split
62.10	65.49	3.40	912835	0.17	2.62	300.0	10.3	0.319	0.015	bliCD	1/2 Core Split
65.49	69.15	3.70	912836	0.19	3.8	235.8	5.5	0.303	0.013	bliCD	1/2 Core Split
69.15	72.64	3.50	912837	0.20	11.39	232.7	8.1	0.251	0.011	bliCD	1/2 Core Split
72.64	76.22	3.60	912838	0.17	5.55	365.1	8.3	0.363	0.020	bliCD	1/2 Core Split
76.22	79.37	3.20	912839	0.19	10.05	249.5	5.0	0.209	0.012	bliCD	1/2 Core Split
Duplicate	Previous		912840	0.19	10.66	269.8	5.0	0.224	0.013		Quality Control
79.37	82.88	3.50	912841	0.52	2.8	335.7	6.4	0.327	0.016	bliCD	1/2 Core Split
82.88	86.49	3.60	912842	0.54	7.77	492.4	10.2	0.317	0.012	bliCD	1/2 Core Split
86.49	89.74	3.20	912843	0.88	5.06	146.4	4.8	0.167	0.007	blfgAMX	1/2 Core Split
89.74	92.97	3.20	912844	0.31	43.56	482.6	10.3	0.366	0.015	blfgAMX	1/2 Core Split
92.97	95.95	3.00	912845	0.12	1.7	162.9	3.2	0.096	0.008	blfgAMX	1/2 Core Split
95.95	99.45	3.50	912846	0.12	26.83	146.4	11.1	0.122	0.009	blfgAMX	1/2 Core Split
99.45	102.78	3.30	912847	0.31	25.74	165.6	9.9	0.234	0.012	blfgAMX	1/2 Core Split
102.78	106.54	3.80	912848	0.19	8.33	380.3	42.1	0.172	0.022	blfgAMX	1/2 Core Split
106.54	109.76	3.20	912849	0.63	16.71	278.3	9.0	0.176	0.010	nmiCD	1/2 Core Split
Standard	OKA-1		907550	0.55	20	50.0	28.0	0.321	0.007		Quality Control
109.76	112.80	3.00	907551	0.02	3	401.0	7.0	0.361	0.016	nmiCD	1/2 Core Split
112.80	115.85	3.00	907552	0.02	2	293.0	4.0	0.268	0.018	nmiCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,043.110	Central 3	Azimuth	30 °	Date Start	
Laboratory	Inspectorate	Northing	7,710,517.535		Inclination	-45 °	Date End	
File No.	10-360-03594-01	Elevation	522.521		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
115.85	118.90	3.10	907553	0.04	31	71.0	4.0	0.198	0.010	gmiCM	1/2 Core Split
118.90	121.53	2.60	907554	0.09	15	174.0	7.0	0.159	0.008	blfgCD	1/2 Core Split
121.53	123.90	2.40	907555	0.21	8	200.0	5.0	0.395	0.010	blfgCD	1/2 Core Split
123.90	127.39	3.50	907556	0.06	8	308.0	9.0	0.307	0.015	bliCD	1/2 Core Split
127.39	130.91	3.50	907557	0.17	5	216.0	5.0	0.547	0.011	bliCD	1/2 Core Split
130.91	134.30	3.40	907558	0.08	2	299.0	5.0	0.295	0.010	bliCD	1/2 Core Split
134.30	137.82	3.50	907559	0.16	4	192.0	4.0	0.135	0.009	bliCD	1/2 Core Split
Duplicate	Previous		907560	0.14	4	178.0	4.0	0.135	0.010		Quality Control
137.82	139.18	1.40	907561	0.06	34	124.0	34.0	0.161	0.008	gmiCM	1/2 Core Split
139.18	142.96	3.80	907562	0.19	19	323.0	13.0	0.379	0.012	glcCD	1/2 Core Split
142.96	146.44	3.50	907563	0.09	8	114.0	9.0	0.880	0.019	glcCD	1/2 Core Split
146.44	150.49	4.10	907564	0.11	84	175.0	62.0	0.292	0.013	glcCD	1/2 Core Split
150.49	152.99	2.50	907565	0.40	137	343.0	106.0	0.237	0.011	blfgCD	1/2 Core Split
152.99	155.58	2.60	907566	0.13	50	258.0	21.0	0.412	0.013	nmpCD	1/2 Core Split
155.58	158.54	3.00	907567	0.09	3	176.0	5.0	0.369	0.009	nmpCD	1/2 Core Split
158.54	161.59	3.10	907568	0.14	2	257.0	5.0	0.732	0.014	nmpCD	1/2 Core Split
161.59	164.63	3.00	907569	0.12	6	214.0	5.0	0.753	0.011	nmpCD	1/2 Core Split
Duplicate	Previous		907570	0.14	5	201.0	4.0	0.751	0.011		Quality Control
Standard	Aley1		285054	0.43	26	165.0	12.0	0.207			Quality Control
164.63	167.68	3.10	907571	0.11	5	217.0	6.0	0.408	0.014	nmpCD	1/2 Core Split
167.68	170.73	3.00	907572	0.12	1	248.0	4.0	0.418	0.012	nmpCD	1/2 Core Split
170.73	173.78	3.10	907573	0.07	3	86.0	2.0	0.179	0.009	nmpCD	1/2 Core Split
173.78	176.83	3.10	907574	0.02	6	124.0	3.0	0.225	0.015	nmpCD	1/2 Core Split
176.83	179.88	3.00	907575	0.02	6	124.0	3.0	0.258	0.013	nmpCD	1/2 Core Split
179.88	182.93	3.10	907576	0.03	9	95.0	4.0	0.217	0.010	nmpCD	1/2 Core Split
182.93	185.98	3.00	907577	0.02	9	138.0	3.0	0.265	0.011	nmpCD	1/2 Core Split
185.98	189.02	3.00	907578	0.04	21	165.0	10.0	0.264	0.011	nmpCD	1/2 Core Split
189.02	192.07	3.00	907579	0.01	10	271.0	5.0	0.323	0.011	nmpCD	1/2 Core Split
Duplicate	Previous		907580	0.01	10	272.0	5.0	0.329	0.012		Quality Control
192.07	195.70	3.60	907581	0.08	35	149.0	26.0	0.177	0.012	nmpCD	1/2 Core Split
195.70	198.40	2.70	907582	0.17	186	164.0	143.0	0.134	0.007	gliCM	1/2 Core Split
198.40	201.22	2.80	907583	0.25	9	307.0	398.0	0.160	0.010	gliCM	1/2 Core Split
201.22	203.71	2.50	907584	0.16	112	559.0	46.0	0.227	0.029	glcCD	1/2 Core Split
203.71	206.82	3.10	907585	0.23	22	120.0	22.0	0.179	0.009	bliCM	1/2 Core Split
206.82	208.87	2.10	907586	0.12	49	157.0	33.0	0.198	0.010	bliCM	1/2 Core Split
208.87	213.41	4.60	907587	0.08	41	235.0	24.0	0.295	0.012	blpCD	1/2 Core Split



Hole ID

2010-028

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information			
Logged By	Ryan Kressall		Easting	654,043.110	Central 3	Azimuth	30 °	Date Start			
Laboratory	Inspectorate		Northing	7,710,517.535		Inclination	-45 °	Date End			
File No.	10-360-03594-01		Elevation	522.521		Length	213.41 Metres	Operator	Taseko		
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
Drill Hole Selected Interval - Weighted Average Analytical Results											
Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
3.05	62.10	59.05		0.477	17	308.1	8	0.315	0.013		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,048.646	Central 3	Azimuth	30 °	Date Start	18-Aug-10
Laboratory	Inspectorate	Northing	7,710,486.881		Inclination	-45 °	Date End	19-Aug-10
File No.	10-360-03593-01	Elevation	526.458		Length	215.85 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	4.49	4.50	Not Sampled							CASE	Not Sampled
4.49	7.63	3.10	912919	0.27	6.01	44.3	1.0	0.095	0.004	blfgCD	1/2 Core Split
7.63	10.74	3.10	912921	0.39	6.75	97.1	1.9	0.110	0.005	blfgCD	1/2 Core Split
10.74	13.70	3.00	912922	0.25	7.76	96.3	1.3	0.093	0.005	blfgCD	1/2 Core Split
13.70	17.29	3.60	912923	0.42	6	107.0	1.3	0.103	0.005	blfgCD	1/2 Core Split
17.29	20.50	3.20	912924	0.82	12.19	169.4	2.2	0.157	0.006	glfgCD	1/2 Core Split
Blank	Granite		912925	0.01	1.69	10.2	4.1	0.017	0.002		Quality Control
20.50	23.78	3.30	912926	0.79	14.57	192.7	4.3	0.179	0.010	glfgCD	1/2 Core Split
23.78	26.83	3.00	912927	0.97	14.58	229.2	4.5	0.201	0.013	glfgCD	1/2 Core Split
26.83	29.33	2.50	912928	0.24	37.74	250.8	5.3	0.143	0.013	blfgCD	1/2 Core Split
29.33	31.92	2.60	912929	0.63	100.21	554.4	13.0	0.154	0.012	blfgCD	1/2 Core Split
Standard	Aley2		912930	0.71	2.06	186.2	2.1	0.216	0.012		Quality Control
31.92	35.10	3.20	912931	0.18	8.24	154.6	1.3	0.178	0.006	nmiCD	1/2 Core Split
35.10	38.04	2.90	912932	0.26	8.01	190.2	1.4	0.173	0.006	nmiCD	1/2 Core Split
38.04	42.23	4.20	912933	0.69	12.94	253.6	2.7	0.181	0.013	blfgCD	1/2 Core Split
42.23	44.58	2.40	912934	1.02	18.19	218.7	3.0	0.259	0.007	blfgCD	1/2 Core Split
44.58	47.58	3.00	912935	0.39	11.52	120.6	3.1	0.188	0.008	blfgCD	1/2 Core Split
47.58	50.82	3.20	912936	0.21	1.77	260.0	8.5	1.117	0.017	bliCD	1/2 Core Split
50.82	53.90	3.10	912937	0.27	2.16	216.7	4.7	0.253	0.012	bliCD	1/2 Core Split
53.90	57.27	3.40	912938	0.35	2.26	209.2	9.4	0.285	0.022	bliCD	1/2 Core Split
57.27	60.59	3.30	912939	0.12	58.47	202.8	29.0	0.231	0.010	bliCD	1/2 Core Split
60.59	63.41	2.80	912941	0.86	6.01	205.9	6.6	0.298	0.018	nmAMX	1/2 Core Split
63.41	66.11	2.70	912942	0.71	5.27	118.0	6.4	0.343	0.020	nmAMX	1/2 Core Split
66.11	69.00	2.90	912943	0.61	4.84	347.5	9.6	0.265	0.021	gmfgCD	1/2 Core Split
69.00	71.80	2.80	912944	0.24	2.62	354.8	5.7	0.231	0.012	gmfgCD	1/2 Core Split
71.80	74.83	3.00	912945	0.14	1.41	271.6	4.3	0.174	0.011	gmfgCD	1/2 Core Split
74.83	78.45	3.60	912946	0.38	6.01	120.1	4.1	0.273	0.015	nlpCD	1/2 Core Split
78.45	82.03	3.60	912947	0.70	3.37	264.6	8.1	0.214	0.016	nlpCD	1/2 Core Split
82.03	85.38	3.30	912948	0.37	31.91	91.5	6.2	0.184	0.008	nlpCD	1/2 Core Split
85.38	88.16	2.80	912949	0.44	1.51	70.5	4.1	0.183	0.009	nlcCD	1/2 Core Split
Standard	Aley3		912950	0.78	37.05	316.9	9.3	0.222	0.010		Quality Control
88.16	90.85	2.70	912951	0.35	28.99	156.0	7.8	0.193	0.011	nlcCD	1/2 Core Split
90.85	94.83	4.00	912952	0.30	13.35	116.4	8.4	0.229	0.012	glfgCD	1/2 Core Split
94.83	98.83	4.00	912953	0.48	5.38	182.3	8.5	0.225	0.010	glfgCD	1/2 Core Split
98.83	102.80	4.00	912954	0.28	1.8	221.4	8.7	0.195	0.011	glfgCD	1/2 Core Split
102.80	107.08	4.30	912955	0.14	1.29	206.1	6.5	0.343	0.013	glfgCD	1/2 Core Split
107.08	109.59	2.50	912956	0.60	37.16	256.4	14.6	0.405	0.019	blpCD	1/2 Core Split
109.59	112.26	2.70	912957	0.65	37.14	397.9	12.9	0.357	0.025	blpCD	1/2 Core Split
112.26	115.24	3.00	912958	0.47	40.56	427.3	10.5	0.391	0.009	nifgCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,048.646	Central 3	Azimuth	30 °	Date Start	18-Aug-10
Laboratory	Inspectorate	Northing	7,710,486.881		Inclination	-45 °	Date End	19-Aug-10
File No.	10-360-03593-01	Elevation	526.458		Length	215.85 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
115.24	118.29	3.10	912959	0.25	6.17	196.5	7.2	0.197	0.011	nlfCD	1/2 Core Split
Duplicate	Previous		912960	0.26	5.78	190.3	6.8	0.192	0.010		Quality Control
118.29	121.25	3.00	912961	0.14	13.27	165.6	17.8	0.166	0.006	nlfCD	1/2 Core Split
121.25	124.39	3.10	912962	0.15	9.7	216.9	12.1	0.156	0.009	nIAMX	1/2 Core Split
124.39	127.59	3.20	912963	0.16	9.75	217.5	8.8	0.231	0.009	nIAMX	1/2 Core Split
127.59	130.49	2.90	912964	0.32	12.07	125.0	10.2	0.219	0.009	nIAMX	1/2 Core Split
130.49	133.76	3.30	912965	0.14	2.75	533.6	20.2	0.260	0.019	nmiCD	1/2 Core Split
133.76	137.10	3.30	912966	0.04	1.58	761.8	11.4	0.493	0.018	nmiCD	1/2 Core Split
137.10	139.94	2.80	912967	0.08	0.63	160.8	7.8	0.526	0.018	nmiCD	1/2 Core Split
139.94	143.21	3.30	912968	0.16	58.3	155.5	10.9	0.209	0.010	nlfCD	1/2 Core Split
143.21	146.50	3.30	912969	0.14	15.02	99.8	6.8	0.220	0.010	nlfCD	1/2 Core Split
Standard	OKA-1		912970	0.53	44.94	60.3	32.4	0.327	0.008		Quality Control
146.50	151.04	4.50	912971	0.45	11.33	139.7	6.3	0.264	0.006	nlfCD	1/2 Core Split
151.04	154.60	3.60	912972	0.15	10.58	186.8	7.1	0.182	0.007	nmiAMX	1/2 Core Split
154.60	158.21	3.60	912973	0.18	8.06	128.3	7.8	0.180	0.007	nxiCD	1/2 Core Split
158.21	161.87	3.70	912974	0.18	11.77	107.5	10.8	0.172	0.008	nxiCD	1/2 Core Split
161.87	165.48	3.60	912975	0.03	2.81	100.4	4.7	0.157	0.004	nxiCD	1/2 Core Split
165.48	169.09	3.60	912976	0.11	6.63	155.2	4.7	0.251	0.006	nxiCD	1/2 Core Split
169.09	172.47	3.40	912977	0.05	0.39	140.2	1.7	0.216	0.006	nxiCD	1/2 Core Split
172.47	175.98	3.50	912978	0.19	18.36	119.4	4.3	0.161	0.008	nliCD	1/2 Core Split
175.98	179.52	3.50	912979	0.25	0.4	339.3	5.5	0.151	0.011	nliCD	1/2 Core Split
Duplicate	Previous		912980	0.22	0.29	327.4	5.3	0.162	0.011		Quality Control
179.52	182.90	3.40	912981	0.11	9.78	331.1	4.6	0.210	0.012	nliCD	1/2 Core Split
182.90	186.43	3.50	912982	0.13	3.02	118.7	2.9	0.294	0.008	nliCD	1/2 Core Split
186.43	189.83	3.40	912983	0.17	8.16	154.8	5.7	0.217	0.008	nliCD	1/2 Core Split
189.83	193.52	3.70	912984	0.13	49.37	269.8	18.0	0.268	0.010	nliCD	1/2 Core Split
193.52	196.80	3.30	912985	0.07	9.31	209.1	5.0	0.292	0.009	bliCD	1/2 Core Split
196.80	200.15	3.30	912986	0.17	5.94	269.3	6.0	0.431	0.010	bliCD	1/2 Core Split
200.15	203.30	3.20	912987	0.07	0.29	400.0	4.9	0.993	0.013	bliCD	1/2 Core Split
203.30	206.71	3.40	912988	0.05	0.92	164.0	2.7	0.425	0.006	bliCD	1/2 Core Split
206.71	209.76	3.00	912989	0.13	11.77	275.7	5.7	0.282	0.013	nxcCD	1/2 Core Split
Standard	Aley2		912990	0.71	47.24	207.5	2.6	0.234	0.012		Quality Control
209.76	212.80	3.00	912991	0.10	12.82	158.3	5.9	0.287	0.006	nxcCD	1/2 Core Split
212.80	215.85	3.00	912992	0.26	21.72	218.0	11.4	0.305	0.012	nxcCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
4.49	115.24	110.75		0.448	15	206.6	7	0.299	0.012		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,066.758	Central 3	Azimuth	30 °	Date Start	20-Aug-10
Laboratory	Inspectorate	Northing	7,710,470.650		Inclination	-45 °	Date End	21-Aug-10
File No.	10-360-03595-01	Elevation	537.505		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.67	3.00	Not Sampled							CASE	Not Sampled
3.67	7.42	3.80	875308	0.18	2.84	102.7	1.0	0.136	0.007	bliCD	1/2 Core Split
7.42	11.19	3.80	875309	0.22	2.85	240.7	2.1	0.269	0.009	bliCD	1/2 Core Split
Standard	Aley1		875310	0.47	27	210.5	2.6	0.226	0.013		Quality Control
11.19	14.49	3.30	875311	0.33	2.66	66.0	1.0	0.132	0.006	glfgCD	1/2 Core Split
14.49	17.39	2.90	875312	0.31	3.36	74.1	0.6	0.144	0.006	glfgCD	1/2 Core Split
17.39	20.42	3.00	875313	0.22	3.34	68.9	0.8	0.113	0.005	glfgCD	1/2 Core Split
20.42	23.57	3.10	875314	0.20	2.62	111.2	1.3	0.184	0.008	glfgCD	1/2 Core Split
23.57	26.33	2.80	875315	0.43	23.43	207.4	4.9	0.156	0.012	glfgCD	1/2 Core Split
26.33	29.43	3.10	875316	0.60	39.85	239.8	9.6	0.149	0.010	blfgCD	1/2 Core Split
29.43	32.26	2.80	875317	0.25	3.34	272.0	2.3	0.221	0.011	blfgCD	1/2 Core Split
32.26	35.11	2.90	875318	0.29	4.82	129.4	1.5	0.143	0.009	blfgCD	1/2 Core Split
35.11	37.88	2.80	875319	0.24	7.48	129.1	3.0	0.119	0.008	blfgCD	1/2 Core Split
Duplicate	Previous		875320	0.26	7.52	129.5	3.0	0.120	0.008		Quality Control
37.88	41.34	3.50	875321	0.19	3.63	108.8	1.9	0.101	0.008	bmiCD	1/2 Core Split
41.34	45.07	3.70	875322	0.19	33.32	201.2	12.9	0.129	0.013	bmiCD	1/2 Core Split
45.07	48.34	3.30	875323	0.36	4.46	363.6	7.0	0.155	0.020	bliCD	1/2 Core Split
48.34	51.63	3.30	875324	0.16	1.98	244.9	3.4	0.137	0.014	bliCD	1/2 Core Split
51.63	54.88	3.20	875325	0.33	7.66	433.6	4.9	0.315	0.016	bliCD	1/2 Core Split
54.88	57.93	3.00	875326	0.36	38.37	492.7	19.6	0.229	0.031	bliCD	1/2 Core Split
57.93	60.98	3.00	875327	0.36	50.59	261.8	21.8	0.149	0.012	bliCD	1/2 Core Split
60.98	64.02	3.00	875328	0.12	8.38	207.1	3.4	0.136	0.014	bliCD	1/2 Core Split
64.02	66.82	2.80	875329	0.57	14.14	280.1	8.4	0.201	0.015	gmCD	1/2 Core Split
Standard	Aley1		875330	0.47	23.73	166.2	11.1	0.223	0.010		Quality Control
66.82	69.89	3.10	875331	0.73	16.63	370.7	12.9	0.237	0.024	blfCD	1/2 Core Split
69.89	72.84	3.00	875332	0.63	4.65	200.3	4.1	0.257	0.015	blfCD	1/2 Core Split
72.84	75.72	2.90	875333	0.78	14.24	273.1	5.9	0.226	0.016	blfCD	1/2 Core Split
75.72	78.77	3.00	875334	0.54	10.81	200.6	7.0	0.296	0.019	blfCD	1/2 Core Split
78.77	82.04	3.30	875335	0.44	2.82	259.1	7.0	0.294	0.020	blfCD	1/2 Core Split
82.04	84.00	2.00	875336	0.43	0.13	31.3	3.8	0.294	0.013	dlpCC	1/2 Core Split
84.00	86.18	2.20	875337	0.65	0.92	126.0	3.7	0.255	0.016	dlpCC	1/2 Core Split
86.18	89.25	3.10	875338	0.64	2.85	227.9	7.3	0.205	0.015	nlpCD	1/2 Core Split
89.25	92.49	3.20	875339	0.44	0.82	145.3	4.0	0.243	0.013	nlpCD	1/2 Core Split
Duplicate	Previous		875340	0.41	0.73	132.1	3.8	0.247	0.014		Quality Control
92.49	95.49	3.00	875341	0.44	1.88	237.6	8.2	0.240	0.015	nlpCD	1/2 Core Split
95.49	98.49	3.00	875342	0.29	0.97	71.3	2.0	0.165	0.010	nlpCD	1/2 Core Split
98.49	101.04	2.60	875343	0.26	0.53	100.5	2.5	0.197	0.012	nlpCD	1/2 Core Split
101.04	104.02	3.00	875344	0.76	7.58	292.8	8.9	0.208	0.018	nlpCD	1/2 Core Split
104.02	106.99	3.00	875345	0.93	3.3	192.7	5.3	0.249	0.014	blpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,066.758	Central 3	Azimuth	30 °	Date Start	20-Aug-10
Laboratory	Inspectorate	Northing	7,710,470.650		Inclination	-45 °	Date End	21-Aug-10
File No.	10-360-03595-01	Elevation	537.505		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
106.99	110.01	3.00	875346	0.68	6.59	240.4	8.2	0.221	0.018	blpCD	1/2 Core Split
110.01	113.00	3.00	875347	0.50	2.25	119.0	3.2	0.276	0.014	blpCD	1/2 Core Split
113.00	115.95	3.00	875348	0.60	2.41	200.7	8.6	0.246	0.016	blpCD	1/2 Core Split
115.95	119.09	3.10	875349	0.35	0.84	158.6	9.3	0.231	0.016	blpCD	1/2 Core Split
Duplicate	Previous		912500	0.35	0.92	162.7	9.3	0.237	0.017		Quality Control
119.09	121.95	2.90	912501	1.03	2.23	288.2	11.8	0.270	0.020	blpCD	1/2 Core Split
121.95	124.73	2.80	912502	0.60	1.79	127.8	4.9	0.232	0.012	blpCCCD	1/2 Core Split
124.73	126.73	2.00	912503	1.47	0.16	74.0	1.9	0.254	0.009	blpCCCD	1/2 Core Split
Blank	Granite		912504	0.05	1.68	12.6	4.8	0.026	0.003		Quality Control
126.73	129.25	2.50	912505	1.25	0.1	95.3	2.0	0.273	0.013	blpCCCD	1/2 Core Split
129.25	132.19	2.90	912506	0.39	5.79	326.3	14.1	0.195	0.019	blpCD	1/2 Core Split
132.19	135.50	3.30	912507	0.70	15.93	318.7	11.5	0.243	0.020	blpCD	1/2 Core Split
135.50	138.48	3.00	912508	1.28	23.28	335.5	14.6	0.228	0.016	blpCD	1/2 Core Split
138.48	141.32	2.80	912509	0.52	9.05	241.9	7.7	0.200	0.015	blpCD	1/2 Core Split
Standard	Aley3		912510	0.79	35.22	308.8	8.6	0.221	0.009		Quality Control
141.32	144.21	2.90	912511	0.31	18.65	197.6	6.8	0.175	0.012	blpCD	1/2 Core Split
144.21	147.14	2.90	912512	0.23	2.33	223.8	4.8	0.205	0.010	gmpCD	1/2 Core Split
147.14	149.81	2.70	912513	0.43	5.11	307.5	6.3	0.191	0.018	gmpCD	1/2 Core Split
149.81	153.51	3.70	912514	1.38	16.41	249.6	12.8	0.312	0.021	blpCD	1/2 Core Split
153.51	157.17	3.70	912515	0.66	0.18	276.9	10.8	0.277	0.025	blpCD	1/2 Core Split
157.17	160.27	3.10	Not Sampled							gmCD	Not Sampled
160.27	163.13	2.90	912517	0.66	10.95	253.7	7.6	0.259	0.020	gmCD	1/2 Core Split
163.13	166.88	3.80	912518	0.23	4.28	198.3	6.2	0.175	0.015	nmiCD	1/2 Core Split
166.88	170.39	3.50	912519	0.16	2.07	381.2	5.3	0.446	0.015	nmiCD	1/2 Core Split
Duplicate	Previous		912520	0.15	2.15	445.6	5.4	0.473	0.015		Quality Control
170.39	173.95	3.60	912521	0.35	6.89	348.2	6.3	0.297	0.014	nmiCD	1/2 Core Split
173.95	176.97	3.00	912522	0.38	6.07	398.0	8.3	0.251	0.016	nmiCD	1/2 Core Split
176.97	180.16	3.20	912523	0.37	2.41	314.1	8.0	0.428	0.016	gmiCD	1/2 Core Split
180.16	183.09	2.90	912524	0.72	28.35	294.4	17.1	0.556	0.022	gmiCD	1/2 Core Split
183.09	186.20	3.10	912525	0.04	0.55	194.2	3.0	0.718	0.011	gmiCD	1/2 Core Split
186.20	189.22	3.00	912526	0.17	2.8	202.8	5.1	0.197	0.011	blcCD	1/2 Core Split
189.22	192.17	2.90	912527	0.73	0.14	100.1	9.5	0.261	0.010	blcCD	1/2 Core Split
192.17	195.12	3.00	912528	0.22	10.86	163.9	4.6	0.168	0.008	blcCD	1/2 Core Split
195.12	198.30	3.20	912529	0.34	3.88	159.9	5.3	0.178	0.009	blcCD	1/2 Core Split
Standard	Aley2		912530	0.72	45.85	209.2	2.3	0.227	0.012		Quality Control
198.30	200.83	2.50	912531	0.14	6.73	115.5	3.5	0.207	0.011	blcAMX	1/2 Core Split
200.83	203.50	2.70	912532	0.18	5.22	56.8	3.6	0.158	0.006	blcAMX	1/2 Core Split
203.50	208.30	4.80	912533	0.34	20.08	178.1	7.7	0.165	0.008	bliCD	1/2 Core Split
208.30	211.64	3.30	912534	0.20	21.36	189.4	41.2	0.308	0.009	dipCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,066.758	Central 3	Azimuth	30 °	Date Start	20-Aug-10
Laboratory	Inspectorate	Northing	7,710,470.650		Inclination	-45 °	Date End	21-Aug-10
File No.	10-360-03595-01	Elevation	537.505		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
211.64	213.41	1.80	912535	0.73	4.44	205.4	13.0	0.325	0.013	dIpCD	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
45.07	198.30	150.13		0.530	8	241.6	8	0.289	0.016		
101.04	138.48	37.44	Incl.	0.786	6	219.0	8	0.244	0.016		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,033.675	Central 3	Azimuth	30 °	Date Start	21-Aug-10
Laboratory	Inspectorate	Northing	7,710,441.555		Inclination	-45 °	Date End	22-Aug-10
File No.	10-360-03616-01	Elevation	520.369		Length	214.94 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	6.09	6.10	Not Sampled							CASE	Not Sampled
6.09	9.66	3.60	912606	0.40	7.92	159.7	3.5	0.199	0.012	blfgCD	1/2 Core Split
9.66	13.12	3.50	912607	0.17	2.6	130.0	1.6	0.234	0.009	blfgCD	1/2 Core Split
13.12	16.37	3.30	912608	0.28	14.97	136.4	4.2	0.255	0.009	blfgCD	1/2 Core Split
16.37	20.04	3.70	912609	0.25	6.24	125.6	2.6	0.265	0.008	blfgCD	1/2 Core Split
Standard	Aley1		912610	0.44	22.21	136.6	7.3	0.204	0.010		Quality Control
20.04	23.68	3.60	912611	0.31	16.34	126.2	2.8	0.234	0.009	blfgCD	1/2 Core Split
23.68	27.02	3.30	912612	1.69	11.65	274.4	7.5	0.232	0.009	gliCM	1/2 Core Split
27.02	30.00	3.00	912613	0.67	1.94	154.5	5.0	0.200	0.009	bliCD	1/2 Core Split
Blank	Granite		912614	<0.01	2.05	8.0	2.8	0.020	0.002		Quality Control
30.00	33.15	3.10	912615	0.50	8.16	172.6	4.7	0.238	0.012	bliCD	1/2 Core Split
33.15	36.13	3.00	912616	0.81	0.98	100.7	1.7	0.218	0.010	bliCD	1/2 Core Split
36.13	39.06	2.90	912617	1.57	0.54	178.9	10.7	0.275	0.013	bliCD	1/2 Core Split
39.06	42.32	3.30	912618	0.45	0.5	171.6	3.3	0.195	0.008	bliCD	1/2 Core Split
42.32	45.59	3.30	912619	0.20	3.42	74.6	1.5	0.135	0.006	blfgCD	1/2 Core Split
Duplicate	Previous		912620	0.19	3.13	73.7	1.3	0.133	0.006		Quality Control
45.59	48.69	3.10	912621	0.34	6.26	81.1	1.3	0.213	0.007	blfgCD	1/2 Core Split
48.69	52.35	3.70	912622	0.19	2.13	76.7	1.0	0.131	0.006	nlfCD	1/2 Core Split
52.35	55.96	3.60	912623	0.19	1.44	94.0	1.1	0.081	0.007	nlfCD	1/2 Core Split
55.96	59.36	3.40	912624	0.16	1.8	98.4	1.1	0.117	0.010	nlfCD	1/2 Core Split
59.36	63.20	3.80	912625	<0.01	0.25	64.3	0.4	0.086	0.005	nlfCD	1/2 Core Split
63.20	66.66	3.50	912626	0.11	3.59	153.8	1.5	0.170	0.020	gmiCD	1/2 Core Split
66.66	69.96	3.30	912627	0.40	6.74	241.7	2.7	0.531	0.024	gmiCD	1/2 Core Split
69.96	73.21	3.20	912628	0.42	11.33	268.3	3.6	0.214	0.023	gmiCD	1/2 Core Split
73.21	76.49	3.30	912629	0.34	7.72	254.0	3.6	0.569	0.019	gmiCD	1/2 Core Split
Standard	Aley2		912630	0.70	4.68	206.3	2.1	0.217	0.012		Quality Control
76.49	79.81	3.30	912631	0.36	23.97	317.5	9.9	0.258	0.025	gmiCD	1/2 Core Split
79.81	83.76	4.00	912632	0.46	13.03	201.0	4.1	0.206	0.010	bliCD	1/2 Core Split
83.76	87.58	3.80	912633	0.48	48.13	253.2	7.6	0.180	0.011	bliCD	1/2 Core Split
87.58	90.77	3.20	912634	0.36	3.96	133.0	1.9	0.150	0.009	bliCD	1/2 Core Split
90.77	94.16	3.40	912635	0.29	7.24	146.6	1.9	0.154	0.009	bliCD	1/2 Core Split
94.16	97.55	3.40	912636	0.39	19.24	413.5	5.3	0.151	0.009	bliCD	1/2 Core Split
97.55	100.75	3.20	912637	0.89	7.65	175.6	3.5	0.219	0.020	bliCD	1/2 Core Split
100.75	103.95	3.20	912638	0.32	4.36	132.0	1.6	0.173	0.011	bliCD	1/2 Core Split
103.95	107.21	3.30	912639	0.22	2.31	48.9	0.9	0.133	0.008	bliCD	1/2 Core Split
Duplicate	Previous		912640	0.25	2.62	50.7	1.0	0.137	0.007		Quality Control
107.21	110.47	3.30	912641	0.48	5.92	110.6	1.7	0.138	0.007	bliCD	1/2 Core Split
110.47	113.61	3.10	912642	0.88	5.67	261.9	3.6	0.198	0.013	bliCD	1/2 Core Split
113.61	116.84	3.20	912643	0.56	3.71	214.1	2.6	0.190	0.018	bliCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length			Drill Hole Information		
Logged By	Ryan Kressall		Easting	654,033.675	Central 3	Azimuth	30 °		Date Start	21-Aug-10	
Laboratory	Inspectorate		Northing	7,710,441.555		Inclination	-45 °		Date End	22-Aug-10	
File No.	10-360-03616-01		Elevation	520.369		Length	214.94 Metres		Operator	Taseko	
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
116.84	119.97	3.10	912644	0.54	4.64	187.3	2.2	0.176	0.019	bliCD	1/2 Core Split
119.97	123.59	3.60	912645	0.68	7.86	91.1	4.6	0.147	0.008	dlpCCCD	1/2 Core Split
123.59	127.82	4.20	912646	0.81	4.98	120.0	2.1	0.188	0.014	gmfCD	1/2 Core Split
127.82	131.96	4.10	912647	0.80	5.29	99.8	1.8	0.179	0.010	gmfCD	1/2 Core Split
131.96	135.98	4.00	912648	0.83	1.81	223.1	4.1	0.212	0.020	glcCD	1/2 Core Split
135.98	139.85	3.90	912649	0.40	4.05	154.4	1.9	0.167	0.016	gcrenfgCD	1/2 Core Split
Standard	Aley1		912650	0.43	20.74	139.9	7.6	0.237	0.009		Quality Control
139.85	143.04	3.20	912651	0.21	1.17	66.9	1.6	0.163	0.007	gcrenfgCD	1/2 Core Split
143.04	146.09	3.10	912652	0.50	5.04	110.3	3.0	0.182	0.013	gcrenfgCD	1/2 Core Split
146.09	149.21	3.10	912653	1.21	11.39	204.1	12.9	0.299	0.033	gcrenfgCD	1/2 Core Split
149.21	152.07	2.90	912654	0.42	2.88	157.5	4.8	0.259	0.014	gcrenfgCD	1/2 Core Split
152.07	154.63	2.60	912655	0.22	1.35	88.9	2.3	0.097	0.008	ncrenvCD	1/2 Core Split
154.63	157.65	3.00	912656	0.47	6.33	88.5	3.1	0.172	0.011	nlicAMX	1/2 Core Split
157.65	160.72	3.10	912657	0.26	16.19	97.8	5.2	0.139	0.008	nlicAMX	1/2 Core Split
160.72	164.11	3.40	912658	0.28	17.61	150.2	6.2	0.153	0.009	nlicAMX	1/2 Core Split
164.11	167.86	3.80	912659	0.26	30.05	137.2	6.0	0.163	0.009	ncrencCD	1/2 Core Split
Duplicate	Previous		912660	0.26	31.22	144.9	6.5	0.157	0.009		Quality Control
167.86	171.57	3.70	912661	0.25	57.44	188.8	8.7	0.311	0.013	ncrencCD	1/2 Core Split
171.57	175.61	4.00	912662	0.52	5.53	159.8	5.6	0.287	0.028	ICD	1/2 Core Split
175.61	179.78	4.20	912663	0.11	0.68	271.6	2.8	0.329	0.019	ICD	1/2 Core Split
179.78	183.55	3.80	912664	0.09	4.33	262.2	4.7	0.289	0.013	ICD	1/2 Core Split
183.55	187.01	3.50	912665	0.60	9.85	166.5	8.7	0.169	0.012	nmcCD	1/2 Core Split
187.01	190.30	3.30	912666	1.28	41.88	370.0	30.6	0.373	0.017	nmcCD	1/2 Core Split
190.30	193.00	2.70	912667	0.24	12.95	97.7	5.9	0.167	0.008	nifgCD	1/2 Core Split
193.00	195.67	2.70	912668	0.29	1.98	58.8	2.1	0.171	0.007	nifgCD	1/2 Core Split
195.67	199.07	3.40	912669	0.35	17.39	106.0	8.0	0.200	0.009	nifgAMX	1/2 Core Split
Standard	Aley2		912670	0.71	46.55	190.3	2.2	0.237	0.012		Quality Control
199.07	202.57	3.50	912671	0.28	5.7	91.9	5.1	0.159	0.010	nifgAMX	1/2 Core Split
202.57	205.96	3.40	912672	0.10	2.32	42.4	2.9	0.116	0.006	nifgAMX	1/2 Core Split
205.96	210.23	4.30	912673	0.11	6.53	63.1	4.0	0.179	0.009	nifgAMX	1/2 Core Split
210.23	212.58	2.40	912674	0.06	1.64	137.1	1.8	0.122	0.009	blfgCD	1/2 Core Split
212.58	214.94	2.40	912675	0.31	33.82	122.3	26.6	0.184	0.010	blfgCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,033.675	Central 3	Azimuth	30 °	Date Start	21-Aug-10
Laboratory	Inspectorate	Northing	7,710,441.555		Inclination	-45 °	Date End	22-Aug-10
File No.	10-360-03616-01	Elevation	520.369		Length	214.94 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
20.04	42.32	22.28		0.845	6	168.9	5	0.231	0.010		
23.68	39.06	15.38	Incl.	1.055	5	178.5	6	0.238	0.011		
66.66	199.07	132.41		0.477	12	177.4	5	0.242	0.014		
119.97	135.98	16.01	Incl.	0.783	5	134.1	3	0.182	0.013		

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length			Drill Hole Information		
Logged By	Ryan Kressall		Easting	654,154.760	Central 4	Azimuth	60 °		Date Start	22-Aug-10	
Laboratory	Inspectorate		Northing	7,710,454.927		Inclination	-50 °		Date End	23-Aug-10	
File No.	10-360-03617-01		Elevation	554.683		Length	205.18 Metres		Operator	Taseko	
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	3.05	3.00	Not Sampled							CASE	Not Sampled
3.05	6.06	3.00	912676	0.27	3.9	70.2	2.6	0.187	0.011	bliCD	1/2 Core Split
6.06	9.04	3.00	912677	0.56	5.43	88.1	2.1	0.247	0.012	bliCD	1/2 Core Split
9.04	11.97	2.90	912678	0.58	7.53	81.6	3.2	0.347	0.011	bliCD	1/2 Core Split
11.97	15.04	3.10	912679	0.45	3.85	60.9	2.1	0.185	0.008	bliCD	1/2 Core Split
Duplicate	Previous		912680	0.45	3.91	60.9	2.1	0.185	0.009		Quality Control
15.04	17.99	2.90	912681	0.35	3.49	77.3	2.2	0.197	0.009	bliCD	1/2 Core Split
17.99	20.86	2.90	912682	1.01	36.25	179.8	10.4	0.220	0.012	bliCD	1/2 Core Split
20.86	24.20	3.30	912683	0.98	18.18	206.2	5.7	0.246	0.016	blfCD	1/2 Core Split
24.20	27.44	3.20	912684	0.60	9.09	119.0	3.2	0.180	0.013	blfCD	1/2 Core Split
27.44	30.54	3.10	912685	0.78	10.53	155.3	4.4	0.208	0.014	blfCD	1/2 Core Split
30.54	33.54	3.00	912686	1.12	80.01	204.1	7.8	0.247	0.014	blfCD	1/2 Core Split
33.54	36.82	3.30	912687	0.25	4.51	187.1	3.0	0.286	0.014	blfCD	1/2 Core Split
36.82	40.26	3.40	912688	0.29	2.56	271.8	3.3	0.191	0.022	blvCD	1/2 Core Split
40.26	43.68	3.40	912689	0.18	2.69	121.0	2.3	0.179	0.011	blvCD	1/2 Core Split
Standard	Aley1		912690	0.50	19.39	142.9	8.3	0.200	0.010		Quality Control
43.68	47.17	3.50	912691	0.27	7.63	118.3	2.2	0.165	0.009	blvCD	1/2 Core Split
47.17	50.61	3.40	912692	0.26	24.84	127.0	5.7	0.160	0.011	blvCD	1/2 Core Split
50.61	54.05	3.40	912693	0.19	13.94	131.8	6.6	0.259	0.013	blvCD	1/2 Core Split
54.05	57.60	3.60	912694	0.16	33.61	102.3	14.5	0.160	0.008	blvCD	1/2 Core Split
57.60	60.98	3.40	912695	0.34	4.45	93.5	2.2	0.150	0.008	blvCD	1/2 Core Split
60.98	64.19	3.20	912696	0.16	0.46	62.3	1.4	0.111	0.006	blvCD	1/2 Core Split
64.19	67.56	3.40	912697	0.19	0.74	62.0	1.1	0.119	0.006	blvCD	1/2 Core Split
67.56	70.85	3.30	912698	0.78	11.89	234.7	7.3	0.247	0.018	blvCD	1/2 Core Split
70.85	74.16	3.30	912699	0.35	2.6	89.0	2.8	0.159	0.012	blvCD	1/2 Core Split
Duplicate	Previous		912700	0.36	2.72	90.9	3.0	0.165	0.012		Quality Control
74.16	77.34	3.20	912701	0.10	0.71	53.1	0.9	0.225	0.005	blvCD	1/2 Core Split
77.34	80.68	3.30	912702	0.77	6.24	119.9	2.9	0.233	0.011	blvCD	1/2 Core Split
80.68	84.02	3.30	912703	0.66	8.75	95.0	4.2	0.167	0.011	blvCD	1/2 Core Split
84.02	87.20	3.20	912704	0.36	3.62	77.6	2.8	0.140	0.009	blvCD	1/2 Core Split
87.20	90.23	3.00	912705	0.32	7.61	88.4	4.2	0.178	0.009	IAMX	1/2 Core Split
90.23	93.27	3.00	Not Sampled								Not Sampled
93.27	96.49	3.20	912707	0.75	0.14	140.9	2.3	0.216	0.011	IAMX	1/2 Core Split
96.49	99.45	3.00	912708	0.19	12.64	67.4	3.9	0.142	0.008	IAMX	1/2 Core Split
99.45	103.45	4.00	912709	0.31	7.53	96.8	3.2	0.198	0.008	bliCD	1/2 Core Split
Standard	Aley3		912710	0.80	32.78	297.6	7.7	0.199	0.009		Quality Control
103.45	106.71	3.30	912711	0.35	3.44	283.5	5.3	0.272	0.018	blvCD	1/2 Core Split
106.71	110.50	3.80	912712	0.41	5.35	190.5	4.5	0.216	0.013	blvCD	1/2 Core Split
110.50	113.75	3.20	912713	0.34	12.63	108.6	5.3	0.266	0.013	blvCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information			
Logged By	Ryan Kressall		Easting	654,154.760	Central 4	Azimuth	60 °	Date Start	22-Aug-10		
Laboratory	Inspectorate		Northing	7,710,454.927		Inclination	-50 °	Date End	23-Aug-10		
File No.	10-360-03617-01		Elevation	554.683		Length	205.18 Metres	Operator	Taseko		
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
113.75	117.04	3.30	912714	0.21	3.74	179.8	2.3	0.247	0.012	blvCD	1/2 Core Split
117.04	120.51	3.50	912715	0.15	0.55	97.6	1.0	0.144	0.007	blvCD	1/2 Core Split
120.51	124.00	3.50	912716	0.83	2.18	121.6	2.2	0.202	0.014	blvCD	1/2 Core Split
124.00	127.37	3.40	912717	0.14	16.5	57.2	7.1	0.103	0.006	lcAMX	1/2 Core Split
127.37	129.71	2.30	912718	0.32	2.58	64.9	3.5	0.127	0.009	lcAMX	1/2 Core Split
129.71	132.16	2.40	912719	0.13	1.5	72.5	2.1	0.098	0.006	lcAMX	1/2 Core Split
Duplicate	Previous		912720	0.13	1.49	74.4	2.6	0.102	0.006		Quality Control
132.16	135.74	3.60	912721	0.44	3.83	86.5	3.3	0.129	0.007	bliCD	1/2 Core Split
135.74	139.16	3.40	912722	0.48	7.82	92.5	3.3	0.211	0.007	bliCD	1/2 Core Split
139.16	142.58	3.40	912723	0.14	1.37	20.1	1.1	0.241	0.006	bliCD	1/2 Core Split
142.58	146.13	3.50	912724	0.42	6.11	67.7	2.7	0.162	0.008	bliCD	1/2 Core Split
146.13	149.61	3.50	912725	0.22	27.57	90.0	5.5	0.146	0.010	bliCD	1/2 Core Split
149.61	153.08	3.50	912726	0.22	2.84	41.6	1.8	0.134	0.006	bliCD	1/2 Core Split
153.08	155.86	2.80	912727	0.14	2.2	51.0	1.9	0.148	0.005	blcCD	1/2 Core Split
155.86	158.68	2.80	912728	0.44	3.09	71.4	3.1	0.191	0.010	blcCD	1/2 Core Split
158.68	161.41	2.70	912729	0.35	3.43	77.9	2.4	0.170	0.010	blcCD	1/2 Core Split
Standard	Aley1		912730	0.45	21.96	142.4	10.7	0.215	0.011		Quality Control
161.41	164.39	3.00	912731	0.46	7.37	45.2	2.1	0.130	0.006	blcCD	1/2 Core Split
164.39	167.50	3.10	912732	0.06	0.57	15.0	0.5	0.149	0.005	bliCD	1/2 Core Split
167.50	170.63	3.10	912733	0.05	0.71	22.4	0.9	0.104	0.004	bliCD	1/2 Core Split
170.63	173.78	3.20	912734	0.08	0.92	34.2	1.8	0.173	0.005	bliCD	1/2 Core Split
173.78	176.83	3.10	912735	0.36	6.04	59.5	2.4	0.217	0.009	bliCD	1/2 Core Split
176.83	179.88	3.00	912736	0.23	7.12	39.3	3.4	0.147	0.007	bliCD	1/2 Core Split
179.88	182.93	3.10	912737	0.11	1.98	36.0	1.7	0.119	0.005	bliCD	1/2 Core Split
182.93	185.98	3.00	912738	0.24	8.41	122.2	2.4	0.181	0.008	bliCD	1/2 Core Split
185.98	189.17	3.20	912739	0.13	2.07	86.3	2.4	0.205	0.006	bliCD	1/2 Core Split
Duplicate	Previous		912740	0.13	1.93	85.4	2.4	0.209	0.006		Quality Control
189.17	192.30	3.10	912741	0.30	30.69	82.8	7.0	0.162	0.008	bliCD	1/2 Core Split
192.30	195.42	3.10	912742	0.29	33.33	140.3	13.4	0.206	0.010	blpCD	1/2 Core Split
195.42	198.57	3.20	912743	0.31	31.02	187.6	7.3	0.207	0.009	blpCD	1/2 Core Split
198.57	201.80	3.20	912744	0.65	5.92	80.0	4.1	0.213	0.007	blpCD	1/2 Core Split
Blank	Granite		912745	0.01	1.57	9.3	4.4	0.021	0.002		Quality Control
201.80	205.18	3.40	912746	0.09	25.47	46.9	9.0	0.162	0.008	blpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,154.760	Central 4	Azimuth	60 °	Date Start	22-Aug-10
Laboratory	Inspectorate	Northing	7,710,454.927		Inclination	-50 °	Date End	23-Aug-10
File No.	10-360-03617-01	Elevation	554.683		Length	205.18 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
3.05	33.54	30.49		0.672	18	125.0	4	0.236	0.012		
17.99	33.54	15.55	Incl.	0.894	30	172.6	6	0.220	0.014		
67.56	146.13	78.57		0.379	6	105.9	3	0.184	0.010		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,064.539	Central 4	Azimuth	30 °	Date Start	25-Aug-10
Laboratory	Inspectorate	Northing	7,710,419.843		Inclination	-45 °	Date End	27-Aug-10
File No.	10-360-03626-01	Elevation	543.094		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	6.10	6.10	Not Sampled							CASE	Not Sampled
6.10	9.69	3.60	912747	1.01	17.31	158.5	5.7	0.223	0.010	glcCD	1/2 Core Split
9.69	13.10	3.40	912748	0.82	9.41	114.5	4.6	0.191	0.007	glcCD	1/2 Core Split
13.10	16.68	3.60	912749	0.75	18.1	140.4	2.8	0.250	0.009	glcCD	1/2 Core Split
16.68	20.65	4.00	912851	1.35	46.7	378.3	9.4	0.263	0.009	glcCD	1/2 Core Split
Standard	Aley1		912850	0.39	37.13	159.6	9.3	0.233	0.010		Quality Control
20.65	23.97	3.30	912852	0.76	26.87	174.1	3.4	0.337	0.010	glcCD	1/2 Core Split
23.97	27.44	3.50	912853	1.06	37.74	171.3	4.6	0.353	0.010	glcCD	1/2 Core Split
27.44	31.09	3.60	912854	0.21	3.97	45.9	1.3	0.410	0.006	blcCD	1/2 Core Split
31.09	35.65	4.60	912855	1.13	27.83	205.9	5.1	0.891	0.010	blcCD	1/2 Core Split
35.65	38.49	2.80	912856	0.41	8.27	91.7	2.0	0.403	0.010	blcCD	1/2 Core Split
38.49	41.97	3.50	912857	0.35	4.94	91.4	1.6	0.306	0.012	blcCD	1/2 Core Split
41.97	45.22	3.20	912858	0.80	0.41	206.8	4.3	0.326	0.012	blcCD	1/2 Core Split
45.22	48.43	3.20	912859	0.60	10.34	119.5	2.1	0.215	0.009	blcCD	1/2 Core Split
48.43	51.75	3.30	912861	0.80	42.52	293.2	7.0	0.276	0.011	blcCD	1/2 Core Split
51.75	55.07	3.30	912862	0.46	6.95	94.0	1.5	0.149	0.008	blcCD	1/2 Core Split
55.07	58.17	3.10	912863	0.35	7.44	90.3	1.8	0.142	0.007	blcCD	1/2 Core Split
58.17	61.13	3.00	912864	0.40	12.06	96.3	3.8	0.264	0.009	bcreniCD	1/2 Core Split
61.13	63.39	2.26	912865	0.75	3.09	112.3	1.3	0.171	0.006	glpCD	1/2 Core Split
Blank	Granite		912866	0.02	1.91	9.5	3.5	0.021	0.002		Quality Control
63.39	65.63	2.20	912867	0.88	0.23	172.5	2.0	0.189	0.012	glpCD	1/2 Core Split
65.63	68.14	2.50	912868	0.58	8.39	143.1	2.8	0.198	0.011	blpCD	1/2 Core Split
68.14	70.78	2.60	912869	0.25	8.42	234.9	2.8	0.344	0.016	blpCD	1/2 Core Split
Standard	Aley2		912870	0.72	46.24	187.8	2.0	0.217	0.013		Quality Control
70.78	74.46	3.70	912871	0.91	2.11	130.6	2.1	0.236	0.008	blfgCD	1/2 Core Split
74.46	78.02	3.60	912872	1.25	0.42	138.7	3.9	0.254	0.010	blfgCD	1/2 Core Split
78.02	81.42	3.40	912873	0.80	0.94	173.2	2.0	0.189	0.008	blpCCCD	1/2 Core Split
81.42	84.73	3.30	912874	0.67	11.7	144.2	2.3	0.182	0.008	blpCCCD	1/2 Core Split
84.73	88.41	3.70	912875	0.57	0.41	90.4	7.4	0.179	0.008	blpCCCD	1/2 Core Split
88.41	91.46	3.00	912876	0.82	0.82	158.6	3.8	0.202	0.010	gliCD	1/2 Core Split
91.46	94.51	3.10	912877	0.42	10.76	99.9	1.9	0.183	0.011	gliCD	1/2 Core Split
94.51	98.37	3.90	912878	0.85	35.4	234.2	7.1	0.187	0.012	gliCD	1/2 Core Split
98.37	100.73	2.40	912879	1.70	1.06	372.0	12.6	0.270	0.014	gliCD	1/2 Core Split
Duplicate	Previous		912880	1.77	1.35	351.4	12.5	0.264	0.013		Quality Control
100.73	103.66	2.90	912881	0.31	7.83	112.1	2.4	0.209	0.010	gliCD	1/2 Core Split
103.66	106.46	2.80	912882	0.78	0.24	83.2	2.6	0.212	0.009	gliCD	1/2 Core Split
106.46	109.50	3.00	912883	0.67	0.1	107.0	3.1	0.237	0.010	gliCD	1/2 Core Split
109.50	112.30	2.80	912884	1.63	0.85	220.0	11.2	0.263	0.011	gmiCM	1/2 Core Split
112.30	116.08	3.80	912885	1.77	0.43	136.2	11.5	0.331	0.022	blcCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,064.539	Central 4	Azimuth	30 °	Date Start	25-Aug-10
Laboratory	Inspectorate	Northing	7,710,419.843		Inclination	-45 °	Date End	27-Aug-10
File No.	10-360-03626-01	Elevation	543.094		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
116.08	120.02	3.90	912886	1.04	0.2	69.9	3.9	0.308	0.017	bIcCD	1/2 Core Split
120.02	123.45	3.40	912887	0.65	0.17	144.6	5.1	0.355	0.020	liCD	1/2 Core Split
123.45	126.84	3.40	912888	0.19	0.11	81.6	2.2	0.090	0.006	liCD	1/2 Core Split
126.84	130.13	3.30	912889	0.48	0.13	83.3	3.0	0.136	0.007	liCD	1/2 Core Split
130.13	133.20	3.10	912891	0.27	3.46	102.2	1.9	0.120	0.007	liCD	1/2 Core Split
Standard	OKA-1		912890	0.53	41.81	54.2	27.3	0.344	0.008		Quality Control
133.20	136.13	2.90	912892	0.29	5.26	77.8	2.0	0.138	0.008	liCD	1/2 Core Split
136.13	139.45	3.30	912893	0.43	10.85	89.4	3.7	0.126	0.006	liCD	1/2 Core Split
139.45	143.64	4.20	912894	1.34	0.44	274.6	10.9	0.475	0.014	nmcCD	1/2 Core Split
143.64	146.60	2.96	912895	0.62	0.08	122.3	2.9	0.163	0.014	glCD	1/2 Core Split
146.60	149.81	3.20	912896	0.55	2.77	209.8	2.2	0.185	0.015	glCD	1/2 Core Split
149.81	152.81	3.00	912897	1.26	0.33	136.5	11.3	0.201	0.009	gliCCCD	1/2 Core Split
152.81	155.78	3.00	912898	1.07	0.36	150.0	2.9	0.173	0.007	gliCCCD	1/2 Core Split
155.78	159.89	4.10	912899	0.16	1.36	80.6	1.1	0.124	0.005	blfgCD	1/2 Core Split
159.89	163.90	4.00	912901	0.56	8.19	153.0	2.8	0.168	0.008	blfgCD	1/2 Core Split
163.90	166.09	2.20	912902	0.44	0.18	90.8	0.9	0.113	0.005	glCD	1/2 Core Split
166.09	168.69	2.60	912903	0.10	0.79	79.6	0.6	0.102	0.007	bmiCD	1/2 Core Split
168.69	171.07	2.40	912904	0.18	1.44	112.9	1.4	0.200	0.009	bmiCD	1/2 Core Split
171.07	174.44	3.40	912905	0.48	6.97	164.2	3.9	0.193	0.014	gmiCD	1/2 Core Split
174.44	177.84	3.40	912906	0.35	1.67	160.4	2.8	0.197	0.012	gmiCD	1/2 Core Split
177.84	181.00	3.20	912907	0.22	4.44	152.3	2.9	0.270	0.009	gmiCD	1/2 Core Split
181.00	184.06	3.10	912908	0.46	5.4	149.9	2.7	0.255	0.013	bliCD	1/2 Core Split
184.06	186.94	2.90	912909	0.52	8.47	124.3	3.6	0.220	0.013	bliCD	1/2 Core Split
Standard	Aley1		912910	0.44	26.53	146.8	8.9	0.249	0.010		Quality Control
186.94	189.72	2.80	912911	0.17	0.69	147.6	0.9	0.217	0.008	gmiCD	1/2 Core Split
189.72	192.56	2.80	912912	0.29	2.5	142.1	1.3	0.128	0.013	gmiCD	1/2 Core Split
192.56	195.31	2.80	912913	0.20	0.31	48.7	3.5	0.114	0.006	gmiCD	1/2 Core Split
195.31	198.92	3.60	912914	0.52	15.9	197.2	6.0	0.163	0.013	gmpCD	1/2 Core Split
198.92	202.52	3.60	912915	0.50	62.94	111.8	29.8	0.181	0.011	gmpCD	1/2 Core Split
202.52	206.47	3.90	912916	0.41	5.93	228.5	3.5	0.166	0.011	gmpCD	1/2 Core Split
206.47	210.15	3.70	912917	0.41	9.26	158.3	4.8	0.451	0.016	gmpCD	1/2 Core Split
210.15	213.41	3.80	912918	0.30	8.34	134.5	2.8	0.144	0.010	gmpCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples			Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information			
Logged By	Ryan Kressall		Easting	654,064.539	Central 4	Azimuth	30 °	Date Start	25-Aug-10		
Laboratory	Inspectorate		Northing	7,710,419.843		Inclination	-45 °	Date End	27-Aug-10		
File No.	10-360-03626-01		Elevation	543.094		Length	213.41 Metres	Operator	Taseko		
Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
Drill Hole Selected Interval - Weighted Average Analytical Results											
Sample Interval (metres)				Analytical Results							
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
6.10	213.41	207.31		0.658	9	147.2	4	0.280	0.010		
6.10	35.65	29.55	Incl.	0.900	24	177.4	5	0.530	0.009		
61.13	123.45	62.32	Incl.	0.873	5	150.1	5	0.249	0.012		
139.45	155.78	16.33	Incl.	0.990	1	186.2	6	0.318	0.012		

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,124.652	Central 4	Azimuth	60 °	Date Start	26-Aug-10
Laboratory	Inspectorate	Northing	7,710,438.797		Inclination	-50 °	Date End	27-Aug-10
File No.	10-360-03625-01	Elevation	552.776		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y ₂ O ₃ %		
0.00	2.49	2.50	Not Sampled							CASE	Not Sampled
2.49	5.10	2.60	912761	0.30	4.9	50.6	0.8	0.209	0.009	bliCD	1/2 Core Split
5.10	8.67	3.60	912762	0.26	2.77	48.7	0.5	0.200	0.008	bliCD	1/2 Core Split
8.67	12.20	3.50	912763	0.29	12.74	75.0	1.7	0.173	0.007	bliCD	1/2 Core Split
12.20	15.70	3.50	912764	0.31	43.33	136.2	7.4	0.163	0.008	bliCD	1/2 Core Split
15.70	19.32	3.60	912765	0.26	26.99	113.5	4.8	0.248	0.008	bliCD	1/2 Core Split
19.32	22.82	3.50	912766	0.38	24.05	76.4	4.3	0.152	0.009	bliCD	1/2 Core Split
22.82	26.58	3.80	912767	0.30	9.77	41.7	4.1	0.196	0.007	bliCD	1/2 Core Split
26.58	30.49	3.90	912768	0.11	0.7	23.8	0.3	0.140	0.004	gmCD	1/2 Core Split
30.49	34.65	4.20	912769	0.28	10.58	52.4	4.9	0.175	0.008	gmCD	1/2 Core Split
Standard	Aley2		912770	0.71	48.04	224.9	2.4	0.235	0.013		Quality Control
34.65	39.63	5.00	912771	0.29	4.86	74.8	0.6	0.150	0.009	nmiCD	1/2 Core Split
39.63	42.68	3.00	912772	0.44	4.13	100.5	0.7	0.183	0.009	nmiCD	1/2 Core Split
42.68	45.73	3.00	912773	0.32	4.62	94.9	1.4	0.161	0.010	nmiCD	1/2 Core Split
45.73	48.78	3.10	912774	0.44	2.08	106.4	0.6	0.224	0.011	nmiCD	1/2 Core Split
48.78	51.83	3.00	912775	0.53	3.78	103.4	0.7	0.238	0.011	nmiCD	1/2 Core Split
51.83	54.88	3.10	912776	0.35	2.49	93.5	0.7	0.174	0.009	nmiCD	1/2 Core Split
54.88	57.93	3.00	912777	0.48	8.89	119.5	2.4	0.168	0.008	nmiCD	1/2 Core Split
57.93	60.96	3.00	912778	0.32	2.09	76.1	0.9	0.122	0.006	nmiCD	1/2 Core Split
60.96	64.02	3.10	912779	0.37	1.61	98.9	0.3	0.171	0.007	nmiCD	1/2 Core Split
64.02	67.07	3.00	912781	0.34	2.79	75.9	0.4	0.130	0.007	nmiCD	1/2 Core Split
67.07	70.12	3.10	912782	0.56	7.84	103.8	1.2	0.171	0.010	nmiCD	1/2 Core Split
70.12	73.17	3.00	912783	0.50	4.04	96.8	0.9	0.145	0.006	nmiCD	1/2 Core Split
73.17	76.22	3.00	912784	0.42	5.99	60.1	1.6	0.187	0.010	nmiCD	1/2 Core Split
76.22	79.27	3.00	912785	0.13	0.65	44.3	0.5	0.176	0.007	nmiCD	1/2 Core Split
79.27	82.32	3.00	912786	0.23	4.08	89.0	1.5	0.349	0.017	nmiCD	1/2 Core Split
82.32	85.37	3.10	912787	0.22	2.22	46.0	0.8	0.111	0.008	nmiCD	1/2 Core Split
85.37	88.41	3.00	912788	0.33	5.06	62.2	1.6	0.135	0.007	nmiCD	1/2 Core Split
88.41	91.46	3.00	912789	0.68	8.91	83.9	1.4	0.149	0.007	nmiCD	1/2 Core Split
Standard	Aley1		912790	0.45	28.25	172.9	10.4	0.203	0.009		Quality Control
91.46	94.51	3.10	912791	0.49	5.69	124.5	1.1	0.205	0.009	nmiCD	1/2 Core Split
94.51	97.56	3.00	912792	0.26	6.24	33.9	1.9	0.117	0.004	nmiCD	1/2 Core Split
97.56	100.61	3.00	912793	0.42	5.65	49.4	1.7	0.187	0.007	nmiCD	1/2 Core Split
100.61	103.66	3.00	912794	0.24	2.29	46.0	0.8	0.170	0.005	nmiCD	1/2 Core Split
103.66	106.71	3.00	912795	0.27	2.53	50.7	1.0	0.112	0.006	nmiCD	1/2 Core Split
106.71	111.24	4.50	912796	0.32	2.36	40.7	1.2	0.155	0.009	nmiCD	1/2 Core Split
111.24	115.22	4.00	912797	0.25	3.18	45.6	1.0	0.185	0.009	gmiCD	1/2 Core Split
115.22	119.16	3.90	912798	0.31	3.16	50.4	1.2	0.292	0.011	gmiCD	1/2 Core Split
119.16	122.15	3.00	912799	0.40	5.39	55.7	1.4	0.264	0.011	nifgCD	1/2 Core Split

ALEY - ANALYTICAL RESULTS

Drill Core Samples		Location	UTM NAD 83	Comment	Direction / Length		Drill Hole Information	
Logged By	Ryan Kressall	Easting	654,124.652	Central 4	Azimuth	60 °	Date Start	26-Aug-10
Laboratory	Inspectorate	Northing	7,710,438.797		Inclination	-50 °	Date End	27-Aug-10
File No.	10-360-03625-01	Elevation	552.776		Length	213.41 Metres	Operator	Taseko

Sample Interval (metres)			Sample Number	Analytical Results						Litho	Sample Method
From	To	Int.		Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %		
122.15	125.10	2.90	912801	0.27	4.01	37.0	1.3	0.190	0.010	nlfCD	1/2 Core Split
125.10	128.05	3.00	912802	0.38	5.15	53.3	1.4	0.235	0.011	nlfCD	1/2 Core Split
128.05	131.62	3.60	912803	0.54	5.61	47.2	1.3	0.367	0.020	gliCD	1/2 Core Split
131.62	134.94	3.30	912804	0.22	0.71	23.9	0.4	0.183	0.006	gliCD	1/2 Core Split
134.94	138.56	3.60	912805	0.43	1.39	42.6	0.6	0.178	0.009	gliCD	1/2 Core Split
138.56	141.85	3.30	912806	0.33	20.41	88.5	1.6	0.292	0.009	gliCD	1/2 Core Split
141.85	145.27	3.40	912807	0.42	5.55	39.8	1.7	0.281	0.008	nliCD	1/2 Core Split
145.27	148.62	3.30	912808	0.54	10.05	57.8	3.7	0.220	0.011	nliCD	1/2 Core Split
148.62	151.68	3.10	912809	0.25	2.97	34.5	1.3	0.187	0.006	nliCD	1/2 Core Split
Standard	Aley2		912810	0.77	50.37	211.3	2.1	0.229	0.013		Quality Control
151.68	155.49	3.80	912811	0.30	3.46	35.0	1.1	0.188	0.006	nlfAMX	1/2 Core Split
155.49	159.07	3.60	912812	0.21	0.5	20.1	0.5	0.169	0.005	blpCD	1/2 Core Split
159.07	162.59	3.50	912813	0.50	3.58	27.0	1.2	0.161	0.007	blpCD	1/2 Core Split
162.59	166.20	3.60	912814	0.19	22.39	30.5	9.8	0.164	0.006	blpCD	1/2 Core Split
166.20	169.87	3.70	912815	0.29	11.17	36.5	5.5	0.171	0.007	blpCD	1/2 Core Split
169.87	173.66	3.80	912816	0.16	3.3	19.7	3.0	0.152	0.005	blpCD	1/2 Core Split
173.66	177.25	3.60	912817	0.41	13.24	51.6	7.6	0.207	0.007	blpCD	1/2 Core Split
177.25	180.61	3.40	912818	0.17	14.03	34.9	6.5	0.300	0.009	blpCD	1/2 Core Split
180.61	184.08	3.50	912819	0.19	2.85	28.2	2.7	0.154	0.005	blpCD	1/2 Core Split
184.08	186.49	2.40	912821	0.19	1.3	25.9	0.4	0.105	0.004	blpCCCD	1/2 Core Split
186.49	189.02	2.50	912822	0.46	5.35	55.6	1.7	0.218	0.010	blpCCCD	1/2 Core Split
Blank	Granite		912823	0.31	3.75	50.1	2.9	0.189	0.009		Quality Control
189.02	191.43	2.40	912824	0.33	3.57	49.2	2.3	0.223	0.009	blpCCCD	1/2 Core Split
191.43	194.09	2.70	912825	0.27	1.22	44.7	0.3	0.142	0.005	blpCCCD	1/2 Core Split
194.09	197.43	3.30	912826	0.20	4.17	24.6	1.6	0.159	0.007	blpCD	1/2 Core Split
197.43	200.78	3.30	912827	0.18	0.92	40.3	0.6	0.182	0.006	blpCD	1/2 Core Split
200.78	203.99	3.20	912828	0.10	11.22	26.3	4.9	0.183	0.007	blpCD	1/2 Core Split
203.99	207.40	3.40	912829	0.08	10.02	44.2	6.8	0.326	0.007	blpCD	1/2 Core Split
Standard	Aley3		912830	0.79	38.49	307.9	7.7	0.201	0.009		Quality Control
207.40	210.30	2.90	912831	0.39	21.5	120.2	4.9	0.259	0.007	blAMX	1/2 Core Split
210.30	213.41	3.10	912832	0.23	2.45	22.8	1.5	0.122	0.007	blAMX	1/2 Core Split

Drill Hole Selected Interval - Weighted Average Analytical Results

Sample Interval (metres)			Analytical Results					
From	To	Int.	Nb ₂ O ₅ %	Ta ppm	Th ppm	U ppm	TREO %	Y2O3 %
2.49	162.59	160.10	0.346	7	64.7	2	0.196	0.008

Certificate of Analysis

10-360-03268-01

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 10/18/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-020</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">66</td> <td>Core</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	66	Core	SP-RX-2K/Rock/Chips/Drill Core	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
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Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875350	Pulp	0.54	1.90	0.30	66.03	<0.01	8.29	0.71	1.50	2.38	1.36	0.44	3.41	9.92	0.22
B875351	Core	0.17	0.20	<0.01	60.21	<0.01	7.19	<0.01	4.58	17.26	0.75	0.04	5.42	1.83	0.05
B875352	Core	0.22	0.65	<0.01	55.15	<0.01	9.28	0.02	4.40	15.86	0.64	0.26	4.22	5.69	0.14
B875353	Core	0.67	5.80	<0.01	32.91	0.01	6.21	0.28	6.38	14.91	0.16	0.23	8.80	21.52	0.79
B875354	Core	0.18	0.24	<0.01	65.01	<0.01	5.34	0.03	5.06	15.20	0.45	0.11	5.73	0.86	0.05
B875355	Core	0.59	0.41	<0.01	64.65	<0.01	4.44	0.07	4.56	15.14	0.41	0.13	6.96	1.39	0.03
B875356	Core	0.72	1.34	<0.01	60.12	<0.01	4.64	0.07	4.67	17.21	0.46	0.08	4.19	5.17	0.09
B875357	Core	0.17	5.14	0.02	20.34	<0.01	6.96	0.78	5.67	15.69	0.23	0.39	2.57	38.28	0.85
B875358	Core	0.35	1.13	<0.01	49.93	<0.01	7.06	0.23	4.82	15.61	0.42	0.30	3.45	14.44	0.09
B875359	Core	0.28	3.60	0.01	28.05	<0.01	6.62	0.40	5.57	15.59	0.32	0.40	3.56	36.39	0.19
B875360 Dup	Core	0.28	3.57	0.01	27.90	0.02	6.40	0.39	5.51	15.31	0.35	0.32	3.50	37.56	0.20
B875361	Core	0.20	0.35	<0.01	62.71	<0.01	5.99	0.04	4.89	16.74	0.45	0.10	4.10	2.32	0.03
B875362	Core	0.07	0.20	<0.01	63.62	<0.01	5.30	0.03	6.70	18.08	0.52	0.08	2.12	1.63	0.02
B875363	Core	0.12	0.34	<0.01	61.94	<0.01	6.36	0.04	7.02	15.78	0.32	0.12	2.83	2.92	0.04
B875364	Core	0.65	0.45	<0.01	60.52	<0.01	6.20	0.03	4.09	12.90	0.37	0.10	6.51	6.23	0.07
B875365	Core	0.41	0.47	0.03	30.32	<0.01	29.47	0.18	6.40	8.38	0.48	0.11	7.03	6.88	0.29
B875366	Core	0.49	0.25	<0.01	54.27	0.01	9.15	0.03	5.65	14.58	0.75	0.04	4.88	7.02	0.05
B875367	Core	0.45	0.15	<0.01	65.59	<0.01	5.10	0.01	3.87	14.71	0.56	0.06	5.08	2.74	0.05
B875368	Core	0.05	0.70	<0.01	57.52	<0.01	7.06	0.05	4.03	14.17	0.26	0.06	5.93	6.86	0.21
B875369	Core	0.03	0.40	<0.01	64.42	<0.01	4.58	<0.01	4.28	16.07	0.31	0.06	2.52	5.81	0.07
B875370	Pulp	0.48	0.30	<0.01	66.47	<0.01	5.70	0.04	3.35	14.65	0.43	0.09	3.42	2.56	0.11
B875371	Core	0.05	0.38	<0.01	63.81	<0.01	3.69	0.02	7.16	15.71	0.27	0.07	4.21	3.41	0.04
B875372	Core	0.06	0.40	<0.01	61.74	<0.01	4.41	<0.01	8.58	15.17	0.28	0.06	4.98	2.55	0.06
B875373	Core	0.02	0.30	<0.01	55.58	<0.01	8.91	<0.01	8.02	15.36	0.37	0.04	6.07	2.37	0.09
B875374	Core	0.25	0.18	<0.01	58.94	<0.01	6.71	<0.01	10.35	14.32	0.88	0.04	4.34	1.92	0.08
B880355	Core	0.25	0.17	<0.01	63.30	<0.01	5.87	<0.01	6.75	15.22	0.71	0.04	5.06	0.62	0.07
B880356	Core	0.71	0.39	<0.01	63.91	<0.01	4.57	0.03	7.48	14.19	0.34	0.07	5.32	2.08	0.17
B880357	Core	0.49	0.25	<0.01	64.74	<0.01	3.92	0.02	7.84	14.18	0.34	0.07	5.59	1.78	0.09
B880358	Core	0.25	0.13	<0.01	65.63	<0.01	3.59	0.02	7.81	17.22	0.45	0.06	2.60	1.22	0.03
B880359	Core	0.36	0.23	<0.01	66.99	<0.01	4.11	<0.01	7.87	12.73	0.45	0.06	4.49	1.27	0.10
B880360	Pulp	0.74	0.23	0.02	69.68	<0.01	3.75	0.04	4.73	11.89	0.28	0.12	3.43	3.95	0.12
B880361	Core	0.37	0.15	<0.01	65.09	<0.01	4.01	<0.01	9.98	13.76	0.45	0.06	4.13	1.04	0.04
B880362	Core	0.35	0.17	<0.01	62.94	<0.01	5.86	<0.01	8.64	12.91	0.57	0.04	5.28	1.27	0.09
B880363	Core	0.78	0.36	<0.01	68.58	<0.01	5.65	<0.01	6.89	8.64	0.27	0.08	5.49	1.89	0.16
B880364	Core	0.61	0.26	<0.01	64.82	<0.01	4.13	0.01	8.51	14.96	0.26	0.08	4.31	1.04	0.04
B880365	Core	0.55	0.21	<0.01	64.89	<0.01	4.08	0.01	8.74	11.64	0.30	0.07	6.75	1.25	0.05
B880366	Core	0.71	0.22	0.01	66.04	<0.01	5.16	0.02	7.51	11.84	0.38	0.07	5.06	1.29	0.06
B880367	Core	0.57	0.17	0.02	62.32	<0.01	11.19	<0.01	6.31	8.48	0.55	0.04	5.44	0.99	0.08
B880368	Core	0.65	0.30	<0.01	60.43	<0.01	6.82	<0.01	7.82	11.47	0.52	0.05	8.24	1.68	0.13
B880369	Core	2.74	1.14	0.03	39.02	<0.01	25.73	0.39	7.35	7.13	0.39	0.06	7.03	5.69	1.10



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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B880370 Dup	Core	2.80	1.16	0.03	39.78	<0.01	22.53	0.45	7.42	6.77	0.36	0.08	7.50	5.61	0.85
B880371	Core	0.47	0.14	<0.01	65.53	<0.01	4.51	<0.01	8.38	14.18	0.41	0.06	4.15	0.95	0.08
B880372	Core	0.51	0.49	<0.01	62.87	<0.01	3.94	0.02	7.82	16.26	0.29	0.07	4.42	2.44	0.05
B880373	Core	0.32	0.33	<0.01	61.01	<0.01	5.70	<0.01	7.33	16.52	0.37	0.08	4.91	1.85	0.06
B880374	Core	0.29	1.56	0.10	30.49	<0.01	24.01	0.70	4.96	11.84	0.47	0.43	5.76	11.61	0.43
B880375	Core	0.15	4.36	0.13	39.39	<0.01	7.37	1.81	4.40	13.05	0.32	1.32	2.68	22.12	0.72
B880376	Core	0.23	1.66	0.08	31.37	<0.01	21.49	0.73	4.25	10.97	0.42	0.17	11.42	10.08	0.32
B880377	Core	0.24	0.69	<0.01	56.09	<0.01	9.95	0.05	5.75	15.44	0.56	0.08	4.78	3.30	0.12
B880378	Core	1.11	0.54	<0.01	56.33	<0.01	8.44	0.03	5.83	15.95	0.54	0.05	5.77	3.55	0.25
B880379	Core	0.20	0.29	0.01	47.11	<0.01	16.21	0.06	4.53	13.44	0.52	0.06	7.85	4.29	0.15
B880380	Pulp	0.45	0.34	<0.01	65.79	<0.01	5.70	0.06	3.72	15.82	0.43	0.13	3.71	2.22	0.11
B880381	Core	0.29	0.43	<0.01	63.29	<0.01	5.51	0.06	4.66	14.87	0.29	0.12	5.06	3.44	0.12
B880382	Core	<0.01	15.41	0.11	5.73	0.02	3.60	3.68	0.53	1.31	0.09	3.82	0.19	64.38	0.39
B880383	Core	0.25	0.31	<0.01	65.71	<0.01	4.12	0.03	4.14	15.98	0.33	0.11	5.63	2.13	0.12
B880384	Core	0.66	0.71	<0.01	62.57	<0.01	5.01	0.01	4.91	16.31	0.26	0.09	3.47	4.78	0.11
B880385	Core	0.17	0.29	<0.01	67.41	<0.01	4.36	<0.01	5.10	16.44	0.27	0.07	3.36	0.95	0.09
B880386	Core	0.16	0.34	<0.01	57.21	<0.01	6.41	0.01	7.65	16.45	0.31	0.06	7.10	2.12	0.15
B880387	Core	0.60	0.30	<0.01	60.53	<0.01	6.70	<0.01	4.86	18.22	0.34	0.04	4.00	2.67	0.14
B880388	Core	0.50	2.50	0.08	47.78	<0.01	10.73	1.08	2.26	7.60	0.35	1.23	3.30	19.63	0.71
B880389	Core	0.51	0.36	0.02	61.40	<0.01	8.24	0.07	4.28	14.04	0.47	0.11	4.84	3.24	0.13
B880390 Dup	Core	0.47	0.33	0.02	62.13	<0.01	7.76	0.07	4.97	13.79	0.47	0.11	4.62	3.04	0.12
B880391	Core	0.37	0.19	<0.01	63.41	<0.01	4.54	<0.01	4.98	19.25	0.38	0.05	3.30	1.88	0.10
B880392	Core	0.42	0.23	<0.01	65.92	<0.01	4.11	0.01	4.42	17.23	0.35	0.07	3.76	2.25	0.09
B880393	Core	0.22	3.51	0.05	41.39	<0.01	6.53	1.70	3.98	12.38	0.30	1.05	2.77	23.71	0.63
B880394	Core	0.27	0.59	<0.01	59.04	<0.01	4.51	0.19	4.90	16.68	0.32	0.16	3.00	9.11	0.05
B880395	Core	0.25	1.77	0.01	50.73	<0.01	4.63	0.52	5.18	18.19	0.28	0.16	2.05	14.92	0.11
B880396	Core	0.13	4.23	0.01	38.03	<0.01	6.35	0.31	6.73	17.94	0.20	0.10	1.75	21.94	0.32
B880397	Core	0.35	0.75	<0.01	60.30	<0.01	4.47	0.10	4.78	16.40	0.31	0.31	6.09	4.05	0.06
B880398	Core	0.26	0.33	<0.01	62.19	<0.01	4.66	0.03	4.58	19.05	0.39	0.13	5.71	1.14	0.03
B880399	Core	0.19	0.46	<0.01	54.03	<0.01	9.17	0.06	4.47	18.17	0.34	0.08	4.06	6.05	0.13

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Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875350	Pulp	96.49	<0.5	0.87	25	2883	<2	>10	<0.5	5	9	17	2.83	0.57	898
B875351	Core	97.56	<0.5	0.07	11	26	<2	>10	<0.5	5	9	11	2.57	<0.01	401
B875352	Core	96.33	<0.5	0.29	11	27	<2	>10	<0.5	6	8	17	3.08	0.01	286
B875353	Core	98.01	<0.5	3.29	8	55	<2	>10	<0.5	9	28	44	3.76	0.22	396
B875354	Core	98.09	<0.5	0.09	43	25	<2	>10	<0.5	4	12	12	3.12	0.02	2104
B875355	Core	98.20	<0.5	0.17	34	36	<2	>10	<0.5	4	10	36	2.57	0.05	1468
B875356	Core	98.05	<0.5	0.58	7	38	<2	>10	<0.5	4	12	42	2.70	0.05	327
B875357	Core	96.93	<0.5	2.61	<5	172	<2	>10	<0.5	18	44	23	4.67	0.56	256
B875358	Core	97.50	<0.5	0.50	14	73	<2	>10	<0.5	9	12	28	4.09	0.17	491
B875359	Core	100.71	<0.5	1.81	5	120	<2	>10	<0.5	7	46	19	3.88	0.31	320
B875360 Dup	Core	101.04	<0.5	1.78	5	106	<2	>10	<0.5	7	46	18	3.85	0.30	310
B875361	Core	97.73	<0.5	0.13	17	24	<2	>10	<0.5	6	10	15	3.50	0.03	611
B875362	Core	98.31	<0.5	0.06	27	26	<2	>10	<0.5	5	10	5	3.00	0.02	981
B875363	Core	97.71	<0.5	0.12	50	25	<2	>10	<0.5	4	10	9	3.84	0.03	2411
B875364	Core	97.48	<0.5	0.17	31	30	<2	>10	<0.5	8	13	38	4.29	0.02	1775
B875365	Core	90.04	<0.5	0.19	<5	252	<2	>10	<0.5	20	12	8	>10	0.14	470
B875366	Core	96.69	<0.5	0.10	47	41	<2	>10	<0.5	11	13	33	3.92	0.02	2400
B875367	Core	97.95	<0.5	0.05	5	64	<2	>10	<0.5	6	9	27	3.50	<0.01	284
B875368	Core	96.86	<0.5	0.30	7	26	<2	>10	<0.5	9	11	5	4.88	0.03	330
B875369	Core	98.54	<0.5	0.17	16	14	<2	>10	<0.5	5	14	3	3.15	<0.01	650
B875370	Pulp	97.12	<0.5	0.10	6	42	<2	>10	<0.5	5	5	29	4.03	0.03	322
B875371	Core	98.77	<0.5	0.16	7	38	<2	>10	<0.5	7	10	5	2.47	0.01	270
B875372	Core	98.24	<0.5	0.17	13	79	<2	>10	<0.5	7	9	5	2.99	<0.01	443
B875373	Core	97.11	<0.5	0.12	28	78	<2	>10	<0.5	10	9	2	3.88	<0.01	940
B875374	Core	97.78	<0.5	0.02	<5	80	<2	>10	<0.5	4	10	15	2.95	<0.01	198
B880355	Core	97.83	<0.5	0.04	5	51	<2	>10	<0.5	3	19	16	2.89	<0.01	251
B880356	Core	98.57	<0.5	0.16	9	46	<2	>10	<0.5	10	8	48	3.98	0.03	428
B880357	Core	98.83	<0.5	0.12	7	34	<2	>10	<0.5	9	13	38	3.68	0.02	335
B880358	Core	98.77	<0.5	0.04	8	44	<2	>10	<0.5	5	8	18	3.20	<0.01	344
B880359	Core	98.32	<0.5	0.07	30	73	<2	>10	<0.5	8	8	31	3.70	<0.01	426
B880360	Pulp	98.24	<0.5	0.08	10	160	<2	>10	<0.5	4	6	41	3.19	0.03	357
B880361	Core	98.72	<0.5	0.05	11	61	<2	>10	<0.5	6	9	25	3.20	<0.01	384
B880362	Core	97.80	<0.5	0.06	19	66	<2	>10	<0.5	6	8	24	3.22	<0.01	297
B880363	Core	98.04	<0.5	0.15	37	75	<2	>10	<0.5	14	8	28	5.28	<0.01	393
B880364	Core	98.43	<0.5	0.08	10	50	<2	>10	<0.5	8	9	37	3.71	<0.01	320
B880365	Core	97.99	<0.5	0.06	9	60	<2	>10	<0.5	7	9	33	3.60	<0.01	318
B880366	Core	97.66	<0.5	0.08	21	122	<2	>10	<0.5	10	10	25	4.54	<0.01	295
B880367	Core	95.58	<0.5	0.06	28	173	<2	>10	<0.5	5	7	33	6.14	<0.01	457
B880368	Core	97.46	<0.5	0.12	17	66	<2	>10	<0.5	14	8	7	3.50	<0.01	319
B880369	Core	95.07	<0.5	0.56	<5	268	<2	>10	<0.5	16	9	313	>10	0.33	439

Certificate of Analysis

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Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B880370 Dup	Core	92.54	<0.5	0.56	<5	263	<2	>10	<0.5	17	8	288	>10	0.33	489
B880371	Core	98.41	<0.5	0.05	12	47	<2	>10	<0.5	7	8	28	3.74	<0.01	268
B880372	Core	98.70	<0.5	0.23	6	30	<2	>10	<0.5	7	12	34	3.19	0.02	347
B880373	Core	98.18	<0.5	0.14	8	45	<2	>10	<0.5	11	16	21	3.71	<0.01	332
B880374	Core	92.37	<0.5	0.73	<5	824	<2	>10	<0.5	23	12	18	>10	0.57	266
B880375	Core	97.68	<0.5	2.29	<5	1369	<2	>10	<0.5	20	20	43	5.10	1.57	232
B880376	Core	92.96	<0.5	0.75	<5	587	<2	>10	<0.5	23	10	6	>10	0.59	324
B880377	Core	96.82	<0.5	0.30	6	71	<2	>10	<0.5	9	11	17	3.91	0.04	274
B880378	Core	97.29	<0.5	0.24	<5	37	<2	>10	<0.5	6	14	61	4.18	0.02	352
B880379	Core	94.52	<0.5	0.12	<5	112	<2	>10	<0.5	11	14	10	8.18	0.05	224
B880380	Pulp	98.04	<0.5	0.11	7	40	<2	>10	<0.5	6	6	27	3.78	0.03	343
B880381	Core	97.87	<0.5	0.17	<5	56	<2	>10	<0.5	9	13	19	4.32	0.05	284
B880382	Core	99.26	<0.5	8.28	<5	830	<2	3.12	<0.5	8	156	2	2.85	3.36	28
B880383	Core	98.60	<0.5	0.13	6	35	<2	>10	<0.5	7	8	18	3.40	0.02	269
B880384	Core	98.25	<0.5	0.32	<5	31	<2	>10	<0.5	9	9	45	4.19	0.01	307
B880385	Core	98.35	<0.5	0.12	8	20	<2	>10	<0.5	7	9	11	3.57	<0.01	329
B880386	Core	97.81	<0.5	0.14	9	23	<2	>10	<0.5	8	9	13	3.98	<0.01	326
B880387	Core	97.82	<0.5	0.11	<5	22	<2	>10	<0.5	6	10	35	4.16	<0.01	273
B880388	Core	97.25	<0.5	1.44	<5	621	<2	>10	<0.5	15	27	20	6.28	0.82	242
B880389	Core	97.22	<0.5	0.15	<5	219	<2	>10	<0.5	8	8	17	4.99	0.07	324
B880390 Dup	Core	97.43	<0.5	0.15	6	217	<2	>10	<0.5	8	8	17	4.81	0.07	335
B880391	Core	98.09	<0.5	0.08	6	27	<2	>10	<0.5	6	12	24	3.02	0.01	341
B880392	Core	98.46	<0.5	0.09	6	27	<2	>10	<0.5	5	10	29	3.21	0.02	328
B880393	Core	98.02	<0.5	1.88	6	433	<2	>10	<0.5	16	35	35	5.05	1.51	271
B880394	Core	98.56	<0.5	0.28	7	77	<2	>10	<0.5	6	14	20	3.51	0.16	312
B880395	Core	98.57	<0.5	0.92	13	114	<2	>10	<0.5	6	22	16	3.97	0.46	386
B880396	Core	97.92	<0.5	2.51	<5	76	<2	>10	<0.5	20	38	13	5.31	0.23	181
B880397	Core	97.64	<0.5	0.33	10	37	<2	>10	<0.5	5	10	23	3.35	0.05	329
B880398	Core	98.24	<0.5	0.15	8	27	<2	>10	<0.5	5	8	16	3.27	0.03	325
B880399	Core	97.02	<0.5	0.26	10	51	<2	>10	<0.5	6	2	17	6.06	0.04	375

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Aley Corporation
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Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875350	Pulp	1.42	6867	13	0.34	1	>10000	63	<5	3	>10000	0.09	<10	153	<10
B875351	Core	>10	3942	1	0.02	<1	>10000	18	<5	7	2850	0.01	<10	21	<10
B875352	Core	>10	3459	3	0.24	1	>10000	9	<5	7	1876	0.04	<10	52	<10
B875353	Core	9.59	984	3	0.17	13	>10000	8	<5	13	1742	0.23	<10	75	<10
B875354	Core	>10	3839	5	0.05	<1	>10000	16	<5	8	2153	0.01	<10	18	<10
B875355	Core	>10	3165	2	0.07	2	>10000	8	<5	6	2311	0.02	<10	18	<10
B875356	Core	>10	3623	2	0.03	3	>10000	6	<5	7	2478	0.03	<10	26	<10
B875357	Core	>10	1861	11	0.27	17	>10000	11	<5	22	951	0.33	<10	126	<10
B875358	Core	>10	3267	2	0.20	4	>10000	42	<5	15	1970	0.03	<10	36	<10
B875359	Core	>10	2353	2	0.28	7	>10000	11	<5	15	1504	0.06	<10	72	<10
B875360 Dup	Core	>10	2372	2	0.27	7	>10000	8	<5	14	1477	0.06	<10	70	<10
B875361	Core	>10	3523	6	0.04	2	>10000	14	<5	6	1730	<0.01	<10	20	<10
B875362	Core	>10	4208	5	0.03	<1	9354	13	<5	6	2084	<0.01	<10	11	<10
B875363	Core	>10	2605	5	0.05	<1	>10000	21	<5	8	530	0.01	<10	27	<10
B875364	Core	8.36	3427	2	0.04	2	>10000	15	<5	11	2401	0.03	<10	58	<10
B875365	Core	5.48	4477	1	0.05	4	>10000	26	<5	9	2815	0.17	<10	221	<10
B875366	Core	9.43	4545	3	0.03	2	>10000	17	<5	11	2683	0.02	<10	23	<10
B875367	Core	9.89	5093	1	0.03	<1	>10000	8	<5	6	4134	0.02	<10	23	<10
B875368	Core	9.40	2371	3	0.02	<1	>10000	14	<5	6	575	0.08	<10	75	<10
B875369	Core	>10	2903	3	0.02	<1	>10000	10	<5	7	566	0.02	<10	27	<10
B875370	Pulp	>10	4213	3	0.04	<1	>10000	6	<5	7	2260	0.03	<10	33	<10
B875371	Core	>10	2422	1	0.02	<1	>10000	13	<5	4	712	0.02	<10	31	<10
B875372	Core	>10	2577	1	0.02	<1	>10000	11	<5	4	629	0.03	<10	32	<10
B875373	Core	>10	2272	2	0.02	<1	>10000	18	<5	6	261	0.03	<10	38	<10
B875374	Core	9.79	5510	3	0.02	<1	>10000	6	<5	6	3183	0.02	<10	9	<10
B880355	Core	>10	4843	2	0.02	<1	>10000	7	<5	7	3202	0.02	<10	14	<10
B880356	Core	>10	3784	1	0.03	1	>10000	9	<5	7	2546	0.05	<10	51	<10
B880357	Core	9.31	4034	1	0.03	2	>10000	10	<5	7	2432	0.03	<10	27	<10
B880358	Core	>10	5137	1	0.02	<1	>10000	8	<5	6	3181	0.01	<10	10	<10
B880359	Core	7.73	5066	2	0.02	<1	>10000	9	<5	8	2765	0.04	<10	26	<10
B880360	Pulp	8.23	3046	2	0.06	1	>10000	6	<5	7	2175	0.06	<10	67	<10
B880361	Core	9.31	4796	2	0.02	<1	>10000	7	<5	6	3094	0.02	<10	15	<10
B880362	Core	8.64	4376	2	0.02	<1	>10000	6	<5	7	2631	0.02	<10	16	<10
B880363	Core	5.80	3402	3	0.02	<1	>10000	9	<5	6	1977	0.07	<10	91	<10
B880364	Core	>10	3082	2	0.02	<1	>10000	9	<5	6	1567	0.02	<10	33	<10
B880365	Core	8.05	3496	2	0.02	<1	>10000	8	<5	7	2173	0.03	<10	34	<10
B880366	Core	7.44	4216	3	0.02	<1	>10000	10	<5	5	2111	0.02	<10	55	<10
B880367	Core	5.91	4053	3	0.02	<1	>10000	7	<5	7	1922	0.03	<10	76	<10
B880368	Core	7.95	3616	2	0.02	<1	>10000	9	<5	4	2566	0.04	<10	63	<10
B880369	Core	4.27	3815	5	0.04	10	>10000	2	<5	5	2505	0.57	<10	281	<10

Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B880370 Dup	Core	4.21	3630	4	0.04	9	>10000	7	<5	5	2383	0.51	<10	277	<10
B880371	Core	9.29	4510	3	0.02	<1	>10000	8	<5	6	2786	0.04	<10	43	<10
B880372	Core	>10	3152	1	0.02	2	>10000	8	<5	6	1487	0.03	<10	31	<10
B880373	Core	>10	3242	2	0.03	1	>10000	9	<5	6	1707	0.03	<10	32	<10
B880374	Core	7.75	4393	1	0.31	5	>10000	28	<5	15	2991	0.25	<10	165	<10
B880375	Core	7.80	3024	3	0.94	10	>10000	10	<5	12	2349	0.39	<10	104	<10
B880376	Core	6.51	3633	<1	0.13	3	>10000	28	<5	13	2420	0.17	<10	129	<10
B880377	Core	>10	4205	1	0.05	2	>10000	9	<5	5	2968	0.04	<10	44	<10
B880378	Core	>10	3753	1	0.03	2	>10000	5	<5	6	2480	0.07	<10	50	<10
B880379	Core	8.87	3690	<1	0.04	1	>10000	16	<5	9	2817	0.06	<10	83	<10
B880380	Pulp	>10	3873	3	0.04	<1	>10000	9	<5	6	2050	0.03	<10	34	<10
B880381	Core	>10	2968	<1	0.03	2	>10000	10	<5	7	2002	0.06	<10	59	<10
B880382	Core	0.78	715	3	2.96	7	863	12	<5	5	615	0.29	<10	53	<10
B880383	Core	9.69	3517	2	0.03	<1	>10000	10	<5	8	2613	0.04	<10	31	<10
B880384	Core	>10	2776	2	0.03	1	>10000	9	<5	10	870	0.06	<10	50	<10
B880385	Core	>10	2866	1	0.02	<1	>10000	8	<5	6	893	0.04	<10	31	<10
B880386	Core	9.90	2701	3	0.02	<1	>10000	12	<5	5	697	0.04	<10	33	<10
B880387	Core	>10	2867	2	0.02	2	>10000	9	<5	5	845	0.06	<10	108	<10
B880388	Core	4.81	2767	2	1.14	13	>10000	14	<5	9	4057	0.36	<10	156	<10
B880389	Core	7.70	3949	1	0.09	3	>10000	17	<5	6	3828	0.05	<10	75	<10
B880390 Dup	Core	7.86	3937	1	0.09	<1	>10000	15	<5	5	3724	0.04	<10	74	<10
B880391	Core	>10	3343	1	0.03	<1	>10000	14	<5	6	1703	0.05	<10	71	<10
B880392	Core	>10	3573	1	0.03	1	>10000	11	<5	5	1782	0.05	<10	55	<10
B880393	Core	8.07	3000	3	0.77	10	>10000	14	<5	14	1768	0.36	<10	132	<10
B880394	Core	>10	3225	6	0.10	1	>10000	12	<5	11	1618	0.02	<10	44	<10
B880395	Core	>10	3104	17	0.10	3	>10000	11	<5	16	1661	0.04	<10	45	<10
B880396	Core	>10	2178	5	0.05	15	8838	10	<5	12	1358	0.08	<10	71	<10
B880397	Core	9.41	3004	4	0.22	1	>10000	12	<5	6	1639	0.02	<10	29	<10
B880398	Core	>10	3605	4	0.07	<1	>10000	16	<5	6	2143	0.01	<10	17	<10
B880399	Core	>10	3030	<1	0.05	<1	>10000	14	<5	8	1524	0.08	<10	115	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875350	Pulp	419	69	>1000	16.1	4.8	13.3	45.6	0.2	2.1	955.6	0.4	489.4	155.5	52.7
B875351	Core	13	14	722.6	18.5	5.3	10.0	35.1	0.7	2.7	432.0	0.4	270.7	74.4	38.3
B875352	Core	15	13	584.3	21.8	7.2	10.9	34.6	0.6	3.3	333.8	0.5	234.5	61.0	37.2
B875353	Core	24	98	869.6	32.4	9.7	28.1	57.9	2.6	4.6	443.2	0.6	385.5	97.5	64.5
B875354	Core	13	19	>1000	24.4	6.3	16.6	66.1	1.8	3.1	>1000	0.4	635.4	202.2	66.6
B875355	Core	13	57	>1000	25.7	6.8	20.4	67.5	4.5	3.3	>1000	0.4	607.8	189.6	71.0
B875356	Core	20	70	767.3	18.3	5.6	15.3	36.6	3.2	2.6	429.3	0.3	287.3	77.9	41.5
B875357	Core	44	90	515.7	13.6	4.3	8.5	25.8	3.5	1.9	274.5	0.3	204.1	54.7	31.5
B875358	Core	64	105	951.7	20.7	6.2	13.6	41.0	4.4	3.0	585.0	0.5	340.0	95.6	44.7
B875359	Core	47	71	616.6	16.9	5.6	10.7	31.9	6.9	2.5	337.7	0.4	238.7	65.1	36.3
B875360 Dup	Core	45	70	628.8	18.3	5.6	11.3	33.1	7.8	2.6	342.3	0.4	247.5	65.3	38.6
B875361	Core	16	43	>1000	25.9	7.5	16.5	55.8	1.6	3.5	709.9	0.5	531.4	139.9	73.3
B875362	Core	14	18	>1000	15.9	4.0	10.2	48.9	0.1	1.9	>1000	0.3	568.5	170.5	56.0
B875363	Core	8	36	>1000	27.3	6.4	19.1	90.0	0.8	2.9	>1000	0.5	>1000	337.7	104.9
B875364	Core	11	51	>1000	34.2	9.3	24.4	80.9	8.5	4.5	>1000	0.6	791.4	234.7	87.3
B875365	Core	136	50	911.5	18.0	4.8	13.3	43.9	14.2	2.3	483.0	0.3	385.0	100.6	51.5
B875366	Core	17	26	>1000	24.5	5.9	19.0	77.1	8.4	2.9	>1000	0.3	852.4	270.9	78.3
B875367	Core	19	15	652.4	19.1	5.1	13.5	36.8	5.3	2.6	308.7	0.3	291.3	73.8	43.1
B875368	Core	14	55	742.7	19.8	7.0	9.8	37.1	2.2	3.1	380.6	0.6	308.7	81.0	42.1
B875369	Core	8	16	>1000	19.1	5.9	12.1	47.7	0.8	2.6	721.4	0.4	492.3	138.3	56.4
B875370	Pulp	21	29	686.5	20.6	6.6	13.0	40.3	2.0	3.1	349.7	0.5	289.3	74.3	46.6
B875371	Core	17	38	591.0	18.4	5.9	10.1	33.5	1.0	2.7	292.8	0.5	260.2	66.1	40.2
B875372	Core	7	34	919.2	21.2	6.6	12.2	43.2	1.0	3.1	485.7	0.6	369.3	98.2	49.7
B875373	Core	8	40	>1000	22.0	6.3	12.3	57.3	0.7	2.8	969.8	0.5	614.3	176.4	63.9
B875374	Core	21	11	467.6	17.2	5.1	9.4	29.0	3.0	2.4	220.9	0.3	209.5	53.6	32.7
B880355	Core	24	36	555.4	18.5	5.7	9.4	33.8	1.7	2.6	280.6	0.4	252.2	62.3	39.7
B880356	Core	18	33	907.9	26.1	8.0	16.0	50.1	3.9	3.7	492.2	0.6	374.7	97.6	55.8
B880357	Core	16	38	693.9	27.1	8.9	13.2	43.6	2.4	4.2	352.8	0.6	305.1	76.7	49.9
B880358	Core	22	15	691.6	15.3	4.4	9.2	32.0	0.8	2.1	391.0	0.3	262.8	71.5	37.5
B880359	Core	22	30	851.1	23.4	6.9	12.7	45.0	1.6	3.3	477.1	0.4	347.2	90.6	51.6
B880360	Pulp	12	39	825.7	24.2	8.1	13.9	45.8	1.6	3.7	408.6	0.7	350.4	89.6	52.4
B880361	Core	16	21	759.9	18.4	5.1	11.1	36.7	2.1	2.5	419.8	0.3	297.5	80.4	42.4
B880362	Core	17	23	645.0	17.4	5.3	10.0	33.5	1.7	2.5	335.0	0.4	269.4	69.3	38.6
B880363	Core	18	31	822.0	28.2	9.1	15.6	49.8	4.8	4.2	417.4	0.7	353.9	91.9	57.7
B880364	Core	10	33	735.7	26.8	8.9	16.3	47.2	3.7	4.0	387.0	0.8	334.5	83.5	52.3
B880365	Core	12	36	693.9	28.8	10.4	15.3	45.1	3.1	4.6	341.0	0.9	306.2	76.7	49.2
B880366	Core	24	30	650.6	22.4	7.0	14.1	39.6	4.5	3.2	313.0	0.6	300.6	74.4	46.8
B880367	Core	27	71	979.2	20.3	6.2	13.3	44.7	3.5	2.8	495.7	0.5	401.3	107.5	52.6
B880368	Core	13	24	693.7	23.1	7.6	13.9	42.2	3.3	3.4	337.7	0.6	318.7	78.3	49.3
B880369	Core	108	86	>1000	25.8	6.6	18.7	60.4	11.7	3.3	514.1	0.5	480.3	121.0	72.3



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B880370 Dup	Core	110	90	>1000	25.8	6.9	18.0	56.2	12.0	3.3	497.2	0.4	468.3	121.9	69.6
B880371	Core	17	20	574.6	18.3	5.9	11.5	33.6	4.4	2.5	272.4	0.5	245.9	64.0	38.6
B880372	Core	10	38	725.2	20.1	6.4	13.1	39.1	3.4	2.8	360.8	0.5	306.1	79.8	45.4
B880373	Core	22	49	693.5	19.9	6.3	12.1	37.1	2.4	2.9	344.9	0.5	295.5	77.1	44.8
B880374	Core	173	375	516.5	14.7	4.2	9.6	28.8	15.6	2.0	237.5	0.3	231.2	59.7	36.1
B880375	Core	68	96	490.0	15.3	5.1	9.0	28.8	2.8	2.4	250.1	0.5	211.3	53.4	32.2
B880376	Core	131	176	725.2	21.5	6.4	13.3	44.2	10.4	3.1	349.2	0.5	330.3	82.1	50.3
B880377	Core	17	31	601.5	17.0	5.4	10.6	33.6	2.1	2.3	301.6	0.4	262.5	66.5	39.0
B880378	Core	18	67	771.5	21.8	6.6	17.6	41.6	3.2	3.1	393.8	0.5	307.8	83.5	46.4
B880379	Core	60	167	544.9	18.2	5.2	11.3	34.4	7.6	2.4	246.5	0.4	256.4	63.3	41.1
B880380	Pulp	21	28	735.7	23.6	7.3	13.6	44.3	2.4	3.5	391.2	0.5	315.6	80.5	51.2
B880381	Core	16	86	687.2	21.7	6.7	14.4	42.4	4.9	3.1	320.8	0.5	307.5	75.6	49.9
B880382	Core	52	6	56.1	2.9	1.5	1.2	3.8	3.2	0.5	28.7	0.2	24.2	6.2	4.3
B880383	Core	14	30	605.8	19.2	6.5	10.5	36.1	5.5	2.9	282.1	0.5	274.6	67.4	42.8
B880384	Core	11	93	668.1	22.7	7.8	13.0	40.2	6.0	3.3	320.8	0.7	291.3	75.2	46.1
B880385	Core	8	27	714.4	18.6	6.2	10.5	36.8	4.3	2.7	369.8	0.5	301.4	79.4	44.3
B880386	Core	7	25	672.0	23.6	7.9	11.5	39.9	1.8	3.6	353.3	0.7	292.4	73.9	45.2
B880387	Core	6	51	645.1	19.8	6.4	13.3	36.4	2.7	2.8	311.9	0.5	278.0	69.9	43.8
B880388	Core	74	102	543.9	16.6	5.4	9.9	29.7	3.1	2.4	252.8	0.5	228.8	58.6	35.3
B880389	Core	34	63	703.9	17.3	5.2	10.9	36.0	3.0	2.4	349.1	0.4	294.2	77.2	41.9
B880390 Dup	Core	39	65	699.9	17.2	5.4	11.1	36.6	2.8	2.4	344.6	0.4	295.1	76.7	43.4
B880391	Core	11	28	746.6	17.7	5.3	11.7	35.8	1.7	2.4	371.9	0.4	314.4	82.4	44.4
B880392	Core	12	39	749.4	20.8	6.3	13.3	41.7	2.0	2.9	351.0	0.5	338.7	84.3	52.0
B880393	Core	76	71	588.4	17.9	5.6	11.3	35.5	3.3	2.5	272.2	0.5	277.3	67.9	47.1
B880394	Core	29	24	625.1	20.2	6.7	11.3	37.5	1.4	3.0	311.3	0.5	293.7	71.4	48.0
B880395	Core	35	27	753.0	15.2	4.5	10.5	35.0	2.1	2.0	404.4	0.3	320.5	81.9	46.7
B880396	Core	19	37	442.4	13.0	4.2	8.1	26.3	2.7	1.9	223.0	0.3	199.7	50.9	33.0
B880397	Core	12	38	720.3	28.9	10.0	14.9	46.5	1.8	4.3	378.8	0.7	310.7	79.3	51.2
B880398	Core	14	18	737.0	19.1	6.0	11.6	37.5	2.2	2.8	408.6	0.4	297.4	77.6	43.3
B880399	Core	25	67	620.5	15.8	5.0	9.8	31.3	2.4	2.2	331.6	0.4	256.0	67.1	37.9



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Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875350	Pulp	2.3	0.6	4.1	61.9	25.10	45.1	0.6
B875351	Core	2.9	0.6	3.5	62.7	8.04	86.9	31.5
B875352	Core	3.5	0.8	5.0	87.1	18.67	108.2	75.2
B875353	Core	5.4	1.0	6.0	130.6	110.89	344.5	222.4
B875354	Core	3.8	0.7	4.5	83.4	15.24	93.1	31.9
B875355	Core	4.2	0.7	4.6	87.6	36.94	196.8	138.9
B875356	Core	3.1	0.6	3.7	71.7	11.34	413.4	68.1
B875357	Core	2.2	0.4	3.2	51.8	15.74	83.6	25.8
B875358	Core	3.3	0.7	4.3	81.3	70.52	189.2	128.3
B875359	Core	2.8	0.6	3.9	66.1	17.79	110.7	52.2
B875360 Dup	Core	3.0	0.6	3.9	69.8	17.53	111.8	59.6
B875361	Core	4.3	0.8	5.2	100.3	20.45	153.0	83.9
B875362	Core	2.4	0.4	2.8	53.9	7.34	94.7	37.7
B875363	Core	4.1	0.7	4.8	87.0	20.26	146.6	101.9
B875364	Core	5.1	1.0	5.8	120.9	36.38	195.3	88.2
B875365	Core	3.1	0.5	3.4	58.8	51.06	73.0	13.6
B875366	Core	3.7	0.6	3.8	75.9	7.08	118.8	5.8
B875367	Core	3.2	0.5	3.0	65.2	2.98	56.0	2.2
B875368	Core	3.1	0.8	5.0	79.2	24.25	126.3	58.3
B875369	Core	3.1	0.6	4.5	66.3	5.92	107.4	14.9
B875370	Pulp	3.6	0.7	4.5	75.9	8.08	129.7	23.8
B875371	Core	3.0	0.7	4.6	70.9	12.44	48.1	76.6
B875372	Core	3.5	0.8	5.2	77.1	8.90	65.6	77.5
B875373	Core	3.5	0.7	4.8	74.6	4.57	112.9	31.1
B875374	Core	2.8	0.5	3.1	64.9	2.92	66.5	2.2
B880355	Core	3.1	0.6	3.7	65.1	3.19	92.7	6.5
B880356	Core	4.4	0.9	5.7	93.9	9.52	133.3	29.6
B880357	Core	4.5	1.0	6.1	104.7	5.33	158.6	15.4
B880358	Core	2.5	0.5	3.0	55.8	2.35	51.9	5.2
B880359	Core	3.9	0.8	4.5	88.9	4.51	122.7	9.6
B880360	Pulp	3.9	0.9	6.3	95.2	2.01	166.4	47.9
B880361	Core	3.1	0.5	3.5	63.7	3.04	82.0	7.8
B880362	Core	2.9	0.6	3.6	64.6	3.04	85.6	5.2
B880363	Core	4.6	1.0	6.2	106.0	5.28	128.8	<0.1
B880364	Core	4.4	1.1	6.7	96.4	3.40	123.7	31.3
B880365	Core	4.7	1.2	7.7	112.3	3.04	159.4	7.8
B880366	Core	3.8	0.8	5.1	79.6	3.52	81.1	0.1
B880367	Core	3.4	0.7	4.6	69.1	3.30	118.2	17.6
B880368	Core	3.9	0.8	5.7	83.0	3.25	73.7	<0.1
B880369	Core	4.7	0.7	4.4	78.4	26.12	270.7	58.0



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Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B880370 Dup	Core	4.6	0.7	4.5	76.4	25.01	275.6	55.7
B880371	Core	3.1	0.6	4.2	62.2	2.27	93.5	0.7
B880372	Core	3.3	0.7	4.7	72.1	3.43	105.2	12.9
B880373	Core	3.4	0.7	4.5	67.0	14.87	103.4	68.5
B880374	Core	2.6	0.4	2.9	45.9	348.60	152.9	38.0
B880375	Core	2.5	0.6	4.0	59.3	48.99	93.2	99.4
B880376	Core	3.8	0.7	4.6	73.3	180.83	135.9	31.1
B880377	Core	2.8	0.6	3.8	60.6	35.97	62.7	103.0
B880378	Core	3.7	0.7	4.6	80.6	62.79	139.7	105.6
B880379	Core	3.0	0.6	3.6	59.6	158.87	84.2	40.1
B880380	Pulp	4.0	0.8	4.9	78.5	8.20	135.4	25.7
B880381	Core	3.7	0.7	4.7	76.9	101.44	90.2	131.9
B880382	Core	0.4	0.2	1.7	16.3	3.59	7.4	2.5
B880383	Core	3.2	0.7	4.5	69.8	47.62	90.3	22.0
B880384	Core	3.6	0.9	5.9	86.3	27.77	184.2	41.4
B880385	Core	3.1	0.7	4.6	67.0	29.95	76.4	70.9
B880386	Core	3.7	1.0	5.9	87.8	12.08	138.5	27.3
B880387	Core	3.2	0.7	4.6	75.2	11.50	275.3	40.9
B880388	Core	2.7	0.6	3.9	59.7	4.83	255.4	1.5
B880389	Core	3.0	0.6	3.9	59.0	36.00	257.3	10.3
B880390 Dup	Core	3.0	0.6	4.0	58.9	35.00	250.2	10.1
B880391	Core	2.9	0.6	4.1	60.8	10.43	188.8	58.3
B880392	Core	3.6	0.7	4.8	76.5	13.00	294.0	124.6
B880393	Core	3.0	0.6	4.1	62.8	16.13	70.9	36.0
B880394	Core	3.3	0.8	4.8	71.5	6.80	91.6	12.7
B880395	Core	2.5	0.4	3.1	48.6	5.05	94.2	10.8
B880396	Core	2.2	0.4	3.0	47.4	16.77	62.1	33.0
B880397	Core	4.8	1.1	6.7	106.9	41.22	200.0	134.2
B880398	Core	3.2	0.7	4.4	67.0	32.37	66.3	59.7
B880399	Core	2.6	0.6	3.8	55.6	25.90	74.4	119.4

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875350	Pulp	0.54													
B875350 Dup		0.54													
QCV1010-00449-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875368	Core	0.05													
B875368 Dup		0.05													
QCV1010-00449-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B880366	Core	0.71													
B880366 Dup		0.65													
QCV1010-00449-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B880384	Core	0.66													
B880384 Dup		0.70													
QCV1010-00449-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B875350	Pulp		1.90	0.30	66.03	<0.01	8.29	0.71	1.50	2.38	1.36	0.44	3.41	9.92	0.22
B875350 Dup			1.89	0.32	66.00	<0.01	8.29	0.65	1.44	2.40	1.34	0.42	3.39	10.04	0.28
QCV1010-00452-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875368	Core		0.70	<0.01	57.52	<0.01	7.06	0.05	4.03	14.17	0.26	0.06	5.93	6.86	0.21
B875368 Dup			0.77	<0.01	56.33	<0.01	7.20	0.05	4.07	15.42	0.26	0.07	6.07	6.93	0.21
QCV1010-00452-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B880366	Core		0.22	0.01	66.04	<0.01	5.16	0.02	7.51	11.84	0.38	0.07	5.06	1.29	0.06
B880366 Dup			0.24	0.01	66.97	<0.01	5.24	0.02	7.80	10.94	0.38	0.07	5.24	1.34	0.06
QCV1010-00452-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B880384	Core		0.71	<0.01	62.57	<0.01	5.01	0.01	4.91	16.31	0.26	0.09	3.47	4.78	0.11
B880384 Dup			0.73	<0.01	62.45	<0.01	5.05	0.02	4.98	16.32	0.26	0.09	3.50	4.80	0.11
QCV1010-00452-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1010-00452-0013-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.32	0.04	9.04	<0.01	6.52	1.63	4.52	0.54	0.10	6.94	0.12	49.95	0.28



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Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875350	Pulp		<0.5	0.87	25	2883	<2	>10	<0.5	5	9	17	2.83	0.57	898
B875350 Dup			<0.5	0.91	23	2876	<2	>10	<0.5	4	8	15	2.99	0.60	942
QCV1010-00450-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.6									1060			
B875368	Core		<0.5	0.30	7	26	<2	>10	<0.5	9	11	5	4.88	0.03	330
B875368 Dup			<0.5	0.31	7	27	<2	>10	<0.5	9	10	6	4.79	0.04	339
QCV1010-00450-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							119	1061	734			
B880366	Core		<0.5	0.08	21	122	<2	>10	<0.5	10	10	25	4.54	<0.01	295
B880366 Dup			<0.5	0.09	18	124	<2	>10	<0.5	8	10	29	4.62	<0.01	279
QCV1010-00450-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							121	1103	771			
B880384	Core		<0.5	0.32	<5	31	<2	>10	<0.5	9	9	45	4.19	0.01	307
B880384 Dup			<0.5	0.31	<5	30	<2	>10	<0.5	9	10	43	3.99	0.01	294
QCV1010-00450-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.4									1023			
QCV1010-00450-0013-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101									6130			
STD-CDN-ME-6 result			>100									6316			
B875350	Pulp	96.49													
B875350 Dup		96.46													
QCV1010-00452-0002-BLK		<0.01													
B875368	Core	96.86													
B875368 Dup		97.38													
QCV1010-00452-0005-BLK		<0.01													
B880366	Core	97.66													
B880366 Dup		98.31													
QCV1010-00452-0008-BLK		<0.01													
B880384	Core	98.25													
B880384 Dup		98.33													
QCV1010-00452-0011-BLK		<0.01													
QCV1010-00452-0013-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.01													



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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875350	Pulp	1.42	6867	13	0.34	1	>10000	63	<5	3	>10000	0.09	<10	153	<10
B875350 Dup		1.37	7255	13	0.36	2	>10000	68	<5	3	>10000	0.15	<10	164	<10
QCV1010-00450-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875368	Core	9.40	2371	3	0.02	<1	>10000	14	<5	6	575	0.08	<10	75	<10
B875368 Dup		9.48	2358	3	0.02	<1	>10000	13	<5	7	574	0.08	<10	75	<10
QCV1010-00450-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385		22							
STD-OREAS-45P-4A result					0.08	373		24							
B880366	Core	7.44	4216	3	0.02	<1	>10000	10	<5	5	2111	0.02	<10	55	<10
B880366 Dup		7.40	4317	3	0.02	<1	>10000	4	<5	6	2119	0.03	<10	56	<10
QCV1010-00450-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.08	378	468	24							
B880384	Core	>10	2776	2	0.03	1	>10000	9	<5	10	870	0.06	<10	50	<10
B880384 Dup		>10	2654	2	0.03	2	>10000	7	<5	10	871	0.05	<10	48	<10
QCV1010-00450-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1010-00450-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							



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Richmond, British Columbia V7A 4V5
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10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875350	Pulp	419	69												
B875350 Dup		435	81												
QCV1010-00450-0002-BLK		<2	<1												
B875368	Core	14	55												
B875368 Dup		19	54												
QCV1010-00450-0005-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		129													
B880366	Core	24	30												
B880366 Dup		25	51												
QCV1010-00450-0008-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		132													
B880384	Core	11	93												
B880384 Dup		11	85												
QCV1010-00450-0011-BLK		<2	<1												
QCV1010-00450-0013-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5494													
QCV1010-00453-0001-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875350	Pulp			>1000	16.1	4.8	13.3	45.6	0.2	2.1	955.6	0.4	489.4	155.5	52.7
B875350 Dup				>1000	16.5	4.7	13.0	45.4	0.2	2.0	958.9	0.4	480.1	153.4	52.3
B875368	Core			742.7	19.8	7.0	9.8	37.1	2.2	3.1	380.6	0.6	308.7	81.0	42.1
B875368 Dup				756.7	20.4	7.3	10.0	37.5	2.2	3.1	387.5	0.6	317.1	82.5	42.5
B880366	Core			650.6	22.4	7.0	14.1	39.6	4.5	3.2	313.0	0.6	300.6	74.4	46.8
B880366 Dup				660.1	22.6	7.0	14.0	41.0	5.3	3.4	321.4	0.6	307.7	75.4	48.0
B880384	Core			668.1	22.7	7.8	13.0	40.2	6.0	3.3	320.8	0.7	291.3	75.2	46.1
B880384 Dup				655.7	22.8	7.9	12.9	39.6	6.4	3.4	327.2	0.7	295.2	74.6	46.3
QCV1010-00453-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2		14.0	10.6	4.3	58.0		57.0		12.7
STD-SY-4 result				114.9	17.8	12.9		13.4	10.3	4.2	54.5		54.2		12.0



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10-360-03268-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
QCV1010-00453-0001-BLK		<0.1	<0.1	<0.1	<0.10			
B875350	Pulp	2.3	0.6	4.1	61.9			
B875350 Dup		2.4	0.6	4.1	61.4			
B875368	Core	3.1	0.8	5.0	79.2			
B875368 Dup		3.0	0.8	5.1	79.6			
B880366	Core	3.8	0.8	5.1	79.6			
B880366 Dup		3.9	0.8	5.2	81.3			
B880384	Core	3.6	0.9	5.9	86.3			
B880384 Dup		3.8	0.9	5.9	85.6			
QCV1010-00453-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected				14.8	119.0			
STD-SY-4 result				13.6	111.5			
B875350	Pulp					25.10	45.1	0.6
B875350 Dup						25.45	46.3	0.5
QCV1103-01139-0002-BLK						<0.05	<0.2	<0.1
QCV1103-01139-0005-BLK						<0.05	<0.2	<0.1
QCV1103-01139-0008-BLK						<0.05	<0.2	<0.1
QCV1103-01139-0011-BLK						<0.05	<0.2	<0.1
QCV1103-01139-0013-BLK						<0.05	<0.2	<0.1
STD-OREAS-45P-4A expected								
STD-OREAS-45P-4A result								0.6

Certificate of Analysis

10-360-03294-01

Inspectorate Exploration & Mining Services Ltd.
#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5 Canada
Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 10/20/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Description: Aley 2010-022</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">6</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">100</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	6	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	100	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	6	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03294-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B874927	Rock	0.34	0.22	<0.01	32.11	<0.01	6.74	0.05	37.40	15.39	0.53	0.04	5.05	0.84	0.06
B874928	Rock	0.35	0.16	<0.01	32.41	<0.01	5.32	0.05	37.67	15.87	0.61	0.06	5.58	1.91	0.02
B874929	Rock	0.38	0.22	<0.01	31.60	<0.01	5.51	0.02	40.73	16.99	0.36	0.08	3.15	0.66	0.02
B874930	Pulp	0.76	0.58	0.02	28.30	<0.01	19.04	0.11	31.37	11.90	0.49	0.06	5.96	2.24	0.64
B874931	Rock	0.33	0.18	<0.01	32.78	<0.01	6.45	0.04	39.08	17.15	0.48	0.06	3.51	0.63	0.02
B874932	Rock	0.56	0.35	<0.01	31.90	<0.01	6.85	0.03	35.70	15.46	0.52	0.04	4.95	2.83	0.15
B874933	Rock	1.09	1.30	<0.01	27.20	<0.01	27.74	0.02	14.51	10.84	0.16	0.04	6.69	4.59	1.42
B874934	Rock	0.69	0.54	<0.01	30.46	<0.01	15.38	0.06	29.86	12.44	0.48	0.04	6.20	2.05	0.67
B874935	Rock	0.43	0.26	<0.01	33.47	<0.01	6.63	0.02	36.24	15.42	0.42	0.04	4.80	1.61	0.23
B874936	Rock	0.38	0.28	<0.01	35.26	<0.01	5.49	<0.01	33.41	14.76	0.39	0.04	8.33	1.65	0.19
B874937	Rock	1.47	0.92	<0.01	33.07	<0.01	9.88	0.11	25.91	11.85	0.36	0.07	10.63	5.31	0.53
B874938	Rock	1.46	1.74	<0.01	31.64	<0.01	6.62	0.02	27.58	13.43	0.35	0.05	9.26	8.11	0.27
B874939	Rock	0.75	0.93	<0.01	32.53	0.01	15.86	0.02	23.52	12.90	0.34	0.04	6.03	4.56	0.63
B874940 Dup	Rock	0.74	0.88	<0.01	32.94	<0.01	15.14	0.02	24.50	13.30	0.35	0.04	5.94	4.35	0.60
B874941	Rock	0.38	0.23	<0.01	32.31	<0.01	6.02	0.02	39.43	15.91	0.68	0.03	3.00	1.39	0.23
B874942	Rock	0.80	0.95	<0.01	32.93	<0.01	5.76	0.03	34.36	14.76	0.57	0.03	5.89	3.19	0.72
B874943	Rock	0.29	0.13	<0.01	34.04	<0.01	5.05	0.03	37.08	16.11	0.57	0.03	5.82	0.56	0.05
B874944	Rock	0.20	0.12	<0.01	34.69	<0.01	4.79	0.05	35.59	14.95	0.55	0.04	8.02	0.60	0.02
B874945	Rock	0.29	0.19	<0.01	33.25	<0.01	6.40	0.02	36.96	16.87	0.68	0.04	3.60	0.73	0.09
B874946	Rock	0.38	0.34	<0.01	31.12	<0.01	9.32	0.02	36.08	16.01	0.48	0.03	2.44	2.25	0.35
B874947	Rock	0.46	0.19	<0.01	36.12	<0.01	4.77	0.02	29.55	13.15	0.40	0.04	11.18	4.27	0.10
B874948	Rock	0.34	0.18	<0.01	30.88	<0.01	6.19	0.02	35.65	14.30	0.58	0.03	4.54	6.46	0.41
B874949	Rock	0.25	0.10	<0.01	31.45	<0.01	6.32	0.02	38.11	15.03	0.66	0.03	4.04	2.61	0.10
B874950	Pulp	0.51	1.87	0.38	48.13	<0.01	4.37	0.80	32.11	1.96	0.88	0.44	2.64	5.96	0.22
B874951	Rock	0.58	0.13	<0.01	32.96	<0.01	8.97	0.04	33.38	13.56	0.62	0.04	4.09	4.93	0.19
B874952	Rock	0.93	1.10	<0.01	29.39	<0.01	5.60	0.04	34.30	15.01	0.71	0.04	3.99	8.86	0.39
B874953	Rock	1.21	1.02	<0.01	30.03	<0.01	7.34	0.04	31.65	14.73	0.58	0.04	4.60	8.42	0.70
B874954	Rock	0.44	0.14	<0.01	33.42	<0.01	5.27	0.02	34.25	14.07	0.53	0.03	7.30	4.00	0.08
B874955	Rock	0.30	0.10	<0.01	34.71	0.01	5.52	0.02	36.31	17.03	0.66	0.03	4.03	1.16	0.05
B874956	Rock	0.43	0.10	<0.01	36.16	<0.01	5.01	0.02	34.97	16.42	0.56	0.03	5.23	1.36	0.06
B874957	Rock	0.80	0.44	0.03	33.04	<0.01	13.00	0.10	31.41	10.78	0.40	0.05	5.83	2.84	0.27
B874958	Rock	0.48	0.22	<0.01	32.73	<0.01	6.40	0.01	36.36	15.56	0.41	0.03	4.52	2.25	0.22
B874959	Rock	1.09	0.34	0.01	30.97	<0.01	16.20	0.07	29.16	11.24	0.42	0.04	5.98	2.80	0.63
B874960 Dup	Rock	1.06	0.38	0.01	30.50	<0.01	16.41	0.07	29.22	11.42	0.44	0.05	6.25	2.17	0.66
B874961	Rock	1.23	0.50	0.02	26.23	<0.01	20.98	0.36	25.67	11.00	0.46	0.05	7.32	3.87	0.56
B874962	Rock	0.02	16.36	0.13	5.36	0.03	4.15	3.86	2.02	1.32	0.12	3.43	0.33	61.76	0.43
B874963	Rock	0.51	0.16	<0.01	33.56	<0.01	6.76	0.06	36.36	14.39	0.51	0.05	5.04	2.25	0.08
B874964	Rock	0.57	0.17	<0.01	32.46	<0.01	7.40	0.03	36.19	14.06	0.51	0.03	6.05	1.62	0.11
B874965	Rock	0.45	0.11	<0.01	34.33	<0.01	4.39	0.03	37.68	15.56	0.49	0.03	5.37	1.33	0.08
B874966	Rock	0.73	0.40	<0.01	33.19	<0.01	8.10	0.09	33.90	14.13	0.46	0.04	5.38	2.74	0.24



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03294-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B874967	Rock	0.73	0.38	<0.01	32.30	<0.01	13.44	0.09	29.52	13.52	0.34	0.04	5.77	2.65	0.34
B874968	Rock	0.48	0.16	<0.01	33.97	<0.01	4.27	0.03	39.20	16.18	0.36	0.03	4.03	1.27	0.04
B874969	Rock	0.50	0.09	<0.01	35.03	<0.01	3.84	0.03	38.02	17.22	0.54	0.03	4.86	0.68	0.03
B874970	Pulp	0.73	0.22	0.02	37.56	<0.01	4.86	0.07	37.04	12.01	0.40	0.10	3.92	3.30	0.13
B874971	Rock	0.34	0.08	<0.01	34.40	<0.01	4.17	0.02	38.63	16.63	0.50	0.03	4.68	0.79	0.03
B874972	Rock	0.47	0.12	<0.01	31.38	<0.01	4.59	0.03	37.58	15.38	0.48	0.03	5.33	0.86	0.06
B874973	Rock	0.40	0.94	0.01	26.11	<0.01	5.47	0.38	33.14	14.73	0.40	0.58	4.37	6.79	0.12
B874974	Rock	0.54	0.26	<0.01	32.43	<0.01	9.81	0.07	32.61	13.33	0.38	0.04	6.82	2.38	0.17
B874975	Rock	0.77	0.32	<0.01	35.56	<0.01	7.32	0.03	30.76	13.49	0.38	0.04	8.94	1.73	0.17
B874976	Rock	0.27	2.01	<0.01	27.99	<0.01	4.40	0.04	33.66	16.47	0.37	0.03	4.88	9.42	0.23
B874977	Rock	0.49	0.14	<0.01	33.99	<0.01	4.33	0.02	37.72	16.49	0.47	0.03	5.68	0.76	0.05
B874978	Rock	0.39	0.15	<0.01	32.61	<0.01	4.76	0.05	38.22	16.81	0.47	0.04	5.97	0.43	0.04
B874979	Rock	0.18	0.22	<0.01	30.57	<0.01	6.04	0.05	38.20	18.42	0.43	0.03	2.69	3.49	0.04
B874980 Dup	Rock	0.18	0.22	<0.01	29.57	<0.01	6.15	0.04	39.07	16.85	0.42	0.03	2.68	3.50	0.04
B874981	Rock	0.14	0.18	<0.01	33.13	<0.01	3.69	0.01	39.87	17.33	0.56	0.03	4.10	1.33	0.05
B874982	Rock	0.21	0.28	<0.01	33.77	<0.01	5.08	0.04	31.14	17.10	0.41	0.03	4.51	1.55	0.03
B874983	Rock	0.20	0.53	<0.01	29.86	<0.01	3.19	0.35	36.89	18.21	0.34	0.40	3.28	5.62	0.03
B874984	Rock	0.15	0.10	<0.01	32.11	<0.01	4.71	0.03	39.69	18.31	0.45	0.03	2.91	0.83	0.02
B874985	Rock	0.07	0.26	<0.01	31.68	<0.01	4.76	0.04	37.74	19.31	0.49	0.03	4.10	1.23	0.03
B874986	Rock	0.12	0.60	<0.01	35.71	<0.01	4.08	0.01	33.19	16.34	0.35	0.04	7.97	1.47	0.02
B874987	Rock	0.10	0.13	<0.01	33.22	<0.01	5.37	0.02	37.73	16.24	0.48	0.03	4.01	1.44	0.01
B874988	Rock	0.10	0.06	<0.01	33.73	<0.01	3.81	0.02	38.85	16.36	0.54	0.03	4.69	1.23	0.02
B874989	Rock	0.16	0.16	0.01	34.09	<0.01	7.52	0.06	33.85	13.85	0.46	0.04	6.32	2.79	0.09
B874990	Pulp	0.45	0.26	<0.01	33.27	<0.01	5.46	0.05	38.78	14.20	0.48	0.05	4.21	2.16	0.12
B874991	Rock	0.10	0.31	<0.01	31.90	<0.01	4.65	0.02	39.44	16.50	0.39	0.03	4.50	1.63	0.02
B874992	Rock	0.38	0.15	<0.01	35.77	<0.01	5.14	0.02	37.87	17.49	0.51	0.03	4.52	1.41	0.04
B874993	Rock	0.15	0.20	<0.01	35.50	<0.01	5.14	0.03	36.78	16.05	0.29	0.03	5.82	3.04	0.09
B874994	Rock	0.11	0.23	<0.01	33.89	0.01	4.49	0.01	37.72	15.56	0.30	0.03	5.54	1.88	0.09
B874995	Rock	0.04	0.06	<0.01	33.96	<0.01	6.39	0.03	39.03	16.28	0.59	0.02	2.03	0.66	0.02
B874996	Rock	0.17	0.10	<0.01	34.12	<0.01	4.91	0.03	37.90	16.31	0.57	0.03	4.21	0.90	0.02
B874997	Rock	0.12	0.03	<0.01	32.15	<0.01	3.86	0.01	41.70	17.01	0.63	0.03	2.38	0.70	0.01
B874998	Rock	0.42	0.19	<0.01	34.60	<0.01	2.93	0.03	37.01	15.89	0.50	0.04	6.89	1.02	0.02
B874999	Rock	0.14	0.08	<0.01	33.37	<0.01	4.04	0.03	40.90	16.94	0.58	0.04	2.68	0.60	0.01
B875000 Dup	Rock	0.13	0.03	<0.01	34.07	<0.01	3.97	0.02	41.11	16.77	0.58	0.03	2.68	0.27	<0.01
B875001	Rock	0.15	0.14	<0.01	32.77	<0.01	3.92	0.02	38.10	16.53	0.50	0.03	6.21	0.64	0.03
B875002	Rock	0.06	0.29	<0.01	33.57	<0.01	5.69	0.01	36.99	16.13	0.46	0.02	4.19	1.48	0.10
B875003	Rock	0.03	0.13	<0.01	35.42	<0.01	5.53	0.03	35.99	15.92	0.45	0.02	5.42	0.34	0.02
B875004	Rock	0.10	0.03	<0.01	34.50	<0.01	5.32	0.01	39.83	17.83	0.66	0.02	1.69	0.15	<0.01
B875005	Rock	0.35	0.09	<0.01	36.37	<0.01	4.19	0.03	37.91	16.55	0.56	0.03	4.44	0.26	0.03
B875006	Rock	0.18	0.06	<0.01	34.92	<0.01	3.82	0.02	38.60	16.03	0.48	0.03	5.02	0.23	0.02



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875007	Rock	0.10	0.24	0.01	36.77	<0.01	5.25	0.02	36.72	12.37	0.37	0.03	6.62	1.07	0.09
B875008	Rock	0.16	0.35	<0.01	33.67	<0.01	4.03	0.02	37.70	15.43	0.44	0.03	5.29	1.65	0.14
B875009	Rock	0.10	0.31	<0.01	34.09	<0.01	10.25	0.04	30.72	13.96	0.43	0.05	7.33	2.94	0.13
B875010	Pulp	0.71	0.15	0.02	39.05	<0.01	4.91	0.04	36.81	12.77	0.38	0.09	3.90	3.04	0.12
B875011	Rock	0.16	0.63	<0.01	30.28	<0.01	9.32	0.05	30.40	11.80	0.38	0.04	6.37	9.12	0.45
B875012	Rock	0.09	0.76	<0.01	31.42	<0.01	5.01	0.05	32.76	14.10	0.29	0.04	6.22	7.62	0.53
B875013	Rock	0.10	0.61	<0.01	31.81	<0.01	7.82	0.05	36.73	14.71	0.44	0.03	4.13	2.17	0.58
B875014	Rock	0.13	0.07	<0.01	33.13	<0.01	3.97	0.02	39.18	16.34	0.40	0.04	3.84	2.56	0.03
B875015	Rock	0.15	0.99	0.04	34.35	<0.01	10.48	0.40	25.49	10.35	0.28	0.27	7.64	8.55	0.79
B875016	Rock	0.04	0.76	0.01	33.93	<0.01	5.98	0.05	32.68	14.38	0.44	0.08	5.74	5.68	0.40
B875017	Rock	0.07	0.73	0.05	26.09	<0.01	14.73	0.45	27.14	13.07	0.63	0.47	6.45	7.79	0.79
B875018	Rock	0.08	0.20	<0.01	33.27	<0.01	4.84	0.02	35.91	14.44	0.60	0.04	7.59	1.59	0.07
B875019	Rock	0.15	0.47	<0.01	30.27	<0.01	8.19	0.06	32.41	15.60	0.46	0.05	6.00	5.23	0.35
B875020 Dup	Rock	0.15	0.46	<0.01	31.34	<0.01	8.29	0.06	31.56	15.20	0.47	0.05	5.95	5.14	0.33
B875021	Rock	0.09	0.22	0.09	30.46	<0.01	10.04	0.17	34.32	15.53	0.67	0.22	2.39	4.51	0.29
B875022	Rock	<0.01	15.71	0.12	4.05	0.03	4.28	3.64	1.63	1.50	0.12	3.50	0.31	63.63	0.43
B875023	Rock	0.12	0.28	0.02	30.61	<0.01	12.75	0.16	31.33	14.66	0.57	0.15	3.38	4.78	0.47
B875024	Rock	0.07	0.38	<0.01	33.61	<0.01	4.84	0.02	30.50	14.39	0.43	0.05	8.85	6.97	0.17
B875025	Rock	0.11	0.36	<0.01	35.46	<0.01	4.58	0.03	31.67	13.50	0.42	0.08	8.72	4.78	0.19
B875026	Rock	0.11	0.23	<0.01	32.35	<0.01	3.26	0.02	40.71	16.34	0.54	0.05	3.37	2.09	0.08
B875027	Rock	0.18	0.11	0.01	33.77	<0.01	3.84	0.02	38.06	17.93	0.65	0.06	3.94	1.73	0.01
B875028	Rock	0.06	0.59	<0.01	33.11	<0.01	4.30	0.02	34.44	16.38	0.38	0.06	6.97	3.82	0.21
B875029	Rock	0.06	1.35	0.06	32.74	<0.01	11.67	0.49	27.06	8.48	0.48	0.45	5.47	10.38	0.98
B875030	Pulp	0.52	1.84	0.36	48.26	<0.01	4.45	0.76	32.10	1.92	0.87	0.44	2.69	5.83	0.23
B875031	Rock	0.08	0.99	0.15	32.44	<0.01	8.62	0.67	30.79	11.29	0.54	0.48	4.32	8.12	0.56
B875032	Rock	0.02	0.80	0.07	42.01	<0.01	8.87	0.44	29.20	3.85	0.26	0.51	5.84	7.05	0.64

Certificate of Analysis

10-360-03294-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B874927	Rock	98.43	2.6	0.10	17	47	<2	>10	<0.5	44	<1	7	5.35	0.02	673
B874928	Rock	99.67	1.0	0.09	7	32	<2	>10	<0.5	17	<1	5	3.85	0.02	505
B874929	Rock	99.36	0.9	0.11	<5	13	<2	>10	<0.5	42	<1	8	4.06	<0.01	266
B874930	Pulp	100.69	0.8	0.30	<5	151	<2	>10	<0.5	35	<1	23	>10	0.08	325
B874931	Rock	100.38	1.3	0.08	<5	18	<2	>10	<0.5	42	<1	5	4.78	0.02	409
B874932	Rock	98.78	0.5	0.16	10	21	<2	>10	<0.5	31	<1	9	5.42	0.01	655
B874933	Rock	94.54	1.3	0.62	<5	34	<2	>10	<0.5	70	<1	18	>10	<0.01	393
B874934	Rock	98.21	1.1	0.26	<5	62	<2	>10	<0.5	41	<1	23	>10	0.04	366
B874935	Rock	99.15	0.6	0.12	<5	22	<2	>10	<0.5	34	<1	10	9.26	<0.01	467
B874936	Rock	99.80	1.4	0.13	<5	28	<2	>10	<0.5	21	<1	10	7.44	<0.01	407
B874937	Rock	98.66	1.1	0.45	<5	36	<2	>10	<0.5	12	<1	7	7.68	0.07	541
B874938	Rock	99.09	1.0	0.90	<5	31	<2	>10	<0.5	43	13	7	5.88	0.01	627
B874939	Rock	97.38	0.7	0.46	<5	28	<2	>10	<0.5	50	<1	11	>10	<0.01	427
B874940 Dup	Rock	98.08	0.5	0.42	<5	25	<2	>10	<0.5	33	<1	9	>10	<0.01	395
B874941	Rock	99.25	0.8	0.11	<5	26	<2	>10	<0.5	40	<1	4	4.37	<0.01	460
B874942	Rock	99.21	<0.5	0.47	<5	28	<2	>10	<0.5	36	<1	6	4.38	<0.01	289
B874943	Rock	99.46	0.6	0.07	<5	31	<2	>10	<0.5	21	<1	5	6.38	<0.01	325
B874944	Rock	99.43	1.5	0.05	5	27	<2	>10	<0.5	31	<1	4	3.97	<0.01	485
B874945	Rock	98.84	0.6	0.09	<5	19	<2	>10	<0.5	21	<1	4	5.19	<0.01	334
B874946	Rock	98.45	0.8	0.17	<5	20	<2	>10	<0.5	34	<1	5	8.49	<0.01	288
B874947	Rock	99.82	0.8	0.10	<5	26	<2	>10	<0.5	37	<1	29	4.34	<0.01	518
B874948	Rock	99.26	0.5	0.09	10	29	<2	>10	<0.5	13	<1	7	5.26	<0.01	973
B874949	Rock	98.47	0.9	0.05	41	37	<2	>10	<0.5	14	<1	6	5.09	<0.01	2247
B874950	Pulp	99.76	0.9	0.94	30	2854	<2	>10	<0.5	34	<1	11	3.63	0.59	1390
B874951	Rock	98.91	0.7	0.05	12	39	<2	>10	<0.5	39	<1	7	7.51	<0.01	1401
B874952	Rock	99.42	<0.5	0.56	8	36	<2	>10	<0.5	36	<1	5	4.93	0.02	872
B874953	Rock	99.15	0.8	0.51	14	44	<2	>10	<0.5	32	<1	6	>10	0.02	2807
B874954	Rock	99.13	<0.5	0.08	13	33	<2	>10	<0.5	22	<1	5	5.92	<0.01	735
B874955	Rock	99.64	<0.5	0.05	<5	32	<2	>10	<0.5	26	<1	6	4.44	<0.01	626
B874956	Rock	99.93	0.6	0.05	6	32	<2	>10	<0.5	17	<1	5	4.25	<0.01	445
B874957	Rock	98.19	<0.5	0.22	<5	225	<2	>10	<0.5	57	<1	17	>10	0.07	513
B874958	Rock	98.74	0.7	0.11	<5	27	<2	>10	<0.5	67	<1	13	4.96	<0.01	372
B874959	Rock	97.88	0.7	0.18	<5	107	<2	>10	<0.5	38	<1	31	>10	0.05	351
B874960 Dup	Rock	97.57	0.5	0.18	<5	102	<2	>10	<0.5	54	<1	32	>10	0.05	346
B874961	Rock	97.04	0.8	0.26	<5	146	<2	>10	<0.5	83	<1	56	>10	0.29	330
B874962	Rock	99.29	1.5	8.11	<5	839	<2	3.69	<0.5	22	18	8	3.22	4.06	26
B874963	Rock	99.22	<0.5	0.08	<5	58	<2	>10	<0.5	21	<1	11	5.72	0.03	254
B874964	Rock	98.66	0.6	0.09	<5	65	<2	>10	<0.5	83	<1	14	>10	<0.01	337
B874965	Rock	99.41	<0.5	0.06	<5	39	<2	>10	<0.5	28	<1	5	4.45	<0.01	324
B874966	Rock	98.68	<0.5	0.24	<5	43	<2	>10	<0.5	61	<1	10	6.70	0.05	499

Certificate of Analysis

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A Bureau Veritas Group Company

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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B874967	Rock	98.39	<0.5	0.21	<5	49	<2	>10	<0.5	38	<1	7	>10	0.06	330
B874968	Rock	99.57	<0.5	0.08	<5	26	<2	>10	<0.5	43	<1	6	3.67	0.02	335
B874969	Rock	100.38	<0.5	0.05	<5	34	<2	>10	<0.5	47	<1	4	3.30	0.02	276
B874970	Pulp	99.63	<0.5	0.09	6	172	<2	>10	<0.5	29	<1	3	4.18	0.03	410
B874971	Rock	99.97	<0.5	0.05	<5	35	<2	>10	<0.5	37	<1	8	3.60	0.01	603
B874972	Rock	95.85	<0.5	0.05	<5	40	<2	>10	<0.5	37	<1	4	3.52	0.01	317
B874973	Rock	93.05	<0.5	0.49	<5	139	<2	>10	<0.5	25	<1	5	4.54	0.27	398
B874974	Rock	98.32	<0.5	0.13	<5	55	<2	>10	<0.5	38	<1	7	>10	0.04	340
B874975	Rock	98.76	<0.5	0.17	15	35	<2	>10	<0.5	55	<1	4	9.76	0.01	2534
B874976	Rock	99.51	<0.5	1.22	<5	26	<2	>10	<0.5	40	<1	6	3.58	0.02	489
B874977	Rock	99.70	<0.5	0.08	<5	27	<2	>10	<0.5	12	<1	12	3.88	0.01	259
B874978	Rock	99.55	<0.5	0.06	<5	48	<2	>10	<0.5	33	<1	7	4.10	0.01	230
B874979	Rock	100.18	0.6	0.13	15	35	<2	>10	<0.5	56	<1	6	5.03	0.03	1587
B874980 Dup	Rock	98.59	<0.5	0.12	16	35	<2	>10	<0.5	45	<1	6	4.90	0.03	1597
B874981	Rock	100.30	<0.5	0.10	<5	36	<2	>10	<0.5	35	<1	2	2.17	<0.01	324
B874982	Rock	93.95	<0.5	0.16	<5	26	<2	>10	<0.5	31	<1	7	6.66	0.02	223
B874983	Rock	98.71	<0.5	0.28	<5	70	<2	>10	<0.5	41	<1	3	2.87	0.24	358
B874984	Rock	99.20	<0.5	0.06	8	30	<2	>10	<0.5	32	<1	13	4.43	0.01	507
B874985	Rock	99.69	<0.5	0.15	<5	32	<2	>10	<0.5	6	<1	4	4.10	0.02	303
B874986	Rock	99.80	<0.5	0.35	12	23	<2	>10	<0.5	28	<1	4	3.54	<0.01	1391
B874987	Rock	98.69	<0.5	0.08	36	27	<2	>10	<0.5	47	<1	3	4.77	<0.01	3702
B874988	Rock	99.35	<0.5	0.04	7	38	<2	>10	<0.5	17	<1	3	3.62	<0.01	653
B874989	Rock	99.23	<0.5	0.10	<5	83	<2	>10	<0.5	26	<1	4	6.55	0.04	252
B874990	Pulp	99.04	<0.5	0.12	<5	43	<2	>10	<0.5	27	<1	7	4.88	0.03	381
B874991	Rock	99.39	<0.5	0.16	<5	45	<2	>10	<0.5	41	<1	7	6.80	<0.01	532
B874992	Rock	102.95	<0.5	0.07	8	38	<2	>10	<0.5	40	<1	3	7.62	0.01	901
B874993	Rock	102.98	<0.5	0.11	50	37	<2	>10	<0.5	33	<1	8	4.34	<0.01	2705
B874994	Rock	99.75	<0.5	0.13	20	34	<2	>10	<0.5	31	<1	8	3.59	<0.01	965
B874995	Rock	99.08	<0.5	0.03	49	22	<2	>10	<0.5	26	<1	2	5.04	<0.01	4212
B874996	Rock	99.12	0.5	0.06	26	35	<2	>10	<0.5	41	<1	3	4.18	<0.01	2214
B874997	Rock	98.52	<0.5	0.02	6	37	<2	>10	<0.5	36	<1	2	3.52	<0.01	461
B874998	Rock	99.11	<0.5	0.12	<5	35	<2	>10	<0.5	29	<1	3	4.57	<0.01	391
B874999	Rock	99.28	<0.5	0.02	11	28	<2	>10	<0.5	35	<1	2	2.37	<0.01	850
B875000 Dup	Rock	99.55	<0.5	0.02	8	28	<2	>10	<0.5	57	<1	2	3.71	<0.01	883
B875001	Rock	98.92	<0.5	0.09	8	27	<2	>10	<0.5	27	<1	3	3.21	<0.01	763
B875002	Rock	98.96	<0.5	0.15	20	22	<2	>10	<0.5	21	<1	4	4.81	<0.01	1983
B875003	Rock	99.27	<0.5	0.07	49	19	<2	>10	<0.5	22	<1	4	5.25	0.02	4933
B875004	Rock	100.07	<0.5	0.02	107	23	<2	>10	<0.5	17	<1	4	4.89	<0.01	5533
B875005	Rock	100.46	<0.5	0.04	17	68	<2	>10	<0.5	6	<1	3	3.90	0.01	865
B875006	Rock	99.24	<0.5	0.04	<5	28	<2	>10	<0.5	16	<1	6	3.47	0.01	303

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875007	Rock	99.56	<0.5	0.14	13	93	<2	>10	<0.5	37	<1	8	8.31	<0.01	356
B875008	Rock	98.75	<0.5	0.19	<5	36	<2	>10	<0.5	28	<1	9	5.67	0.01	240
B875009	Rock	100.25	<0.5	0.15	<5	52	<2	>10	<0.5	28	<1	5	8.86	0.03	263
B875010	Pulp	101.29	<0.5	0.08	10	170	<2	>10	<0.5	29	<1	4	4.55	0.04	370
B875011	Rock	98.87	<0.5	0.31	8	54	<2	>10	<0.5	15	<1	10	8.69	0.05	441
B875012	Rock	98.82	<0.5	0.38	5	29	<2	>10	<0.5	30	<1	9	4.63	0.02	462
B875013	Rock	99.10	1.9	0.31	<5	41	<2	>10	<0.5	25	<1	5	>10	0.02	524
B875014	Rock	99.59	<0.5	0.04	<5	21	<2	>10	<0.5	54	<1	3	6.09	<0.01	265
B875015	Rock	99.65	<0.5	0.51	<5	244	<2	>10	<0.5	19	<1	6	9.85	0.33	355
B875016	Rock	100.13	<0.5	0.38	<5	78	<2	>10	<0.5	49	<1	6	5.05	0.04	348
B875017	Rock	98.40	<0.5	0.38	<5	327	<2	>10	<0.5	26	<1	8	>10	0.40	271
B875018	Rock	98.60	<0.5	0.10	<5	50	<2	>10	<0.5	23	<1	3	4.26	<0.01	342
B875019	Rock	99.11	<0.5	0.24	5	55	<2	>10	<0.5	38	<1	6	6.68	0.06	619
B875020 Dup	Rock	98.87	<0.5	0.23	<5	53	<2	>10	<0.5	45	<1	7	7.10	0.05	615
B875021	Rock	98.92	<0.5	0.10	<5	606	<2	>10	<0.5	42	<1	3	8.68	0.14	231
B875022	Rock	98.95	<0.5	6.88	<5	739	<2	3.72	<0.5	43	63	6	3.19	3.57	24
B875023	Rock	99.16	<0.5	0.13	<5	134	<2	>10	<0.5	35	<1	5	>10	0.13	159
B875024	Rock	100.23	<0.5	0.18	6	39	<2	>10	<0.5	44	<1	4	3.90	0.02	476
B875025	Rock	99.80	<0.5	0.18	<5	67	<2	>10	<0.5	51	<1	4	4.17	0.02	395
B875026	Rock	99.06	<0.5	0.12	<5	44	<2	>10	<0.5	35	<1	3	2.84	0.01	175
B875027	Rock	100.15	<0.5	0.06	<5	93	<2	>10	<0.5	22	<1	4	3.36	0.01	186
B875028	Rock	100.29	<0.5	0.31	<5	30	<2	>10	<0.5	46	<1	5	3.98	0.01	394
B875029	Rock	99.61	<0.5	0.71	<5	457	<2	>10	<0.5	19	<1	13	>10	0.46	617
B875030	Pulp	99.75	1.1	0.97	24	2968	<2	>10	<0.5	39	<1	10	6.13	0.72	899
B875031	Rock	98.97	<0.5	0.49	6	1543	<2	>10	<0.5	31	<1	8	6.80	0.53	467
B875032	Rock	99.54	<0.5	0.40	6	565	<2	>10	<0.5	34	<1	7	6.83	0.34	488

Certificate of Analysis

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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B874927	Rock	9.99	4579	3	0.03	3	>10000	10	<5	9	1665	0.01	<10	327	<10
B874928	Rock	>10	4933	1	0.04	3	>10000	9	<5	5	2522	<0.01	<10	327	<10
B874929	Rock	>10	2971	<1	0.06	4	>10000	7	<5	4	496	<0.01	<10	367	<10
B874930	Pulp	8.84	4303	<1	0.04	6	>10000	12	<5	6	2099	0.20	<10	460	<10
B874931	Rock	>10	3899	4	0.03	4	>10000	8	<5	5	750	<0.01	<10	425	<10
B874932	Rock	>10	4492	2	0.02	5	>10000	9	<5	9	2078	0.06	<10	452	<10
B874933	Rock	6.98	1421	<1	0.03	7	>10000	17	<5	4	1359	0.48	<10	691	<10
B874934	Rock	9.40	4587	<1	0.03	4	>10000	11	<5	5	2654	0.33	<10	518	<10
B874935	Rock	>10	6655	<1	0.02	3	>10000	11	<5	6	2373	0.09	<10	386	<10
B874936	Rock	>10	5849	<1	0.03	3	>10000	11	<5	7	2359	0.06	<10	330	<10
B874937	Rock	8.05	2913	<1	0.04	4	>10000	11	<5	6	3053	0.23	<10	484	<10
B874938	Rock	9.85	3254	<1	0.04	7	>10000	12	<5	8	3118	0.09	<10	324	<10
B874939	Rock	9.44	3339	<1	0.02	11	>10000	20	<5	7	1968	<0.01	<10	713	<10
B874940 Dup	Rock	8.87	3145	<1	0.02	9	>10000	14	<5	7	1875	0.24	<10	661	<10
B874941	Rock	9.71	5498	<1	0.01	3	>10000	11	<5	10	2350	0.04	<10	399	<10
B874942	Rock	9.25	4711	<1	0.02	3	>10000	13	<5	9	2636	0.13	<10	350	<10
B874943	Rock	>10	8145	3	0.02	3	>10000	14	<5	7	3253	0.01	<10	310	<10
B874944	Rock	>10	4973	1	0.02	2	>10000	12	<5	7	2655	<0.01	<10	297	<10
B874945	Rock	>10	6165	<1	0.02	3	>10000	12	<5	6	690	0.01	<10	318	<10
B874946	Rock	>10	4878	11	0.02	4	>10000	14	<5	9	838	0.03	<10	333	<10
B874947	Rock	9.56	4034	<1	0.03	3	>10000	17	<5	8	2195	0.03	<10	264	<10
B874948	Rock	>10	5462	<1	0.02	2	>10000	13	<5	10	2631	0.05	<10	306	<10
B874949	Rock	9.92	5902	<1	0.02	4	>10000	12	<5	10	3023	0.04	<10	410	<10
B874950	Pulp	1.73	8008	22	0.39	8	>10000	67	<5	3	>10000	0.14	30	323	<10
B874951	Rock	9.51	5895	<1	0.02	5	>10000	13	<5	10	3157	0.08	<10	430	<10
B874952	Rock	>10	6860	<1	0.02	3	>10000	11	<5	8	3712	0.07	<10	308	<10
B874953	Rock	>10	9353	<1	0.03	3	>10000	12	<5	9	3164	0.23	<10	306	<10
B874954	Rock	>10	6783	3	0.02	2	>10000	12	<5	6	3202	0.02	<10	286	<10
B874955	Rock	>10	5967	<1	0.02	2	>10000	10	<5	6	3479	0.02	<10	317	<10
B874956	Rock	>10	5233	1	0.02	3	>10000	9	<5	8	3447	0.03	<10	396	<10
B874957	Rock	8.17	3642	<1	0.03	5	>10000	14	<5	5	3612	0.17	<10	450	<10
B874958	Rock	>10	3567	<1	0.02	4	>10000	10	<5	8	2108	0.09	<10	430	<10
B874959	Rock	8.58	3989	<1	0.03	4	>10000	11	<5	7	3210	0.30	<10	488	<10
B874960 Dup	Rock	7.94	3442	<1	0.03	5	>10000	11	<5	7	2616	0.28	<10	486	<10
B874961	Rock	8.85	4468	<1	0.04	6	>10000	10	<5	4	3704	0.36	<10	512	<10
B874962	Rock	1.23	834	<1	3.01	6	1391	21	<5	5	572	0.30	<10	112	<10
B874963	Rock	>10	4778	<1	0.03	2	>10000	6	<5	5	4032	0.04	<10	341	<10
B874964	Rock	>10	8377	3	0.02	4	>10000	6	<5	5	4155	0.05	<10	363	<10
B874965	Rock	>10	5555	1	0.02	3	>10000	8	<5	7	3902	0.05	<10	438	<10
B874966	Rock	>10	4191	<1	0.02	4	>10000	7	<5	6	2998	0.13	<10	465	<10

Certificate of Analysis

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Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B874967	Rock	9.44	3051	<1	0.03	4	>10000	9	<5	4	2214	0.20	<10	513	<10
B874968	Rock	>10	3452	<1	0.02	2	>10000	9	<5	6	2035	0.02	<10	346	<10
B874969	Rock	>10	5141	<1	0.02	3	>10000	9	<5	5	4075	0.01	<10	335	<10
B874970	Pulp	9.17	3819	<1	0.06	2	>10000	12	<5	7	2759	0.06	<10	314	<10
B874971	Rock	>10	4824	10	0.02	2	>10000	9	<5	5	3473	0.02	<10	334	<10
B874972	Rock	9.72	4069	<1	0.02	3	>10000	9	<5	7	3252	0.04	<10	422	<10
B874973	Rock	>10	3753	<1	0.52	4	>10000	10	<5	9	2305	0.07	<10	448	<10
B874974	Rock	>10	6700	<1	0.02	3	>10000	10	<5	6	2995	0.08	<10	433	<10
B874975	Rock	>10	5923	<1	0.03	3	>10000	10	<5	5	3389	0.08	<10	448	<10
B874976	Rock	>10	3346	5	0.02	4	>10000	11	<5	10	1992	0.05	<10	370	<10
B874977	Rock	>10	4758	<1	0.02	2	>10000	47	<5	5	3400	0.02	<10	338	<10
B874978	Rock	>10	4420	2	0.02	2	>10000	17	<5	7	2559	0.01	<10	328	<10
B874979	Rock	>10	3967	8	0.02	2	>10000	11	<5	9	2055	0.02	<10	359	<10
B874980 Dup	Rock	>10	3795	8	0.02	2	>10000	11	<5	9	1968	0.02	<10	349	<10
B874981	Rock	>10	3851	1	0.02	2	>10000	10	<5	5	2553	0.01	<10	343	<10
B874982	Rock	>10	6167	2	0.02	3	>10000	11	<5	7	2887	0.01	<10	347	<10
B874983	Rock	>10	3402	<1	0.39	4	>10000	11	<5	13	1946	0.02	<10	441	<10
B874984	Rock	>10	4672	1	0.02	3	>10000	19	<5	6	2899	0.01	<10	434	<10
B874985	Rock	>10	4670	1	0.02	2	>10000	11	<5	5	3116	0.01	<10	354	<10
B874986	Rock	>10	3265	2	0.03	2	>10000	10	<5	5	2019	<0.01	<10	319	<10
B874987	Rock	>10	4697	2	0.02	2	>10000	8	<5	6	1945	<0.01	<10	336	<10
B874988	Rock	>10	5683	1	0.02	1	>10000	8	<5	6	3879	<0.01	<10	335	<10
B874989	Rock	9.63	4407	<1	0.03	3	>10000	11	<5	7	3462	0.04	<10	342	<10
B874990	Pulp	>10	4772	3	0.04	2	>10000	9	<5	7	2520	0.03	<10	340	<10
B874991	Rock	>10	6605	3	0.02	3	>10000	12	<5	5	1831	<0.01	<10	323	<10
B874992	Rock	>10	8963	4	0.02	2	>10000	12	<5	5	3285	0.02	<10	332	<10
B874993	Rock	>10	2818	4	0.02	5	>10000	16	<5	9	543	0.06	<10	448	<10
B874994	Rock	>10	2698	2	0.02	5	>10000	78	<5	8	586	0.05	<10	417	<10
B874995	Rock	>10	5167	15	0.02	3	9657	14	<5	7	1875	<0.01	<10	337	<10
B874996	Rock	>10	5377	3	0.02	3	>10000	12	<5	6	2745	<0.01	<10	319	<10
B874997	Rock	>10	6401	2	0.02	2	>10000	10	<5	5	4065	<0.01	<10	340	<10
B874998	Rock	>10	8903	<1	0.04	4	>10000	13	<5	5	4206	<0.01	<10	302	<10
B874999	Rock	>10	3960	4	0.02	2	>10000	11	<5	5	1806	<0.01	<10	327	<10
B875000 Dup	Rock	>10	5950	4	0.02	7	>10000	9	<5	6	2899	<0.01	<10	332	<10
B875001	Rock	9.56	4514	5	0.02	3	>10000	10	<5	7	2754	0.01	<10	322	<10
B875002	Rock	>10	4310	<1	0.02	3	>10000	11	<5	11	1712	0.04	<10	349	<10
B875003	Rock	>10	4671	2	0.02	3	>10000	14	<5	9	684	<0.01	<10	324	<10
B875004	Rock	>10	6745	38	0.01	4	8552	14	<5	10	1894	<0.01	112	422	<10
B875005	Rock	>10	5653	10	0.05	4	>10000	12	<5	9	3117	0.02	<10	386	<10
B875006	Rock	>10	4772	6	0.03	2	>10000	13	<5	6	2832	<0.01	<10	301	<10

Certificate of Analysis

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Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B875007	Rock	>10	6623	8	0.02	4	>10000	18	<5	8	839	0.03	<10	245	<10
B875008	Rock	>10	7115	<1	0.02	3	>10000	13	<5	7	2859	0.04	<10	307	<10
B875009	Rock	9.39	4099	2	0.03	3	>10000	12	<5	8	2541	0.05	<10	285	<10
B875010	Pulp	9.17	4099	<1	0.06	2	>10000	16	<5	6	2891	0.04	<10	266	<10
B875011	Rock	9.23	4056	4	0.03	3	>10000	95	<5	10	823	0.18	<10	269	<10
B875012	Rock	>10	2901	<1	0.02	4	>10000	20	<5	7	848	0.17	<10	349	<10
B875013	Rock	>10	7734	30	0.02	4	>10000	13	<5	16	796	0.06	<10	346	<10
B875014	Rock	>10	6924	6	0.03	2	>10000	14	<5	7	2553	<0.01	<10	260	<10
B875015	Rock	8.93	2900	2	0.28	3	>10000	12	<5	4	2191	0.42	<10	314	<10
B875016	Rock	9.03	4038	<1	0.06	1	>10000	11	<5	6	2375	0.17	<10	254	<10
B875017	Rock	8.20	5713	<1	0.46	3	>10000	12	<5	7	1970	0.47	<10	305	<10
B875018	Rock	9.76	5618	4	0.03	2	>10000	13	<5	10	2587	<0.01	<10	224	<10
B875019	Rock	8.82	4123	<1	0.04	3	>10000	12	<5	8	1930	0.09	<10	271	<10
B875020 Dup	Rock	9.35	4468	<1	0.04	4	>10000	14	<5	8	2085	0.09	<10	266	<10
B875021	Rock	>10	6532	2	0.21	2	>10000	13	<5	8	3257	0.06	<10	246	<10
B875022	Rock	1.15	532	<1	2.97	6	911	21	<5	4	502	0.28	<10	74	<10
B875023	Rock	>10	9840	5	0.11	2	>10000	11	<5	8	4263	0.35	<10	239	<10
B875024	Rock	8.60	3819	2	0.04	1	>10000	12	<5	8	2022	0.03	<10	201	<10
B875025	Rock	9.73	4184	<1	0.06	1	>10000	10	<5	6	2918	0.04	<10	203	<10
B875026	Rock	>10	5244	<1	0.04	1	>10000	8	<5	5	3621	0.02	<10	235	<10
B875027	Rock	>10	6205	5	0.05	1	>10000	12	<5	6	4131	<0.01	<10	235	<10
B875028	Rock	>10	3859	<1	0.05	2	>10000	12	<5	6	2112	0.03	<10	227	<10
B875029	Rock	>10	7941	1	0.32	3	>10000	15	<5	7	2793	0.59	<10	222	<10
B875030	Pulp	3.18	>10000	17	0.33	7	<10	63	<5	2	>10000	0.09	<10	189	<10
B875031	Rock	7.95	4763	7	0.44	3	>10000	12	<5	8	3811	0.31	<10	314	<10
B875032	Rock	3.26	2237	1	0.50	2	>10000	11	<5	2	4161	0.39	<10	214	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03294-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B874927	Rock	15	42	>1000	24.9	9.3	14.6	51.7	1.1	3.7	719.0	0.8	437.5	119.4	59.8
B874928	Rock	15	31	842.7	20.0	6.8	11.8	39.2	1.2	2.8	457.4	0.5	344.7	89.4	46.5
B874929	Rock	8	26	515.7	18.4	7.0	9.6	31.6	1.5	2.8	264.7	0.7	231.0	57.9	35.9
B874930	Pulp	63	63	732.9	19.0	6.5	13.2	39.2	6.6	2.6	363.4	0.5	325.1	82.7	47.6
B874931	Rock	11	36	614.0	19.4	7.5	10.1	34.4	1.5	3.0	329.8	0.7	262.8	65.6	39.7
B874932	Rock	20	37	>1000	21.3	7.4	15.0	46.7	1.3	3.0	571.0	0.6	414.2	109.5	54.3
B874933	Rock	23	26	990.8	24.3	7.4	30.9	52.3	4.5	3.3	506.1	0.5	439.8	112.3	60.4
B874934	Rock	47	37	761.9	21.2	7.2	14.5	41.4	3.3	3.0	380.3	0.5	344.6	86.7	50.1
B874935	Rock	13	29	868.7	21.8	7.5	14.3	43.2	3.2	3.0	452.5	0.6	371.4	95.4	51.2
B874936	Rock	10	77	778.7	27.5	10.9	15.4	47.8	6.7	4.4	378.2	0.9	359.7	90.5	55.3
B874937	Rock	27	81	>1000	28.0	8.5	21.6	60.9	9.4	3.8	513.4	0.6	513.6	125.0	73.5
B874938	Rock	15	76	>1000	32.6	11.0	25.0	65.7	5.8	4.7	608.7	0.8	530.3	136.4	79.6
B874939	Rock	21	65	769.9	24.7	8.8	22.4	47.1	11.4	3.6	372.5	0.7	352.3	87.7	53.1
B874940 Dup	Rock	20	55	759.0	23.8	8.6	20.2	44.6	9.9	3.5	364.3	0.6	342.8	86.2	50.7
B874941	Rock	23	44	615.4	17.9	7.2	8.7	29.8	1.8	2.9	371.2	0.5	225.1	61.0	31.8
B874942	Rock	24	72	538.7	27.9	11.8	13.7	37.0	2.4	4.7	270.5	0.9	229.2	58.0	37.4
B874943	Rock	18	49	584.6	26.5	10.8	11.7	37.7	0.9	4.3	300.7	0.7	251.8	63.3	41.7
B874944	Rock	16	69	831.1	31.3	13.0	13.4	47.5	1.2	5.1	465.7	0.9	337.0	89.6	50.9
B874945	Rock	11	60	603.4	23.9	9.4	11.1	36.1	1.9	3.7	321.6	0.8	245.1	62.2	40.3
B874946	Rock	20	45	529.5	28.0	12.4	11.9	37.4	1.7	4.8	278.9	0.9	218.2	55.4	38.5
B874947	Rock	14	101	844.1	38.7	18.6	16.7	52.3	2.6	6.8	485.2	1.7	341.6	89.2	53.2
B874948	Rock	25	44	>1000	26.9	10.1	13.6	48.6	0.8	4.2	894.7	0.6	365.9	112.6	47.0
B874949	Rock	33	51	>1000	23.1	7.7	15.1	56.1	1.8	3.3	>1000	0.5	539.3	174.0	54.0
B874950	Pulp	461	89	>1000	15.4	4.9	13.5	43.8	<0.1	2.0	930.1	0.4	497.4	152.9	49.9
B874951	Rock	26	56	>1000	19.7	7.3	12.8	43.7	3.2	3.0	936.8	0.5	379.4	114.5	43.1
B874952	Rock	26	33	>1000	26.1	8.7	21.1	53.5	1.8	3.7	809.8	0.5	447.1	125.8	58.1
B874953	Rock	24	54	>1000	33.0	11.9	21.6	67.1	3.6	4.9	>1000	0.8	620.3	182.7	71.2
B874954	Rock	22	55	>1000	25.4	9.6	14.3	46.8	2.6	3.9	680.9	0.7	389.4	107.5	52.2
B874955	Rock	32	31	>1000	18.5	6.4	11.6	39.8	2.4	2.5	633.3	0.4	369.3	102.0	45.7
B874956	Rock	29	47	654.1	17.4	6.1	11.7	34.3	2.3	2.6	337.1	0.5	281.5	72.7	40.3
B874957	Rock	53	79	848.1	20.7	6.8	15.2	42.8	4.3	2.9	432.1	0.6	372.3	93.2	51.5
B874958	Rock	14	46	623.7	20.2	7.5	11.5	34.0	2.7	3.0	320.2	0.6	262.7	67.2	38.9
B874959	Rock	47	55	717.6	20.2	7.2	13.3	40.2	7.4	3.0	342.8	0.5	323.6	80.4	47.3
B874960 Dup	Rock	47	61	727.1	21.1	7.6	13.8	40.1	8.5	3.0	349.1	0.5	319.1	81.8	47.0
B874961	Rock	94	53	751.4	16.2	4.6	12.7	38.5	6.4	2.1	355.3	0.2	348.1	86.4	48.1
B874962	Rock	59	7	72.9	3.1	1.7	1.4	4.4	1.2	0.5	36.1	0.2	32.4	7.8	5.0
B874963	Rock	26	35	504.9	13.2	3.9	9.5	28.3	3.0	1.7	230.6	0.2	232.4	58.4	34.6
B874964	Rock	27	32	610.7	16.9	5.9	11.1	32.7	4.0	2.4	298.4	0.4	274.7	69.2	40.5
B874965	Rock	23	48	524.0	16.0	5.8	10.3	30.2	3.1	2.3	243.9	0.4	238.0	59.5	36.2
B874966	Rock	36	44	807.1	16.7	5.4	13.2	36.0	3.9	2.3	406.9	0.4	336.9	87.4	44.2



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B874967	Rock	29	35	683.1	20.9	6.7	14.9	40.2	4.7	3.0	322.3	0.4	318.8	78.8	48.4
B874968	Rock	12	36	633.6	16.4	5.8	10.8	32.9	2.3	2.4	323.3	0.5	270.7	69.5	39.4
B874969	Rock	20	38	535.2	13.5	4.3	9.8	28.9	2.5	1.9	260.8	0.3	240.1	61.2	34.9
B874970	Pulp	15	40	802.7	22.3	8.1	14.1	43.8	1.9	3.4	387.6	0.7	351.5	88.8	51.2
B874971	Rock	19	26	>1000	15.7	4.9	11.7	39.6	1.7	2.1	545.4	0.3	406.0	108.9	50.0
B874972	Rock	25	67	519.0	14.9	4.7	10.3	29.7	2.5	2.0	237.1	0.3	241.4	59.5	36.2
B874973	Rock	43	74	624.9	16.3	5.6	11.5	32.9	3.4	2.4	313.1	0.4	274.9	68.5	39.4
B874974	Rock	25	59	623.3	19.4	7.2	11.2	35.0	5.6	2.9	313.5	0.6	275.6	69.2	40.4
B874975	Rock	19	51	>1000	25.7	7.3	19.2	68.4	4.0	3.3	>1000	0.5	660.6	191.2	76.6
B874976	Rock	16	35	836.3	19.2	6.8	11.6	38.5	3.3	2.8	467.5	0.5	316.0	85.5	45.7
B874977	Rock	18	36	498.8	17.5	6.1	10.9	32.1	4.1	2.6	233.2	0.4	232.5	57.1	37.7
B874978	Rock	17	42	409.6	18.5	7.0	9.4	29.0	2.8	2.8	210.3	0.6	186.3	46.3	31.7
B874979	Rock	16	19	>1000	15.0	4.6	11.0	42.6	0.5	2.0	>1000	0.3	426.9	134.9	46.6
B874980 Dup	Rock	16	19	>1000	14.9	4.4	11.0	43.6	0.5	2.0	>1000	0.3	453.9	142.6	48.3
B874981	Rock	22	30	536.5	12.9	4.3	8.4	26.0	1.1	1.8	290.1	0.3	215.1	57.3	30.3
B874982	Rock	14	34	412.3	13.2	4.4	8.7	24.3	1.6	1.8	192.5	0.3	189.3	46.2	29.2
B874983	Rock	30	81	535.2	14.0	5.2	9.2	28.1	1.8	2.1	268.4	0.4	231.4	57.9	33.4
B874984	Rock	27	22	655.4	11.3	4.0	7.8	24.1	0.9	1.6	396.8	0.3	228.0	64.4	28.2
B874985	Rock	22	19	504.2	12.4	4.1	7.5	24.3	0.8	1.7	266.0	0.3	207.0	53.2	30.0
B874986	Rock	11	34	>1000	22.7	7.2	16.0	52.7	0.7	3.2	970.1	0.5	487.8	142.3	59.5
B874987	Rock	14	21	>1000	18.9	4.4	17.0	72.9	0.5	2.2	>1000	0.3	869.7	289.8	71.6
B874988	Rock	20	17	998.2	13.7	4.2	10.4	34.6	0.9	1.8	618.2	0.2	342.2	98.1	40.3
B874989	Rock	44	118	507.5	14.6	4.9	10.1	29.8	5.0	2.1	235.0	0.3	238.5	58.0	36.3
B874990	Pulp	26	34	702.1	19.3	6.3	12.3	37.4	2.5	2.8	361.5	0.4	299.9	76.0	45.2
B874991	Rock	14	60	848.6	17.2	6.3	10.5	35.3	1.0	2.5	490.9	0.5	316.0	86.6	41.2
B874992	Rock	20	40	>1000	18.1	6.0	12.3	40.4	1.4	2.6	813.0	0.4	406.8	123.8	42.9
B874993	Rock	12	106	>1000	24.6	6.9	24.7	77.9	1.1	3.2	>1000	0.6	846.3	267.9	80.2
B874994	Rock	14	87	>1000	21.5	7.6	14.1	42.2	0.8	3.2	705.4	0.6	362.5	106.0	44.1
B874995	Rock	21	10	>1000	20.7	3.2	19.5	95.1	0.2	2.0	>1000	0.2	>1000	394.7	87.6
B874996	Rock	18	20	>1000	21.4	6.3	16.4	58.9	1.2	2.9	>1000	0.4	605.4	200.3	59.0
B874997	Rock	24	9	712.4	9.4	2.7	6.3	22.7	0.4	1.2	442.6	0.1	221.2	65.9	25.2
B874998	Rock	16	36	682.1	19.1	6.6	12.0	35.7	1.4	2.9	372.7	0.4	282.2	73.4	41.0
B874999	Rock	16	12	>1000	11.9	3.5	8.6	30.6	0.2	1.5	790.6	0.2	346.8	111.1	33.1
B875000 Dup	Rock	16	11	>1000	12.3	3.4	8.7	32.4	0.3	1.6	809.7	0.2	351.9	113.2	33.8
B875001	Rock	16	24	>1000	17.4	5.4	11.8	38.9	0.9	2.4	735.0	0.3	383.0	114.6	43.5
B875002	Rock	18	25	>1000	18.6	5.6	15.0	52.5	2.9	2.5	>1000	0.4	565.9	192.3	50.1
B875003	Rock	14	19	>1000	24.5	5.4	20.7	85.8	0.2	2.6	>1000	0.4	>1000	346.5	76.6
B875004	Rock	27	16	>1000	24.4	5.4	18.1	86.3	<0.1	2.7	>1000	0.3	>1000	365.7	77.5
B875005	Rock	25	36	>1000	26.7	9.1	14.0	46.2	1.3	4.0	672.4	0.5	383.3	113.9	48.2
B875006	Rock	16	21	652.9	26.2	9.7	11.8	39.0	0.7	4.1	330.4	0.6	263.2	70.1	41.5



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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875007	Rock	11	36	656.5	29.0	11.3	12.4	41.8	0.7	4.7	339.1	0.9	284.8	72.9	44.5
B875008	Rock	13	37	486.0	20.5	7.4	10.3	33.1	1.6	3.2	227.9	0.5	220.7	55.8	35.7
B875009	Rock	42	41	613.7	19.0	6.4	12.0	37.0	2.5	2.7	277.3	0.4	290.4	72.3	43.8
B875010	Pulp	15	32	795.5	22.3	8.0	14.0	43.0	2.0	3.3	385.0	0.7	346.8	89.5	51.4
B875011	Rock	32	48	861.8	31.8	11.0	17.1	53.9	4.8	4.8	443.1	0.7	374.4	97.1	58.5
B875012	Rock	14	332	836.9	26.5	9.8	15.0	50.1	5.0	4.0	389.3	0.9	397.1	98.8	59.7
B875013	Rock	31	68	884.5	23.3	7.7	16.0	50.1	4.0	3.4	445.9	0.6	395.9	100.3	66.9
B875014	Rock	10	17	575.9	19.4	6.6	10.7	33.5	0.6	2.8	266.1	0.5	261.7	66.0	40.4
B875015	Rock	58	103	824.9	28.2	10.0	16.9	54.2	9.6	4.2	382.6	0.7	409.4	98.2	64.1
B875016	Rock	23	116	818.2	22.0	7.1	14.1	45.6	6.1	3.1	382.4	0.5	380.7	94.6	55.7
B875017	Rock	95	185	710.5	20.4	6.2	14.0	43.3	10.2	2.8	306.4	0.4	352.5	86.5	53.3
B875018	Rock	27	29	859.1	36.4	12.4	17.3	58.8	1.8	5.5	397.1	0.7	403.4	100.7	64.8
B875019	Rock	31	78	>1000	28.8	8.6	20.0	64.9	4.3	3.9	730.9	0.5	601.0	161.0	79.3
B875020 Dup	Rock	31	78	>1000	30.5	9.3	20.8	65.4	4.8	4.3	737.5	0.6	607.3	159.8	80.6
B875021	Rock	59	24	531.6	13.3	4.2	9.1	27.4	2.9	1.8	264.3	0.2	223.6	59.0	33.9
B875022	Rock	43	6	84.7	3.2	1.7	1.6	5.0	2.7	0.5	43.3	0.2	34.5	8.7	5.4
B875023	Rock	75	58	423.6	11.4	3.5	8.4	24.6	4.0	1.6	180.4	0.2	209.6	51.0	32.6
B875024	Rock	26	34	>1000	34.2	11.9	20.3	64.0	1.3	5.1	545.2	0.8	496.2	129.0	73.3
B875025	Rock	27	33	886.0	29.5	10.5	18.1	53.7	2.5	4.4	438.4	0.7	412.6	101.7	63.3
B875026	Rock	19	16	412.8	13.4	4.6	8.4	25.4	0.8	2.0	190.0	0.3	196.2	48.1	30.4
B875027	Rock	25	12	440.7	14.2	4.4	9.8	28.6	1.1	2.0	192.6	0.2	227.9	54.2	36.5
B875028	Rock	25	34	878.7	26.1	8.5	17.7	52.4	1.3	3.6	425.1	0.6	427.4	105.5	66.5
B875029	Rock	74	83	>1000	29.9	9.8	21.7	66.3	8.6	4.3	654.2	0.8	596.7	154.3	81.1
B875030	Pulp	470	63	>1000	14.9	4.8	13.3	42.9	0.3	1.9	927.1	0.4	494.4	154.4	50.6
B875031	Rock	89	330	792.7	18.1	5.5	14.2	41.8	7.8	2.5	401.7	0.4	355.6	89.4	52.6
B875032	Rock	79	77	837.5	26.9	9.1	16.6	49.7	3.5	4.0	421.7	0.6	377.2	94.3	58.0

Certificate of Analysis

10-360-03294-01

Aley Corporation
 Suite 1020-800 West Pender St.
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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B874927	Rock	4.6	1.1	6.6	96.0	15.13	217.13	3.73
B874928	Rock	3.6	0.8	4.8	69.1	21.26	170.96	2.87
B874929	Rock	3.3	0.8	5.4	67.0	40.88	150.86	2.40
B874930	Pulp	3.6	0.7	4.2	65.0	34.21	248.46	7.49
B874931	Rock	3.4	0.9	5.6	72.6	29.61	170.21	2.75
B874932	Rock	4.1	0.8	5.1	77.5	8.82	148.67	5.09
B874933	Rock	4.7	0.8	4.9	94.7	63.55	149.10	27.55
B874934	Rock	3.8	0.8	5.0	74.1	30.31	146.26	15.49
B874935	Rock	4.0	0.9	5.7	77.1	13.28	117.88	7.71
B874936	Rock	5.1	1.3	8.0	103.5	41.05	228.83	52.51
B874937	Rock	5.4	0.9	5.7	87.4	19.45	182.18	6.62
B874938	Rock	6.2	1.2	7.0	116.9	18.32	232.59	13.40
B874939	Rock	4.5	1.0	6.0	99.0	35.15	158.64	24.03
B874940 Dup	Rock	4.4	1.0	5.4	93.9	32.90	156.21	21.97
B874941	Rock	3.1	0.8	4.9	69.9	16.32	174.35	11.86
B874942	Rock	4.7	1.4	7.9	117.5	30.38	329.11	13.68
B874943	Rock	4.7	1.2	6.8	105.5	15.57	314.16	11.77
B874944	Rock	5.4	1.5	8.3	123.0	26.86	417.20	15.06
B874945	Rock	4.1	1.1	6.3	94.5	80.60	331.92	18.63
B874946	Rock	4.9	1.5	8.2	115.1	22.16	306.81	10.24
B874947	Rock	6.4	2.4	14.6	165.6	52.34	631.95	30.20
B874948	Rock	4.7	1.1	5.9	101.2	9.71	298.88	9.11
B874949	Rock	3.8	0.9	5.0	83.6	7.88	161.89	7.24
B874950	Pulp	2.5	0.6	4.1	54.5	0.26	44.83	25.40
B874951	Rock	3.4	0.8	4.9	76.0	6.21	179.08	3.32
B874952	Rock	4.8	1.0	5.6	96.9	31.89	145.64	15.88
B874953	Rock	5.7	1.3	7.4	122.6	38.16	225.23	21.43
B874954	Rock	4.5	1.1	6.9	96.6	6.72	238.52	9.36
B874955	Rock	3.2	0.7	4.2	65.5	2.73	131.11	3.86
B874956	Rock	3.2	0.7	4.4	65.8	3.51	117.63	3.57
B874957	Rock	3.8	0.8	5.0	74.3	<0.05	130.68	6.59
B874958	Rock	3.6	0.9	5.3	76.7	14.77	156.53	7.83
B874959	Rock	3.7	0.8	4.9	74.9	27.12	144.27	10.91
B874960 Dup	Rock	3.8	0.9	4.8	76.1	27.32	159.20	10.90
B874961	Rock	3.1	0.5	2.8	50.5	29.96	144.19	10.17
B874962	Rock	0.4	0.2	1.9	17.1	2.17	9.46	3.06
B874963	Rock	2.5	0.4	2.6	44.4	1.78	81.12	2.43
B874964	Rock	3.1	0.6	4.0	63.2	<0.05	87.86	4.76
B874965	Rock	2.9	0.6	3.8	59.4	6.63	105.67	4.00
B874966	Rock	3.2	0.6	3.8	59.1	21.66	102.58	9.02

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 Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B874967	Rock	4.0	0.7	4.6	75.9	9.21	86.79	2.79
B874968	Rock	2.9	0.6	4.3	62.5	13.66	110.90	4.07
B874969	Rock	2.5	0.4	2.9	47.6	3.20	72.39	1.34
B874970	Pulp	4.2	1.0	6.3	87.4	4.44	166.64	2.23
B874971	Rock	2.9	0.5	3.3	53.5	3.02	91.50	2.24
B874972	Rock	2.7	0.5	3.2	52.5	1.76	91.99	1.77
B874973	Rock	3.0	0.6	4.0	62.8	29.88	98.52	36.00
B874974	Rock	3.5	0.9	5.3	74.4	3.29	167.11	8.69
B874975	Rock	4.6	0.8	5.1	89.4	3.40	142.65	8.85
B874976	Rock	3.5	0.7	4.9	72.9	17.84	142.67	15.95
B874977	Rock	3.3	0.7	4.2	67.4	5.85	131.29	6.12
B874978	Rock	3.3	0.8	4.9	71.0	6.78	197.15	5.37
B874979	Rock	2.6	0.5	3.3	51.5	6.88	200.11	5.45
B874980 Dup	Rock	2.6	0.5	3.3	52.0	2.77	116.24	4.72
B874981	Rock	2.4	0.4	2.7	47.4	26.72	67.36	26.88
B874982	Rock	2.4	0.4	3.0	49.4	77.19	65.58	30.04
B874983	Rock	2.6	0.6	3.7	54.6	98.96	116.38	42.42
B874984	Rock	2.0	0.4	3.0	42.3	29.42	43.06	20.34
B874985	Rock	2.3	0.5	3.1	44.7	24.34	51.97	9.44
B874986	Rock	4.3	0.8	4.8	79.8	56.43	121.03	23.72
B874987	Rock	3.0	0.5	3.3	58.9	29.08	56.88	20.21
B874988	Rock	2.4	0.4	3.0	47.1	13.69	67.26	6.76
B874989	Rock	2.7	0.5	3.2	53.5	82.11	75.16	74.23
B874990	Pulp	3.5	0.7	4.6	70.6	21.61	138.97	9.07
B874991	Rock	3.1	0.7	4.9	66.4	137.07	96.64	32.89
B874992	Rock	3.1	0.7	4.4	66.1	53.14	187.44	18.40
B874993	Rock	4.3	0.9	5.5	89.3	147.22	371.42	63.68
B874994	Rock	3.9	0.9	5.9	83.6	121.43	253.19	76.14
B874995	Rock	3.2	0.4	2.6	53.2	8.31	100.01	7.89
B874996	Rock	3.7	0.7	4.3	74.6	3.79	105.51	3.70
B874997	Rock	1.6	0.3	1.9	32.4	9.67	54.83	6.42
B874998	Rock	3.5	0.7	4.3	70.9	70.00	141.66	60.60
B874999	Rock	2.0	0.4	2.4	40.7	2.73	70.32	2.42
B875000 Dup	Rock	2.0	0.3	2.7	40.8	2.35	67.71	2.16
B875001	Rock	3.1	0.6	3.5	60.7	27.39	117.55	17.37
B875002	Rock	3.0	0.6	3.8	63.4	21.19	98.21	8.13
B875003	Rock	3.8	0.6	4.0	72.7	7.45	193.14	8.42
B875004	Rock	3.9	0.6	3.6	74.0	2.70	153.42	2.04
B875005	Rock	4.6	0.9	5.3	104.0	3.88	150.82	4.84
B875006	Rock	4.6	1.1	6.2	102.8	4.20	148.15	4.35



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Certificate of Analysis

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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875007	Rock	5.2	1.3	7.2	121.9	39.48	229.07	11.00
B875008	Rock	3.8	0.8	5.1	83.5	39.25	170.95	14.71
B875009	Rock	3.5	0.7	4.2	69.4	12.59	103.81	8.05
B875010	Pulp	4.1	1.0	6.1	86.8	<0.05	168.20	2.29
B875011	Rock	5.9	1.2	6.9	124.0	10.90	171.24	4.40
B875012	Rock	4.9	1.2	7.7	102.8	15.45	168.37	5.66
B875013	Rock	4.5	0.8	5.5	87.1	5.03	244.23	5.01
B875014	Rock	3.6	0.7	4.5	67.1	1.48	93.79	1.16
B875015	Rock	5.5	1.1	7.0	107.1	2.28	137.91	6.53
B875016	Rock	4.1	0.8	4.9	81.2	5.16	114.08	6.68
B875017	Rock	3.8	0.7	4.4	70.9	8.35	75.40	4.65
B875018	Rock	6.8	1.3	7.0	136.6	9.42	243.95	7.57
B875019	Rock	5.3	0.9	5.5	96.2	60.49	181.81	42.70
B875020 Dup	Rock	5.7	1.0	5.6	103.8	65.22	191.89	45.02
B875021	Rock	2.5	0.4	2.7	47.6	6.30	107.09	4.80
B875022	Rock	0.5	0.2	1.8	18.2	2.28	10.03	2.86
B875023	Rock	2.2	0.3	2.4	41.6	4.89	67.47	6.95
B875024	Rock	6.5	1.3	7.2	127.3	2.77	251.67	5.95
B875025	Rock	5.4	1.1	6.5	112.4	1.83	148.80	4.37
B875026	Rock	2.5	0.5	3.3	52.4	1.06	51.69	1.56
B875027	Rock	2.7	0.4	2.6	49.7	1.26	90.36	1.58
B875028	Rock	4.9	0.9	5.4	91.7	3.06	186.84	4.22
B875029	Pulp	5.8	1.1	6.9	107.8	5.13	157.29	19.10
B875030	Pulp	2.4	0.6	4.1	54.4	0.34	50.36	30.25
B875031	Rock	3.5	0.6	3.8	60.5	29.80	67.70	16.60
B875032	Rock	5.2	1.0	5.7	99.2	1.75	60.19	7.87

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B874927	Rock	0.34													
B874927 Dup		0.34													
QCV1010-00533-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B874945	Rock	0.29													
B874945 Dup		0.27													
QCV1010-00533-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B874963	Rock	0.51													
B874963 Dup		0.50													
QCV1010-00533-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B874981	Rock	0.14													
B874981 Dup		0.15													
QCV1010-00533-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B874999	Rock	0.14													
B874999 Dup		0.13													
QCV1010-00533-0014-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875017	Rock	0.07													
B875017 Dup		0.07													
QCV1010-00533-0017-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B874927	Rock		0.22	<0.01	32.11	<0.01	6.74	0.05	37.40	15.39	0.53	0.04	5.05	0.84	0.06
B874927 Dup			0.20	<0.01	31.78	<0.01	6.72	0.04	37.33	15.12	0.52	0.04	5.09	0.85	0.06
QCV1010-00537-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B874945	Rock		0.19	<0.01	33.25	<0.01	6.40	0.02	36.96	16.87	0.68	0.04	3.60	0.73	0.09
B874945 Dup			0.19	<0.01	32.64	<0.01	6.20	0.02	39.01	15.86	0.67	0.04	3.49	0.98	0.09
QCV1010-00537-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B874963	Rock		0.16	<0.01	33.56	<0.01	6.76	0.06	36.36	14.39	0.51	0.05	5.04	2.25	0.08
B874963 Dup			0.15	<0.01	32.44	<0.01	6.89	0.05	36.67	15.47	0.51	0.05	5.17	1.57	0.08
QCV1010-00537-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B874981	Rock		0.18	<0.01	33.13	<0.01	3.69	0.01	39.87	17.33	0.56	0.03	4.10	1.33	0.05
B874981 Dup			0.17	<0.01	33.13	<0.01	3.68	<0.01	39.91	17.32	0.55	0.03	4.09	1.31	0.05



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
QCV1010-00537-0011-BLK		0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B874999	Rock		0.08	<0.01	33.37	<0.01	4.04	0.03	40.90	16.94	0.58	0.04	2.68	0.60	0.01
B874999 Dup			0.08	<0.01	33.50	<0.01	3.96	0.01	41.09	16.52	0.57	0.02	2.68	0.27	<0.01
QCV1010-00537-0014-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875017	Rock		0.73	0.05	26.09	<0.01	14.73	0.45	27.14	13.07	0.63	0.47	6.45	7.79	0.79
B875017 Dup			0.73	0.05	26.10	<0.01	14.69	0.46	27.14	12.93	0.63	0.49	6.47	7.80	0.80
QCV1010-00537-0017-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1010-00537-0019-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.83	0.04	7.52	<0.01	6.53	1.80	4.54	0.52	0.11	7.04	0.17	50.06	0.29



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Certificate of Analysis

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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B874927	Rock		2.6	0.10	17	47	<2	>10	<0.5	44	<1	7	5.35	0.02	673
B874927 Dup			2.4	0.11	24	48	<2	>10	<0.5	65	<1	7	5.58	0.02	640
QCV1010-00534-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							120	1035	781			
B874945	Rock		0.6	0.09	<5	19	<2	>10	<0.5	21	<1	4	5.19	<0.01	334
B874945 Dup			0.7	0.09	<5	19	<2	>10	<0.5	27	<1	4	5.44	<0.01	327
QCV1010-00534-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							133	1025	757			
B874963	Rock		<0.5	0.08	<5	58	<2	>10	<0.5	21	<1	11	5.72	0.03	254
B874963 Dup			<0.5	0.08	<5	59	<2	>10	<0.5	39	<1	10	6.31	0.03	254
QCV1010-00534-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			94.6									6597			
B874981	Rock		<0.5	0.10	<5	36	<2	>10	<0.5	35	<1	2	2.17	<0.01	324
B874981 Dup			<0.5	0.10	<5	37	<2	>10	<0.5	21	<1	2	2.17	<0.01	320
QCV1010-00534-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
B874999	Rock		<0.5	0.02	11	28	<2	>10	<0.5	35	<1	2	2.37	<0.01	850
B874999 Dup			<0.5	0.03	9	28	<2	>10	<0.5	14	<1	3	2.39	<0.01	881
QCV1010-00534-0014-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
B875017	Rock		<0.5	0.38	<5	327	<2	>10	<0.5	26	<1	8	>10	0.40	271
B875017 Dup			<0.5	0.35	<5	319	<2	>10	<0.5	52	<1	5	>10	0.38	263
QCV1010-00534-0017-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							122	1056	746			
QCV1010-00534-0019-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B874927	Rock	98.43													
B874927 Dup		97.78													
QCV1010-00537-0002-BLK		<0.01													
B874945	Rock	98.84													
B874945 Dup		99.20													
QCV1010-00537-0005-BLK		<0.01													
B874963	Rock	99.22													
B874963 Dup		99.04													
QCV1010-00537-0008-BLK		<0.01													
B874981	Rock	100.30													
B874981 Dup		100.24													
QCV1010-00537-0011-BLK		<0.01													
B874999	Rock	99.28													
B874999 Dup		98.72													



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
QCV1010-00537-0014-BLK		<0.01													
B875017	Rock	98.40													
B875017 Dup		98.30													
QCV1010-00537-0017-BLK		<0.01													
QCV1010-00537-0019-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		99.47													



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B874927	Rock	9.99	4579	3	0.03	3	>10000	10	<5	9	1665	0.01	<10	327	<10
B874927 Dup		>10	4791	3	0.03	3	>10000	9	<5	10	1749	0.02	<10	339	<10
QCV1010-00534-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385		22							
STD-OREAS-45P-4A result					0.07	378		23							
B874945	Rock	>10	6165	<1	0.02	3	>10000	12	<5	6	690	0.01	<10	318	<10
B874945 Dup		>10	6419	<1	0.02	3	>10000	12	<5	6	646	0.02	<10	313	<10
QCV1010-00534-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385		22							
STD-OREAS-45P-4A result					0.07	380		22							
B874963	Rock	>10	4778	<1	0.03	2	>10000	6	<5	5	4032	0.04	<10	341	<10
B874963 Dup		>10	5314	<1	0.03	2	>10000	6	<5	5	4481	0.04	<10	341	<10
QCV1010-00534-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B874981	Rock	>10	3851	1	0.02	2	>10000	10	<5	5	2553	0.01	<10	343	<10
B874981 Dup		>10	3862	<1	0.02	2	>10000	8	<5	5	2522	0.01	<10	338	<10
QCV1010-00534-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B874999	Rock	>10	3960	4	0.02	2	>10000	11	<5	5	1806	<0.01	<10	327	<10
B874999 Dup		>10	3976	4	0.02	3	>10000	9	<5	5	1838	<0.01	<10	330	<10
QCV1010-00534-0014-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875017	Rock	8.20	5713	<1	0.46	3	>10000	12	<5	7	1970	0.47	<10	305	<10
B875017 Dup		8.34	5847	<1	0.46	3	>10000	11	<5	6	1909	0.48	<10	293	<10
QCV1010-00534-0017-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385		22							
STD-OREAS-45P-4A result					0.09	387		22							
QCV1010-00534-0019-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10

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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B874927	Rock	15	42												
B874927 Dup		15	41												
QCV1010-00534-0002-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		142													
B874945	Rock	11	60												
B874945 Dup		10	54												
QCV1010-00534-0005-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		146													
B874963	Rock	26	35												
B874963 Dup		27	35												
QCV1010-00534-0008-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5230													
B874981	Rock	22	30												
B874981 Dup		21	30												
QCV1010-00534-0011-BLK		<2	<1												
B874999	Rock	16	12												
B874999 Dup		16	10												
QCV1010-00534-0014-BLK		<2	<1												
B875017	Rock	95	185												
B875017 Dup		93	186												
QCV1010-00534-0017-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		128													
QCV1010-00534-0019-BLK		<2	<1												
B874927	Rock			>1000	24.9	9.3	14.6	51.7	1.1	3.7	719.0	0.8	437.5	119.4	59.8
B874927 Dup				>1000	26.1	9.4	14.5	50.6	1.0	3.8	706.8	0.8	446.1	119.2	58.0
QCV1010-00535-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B874945	Rock			603.4	23.9	9.4	11.1	36.1	1.9	3.7	321.6	0.8	245.1	62.2	40.3
B874945 Dup				592.4	24.2	9.7	11.4	37.0	2.1	3.8	304.7	0.8	253.5	61.4	39.4
QCV1010-00535-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B874963	Rock			504.9	13.2	3.9	9.5	28.3	3.0	1.7	230.6	0.2	232.4	58.4	34.6
B874963 Dup				512.8	13.0	4.0	9.8	28.9	3.3	1.8	229.8	0.2	239.9	58.9	34.8
QCV1010-00535-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B874981	Rock			536.5	12.9	4.3	8.4	26.0	1.1	1.8	290.1	0.3	215.1	57.3	30.3
B874981 Dup				540.8	13.0	4.1	8.1	25.6	0.9	1.8	289.3	0.2	221.6	57.2	30.3
QCV1010-00535-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B874999	Rock			>1000	11.9	3.5	8.6	30.6	0.2	1.5	790.6	0.2	346.8	111.1	33.1
B874999 Dup				>1000	11.6	3.5	8.3	30.8	0.2	1.5	767.6	0.2	346.2	107.9	32.3



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
QCV1010-00535-0014-BLK	Rock	2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875017				710.5	20.4	6.2	14.0	43.3	10.2	2.8	306.4	0.4	352.5	86.5	53.3
B875017 Dup				707.2	20.5	6.3	13.7	43.1	10.4	2.8	308.0	0.5	348.6	86.4	52.6
QCV1010-00535-0017-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1010-00535-0019-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				126.9	17.4	13.7	2.0	13.8	9.7	3.9	62.4	1.9	60.1	14.4	12.2



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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B874927	Rock	4.6	1.1	6.6	96.0			
B874927 Dup		4.6	1.2	6.8	96.0			
QCV1010-00535-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B874945	Rock	4.1	1.1	6.3	94.5			
B874945 Dup		4.1	1.1	6.4	88.6			
QCV1010-00535-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B874963	Rock	2.5	0.4	2.6	44.4			
B874963 Dup		2.5	0.4	2.5	44.7			
QCV1010-00535-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B874981	Rock	2.4	0.4	2.7	47.4			
B874981 Dup		2.4	0.4	2.8	47.4			
QCV1010-00535-0011-BLK		<0.1	<0.1	<0.1	<0.10			
B874999	Rock	2.0	0.4	2.4	40.7			
B874999 Dup		1.9	0.3	2.5	39.7			
QCV1010-00535-0014-BLK		<0.1	<0.1	<0.1	<0.10			
B875017	Rock	3.8	0.7	4.4	70.9			
B875017 Dup		3.8	0.7	4.3	71.5			
QCV1010-00535-0017-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1010-00535-0019-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.2	14.3	109.1			
B874927	Rock					15.13	217.13	3.73
B874927 Dup						18.73	204.60	3.79
QCV1105-00499-0002-BLK						<0.05	<0.20	<0.10
QCV1105-00499-0005-BLK						<0.05	<0.20	<0.10
QCV1105-00499-0008-BLK						<0.05	<0.20	<0.10
QCV1105-00499-0011-BLK						<0.05	<0.20	<0.10
B874999	Rock					2.73	70.32	2.42
B874999 Dup						2.61	68.85	2.27
QCV1105-00499-0014-BLK						<0.05	<0.20	<0.10
QCV1105-00499-0017-BLK						<0.05	<0.20	<0.10
QCV1105-00499-0019-BLK						<0.05	<0.20	<0.10

Certificate of Analysis

10-360-03316-01

Inspectorate Exploration & Mining Services Ltd.
#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5 Canada
Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 10/22/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY0002 Description: Aley 2010-023</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">72</td> <td>Core</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	72	Core	SP-RX-2K/Rock/Chips/Drill Core	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	72	Core	SP-RX-2K/Rock/Chips/Drill Core																																		
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Vancouver, BC	REE-LB-MS	REE Group by ICP-MS																																			
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			
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Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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Certificate of Analysis

10-360-03316-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875033	Core	0.37	0.20	<0.01	31.96	<0.01	5.04	0.05	37.62	16.98	0.68	0.06	6.61	1.11	0.03
B875034	Core	0.40	0.12	<0.01	31.77	<0.01	5.64	0.04	38.74	17.47	0.44	0.04	4.27	0.46	0.11
B875035	Core	0.78	1.03	<0.01	30.03	<0.01	10.66	0.09	31.62	14.24	0.53	0.10	4.62	2.97	3.14
B875036	Core	1.02	0.72	<0.01	31.11	<0.01	8.03	0.07	34.37	17.28	0.34	0.05	5.02	1.70	0.63
B875037	Core	0.65	0.19	<0.01	35.04	<0.01	6.72	0.03	37.43	12.42	0.52	0.03	6.19	0.50	0.06
B875038	Core	0.46	0.13	<0.01	33.72	<0.01	5.48	0.02	38.95	16.43	0.48	0.03	4.70	0.42	0.02
B875039	Core	0.76	0.31	<0.01	30.28	<0.01	10.65	0.03	32.84	15.47	0.52	0.04	7.05	1.59	0.16
B875040 Dup	Core	0.79	0.30	<0.01	30.81	<0.01	10.70	0.03	33.83	15.20	0.46	0.04	6.60	1.50	0.15
B875041	Core	1.06	0.35	<0.01	30.04	<0.01	16.21	0.06	29.67	13.81	0.38	0.05	6.08	2.20	0.20
B875042	Core	2.10	1.07	0.04	21.58	<0.01	42.93	0.70	12.69	7.25	0.58	0.11	6.72	5.21	1.48
B875043	Core	3.09	1.41	0.03	23.57	<0.01	32.77	0.91	13.52	7.53	0.43	0.19	11.32	7.25	0.98
B875044	Core	2.08	0.89	0.03	23.65	<0.01	33.40	0.50	18.27	7.94	0.56	0.15	8.22	4.37	0.90
B875045	Core	0.57	0.48	<0.01	33.82	<0.01	8.40	0.06	36.10	13.50	0.67	0.05	4.97	1.84	0.16
B875046	Core	1.23	1.22	0.04	19.27	<0.01	36.21	0.76	19.54	10.08	0.47	0.06	5.08	5.84	0.92
B875047	Core	0.50	0.13	<0.01	32.57	<0.01	9.37	0.02	36.44	14.90	0.53	0.03	3.74	1.60	0.06
B875048	Core	1.16	0.42	<0.01	20.52	<0.01	31.28	0.16	25.00	11.58	0.54	0.05	6.32	2.77	0.28
B875049	Core	1.39	0.25	0.01	22.24	<0.01	37.91	0.13	17.46	8.47	0.47	0.06	7.69	4.08	0.28
B875050	Pulp	0.78	0.52	0.02	27.73	<0.01	19.17	0.09	30.88	12.34	0.50	0.06	5.32	2.65	0.50
B875051	Core	0.36	0.15	<0.01	34.98	<0.01	5.92	0.02	37.93	15.19	0.42	0.06	4.29	0.88	0.03
B875052	Core	0.73	0.49	<0.01	34.12	<0.01	11.32	0.06	31.78	14.69	0.39	0.08	4.65	2.05	0.39
B875053	Core	0.73	0.46	<0.01	32.81	<0.01	17.25	0.02	26.59	15.01	0.45	0.04	5.51	1.20	0.78
B875054	Core	1.20	0.64	0.02	29.84	<0.01	27.86	0.17	19.95	10.33	0.44	0.05	6.22	3.03	0.74
B875055	Core	0.01	15.36	0.14	4.70	0.02	4.47	3.41	1.02	1.47	0.12	3.72	0.29	63.81	0.39
B875056	Core	0.34	0.15	<0.01	34.67	<0.01	7.89	0.02	32.27	16.76	0.39	0.03	6.23	0.54	0.04
B875057	Core	0.63	0.29	<0.01	34.48	<0.01	5.69	0.06	36.18	16.21	0.32	0.08	5.09	0.89	0.23
B875058	Core	0.80	0.36	<0.01	39.15	<0.01	5.90	0.09	29.29	11.23	0.42	0.06	12.13	0.84	0.24
B875059	Core	0.99	0.35	<0.01	36.92	<0.01	11.28	0.08	28.57	13.87	0.39	0.08	7.76	0.84	0.50
B875060 Dup	Core	1.03	0.30	<0.01	36.25	<0.01	11.04	0.07	28.29	13.67	0.38	0.08	7.71	0.83	0.47
B875061	Core	0.62	0.32	<0.01	35.57	<0.01	13.36	0.08	28.61	14.57	0.41	0.09	6.05	1.26	0.44
B875062	Core	0.53	0.12	<0.01	38.31	<0.01	6.65	0.04	34.02	13.66	0.55	0.05	6.71	0.63	0.07
B875063	Core	0.40	0.13	<0.01	33.34	<0.01	9.71	0.19	37.38	14.44	0.53	0.06	3.40	1.05	0.08
B875064	Core	0.72	0.46	<0.01	35.57	<0.01	12.53	0.09	30.70	13.28	0.54	0.05	5.53	1.13	0.34
B875065	Core	0.79	0.47	<0.01	33.96	<0.01	10.03	0.03	31.71	15.29	0.53	0.04	5.74	1.57	0.53
B875066	Core	0.61	0.43	<0.01	34.32	<0.01	9.51	0.04	33.11	14.07	0.58	0.05	5.49	1.55	0.25
B875067	Core	1.20	0.92	0.01	22.31	<0.01	38.19	0.51	15.79	8.12	0.50	0.07	7.28	4.05	1.11
B875068	Core	2.59	0.96	0.01	31.62	<0.01	8.13	0.73	26.80	14.93	0.63	0.07	8.25	5.13	1.88
B875069	Core	1.49	0.53	<0.01	30.88	<0.01	5.88	0.03	37.27	17.97	0.74	0.03	3.24	2.77	0.08
B875070	Pulp	0.54	1.71	0.39	47.07	<0.01	4.72	0.71	31.47	2.21	0.99	0.44	2.61	7.00	0.21
B875071	Core	0.35	0.10	<0.01	36.14	<0.01	5.77	0.03	39.18	13.16	0.69	0.06	4.61	0.52	0.02
B875072	Core	0.43	0.11	<0.01	34.08	<0.01	6.24	0.03	38.72	16.29	0.76	0.04	4.01	0.52	0.09



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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10-360-03316-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875073	Core	0.54	0.16	<0.01	34.88	<0.01	5.34	0.03	38.12	16.27	0.42	0.08	4.43	0.63	0.03
B875074	Core	1.20	0.39	<0.01	36.17	<0.01	13.10	0.07	28.20	12.92	0.41	0.06	6.96	1.25	0.31
B875075	Core	0.25	0.16	<0.01	34.79	<0.01	5.54	0.04	38.35	15.04	0.70	0.06	4.75	0.52	0.02
B875076	Core	0.36	0.09	<0.01	32.43	<0.01	3.94	0.03	40.14	17.65	0.77	0.04	4.11	0.30	0.02
B875077	Core	0.83	0.22	<0.01	28.72	<0.01	13.78	0.05	31.19	18.38	0.46	0.04	6.14	0.60	0.15
B875078	Core	0.60	0.17	<0.01	34.46	<0.01	5.80	0.04	34.26	15.07	0.66	0.06	8.33	0.60	0.07
B875079	Core	0.35	0.24	<0.01	30.93	<0.01	19.41	0.06	26.62	12.71	0.70	0.06	7.17	1.32	0.50
B875080 Dup	Core	0.35	0.23	<0.01	31.48	<0.01	19.19	0.05	26.42	12.16	0.69	0.06	7.08	1.30	0.51
B875081	Core	0.32	0.12	<0.01	31.40	<0.01	6.54	0.01	39.46	17.49	0.66	0.04	3.22	0.85	0.06
B875082	Core	0.39	0.19	<0.01	31.80	<0.01	5.77	0.01	38.29	16.98	0.61	0.05	4.55	1.36	0.06
B875083	Core	0.30	0.08	<0.01	34.27	<0.01	5.96	0.03	39.18	15.05	0.78	0.04	4.59	0.63	0.03
B875084	Core	0.32	0.10	<0.01	33.00	<0.01	5.66	0.02	39.51	15.23	0.84	0.05	4.36	0.87	0.02
B875085	Core	0.12	2.68	0.01	21.61	0.01	7.04	0.21	33.09	18.45	0.56	0.19	3.84	11.26	0.40
B875086	Core	0.14	1.63	<0.01	25.96	<0.01	5.86	0.07	35.57	18.57	0.59	0.08	3.82	7.26	0.27
B875087	Core	0.21	0.09	<0.01	30.08	<0.01	5.19	0.02	40.12	19.07	0.74	0.05	3.49	0.41	0.02
B875088	Core	0.21	0.20	<0.01	33.04	<0.01	4.41	0.02	40.74	16.41	0.74	0.05	3.37	0.72	0.02
B875089	Core	0.23	0.08	<0.01	31.57	0.02	4.23	0.01	39.22	18.15	0.70	0.04	5.19	0.32	0.01
B875090	Pulp	0.75	0.18	0.03	35.32	<0.01	6.23	0.04	37.73	11.39	0.51	0.09	4.09	4.18	0.14
B875091	Core	0.21	0.04	<0.01	34.46	<0.01	4.28	0.02	37.58	19.58	0.73	0.03	4.08	0.25	<0.01
B875092	Core	0.18	0.14	<0.01	30.27	<0.01	4.40	0.01	38.76	18.91	0.72	0.04	5.48	0.59	0.01
B875093	Core	0.62	0.11	<0.01	32.13	<0.01	5.19	0.02	37.07	18.39	0.56	0.05	5.99	0.38	0.03
B875094	Core	0.42	0.09	<0.01	30.40	<0.01	4.50	0.01	38.51	19.56	0.63	0.05	5.30	0.28	0.02
B875095	Core	0.43	0.10	<0.01	31.52	<0.01	4.37	0.03	38.42	17.57	0.61	0.03	6.08	0.30	0.01
B875096	Core	0.34	0.05	<0.01	33.50	<0.01	6.87	0.03	37.80	14.17	0.78	0.04	5.56	0.29	0.03
B875097	Core	0.32	0.06	<0.01	34.75	<0.01	6.87	0.02	40.29	14.23	0.92	0.03	3.08	0.21	0.02
B875098	Core	0.19	0.04	<0.01	34.09	<0.01	7.05	0.01	36.83	14.64	0.79	0.03	5.67	0.18	0.02
B875099	Core	0.73	0.13	<0.01	34.93	<0.01	5.93	0.05	35.94	14.67	0.67	0.04	6.59	0.42	0.02
B875100 Dup	Core	0.72	0.15	<0.01	35.41	<0.01	6.29	0.05	36.05	13.95	0.67	0.04	6.55	0.52	0.03
B875101	Core	0.41	0.11	<0.01	33.30	<0.01	6.27	0.04	38.56	16.22	0.64	0.03	4.39	0.31	0.04
B875102	Core	0.15	0.24	<0.01	32.98	<0.01	5.56	0.04	35.09	14.59	0.53	0.04	9.40	0.63	0.03
B875103	Core	0.15	0.16	<0.01	34.07	<0.01	6.10	0.02	33.64	15.87	0.53	0.04	9.23	0.46	0.03
B875104	Core	0.33	0.09	<0.01	34.91	<0.01	5.06	0.03	37.35	15.15	0.65	0.03	6.00	0.28	0.02
B875105	Core	0.15	0.11	<0.01	34.12	<0.01	8.51	0.02	37.63	15.07	0.96	0.03	3.13	0.35	0.01
B875106	Core	6.75	0.23	<0.01	34.82	<0.01	5.12	0.04	35.48	15.23	0.36	0.04	7.54	0.53	0.07
B875107	Core	0.41	0.53	<0.01	31.62	<0.01	5.77	0.02	37.34	18.07	0.32	0.04	4.49	1.18	0.10

Certificate of Analysis

10-360-03316-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875033	Core	100.34	1.9	0.08	5	55	<2	>10	<0.5	2	7	45	2.94	0.03	168
B875034	Core	99.10	1.1	0.06	28	24	<2	>10	<0.5	6	8	48	3.63	0.02	838
B875035	Core	99.02	1.1	0.54	63	24	<2	>10	<0.5	26	11	112	6.41	0.08	446
B875036	Core	99.32	1.1	0.37	20	26	<2	>10	<0.5	11	9	118	4.80	0.05	704
B875037	Core	99.15	0.9	0.10	42	30	<2	>10	<0.5	2	11	83	3.78	0.03	778
B875038	Core	100.37	1.3	0.07	41	23	<2	>10	<0.5	3	7	57	3.41	<0.01	751
B875039	Core	98.94	1.0	0.15	21	41	<2	>10	<0.5	13	8	106	5.80	0.02	340
B875040 Dup	Core	99.62	0.9	0.16	25	42	<2	>10	<0.5	13	9	108	5.92	0.02	344
B875041	Core	99.05	1.6	0.18	<5	52	<2	>10	<0.5	11	10	132	9.84	0.05	316
B875042	Core	100.38	1.6	0.54	<5	274	<2	>10	<0.5	33	11	120	>10	0.60	397
B875043	Core	99.90	1.2	0.79	15	211	<2	>10	<0.5	19	9	39	>10	0.83	805
B875044	Core	98.89	1.6	0.50	<5	209	<2	>10	<0.5	22	8	262	>10	0.45	514
B875045	Core	100.06	1.3	0.19	8	45	<2	>10	<0.5	11	8	86	5.43	0.04	409
B875046	Core	99.51	1.0	0.66	<5	288	<2	>10	<0.5	43	7	279	>10	0.69	279
B875047	Core	99.40	0.8	0.06	<5	38	<2	>10	<0.5	13	8	59	6.13	0.01	221
B875048	Core	98.94	1.2	0.21	9	64	<2	>10	<0.5	29	9	11	>10	0.14	437
B875049	Core	99.06	1.0	0.13	<5	120	<2	>10	<0.5	21	13	131	>10	0.12	309
B875050	Pulp	99.78	1.0	0.27	11	141	<2	>10	<0.5	14	5	69	>10	0.07	326
B875051	Core	99.87	1.4	0.07	5	15	<2	>10	<0.5	11	7	55	4.00	<0.01	270
B875052	Core	100.03	0.5	0.25	<5	36	<2	>10	<0.5	18	9	116	7.76	0.04	290
B875053	Core	100.12	0.7	0.23	5	28	<2	>10	<0.5	23	12	104	>10	0.02	308
B875054	Core	99.30	0.5	0.32	<5	124	<2	>10	<0.5	25	7	23	>10	0.13	299
B875055	Core	98.92	0.6	8.45	<5	949	<2	3.12	<0.5	9	94	7	2.99	3.37	34
B875056	Core	99.01	0.8	0.08	9	18	<2	>10	<0.5	20	9	66	5.90	0.01	331
B875057	Core	99.54	1.0	0.14	7	33	<2	>10	<0.5	9	16	91	4.29	0.04	255
B875058	Core	99.73	1.1	0.17	22	52	<2	>10	<0.5	11	11	37	4.06	0.07	548
B875059	Core	100.66	0.8	0.15	9	55	<2	>10	<0.5	21	15	122	8.03	0.05	300
B875060 Dup	Core	99.11	0.9	0.16	7	53	<2	>10	<0.5	20	16	123	8.28	0.05	298
B875061	Core	100.78	0.8	0.15	22	48	<2	>10	<0.5	17	13	74	>10	0.05	672
B875062	Core	100.81	1.2	0.06	9	29	<2	>10	<0.5	12	12	82	4.81	0.03	284
B875063	Core	100.32	1.2	0.07	7	28	<2	>10	<0.5	8	9	60	6.86	0.04	241
B875064	Core	100.24	1.0	0.22	13	54	<2	>10	<0.5	25	13	94	8.36	0.06	298
B875065	Core	99.93	0.8	0.25	6	25	<2	>10	<0.5	26	10	111	7.37	<0.01	292
B875066	Core	99.39	1.0	0.21	8	27	<2	>10	<0.5	13	17	85	6.36	0.02	362
B875067	Core	98.87	1.6	0.41	<5	93	<2	>10	<0.5	32	7	161	>10	0.37	286
B875068	Core	99.14	<0.5	0.49	<5	71	<2	>10	<0.5	19	8	149	5.91	0.58	345
B875069	Core	99.42	1.5	0.31	<5	29	<2	>10	<0.5	<1	12	191	4.12	0.02	196
B875070	Pulp	99.54	0.6	0.91	27	2890	<2	>10	<0.5	4	7	18	3.28	0.59	875
B875071	Core	100.28	0.6	0.04	5	26	<2	>10	<0.5	3	8	43	3.41	<0.01	234
B875072	Core	100.90	1.3	0.05	746	34	<2	>10	<0.5	5	11	54	4.06	0.02	197

Certificate of Analysis

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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875073	Core	100.38	1.4	0.08	6	23	<2	>10	<0.5	5	10	71	3.58	0.02	222
B875074	Core	99.86	1.3	0.19	7	43	<2	>10	<0.5	14	17	162	8.72	0.05	265
B875075	Core	99.97	1.0	0.08	7	33	<2	>10	<0.5	3	10	34	3.36	0.03	264
B875076	Core	99.52	0.8	0.04	6	28	<2	>10	<0.5	2	8	44	2.48	0.02	188
B875077	Core	99.74	0.9	0.11	50	35	<2	>10	<0.5	15	17	110	7.41	0.04	278
B875078	Core	99.54	<0.5	0.08	9	37	<2	>10	<0.5	4	10	84	3.80	0.03	377
B875079	Core	99.72	0.5	0.11	7	44	<2	>10	<0.5	22	10	64	>10	0.04	399
B875080 Dup	Core	99.18	0.6	0.11	5	44	<2	>10	<0.5	22	10	66	>10	0.04	367
B875081	Core	99.85	0.5	0.05	<5	23	<2	>10	<0.5	13	9	44	4.13	0.01	174
B875082	Core	99.66	<0.5	0.09	<5	24	<2	>10	<0.5	10	10	56	3.68	<0.01	182
B875083	Core	100.65	<0.5	0.03	<5	32	<2	>10	<0.5	5	8	42	3.50	0.01	155
B875084	Core	99.67	<0.5	0.04	<5	34	<2	>10	<0.5	6	8	39	3.06	0.01	214
B875085	Core	99.34	1.0	1.57	10	73	<2	>10	<0.5	11	38	18	4.15	0.17	206
B875086	Core	99.69	<0.5	0.85	20	35	<2	>10	<0.5	10	26	20	3.70	0.06	222
B875087	Core	99.28	<0.5	0.04	8	27	<2	>10	<0.5	7	10	30	3.33	<0.01	172
B875088	Core	99.73	0.8	0.09	6	25	<2	>10	<0.5	4	9	27	2.68	<0.01	147
B875089	Core	99.55	1.0	0.04	5	27	<2	>10	<0.5	6	12	28	2.50	<0.01	176
B875090	Pulp	99.93	0.9	0.08	21	170	<2	>10	<0.5	6	5	55	3.78	0.03	336
B875091	Core	101.05	<0.5	0.02	7	28	<2	>10	<0.5	6	9	25	2.69	<0.01	183
B875092	Core	99.34	<0.5	0.07	5	27	<2	>10	<0.5	4	10	25	2.55	<0.01	192
B875093	Core	99.91	0.5	0.05	<5	24	<2	>10	<0.5	4	13	76	3.48	0.01	266
B875094	Core	99.37	0.6	0.03	5	24	<2	>10	<0.5	4	9	57	2.99	<0.01	212
B875095	Core	99.05	0.7	0.05	5	29	<2	>10	<0.5	4	10	55	2.87	0.02	221
B875096	Core	99.11	1.0	0.03	7	31	<2	>10	<0.5	5	10	42	3.74	<0.01	243
B875097	Core	100.49	1.2	0.03	7	32	<2	>10	<0.5	4	9	38	3.89	<0.01	276
B875098	Core	99.36	0.9	0.02	13	31	<2	>10	<0.5	7	13	22	4.27	<0.01	356
B875099	Core	99.40	1.2	0.06	11	39	<2	>10	<0.5	4	9	94	3.75	0.03	415
B875100 Dup	Core	99.71	1.1	0.06	11	39	<2	>10	<0.5	4	10	91	3.77	0.03	415
B875101	Core	99.93	2.2	0.06	19	32	<2	>10	<0.5	4	9	54	3.94	0.02	557
B875102	Core	99.12	1.9	0.11	11	26	<2	>10	<0.5	7	10	23	2.97	0.02	260
B875103	Core	100.18	1.5	0.08	15	23	<2	>10	<0.5	7	12	23	3.66	0.01	381
B875104	Core	99.57	1.3	0.04	89	18	<2	>10	<0.5	4	9	43	3.07	0.01	2927
B875105	Core	99.95	1.1	0.06	174	19	<2	>10	<0.5	15	9	21	5.41	0.01	6078
B875106	Core	99.46	0.9	0.11	43	16	<2	>10	<0.5	12	10	29	3.32	0.02	1438
B875107	Core	99.49	1.6	0.28	15	17	<2	>10	<0.5	15	11	65	3.72	<0.01	475

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10-360-03316-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875033	Core	>10	4109	1	0.03	2	>10000	7	<5	5	2701	0.01	<10	14	<10
B875034	Core	>10	3070	1	0.03	2	>10000	12	<5	7	912	0.02	<10	27	<10
B875035	Core	9.52	3560	2	0.06	5	>10000	7	<5	6	919	0.29	<10	59	<10
B875036	Core	>10	2270	1	0.03	3	>10000	8	<5	9	667	0.15	<10	77	<10
B875037	Core	>10	3298	2	0.02	2	>10000	9	<5	8	1762	0.02	<10	30	<10
B875038	Core	>10	3401	1	0.02	1	>10000	8	<5	6	1650	<0.01	<10	20	<10
B875039	Core	9.39	2900	1	0.03	3	>10000	7	<5	5	2183	0.06	<10	91	<10
B875040 Dup	Core	9.90	2976	2	0.03	3	>10000	6	<5	6	2248	0.07	<10	94	<10
B875041	Core	8.64	2501	<1	0.03	5	>10000	4	<5	6	1664	0.10	<10	158	<10
B875042	Core	4.36	3597	3	0.08	15	>10000	4	<5	2	2124	0.53	<10	619	<10
B875043	Core	5.23	2980	2	0.15	9	>10000	13	<5	3	3390	0.22	<10	374	<10
B875044	Core	5.72	4022	1	0.11	12	>10000	3	<5	4	3081	0.47	<10	416	<10
B875045	Core	>10	4761	2	0.03	2	>10000	7	<5	6	2914	0.06	<10	53	<10
B875046	Core	5.99	3490	1	0.04	10	>10000	<2	<5	3	2371	0.61	<10	420	<10
B875047	Core	>10	3924	<1	0.02	2	>10000	5	<5	6	2452	0.03	<10	67	<10
B875048	Core	7.86	3481	<1	0.03	7	>10000	11	<5	8	1694	0.09	<10	228	<10
B875049	Core	5.37	3378	<1	0.04	11	>10000	4	<5	8	2341	0.19	<10	321	<10
B875050	Pulp	8.02	3681	3	0.04	6	>10000	8	<5	5	1889	0.17	<10	210	<10
B875051	Core	>10	3042	1	0.04	1	>10000	7	<5	6	1470	0.02	<10	28	<10
B875052	Core	9.58	2869	1	0.05	3	>10000	6	<5	5	1505	0.22	<10	190	<10
B875053	Core	9.54	3084	1	0.02	5	>10000	7	<5	7	2024	0.21	<10	127	<10
B875054	Core	6.23	3573	1	0.03	7	>10000	3	<5	4	2231	0.33	<10	348	<10
B875055	Core	0.90	775	4	2.90	6	1251	12	<5	5	709	0.27	<10	60	<10
B875056	Core	>10	3136	<1	0.03	15	>10000	15	<5	6	1722	0.02	<10	28	<10
B875057	Core	>10	2575	1	0.05	3	>10000	6	<5	6	910	0.06	<10	55	<10
B875058	Core	8.53	3041	1	0.04	2	>10000	12	<5	5	2034	0.05	<10	38	<10
B875059	Core	8.73	2931	1	0.05	4	>10000	5	<5	5	2235	0.16	<10	153	<10
B875060 Dup	Core	8.89	2979	1	0.05	3	>10000	6	<5	5	2260	0.14	<10	146	<10
B875061	Core	9.28	3230	4	0.05	5	>10000	9	<5	6	992	0.16	<10	134	<10
B875062	Core	>10	4117	1	0.03	1	>10000	7	<5	6	3056	0.03	<10	36	<10
B875063	Core	>10	3973	<1	0.04	3	>10000	8	<5	6	2193	0.04	<10	66	<10
B875064	Core	9.70	3819	3	0.03	3	>10000	6	<5	4	2737	0.18	<10	202	<10
B875065	Core	>10	4054	2	0.03	4	>10000	6	<5	8	2601	0.21	<10	180	<10
B875066	Core	>10	4052	1	0.03	3	>10000	6	<5	7	3131	0.09	<10	108	<10
B875067	Core	6.57	3424	1	0.04	12	>10000	<2	<5	1	2948	0.65	<10	525	<10
B875068	Core	9.40	4678	1	0.05	3	>10000	7	<5	2	3894	1.07	<10	38	<10
B875069	Core	>10	5361	2	0.02	2	>10000	3	<5	9	3092	0.04	<10	39	<10
B875070	Pulp	1.48	7224	14	0.37	2	>10000	76	<5	3	>10000	0.15	<10	169	<10
B875071	Core	>10	4255	1	0.03	1	>10000	7	<5	5	2405	<0.01	<10	13	<10
B875072	Core	>10	5172	<1	0.02	1	>10000	5	<5	4	3465	0.02	<10	31	<10

Certificate of Analysis

10-360-03316-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875073	Core	>10	2985	1	0.05	1	>10000	9	<5	4	1547	0.01	<10	40	<10
B875074	Core	9.70	2877	1	0.04	3	>10000	<2	<5	3	2089	0.18	<10	270	<10
B875075	Core	>10	4447	2	0.04	<1	>10000	7	<5	4	2858	<0.01	<10	13	<10
B875076	Core	>10	5185	1	0.02	<1	>10000	6	<5	4	3721	<0.01	<10	8	<10
B875077	Core	9.76	2652	1	0.03	3	>10000	4	<5	5	1853	0.07	<10	138	<10
B875078	Core	>10	4628	1	0.04	1	>10000	6	<5	5	3720	0.03	<10	60	<10
B875079	Core	8.47	4774	<1	0.04	5	>10000	4	<5	3	3996	0.26	<10	630	<10
B875080 Dup	Core	8.01	4546	1	0.04	5	>10000	4	<5	3	3841	0.26	<10	619	<10
B875081	Core	>10	4408	2	0.02	1	>10000	7	<5	4	2821	0.02	<10	32	<10
B875082	Core	>10	4130	1	0.03	2	>10000	5	<5	5	3284	0.02	<10	37	<10
B875083	Core	>10	4940	2	0.02	<1	>10000	6	<5	4	4366	0.01	<10	22	<10
B875084	Core	>10	5015	<1	0.03	<1	>10000	8	<5	6	4162	<0.01	<10	12	<10
B875085	Core	>10	3557	5	0.15	15	>10000	6	<5	8	2235	0.08	<10	56	<10
B875086	Core	>10	4003	3	0.05	7	>10000	6	<5	7	2399	0.06	<10	39	<10
B875087	Core	>10	5089	12	0.03	1	>10000	7	<5	5	3484	<0.01	<10	7	<10
B875088	Core	>10	4923	1	0.03	<1	>10000	6	<5	5	3802	<0.01	<10	7	<10
B875089	Core	>10	4663	<1	0.02	<1	>10000	6	<5	4	3854	<0.01	<10	4	<10
B875090	Pulp	8.67	3376	2	0.06	1	>10000	8	<5	6	2546	0.05	<10	72	<10
B875091	Core	>10	5054	5	0.02	<1	>10000	6	<5	4	3913	<0.01	<10	2	<10
B875092	Core	>10	4749	2	0.03	<1	>10000	6	<5	5	3708	<0.01	<10	3	<10
B875093	Core	>10	3919	1	0.03	1	>10000	5	<5	5	2902	0.02	<10	44	<10
B875094	Core	>10	4320	<1	0.03	<1	>10000	5	<5	5	3294	<0.01	<10	16	<10
B875095	Core	>10	4171	1	0.02	<1	>10000	6	<5	5	2851	<0.01	<10	13	<10
B875096	Core	>10	4586	4	0.02	1	>10000	7	<5	5	2820	<0.01	<10	24	<10
B875097	Core	>10	5630	2	0.02	1	>10000	6	<5	5	3251	<0.01	<10	16	<10
B875098	Core	>10	5156	2	0.02	2	>10000	9	<5	7	2493	<0.01	<10	19	<10
B875099	Core	>10	4454	2	0.02	2	>10000	3	<5	5	2349	0.01	<10	17	<10
B875100 Dup	Core	>10	4469	2	0.02	2	>10000	2	<5	6	2335	0.01	<10	17	<10
B875101	Core	>10	4214	1	0.02	2	>10000	7	<5	6	1990	<0.01	<10	11	<10
B875102	Core	>10	2971	2	0.03	2	>10000	13	<5	6	1666	0.01	<10	16	<10
B875103	Core	9.73	3405	8	0.03	2	>10000	12	<5	6	2072	0.01	<10	13	<10
B875104	Core	>10	4047	2	0.02	2	>10000	15	<5	8	2320	<0.01	<10	10	<10
B875105	Core	>10	6643	3	0.02	6	>10000	25	<5	11	1474	<0.01	<10	12	<10
B875106	Core	>10	2383	1	0.03	2	>10000	13	<5	6	679	0.02	<10	23	<10
B875107	Core	>10	2132	<1	0.03	2	>10000	13	<5	6	635	0.04	<10	31	<10



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03316-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875033	Core	14	23	440.7	19.3	7.8	9.8	29.6	2.2	3.2	222.4	0.5	183.9	52.0	31.8
B875034	Core	10	10	>1000	37.7	14.3	21.2	75.4	1.9	6.0	>1000	1.1	692.0	236.2	85.6
B875035	Core	18	19	996.1	16.5	6.5	15.2	33.2	1.6	2.6	675.5	0.5	290.1	98.8	36.2
B875036	Core	8	19	>1000	27.0	10.0	20.4	57.8	1.9	4.1	>1000	0.7	534.0	179.7	67.5
B875037	Core	12	24	>1000	27.2	10.3	16.8	53.1	4.1	4.4	906.8	0.7	434.3	141.5	59.6
B875038	Core	12	14	>1000	25.3	9.3	15.3	50.4	2.4	3.9	>1000	0.6	441.5	147.5	55.6
B875039	Core	17	31	843.3	21.1	7.5	16.9	42.4	4.2	3.2	438.6	0.5	340.3	99.8	50.7
B875040 Dup	Core	17	35	822.1	21.5	7.6	17.1	42.1	4.2	3.3	430.9	0.5	335.3	97.0	51.2
B875041	Core	24	58	799.8	20.2	7.1	16.0	41.5	5.8	2.9	389.5	0.5	333.8	95.2	51.0
B875042	Core	177	65	812.4	15.6	4.3	13.3	37.8	8.3	2.1	384.6	0.1	335.7	97.4	48.7
B875043	Core	117	46	>1000	33.6	8.6	29.3	83.4	7.2	4.4	838.9	0.3	744.6	215.7	105.9
B875044	Core	125	72	>1000	23.8	6.6	20.4	59.1	8.9	3.3	658.9	0.2	526.1	159.6	76.8
B875045	Core	22	36	865.7	19.9	7.2	14.3	40.7	4.1	3.1	478.4	0.4	334.8	100.5	48.8
B875046	Core	85	59	663.0	15.3	5.0	11.4	33.3	6.3	2.1	320.9	0.3	273.9	78.9	41.9
B875047	Core	21	44	593.2	16.0	5.8	10.7	31.9	6.0	2.4	285.9	0.4	246.6	71.5	38.4
B875048	Core	67	131	992.2	26.5	9.7	16.5	47.2	9.6	4.1	514.6	0.6	397.2	117.7	56.6
B875049	Core	140	313	740.8	19.4	6.2	14.2	40.4	18.2	2.7	341.4	0.3	322.1	91.7	51.4
B875050	Pulp	58	48	769.8	19.5	6.6	13.8	38.3	10.0	2.9	377.1	0.5	315.0	90.6	49.8
B875051	Core	10	26	646.1	20.5	8.5	11.3	35.1	2.5	3.3	321.8	0.6	260.7	74.7	41.2
B875052	Core	15	50	794.2	20.7	7.6	14.6	40.0	8.3	3.2	391.3	0.5	318.6	93.4	49.0
B875053	Core	17	32	682.9	26.4	10.9	16.7	39.6	5.1	4.4	342.0	0.6	277.1	80.9	45.2
B875054	Core	56	60	788.5	21.3	7.4	14.1	40.0	10.8	3.1	376.5	0.4	325.1	94.6	49.6
B875055	Core	55	7	65.9	3.1	1.7	1.3	3.9	3.0	0.4	33.4	0.2	27.7	7.7	4.5
B875056	Core	19	27	732.4	22.2	9.1	11.6	36.3	2.6	3.6	404.2	0.6	277.8	82.6	41.6
B875057	Core	11	24	621.9	38.8	16.7	16.1	50.2	4.3	6.7	310.7	1.1	272.2	76.1	51.0
B875058	Core	12	39	>1000	68.5	29.4	28.6	91.4	3.5	12.0	676.5	2.0	568.8	158.9	100.0
B875059	Core	14	33	819.4	29.9	11.1	23.4	49.6	8.3	4.9	381.2	0.6	355.9	101.9	57.2
B875060 Dup	Core	14	30	815.4	30.8	11.7	23.9	49.9	8.4	4.9	380.5	0.6	357.0	102.3	58.3
B875061	Core	22	35	>1000	34.3	12.0	20.6	68.6	5.4	5.3	910.5	0.7	651.8	199.4	87.3
B875062	Core	18	36	699.0	24.2	8.9	14.7	40.1	4.4	3.8	336.4	0.5	301.8	84.7	48.8
B875063	Core	34	57	558.0	17.1	6.6	10.1	30.7	3.3	2.7	323.8	0.4	233.4	67.0	36.5
B875064	Core	19	25	740.4	19.2	6.8	15.2	38.5	4.4	2.9	366.9	0.3	304.1	89.3	46.1
B875065	Core	19	27	741.4	28.1	10.9	15.8	44.5	6.6	4.5	349.7	0.6	332.2	91.5	52.1
B875066	Core	17	19	876.9	25.6	9.1	15.9	46.1	2.3	3.9	431.3	0.5	371.7	110.2	56.3
B875067	Core	63	33	776.3	17.2	4.7	14.3	40.2	4.8	2.3	357.0	0.1	347.1	96.2	53.3
B875068	Core	40	88	901.4	22.1	6.7	17.1	48.4	6.8	3.1	396.9	0.3	399.8	112.1	60.5
B875069	Core	30	42	501.9	18.7	7.5	13.3	30.4	0.9	3.1	213.9	0.4	226.9	62.9	36.2
B875070	Pulp	428	75	>1000	14.9	4.8	13.5	39.9	0.3	2.0	963.8	0.4	476.4	164.8	50.9
B875071	Core	14	11	656.5	17.3	6.5	10.3	31.0	0.9	2.7	337.2	0.4	255.3	75.6	37.5
B875072	Core	16	10	522.0	13.1	4.4	10.2	27.1	1.4	1.8	245.3	0.2	224.0	64.0	34.4



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Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875073	Core	8	12	670.1	23.2	8.5	13.4	38.1	1.9	3.6	329.8	0.6	283.2	79.7	47.7
B875074	Core	13	35	859.1	23.5	7.7	18.9	47.1	8.4	3.5	410.0	0.5	368.7	106.0	57.9
B875075	Core	13	7	741.9	16.9	5.9	11.0	34.0	0.6	2.5	373.7	0.3	296.4	86.7	42.7
B875076	Core	11	10	554.4	13.7	4.3	10.1	28.2	2.2	1.9	258.9	0.2	239.2	67.0	36.2
B875077	Core	10	10	739.1	22.8	7.8	18.3	42.4	4.2	3.4	341.5	0.5	323.4	90.3	51.5
B875078	Core	13	19	950.5	27.2	9.5	17.3	49.3	1.7	4.0	460.0	0.5	405.0	117.7	60.7
B875079	Core	28	9	971.5	18.8	5.7	13.1	39.1	0.7	2.6	484.8	0.2	375.1	113.5	49.4
B875080 Dup	Core	28	8	954.3	18.9	5.6	12.8	39.3	0.7	2.6	479.6	0.2	373.2	111.0	49.9
B875081	Core	15	9	504.2	14.3	4.8	9.3	25.6	1.7	2.0	242.4	0.3	199.3	59.2	31.0
B875082	Core	13	14	500.2	14.5	4.6	11.0	28.6	2.5	2.0	231.6	0.2	222.9	62.4	36.1
B875083	Core	18	16	410.9	12.5	4.0	9.1	25.4	1.4	1.8	182.0	<0.1	191.3	52.0	30.7
B875084	Core	18	11	530.9	11.8	3.1	9.1	26.0	1.3	1.5	246.6	<0.1	229.3	65.2	33.7
B875085	Core	24	13	502.8	15.9	5.8	8.8	27.8	1.2	2.4	244.2	0.3	212.0	60.4	33.4
B875086	Core	17	12	524.5	15.6	5.5	8.9	28.4	1.2	2.3	255.2	0.3	219.1	61.6	33.8
B875087	Core	17	13	384.1	13.9	5.0	7.7	23.8	0.9	2.0	180.0	0.2	170.4	47.6	27.9
B875088	Core	13	9	372.0	12.3	4.4	7.7	22.5	1.1	1.8	169.6	0.2	166.7	45.8	27.4
B875089	Core	14	12	460.6	15.5	5.2	9.2	28.4	0.7	2.3	209.5	0.2	203.1	57.0	33.9
B875090	Pulp	14	31	879.1	24.1	9.1	15.6	46.2	2.5	3.8	421.4	0.7	349.5	102.3	54.5
B875091	Core	16	8	449.0	11.3	3.6	7.4	23.1	0.4	1.6	211.7	<0.1	193.2	54.7	29.7
B875092	Core	13	15	485.1	16.1	5.8	9.4	29.2	0.8	2.5	229.4	0.3	216.6	60.9	34.3
B875093	Core	11	30	641.3	23.8	8.9	13.9	39.6	3.4	3.8	306.3	0.6	286.7	80.2	46.4
B875094	Core	12	23	507.8	20.5	7.7	10.3	32.1	2.3	3.2	235.0	0.4	223.2	62.4	36.6
B875095	Core	13	26	547.9	23.1	8.7	10.9	34.4	2.1	3.7	263.8	0.5	237.7	67.0	39.9
B875096	Core	16	27	641.0	22.3	8.2	10.9	34.4	2.2	3.4	331.9	0.4	251.4	73.5	40.2
B875097	Core	22	14	633.1	17.4	6.3	9.1	29.8	1.4	2.6	332.3	0.3	242.2	72.6	34.4
B875098	Core	17	22	839.7	26.8	9.8	11.9	42.5	0.5	4.2	446.4	0.5	317.4	96.9	47.5
B875099	Core	15	41	946.3	33.2	12.8	14.8	49.6	4.6	5.6	506.6	0.7	354.7	107.5	53.7
B875100 Dup	Core	14	40	905.4	31.9	11.8	14.3	47.8	4.1	5.1	495.9	0.7	344.6	104.1	51.6
B875101	Core	15	19	>1000	36.5	13.8	15.9	53.8	1.6	5.9	724.7	0.8	433.3	138.0	59.9
B875102	Core	9	48	601.3	37.1	16.4	13.3	43.0	1.7	6.7	318.1	1.1	239.2	69.5	43.3
B875103	Core	10	35	845.9	35.5	14.7	14.0	46.3	1.1	6.1	510.3	1.0	292.2	90.7	46.8
B875104	Core	10	14	>1000	35.5	8.6	30.5	114.4	1.0	4.3	>1000	0.4	>1000	430.9	127.6
B875105	Core	19	4	>1000	40.7	8.6	31.8	140.0	0.4	4.9	>1000	0.4	>1000	662.0	114.9
B875106	Core	7	22	>1000	42.3	17.0	18.3	70.6	1.4	7.0	>1000	1.1	603.7	238.9	62.3
B875107	Core	11	30	>1000	27.4	10.8	14.9	43.7	2.8	4.5	589.7	0.7	344.5	112.5	46.9

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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875033	Core	3.4	0.8	4.9	79.1	291.30	25.6	5.0
B875034	Core	6.3	1.6	10.0	143.3	71.14	11.8	4.8
B875035	Core	2.6	0.7	4.8	72.6	143.78	25.9	13.4
B875036	Core	4.6	1.1	6.7	113.6	159.64	33.9	13.7
B875037	Core	4.8	1.1	6.7	111.2	289.38	18.4	2.9
B875038	Core	4.4	1.0	6.3	98.3	183.83	12.8	1.7
B875039	Core	3.9	0.8	5.0	86.7	175.00	21.1	6.9
B875040 Dup	Core	3.9	0.8	5.4	87.4	186.00	20.4	7.3
B875041	Core	3.7	0.7	5.0	78.6	230.20	17.2	5.0
B875042	Core	3.0	0.4	2.7	52.8	228.37	<0.2	35.0
B875043	Core	6.8	0.8	4.7	106.1	179.07	0.5	31.5
B875044	Core	4.7	0.6	3.8	78.4	230.96	38.8	18.9
B875045	Core	3.6	0.8	4.8	79.9	183.90	13.5	7.4
B875046	Core	2.9	0.4	3.3	55.1	200.71	57.1	22.9
B875047	Core	2.9	0.5	4.3	63.2	143.63	18.3	5.5
B875048	Core	4.6	1.0	6.0	101.1	408.05	<0.2	13.5
B875049	Core	3.6	0.6	4.1	69.7	483.46	67.4	22.5
B875050	Pulp	3.6	0.7	4.7	73.4	336.95	2.4	9.9
B875051	Core	3.6	0.9	6.0	84.2	244.61	14.4	4.8
B875052	Core	3.7	0.8	5.5	82.7	228.06	15.9	5.7
B875053	Core	4.6	1.2	6.6	113.0	282.67	12.1	4.6
B875054	Core	3.7	0.8	4.7	79.6	244.41	<0.2	5.3
B875055	Core	0.3	0.1	1.9	17.9	10.03	1.5	4.3
B875056	Core	3.9	1.0	6.5	94.4	319.91	7.6	4.8
B875057	Core	6.8	1.9	10.6	165.1	289.18	17.5	8.3
B875058	Core	12.0	3.4	18.4	293.9	318.08	28.8	41.0
B875059	Core	5.4	1.2	6.7	117.7	358.54	18.4	10.2
B875060 Dup	Core	5.6	1.2	6.9	124.1	330.15	18.2	10.5
B875061	Core	6.0	1.2	7.3	129.4	406.65	7.0	4.6
B875062	Core	4.3	0.9	5.8	98.2	232.36	7.4	6.1
B875063	Core	3.0	0.7	4.5	68.4	146.19	25.1	11.6
B875064	Core	3.5	0.7	4.2	80.2	173.45	14.7	20.0
B875065	Core	4.9	1.1	6.5	112.2	230.61	32.6	39.4
B875066	Core	4.5	0.9	5.6	103.5	137.10	6.6	8.2
B875067	Core	3.4	0.4	2.7	55.3	119.52	17.9	5.8
B875068	Core	4.3	0.6	3.9	74.5	239.88	26.9	35.0
B875069	Core	3.3	0.7	4.5	92.0	163.38	8.7	6.2
B875070	Pulp	2.3	0.5	4.0	58.5	65.47	39.6	33.6
B875071	Core	3.0	0.7	4.5	68.2	100.16	7.1	3.1
B875072	Core	2.4	0.4	3.0	49.3	74.24	4.8	4.0

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 Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875073	Core	4.2	0.9	6.0	92.1	129.56	10.4	4.1
B875074	Core	4.5	0.8	5.3	91.1	194.07	12.5	7.0
B875075	Core	3.0	0.6	4.0	66.0	77.76	4.8	3.4
B875076	Core	2.5	0.4	2.9	50.6	53.94	4.2	2.8
B875077	Core	4.2	0.8	5.1	94.4	118.92	9.6	5.6
B875078	Core	4.9	1.0	5.7	108.2	154.14	7.1	5.5
B875079	Core	3.3	0.5	3.5	67.3	86.65	3.3	2.3
B875080 Dup	Core	3.3	0.5	3.6	65.9	84.52	3.4	2.3
B875081	Core	2.5	0.4	3.3	52.7	66.05	3.0	2.2
B875082	Core	2.7	0.4	3.2	55.1	79.84	9.5	11.6
B875083	Core	2.4	0.3	2.3	44.7	66.29	2.9	2.1
B875084	Core	2.2	0.2	2.0	39.0	49.77	1.9	1.6
B875085	Core	2.7	0.6	4.0	62.7	49.28	1.9	1.6
B875086	Core	2.7	0.5	3.8	60.9	77.99	14.1	25.1
B875087	Core	2.4	0.5	3.1	53.4	107.54	13.7	3.6
B875088	Core	2.3	0.3	2.8	49.5	49.46	9.9	10.0
B875089	Core	2.8	0.4	3.1	60.6	122.57	1.1	2.6
B875090	Pulp	4.5	1.0	7.0	97.6	222.14	1.5	2.6
B875091	Core	2.1	0.3	2.1	42.2	66.35	<0.2	0.8
B875092	Core	2.9	0.5	3.7	64.2	118.47	21.4	24.8
B875093	Core	4.3	0.9	6.0	99.8	206.38	15.5	5.3
B875094	Core	3.7	0.8	4.8	81.6	193.57	13.1	5.0
B875095	Core	4.1	0.9	5.7	89.7	217.56	23.7	5.7
B875096	Core	3.8	0.8	5.0	88.5	212.97	10.9	3.8
B875097	Core	3.1	0.6	3.8	68.0	128.12	4.7	3.1
B875098	Core	4.6	0.9	5.7	106.4	354.57	6.1	5.5
B875099	Core	5.8	1.3	7.6	138.6	459.29	58.8	19.1
B875100 Dup	Core	5.6	1.3	7.4	130.8	450.01	58.5	18.9
B875101	Core	6.2	1.5	8.3	142.4	253.09	17.7	10.6
B875102	Core	6.3	1.7	10.1	160.2	425.27	173.9	219.2
B875103	Core	6.1	1.6	9.0	145.6	309.13	73.7	99.1
B875104	Core	6.7	0.9	5.6	106.4	91.07	6.5	5.8
B875105	Core	6.9	0.9	5.5	133.2	62.34	22.8	10.0
B875106	Core	7.0	1.9	10.8	165.8	165.99	47.2	39.2
B875107	Core	4.7	1.2	7.3	109.9	178.59	99.9	113.2

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875033	Core	0.37													
B875033 Dup		0.36													
QCV1010-00622-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875051	Core	0.36													
B875051 Dup		0.36													
QCV1010-00622-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875069	Core	1.49													
B875069 Dup		1.49													
QCV1010-00622-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875087	Core	0.21													
B875087 Dup		0.21													
QCV1010-00622-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875105	Core	0.15													
B875105 Dup		0.14													
B875033	Core		0.20	<0.01	31.96	<0.01	5.04	0.05	37.62	16.98	0.68	0.06	6.61	1.11	0.03
B875033 Dup			0.18	<0.01	32.02	<0.01	4.93	0.05	37.60	17.03	0.63	0.06	6.33	1.08	0.03
QCV1010-00626-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875051	Core		0.15	<0.01	34.98	<0.01	5.92	0.02	37.93	15.19	0.42	0.06	4.29	0.88	0.03
B875051 Dup			0.14	<0.01	34.91	<0.01	5.89	0.02	37.89	15.21	0.42	0.05	4.21	0.88	0.03
QCV1010-00626-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875069	Core		0.53	<0.01	30.88	<0.01	5.88	0.03	37.27	17.97	0.74	0.03	3.24	2.77	0.08
B875069 Dup			0.55	<0.01	31.04	<0.01	5.90	0.04	37.18	18.02	0.75	0.03	3.50	2.81	0.09
QCV1010-00626-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875087	Core		0.09	<0.01	30.08	<0.01	5.19	0.02	40.12	19.07	0.74	0.05	3.49	0.41	0.02
B875087 Dup			0.09	<0.01	30.82	<0.01	5.25	0.02	40.09	18.99	0.77	0.05	3.52	0.42	0.01
QCV1010-00626-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875105	Core		0.11	<0.01	34.12	<0.01	8.51	0.02	37.63	15.07	0.96	0.03	3.13	0.35	0.01
B875105 Dup			0.11	<0.01	33.95	<0.01	8.52	0.02	37.70	14.97	1.00	0.03	3.15	0.34	0.01
QCV1010-00626-0014-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.71	0.05	8.11	<0.01	6.59	1.63	4.56	0.57	0.15	7.24	0.15	49.93	0.30



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875033	Core		1.9	0.08	5	55	<2	>10	<0.5	2	7	45	2.94	0.03	168
B875033 Dup			1.5	0.08	6	56	<2	>10	<0.5	2	7	45	2.94	0.03	152
QCV1010-00623-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			96.7									6444			
B875051	Core		1.4	0.07	5	15	<2	>10	<0.5	11	7	55	4.00	<0.01	270
B875051 Dup			1.1	0.07	7	15	<2	>10	<0.5	12	7	55	3.97	<0.01	268
QCV1010-00623-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			63.1									966			
B875069	Core		1.5	0.31	<5	29	<2	>10	<0.5	<1	12	191	4.12	0.02	196
B875069 Dup			1.6	0.30	<5	29	<2	>10	<0.5	<1	13	192	4.19	0.02	214
QCV1010-00623-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			62.1									1041			
B875087	Core		<0.5	0.04	8	27	<2	>10	<0.5	7	10	30	3.33	<0.01	172
B875087 Dup			<0.5	0.04	8	26	<2	>10	<0.5	7	10	28	3.31	<0.01	168
QCV1010-00623-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B875105	Core		1.1	0.06	174	19	<2	>10	<0.5	15	9	21	5.41	0.01	6078
B875105 Dup			1.1	0.06	186	19	<2	>10	<0.5	16	9	22	5.17	0.01	6160
QCV1010-00623-0014-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										127	1198	732			
B875033	Core	100.34													
B875033 Dup		99.96													
QCV1010-00626-0002-BLK		<0.01													
B875051	Core	99.87													
B875051 Dup		99.65													
QCV1010-00626-0005-BLK		<0.01													
B875069	Core	99.42													
B875069 Dup		99.92													
QCV1010-00626-0008-BLK		<0.01													
B875087	Core	99.28													
B875087 Dup		100.03													
QCV1010-00626-0011-BLK		<0.01													
B875105	Core	99.95													
B875105 Dup		99.82													
QCV1010-00626-0014-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.01													

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 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
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 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875033	Core	>10	4109	1	0.03	2	>10000	7	<5	5	2701	0.01	<10	14	<10
B875033 Dup		>10	4127	1	0.03	1	>10000	8	<5	5	2723	0.01	<10	14	<10
QCV1010-00623-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875051	Core	>10	3042	1	0.04	1	>10000	7	<5	6	1470	0.02	<10	28	<10
B875051 Dup		>10	3025	2	0.04	1	>10000	6	<5	6	1458	0.02	<10	28	<10
QCV1010-00623-0005-BLK		<0.01	<5	<1	<0.01	<1	13	<2	<5	<1	<1	<0.01	<10	<1	<10
B875069	Core	>10	5361	2	0.02	2	>10000	3	<5	9	3092	0.04	<10	39	<10
B875069 Dup		>10	5461	2	0.02	2	>10000	<2	<5	8	3162	0.04	<10	40	<10
QCV1010-00623-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875087	Core	>10	5089	12	0.03	1	>10000	7	<5	5	3484	<0.01	<10	7	<10
B875087 Dup		>10	5078	12	0.03	<1	>10000	7	<5	5	3476	<0.01	<10	6	<10
QCV1010-00623-0011-BLK		<0.01	<5	<1	<0.01	<1	14	<2	<5	<1	<1	<0.01	<10	<1	<10
B875105	Core	>10	6643	3	0.02	6	>10000	25	<5	11	1474	<0.01	<10	12	<10
B875105 Dup		>10	6333	3	0.02	5	>10000	27	<5	11	1402	<0.01	<10	13	<10
QCV1010-00623-0014-BLK		<0.01	<5	<1	<0.01	<1	11	2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454								
STD-OREAS-45P-4A result					0.08	361	466								

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10-360-03316-01

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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875033	Core	14	23												
B875033 Dup		14	21												
QCV1010-00623-0002-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5295													
B875051	Core	10	26												
B875051 Dup		10	27												
QCV1010-00623-0005-BLK		<2	<1												
B875069	Core	30	42												
B875069 Dup		24	43												
QCV1010-00623-0008-BLK		<2	<1												
B875087	Core	17	13												
B875087 Dup		15	13												
QCV1010-00623-0011-BLK		<2	<1												
B875105	Core	19	4												
B875105 Dup		19	6												
QCV1010-00623-0014-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		141													
B875033	Core			440.7	19.3	7.8	9.8	29.6	2.2	3.2	222.4	0.5	183.9	52.0	31.8
B875033 Dup				442.9	19.6	7.9	10.0	29.7	2.0	3.3	225.5	0.5	181.3	52.2	32.3
QCV1010-00624-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				121.3	18.0	14.2	1.9	13.9	11.1	4.3	57.8	1.9	57.0	14.9	12.5
B875051	Core			646.1	20.5	8.5	11.3	35.1	2.5	3.3	321.8	0.6	260.7	74.7	41.2
B875051 Dup				640.0	20.9	8.3	11.4	35.7	2.7	3.4	318.5	0.6	264.7	75.8	42.3
QCV1010-00624-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				123.7	18.1	14.8	1.9	13.9	9.6	4.3	60.6	1.9	57.9	15.2	12.5
B875069	Core			501.9	18.7	7.5	13.3	30.4	0.9	3.1	213.9	0.4	226.9	62.9	36.2
B875069 Dup				503.1	19.3	7.6	13.6	30.0	0.9	3.2	222.1	0.4	228.1	63.3	37.0
QCV1010-00624-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				124.2	18.4	14.7	1.9	14.4	9.7	4.4	60.4	2.0	57.3	15.6	12.8
B875087	Core			384.1	13.9	5.0	7.7	23.8	0.9	2.0	180.0	0.2	170.4	47.6	27.9
B875087 Dup				401.3	13.5	4.8	7.5	23.6	1.1	2.0	183.2	0.2	172.1	48.3	28.1
QCV1010-00624-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				125.4	18.6	14.5	1.9	14.3	10.6	4.4	61.7	2.0	58.4	15.7	12.9
B875105	Core			>1000	40.7	8.6	31.8	140.0	0.4	4.9	>1000	0.4	>1000	662.0	114.9
B875105 Dup				>1000	41.7	8.8	33.0	145.5	0.4	4.8	>1000	0.4	>1000	673.5	118.2



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
QCV1010-00624-0014-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				120.1	18.0	14.7	1.9	13.7	11.0	4.3	57.5	2.0	55.1	14.9	12.1



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875033	Core	3.4	0.8	4.9	79.1			
B875033 Dup		3.4	0.8	5.1	82.2			
QCV1010-00624-0002-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	15.1	117.1			
B875051	Core	3.6	0.9	6.0	84.2			
B875051 Dup		3.7	0.9	6.0	85.7			
QCV1010-00624-0005-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	15.1	122.3			
B875069	Core	3.3	0.7	4.5	92.0			
B875069 Dup		3.3	0.7	4.6	93.7			
QCV1010-00624-0008-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.5	2.2	15.3	120.9			
B875087	Core	2.4	0.5	3.1	53.4			
B875087 Dup		2.4	0.4	3.0	53.2			
QCV1010-00624-0011-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.5	2.2	15.4	121.2			
B875105	Core	6.9	0.9	5.5	133.2			
B875105 Dup		6.8	0.9	5.3	132.7			
QCV1010-00624-0014-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.6	2.2	15.2	112.8			
B875033	Core					291.30	25.6	5.0
B875033 Dup						264.27	24.6	4.7
QCV1103-01156-0002-BLK						<0.05	<0.2	<0.1
QCV1103-01156-0005-BLK						<0.05	<0.2	<0.1
QCV1103-01156-0008-BLK						<0.05	<0.2	<0.1
B875087	Core					107.54	13.7	3.6
B875087 Dup						116.41	13.3	3.9
QCV1103-01156-0011-BLK						<0.05	<0.2	<0.1
QCV1103-01156-0014-BLK						<0.05	<0.2	<0.1



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10-360-03360-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdmining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdmining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdmining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 10/25/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Description: Aley 2010-017</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">58</td> <td>Core</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	58	Core	SP-RX-2K/Rock/Chips/Drill Core	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	58	Core	SP-RX-2K/Rock/Chips/Drill Core																																		
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Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																			
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Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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Certificate of Analysis

10-360-03360-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875854	Core	1.05	0.29	0.01	28.48	<0.01	24.00	0.14	22.73	11.45	0.38	0.05	8.92	1.62	0.39
B875855	Core	0.36	0.10	<0.01	30.91	<0.01	5.31	0.02	40.06	18.80	0.52	0.02	3.73	0.83	0.08
B875856	Core	1.10	0.58	<0.01	30.04	<0.01	6.15	0.08	37.68	18.40	0.50	0.04	3.24	2.79	0.14
B875857	Core	1.93	1.07	0.03	21.66	<0.01	25.50	0.57	26.10	13.53	0.68	0.06	4.51	5.17	0.74
B875858	Core	0.18	0.13	<0.01	30.88	<0.01	5.91	0.01	39.86	18.77	0.61	0.03	2.50	1.38	0.13
B875859	Core	0.28	0.22	<0.01	32.20	<0.01	7.33	0.05	36.21	17.44	0.59	0.03	4.93	1.67	0.14
B875860 Dup	Core	0.28	0.22	<0.01	32.32	<0.01	7.40	0.05	36.37	17.36	0.58	0.03	4.86	1.49	0.13
B875861	Core	0.54	0.91	<0.01	27.37	<0.01	13.64	0.26	31.29	14.75	0.50	0.06	5.21	4.99	0.18
B875862	Core	0.21	0.26	<0.01	33.38	<0.01	6.23	0.04	36.18	17.09	0.47	0.04	5.67	1.76	0.27
B875863	Core	0.25	3.27	0.06	23.06	<0.01	8.45	1.69	22.87	13.87	0.47	1.28	3.06	18.83	0.64
B875864	Core	0.11	0.21	0.02	35.29	<0.01	4.95	0.12	36.21	15.44	0.47	0.21	4.31	2.52	0.12
B875865	Core	0.24	0.18	0.01	30.65	<0.01	5.10	0.08	37.28	18.46	0.48	0.17	3.44	3.39	0.05
B875866	Core	0.30	0.19	0.04	48.11	<0.01	3.32	0.07	37.42	6.58	0.32	0.05	3.18	1.07	0.02
B875867	Core	0.17	0.95	0.03	29.49	<0.01	4.42	0.76	29.00	16.49	0.49	1.24	3.65	13.03	0.08
B875868	Core	0.28	0.16	<0.01	32.68	<0.01	4.47	0.02	38.44	19.12	0.48	0.03	3.55	1.31	0.06
B875869	Core	0.24	0.36	<0.01	31.97	<0.01	6.45	0.08	38.79	18.05	0.64	0.03	2.77	2.05	0.05
B875870	Pulp	0.68	0.16	0.02	36.90	<0.01	5.26	0.04	36.93	14.25	0.38	0.08	3.78	3.17	0.12
B875871	Core	0.19	0.19	<0.01	30.73	<0.01	5.15	0.03	40.33	18.97	0.58	0.03	2.96	0.77	0.03
B875872	Core	0.75	0.92	<0.01	28.02	<0.01	6.42	0.03	34.09	17.80	0.30	0.05	5.08	6.00	0.25
B875873	Core	0.49	0.57	<0.01	30.25	<0.01	5.22	0.14	34.16	17.00	0.50	0.15	5.40	5.81	0.06
B875874	Core	0.71	0.23	0.01	15.61	<0.01	50.02	0.15	15.51	7.78	0.54	0.04	3.70	3.19	0.64
B875875	Core	0.29	0.09	<0.01	26.53	<0.01	20.00	0.05	30.37	16.31	0.56	0.04	3.24	1.86	0.18
B875876	Core	0.50	0.26	0.04	18.12	<0.01	49.65	0.10	13.50	6.18	0.55	0.08	5.16	3.29	0.50
B875877	Core	<0.01	15.67	0.12	3.92	0.03	4.71	3.59	0.92	1.49	0.11	3.46	0.30	58.22	0.41
B875878	Core	0.87	0.18	0.05	20.57	<0.01	44.68	0.10	16.30	5.30	0.48	0.21	4.89	3.95	0.58
B875879	Core	0.46	0.25	0.01	27.70	<0.01	22.11	0.11	29.02	11.79	0.56	0.03	4.00	2.59	0.28
B875880 Dup	Core	0.45	0.24	0.02	26.62	<0.01	22.91	0.11	28.93	12.17	0.57	0.03	3.97	2.59	0.28
B875881	Core	0.15	0.20	<0.01	32.01	<0.01	4.48	0.05	38.14	19.04	0.42	0.03	4.78	1.58	0.07
B875882	Core	0.10	0.91	<0.01	27.61	<0.01	4.98	0.11	38.62	18.74	0.51	0.04	2.10	5.24	0.07
B875883	Core	0.13	0.32	<0.01	31.74	<0.01	5.78	0.04	36.86	18.91	0.45	0.05	3.48	1.76	0.08
B875884	Core	0.17	0.28	<0.01	31.05	<0.01	6.88	0.05	36.90	18.71	0.47	0.05	2.94	2.05	0.05
B875885	Core	0.15	0.19	<0.01	30.59	<0.01	4.51	0.03	35.87	18.20	0.37	0.04	5.11	4.77	0.05
B875886	Core	0.13	0.11	<0.01	30.39	<0.01	3.87	0.02	39.23	19.48	0.36	0.03	3.85	3.34	0.03
B875887	Core	0.17	0.07	<0.01	30.69	<0.01	3.73	0.03	41.04	19.75	0.59	0.02	3.34	1.62	0.02
B875888	Core	0.06	0.43	0.01	31.88	<0.01	9.67	0.06	31.86	14.25	0.36	0.05	8.31	3.47	0.13
B875889	Core	0.22	0.20	<0.01	35.79	<0.01	4.23	0.05	37.29	16.52	0.48	0.03	5.19	1.27	0.04
B875890	Pulp	0.48	0.23	<0.01	32.78	<0.01	5.92	0.05	37.91	17.63	0.48	0.05	4.12	1.63	0.14
B875891	Core	0.28	0.13	<0.01	32.62	<0.01	5.63	0.03	37.83	16.48	0.47	0.03	5.98	0.41	0.05
B875892	Core	0.17	0.21	<0.01	32.50	<0.01	5.70	0.01	38.38	16.03	0.48	0.02	4.93	1.22	0.05
B875893	Core	0.23	0.40	<0.01	31.10	<0.01	4.75	0.01	38.90	17.48	0.24	0.02	4.03	2.73	0.04



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10-360-03360-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875894	Core	0.15	0.14	0.01	36.22	<0.01	4.55	<0.01	39.34	16.37	0.39	0.02	3.25	1.16	0.02
B875895	Core	0.09	0.36	0.02	39.70	<0.01	6.87	0.02	36.80	11.33	0.48	0.02	3.78	1.41	0.13
B875896	Core	0.07	0.60	<0.01	32.25	<0.01	4.72	0.02	36.54	16.52	0.45	0.02	3.97	4.15	0.16
B875897	Core	0.13	0.65	<0.01	32.41	<0.01	5.93	0.03	36.26	15.47	0.47	0.03	5.19	3.28	0.26
B875898	Core	0.05	2.17	0.03	25.84	<0.01	13.09	0.24	26.82	11.46	0.30	0.20	5.55	11.52	1.58
B875899	Core	0.09	2.70	0.02	22.29	<0.01	17.15	0.20	29.03	14.39	0.48	0.04	2.46	8.50	1.96
B880250 Dup	Core	0.09	2.79	0.02	22.75	<0.01	17.98	0.20	28.41	13.74	0.49	0.04	2.64	8.77	2.03
B880251	Core	0.09	1.63	<0.01	26.19	<0.01	10.26	0.08	33.72	17.09	0.39	0.03	3.26	5.03	1.19
B880252	Core	0.03	0.05	<0.01	34.56	<0.01	5.29	0.01	39.52	17.81	0.69	0.03	2.48	0.92	0.03
B880253	Core	0.08	1.65	0.02	30.65	<0.01	14.24	0.15	28.47	10.59	0.52	0.03	3.05	9.04	1.09
B880254	Core	0.02	0.54	<0.01	31.58	<0.01	5.61	0.03	34.99	15.81	0.46	0.04	5.50	5.04	0.24
B880255	Core	0.01	0.71	0.04	43.62	<0.01	5.76	0.12	33.00	5.62	0.21	0.14	4.86	5.26	0.37
B880256	Core	0.03	0.59	0.02	39.96	<0.01	5.64	0.06	32.15	9.14	0.28	0.13	4.92	6.98	0.30
B880257	Core	0.15	0.43	<0.01	31.46	<0.01	5.75	0.01	37.97	17.40	0.59	0.03	3.55	3.59	0.27
B880258	Core	0.08	0.57	0.01	28.46	<0.01	8.08	0.11	38.02	17.47	0.67	0.03	3.73	2.71	0.28
B880259	Core	0.21	2.69	0.08	21.49	<0.01	25.79	1.08	19.08	9.94	0.48	0.08	6.39	9.70	1.49
B880260	Pulp	0.53	1.81	0.34	47.09	<0.01	4.63	0.72	31.92	2.34	0.84	0.42	2.65	5.94	0.22
B880261	Core	0.11	2.29	0.07	29.45	<0.01	19.52	0.76	25.87	7.74	0.44	0.04	3.20	6.62	1.40
B880262	Core	0.04	0.36	<0.01	30.95	<0.01	5.38	0.06	39.18	17.54	0.35	0.03	3.84	2.83	0.12
B880263	Core	0.04	0.28	0.01	34.24	<0.01	4.43	0.03	38.26	16.06	0.25	0.02	5.27	1.71	0.05
B880264	Core	0.52	0.09	<0.01	34.16	<0.01	4.03	0.01	37.51	17.17	0.51	0.02	5.81	0.96	0.04

Certificate of Analysis

10-360-03360-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875854	Core	98.47	<0.5	0.13	<5	89	<2	>10	<0.5	21	12	58	>10	0.07	351
B875855	Core	100.39	<0.5	0.05	8	38	<2	>10	<0.5	7	9	19	3.37	0.01	266
B875856	Core	99.64	<0.5	0.29	6	62	<2	>10	<0.5	6	13	55	4.05	0.05	328
B875857	Core	99.63	<0.5	0.53	<5	243	<2	>10	<0.5	8	11	70	>10	0.40	465
B875858	Core	100.22	<0.5	0.05	78	36	<2	>10	<0.5	4	15	11	3.63	0.01	2242
B875859	Core	100.81	<0.5	0.10	30	54	<2	>10	<0.5	8	20	16	4.42	0.03	1221
B875860 Dup	Core	100.82	<0.5	0.10	37	55	<2	>10	<0.5	7	30	15	4.48	0.03	1227
B875861	Core	99.16	<0.5	0.43	<5	73	<2	>10	<0.5	10	16	30	8.59	0.19	481
B875862	Core	101.39	<0.5	0.11	15	34	<2	>10	<0.5	8	12	12	3.91	0.02	583
B875863	Core	97.56	<0.5	1.78	14	462	<2	>10	<0.5	17	23	25	5.61	1.35	722
B875864	Core	99.88	<0.5	0.11	<5	187	<2	>10	<0.5	7	14	8	3.34	0.09	240
B875865	Core	99.29	<0.5	0.09	<5	89	<2	>10	<0.5	5	12	14	3.44	0.05	219
B875866	Core	100.38	<0.5	0.11	7	325	<2	>10	<0.5	6	8	2	2.20	0.05	290
B875867	Core	99.64	<0.5	0.49	<5	196	<2	>10	<0.5	4	20	10	2.83	0.59	214
B875868	Core	100.35	<0.5	0.08	<5	37	<2	>10	<0.5	6	11	17	2.84	<0.01	248
B875869	Core	101.26	<0.5	0.16	9	36	<2	>10	<0.5	4	14	13	4.10	0.04	492
B875870	Pulp	101.11	<0.5	0.08	12	175	<2	>10	<0.5	5	9	35	3.46	0.03	379
B875871	Core	99.78	1.0	0.09	8	34	<2	>10	<0.5	4	11	11	3.70	<0.01	413
B875872	Core	98.97	0.7	0.45	7	29	<2	>10	<0.5	12	15	51	3.90	0.01	359
B875873	Core	99.29	<0.5	0.28	6	39	<2	>10	<0.5	5	17	24	3.30	0.10	311
B875874	Core	97.42	<0.5	0.11	<5	104	<2	>10	<0.5	23	10	23	>10	0.10	309
B875875	Core	99.23	<0.5	0.05	<5	51	<2	>10	<0.5	17	10	12	>10	0.03	205
B875876	Core	97.45	0.6	0.11	<5	272	<2	>10	<0.5	35	14	<1	>10	0.08	364
B875877	Core	92.96	0.8	8.30	<5	896	<2	3.07	<0.5	9	163	3	3.10	3.07	39
B875878	Core	97.30	<0.5	0.07	<5	352	<2	>10	<0.5	18	8	1	>10	0.07	392
B875879	Core	98.45	0.7	0.12	<5	121	<2	>10	<0.5	21	19	6	>10	0.08	248
B875880 Dup	Core	98.44	<0.5	0.12	<5	118	<2	>10	<0.5	19	27	4	>10	0.08	236
B875881	Core	100.80	<0.5	0.09	7	26	<2	>10	<0.5	4	9	9	2.99	0.03	279
B875882	Core	98.94	<0.5	0.42	7	34	<2	>10	<0.5	6	28	6	3.53	0.07	217
B875883	Core	99.47	<0.5	0.15	29	21	<2	>10	<0.5	7	18	6	3.78	0.03	1277
B875884	Core	99.44	<0.5	0.14	7	25	<2	>10	<0.5	12	18	11	4.52	0.03	219
B875885	Core	99.73	<0.5	0.09	11	22	<2	>10	<0.5	6	15	10	2.81	0.02	402
B875886	Core	100.72	<0.5	0.05	7	22	<2	>10	<0.5	5	16	8	2.48	<0.01	280
B875887	Core	100.92	<0.5	0.03	<5	30	<2	>10	<0.5	3	16	8	2.43	0.01	162
B875888	Core	100.48	1.2	0.24	51	123	30	>10	<0.5	42	37	18	9.37	0.03	453
B875889	Core	101.10	<0.5	0.11	<5	80	<2	>10	<0.5	30	21	28	4.13	0.03	828
B875890	Pulp	100.96	<0.5	0.13	29	66	11	>10	<0.5	14	<1	27	5.51	0.04	565
B875891	Core	99.67	<0.5	0.06	74	70	<2	>10	<0.5	29	95	10	4.92	0.01	659
B875892	Core	99.56	<0.5	0.10	27	92	<2	>10	<0.5	27	29	20	4.90	<0.01	896
B875893	Core	99.72	<0.5	0.21	18	73	<2	>10	<0.5	20	37	23	4.04	<0.01	656



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10-360-03360-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875894	Core	101.50	<0.5	0.07	30	114	<2	>10	<0.5	38	18	8	4.01	<0.01	465
B875895	Core	100.92	<0.5	0.21	39	206	<2	>10	<0.5	50	32	16	6.39	<0.01	1557
B875896	Core	99.42	<0.5	0.34	76	66	<2	>10	<0.5	22	20	11	4.53	0.01	779
B875897	Core	100.00	<0.5	0.37	<5	83	<2	>10	<0.5	34	26	22	5.91	0.02	1198
B875898	Core	98.78	<0.5	1.18	51	285	<2	>10	<0.5	81	30	59	>10	0.21	766
B875899	Core	99.23	<0.5	1.44	<5	187	<2	>10	<0.5	86	40	36	>10	0.18	419
B880250 Dup	Core	99.85	<0.5	1.49	12	216	<2	>10	<0.5	87	36	37	>10	0.18	422
B880251	Core	98.88	<0.5	0.87	52	65	<2	>10	<0.5	43	37	19	9.10	0.08	900
B880252	Core	101.42	<0.5	0.03	26	62	<2	>10	<0.5	11	12	25	4.77	<0.01	449
B880253	Core	99.51	<0.5	0.87	116	235	<2	>10	<0.5	43	24	35	>10	0.15	348
B880254	Core	99.86	<0.5	0.28	38	60	<2	>10	<0.5	36	24	12	4.89	0.02	794
B880255	Core	99.70	<0.5	0.41	29	401	<2	>10	<0.5	38	31	9	5.95	0.10	1153
B880256	Core	100.18	<0.5	0.33	34	225	<2	>10	<0.5	15	53	9	5.35	0.05	670
B880257	Core	101.07	<0.5	0.22	25	52	<2	>10	<0.5	44	28	15	4.55	0.02	315
B880258	Core	100.14	<0.5	0.30	37	167	<2	>10	<0.5	28	15	11	6.48	0.09	480
B880259	Core	98.31	<0.5	1.45	8	948	<2	>10	<0.5	70	10	29	>10	1.02	569
B880260	Pulp	98.93	<0.5	0.95	61	2755	<2	>10	<0.5	16	28	23	2.75	0.62	1584
B880261	Core	97.40	0.6	1.26	73	283	<2	>10	<0.5	70	12	31	>10	0.68	362
B880262	Core	100.65	<0.5	0.19	<5	48	<2	>10	<0.5	36	18	8	4.91	0.05	742
B880263	Core	100.61	<0.5	0.16	10	141	42	>10	<0.5	57	14	6	4.28	0.02	665
B880264	Core	100.32	0.8	0.05	79	52	<2	>10	<0.5	17	2	8	3.97	0.01	400

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Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875854	Core	6.36	3128	1	0.04	6	>10000	16	<5	3	2592	0.20	<10	277	<10
B875855	Core	9.85	3911	1	0.02	1	>10000	17	<5	5	2571	0.03	<10	38	<10
B875856	Core	9.89	3892	2	0.03	3	>10000	38	<5	8	2240	0.06	<10	34	<10
B875857	Core	7.16	5182	1	0.04	7	>10000	39	<5	4	2683	0.26	<10	260	<10
B875858	Core	9.71	4621	4	0.02	1	8726	22	<5	10	1912	0.01	<10	21	<10
B875859	Core	9.02	4426	5	0.02	2	>10000	22	<5	9	1871	0.02	<10	32	<10
B875860 Dup	Core	9.22	4464	6	0.02	3	>10000	23	<5	10	1893	0.03	<10	33	<10
B875861	Core	7.97	3890	2	0.04	3	>10000	23	<5	7	2581	0.06	<10	147	<10
B875862	Core	9.07	3595	1	0.03	2	>10000	15	<5	7	1507	0.06	<10	36	<10
B875863	Core	7.66	3700	4	1.06	9	>10000	14	<5	15	1839	0.33	<10	113	<10
B875864	Core	8.20	3767	1	0.19	1	>10000	8	<5	7	3756	0.06	<10	45	<10
B875865	Core	9.61	3850	3	0.15	1	>10000	11	<5	6	2506	0.02	<10	43	<10
B875866	Core	3.83	2565	<1	0.04	<1	>10000	11	<5	4	3483	<0.01	<10	32	<10
B875867	Core	8.88	3875	2	0.98	1	>10000	11	<5	14	2923	0.04	<10	39	<10
B875868	Core	<0.01	3822	2	0.03	2	>10000	15	<5	5	2203	0.02	<10	30	<10
B875869	Core	9.50	5208	9	0.02	2	>10000	15	<5	7	2022	0.01	<10	15	<10
B875870	Pulp	7.74	3198	2	0.06	2	>10000	24	<5	8	2325	0.06	<10	72	<10
B875871	Core	>10	4990	16	0.02	2	>10000	13	<5	6	2326	<0.01	<10	10	<10
B875872	Core	9.75	2215	4	0.03	8	>10000	26	<5	8	773	0.08	<10	93	<10
B875873	Core	9.40	3937	7	0.14	1	>10000	17	<5	9	2636	0.02	<10	25	<10
B875874	Core	4.57	4344	1	0.03	13	>10000	18	<5	12	1679	0.39	<10	341	<10
B875875	Core	8.99	4406	<1	0.02	5	>10000	11	<5	7	2846	0.08	<10	106	<10
B875876	Core	3.73	4605	1	0.06	12	>10000	10	<5	11	1927	0.26	<10	252	<10
B875877	Core	0.86	743	4	2.65	7	1219	12	<5	5	694	0.26	<10	55	<10
B875878	Core	3.26	4060	1	0.18	11	>10000	15	<5	11	2563	0.23	<10	285	<10
B875879	Core	6.79	4623	4	0.02	6	>10000	8	<5	10	2873	0.15	<10	151	<10
B875880 Dup	Core	6.68	4584	4	0.02	6	>10000	6	<5	10	2827	0.14	<10	150	<10
B875881	Core	>10	3317	3	0.02	2	>10000	11	<5	5	2027	0.02	<10	20	<10
B875882	Core	<0.01	4362	8	0.02	4	7426	9	<5	11	2463	0.01	<10	23	<10
B875883	Core	>10	3632	9	0.03	2	>10000	16	<5	8	1299	0.01	<10	18	<10
B875884	Core	>10	3859	3	0.04	3	>10000	16	<5	6	1652	0.02	<10	35	<10
B875885	Core	9.84	3022	3	0.03	2	>10000	17	<5	5	1566	0.01	<10	16	<10
B875886	Core	>10	2917	1	0.02	2	>10000	12	<5	4	1530	0.01	<10	11	<10
B875887	Core	>10	4860	2	0.02	<1	>10000	12	<5	5	3256	<0.01	<10	6	<10
B875888	Core	>10	4254	<1	0.04	25	>10000	3	10	19	1447	0.09	<10	51	<10
B875889	Core	>10	5686	4	0.02	9	>10000	33	16	8	2170	0.02	121	45	15
B875890	Pulp	>10	5663	<1	0.04	13	>10000	96	<5	11	2019	0.06	<10	53	13
B875891	Core	>10	3496	2	0.02	7	>10000	14	6	6	1958	0.01	<10	45	24
B875892	Core	>10	5385	3	0.02	13	>10000	19	17	9	1441	0.02	<10	44	<10
B875893	Core	>10	2682	<1	0.02	19	>10000	26	<5	5	363	0.02	<10	46	<10

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10-360-03360-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875894	Core	>10	4360	<1	0.02	13	>10000	48	<5	7	1189	0.01	<10	44	24
B875895	Core	8.80	5503	<1	0.02	12	>10000	11	<5	10	1241	0.04	<10	35	21
B875896	Core	>10	5260	<1	0.02	24	>10000	6	45	7	1729	0.06	39	48	<10
B875897	Core	>10	5670	10	0.03	17	>10000	7	<5	10	1743	0.06	<10	47	<10
B875898	Core	8.62	3412	4	0.16	31	>10000	20	<5	2	975	0.77	<10	59	<10
B875899	Core	>10	5700	<1	0.03	20	>10000	15	<5	16	785	0.83	<10	69	25
B880250 Dup	Core	>10	5740	6	0.03	20	>10000	16	<5	20	799	0.86	<10	74	23
B880251	Core	>10	4446	3	0.02	15	>10000	<2	<5	12	513	0.27	<10	57	32
B880252	Core	>10	8252	5	0.02	20	>10000	21	27	9	2621	0.01	<10	48	23
B880253	Core	7.49	5954	6	0.02	21	>10000	18	<5	10	1357	0.63	<10	54	<10
B880254	Core	>10	5204	<1	0.02	7	>10000	28	<5	9	1637	0.09	<10	46	<10
B880255	Core	4.92	2660	<1	0.12	15	>10000	27	8	4	2865	0.27	<10	28	14
B880256	Core	7.03	3378	4	0.11	27	>10000	19	<5	5	1898	0.16	<10	33	<10
B880257	Core	>10	5932	<1	0.03	12	>10000	50	22	7	2051	0.13	<10	53	10
B880258	Core	>10	6987	<1	0.03	12	>10000	12	<5	7	2485	0.17	<10	52	<10
B880259	Core	7.62	5426	2	0.07	24	>10000	28	11	<1	1765	1.02	<10	69	<10
B880260	Pulp	1.95	6160	17	0.32	8	>10000	74	21	4	>10000	0.19	112	36	<10
B880261	Core	6.17	5169	<1	0.03	20	>10000	32	<5	<1	2027	0.99	<10	64	<10
B880262	Core	>10	4003	<1	0.02	15	>10000	9	<5	6	831	0.05	<10	50	13
B880263	Core	>10	2865	<1	0.02	18	>10000	28	<5	4	564	0.03	<10	46	<10
B880264	Core	>10	5848	<1	0.03	11	>10000	29	<5	6	2792	0.02	<10	47	30



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875854	Core	90	65	833.6	20.8	6.2	15.3	45.0	8.5	2.9	382.8	0.4	343.9	101.0	56.7
B875855	Core	19	19	623.8	14.5	4.8	10.8	30.6	2.2	2.1	313.3	0.3	244.0	70.4	38.1
B875856	Core	23	18	743.0	17.1	5.5	19.9	35.7	1.7	2.4	350.4	0.4	297.4	87.1	44.6
B875857	Core	108	54	935.5	12.7	3.2	10.9	32.8	7.5	1.6	495.1	0.1	319.8	100.3	42.4
B875858	Core	32	11	>1000	22.6	3.3	23.9	105.8	1.0	1.9	>1000	0.2	>1000	429.4	159.0
B875859	Core	32	39	>1000	27.7	7.7	21.3	80.7	3.3	3.5	>1000	0.5	791.9	256.1	108.3
B875860 Dup	Core	32	46	>1000	27.2	7.6	20.8	79.1	3.0	3.6	>1000	0.5	774.0	249.5	105.6
B875861	Core	57	38	958.3	19.2	5.7	15.0	44.5	5.0	2.6	517.8	0.3	371.2	110.3	56.9
B875862	Core	25	37	>1000	24.9	8.3	15.8	49.6	2.5	3.6	661.3	0.6	418.8	127.6	61.1
B875863	Core	105	87	>1000	16.0	4.8	12.3	40.9	3.5	2.1	742.6	0.4	394.1	128.6	50.8
B875864	Core	34	79	521.4	14.5	4.6	9.6	28.8	1.2	2.0	244.4	0.3	218.2	61.3	35.9
B875865	Core	28	27	510.6	15.3	5.1	10.6	29.7	1.1	2.1	237.4	0.4	217.6	60.9	36.3
B875866	Core	14	39	665.5	20.0	7.3	12.3	37.2	0.4	3.1	318.3	0.6	263.8	76.0	43.9
B875867	Core	53	62	479.1	13.2	4.3	8.6	26.3	1.6	1.8	220.0	0.3	202.7	56.3	32.3
B875868	Core	21	35	553.1	19.0	6.6	11.2	33.5	1.2	2.8	271.6	0.4	226.1	63.9	40.3
B875869	Core	51	26	>1000	22.1	6.7	14.3	48.4	1.0	2.9	531.6	0.4	411.6	118.5	62.5
B875870	Pulp	12	43	869.2	24.5	8.5	15.1	46.5	1.3	3.6	427.3	0.8	350.2	100.9	55.9
B875871	Core	37	25	890.3	23.5	7.2	14.8	47.6	1.2	3.3	448.5	0.3	372.3	106.1	61.2
B875872	Core	13	60	817.1	31.2	11.2	17.3	52.6	2.6	4.6	405.4	0.8	339.7	94.8	62.5
B875873	Core	31	28	730.5	18.0	5.6	12.6	37.5	1.7	2.5	355.6	0.3	292.1	84.4	46.9
B875874	Core	258	107	455.7	10.6	3.1	7.6	22.6	9.4	1.4	200.7	0.1	177.9	51.2	28.5
B875875	Core	94	43	408.9	11.5	3.7	7.6	23.5	4.6	1.6	188.7	0.2	172.1	48.8	28.2
B875876	Core	275	246	559.8	14.0	4.6	9.2	29.5	17.2	1.9	261.2	0.3	217.6	63.8	35.0
B875877	Core	57	11	64.4	3.0	1.6	1.4	4.0	2.2	0.4	32.0	0.2	25.8	7.2	4.4
B875878	Core	261	273	669.6	15.9	5.3	11.5	35.4	20.3	2.3	326.8	0.3	265.9	76.5	43.6
B875879	Core	74	99	536.7	13.9	4.2	9.3	28.3	6.2	1.8	234.6	0.2	220.3	61.9	36.0
B875880 Dup	Core	76	93	532.4	13.7	4.4	9.3	29.0	6.2	1.9	238.4	0.3	221.2	62.6	36.6
B875881	Core	19	50	681.6	21.4	7.1	13.1	40.6	1.4	3.2	333.5	0.4	281.6	80.3	49.4
B875882	Core	34	14	508.0	17.5	5.3	9.0	31.2	0.5	2.4	264.7	0.2	191.9	54.6	37.0
B875883	Core	25	16	>1000	29.8	7.8	22.5	98.4	0.7	3.7	>1000	0.4	>1000	375.9	126.7
B875884	Core	28	32	517.9	18.1	5.8	9.8	30.7	1.5	2.6	268.2	0.3	200.6	57.9	35.5
B875885	Core	20	71	928.2	28.4	9.9	15.8	50.3	1.4	4.1	514.5	0.6	350.2	102.9	58.6
B875886	Core	12	35	697.5	18.8	6.8	11.4	36.2	1.1	2.8	345.6	0.5	274.7	79.1	43.4
B875887	Core	20	16	401.9	16.7	5.6	8.9	27.1	0.3	2.4	193.7	0.2	164.5	46.9	29.0
B875888	Core	55	196	626.6	29.2	10.8	14.4	46.2	5.4	4.6	296.1	0.7	281.1	75.1	52.1
B875889	Core	27	37	987.9	22.1	7.2	14.1	45.6	2.4	3.1	525.6	0.4	387.9	112.3	56.4
B875890	Pulp	33	38	825.5	21.3	7.1	14.0	42.2	2.2	3.0	418.2	0.5	311.9	91.4	52.5
B875891	Core	30	41	851.2	25.7	8.8	14.2	45.0	2.2	3.9	431.4	0.6	339.8	98.4	53.2
B875892	Core	36	74	>1000	24.7	8.6	14.5	48.9	1.2	3.7	616.7	0.5	412.1	127.3	59.0
B875893	Core	12	61	854.1	24.1	8.0	13.5	44.9	1.1	3.6	428.9	0.5	341.0	98.3	54.5



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03360-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875894	Core	19	35	603.6	15.2	5.1	9.1	29.6	0.6	2.2	294.2	0.3	238.7	68.8	36.4
B875895	Core	44	37	>1000	26.5	8.2	18.4	62.6	1.4	3.7	>1000	0.5	589.3	186.4	77.4
B875896	Core	30	60	>1000	19.7	6.2	13.6	45.7	2.4	2.7	605.6	0.4	399.2	123.2	56.8
B875897	Core	38	53	>1000	29.4	9.8	17.5	58.8	2.3	4.3	762.4	0.5	514.7	159.5	69.0
B875898	Core	70	213	>1000	31.6	11.8	16.3	59.7	4.7	4.9	573.3	1.0	449.8	130.2	70.8
B875899	Core	78	310	577.3	24.6	8.7	12.7	43.5	8.7	3.7	278.2	0.6	243.0	66.8	49.5
B880250 Dup	Core	80	336	579.5	25.5	9.0	12.8	45.4	9.2	3.8	278.3	0.6	248.8	69.1	50.4
B880251	Core	35	86	>1000	33.9	11.4	16.7	62.8	3.9	5.0	627.2	0.7	441.8	133.6	69.6
B880252	Core	37	33	658.8	17.2	5.3	9.3	33.9	<0.1	2.4	286.6	0.2	263.2	76.1	40.3
B880253	Core	99	188	570.3	18.0	6.3	10.9	34.3	6.3	2.6	250.7	0.4	243.4	68.8	39.6
B880254	Core	30	101	>1000	30.1	10.3	16.4	60.1	1.4	4.5	549.3	0.6	488.5	140.2	72.5
B880255	Core	50	88	>1000	31.9	10.2	20.6	70.4	2.4	4.5	739.3	0.7	601.7	177.7	82.4
B880256	Core	38	225	889.2	27.2	9.6	15.1	49.8	1.9	4.0	445.4	0.7	365.6	104.5	57.9
B880257	Core	29	24	491.3	17.1	6.0	9.7	29.0	4.8	2.6	220.9	0.3	206.8	57.7	34.4
B880258	Core	49	33	722.0	18.5	5.5	11.6	38.1	2.2	2.5	332.3	0.3	304.1	87.4	48.3
B880259	Core	155	605	853.3	26.9	8.9	16.7	52.7	13.5	3.9	394.0	0.5	378.9	103.6	63.6
B880260	Pulp	510	123	>1000	15.1	4.8	13.3	44.3	<0.1	2.1	>1000	0.4	490.4	166.1	54.5
B880261	Core	99	130	551.6	17.3	5.7	10.0	32.4	4.6	2.4	262.7	0.3	234.0	64.4	37.6
B880262	Core	28	52	>1000	22.1	7.2	13.6	49.0	1.1	3.0	530.7	0.5	424.6	122.1	64.9
B880263	Core	11	25	923.3	25.2	9.5	13.3	48.8	0.1	4.0	464.2	0.7	389.5	107.5	61.8
B880264	Core	28	39	613.6	20.2	6.8	12.0	36.9	5.9	3.0	268.2	0.4	261.8	71.8	43.1

Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875854	Core	4.0	0.6	4.0	67.7	7.47	154.51	4.83
B875855	Core	2.6	0.4	3.3	52.9	2.77	80.12	1.63
B875856	Core	3.1	0.5	3.8	74.2	21.71	131.80	8.48
B875857	Core	2.3	0.3	2.2	38.6	<0.05	137.41	10.56
B875858	Core	3.7	0.3	2.9	47.0	2.63	101.21	3.88
B875859	Core	5.1	0.8	5.3	85.5	70.65	201.43	64.20
B875860 Dup	Core	4.9	0.8	5.3	83.9	69.36	212.43	67.46
B875861	Core	3.5	0.6	3.7	64.2	10.45	136.87	17.00
B875862	Core	4.5	0.9	5.9	90.2	71.95	123.36	98.28
B875863	Core	2.8	0.5	3.5	54.5	11.40	147.03	9.76
B875864	Core	2.6	0.4	3.2	51.9	16.84	64.58	11.71
B875865	Core	2.8	0.5	3.7	58.2	11.60	112.60	8.53
B875866	Core	3.6	0.8	5.8	80.6	2.18	261.19	32.13
B875867	Core	2.3	0.4	3.1	47.4	17.27	94.09	12.46
B875868	Core	3.5	0.7	4.3	71.7	44.57	231.91	20.86
B875869	Core	4.0	0.6	4.2	73.6	8.18	153.97	8.26
B875870	Pulp	4.4	1.0	6.5	94.8	40.32	224.01	2.52
B875871	Core	4.2	0.6	3.9	78.2	16.36	135.08	17.47
B875872	Core	5.6	1.2	7.0	118.9	32.38	381.45	11.54
B875873	Core	3.2	0.5	3.4	61.5	23.34	141.53	16.64
B875874	Core	1.8	0.3	2.0	35.4	111.89	596.09	8.63
B875875	Core	2.0	0.3	2.5	41.0	42.09	222.65	12.38
B875876	Core	2.6	0.4	3.4	49.2	2.16	585.40	28.39
B875877	Core	0.4	0.1	1.8	17.3	3.61	16.14	4.44
B875878	Core	2.9	0.5	3.7	55.2	0.58	836.07	5.37
B875879	Core	2.4	0.4	2.6	47.1	3.58	480.33	30.03
B875880 Dup	Core	2.5	0.4	2.6	47.5	3.18	507.22	32.17
B875881	Core	3.9	0.7	4.1	77.8	75.75	231.36	50.07
B875882	Core	3.2	0.5	3.0	61.8	4.85	117.50	7.03
B875883	Core	4.9	0.8	5.0	95.7	28.35	53.98	19.63
B875884	Core	3.2	0.6	3.6	68.5	28.99	146.48	21.40
B875885	Core	5.1	1.0	6.3	107.9	132.63	281.43	71.36
B875886	Core	3.3	0.7	4.6	78.1	99.20	133.38	46.31
B875887	Core	2.9	0.5	3.0	63.3	40.14	90.43	11.37
B875888	Core	5.1	1.1	6.8	114.6	52.02	164.78	22.51
B875889	Core	3.9	0.7	4.5	79.4	23.74	109.83	9.01
B875890	Pulp	3.8	0.7	4.8	74.4	29.89	151.47	9.59
B875891	Core	4.4	0.9	5.5	96.7	20.05	126.41	12.70
B875892	Core	4.2	0.8	5.3	89.8	62.83	178.15	13.65
B875893	Core	4.3	0.8	5.3	85.6	68.09	215.16	11.59



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03360-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875894	Core	2.6	0.5	3.5	58.0	1.72	139.60	5.23
B875895	Core	4.4	0.8	5.4	97.9	1.11	146.16	6.26
B875896	Core	3.5	0.6	4.2	70.2	4.21	77.69	3.90
B875897	Core	5.1	1.0	5.5	109.4	3.96	201.95	5.75
B875898	Core	5.5	1.3	8.7	125.1	8.83	126.44	7.48
B875899	Core	4.5	0.9	6.0	98.7	17.62	109.17	10.30
B880250 Dup	Core	4.6	0.9	5.9	101.5	21.04	120.01	10.50
B880251	Core	6.1	1.1	6.7	129.2	8.05	225.74	4.78
B880252	Core	2.9	0.5	3.0	61.5	0.72	136.12	2.35
B880253	Core	3.2	0.6	3.9	74.7	8.70	81.93	11.81
B880254	Core	5.2	1.0	6.4	117.6	2.69	200.44	3.74
B880255	Core	5.6	1.1	6.6	117.8	2.40	128.94	6.77
B880256	Core	4.8	1.1	6.4	106.9	0.19	95.70	7.26
B880257	Core	3.0	0.6	3.8	66.7	3.21	88.60	3.49
B880258	Core	3.3	0.5	3.2	61.8	2.52	107.80	3.45
B880259	Core	5.0	0.9	5.6	99.1	24.35	116.85	10.64
B880260	Pulp	2.3	0.6	4.1	59.3	26.09	54.89	28.98
B880261	Core	3.0	0.6	3.7	65.0	21.08	77.51	7.78
B880262	Core	4.0	0.7	4.8	80.0	2.36	128.48	2.72
B880263	Core	4.5	1.0	6.2	103.8	15.42	77.00	4.98
B880264	Core	3.6	0.6	4.0	74.6	2.01	123.25	9.15



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875854	Core	1.05													
B875854 Dup		1.00													
QCV1010-00691-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875872	Core	0.75													
B875872 Dup		0.73													
QCV1010-00691-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875890	Pulp	0.48													
B875890 Dup		0.46													
QCV1010-00691-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B880258	Core	0.08													
B880258 Dup		0.09													
B875854	Core		0.29	0.01	28.48	<0.01	24.00	0.14	22.73	11.45	0.38	0.05	8.92	1.62	0.39
B875854 Dup			0.28	0.01	28.50	<0.01	24.04	0.12	22.81	11.50	0.38	0.05	9.00	1.63	0.41
QCV1010-00695-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875872	Core		0.92	<0.01	28.02	<0.01	6.42	0.03	34.09	17.80	0.30	0.05	5.08	6.00	0.25
B875872 Dup			0.92	<0.01	30.91	<0.01	6.34	0.03	33.10	17.62	0.29	0.05	5.07	5.97	0.24
QCV1010-00695-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875890	Pulp		0.23	<0.01	32.78	<0.01	5.92	0.05	37.91	17.63	0.48	0.05	4.12	1.63	0.14
B875890 Dup			0.23	<0.01	31.16	<0.01	5.99	0.05	37.84	17.84	0.48	0.05	4.27	1.67	0.12
QCV1010-00695-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B880258	Core		0.57	0.01	28.46	<0.01	8.08	0.11	38.02	17.47	0.67	0.03	3.73	2.71	0.28
B880258 Dup			0.58	0.01	29.87	<0.01	7.83	0.11	38.16	16.99	0.65	0.03	3.52	2.76	0.27
QCV1010-00695-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			19.51	0.04	7.81	<0.01	6.31	1.77	4.53	0.57	0.11	6.51	0.14	50.57	0.28



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875854	Core		<0.5	0.13	<5	89	<2	>10	<0.5	21	12	58	>10	0.07	351
B875854 Dup			<0.5	0.13	<5	84	<2	>10	<0.5	24	11	37	>10	0.08	382
QCV1010-00692-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			96.5									6437			
B875872	Core		0.7	0.45	7	29	<2	>10	<0.5	12	15	51	3.90	0.01	359
B875872 Dup			0.7	0.45	7	29	<2	>10	<0.5	11	15	50	3.83	0.01	356
QCV1010-00692-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			99.2									6443			
B875890	Pulp		<0.5	0.13	29	66	11	>10	<0.5	14	<1	27	5.51	0.04	565
B875890 Dup			<0.5	0.11	39	63	<2	>10	<0.5	33	8	28	5.92	0.03	621
QCV1010-00692-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			58.9									1062			
B880258	Core		<0.5	0.30	37	167	<2	>10	<0.5	28	15	11	6.48	0.09	480
B880258 Dup			<0.5	0.30	35	164	<2	>10	<0.5	22	17	11	6.60	0.09	488
QCV1010-00692-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			96.7									6210			
B875854	Core	98.47													
B875854 Dup		98.73													
QCV1010-00695-0002-BLK		<0.01													
B875872	Core	98.97													
B875872 Dup		100.55													
QCV1010-00695-0005-BLK		<0.01													
B875890	Pulp	100.96													
B875890 Dup		99.72													
QCV1010-00695-0008-BLK		<0.01													
B880258	Core	100.14													
B880258 Dup		100.78													
QCV1010-00695-0011-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		98.14													



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Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875854	Core	6.36	3128	1	0.04	6	>10000	16	<5	3	2592	0.20	<10	277	<10
B875854 Dup		6.19	3048	2	0.04	5	>10000	17	<5	3	2516	0.19	<10	295	<10
QCV1010-00692-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
B875872	Core	9.75	2215	4	0.03	8	>10000	26	<5	8	773	0.08	<10	93	<10
B875872 Dup		9.49	2181	3	0.04	8	>10000	25	<5	8	781	0.08	<10	93	<10
QCV1010-00692-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
B875890	Pulp	>10	5663	<1	0.04	13	>10000	96	<5	11	2019	0.06	<10	53	13
B875890 Dup		>10	5446	<1	0.04	15	>10000	94	<5	10	1916	0.05	<10	51	<10
QCV1010-00692-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-8 expected								19400							
STD-CDN-ME-8 result								>10000							
B880258	Core	>10	6987	<1	0.03	12	>10000	12	<5	7	2485	0.17	<10	52	
B880258 Dup		>10	6947	2	0.03	14	>10000	15	<5	7	2471	0.18	<10	52	
QCV1010-00692-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9903							



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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875854	Core	90	65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875854 Dup		94	66												
QCV1010-00692-0002-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5465													
B875872	Core	13	60												
B875872 Dup		13	60												
QCV1010-00692-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5441													
B875890	Pulp	33	38												
B875890 Dup		29	37												
QCV1010-00692-0008-BLK		<2	<1												
STD-CDN-ME-8 expected		19200													
STD-CDN-ME-8 result		>10000													
B880258	Core	49	33												
B880258 Dup		49	34												
QCV1010-00692-0011-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5212													
B875854	Core			833.6	20.8	6.2	15.3	45.0	8.5	2.9	382.8	0.4	343.9	101.0	56.7
B875854 Dup				832.3	20.9	6.3	15.8	46.4	8.4	2.8	383.3	0.4	351.1	100.6	57.0
QCV1010-00693-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875872	Core			817.1	31.2	11.2	17.3	52.6	2.6	4.6	405.4	0.8	339.7	94.8	62.5
B875872 Dup				830.9	31.3	11.2	17.2	52.9	2.7	4.6	410.4	0.8	339.6	96.2	63.4
QCV1010-00693-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875890	Pulp			825.5	21.3	7.1	14.0	42.2	2.2	3.0	418.2	0.5	311.9	91.4	52.5
B875890 Dup				807.1	21.3	7.1	14.0	42.7	2.2	3.1	423.2	0.5	316.2	90.5	51.0
QCV1010-00693-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B880258	Core			722.0	18.5	5.5	11.6	38.1	2.2	2.5	332.3	0.3	304.1	87.4	48.3
B880258 Dup				742.2	18.4	5.4	11.7	37.9	2.1	2.5	343.7	0.3	305.2	88.2	49.3
QCV1010-00693-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				129.8	18.5	14.4	2.0	14.8	10.9	4.3	62.0	2.0	58.4	15.4	12.9



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875854	Core	4.0	0.6	4.0	67.7			
B875854 Dup		4.0	0.6	4.0	68.9			
QCV1010-00693-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875872	Core	5.6	1.2	7.0	118.9			
B875872 Dup		5.7	1.2	7.3	118.5			
QCV1010-00693-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B875890	Pulp	3.8	0.7	4.8	74.4			
B875890 Dup		3.9	0.7	4.9	76.2			
QCV1010-00693-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B880258	Core	3.3	0.5	3.2	61.8			
B880258 Dup		3.2	0.5	3.2	61.2			
QCV1010-00693-0011-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.2	14.6	119.5			
B875854	Core					7.47	154.51	4.83
B875854 Dup						7.40	137.26	4.85
QCV1105-00497-0002-BLK						<0.05	<0.20	<0.10
B875872	Core					32.38	381.45	11.54
B875872 Dup						33.54	376.59	11.60
QCV1105-00497-0005-BLK						<0.05	<0.20	<0.10
B875890	Pulp					29.89	151.47	9.59
B875890 Dup						29.13	151.67	9.72
QCV1105-00497-0008-BLK						<0.05	<0.20	<0.10
B880258	Core					2.52	107.80	3.45
B880258 Dup						2.52	104.45	3.42
QCV1105-00497-0011-BLK						<0.05	<0.20	<0.10

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10-360-03413-01

Inspectorate Exploration & Mining Services Ltd.
#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5 Canada
Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/01/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: ALEY 2010-018</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">86</td> <td>Core</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	86	Core	SP-RX-2K/Rock/Chips/Drill Core	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	86	Core	SP-RX-2K/Rock/Chips/Drill Core																																		
Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
Location	Method	Description																																			
Vancouver, BC	REE-LB-MS	REE Group by ICP-MS																																			
Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																																			
Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																			
Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			
Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level																																			
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B880265	Core	0.29	0.30	<0.01	36.35	<0.01	3.09	0.05	40.20	18.20	0.34	0.03	3.99	0.34	0.05
B880266	Core	0.12	0.20	0.01	38.63	<0.01	3.65	<0.01	39.20	16.66	0.47	0.04	4.63	0.23	0.07
B880267	Core	0.09	0.17	0.01	36.68	<0.01	3.98	0.01	39.20	18.13	0.53	0.04	4.15	0.13	0.10
B880268	Core	0.10	0.16	0.01	36.81	<0.01	4.64	<0.01	39.15	17.67	0.56	0.03	4.12	<0.01	0.10
B880269	Core	0.20	0.17	0.04	38.18	<0.01	3.88	<0.01	35.29	13.57	0.45	0.03	8.14	0.14	0.15
B880270 Dup	Core	0.21	0.18	0.04	38.67	0.02	3.90	0.03	35.28	13.44	0.47	0.05	8.16	0.11	0.15
B880271	Core	0.10	0.33	0.01	35.70	<0.01	3.91	0.02	38.68	18.18	0.40	0.03	5.24	0.44	0.10
B880272	Core	0.16	0.47	0.01	32.22	<0.01	4.46	0.15	35.26	17.15	0.40	0.15	5.72	4.98	0.09
B880273	Core	0.05	0.55	0.01	32.28	<0.01	4.15	0.10	40.59	17.52	0.41	0.09	2.63	1.24	0.04
B880274	Core	0.05	2.92	0.04	24.58	<0.01	5.12	0.57	32.47	16.60	0.31	0.09	3.09	12.00	0.36
B880275	Core	0.06	4.29	0.13	18.98	<0.01	6.30	2.11	24.38	14.92	0.36	0.88	2.60	24.36	0.45
B880276	Core	0.04	0.47	0.01	35.97	<0.01	3.96	0.09	37.42	18.55	0.32	0.03	5.97	1.00	0.05
B880277	Core	<0.01	0.22	<0.01	35.69	<0.01	3.90	0.01	38.21	18.31	0.31	0.03	5.81	0.34	0.04
B880278	Core	0.04	0.30	<0.01	35.18	0.01	6.59	0.03	34.98	15.69	0.36	0.03	7.57	2.23	0.08
B880279	Core	0.02	0.28	<0.01	35.61	<0.01	4.11	0.04	39.39	17.28	0.37	0.03	5.15	0.43	0.05
B880280	Pulp	0.72	0.56	0.02	28.80	<0.01	17.56	0.07	29.69	13.64	0.52	0.05	6.42	2.51	0.67
B880281	Core	0.02	0.37	<0.01	37.41	<0.01	7.65	<0.01	32.75	15.43	0.35	0.03	7.68	1.07	0.10
B880282	Core	0.08	0.63	<0.01	35.68	<0.01	6.59	0.01	34.80	15.96	0.43	0.04	6.99	1.58	0.21
B880283	Core	0.11	0.94	0.02	29.97	<0.01	8.56	0.11	36.69	17.06	0.47	0.04	1.40	4.60	0.05
B880284	Core	0.06	0.21	<0.01	32.55	<0.01	6.74	0.03	37.71	18.35	0.44	0.03	3.04	0.29	0.04
B880285	Core	0.13	4.34	0.11	23.77	<0.01	7.38	1.50	25.15	14.12	0.34	0.69	2.70	18.53	0.82
B880286	Core	0.05	1.60	0.01	28.92	<0.01	7.40	0.20	32.24	15.82	0.32	0.16	3.01	9.72	0.40
B880287	Core	0.34	2.19	0.04	30.17	0.01	6.13	0.49	31.67	13.82	0.36	0.39	4.01	10.36	0.45
B880288	Core	0.07	0.17	<0.01	31.45	<0.01	4.38	0.02	35.24	17.74	0.48	0.03	3.17	7.20	0.63
B880289	Core	0.07	2.61	<0.01	26.84	0.01	6.88	0.05	31.45	15.80	0.22	0.03	4.14	11.60	0.72
B880290 Dup	Core	0.07	2.70	<0.01	26.58	0.01	6.89	0.05	31.06	16.04	0.21	0.03	4.30	11.41	0.76
B880291	Core	0.62	0.34	<0.01	32.45	<0.01	5.26	0.03	37.50	17.72	0.23	0.03	4.13	1.46	0.04
B880292	Core	0.05	1.23	<0.01	28.95	<0.01	5.28	0.03	37.66	18.51	0.31	0.03	2.25	4.91	0.18
B880293	Core	0.04	3.09	<0.01	24.51	0.01	7.78	0.06	32.57	17.28	0.62	0.05	0.37	12.89	0.31
B880294	Core	0.08	2.72	0.02	27.28	<0.01	7.10	0.65	31.80	14.20	0.67	0.27	1.93	14.08	0.41
B880295	Core	0.05	0.64	<0.01	34.96	<0.01	3.91	0.06	34.20	15.25	0.35	0.10	8.23	4.28	0.07
B880296	Core	0.05	0.45	<0.01	34.76	<0.01	3.54	0.04	35.94	16.11	0.24	0.11	7.59	3.62	0.14
B880297	Core	0.04	0.13	<0.01	33.40	<0.01	3.56	<0.01	41.23	19.56	0.62	0.04	4.22	0.32	0.03
B880298	Core	0.04	0.11	<0.01	29.98	<0.01	5.35	<0.01	41.69	18.95	0.58	0.03	1.83	0.78	0.01
B880299	Core	0.06	0.28	<0.01	31.34	<0.01	3.92	<0.01	39.08	17.44	0.47	0.03	4.41	2.19	0.08
B880300	Pulp	0.47	0.25	<0.01	31.43	<0.01	5.49	0.03	39.05	17.12	0.47	0.04	4.60	1.51	0.11
B880301	Core	0.02	0.23	<0.01	31.98	<0.01	3.37	<0.01	40.09	18.02	0.59	0.03	3.94	1.49	0.01
B880302	Core	0.03	0.52	<0.01	33.32	<0.01	3.73	0.01	36.76	18.68	0.32	0.03	4.69	3.79	0.11
B880303	Core	0.02	0.40	0.05	47.34	<0.01	5.98	0.16	31.11	5.49	0.25	0.22	6.11	5.85	0.23
B880304	Core	<0.01	13.93	0.12	4.39	0.04	3.89	2.89	1.10	1.49	0.11	2.95	0.28	67.42	0.47



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B880305	Core	<0.01	0.54	0.05	45.23	<0.01	3.88	0.21	33.26	7.13	0.17	0.11	5.20	4.63	0.20
B880306	Core	0.01	1.02	0.02	30.09	<0.01	4.19	0.36	30.94	16.16	0.25	0.56	3.53	12.05	0.20
B880307	Core	<0.01	0.27	<0.01	31.11	<0.01	2.38	<0.01	40.09	20.95	0.25	0.04	2.94	2.14	0.06
B880308	Core	<0.01	0.74	0.06	45.54	<0.01	3.15	0.34	32.76	5.60	0.15	0.19	4.40	6.35	0.10
B880309	Core	0.82	1.75	0.02	36.25	<0.01	4.80	0.12	32.78	13.32	0.52	0.04	2.09	5.83	0.05
B880310 Dup	Core	0.83	1.83	<0.01	36.55	<0.01	4.69	<0.01	32.76	13.94	0.54	0.04	2.07	6.03	0.03
B880311	Core	0.46	4.42	0.10	25.14	0.01	7.58	1.46	32.55	13.32	0.37	0.69	1.02	15.89	0.79
B880312	Core	0.27	1.50	0.03	32.74	<0.01	5.92	0.28	35.04	15.54	0.68	0.14	5.56	2.45	0.27
B880313	Core	0.02	0.25	<0.01	35.91	<0.01	6.63	0.03	35.99	16.68	0.48	0.04	1.76	1.51	0.11
B880314	Core	0.07	0.73	0.01	31.75	<0.01	5.80	0.07	37.28	15.32	0.66	0.03	4.72	3.57	0.22
B880315	Core	0.12	3.97	0.08	22.40	<0.01	6.85	2.02	25.82	15.36	0.46	0.73	2.75	17.75	0.70
B880316	Core	0.15	3.78	0.06	24.76	0.01	6.72	1.32	27.99	13.84	0.53	0.94	3.22	16.36	0.73
B880317	Core	0.14	2.45	0.05	27.24	<0.01	7.94	1.19	33.40	14.34	0.80	0.29	2.15	12.38	0.36
B880318	Core	0.10	1.29	<0.01	34.32	<0.01	5.32	0.23	34.87	18.11	0.53	0.08	4.43	3.85	0.16
B880319	Core	0.12	0.30	<0.01	31.40	<0.01	5.50	0.02	39.70	15.54	0.64	0.04	3.70	2.88	0.03
B880320	Pulp	0.67	0.21	0.02	36.55	<0.01	5.10	0.03	36.82	13.12	0.43	0.08	4.08	3.44	0.13
B880321	Core	0.08	0.09	<0.01	32.30	<0.01	4.22	0.02	40.04	18.37	0.55	0.03	3.35	1.56	0.01
B880322	Core	0.26	0.07	<0.01	33.13	<0.01	4.74	0.01	39.21	15.67	0.50	0.03	4.61	2.30	0.02
B880323	Core	0.30	0.08	<0.01	33.03	<0.01	4.29	<0.01	39.27	16.95	0.48	0.03	3.71	2.41	0.04
B880324	Core	0.16	0.06	<0.01	33.56	<0.01	5.19	<0.01	41.95	18.06	0.55	0.02	2.59	0.12	0.03
B880325	Core	0.23	0.18	<0.01	32.57	<0.01	3.91	<0.01	38.78	16.17	0.38	0.03	5.59	1.69	0.03
B880326	Core	0.05	0.28	0.01	34.04	<0.01	4.35	0.01	36.40	14.90	0.44	0.05	7.86	1.36	0.03
B880327	Core	0.10	0.19	0.02	33.44	<0.01	4.75	<0.01	37.86	14.80	0.56	0.03	5.96	1.29	0.02
B880328	Core	<0.01	0.12	0.01	31.84	<0.01	4.40	<0.01	40.00	17.47	0.38	0.03	4.71	0.59	0.02
B880329	Core	0.28	0.09	<0.01	35.20	<0.01	4.69	<0.01	37.78	14.20	0.49	0.03	6.59	0.05	0.02
B880330 Dup	Core	0.31	0.10	<0.01	35.40	<0.01	4.62	<0.01	37.79	14.40	0.48	0.03	6.38	0.05	0.02
B880331	Core	0.34	0.13	0.02	36.17	<0.01	5.15	0.02	37.33	13.27	0.46	0.02	6.34	0.35	0.03
B880332	Core	0.07	0.92	0.03	35.59	<0.01	16.20	0.23	23.21	5.95	0.52	0.09	12.24	4.29	0.26
B880333	Core	0.05	0.24	<0.01	34.03	<0.01	3.85	0.01	39.11	15.56	0.38	0.02	5.46	0.23	0.04
B880334	Core	0.03	0.33	0.01	33.14	<0.01	4.76	0.03	38.06	16.16	0.38	0.05	6.61	0.57	0.05
B880335	Core	0.10	0.26	<0.01	34.70	<0.01	5.27	0.03	38.01	14.80	0.34	0.02	4.94	0.57	0.04
B880336	Core	0.15	0.18	0.01	35.48	<0.01	4.44	0.03	39.98	14.73	0.49	0.03	4.25	0.16	0.03
B880337	Core	0.06	0.06	<0.01	31.45	<0.01	2.47	<0.01	41.64	19.88	0.55	0.02	3.40	<0.01	<0.01
B880338	Core	0.12	4.03	0.01	23.94	<0.01	5.34	0.23	30.17	18.29	0.39	0.06	3.52	12.85	0.23
B880339	Core	0.22	2.41	0.01	27.66	<0.01	4.94	0.05	34.36	17.38	0.41	0.02	2.69	9.41	0.15
B880340	Pulp	0.76	0.53	0.02	28.70	<0.01	19.45	0.08	29.00	13.16	0.42	0.05	5.94	1.88	0.58
B880341	Core	0.11	1.13	0.01	29.09	<0.01	5.84	0.03	40.50	19.19	0.49	0.01	1.56	1.87	0.06
B880342	Core	<0.01	15.42	0.13	4.25	0.05	3.87	3.36	1.18	1.57	0.11	3.52	0.26	68.70	0.46
B880343	Core	0.11	0.66	0.01	34.11	<0.01	4.21	0.03	39.06	16.20	0.37	0.02	4.59	1.03	0.04
B880344	Core	0.10	1.63	0.03	24.66	<0.01	4.06	0.80	33.09	17.77	0.43	0.34	3.19	13.93	0.08



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Certificate of Analysis

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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B880345	Core	0.02	0.60	<0.01	31.57	<0.01	3.98	0.04	37.22	18.62	0.34	0.05	6.32	3.95	0.18
B880346	Core	0.05	0.28	<0.01	32.31	<0.01	4.70	<0.01	40.79	18.81	0.42	0.03	4.11	0.37	0.04
B880347	Core	0.02	0.72	<0.01	29.13	<0.01	5.68	0.03	38.94	18.53	0.29	0.03	3.81	2.71	0.11
B880348	Core	0.04	0.44	<0.01	32.02	<0.01	4.48	0.01	37.91	16.32	0.30	0.03	5.51	2.34	0.09
B880349	Core	0.05	0.32	<0.01	35.00	<0.01	5.28	<0.01	36.22	15.91	0.38	0.03	6.23	2.43	0.08
B880350 Dup	Core	0.05	0.32	<0.01	34.78	<0.01	5.17	<0.01	36.02	16.10	0.37	0.03	6.18	2.31	0.08
B880351	Core	0.07	0.61	<0.01	32.73	<0.01	6.19	<0.01	36.60	17.44	0.29	0.03	5.88	3.91	0.07
B880352	Core	0.30	0.36	0.01	35.97	<0.01	5.87	<0.01	38.62	15.77	0.43	0.03	5.06	0.94	0.09
B880353	Core	0.02	0.67	<0.01	29.74	<0.01	7.32	<0.01	35.19	16.87	0.26	0.03	4.61	5.10	0.16
B880354	Core	0.18	0.27	<0.01	32.53	<0.01	4.50	0.01	41.14	18.82	0.39	0.03	3.78	1.78	0.02

Certificate of Analysis

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Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B880265	Core	102.96	<0.5	0.12	10	47	<2	>10	<0.5	3	27	25	2.20	0.04	301
B880266	Core	103.81	<0.5	0.07	17	89	<2	>10	<0.5	3	11	11	2.60	0.01	349
B880267	Core	103.16	<0.5	0.05	11	69	<2	>10	<0.5	4	11	10	2.74	<0.01	346
B880268	Core	103.25	<0.5	0.02	15	79	<2	>10	<0.5	5	13	9	3.12	<0.01	422
B880269	Core	100.06	<0.5	0.04	37	244	<2	>10	<0.5	3	11	19	2.77	<0.01	375
B880270 Dup	Core	100.50	<0.5	0.05	32	230	<2	>10	<0.5	3	17	19	2.73	0.01	369
B880271	Core	103.04	<0.5	0.11	16	64	<2	>10	<0.5	5	16	8	2.84	<0.01	453
B880272	Core	101.06	<0.5	0.20	19	76	<2	>10	<0.5	7	15	16	3.41	0.12	313
B880273	Core	99.62	<0.5	0.23	10	80	<2	>10	<0.5	12	19	6	3.02	0.08	255
B880274	Core	98.14	<0.5	1.40	39	278	<2	>10	<0.5	10	30	12	3.83	0.45	1019
B880275	Core	99.77	<0.5	2.18	28	866	<2	>10	<0.5	13	33	26	4.91	1.79	948
B880276	Core	103.83	<0.5	0.21	19	85	<2	>10	<0.5	6	18	6	2.58	0.09	499
B880277	Core	102.88	<0.5	0.07	12	26	<2	>10	<0.5	4	14	3	2.44	<0.01	429
B880278	Core	103.05	<0.5	0.12	37	45	<2	>10	<0.5	11	18	4	4.09	0.03	1586
B880279	Core	102.76	<0.5	0.10	10	49	<2	>10	<0.5	5	28	4	2.50	0.04	345
B880280	Pulp	100.51	<0.5	0.27	9	142	<2	>10	<0.5	15	22	70	>10	0.07	359
B880281	Core	102.86	<0.5	0.16	23	38	<2	>10	<0.5	10	22	3	5.03	0.01	593
B880282	Core	102.94	0.9	0.15	28	40	<2	>10	<0.5	9	24	16	4.37	0.02	942
B880283	Core	99.91	<0.5	0.48	134	140	<2	>10	<0.5	7	23	11	5.45	0.11	5754
B880284	Core	99.45	<0.5	0.09	112	58	<2	>10	<0.5	8	14	6	4.62	0.02	4831
B880285	Core	99.46	<0.5	2.49	16	716	<2	>10	<0.5	18	39	28	5.31	1.39	572
B880286	Core	99.81	0.6	0.84	48	110	<2	>10	<0.5	12	32	13	5.22	0.19	1695
B880287	Core	100.10	<0.5	1.15	7	281	<2	>10	<0.5	12	28	40	4.13	0.45	373
B880288	Core	100.51	<0.5	0.07	24	26	<2	>10	<0.5	3	21	19	3.08	0.01	968
B880289	Core	100.36	0.5	1.55	22	23	<2	>10	<0.5	14	44	10	4.81	0.05	770
B880290 Dup	Core	100.04	<0.5	1.58	24	24	<2	>10	<0.5	15	44	9	5.00	0.05	867
B880291	Core	99.20	<0.5	0.14	9	15	<2	>10	<0.5	8	17	44	3.74	0.03	445
B880292	Core	99.36	<0.5	0.57	24	15	<2	>10	<0.5	6	25	6	3.72	0.02	929
B880293	Core	99.54	<0.5	1.75	43	51	<2	>10	<0.5	10	36	6	5.86	0.06	2036
B880294	Core	101.15	<0.5	1.43	18	154	<2	>10	<0.5	11	26	10	5.00	0.57	725
B880295	Core	102.05	<0.5	0.21	12	21	<2	>10	<0.5	5	17	10	2.80	0.04	398
B880296	Core	102.56	0.5	0.19	14	19	<2	>10	<0.5	6	18	8	2.53	0.03	463
B880297	Core	103.12	<0.5	0.04	9	34	<2	>10	<0.5	5	10	8	2.57	0.01	231
B880298	Core	99.32	<0.5	0.03	41	28	<2	>10	<0.5	6	11	5	4.37	<0.01	971
B880299	Core	99.24	0.8	0.12	6	23	<2	>10	<0.5	4	17	7	2.91	<0.01	245
B880300	Pulp	100.12	<0.5	0.12	7	46	<2	>10	<0.5	5	6	35	4.20	0.03	362
B880301	Core	99.77	<0.5	0.09	<5	29	<2	>10	<0.5	3	11	3	2.23	<0.01	167
B880302	Core	101.97	<0.5	0.25	10	20	<2	>10	<0.5	7	19	3	2.64	0.01	385
B880303	Core	103.19	0.5	0.19	12	343	<2	>10	<0.5	9	12	2	4.29	0.17	496
B880304	Core	99.10	<0.5	7.65	<5	863	<2	3.05	<0.5	9	175	<1	2.57	2.84	34

Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B880305	Core	100.62	<0.5	0.25	11	318	<2	>10	<0.5	7	12	3	2.64	0.20	407
B880306	Core	99.39	<0.5	0.53	6	175	<2	>10	<0.5	7	21	7	2.98	0.33	249
B880307	Core	100.24	<0.5	0.12	10	13	<2	>10	<0.5	3	27	4	1.76	<0.01	403
B880308	Core	99.39	0.5	0.35	8	433	<2	>10	<0.5	9	11	5	2.32	0.32	311
B880309	Core	97.56	0.6	0.93	75	280	<2	>10	<0.5	2	11	57	3.24	0.18	402
B880310 Dup	Core	98.49	<0.5	0.92	73	265	<2	>10	<0.5	3	14	35	3.25	0.19	395
B880311	Core	103.34	<0.5	1.25	18	119	<2	>10	<0.5	5	19	32	3.69	0.13	360
B880312	Core	100.15	0.7	0.65	18	109	<2	>10	<0.5	8	17	24	4.21	0.15	412
B880313	Core	99.40	<0.5	0.28	5	313	<2	>10	<0.5	6	15	3	4.87	0.33	306
B880314	Core	100.15	0.6	0.37	12	115	<2	>10	<0.5	8	17	12	3.98	0.07	393
B880315	Core	98.89	0.6	2.07	5	515	<2	>10	<0.5	16	28	46	4.56	1.43	193
B880316	Core	100.27	0.9	2.07	<5	464	<2	>10	<0.5	17	31	62	4.76	1.18	271
B880317	Core	102.58	0.5	1.23	25	346	<2	>10	<0.5	10	23	36	4.77	0.99	1034
B880318	Core	103.19	<0.5	0.59	23	68	<2	>10	<0.5	7	22	13	3.39	0.14	585
B880319	Core	99.77	<0.5	0.12	16	48	<2	>10	<0.5	4	14	11	3.87	0.02	711
B880320	Pulp	100.02	0.6	0.08	11	169	<2	>10	<0.5	6	7	38	3.38	0.04	372
B880321	Core	100.54	<0.5	0.01	6	37	<2	>10	<0.5	4	12	8	3.03	<0.01	282
B880322	Core	100.31	<0.5	0.02	33	36	<2	>10	<0.5	5	15	16	3.39	<0.01	1529
B880323	Core	100.32	<0.5	0.01	21	42	<2	>10	<0.5	3	20	24	3.01	<0.01	826
B880324	Core	102.14	<0.5	0.01	45	54	<2	>10	<0.5	5	9	15	3.66	<0.01	1994
B880325	Core	99.36	<0.5	0.07	13	63	<2	>10	<0.5	7	11	14	2.78	0.01	435
B880326	Core	99.74	0.7	0.11	29	88	<2	>10	<0.5	8	12	7	3.08	<0.01	843
B880327	Core	98.93	0.5	0.07	32	129	<2	>10	<0.5	10	11	10	3.40	<0.01	856
B880328	Core	99.58	0.8	0.04	104	70	<2	>10	<0.5	7	18	2	3.05	0.01	3972
B880329	Core	99.17	<0.5	0.02	30	71	<2	>10	<0.5	4	10	23	3.48	<0.01	1024
B880330 Dup	Core	99.28	<0.5	0.02	28	69	<2	>10	<0.5	4	8	21	3.36	<0.01	976
B880331	Core	99.29	<0.5	0.05	66	123	<2	>10	<0.5	4	10	24	3.72	0.01	2559
B880332	Core	99.54	0.7	0.44	241	252	<2	>10	<0.5	14	12	53	>10	0.19	898
B880333	Core	98.95	<0.5	0.08	36	51	<2	>10	<0.5	2	9	6	3.04	<0.01	1569
B880334	Core	100.14	<0.5	0.11	219	70	<2	>10	<0.5	6	9	6	4.09	0.03	9535
B880335	Core	99.00	<0.5	0.06	93	76	<2	>10	<0.5	4	8	12	3.24	0.01	4100
B880336	Core	99.80	<0.5	0.01	6	51	<2	>10	<0.5	2	23	10	2.01	<0.01	164
B880337	Core	99.48	<0.5	0.01	5	50	<2	>10	<0.5	2	9	5	2.00	<0.01	160
B880338	Core	99.05	0.6	2.06	27	80	<2	>10	<0.5	6	25	20	3.85	0.17	154
B880339	Core	99.49	0.5	0.11	90	83	<2	>10	<0.5	5	9	4	3.32	0.02	3700
B880340	Pulp	99.80	0.5	0.26	7	143	<2	>10	<0.5	13	7	72	>10	0.07	312
B880341	Core	99.79	<0.5	0.56	39	94	<2	>10	<0.5	5	13	10	4.53	0.03	1224
B880342	Core	102.88	<0.5	7.42	<5	865	<2	2.82	<0.5	8	214	1	2.54	2.31	40
B880343	Core	100.35	<0.5	0.30	42	86	<2	>10	<0.5	3	11	12	3.07	0.03	1267
B880344	Core	100.01	<0.5	0.78	<5	209	<2	>10	<0.5	3	20	8	2.83	0.70	269



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Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B880345	Core	102.89	<0.5	0.26	12	28	<2	>10	<0.5	5	14	4	2.78	0.03	403
B880346	Core	101.88	<0.5	0.11	44	25	<2	>10	<0.5	4	11	6	3.26	<0.01	1750
B880347	Core	99.99	<0.5	0.35	47	21	<2	>10	<0.5	6	14	6	4.07	0.02	1588
B880348	Core	99.45	<0.5	0.21	9	19	<2	>10	<0.5	6	16	6	3.21	<0.01	339
B880349	Core	101.89	<0.5	0.13	11	22	<2	>10	<0.5	8	15	7	3.24	<0.01	405
B880350 Dup	Core	101.37	<0.5	0.13	16	21	<2	>10	<0.5	8	25	9	3.23	<0.01	459
B880351	Core	103.76	<0.5	0.24	10	21	<2	>10	<0.5	11	17	7	3.90	<0.01	279
B880352	Core	103.15	<0.5	0.13	36	69	<2	>10	<0.5	6	11	22	3.31	<0.01	1366
B880353	Core	99.97	<0.5	0.27	16	18	<2	>10	<0.5	26	18	5	4.56	<0.01	381
B880354	Core	103.30	<0.5	0.08	10	26	<2	>10	<0.5	4	21	13	2.76	<0.01	344



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B880265	Core	>10	2438	<1	0.02	1	>10000	58	<5	6	787	0.02	<10	27	<10
B880266	Core	9.77	3298	2	0.02	1	>10000	33	<5	8	2090	0.03	<10	28	<10
B880267	Core	>10	3660	<1	0.02	2	>10000	26	<5	10	2803	0.03	<10	45	<10
B880268	Core	>10	3815	2	0.02	1	>10000	23	<5	6	1854	0.04	<10	55	<10
B880269	Core	6.98	3207	3	0.02	2	>10000	51	<5	8	2279	0.06	<10	70	28
B880270 Dup	Core	7.03	3201	2	0.02	3	>10000	51	<5	8	2225	0.05	<10	67	28
B880271	Core	>10	2855	2	0.02	1	>10000	24	<5	5	1399	0.02	<10	38	<10
B880272	Core	9.92	2958	2	0.10	3	>10000	42	<5	8	1747	0.03	<10	39	<10
B880273	Core	>10	2924	2	0.06	2	8529	15	<5	6	1549	0.01	<10	17	<10
B880274	Core	9.81	2248	5	0.06	8	>10000	16	<5	12	941	0.06	<10	60	<10
B880275	Core	8.98	2839	3	0.62	9	8927	19	<5	20	1945	0.20	<10	86	<10
B880276	Core	>10	2215	2	0.03	2	>10000	16	<5	7	806	0.01	<10	24	<10
B880277	Core	>10	2037	2	0.02	<1	>10000	8	<5	6	625	0.01	<10	25	<10
B880278	Core	9.93	2302	5	0.03	1	>10000	14	<5	10	742	0.03	<10	41	<10
B880279	Core	>10	2443	1	0.03	<1	>10000	10	<5	7	1183	0.02	<10	25	<10
B880280	Pulp	7.86	3540	2	0.04	3	>10000	20	<5	6	1642	0.15	<10	219	<10
B880281	Core	9.49	2358	1	0.03	1	>10000	9	<5	9	1399	0.04	<10	56	<10
B880282	Core	9.47	2863	3	0.03	2	>10000	26	<5	11	1512	0.05	<10	47	<10
B880283	Core	>10	3338	75	0.03	2	3956	31	<5	18	751	0.01	<10	42	<10
B880284	Core	>10	3284	8	0.02	2	8640	22	<5	11	516	<0.01	<10	22	<10
B880285	Core	8.52	2699	4	0.58	15	8504	25	<5	13	1392	0.34	<10	112	<10
B880286	Core	9.98	2416	21	0.13	7	9210	16	<5	11	334	0.16	<10	61	<10
B880287	Core	8.48	2546	5	0.31	10	>10000	58	<5	8	941	0.20	<10	69	<10
B880288	Core	>10	3661	12	0.02	1	9846	29	<5	6	1446	<0.01	<10	16	<10
B880289	Core	>10	1639	1	0.02	17	>10000	17	<5	11	329	0.17	<10	67	<10
B880290 Dup	Core	>10	1606	2	0.02	19	>10000	17	<5	11	328	0.23	<10	73	<10
B880291	Core	>10	1712	3	0.02	2	>10000	107	<5	5	341	0.01	<10	52	<10
B880292	Core	>10	2331	14	0.02	3	6831	13	<5	8	269	0.04	<10	29	<10
B880293	Core	>10	5004	72	0.04	9	1131	13	<5	15	592	0.08	<10	69	<10
B880294	Core	9.01	4923	15	0.21	6	5868	17	<5	10	1174	0.09	<10	53	<10
B880295	Core	9.66	2576	3	0.04	<1	>10000	16	<5	4	1354	0.01	<10	23	<10
B880296	Core	9.72	1838	3	0.08	<1	>10000	15	<5	4	626	0.04	<10	29	<10
B880297	Core	>10	4684	5	0.03	<1	>10000	13	<5	3	2893	<0.01	<10	8	<10
B880298	Core	>10	5094	33	0.02	1	5894	15	<5	10	1915	<0.01	<10	32	<10
B880299	Core	>10	4072	2	0.02	1	>10000	18	<5	3	1757	0.02	<10	22	<10
B880300	Pulp	9.71	4095	3	0.04	2	>10000	93	<5	8	1884	0.03	<10	39	<10
B880301	Core	9.61	4138	2	0.02	<1	>10000	12	<5	3	2458	<0.01	<10	9	<10
B880302	Core	>10	2297	3	0.03	<1	>10000	12	<5	4	728	0.03	<10	42	<10
B880303	Core	3.40	1830	1	0.18	1	>10000	12	<5	3	2842	0.12	<10	78	<10
B880304	Core	0.82	733	4	2.42	7	999	10	<5	6	704	0.25	<10	57	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B880305	Core	3.88	957	2	0.08	<1	>10000	11	<5	3	3007	0.07	<10	50	<10
B880306	Core	8.26	1906	2	0.44	<1	>10000	11	<5	4	744	0.07	<10	77	<10
B880307	Core	>10	1995	4	0.03	1	9695	11	<5	3	285	0.02	<10	18	<10
B880308	Core	3.23	919	2	0.14	<1	>10000	12	<5	2	3297	0.05	<10	33	<10
B880309	Core	6.94	4020	1	0.04	2	>10000	121	<5	9	4456	0.08	<10	40	18
B880310 Dup	Core	7.06	4087	1	0.04	2	>10000	109	<5	6	4389	0.07	<10	40	18
B880311	Core	7.82	3681	1	0.08	4	>10000	80	<5	12	2955	0.04	<10	46	12
B880312	Core	8.74	4629	3	0.08	5	>10000	58	<5	12	2768	0.04	<10	47	<10
B880313	Core	8.85	7926	1	0.44	2	5286	13	<5	10	3578	0.03	<10	52	<10
B880314	Core	9.14	4902	4	0.03	4	>10000	24	<5	10	2488	0.03	<10	34	<10
B880315	Core	7.70	3301	2	0.53	14	8391	28	<5	14	2205	0.24	<10	82	<10
B880316	Core	7.72	3945	2	0.74	15	>10000	32	<5	14	2410	0.31	<10	92	<10
B880317	Core	9.01	5684	2	0.22	9	6700	33	<5	13	2686	0.14	<10	62	<10
B880318	Core	9.34	4254	2	0.06	4	>10000	29	<5	10	2164	0.03	<10	30	<10
B880319	Core	9.75	4475	9	0.02	1	>10000	37	<5	8	1876	<0.01	<10	21	<10
B880320	Pulp	7.48	2931	2	0.06	<1	>10000	117	<5	8	2187	0.06	<10	75	<10
B880321	Core	>10	4119	3	0.02	1	>10000	24	<5	5	2052	<0.01	<10	11	<10
B880322	Core	9.50	3692	1	0.02	2	>10000	48	<5	7	1531	<0.01	<10	10	<10
B880323	Core	9.89	3419	2	0.02	<1	>10000	72	<5	7	842	0.01	<10	18	<10
B880324	Core	>10	3847	2	0.02	1	8064	49	<5	8	1335	<0.01	<10	20	<10
B880325	Core	9.85	2942	1	0.03	<1	>10000	43	<5	5	1125	<0.01	<10	18	<10
B880326	Core	8.89	3354	2	0.03	<1	>10000	21	<5	8	1569	<0.01	<10	22	<10
B880327	Core	9.11	4190	2	0.02	<1	>10000	34	<5	7	2048	<0.01	<10	20	<10
B880328	Core	9.67	2826	2	0.02	<1	>10000	16	<5	11	414	<0.01	<10	18	<10
B880329	Core	7.98	3844	2	0.02	1	>10000	69	<5	8	1424	0.01	<10	18	<10
B880330 Dup	Core	7.80	3739	2	0.02	<1	>10000	64	<5	7	1401	<0.01	<10	18	<10
B880331	Core	7.92	3550	3	0.02	<1	>10000	78	<5	10	1326	<0.01	<10	16	<10
B880332	Core	3.17	4189	8	0.07	3	>10000	26	<5	17	2002	0.09	<10	127	<10
B880333	Core	9.58	3253	1	0.02	<1	>10000	26	<5	9	1626	<0.01	<10	23	<10
B880334	Core	9.87	2726	4	0.02	<1	>10000	50	<5	23	570	0.01	<10	34	<10
B880335	Core	9.84	3801	4	0.02	<1	>10000	49	<5	12	1711	<0.01	<10	25	<10
B880336	Core	>10	4704	2	0.02	3	>10000	30	<5	4	3386	<0.01	<10	6	<10
B880337	Core	>10	4678	4	0.02	<1	>10000	20	<5	3	3435	<0.01	<10	5	<10
B880338	Core	9.83	2995	4	0.05	5	>10000	53	<5	7	1717	0.07	<10	50	<10
B880339	Core	8.61	2719	2	0.03	<1	>10000	25	<5	14	649	0.01	<10	35	<10
B880340	Pulp	7.48	3688	2	0.04	4	>10000	18	<5	6	1590	0.17	<10	202	<10
B880341	Core	>10	4044	9	0.01	2	5148	35	<5	10	1079	0.02	<10	33	<10
B880342	Core	0.83	724	4	2.36	7	855	12	5	6	678	0.24	<10	54	<10
B880343	Core	8.79	2808	1	0.02	1	>10000	34	<5	11	644	0.01	<10	28	<10
B880344	Core	>10	3187	1	0.25	<1	>10000	26	<5	13	1914	0.03	<10	18	<10



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10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B880345	Core	9.95	2507	2	0.03	<1	>10000	14	<5	6	886	0.04	<10	37	<10
B880346	Core	>10	2973	11	0.02	<1	>10000	25	<5	10	802	0.01	<10	26	<10
B880347	Core	>10	2155	9	0.02	1	>10000	19	<5	10	333	0.03	<10	36	<10
B880348	Core	>10	2292	2	0.02	2	>10000	19	<5	5	629	0.03	<10	31	<10
B880349	Core	9.74	2299	5	0.02	2	>10000	22	<5	6	626	0.02	<10	41	<10
B880350 Dup	Core	9.90	2356	5	0.02	1	>10000	43	<5	5	597	0.03	<10	41	<10
B880351	Core	9.32	1906	5	0.02	2	>10000	25	<5	3	358	0.02	<10	18	<10
B880352	Core	8.36	2541	2	0.02	1	>10000	57	<5	8	520	0.02	<10	36	<10
B880353	Core	9.20	1689	6	0.02	2	>10000	15	<5	5	267	0.04	<10	48	<10
B880354	Core	>10	2508	3	0.02	<1	>10000	40	<5	5	579	<0.01	<10	12	<10



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B880265	Core	11	22	744.7	21.4	7.6	11.7	38.6	<0.1	3.2	369.0	0.6	300.3	84.6	43.2
B880266	Core	26	12	856.2	21.8	7.7	13.9	42.0	1.9	3.2	422.9	0.6	347.7	101.1	48.8
B880267	Core	31	9	723.0	17.2	5.9	11.0	34.9	2.0	2.4	372.4	0.5	281.3	83.5	40.4
B880268	Core	17	8	883.1	16.9	5.7	11.2	35.5	0.4	2.3	477.1	0.4	315.2	96.6	41.6
B880269	Core	33	16	942.3	24.6	8.3	16.3	47.8	2.2	3.8	482.9	0.6	383.5	110.6	55.8
B880270 Dup	Core	34	13	911.4	23.2	7.7	15.2	46.6	2.3	3.5	462.5	0.6	364.7	106.9	53.7
B880271	Core	15	11	>1000	25.9	8.3	16.6	56.6	0.5	3.7	619.3	0.7	490.3	143.5	69.2
B880272	Core	21	42	692.3	22.6	8.0	13.2	39.7	2.6	3.4	342.7	0.6	289.8	81.4	44.4
B880273	Core	12	10	570.1	15.6	6.0	8.2	27.4	0.1	2.4	294.6	0.5	212.6	63.3	32.0
B880274	Core	19	14	>1000	25.4	8.5	17.3	58.9	1.6	3.6	>1000	0.6	542.2	184.1	61.0
B880275	Core	108	40	>1000	15.4	4.6	11.8	41.3	2.4	2.0	>1000	0.4	395.7	140.7	43.8
B880276	Core	14	20	989.1	22.5	8.4	11.9	42.6	0.9	3.4	609.3	0.7	337.6	104.9	45.9
B880277	Core	8	5	888.9	18.9	6.7	11.0	38.1	0.9	2.8	515.8	0.6	318.7	97.2	44.2
B880278	Core	8	12	>1000	25.8	7.2	19.7	69.0	<0.1	3.5	>1000	0.6	718.8	262.2	70.5
B880279	Core	10	4	675.1	16.5	5.9	9.2	31.7	<0.1	2.3	369.5	0.5	256.8	76.4	36.3
B880280	Pulp	61	52	870.7	21.9	7.3	15.0	42.5	9.4	3.2	426.1	0.6	350.5	102.5	50.1
B880281	Core	15	13	>1000	21.1	6.9	14.4	47.9	0.5	3.1	816.5	0.5	413.0	129.8	52.3
B880282	Core	20	12	>1000	21.9	7.7	14.7	50.4	1.4	3.2	>1000	0.6	502.0	183.2	48.8
B880283	Core	22	8	>1000	19.9	4.2	22.7	93.0	0.2	2.3	>1000	0.2	>1000	500.4	78.1
B880284	Core	10	4	>1000	33.8	6.6	32.3	136.8	<0.1	3.7	>1000	0.4	>1000	741.8	114.6
B880285	Core	97	35	>1000	17.5	5.8	11.3	37.2	1.5	2.5	707.6	0.5	359.0	118.6	41.0
B880286	Core	19	16	>1000	24.9	7.0	21.1	73.8	0.6	3.2	>1000	0.5	898.9	306.8	84.9
B880287	Core	34	30	867.4	26.0	9.8	15.7	43.1	2.0	4.0	441.5	0.7	342.1	102.2	50.5
B880288	Core	22	16	>1000	20.2	6.5	14.8	45.0	2.0	2.8	926.2	0.4	534.3	204.1	72.3
B880289	Core	7	32	>1000	21.2	6.7	14.8	47.1	2.1	3.0	905.5	0.6	548.2	151.4	61.6
B880290 Dup	Core	7	37	>1000	23.7	7.4	16.7	54.0	4.0	3.4	959.2	0.6	521.6	155.8	62.9
B880291	Core	4	31	>1000	26.3	9.3	15.7	45.2	0.8	4.0	548.9	0.7	363.0	112.0	53.3
B880292	Core	6	11	>1000	21.0	6.2	15.2	56.8	0.3	2.9	>1000	0.5	640.0	210.3	71.4
B880293	Core	17	11	>1000	15.2	2.0	20.3	73.2	0.1	1.3	>1000	<0.1	>1000	365.6	96.5
B880294	Core	33	66	>1000	15.9	4.7	13.1	41.6	3.7	2.1	782.3	0.3	459.2	151.1	51.5
B880295	Core	10	26	876.5	34.0	13.4	15.8	51.6	0.3	5.5	461.9	1.1	357.9	102.2	56.8
B880296	Core	6	21	947.3	51.3	21.3	17.9	64.5	0.3	8.8	497.8	1.9	375.6	111.1	64.3
B880297	Core	15	6	530.5	20.3	7.8	9.1	28.8	<0.1	3.3	274.3	0.5	205.2	60.8	31.8
B880298	Core	15	14	>1000	29.8	12.1	13.8	58.6	<0.1	4.8	>1000	0.9	521.5	173.0	69.4
B880299	Core	15	7	558.6	23.3	9.0	11.0	34.8	<0.1	3.7	281.0	0.6	232.7	68.1	37.3
B880300	Pulp	24	25	869.8	22.4	7.8	14.6	43.7	2.6	3.4	459.1	0.6	337.7	100.3	51.1
B880301	Core	18	7	435.6	17.4	6.6	8.4	27.0	<0.1	2.9	203.2	0.5	180.0	54.5	29.1
B880302	Core	8	15	966.3	25.2	8.2	15.4	50.3	<0.1	3.7	477.8	0.6	399.8	115.1	59.7
B880303	Core	42	52	>1000	26.8	8.9	18.3	54.5	<0.1	4.1	588.7	0.6	446.4	132.8	64.6
B880304	Core	56	7	79.9	3.6	1.8	1.5	4.4	2.5	0.6	39.8	0.2	31.5	9.2	5.1



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B880305	Core	17	56	871.2	19.8	6.4	13.1	40.2	0.4	2.8	463.4	0.5	338.2	99.7	46.7
B880306	Core	54	42	608.1	17.1	5.9	9.7	31.6	0.8	2.6	310.3	0.5	243.0	71.8	35.7
B880307	Core	7	8	855.0	20.9	8.0	10.8	38.0	<0.1	3.4	447.5	0.7	323.6	97.9	45.6
B880308	Core	23	26	732.4	20.6	6.8	13.2	39.4	<0.1	3.1	363.6	0.5	300.1	86.3	45.5
B880309	Core	61	12	888.1	21.6	6.5	16.7	48.6	1.6	3.0	435.2	0.3	395.2	114.6	58.2
B880310 Dup	Core	58	11	971.5	23.6	6.7	17.1	46.7	1.5	3.3	424.7	0.3	402.3	111.6	61.0
B880311	Core	47	12	924.1	22.3	6.8	16.5	46.0	5.0	3.2	433.6	0.5	391.0	112.8	56.8
B880312	Core	34	13	>1000	26.0	7.9	17.1	53.0	2.5	3.7	510.4	0.5	462.4	130.6	67.5
B880313	Core	67	28	713.3	12.8	3.6	11.0	30.3	1.2	1.7	361.2	0.3	285.4	82.4	40.0
B880314	Core	27	11	930.0	22.3	6.5	15.0	47.2	0.7	3.1	465.4	0.4	381.7	109.4	59.4
B880315	Core	82	23	516.2	12.2	3.9	8.7	24.9	1.6	1.7	247.8	0.3	207.2	60.6	30.3
B880316	Core	64	25	603.1	14.3	4.9	9.0	26.2	1.2	2.1	335.9	0.4	215.8	66.5	31.1
B880317	Core	63	16	>1000	8.8	2.4	6.9	25.0	0.5	1.1	941.0	0.1	273.4	102.2	26.5
B880318	Core	30	14	977.2	16.3	5.1	10.9	34.0	1.0	2.4	634.9	0.3	296.9	97.0	37.9
B880319	Core	23	20	>1000	13.4	4.1	9.3	31.1	0.3	1.8	716.7	0.2	292.5	100.6	34.8
B880320	Pulp	12	32	855.8	23.7	8.7	15.0	43.1	0.9	3.7	423.8	0.8	342.0	99.0	50.0
B880321	Core	17	5	612.2	13.5	4.7	8.7	27.2	<0.1	1.9	345.4	0.3	217.2	65.0	31.1
B880322	Core	14	10	>1000	23.0	7.4	16.5	55.0	<0.1	3.1	>1000	0.6	550.2	186.7	63.5
B880323	Core	9	12	>1000	19.5	6.9	12.4	37.4	0.2	3.0	916.3	0.6	342.7	119.6	41.1
B880324	Core	13	7	>1000	18.5	5.0	17.7	59.2	0.5	2.3	>1000	0.4	627.5	229.3	64.4
B880325	Core	8	26	706.1	17.6	6.1	10.4	30.4	1.0	2.7	424.2	0.5	230.8	73.1	33.1
B880326	Core	11	10	>1000	20.7	6.6	14.4	47.2	0.8	3.0	867.9	0.5	428.8	138.5	53.2
B880327	Core	21	9	>1000	19.4	6.0	14.4	45.9	0.3	2.7	>1000	0.4	427.4	144.7	51.1
B880328	Core	7	2	>1000	22.6	5.4	20.6	82.4	<0.1	2.6	>1000	0.4	989.7	393.1	80.8
B880329	Core	13	9	>1000	22.3	7.5	15.8	50.6	0.3	3.3	>1000	0.6	449.1	160.2	55.5
B880330 Dup	Core	11	9	>1000	24.4	7.8	17.3	51.2	0.5	3.3	>1000	0.6	481.8	162.2	56.1
B880331	Core	13	13	>1000	28.6	8.0	25.4	76.8	0.8	3.6	>1000	0.6	812.0	297.7	83.0
B880332	Core	75	46	>1000	25.7	8.1	18.7	58.2	13.8	3.6	>1000	0.5	511.7	167.5	63.1
B880333	Core	16	22	>1000	20.3	6.1	16.1	52.7	1.1	2.7	>1000	0.5	546.6	199.5	51.8
B880334	Core	13	8	>1000	31.7	7.1	33.3	119.5	0.5	3.7	>1000	0.5	>1000	569.1	112.7
B880335	Core	14	7	>1000	39.8	6.5	44.0	183.3	1.0	3.6	>1000	0.4	>1000	>1000	173.3
B880336	Core	23	3	>1000	21.5	4.3	26.3	90.4	0.2	2.4	>1000	0.3	>1000	441.9	91.4
B880337	Core	18	2	347.1	8.6	2.7	5.7	17.2	<0.1	1.2	171.4	<0.1	138.7	38.6	19.7
B880338	Core	24	65	362.6	11.7	4.1	7.2	20.9	4.7	1.8	173.7	0.3	153.9	42.0	24.1
B880339	Core	11	26	465.0	12.7	4.5	8.5	23.4	0.7	1.9	232.0	0.3	201.2	55.9	29.5
B880340	Pulp	57	49	845.0	21.3	6.9	14.7	42.0	9.5	3.1	413.7	0.5	330.2	96.4	49.4
B880341	Core	16	10	>1000	20.3	5.6	15.8	57.6	0.3	2.6	>1000	0.4	793.5	237.5	78.3
B880342	Core	51	6	94.2	3.4	1.9	1.5	4.6	3.8	0.6	50.5	0.2	34.6	10.3	5.0
B880343	Core	12	26	>1000	31.0	10.1	20.7	68.2	0.8	4.4	>1000	0.7	743.8	231.5	85.2
B880344	Core	43	20	599.2	11.5	4.0	8.0	25.8	1.9	1.7	311.1	0.2	229.6	67.4	30.2



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B880345	Core	11	32	968.1	23.3	8.1	14.6	47.7	<0.1	3.5	497.4	0.6	411.3	115.0	59.1
B880346	Core	14	16	>1000	34.4	10.5	27.8	97.8	0.4	4.8	>1000	0.7	>1000	353.5	126.6
B880347	Core	10	20	>1000	29.1	8.2	24.8	87.2	0.2	3.8	>1000	0.6	>1000	316.5	112.4
B880348	Core	8	22	743.5	19.8	7.6	11.6	36.2	0.9	3.2	392.6	0.6	292.8	85.2	42.0
B880349	Core	8	37	958.5	23.4	9.2	13.6	44.1	0.7	3.8	513.9	0.7	365.8	109.4	50.5
B880350 Dup	Core	41	37	>1000	26.9	10.2	15.4	49.0	0.8	4.3	584.0	0.8	408.6	123.0	58.9
B880351	Core	10	40	674.0	29.9	12.0	13.9	43.6	0.8	5.0	352.6	0.9	269.4	76.6	42.3
B880352	Core	10	30	>1000	39.2	12.0	25.5	95.1	1.0	5.4	>1000	0.8	812.8	264.5	103.9
B880353	Core	8	35	>1000	19.2	6.4	13.0	44.0	<0.1	2.8	571.3	0.6	397.7	116.7	53.6
B880354	Core	10	17	823.1	24.1	8.9	13.6	43.7	0.5	3.8	423.1	0.7	328.5	93.3	50.3

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#200 - 11620 Horseshoe Way
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Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B880265	Core	4.0	0.9	5.7	80.5	74.31	328.0	8.5
B880266	Core	4.0	0.8	5.1	80.6	40.68	117.7	14.5
B880267	Core	3.2	0.7	4.1	60.3	55.07	93.9	19.0
B880268	Core	2.9	0.6	4.1	60.1	66.69	60.2	25.2
B880269	Core	4.6	1.0	5.9	93.6	138.79	86.9	43.7
B880270 Dup	Core	4.3	0.9	5.4	87.6	139.43	87.1	41.7
B880271	Core	4.8	1.0	5.9	90.3	61.15	65.9	30.7
B880272	Core	4.3	0.9	5.5	84.1	79.52	180.7	53.6
B880273	Core	2.8	0.7	4.5	58.5	60.63	55.9	22.9
B880274	Core	4.5	0.9	5.7	87.7	54.40	89.1	20.5
B880275	Core	2.8	0.5	3.4	50.3	44.59	84.7	30.3
B880276	Core	4.0	1.0	5.7	85.0	69.22	97.9	36.3
B880277	Core	3.5	0.8	4.9	69.7	5.19	22.3	2.7
B880278	Core	4.5	0.9	5.1	87.6	9.50	31.1	2.5
B880279	Core	2.9	0.6	4.4	58.9	10.96	24.4	3.1
B880280	Pulp	4.0	0.8	5.0	78.7	0.49	302.6	9.5
B880281	Core	3.9	0.7	4.9	76.1	17.48	34.0	5.7
B880282	Core	3.5	0.9	5.5	81.3	13.22	84.0	6.9
B880283	Core	3.4	0.4	2.9	73.9	25.21	137.1	16.6
B880284	Core	4.8	0.8	4.8	98.0	21.26	48.6	9.8
B880285	Core	2.9	0.7	4.6	63.1	42.14	146.6	16.6
B880286	Core	4.3	0.8	5.0	80.9	12.82	80.3	7.9
B880287	Core	4.6	1.1	6.2	102.2	72.21	208.7	20.5
B880288	Core	3.3	0.6	4.0	66.1	42.57	82.9	43.2
B880289	Core	4.0	0.8	5.0	80.2	134.38	106.3	116.2
B880290 Dup	Core	4.4	0.9	5.5	87.4	111.31	100.8	108.8
B880291	Core	4.7	1.1	6.3	98.5	25.22	340.8	13.3
B880292	Core	3.6	0.7	4.5	70.6	20.96	118.7	13.6
B880293	Core	2.4	0.2	1.7	38.1	8.09	100.6	5.0
B880294	Core	2.8	0.5	3.3	57.9	47.71	102.6	16.8
B880295	Core	6.0	1.7	9.6	148.5	4.57	130.7	4.1
B880296	Core	8.7	2.7	16.1	228.5	42.73	108.4	22.2
B880297	Core	3.5	0.9	5.1	87.9	1.36	72.7	2.5
B880298	Core	4.8	1.4	8.1	136.2	1.58	251.8	4.5
B880299	Core	4.2	1.0	5.9	98.0	2.78	53.8	3.2
B880300	Pulp	4.3	0.9	5.5	86.2	24.31	158.6	9.8
B880301	Core	3.1	0.8	4.4	73.8	0.69	52.0	1.2
B880302	Core	4.7	0.9	5.5	98.1	2.49	77.9	1.8
B880303	Core	5.2	1.0	6.0	102.4	0.36	85.0	5.7
B880304	Core	0.5	0.2	1.9	19.7	1.69	8.8	4.4



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Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb REE-LB-MS ppm 0.1	Tm REE-LB-MS ppm 0.1	Yb REE-LB-MS ppm 0.1	Y REE-LB-MS ppm 0.10	Ta Ta-4A-LL-MS ppm 0.05	Th Th-4A-LL-MS ppm 0.2	U U-4A-LL-MS ppm 0.1
B880305	Core	3.6	0.7	4.5	76.5	2.40	60.2	6.9
B880306	Core	3.1	0.7	4.5	69.2	8.62	30.1	13.5
B880307	Core	3.6	1.0	5.7	100.0	1.49	44.3	1.2
B880308	Core	3.8	0.8	4.6	80.8	0.15	45.7	4.7
B880309	Core	4.2	0.7	3.9	74.4	52.70	108.4	14.4
B880310 Dup	Core	4.3	0.7	4.1	82.5	42.52	68.1	13.3
B880311	Core	4.2	0.8	5.1	81.7	10.76	85.9	5.3
B880312	Core	4.8	0.8	4.8	91.6	14.25	97.4	7.2
B880313	Core	2.5	0.4	2.5	44.0	7.44	38.9	6.7
B880314	Core	4.2	0.7	4.3	78.2	13.08	66.6	8.2
B880315	Core	2.2	0.4	2.6	45.3	8.27	34.5	4.5
B880316	Core	2.5	0.5	3.6	55.3	13.15	67.3	6.5
B880317	Core	1.4	0.2	1.8	29.2	9.48	44.0	3.7
B880318	Core	3.0	0.6	3.4	58.4	16.69	71.7	3.7
B880319	Core	2.3	0.4	2.5	46.4	14.96	88.9	6.5
B880320	Pulp	4.4	1.0	6.4	96.5	6.83	174.1	2.2
B880321	Core	2.5	0.5	3.3	50.0	0.59	33.1	2.1
B880322	Core	4.0	0.9	5.5	80.2	0.55	56.4	4.0
B880323	Core	3.3	0.8	5.1	77.1	4.75	61.6	4.6
B880324	Core	3.2	0.6	4.0	60.6	3.11	50.5	3.6
B880325	Core	3.2	0.7	4.6	69.4	17.06	150.6	9.0
B880326	Core	3.9	0.8	4.4	73.4	6.09	64.4	2.3
B880327	Core	3.5	0.7	4.1	73.5	5.11	73.3	3.3
B880328	Core	3.6	0.6	4.3	71.0	2.43	29.0	2.6
B880329	Core	4.0	0.9	5.3	88.1	1.59	64.4	4.0
B880330 Dup	Core	4.2	0.9	5.2	89.1	1.80	66.8	4.5
B880331	Core	5.0	0.9	5.9	99.6	4.05	90.9	4.5
B880332	Core	4.8	0.9	5.1	92.2	29.23	76.9	13.3
B880333	Core	3.5	0.7	4.6	68.2	4.93	140.5	8.1
B880334	Core	5.3	0.9	5.4	93.6	14.96	137.5	6.6
B880335	Core	5.2	0.8	4.7	88.1	3.81	112.5	4.5
B880336	Core	3.5	0.5	3.5	62.6	13.37	44.4	8.3
B880337	Core	1.6	0.2	1.6	30.9	0.50	43.7	1.1
B880338	Core	2.1	0.4	2.7	47.5	11.99	53.4	6.1
B880339	Core	2.3	0.5	3.0	50.1	7.28	271.3	6.5
B880340	Pulp	3.9	0.8	5.0	78.3	38.11	290.2	8.7
B880341	Core	3.1	0.6	3.8	72.0	13.65	117.2	5.8
B880342	Core	0.4	0.2	1.9	19.0	1.77	9.3	4.2
B880343	Core	5.2	1.2	6.5	114.5	36.97	152.7	8.3
B880344	Core	2.1	0.4	2.6	44.5	17.27	42.9	4.9



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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B880345	Core	4.3	0.9	5.5	89.5	5.27	85.4	2.9
B880346	Core	6.0	1.2	6.8	128.2	8.67	180.9	4.3
B880347	Core	5.0	1.0	6.0	103.5	8.50	139.0	6.1
B880348	Core	3.6	0.8	5.4	82.6	59.68	76.8	26.6
B880349	Core	4.3	1.0	6.2	104.9	94.82	134.6	37.5
B880350 Dup	Core	4.6	1.2	6.7	115.3	11.88	135.9	34.9
B880351	Core	5.3	1.3	7.4	135.3	100.98	272.1	32.6
B880352	Core	7.3	1.4	7.6	135.5	31.22	348.9	6.8
B880353	Core	3.5	0.8	5.0	75.0	4.25	88.4	4.9
B880354	Core	4.4	1.0	6.2	93.9	26.76	209.0	7.2

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B880265	Core	0.29													
B880265 Dup		0.28													
QCV1011-00011-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B880283	Core	0.11													
B880283 Dup		0.10													
QCV1011-00011-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
B880301	Core	0.02													
B880301 Dup		0.02													
QCV1011-00011-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
B880319	Core	0.12													
B880319 Dup		0.12													
QCV1011-00011-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B880337	Core	0.06													
B880337 Dup		0.06													
QCV1011-00011-0014-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B880265	Core		0.30	<0.01	36.35	<0.01	3.09	0.05	40.20	18.20	0.34	0.03	3.99	0.34	0.05
B880265 Dup			0.32	<0.01	36.35	<0.01	3.10	0.05	40.25	18.19	0.36	0.03	4.03	0.35	0.05
QCV1011-00013-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B880283	Core		0.94	0.02	29.97	<0.01	8.56	0.11	36.69	17.06	0.47	0.04	1.40	4.60	0.05
B880283 Dup			0.94	0.02	29.93	<0.01	8.57	0.12	36.72	16.91	0.47	0.04	1.45	4.61	0.05
QCV1011-00013-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B880301	Core		0.23	<0.01	31.98	<0.01	3.37	<0.01	40.09	18.02	0.59	0.03	3.94	1.49	0.01
B880301 Dup			0.24	<0.01	32.06	<0.01	3.37	0.01	40.19	17.95	0.60	0.03	3.95	1.48	0.01
QCV1011-00013-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B880319	Core		0.30	<0.01	31.40	<0.01	5.50	0.02	39.70	15.54	0.64	0.04	3.70	2.88	0.03
B880319 Dup			0.35	<0.01	31.17	<0.01	5.42	0.02	39.15	16.22	0.58	0.03	3.79	2.77	0.02
QCV1011-00013-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00013-0014-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00013-0016-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.65	0.05	8.06	<0.01	6.20	1.68	4.50	0.59	0.11	7.44	0.16	50.76	0.30



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B880265	Core		<0.5	0.12	10	47	<2	>10	<0.5	3	27	25	2.20	0.04	301
B880265 Dup			<0.5	0.12	11	50	<2	>10	<0.5	3	21	24	2.18	0.04	311
QCV1011-00012-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			96.6									6371			
B880283	Core		<0.5	0.48	134	140	<2	>10	<0.5	7	23	11	5.45	0.11	5754
B880283 Dup			0.7	0.45	130	133	<2	>10	<0.5	7	22	8	5.56	0.10	5861
QCV1011-00012-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			97.3									5920			
B880301	Core		<0.5	0.09	<5	29	<2	>10	<0.5	3	11	3	2.23	<0.01	167
B880301 Dup			<0.5	0.09	<5	30	<2	>10	<0.5	3	11	3	2.40	<0.01	182
QCV1011-00012-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										119	1014	681			
B880319	Core		<0.5	0.12	16	48	<2	>10	<0.5	4	14	11	3.87	0.02	711
B880319 Dup			<0.5	0.12	19	49	<2	>10	<0.5	4	14	11	3.96	0.02	694
QCV1011-00012-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B880337	Core		<0.5	0.01	5	50	<2	>10	<0.5	2	9	5	2.00	<0.01	160
B880337 Dup			<0.5	0.01	5	53	<2	>10	<0.5	2	9	6	2.07	<0.01	163
QCV1011-00012-0014-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1011-00012-0016-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B880265	Core	102.96													
B880265 Dup		103.08													
QCV1011-00013-0002-BLK		<0.01													
B880283	Core	99.91													
B880283 Dup		99.85													
QCV1011-00013-0005-BLK		<0.01													
B880301	Core	99.77													
B880301 Dup		99.90													
QCV1011-00013-0008-BLK		<0.01													
B880319	Core	99.77													
B880319 Dup		99.53													
QCV1011-00013-0011-BLK		<0.01													
QCV1011-00013-0014-BLK		<0.01													
QCV1011-00013-0016-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.51													



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B880265	Core	>10	2438	<1	0.02	1	>10000	58	<5	6	787	0.02	<10	27	<10
B880265 Dup		>10	2449	1	0.02	1	>10000	59	<5	6	769	0.02	<10	27	<10
QCV1011-00012-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9979							
B880283	Core	>10	3338	75	0.03	2	3956	31	<5	18	751	0.01	<10	42	<10
B880283 Dup		>10	3421	74	0.03	2	3818	28	<5	17	716	0.01	<10	40	<10
QCV1011-00012-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
B880301	Core	9.61	4138	2	0.02	<1	>10000	12	<5	3	2458	<0.01	<10	9	<10
B880301 Dup		>10	4463	2	0.02	<1	>10000	12	<5	3	2665	<0.01	<10	9	<10
QCV1011-00012-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.08	356	410	19							
B880319	Core	9.75	4475	9	0.02	1	>10000	37	<5	8	1876	<0.01	<10	21	<10
B880319 Dup		9.94	4556	9	0.02	1	>10000	36	<5	8	1926	<0.01	<10	21	<10
QCV1011-00012-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B880337	Core	>10	4678	4	0.02	<1	>10000	20	<5	3	3435	<0.01	<10	5	<10
B880337 Dup		>10	4894	3	0.02	<1	>10000	20	<5	4	3505	<0.01	<10	6	<10
QCV1011-00012-0014-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00012-0016-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10



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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B880265	Core	11	22												
B880265 Dup		15	22												
QCV1011-00012-0002-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5406													
B880283	Core	22	8												
B880283 Dup		21	8												
QCV1011-00012-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5204													
B880301	Core	18	7												
B880301 Dup		18	7												
QCV1011-00012-0008-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		145													
B880319	Core	23	20												
B880319 Dup		24	37												
QCV1011-00012-0011-BLK		<2	<1												
B880337	Core	18	2												
B880337 Dup		19	3												
QCV1011-00012-0014-BLK		<2	<1												
QCV1011-00012-0016-BLK		<2	<1												
B880265	Core			744.7	21.4	7.6	11.7	38.6	<0.1	3.2	369.0	0.6	300.3	84.6	43.2
B880265 Dup				760.6	22.3	7.6	11.7	39.4	<0.1	3.3	384.7	0.6	293.8	87.4	44.8
QCV1011-00013-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B880283	Core			>1000	19.9	4.2	22.7	93.0	0.2	2.3	>1000	0.2	>1000	500.4	78.1
B880283 Dup				>1000	20.0	4.4	22.2	90.6	0.2	2.1	>1000	0.2	>1000	469.7	77.7
QCV1011-00013-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B880301	Core			435.6	17.4	6.6	8.4	27.0	<0.1	2.9	203.2	0.5	180.0	54.5	29.1
B880301 Dup				440.7	17.6	6.7	8.6	27.7	<0.1	3.0	209.5	0.5	185.1	50.5	29.5
QCV1011-00013-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B880319	Core			>1000	13.4	4.1	9.3	31.1	0.3	1.8	716.7	0.2	292.5	100.6	34.8
B880319 Dup				>1000	13.6	4.3	9.5	31.9	0.3	1.9	745.2	0.2	296.7	105.4	35.1
QCV1011-00013-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00013-0014-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00013-0016-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				131.0	18.3	14.9	2.1	14.4	10.6	4.4	62.6	2.0	57.6	15.8	12.4



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Certificate of Analysis

10-360-03413-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B880265	Core	4.0	0.9	5.7	80.5			
B880265 Dup		3.9	0.9	5.8	82.1			
QCV1011-00013-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B880283	Core	3.4	0.4	2.9	73.9			
B880283 Dup		2.9	0.4	2.8	60.3			
QCV1011-00013-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B880301	Core	3.1	0.8	4.4	73.8			
B880301 Dup		3.1	0.8	4.6	78.2			
QCV1011-00013-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B880319	Core	2.3	0.4	2.5	46.4			
B880319 Dup		2.3	0.4	2.5	50.6			
QCV1011-00013-0011-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00013-0014-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00013-0016-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.5	2.3	14.9	124.5			
B880265	Core					74.31	328.0	8.5
B880265 Dup						72.67	328.7	8.3
QCV1103-01164-0002-BLK						<0.05	<0.2	<0.1
B880283	Core					25.21	137.1	16.6
B880283 Dup						24.79	139.8	16.6
QCV1103-01164-0005-BLK						<0.05	<0.2	<0.1
B880301	Core					0.69	52.0	1.2
B880301 Dup						0.68	52.4	1.3
QCV1103-01164-0008-BLK						<0.05	<0.2	<0.1
B880319	Core					14.96	88.9	6.5
B880319 Dup						14.85	79.0	6.8
QCV1103-01164-0011-BLK						<0.05	<0.2	<0.1
B880337	Core					0.50	43.7	1.1
B880337 Dup						0.54	44.1	1.1
QCV1103-01164-0014-BLK						<0.05	<0.2	<0.1
QCV1103-01164-0016-BLK						<0.05	<0.2	<0.1

Certificate of Analysis

10-360-03430-01

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/02/2010 Date Completed: 12/08/2010 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-021</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">50</td> <td>Core</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p>Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	50	Core	SP-RX-2K/Rock/Chips/Drill Core	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	50	Core	SP-RX-2K/Rock/Chips/Drill Core																																		
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Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																			
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Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																																			
Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875375	Core	0.09	0.69	0.03	25.60	<0.01	15.87	0.29	29.50	14.06	0.59	0.24	4.51	9.28	1.29
B875376	Core	2.07	1.24	0.04	23.18	<0.01	27.82	0.79	14.97	9.16	0.49	0.22	11.55	9.77	1.62
B875377	Core	0.90	0.61	0.01	30.04	<0.01	11.53	0.13	33.45	15.48	0.75	0.05	6.31	3.05	0.56
B875378	Core	0.33	0.19	<0.01	33.48	<0.01	4.29	0.01	38.70	18.67	0.62	0.03	5.56	1.08	0.04
B875379	Core	0.96	1.00	0.01	26.39	<0.01	23.30	0.27	22.99	10.93	0.53	0.05	8.40	4.66	0.91
B875380 Dup	Core	0.94	1.03	0.01	27.10	<0.01	22.98	0.27	23.20	11.26	0.54	0.05	8.39	4.97	0.90
B875381	Core	0.57	0.37	<0.01	34.54	<0.01	4.79	<0.01	34.59	15.85	0.47	0.06	8.97	2.30	0.07
B875382	Core	1.15	0.65	0.01	25.60	<0.01	27.73	0.23	24.68	10.52	0.43	0.06	7.02	3.47	0.97
B875383	Core	0.53	0.23	<0.01	32.92	<0.01	5.91	0.03	38.60	17.44	0.57	0.04	5.38	1.08	0.07
B875384	Core	1.80	0.31	<0.01	36.50	<0.01	9.77	0.02	27.10	11.37	0.51	0.07	13.72	1.76	0.10
B875385	Core	0.15	0.36	<0.01	4.66	0.08	1.82	0.07	3.05	1.35	0.06	0.01	1.23	85.92	0.09
B875386	Core	0.56	0.23	<0.01	32.49	<0.01	5.17	0.02	38.39	17.40	0.60	0.04	5.76	0.80	0.05
B875387	Core	0.37	0.19	<0.01	32.65	<0.01	4.94	0.01	39.16	17.95	0.68	0.05	5.14	0.70	0.05
B875388	Core	0.75	0.42	<0.01	32.88	<0.01	8.07	0.09	33.96	14.66	0.66	0.06	7.77	2.44	0.08
B875389	Core	0.31	0.16	<0.01	31.44	<0.01	4.16	0.02	41.44	18.17	0.68	0.05	3.50	0.11	0.03
B875390	Pulp	0.76	0.21	0.02	36.07	<0.01	4.73	0.05	38.00	13.77	0.46	0.09	3.90	3.88	0.13
B875391	Core	0.77	0.26	<0.01	33.10	0.03	9.46	0.06	33.80	14.44	0.53	0.06	7.85	0.88	0.12
B875392	Core	0.34	0.13	<0.01	32.82	<0.01	4.09	0.03	39.75	19.11	0.55	0.04	5.43	0.09	0.03
B875393	Core	0.36	0.14	<0.01	31.71	<0.01	4.67	0.01	38.93	17.41	0.55	0.06	5.56	0.42	0.04
B875394	Core	0.50	0.16	<0.01	31.56	<0.01	5.28	<0.01	39.12	17.26	0.61	0.04	4.99	0.76	0.03
B875395	Core	1.82	0.39	0.01	30.67	<0.01	16.11	0.09	26.20	11.21	0.58	0.07	11.45	2.09	0.35
B875396	Core	0.79	0.19	<0.01	31.63	<0.01	8.72	0.03	35.42	14.78	0.52	0.05	6.14	1.45	0.14
B875397	Core	0.62	0.24	<0.01	32.25	<0.01	6.80	0.02	37.10	16.15	0.46	0.09	6.37	0.57	0.07
B875398	Core	0.37	0.15	<0.01	33.19	<0.01	4.14	0.03	39.69	18.48	0.70	0.06	5.26	0.23	0.05
B875399	Core	0.44	0.20	<0.01	31.78	<0.01	4.95	0.05	38.12	17.94	0.62	0.07	5.41	0.16	0.09
B874900 Dup	Core	0.43	0.19	<0.01	32.65	<0.01	4.97	0.04	38.11	18.47	0.63	0.06	5.30	0.16	0.10
B874901	Core	0.52	0.18	<0.01	32.95	<0.01	5.37	0.05	35.23	16.65	0.63	0.05	7.81	0.13	0.07
B874902	Core	0.64	0.25	<0.01	33.60	<0.01	5.74	0.05	35.45	15.60	0.55	0.04	7.67	0.35	0.20
B874903	Core	0.44	0.27	<0.01	35.52	<0.01	4.79	0.05	32.56	15.28	0.52	0.04	10.52	0.23	0.18
B874904	Core	0.25	0.15	<0.01	34.18	<0.01	4.75	0.04	36.28	15.47	0.65	0.04	8.15	0.12	0.06
B874905	Core	0.74	0.30	<0.01	29.62	<0.01	10.36	0.02	36.08	15.12	0.46	0.04	6.37	0.78	0.21
B874906	Core	2.00	0.57	0.01	29.88	<0.01	25.40	0.19	21.49	7.31	0.57	0.06	11.56	2.36	0.43
B874907	Core	0.50	0.26	<0.01	31.79	<0.01	5.05	0.02	40.36	17.64	0.46	0.05	4.16	0.64	0.04
B874908	Core	0.49	0.20	<0.01	35.36	<0.01	6.25	0.02	38.25	14.28	0.60	0.04	5.88	0.32	0.06
B874909	Core	0.51	0.25	<0.01	36.22	<0.01	6.58	0.05	35.28	13.34	0.57	0.04	7.96	0.60	0.09
B874910	Pulp	0.55	1.89	0.37	46.36	<0.01	4.13	0.70	32.10	2.31	0.99	0.46	2.72	7.53	0.24
B874911	Core	0.42	0.21	<0.01	32.42	<0.01	5.34	0.06	39.09	17.29	0.53	0.03	4.76	0.14	0.07
B874912	Core	0.54	0.21	<0.01	34.42	<0.01	5.48	0.05	37.30	14.89	0.68	0.03	6.60	0.17	0.08
B874913	Core	0.55	0.28	<0.01	33.00	<0.01	4.08	0.05	38.11	16.70	0.44	0.08	6.61	0.50	0.04
B874914	Core	0.48	0.20	<0.01	31.12	<0.01	7.08	0.05	39.04	16.80	0.73	0.03	4.05	0.65	0.11



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B874915	Core	0.41	0.17	<0.01	32.26	<0.01	4.86	0.02	39.38	16.69	0.59	0.03	5.06	0.76	0.06
B874916	Core	0.77	0.37	<0.01	33.19	<0.01	6.70	0.06	36.01	13.92	0.62	0.05	7.44	1.35	0.21
B874917	Core	0.67	0.62	<0.01	37.32	<0.01	5.77	0.04	37.83	12.99	0.68	0.04	5.48	1.14	0.09
B874918	Core	0.76	0.28	<0.01	35.97	<0.01	4.76	0.01	37.66	15.92	0.66	0.03	6.28	0.37	0.06
B874919	Core	1.30	0.51	<0.01	37.51	<0.01	7.39	0.05	31.16	11.25	0.55	0.05	11.03	1.02	0.18
B874920 Dup	Core	1.31	0.51	<0.01	37.03	<0.01	7.07	0.03	31.72	11.62	0.55	0.05	10.24	0.95	0.18
B874921	Core	0.90	0.41	<0.01	32.69	<0.01	4.79	0.03	35.76	16.32	0.55	0.05	7.23	1.98	0.09
B874922	Core	0.76	0.47	<0.01	31.03	<0.01	6.09	0.06	37.85	16.48	0.51	0.07	5.57	1.89	0.13
B874923	Core	0.56	0.26	<0.01	31.21	<0.01	4.62	0.03	40.99	17.97	0.29	0.08	3.98	0.50	0.03
B874924	Core	0.22	0.08	<0.01	31.54	<0.01	3.09	<0.01	41.43	18.91	0.72	0.03	3.82	0.29	<0.01
B874925	Core	0.25	0.08	<0.01	31.85	<0.01	3.33	0.02	41.19	18.22	0.76	0.03	4.04	0.35	<0.01
B874926	Core	0.11	0.09	0.02	31.58	<0.01	5.49	0.03	41.70	16.86	1.00	0.07	2.79	0.06	0.01
B874950	Pulp	0.53	1.84	0.37	46.98	<0.01	4.05	0.77	32.15	2.24	0.93	0.47	2.63	7.14	0.23

Certificate of Analysis

10-360-03430-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875375	Core	101.93	0.6	0.29	34	172	<2	>10	<0.5	22	14	<1	>10	0.20	285
B875376	Core	100.86	<0.5	0.38	37	182	<2	>10	<0.5	15	10	7	>10	0.39	461
B875377	Core	101.98	<0.5	0.21	48	65	<2	>10	<0.5	11	9	43	8.64	0.08	560
B875378	Core	102.68	<0.5	0.07	48	22	<2	>10	<0.5	9	11	25	3.26	<0.01	512
B875379	Core	99.45	<0.5	0.47	30	98	<2	>10	<0.5	43	10	107	>10	0.21	368
B875380 Dup	Core	100.71	<0.5	0.46	26	110	<2	>10	<0.5	40	14	144	>10	0.25	399
B875381	Core	102.02	<0.5	0.16	47	22	<2	>10	<0.5	14	10	49	3.85	<0.01	396
B875382	Core	101.38	<0.5	0.29	27	76	<2	>10	<0.5	29	10	8	>10	0.17	351
B875383	Core	102.27	<0.5	0.09	45	34	<2	>10	<0.5	13	8	35	4.69	0.02	314
B875384	Core	101.25	<0.5	0.12	42	66	<2	>10	<0.5	16	11	6	8.83	<0.01	452
B875385	Core	98.72	<0.5	0.15	36	11	<2	2.27	<0.5	8	244	12	1.23	0.05	49
B875386	Core	100.96	<0.5	0.09	41	31	<2	>10	<0.5	10	9	34	3.76	<0.01	376
B875387	Core	101.53	<0.5	0.06	40	31	<2	>10	<0.5	10	19	24	3.80	<0.01	243
B875388	Core	101.10	<0.5	0.16	38	59	<2	>10	<0.5	20	9	49	6.70	0.05	301
B875389	Core	99.77	<0.5	0.05	40	28	<2	>10	<0.5	7	8	18	3.01	0.01	301
B875390	Pulp	101.30	<0.5	0.07	46	150	<2	>10	<0.5	6	8	28	3.41	0.03	333
B875391	Core	100.60	<0.5	0.09	40	43	<2	>10	<0.5	9	12	46	6.05	0.03	313
B875392	Core	102.07	<0.5	0.05	43	32	<2	>10	<0.5	9	9	19	3.00	<0.01	232
B875393	Core	99.52	<0.5	0.05	43	25	<2	>10	<0.5	7	10	20	3.67	<0.01	341
B875394	Core	99.82	<0.5	0.06	43	24	<2	>10	<0.5	19	9	29	3.91	<0.01	254
B875395	Core	99.23	<0.5	0.16	38	85	<2	>10	<0.5	19	13	13	>10	0.06	491
B875396	Core	99.07	<0.5	0.08	57	53	<2	>10	<0.5	12	12	4	7.06	0.02	300
B875397	Core	100.14	<0.5	0.09	41	33	<2	>10	<0.5	6	10	35	5.25	0.01	336
B875398	Core	101.97	<0.5	0.06	41	31	<2	>10	<0.5	5	10	22	3.07	0.02	277
B875399	Core	99.41	<0.5	0.07	47	34	<2	>10	<0.5	8	13	28	4.07	0.02	532
B874900 Dup	Core	100.69	<0.5	0.08	47	36	<2	>10	<0.5	7	11	28	4.19	0.02	519
B874901	Core	99.12	<0.5	0.07	51	34	<2	>10	<0.5	9	12	29	4.26	0.03	783
B874902	Core	99.50	<0.5	0.11	47	30	<2	>10	<0.5	11	13	40	4.90	0.04	587
B874903	Core	99.96	<0.5	0.11	41	27	<2	>10	<0.5	6	14	27	3.59	0.03	256
B874904	Core	99.91	<0.5	0.06	48	30	<2	>10	<0.5	8	11	16	3.76	0.02	557
B874905	Core	99.35	<0.5	0.13	37	27	<2	>10	<0.5	16	10	43	8.80	0.01	348
B874906	Core	99.83	<0.5	0.24	32	95	<2	>10	<0.5	33	11	19	>10	0.13	462
B874907	Core	100.46	<0.5	0.11	81	31	<2	>10	<0.5	9	15	32	3.99	0.02	282
B874908	Core	101.28	<0.5	0.10	40	43	<2	>10	<0.5	5	8	56	4.66	0.01	775
B874909	Core	101.00	<0.5	0.09	55	45	<2	>10	<0.5	20	13	6	4.79	0.03	454
B874910	Pulp	99.81	<0.5	0.89	27	2756	<2	>10	<0.5	8	13	7	3.37	0.53	937
B874911	Core	99.94	<0.5	0.09	75	39	<2	>10	<0.5	9	13	2	4.42	0.03	1330
B874912	Core	99.92	<0.5	0.09	50	62	<2	>10	<0.5	8	14	3	4.53	0.04	618
B874913	Core	99.89	<0.5	0.12	49	41	<2	>10	<0.5	6	19	5	3.55	0.04	496
B874914	Core	99.87	<0.5	0.08	48	65	<2	>10	<0.5	10	13	2	6.15	0.03	661



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B874915	Core	99.88	<0.5	0.07	51	32	<2	>10	<0.5	12	15	2	4.15	0.01	501
B874916	Core	99.93	<0.5	0.15	90	47	<2	>10	<0.5	17	13	8	5.45	0.02	456
B874917	Core	102.01	<0.5	0.26	94	55	<2	>10	<0.5	11	12	5	4.77	0.01	370
B874918	Core	102.03	<0.5	0.11	50	44	<2	>10	<0.5	10	11	6	3.85	<0.01	345
B874919	Core	100.72	<0.5	0.23	101	73	<2	>10	<0.5	15	12	33	5.80	0.03	626
B874920 Dup	Core	99.96	<0.5	0.23	112	66	<2	>10	<0.5	19	13	30	5.60	0.03	578
B874921	Core	99.91	<0.5	0.19	51	34	<2	>10	<0.5	18	19	15	4.10	0.02	467
B874922	Core	100.15	<0.5	0.23	49	31	<2	>10	<0.5	18	25	9	5.37	0.04	434
B874923	Core	99.96	<0.5	0.12	42	21	<2	>10	<0.5	15	13	4	4.12	0.03	313
B874924	Core	99.93	<0.5	0.03	37	43	<2	>10	<0.5	8	15	1	2.74	<0.01	190
B874925	Core	99.89	<0.5	0.03	39	47	<2	>10	<0.5	8	12	1	2.85	<0.01	235
B874926	Core	99.69	<0.5	0.03	40	117	<2	>10	<0.5	7	14	<1	4.65	0.02	297
B874950	Pulp	99.80	<0.5	0.98	29	723	<2	>10	<0.5	8	12	7	3.53	0.62	1035

Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875375	Core	8.56	3411	2	0.13	3	>10000	14	<5	7	1984	0.58	<10	188	<10
B875376	Core	4.20	2042	3	0.09	2	>10000	13	<5	3	1440	0.26	<10	267	<10
B875377	Core	6.76	3315	2	0.03	<1	>10000	15	<5	3	2017	0.14	<10	121	<10
B875378	Core	>10	3457	3	0.03	<1	>10000	18	<5	5	2303	0.02	<10	15	<10
B875379	Core	6.42	2960	3	0.04	3	>10000	18	<5	3	2048	0.33	<10	289	<10
B875380 Dup	Core	6.85	3205	3	0.04	4	>10000	22	<5	3	2348	0.40	<10	310	<10
B875381	Core	>10	2692	2	0.04	<1	>10000	17	<5	6	2238	0.02	<10	31	<10
B875382	Core	6.79	2452	2	0.05	3	>10000	13	<5	5	1347	0.28	<10	365	<10
B875383	Core	>10	3318	2	0.03	1	>10000	16	<5	6	1754	0.03	<10	34	<10
B875384	Core	6.74	2540	2	0.05	1	>10000	20	<5	3	2574	0.02	<10	94	<10
B875385	Core	0.79	361	<1	0.01	4	4406	5	<5	<1	270	0.01	<10	12	<10
B875386	Core	8.09	3165	3	0.03	<1	>10000	19	<5	6	2055	0.02	<10	22	<10
B875387	Core	8.56	3785	3	0.03	3	>10000	17	<5	5	2684	0.02	<10	30	<10
B875388	Core	7.39	3776	3	0.04	1	>10000	22	<5	6	3167	0.04	<10	60	<10
B875389	Core	8.04	3534	3	0.03	1	>10000	18	<5	6	2112	0.01	<10	13	<10
B875390	Pulp	6.16	2343	3	0.06	2	>10000	21	<5	7	1736	0.05	<10	64	<10
B875391	Core	5.83	2445	2	0.03	2	>10000	27	<5	6	1705	0.04	<10	83	<10
B875392	Core	8.10	2974	2	0.03	<1	>10000	24	<5	6	2249	0.01	<10	14	<10
B875393	Core	8.30	3258	2	0.05	2	>10000	17	<5	7	2092	0.01	<10	17	<10
B875394	Core	7.92	3412	2	0.03	<1	>10000	14	<5	5	2477	0.02	<10	20	<10
B875395	Core	5.22	3247	<1	0.05	2	>10000	13	<5	5	2797	0.10	<10	231	<10
B875396	Core	7.57	3142	2	0.04	<1	>10000	17	<5	7	2379	0.04	<10	99	<10
B875397	Core	7.87	2607	2	0.06	<1	>10000	18	<5	6	1746	0.03	<10	60	<10
B875398	Core	8.29	3750	<1	0.05	<1	>10000	19	<5	6	2924	0.02	<10	17	<10
B875399	Core	8.91	3670	2	0.04	1	>10000	16	<5	8	2733	0.03	<10	29	<10
B874900 Dup	Core	9.11	3795	2	0.04	<1	>10000	18	<5	8	2868	0.03	<10	30	<10
B874901	Core	7.70	3637	2	0.04	<1	>10000	16	<5	7	2926	0.02	<10	40	<10
B874902	Core	8.37	3463	2	0.03	<1	>10000	16	<5	9	1959	0.04	<10	36	<10
B874903	Core	7.14	2896	2	0.03	<1	>10000	17	<5	6	2088	0.04	<10	23	<10
B874904	Core	8.16	3912	3	0.03	<1	>10000	20	<5	7	2562	0.02	<10	18	<10
B874905	Core	8.33	2793	4	0.03	1	>10000	18	<5	6	1724	0.08	<10	180	<10
B874906	Core	3.64	3056	2	0.04	3	>10000	18	<5	3	2748	0.10	<10	233	<10
B874907	Core	8.53	2654	4	0.04	3	>10000	17	<5	5	1215	0.02	<10	34	<10
B874908	Core	6.85	3257	8	0.03	<1	>10000	54	<5	7	1120	0.02	<10	34	<10
B874909	Core	6.87	1778	7	0.03	<1	>10000	30	<5	4	1631	0.01	<10	37	<10
B874910	Pulp	1.24	6117	16	0.29	<1	>10000	84	<5	3	>10000	0.09	<10	164	<10
B874911	Core	9.39	3168	26	0.02	<1	>10000	31	<5	7	1539	0.01	<10	23	<10
B874912	Core	8.23	2563	7	0.02	1	>10000	26	<5	5	2087	0.01	<10	20	<10
B874913	Core	9.03	2335	5	0.05	<1	>10000	26	<5	5	1628	0.01	<10	25	<10
B874914	Core	8.74	4613	5	0.03	<1	>10000	27	<5	5	2953	0.03	<10	51	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B874915	Core	9.75	3522	4	0.03	<1	>10000	26	<5	5	2444	0.02	<10	29	<10
B874916	Core	7.64	3603	5	0.03	<1	>10000	31	<5	5	2944	0.04	<10	57	<10
B874917	Core	5.92	3584	5	0.03	<1	>10000	25	<5	5	2703	0.02	<10	28	<10
B874918	Core	7.37	2405	4	0.03	<1	>10000	23	<5	3	2836	0.01	<10	28	<10
B874919	Core	6.00	2271	4	0.04	<1	>10000	29	<5	3	2092	0.03	<10	89	<10
B874920 Dup	Core	6.62	2124	4	0.04	<1	>10000	27	<5	2	2139	0.03	<10	78	<10
B874921	Core	9.09	2548	2	0.04	<1	>10000	30	<5	3	2772	0.02	<10	30	<10
B874922	Core	9.35	3298	6	0.05	<1	>10000	29	<5	5	2279	0.04	<10	75	<10
B874923	Core	9.71	1873	3	0.06	<1	>10000	35	<5	3	703	0.01	<10	61	<10
B874924	Core	>10	4558	2	0.03	<1	>10000	22	<5	4	4012	<0.01	<10	2	<10
B874925	Core	9.88	2295	3	0.03	<1	>10000	25	<5	3	4000	<0.01	<10	6	<10
B874926	Core	8.84	5744	5	0.05	<1	>10000	28	<5	5	3539	<0.01	<10	6	<10
B874950	Pulp	1.23	6227	15	0.32	<1	>10000	82	<5	3	>10000	0.10	<10	176	<10



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875375	Core	130	88	693.5	12.2	3.8	9.2	28.9	18.2	1.8	355.9	0.3	239.1	70.9	33.5
B875376	Core	128	61	>1000	25.4	6.9	20.4	63.5	44.6	3.5	754.0	0.4	550.8	167.0	75.1
B875377	Core	39	18	>1000	16.8	4.6	14.3	47.8	7.3	2.2	864.0	0.3	464.8	151.3	55.6
B875378	Core	19	15	>1000	18.4	5.8	12.8	41.9	4.5	2.7	642.0	0.4	362.8	114.8	47.3
B875379	Core	182	27	>1000	22.3	6.9	17.3	49.9	17.0	3.3	453.0	0.5	388.9	112.4	57.0
B875380 Dup	Core	185	33	997.7	22.3	7.0	17.1	49.6	16.1	3.3	467.9	0.5	388.8	113.2	57.6
B875381	Core	17	27	>1000	26.9	9.4	17.8	53.0	7.9	4.1	477.9	0.7	410.9	118.9	60.8
B875382	Core	106	59	877.7	20.7	7.3	14.4	44.2	29.5	3.3	392.8	0.7	335.2	95.8	49.5
B875383	Core	20	42	733.1	19.1	7.3	11.9	36.3	7.1	3.1	349.1	0.7	272.4	79.7	40.5
B875384	Core	32	21	>1000	34.0	11.1	24.7	69.8	17.2	5.1	527.3	0.8	532.0	149.0	83.1
B875385	Core	7	16	130.7	3.5	1.2	2.3	6.8	3.2	0.5	54.4	<0.1	51.5	14.7	8.2
B875386	Core	19	28	975.2	20.0	6.8	13.6	40.4	4.6	3.1	466.2	0.5	336.9	102.5	46.8
B875387	Core	23	13	636.9	15.8	5.3	11.3	31.8	2.9	2.4	281.5	0.4	246.3	72.5	38.2
B875388	Core	41	45	811.6	20.0	6.6	15.1	42.6	13.0	3.0	343.9	0.4	331.7	93.5	50.0
B875389	Core	20	11	803.6	16.2	5.6	10.2	33.2	3.0	2.5	395.7	0.4	271.7	84.6	38.1
B875390	Pulp	15	28	924.5	24.8	9.3	15.4	46.1	1.7	4.0	408.2	0.9	341.3	100.7	51.8
B875391	Core	36	34	930.3	28.4	10.2	16.7	50.2	10.5	4.7	440.7	0.8	351.0	103.0	55.2
B875392	Core	29	13	600.8	18.0	6.7	10.8	31.9	2.6	2.9	274.4	0.5	236.4	67.5	38.0
B875393	Core	20	19	748.1	21.5	7.9	11.5	37.4	2.9	3.6	385.5	0.6	258.8	78.2	40.2
B875394	Core	16	22	690.4	16.5	5.7	11.6	34.4	3.6	2.6	308.4	0.5	265.5	76.3	41.1
B875395	Core	52	39	>1000	28.6	8.3	22.4	64.9	14.2	4.0	570.7	0.5	531.1	153.7	79.9
B875396	Core	36	40	792.3	21.0	7.5	14.4	40.4	8.7	3.3	335.2	0.5	303.0	88.1	46.8
B875397	Core	18	30	793.9	22.2	8.1	13.7	40.9	4.8	3.6	373.6	0.7	299.2	88.5	46.8
B875398	Core	25	14	706.4	18.6	6.4	12.2	37.0	2.1	2.9	316.5	0.4	265.7	77.4	39.9
B875399	Core	20	22	992.8	23.1	8.1	14.2	43.0	2.9	3.7	568.2	0.6	318.2	100.2	46.2
B874900 Dup	Core	19	25	933.8	22.8	8.2	13.4	41.6	2.9	3.6	517.5	0.6	304.2	94.8	44.9
B874901	Core	16	22	>1000	28.7	9.3	19.7	62.7	4.1	4.3	917.4	0.5	488.7	157.2	69.4
B874902	Core	16	39	>1000	40.3	16.1	19.4	63.4	4.9	7.0	677.5	1.2	432.6	132.2	64.5
B874903	Core	14	35	699.7	37.0	15.7	15.3	47.0	3.9	6.9	346.2	1.1	262.9	76.1	47.2
B874904	Core	17	24	>1000	24.7	9.8	13.4	47.1	3.3	4.2	662.4	0.7	385.7	124.0	51.3
B874905	Core	27	35	882.1	26.2	9.7	17.9	47.6	6.1	4.3	392.5	0.8	335.3	99.5	53.6
B874906	Core	75	39	>1000	29.7	8.5	22.9	66.9	32.5	4.2	574.9	0.5	550.3	157.6	81.3
B874907	Core	15	20	727.0	20.1	7.7	12.5	37.6	2.1	3.4	329.3	0.7	278.0	80.8	43.3
B874908	Core	42	17	>1000	26.9	9.7	17.7	62.7	2.4	4.2	941.8	0.8	636.5	201.7	76.2
B874909	Core	19	<1	>1000	32.1	11.7	18.3	56.6	3.2	5.2	560.9	1.0	407.0	123.3	60.6
B874910	Pulp	470	10	>1000	16.6	5.6	14.5	47.6	<0.1	2.3	>1000	0.6	500.1	177.3	52.8
B874911	Core	16	<1	>1000	36.2	12.5	23.5	89.2	1.4	5.6	>1000	0.9	911.4	290.6	104.5
B874912	Core	29	1	>1000	32.0	11.8	17.7	58.5	1.7	5.3	676.8	0.8	476.2	145.9	65.9
B874913	Core	16	8	>1000	27.7	10.4	17.0	54.2	1.9	4.5	541.6	0.9	413.5	124.9	60.1
B874914	Core	32	<1	>1000	17.5	5.5	14.6	46.6	2.4	2.5	725.0	0.3	473.8	148.7	55.3



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03430-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
B874915	Core	19	<1	>1000	20.3	6.8	15.0	45.2	2.0	3.1	517.0	0.5	383.9	116.9	51.6
B874916	Core	24	<1	>1000	24.5	7.9	19.6	53.7	1.7	3.7	485.5	0.5	416.3	122.3	62.6
B874917	Core	22	<1	938.7	19.1	6.0	13.3	42.3	0.7	2.8	436.1	0.5	335.6	103.1	47.9
B874918	Core	23	<1	874.3	20.3	6.4	15.8	43.8	0.8	3.1	386.8	0.5	333.4	98.0	50.9
B874919	Core	19	<1	>1000	38.0	13.7	24.1	72.2	8.2	6.2	684.1	1.1	555.3	166.2	82.1
B874920 Dup	Core	19	<1	>1000	36.9	13.6	22.8	66.0	6.3	6.0	588.5	1.1	492.4	145.9	74.8
B874921	Core	18	<1	>1000	26.5	8.9	18.5	53.0	2.0	4.1	486.7	0.6	401.3	118.8	60.8
B874922	Core	16	<1	979.4	25.1	8.5	18.1	49.8	3.1	3.9	443.8	0.6	364.3	107.7	56.6
B874923	Core	11	4	679.0	21.9	8.6	12.0	37.4	0.6	3.8	316.7	0.9	261.3	74.8	41.7
B874924	Core	25	<1	454.6	10.6	3.1	8.0	24.6	0.1	1.5	188.6	0.2	181.3	51.6	28.7
B874925	Core	20	<1	545.5	11.1	3.2	8.8	26.4	0.1	1.5	236.2	0.2	208.6	60.7	31.5
B874926	Core	38	1	639.7	10.4	2.6	8.6	26.9	<0.1	1.4	310.4	0.1	223.4	68.5	33.2
B874950	Pulp	478	15	>1000	15.6	5.1	14.0	46.0	<0.1	2.3	>1000	0.5	487.1	172.9	51.2

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Aley Corporation
 Suite 1020-800 West Pender St.
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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875375	Core	2.5	0.4	2.6	41.3	13.29	31.76	1.66
B875376	Core	5.4	0.7	4.0	76.0	1.70	114.71	10.79
B875377	Core	3.4	0.5	2.8	50.9	1.18	59.69	6.87
B875378	Core	3.5	0.7	3.9	63.1	12.48	78.10	2.75
B875379	Core	4.6	0.8	4.3	75.6	15.90	93.15	8.57
B875380 Dup	Core	4.6	0.8	4.4	75.2	15.80	91.01	8.19
B875381	Core	5.3	1.1	6.2	94.9	26.37	107.34	4.99
B875382	Core	4.3	0.9	5.2	78.2	0.80	166.83	13.84
B875383	Core	3.7	0.9	5.2	74.1	19.28	140.26	4.12
B875384	Core	7.1	1.3	6.8	113.3	1.66	81.76	3.41
B875385	Core	0.6	<0.1	0.9	12.4	0.18	35.18	0.58
B875386	Core	3.8	0.8	4.4	73.8	12.77	115.29	2.66
B875387	Core	3.2	0.6	3.4	56.0	7.51	59.52	1.59
B875388	Core	4.1	0.7	3.7	69.1	21.88	139.93	2.65
B875389	Core	3.2	0.7	3.9	59.7	3.92	67.00	0.96
B875390	Pulp	4.7	1.2	6.6	96.5	2.25	152.39	2.02
B875391	Core	5.5	1.2	6.7	109.7	13.31	161.33	3.90
B875392	Core	3.5	0.8	4.5	68.8	5.93	93.62	1.40
B875393	Core	4.1	0.9	5.0	83.0	16.40	145.50	2.13
B875394	Core	3.4	0.6	3.8	60.5	17.00	91.52	4.37
B875395	Core	6.1	0.9	4.6	90.8	1.33	120.53	6.25
B875396	Core	4.3	0.9	4.7	78.0	0.19	119.78	2.47
B875397	Core	4.4	1.0	5.5	82.1	21.24	150.98	3.59
B875398	Core	3.7	0.8	4.0	69.5	10.29	73.48	1.99
B875399	Core	4.4	1.0	5.2	86.3	8.75	97.39	2.40
B874900 Dup	Core	4.4	0.9	4.9	85.0	9.18	96.56	2.91
B874901	Core	5.7	1.0	5.2	98.6	8.66	130.86	2.68
B874902	Core	7.6	2.0	10.1	162.2	11.51	198.20	3.37
B874903	Core	6.8	2.0	9.3	155.8	12.71	286.80	7.03
B874904	Core	4.6	1.2	6.2	100.3	4.40	212.68	2.10
B874905	Core	5.3	1.2	6.5	105.0	12.14	180.11	4.06
B874906	Core	6.2	0.9	5.1	92.4	0.12	140.55	5.78
B874907	Core	3.9	1.0	5.4	79.1	19.45	102.19	2.06
B874908	Core	5.0	1.2	6.8	99.6	14.72	129.42	3.21
B874909	Core	6.1	1.4	7.9	123.7	0.22	86.97	4.82
B874910	Pulp	2.9	0.7	4.3	62.2	10.76	40.70	31.22
B874911	Core	6.8	1.5	8.2	129.7	0.25	88.49	4.36
B874912	Core	6.0	1.4	7.4	122.6	0.06	72.36	3.23
B874913	Core	5.5	1.2	7.3	104.1	0.13	87.51	5.49
B874914	Core	3.3	0.6	3.4	61.2	1.16	55.16	2.89



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B874915	Core	4.0	0.8	4.6	72.6	0.45	26.94	2.50
B874916	Core	5.0	0.9	5.0	87.3	0.38	34.08	7.80
B874917	Core	3.8	0.7	4.0	65.5	0.34	32.40	7.25
B874918	Core	4.0	0.7	4.2	71.0	0.07	23.12	5.28
B874919	Core	7.3	1.7	9.0	143.2	0.41	32.16	8.31
B874920 Dup	Core	7.2	1.7	8.8	138.1	0.09	33.46	8.54
B874921	Core	5.3	1.0	5.6	97.0	0.12	25.11	6.36
B874922	Core	5.1	1.0	5.5	92.0	1.40	50.64	6.40
B874923	Core	4.2	1.1	6.4	85.8	2.79	132.87	3.92
B874924	Core	2.2	0.3	1.7	33.7	<0.05	7.27	1.08
B874925	Core	2.3	0.3	1.9	36.4	0.16	19.51	0.94
B874926	Core	2.2	0.3	1.6	32.2	0.37	44.81	0.88
B874950	Pulp	2.8	0.7	4.4	59.9	8.75	38.45	28.03



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875375	Core	0.09													
B875375 Dup		0.09													
QCV1011-00041-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875393	Core	0.36													
B875393 Dup		0.36													
QCV1011-00041-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B874911	Core	0.42													
B874911 Dup		0.42													
QCV1011-00041-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.55													
QCV1011-00041-0010-BLK		<0.01													
B875375	Core		0.69	0.03	25.60	<0.01	15.87	0.29	29.50	14.06	0.59	0.24	4.51	9.28	1.29
B875375 Dup			0.71	0.03	25.30	<0.01	15.80	0.30	29.51	14.36	0.59	0.25	4.54	9.40	1.32
QCV1011-00045-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875393	Core		0.14	<0.01	31.71	<0.01	4.67	0.01	38.93	17.41	0.55	0.06	5.56	0.42	0.04
B875393 Dup			0.14	<0.01	31.77	<0.01	4.74	0.01	38.92	17.42	0.56	0.06	5.58	0.43	0.04
QCV1011-00045-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B874911	Core		0.21	<0.01	32.42	<0.01	5.34	0.06	39.09	17.29	0.53	0.03	4.76	0.14	0.07
B874911 Dup			0.21	<0.01	32.59	<0.01	5.33	0.05	39.18	16.97	0.53	0.03	4.81	0.14	0.07
QCV1011-00045-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00045-0010-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.53	0.04	7.80	<0.01	6.34	1.72	4.52	0.54	0.12	7.70	0.13	50.28	0.31



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875375	Core		0.6	0.29	34	172	<2	>10	<0.5	22	14	<1	>10	0.20	285
B875375 Dup			<0.5	0.25	33	146	<2	>10	<0.5	19	14	<1	>10	0.17	240
QCV1011-00042-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			60.5									1019			
B875393	Core		<0.5	0.05	43	25	<2	>10	<0.5	7	10	20	3.67	<0.01	341
B875393 Dup			<0.5	0.06	42	26	<2	>10	<0.5	7	10	20	3.85	<0.01	359
QCV1011-00042-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			99.8									6098			
B874911	Core		<0.5	0.09	75	39	<2	>10	<0.5	9	13	2	4.42	0.03	1330
B874911 Dup			<0.5	0.09	74	41	<2	>10	<0.5	10	13	2	4.57	0.03	1348
QCV1011-00042-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										132	1056	744			
QCV1011-00042-0010-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			98.3									6432			
B875375	Core	101.93													
B875375 Dup		102.11													
QCV1011-00045-0002-BLK		<0.01													
B875393	Core	99.52													
B875393 Dup		99.67													
QCV1011-00045-0005-BLK		<0.01													
B874911	Core	99.94													
B874911 Dup		99.92													
QCV1011-00045-0008-BLK		<0.01													
QCV1011-00045-0010-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.05													



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875375	Core	8.56	3411	2	0.13	3	>10000	14	<5	7	1984	0.58	<10	188	<10
B875375 Dup		7.37	2924	2	0.11	2	>10000	14	<5	6	1692	0.39	<10	161	<10
QCV1011-00042-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875393	Core	8.30	3258	2	0.05	2	>10000	17	<5	7	2092	0.01	<10	17	<10
B875393 Dup		8.87	3416	2	0.05	<1	>10000	15	<5	7	2218	0.01	<10	18	<10
QCV1011-00042-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
B874911	Core	9.39	3168	26	0.02	<1	>10000	31	<5	7	1539	0.01	<10	23	<10
B874911 Dup		9.35	3257	25	0.03	<1	>10000	32	<5	7	1553	0.01	<10	24	<10
QCV1011-00042-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454								
STD-OREAS-45P-4A result					0.08	375	483								
QCV1011-00042-0010-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9979							



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875375	Core	130	88												
B875375 Dup		112	73												
QCV1011-00042-0002-BLK		<2	<1												
B875393	Core	20	19												
B875393 Dup		17	19												
QCV1011-00042-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5122													
B874911	Core	16	<1												
B874911 Dup		17	<1												
QCV1011-00042-0008-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		134													
QCV1011-00042-0010-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5163													
B875375	Core			693.5	12.2	3.8	9.2	28.9	18.2	1.8	355.9	0.3	239.1	70.9	33.5
B875375 Dup				685.3	12.1	3.7	9.3	28.4	17.4	1.7	353.1	0.3	238.1	71.3	33.5
QCV1011-00043-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875393	Core			748.1	21.5	7.9	11.5	37.4	2.9	3.6	385.5	0.6	258.8	78.2	40.2
B875393 Dup				749.2	21.9	8.4	11.9	36.8	3.0	3.5	387.6	0.6	264.6	79.3	40.4
QCV1011-00043-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B874911	Core			>1000	36.2	12.5	23.5	89.2	1.4	5.6	>1000	0.9	911.4	290.6	104.5
B874911 Dup				>1000	36.7	12.6	23.4	91.8	1.5	5.6	>1000	1.0	911.0	296.1	105.4
QCV1011-00043-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00043-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0		4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				132.0	19.5	15.1	2.1	15.2		4.7	63.1	2.2	58.1	16.4	12.9



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875375	Core	2.5	0.4	2.6	41.3			
B875375 Dup		2.5	0.4	2.6	40.6			
QCV1011-00043-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875393	Core	4.1	0.9	5.0	83.0			
B875393 Dup		4.3	0.9	4.9	87.8			
QCV1011-00043-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B874911	Core	6.8	1.5	8.2	129.7			
B874911 Dup		6.8	1.6	8.3	133.4			
QCV1011-00043-0008-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00043-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.8	2.4	15.6	125.1			
B875375	Core					13.29	31.76	1.66
B875375 Dup						13.28	31.39	1.67
QCV1105-00498-0002-BLK						<0.05	<0.20	<0.10
B875393	Core					16.40	145.50	2.13
B875393 Dup						15.66	135.30	2.03
QCV1105-00498-0005-BLK						<0.05	<0.20	<0.10
B874911	Core					0.25	88.49	4.36
B874911 Dup						0.26	65.06	4.30
QCV1105-00498-0008-BLK						<0.05	<0.20	<0.10
QCV1105-00498-0010-BLK						<0.05	<0.20	<0.10

Certificate of Analysis

10-360-03460-01

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/03/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: Aley 0002 Description: Aley 2010-015</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">61</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p>Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	61	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
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The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03460-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875745	Rock	0.72	0.29	<0.01	33.70	<0.01	6.81	0.02	37.04	15.67	0.55	0.04	6.06	1.57	0.13
B875746	Rock	1.52	1.46	0.03	28.47	<0.01	22.87	0.24	23.01	7.96	0.66	0.06	8.60	5.73	1.39
B875747	Rock	0.52	0.46	<0.01	31.57	<0.01	9.28	0.05	37.08	15.77	0.73	0.03	4.70	2.05	0.42
B875748	Rock	0.87	0.71	0.02	29.85	<0.01	17.97	0.24	30.11	11.79	0.60	0.05	6.11	3.26	0.67
B875749	Rock	0.81	0.23	0.01	33.69	<0.01	6.51	0.01	37.45	14.51	0.56	0.03	5.98	1.17	0.08
B875750	Pulp	0.43	0.24	<0.01	31.76	<0.01	5.79	0.06	39.06	16.38	0.52	0.05	4.49	1.52	0.13
B875751	Rock	0.43	0.53	0.01	32.17	<0.01	11.10	0.08	33.87	15.38	0.48	0.03	5.94	2.15	0.34
B875752	Rock	0.40	0.17	<0.01	33.95	<0.01	4.36	<0.01	39.81	18.46	0.48	0.03	4.95	0.33	0.02
B875753	Rock	0.25	0.28	0.01	31.27	<0.01	10.62	<0.01	37.45	19.23	0.52	0.02	2.91	0.57	0.23
B875754	Rock	0.66	0.12	<0.01	34.00	<0.01	5.93	0.01	40.68	16.73	0.99	0.04	3.56	0.09	0.03
B875755	Rock	0.62	0.26	<0.01	36.09	<0.01	4.93	0.02	37.16	15.39	0.71	0.04	6.54	1.13	0.04
B875756	Rock	0.27	0.33	0.01	29.32	<0.01	7.61	0.14	35.75	15.71	0.78	0.23	4.06	7.79	0.08
B875757	Rock	0.24	0.08	<0.01	31.81	<0.01	4.06	0.03	41.52	18.72	0.73	0.03	3.40	0.53	0.02
B875758	Rock	0.26	0.20	0.01	31.56	<0.01	5.54	0.07	40.25	17.42	0.78	0.03	3.54	0.96	0.04
B875759	Rock	0.39	0.15	<0.01	32.81	<0.01	5.15	0.03	39.45	17.55	0.95	0.05	4.89	0.58	0.03
B875760 Dup	Rock	0.42	0.16	<0.01	32.99	<0.01	5.11	0.04	39.38	17.42	0.95	0.06	5.03	0.56	0.03
B875761	Rock	0.28	0.16	0.05	40.19	<0.01	3.55	0.10	39.91	12.03	0.65	0.04	3.23	0.71	0.03
B875762	Rock	0.87	0.33	0.05	38.66	<0.01	14.97	0.23	29.91	7.28	0.50	0.08	6.05	1.62	0.22
B875763	Rock	<0.01	16.68	0.13	4.09	0.02	3.80	4.08	1.02	1.55	0.12	4.07	0.30	63.63	0.45
B875764	Rock	0.55	0.22	0.03	40.52	<0.01	5.09	0.08	37.47	10.06	0.65	0.07	4.69	1.00	0.03
B875765	Rock	0.63	0.21	0.05	43.13	<0.01	7.91	0.14	35.76	7.38	0.52	0.10	4.05	0.63	0.04
B875766	Rock	0.67	0.24	0.03	42.53	<0.01	4.74	0.05	37.45	8.74	0.59	0.05	4.85	0.90	0.03
B875767	Rock	0.39	0.24	<0.01	34.65	<0.01	4.65	0.03	38.93	17.16	0.51	0.04	4.54	1.24	0.03
B875768	Rock	0.74	0.16	<0.01	31.37	<0.01	5.55	0.03	41.77	18.64	0.64	0.03	2.54	0.10	0.03
B875769	Rock	0.57	0.49	<0.01	32.08	<0.01	6.15	0.03	36.88	17.34	0.49	0.04	6.35	1.21	0.13
B875770	Pulp	0.53	2.01	0.35	45.77	<0.01	4.15	0.86	32.29	2.46	0.96	0.48	2.81	7.88	0.23
B875771	Rock	0.37	0.24	<0.01	32.45	<0.01	4.29	<0.01	40.84	19.56	0.42	0.04	4.32	0.18	0.02
B875772	Rock	<0.01	0.16	<0.01	32.54	<0.01	5.06	0.02	38.53	19.38	0.33	0.02	3.90	1.33	0.05
B875773	Rock	0.73	0.30	<0.01	35.53	<0.01	4.41	0.03	36.67	16.44	0.44	0.04	7.53	0.39	0.04
B875774	Rock	0.36	0.24	<0.01	32.34	<0.01	3.92	0.02	41.75	19.58	0.52	0.04	3.18	0.31	0.05
B875775	Rock	0.51	0.27	0.01	35.98	<0.01	4.91	<0.01	38.19	15.78	0.37	0.03	5.75	0.35	0.05
B875776	Rock	0.03	0.31	<0.01	31.84	<0.01	4.12	0.03	39.55	18.19	0.30	0.04	5.10	0.92	0.04
B875777	Rock	0.27	0.13	<0.01	33.71	<0.01	5.27	0.01	36.95	16.44	0.57	0.03	6.74	<0.01	0.04
B875778	Rock	0.16	0.22	<0.01	36.29	<0.01	4.27	0.02	33.38	15.46	0.41	0.03	11.97	0.13	0.04
B875779	Rock	0.05	1.03	0.01	31.09	<0.01	16.80	0.07	21.88	12.65	0.33	0.05	8.09	7.25	0.30
B875780 Dup	Rock	0.05	1.07	0.01	30.84	<0.01	17.58	0.05	22.37	12.57	0.34	0.05	7.93	7.04	0.30
B875781	Rock	0.16	0.59	0.02	33.23	<0.01	9.80	0.12	31.78	14.11	0.55	0.05	7.19	4.61	0.16
B875782	Rock	0.05	1.47	0.10	28.81	<0.01	19.56	0.49	22.62	12.59	0.60	0.12	7.32	8.93	0.34
B875783	Rock	<0.01	14.52	0.13	4.13	0.03	4.07	3.84	1.05	1.53	0.12	3.47	0.36	69.58	0.47
B875784	Rock	0.15	1.21	0.02	27.10	<0.01	19.26	0.15	27.11	13.34	0.50	0.07	7.80	5.40	0.33



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Certificate of Analysis

10-360-03460-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875785	Rock	0.12	0.40	<0.01	32.10	<0.01	5.07	0.03	36.91	19.99	0.31	0.04	6.93	0.51	0.05
B875786	Rock	0.07	0.31	<0.01	30.80	<0.01	4.43	0.01	36.83	21.21	0.33	0.03	6.87	0.27	0.05
B875787	Rock	0.02	0.28	<0.01	30.93	<0.01	5.15	0.02	37.13	18.94	0.33	0.03	4.90	2.28	0.07
B875788	Rock	0.07	0.62	0.02	33.51	<0.01	5.14	0.30	32.73	13.79	0.39	0.08	7.28	5.92	0.09
B875789	Rock	0.14	1.54	0.05	20.21	<0.01	6.36	1.02	22.79	17.83	0.51	1.18	4.11	27.08	0.11
B875790	Pulp	0.79	0.60	0.02	28.67	<0.01	17.45	0.11	31.26	13.45	0.50	0.06	5.88	2.61	0.66
B875791	Rock	0.35	0.07	<0.01	31.75	<0.01	4.40	0.01	40.08	19.27	0.68	0.03	3.26	0.28	0.02
B875792	Rock	0.24	0.13	<0.01	33.68	<0.01	3.96	0.02	37.20	17.86	0.54	0.06	6.10	0.38	0.02
B875793	Rock	0.05	0.28	<0.01	31.04	<0.01	4.07	0.03	37.29	18.38	0.36	0.06	4.44	5.59	0.10
B875794	Rock	0.11	0.36	<0.01	31.96	<0.01	3.50	0.02	37.29	20.54	0.43	0.08	5.61	2.94	0.05
B875795	Rock	0.06	0.21	<0.01	32.79	<0.01	4.33	0.03	37.63	19.57	0.36	0.06	5.39	1.64	0.03
B875796	Rock	0.05	0.22	<0.01	33.28	<0.01	3.77	0.02	35.00	16.95	0.36	0.08	8.28	2.32	0.05
B875797	Rock	0.02	0.18	<0.01	32.97	<0.01	4.85	0.02	35.92	17.73	0.30	0.06	6.46	1.19	0.05
B875798	Rock	0.03	0.16	<0.01	32.37	<0.01	4.43	0.04	35.13	18.51	0.34	0.04	7.02	1.85	0.07
B875799	Rock	0.07	0.25	<0.01	31.58	<0.01	3.70	0.04	36.30	18.57	0.29	0.04	6.88	2.71	0.10
B875800 Dup	Rock	0.07	0.24	<0.01	31.48	<0.01	3.63	0.03	36.10	18.95	0.29	0.04	6.87	2.87	0.09
B875801	Rock	0.04	0.19	<0.01	31.91	<0.01	4.07	0.04	38.05	19.71	0.39	0.04	5.51	<0.01	0.03
B875802	Rock	0.04	0.22	<0.01	31.58	<0.01	5.04	0.03	38.23	19.97	0.34	0.04	4.73	0.15	0.03
B875803	Rock	0.02	0.29	<0.01	32.80	<0.01	3.64	0.02	35.83	18.86	0.31	0.04	7.33	1.89	0.06
B875804	Rock	0.05	0.47	<0.01	31.97	<0.01	3.67	0.02	35.21	17.14	0.32	0.03	6.25	4.59	0.19
B875805	Rock	0.02	0.56	<0.01	32.79	<0.01	4.83	0.08	34.47	15.79	0.29	0.07	5.15	5.64	0.25
B875806	Rock	0.06	0.11	<0.01	32.89	<0.01	3.26	0.03	39.52	18.65	0.50	0.03	4.94	<0.01	0.02
B875807	Rock	0.05	0.17	<0.01	33.70	<0.01	5.20	0.03	35.84	17.56	0.33	0.04	6.88	0.10	0.04
B875808	Rock	0.03	0.15	<0.01	32.68	<0.01	3.70	0.02	35.80	16.90	0.31	0.04	7.33	3.01	0.05

Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875745	Rock	101.89	<0.5	0.11	8	64	<2	>10	<0.5	12	9	76	5.32	<0.01	519
B875746	Rock	100.47	<0.5	0.64	19	209	<2	>10	<0.5	34	6	215	>10	0.12	642
B875747	Rock	102.15	<0.5	0.20	7	46	<2	>10	<0.5	18	9	63	6.96	0.02	385
B875748	Rock	101.39	<0.5	0.31	12	135	<2	>10	<0.5	27	4	118	>10	0.13	402
B875749	Rock	100.23	<0.5	0.08	7	79	<2	>10	<0.5	17	8	50	5.16	<0.01	1139
B875750	Pulp	100.01	<0.5	0.10	9	46	<2	>10	<0.5	8	2	49	4.49	0.02	313
B875751	Rock	102.08	<0.5	0.24	8	80	<2	>10	<0.5	16	10	110	8.75	0.04	398
B875752	Rock	102.57	<0.5	0.07	5	51	<2	>10	<0.5	8	15	43	3.32	<0.01	355
B875753	Rock	103.12	<0.5	0.11	12	100	<2	>10	<0.5	20	4	46	7.82	<0.01	297
B875754	Rock	102.20	<0.5	0.03	<5	71	<2	>10	<0.5	6	3	19	4.64	<0.01	365
B875755	Rock	102.32	<0.5	0.11	9	52	<2	>10	<0.5	9	8	71	3.76	0.01	321
B875756	Rock	101.82	<0.5	0.14	<5	83	<2	>10	<0.5	9	8	32	6.47	0.09	238
B875757	Rock	100.93	<0.5	0.02	<5	35	<2	>10	<0.5	6	5	24	3.26	<0.01	214
B875758	Rock	100.42	<0.5	0.07	8	100	<2	>10	<0.5	7	5	33	4.81	0.04	203
B875759	Rock	101.64	<0.5	0.05	7	62	<2	>10	<0.5	10	8	43	4.36	0.02	294
B875760 Dup	Rock	101.74	<0.5	0.06	8	59	<2	>10	<0.5	8	10	46	4.28	0.02	297
B875761	Rock	100.64	<0.5	0.05	8	328	<2	>10	<0.5	10	3	39	2.96	0.05	222
B875762	Rock	99.90	<0.5	0.13	6	356	<2	>10	<0.5	25	9	32	>10	0.14	304
B875763	Rock	99.94	<0.5	7.88	83	892	<2	3.26	<0.5	9	104	4	2.87	3.09	18
B875764	Rock	99.90	<0.5	0.09	<5	239	<2	>10	<0.5	11	6	67	4.16	0.05	299
B875765	Rock	99.91	<0.5	0.08	<5	340	<2	>10	<0.5	9	3	7	6.30	0.10	261
B875766	Rock	100.19	<0.5	0.10	8	202	<2	>10	<0.5	7	4	5	3.72	0.04	294
B875767	Rock	102.04	<0.5	0.09	<5	45	<2	>10	<0.5	8	8	42	3.65	<0.01	297
B875768	Rock	100.84	<0.5	0.06	<5	33	<2	>10	<0.5	7	5	27	4.40	<0.01	361
B875769	Rock	101.19	<0.5	0.21	12	47	<2	>10	<0.5	18	7	69	4.63	<0.01	329
B875770	Pulp	100.27	0.5	0.90	24	2868	<2	>10	<0.5	6	8	11	3.18	0.51	956
B875771	Rock	102.37	<0.5	0.09	<5	37	<2	>10	<0.5	5	8	33	3.21	0.01	318
B875772	Rock	101.33	<0.5	0.06	7	23	<2	>10	<0.5	6	6	40	3.55	<0.01	234
B875773	Rock	101.82	<0.5	0.12	<5	45	<2	>10	<0.5	6	6	78	3.63	<0.01	474
B875774	Rock	101.95	<0.5	0.10	<5	65	<2	>10	<0.5	7	4	39	3.00	<0.01	355
B875775	Rock	101.68	<0.5	0.12	16	94	<2	>10	<0.5	7	5	53	3.86	<0.01	363
B875776	Rock	100.44	<0.5	0.13	<5	22	<2	>10	<0.5	9	6	8	3.18	<0.01	262
B875777	Rock	99.91	<0.5	0.05	<5	40	<2	>10	<0.5	5	13	30	4.17	<0.01	669
B875778	Rock	102.24	<0.5	0.09	6	21	<2	>10	<0.5	8	7	19	3.27	<0.01	578
B875779	Rock	99.55	<0.5	0.49	14	75	<2	>10	<0.5	31	33	19	>10	0.03	346
B875780 Dup	Rock	100.16	<0.5	0.54	14	72	<2	>10	<0.5	32	30	10	>10	0.03	351
B875781	Rock	102.22	<0.5	0.27	10	169	<2	>10	<0.5	11	13	7	7.61	0.07	396
B875782	Rock	102.96	<0.5	0.65	13	692	<2	>10	<0.5	21	7	11	>10	0.34	280
B875783	Rock	103.28	<0.5	8.91	94	938	<2	3.70	<0.5	10	165	4	3.11	2.80	27
B875784	Rock	102.29	<0.5	0.54	23	126	<2	>10	<0.5	23	5	14	>10	0.06	416

Certificate of Analysis

10-360-03460-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875785	Rock	102.35	<0.5	0.17	6	27	<2	>10	<0.5	11	8	12	3.97	0.01	680
B875786	Rock	101.15	<0.5	0.12	<5	21	<2	>10	<0.5	9	11	4	3.46	<0.01	669
B875787	Rock	100.06	<0.5	0.12	<5	27	<2	>10	<0.5	5	12	3	4.02	<0.01	288
B875788	Rock	99.90	<0.5	0.31	8	211	<2	>10	<0.5	6	13	3	4.02	0.18	470
B875789	Rock	102.80	<0.5	0.80	9	379	<2	>10	<0.5	8	25	4	4.88	0.66	1075
B875790	Pulp	101.28	<0.5	0.28	20	147	<2	>10	<0.5	17	2	27	>10	0.07	316
B875791	Rock	99.86	<0.5	<0.01	<5	32	<2	>10	<0.5	9	6	<1	3.60	<0.01	2836
B875792	Rock	99.96	<0.5	0.01	<5	47	<2	>10	<0.5	5	7	2	2.95	0.01	4548
B875793	Rock	101.65	<0.5	0.12	7	19	<2	>10	<0.5	7	16	3	3.06	0.02	527
B875794	Rock	102.80	<0.5	0.16	<5	22	<2	>10	<0.5	7	12	2	2.72	0.01	466
B875795	Rock	102.03	<0.5	0.09	<5	20	<2	>10	<0.5	5	8	3	3.44	0.02	495
B875796	Rock	100.34	<0.5	0.10	6	20	<2	>10	<0.5	5	10	2	2.98	0.01	449
B875797	Rock	99.75	<0.5	0.07	13	15	<2	>10	<0.5	8	10	4	3.84	0.02	2328
B875798	Rock	99.98	<0.5	0.07	<5	23	<2	>10	<0.5	6	14	3	3.58	0.03	1655
B875799	Rock	100.45	<0.5	0.11	5	28	<2	>10	<0.5	5	16	3	2.78	0.03	430
B875800 Dup	Rock	100.59	<0.5	0.10	<5	25	<2	>10	<0.5	5	12	2	2.96	0.02	409
B875801	Rock	99.95	<0.5	0.05	<5	22	<2	>10	<0.5	6	11	2	3.37	<0.01	432
B875802	Rock	100.36	<0.5	0.08	5	16	<2	>10	<0.5	11	11	3	3.77	<0.01	350
B875803	Rock	101.08	<0.5	0.11	<5	15	<2	>10	<0.5	10	12	2	2.81	<0.01	327
B875804	Rock	99.87	<0.5	0.19	<5	26	<2	>10	<0.5	11	15	4	3.00	<0.01	369
B875805	Rock	99.93	<0.5	0.24	7	73	<2	>10	<0.5	11	21	3	3.56	0.04	350
B875806	Rock	99.94	<0.5	0.03	<5	26	<2	>10	<0.5	5	10	1	2.47	0.01	228
B875807	Rock	99.90	<0.5	0.07	<5	38	<2	>10	<0.5	11	12	4	4.24	0.02	376
B875808	Rock	100.00	<0.5	0.05	<5	21	<2	>10	<0.5	6	20	4	3.01	0.01	416



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875745	Rock	6.01	4361	<1	0.02	<1	>10000	277	<5	8	2062	0.07	<10	78	<10
B875746	Rock	3.57	5294	<1	0.03	<1	>10000	637	<5	9	2242	0.64	<10	389	<10
B875747	Rock	5.74	5547	<1	0.02	<1	>10000	185	<5	9	2983	0.19	<10	122	<10
B875748	Rock	4.92	4881	<1	0.02	<1	>10000	316	<5	7	2434	0.36	<10	217	<10
B875749	Rock	6.00	4506	3	0.02	<1	>10000	174	<5	9	1834	0.04	<10	38	<10
B875750	Pulp	6.52	4280	3	0.03	<1	>10000	178	<5	8	2279	0.04	<10	45	<10
B875751	Rock	6.06	4004	<1	0.02	<1	>10000	318	<5	7	1718	0.15	<10	126	<10
B875752	Rock	6.53	3739	<1	0.02	<1	>10000	167	<5	7	1661	0.01	<10	29	<10
B875753	Rock	6.34	3868	3	0.01	<1	>10000	165	<5	8	500	0.11	<10	113	<10
B875754	Rock	5.97	7810	1	0.02	<1	>10000	64	<5	6	3291	0.01	<10	18	<10
B875755	Rock	5.45	5249	<1	0.02	<1	>10000	242	<5	6	3348	0.03	<10	15	<10
B875756	Rock	6.75	6740	<1	0.13	<1	>10000	110	<5	12	3712	0.04	<10	73	<10
B875757	Rock	7.24	5761	<1	0.02	<1	>10000	93	<5	5	4157	<0.01	<10	9	<10
B875758	Rock	7.37	6642	<1	0.02	<1	>10000	112	<5	6	4278	0.02	<10	32	<10
B875759	Rock	6.68	7999	2	0.03	<1	>10000	155	<5	5	4772	0.02	<10	13	<10
B875760 Dup	Rock	6.45	7792	1	0.03	<1	>10000	164	<5	5	4713	0.02	<10	13	<10
B875761	Rock	5.11	5313	1	0.03	<1	>10000	108	<5	6	6513	0.02	<10	12	<10
B875762	Rock	3.53	4036	<1	0.05	<1	>10000	30	<5	5	5599	0.09	<10	203	<10
B875763	Rock	0.81	856	1	2.50	5	1089	12	<5	5	651	0.27	<10	4	<10
B875764	Rock	4.39	5137	<1	0.04	<1	>10000	206	<5	6	4832	0.02	<10	23	<10
B875765	Rock	3.62	4162	<1	0.06	<1	>10000	21	<5	5	5445	0.02	<10	84	<10
B875766	Rock	4.04	4660	<1	0.04	<1	>10000	16	<5	4	4354	0.01	<10	42	<10
B875767	Rock	6.51	3844	<1	0.02	<1	>10000	155	<5	6	1384	0.01	<10	34	<10
B875768	Rock	6.54	4847	10	0.02	<1	9203	94	<5	7	2048	0.01	<10	28	<10
B875769	Rock	6.29	3602	1	0.02	<1	>10000	260	<5	6	1839	0.06	<10	46	<10
B875770	Pulp	1.30	6223	13	0.31	<1	>10000	79	<5	4	>10000	0.12	<10	169	<10
B875771	Rock	6.53	3010	<1	0.02	<1	>10000	129	<5	6	824	<0.01	<10	20	<10
B875772	Rock	6.48	2238	<1	0.02	<1	>10000	144	<5	7	574	0.03	<10	79	<10
B875773	Rock	6.44	3375	4	0.02	<1	>10000	265	<5	7	2015	0.02	<10	43	<10
B875774	Rock	6.52	3788	3	0.02	<1	>10000	130	<5	6	2268	0.03	<10	28	<10
B875775	Rock	5.60	2802	<1	0.02	<1	>10000	191	<5	8	646	0.02	<10	47	<10
B875776	Rock	6.85	2354	<1	0.02	<1	>10000	16	<5	6	686	0.02	<10	24	<10
B875777	Rock	6.36	4689	5	0.02	2	>10000	105	<5	10	1908	0.01	<10	24	<10
B875778	Rock	5.49	3232	2	0.02	<1	>10000	57	<5	10	1713	0.02	<10	30	<10
B875779	Rock	5.32	2468	<1	0.03	<1	>10000	33	<5	16	1524	0.14	<10	112	<10
B875780 Dup	Rock	5.46	2575	<1	0.03	<1	>10000	32	<5	16	1552	0.15	<10	117	<10
B875781	Rock	5.78	4519	<1	0.03	<1	>10000	21	<5	10	2765	0.06	<10	75	<10
B875782	Rock	5.15	4475	<1	0.08	<1	>10000	24	<5	16	2632	0.18	<10	142	<10
B875783	Rock	1.02	935	<1	2.67	6	1460	12	<5	6	716	0.29	<10	3	<10
B875784	Rock	5.21	3827	<1	0.04	<1	>10000	31	<5	15	1398	0.17	<10	166	<10

Certificate of Analysis

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Aley Corporation
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 Vancouver, BC V6C 2V6



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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875785	Rock	7.02	2406	2	0.02	<1	>10000	12	<5	7	530	0.01	<10	31	<10
B875786	Rock	7.13	2683	<1	0.02	<1	>10000	15	<5	7	817	0.02	<10	35	<10
B875787	Rock	6.66	2860	<1	0.02	<1	>10000	12	<5	7	588	0.03	<10	55	<10
B875788	Rock	5.83	3255	<1	0.05	<1	>10000	16	<5	8	2250	0.04	<10	43	<10
B875789	Rock	6.53	4188	<1	0.87	<1	>10000	17	<5	25	1847	0.05	<10	47	<10
B875790	Pulp	5.65	4213	<1	0.04	<1	>10000	23	<5	7	1985	0.13	<10	226	<10
B875791	Rock	7.35	5606	1	0.02	<1	>10000	14	<5	8	2963	<0.01	<10	10	<10
B875792	Rock	7.10	3988	<1	0.04	<1	>10000	19	<5	10	2272	<0.01	<10	14	<10
B875793	Rock	6.95	2707	<1	0.04	<1	>10000	9	<5	6	512	0.03	<10	27	<10
B875794	Rock	6.72	3397	<1	0.05	<1	>10000	7	<5	5	1884	0.01	<10	16	<10
B875795	Rock	7.11	2855	1	0.06	<1	>10000	8	<5	5	711	0.01	<10	17	<10
B875796	Rock	6.55	2984	<1	0.06	<1	>10000	17	<5	6	1367	0.01	<10	23	<10
B875797	Rock	6.81	2649	<1	0.05	<1	>10000	15	<5	8	510	0.02	<10	23	<10
B875798	Rock	7.03	2986	1	0.04	<1	>10000	11	<5	8	779	0.02	<10	21	<10
B875799	Rock	6.46	2201	<1	0.03	<1	>10000	12	<5	6	764	0.02	<10	32	<10
B875800 Dup	Rock	7.29	2349	<1	0.03	<1	>10000	8	<5	6	754	0.02	<10	32	<10
B875801	Rock	7.58	3264	1	0.02	<1	>10000	7	<5	6	1622	<0.01	<10	19	<10
B875802	Rock	6.72	2545	2	0.02	<1	>10000	10	<5	6	748	<0.01	<10	23	<10
B875803	Rock	7.17	2395	<1	0.02	<1	>10000	10	<5	6	793	0.02	<10	32	<10
B875804	Rock	6.94	2720	<1	0.02	<1	>10000	22	<5	4	827	0.08	<10	36	<10
B875805	Rock	6.06	2253	<1	0.03	<1	>10000	14	<5	5	1217	0.09	<10	52	<10
B875806	Rock	6.94	3935	3	0.02	<1	>10000	9	<5	5	2491	<0.01	<10	13	<10
B875807	Rock	7.25	2825	6	0.03	<1	>10000	12	<5	6	1241	0.01	<10	23	<10
B875808	Rock	6.86	2637	1	0.02	<1	>10000	12	<5	7	860	0.02	<10	28	<10



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Certificate of Analysis

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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875745	Rock	19	108	>1000	22.3	7.9	17.0	50.0	2.6	3.4	684.7	0.6	428.3	122.9	57.8
B875746	Rock	88	334	>1000	27.3	8.2	22.8	65.8	10.3	3.7	>1000	0.5	669.9	193.3	82.7
B875747	Rock	38	123	790.9	13.5	4.5	11.0	31.8	2.0	1.9	480.9	0.3	294.8	86.8	38.8
B875748	Rock	69	245	>1000	17.1	5.4	13.5	39.3	3.3	2.4	614.7	0.4	396.0	113.9	50.1
B875749	Rock	15	94	>1000	24.4	7.1	21.0	70.4	2.1	3.1	>1000	0.6	904.7	254.2	100.9
B875750	Pulp	26	89	890.6	19.7	6.7	14.2	42.4	2.3	2.9	509.9	0.5	363.7	101.8	53.2
B875751	Rock	44	145	951.3	20.7	7.3	16.2	44.1	4.2	3.1	557.3	0.6	392.2	108.4	54.2
B875752	Rock	10	71	853.7	20.4	7.5	13.5	41.3	1.0	3.2	468.3	0.6	355.2	99.6	49.8
B875753	Rock	13	119	730.3	17.4	6.5	14.7	35.0	0.9	2.7	390.9	0.5	298.0	83.8	42.4
B875754	Rock	33	65	830.5	16.2	6.4	10.2	33.1	0.4	2.6	456.3	0.4	337.9	96.1	42.9
B875755	Rock	21	78	838.6	17.8	5.2	15.0	41.3	0.9	2.4	425.0	0.2	380.2	102.1	52.8
B875756	Rock	38	109	613.0	13.5	4.4	10.0	29.5	2.4	1.9	318.9	0.2	261.0	72.3	37.2
B875757	Rock	21	49	507.5	9.9	2.9	8.4	24.2	0.6	1.3	271.0	<0.1	214.8	60.7	31.0
B875758	Rock	28	77	500.0	9.9	2.7	8.2	23.9	0.7	1.3	258.6	<0.1	222.2	59.7	30.7
B875759	Rock	30	66	712.2	12.6	3.5	10.7	30.4	0.8	1.6	379.0	<0.1	302.2	84.1	39.5
B875760 Dup	Rock	30	68	716.6	12.5	3.9	10.9	31.1	0.9	1.7	381.6	0.1	304.3	84.8	40.2
B875761	Rock	18	56	580.7	13.9	4.8	9.9	28.4	0.6	2.0	299.0	0.3	248.3	68.3	35.4
B875762	Rock	69	187	821.9	19.4	6.7	14.9	41.7	6.4	2.9	413.2	0.5	361.5	98.7	53.4
B875763	Rock	59	129	69.3	2.8	1.8	1.3	3.9	1.1	0.5	44.4	0.2	30.9	8.3	4.5
B875764	Rock	29	109	764.9	18.4	6.3	13.2	38.4	1.4	2.7	388.7	0.4	331.2	90.2	48.0
B875765	Rock	50	130	658.3	17.7	6.3	12.4	34.6	2.4	2.6	343.5	0.5	289.8	78.3	43.5
B875766	Rock	25	77	729.9	19.2	6.9	14.5	38.2	1.4	2.9	372.2	0.5	325.8	88.5	48.5
B875767	Rock	12	73	713.8	19.8	7.2	13.4	39.1	1.6	3.1	386.9	0.6	312.2	84.1	48.6
B875768	Rock	23	67	775.2	16.3	5.6	10.4	34.2	1.4	2.4	461.8	0.4	302.9	85.2	43.1
B875769	Rock	18	96	831.9	26.5	9.1	18.7	49.2	2.0	4.0	439.1	0.6	384.4	100.5	59.8
B875770	Pulp	472	122	>1000	15.2	5.2	14.2	43.6	<0.1	2.1	>1000	0.4	528.6	178.8	53.3
B875771	Rock	11	65	773.2	19.1	7.2	12.0	36.9	1.4	2.9	438.8	0.6	323.2	88.3	45.1
B875772	Rock	11	116	652.5	19.1	7.2	14.0	35.2	2.5	3.0	349.3	0.6	285.3	75.9	44.5
B875773	Rock	15	101	>1000	27.5	9.5	18.3	55.8	1.5	4.1	659.8	0.7	492.0	137.8	69.1
B875774	Rock	18	71	821.5	15.0	5.1	10.9	34.4	0.8	2.2	466.0	0.3	338.0	95.3	43.0
B875775	Rock	10	104	778.7	31.5	12.5	15.6	46.3	1.6	5.2	475.6	1.0	325.8	88.6	52.4
B875776	Rock	10	44	625.3	13.7	5.0	9.1	29.8	0.6	2.0	357.9	0.4	262.6	70.7	37.0
B875777	Rock	21	72	>1000	26.7	9.9	15.0	50.5	1.9	4.2	904.7	0.7	452.4	136.7	59.7
B875778	Rock	14	58	>1000	28.3	10.1	17.3	57.2	1.1	4.3	816.2	0.8	495.1	141.9	68.3
B875779	Rock	44	199	924.2	22.2	7.6	15.4	47.0	9.3	3.3	564.6	0.5	392.4	108.1	58.5
B875780 Dup	Rock	43	208	956.8	22.0	7.2	14.5	45.6	10.0	3.2	566.7	0.5	392.7	109.9	57.1
B875781	Rock	68	98	856.4	17.5	5.5	12.9	38.2	6.7	2.6	536.6	0.4	339.0	97.2	47.3
B875782	Rock	141	358	656.2	16.7	5.4	11.7	36.0	19.5	2.4	379.9	0.4	284.9	76.7	45.1
B875783	Rock	66	126	71.7	2.8	1.6	1.4	4.2	2.9	0.5	41.7	0.2	30.8	8.1	5.1
B875784	Rock	79	197	869.4	18.7	6.8	13.0	38.4	6.8	2.9	549.4	0.5	334.4	96.1	48.1



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03460-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875785	Rock	10	48	>1000	24.3	9.3	12.9	43.1	1.1	3.9	851.1	0.8	360.8	110.3	47.9
B875786	Rock	11	49	>1000	22.2	8.0	14.5	49.1	1.4	3.4	890.8	0.6	453.2	138.7	59.3
B875787	Rock	12	61	705.3	15.6	5.9	9.2	31.2	0.9	2.4	438.2	0.5	278.6	79.5	39.5
B875788	Rock	31	83	956.1	19.4	7.3	12.3	39.5	4.2	3.0	626.1	0.6	347.0	103.2	47.8
B875789	Rock	76	125	>1000	11.4	3.5	9.4	33.2	4.0	1.5	>1000	0.2	371.0	130.8	36.1
B875790	Pulp	67	165	823.5	19.6	6.8	14.4	40.1	11.1	3.0	431.5	0.5	347.4	97.8	51.8
B875791	Rock	25	48	>1000	24.5	6.9	21.5	75.4	0.2	3.2	>1000	0.4	874.3	332.4	73.8
B875792	Rock	16	47	>1000	29.2	6.9	39.3	122.7	1.0	3.2	>1000	0.4	>1000	559.6	128.8
B875793	Rock	10	34	>1000	19.5	7.3	12.4	38.5	0.6	3.0	718.0	0.6	342.3	106.6	44.5
B875794	Rock	13	25	>1000	17.9	6.1	13.0	39.8	0.4	2.6	645.2	0.4	367.3	109.3	48.2
B875795	Rock	11	35	>1000	18.6	7.3	12.0	38.5	0.3	2.9	720.7	0.5	360.8	110.2	45.3
B875796	Rock	20	32	>1000	22.5	8.6	14.0	44.0	1.2	3.5	651.6	0.7	392.7	114.5	49.9
B875797	Rock	9	53	>1000	24.7	7.3	22.0	76.6	0.7	3.2	>1000	0.6	884.9	319.3	79.3
B875798	Rock	10	42	>1000	28.1	9.3	19.8	74.0	1.1	3.9	>1000	0.7	816.6	279.4	79.6
B875799	Rock	10	35	>1000	27.6	10.4	15.2	49.3	0.8	4.2	559.1	0.8	422.7	120.6	58.2
B875800 Dup	Rock	9	36	>1000	27.0	10.3	15.1	49.1	0.7	4.3	550.3	0.8	414.2	118.7	57.2
B875801	Rock	11	40	979.4	17.7	6.3	11.2	39.4	0.2	2.6	551.0	0.5	379.9	112.5	47.8
B875802	Rock	13	49	847.4	21.8	8.7	11.8	39.9	0.4	3.6	473.4	0.7	355.3	99.6	48.3
B875803	Rock	10	41	860.0	21.3	8.1	13.0	42.7	0.6	3.4	442.1	0.6	371.4	100.5	53.9
B875804	Rock	13	66	937.1	26.8	9.7	16.9	55.0	1.7	4.2	463.0	0.7	443.4	117.7	67.7
B875805	Rock	18	66	983.9	24.0	8.2	14.8	50.5	0.2	3.5	507.1	0.6	454.4	124.6	67.2
B875806	Rock	16	31	548.0	18.5	7.6	9.1	29.9	<0.1	3.0	294.9	0.5	241.4	66.2	35.6
B875807	Rock	10	50	927.8	25.7	10.4	14.0	47.6	0.5	4.2	505.3	0.8	408.5	111.7	58.5
B875808	Rock	9	43	962.8	26.5	10.7	14.2	47.8	0.6	4.3	512.8	0.9	430.9	117.7	61.5



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875745	Rock	5.0	0.9	5.6	86.8	19.05	101.08	5.29
B875746	Rock	5.9	0.9	5.5	93.2	88.66	112.36	26.88
B875747	Rock	2.9	0.5	3.2	50.3	16.22	63.16	8.60
B875748	Rock	3.7	0.6	4.0	59.8	27.83	61.61	9.99
B875749	Rock	5.1	0.8	5.5	78.8	6.09	49.14	3.27
B875750	Pulp	4.3	0.8	5.0	73.9	18.26	121.60	7.79
B875751	Rock	4.5	0.8	5.2	77.3	23.47	117.70	7.81
B875752	Rock	4.4	0.9	5.8	80.2	14.00	84.11	2.33
B875753	Rock	3.7	0.7	4.9	71.2	11.25	57.64	4.62
B875754	Rock	3.2	0.7	4.3	78.8	<0.05	36.38	2.64
B875755	Rock	4.1	0.5	3.3	59.8	12.44	54.12	5.69
B875756	Rock	2.9	0.4	3.0	49.0	10.26	32.85	4.34
B875757	Rock	2.3	0.2	1.7	33.3	1.18	26.31	0.81
B875758	Rock	2.1	0.2	1.7	32.6	20.47	49.55	2.72
B875759	Rock	2.8	0.3	2.4	41.5	4.41	40.67	2.17
B875760 Dup	Rock	2.9	0.3	2.4	42.4	4.33	43.06	2.33
B875761	Rock	3.0	0.5	3.8	52.6	1.21	27.08	1.53
B875762	Rock	4.4	0.7	4.6	71.8	0.34	75.70	3.22
B875763	Rock	0.4	0.1	1.8	18.2	1.79	6.69	3.00
B875764	Rock	4.0	0.7	4.5	67.9	14.14	84.14	2.91
B875765	Rock	3.7	0.7	4.8	68.1	0.20	95.61	1.96
B875766	Rock	4.2	0.7	5.0	73.4	0.55	81.23	5.44
B875767	Rock	4.3	0.8	5.4	77.8	77.83	153.19	10.79
B875768	Rock	3.5	0.6	3.8	58.7	39.68	132.08	9.19
B875769	Rock	5.7	1.0	6.3	108.3	38.00	137.05	19.89
B875770	Pulp	2.9	0.6	4.6	60.0	1.55	37.16	21.80
B875771	Rock	4.0	0.8	5.5	76.4	66.80	142.50	11.71
B875772	Rock	4.1	0.8	5.8	83.0	119.88	177.18	24.31
B875773	Rock	6.0	1.1	6.7	107.3	43.57	178.94	14.29
B875774	Rock	3.2	0.5	3.7	59.3	39.80	69.24	11.98
B875775	Rock	6.5	1.5	9.2	117.9	94.87	220.12	14.49
B875776	Rock	2.9	0.5	3.9	52.8	4.74	35.85	1.20
B875777	Rock	5.6	1.1	6.6	97.6	50.96	195.81	11.53
B875778	Rock	6.0	1.2	7.5	111.8	6.32	105.19	3.43
B875779	Rock	4.9	0.8	5.2	85.8	18.01	46.25	1.44
B875780 Dup	Rock	4.8	0.8	4.9	81.0	16.17	39.03	1.25
B875781	Rock	3.8	0.6	4.1	64.7	0.76	33.08	3.03
B875782	Rock	3.6	0.6	3.8	59.6	7.63	39.90	5.07
B875783	Rock	0.4	0.1	1.9	17.6	2.09	9.70	4.30
B875784	Rock	4.1	0.7	5.0	74.3	20.30	90.66	12.94



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875785	Rock	5.0	1.1	6.7	96.3	3.75	115.22	9.61
B875786	Rock	4.6	0.9	6.1	85.8	2.35	92.59	14.35
B875787	Rock	3.3	0.7	4.6	63.6	7.49	27.78	4.86
B875788	Rock	4.0	0.8	5.4	79.0	2.56	51.02	10.45
B875789	Rock	2.2	0.3	2.7	40.6	4.72	77.38	25.93
B875790	Pulp	4.2	0.8	5.2	76.3	0.94	165.97	7.26
B875791	Rock	4.7	0.7	4.8	91.4	0.09	26.59	3.48
B875792	Rock	6.0	0.7	4.9	92.0	0.75	49.43	5.55
B875793	Rock	4.0	0.9	5.6	79.5	10.24	42.62	16.73
B875794	Rock	3.8	0.7	4.3	68.4	0.12	16.03	4.62
B875795	Rock	3.8	0.8	5.4	74.9	0.26	38.02	1.68
B875796	Rock	4.7	1.0	6.3	91.5	0.24	63.80	2.10
B875797	Rock	5.2	0.8	5.5	85.1	4.22	74.37	2.39
B875798	Rock	5.7	1.1	7.1	99.8	2.99	159.94	4.33
B875799	Rock	5.7	1.2	7.5	112.0	5.57	72.98	15.15
B875800 Dup	Rock	5.6	1.2	7.1	111.7	3.11	64.51	14.10
B875801	Rock	3.7	0.7	4.9	69.3	0.12	47.05	1.52
B875802	Rock	4.2	1.1	6.7	91.4	0.48	41.95	4.14
B875803	Rock	4.6	1.0	6.0	85.6	2.36	58.69	2.78
B875804	Rock	6.0	1.0	6.4	105.9	1.28	76.26	3.28
B875805	Rock	5.3	1.0	6.0	92.6	1.11	78.59	2.83
B875806	Rock	3.7	0.8	5.2	79.2	<0.05	34.70	1.15
B875807	Rock	5.4	1.2	7.3	109.9	0.24	70.87	3.63
B875808	Rock	5.3	1.3	7.9	111.4	0.70	140.54	4.68



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Certificate of Analysis

10-360-03460-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875745	Rock	0.72													
B875745 Dup		0.72													
QCV1011-00134-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875763	Rock	<0.01													
B875763 Dup		<0.01													
QCV1011-00134-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875781	Rock	0.16													
B875781 Dup		0.15													
QCV1011-00134-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875799	Rock	0.07													
B875799 Dup		0.07													
QCV1011-00134-0011-BLK		<0.01													
QCV1011-00134-0012-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B875745	Rock		0.29	<0.01	33.70	<0.01	6.81	0.02	37.04	15.67	0.55	0.04	6.06	1.57	0.13
B875745 Dup			0.28	<0.01	33.68	<0.01	6.79	0.02	37.02	15.55	0.55	0.03	5.99	1.53	0.13
QCV1011-00138-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875763	Rock		16.68	0.13	4.09	0.02	3.80	4.08	1.02	1.55	0.12	4.07	0.30	63.63	0.45
B875763 Dup			16.61	0.13	4.08	0.03	3.74	3.98	1.04	1.52	0.12	3.85	0.26	63.90	0.44
QCV1011-00138-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875781	Rock		0.59	0.02	33.23	<0.01	9.80	0.12	31.78	14.11	0.55	0.05	7.19	4.61	0.16
B875781 Dup			0.60	0.02	33.26	<0.01	9.68	0.10	31.78	13.95	0.56	0.05	7.26	4.59	0.15
QCV1011-00138-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875799	Rock		0.25	<0.01	31.58	<0.01	3.70	0.04	36.30	18.57	0.29	0.04	6.88	2.71	0.10
B875799 Dup			0.24	<0.01	31.68	<0.01	3.70	0.05	36.26	18.85	0.29	0.04	6.85	2.75	0.10
QCV1011-00138-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00138-0012-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.74	0.05	8.08	<0.01	6.29	1.77	4.50	0.55	0.12	7.27	0.13	49.93	0.30



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875745	Rock		<0.5	0.11	8	64	<2	>10	<0.5	12	9	76	5.32	<0.01	519
B875745 Dup			<0.5	0.11	8	64	<2	>10	<0.5	13	10	76	5.53	<0.01	554
QCV1011-00135-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							132	1055	742			
B875763	Rock		<0.5	7.88	83	892	<2	3.26	<0.5	9	104	4	2.87	3.09	18
B875763 Dup			<0.5	8.10	95	933	<2	3.43	<0.5	10	113	4	2.78	3.33	20
QCV1011-00135-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			96.2									6269			
B875781	Rock		<0.5	0.27	10	169	<2	>10	<0.5	11	13	7	7.61	0.07	396
B875781 Dup			<0.5	0.27	8	187	<2	>10	<0.5	11	12	5	7.28	0.07	388
QCV1011-00135-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			59.7									1090			
B875799	Rock		<0.5	0.11	5	28	<2	>10	<0.5	5	16	3	2.78	0.03	430
B875799 Dup			<0.5	0.11	8	23	<2	>10	<0.5	5	13	2	2.87	0.03	412
QCV1011-00135-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1011-00135-0012-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.4									1050			
B875745	Rock	101.89													
B875745 Dup		101.59													
QCV1011-00138-0002-BLK		<0.01													
B875763	Rock	99.94													
B875763 Dup		99.70													
QCV1011-00138-0005-BLK		<0.01													
B875781	Rock	102.22													
B875781 Dup		102.00													
QCV1011-00138-0008-BLK		<0.01													
B875799	Rock	100.45													
B875799 Dup		100.81													
QCV1011-00138-0011-BLK		<0.01													
QCV1011-00138-0012-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		99.73													



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Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875745	Rock	6.01	4361	<1	0.02	<1	>10000	277	<5	8	2062	0.07	<10	78	<10
B875745 Dup		6.04	4513	1	0.02	<1	>10000	291	<5	8	2132	0.07	<10	79	<10
QCV1011-00135-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.07	354	495	24							
B875763	Rock	0.81	856	1	2.50	5	1089	12	<5	5	651	0.27	<10	4	<10
B875763 Dup		0.92	957	1	2.64	6	1195	11	<5	6	704	0.27	<10	3	<10
QCV1011-00135-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
B875781	Rock	5.78	4519	<1	0.03	<1	>10000	21	<5	10	2765	0.06	<10	75	<10
B875781 Dup		5.61	4358	<1	0.03	<1	>10000	18	<5	10	2734	0.06	<10	76	<10
QCV1011-00135-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875799	Rock	6.46	2201	<1	0.03	<1	>10000	12	<5	6	764	0.02	<10	32	<10
B875799 Dup		6.56	2246	<1	0.03	<1	>10000	10	<5	6	727	0.02	<10	30	<10
QCV1011-00135-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00135-0012-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10

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Vancouver, BC V6C 2V6



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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875745	Rock	19	108												
B875745 Dup		20	112												
QCV1011-00135-0002-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		142													
B875763	Rock	59	129												
B875763 Dup		65	129												
QCV1011-00135-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5113													
B875781	Rock	68	98												
B875781 Dup		66	100												
QCV1011-00135-0008-BLK		<2	<1												
B875799	Rock	10	35												
B875799 Dup		9	39												
QCV1011-00135-0011-BLK		<2	<1												
QCV1011-00135-0012-BLK		<2	<1												
B875745	Rock			>1000	22.3	7.9	17.0	50.0	2.6	3.4	684.7	0.6	428.3	122.9	57.8
B875745 Dup				>1000	21.9	7.9	16.8	47.9	2.6	3.3	688.4	0.6	436.8	122.9	57.2
QCV1011-00136-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875763	Rock			69.3	2.8	1.8	1.3	3.9	1.1	0.5	44.4	0.2	30.9	8.3	4.5
B875763 Dup				68.8	2.8	1.7	1.2	4.0	1.2	0.5	40.2	0.2	29.6	7.9	4.6
QCV1011-00136-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875781	Rock			856.4	17.5	5.5	12.9	38.2	6.7	2.6	536.6	0.4	339.0	97.2	47.3
B875781 Dup				831.1	16.8	5.5	12.8	37.1	6.9	2.5	511.4	0.4	331.1	93.5	46.4
QCV1011-00136-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875799	Rock			>1000	27.6	10.4	15.2	49.3	0.8	4.2	559.1	0.8	422.7	120.6	58.2
B875799 Dup				>1000	26.7	10.1	14.7	48.8	0.8	4.2	556.0	0.8	411.5	118.8	57.7
QCV1011-00136-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00136-0012-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3		2.1	57.0	15.0	12.7
STD-SY-4 result				131.6	18.4	14.3	2.0	14.6	10.8	4.4		2.2	62.5	16.5	13.1



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875745	Rock	5.0	0.9	5.6	86.8			
B875745 Dup		4.9	0.9	5.6	85.6			
QCV1011-00136-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875763	Rock	0.4	0.1	1.8	18.2			
B875763 Dup		0.4	0.1	1.9	17.9			
QCV1011-00136-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B875781	Rock	3.8	0.6	4.1	64.7			
B875781 Dup		3.7	0.6	4.1	64.5			
QCV1011-00136-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B875799	Rock	5.7	1.2	7.5	112.0			
B875799 Dup		5.4	1.2	7.3	111.1			
QCV1011-00136-0011-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00136-0012-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.8	2.4	15.8	123.5			
B875745	Rock					19.05	101.08	5.29
B875745 Dup						19.05	107.15	5.46
QCV1105-00483-0002-BLK						<0.05	<0.20	<0.10
B875763	Rock					1.79	6.69	3.00
B875763 Dup						1.79	6.88	3.14
QCV1105-00483-0005-BLK						<0.05	<0.20	<0.10
B875781	Rock					0.76	33.08	3.03
B875781 Dup						0.79	34.11	2.98
QCV1105-00483-0008-BLK						<0.05	<0.20	<0.10
B875799	Rock					5.57	72.98	15.15
B875799 Dup						5.54	72.39	15.40
QCV1105-00483-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00483-0012-BLK						<0.05	<0.20	<0.10



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10-360-03477-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/04/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Description: Aley 2010-014</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">1</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">30</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	1	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	30	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	1	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
Vancouver, BC	30	Rock	SP-RX-2K/Rock/Chips/Drill Core																																		
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Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																			
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Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																																			
Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



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10-360-03477-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875714	Rock	1.05	0.59	0.02	34.68	<0.01	12.48	0.07	29.20	10.27	0.45	0.04	9.60	0.96	0.32
B875715	Rock	0.62	0.40	0.04	38.43	<0.01	11.22	0.04	33.06	8.14	0.66	0.03	6.45	1.04	0.34
B875716	Rock	0.28	0.11	<0.01	35.34	<0.01	4.91	<0.01	38.40	16.69	0.77	0.02	6.19	<0.01	0.01
B875717	Rock	0.53	0.26	0.01	36.26	<0.01	6.83	0.04	38.76	15.15	0.42	0.02	4.12	0.36	0.07
B875718	Rock	0.53	0.25	0.01	38.43	<0.01	5.44	0.02	38.25	14.23	0.47	0.02	5.02	0.15	0.12
B875719	Rock	0.62	0.25	0.02	40.57	<0.01	7.82	0.02	35.64	10.73	0.66	0.03	6.03	0.24	0.06
B875720 Dup	Rock	0.63	0.26	0.02	39.38	<0.01	7.73	0.02	35.49	10.79	0.64	0.02	6.14	0.25	0.06
B875721	Rock	0.25	0.18	0.01	39.94	<0.01	4.39	0.02	40.66	14.32	0.45	0.02	3.22	0.07	0.02
B875722	Rock	0.47	0.22	0.01	38.18	<0.01	5.07	0.02	37.50	13.30	0.61	0.03	5.46	0.32	0.05
B875723	Rock	0.35	0.21	0.01	36.22	<0.01	8.06	0.03	36.82	13.53	0.64	0.03	4.87	0.70	0.24
B875724	Rock	0.61	0.22	0.02	37.49	<0.01	7.50	0.02	35.67	11.27	0.74	0.03	5.73	1.22	0.21
B875725	Rock	0.70	0.13	0.01	34.53	<0.01	12.68	0.02	33.40	11.92	0.62	0.03	6.04	0.68	0.13
B875726	Rock	0.37	0.15	<0.01	35.82	<0.01	4.40	<0.01	38.99	16.21	0.61	0.03	4.87	0.24	0.04
B875727	Rock	0.90	0.44	0.02	38.01	<0.01	11.24	0.02	32.44	8.91	0.68	0.03	6.95	1.07	0.28
B875728	Rock	0.67	0.49	0.03	34.98	0.01	14.84	0.03	31.20	9.88	0.74	0.04	6.82	1.00	0.53
B875729	Rock	0.42	0.17	0.01	35.07	<0.01	6.29	0.02	37.75	16.03	0.69	0.03	5.57	0.29	0.07
B875730	Pulp	0.69	0.20	0.02	35.45	<0.01	4.85	0.06	37.99	14.09	0.43	0.08	3.97	2.90	0.15
B875731	Rock	1.53	0.74	0.02	15.56	<0.01	62.56	0.29	7.95	1.46	0.33	0.04	6.80	2.44	1.47
B875732	Rock	0.01	14.29	0.12	3.91	0.03	4.02	3.35	0.90	1.40	0.12	3.02	0.27	67.73	0.45
B875733	Rock	1.61	0.69	0.03	27.31	<0.01	38.82	0.23	14.52	3.79	0.47	0.05	8.83	3.60	1.09
B875734	Rock	1.25	0.52	0.02	29.29	<0.01	16.44	0.03	31.12	13.10	0.63	0.04	7.31	1.04	0.51
B875735	Rock	0.77	0.34	<0.01	34.02	<0.01	6.37	<0.01	35.98	16.53	0.64	0.03	5.65	3.14	0.21
B875736	Rock	0.67	0.28	0.01	29.24	<0.01	17.57	0.04	31.55	14.02	0.65	0.03	5.30	1.00	0.54
B875737	Rock	0.46	0.17	<0.01	32.98	<0.01	4.31	<0.01	38.68	18.07	0.66	0.03	5.26	0.40	0.05
B875738	Rock	0.34	0.16	<0.01	33.63	<0.01	5.07	0.01	39.38	16.66	0.67	0.02	4.29	0.41	0.06
B875739	Rock	0.47	0.27	0.01	31.38	<0.01	10.43	0.06	36.32	15.87	0.69	0.03	4.33	1.05	0.24
B875740 Dup	Rock	0.47	0.26	0.01	30.58	<0.01	10.66	0.05	36.23	15.11	0.67	0.02	4.39	0.98	0.24
B875741	Rock	0.35	0.15	0.01	33.54	<0.01	5.27	0.01	39.83	17.03	0.69	0.02	3.85	0.15	0.06
B875742	Rock	0.78	0.60	0.02	31.10	<0.01	15.76	0.22	30.68	13.62	0.67	0.04	6.35	2.44	0.44
B875743	Rock	0.41	0.29	<0.01	32.87	<0.01	5.28	0.04	39.42	19.21	0.69	0.03	4.11	0.90	0.05
B875744	Rock	0.53	0.17	0.01	33.56	<0.01	6.24	0.02	38.61	17.14	0.66	0.03	4.51	0.55	0.06

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10-360-03477-01

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Vancouver, BC V6C 2V6



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Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B875714	Rock	98.68	<0.5	0.33	11	233	<2	>10	<0.5	11	13	40	8.82	0.05	565
B875715	Rock	99.84	<0.5	0.24	49	370	<2	>10	<0.5	10	15	25	7.74	0.03	795
B875716	Rock	102.47	<0.5	0.06	6	72	<2	>10	<0.5	3	11	10	3.51	<0.01	484
B875717	Rock	102.30	<0.5	0.15	14	114	<2	>10	<0.5	10	12	15	4.87	0.03	533
B875718	Rock	102.44	<0.5	0.14	<5	105	<2	>10	<0.5	9	12	20	3.88	0.02	602
B875719	Rock	102.06	<0.5	0.14	18	230	<2	>10	<0.5	7	14	22	5.58	0.02	1475
B875720 Dup	Rock	100.81	<0.5	0.14	16	217	<2	>10	<0.5	5	11	20	5.51	0.02	1403
B875721	Rock	103.32	0.6	0.10	15	120	<2	>10	<0.5	3	12	10	3.13	<0.01	504
B875722	Rock	100.77	<0.5	0.13	7	122	<2	>10	<0.5	8	10	4	3.62	<0.01	564
B875723	Rock	101.36	<0.5	0.11	9	147	<2	>10	<0.5	12	13	6	5.75	0.02	985
B875724	Rock	100.12	<0.5	0.12	<5	193	<2	>10	<0.5	9	15	8	5.35	0.01	789
B875725	Rock	100.19	<0.5	0.07	6	142	<2	>10	<0.5	11	12	10	9.04	<0.01	408
B875726	Rock	101.37	<0.5	0.08	<5	76	<2	>10	<0.5	4	12	14	3.14	<0.01	415
B875727	Rock	100.08	<0.5	0.26	22	208	<2	>10	<0.5	17	14	16	8.02	<0.01	729
B875728	Rock	100.60	<0.5	0.29	12	237	<2	>10	<0.5	21	14	20	>10	<0.01	548
B875729	Rock	101.99	<0.5	0.09	9	116	<2	>10	<0.5	13	13	8	4.94	<0.01	496
B875730	Pulp	100.20	<0.5	0.09	8	226	<2	>10	<0.5	2	8	14	4.15	0.03	624
B875731	Rock	99.65	0.8	0.48	<5	273	<2	>10	<0.5	109	12	268	>10	0.25	760
B875732	Rock	99.62	0.5	0.71	<5	1124	<2	4.51	<0.5	11	208	6	2.94	3.18	49
B875733	Rock	99.43	<0.5	0.39	<5	284	<2	>10	<0.5	52	14	94	>10	0.18	775
B875734	Rock	100.06	<0.5	0.33	<5	184	<2	>10	<0.5	30	10	52	>10	0.02	805
B875735	Rock	102.93	<0.5	0.20	10	78	<2	>10	<0.5	16	18	13	4.38	<0.01	1070
B875736	Rock	100.23	<0.5	0.16	<5	114	<2	>10	<0.5	21	13	32	>10	0.03	462
B875737	Rock	100.63	<0.5	0.11	<5	80	<2	>10	<0.5	6	16	21	3.07	<0.01	382
B875738	Rock	100.38	<0.5	0.09	<5	83	<2	>10	<0.5	7	14	15	3.60	<0.01	339
B875739	Rock	100.69	<0.5	0.16	<5	124	<2	>10	<0.5	16	16	33	7.35	0.04	351
B875740 Dup	Rock	99.22	<0.5	0.17	<5	132	<2	>10	<0.5	14	17	32	7.43	0.04	357
B875741	Rock	100.61	<0.5	0.08	9	132	<2	>10	<0.5	6	12	18	3.87	<0.01	386
B875742	Rock	101.95	<0.5	0.37	<5	173	<2	>10	<0.5	17	15	54	>10	0.19	466
B875743	Rock	102.90	<0.5	0.15	<5	78	<2	>10	<0.5	4	15	19	3.73	0.03	586
B875744	Rock	101.55	<0.5	0.08	5	119	<2	>10	<0.5	3	22	17	4.35	<0.01	505



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03477-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875714	Rock	6.29	3422	<1	0.03	11	>10000	212	<5	12	1815	0.20	<10	63	<10
B875715	Rock	4.30	4510	3	0.03	6	>10000	164	<5	14	1312	0.13	<10	41	<10
B875716	Rock	9.58	5944	<1	0.02	4	>10000	76	<5	12	3365	<0.01	<10	61	<10
B875717	Rock	8.69	3199	<1	0.02	3	>10000	76	<5	10	868	0.04	<10	64	<10
B875718	Rock	7.63	3594	<1	0.02	4	>10000	131	<5	9	1560	0.05	<10	58	<10
B875719	Rock	6.59	4921	2	0.02	5	>10000	156	<5	14	1275	0.03	<10	44	<10
B875720 Dup	Rock	6.57	4789	2	0.02	6	>10000	152	<5	14	1253	0.03	10	43	<10
B875721	Rock	8.10	3186	<1	0.02	3	>10000	67	<5	9	1201	0.01	<10	52	<10
B875722	Rock	6.43	3433	<1	0.02	5	>10000	13	<5	9	2331	0.02	<10	55	<10
B875723	Rock	7.85	4865	1	0.02	7	>10000	18	<5	11	1929	0.12	<10	67	<10
B875724	Rock	6.71	4730	1	0.02	4	>10000	19	<5	10	2504	0.05	<10	47	<10
B875725	Rock	7.48	5391	<1	0.03	5	>10000	22	<5	13	3565	0.05	<10	63	<10
B875726	Rock	9.61	5213	<1	0.02	4	>10000	83	<5	9	3874	0.03	<10	64	<10
B875727	Rock	5.59	5755	4	0.03	5	>10000	23	<5	10	2175	0.11	<10	47	<10
B875728	Rock	5.23	5314	3	0.03	11	>10000	25	<5	8	2407	0.21	<10	65	<10
B875729	Rock	9.80	5713	<1	0.02	3	>10000	20	<5	9	3672	0.03	<10	58	<10
B875730	Pulp	8.86	3018	<1	0.06	4	>10000	112	<5	10	2929	0.08	<10	59	<10
B875731	Rock	1.12	2859	<1	0.03	15	>10000	105	<5	<1	2492	0.88	<10	100	<10
B875732	Rock	0.96	993	<1	2.13	8	1168	15	<5	3	873	0.34	<10	20	<10
B875733	Rock	2.48	3802	<1	0.04	13	>10000	27	<5	<1	3724	0.45	<10	78	<10
B875734	Rock	7.02	4912	3	0.03	12	>10000	119	<5	13	3232	0.26	<10	77	<10
B875735	Rock	8.31	4605	2	0.02	6	>10000	39	<5	8	2684	0.08	17	71	<10
B875736	Rock	7.92	4756	<1	0.02	14	>10000	49	<5	3	3847	0.28	<10	84	<10
B875737	Rock	9.66	4953	<1	0.02	5	>10000	104	<5	8	4403	0.04	<10	67	<10
B875738	Rock	9.12	5193	<1	0.02	3	>10000	92	<5	9	3786	0.04	<10	67	<10
B875739	Rock	8.69	5410	<1	0.02	5	>10000	121	<5	6	4041	0.15	<10	74	<10
B875740 Dup	Rock	8.14	5459	<1	0.02	5	>10000	116	<5	6	4050	0.16	<10	72	<10
B875741	Rock	9.98	5566	<1	0.02	5	>10000	83	<5	9	3245	0.04	<10	69	<10
B875742	Rock	8.05	5576	<1	0.03	8	>10000	189	<5	2	4361	0.31	<10	73	<10
B875743	Rock	9.70	5067	<1	0.02	4	>10000	107	<5	8	3201	0.03	<10	68	<10
B875744	Rock	9.14	4899	1	0.02	4	>10000	133	<5	9	2826	0.04	<10	62	<10



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Richmond, British Columbia V7A 4V5
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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875714	Rock	29	60	>1000	37.3	14.2	19.8	59.6	5.7	6.1	506.7	1.2	424.9	122.0	67.3
B875715	Rock	34	23	>1000	30.7	11.3	19.7	56.8	2.7	4.7	700.0	0.9	468.3	144.9	67.3
B875716	Rock	30	28	663.4	21.6	8.2	11.5	35.5	1.1	3.4	356.0	0.6	253.7	74.1	39.4
B875717	Rock	16	32	773.9	26.0	9.8	15.4	43.0	3.3	4.1	394.9	0.9	307.0	88.3	50.0
B875718	Rock	14	20	899.4	27.5	10.2	16.0	47.5	2.1	4.3	457.7	0.8	353.3	103.4	55.6
B875719	Rock	19	27	>1000	34.1	11.8	20.7	70.0	4.0	5.2	>1000	0.9	636.5	204.8	84.4
B875720 Dup	Rock	19	53	>1000	34.0	11.5	20.0	68.9	4.1	5.0	>1000	0.9	617.5	198.4	81.9
B875721	Rock	13	14	665.1	16.3	5.8	10.1	29.8	1.2	2.5	337.8	0.6	257.5	74.9	37.1
B875722	Rock	24	19	748.0	19.1	6.3	13.5	37.4	4.5	2.9	374.1	0.5	293.0	86.3	45.3
B875723	Rock	43	16	>1000	22.0	7.3	13.8	44.3	2.5	3.3	655.6	0.6	402.0	124.5	52.9
B875724	Rock	44	12	>1000	20.6	7.9	14.2	41.5	3.2	3.2	554.0	0.6	363.5	112.6	47.7
B875725	Rock	54	54	654.1	16.3	5.5	11.8	34.0	5.9	2.4	300.1	0.4	269.9	77.6	41.0
B875726	Rock	20	12	616.6	17.2	5.7	11.9	31.8	2.1	2.6	292.0	0.4	252.3	72.0	38.1
B875727	Rock	32	10	>1000	25.3	8.5	19.0	50.7	4.8	3.8	547.2	0.7	420.8	124.7	62.8
B875728	Rock	45	15	858.6	20.9	6.8	16.1	43.0	2.7	3.0	413.6	0.5	351.8	101.1	52.8
B875729	Rock	20	8	718.2	19.2	6.3	15.4	37.4	2.0	2.8	340.4	0.4	291.6	84.8	44.6
B875730	Pulp	15	45	885.4	24.6	9.1	15.4	46.0	2.2	3.9	417.2	0.8	354.5	102.5	54.6
B875731	Rock	580	14	920.8	19.4	5.6	14.6	42.0	7.8	2.7	434.3	0.4	370.7	109.0	55.3
B875732	Rock	58	5	70.4	3.1	1.8	1.4	4.0	3.6	0.6	35.0	0.3	27.5	7.9	4.7
B875733	Rock	274	38	>1000	22.8	6.5	18.0	51.9	8.6	3.1	502.7	0.4	450.3	129.6	65.3
B875734	Rock	51	24	>1000	25.6	7.7	23.4	60.2	6.2	3.5	582.9	0.6	447.6	132.6	72.9
B875735	Rock	25	17	>1000	24.5	8.3	19.6	51.5	6.1	3.6	744.1	0.6	452.6	143.0	61.6
B875736	Rock	101	18	690.6	14.2	4.1	11.4	33.0	2.6	2.0	323.5	0.2	273.2	81.5	40.0
B875737	Rock	31	11	559.0	14.0	4.3	11.2	30.4	2.6	2.0	255.3	0.2	233.8	67.0	37.3
B875738	Rock	22	5	520.8	13.5	4.3	10.4	27.2	1.7	2.0	238.8	0.3	214.8	62.3	33.7
B875739	Rock	53	6	540.7	14.0	4.0	9.8	28.3	1.8	1.9	244.3	0.2	224.8	65.3	34.9
B875740 Dup	Rock	56	6	542.3	13.0	4.0	10.0	28.1	1.7	1.9	241.3	0.2	219.9	63.4	35.5
B875741	Rock	22	5	531.2	12.9	4.4	9.3	25.5	1.5	1.9	249.3	0.4	215.7	62.6	32.9
B875742	Rock	79	24	737.8	16.2	4.5	12.7	36.6	4.9	2.2	334.8	0.3	311.9	90.6	45.8
B875743	Rock	22	21	817.5	15.4	4.5	11.5	35.1	1.9	2.2	404.2	0.3	321.4	94.1	46.0
B875744	Rock	22	24	687.6	18.3	6.0	11.6	34.6	2.1	2.7	322.0	0.4	275.1	79.2	42.1



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03477-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875714	Rock	6.6	1.7	10.4	143.1	29.53	172.53	13.52
B875715	Rock	5.5	1.3	7.5	114.8	20.28	119.48	9.77
B875716	Rock	3.8	1.0	5.3	79.4	7.84	141.14	3.04
B875717	Rock	4.6	1.2	7.0	100.4	11.06	142.39	4.26
B875718	Rock	5.0	1.2	7.1	104.4	14.61	106.32	3.71
B875719	Rock	6.0	1.4	8.0	121.7	17.55	126.88	5.62
B875720 Dup	Rock	6.1	1.4	8.0	119.4	15.54	125.68	5.68
B875721	Rock	3.0	0.7	4.7	60.9	9.08	72.35	2.21
B875722	Rock	3.5	0.7	3.9	67.7	1.45	47.65	4.34
B875723	Rock	3.7	0.9	5.0	76.3	2.86	96.75	4.38
B875724	Rock	3.7	0.9	5.1	81.1	0.57	74.38	6.21
B875725	Rock	3.0	0.6	3.6	57.2	2.08	105.05	2.77
B875726	Rock	3.1	0.7	4.1	62.8	9.38	75.45	2.41
B875727	Rock	4.7	1.0	6.1	95.8	3.57	109.15	13.09
B875728	Rock	4.0	0.7	4.5	76.9	2.49	98.55	17.95
B875729	Rock	3.7	0.7	4.1	71.0	0.15	43.75	2.77
B875730	Pulp	4.5	1.1	6.8	95.5	6.70	183.50	2.34
B875731	Rock	3.7	0.6	3.7	65.2	6.21	193.67	21.63
B875732	Rock	0.5	0.2	2.1	18.2	1.82	8.50	4.42
B875733	Rock	4.5	0.7	4.2	73.1	1.00	187.53	14.77
B875734	Rock	5.1	0.9	5.3	91.5	9.27	194.37	17.01
B875735	Rock	4.3	0.9	5.4	90.7	0.81	88.77	6.10
B875736	Rock	2.7	0.4	2.6	47.0	2.74	88.16	10.21
B875737	Rock	2.8	0.4	2.8	48.0	17.06	66.46	3.75
B875738	Rock	2.5	0.5	3.0	48.0	13.57	57.02	3.10
B875739	Rock	2.6	0.4	2.6	45.8	14.84	63.06	6.45
B875740 Dup	Rock	2.6	0.4	2.4	45.4	14.28	62.89	6.33
B875741	Rock	2.4	0.5	3.2	47.5	17.82	61.00	5.05
B875742	Rock	3.1	0.5	3.0	54.7	35.02	119.36	12.34
B875743	Rock	2.8	0.5	3.3	54.4	28.82	101.92	5.85
B875744	Rock	3.3	0.7	4.2	69.7	25.58	135.83	6.94

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875714	Rock	1.05													
B875714 Dup		1.04													
QCV1011-00185-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875732	Rock	0.01													
B875732 Dup		0.01													
QCV1011-00185-0005-BLK		<0.01													
QCV1011-00185-0006-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875714	Rock		0.59	0.02	34.68	<0.01	12.48	0.07	29.20	10.27	0.45	0.04	9.60	0.96	0.32
B875714 Dup			0.60	0.02	34.62	<0.01	12.52	0.07	29.22	10.29	0.45	0.04	9.61	0.97	0.33
QCV1011-00189-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.63	0.04	7.96	<0.01	6.38	1.72	4.52	0.57	0.12	6.74	0.13	51.51	0.29
B875732	Rock		14.29	0.12	3.91	0.03	4.02	3.35	0.90	1.40	0.12	3.02	0.27	67.73	0.45
B875732 Dup			15.24	0.12	3.84	0.03	3.98	3.53	0.85	1.54	0.12	3.40	0.28	66.65	0.46
QCV1011-00189-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00189-0006-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.66	0.04	8.19	<0.01	6.34	1.65	4.50	0.59	0.13	7.03	0.13	50.61	0.30



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
B875714	Rock			0.33	11	233	<2	>10	<0.5	11	13	40	8.82	0.05	565
B875714 Dup				0.35	8	234	<2	>10	<0.5	12	15	38	8.80	0.05	541
QCV1011-00186-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							127	1171	795			
B875732	Rock		0.5	6.71	<5	1124	<2	4.51	<0.5	11	208	6	2.94	3.18	49
B875732 Dup			<0.5	6.74	<5	1120	<2	4.36	<0.5	11	207	9	2.64	2.59	50
QCV1011-00186-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1011-00186-0006-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							127	1195	703			
B875714	Rock	98.68													
B875714 Dup		98.74													
QCV1011-00189-0002-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.61													
B875732	Rock	99.62													
B875732 Dup		100.04													
QCV1011-00189-0005-BLK		<0.01													
QCV1011-00189-0006-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.19													



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03477-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875714	Rock	6.29	3422	<1	0.03	11	>10000	212	<5	12	1815	0.20	<10	63	<10
B875714 Dup		6.16	3344	<1	0.03	7	>10000	224	<5	12	1588	0.21	<10	61	<10
QCV1011-00186-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.08	389	470	21							
B875732	Rock	0.96	993	<1	2.13	8	1168	15	<5	3	873	0.34	<10	20	<10
B875732 Dup		0.89	905	<1	2.39	10	1168	12	<5	3	906	0.34	<10	21	<10
QCV1011-00186-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00186-0006-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.07	379	476	21							



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Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875714	Rock	29	60	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875714 Dup		28	76												
QCV1011-00186-0002-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		153													
B875732	Rock	58	5												
B875732 Dup		57	6												
QCV1011-00186-0005-BLK		<2	<1												
QCV1011-00186-0006-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		152													
B875714	Rock			>1000	37.3	14.2	19.8	59.6	5.7	6.1	506.7	1.2	424.9	122.0	67.3
B875714 Dup				>1000	37.5	14.7	20.6	57.8	5.7	6.0	512.7	1.2	422.1	122.8	69.7
QCV1011-00187-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				126.8	19.1	14.8	2.0	14.0	10.1	4.4	58.2	2.0	57.4	15.3	12.3
B875732	Rock			70.4	3.1	1.8	1.4	4.0	3.6	0.6	35.0	0.3	27.5	7.9	4.7
B875732 Dup				70.2	3.1	1.8	1.5	4.0	3.6	0.6	34.8	0.3	27.1	8.0	4.6
QCV1011-00187-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00187-0006-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				130.2	18.6	14.7	2.0	14.5	10.4	4.5	61.1	2.1	57.9	15.9	12.9



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875714	Rock	6.6	1.7	10.4	143.1			
B875714 Dup		6.6	1.8	10.4	146.5			
QCV1011-00187-0002-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.5	2.3	14.9	115.4			
B875732	Rock	0.5	0.2	2.1	18.2			
B875732 Dup		0.4	0.2	2.1	17.8			
QCV1011-00187-0005-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00187-0006-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.6	2.3	15.0	124.7			
B875714	Rock					29.53	172.53	13.52
B875714 Dup						30.84	172.53	14.05
QCV1105-00470-0002-BLK						<0.05	<0.20	<0.10
B875732	Rock					1.82	8.50	4.42
B875732 Dup						1.84	8.37	4.26
QCV1105-00470-0005-BLK						<0.05	<0.20	<0.10
QCV1105-00470-0006-BLK						<0.05	<0.20	<0.10



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10-360-03480-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/04/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Description: Aley 2010-016</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">42</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	42	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
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Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																			
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Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																																			
Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03480-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875809	Rock	0.54	0.25	<0.01	30.91	<0.01	6.27	<0.01	38.71	16.84	0.48	0.02	4.65	0.74	0.25
B875810	Pulp	0.73	0.20	0.02	33.60	<0.01	4.59	0.05	38.33	13.96	0.39	0.08	3.92	3.34	0.13
B875811	Rock	0.84	0.33	<0.01	27.64	<0.01	15.55	0.05	31.04	14.78	0.56	0.04	6.77	1.27	0.39
B875812	Rock	0.35	0.10	<0.01	32.69	<0.01	4.79	<0.01	39.19	18.41	0.63	0.02	4.28	0.34	0.05
B875813	Rock	0.53	0.17	<0.01	31.54	<0.01	4.84	<0.01	38.80	17.97	0.41	0.02	4.38	0.35	0.04
B875814	Rock	0.80	0.30	<0.01	30.88	<0.01	11.06	0.05	33.68	14.77	0.49	0.04	5.57	1.65	0.13
B875815	Rock	1.07	0.27	<0.01	30.93	<0.01	14.10	0.12	30.61	13.95	0.57	0.04	6.94	1.95	0.23
B875816	Rock	0.42	0.17	<0.01	32.03	<0.01	5.38	0.02	37.78	18.30	0.47	0.03	4.47	0.90	0.10
B875817	Rock	0.76	0.57	0.03	27.76	<0.01	26.50	0.16	23.10	11.02	0.46	0.04	5.20	2.59	1.02
B875818	Rock	0.01	15.90	0.12	4.56	0.02	4.46	3.40	1.00	1.78	0.13	3.05	0.40	68.98	0.48
B875819	Rock	0.75	0.55	0.02	27.90	<0.01	15.93	0.23	31.57	14.48	0.58	0.05	4.86	2.12	0.47
B875820 Dup	Rock	0.79	0.53	0.02	28.06	<0.01	15.48	0.24	31.78	14.04	0.57	0.04	4.82	2.00	0.43
B875821	Rock	1.06	0.48	0.03	29.27	<0.01	17.53	0.22	29.28	12.54	0.52	0.05	5.91	2.18	0.38
B875822	Rock	0.61	0.18	<0.01	30.63	<0.01	5.18	0.04	38.81	18.41	0.40	0.04	4.11	0.72	0.06
B875823	Rock	0.43	0.19	<0.01	31.16	<0.01	6.69	0.02	38.28	16.82	0.54	0.03	4.51	0.67	0.10
B875824	Rock	1.45	0.49	<0.01	30.75	<0.01	12.78	0.04	30.28	14.68	0.43	0.03	6.40	2.05	0.43
B875825	Rock	0.37	0.12	<0.01	30.79	<0.01	5.61	<0.01	40.34	18.64	0.58	0.02	2.99	0.87	0.05
B875826	Rock	0.85	3.37	<0.01	22.64	<0.01	7.27	0.19	28.84	16.81	0.43	0.21	2.52	15.77	0.82
B875827	Rock	0.24	2.37	0.01	24.75	<0.01	5.87	0.38	31.85	17.30	0.34	0.20	3.04	13.09	0.72
B875828	Rock	0.29	0.32	<0.01	30.00	<0.01	5.44	0.02	37.00	17.59	0.37	0.03	5.25	1.91	0.19
B875829	Rock	0.25	0.44	0.01	31.96	<0.01	5.53	0.07	34.19	14.63	0.36	0.07	6.33	4.55	0.21
B875830	Pulp	0.40	0.24	<0.01	30.61	<0.01	5.38	0.04	38.77	16.11	0.47	0.04	4.41	2.08	0.13
B875831	Rock	0.30	1.84	0.01	26.26	<0.01	5.35	0.49	30.67	15.46	0.33	0.40	4.40	13.01	0.23
B875832	Rock	0.64	0.46	<0.01	30.34	<0.01	5.69	0.20	36.00	16.81	0.54	0.04	4.86	2.17	0.15
B875833	Rock	0.43	0.29	<0.01	30.90	<0.01	4.39	0.10	37.63	17.46	0.58	0.04	5.42	1.15	0.10
B875834	Rock	0.31	0.18	<0.01	28.67	<0.01	6.63	0.11	38.50	18.47	0.55	0.12	2.84	1.85	0.07
B875835	Rock	0.25	0.55	0.01	28.83	<0.01	5.93	0.15	33.16	16.09	0.42	0.12	4.61	9.14	0.13
B875836	Rock	0.19	0.27	<0.01	32.02	<0.01	3.14	0.04	37.35	16.03	0.44	0.05	4.90	3.93	0.04
B875837	Rock	0.26	0.42	<0.01	31.03	<0.01	4.19	0.06	37.26	17.33	0.55	0.05	4.79	4.07	0.04
B875838	Rock	0.18	2.03	0.07	20.27	0.01	6.25	1.52	17.96	14.62	0.35	1.85	2.97	33.51	0.24
B875839	Rock	0.22	0.19	<0.01	31.10	<0.01	4.22	0.04	39.50	16.53	0.51	0.03	4.99	0.70	0.02
B875840	Rock	0.12	0.10	<0.01	30.13	<0.01	4.25	0.03	42.35	17.99	0.60	0.02	2.34	0.57	0.02
B875841	Rock	0.16	0.43	<0.01	29.63	<0.01	5.51	0.09	37.22	16.17	0.41	0.02	4.83	3.98	0.06
B875842	Rock	0.43	0.15	<0.01	29.18	<0.01	5.89	0.02	39.25	17.89	0.48	0.03	3.80	1.64	0.08
B875843	Rock	1.74	1.75	<0.01	30.38	<0.01	3.41	0.05	28.81	15.77	0.25	0.06	8.54	9.21	0.07
B875844	Rock	0.23	1.88	<0.01	27.08	<0.01	4.86	0.02	34.57	21.45	0.38	0.03	4.30	5.54	0.18
B875845	Rock	0.30	0.32	<0.01	31.62	<0.01	4.43	0.01	36.76	18.93	0.40	0.03	5.83	1.32	0.02
B875846	Rock	0.15	0.22	<0.01	31.66	<0.01	5.58	0.01	38.23	17.21	0.37	0.02	5.07	1.63	0.35
B875847	Rock	0.22	0.20	<0.01	31.94	<0.01	4.72	<0.01	38.75	18.97	0.49	0.02	4.96	1.27	0.04
B875848	Rock	0.15	0.37	0.01	32.92	<0.01	4.68	0.01	38.47	17.16	0.44	0.02	4.16	3.26	0.03



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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03480-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B875849	Rock	0.09	2.44	0.05	28.55	<0.01	5.22	0.74	31.43	18.38	0.39	0.18	3.54	10.68	0.16
B875850	Pulp	0.54	1.75	0.34	46.59	<0.01	4.14	0.68	32.18	2.23	0.87	0.33	2.60	6.38	0.22
B875851	Rock	0.25	0.71	<0.01	30.47	<0.01	5.61	0.07	36.44	16.35	0.31	0.02	6.30	2.46	0.06
B875852	Rock	0.36	0.45	<0.01	29.97	<0.01	4.64	0.01	38.15	17.10	0.37	0.02	5.25	1.56	0.06
B875853	Rock	0.36	0.17	<0.01	31.74	<0.01	3.39	0.02	38.45	16.76	0.48	0.02	5.92	1.02	0.02

Certificate of Analysis

10-360-03480-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875809	Rock	99.13	<0.5	0.12	6	34	<2	>10	<0.5	10	9	33	4.35	<0.01	380
B875810	Pulp	98.62	<0.5	0.08	10	160	<2	>10	<0.5	4	6	38	3.24	0.03	336
B875811	Rock	98.42	<0.5	0.14	<5	67	<2	>10	<0.5	22	10	27	>10	<0.01	458
B875812	Rock	100.53	<0.5	0.03	8	28	<2	>10	<0.5	6	8	21	3.20	0.03	390
B875813	Rock	98.54	<0.5	0.07	9	19	<2	>10	<0.5	7	9	33	3.43	<0.01	470
B875814	Rock	98.64	<0.5	0.13	<5	63	<2	>10	<0.5	13	12	7	7.80	0.04	294
B875815	Rock	99.72	<0.5	0.12	17	64	<2	>10	<0.5	13	12	17	9.43	0.10	918
B875816	Rock	99.65	<0.5	0.07	22	29	<2	>10	<0.5	10	8	32	3.70	<0.01	951
B875817	Rock	98.45	<0.5	0.28	<5	212	<2	>10	<0.5	36	12	128	>10	0.14	626
B875818	Rock	104.28	<0.5	7.94	<5	927	<2	2.83	<0.5	9	103	2	2.60	2.97	41
B875819	Rock	98.77	<0.5	0.27	<5	200	<2	>10	<0.5	8	9	45	>10	0.20	441
B875820 Dup	Rock	98.01	<0.5	0.27	<5	202	<2	>10	<0.5	8	9	42	>10	0.20	424
B875821	Rock	98.40	<0.5	0.24	<5	221	<2	>10	<0.5	17	12	42	>10	0.18	533
B875822	Rock	98.58	<0.5	0.07	7	21	<2	>10	<0.5	7	11	38	3.76	0.02	306
B875823	Rock	99.03	<0.5	0.09	33	52	<2	>10	<0.5	11	7	32	4.64	0.02	365
B875824	Rock	98.38	<0.5	0.24	<5	78	<2	>10	<0.5	14	8	69	8.48	0.04	309
B875825	Rock	100.02	<0.5	0.06	10	26	<2	>10	<0.5	4	10	26	3.93	<0.01	454
B875826	Rock	98.89	<0.5	1.85	<5	73	<2	>10	<0.5	14	25	62	5.13	0.15	253
B875827	Rock	99.92	0.5	1.28	11	102	<2	>10	<0.5	12	23	17	4.23	0.29	506
B875828	Rock	98.12	<0.5	0.14	7	23	<2	>10	<0.5	8	10	18	3.91	<0.01	349
B875829	Rock	98.35	<0.5	0.20	<5	79	<2	>10	<0.5	10	11	22	3.86	0.04	299
B875830	Pulp	98.31	<0.5	0.07	5	28	<2	>10	<0.5	3	3	17	2.29	0.02	254
B875831	Rock	98.44	<0.5	1.04	<5	93	<2	>10	<0.5	7	18	18	3.70	0.39	243
B875832	Rock	97.25	<0.5	0.23	<5	64	<2	>10	<0.5	5	11	38	3.98	0.16	213
B875833	Rock	98.07	<0.5	0.13	<5	52	<2	>10	<0.5	4	10	24	3.12	0.07	246
B875834	Rock	98.00	<0.5	0.07	<5	72	<2	>10	<0.5	6	12	19	4.74	0.09	144
B875835	Rock	99.15	<0.5	0.27	<5	80	<2	>10	<0.5	8	17	16	4.12	0.13	236
B875836	Rock	98.22	<0.5	0.13	7	53	<2	>10	<0.5	5	12	13	2.22	0.04	279
B875837	Rock	99.80	<0.5	0.21	<5	41	<2	>10	<0.5	3	12	16	2.90	0.05	232
B875838	Rock	101.64	<0.5	1.06	<5	451	<2	>10	<0.5	7	19	6	4.39	1.15	181
B875839	Rock	97.84	<0.5	0.09	8	55	<2	>10	<0.5	7	9	13	2.96	0.02	246
B875840	Rock	98.40	<0.5	0.03	6	49	<2	>10	<0.5	6	9	9	2.98	<0.01	202
B875841	Rock	98.34	<0.5	0.21	9	34	<2	>10	<0.5	9	9	10	3.84	0.06	320
B875842	Rock	98.42	<0.5	0.06	10	38	<2	>10	<0.5	7	9	26	4.27	0.01	513
B875843	Rock	98.32	<0.5	0.87	<5	44	<2	>10	<0.5	<1	14	89	2.60	0.03	325
B875844	Rock	100.30	<0.5	0.97	23	35	<2	>10	<0.5	11	29	14	3.40	<0.01	956
B875845	Rock	99.67	<0.5	0.16	13	38	<2	>10	<0.5	9	10	19	3.14	<0.01	513
B875846	Rock	100.37	<0.5	0.10	34	76	<2	>10	<0.5	9	10	11	4.05	<0.01	1572
B875847	Rock	101.37	<0.5	0.09	9	46	<2	>10	<0.5	6	9	14	3.35	<0.01	391
B875848	Rock	101.52	<0.5	0.18	13	98	<2	>10	<0.5	6	10	11	3.31	<0.01	481



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B875849	Rock	101.77	<0.5	1.41	15	411	<2	>10	<0.5	5	25	6	3.70	0.64	674
B875850	Pulp	98.31	<0.5	0.96	24	2865	<2	>10	<0.5	5	8	14	2.99	0.60	953
B875851	Rock	98.82	<0.5	0.33	12	58	<2	>10	<0.5	9	9	20	4.02	0.04	471
B875852	Rock	97.59	<0.5	0.23	7	40	<2	>10	<0.5	7	10	24	3.45	<0.01	318
B875853	Rock	98.02	<0.5	0.07	<5	65	<2	>10	<0.5	4	15	4	2.49	0.01	194

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Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B875809	Rock	9.82	3493	1	0.02	1	>10000	164	<5	6	2240	0.12	<10	94	<10
B875810	Pulp	7.59	2934	2	0.06	<1	>10000	201	<5	7	2231	0.06	<10	66	<10
B875811	Rock	7.51	4104	2	0.03	2	>10000	87	<5	5	2804	0.16	<10	207	<10
B875812	Rock	9.77	4396	1	0.02	<1	>10000	106	<5	6	2897	0.02	<10	9	<10
B875813	Rock	9.97	3000	2	0.02	1	>10000	159	<5	6	985	0.02	<10	21	<10
B875814	Rock	8.27	3507	1	0.03	2	>10000	33	<5	5	2393	0.05	<10	115	<10
B875815	Rock	7.43	3869	4	0.04	2	>10000	67	<5	6	2606	0.08	<10	139	<10
B875816	Rock	9.96	3235	3	0.02	<1	>10000	146	<5	8	1906	0.05	<10	42	<10
B875817	Rock	6.17	3332	3	0.04	4	>10000	241	<5	5	1951	0.44	<10	313	<10
B875818	Rock	0.83	742	4	2.61	6	1068	17	<5	5	709	0.28	<10	54	<10
B875819	Rock	8.21	4161	2	0.05	3	>10000	233	<5	5	3031	0.17	<10	190	<10
B875820 Dup	Rock	8.35	4372	2	0.04	3	>10000	222	<5	5	3138	0.18	<10	181	<10
B875821	Rock	7.21	3768	2	0.05	3	>10000	125	<5	5	2865	0.20	<10	196	<10
B875822	Rock	>10	2962	2	0.03	1	>10000	189	<5	5	1373	0.03	<10	49	<10
B875823	Rock	9.46	3846	3	0.03	1	>10000	126	<5	6	2476	0.05	<10	35	<10
B875824	Rock	7.96	3097	2	0.03	2	>10000	371	<5	5	2177	0.22	<10	153	<10
B875825	Rock	9.84	4116	2	0.02	<1	>10000	122	<5	6	1938	0.02	<10	13	<10
B875826	Rock	9.31	3141	3	0.18	10	9340	287	<5	11	1696	0.28	<10	90	<10
B875827	Rock	9.58	2515	3	0.16	6	>10000	73	<5	12	1278	0.20	<10	71	<10
B875828	Rock	9.54	2748	2	0.03	<1	>10000	97	<5	6	1362	0.07	<10	60	<10
B875829	Rock	8.11	2698	2	0.05	3	>10000	92	<5	7	2089	0.10	<10	78	<10
B875830	Pulp	5.91	2237	2	0.02	<1	9572	89	<5	5	1258	0.03	<10	22	<10
B875831	Rock	8.91	2436	2	0.37	3	>10000	97	<5	11	1566	0.10	<10	70	<10
B875832	Rock	9.52	3922	2	0.04	2	>10000	197	<5	5	3204	0.06	<10	51	<10
B875833	Rock	9.67	4260	2	0.04	1	>10000	128	<5	5	3422	0.05	<10	33	<10
B875834	Rock	>10	4118	2	0.11	1	>10000	101	<5	5	3100	0.03	<10	56	<10
B875835	Rock	9.35	3062	1	0.12	2	>10000	82	<5	11	2435	0.06	<10	61	<10
B875836	Rock	9.61	3237	1	0.05	1	>10000	63	<5	8	2111	0.02	<10	8	<10
B875837	Rock	>10	4029	3	0.04	<1	>10000	82	<5	6	3307	0.02	<10	24	<10
B875838	Rock	7.99	2560	2	1.52	2	>10000	32	<5	18	1845	0.14	<10	139	<10
B875839	Rock	9.98	3963	5	0.03	1	>10000	72	<5	5	2878	0.01	<10	7	<10
B875840	Rock	>10	4534	4	0.02	<1	8400	44	<5	5	2558	<0.01	<10	<1	<10
B875841	Rock	9.28	3093	3	0.02	1	>10000	53	<5	8	1553	0.03	<10	22	<10
B875842	Rock	>10	3747	9	0.02	2	>10000	145	<5	7	1990	0.03	<10	35	<10
B875843	Rock	8.82	1872	2	0.05	3	>10000	526	<5	9	2042	0.05	<10	14	<10
B875844	Rock	>10	2841	5	0.03	10	>10000	81	<5	8	1932	0.07	<10	27	<10
B875845	Rock	9.92	2931	3	0.03	2	>10000	106	<5	5	1660	0.01	<10	7	<10
B875846	Rock	9.20	2860	3	0.02	3	>10000	57	<5	13	923	0.06	<10	43	<10
B875847	Rock	>10	3653	4	0.02	<1	>10000	75	<5	6	2273	0.02	<10	28	<10
B875848	Rock	8.84	3221	3	0.02	1	>10000	57	<5	8	1329	0.01	<10	14	<10



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B875849	Rock	9.00	2978	3	0.17	3	>10000	35	<5	9	1723	0.08	<10	32	<10
B875850	Pulp	1.39	6667	13	0.34	1	>10000	65	<5	4	>10000	0.10	<10	156	<10
B875851	Rock	9.50	2487	3	0.02	2	>10000	90	<5	6	749	0.03	<10	32	<10
B875852	Rock	>10	2931	2	0.02	2	>10000	128	<5	6	1839	0.03	<10	35	<10
B875853	Rock	>10	3850	2	0.03	<1	>10000	9	<5	4	2900	<0.01	<10	5	<10



INSPECTORATE

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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875809	Rock	14	25	840.8	18.5	6.0	14.1	39.3	2.5	2.6	442.8	0.5	302.1	91.3	45.5
B875810	Pulp	12	37	871.9	23.2	8.8	15.9	45.5	1.1	3.5	407.8	0.8	333.3	98.9	53.9
B875811	Rock	55	53	>1000	20.3	5.9	17.2	47.8	4.0	2.6	525.2	0.3	396.7	118.7	57.6
B875812	Rock	21	17	842.7	16.2	5.2	12.3	35.2	2.0	2.2	480.1	0.3	277.9	89.1	41.0
B875813	Rock	10	26	986.0	20.7	7.4	16.0	43.6	1.3	3.0	543.5	0.6	341.7	106.2	50.4
B875814	Rock	52	54	759.6	18.4	6.2	15.2	39.8	7.0	2.7	353.3	0.5	305.1	88.0	48.5
B875815	Rock	52	51	>1000	25.0	6.4	23.1	74.9	10.5	2.9	>1000	0.4	745.8	232.2	91.1
B875816	Rock	15	24	>1000	22.5	6.8	22.1	61.4	2.8	3.0	982.4	0.5	639.7	198.2	72.6
B875817	Rock	89	25	>1000	20.5	6.6	17.5	46.0	3.7	2.8	636.6	0.4	391.5	124.8	52.7
B875818	Rock	58	7	108.6	3.6	1.9	2.0	5.5	2.3	0.6	57.5	0.2	38.6	11.4	6.3
B875819	Rock	71	34	900.8	14.8	4.1	13.3	37.1	4.0	1.9	447.6	0.2	335.4	100.2	47.1
B875820 Dup	Rock	71	34	888.4	14.9	4.3	13.3	37.3	4.1	1.9	438.9	0.2	331.0	99.7	46.2
B875821	Rock	68	35	>1000	18.2	5.3	15.4	43.9	5.2	2.4	563.3	0.4	395.4	122.5	55.5
B875822	Rock	13	36	708.6	17.9	6.5	12.9	35.7	2.5	2.7	340.8	0.6	271.7	79.1	42.5
B875823	Rock	19	34	799.6	18.5	6.1	14.0	38.1	3.5	2.6	399.3	0.4	301.0	89.2	44.7
B875824	Rock	41	67	755.1	26.1	8.7	27.8	50.0	11.3	3.8	331.0	0.6	334.0	92.0	58.9
B875825	Rock	22	26	893.1	19.4	6.8	13.4	36.8	2.3	2.8	485.3	0.5	303.0	94.7	43.4
B875826	Rock	47	52	597.2	18.7	6.4	16.5	35.4	5.6	2.8	288.7	0.5	242.7	68.7	42.6
B875827	Rock	40	28	>1000	19.9	6.3	14.6	46.0	3.3	2.8	609.0	0.4	398.9	120.2	58.6
B875828	Rock	15	27	855.2	23.1	8.0	16.4	46.8	3.0	3.3	410.5	0.6	359.1	100.8	58.1
B875829	Rock	20	43	734.7	21.0	7.3	15.5	42.6	5.2	3.0	338.3	0.5	304.2	85.9	50.9
B875830	Pulp	14	19	862.6	21.9	7.0	15.5	43.6	2.2	3.1	444.7	0.5	336.5	98.2	53.2
B875831	Rock	42	50	580.7	18.7	6.5	12.9	34.8	5.0	2.8	265.8	0.6	243.3	68.2	41.5
B875832	Rock	35	50	517.7	17.2	5.4	13.2	32.3	5.0	2.4	235.3	0.3	225.1	62.0	38.9
B875833	Rock	30	30	565.8	17.1	5.5	12.6	33.3	3.2	2.4	273.8	0.3	237.7	65.8	39.5
B875834	Rock	35	38	333.4	9.6	3.0	7.1	19.0	2.9	1.2	149.6	0.1	137.9	38.2	22.9
B875835	Rock	40	20	603.3	18.4	6.3	12.4	34.4	3.2	2.7	283.7	0.4	244.1	69.4	41.3
B875836	Rock	15	23	727.1	19.3	6.6	13.7	37.4	1.1	2.7	345.3	0.5	285.5	82.4	43.8
B875837	Rock	26	18	544.3	16.0	5.2	10.9	30.8	1.6	2.3	252.5	0.3	224.7	64.2	37.0
B875838	Rock	143	131	416.3	11.6	4.1	8.0	23.0	5.5	1.7	188.6	0.4	167.9	47.3	27.3
B875839	Rock	21	32	562.2	14.9	4.9	11.4	32.0	1.7	2.1	267.0	0.3	230.3	64.0	38.3
B875840	Rock	19	17	463.1	10.6	3.6	6.8	21.4	0.4	1.5	213.3	0.2	178.4	51.9	27.0
B875841	Rock	27	40	715.3	19.8	7.0	13.0	38.1	2.1	2.9	353.9	0.5	285.9	80.9	46.3
B875842	Rock	28	53	>1000	20.1	6.5	15.9	44.3	3.1	2.7	600.6	0.5	378.4	114.6	56.0
B875843	Rock	26	166	978.4	25.1	7.8	20.5	54.1	0.8	3.5	422.0	0.5	420.8	114.0	67.5
B875844	Rock	17	45	>1000	22.6	6.2	20.1	64.1	1.9	2.8	>1000	0.4	632.8	201.0	82.5
B875845	Rock	14	83	>1000	22.7	8.1	17.4	46.8	2.4	3.3	610.7	0.6	368.9	113.8	56.4
B875846	Rock	17	82	>1000	29.8	9.9	23.0	73.6	2.3	4.2	>1000	0.8	708.9	239.3	82.6
B875847	Rock	20	43	839.1	20.5	7.1	13.8	40.0	1.5	3.1	440.1	0.5	308.1	91.0	46.5
B875848	Rock	18	43	982.8	21.6	7.7	14.6	44.0	2.1	3.2	517.8	0.6	372.1	109.9	54.5



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Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875849	Rock	48	65	>1000	22.3	7.1	16.8	55.0	2.6	3.1	714.0	0.5	509.1	149.2	71.8
B875850	Pulp	466	69	>1000	16.2	5.2	15.6	45.9	0.2	2.1	>1000	0.5	494.8	170.7	54.7
B875851	Rock	14	119	>1000	30.2	10.1	20.3	56.2	3.3	4.4	530.7	0.7	416.5	118.7	68.0
B875852	Rock	14	66	719.1	23.3	8.0	16.6	43.2	2.6	3.5	347.6	0.6	300.6	83.6	51.4
B875853	Rock	19	6	709.2	20.0	6.5	14.3	40.5	1.3	2.8	326.2	0.3	307.5	84.9	51.4



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875809	Rock	3.5	0.7	4.5	67.9	17.84	107.21	4.55
B875810	Pulp	4.3	1.1	6.7	88.2	50.02	195.68	2.21
B875811	Rock	3.7	0.6	3.8	65.8	0.92	145.01	2.79
B875812	Rock	3.0	0.6	3.5	57.0	3.34	79.72	1.70
B875813	Rock	3.7	0.9	5.6	76.5	14.90	150.62	3.49
B875814	Rock	3.5	0.7	4.7	65.9	5.65	150.69	3.82
B875815	Rock	4.6	0.7	4.3	72.8	0.88	119.71	1.84
B875816	Rock	4.0	0.8	4.8	80.5	11.81	115.18	4.76
B875817	Rock	3.7	0.8	4.3	73.4	43.36	138.22	18.36
B875818	Rock	0.5	0.2	2.1	18.6	2.05	11.45	5.13
B875819	Rock	2.8	0.4	2.6	47.1	24.50	129.39	21.23
B875820 Dup	Rock	2.8	0.4	2.8	47.8	22.30	127.66	22.75
B875821	Rock	3.4	0.6	3.8	58.6	5.47	117.07	14.46
B875822	Rock	3.2	0.8	5.0	66.7	27.34	170.19	3.04
B875823	Rock	3.3	0.7	4.5	64.9	53.80	138.89	16.43
B875824	Rock	4.9	1.0	6.0	104.3	34.66	169.02	27.00
B875825	Rock	3.2	0.8	5.0	70.7	8.64	123.75	6.84
B875826	Rock	3.5	0.7	4.6	69.8	57.21	131.75	36.82
B875827	Rock	3.6	0.7	4.6	69.3	21.78	78.87	10.93
B875828	Rock	4.4	1.0	6.1	84.3	14.31	107.92	5.46
B875829	Rock	3.9	0.9	5.2	79.5	18.62	107.78	7.96
B875830	Pulp	3.8	0.8	5.1	75.2	16.36	96.40	6.86
B875831	Rock	3.4	0.8	5.2	71.1	36.84	121.23	11.29
B875832	Rock	3.1	0.6	3.6	59.4	8.11	138.27	3.40
B875833	Rock	3.1	0.6	3.4	60.9	5.58	117.02	4.51
B875834	Rock	1.7	0.3	2.1	33.3	9.62	62.89	2.86
B875835	Rock	3.4	0.7	4.4	67.1	17.27	62.41	12.13
B875836	Rock	3.4	0.8	4.8	69.4	86.64	142.44	36.00
B875837	Rock	2.8	0.6	3.8	56.0	9.08	59.49	5.47
B875838	Rock	2.1	0.5	3.8	44.9	26.12	72.25	54.43
B875839	Rock	2.8	0.5	3.5	53.3	102.17	104.96	14.39
B875840	Rock	1.8	0.4	2.9	40.9	26.03	63.74	8.78
B875841	Rock	3.7	0.8	5.5	73.5	86.47	99.05	40.28
B875842	Rock	3.6	0.7	4.6	67.7	88.13	292.57	19.88
B875843	Rock	4.8	0.9	5.4	81.3	142.10	1043.39	18.69
B875844	Rock	4.1	0.7	4.2	66.9	88.57	186.00	44.40
B875845	Rock	4.2	0.9	5.8	82.9	150.24	254.54	71.47
B875846	Rock	5.3	1.2	7.2	105.7	132.08	283.38	52.21
B875847	Rock	3.7	0.8	4.9	75.7	48.63	205.61	11.50
B875848	Rock	3.9	0.9	5.5	81.0	73.62	153.40	20.04



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875849	Rock	4.0	0.8	5.0	77.3	15.71	128.30	6.51
B875850	Pulp	2.7	0.7	4.4	59.1	2.32	57.28	30.83
B875851	Rock	5.5	1.2	7.1	108.9	153.42	310.24	30.56
B875852	Rock	4.3	1.0	5.8	90.0	90.41	211.12	17.63
B875853	Rock	3.7	0.7	4.4	72.8	0.32	58.96	10.93

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2	
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875809	Rock	0.54														
B875809 Dup		0.50														
QCV1011-00195-0002-BLK		<0.01														
STD-OKA-1 expected		0.53														
STD-OKA-1 result		0.53														
B875827	Rock	0.24														
B875827 Dup		0.22														
QCV1011-00195-0005-BLK		<0.01														
STD-OKA-1 expected		0.53														
STD-OKA-1 result		0.54														
B875845	Rock	0.30														
B875845 Dup		0.29														
QCV1011-00195-0008-BLK		<0.01														
STD-OKA-1 expected		0.53														
STD-OKA-1 result		0.53														
B875809	Rock		0.25	<0.01	30.91	<0.01	6.27	<0.01	38.71	16.84	0.48	0.02	4.65	0.74	0.25	
B875809 Dup			0.26	<0.01	30.97	<0.01	6.31	<0.01	38.66	17.17	0.48	0.02	4.79	0.78	0.25	
QCV1011-00199-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
B875827	Rock		2.37	0.01	24.75	<0.01	5.87	0.38	31.85	17.30	0.34	0.20	3.04	13.09	0.72	
B875827 Dup			2.41	0.01	24.87	<0.01	5.86	0.39	31.83	17.62	0.35	0.20	3.02	13.24	0.75	
QCV1011-00199-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
B875845	Rock		0.32	<0.01	31.62	<0.01	4.43	0.01	36.76	18.93	0.40	0.03	5.83	1.32	0.02	
B875845 Dup			0.32	<0.01	31.60	<0.01	4.43	0.02	36.73	17.95	0.40	0.03	5.85	1.29	0.02	
QCV1011-00199-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29	
STD-SY-4 result			20.58	0.04	8.58	<0.01	6.35	1.59	4.52	0.52	0.11	7.33	0.14	49.96	0.30	



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875809	Rock		<0.5	0.12	6	34	<2	>10	<0.5	10	9	33	4.35	<0.01	380
B875809 Dup			<0.5	0.11	6	30	<2	>10	<0.5	10	10	33	4.32	<0.01	390
QCV1011-00196-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			55.9									980			
B875827	Rock		0.5	1.28	11	102	<2	>10	<0.5	12	23	17	4.23	0.29	506
B875827 Dup			0.8	1.26	11	104	<2	>10	<0.5	12	24	18	4.19	0.30	508
QCV1011-00196-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			58.3									972			
B875845	Rock		<0.5	0.16	13	38	<2	>10	<0.5	9	10	19	3.14	<0.01	513
B875845 Dup			<0.5	0.15	12	42	<2	>10	<0.5	9	13	19	3.18	<0.01	474
QCV1011-00196-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			56.3									970			
B875809	Rock		99.13												
B875809 Dup			99.70												
QCV1011-00199-0002-BLK			<0.01												
B875827	Rock		99.92												
B875827 Dup			100.56												
QCV1011-00199-0005-BLK			<0.01												
B875845	Rock		99.67												
B875845 Dup			98.63												
QCV1011-00199-0008-BLK			<0.01												
STD-SY-4 expected															
STD-SY-4 result			100.02												



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875809	Rock	9.82	3493	1	0.02	1	>10000	164	<5	6	2240	0.12	<10	94	<10
B875809 Dup		9.65	3488	2	0.02	1	>10000	156	<5	5	2231	0.13	<10	94	<10
QCV1011-00196-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875827	Rock	9.58	2515	3	0.16	6	>10000	73	<5	12	1278	0.20	<10	71	<10
B875827 Dup		9.58	2515	3	0.16	6	>10000	77	<5	12	1274	0.22	<10	72	<10
QCV1011-00196-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875845	Rock	9.92	2931	3	0.03	2	>10000	106	<5	5	1660	0.01	<10	7	<10
B875845 Dup		9.93	2944	3	0.03	3	>10000	106	<5	5	1687	0.01	<10	6	<10
QCV1011-00196-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875809	Rock	14	25												
B875809 Dup		13	25												
QCV1011-00196-0002-BLK		<2	<1												
B875827	Rock	40	28												
B875827 Dup		40	34												
QCV1011-00196-0005-BLK		<2	<1												
B875845	Rock	14	83												
B875845 Dup		14	81												
QCV1011-00196-0008-BLK		<2	<1												
B875809	Rock			840.8	18.5	6.0	14.1	39.3	2.5	2.6	442.8	0.5	302.1	91.3	45.5
B875809 Dup				828.1	18.7	5.8	14.0	39.6	2.5	2.7	448.7	0.5	295.9	92.1	46.1
QCV1011-00197-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875827	Rock			>1000	19.9	6.3	14.6	46.0	3.3	2.8	609.0	0.4	398.9	120.2	58.6
B875827 Dup				>1000	20.3	6.3	14.9	46.4	3.3	2.8	624.5	0.5	405.1	123.9	59.3
QCV1011-00197-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875845	Rock			>1000	22.7	8.1	17.4	46.8	2.4	3.3	610.7	0.6	368.9	113.8	56.4
B875845 Dup				>1000	23.2	7.8	17.3	47.6	2.3	3.3	606.0	0.6	371.0	113.6	55.5
QCV1011-00197-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				130.2	19.1	14.7	2.2	14.9	11.1	4.4	62.7	2.2	57.7	15.6	13.8



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
B875809	Rock	3.5	0.7	4.5	67.9			
B875809 Dup		3.5	0.7	4.3	67.3			
QCV1011-00197-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875827	Rock	3.6	0.7	4.6	69.3			
B875827 Dup		3.7	0.7	4.6	69.2			
QCV1011-00197-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B875845	Rock	4.2	0.9	5.8	82.9			
B875845 Dup		4.2	1.0	6.0	82.3			
QCV1011-00197-0008-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.6	2.4	16.2	121.2			
B875809	Rock					17.84	107.21	4.55
B875809 Dup						17.70	104.45	4.49
QCV1105-00495-0002-BLK						<0.05	<0.20	<0.10
B875827	Rock					21.78	78.87	10.93
B875827 Dup						22.44	77.00	10.94
QCV1105-00495-0005-BLK						<0.05	<0.20	<0.10
B875845	Rock					150.24	254.54	71.47
B875845 Dup						153.43	247.04	70.33
QCV1105-00495-0008-BLK						<0.05	<0.20	<0.10



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 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/08/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-012</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">2</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">48</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	2	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	48	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
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The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	4	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B875600	Rock	0.60	0.21	<0.01	34.23	<0.01		5.17	0.03	38.24	15.65	0.49	0.04	5.10	0.43
B875601	Rock	0.78	0.17	<0.01	37.88	<0.01		6.93	0.03	37.32	11.94	0.47	0.02	4.74	0.23
B875602	Rock	MS	MS				MS								
B875603	Rock	0.58	0.23	0.02	42.98	<0.01		8.99	0.03	34.08	5.72	0.93	0.02	5.42	1.14
B875604	Rock	1.59	0.74	0.02	21.28	<0.01		41.89	0.46	14.56	5.81	0.52	0.06	8.73	4.22
B875605	Rock	0.03	11.62	0.12	3.90	0.02		3.94	2.83	0.97	1.35	0.11	2.82	0.33	68.92
B875606	Rock	0.36	0.14	<0.01	33.11	<0.01		4.78	0.02	39.76	16.16	0.64	0.02	4.49	0.52
B875607	Rock	0.20	0.07	<0.01	33.13	<0.01		4.79	0.01	41.09	17.06	0.67	0.02	3.05	0.87
B875608	Rock	0.45	0.13	<0.01	36.17	<0.01		4.75	0.02	36.80	15.68	0.50	0.02	7.36	0.10
B875609	Rock	0.55	0.10	<0.01	34.98	<0.01		7.20	0.04	36.10	14.60	0.46	0.02	6.64	0.10
B875610	Pulp	0.79	0.47	0.02	29.64	<0.01		16.82	0.07	31.29	12.91	0.47	0.04	5.39	2.14
B875611	Rock	0.52	0.16	<0.01	33.58	<0.01		4.79	0.04	38.65	17.27	0.33	0.03	5.84	0.06
B875612	Rock	0.35	0.09	<0.01	32.47	<0.01		5.34	0.03	39.79	17.18	0.38	0.02	4.91	<0.01
B875613	Rock	0.67	0.14	<0.01	32.07	<0.01		4.10	0.03	38.13	17.27	0.47	0.03	5.87	0.04
B875614	Rock	1.15	0.24	<0.01	35.57	<0.01		5.63	0.04	33.03	14.13	0.48	0.04	9.74	0.39
B875615	Rock	0.67	0.19	<0.01	35.88	<0.01		4.05	0.05	35.80	14.93	0.43	0.04	8.26	0.14
B875616	Rock	0.33	0.17	<0.01	31.58	<0.01		4.88	0.05	41.42	17.08	0.33	0.04	3.19	0.22
B875617	Rock	0.29	0.14	<0.01	31.88	<0.01		4.83	0.02	39.99	17.12	0.41	0.04	4.66	0.10
B875618	Rock	0.75	0.24	<0.01	29.92	<0.01		13.90	0.05	34.13	14.07	0.43	0.04	6.35	0.28
B875619	Rock	0.30	0.11	<0.01	31.85	<0.01		4.73	0.04	39.83	18.52	0.39	0.03	4.44	<0.01
B875620 Dup	Rock	0.28	0.11	<0.01	32.33	<0.01		4.92	0.02	39.10	18.54	0.41	0.02	4.50	<0.01
B875621	Rock	0.54	0.20	<0.01	32.29	<0.01		4.93	0.06	38.99	17.45	0.34	0.05	5.13	0.22
B875622	Rock	0.48	0.31	<0.01	29.95	<0.01		8.20	0.08	38.28	17.38	0.47	0.03	4.63	0.37
B875623	Rock	0.38	0.10	<0.01	32.47	<0.01		4.08	0.01	40.61	18.69	0.57	0.02	4.30	<0.01
B875624	Rock	0.20	0.06	<0.01	32.64	<0.01		4.59	0.01	40.68	17.44	0.46	0.02	4.15	<0.01
B875625	Rock	0.52	0.10	<0.01	32.43	<0.01		6.11	0.02	37.93	17.71	0.47	0.02	5.82	<0.01
B875626	Rock	1.39	0.32	<0.01	32.04	<0.01		12.21	0.07	28.57	13.47	0.39	0.06	10.71	1.48
B875627	Rock	0.38	0.16	<0.01	32.62	<0.01		5.26	0.03	39.20	17.10	0.48	0.03	4.83	0.12
B875628	Rock	0.22	0.06	<0.01	30.95	<0.01		5.93	0.01	40.64	18.24	0.63	0.01	2.92	<0.01
B875629	Rock	0.84	0.12	<0.01	34.93	<0.01		6.66	0.02	34.90	15.10	0.48	0.03	7.55	<0.01
B875630	Pulp	0.82	0.45	0.02	29.36	<0.01		17.01	0.07	31.11	12.74	0.44	0.04	5.55	1.98
B875631	Rock	0.18	0.05	<0.01	32.22	<0.01		5.08	0.01	40.36	16.94	0.63	0.02	4.18	<0.01
B875632	Rock	0.74	0.21	<0.01	33.78	<0.01		5.47	0.03	38.60	17.02	0.55	0.05	3.80	0.40
B875633	Rock	1.18	0.32	<0.01	35.28	<0.01		7.11	0.06	33.52	14.50	0.48	0.08	7.36	1.04
B875634	Rock	0.42	0.15	<0.01	34.45	<0.01		3.96	0.02	39.05	16.74	0.66	0.04	5.54	0.39
B875635	Rock	0.83	0.34	<0.01	32.25	<0.01		8.36	0.05	33.63	14.81	0.46	0.04	7.68	1.33
B875636	Rock	0.30	0.09	<0.01	32.88	<0.01		3.67	0.02	40.02	18.41	0.59	0.02	4.02	0.60
B875637	Rock	0.76	0.23	<0.01	33.26	<0.01		4.20	<0.01	35.99	16.95	0.47	0.03	6.46	1.22
B875638	Rock	0.35	0.22	<0.01	29.57	<0.01		12.00	0.06	34.75	13.86	0.39	0.06	10.72	1.46
B875639	Rock	0.69	0.41	<0.01	38.92	<0.01		5.24	0.03	32.84	15.84	0.48	0.02	5.50	0.12



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Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	4	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B875640 Dup	Rock	0.65	0.38	0.01	38.42	<0.01		4.81	0.09	32.99	14.37	0.47	0.03	5.60	1.93
B875641	Rock	0.47	0.17	<0.01	35.93	<0.01		5.79	<0.01	37.73	17.01	0.63	0.02	2.61	<0.01
B875642	Rock	0.30	1.58	<0.01	34.44	<0.01		6.72	0.02	33.62	17.88	0.49	0.03	6.47	<0.01
B875643	Rock	0.28	0.18	<0.01	35.04	<0.01		4.71	0.03	38.74	17.99	0.53	0.03	4.54	0.19
B875644	Rock	0.40	0.12	<0.01	33.84	<0.01		4.44	0.01	39.77	18.75	0.53	0.03	3.45	0.47
B875645	Rock	0.61	0.14	<0.01	36.46	<0.01		4.05	<0.01	38.02	17.49	0.52	0.03	2.93	0.33
B875646	Rock	0.26	0.23	<0.01	39.10	0.02		4.57	<0.01	33.25	16.80	0.44	0.07	6.20	<0.01
B875647	Rock	0.29	0.42	<0.01	38.13	<0.01		3.99	0.02	34.09	16.57	0.65	0.04	5.59	0.38
B875648	Rock	0.30	0.96	<0.01	30.48	<0.01		5.36	0.04	36.93	17.88	0.60	0.03	3.32	6.57
B875649	Rock	0.21	0.15	<0.01	34.77	<0.01		4.72	<0.01	38.01	16.88	0.58	0.03	5.26	<0.01

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP %	WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
B875600	Rock	0.10	99.69	1.0	0.13	<5	191	<2	>10	<0.5	4	14	38	4.39	0.04
B875601	Rock	0.12	99.86	0.6	0.12	35	146	<2	>10	<0.5	1	11	32	5.45	0.03
B875602	Rock			NS											
B875603	Rock	0.17	99.72	0.9	0.15	36	250	<2	>10	<0.5	10	15	11	8.15	0.04
B875604	Rock	1.15	99.44	<0.5	0.45	8	185	<2	>10	<0.5	19	15	44	>10	0.54
B875605	Rock	0.39	97.32	<0.5	7.44	<5	1257	<2	4.48	<0.5	11	153	8	3.52	3.61
B875606	Rock	0.03	99.67	<0.5	0.08	<5	51	<2	>10	<0.5	3	13	19	3.58	0.02
B875607	Rock	0.01	100.77	<0.5	0.05	9	54	<2	>10	<0.5	4	14	13	3.49	0.01
B875608	Rock	0.04	101.59	<0.5	0.09	15	71	<2	>10	<0.5	5	15	12	3.59	0.02
B875609	Rock	0.12	100.36	<0.5	0.08	18	72	<2	>10	<0.5	8	13	29	5.38	0.02
B875610	Pulp	0.54	99.78	<0.5	0.28	<5	171	<2	>10	<0.5	14	10	51	>10	0.09
B875611	Rock	0.07	100.82	<0.5	0.10	<5	47	<2	>10	<0.5	6	13	25	3.43	0.04
B875612	Rock	0.05	100.27	<0.5	0.06	13	56	<2	>10	<0.5	5	13	19	4.53	0.02
B875613	Rock	0.04	98.21	<0.5	0.10	<5	39	<2	>10	<0.5	3	11	31	3.73	0.03
B875614	Rock	0.19	99.48	0.6	0.15	<5	49	<2	>10	<0.5	10	12	21	4.56	0.03
B875615	Rock	0.06	99.84	<0.5	0.13	8	93	<2	>10	<0.5	7	13	17	3.58	0.05
B875616	Rock	0.09	99.05	<0.5	0.11	<5	36	<2	>10	<0.5	11	13	20	3.98	0.05
B875617	Rock	0.04	99.24	0.6	0.08	7	103	<2	>10	<0.5	7	15	15	4.14	0.02
B875618	Rock	0.30	99.71	0.8	0.14	<5	53	<2	>10	<0.5	19	10	24	>10	0.07
B875619	Rock	0.04	99.98	0.6	0.08	<5	69	<2	>10	<0.5	6	19	14	4.10	0.03
B875620 Dup	Rock	0.04	99.99	<0.5	0.07	<5	32	<2	>10	<0.5	7	15	14	4.20	0.03
B875621	Rock	0.07	99.74	0.6	0.13	<5	81	<2	>10	<0.5	5	12	20	4.54	0.06
B875622	Rock	0.13	99.83	0.9	0.20	<5	200	<2	>10	<0.5	10	16	23	7.07	0.08
B875623	Rock	0.02	100.87	0.8	0.07	<5	133	<2	>10	<0.5	2	16	23	3.50	0.01
B875624	Rock	0.03	100.10	<0.5	0.04	7	26	<2	>10	<0.5	5	15	11	3.32	<0.01
B875625	Rock	0.04	100.66	<0.5	0.07	13	42	<2	>10	<0.5	14	16	14	4.81	0.02
B875626	Rock	0.32	99.66	<0.5	0.23	<5	41	<2	>10	<0.5	20	27	13	8.52	0.04
B875627	Rock	0.05	99.87	<0.5	0.11	7	38	<2	>10	<0.5	6	12	17	4.44	0.02
B875628	Rock	0.02	99.42	<0.5	0.04	7	41	<2	>10	<0.5	5	15	11	5.24	<0.01
B875629	Rock	0.07	99.85	0.9	0.07	7	45	<2	>10	<0.5	5	18	23	5.74	0.03
B875630	Pulp	0.52	99.30	<0.5	0.26	<5	175	<2	>10	<0.5	11	9	49	>10	0.08
B875631	Rock	0.01	99.51	0.5	0.04	7	56	<2	>10	<0.5	2	23	9	4.30	<0.01
B875632	Rock	0.06	99.98	0.7	0.13	<5	284	<2	>10	<0.5	<1	13	27	4.77	0.02
B875633	Rock	0.16	99.91	0.6	0.20	<5	103	<2	>10	<0.5	9	12	38	6.55	0.07
B875634	Rock	0.02	101.04	0.7	0.10	<5	51	<2	>10	<0.5	<1	12	15	2.82	0.02
B875635	Rock	0.28	99.24	0.5	0.21	<5	77	<2	>10	<0.5	13	17	50	7.85	0.05
B875636	Rock	0.03	100.36	0.6	0.06	<5	44	<2	>10	<0.5	6	13	15	3.44	0.02
B875637	Rock	0.10	98.94	1.0	0.15	<5	47	<2	>10	<0.5	7	13	33	3.90	0.01
B875638	Rock	0.32	103.39	0.6	0.23	<5	58	<2	>10	<0.5	10	14	17	3.74	0.02
B875639	Rock	0.05	99.45	0.5	0.21	<5	134	<2	>10	<0.5	13	19	33	3.57	0.12



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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP %	WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
B875640 Dup	Rock	0.06	99.16	<0.5	0.23	<5	133	<2	>10	<0.5	12	16	32	3.85	0.12
B875641	Rock	0.02	99.93	<0.5	0.04	<5	40	<2	>10	<0.5	2	13	17	4.22	0.02
B875642	Rock	0.07	101.32	0.6	0.08	<5	51	<2	>10	<0.5	20	36	21	5.23	0.06
B875643	Rock	0.03	102.01	<0.5	0.12	<5	24	<2	>10	<0.5	10	16	13	4.11	<0.01
B875644	Rock	0.02	101.44	0.5	0.08	6	35	<2	>10	<0.5	4	20	15	4.15	<0.01
B875645	Rock	0.02	100.01	<0.5	0.09	<5	32	<2	>10	<0.5	2	16	22	4.16	<0.01
B875646	Rock	0.02	100.70	<0.5	5.41	<5	39	<2	>10	<0.5	11	20	13	5.86	<0.01
B875647	Rock	0.02	99.92	<0.5	0.10	<5	103	<2	>10	<0.5	15	24	14	5.18	0.09
B875648	Rock	0.17	102.35	<0.5	0.65	7	48	<2	>10	<0.5	13	25	16	4.91	0.04
B875649	Rock	0.01	100.43	<0.5	0.09	11	38	<2	>10	<0.5	7	12	12	4.39	<0.01



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A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V
		30-4A-TR ppm 10	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR ppm 1	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR ppm 5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR ppm 10	30-4A-TR ppm 1
B875600	Rock	565	9.97	4162	<1	0.03	5	>10000	146	<5	10	1945	0.06	<10	68
B875601	Rock	4420	8.42	3764	1	0.02	5	>10000	153	<5	13	615	0.06	415	47
B875602	Rock								<2						
B875603	Rock	4567	4.52	8264	4	0.02	6	>10000	19	<5	14	1319	0.04	366	28
B875604	Rock	3774	4.36	4585	<1	0.05	13	>10000	30	<5	<1	2313	0.36	<10	118
B875605	Rock	108	1.16	992	<1	3.05	9	1657	13	<5	3	842	0.32	<10	21
B875606	Rock	479	>10	4935	<1	0.02	4	>10000	78	<5	7	2924	0.02	<10	54
B875607	Rock	547	>10	5065	<1	0.02	3	>10000	50	<5	7	2803	<0.01	<10	58
B875608	Rock	718	>10	3854	<1	0.03	4	>10000	47	<5	9	2418	0.02	26	59
B875609	Rock	727	>10	3378	5	0.02	5	>10000	123	<5	12	1402	0.05	<10	63
B875610	Pulp	459	9.66	3654	<1	0.05	7	>10000	138	<5	7	1793	0.17	<10	80
B875611	Rock	622	>10	2682	<1	0.02	5	>10000	112	<5	9	922	0.04	<10	66
B875612	Rock	1100	>10	3505	<1	0.02	4	>10000	84	<5	11	1444	0.03	22	68
B875613	Rock	497	>10	4000	<1	0.02	6	>10000	137	<5	8	2801	0.03	<10	63
B875614	Rock	554	>10	3600	<1	0.03	5	>10000	84	<5	8	3291	0.07	<10	65
B875615	Rock	603	>10	3371	<1	0.03	3	>10000	69	<5	12	2345	0.03	<10	63
B875616	Rock	562	>10	2758	<1	0.03	4	>10000	78	<5	12	803	0.05	<10	71
B875617	Rock	1267	>10	3540	<1	0.04	4	>10000	75	<5	12	1273	0.02	71	67
B875618	Rock	437	9.97	3749	<1	0.03	12	>10000	104	<5	9	2917	0.15	<10	88
B875619	Rock	578	>10	3333	<1	0.02	9	>10000	3465	<5	9	1534	0.02	<10	66
B875620 Dup	Rock	597	>10	3440	<1	0.02	6	>10000	242	<5	9	1569	0.02	<10	68
B875621	Rock	589	>10	3093	<1	0.03	5	>10000	160	<5	9	1264	0.04	<10	68
B875622	Rock	630	>10	4087	<1	0.02	6	>10000	153	<5	9	1964	0.07	<10	70
B875623	Rock	367	>10	4809	<1	0.02	4	>10000	116	<5	10	2386	0.01	<10	67
B875624	Rock	1619	9.89	3622	<1	0.02	3	>10000	69	<5	11	1000	0.01	207	67
B875625	Rock	1139	>10	3756	<1	0.02	4	>10000	58	<5	13	1486	0.02	50	68
B875626	Rock	857	9.28	3307	<1	0.04	9	>10000	56	<5	11	2746	0.09	<10	73
B875627	Rock	670	>10	4081	<1	0.02	6	>10000	85	<5	11	2497	0.03	<10	67
B875628	Rock	845	>10	5748	<1	0.02	4	>10000	61	<5	9	2187	<0.01	<10	67
B875629	Rock	612	>10	4099	<1	0.03	6	>10000	109	<5	13	1997	0.05	<10	65
B875630	Pulp	501	9.92	3858	<1	0.04	10	>10000	178	<5	6	1959	0.20	<10	77
B875631	Rock	938	>10	5174	<1	0.02	6	>10000	50	<5	8	1677	<0.01	25	60
B875632	Rock	659	>10	4658	<1	0.03	6	>10000	151	<5	9	1976	0.03	<10	67
B875633	Rock	579	>10	4136	<1	0.08	6	>10000	214	<5	6	2884	0.12	<10	62
B875634	Rock	469	>10	5450	<1	0.04	4	>10000	98	<5	7	4147	0.01	32	64
B875635	Rock	491	>10	4119	<1	0.03	6	>10000	178	<5	6	3586	0.15	<10	68
B875636	Rock	331	>10	5296	<1	0.03	3	>10000	65	<5	9	4385	0.02	<10	69
B875637	Rock	570	>10	4100	<1	0.04	4	>10000	159	<5	8	3382	0.06	<10	65
B875638	Rock	435	>10	4766	<1	0.03	4	>10000	77	<5	8	3838	0.04	<10	64
B875639	Rock	473	8.32	3351	<1	0.03	6	>10000	140	<5	7	3626	0.05	<10	59



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V
		30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm
B875640 Dup	Rock	505	>10	3758	<1	0.04	6	>10000	138	<5	7	3952	0.05	<10	61
B875641	Rock	480	>10	5329	<1	0.04	4	>10000	103	<5	7	4314	0.02	<10	64
B875642	Rock	368	>10	4550	<1	0.03	17	>10000	65	<5	14	2561	0.20	<10	80
B875643	Rock	355	>10	4596	<1	0.05	4	>10000	65	<5	9	2532	0.01	<10	67
B875644	Rock	356	>10	4200	<1	0.03	4	>10000	93	<5	7	3102	0.01	<10	71
B875645	Rock	507	>10	4267	<1	0.03	5	>10000	143	<5	7	3256	0.02	<10	64
B875646	Rock	1098	>10	4267	<1	0.03	5	>10000	68	<5	14	2297	0.04	<10	64
B875647	Rock	560	>10	4117	<1	0.15	4	>10000	70	<5	13	2366	0.06	<10	65
B875648	Rock	601	>10	5310	1	0.03	9	>10000	68	<5	13	3146	0.06	<10	69
B875649	Rock	950	>10	4957	<1	0.03	4	>10000	58	<5	9	2560	<0.01	44	65



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	W	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr
		30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
B875600	Rock	<10	29	21	813.6	25.4	9.4	15.1	43.4	2.3	3.9	450.2	0.8	298.1	89.4
B875601	Rock	<10	21	15	>1000	35.3	10.0	34.2	123.0	4.7	4.4	>1000	0.8	>1000	470.8
B875602	Rock														
B875603	Rock	<10	50	16	>1000	31.6	9.4	28.6	103.3	3.9	4.1	>1000	0.6	>1000	400.5
B875604	Rock	<10	200	89	>1000	28.0	6.1	26.5	100.6	16.2	3.0	>1000	0.3	>1000	389.4
B875605	Rock	<10	75	8	133.6	3.4	1.7	1.7	5.4	3.9	0.5	79.9	0.2	41.3	13.3
B875606	Rock	<10	29	18	725.5	16.7	5.6	11.6	35.4	1.8	2.4	381.5	0.3	269.3	80.9
B875607	Rock	<10	29	9	701.4	11.7	3.7	8.9	27.3	0.8	1.6	398.6	0.2	241.7	75.2
B875608	Rock	<10	21	50	934.0	24.2	8.8	15.3	46.1	2.8	3.6	532.4	0.6	337.6	101.9
B875609	Rock	<10	23	82	974.4	30.3	11.0	17.9	51.4	4.5	4.7	559.6	0.9	355.8	105.2
B875610	Pulp	<10	85	64	812.0	22.4	7.6	15.2	44.5	7.9	3.2	389.6	0.6	323.9	93.5
B875611	Rock	<10	14	58	915.3	32.8	12.1	18.5	54.6	2.7	5.2	481.2	1.0	357.0	103.2
B875612	Rock	<10	18	54	>1000	28.4	10.2	17.4	58.4	3.4	4.3	717.0	0.8	430.5	131.3
B875613	Rock	<10	19	45	757.8	24.8	8.7	16.0	45.5	1.3	3.7	363.5	0.7	316.8	88.3
B875614	Rock	<10	25	177	890.4	30.0	10.0	25.5	55.6	6.2	4.3	403.3	0.7	394.9	107.5
B875615	Rock	<10	19	61	917.5	36.5	14.1	18.8	55.6	1.9	5.9	454.6	1.1	372.3	106.2
B875616	Rock	<10	16	10	802.7	23.4	9.0	12.7	40.5	1.3	3.7	426.5	0.8	301.2	90.9
B875617	Rock	<10	17	13	>1000	24.7	8.3	16.6	58.5	1.0	3.5	828.4	0.7	547.3	170.9
B875618	Rock	<10	31	40	700.7	26.3	9.6	17.4	45.2	4.7	4.2	328.4	0.7	295.8	83.1
B875619	Rock	13	62	20	855.3	21.5	8.4	12.1	39.7	1.3	3.3	458.2	0.7	308.2	93.1
B875620 Dup	Rock	<10		22	803.2	20.6	8.2	11.9	38.0	1.3	3.2	428.0	0.7	294.3	87.8
B875621	Rock	<10	26	29	878.2	24.7	10.0	14.7	44.2	1.9	3.9	461.8	0.9	326.8	96.3
B875622	Rock	<10	37	24	880.3	21.8	8.0	15.0	42.4	2.3	3.2	453.2	0.7	328.1	99.0
B875623	Rock	<10	31	20	538.4	19.8	7.9	10.7	32.9	1.1	3.2	261.0	0.7	219.7	62.9
B875624	Rock	<10	19	15	>1000	28.5	9.0	22.4	81.8	0.9	3.6	>1000	0.8	902.7	261.8
B875625	Rock	<10	20	47	>1000	30.2	10.7	21.1	71.6	2.3	4.3	778.3	0.9	642.4	183.0
B875626	Rock	<10	30	73	>1000	32.9	11.3	24.9	68.8	7.3	4.7	604.0	0.8	529.2	149.6
B875627	Rock	<10	22	35	887.0	21.1	7.7	13.2	43.0	2.6	3.2	452.6	0.6	340.1	100.0
B875628	Rock	<10	24	13	>1000	20.0	6.3	12.0	48.3	0.6	2.7	653.6	0.4	475.5	140.6
B875629	Rock	<10	20	61	963.0	37.9	14.2	21.2	61.8	4.1	5.9	467.9	1.1	409.0	114.6
B875630	Pulp	<10	77	63	906.5	21.0	7.1	15.6	44.4	7.6	3.0	463.1	0.5	343.1	101.7
B875631	Rock	<10	20	18	>1000	23.1	8.7	13.2	48.4	0.4	3.6	688.5	0.7	459.8	142.4
B875632	Rock	<10	21	28	937.0	22.5	8.4	13.5	44.3	1.4	3.4	495.3	0.7	328.9	100.5
B875633	Rock	<10	19	5	>1000	30.3	10.5	25.4	60.8	3.5	4.4	515.4	0.8	441.6	127.4
B875634	Rock	<10	22	22	709.9	18.8	6.4	13.2	39.4	1.0	2.7	332.7	0.4	289.0	83.0
B875635	Rock	<10	33	35	750.4	23.9	8.7	17.3	45.1	2.8	3.7	339.8	0.6	320.5	89.2
B875636	Rock	<10	21	9	479.0	12.2	3.8	9.2	26.5	1.1	1.6	228.4	0.2	196.5	56.4
B875637	Rock	<10	17	26	894.3	21.6	7.3	16.1	45.1	0.9	3.1	424.2	0.5	356.5	103.9
B875638	Rock	<10	21	11	650.3	17.0	5.5	12.4	36.0	1.7	2.4	302.5	0.4	266.4	76.2
B875639	Rock	<10	19	25	801.6	26.7	9.3	17.2	49.5	1.4	3.9	370.2	0.7	344.0	96.7



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	W 30-4A-TR ppm 10	Zn 30-4A-TR ppm 2	Zr 30-4A-TR ppm 1	Ce REE-LB-MS ppm 0.1	Dy REE-LB-MS ppm 0.1	Er REE-LB-MS ppm 0.1	Eu REE-LB-MS ppm 0.1	Gd REE-LB-MS ppm 0.1	Hf REE-LB-MS ppm 0.1	Ho REE-LB-MS ppm 0.1	La REE-LB-MS ppm 0.1	Lu REE-LB-MS ppm 0.1	Nd REE-LB-MS ppm 0.1	Pr REE-LB-MS ppm 0.1
B875640 Dup	Rock	<10	19	23	795.9	26.9	9.2	17.1	49.8	2.2	4.0	363.7	0.7	340.5	95.7
B875641	Rock	<10	23	25	713.8	16.4	4.8	12.1	36.9	1.3	2.2	340.8	0.3	285.5	82.4
B875642	Rock	<10	24	33	548.8	15.4	5.8	10.2	29.5	2.7	2.3	269.0	0.5	217.8	62.7
B875643	Rock	<10	16	26	562.3	18.9	7.5	10.9	32.9	1.7	3.0	272.4	0.6	223.6	64.8
B875644	Rock	<10	23	35	551.0	14.0	5.0	9.9	29.4	0.8	2.1	272.1	0.3	212.5	62.1
B875645	Rock	<10	17	36	792.5	23.4	8.2	15.3	44.8	0.4	3.4	387.8	0.6	318.5	91.6
B875646	Rock	<10	18	46	>1000	28.5	8.6	21.2	73.2	2.7	3.7	923.1	0.6	672.6	202.5
B875647	Rock	<10	29	41	870.7	19.5	6.6	14.6	42.8	6.4	2.8	432.6	0.5	337.3	99.2
B875648	Rock	<10	29	23	881.1	16.1	5.0	11.6	37.2	2.3	2.2	483.0	0.3	323.9	95.8
B875649	Rock	<10	22	41	>1000	26.8	8.6	16.7	59.2	1.1	3.8	711.7	0.6	521.8	152.7

Certificate of Analysis

10-360-03506-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Sm	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875600	Rock	46.3	4.9	1.2	6.1	102.1	19.44	104.7	5.1
B875601	Rock	122.9	6.7	1.3	7.1	119.8	15.93	78.1	4.1
B875602	Rock								
B875603	Rock	105.2	5.6	1.2	5.9	111.5	0.11	133.5	5.9
B875604	Rock	109.0	5.6	0.7	3.8	69.4	0.41	215.9	9.3
B875605	Rock	5.8	0.5	0.2	1.8	17.5	1.95	11.0	4.8
B875606	Rock	39.4	3.5	0.6	3.5	61.8	9.32	88.0	2.2
B875607	Rock	32.4	2.4	0.3	2.1	41.6	3.42	56.3	1.6
B875608	Rock	50.5	5.0	1.0	5.4	91.2	2.39	181.0	4.3
B875609	Rock	57.0	6.0	1.4	7.3	120.0	18.69	362.9	5.5
B875610	Pulp	50.3	4.7	0.9	5.0	83.3	7.89	300.5	8.2
B875611	Rock	58.5	6.8	1.6	8.3	138.5	85.85	305.1	10.4
B875612	Rock	67.9	6.0	1.2	6.7	113.2	57.33	262.8	8.6
B875613	Rock	50.8	5.2	1.1	5.6	96.4	21.60	193.7	3.9
B875614	Rock	64.7	6.3	1.2	6.4	111.4	1.78	280.8	4.8
B875615	Rock	61.4	6.9	1.8	9.4	151.6	0.87	250.0	5.0
B875616	Rock	45.6	4.5	1.2	6.7	95.8	7.58	105.6	2.6
B875617	Rock	69.5	4.9	1.1	6.3	88.7	5.86	129.8	2.6
B875618	Rock	49.2	5.5	1.2	6.2	108.0	4.50	196.2	9.9
B875619	Rock	44.0	4.2	1.1	6.2	89.4	8.71	113.2	2.8
B875620 Dup	Rock	43.2	4.2	1.1	6.0	86.2	8.14	115.3	2.7
B875621	Rock	49.1	4.9	1.4	7.3	104.5	26.26	193.3	5.7
B875622	Rock	47.6	4.4	1.1	5.6	88.3	25.91	179.2	8.9
B875623	Rock	36.2	3.8	1.0	5.7	82.9	15.18	154.4	2.4
B875624	Rock	113.0	5.8	1.2	6.7	93.6	4.42	129.4	2.9
B875625	Rock	91.0	6.3	1.4	7.8	115.2	1.26	190.8	5.1
B875626	Rock	81.2	7.0	1.4	7.2	124.5	0.53	192.1	10.5
B875627	Rock	48.7	4.3	0.9	5.4	81.2	21.97	129.9	3.6
B875628	Rock	57.6	3.9	0.8	4.0	70.3	4.12	87.8	2.4
B875629	Rock	69.0	7.5	1.8	9.1	155.1	1.63	258.9	5.3
B875630	Pulp	50.4	4.4	0.8	4.8	78.4	30.54	295.1	9.1
B875631	Rock	57.3	4.5	1.1	5.9	90.3	5.60	141.6	1.8
B875632	Rock	47.2	4.4	1.1	5.9	88.9	22.17	180.8	5.2
B875633	Rock	69.6	6.4	1.3	6.9	122.9	28.92	151.9	10.4
B875634	Rock	44.2	4.0	0.7	4.0	70.1	12.95	106.9	2.5
B875635	Rock	51.2	5.0	1.1	5.6	93.5	30.87	216.2	14.0
B875636	Rock	30.9	2.6	0.4	2.5	42.8	8.14	40.9	5.5
B875637	Rock	53.7	4.5	0.9	4.8	80.1	29.53	172.9	11.2
B875638	Rock	41.6	3.6	0.6	3.7	60.8	14.15	75.3	6.0
B875639	Rock	55.3	5.6	1.1	6.4	103.2	15.68	148.2	8.5



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Certificate of Analysis

10-360-03506-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Sm	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875640 Dup	Rock	54.6	5.5	1.2	6.5	105.0	16.68	150.9	9.0
B875641	Rock	43.0	3.4	0.5	3.0	55.9	10.00	90.0	3.1
B875642	Rock	34.4	3.1	0.7	4.2	63.6	20.50	115.0	6.4
B875643	Rock	37.1	3.8	0.9	5.0	77.9	30.54	155.9	12.6
B875644	Rock	32.9	3.0	0.6	3.2	55.4	29.85	156.7	6.1
B875645	Rock	51.2	4.8	1.0	5.4	92.0	16.11	161.9	4.8
B875646	Rock	88.1	5.9	1.0	5.6	96.2	100.54	139.5	113.4
B875647	Rock	50.1	4.1	0.8	4.5	75.4	59.10	116.5	73.5
B875648	Rock	44.2	3.3	0.5	3.3	59.6	12.61	97.5	7.8
B875649	Rock	70.7	5.5	1.0	5.6	97.8	55.66	171.1	45.2



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875600	Rock	0.60					4	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B875600 Dup		0.65													
QCV1011-00247-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875618	Rock	0.75													
B875618 Dup		0.70													
QCV1011-00247-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875636	Rock	0.30													
B875636 Dup		0.30													
QCV1011-00247-0008-BLK		<0.01													
QCV1011-00247-0009-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875600	Rock		0.21	<0.01	34.23	<0.01		5.17	0.03	38.24	15.65	0.49	0.04	5.10	0.43
B875600 Dup			0.21	0.05	34.13	<0.01		5.12	0.04	38.23	15.88	0.49	0.03	5.05	0.42
QCV1011-00251-0002-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875618	Rock		0.24	<0.01	29.92	<0.01		13.90	0.05	34.13	14.07	0.43	0.04	6.35	0.28
B875618 Dup			0.25	<0.01	29.85	<0.01		13.88	0.06	34.10	14.10	0.47	0.04	6.48	0.30
QCV1011-00251-0005-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875636	Rock		0.09	<0.01	32.88	<0.01		3.67	0.02	40.02	18.41	0.59	0.02	4.02	0.60
B875636 Dup			0.09	<0.01	31.37	<0.01		3.44	0.02	40.02	19.32	0.58	0.03	3.95	0.65
QCV1011-00251-0008-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00251-0009-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05			6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90
STD-SY-4 result			20.83	0.04	8.06	<0.01		6.25	1.69	4.49	0.55	0.11	7.29	0.13	50.30



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP % 0.01	WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01
B875600	Rock			1.0	0.13	<5	191	<2	>10	<0.5	4	14	38	4.39	0.04
B875600 Dup				<0.5	0.13	9	205	<2	>10	<0.5	5	12	31	4.49	0.04
QCV1011-00248-0002-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-CDN-ME-6 expected				101.0									6130		
STD-CDN-ME-6 result				98.5									5942		
B875618	Rock			0.8	0.14	<5	53	<2	>10	<0.5	19	10	24	>10	0.07
B875618 Dup				1.4	0.16	<5	51	<2	>10	<0.5	17	10	24	>10	0.06
QCV1011-00248-0005-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-OREAS-45P-4A expected											122	1103	749		
STD-OREAS-45P-4A result											127	1209	784		
B875636	Rock			0.6	0.06	<5	44	<2	>10	<0.5	6	13	15	3.44	0.02
B875636 Dup				0.7	0.07	<5	42	<2	>10	<0.5	7	13	16	3.31	0.02
QCV1011-00248-0008-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
QCV1011-00248-0009-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-CDN-ME-6 expected				101.0									6130		
STD-CDN-ME-6 result				95.6									6141		
B875600	Rock	0.10	99.69												
B875600 Dup		0.10	99.77												
QCV1011-00251-0002-BLK		<0.01	<0.01												
B875618	Rock	0.30	99.71												
B875618 Dup		0.31	99.84												
QCV1011-00251-0005-BLK		<0.01	<0.01												
B875636	Rock	0.03	100.36												
B875636 Dup		0.03	99.49												
QCV1011-00251-0008-BLK		<0.01	<0.01												
QCV1011-00251-0009-BLK		<0.01	<0.01												
STD-SY-4 expected		0.29													
STD-SY-4 result		0.29	100.05												



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V
		30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm
B875600	Rock	565	9.97	4162	<1	0.03	5	>10000	146	<5	10	1945	0.06	<10	68
B875600 Dup		618	>10	4352	<1	0.03	6	>10000	99	<5	8	2021	0.05	<10	64
QCV1011-00248-0002-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result				2045											
B875618	Rock	437	9.97	3749	<1	0.03	12	>10000	104	<5	9	2917	0.15	<10	88
B875618 Dup		410	9.77	4020	<1	0.03	7	>10000	115	<5	8	2621	0.18	<10	84
QCV1011-00248-0005-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-OREAS-45P-4A expected						0.08	385	454							
STD-OREAS-45P-4A result				1444		0.08	376	464							
B875636	Rock	331	>10	5296	<1	0.03	3	>10000	65	<5	9	4385	0.02	<10	69
B875636 Dup		323	>10	5267	<1	0.02	4	>10000	60	<5	9	4270	0.02	<10	72
QCV1011-00248-0008-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
QCV1011-00248-0009-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result				2556											



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Sample Description	Sample Type	W 30-4A-TR ppm	Zn 30-4A-TR ppm	Zr 30-4A-TR ppm	Ce REE-LB-MS ppm	Dy REE-LB-MS ppm	Er REE-LB-MS ppm	Eu REE-LB-MS ppm	Gd REE-LB-MS ppm	Hf REE-LB-MS ppm	Ho REE-LB-MS ppm	La REE-LB-MS ppm	Lu REE-LB-MS ppm	Nd REE-LB-MS ppm	Pr REE-LB-MS ppm
B875600	Rock	<10	29	21											
B875600 Dup		<10	26	22											
QCV1011-00248-0002-BLK		<10	<2	<1											
STD-CDN-ME-6 expected			5170												
STD-CDN-ME-6 result			5114												
B875618	Rock	<10	31	40											
B875618 Dup		<10	32	40											
QCV1011-00248-0005-BLK		<10	<2	<1											
STD-OREAS-45P-4A expected			142												
STD-OREAS-45P-4A result			151												
B875636	Rock	<10	21	9											
B875636 Dup		<10	25	8											
QCV1011-00248-0008-BLK		<10	<2	<1											
QCV1011-00248-0009-BLK		<10	<2	<1											
STD-CDN-ME-6 expected			5170												
STD-CDN-ME-6 result			5098												
B875600	Rock				813.6	25.4	9.4	15.1	43.4	2.3	3.9	450.2	0.8	298.1	89.4
B875600 Dup					809.7	24.0	9.1	15.3	44.2	2.2	3.8	452.4	0.7	296.4	88.4
QCV1011-00249-0002-BLK					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result					22.5	2.8	1.7	1.1	2.9	0.5	0.5	11.0	0.2	11.1	2.9
B875618	Rock				700.7	26.3	9.6	17.4	45.2	4.7	4.2	328.4	0.7	295.8	83.1
B875618 Dup					678.6	26.0	9.6	17.0	43.9	4.4	4.1	316.3	0.7	287.8	79.9
QCV1011-00249-0005-BLK					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result					24.0	3.0	1.7	1.1	3.0	0.7	0.5	12.4	0.2	12.2	3.0
B875636	Rock				479.0	12.2	3.8	9.2	26.5	1.1	1.6	228.4	0.2	196.5	56.4
B875636 Dup					486.7	11.8	3.7	9.1	26.2	1.0	1.7	229.4	0.2	198.4	56.5
QCV1011-00249-0008-BLK					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00249-0009-BLK					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected					122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0
STD-SY-4 result					130.8	18.3	14.7	2.1	15.2	11.1	4.4	62.4	2.2	57.2	15.6



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Certificate of Analysis

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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Sm	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875600	Rock	46.3	4.9	1.2	6.1	102.1			
B875600 Dup		46.8	4.9	1.2	6.2	100.3			
QCV1011-00249-0002-BLK		<0.1	<0.1	<0.1	<0.1	<0.10			
STD-CDN-ME-6 expected									
STD-CDN-ME-6 result		2.7	0.4	0.2	1.8	17.0			
B875618	Rock	49.2	5.5	1.2	6.2	108.0			
B875618 Dup		48.1	5.3	1.2	6.1	106.2			
QCV1011-00249-0005-BLK		<0.1	<0.1	<0.1	<0.1	<0.10			
STD-CDN-ME-6 expected									
STD-CDN-ME-6 result		2.8	0.4	0.2	1.9	17.3			
B875636	Rock	30.9	2.6	0.4	2.5	42.8			
B875636 Dup		30.5	2.6	0.4	2.5	42.5			
QCV1011-00249-0008-BLK		<0.1	<0.1	<0.1	<0.1	<0.10			
QCV1011-00249-0009-BLK		<0.1	<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		12.7	2.6	2.3	14.8	119.0			
STD-SY-4 result		12.9	2.8	2.5	15.0	125.3			
QCV1103-01166-0002-BLK							<0.05	<0.2	<0.1
QCV1103-01166-0009-BLK							<0.05	<0.2	<0.1

Certificate of Analysis

10-360-03507-01

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/08/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-024</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">51</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uranium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	51	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uranium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
Vancouver, BC	51	Rock	SP-RX-2K/Rock/Chips/Drill Core																																		
Location	Method	Description																																			
Vancouver, BC	REE-LB-MS	REE Group by ICP-MS																																			
Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																																			
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Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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Certificate of Analysis

10-360-03507-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875108	Rock	0.29	0.11	<0.01	34.06	<0.01	4.93	0.03	39.45	18.13	0.68	0.03	3.82	0.14	0.07
B875109	Rock	0.27	0.22	0.01	34.07	<0.01	4.97	0.02	37.77	17.84	0.61	0.02	5.15	0.63	0.05
B875110	Pulp	0.44	0.24	<0.01	33.76	<0.01	5.85	0.04	37.95	17.31	0.50	0.05	4.53	1.19	0.12
B875111	Rock	0.33	0.18	<0.01	32.77	<0.01	4.83	0.02	38.85	18.54	0.59	0.02	3.97	1.19	0.08
B875112	Rock	0.70	0.49	<0.01	29.09	<0.01	13.97	0.06	29.93	15.13	0.48	0.03	5.50	1.86	0.55
B875113	Rock	0.28	0.19	<0.01	32.41	<0.01	5.15	0.04	37.56	17.83	0.52	0.05	4.58	1.14	0.14
B875114	Rock	0.29	0.31	<0.01	32.31	<0.01	5.14	0.05	37.01	17.91	0.56	0.04	5.02	1.22	0.65
B875115	Rock	0.74	0.53	<0.01	32.51	<0.01	7.17	0.08	32.64	15.35	0.48	0.09	6.33	2.36	0.59
B875116	Rock	0.34	0.52	<0.01	32.26	<0.01	5.42	0.10	38.44	17.41	0.41	0.06	3.72	1.13	0.15
B875117	Rock	0.53	0.24	<0.01	33.09	<0.01	5.29	0.02	37.65	17.51	0.45	0.04	4.80	0.35	0.09
B875118	Rock	0.46	0.27	<0.01	31.81	<0.01	6.88	0.05	37.04	17.05	0.55	0.03	3.76	0.92	0.18
B875119	Rock	0.66	0.42	<0.01	29.73	<0.01	11.45	0.07	32.79	16.76	0.36	0.03	4.29	1.73	0.18
B875120 Dup	Rock	0.65	0.43	<0.01	29.39	<0.01	10.61	0.07	33.35	17.48	0.35	0.03	4.08	1.75	0.17
B875121	Rock	0.44	0.15	<0.01	30.59	<0.01	5.17	0.03	37.79	17.83	0.46	0.03	4.01	1.28	0.03
B875122	Rock	0.46	0.11	<0.01	31.22	<0.01	4.58	0.02	39.13	18.64	0.47	0.03	3.76	0.65	0.02
B875123	Rock	0.41	0.17	<0.01	32.66	<0.01	4.93	0.06	39.22	18.21	0.56	0.04	3.76	0.97	0.03
B875124	Rock	0.49	0.20	0.01	31.13	<0.01	9.00	0.07	35.47	16.51	0.56	0.04	3.86	1.42	0.11
B875125	Rock	0.39	0.15	<0.01	33.11	<0.01	4.39	0.04	39.73	17.87	0.69	0.04	3.93	0.19	0.03
B875126	Rock	0.40	0.22	<0.01	33.07	<0.01	5.18	0.07	39.69	18.01	0.51	0.03	3.02	1.04	0.12
B875127	Rock	0.36	0.25	<0.01	31.28	<0.01	5.51	0.06	39.65	18.55	0.46	0.05	2.62	0.98	0.09
B875128	Rock	0.39	0.16	<0.01	31.46	<0.01	6.07	0.03	38.12	18.82	0.62	0.04	3.77	0.62	0.14
B875129	Rock	0.33	0.17	<0.01	32.62	<0.01	5.25	0.04	39.43	17.97	0.67	0.04	3.78	0.10	0.03
B875130	Pulp	0.72	0.18	0.02	36.66	<0.01	5.04	0.03	37.96	13.16	0.39	0.07	3.66	3.00	0.13
B875131	Rock	0.27	0.14	<0.01	32.54	<0.01	4.75	0.04	40.37	18.00	0.71	0.03	3.19	0.53	0.03
B875132	Rock	0.44	0.15	0.01	33.90	<0.01	5.30	0.05	38.45	17.44	0.64	0.03	4.40	0.41	0.05
B875133	Rock	0.55	0.22	<0.01	32.71	<0.01	6.38	0.03	35.85	16.60	0.52	0.04	5.08	0.40	0.09
B875134	Rock	0.34	0.17	0.01	33.40	<0.01	4.97	0.03	39.15	18.80	0.63	0.03	3.74	0.58	0.05
B875135	Rock	0.33	0.14	<0.01	32.71	<0.01	4.17	0.02	39.76	18.07	0.69	0.03	3.64	0.72	0.02
B875136	Rock	0.44	0.22	<0.01	32.35	<0.01	4.66	0.04	38.82	18.60	0.53	0.04	3.63	1.32	0.04
B875137	Rock	0.74	0.14	0.02	35.89	<0.01	7.27	0.11	34.54	13.66	0.68	0.09	5.94	1.12	0.05
B875138	Rock	0.02	15.23	0.13	3.98	0.03	3.88	3.77	0.95	1.47	0.11	3.33	0.25	66.21	0.46
B875139	Rock	0.54	0.21	<0.01	33.11	<0.01	5.27	0.05	36.31	17.98	0.72	0.06	5.02	1.10	0.04
B875140 Dup	Rock	0.52	0.18	<0.01	33.83	<0.01	4.87	0.05	36.07	18.02	0.71	0.05	5.07	1.02	0.03
B875141	Rock	0.41	0.12	0.01	33.97	<0.01	4.64	0.02	39.76	18.45	0.70	0.03	3.49	0.39	0.02
B875142	Rock	0.30	0.16	0.01	33.18	<0.01	4.31	0.02	40.34	19.18	0.50	0.03	2.69	0.44	0.02
B875143	Rock	0.56	0.16	<0.01	32.25	<0.01	5.96	0.03	37.31	17.69	0.56	0.05	4.31	0.48	0.05
B875144	Rock	0.88	0.22	<0.01	33.02	<0.01	8.66	0.03	31.31	16.59	0.39	0.06	5.95	1.14	0.09
B875145	Rock	0.28	0.84	<0.01	30.32	<0.01	4.48	0.03	36.79	18.38	0.62	0.04	4.56	2.94	0.11
B875146	Rock	0.42	1.58	<0.01	29.79	<0.01	5.05	0.04	34.85	19.00	0.46	0.05	4.65	4.50	0.18
B875147	Rock	0.15	0.07	<0.01	33.12	<0.01	3.26	0.02	41.19	19.74	0.64	0.03	3.38	<0.01	<0.01

Certificate of Analysis

10-360-03507-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
B875148	Rock	0.17	0.22	<0.01	32.60	<0.01	4.37	0.02	39.42	18.47	0.59	0.03	4.07	0.14	0.02
B875149	Rock	0.15	0.25	<0.01	34.31	<0.01	5.72	0.04	33.88	16.18	0.52	0.04	7.46	0.14	0.03
B875150	Pulp	0.53	1.84	0.34	47.56	<0.01	4.19	0.72	32.03	2.39	0.90	0.43	2.50	6.23	0.24
B875151	Rock	0.13	0.13	<0.01	32.51	<0.01	4.85	0.04	38.39	17.99	0.65	0.03	4.22	<0.01	0.01
B875152	Rock	0.17	0.55	<0.01	32.61	<0.01	4.69	0.14	36.90	17.83	0.52	0.04	5.50	0.82	0.07
B875153	Rock	0.16	0.65	<0.01	31.52	<0.01	7.05	0.09	35.25	18.34	0.36	0.04	4.19	2.28	0.10
B875154	Rock	0.15	0.17	<0.01	33.78	<0.01	4.57	0.02	39.19	18.74	0.61	0.03	3.70	0.21	0.03
B875155	Rock	0.28	0.22	<0.01	33.54	<0.01	4.49	0.03	36.23	17.56	0.46	0.05	5.46	2.42	0.07
B875156	Rock	0.14	0.40	<0.01	32.77	<0.01	3.78	0.04	37.25	18.08	0.30	0.06	4.74	2.94	0.15
B875157	Rock	0.15	5.37	0.05	22.62	0.01	7.38	1.16	24.38	14.50	0.38	1.02	2.54	19.87	0.94
B875158	Rock	0.12	0.15	<0.01	30.46	<0.01	4.41	0.02	39.39	17.98	0.65	0.04	3.25	0.38	0.01
B875159	Rock	0.07	0.19	<0.01	34.48	<0.01	3.99	0.04	36.21	16.48	0.41	0.08	6.36	0.37	0.06
B875160 Dup	Rock	0.06	0.21	<0.01	34.59	<0.01	4.78	0.06	35.74	15.76	0.44	0.07	6.27	0.41	0.06
B875161	Rock	0.03	0.25	<0.01	33.70	<0.01	4.48	0.05	33.06	16.00	0.24	0.06	9.62	0.20	0.11



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03507-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875108	Rock	101.46	1.4	0.06	7	60	<2	>10	<0.5	5	11	24	3.32	0.01	277
B875109	Rock	101.37	0.9	0.12	23	93	<2	>10	<0.5	5	14	16	3.19	<0.01	791
B875110	Pulp	101.53	<0.5	0.15	7	55	<2	>10	<0.5	7	6	36	3.97	0.03	372
B875111	Rock	101.06	<0.5	0.10	6	54	<2	>10	<0.5	7	11	29	3.14	0.01	251
B875112	Rock	97.10	<0.5	0.24	<5	54	<2	>10	<0.5	17	11	62	9.57	0.04	347
B875113	Rock	99.61	<0.5	0.11	13	31	<2	>10	<0.5	8	10	21	3.42	0.02	429
B875114	Rock	100.22	<0.5	0.18	10	32	<2	>10	<0.5	9	11	19	3.36	0.03	365
B875115	Rock	98.13	<0.5	0.28	28	37	<2	>10	<0.5	17	15	83	4.74	0.05	441
B875116	Rock	99.65	<0.5	0.26	23	84	<2	>10	<0.5	8	9	31	3.52	0.08	588
B875117	Rock	99.54	<0.5	0.13	15	73	<2	>10	<0.5	9	10	45	3.54	<0.01	382
B875118	Rock	98.56	<0.5	0.15	21	62	<2	>10	<0.5	19	12	222	4.52	0.04	300
B875119	Rock	97.81	<0.5	0.21	8	50	<2	>10	<0.5	20	14	46	7.63	0.05	312
B875120 Dup	Rock	97.71	<0.5	0.23	11	47	<2	>10	<0.5	22	18	45	6.94	0.05	299
B875121	Rock	97.40	<0.5	0.09	8	35	<2	>10	<0.5	10	14	36	3.40	0.02	299
B875122	Rock	98.65	<0.5	0.06	10	38	<2	>10	<0.5	7	12	36	3.05	<0.01	370
B875123	Rock	100.63	<0.5	0.07	8	38	<2	>10	<0.5	8	11	31	3.24	0.02	303
B875124	Rock	98.38	<0.5	0.10	13	86	<2	>10	<0.5	14	15	29	5.93	0.04	280
B875125	Rock	100.17	1.1	0.08	8	46	<2	>10	<0.5	5	10	28	2.99	0.02	371
B875126	Rock	100.97	<0.5	0.12	12	46	<2	>10	<0.5	8	13	35	3.34	0.05	395
B875127	Rock	99.50	<0.5	0.13	10	27	<2	>10	<0.5	14	13	28	3.66	0.03	346
B875128	Rock	99.86	<0.5	0.08	5	39	<2	>10	<0.5	9	12	29	3.95	0.02	280
B875129	Rock	100.10	<0.5	0.09	6	46	<2	>10	<0.5	5	10	25	3.39	0.03	284
B875130	Pulp	100.32	<0.5	0.10	16	202	<2	>10	<0.5	7	6	4	3.35	0.03	395
B875131	Rock	100.33	<0.5	0.07	7	58	<2	>10	<0.5	7	11	24	3.12	0.02	217
B875132	Rock	100.84	<0.5	0.08	<5	104	<2	>10	<0.5	7	10	31	3.47	0.03	251
B875133	Rock	97.92	<0.5	0.12	8	46	<2	>10	<0.5	10	32	43	4.24	0.02	294
B875134	Rock	101.57	<0.5	0.09	6	87	<2	>10	<0.5	9	11	28	3.35	0.02	256
B875135	Rock	99.98	<0.5	0.07	18	69	<2	>10	<0.5	7	13	26	2.84	0.01	217
B875136	Rock	100.28	<0.5	0.12	5	73	<2	>10	<0.5	9	14	32	3.11	0.03	296
B875137	Rock	99.51	<0.5	0.08	10	191	<2	>10	<0.5	9	11	2	4.88	0.09	357
B875138	Rock	99.81	<0.5	7.93	<5	1067	<2	2.83	<0.5	9	127	2	2.54	3.05	37
B875139	Rock	99.87	<0.5	0.08	32	50	<2	>10	<0.5	6	11	39	3.57	0.03	301
B875140 Dup	Rock	99.93	<0.5	0.09	34	47	<2	>10	<0.5	6	12	32	3.33	0.02	277
B875141	Rock	101.61	<0.5	0.06	15	122	<2	>10	<0.5	5	10	29	3.13	<0.01	285
B875142	Rock	100.90	2.1	0.09	10	109	<2	>10	<0.5	7	15	23	2.85	0.02	255
B875143	Rock	98.85	0.5	0.09	<5	29	<2	>10	<0.5	8	22	37	3.98	0.02	251
B875144	Rock	97.48	0.9	0.12	7	23	<2	>10	<0.5	10	23	66	5.79	0.02	304
B875145	Rock	99.12	<0.5	0.40	<5	32	<2	>10	<0.5	7	16	21	3.01	0.02	230
B875146	Rock	100.15	0.7	0.80	6	33	<2	>10	<0.5	9	26	33	3.30	0.02	240
B875147	Rock	101.46	<0.5	0.03	<5	37	<2	>10	<0.5	3	9	11	2.14	<0.01	184



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Certificate of Analysis

10-360-03507-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875148	Rock	99.97	<0.5	0.12	9	44	<2	>10	<0.5	10	11	12	2.93	0.02	274
B875149	Rock	98.57	0.5	0.11	15	44	<2	>10	<0.5	15	13	12	3.76	0.03	371
B875150	Pulp	99.36	0.7	0.96	28	2987	<2	>10	<0.5	6	9	5	2.78	0.57	959
B875151	Rock	98.83	0.6	0.07	10	39	<2	>10	<0.5	6	12	10	3.30	0.02	328
B875152	Rock	99.69	0.6	0.25	9	34	<2	>10	<0.5	6	10	13	3.17	0.10	371
B875153	Rock	99.88	<0.5	0.34	16	22	<2	>10	<0.5	28	17	13	4.76	0.07	363
B875154	Rock	101.08	<0.5	0.07	29	26	<2	>10	<0.5	5	10	10	3.07	0.02	1181
B875155	Rock	100.54	0.5	0.12	21	52	<2	>10	<0.5	7	12	18	3.02	0.02	739
B875156	Rock	100.51	<0.5	0.21	8	24	<2	>10	<0.5	7	13	11	2.50	0.03	325
B875157	Rock	100.22	0.7	2.83	<5	437	<2	>10	<0.5	22	40	32	5.01	0.86	235
B875158	Rock	96.74	0.6	0.05	18	29	<2	>10	<0.5	5	18	7	3.13	<0.01	645
B875159	Rock	98.66	0.5	0.10	33	25	<2	>10	<0.5	5	14	6	3.09	0.02	1220
B875160 Dup	Rock	98.40	<0.5	0.11	39	25	<2	>10	<0.5	7	12	5	3.10	0.02	1344
B875161	Rock	97.79	0.7	0.13	84	23	<2	>10	<0.5	8	13	4	2.98	0.03	3160

Certificate of Analysis

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Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875108	Rock	>10	4930	3	0.05	<1	>10000	82	<5	6	3250	0.01	<10	15	<10
B875109	Rock	9.86	4404	2	0.04	<1	>10000	62	<5	8	2923	<0.01	<10	16	<10
B875110	Pulp	>10	3812	4	0.07	<1	>10000	108	<5	7	2112	0.03	<10	40	<10
B875111	Rock	>10	4401	2	0.04	<1	>10000	78	<5	8	3253	0.02	<10	31	<10
B875112	Rock	8.68	3634	2	0.05	2	>10000	159	<5	6	2657	0.26	<10	293	<10
B875113	Rock	>10	3876	1	0.07	<1	>10000	70	<5	8	2729	0.04	<10	31	<10
B875114	Rock	9.71	4045	2	0.05	<1	>10000	68	<5	7	2901	0.05	<10	28	<10
B875115	Rock	8.96	3427	2	0.11	4	>10000	184	<5	8	2495	0.13	<10	110	<10
B875116	Rock	>10	2893	2	0.08	<1	>10000	84	<5	9	1362	0.03	<10	39	<10
B875117	Rock	>10	3303	2	0.06	<1	>10000	124	<5	7	1968	0.02	<10	31	<10
B875118	Rock	9.60	3943	2	0.05	2	>10000	111	<5	6	2264	0.05	<10	58	<10
B875119	Rock	9.36	2600	2	0.05	1	>10000	126	<5	6	1383	0.08	<10	142	<10
B875120 Dup	Rock	9.31	2528	2	0.06	<1	>10000	120	<5	5	1321	0.07	<10	147	<10
B875121	Rock	>10	3493	2	0.05	<1	>10000	110	<5	6	2255	0.01	<10	23	<10
B875122	Rock	>10	3576	5	0.06	<1	>10000	117	<5	7	2072	0.01	<10	22	<10
B875123	Rock	>10	3965	5	0.06	<1	>10000	100	<5	7	2378	0.01	<10	23	<10
B875124	Rock	9.50	3987	3	0.06	<1	>10000	96	<5	7	2537	0.05	<10	95	<10
B875125	Rock	>10	4920	2	0.05	<1	>10000	97	<5	5	3292	0.01	<10	15	<10
B875126	Rock	>10	3528	2	0.05	<1	>10000	98	<5	7	1867	0.03	<10	29	<10
B875127	Rock	>10	3368	4	0.06	<1	>10000	95	<5	6	1621	0.03	<10	42	<10
B875128	Rock	>10	4525	1	0.06	<1	>10000	98	<5	7	3003	0.04	<10	43	<10
B875129	Rock	>10	4866	3	0.05	<1	>10000	87	<5	6	2949	0.01	<10	16	<10
B875130	Pulp	7.98	2988	3	0.09	<1	>10000	18	<5	5	2255	0.04	<10	84	<10
B875131	Rock	>10	5111	2	0.05	<1	>10000	73	<5	6	3458	0.01	<10	16	<10
B875132	Rock	>10	4500	3	0.05	<1	>10000	104	<5	5	3467	0.02	<10	40	<10
B875133	Rock	9.81	3627	3	0.06	<1	>10000	143	<5	6	2879	0.03	<10	64	<10
B875134	Rock	>10	4446	4	0.05	<1	>10000	88	<5	6	3110	0.01	<10	21	<10
B875135	Rock	>10	4932	2	0.05	<1	>10000	86	<5	5	3517	<0.01	<10	12	<10
B875136	Rock	>10	3753	3	0.05	<1	>10000	111	<5	5	2145	0.01	<10	22	<10
B875137	Rock	7.72	4890	2	0.10	<1	>10000	12	<5	3	4978	0.01	<10	52	<10
B875138	Rock	0.83	772	4	2.61	5	966	10	<5	6	740	0.26	<10	60	<10
B875139	Rock	9.72	5250	1	0.08	<1	>10000	128	<5	7	3901	0.02	<10	27	<10
B875140 Dup	Rock	>10	5190	2	0.07	<1	>10000	124	<5	7	4120	0.01	<10	24	<10
B875141	Rock	>10	4978	3	0.05	<1	>10000	108	<5	6	3615	<0.01	<10	16	<10
B875142	Rock	>10	3483	2	0.05	<1	>10000	89	<5	5	1453	<0.01	<10	24	<10
B875143	Rock	9.92	3905	1	0.06	2	>10000	142	<5	5	2711	0.02	<10	74	<10
B875144	Rock	8.90	2711	3	0.07	3	>10000	217	<5	6	1738	0.05	<10	135	<10
B875145	Rock	>10	4476	2	0.06	2	>10000	72	<5	7	3386	0.03	<10	41	<10
B875146	Rock	>10	3272	1	0.07	7	>10000	100	<5	7	2200	0.05	<10	35	<10
B875147	Rock	>10	4622	3	0.05	<1	>10000	40	<5	5	3605	<0.01	<10	5	<10



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875148	Rock	>10	4230	2	0.06	<1	>10000	48	<5	5	2812	<0.01	<10	11	<10
B875149	Rock	9.05	3588	4	0.06	<1	>10000	45	<5	6	2176	<0.01	<10	16	<10
B875150	Pulp	1.29	6300	14	0.34	<1	>10000	64	<5	4	>10000	0.10	<10	178	<10
B875151	Rock	>10	4618	3	0.05	<1	>10000	40	<5	5	2710	<0.01	<10	11	<10
B875152	Rock	>10	3744	2	0.05	1	>10000	54	<5	11	1993	0.02	<10	33	<10
B875153	Rock	>10	2536	3	0.06	<1	>10000	48	<5	10	1070	0.03	<10	40	<10
B875154	Rock	>10	4231	5	0.06	<1	>10000	46	<5	7	2161	<0.01	<10	16	<10
B875155	Rock	9.77	3201	2	0.06	<1	>10000	71	<5	7	1728	0.02	<10	21	<10
B875156	Rock	>10	2147	2	0.08	<1	>10000	37	<5	6	710	0.05	<10	35	<10
B875157	Rock	8.05	2778	4	0.76	19	>10000	42	<5	16	1538	0.42	<10	122	<10
B875158	Rock	>10	4765	8	0.05	2	>10000	31	<5	6	2489	<0.01	<10	10	<10
B875159	Rock	9.72	3083	2	0.08	<1	>10000	26	<5	7	1357	0.01	<10	20	<10
B875160 Dup	Rock	9.46	3013	2	0.07	<1	>10000	22	<5	8	1332	0.01	<10	20	<10
B875161	Rock	9.01	1774	3	0.07	1	>10000	22	<5	11	607	0.02	<10	25	<10



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875108	Rock	23	20	561.5	20.4	7.0	12.2	34.5	2.2	3.2	305.2	0.4	247.8	71.0	39.2
B875109	Rock	20	20	>1000	32.6	10.8	19.7	70.0	2.1	4.9	890.8	0.6	645.4	189.6	87.9
B875110	Pulp	24	29	760.9	23.4	8.2	16.3	44.5	2.8	3.7	429.7	0.6	318.8	92.5	51.2
B875111	Rock	20	15	505.1	21.1	7.4	12.2	34.4	2.2	3.3	262.6	0.4	237.3	66.0	39.9
B875112	Rock	24	38	745.7	22.5	7.7	16.2	43.5	7.4	3.4	394.5	0.4	329.1	93.5	49.8
B875113	Rock	17	19	864.8	24.1	8.3	14.9	45.3	3.0	3.7	498.3	0.5	350.7	104.0	50.9
B875114	Rock	16	15	751.0	25.6	9.7	15.0	43.9	2.7	4.1	424.0	0.6	315.4	91.6	48.6
B875115	Rock	16	34	955.3	35.9	12.9	22.6	60.9	3.8	5.7	503.9	0.8	430.0	121.9	69.7
B875116	Rock	27	21	>1000	34.8	11.8	18.7	64.0	2.1	5.4	662.9	0.8	509.9	146.8	73.8
B875117	Rock	18	22	791.2	35.4	13.6	19.1	55.2	2.7	5.9	414.4	1.0	360.1	101.3	60.7
B875118	Rock	16	19	705.5	19.8	6.9	14.7	38.0	2.4	3.1	376.7	0.5	298.1	85.6	44.2
B875119	Rock	18	34	800.9	23.3	8.0	18.2	44.6	4.9	3.6	433.6	0.7	335.0	97.5	51.2
B875120 Dup	Rock	17	33	758.5	22.8	8.3	17.5	43.0	4.0	3.5	413.8	0.7	322.5	94.0	50.4
B875121	Rock	14	18	648.0	20.6	7.3	13.8	38.5	2.4	3.3	342.7	0.5	285.4	81.2	42.7
B875122	Rock	14	18	716.3	19.8	7.0	13.5	39.1	1.9	3.0	396.9	0.6	300.2	88.5	44.8
B875123	Rock	15	17	635.8	18.2	6.3	13.1	35.9	1.9	2.8	335.6	0.5	274.9	79.3	41.6
B875124	Rock	28	32	589.8	19.6	6.9	13.8	37.0	3.0	3.1	307.3	0.5	270.9	75.1	42.9
B875125	Rock	20	16	747.5	19.4	6.3	14.2	39.2	1.2	2.9	401.6	0.3	323.4	92.8	47.2
B875126	Rock	13	21	787.7	21.8	7.5	14.0	41.0	1.9	3.4	442.7	0.5	318.6	95.4	48.8
B875127	Rock	12	15	750.5	18.9	6.9	12.9	37.1	2.1	2.9	439.7	0.6	295.3	88.9	41.6
B875128	Rock	18	21	577.8	17.5	6.1	12.2	32.3	2.5	2.7	305.7	0.3	250.0	71.5	37.6
B875129	Rock	20	18	576.6	18.7	6.8	11.5	33.2	1.2	3.0	300.3	0.4	245.3	70.3	38.6
B875130	Pulp	13	28	806.1	25.2	9.1	16.4	46.4	1.8	4.0	425.8	0.8	339.9	98.8	52.6
B875131	Rock	22	12	440.3	13.4	4.7	9.6	26.1	1.1	2.1	221.4	0.2	198.2	55.1	30.2
B875132	Rock	20	24	533.6	17.4	5.9	13.1	33.2	2.3	2.6	264.0	0.4	242.3	68.4	38.7
B875133	Rock	16	26	626.2	21.6	7.0	17.1	41.0	4.0	3.3	311.8	0.4	289.7	80.7	46.9
B875134	Rock	19	15	540.5	19.7	6.9	12.1	35.1	1.0	3.1	277.3	0.4	238.9	68.0	39.4
B875135	Rock	22	13	489.1	14.5	4.8	10.6	29.2	1.4	2.2	248.4	0.3	216.9	60.8	33.8
B875136	Rock	13	14	652.6	19.1	6.7	12.8	37.4	0.9	2.9	345.6	0.5	283.0	80.9	42.7
B875137	Rock	31	35	742.6	18.8	5.5	14.7	40.4	4.2	2.5	374.2	0.3	329.9	94.9	49.9
B875138	Rock	56	8	62.6	3.2	1.9	1.5	4.6	3.7	0.6	33.8	0.2	26.6	7.6	4.7
B875139	Rock	26	27	613.2	17.9	5.2	14.2	39.7	4.9	2.7	314.3	0.3	299.3	80.2	43.3
B875140 Dup	Rock	21	21	603.2	17.8	5.1	14.1	36.0	3.1	2.4	296.2	0.3	270.5	78.3	42.6
B875141	Rock	18	16	578.2	16.1	5.3	11.4	33.0	1.3	2.4	314.4	0.3	247.4	70.4	38.1
B875142	Rock	12	14	572.3	20.5	7.8	11.8	35.3	1.8	3.3	309.4	0.7	247.7	70.9	39.9
B875143	Rock	14	21	557.7	16.6	5.7	14.2	35.2	3.3	2.5	276.4	0.4	255.1	70.2	40.3
B875144	Rock	13	52	727.1	24.6	9.1	17.8	44.6	5.0	4.1	377.5	0.8	342.5	92.2	54.4
B875145	Rock	18	18	500.9	18.2	6.3	12.3	33.2	1.8	2.8	242.9	0.4	234.7	64.3	37.8
B875146	Rock	15	30	518.5	25.7	10.5	13.9	39.5	3.0	4.6	262.6	0.8	248.6	67.0	43.1
B875147	Rock	18	10	366.0	13.3	5.2	8.2	23.5	0.4	2.2	185.3	0.3	164.7	46.8	26.8

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Aley Corporation
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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875148	Rock	16	18	550.0	17.6	6.1	10.8	31.2	0.6	2.7	290.0	0.3	241.3	68.3	36.4
B875149	Rock	16	42	732.6	37.9	15.6	15.9	51.3	0.5	6.6	398.0	1.0	318.3	88.9	53.9
B875150	Pulp	470	61	>1000	16.8	5.7	15.2	46.0	0.3	2.3	>1000	0.5	475.1	168.9	50.2
B875151	Rock	21	21	653.7	21.3	8.6	9.8	34.8	0.2	3.6	363.6	0.5	267.3	78.2	39.0
B875152	Rock	17	41	755.4	31.5	12.8	13.7	45.1	3.9	5.5	430.0	0.8	308.5	89.3	47.4
B875153	Rock	13	20	816.8	22.4	8.6	12.6	41.4	1.4	3.7	471.6	0.7	318.1	96.9	45.2
B875154	Rock	15	16	>1000	24.4	7.8	18.3	64.9	1.2	3.5	>1000	0.5	607.9	204.9	72.5
B875155	Rock	11	24	>1000	29.9	12.2	16.7	52.6	1.9	5.1	892.3	0.9	399.3	131.9	52.6
B875156	Rock	7	24	684.0	26.2	10.1	14.6	44.0	3.0	4.3	370.1	0.9	304.1	86.2	47.4
B875157	Rock	64	46	494.9	17.6	7.3	9.7	27.8	2.0	3.0	285.1	0.6	197.9	58.3	31.0
B875158	Rock	20	12	>1000	18.2	6.6	10.6	35.9	0.1	2.9	764.7	0.4	289.7	99.6	35.5
B875159	Rock	14	19	>1000	31.5	11.8	19.3	66.0	1.4	5.1	>1000	0.9	554.0	189.5	65.5
B875160 Dup	Rock	12	19	>1000	30.2	11.3	18.7	63.9	1.6	4.9	>1000	0.8	549.2	188.4	64.5
B875161	Rock	7	22	>1000	59.8	17.9	40.0	157.7	1.8	8.2	>1000	1.2	>1000	507.3	156.2

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875108	Rock	3.8	0.8	3.9	76.1	7.10	109.2	1.6
B875109	Rock	6.2	1.2	5.9	122.1	5.14	189.2	2.1
B875110	Pulp	4.8	1.0	5.2	86.3	23.97	168.7	9.8
B875111	Rock	3.9	0.8	4.0	79.1	12.03	101.9	2.1
B875112	Rock	4.3	0.8	4.3	82.8	38.72	168.4	8.4
B875113	Rock	4.7	1.0	4.9	90.3	15.35	123.1	4.6
B875114	Rock	4.8	1.0	5.5	99.0	11.58	138.3	5.2
B875115	Rock	6.9	1.4	7.2	139.8	37.38	170.0	14.4
B875116	Rock	6.6	1.4	7.0	132.6	25.49	191.0	7.2
B875117	Rock	6.8	1.6	8.2	146.1	20.11	164.0	3.0
B875118	Rock	3.8	0.8	4.4	75.3	28.10	129.5	6.8
B875119	Rock	4.6	1.0	5.6	93.7	28.30	157.7	9.1
B875120 Dup	Rock	4.5	1.0	5.5	91.3	26.50	161.3	8.7
B875121	Rock	3.9	0.9	4.9	80.8	19.85	116.0	3.6
B875122	Rock	3.8	0.8	4.8	76.4	8.99	99.4	2.3
B875123	Rock	3.4	0.8	4.6	68.0	19.83	107.8	2.8
B875124	Rock	3.8	0.8	4.3	76.1	1.86	127.1	4.3
B875125	Rock	3.8	0.7	3.8	70.5	10.00	86.4	3.4
B875126	Rock	4.3	0.9	5.0	82.2	13.38	119.7	4.4
B875127	Rock	3.5	0.9	4.9	74.5	9.22	79.8	2.9
B875128	Rock	3.4	0.7	3.6	66.9	21.02	113.0	3.6
B875129	Rock	3.6	0.8	4.2	71.7	16.69	117.0	7.2
B875130	Pulp	5.0	1.2	6.7	100.0	1.00	137.7	2.5
B875131	Rock	2.6	0.5	2.8	50.5	5.80	62.4	3.4
B875132	Rock	3.4	0.6	3.5	64.6	8.44	91.1	2.8
B875133	Rock	4.3	0.7	4.1	81.4	15.32	105.1	5.2
B875134	Rock	3.9	0.7	4.3	74.3	8.04	105.7	3.1
B875135	Rock	2.9	0.5	3.2	53.2	11.59	65.1	4.3
B875136	Rock	3.6	0.8	4.3	72.4	10.66	76.2	3.9
B875137	Rock	3.8	0.5	3.2	60.3	0.52	45.5	2.5
B875138	Rock	0.5	0.2	1.9	19.4	1.52	12.0	5.9
B875139	Rock	3.8	0.6	3.6	62.3	16.57	92.6	11.3
B875140 Dup	Rock	3.4	0.5	2.9	61.3	16.91	90.4	11.4
B875141	Rock	3.2	0.5	3.2	57.4	15.64	103.6	6.9
B875142	Rock	3.9	0.9	5.4	76.4	15.62	99.0	4.5
B875143	Rock	3.4	0.6	3.8	62.0	14.10	123.8	2.9
B875144	Rock	5.0	1.1	5.7	99.2	31.89	221.3	6.5
B875145	Rock	3.5	0.7	4.0	67.3	9.76	99.5	5.7
B875146	Rock	4.9	1.3	6.5	103.9	29.67	198.3	18.5
B875147	Rock	2.6	0.6	3.0	54.9	2.52	65.1	2.4



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875148	Rock	3.4	0.7	3.7	66.1	46.33	113.2	64.2
B875149	Rock	6.8	1.8	8.8	152.4	72.73	363.1	106.0
B875150	Pulp	3.0	0.7	4.2	62.8	5.94	56.6	32.8
B875151	Rock	3.8	0.9	4.6	83.9	23.82	191.9	32.5
B875152	Rock	5.6	1.5	7.3	126.7	105.81	284.3	136.1
B875153	Rock	4.1	1.0	5.5	90.8	25.65	174.1	20.0
B875154	Rock	4.6	0.8	4.8	84.4	29.10	124.0	35.2
B875155	Rock	5.4	1.4	7.6	126.7	23.16	208.3	19.4
B875156	Rock	5.0	1.3	6.7	106.0	51.66	133.5	25.8
B875157	Rock	3.2	0.9	4.9	75.9	13.14	122.9	9.0
B875158	Rock	3.3	0.7	3.7	72.9	2.06	155.2	3.8
B875159	Rock	5.8	1.4	7.3	124.8	22.49	169.4	25.9
B875160 Dup	Rock	5.6	1.4	7.2	119.5	22.45	174.1	25.5
B875161	Rock	11.6	2.1	10.5	216.8	11.82	316.8	15.3

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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875108	Rock	0.29													
B875108 Dup		0.32													
QCV1011-00253-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875126	Rock	0.40													
B875126 Dup		0.40													
QCV1011-00253-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875144	Rock	0.88													
B875144 Dup		0.91													
QCV1011-00253-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
QCV1011-00253-0010-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875108	Rock		0.11	<0.01	34.06	<0.01	4.93	0.03	39.45	18.13	0.68	0.03	3.82	0.14	0.07
B875108 Dup			0.12	<0.01	33.64	<0.01	4.96	0.03	39.59	18.14	0.67	0.03	3.79	0.15	0.07
QCV1011-00257-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875126	Rock		0.22	<0.01	33.07	<0.01	5.18	0.07	39.69	18.01	0.51	0.03	3.02	1.04	0.12
B875126 Dup			0.21	<0.01	31.25	<0.01	5.06	0.08	39.68	18.49	0.49	0.03	3.04	1.00	0.11
QCV1011-00257-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875144	Rock		0.22	<0.01	33.02	<0.01	8.66	0.03	31.31	16.59	0.39	0.06	5.95	1.14	0.09
B875144 Dup			0.22	<0.01	34.31	<0.01	8.66	0.04	31.43	15.13	0.38	0.06	6.01	1.10	0.09
QCV1011-00257-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00257-0010-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.63	0.04	7.95	<0.01	6.35	1.78	4.50	0.59	0.11	7.42	0.14	50.23	0.30



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875108	Rock		1.4	0.06	7	60	<2	>10	<0.5	5	11	24	3.32	0.01	277
B875108 Dup			1.3	0.07	6	61	<2	>10	<0.5	5	11	21	3.26	0.01	280
QCV1011-00254-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			98.3									6145			
B875126	Rock		<0.5	0.12	12	46	<2	>10	<0.5	8	13	35	3.34	0.05	395
B875126 Dup			<0.5	0.11	11	43	<2	>10	<0.5	8	12	36	3.32	0.05	387
QCV1011-00254-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B875144	Rock		0.9	0.12	7	23	<2	>10	<0.5	10	23	66	5.79	0.02	304
B875144 Dup			<0.5	0.11	8	26	<2	>10	<0.5	10	19	67	5.67	0.02	292
QCV1011-00254-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			99.2									6212			
QCV1011-00254-0010-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			62.2									957			
B875108	Rock	101.46													
B875108 Dup		101.20													
QCV1011-00257-0002-BLK		<0.01													
B875126	Rock	100.97													
B875126 Dup		99.45													
QCV1011-00257-0005-BLK		<0.01													
B875144	Rock	97.48													
B875144 Dup		97.44													
QCV1011-00257-0008-BLK		<0.01													
QCV1011-00257-0010-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.06													



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875108	Rock	>10	4930	3	0.05	<1	>10000	82	<5	6	3250	0.01	<10	15	<10
B875108 Dup		>10	4855	3	0.04	<1	>10000	76	<5	6	3206	0.01	<10	15	<10
QCV1011-00254-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9987							
B875126	Rock	>10	3528	2	0.05	<1	>10000	98	<5	7	1867	0.03	<10	29	<10
B875126 Dup		>10	3497	2	0.05	<1	>10000	99	<5	7	1842	0.03	<10	28	<10
QCV1011-00254-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875144	Rock	8.90	2711	3	0.07	3	>10000	217	<5	6	1738	0.05	<10	135	<10
B875144 Dup		8.76	2667	2	0.07	<1	>10000	225	<5	6	1712	0.05	<10	136	<10
QCV1011-00254-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00254-0010-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10

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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875108	Rock	23	20												
B875108 Dup		20	19												
QCV1011-00254-0002-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5356													
B875126	Rock	13	21												
B875126 Dup		15	21												
QCV1011-00254-0005-BLK		<2	<1												
B875144	Rock	13	52												
B875144 Dup		13	52												
QCV1011-00254-0008-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5317													
QCV1011-00254-0010-BLK		<2	<1												
B875108	Rock			561.5	20.4	7.0	12.2	34.5	2.2	3.2	305.2	0.4	247.8	71.0	39.2
B875108 Dup				578.3	20.5	7.1	12.6	35.3	2.2	3.2	314.7	0.4	255.6	72.5	39.6
QCV1011-00255-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result				20.2	3.0	1.9	1.1	2.9	1.6	0.6	11.2	0.2	11.1	2.8	2.6
B875126	Rock			787.7	21.8	7.5	14.0	41.0	1.9	3.4	442.7	0.5	318.6	95.4	48.8
B875126 Dup				771.5	21.5	7.5	14.0	41.6	2.0	3.4	435.5	0.5	325.7	94.1	46.8
QCV1011-00255-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result				20.2	3.1	2.0	1.1	2.7	2.0	0.6	11.1	0.2	11.3	2.6	2.5
B875144	Rock			727.1	24.6	9.1	17.8	44.6	5.0	4.1	377.5	0.8	342.5	92.2	54.4
B875144 Dup				773.1	25.9	9.5	19.2	47.9	6.0	4.1	396.8	0.7	350.3	97.8	55.5
QCV1011-00255-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00255-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3		2.1	57.0	15.0	12.7
STD-SY-4 result				130.6	19.2	15.3	2.2	14.7	11.5	4.7		2.1	58.4	16.4	12.9



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875108	Rock	3.8	0.8	3.9	76.1			
B875108 Dup		3.8	0.7	3.8	77.0			
QCV1011-00255-0002-BLK		<0.1	<0.1	<0.1	<0.10			
STD-CDN-ME-6 expected								
STD-CDN-ME-6 result		0.4	0.2	1.9	18.0			
B875126	Rock	4.3	0.9	5.0	82.2			
B875126 Dup		4.1	0.9	4.9	81.8			
QCV1011-00255-0005-BLK		<0.1	<0.1	<0.1	<0.10			
STD-CDN-ME-6 expected								
STD-CDN-ME-6 result		0.4	0.2	1.8	18.7			
B875144	Rock	5.0	1.1	5.7	99.2			
B875144 Dup		5.2	1.1	6.1	101.9			
QCV1011-00255-0008-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00255-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.7	2.4	14.7	123.8			
B875108	Rock					7.10	109.2	1.6
B875108 Dup						6.80	108.8	1.5
QCV1103-01173-0002-BLK						<0.05	<0.2	<0.1
B875126	Rock					13.38	119.7	4.4
B875126 Dup						13.68	124.3	4.4
QCV1103-01173-0005-BLK						<0.05	<0.2	<0.1
B875144	Rock					31.89	221.3	6.5
B875144 Dup						33.66	230.1	6.9
QCV1103-01173-0008-BLK						<0.05	<0.2	<0.1
QCV1103-01173-0010-BLK						<0.05	<0.2	<0.1



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10-360-03524-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/09/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-013</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">60</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	60	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
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Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			
Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level																																			
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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Certificate of Analysis

10-360-03524-01

Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875650	Pulp	0.78	0.56	0.02	28.39	<0.01	16.68	0.09	31.05	13.98	0.49	0.05	5.72	2.05	0.57
B875651	Rock	0.43	0.19	<0.01	31.01	<0.01	4.39	0.02	39.72	20.36	0.38	0.02	3.93	0.03	0.03
B875652	Rock	0.54	0.18	<0.01	30.77	<0.01	4.99	<0.01	38.65	19.34	0.36	0.03	4.51	0.04	0.03
B875653	Rock	0.35	0.15	<0.01	30.58	<0.01	5.21	0.01	39.34	19.15	0.46	0.03	3.25	0.05	0.04
B875654	Rock	1.17	0.23	0.03	27.85	<0.01	30.06	0.06	22.04	8.38	0.51	0.07	6.23	2.52	0.29
B875655	Rock	0.43	0.17	<0.01	30.74	<0.01	5.88	<0.01	38.80	19.73	0.32	0.02	3.35	0.05	0.05
B875656	Rock	0.59	0.17	<0.01	33.26	<0.01	7.69	0.02	30.95	15.61	0.35	0.03	9.04	0.04	0.14
B875657	Rock	0.02	0.06	<0.01	32.45	<0.01	5.41	<0.01	36.24	17.34	0.55	0.03	6.66	<0.01	0.01
B875658	Rock	0.01	0.09	<0.01	29.25	<0.01	6.22	0.01	40.92	18.92	0.72	0.02	3.65	<0.01	<0.01
B875659	Rock	0.17	0.10	<0.01	30.08	<0.01	6.13	0.01	40.23	18.71	0.71	0.03	3.63	<0.01	0.01
B875660 Dup	Rock	0.18	0.12	<0.01	30.62	<0.01	6.18	0.01	41.05	17.91	0.65	0.03	3.73	<0.01	0.03
B875661	Rock	0.54	0.32	<0.01	31.92	<0.01	5.04	0.01	36.35	17.87	0.37	0.03	6.67	0.18	0.09
B875662	Rock	0.34	0.12	<0.01	33.08	<0.01	5.38	<0.01	38.09	18.09	0.65	0.03	5.33	<0.01	0.05
B875663	Rock	0.74	0.25	<0.01	31.97	<0.01	7.10	0.01	33.49	17.50	0.36	0.03	6.64	0.15	0.23
B875664	Rock	0.39	0.20	<0.01	33.37	<0.01	6.04	0.01	36.25	18.36	0.55	0.03	6.14	0.25	0.06
B875665	Rock	0.32	0.13	<0.01	32.88	<0.01	4.78	0.05	38.89	18.78	0.77	0.03	4.05	0.72	0.02
B875666	Rock	0.46	0.17	<0.01	32.24	<0.01	5.46	0.04	37.84	18.26	0.53	0.03	5.22	0.11	0.05
B875667	Rock	0.69	0.29	<0.01	31.70	<0.01	6.15	0.07	34.57	17.04	0.67	0.04	6.67	1.25	0.07
B875668	Rock	1.43	0.83	0.01	25.06	<0.01	33.32	0.58	15.05	9.78	0.42	0.05	7.67	4.81	0.91
B875669	Rock	0.46	0.20	<0.01	31.98	<0.01	4.61	0.03	38.71	18.61	0.63	0.03	4.76	0.43	0.05
B875670	Pulp	0.79	0.57	0.02	28.53	<0.01	16.88	0.11	30.97	14.51	0.49	0.06	5.78	2.12	0.59
B875671	Rock	0.40	0.23	<0.01	32.03	<0.01	5.09	0.05	39.13	17.83	0.54	0.03	4.41	0.34	0.06
B875672	Rock	0.36	0.20	<0.01	32.08	<0.01	5.50	0.02	38.22	17.79	0.62	0.03	4.62	1.00	0.07
B875673	Rock	0.22	0.13	<0.01	32.54	<0.01	3.88	0.02	39.91	19.18	0.71	0.03	4.15	0.45	0.02
B875674	Rock	0.59	0.82	0.04	24.90	<0.01	29.45	0.60	20.01	11.06	0.50	0.06	8.22	2.93	0.55
B875675	Rock	0.47	0.25	<0.01	31.75	<0.01	5.70	0.05	36.98	17.26	0.53	0.03	5.44	1.26	0.07
B875676	Rock	0.49	0.36	<0.01	30.88	<0.01	5.43	0.02	36.79	18.07	0.54	0.03	5.16	1.17	0.09
B875677	Rock	0.33	0.42	<0.01	33.47	<0.01	5.20	0.02	35.42	17.52	0.58	0.04	7.31	1.31	0.07
B875678	Rock	0.36	0.17	<0.01	33.95	<0.01	4.87	<0.01	37.38	18.82	0.59	0.03	5.20	0.38	0.03
B875679	Rock	0.33	0.36	<0.01	34.24	<0.01	6.67	0.06	33.37	16.55	0.49	0.05	7.80	1.19	0.10
B875680 Dup	Rock	0.32	0.37	<0.01	33.96	<0.01	7.02	0.06	32.46	17.01	0.49	0.04	7.85	1.33	0.11
B875681	Rock	0.35	3.07	<0.01	26.45	<0.01	5.87	0.02	31.77	20.21	0.42	0.03	4.49	7.96	0.42
B875682	Rock	0.36	0.47	0.01	33.21	0.01	6.06	0.06	35.41	17.96	0.54	0.04	6.04	0.52	0.11
B875683	Rock	0.13	0.11	<0.01	32.22	<0.01	5.09	0.02	39.43	18.66	0.67	0.03	3.58	<0.01	0.04
B875684	Rock	0.37	0.18	<0.01	31.99	<0.01	4.89	0.02	38.03	18.14	0.48	0.03	4.37	0.58	0.02
B875685	Rock	0.37	0.58	<0.01	29.23	<0.01	6.32	0.10	32.77	16.73	0.44	0.07	5.07	7.25	0.10
B875686	Rock	0.22	0.27	<0.01	34.99	<0.01	4.43	0.02	35.93	17.07	0.43	0.03	6.65	0.97	0.04
B875687	Rock	0.27	0.15	<0.01	33.65	<0.01	4.22	0.01	39.22	19.62	0.53	0.03	3.82	0.03	0.02
B875688	Rock	<0.01	14.35	0.12	4.24	0.04	3.91	3.35	1.07	1.60	0.12	2.90	0.28	66.11	0.43
B875689	Rock	0.41	0.24	<0.01	33.88	<0.01	2.75	0.01	39.07	20.07	0.34	0.04	4.52	0.18	0.02



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875690	Pulp	0.53	1.73	0.36	45.53	<0.01	4.10	0.76	32.05	2.38	0.91	0.38	2.73	7.64	0.22
B875691	Rock	0.29	0.12	<0.01	31.69	<0.01	4.80	<0.01	39.40	19.38	0.43	0.02	3.42	<0.01	0.01
B875692	Rock	0.11	0.51	<0.01	30.69	<0.01	9.20	0.02	32.23	16.62	0.41	0.02	5.50	1.88	0.13
B875693	Rock	0.10	0.14	<0.01	32.52	<0.01	4.32	0.01	39.73	19.50	0.45	0.02	3.64	<0.01	0.03
B875694	Rock	0.09	0.38	<0.01	32.58	<0.01	4.33	<0.01	37.30	18.02	0.46	0.02	4.87	2.08	0.07
B875695	Rock	0.08	0.40	<0.01	34.52	<0.01	7.03	0.05	33.30	15.80	0.50	0.04	7.34	1.52	0.09
B875696	Rock	0.05	0.67	<0.01	31.62	<0.01	7.93	0.02	32.37	16.78	0.40	0.03	6.08	2.89	0.18
B875697	Rock	0.04	0.47	<0.01	29.26	<0.01	7.80	0.02	39.04	19.40	0.64	0.02	0.76	0.59	0.03
B875698	Rock	0.03	0.54	<0.01	31.49	<0.01	8.10	0.02	32.97	17.50	0.36	0.03	6.36	0.74	0.09
B875699	Rock	0.14	0.10	<0.01	32.04	<0.01	5.76	0.04	39.67	19.37	0.65	0.02	2.79	<0.01	0.01
B875700 Dup	Rock	0.14	0.11	<0.01	31.81	<0.01	5.63	0.02	40.13	20.05	0.67	0.03	2.32	<0.01	0.01
B875701	Rock	0.36	0.28	<0.01	34.57	<0.01	3.99	0.01	37.65	18.41	0.28	0.02	5.91	0.28	0.04
B875702	Rock	0.06	0.49	<0.01	32.64	<0.01	9.95	0.05	30.72	14.67	0.56	0.05	6.79	4.43	0.16
B875703	Rock	0.04	0.79	<0.01	32.13	<0.01	10.99	<0.01	29.23	15.29	0.33	0.03	6.50	2.36	0.21
B875704	Rock	0.01	0.39	<0.01	35.53	<0.01	3.60	0.02	36.99	17.91	0.32	0.03	6.09	0.47	0.07
B875705	Rock	0.02	0.18	<0.01	33.79	<0.01	4.39	0.01	37.73	18.28	0.30	0.02	5.53	0.13	0.04
B875706	Rock	0.07	0.20	<0.01	34.00	<0.01	3.35	<0.01	38.58	19.26	0.45	0.03	5.65	0.23	0.03
B875707	Rock	0.09	0.29	<0.01	32.11	<0.01	14.88	0.01	26.50	14.66	0.25	0.02	6.30	3.07	0.21
B875708	Rock	0.03	0.37	<0.01	33.40	<0.01	4.06	<0.01	36.99	20.64	0.30	0.03	5.23	0.45	0.08
B875709	Rock	0.04	0.65	<0.01	33.16	<0.01	5.43	0.02	33.33	18.26	0.30	0.03	6.32	3.61	0.11
B875710	Pulp	0.41	0.31	<0.01	34.12	<0.01	5.70	0.07	38.01	16.77	0.54	0.04	4.22	1.58	0.12
B875711	Rock	0.08	0.16	<0.01	34.86	<0.01	5.23	0.01	35.41	16.37	0.53	0.03	6.86	0.92	0.10
B875712	Rock	0.17	0.15	<0.01	35.66	<0.01	3.36	0.03	37.92	18.31	0.63	0.03	5.43	0.20	0.02
B875713	Rock	0.19	0.28	<0.01	34.57	<0.01	3.98	0.02	35.06	18.45	0.48	0.03	6.67	1.82	0.15



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875650	Pulp	99.65	<0.5	0.24	<5	121	<2	>10	<0.5	12	4	69	>10	0.07	303
B875651	Rock	100.09	0.6	0.07	6	13	<2	>10	<0.5	5	9	34	2.98	0.01	321
B875652	Rock	98.91	<0.5	0.07	7	13	<2	>10	<0.5	4	8	43	3.37	<0.01	371
B875653	Rock	98.29	0.7	0.05	<5	14	<2	>10	<0.5	4	9	26	3.16	0.01	214
B875654	Rock	98.27	<0.5	0.08	<5	223	<2	>10	<0.5	13	11	<1	>10	0.05	218
B875655	Rock	99.12	0.6	0.06	<5	14	<2	>10	<0.5	4	8	33	3.80	<0.01	320
B875656	Rock	97.30	<0.5	0.06	<5	24	<2	>10	<0.5	5	13	51	4.98	0.01	342
B875657	Rock	98.76	1.1	0.01	56	13	<2	>10	<0.5	3	8	2	3.41	<0.01	2105
B875658	Rock	99.82	0.6	0.01	26	17	<2	>10	<0.5	4	10	2	4.04	<0.01	751
B875659	Rock	99.64	<0.5	0.03	28	20	<2	>10	<0.5	5	12	13	3.77	<0.01	811
B875660 Dup	Rock	100.33	<0.5	0.03	26	20	<2	>10	<0.5	4	11	14	3.71	<0.01	792
B875661	Rock	98.85	<0.5	0.10	8	15	<2	>10	<0.5	6	10	44	2.98	<0.01	375
B875662	Rock	100.84	<0.5	0.03	8	20	<2	>10	<0.5	7	9	28	3.13	<0.01	347
B875663	Rock	97.74	<0.5	0.10	8	17	<2	>10	<0.5	18	13	62	4.26	<0.01	449
B875664	Rock	101.26	<0.5	0.08	14	18	<2	>10	<0.5	8	12	33	3.49	0.01	570
B875665	Rock	101.10	0.7	0.03	<5	26	<2	>10	<0.5	5	9	26	2.86	0.04	255
B875666	Rock	99.95	0.8	0.06	12	30	<2	>10	<0.5	9	9	40	3.54	0.03	408
B875667	Rock	98.54	1.4	0.11	<5	50	<2	>10	<0.5	13	11	51	3.64	0.05	324
B875668	Rock	98.49	1.5	0.39	<5	88	<2	>10	<0.5	49	13	15	>10	0.46	401
B875669	Rock	100.05	1.9	0.07	7	29	<2	>10	<0.5	9	9	40	3.17	0.02	358
B875670	Pulp	100.63	2.1	0.25	<5	129	<2	>10	<0.5	14	5	34	>10	0.09	312
B875671	Rock	99.76	1.0	0.08	5	49	<2	>10	<0.5	11	10	28	3.20	0.04	258
B875672	Rock	100.16	1.2	0.06	<5	30	<2	>10	<0.5	9	9	24	2.69	0.02	204
B875673	Rock	101.05	1.3	0.05	5	27	<2	>10	<0.5	6	10	16	2.28	0.01	250
B875674	Rock	99.14	2.0	0.39	<5	261	<2	>10	<0.5	28	9	1	>10	0.47	315
B875675	Rock	99.33	1.7	0.09	9	30	<2	>10	<0.5	10	8	11	3.02	0.04	343
B875676	Rock	98.57	1.6	0.16	<5	25	<2	>10	<0.5	8	11	39	3.42	0.02	273
B875677	Rock	101.36	1.7	0.18	7	29	<2	>10	<0.5	6	10	28	3.12	0.01	303
B875678	Rock	101.45	1.5	0.07	<5	27	<2	>10	<0.5	5	8	30	2.95	<0.01	247
B875679	Rock	100.88	1.7	0.16	6	45	<2	>10	<0.5	8	15	26	4.40	0.04	348
B875680 Dup	Rock	100.69	1.7	0.16	<5	41	<2	>10	<0.5	9	15	24	4.44	0.05	344
B875681	Rock	100.73	2.1	1.63	<5	28	<2	>10	<0.5	11	26	28	3.73	0.02	306
B875682	Rock	100.43	1.5	0.19	17	70	<2	>10	<0.5	9	11	30	3.67	0.05	622
B875683	Rock	99.86	1.8	0.03	19	22	<2	>10	<0.5	6	9	11	3.36	0.02	757
B875684	Rock	98.74	1.9	0.07	<5	21	<2	>10	<0.5	9	11	29	3.43	0.02	267
B875685	Rock	98.69	2.3	0.30	7	57	<2	>10	<0.5	9	25	6	4.41	0.08	348
B875686	Rock	100.84	2.0	0.12	18	38	<2	>10	<0.5	4	12	17	3.08	0.02	743
B875687	Rock	101.30	2.3	0.06	9	16	<2	>10	<0.5	4	13	23	2.87	0.01	444
B875688	Rock	98.53	2.1	8.13	<5	876	<2	2.86	<0.5	9	213	3	2.66	2.64	40
B875689	Rock	101.11	1.9	0.10	6	15	<2	>10	<0.5	5	9	35	1.92	<0.01	358

Certificate of Analysis

10-360-03524-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
B875690	Pulp	98.80	2.5	0.93	29	2895	<2	>10	<0.5	6	8	7	2.81	0.60	1006
B875691	Rock	99.28	2.0	0.04	7	15	<2	>10	<0.5	3	12	23	3.25	<0.01	388
B875692	Rock	97.23	2.4	0.26	9	21	<2	>10	<0.5	14	25	9	6.35	0.02	457
B875693	Rock	100.35	2.2	0.06	11	15	<2	>10	<0.5	5	8	10	2.88	<0.01	463
B875694	Rock	100.13	2.4	0.19	7	32	<2	>10	<0.5	6	13	7	2.87	<0.01	314
B875695	Rock	100.59	2.4	0.19	10	77	<2	>10	<0.5	8	12	5	4.60	0.04	508
B875696	Rock	98.98	3.0	0.34	55	95	<2	>10	<0.5	10	21	3	5.30	0.01	2121
B875697	Rock	98.04	2.5	0.21	34	15	<2	>10	<0.5	13	18	2	5.27	0.02	1367
B875698	Rock	98.21	2.6	0.26	23	15	<2	>10	<0.5	18	21	4	5.62	0.02	893
B875699	Rock	100.47	2.8	0.02	42	15	<2	>10	<0.5	3	11	11	3.66	0.03	1658
B875700 Dup	Rock	100.79	2.4	0.03	45	18	<2	>10	<0.5	4	12	11	3.71	0.01	1619
B875701	Rock	101.45	3.1	0.12	11	34	<2	>10	<0.5	4	12	33	2.64	0.01	421
B875702	Rock	100.52	2.3	0.23	12	75	<2	>10	<0.5	9	17	3	6.63	0.04	618
B875703	Rock	97.87	2.2	0.37	7	22	<2	>10	<0.5	13	28	<1	7.77	<0.01	334
B875704	Rock	101.44	2.9	0.16	11	24	<2	>10	<0.5	3	9	3	2.50	0.02	407
B875705	Rock	100.40	2.6	0.07	10	11	<2	>10	<0.5	9	12	5	3.04	<0.01	353
B875706	Rock	101.80	3.2	0.08	<5	16	<2	>10	<0.5	4	10	6	2.26	<0.01	245
B875707	Rock	98.32	3.1	0.13	<5	22	<2	>10	<0.5	20	34	9	9.98	0.01	230
B875708	Rock	101.56	3.2	0.17	8	11	<2	>10	<0.5	6	10	8	2.74	<0.01	315
B875709	Rock	101.23	3.5	0.33	8	17	<2	>10	<0.5	10	18	5	3.66	0.02	358
B875710	Pulp	101.48	2.8	0.11	6	42	<2	>10	<0.5	6	4	36	3.86	0.06	340
B875711	Rock	100.48	2.9	0.06	9	23	<2	>10	<0.5	10	13	8	3.65	<0.01	282
B875712	Rock	101.75	2.6	0.06	<5	27	<2	>10	<0.5	6	11	13	2.35	0.02	144
B875713	Rock	101.54	3.1	0.11	9	22	<2	>10	<0.5	7	15	17	2.85	0.02	284

Certificate of Analysis

10-360-03524-01

Aley Corporation
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Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B875650	Pulp	8.43	3506	3	0.05	3	>10000	176	<5	6	1617	0.19	<10	204	<10
B875651	Rock	>10	2785	3	0.04	<1	>10000	92	<5	5	977	0.02	<10	22	<10
B875652	Rock	>10	2795	2	0.04	<1	>10000	115	<5	6	763	0.01	<10	31	<10
B875653	Rock	>10	3329	1	0.03	<1	9456	73	<5	5	1228	0.02	<10	43	<10
B875654	Rock	5.05	3648	2	0.06	3	>10000	13	<5	8	1822	0.07	<10	392	<10
B875655	Rock	>10	2426	2	0.03	<1	>10000	91	<5	6	572	0.02	<10	57	<10
B875656	Rock	9.41	2695	1	0.03	2	>10000	134	<5	7	906	0.06	<10	81	<10
B875657	Rock	>10	3983	3	0.03	<1	>10000	19	<5	9	855	<0.01	<10	23	<10
B875658	Rock	>10	5433	2	0.03	<1	2065	12	<5	7	1262	<0.01	<10	20	<10
B875659	Rock	>10	4843	2	0.04	<1	>10000	42	<5	7	1537	0.01	<10	16	<10
B875660 Dup	Rock	>10	4771	2	0.04	<1	>10000	46	<5	6	1571	0.01	<10	16	<10
B875661	Rock	>10	2928	2	0.04	<1	>10000	116	<5	6	1169	0.03	<10	25	<10
B875662	Rock	>10	4832	1	0.04	<1	>10000	74	<5	6	2240	0.02	<10	16	<10
B875663	Rock	>10	2772	3	0.04	<1	>10000	153	<5	8	868	0.08	<10	52	<10
B875664	Rock	>10	3885	3	0.04	<1	>10000	86	<5	9	1822	0.02	<10	24	<10
B875665	Rock	>10	5388	3	0.04	<1	>10000	70	<5	7	3194	<0.01	<10	10	<10
B875666	Rock	>10	3885	3	0.04	<1	>10000	104	<5	8	2031	0.02	<10	23	<10
B875667	Rock	>10	4982	2	0.05	<1	>10000	139	<5	5	2961	0.03	<10	27	<10
B875668	Rock	5.90	3056	3	0.05	3	>10000	47	<5	3	2088	0.34	<10	424	<10
B875669	Rock	>10	4539	3	0.04	<1	>10000	106	<5	6	3014	0.03	<10	24	<10
B875670	Pulp	8.75	3466	3	0.05	2	>10000	69	<5	6	1625	0.16	<10	203	<10
B875671	Rock	>10	3841	3	0.04	<1	>10000	69	<5	6	2376	0.03	<10	32	<10
B875672	Rock	>10	4370	3	0.03	<1	>10000	66	<5	4	1989	0.03	<10	29	<10
B875673	Rock	>10	5088	2	0.04	<1	>10000	48	<5	6	3606	0.01	<10	10	<10
B875674	Rock	6.67	3481	2	0.06	2	>10000	23	<5	3	2879	0.21	<10	380	<10
B875675	Rock	>10	3933	2	0.04	<1	>10000	31	<5	5	1742	0.02	<10	38	<10
B875676	Rock	>10	3959	3	0.04	<1	>10000	107	<5	6	2603	0.03	<10	41	<10
B875677	Rock	>10	4210	3	0.05	1	>10000	80	<5	6	2629	0.02	<10	22	<10
B875678	Rock	>10	4344	3	0.04	<1	>10000	80	<5	6	2351	0.01	<10	23	<10
B875679	Rock	9.98	3597	1	0.05	<1	>10000	76	<5	8	2417	0.05	<10	81	<10
B875680 Dup	Rock	>10	3478	1	0.05	<1	>10000	72	<5	8	2409	0.06	<10	85	<10
B875681	Rock	>10	2989	3	0.04	8	>10000	79	<5	11	1831	0.16	<10	66	<10
B875682	Rock	>10	3690	1	0.04	2	>10000	77	<5	6	1922	0.03	<10	27	<10
B875683	Rock	>10	4758	2	0.04	<1	>10000	34	<5	6	2299	0.01	<10	21	<10
B875684	Rock	>10	3311	3	0.04	<1	>10000	87	<5	6	1847	<0.01	<10	17	<10
B875685	Rock	>10	3033	2	0.07	2	>10000	17	<5	8	1564	0.03	<10	79	<10
B875686	Rock	>10	2777	2	0.04	<1	>10000	55	<5	8	1195	0.02	<10	21	<10
B875687	Rock	>10	3534	2	0.04	<1	>10000	70	<5	6	1272	<0.01	<10	17	<10
B875688	Rock	0.96	883	4	2.57	7	1075	7	<5	6	676	0.28	<10	58	<10
B875689	Rock	>10	2399	2	0.04	<1	>10000	106	<5	5	683	0.01	<10	25	<10

Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875690	Pulp	1.44	6227	14	0.33	<1	9898	73	<5	4	>10000	0.12	<10	186	<10
B875691	Rock	>10	2896	2	0.03	<1	>10000	75	<5	5	1171	<0.01	<10	12	<10
B875692	Rock	>10	2832	2	0.04	<1	>10000	35	<5	10	1523	0.05	<10	52	<10
B875693	Rock	>10	3139	3	0.03	<1	>10000	27	<5	7	1411	0.01	<10	20	<10
B875694	Rock	>10	3160	1	0.04	<1	>10000	26	<5	8	1898	0.03	<10	36	<10
B875695	Rock	9.53	3472	2	0.05	<1	>10000	26	<5	7	2360	0.05	<10	48	<10
B875696	Rock	>10	2723	3	0.04	<1	>10000	20	<5	15	874	0.07	<10	68	<10
B875697	Rock	>10	4251	3	0.03	<1	2522	17	<5	11	955	0.01	<10	32	<10
B875698	Rock	>10	2652	2	0.04	2	>10000	15	<5	13	763	0.05	<10	52	<10
B875699	Rock	>10	4621	4	0.03	<1	9340	43	<5	9	1337	<0.01	<10	18	<10
B875700 Dup	Rock	>10	4730	4	0.03	<1	9201	44	<5	10	1304	<0.01	<10	19	<10
B875701	Rock	>10	2016	<1	0.03	<1	>10000	79	<5	6	543	0.02	<10	34	<10
B875702	Rock	8.85	3666	2	0.05	<1	>10000	17	<5	13	1544	0.07	<10	77	<10
B875703	Rock	9.22	2240	3	0.04	1	>10000	15	<5	12	957	0.09	<10	73	<10
B875704	Rock	>10	2200	1	0.03	<1	>10000	10	<5	9	550	0.03	<10	29	<10
B875705	Rock	>10	2135	2	0.03	<1	>10000	13	<5	6	525	0.01	<10	20	<10
B875706	Rock	>10	3025	2	0.03	<1	>10000	22	<5	4	1917	0.01	<10	16	<10
B875707	Rock	8.84	1841	2	0.03	5	>10000	34	<5	13	864	0.12	<10	125	<10
B875708	Rock	>10	2152	2	0.03	<1	>10000	15	<5	6	720	0.03	<10	26	<10
B875709	Rock	>10	2150	2	0.04	<1	>10000	20	<5	12	940	0.05	<10	50	<10
B875710	Pulp	>10	3509	4	0.05	<1	>10000	101	<5	7	2057	0.04	<10	43	<10
B875711	Rock	9.87	3475	3	0.04	<1	>10000	28	<5	9	2300	0.04	<10	36	<10
B875712	Rock	>10	4256	3	0.04	<1	>10000	42	<5	5	3016	<0.01	<10	11	<10
B875713	Rock	>10	3279	2	0.04	<1	>10000	50	<5	7	2182	0.05	<10	38	<10



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Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875650	Pulp	60	60	846.4	20.3	6.4	13.7	41.6	7.3	2.8	387.7	0.4	333.3	95.2	50.5
B875651	Rock	8	22	755.5	18.0	6.5	11.2	36.9	2.0	2.5	377.4	0.5	289.5	84.0	44.9
B875652	Rock	9	36	873.0	24.7	9.3	14.0	44.9	4.2	3.8	463.8	0.7	328.4	93.6	52.7
B875653	Rock	11	24	587.2	19.1	7.2	11.7	34.6	2.8	2.8	282.5	0.5	233.0	65.2	38.7
B875654	Rock	112	137	641.9	17.6	5.9	13.4	36.1	15.9	2.4	275.8	0.3	270.4	73.9	44.8
B875655	Rock	7	36	773.0	23.9	8.8	12.4	40.6	4.3	3.5	395.7	0.7	300.1	85.3	46.8
B875656	Rock	12	57	>1000	60.0	23.4	23.8	78.5	5.7	9.7	546.4	1.3	442.7	122.9	83.5
B875657	Rock	13	17	>1000	36.4	7.2	30.7	133.6	<0.1	3.7	>1000	0.4	>1000	485.7	200.9
B875658	Rock	16	3	>1000	11.7	2.3	11.6	49.8	<0.1	1.0	856.8	<0.1	644.9	189.0	73.0
B875659	Rock	15	10	>1000	29.7	8.7	19.3	73.5	0.5	3.9	>1000	0.4	797.2	232.0	101.9
B875660 Dup	Rock	15	10	>1000	31.3	9.4	19.6	75.0	0.5	4.2	>1000	0.5	803.4	231.6	104.4
B875661	Rock	10	26	>1000	34.0	13.2	17.2	56.6	2.6	5.3	487.9	0.9	414.8	115.7	68.2
B875662	Rock	15	18	906.9	21.8	7.7	12.5	41.6	1.4	3.1	443.6	0.4	348.9	101.9	50.7
B875663	Rock	8	33	>1000	33.9	12.8	20.1	62.6	6.1	5.2	676.4	0.9	525.9	151.9	75.9
B875664	Rock	14	22	>1000	26.3	8.7	16.4	55.5	2.2	3.7	697.6	0.5	479.1	141.6	70.4
B875665	Rock	23	13	645.5	16.8	5.5	10.1	32.3	2.9	2.3	300.0	0.2	247.3	71.5	37.5
B875666	Rock	15	25	924.9	28.2	9.7	15.9	50.2	3.1	4.1	462.5	0.6	362.3	103.9	57.8
B875667	Rock	20	22	896.0	25.5	8.1	18.5	49.7	5.6	3.5	409.9	0.4	368.0	103.3	60.3
B875668	Rock	62	49	>1000	22.2	6.8	17.6	50.9	29.3	2.9	494.1	0.4	427.7	122.8	64.0
B875669	Rock	17	15	838.4	19.2	6.2	12.1	39.2	2.4	2.5	394.8	0.3	328.4	95.8	48.6
B875670	Pulp	61	58	830.9	20.2	6.8	14.1	42.0	9.0	2.9	376.3	0.4	338.7	93.0	50.4
B875671	Rock	15	13	671.1	15.0	4.9	10.9	32.3	2.9	2.0	312.2	0.3	266.2	77.0	39.5
B875672	Rock	12	10	688.2	15.6	5.0	11.4	33.6	2.7	2.1	325.8	0.3	273.4	79.4	41.7
B875673	Rock	18	14	623.1	11.2	3.2	9.0	28.8	1.2	1.4	308.9	<0.1	240.4	68.8	34.8
B875674	Rock	111	44	832.4	18.4	4.9	14.4	44.9	8.3	2.3	353.7	0.1	365.4	99.0	56.2
B875675	Rock	15	16	969.9	19.7	6.4	14.3	42.4	3.6	2.6	497.2	0.4	358.3	105.6	51.5
B875676	Rock	17	22	687.5	17.7	5.6	12.8	36.1	2.4	2.4	316.4	0.3	285.6	78.0	44.1
B875677	Rock	18	21	905.6	21.4	7.1	14.9	46.1	1.3	2.9	414.7	0.3	376.5	104.5	56.7
B875678	Rock	15	25	670.0	18.5	6.1	11.1	35.1	2.4	2.6	313.4	0.4	278.0	76.7	42.5
B875679	Rock	15	35	928.9	24.6	8.1	15.9	49.1	4.2	3.4	429.0	0.4	385.9	107.5	59.0
B875680 Dup	Rock	15	33	906.0	23.4	7.7	15.5	48.0	4.0	3.3	427.0	0.4	376.1	106.0	58.0
B875681	Rock	16	26	846.6	21.0	7.5	12.9	40.8	1.8	3.0	413.8	0.4	331.2	95.8	49.5
B875682	Rock	14	23	>1000	34.3	12.0	19.4	65.6	1.9	5.0	752.9	0.6	589.4	172.9	82.8
B875683	Rock	18	10	>1000	23.1	7.2	15.2	59.9	<0.1	3.1	854.4	0.4	648.7	192.0	80.7
B875684	Rock	14	24	763.2	20.3	7.5	12.1	38.9	2.0	3.1	358.7	0.5	305.4	85.6	47.1
B875685	Rock	28	28	727.9	26.3	10.1	14.4	43.1	3.4	4.1	346.3	0.7	303.5	83.7	50.8
B875686	Rock	10	22	>1000	28.4	9.7	19.0	65.2	1.9	4.1	730.3	0.7	616.3	173.3	86.2
B875687	Rock	11	24	971.7	20.9	7.6	12.9	43.7	1.4	3.1	474.5	0.5	406.1	113.4	59.1
B875688	Rock	52	9	82.1	3.1	1.7	1.6	4.7	3.7	0.5	44.2	0.1	31.2	8.8	5.1
B875689	Rock	5	55	765.3	22.6	8.2	13.0	43.2	2.5	3.5	361.8	0.6	314.3	89.8	50.9



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875690	Pulp	450	71	>1000	15.6	5.0	13.7	43.7	0.3	2.0	992.1	0.4	513.8	174.6	53.4
B875691	Rock	9	27	798.9	20.4	7.8	10.6	38.2	1.4	3.1	386.3	0.5	326.8	93.4	47.0
B875692	Rock	17	25	940.6	23.0	7.7	13.2	45.2	2.8	3.2	478.5	0.5	377.4	106.3	56.1
B875693	Rock	12	15	875.0	19.2	6.9	10.1	37.2	1.6	2.8	465.8	0.5	326.2	94.2	45.6
B875694	Rock	11	39	643.7	17.6	6.2	10.3	35.3	1.8	2.6	317.3	0.4	258.1	72.4	41.2
B875695	Rock	35	63	979.5	20.1	6.6	13.3	42.8	3.2	2.8	538.4	0.3	351.4	101.4	52.2
B875696	Rock	15	31	>1000	26.4	8.7	19.2	77.0	7.9	3.6	>1000	0.6	803.2	282.6	81.8
B875697	Rock	21	6	>1000	14.4	4.7	10.8	38.6	0.4	1.9	>1000	0.2	408.5	161.5	34.9
B875698	Rock	11	21	>1000	22.4	8.1	13.7	46.8	1.5	3.3	>1000	0.5	407.0	138.8	48.9
B875699	Rock	16	11	>1000	21.0	6.3	15.0	57.3	0.3	2.7	>1000	0.3	602.9	222.2	59.1
B875700 Dup	Rock	17	12	>1000	19.3	5.5	14.6	54.3	0.2	2.5	>1000	0.3	592.2	222.4	56.3
B875701	Rock	7	44	845.1	29.0	11.7	12.3	40.3	1.2	4.9	481.8	0.8	270.4	83.1	39.5
B875702	Rock	37	25	>1000	17.9	6.2	12.0	40.9	5.7	2.5	671.0	0.4	384.3	123.8	47.2
B875703	Rock	15	57	908.2	25.9	10.0	13.6	44.4	6.9	4.1	427.7	0.9	368.2	107.0	49.4
B875704	Rock	9	23	858.1	22.0	8.7	10.9	40.0	1.3	3.5	423.2	0.6	337.0	96.7	47.5
B875705	Rock	6	14	912.5	21.8	8.1	11.4	41.3	1.0	3.3	442.7	0.6	362.6	104.6	52.2
B875706	Rock	10	10	582.3	17.0	6.3	9.4	31.2	<0.1	2.6	270.2	0.4	247.6	67.2	37.9
B875707	Rock	12	185	519.1	22.9	8.9	14.3	39.0	6.5	3.8	235.9	0.6	233.8	62.7	43.1
B875708	Rock	9	29	682.7	23.0	8.6	11.3	39.8	1.1	3.5	322.4	0.6	295.6	80.2	46.2
B875709	Rock	16	47	798.3	23.9	8.4	13.9	44.8	4.5	3.6	376.4	0.5	340.6	93.6	53.5
B875710	Pulp	23	33	798.3	21.7	7.3	13.8	42.0	2.5	3.2	393.1	0.4	316.9	88.4	51.3
B875711	Rock	13	40	718.5	34.1	14.1	12.2	45.5	3.5	5.8	348.8	0.8	280.9	80.2	45.2
B875712	Rock	14	16	389.3	20.7	8.2	8.7	29.5	0.5	3.4	163.9	0.4	175.1	46.2	30.8
B875713	Rock	10	30	735.6	24.4	8.8	12.9	43.2	1.8	3.7	328.0	0.5	306.1	85.5	47.4



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875650	Pulp	3.7	0.7	4.5	73.9	29.52	283.5	7.8
B875651	Rock	3.2	0.7	4.8	66.1	19.04	102.2	4.0
B875652	Rock	4.5	1.0	6.9	93.0	35.74	173.6	4.6
B875653	Rock	3.3	0.8	5.0	75.1	23.53	105.0	3.3
B875654	Rock	3.2	0.6	3.9	63.4	0.81	300.7	5.8
B875655	Rock	4.1	0.9	6.0	91.8	40.53	174.5	5.7
B875656	Rock	10.4	2.5	13.1	208.5	67.51	309.0	18.1
B875657	Rock	6.5	0.7	4.8	91.4	0.43	237.4	1.4
B875658	Rock	2.0	0.2	1.9	28.9	0.22	46.7	1.0
B875659	Rock	5.1	0.9	5.2	94.8	2.13	97.0	2.5
B875660 Dup	Rock	5.2	1.0	6.0	101.1	2.25	95.4	2.6
B875661	Rock	6.0	1.5	8.6	137.8	12.28	137.3	8.1
B875662	Rock	3.6	0.8	5.2	81.1	7.27	99.2	3.9
B875663	Rock	5.7	1.5	9.0	133.5	20.55	158.5	10.8
B875664	Rock	4.7	0.9	5.6	92.9	11.36	157.7	6.4
B875665	Rock	3.0	0.5	3.2	58.6	3.49	59.0	1.4
B875666	Rock	4.9	1.1	6.1	101.4	12.44	150.3	4.2
B875667	Rock	4.6	0.8	5.0	89.9	10.49	100.4	4.2
B875668	Rock	4.1	0.7	4.5	73.5	0.62	172.8	6.6
B875669	Rock	3.3	0.6	4.1	66.2	6.73	71.0	3.6
B875670	Pulp	3.6	0.7	4.5	73.7	6.55	264.3	7.8
B875671	Rock	2.7	0.4	3.3	53.3	1.48	72.8	4.2
B875672	Rock	2.8	0.5	3.5	54.6	16.20	40.7	6.6
B875673	Rock	2.1	0.2	1.8	36.6	11.98	33.1	5.7
B875674	Rock	3.3	0.4	2.8	56.3	1.79	159.2	64.9
B875675	Rock	3.5	0.7	4.7	70.2	1.27	76.4	8.4
B875676	Rock	3.1	0.6	3.7	62.5	16.58	118.8	5.6
B875677	Rock	4.0	0.7	4.3	74.3	21.90	72.0	13.8
B875678	Rock	3.3	0.6	4.1	67.5	32.29	114.6	33.3
B875679	Rock	4.4	0.8	5.1	86.3	89.11	116.4	120.9
B875680 Dup	Rock	4.2	0.7	5.0	83.3	87.51	119.5	112.5
B875681	Rock	3.7	0.7	4.9	78.1	11.61	95.7	10.4
B875682	Rock	5.9	1.3	7.2	124.8	13.10	158.2	5.9
B875683	Rock	3.9	0.8	4.9	79.3	2.16	108.1	2.3
B875684	Rock	3.6	0.8	5.3	77.5	14.43	145.4	5.3
B875685	Rock	4.6	1.2	7.1	103.7	13.01	226.8	27.4
B875686	Rock	5.0	1.1	7.1	103.1	23.43	133.6	19.7
B875687	Rock	3.7	0.8	5.6	78.9	23.40	130.7	8.4
B875688	Rock	0.4	0.1	1.9	18.5	1.77	11.1	4.5
B875689	Rock	4.0	0.9	6.1	87.7	81.04	282.9	26.9



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10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875690	Pulp	2.4	0.6	4.4	58.0	1.97	62.9	31.9
B875691	Rock	3.3	0.9	5.6	76.2	25.47	157.3	7.0
B875692	Rock	4.0	0.8	5.2	83.6	28.89	177.1	14.7
B875693	Rock	3.3	0.7	4.8	72.8	3.90	84.4	2.9
B875694	Rock	3.1	0.6	4.1	68.0	42.36	68.8	49.7
B875695	Rock	3.6	0.6	4.2	74.5	6.87	111.9	3.5
B875696	Rock	4.5	0.9	5.9	98.2	16.27	108.3	3.4
B875697	Rock	2.2	0.4	2.9	52.4	10.46	53.0	2.7
B875698	Rock	3.8	0.8	5.3	85.4	17.10	161.9	10.0
B875699	Rock	3.4	0.6	4.1	70.3	3.46	74.0	4.8
B875700 Dup	Rock	3.0	0.5	3.7	62.8	3.38	79.0	4.8
B875701	Rock	4.9	1.3	7.6	110.3	57.73	356.1	22.8
B875702	Rock	2.9	0.6	4.4	65.8	4.41	77.2	2.9
B875703	Rock	4.7	1.3	7.3	93.4	14.89	94.5	4.1
B875704	Rock	3.7	1.0	6.3	86.4	6.22	182.7	1.9
B875705	Rock	3.8	0.9	5.7	82.9	11.67	81.3	9.0
B875706	Rock	2.9	0.6	4.2	67.5	6.68	81.0	4.3
B875707	Rock	4.3	1.0	6.2	112.6	148.61	127.0	144.4
B875708	Rock	4.0	0.9	5.9	87.4	13.40	100.3	11.6
B875709	Rock	4.4	0.9	5.6	93.8	45.27	99.9	41.5
B875710	Pulp	4.0	0.8	5.1	81.3	26.20	170.9	12.0
B875711	Rock	5.8	1.5	8.3	148.1	72.92	262.2	68.5
B875712	Rock	3.5	0.8	5.0	91.0	3.07	114.6	10.4
B875713	Rock	4.4	0.9	5.8	97.6	12.89	210.4	11.1



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Aley Corporation
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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875650	Pulp	0.78													
B875650 Dup		0.77													
QCV1011-00312-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.51													
B875668	Rock	1.43													
B875668 Dup		1.38													
QCV1011-00312-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B875686	Rock	0.22													
B875686 Dup		0.20													
QCV1011-00312-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.51													
B875704	Rock	0.01													
B875704 Dup		0.02													
QCV1011-00312-0011-BLK		<0.01													
QCV1011-00312-0012-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875650	Pulp		0.56	0.02	28.39	<0.01	16.68	0.09	31.05	13.98	0.49	0.05	5.72	2.05	0.57
B875650 Dup			0.53	0.02	27.99	<0.01	16.95	0.11	30.96	14.06	0.48	0.05	5.91	1.96	0.58
QCV1011-00316-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875668	Rock		0.83	0.01	25.06	<0.01	33.32	0.58	15.05	9.78	0.42	0.05	7.67	4.81	0.91
B875668 Dup			0.82	0.01	25.08	<0.01	33.34	0.57	15.12	9.63	0.41	0.05	7.60	4.79	0.92
QCV1011-00316-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875686	Rock		0.27	<0.01	34.99	<0.01	4.43	0.02	35.93	17.07	0.43	0.03	6.65	0.97	0.04
B875686 Dup			0.26	<0.01	34.21	<0.01	4.38	0.02	35.97	17.62	0.42	0.03	6.64	0.94	0.04
QCV1011-00316-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875704	Rock		0.39	<0.01	35.53	<0.01	3.60	0.02	36.99	17.91	0.32	0.03	6.09	0.47	0.07
B875704 Dup			0.39	<0.01	35.50	<0.01	3.57	0.01	36.92	17.85	0.32	0.02	6.07	0.45	0.07
QCV1011-00316-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00316-0012-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.53	0.04	8.14	<0.01	6.19	1.80	4.56	0.61	0.12	6.84	0.14	50.31	0.29



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
B875650	Pulp		<0.5	0.24	<5	121	<2	>10	<0.5	12	4	69	>10	0.07	303
B875650 Dup			<0.5	0.24	<5	130	<2	>10	<0.5	12	5	79	>10	0.08	319
QCV1011-00313-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3												
STD-OREAS-45P-4A result			<0.5												
B875668	Rock		1.5	0.39	<5	88	<2	>10	<0.5	49	13	15	>10	0.46	401
B875668 Dup			1.4	0.37	<5	81	<2	>10	<0.5	48	13	14	>10	0.45	386
QCV1011-00313-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B875686	Rock		2.0	0.12	18	38	<2	>10	<0.5	4	12	17	3.08	0.02	743
B875686 Dup			2.0	0.12	17	15	<2	>10	<0.5	4	12	16	3.01	0.02	749
QCV1011-00313-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B875704	Rock		2.9	0.16	11	24	<2	>10	<0.5	3	9	3	2.50	0.02	407
B875704 Dup			2.9	0.16	11	24	<2	>10	<0.5	3	9	3	2.49	0.01	412
QCV1011-00313-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1011-00313-0012-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			64.6									1025			
B875650	Pulp	99.65													
B875650 Dup		99.60													
QCV1011-00316-0002-BLK		<0.01													
B875668	Rock	98.49													
B875668 Dup		98.34													
QCV1011-00316-0005-BLK		<0.01													
B875686	Rock	100.84													
B875686 Dup		100.54													
QCV1011-00316-0008-BLK		<0.01													
B875704	Rock	101.44													
B875704 Dup		101.20													
QCV1011-00316-0011-BLK		<0.01													
QCV1011-00316-0012-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		99.59													



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10-360-03524-01

Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875650	Pulp	8.43	3506	3	0.05	3	>10000	176	<5	6	1617	0.19	<10	204	<10
B875650 Dup		8.48	3485	3	0.05	2	>10000	194	<5	6	1667	0.19	<10	215	<10
QCV1011-00313-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875668	Rock	5.90	3056	3	0.05	3	>10000	47	<5	3	2088	0.34	<10	424	<10
B875668 Dup		5.81	2905	4	0.05	4	>10000	43	<5	3	2028	0.28	<10	415	<10
QCV1011-00313-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875686	Rock	>10	2777	2	0.04	<1	>10000	55	<5	8	1195	0.02	<10	21	<10
B875686 Dup		>10	2779	2	0.04	<1	>10000	52	<5	8	1163	0.02	<10	22	<10
QCV1011-00313-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875704	Rock	>10	2200	1	0.03	<1	>10000	10	<5	9	550	0.03	<10	29	<10
B875704 Dup		>10	2220	<1	0.03	<1	>10000	11	<5	9	549	0.03	<10	29	<10
QCV1011-00313-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00313-0012-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10



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Certificate of Analysis

10-360-03524-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875650	Pulp	60	60												
B875650 Dup		62	67												
QCV1011-00313-0002-BLK		<2	<1												
B875668	Rock	62	49												
B875668 Dup		62	45												
QCV1011-00313-0005-BLK		<2	<1												
B875686	Rock	10	22												
B875686 Dup		10	22												
QCV1011-00313-0008-BLK		<2	<1												
B875704	Rock	9	23												
B875704 Dup		9	23												
QCV1011-00313-0011-BLK		<2	<1												
QCV1011-00313-0012-BLK		<2	<1												
B875650	Pulp			846.4	20.3	6.4	13.7	41.6	7.3	2.8	387.7	0.4	333.3	95.2	50.5
B875650 Dup				828.0	20.3	6.5	13.8	41.7	7.3	2.7	390.4	0.4	335.1	94.4	51.0
QCV1011-00314-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875668	Rock			>1000	22.2	6.8	17.6	50.9	29.3	2.9	494.1	0.4	427.7	122.8	64.0
B875668 Dup				>1000	21.4	6.7	16.7	49.4	28.6	2.8	469.8	0.4	417.8	117.8	61.9
QCV1011-00314-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875686	Rock			>1000	28.4	9.7	19.0	65.2	1.9	4.1	730.3	0.7	616.3	173.3	86.2
B875686 Dup				>1000	28.3	9.8	19.1	64.4	1.8	4.0	739.5	0.7	606.1	172.2	86.1
QCV1011-00314-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875704	Rock			858.1	22.0	8.7	10.9	40.0	1.3	3.5	423.2	0.6	337.0	96.7	47.5
B875704 Dup				861.5	22.3	8.8	11.2	40.2	1.4	3.5	426.4	0.7	337.3	96.8	47.9
QCV1011-00314-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00314-0012-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				132.5	18.1	14.5	1.9	14.8	11.5	4.3	60.7	1.9	58.9	15.6	13.1



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Certificate of Analysis

10-360-03524-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875650	Pulp	3.7	0.7	4.5	73.9			
B875650 Dup		3.6	0.6	4.5	70.7			
QCV1011-00314-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875668	Rock	4.1	0.7	4.5	73.5			
B875668 Dup		3.8	0.7	4.5	71.6			
QCV1011-00314-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B875686	Rock	5.0	1.1	7.1	103.1			
B875686 Dup		5.1	1.1	6.8	102.0			
QCV1011-00314-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B875704	Rock	3.7	1.0	6.3	86.4			
B875704 Dup		3.8	1.0	6.4	88.8			
QCV1011-00314-0011-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00314-0012-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	14.5	122.4			
B875650	Pulp					29.52	283.5	7.8
B875650 Dup						34.12	305.5	8.4
QCV1103-01174-0002-BLK						<0.05	<0.2	<0.1
B875668	Rock					0.62	172.8	6.6
B875668 Dup						0.67	166.7	6.5
QCV1103-01174-0005-BLK						<0.05	<0.2	<0.1
B875686	Rock					23.43	133.6	19.7
B875686 Dup						23.96	141.0	21.1
QCV1103-01174-0008-BLK						<0.05	<0.2	<0.1
B875704	Rock					6.22	182.7	1.9
B875704 Dup						5.83	189.9	1.9
QCV1103-01174-0011-BLK						<0.05	<0.2	<0.1
QCV1103-01174-0012-BLK						<0.05	<0.2	<0.1



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10-360-03533-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
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<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/10/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-025</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">70</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p>Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	70	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
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The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03533-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875162	Rock	0.21	0.16	<0.01	35.50	<0.01	4.87	0.01	39.02	13.99	0.77	0.04	5.59	<0.01	0.03
B875163	Rock	0.34	0.89	0.02	35.11	<0.01	4.96	0.22	34.94	12.12	0.55	0.04	8.38	2.39	0.36
B875164	Rock	0.18	0.88	0.01	32.66	<0.01	5.31	0.23	37.66	13.24	0.69	0.12	4.30	4.46	0.15
B875165	Rock	0.15	2.66	0.03	27.67	0.01	5.11	0.95	31.92	11.45	0.57	0.59	2.30	16.85	0.21
B875166	Rock	0.07	3.10	0.05	24.84	<0.01	5.83	1.38	24.60	11.66	0.45	1.28	3.69	22.41	0.23
B875167	Rock	0.23	0.78	0.01	31.22	<0.01	5.21	0.30	34.57	12.45	0.60	0.33	4.04	10.00	0.08
B875168	Rock	0.34	0.24	0.04	37.99	<0.01	4.65	0.04	38.18	11.71	0.93	0.11	4.78	2.21	0.05
B875169	Rock	0.15	0.28	0.01	37.42	<0.01	4.66	0.05	38.97	12.19	0.87	0.04	5.06	0.76	0.08
B875170	Pulp	0.39	0.32	<0.01	33.75	<0.01	5.92	0.06	38.84	13.70	0.59	0.07	4.40	1.40	0.12
B875171	Rock	0.12	2.86	0.03	25.86	<0.01	6.52	1.54	31.86	14.42	0.62	0.37	2.82	12.10	0.57
B875172	Rock	0.19	1.12	<0.01	31.68	<0.01	6.08	0.18	38.17	13.56	0.74	0.07	3.87	3.58	0.22
B875173	Rock	0.22	2.57	0.02	27.23	<0.01	9.10	0.58	28.04	11.58	0.41	0.06	4.12	16.10	0.35
B875174	Rock	0.15	0.23	<0.01	32.64	<0.01	5.72	0.06	40.50	14.49	0.72	0.04	2.42	2.97	0.08
B875175	Rock	0.06	0.56	0.05	25.83	<0.01	4.68	0.99	22.05	12.15	0.39	2.63	2.64	27.34	0.12
B875176	Rock	0.17	0.07	<0.01	32.79	<0.01	4.01	0.02	40.17	16.07	0.73	0.04	4.67	1.24	0.03
B875177	Rock	0.17	0.70	0.02	30.09	<0.01	4.55	0.65	33.74	14.35	0.59	0.45	3.47	10.96	0.08
B875178	Rock	0.40	0.13	<0.01	33.52	<0.01	5.31	0.03	39.12	15.47	0.57	0.03	4.88	0.64	0.07
B875179	Rock	0.14	0.26	<0.01	32.72	<0.01	4.37	0.07	39.37	15.56	0.35	0.03	5.15	1.80	0.03
B875180 Dup	Rock	0.14	0.25	<0.01	33.39	<0.01	4.32	0.07	39.31	15.47	0.36	0.03	5.32	1.77	0.03
B875181	Rock	0.24	0.16	<0.01	33.87	<0.01	4.57	0.02	40.42	15.34	0.68	0.03	4.31	0.79	0.04
B875182	Rock	0.14	0.52	0.02	38.84	<0.01	8.31	0.12	33.88	8.65	0.85	0.03	5.08	4.61	0.09
B875183	Rock	0.07	0.36	<0.01	33.97	<0.01	14.43	0.05	32.22	10.27	0.43	0.03	8.03	1.84	0.24
B875184	Rock	0.12	0.26	<0.01	34.78	<0.01	5.98	0.01	37.62	13.14	0.52	0.03	5.79	2.72	0.09
B875185	Rock	0.05	0.30	0.02	38.03	<0.01	5.01	<0.01	37.59	10.76	0.43	0.03	5.63	2.08	0.24
B875186	Rock	0.06	0.51	<0.01	37.01	<0.01	5.25	0.02	37.05	11.86	0.38	0.03	5.84	2.92	0.26
B875187	Rock	0.04	0.97	0.01	38.90	<0.01	5.68	0.03	34.48	9.16	0.45	0.02	6.87	4.44	0.13
B875188	Rock	0.09	0.19	0.02	37.68	<0.01	7.12	0.03	38.35	10.73	0.87	0.02	3.65	0.64	0.03
B875189	Rock	0.31	0.24	0.02	41.82	<0.01	9.19	0.02	31.20	6.70	0.79	0.02	9.16	1.51	0.02
B875190	Pulp	0.80	0.50	0.02	29.81	<0.01	19.28	0.10	31.19	11.54	0.53	0.06	6.19	1.79	0.71
B875191	Rock	0.17	0.22	0.02	36.66	<0.01	8.85	0.08	38.33	11.02	0.62	0.02	3.71	0.65	0.02
B875192	Rock	0.08	0.20	<0.01	31.93	<0.01	8.61	0.05	41.23	14.69	0.82	0.02	1.13	1.03	0.04
B875193	Rock	0.20	0.38	0.02	26.44	<0.01	23.12	0.16	27.81	12.54	0.69	0.04	6.41	3.61	0.22
B875194	Rock	0.04	0.12	<0.01	30.50	<0.01	6.98	0.02	38.37	15.15	0.77	0.04	3.25	4.30	0.02
B875195	Rock	0.26	0.33	<0.01	32.65	<0.01	6.01	0.11	35.89	14.18	0.65	0.11	6.57	3.07	0.14
B875196	Rock	0.10	0.32	<0.01	32.95	<0.01	7.93	0.07	34.94	14.49	0.50	0.07	6.14	2.48	0.13
B875197	Rock	0.13	0.20	<0.01	32.55	<0.01	6.63	0.05	38.01	15.16	0.52	0.08	5.34	1.47	0.05
B875198	Rock	0.32	0.14	<0.01	33.40	<0.01	5.68	0.04	37.90	15.79	0.63	0.07	4.25	1.23	0.04
B875199	Rock	0.03	0.21	<0.01	33.13	<0.01	5.30	0.06	39.19	15.57	0.52	0.08	3.80	2.06	0.05
B875200 Dup	Rock	0.03	0.22	<0.01	33.55	0.01	5.12	0.06	39.11	16.01	0.53	0.08	4.04	2.01	0.05
B875201	Rock	0.02	0.31	<0.01	33.77	<0.01	4.58	0.07	36.52	14.93	0.47	0.16	6.78	2.33	0.06



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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875202	Rock	0.12	0.17	<0.01	34.46	<0.01	4.82	0.05	37.04	14.42	0.73	0.07	6.31	1.40	0.05
B875203	Rock	0.08	0.14	<0.01	34.00	<0.01	5.57	0.02	38.50	14.49	0.72	0.03	4.42	1.25	0.03
B875204	Rock	0.47	0.18	0.01	35.27	<0.01	5.78	<0.01	37.31	13.96	0.72	0.03	6.09	1.49	0.08
B875205	Rock	0.14	0.08	<0.01	34.80	<0.01	3.69	0.02	41.03	15.65	0.81	0.04	4.17	0.43	0.02
B875206	Rock	0.20	0.08	<0.01	34.34	<0.01	4.29	0.02	39.65	15.51	0.67	0.04	4.39	0.53	0.03
B875207	Rock	0.04	0.06	<0.01	33.56	<0.01	2.66	<0.01	42.65	17.28	0.76	0.03	2.88	0.19	<0.01
B875208	Rock	0.11	0.16	<0.01	34.68	<0.01	4.76	0.03	37.18	15.14	0.55	0.04	6.53	1.13	0.04
B875209	Rock	0.16	0.08	<0.01	34.31	<0.01	3.74	0.01	41.63	15.82	0.80	0.03	3.38	0.97	0.02
B875210	Pulp	0.53	1.67	0.38	48.31	<0.01	4.68	0.79	32.10	2.09	1.02	0.46	2.86	5.68	0.25
B875211	Rock	0.05	0.06	<0.01	34.23	<0.01	5.33	<0.01	42.51	15.26	1.15	0.03	2.03	0.32	<0.01
B875212	Rock	0.29	0.13	<0.01	35.11	<0.01	4.87	0.01	38.66	14.96	0.77	0.04	5.71	1.28	0.04
B875213	Rock	0.58	0.27	<0.01	35.16	<0.01	6.30	0.03	33.87	15.08	0.62	0.04	7.31	3.47	0.06
B875214	Rock	0.10	0.13	<0.01	35.08	<0.01	3.33	0.01	40.60	16.66	0.82	0.04	4.29	1.08	0.01
B875215	Rock	0.34	0.09	<0.01	31.87	<0.01	6.36	0.02	38.23	16.32	0.70	0.03	2.25	3.49	0.03
B875216	Rock	0.45	0.24	<0.01	34.40	<0.01	5.71	0.04	36.94	14.92	0.42	0.04	3.61	2.67	0.06
B875217	Rock	<0.01	14.64	0.13	4.24	0.04	4.30	3.92	1.37	1.53	0.13	3.89	0.26	66.17	0.49
B875218	Rock	0.32	0.24	<0.01	32.80	0.01	6.40	0.06	36.58	14.25	0.72	0.04	3.62	3.91	0.35
B875219	Rock	0.32	0.16	<0.01	35.44	<0.01	5.44	0.03	36.59	14.40	0.50	0.04	5.72	0.93	0.05
B875220 Dup	Rock	0.30	0.17	<0.01	34.90	<0.01	5.34	0.03	36.41	14.77	0.51	0.04	6.08	1.00	0.05
B875221	Rock	0.23	0.34	<0.01	37.46	<0.01	4.61	0.03	36.83	13.12	0.50	0.04	6.45	2.09	0.04
B875222	Rock	0.19	0.70	0.03	27.45	<0.01	31.77	0.29	20.51	8.99	0.55	0.09	7.94	4.93	0.36
B875223	Rock	0.16	0.42	0.04	35.97	<0.01	19.14	0.21	24.46	8.82	0.50	0.07	9.47	3.94	0.24
B875224	Rock	0.38	0.12	<0.01	35.89	<0.01	4.50	0.03	39.58	15.83	0.57	0.05	4.20	0.64	0.03
B875225	Rock	0.26	0.39	<0.01	35.33	<0.01	3.65	0.04	39.56	15.47	0.37	0.04	4.32	0.89	0.02
B875226	Rock	0.15	0.31	<0.01	36.67	<0.01	4.07	0.04	40.29	15.57	0.68	0.04	3.66	0.54	0.02
B875227	Rock	0.15	0.44	0.04	50.47	<0.01	3.28	0.09	36.31	6.61	0.34	0.04	4.37	0.85	0.03
B875228	Rock	0.11	0.29	0.05	47.17	<0.01	3.39	0.10	37.53	8.78	0.52	0.06	4.40	0.53	0.03
B875229	Rock	0.02	0.47	<0.01	34.89	<0.01	2.78	0.07	42.22	16.38	0.56	0.04	2.78	0.94	<0.01
B875230	Pulp	0.75	0.19	0.02	37.16	<0.01	5.14	0.04	37.95	11.34	0.45	0.10	4.18	2.94	0.15
B875231	Rock	0.02	0.43	<0.01	34.03	<0.01	2.72	0.04	40.87	15.68	0.36	0.04	3.68	1.40	<0.01
B875232	Rock	0.07	0.08	<0.01	34.21	<0.01	2.87	0.01	42.75	16.19	0.73	0.05	2.40	0.15	<0.01
B875233	Rock	0.27	0.28	<0.01	34.11	<0.01	3.82	0.05	41.28	16.11	0.57	0.04	1.98	0.71	0.01
B875234	Rock	0.17	0.19	<0.01	33.62	0.01	4.09	0.05	41.99	16.81	0.66	0.05	1.67	0.52	0.01
B875235	Rock	0.32	0.19	<0.01	34.07	<0.01	4.24	0.03	38.72	16.62	0.66	0.05	4.22	0.86	0.01

Certificate of Analysis

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Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B875162	Rock	99.98	<0.5	0.08	52	61	<2	>10	<0.5	6	13	34	3.33	<0.01	485
B875163	Rock	99.98	<0.5	0.47	87	163	<2	>10	<0.5	8	11	51	3.40	0.19	443
B875164	Rock	99.71	<0.5	0.46	39	83	<2	>10	<0.5	5	9	27	3.46	0.20	232
B875165	Rock	100.32	<0.5	1.52	32	214	<2	>10	<0.5	6	14	26	3.29	0.79	130
B875166	Rock	99.53	<0.5	1.71	20	330	<2	>10	<0.5	7	18	16	3.85	1.02	147
B875167	Rock	99.60	<0.5	0.41	12	101	<2	>10	<0.5	7	13	37	3.37	0.22	189
B875168	Rock	100.94	<0.5	0.10	20	307	<2	>10	<0.5	5	6	54	3.03	0.03	189
B875169	Rock	100.40	<0.5	0.11	11	104	<2	>10	<0.5	3	4	22	3.07	0.03	419
B875170	Pulp	99.18	<0.5	0.15	8	45	<2	>10	<0.5	7	<1	73	4.06	0.04	322
B875171	Rock	99.59	<0.5	1.50	17	223	<2	>10	<0.5	14	18	33	4.25	1.14	132
B875172	Rock	99.28	<0.5	0.55	8	49	<2	>10	<0.5	5	9	28	3.94	0.13	444
B875173	Rock	100.17	<0.5	1.40	28	142	<2	>10	<0.5	10	17	38	5.92	0.43	201
B875174	Rock	99.90	<0.5	0.12	<5	65	<2	>10	<0.5	7	6	25	3.64	0.05	183
B875175	Rock	99.45	<0.5	0.30	<5	376	3	>10	<0.5	5	9	10	3.02	0.75	158
B875176	Rock	99.84	<0.5	0.03	<5	41	<2	>10	<0.5	6	9	28	2.58	0.02	216
B875177	Rock	99.67	<0.5	0.39	12	117	<2	>10	<0.5	5	9	29	2.87	0.46	181
B875178	Rock	99.78	<0.5	0.08	23	47	<2	>10	<0.5	8	4	65	3.41	0.02	203
B875179	Rock	99.71	<0.5	0.14	7	37	<2	>10	<0.5	5	7	25	2.76	0.05	357
B875180 Dup	Rock	100.32	<0.5	0.14	8	39	<2	>10	<0.5	5	10	24	2.77	0.05	368
B875181	Rock	100.25	<0.5	0.08	9	36	<2	>10	<0.5	9	5	43	2.82	0.02	149
B875182	Rock	100.99	<0.5	0.29	34	93	<2	>10	<0.5	10	3	31	5.19	0.07	2703
B875183	Rock	101.89	<0.5	0.19	55	66	<2	>10	<0.5	48	<1	60	9.14	0.04	377
B875184	Rock	100.95	<0.5	0.14	10	64	<2	>10	<0.5	5	4	21	3.80	0.01	348
B875185	Rock	100.13	<0.5	0.17	9	174	<2	>10	<0.5	5	2	7	3.24	<0.01	397
B875186	Rock	101.13	<0.5	0.31	11	60	<2	>10	<0.5	5	6	9	3.35	0.01	443
B875187	Rock	101.16	<0.5	0.52	15	92	<2	>10	<0.5	6	5	2	3.63	0.02	811
B875188	Rock	99.32	<0.5	0.11	8	108	10	>10	<0.5	7	2	10	4.49	0.03	>10000
B875189	Rock	100.70	<0.5	0.12	41	173	<2	>10	<0.5	8	4	52	5.74	0.02	2390
B875190	Pulp	101.71	<0.5	0.31	16	142	<2	>10	<0.5	13	<1	155	>10	0.09	286
B875191	Rock	100.21	<0.5	0.12	25	146	<2	>10	<0.5	10	5	29	5.47	0.07	2404
B875192	Rock	99.77	<0.5	0.12	9	49	10	>10	<0.5	10	3	16	5.40	0.05	4853
B875193	Rock	101.43	<0.5	0.22	11	120	<2	>10	<0.5	16	2	37	>10	0.14	203
B875194	Rock	99.53	<0.5	0.06	6	23	8	>10	<0.5	7	12	10	4.43	0.03	2758
B875195	Rock	99.73	<0.5	0.19	14	39	<2	>10	<0.5	8	8	46	3.93	0.10	814
B875196	Rock	100.03	<0.5	0.18	12	23	<2	>10	<0.5	11	7	18	5.14	0.06	279
B875197	Rock	100.05	2.4	0.10	10	22	<2	>10	<0.5	9	6	21	4.33	0.05	1784
B875198	Rock	99.16	<0.5	0.07	8	23	<2	>10	<0.5	6	8	54	3.72	0.03	490
B875199	Rock	99.99	<0.5	0.11	5	21	<2	>10	<0.5	7	11	6	3.33	0.03	502
B875200 Dup	Rock	100.80	<0.5	0.12	6	21	<2	>10	<0.5	6	10	6	3.19	0.04	504
B875201	Rock	100.00	<0.5	0.17	6	24	<2	>10	<0.5	6	7	3	2.87	0.05	383

Certificate of Analysis

10-360-03533-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875202	Rock	99.53	<0.5	0.10	<5	31	<2	>10	<0.5	4	8	17	2.96	0.04	294
B875203	Rock	99.19	<0.5	0.07	14	40	<2	>10	<0.5	7	7	13	3.44	0.03	501
B875204	Rock	100.93	<0.5	0.09	28	102	<2	>10	<0.5	4	4	76	3.63	<0.01	1354
B875205	Rock	100.74	<0.5	0.03	<5	45	<2	>10	<0.5	3	5	22	2.38	0.01	306
B875206	Rock	99.56	<0.5	0.03	6	27	<2	>10	<0.5	7	6	32	2.69	0.01	228
B875207	Rock	100.09	<0.5	0.02	<5	36	<2	>10	<0.5	3	5	6	1.70	0.03	115
B875208	Rock	100.26	<0.5	0.08	6	28	<2	>10	<0.5	8	6	17	2.99	0.03	1154
B875209	Rock	100.79	<0.5	0.04	<5	47	<2	>10	<0.5	3	4	25	2.29	0.02	292
B875210	Pulp	100.30	<0.5	0.88	29	2900	<2	>10	<0.5	5	5	25	2.90	0.64	872
B875211	Rock	100.94	<0.5	0.03	<5	53	<2	>10	<0.5	3	4	7	3.18	0.01	2095
B875212	Rock	101.58	<0.5	0.07	6	34	<2	>10	<0.5	5	4	49	2.98	0.01	793
B875213	Rock	102.23	<0.5	0.16	10	54	<2	>10	<0.5	15	7	97	3.77	0.02	340
B875214	Rock	102.05	<0.5	0.07	<5	53	<2	>10	<0.5	2	6	15	2.04	0.01	397
B875215	Rock	99.40	<0.5	0.05	8	37	<2	>10	<0.5	15	13	58	3.96	0.02	884
B875216	Rock	99.06	<0.5	0.14	<5	32	<2	>10	<0.5	10	14	69	3.51	0.04	3990
B875217	Rock	101.11	<0.5	8.10	75	947	<2	2.92	<0.5	9	153	1	2.61	2.94	38
B875218	Rock	98.99	<0.5	0.13	<5	41	<2	>10	<0.5	7	16	49	3.82	0.05	1304
B875219	Rock	99.32	<0.5	0.08	6	34	<2	>10	<0.5	9	12	51	3.33	0.03	209
B875220 Dup	Rock	99.32	<0.5	0.09	6	34	<2	>10	<0.5	8	10	49	3.22	0.03	212
B875221	Rock	101.53	<0.5	0.19	5	68	<2	>10	<0.5	5	6	37	2.79	0.03	261
B875222	Rock	103.61	<0.5	0.39	9	249	<2	>10	<0.5	17	<1	27	>10	0.22	238
B875223	Rock	103.28	<0.5	0.24	7	296	<2	>10	<0.5	12	<1	15	>10	0.18	258
B875224	Rock	101.43	<0.5	0.06	<5	30	<2	>10	<0.5	8	6	62	2.30	0.04	245
B875225	Rock	100.09	<0.5	0.19	6	24	<2	>10	<0.5	8	7	43	2.29	0.04	266
B875226	Rock	101.91	<0.5	0.16	<5	43	<2	>10	<0.5	4	4	29	2.61	0.04	474
B875227	Rock	102.89	<0.5	0.23	9	307	4	>10	<0.5	6	4	1	2.03	0.09	220
B875228	Rock	102.85	<0.5	0.14	6	337	<2	>10	<0.5	6	4	18	2.12	0.09	216
B875229	Rock	101.13	<0.5		<5	48	3	>10	<0.5	4	7	<1	1.74	0.07	375
B875230	Pulp	99.65	<0.5	0.11	<5	176	<2	>10	0.9	28	<1	102	3.14	0.02	355
B875231	Rock	99.27	<0.5	0.23	24	17	<2	>10	<0.5	17	11	<1	1.66	0.02	257
B875232	Rock	99.45	<0.5	0.03	18	49	<2	>10	<0.5	8	7	<1	1.85	<0.01	261
B875233	Rock	98.98	<0.5	0.16	30	33	<2	>10	0.6	26	<1	33	2.24	0.02	307
B875234	Rock	99.68	<0.5	0.10	<5	38	<2	>10	0.6	10	3	13	2.62	<0.01	632
B875235	Rock	99.68	<0.5	0.11	<5	32	<2	>10	0.6	24	4	30	2.49	<0.01	335

Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B875162	Rock	8.37	4991	<1	0.02	<1	>10000	95	<5	6	3907	<0.01	<10	8	<10
B875163	Rock	7.69	3571	<1	0.03	1	>10000	137	<5	8	3011	0.06	<10	28	<10
B875164	Rock	8.26	4446	<1	0.08	1	>10000	76	<5	8	2849	0.03	<10	19	<10
B875165	Rock	7.55	3695	<1	0.42	1	9408	64	<5	11	2640	0.06	<10	43	<10
B875166	Rock	7.49	3032	<1	0.94	2	>10000	32	<5	12	2313	0.12	<10	51	<10
B875167	Rock	7.56	3981	1	0.19	<1	>10000	91	<5	8	2840	0.03	<10	47	<10
B875168	Rock	6.82	6100	<1	0.06	<1	>10000	140	<5	6	2721	0.02	<10	32	<10
B875169	Rock	7.49	5652	<1	0.02	<1	>10000	72	<5	6	2928	<0.01	<10	12	<10
B875170	Pulp	8.14	3910	2	0.04	<1	>10000	192	<5	7	2250	0.03	<10	37	<10
B875171	Rock	8.14	4062	<1	0.24	8	>10000	53	<5	9	2746	0.23	<10	38	<10
B875172	Rock	8.41	4856	<1	0.04	<1	>10000	86	<5	7	1837	0.04	<10	22	<10
B875173	Rock	6.81	2891	<1	0.03	2	>10000	93	<5	16	1665	0.09	<10	54	<10
B875174	Rock	8.91	4826	2	0.03	<1	9926	71	<5	8	2843	0.01	<10	13	<10
B875175	Rock	7.33	2707	<1	1.88	<1	>10000	29	<5	22	2438	0.05	<10	75	<10
B875176	Rock	8.53	5027	<1	0.03	<1	>10000	76	<5	6	4120	<0.01	<10	8	<10
B875177	Rock	8.10	3908	<1	0.31	<1	>10000	74	<5	18	3255	0.03	<10	27	<10
B875178	Rock	8.72	3971	<1	0.02	<1	>10000	165	<5	6	2969	0.03	<10	51	<10
B875179	Rock	8.94	2412	<1	0.02	<1	>10000	68	<5	4	591	0.01	<10	24	<10
B875180 Dup	Rock	9.04	2437	<1	0.02	<1	>10000	68	<5	4	598	0.01	<10	24	<10
B875181	Rock	8.76	4421	<1	0.02	<1	>10000	110	<5	5	3070	0.02	<10	17	<10
B875182	Rock	4.96	5628	3	0.01	<1	>10000	74	<5	13	1449	0.03	<10	35	<10
B875183	Rock	5.51	3014	4	0.02	<1	>10000	36	<5	8	1381	0.08	<10	72	<10
B875184	Rock	7.61	3509	<1	0.02	<1	>10000	54	<5	7	1917	0.02	<10	20	<10
B875185	Rock	6.46	2888	<1	0.02	<1	>10000	29	<5	6	1369	0.05	<10	30	<10
B875186	Rock	6.91	2566	<1	0.02	<1	>10000	33	<5	5	620	0.06	<10	29	<10
B875187	Rock	4.86	3043	1	0.02	<1	>10000	14	<5	8	757	0.02	<10	17	<10
B875188	Rock	6.26	5803	4	0.01	<1	>10000	65	<5	19	890	<0.01	<10	19	<10
B875189	Rock	3.68	5387	4	0.02	<1	>10000	139	<5	11	1426	0.01	<10	21	<10
B875190	Pulp	7.35	3578	<1	0.04	<1	>10000	320	<5	6	1919	0.17	<10	194	<10
B875191	Rock	6.55	4165	2	0.01	<1	>10000	76	<5	15	446	<0.01	<10	30	<10
B875192	Rock	8.71	5462	4	0.02	<1	4163	48	<5	17	593	0.01	<10	39	<10
B875193	Rock	7.34	4561	<1	0.03	<1	>10000	92	<5	11	2503	0.10	<10	129	<10
B875194	Rock	8.76	5049	5	0.02	<1	>10000	29	<5	9	1738	<0.01	<10	14	<10
B875195	Rock	8.22	4375	5	0.07	<1	>10000	118	<5	8	1981	0.05	<10	46	<10
B875196	Rock	8.32	3258	1	0.05	<1	>10000	58	<5	6	1333	0.04	<10	58	<10
B875197	Rock	8.57	3402	5	0.05	<1	>10000	64	<5	9	910	0.02	<10	37	<10
B875198	Rock	8.96	4167	4	0.04	<1	>10000	139	<5	6	1896	0.01	<10	29	<10
B875199	Rock	9.05	3469	1	0.05	<1	>10000	21	<5	5	1188	0.01	<10	16	<10
B875200 Dup	Rock	8.79	3450	<1	0.05	<1	>10000	18	<5	5	1198	0.01	<10	18	<10
B875201	Rock	8.33	3149	<1	0.10	<1	>10000	13	<5	6	1677	<0.01	<10	15	<10

Certificate of Analysis

10-360-03533-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
B875202	Rock	8.72	4754	2	0.05	<1	>10000	51	<5	6	2478	<0.01	<10	14	<10
B875203	Rock	9.13	4570	3	0.02	<1	>10000	38	<5	6	2066	<0.01	<10	15	<10
B875204	Rock	8.82	4501	2	0.02	<1	>10000	195	<5	8	2348	0.02	<10	20	<10
B875205	Rock	9.76	5209	2	0.03	<1	>10000	67	<5	5	3023	<0.01	<10	13	<10
B875206	Rock	9.28	4310	<1	0.03	<1	>10000	82	<5	6	2545	0.01	<10	13	<10
B875207	Rock	9.66	4983	<1	0.02	<1	>10000	19	<5	4	4056	<0.01	<10	1	<10
B875208	Rock	8.20	3598	<1	0.03	<1	>10000	51	<5	8	2025	0.01	<10	21	<10
B875209	Rock	9.05	5225	1	0.03	<1	>10000	65	<5	6	3666	<0.01	<10	8	<10
B875210	Pulp	1.19	6676	12	0.32	<1	>10000	75	<5	3	>10000	0.14	<10	156	<10
B875211	Rock	8.74	7339	1	0.03	<1	8099	28	<5	8	3443	<0.01	<10	2	<10
B875212	Rock	8.65	4980	1	0.03	<1	>10000	123	<5	8	2823	0.02	<10	17	<10
B875213	Rock	8.10	3966	1	0.03	<1	>10000	218	<5	11	3037	0.03	<10	42	<10
B875214	Rock	8.98	5198	<1	0.03	<1	>10000	41	<5	6	3976	<0.01	<10	7	<10
B875215	Rock	>10	4546	7	0.03	<1	9154	135	<5	10	2658	<0.01	<10	24	<10
B875216	Rock	9.43	2677	6	0.03	<1	>10000	177	<5	23	949	0.02	<10	69	<10
B875217	Rock	0.84	745	<1	2.53	5	1095	6	7	6	736	0.26	<10	5	<10
B875218	Rock	8.85	4457	11	0.03	<1	>10000	118	<5	10	2061	0.06	<10	29	<10
B875219	Rock	8.90	3229	4	0.03	<1	>10000	126	<5	6	1913	0.02	<10	29	<10
B875220 Dup	Rock	8.43	3276	2	0.03	<1	>10000	123	<5	6	1972	0.02	<10	27	<10
B875221	Rock	7.78	3178	<1	0.03	<1	>10000	95	<5	5	2233	0.02	<10	28	<10
B875222	Rock	4.71	3602	<1	0.06	<1	>10000	71	<5	9	2275	0.17	<10	264	<10
B875223	Rock	4.72	3309	<1	0.05	<1	>10000	44	<5	6	3190	0.11	<10	164	<10
B875224	Rock	9.88	2390	<1	0.03	<1	>10000	147	<5	5	817	0.01	<10	15	<10
B875225	Rock	9.10	2376	<1	0.03	<1	>10000	113	<5	4	660	0.01	<10	16	<10
B875226	Rock	9.58	4160	2	0.03	<1	>10000	66	<5	5	1924	<0.01	<10	9	<10
B875227	Rock	3.41	2032	<1	0.03	<1	>10000	12	<5	3	3629	0.01	<10	49	<10
B875228	Rock	4.32	3298	2	0.04	<1	>10000	51	<5	4	4469	0.01	<10	42	<10
B875229	Rock	9.01	3565	<1	0.03	<1	>10000	9	<5	4	1737	<0.01	<10	1	<10
B875230	Pulp	8.26	2890	<1	0.07	<1	>10000	315	<5	8	2279	0.07	<10	94	<10
B875231	Rock	>10	2252	<1	0.03	<1	>10000	<2	57	3	487	<0.01	<10	<1	<10
B875232	Rock	>10	4824	1	0.03	<1	9620	52	<5	6	3430	<0.01	<10	38	<10
B875233	Rock	>10	3427	2	0.03	<1	7547	117	<5	7	1758	<0.01	<10	26	<10
B875234	Rock	>10	4137	<1	0.03	<1	6942	74	<5	16	1877	<0.01	<10	41	<10
B875235	Rock	>10	3686	<1	0.03	<1	>10000	128	<5	6	2329	<0.01	<10	27	<10



INSPECTORATE

A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03533-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B875162	Rock	29	68	>1000	22.2	7.5	15.8	50.6	1.0	3.3	642.0	0.4	403.7	118.3	57.0
B875163	Rock	24	101	>1000	40.6	13.7	23.3	73.4	3.4	6.3	506.9	0.9	487.1	130.8	83.9
B875164	Rock	32	67	590.4	31.3	11.8	14.8	45.5	2.3	5.3	295.0	0.6	259.4	70.4	47.6
B875165	Rock	55	78	344.4	11.4	4.4	8.3	21.7	2.9	1.8	170.2	0.3	147.5	40.9	24.8
B875166	Rock	93	131	364.9	11.1	3.9	7.7	22.4	3.0	1.7	177.6	0.3	159.7	43.9	26.1
B875167	Rock	42	82	473.3	14.6	5.1	10.7	30.2	1.3	2.3	225.7	0.3	213.5	57.3	35.9
B875168	Rock	29	58	481.0	17.2	6.6	11.7	31.8	1.5	2.8	230.7	0.5	213.9	59.3	36.5
B875169	Rock	29	62	941.0	33.3	11.3	18.1	62.0	0.6	5.1	468.8	0.6	449.6	117.7	76.9
B875170	Pulp	26	73	756.8	20.7	7.6	14.5	42.5	2.6	3.2	404.1	0.6	308.3	88.2	49.5
B875171	Rock	71	112	366.8	11.5	4.4	7.7	22.9	0.6	1.8	173.8	0.3	160.0	44.0	27.0
B875172	Rock	31	130	988.6	27.7	10.2	18.2	59.9	1.8	4.3	505.6	0.7	487.6	125.7	78.7
B875173	Rock	61	187	499.1	16.0	6.1	11.3	30.6	5.5	2.6	242.1	0.5	218.3	59.6	36.4
B875174	Rock	33	65	462.0	17.6	6.3	9.9	32.4	1.0	2.8	224.3	0.4	214.0	57.0	38.6
B875175	Rock	74	158	377.8	12.8	4.9	8.2	22.9	6.7	2.0	195.5	0.4	159.4	44.0	26.7
B875176	Rock	27	44	573.8	12.7	3.9	10.2	29.4	1.0	1.8	300.5	0.2	236.0	66.1	36.3
B875177	Rock	41	85	420.5	11.7	4.4	8.1	23.9	2.4	1.8	212.6	0.3	175.9	48.4	28.9
B875178	Rock	21	64	525.9	16.7	6.2	12.0	32.1	1.3	2.6	247.3	0.4	232.7	63.6	39.1
B875179	Rock	13	67	874.3	21.8	8.5	15.1	46.0	0.9	3.4	435.4	0.7	364.7	101.8	56.4
B875180 Dup	Rock	13	69	858.9	22.5	8.9	14.9	46.9	0.9	3.6	431.7	0.7	359.4	97.9	57.0
B875181	Rock	18	98	422.1	13.4	5.2	11.0	26.5	1.6	2.1	199.2	0.3	189.3	51.5	31.7
B875182	Rock	35	129	>1000	27.2	7.6	27.5	104.9	3.1	3.4	>1000	0.6	>1000	405.6	105.8
B875183	Rock	22	207	829.2	27.9	10.6	18.8	51.7	4.0	4.6	440.2	0.8	368.9	99.8	62.1
B875184	Rock	19	92	735.9	32.5	13.1	17.5	53.7	2.0	5.6	390.4	0.9	334.4	89.0	60.7
B875185	Rock	14	82	951.5	30.8	11.7	18.7	59.7	3.3	5.1	479.8	0.8	439.1	118.1	70.2
B875186	Rock	13	158	>1000	32.5	12.4	20.6	65.8	1.1	5.2	514.7	1.0	488.8	128.6	77.1
B875187	Rock	16	101	>1000	36.9	13.4	24.8	83.4	2.2	5.6	890.5	1.0	728.1	196.6	109.5
B875188	Rock	23	144	>1000	78.1	14.0	103.1	409.6	1.4	7.3	>1000	0.8	>1000	>1000	485.0
B875189	Rock	24	161	>1000	41.8	15.2	32.8	109.7	3.1	6.4	>1000	1.1	>1000	333.5	119.2
B875190	Pulp	58	207	833.1	22.0	7.7	16.8	46.4	8.9	3.4	424.8	0.6	353.1	99.4	55.5
B875191	Rock	15	117	>1000	35.4	9.5	30.8	114.9	0.9	4.5	>1000	0.6	>1000	371.9	155.8
B875192	Rock	22	102	>1000	39.2	4.4	53.4	249.2	3.1	2.6	>1000	0.2	>1000	897.0	361.2
B875193	Rock	154	421	562.8	18.2	6.6	13.0	35.5	14.1	3.0	296.1	0.4	248.7	67.0	42.5
B875194	Rock	20	83	>1000	20.9	4.3	22.9	100.9	0.7	2.1	>1000	0.3	>1000	416.8	104.3
B875195	Rock	19	151	>1000	33.3	11.4	28.6	77.8	3.2	5.0	>1000	0.8	661.5	204.6	91.2
B875196	Rock	31	162	931.5	22.7	8.3	15.6	45.9	2.6	3.6	580.9	0.7	354.8	101.9	54.3
B875197	Rock	18	96	>1000	31.0	8.9	27.6	90.5	0.8	4.0	>1000	0.6	900.5	301.5	104.0
B875198	Rock	18	81	>1000	21.4	8.1	15.9	47.9	2.5	3.3	771.2	0.6	424.8	127.1	58.5
B875199	Rock	16	68	>1000	17.8	6.5	13.3	43.7	0.3	2.7	657.0	0.5	396.4	117.8	53.3
B875200 Dup	Rock	13	68	>1000	18.0	6.4	13.7	44.8	0.3	2.6	711.5	0.5	409.9	123.6	55.2
B875201	Rock	15	58	915.7	22.6	8.7	14.8	46.9	0.2	3.5	515.6	0.7	379.3	104.9	56.5



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Richmond, British Columbia V7A 4V5
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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875202	Rock	23	75	>1000	29.0	12.7	16.4	51.4	1.3	5.0	660.4	0.9	393.2	115.0	58.2
B875203	Rock	19	70	>1000	27.0	10.8	17.4	57.1	0.9	4.5	842.3	0.8	519.8	150.4	70.7
B875204	Rock	18	73	>1000	29.8	11.8	22.0	72.0	3.4	4.9	>1000	0.8	683.0	217.2	81.3
B875205	Rock	28	61	682.6	14.1	5.2	9.9	28.6	2.8	2.1	414.4	0.4	247.5	73.7	35.1
B875206	Rock	17	58	659.2	16.4	6.2	10.9	32.4	2.2	2.5	370.4	0.4	270.2	75.0	40.7
B875207	Rock	20	31	285.1	8.1	3.0	5.5	15.9	<0.1	1.2	142.7	<0.1	121.6	32.9	19.4
B875208	Rock	13	94	>1000	24.4	8.0	23.2	70.8	1.4	3.4	>1000	0.7	686.1	224.0	83.9
B875209	Rock	22	42	578.1	12.5	4.2	8.9	28.5	1.0	1.8	331.2	0.2	239.9	65.8	38.2
B875210	Pulp	470	103	>1000	17.1	5.8	15.6	48.0	<0.1	2.3	>1000	0.5	521.3	174.6	56.6
B875211	Rock	28	53	>1000	13.8	2.8	15.9	59.5	<0.1	1.5	>1000	<0.1	712.6	253.2	70.1
B875212	Rock	21	67	>1000	18.0	6.4	13.6	43.3	1.4	2.7	864.8	0.4	399.2	128.2	50.2
B875213	Rock	18	102	755.9	23.2	8.8	16.3	44.7	4.6	3.7	394.0	0.6	339.0	91.9	55.8
B875214	Rock	21	41	802.8	15.9	5.4	12.1	38.1	0.3	2.3	451.0	0.3	340.8	94.6	50.0
B875215	Rock	20	70	>1000	19.5	5.7	16.6	56.5	0.9	2.7	>1000	0.3	555.5	166.0	71.3
B875216	Rock	13	71	>1000	41.2	9.0	40.0	167.1	2.3	4.5	>1000	0.5	>1000	554.2	224.1
B875217	Rock	58	111	99.9	3.3	1.9	1.6	5.1	2.1	0.6	59.2	0.2	37.6	10.6	6.1
B875218	Rock	22	88	>1000	26.8	8.9	20.9	67.2	3.5	4.0	>1000	0.5	688.7	207.8	86.2
B875219	Rock	14	110	534.6	25.8	11.1	14.2	37.7	4.7	4.6	265.0	0.9	227.5	62.1	40.7
B875220 Dup	Rock	13	110	496.3	24.4	10.6	13.5	34.8	4.7	4.4	269.4	0.9	211.4	57.4	38.9
B875221	Rock	16	127	663.3	22.4	8.9	14.5	40.7	2.5	3.7	322.4	0.7	291.5	78.4	47.9
B875222	Rock	190	463	601.1	16.3	5.6	12.7	35.4	12.1	2.6	287.9	0.4	271.6	72.4	43.6
B875223	Rock	110	235	647.2	19.7	6.9	14.2	41.4	13.3	3.1	304.2	0.5	304.2	80.4	49.5
B875224	Rock	13	54	688.0	17.2	6.4	12.1	35.1	3.1	2.7	345.9	0.5	288.6	79.8	42.6
B875225	Rock	6	117	606.2	20.3	7.9	13.4	37.2	1.8	3.3	307.6	0.7	261.8	71.8	43.8
B875226	Rock	16	88	917.5	18.1	7.0	12.0	39.3	1.4	2.8	534.7	0.6	336.0	98.2	46.2
B875227	Rock	14	44	564.7	19.5	7.9	11.6	35.5	0.9	3.2	283.9	0.6	243.6	66.3	39.9
B875228	Rock	18	47	522.2	16.5	6.6	10.4	30.7	0.5	2.7	261.2	0.5	219.9	61.7	36.4
B875229	Rock	11	32	792.7	15.4	6.1	10.3	35.1	<0.1	2.4	440.3	0.5	300.4	88.3	43.0
B875230	Pulp	37	196	846.4	22.7	9.5	15.9	48.8	1.0	3.5	405.9	0.4	351.0	95.0	57.3
B875231	Rock	11	251	566.6	14.3	5.8	8.3	30.5	<0.1	2.0	293.3	0.2	229.3	63.1	36.6
B875232	Rock	21	243	486.6	12.9	4.6	8.1	28.2	<0.1	1.7	247.2	<0.1	205.5	54.2	35.6
B875233	Rock	14	214	710.3	16.4	6.6	9.6	33.4	<0.1	2.4	358.0	0.1	271.5	77.5	40.5
B875234	Rock	17	277	>1000	14.4	4.5	10.4	45.4	<0.1	1.7	586.5	<0.1	450.0	130.7	58.2
B875235	Rock	15	237	823.9	20.4	8.1	12.9	40.0	<0.1	2.9	397.6	<0.1	332.3	93.2	48.8



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Richmond, British Columbia V7A 4V5
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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875162	Rock	4.7	0.8	4.3	84.7	27.11	103.7	9.0
B875163	Rock	8.5	1.5	7.8	155.4	38.60	218.7	11.4
B875164	Rock	6.2	1.2	5.9	129.4	5.02	136.4	3.5
B875165	Rock	2.4	0.5	3.2	47.6	14.62	58.8	4.6
B875166	Rock	2.3	0.4	2.7	43.7	12.43	29.3	4.3
B875167	Rock	3.1	0.6	3.3	58.1	7.52	78.3	3.6
B875168	Rock	3.5	0.7	4.2	75.1	9.10	151.6	4.8
B875169	Rock	7.1	1.2	6.0	121.9	8.50	129.4	5.2
B875170	Pulp	4.3	0.8	5.0	77.9	20.87	157.8	9.9
B875171	Rock	2.3	0.4	2.9	44.9	5.44	41.4	3.6
B875172	Rock	5.9	1.1	6.3	108.8	59.70	191.0	22.4
B875173	Rock	3.3	0.7	4.4	68.9	171.76	225.1	31.8
B875174	Rock	3.7	0.6	3.8	69.5	9.08	94.9	4.7
B875175	Rock	2.5	0.5	3.8	53.2	20.43	45.9	25.6
B875176	Rock	2.7	0.4	2.4	44.5	1.43	43.7	1.8
B875177	Rock	2.3	0.4	3.1	46.6	10.93	63.7	7.3
B875178	Rock	3.6	0.7	3.9	65.6	3.35	130.3	6.4
B875179	Rock	4.3	1.0	6.1	90.3	46.99	268.8	6.7
B875180 Dup	Rock	4.7	1.1	5.9	93.5	44.21	272.5	7.1
B875181	Rock	2.8	0.5	3.2	53.6	122.70	271.7	109.4
B875182	Rock	5.2	0.8	5.1	87.8	47.68	104.0	15.9
B875183	Rock	5.8	1.3	6.9	115.5	67.52	172.4	33.9
B875184	Rock	6.5	1.5	8.1	141.3	8.70	270.7	7.8
B875185	Rock	6.2	1.3	7.1	125.1	5.96	117.3	5.2
B875186	Rock	6.7	1.5	8.5	134.0	6.84	195.6	5.3
B875187	Rock	7.5	1.6	8.8	140.7	1.64	242.1	7.6
B875188	Rock	16.7	1.5	8.9	173.1	17.62	122.6	13.5
B875189	Rock	8.0	1.8	9.6	158.3	26.95	417.7	15.5
B875190	Pulp	4.5	0.9	5.4	85.6	30.29	290.4	8.4
B875191	Rock	7.2	1.1	6.2	110.9	65.97	261.4	13.5
B875192	Rock	8.5	0.4	3.9	70.8	22.42	46.8	15.0
B875193	Rock	3.9	0.7	4.2	71.2	160.94	143.5	138.0
B875194	Rock	3.8	0.5	3.2	56.0	9.53	43.5	10.5
B875195	Rock	6.8	1.3	7.3	127.1	130.66	170.2	50.8
B875196	Rock	4.6	1.0	5.9	93.8	126.94	137.3	99.3
B875197	Rock	6.1	1.0	5.7	104.9	64.61	155.7	27.5
B875198	Rock	4.2	0.9	5.5	83.0	13.60	144.1	9.5
B875199	Rock	3.5	0.8	4.9	65.6	9.19	70.6	9.5
B875200 Dup	Rock	3.5	0.7	4.9	66.1	9.25	76.9	9.6
B875201	Rock	4.5	1.1	6.0	88.7	3.73	145.0	4.4



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875202	Rock	5.5	1.5	8.4	124.6	6.98	191.8	15.4
B875203	Rock	5.0	1.3	7.1	110.3	13.88	143.8	11.9
B875204	Rock	5.6	1.4	8.0	120.3	12.79	255.1	28.3
B875205	Rock	2.6	0.6	3.6	55.0	0.62	88.5	3.4
B875206	Rock	3.1	0.7	4.4	66.4	0.59	76.2	3.5
B875207	Rock	1.6	0.2	1.8	32.7	0.28	48.0	1.0
B875208	Rock	5.0	0.9	5.7	89.3	2.34	107.6	5.6
B875209	Rock	2.5	0.4	2.3	47.3	2.22	69.1	3.9
B875210	Pulp	3.1	0.7	4.7	66.1	36.01	43.1	27.9
B875211	Rock	2.5	0.2	2.0	37.5	1.16	54.1	2.7
B875212	Rock	3.5	0.7	4.2	68.1	3.00	138.1	5.5
B875213	Rock	4.6	1.0	5.9	92.1	5.77	128.8	8.7
B875214	Rock	3.3	0.5	3.4	57.9	1.08	68.2	2.1
B875215	Rock	3.9	0.6	3.5	71.0	4.82	102.6	4.7
B875216	Rock	8.8	0.9	5.6	123.3	6.30	77.0	5.8
B875217	Rock	0.5	0.2	2.1	19.5	1.41	10.0	3.9
B875218	Rock	5.3	1.0	5.6	96.1	4.91	148.8	5.8
B875219	Rock	5.0	1.3	7.5	116.9	16.58	196.8	21.4
B875220 Dup	Rock	4.6	1.2	7.0	112.5	17.30	201.7	22.0
B875221	Rock	4.6	1.0	6.0	93.9	93.94	189.9	94.2
B875222	Rock	3.5	0.6	3.8	66.3	102.91	188.2	81.7
B875223	Rock	4.2	0.7	4.5	75.7	21.85	147.8	187.7
B875224	Rock	3.4	0.7	4.6	69.3	6.63	138.1	5.4
B875225	Rock	4.0	0.9	6.0	86.4	186.10	237.7	110.8
B875226	Rock	3.4	0.8	5.1	76.5	105.62	196.9	63.6
B875227	Rock	3.9	1.0	5.5	82.7	0.30	39.6	10.9
B875228	Rock	3.4	0.7	4.6	69.8	8.97	67.8	13.9
B875229	Rock	3.0	0.6	4.2	62.5	9.32	41.3	3.6
B875230	Pulp	4.3	0.8	5.9	103.7	44.04	183.7	2.3
B875231	Rock	2.1	0.3	3.8	62.4	10.12	33.8	5.6
B875232	Rock	2.2	0.1	2.6	56.8	2.03	72.0	2.5
B875233	Rock	2.7	0.3	3.9	70.2	17.60	160.3	6.3
B875234	Rock	2.4	<0.1	2.9	55.1	25.34	203.6	12.9
B875235	Rock	3.2	0.5	4.9	89.9	34.39	282.0	18.2

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875162	Rock	0.21													
B875162 Dup		0.20													
QCV1011-00355-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
B875180 Dup	Rock	0.14													
B875180 Dup Dup		0.13													
QCV1011-00355-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875198	Rock	0.32													
B875198 Dup		0.34													
QCV1011-00355-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875216	Rock	0.45													
B875216 Dup		0.44													
QCV1011-00355-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875234	Rock	0.17													
B875234 Dup		0.18													
QCV1011-00355-0014-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
B875162	Rock		0.16	<0.01	35.50	<0.01	4.87	0.01	39.02	13.99	0.77	0.04	5.59	<0.01	0.03
B875162 Dup			0.15	<0.01	35.52	<0.01	4.92	0.01	39.06	13.91	0.77	0.04	5.60	<0.01	0.02
QCV1011-00359-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875180 Dup	Rock		0.25	<0.01	33.39	<0.01	4.32	0.07	39.31	15.47	0.36	0.03	5.32	1.77	0.03
B875180 Dup Dup			0.25	<0.01	33.39	<0.01	4.33	0.07	39.36	15.36	0.36	0.03	5.29	1.74	0.03
QCV1011-00359-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875198	Rock		0.14	<0.01	33.40	<0.01	5.68	0.04	37.90	15.79	0.63	0.07	4.25	1.23	0.04
B875198 Dup			0.14	<0.01	33.58	<0.01	5.72	0.04	37.96	15.43	0.63	0.07	4.31	1.24	0.04
QCV1011-00359-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875216	Rock		0.24	<0.01	34.40	<0.01	5.71	0.04	36.94	14.92	0.42	0.04	3.61	2.67	0.06
B875216 Dup			0.25	<0.01	34.46	0.01	5.87	0.07	36.95	14.67	0.42	0.04	3.76	2.55	0.07
QCV1011-00359-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875234	Rock		0.19	<0.01	33.62	0.01	4.09	0.05	41.99	16.81	0.66	0.05	1.67	0.52	0.01
B875234 Dup			0.17	<0.01	33.18	<0.01	4.04	0.03	41.83	16.90	0.65	0.04	1.70	0.54	<0.01
QCV1011-00359-0014-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



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		Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP
Sample	Sample	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Description	Type	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.89	0.04	8.12	<0.01	6.63	1.76	4.48	0.54	0.13	7.60	0.14	50.15	0.31

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Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875162	Rock		<0.5	0.08	52	61	<2	>10	<0.5	6	13	34	3.33	<0.01	485
B875162 Dup			<0.5	0.08	50	60	<2	>10	<0.5	7	13	34	3.27	<0.01	535
QCV1011-00356-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							118	1090	704			
B875180 Dup	Rock		<0.5	0.14	8	39	<2	>10	<0.5	5	10	24	2.77	0.05	368
B875180 Dup Dup			<0.5	0.13	5	38	<2	>10	<0.5	5	8	24	2.71	0.06	358
QCV1011-00356-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.5									1061			
B875198	Rock		<0.5	0.07	8	23	<2	>10	<0.5	6	8	54	3.72	0.03	490
B875198 Dup			<0.5	0.07	9	23	<2	>10	<0.5	6	9	53	3.68	0.03	511
QCV1011-00356-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B875216	Rock		<0.5	0.14	<5	32	<2	>10	<0.5	10	14	69	3.51	0.04	3990
B875216 Dup			<0.5	0.15	7	25	<2	>10	<0.5	11	11	71	3.57	0.04	3341
QCV1011-00356-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			62.3									1082			
B875234	Rock		<0.5	0.10	<5	38	<2	>10	0.6	10	3	13	2.62	<0.01	632
B875234 Dup			<0.5	0.08	<5	34	<2	>10	<0.5	4	<1	17	2.44	<0.01	568
QCV1011-00356-0014-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			97.1									6074			
B875162	Rock	99.98													
B875162 Dup		100.01													
QCV1011-00359-0002-BLK		<0.01													
B875180 Dup	Rock	100.32													
B875180 Dup Dup		100.21													
QCV1011-00359-0005-BLK		<0.01													
B875198	Rock	99.16													
B875198 Dup		99.16													
QCV1011-00359-0008-BLK		<0.01													
B875216	Rock	99.06													
B875216 Dup		99.12													
QCV1011-00359-0011-BLK		<0.01													
B875234	Rock	99.68													
B875234 Dup		99.10													
QCV1011-00359-0014-BLK		<0.01													
STD-SY-4 expected		100.80													
STD-SY-4 result		100.80													



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Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875162	Rock	8.37	4991	<1	0.02	<1	>10000	95	<5	6	3907	<0.01	<10	8	<10
B875162 Dup		8.47	4893	<1	0.02	<1	>10000	93	<5	6	3841	<0.01	<10	7	<10
QCV1011-00356-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.08	347	471	18							
B875180 Dup	Rock	9.04	2437	<1	0.02	<1	>10000	68	<5	4	598	0.01	<10	24	<10
B875180 Dup Dup		9.26	2415	<1	0.02	<1	>10000	66	<5	4	586	0.01	<10	24	<10
QCV1011-00356-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875198	Rock	8.96	4167	4	0.04	<1	>10000	139	<5	6	1896	0.01	<10	29	<10
B875198 Dup		8.91	4178	4	0.04	<1	>10000	141	<5	6	1898	0.01	<10	28	<10
QCV1011-00356-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875216	Rock	9.43	2677	6	0.03	<1	>10000	177	<5	23	949	0.02	<10	69	<10
B875216 Dup		9.60	2732	6	0.03	<1	>10000	177	<5	22	944	0.02	<10	70	<10
QCV1011-00356-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
B875234	Rock	>10	4137	<1	0.03	<1	6942	74	<5	16	1877	<0.01	<10	41	<10
B875234 Dup		>10	3827	2	0.03	<1	6465	59	<5	15	1730	<0.01	<10	49	<10
QCV1011-00356-0014-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9856							

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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875162	Rock	29	68												
B875162 Dup		28	67												
QCV1011-00356-0002-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		141													
B875180 Dup	Rock	13	69												
B875180 Dup Dup		13	68												
QCV1011-00356-0005-BLK		<2	<1												
B875198	Rock	18	81												
B875198 Dup		18	90												
QCV1011-00356-0008-BLK		<2	<1												
B875216	Rock	13	71												
B875216 Dup		13	74												
QCV1011-00356-0011-BLK		<2	<1												
B875234	Rock	17	277												
B875234 Dup		15	243												
QCV1011-00356-0014-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5443													
B875162	Rock			>1000	22.2	7.5	15.8	50.6	1.0	3.3	642.0	0.4	403.7	118.3	57.0
B875162 Dup				>1000	21.3	7.2	15.5	47.2	1.0	3.3	638.2	0.4	399.2	115.9	54.2
QCV1011-00357-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875180 Dup	Rock			858.9	22.5	8.9	14.9	46.9	0.9	3.6	431.7	0.7	359.4	97.9	57.0
B875180 Dup Dup				856.6	22.2	8.6	14.9	45.4	0.9	3.7	426.6	0.7	362.4	99.6	56.1
QCV1011-00357-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875198	Rock			>1000	21.4	8.1	15.9	47.9	2.5	3.3	771.2	0.6	424.8	127.1	58.5
B875198 Dup				>1000	22.2	8.2	16.5	49.3	2.5	3.4	777.6	0.6	431.2	130.7	59.6
QCV1011-00357-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875216	Rock			>1000	41.2	9.0	40.0	167.1	2.3	4.5	>1000	0.5	>1000	554.2	224.1
B875216 Dup				>1000	42.8	9.3	41.2	172.8	2.4	4.8	>1000	0.5	>1000	572.1	230.1
QCV1011-00357-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875234	Rock			>1000	14.4	4.5	10.4	45.4	<0.1	1.7	586.5	<0.1	450.0	130.7	58.2
B875234 Dup				>1000	14.2	4.1	10.3	44.8	<0.1	1.5	578.3	<0.1	449.6	129.0	57.8
QCV1011-00357-0014-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				126.9	18.7	15.0	2.2	14.9	11.3	4.5	61.3	2.2	60.7	15.7	13.2



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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875162	Rock	4.7	0.8	4.3	84.7			
B875162 Dup		4.4	0.7	4.3	78.4			
QCV1011-00357-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875180 Dup	Rock	4.7	1.1	5.9	93.5			
B875180 Dup Dup		4.5	1.0	6.1	92.6			
QCV1011-00357-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B875198	Rock	4.2	0.9	5.5	83.0			
B875198 Dup		4.5	0.9	5.7	86.1			
QCV1011-00357-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B875216	Rock	8.8	0.9	5.6	123.3			
B875216 Dup		9.1	1.0	6.0	126.0			
QCV1011-00357-0011-BLK		<0.1	<0.1	<0.1	<0.10			
B875234	Rock	2.4	<0.1	2.9	55.1			
B875234 Dup		2.3	<0.1	3.2	56.3			
QCV1011-00357-0014-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.8	2.4	15.7	124.7			
B875162	Rock					27.11	103.7	9.0
B875162 Dup						26.22	120.5	9.0
QCV1103-01175-0002-BLK						<0.05	<0.2	<0.1
B875180 Dup	Rock					44.21	272.5	7.1
B875180 Dup Dup						43.02	273.8	6.5
QCV1103-01175-0005-BLK						<0.05	<0.2	<0.1
B875198	Rock					13.60	144.1	9.5
B875198 Dup						13.43	158.9	9.9
QCV1103-01175-0008-BLK						<0.05	<0.2	<0.1
B875216	Rock					6.30	77.0	5.8
B875216 Dup						6.40	69.0	6.1
QCV1103-01175-0011-BLK						<0.05	<0.2	<0.1
B875234	Rock					25.34	203.6	12.9
B875234 Dup						26.10	194.6	13.5
QCV1103-01175-0014-BLK						<0.05	<0.2	<0.1



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Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
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 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/12/2010 Date Completed: 03/16/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-026</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">72</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Uranium (U), Tantalum (Ta), and Thorium (Th) numbers shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	72	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP
Location	Samples	Type	Preparation Description																														
Vancouver, BC	72	Rock	SP-RX-2K/Rock/Chips/Drill Core																														
Location	Method	Description																															
Vancouver, BC	REE-LB-MS	REE Group by ICP-MS																															
Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																															
Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																															
Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																															
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																															
Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level																															
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																															

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875236	Rock	0.43	0.30	<0.01	32.75	<0.01	4.58	0.02	38.77	14.81	0.70	0.04	5.39	1.16	0.07
B875237	Rock	0.55	0.28	<0.01	35.17	<0.01	5.03	0.02	37.29	12.10	0.78	0.04	6.49	1.45	0.03
B875238	Rock	0.52	0.22	<0.01	34.07	<0.01	4.45	0.03	39.00	14.22	0.81	0.04	5.61	0.49	0.01
B875239	Rock	0.41	0.28	<0.01	36.90	<0.01	5.21	0.04	37.84	12.88	0.90	0.04	5.58	0.82	0.07
B875240 Dup	Rock	0.42	0.27	<0.01	33.91	<0.01	5.20	0.03	38.89	12.12	0.89	0.04	5.36	0.74	0.06
B875241	Rock	0.67	0.38	<0.01	36.01	<0.01	7.94	0.04	34.44	12.16	0.75	0.05	6.34	1.31	0.19
B875242	Rock	0.49	0.44	<0.01	33.52	0.01	8.78	0.09	36.42	12.94	0.74	0.05	5.33	1.65	0.27
B875243	Rock	<0.01	16.12	0.13	4.24	0.03	3.70	3.82	1.16	1.48	0.13	3.71	0.32	66.09	0.45
B875244	Rock	0.44	0.55	<0.01	31.82	<0.01	7.05	0.16	35.57	15.40	0.45	0.11	5.43	2.25	0.28
B875245	Rock	0.31	0.31	<0.01	33.90	<0.01	5.94	0.08	37.62	14.54	0.70	0.06	4.94	1.07	0.08
B875246	Rock	0.64	0.40	<0.01	32.60	<0.01	7.20	0.10	34.75	14.45	0.65	0.09	6.98	1.45	0.12
B875247	Rock	0.53	0.25	<0.01	33.07	<0.01	4.59	0.04	37.91	16.15	0.55	0.07	5.32	0.41	0.03
B875248	Rock	0.29	0.44	<0.01	34.44	<0.01	4.10	0.06	38.40	14.96	0.61	0.10	5.16	1.47	0.05
B875249	Rock	0.35	0.31	<0.01	37.78	<0.01	4.67	0.04	36.46	12.91	0.66	0.07	7.17	0.61	0.05
B875250 Dup	Rock	0.34	0.31	<0.01	36.99	<0.01	4.66	0.04	36.09	14.23	0.64	0.07	7.43	0.62	0.05
B875251	Rock	0.36	0.22	<0.01	35.09	<0.01	4.66	0.03	38.61	13.56	0.68	0.05	4.86	0.95	0.03
B875252	Rock	0.47	0.27	<0.01	35.59	<0.01	4.88	0.02	37.30	13.82	0.92	0.05	6.33	0.72	0.03
B875253	Rock	0.37	0.22	<0.01	32.87	<0.01	4.41	0.03	39.80	16.98	0.53	0.04	3.57	0.64	0.03
B875254	Rock	0.59	0.30	<0.01	34.33	<0.01	5.40	0.04	36.44	15.08	0.58	0.06	6.28	0.95	0.03
B875255	Rock	0.48	0.27	<0.01	34.78	<0.01	5.12	0.04	37.04	14.29	0.60	0.03	5.82	0.99	0.03
B875256	Rock	0.15	0.27	<0.01	34.98	<0.01	4.70	0.02	37.30	14.23	0.83	0.05	6.42	0.72	0.02
B875257	Rock	0.12	1.47	<0.01	30.39	<0.01	5.31	0.11	37.67	14.29	0.71	0.04	3.66	4.78	0.23
B875258	Rock	0.18	0.41	<0.01	32.43	<0.01	5.23	0.03	36.99	15.45	0.65	0.04	5.90	1.58	0.05
B875259	Rock	0.10	0.40	<0.01	34.99	<0.01	4.91	0.04	37.71	14.07	0.58	0.04	6.01	0.53	0.03
B875260 Dup	Rock	0.11	0.35	<0.01	33.57	<0.01	4.64	0.03	37.89	14.34	0.55	0.03	5.68	0.55	0.03
B875261	Rock	0.17	0.88	0.01	34.71	<0.01	6.64	0.13	33.76	14.20	0.42	0.04	7.01	1.20	0.11
B875262	Rock	0.25	0.34	<0.01	36.34	<0.01	6.09	0.06	34.35	13.94	0.61	0.04	7.81	0.29	0.05
B875263	Rock	0.77	0.48	<0.01	34.38	<0.01	7.41	0.04	32.63	12.83	0.39	0.05	7.41	2.94	0.09
B875264	Rock	0.80	0.37	0.03	37.75	<0.01	13.48	0.07	31.22	10.00	0.45	0.07	5.56	2.11	0.14
B875265	Rock	0.45	0.49	<0.01	34.84	<0.01	7.94	0.09	33.02	13.63	0.39	0.06	6.87	2.18	0.12
B875266	Rock	0.12	0.51	<0.01	32.06	<0.01	4.57	0.06	37.36	17.33	0.40	0.07	4.67	2.14	0.10
B875267	Rock	0.07	0.31	<0.01	32.82	<0.01	4.58	0.03	32.88	15.39	0.36	0.11	8.19	5.20	0.06
B875268	Rock	0.01	0.42	<0.01	33.46	<0.01	4.07	0.04	36.03	16.17	0.35	0.13	6.96	2.10	0.04
B875269	Rock	0.21	0.64	<0.01	34.77	<0.01	4.15	0.05	36.80	14.70	0.37	0.14	5.81	3.03	0.12
B875270 Dup	Rock	0.17	0.57	<0.01	32.32	<0.01	3.78	0.05	36.86	15.02	0.35	0.13	5.42	2.77	0.12
B875271	Rock	0.10	1.93	0.05	31.77	<0.01	6.59	0.91	31.39	13.98	0.94	1.04	2.03	14.04	0.16
B875272	Rock	0.06	0.48	<0.01	33.59	<0.01	3.22	0.03	38.58	14.97	0.35	0.11	4.52	2.48	0.15
B875273	Rock	0.08	0.77	<0.01	33.43	<0.01	2.43	0.05	38.36	15.31	0.36	0.09	4.05	5.41	0.07
B875274	Rock	0.01	0.68	<0.01	36.07	<0.01	2.83	0.04	37.42	14.00	0.34	0.14	5.15	4.48	0.05
B875275	Rock	0.04	0.56	<0.01	36.25	<0.01	2.32	0.04	39.08	14.47	0.30	0.11	4.61	3.39	0.07



INSPECTORATE

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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03558-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875276	Rock	0.06	0.75	<0.01	32.14	<0.01	3.41	0.04	37.51	17.65	0.33	0.06	4.64	3.65	0.21
B875277	Rock	0.05	8.49	0.13	15.84	0.02	11.07	1.55	15.19	10.76	0.41	1.94	0.92	33.93	1.97
B875278	Rock	0.03	1.91	0.03	28.10	<0.01	5.21	0.20	31.52	13.98	0.45	0.64	1.69	15.76	0.22
B875279	Rock	0.09	0.74	<0.01	35.67	<0.01	4.85	0.03	31.07	13.23	0.33	0.06	8.94	3.21	0.27
B875280 Dup	Rock	0.11	0.77	<0.01	37.35	<0.01	4.96	0.02	31.57	13.07	0.36	0.06	9.32	3.29	0.26
B875281	Rock	0.10	0.45	<0.01	34.95	<0.01	4.24	0.02	39.13	16.69	0.47	0.04	4.49	1.15	0.10
B875282	Rock	0.10	0.32	<0.01	32.46	<0.01	6.38	0.03	38.66	16.42	0.70	0.03	2.77	0.75	0.06
B875283	Rock	0.06	7.32	0.04	15.00	0.01	9.96	0.54	19.12	13.25	0.45	0.82	1.02	31.02	1.82
B875284	Rock	0.09	9.99	0.01	12.86	0.01	9.71	0.12	18.08	15.26	0.24	0.15	1.38	31.54	2.07
B875285	Rock	0.10	3.81	<0.01	28.06	0.01	6.54	0.04	26.20	15.07	0.31	0.04	8.34	12.28	0.72
B875286	Rock	0.07	6.56	0.08	19.84	0.01	9.05	1.51	18.94	10.98	0.39	1.48	1.67	27.43	1.63
B875287	Rock	0.09	0.75	<0.01	32.88	<0.01	4.31	0.02	37.68	16.65	0.38	0.06	3.11	5.42	0.09
B875288	Rock	0.06	0.52	0.06	47.87	<0.01	2.58	0.20	36.72	6.57	0.37	0.14	4.10	2.50	0.08
B875289	Rock	0.08	0.36	0.05	46.67	<0.01	4.00	0.16	34.12	7.02	0.33	0.23	5.90	3.18	0.16
B875290 Dup	Rock	0.09	0.39	0.05	44.81	<0.01	4.40	0.16	34.16	7.09	0.36	0.23	6.02	3.35	0.18
B875291	Rock	0.11	1.58	0.07	33.08	<0.01	6.04	1.09	24.57	11.03	0.53	1.63	5.50	16.17	0.25
B875292	Rock	0.35	1.75	0.03	32.71	<0.01	5.53	0.35	25.08	10.53	0.39	0.52	8.35	16.13	0.23
B875293	Rock	0.28	0.43	<0.01	34.45	<0.01	3.91	0.03	38.41	16.55	0.42	0.05	4.79	2.31	0.03
B875294	Rock	0.09	0.31	<0.01	36.24	<0.01	2.76	0.05	39.32	15.38	0.67	0.08	4.11	2.79	0.02
B875295	Rock	0.11	2.18	0.08	25.85	<0.01	6.08	1.94	13.98	11.06	0.39	3.38	3.76	33.49	0.26
B875296	Rock	0.03	2.50	0.06	21.31	<0.01	6.59	1.47	9.00	11.53	0.44	3.87	1.89	43.37	0.25
B875297	Rock	0.12	3.25	0.02	30.82	0.01	6.50	0.86	30.54	11.28	0.74	0.54	2.73	14.13	0.43
B875298	Rock	0.18	2.46	0.08	42.52	<0.01	5.22	0.71	30.21	5.57	0.38	1.01	3.32	10.16	0.39
B875299	Rock	0.24	0.50	<0.01	37.63	<0.01	4.50	0.02	37.33	14.19	0.41	0.04	5.35	1.58	0.05
B875300 Dup	Rock	0.25	0.51	<0.01	38.45	<0.01	4.81	0.02	36.24	13.50	0.41	0.04	5.48	1.79	0.05
B875301	Rock	0.06	0.79	<0.01	36.85	<0.01	3.78	<0.01	36.81	13.73	0.29	0.05	6.73	2.80	0.04
B875302	Rock	0.05	0.54	<0.01	34.40	<0.01	3.83	0.01	36.83	15.18	0.28	0.04	6.52	2.40	0.06
B875303	Rock	0.07	4.63	<0.01	23.05	0.01	6.62	0.03	29.61	14.14	0.28	0.04	2.03	18.84	0.81
B875304	Rock	0.07	2.45	<0.01	30.20	<0.01	5.55	0.13	32.90	13.94	0.33	0.17	4.83	9.01	0.25
B875305	Rock	0.13	4.94	0.05	25.01	<0.01	6.41	1.26	26.64	12.63	0.39	0.57	3.01	18.14	0.68
B875306	Rock	0.06	2.83	0.08	21.74	<0.01	6.63	0.97	21.35	9.51	0.46	1.25	2.15	32.64	0.22
B875307	Rock	0.09	1.95	0.06	29.91	<0.01	4.59	0.99	21.80	11.44	0.38	1.36	5.25	22.30	0.15

Certificate of Analysis

10-360-03558-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
B875236	Rock	98.60	0.8	0.14	10	35	<2	>10	<0.5	9	12	66	3.43	<0.01	296
B875237	Rock	98.69	<0.5	0.11	6	37	<2	>10	<0.5	5	8	83	3.78	<0.01	292
B875238	Rock	98.96	<0.5	0.07	5	36	<2	>10	<0.5	4	5	75	3.58	0.01	286
B875239	Rock	100.57	<0.5	0.12	7	46	<2	>10	<0.5	6	7	63	3.88	0.02	374
B875240 Dup	Rock	97.52	<0.5	0.13	6	46	<2	>10	<0.5	6	6	61	3.87	0.02	386
B875241	Rock	99.61	<0.5	0.19	9	48	<2	>10	<0.5	18	8	106	5.51	0.02	357
B875242	Rock	100.24	<0.5	0.21	8	39	<2	>10	<0.5	9	11	80	6.13	0.05	249
B875243	Rock	101.37	<0.5	8.30	72	811	<2	3.04	<0.5	9	149	4	2.75	3.20	22
B875244	Rock	99.08	0.7	0.28	16	32	<2	>10	<0.5	10	8	88	5.53	0.09	271
B875245	Rock	99.25	<0.5	0.12	8	34	<2	>10	<0.5	14	9	49	4.28	0.05	280
B875246	Rock	98.79	0.6	0.20	19	44	<2	>10	<0.5	8	7	95	5.26	0.07	313
B875247	Rock	98.42	<0.5	0.13	8	30	<2	>10	<0.5	7	6	76	3.48	0.02	261
B875248	Rock	99.80	<0.5	0.23	10	27	<2	>10	<0.5	8	8	46	2.99	0.03	270
B875249	Rock	100.74	<0.5	0.12	11	30	<2	>10	<0.5	9	8	54	3.20	0.03	260
B875250 Dup	Rock	101.13	<0.5	0.12	14	29	<2	>10	<0.5	10	8	53	3.20	0.03	243
B875251	Rock	98.76	<0.5	0.10	7	26	<2	>10	<0.5	8	7	54	3.30	0.01	246
B875252	Rock	99.93	<0.5	0.10	<5	31	<2	>10	<0.5	5	7	67	3.40	<0.01	287
B875253	Rock	99.13	0.8	0.09	5	20	<2	>10	<0.5	10	7	57	3.10	0.01	255
B875254	Rock	99.50	1.0	0.11	11	28	<2	>10	<0.5	10	10	91	3.87	0.02	328
B875255	Rock	99.04	1.0	0.10	5	32	<2	>10	<0.5	7	23	79	3.78	0.03	293
B875256	Rock	99.54	<0.5	0.09	5	56	<2	>10	<0.5	6	6	40	3.25	<0.01	252
B875257	Rock	98.68	0.6	0.78	15	66	<2	>10	<0.5	11	11	26	3.72	0.08	259
B875258	Rock	98.78	<0.5	0.21	10	66	<2	>10	<0.5	14	8	27	3.87	0.02	447
B875259	Rock	99.32	<0.5	0.20	8	24	<2	>10	<0.5	8	11	18	3.26	0.02	386
B875260 Dup	Rock	97.67	<0.5	0.18	9	23	<2	>10	<0.5	8	13	16	3.44	0.02	373
B875261	Rock	99.12	0.9	0.44	16	95	<2	>10	<0.5	11	8	25	4.71	0.08	559
B875262	Rock	99.94	0.9	0.17	9	29	<2	>10	<0.5	8	16	38	4.09	0.03	415
B875263	Rock	98.67	0.7	0.24	10	26	<2	>10	<0.5	7	11	110	4.72	0.02	243
B875264	Rock	101.24	0.7	0.19	42	198	<2	>10	<0.5	11	5	114	9.19	0.04	265
B875265	Rock	99.64	0.7	0.23	10	33	<2	>10	<0.5	11	11	66	5.22	0.05	322
B875266	Rock	99.27	<0.5	0.27	6	19	5	>10	<0.5	6	10	18	3.28	0.04	1431
B875267	Rock	99.93	1.3	0.13	7	26	<2	>10	<0.5	7	17	10	3.28	0.02	374
B875268	Rock	99.80	0.7	0.21	5	26	5	>10	<0.5	8	12	3	3.01	0.03	280
B875269	Rock	100.59	<0.5	0.32	8	24	<2	>10	<0.5	8	13	30	2.77	0.04	235
B875270 Dup	Rock	97.41	<0.5	0.30	8	24	<2	>10	<0.5	8	17	24	2.75	0.04	227
B875271	Rock	104.84	1.0	1.04	12	330	<2	>10	<0.5	7	16	16	4.57	0.65	366
B875272	Rock	98.50	<0.5	0.23	10	18	<2	>10	<0.5	7	9	7	2.14	0.02	133
B875273	Rock	100.33	0.5	0.38	9	19	5	>10	<0.5	3	12	8	1.65	0.03	347
B875274	Rock	101.21	<0.5	0.33	5	13	9	>10	<0.5	2	14	1	1.80	0.03	274
B875275	Rock	101.20	0.7	0.28	<5	15	4	>10	<0.5	5	12	3	1.53	0.02	159

Certificate of Analysis

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Aley Corporation
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Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875276	Rock	100.40	<0.5	0.36	6	27	4	>10	<0.5	6	34	7	2.44	0.03	141
B875277	Rock	102.21	0.5	4.02	43	930	<2	>10	<0.5	33	89	45	7.61	1.31	261
B875278	Rock	99.72	0.7	1.00	11	203	11	>10	<0.5	7	21	4	3.54	0.14	2694
B875279	Rock	98.42	1.0	0.39	8	19	<2	>10	<0.5	7	18	9	3.17	<0.01	349
B875280 Dup	Rock	101.05	0.7	0.39	9	21	<2	>10	<0.5	7	21	13	3.36	<0.01	342
B875281	Rock	101.74	0.6	0.23	<5	19	<2	>10	<0.5	8	10	14	2.99	<0.01	280
B875282	Rock	98.59	0.6	0.15	6	22	8	>10	<0.5	10	12	11	4.42	<0.01	239
B875283	Rock	100.37	<0.5	3.68	37	311	<2	>10	<0.5	27	46	17	7.20	0.41	538
B875284	Rock	101.44	0.8	4.67	48	74	<2	8.70	<0.5	31	76	14	6.89	0.09	109
B875285	Rock	101.43	<0.5	1.98	24	35	<2	>10	<0.5	14	235	39	4.74	0.03	167
B875286	Rock	99.57	0.8	3.29	36	604	<2	>10	<0.5	28	37	22	6.59	1.33	172
B875287	Rock	101.35	0.7	0.35	7	23	<2	>10	<0.5	6	18	11	2.88	0.01	223
B875288	Rock	101.70	<0.5	0.23	<5	391	5	>10	<0.5	6	7	9	1.53	0.14	233
B875289	Rock	102.18	<0.5	0.19	<5	369	<2	>10	<0.5	7	7	5	2.95	0.11	283
B875290 Dup	Rock	101.20	<0.5	0.19	<5	366	<2	>10	<0.5	7	7	6	2.93	0.11	305
B875291	Rock	101.54	0.8	0.88	9	463	<2	>10	<0.5	7	6	22	4.12	0.82	216
B875292	Rock	101.59	<0.5	0.90	12	180	<2	>10	<0.5	7	15	47	3.94	0.26	294
B875293	Rock	101.40	1.1	0.21	5	34	<2	>10	<0.5	9	8	37	2.75	0.01	315
B875294	Rock	101.74	<0.5	0.14	<5	75	<2	>10	<0.5	4	7	11	2.03	0.04	161
B875295	Rock	102.44	<0.5	1.13	8	533	<2	>10	<0.5	8	13	27	4.14	1.69	154
B875296	Rock	102.29	<0.5	1.12	11	409	5	>10	<0.5	7	18	5	4.31	1.21	82
B875297	Rock	101.86	<0.5	1.59	16	135	<2	>10	<0.5	13	23	36	4.22	0.62	233
B875298	Rock	102.04	<0.5	1.13	13	581	<2	>10	<0.5	14	19	25	3.60	0.52	255
B875299	Rock	101.60	<0.5	0.23	<5	23	<2	>10	<0.5	7	9	34	2.95	<0.01	234
B875300 Dup	Rock	101.30	<0.5	0.23	<5	25	<2	>10	<0.5	8	7	35	2.89	<0.01	202
B875301	Rock	101.87	<0.5	0.42	5	15	<2	>10	<0.5	7	8	7	2.39	<0.01	274
B875302	Rock	100.11	<0.5	0.29	<5	13	<2	>10	<0.5	6	9	6	2.67	<0.01	310
B875303	Rock	100.09	0.8	2.35	23	31	<2	>10	<0.5	16	33	24	4.49	0.02	215
B875304	Rock	99.79	1.0	0.90	11	59	<2	>10	<0.5	8	24	10	3.78	0.09	431
B875305	Rock	99.74	1.3	2.53	25	360	<2	>10	<0.5	16	34	34	4.53	0.90	246
B875306	Rock	99.84	0.9	1.36	12	489	<2	>10	<0.5	8	27	13	4.26	0.65	277
B875307	Rock	100.19	0.9	1.03	12	410	<2	>10	<0.5	5	16	15	3.20	0.71	208

Certificate of Analysis

10-360-03558-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875236	Rock	8.15	5616	<1	0.02	<1	>10000	236	<5	6	3175	0.02	<10	18	<10
B875237	Rock	7.93	6267	<1	0.02	<1	>10000	320	<5	7	3660	0.02	<10	23	<10
B875238	Rock	8.15	6800	<1	0.02	<1	>10000	292	<5	6	3954	<0.01	<10	8	<10
B875239	Rock	8.15	6869	<1	0.02	<1	>10000	218	<5	6	4165	0.02	<10	16	<10
B875240 Dup	Rock	7.98	6819	<1	0.02	<1	>10000	218	<5	6	4054	0.02	<10	17	<10
B875241	Rock	7.94	5327	<1	0.03	<1	>10000	369	<5	6	3503	0.08	<10	77	<10
B875242	Rock	8.24	5392	<1	0.03	<1	>10000	265	<5	5	3058	0.09	<10	78	<10
B875243	Rock	1.14	742	<1	2.65	5	1076	10	7	5	619	0.26	<10	6	<10
B875244	Rock	8.09	3729	<1	0.06	<1	>10000	248	<5	5	1815	0.09	<10	77	<10
B875245	Rock	8.38	5507	<1	0.04	<1	>10000	183	<5	6	3438	0.03	<10	26	<10
B875246	Rock	7.87	5089	<1	0.06	<1	>10000	362	<5	6	3503	0.06	<10	67	<10
B875247	Rock	8.37	4328	<1	0.04	<1	>10000	289	<5	6	3069	0.02	<10	38	<10
B875248	Rock	8.52	4516	<1	0.06	<1	>10000	176	<5	6	3020	0.02	<10	13	<10
B875249	Rock	8.34	4626	<1	0.04	<1	>10000	206	<5	6	3625	0.02	<10	17	<10
B875250 Dup	Rock	7.96	4440	<1	0.04	<1	>10000	199	<5	5	3531	0.02	<10	17	<10
B875251	Rock	8.55	4939	<1	0.03	<1	>10000	212	<5	6	3426	0.01	<10	13	<10
B875252	Rock	8.30	6606	<1	0.03	<1	>10000	274	<5	5	4835	0.01	<10	13	<10
B875253	Rock	8.56	3952	<1	0.03	<1	>10000	217	<5	6	2047	0.01	<10	29	<10
B875254	Rock	8.27	4396	<1	0.04	<1	>10000	355	<5	7	2897	0.02	<10	30	<10
B875255	Rock	8.27	4670	<1	0.02	<1	>10000	277	<5	6	2525	0.01	<10	25	<10
B875256	Rock	8.39	6071	<1	0.03	<1	>10000	92	<5	4	4052	<0.01	<10	7	<10
B875257	Rock	8.31	5459	<1	0.02	2	>10000	77	<5	8	3506	0.07	<10	17	<10
B875258	Rock	8.09	5215	<1	0.02	<1	>10000	109	<5	8	3131	0.02	<10	32	<10
B875259	Rock	8.37	4119	<1	0.02	<1	>10000	68	<5	6	2316	0.01	<10	13	<10
B875260 Dup	Rock	8.17	4141	<1	0.02	<1	>10000	72	<5	6	2290	0.01	<10	14	<10
B875261	Rock	7.99	3057	10	0.02	<1	>10000	113	<5	10	1580	0.03	<10	34	<10
B875262	Rock	7.91	4394	<1	0.02	<1	>10000	152	<5	7	2149	0.02	<10	19	<10
B875263	Rock	7.66	2624	<1	0.03	<1	>10000	440	<5	8	895	0.04	<10	86	<10
B875264	Rock	5.79	3380	<1	0.04	<1	>10000	426	<5	8	2518	0.06	<10	137	<10
B875265	Rock	7.82	2743	<1	0.03	<1	>10000	250	<5	8	852	0.04	<10	79	<10
B875266	Rock	8.26	3086	<1	0.05	<1	>10000	67	<5	7	610	0.02	<10	22	<10
B875267	Rock	7.62	2737	<1	0.07	<1	>10000	48	<5	6	874	0.02	<10	17	<10
B875268	Rock	8.45	2762	<1	0.08	<1	>10000	13	<5	6	849	0.02	<10	23	<10
B875269	Rock	8.42	2592	<1	0.08	<1	>10000	119	<5	4	709	0.04	<10	23	<10
B875270 Dup	Rock	8.57	2621	<1	0.08	<1	>10000	107	<5	4	722	0.02	<10	21	<10
B875271	Rock	6.56	6789	<1	0.65	<1	7645	64	<5	8	2764	0.06	<10	64	<10
B875272	Rock	8.55	2394	<1	0.07	<1	>10000	45	<5	4	492	0.05	<10	41	<10
B875273	Rock	8.74	2563	1	0.05	<1	>10000	50	<5	3	365	0.02	<10	13	<10
B875274	Rock	8.39	2225	<1	0.08	<1	>10000	18	<5	3	283	<0.01	<10	12	<10
B875275	Rock	8.78	2056	<1	0.07	<1	>10000	30	<5	3	404	0.02	<10	12	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03558-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
B875276	Rock	8.69	2387	<1	0.04	5	>10000	37	<5	5	549	0.04	<10	27	<10
B875277	Rock	6.43	2961	2	1.37	36	2893	22	<5	22	870	0.87	<10	148	<10
B875278	Rock	8.71	3236	2	0.46	3	6474	29	<5	12	534	0.04	<10	39	<10
B875279	Rock	7.91	2387	<1	0.04	<1	>10000	55	<5	7	867	0.04	<10	28	<10
B875280 Dup	Rock	8.10	2508	<1	0.04	<1	>10000	64	<5	7	891	0.04	<10	28	<10
B875281	Rock	8.75	3419	4	0.02	<1	>10000	63	<5	5	1743	0.02	<10	19	<10
B875282	Rock	8.61	4887	16	0.02	<1	>10000	55	<5	5	2856	<0.01	<10	13	<10
B875283	Rock	7.61	3379	28	0.60	15	3493	27	<5	20	618	0.49	<10	119	<10
B875284	Rock	8.72	1790	1	0.09	24	4612	36	<5	17	687	0.58	<10	78	<10
B875285	Rock	8.29	2288	6	0.02	81	>10000	52	<5	16	673	0.15	<10	57	<10
B875286	Rock	6.69	3004	2	1.09	13	7172	39	<5	14	1573	0.72	<10	84	<10
B875287	Rock	8.88	2679	2	0.04	<1	>10000	58	<5	5	609	0.02	<10	29	<10
B875288	Rock	4.23	2322	<1	0.08	<1	>10000	43	<5	4	4717	0.03	<10	14	<10
B875289	Rock	4.60	2576	<1	0.15	<1	>10000	45	<5	4	4442	0.07	<10	55	<10
B875290 Dup	Rock	4.57	2504	<1	0.14	<1	>10000	43	<5	4	4300	0.07	<10	57	<10
B875291	Rock	6.16	3840	1	1.09	<1	>10000	77	<5	9	4438	0.13	<10	79	<10
B875292	Rock	6.77	2945	3	0.36	1	>10000	211	<5	13	1956	0.08	<10	72	<10
B875293	Rock	8.52	3139	4	0.03	<1	>10000	176	<5	5	686	0.02	<10	19	<10
B875294	Rock	7.96	5095	3	0.05	<1	>10000	57	<5	5	3628	<0.01	<10	8	<10
B875295	Rock	7.04	2851	5	2.43	3	>10000	93	<5	21	2534	0.14	<10	114	<10
B875296	Rock	7.39	3062	<1	2.68	<1	7391	30	<5	13	831	0.14	<10	126	<10
B875297	Rock	7.25	4975	46	0.35	8	>10000	75	<5	9	1727	0.12	<10	48	<10
B875298	Rock	3.63	2871	1	0.69	6	>10000	61	<5	8	4581	0.20	<10	50	<10
B875299	Rock	8.40	2693	<1	0.02	<1	>10000	143	<5	4	747	0.02	<10	42	<10
B875300 Dup	Rock	8.25	2578	<1	0.03	<1	>10000	151	<5	4	777	0.02	<10	42	<10
B875301	Rock	8.44	1923	<1	0.03	<1	>10000	44	<5	6	479	0.02	<10	26	<10
B875302	Rock	8.59	2061	3	0.02	<1	>10000	39	<5	5	444	0.02	<10	24	<10
B875303	Rock	8.87	2014	6	0.02	10	8072	40	<5	16	343	0.22	<10	77	<10
B875304	Rock	8.30	2380	3	0.10	4	>10000	46	<5	10	643	0.05	<10	35	<10
B875305	Rock	1.18	2920	8	0.32	12	>10000	72	<5	11	991	0.23	<10	64	<10
B875306	Rock	1.24	3150	2	0.68	<1	8362	44	<5	21	911	0.07	<10	88	<10
B875307	Rock	7.37	2761	<1	0.99	1	>10000	61	<5	13	2307	0.06	<10	54	<10



INSPECTORATE

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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03558-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875236	Rock	15	37	877.0	20.4	6.8	19.5	44.8	<0.1	2.5	460.7	<0.1	364.1	101.5	56.5
B875237	Rock	18	55	815.3	19.9	6.0	19.6	44.4	<0.1	2.5	407.3	<0.1	336.6	96.6	52.0
B875238	Rock	20	48	722.1	17.9	5.1	17.1	40.3	<0.1	1.9	356.7	<0.1	313.2	87.1	49.7
B875239	Rock	21	47	>1000	18.1	4.4	18.2	44.8	<0.1	1.5	537.4	<0.1	415.6	120.8	57.3
B875240 Dup	Rock	20	45	985.8	17.4	4.2	17.6	44.3	<0.1	1.5	515.7	<0.1	395.5	116.2	56.9
B875241	Rock	24	69	900.6	19.5	5.9	20.5	45.4	1.6	2.3	453.1	<0.1	369.2	101.6	54.3
B875242	Rock	25	80	735.4	17.5	5.4	16.3	37.7	0.7	2.0	376.7	<0.1	301.9	86.8	47.8
B875243	Rock	53	109	66.6	2.9	1.2	0.8	3.5	1.3	<0.1	36.5	<0.1	27.5	7.1	4.3
B875244	Rock	15	86	636.2	22.3	7.2	18.1	42.5	1.6	2.7	320.8	<0.1	270.9	77.1	48.3
B875245	Rock	18	51	640.6	15.9	4.6	14.5	33.3	<0.1	1.6	327.2	<0.1	272.7	76.2	40.3
B875246	Rock	22	74	756.0	20.6	6.4	20.2	42.6	1.1	2.3	369.9	<0.1	330.4	91.5	52.8
B875247	Rock	16	46	683.2	18.1	5.2	18.3	36.9	<0.1	2.0	337.8	<0.1	292.7	81.3	47.7
B875248	Rock	14	42	711.1	20.8	6.4	17.8	39.9	<0.1	2.5	350.7	<0.1	301.9	86.0	51.7
B875249	Rock	14	52	709.7	24.5	7.5	19.8	44.4	0.9	3.0	340.9	<0.1	315.5	86.2	54.6
B875250 Dup	Rock	14	52	717.2	22.2	7.4	19.8	43.5	0.7	2.9	351.0	<0.1	325.4	88.2	54.2
B875251	Rock	15	47	570.0	18.8	6.1	14.6	33.6	<0.1	2.0	287.3	<0.1	240.9	68.7	43.0
B875252	Rock	21	45	641.6	15.0	4.1	15.3	33.9	<0.1	1.5	314.0	<0.1	273.5	76.7	42.7
B875253	Rock	10	51	648.5	19.5	6.6	16.2	35.8	<0.1	2.2	332.3	<0.1	278.3	77.0	45.9
B875254	Rock	14	52	750.5	22.7	7.1	21.4	43.4	<0.1	2.7	383.1	<0.1	329.5	88.8	55.6
B875255	Rock	15	50	711.7	26.0	9.0	20.5	45.0	<0.1	3.5	356.9	<0.1	311.5	87.3	54.2
B875256	Rock	29	41	698.9	14.7	4.4	14.6	34.2	<0.1	1.5	371.0	<0.1	292.7	81.7	43.5
B875257	Rock	27	59	561.7	12.7	3.8	11.8	28.1	<0.1	1.3	301.4	<0.1	234.5	66.0	34.6
B875258	Rock	19	72	947.0	18.0	5.3	18.3	42.0	0.4	1.9	583.9	<0.1	353.8	104.4	56.7
B875259	Rock	16	63	874.4	21.7	6.9	17.8	42.8	<0.1	2.6	455.0	<0.1	363.6	103.8	55.5
B875260 Dup	Rock	12	63	892.4	21.8	7.2	17.6	44.2	<0.1	2.8	469.2	<0.1	380.5	106.4	57.6
B875261	Rock	14	75	>1000	35.8	12.4	25.2	67.7	<0.1	5.3	744.3	<0.1	570.3	161.8	86.6
B875262	Rock	15	65	991.0	32.9	12.7	19.3	49.2	<0.1	5.2	541.0	<0.1	386.0	112.6	60.4
B875263	Rock	11	117	979.8	34.9	13.0	31.9	61.4	5.4	5.5	516.7	<0.1	422.3	116.7	71.7
B875264	Rock	55	200	717.1	22.1	7.5	18.0	40.1	10.4	2.7	375.4	<0.1	303.8	83.5	49.8
B875265	Rock	12	108	996.9	26.2	9.0	22.8	51.0	5.1	3.7	588.8	<0.1	382.4	110.2	59.3
B875266	Rock	9	55	>1000	24.6	6.6	24.1	70.0	<0.1	2.7	>1000	<0.1	742.7	270.8	77.4
B875267	Rock	9	76	>1000	33.8	13.9	20.0	52.7	<0.1	5.1	780.8	0.3	393.8	124.6	57.2
B875268	Rock	8	51	797.3	19.8	7.2	12.9	36.9	<0.1	2.6	481.9	<0.1	297.6	87.3	44.5
B875269	Rock	7	56	>1000	27.9	10.1	20.9	48.3	<0.1	4.2	570.2	<0.1	379.5	114.4	59.0
B875270 Dup	Rock	8	58	982.3	27.3	9.5	18.9	46.9	0.1	3.9	563.2	<0.1	332.3	98.4	51.9
B875271	Rock	57	124	>1000	13.4	3.4	11.7	31.8	<0.1	1.1	932.4	<0.1	340.5	117.6	37.1
B875272	Rock	6	60	737.5	21.7	7.8	15.8	37.6	<0.1	3.0	404.6	<0.1	299.1	84.6	49.5
B875273	Rock	5	59	>1000	21.2	7.3	18.1	43.1	<0.1	2.8	776.6	<0.1	367.7	115.5	48.8
B875274	Rock	5	32	>1000	20.4	6.9	18.4	51.1	<0.1	2.6	>1000	<0.1	531.7	177.4	62.0
B875275	Rock	5	30	871.0	22.0	7.7	16.2	44.3	<0.1	2.9	503.4	<0.1	343.5	98.9	52.9



INSPECTORATE

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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875276	Rock	9	42	930.2	25.3	8.7	18.6	45.6	<0.1	3.5	515.1	<0.1	370.5	105.1	58.4
B875277	Rock	109	198	881.0	10.1	3.6	8.6	25.4	2.4	0.8	590.1	<0.1	245.1	84.0	29.4
B875278	Rock	31	91	>1000	18.9	2.9	26.1	83.6	<0.1	1.3	>1000	<0.1	>1000	481.5	80.7
B875279	Rock	9	51	861.9	31.7	12.2	18.7	46.2	0.3	4.8	463.8	<0.1	332.2	97.7	53.1
B875280 Dup	Rock	9	52	902.1	32.4	11.6	18.9	49.5	0.3	4.7	490.3	<0.1	355.5	103.6	54.7
B875281	Rock	10	40	>1000	20.4	6.4	15.2	43.3	<0.1	2.3	892.2	<0.1	433.8	145.7	50.3
B875282	Rock	15	49	>1000	16.1	5.0	14.2	38.6	<0.1	1.6	807.5	<0.1	409.1	134.6	46.7
B875283	Rock	132	140	>1000	10.1	2.4	11.2	30.9	2.9	0.4	789.9	<0.1	426.6	141.1	42.8
B875284	Rock	30	127	346.3	12.1	4.6	7.4	20.2	3.1	1.2	176.7	<0.1	148.4	40.9	22.9
B875285	Rock	15	83	425.6	55.9	23.7	17.9	49.9	0.3	10.0	229.3	0.8	188.2	50.3	40.7
B875286	Rock	116	196	496.9	13.7	4.8	10.3	25.6	2.0	1.5	256.5	<0.1	198.8	55.6	30.1
B875287	Rock	9	43	720.4	23.7	8.8	16.7	41.0	<0.1	3.1	378.9	<0.1	304.4	84.0	49.8
B875288	Rock	15	32	701.0	22.4	7.8	16.9	40.6	<0.1	2.8	371.0	<0.1	298.7	82.3	47.2
B875289	Rock	28	89	797.8	26.0	9.3	19.7	48.0	<0.1	3.6	411.5	<0.1	347.9	95.1	55.7
B875290 Dup	Rock	27	83	801.5	26.3	9.3	19.4	46.1	<0.1	3.6	406.9	<0.1	346.4	95.2	56.3
B875291	Rock	73	193	542.8	15.9	4.8	14.0	32.5	1.6	1.7	270.4	<0.1	236.2	65.2	39.5
B875292	Rock	43	127	761.4	28.3	9.3	22.6	51.8	1.4	3.8	366.1	<0.1	354.2	95.5	62.0
B875293	Rock	8	60	791.3	29.7	11.2	23.4	50.7	<0.1	4.3	402.3	<0.1	346.5	95.1	59.0
B875294	Rock	14	34	432.6	17.5	6.1	12.0	28.8	<0.1	2.3	210.3	<0.1	188.5	51.7	33.9
B875295	Rock	97	305	407.1	14.1	4.6	11.1	25.1	4.3	1.3	201.7	<0.1	181.7	48.6	32.5
B875296	Rock	102	324	227.5	9.7	2.8	6.9	15.9	<0.1	0.6	112.6	<0.1	107.5	27.9	20.3
B875297	Rock	29	78	775.9	21.5	6.9	17.4	39.6	<0.1	2.5	411.9	<0.1	304.6	88.5	49.7
B875298	Rock	41	98	703.5	22.1	7.2	15.9	39.2	<0.1	2.7	363.6	<0.1	288.0	81.3	47.5
B875299	Rock	6	53	799.1	26.5	9.0	19.2	44.8	<0.1	3.6	430.9	<0.1	328.2	91.8	53.3
B875300 Dup	Rock	7	57	785.2	27.0	9.6	19.3	44.6	<0.1	3.5	413.4	<0.1	316.5	89.5	52.2
B875301	Rock	5	66	742.8	27.2	9.8	18.6	47.8	<0.1	4.1	397.7	<0.1	324.2	89.6	54.9
B875302	Rock	5	61	>1000	27.9	9.7	20.3	54.5	<0.1	3.8	532.6	<0.1	437.2	120.1	72.7
B875303	Rock	17	91	>1000	24.3	7.1	18.6	54.9	<0.1	2.8	680.2	<0.1	545.4	154.0	78.0
B875304	Rock	17	62	>1000	40.4	12.2	29.1	76.6	0.2	5.4	876.0	<0.1	627.5	174.9	97.0
B875305	Rock	67	111	792.4	17.0	5.4	15.7	35.2	0.3	1.9	434.7	<0.1	300.9	89.8	44.8
B875306	Rock	97	181	619.9	11.3	3.2	11.3	25.6	4.8	0.8	361.3	<0.1	237.7	69.0	35.7
B875307	Rock	76	197	588.2	17.7	5.4	14.0	33.2	1.4	1.9	302.1	<0.1	248.4	70.3	42.0



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10-360-03558-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875236	Rock	4.3	<0.1	3.8	70.0	15.31	63.7	4.3
B875237	Rock	4.0	<0.1	3.7	66.8	37.01	158.8	7.0
B875238	Rock	3.5	<0.1	3.3	57.0	29.21	118.5	3.7
B875239	Rock	3.1	<0.1	2.4	52.4	13.76	62.6	4.3
B875240 Dup	Rock	3.3	<0.1	2.7	51.8	13.84	59.6	4.3
B875241	Rock	4.2	<0.1	3.7	63.1	18.14	94.6	7.1
B875242	Rock	3.3	<0.1	3.3	55.5	27.01	91.5	10.2
B875243	Rock	<0.1	<0.1	1.3	15.5	1.76	8.8	4.0
B875244	Rock	4.1	<0.1	5.4	77.1	136.08	142.9	33.6
B875245	Rock	2.9	<0.1	2.8	50.7	10.21	61.4	2.8
B875246	Rock	4.0	<0.1	3.7	63.3	26.52	137.5	4.7
B875247	Rock	3.4	<0.1	3.5	60.5	14.54	116.5	3.1
B875248	Rock	4.0	<0.1	3.7	68.1	38.74	57.2	16.4
B875249	Rock	4.6	<0.1	4.0	76.2	49.00	79.1	13.2
B875250 Dup	Rock	4.7	<0.1	3.4	76.0	51.00	74.5	17.6
B875251	Rock	3.3	<0.1	3.3	63.4	15.31	108.4	4.3
B875252	Rock	2.7	<0.1	1.8	47.5	11.31	88.7	5.8
B875253	Rock	3.5	<0.1	4.6	65.4	16.49	107.4	5.3
B875254	Rock	4.3	<0.1	4.4	75.7	35.28	186.0	15.4
B875255	Rock	4.6	0.3	5.9	88.1	16.20	138.4	4.8
B875256	Rock	2.8	<0.1	2.3	48.0	9.92	49.7	3.8
B875257	Rock	2.3	<0.1	1.9	43.9	36.30	96.9	8.7
B875258	Rock	3.3	<0.1	3.2	55.6	154.02	116.3	82.2
B875259	Rock	4.0	<0.1	4.3	69.6	120.80	105.9	100.1
B875260 Dup	Rock	3.9	<0.1	4.6	73.3	117.50	101.9	101.9
B875261	Rock	7.4	0.9	8.0	120.0	111.17	326.6	57.4
B875262	Rock	6.2	1.0	7.7	116.0	72.07	302.7	66.2
B875263	Rock	7.4	1.0	8.6	132.5	118.40	266.7	101.4
B875264	Rock	3.9	0.2	4.5	77.1	97.66	349.7	22.9
B875265	Rock	5.4	0.2	5.3	93.6	175.69	198.4	152.0
B875266	Rock	4.3	0.2	4.8	79.8	18.32	36.8	7.4
B875267	Rock	6.1	1.2	9.9	131.0	109.85	129.9	95.6
B875268	Rock	3.7	<0.1	4.5	70.8	8.37	49.4	5.4
B875269	Rock	5.6	0.7	6.2	107.6	86.58	107.3	53.5
B875270 Dup	Rock	5.2	0.5	6.3	99.9	72.42	107.3	46.5
B875271	Rock	1.7	<0.1	2.1	41.3	52.87	88.5	23.1
B875272	Rock	4.2	0.2	5.1	81.0	101.54	36.2	126.4
B875273	Rock	3.9	<0.1	5.1	80.0	79.53	54.4	60.7
B875274	Rock	3.6	<0.1	4.6	75.7	27.50	10.3	41.2
B875275	Rock	4.5	0.3	5.2	85.3	84.45	16.9	140.5



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
B875276	Rock	5.0	0.3	5.6	91.5	76.39	37.1	72.2
B875277	Rock	1.4	<0.1	2.5	38.9	6.96	30.2	8.7
B875278	Rock	1.8	<0.1	2.2	47.0	22.30	30.1	21.7
B875279	Rock	5.8	1.0	7.9	118.9	15.76	164.5	20.8
B875280 Dup	Rock	5.9	0.8	8.1	117.5	17.48	171.5	21.5
B875281	Rock	3.1	<0.1	4.3	72.5	3.08	32.6	2.8
B875282	Rock	2.5	<0.1	2.5	57.9	1.25	19.6	2.0
B875283	Rock	0.8	<0.1	2.1	32.7	4.52	31.1	6.6
B875284	Rock	1.9	<0.1	3.4	51.0	2.91	41.4	5.2
B875285	Rock	11.0	2.5	14.6	234.8	14.24	609.0	18.4
B875286	Rock	2.3	<0.1	3.4	52.0	11.57	43.2	9.5
B875287	Rock	4.3	0.4	6.3	90.1	17.74	74.5	8.8
B875288	Rock	4.1	0.1	4.9	83.4	41.22	15.8	33.2
B875289	Rock	5.2	0.3	6.1	94.1	78.69	105.3	158.8
B875290 Dup	Rock	5.0	0.4	6.3	92.8	82.57	100.9	153.7
B875291	Rock	2.9	<0.1	3.7	56.9	118.79	91.3	162.5
B875292	Rock	5.8	0.4	5.9	98.1	205.54	231.3	240.8
B875293	Rock	5.8	0.6	7.7	114.0	182.43	332.0	83.9
B875294	Rock	3.1	<0.1	3.8	69.0	14.72	73.2	16.5
B875295	Rock	2.3	<0.1	2.9	51.1	45.32	88.9	42.5
B875296	Rock	1.4	<0.1	2.4	33.2	15.32	27.2	13.5
B875297	Rock	3.8	<0.1	3.9	79.9	32.90	79.1	30.8
B875298	Rock	4.3	0.2	5.5	83.9	14.18	101.8	67.0
B875299	Rock	4.8	0.4	6.1	104.4	79.49	228.7	61.0
B875300 Dup	Rock	4.9	0.7	6.1	101.6	83.76	217.4	64.7
B875301	Rock	5.7	0.4	6.4	107.0	104.80	124.2	137.2
B875302	Rock	5.8	0.5	6.4	101.9	88.24	136.4	110.4
B875303	Rock	4.6	0.2	5.1	81.9	22.41	70.4	27.8
B875304	Rock	8.6	0.8	7.2	132.3	45.15	118.1	44.5
B875305	Rock	3.2	<0.1	3.6	62.1	58.56	104.4	60.9
B875306	Rock	1.5	<0.1	2.6	38.5	45.76	94.9	55.0
B875307	Rock	3.2	<0.1	3.8	61.8	115.42	97.6	149.8

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
B875236	Rock	0.43													
B875236 Dup		0.46													
QCV1011-00409-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875254	Rock	0.59													
B875254 Dup		0.62													
QCV1011-00409-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B875272	Rock	0.06													
B875272 Dup		0.06													
QCV1011-00409-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
B875290 Dup	Rock	0.09													
B875290 Dup Dup		0.08													
QCV1011-00409-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1011-00409-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
B875236	Rock		0.30	<0.01	32.75	<0.01	4.58	0.02	38.77	14.81	0.70	0.04	5.39	1.16	0.07
B875236 Dup			0.30	<0.01	33.80	<0.01	4.84	0.02	38.71	13.36	0.73	0.04	5.55	1.24	0.07
QCV1011-00413-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875254	Rock		0.30	<0.01	34.33	<0.01	5.40	0.04	36.44	15.08	0.58	0.06	6.28	0.95	0.03
B875254 Dup			0.30	<0.01	34.16	<0.01	5.34	0.03	36.41	14.97	0.57	0.06	6.19	0.94	0.03
QCV1011-00413-0005-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875272	Rock		0.48	<0.01	33.59	<0.01	3.22	0.03	38.58	14.97	0.35	0.11	4.52	2.48	0.15
B875272 Dup			0.47	<0.01	33.62	<0.01	3.11	0.04	38.49	15.03	0.35	0.11	4.48	2.51	0.15
QCV1011-00413-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
B875290 Dup	Rock		0.39	0.05	44.81	<0.01	4.40	0.16	34.16	7.09	0.36	0.23	6.02	3.35	0.18
B875290 Dup Dup			0.38	0.05	44.85	<0.01	4.58	0.15	34.28	7.05	0.36	0.22	6.09	3.33	0.18
QCV1011-00413-0011-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00413-0013-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.75	0.04	7.90	<0.01	6.28	1.65	4.48	0.54	0.12	7.13	0.18	49.95	0.30



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
B875236	Rock		0.8	0.14	10	35	<2	>10	<0.5	9	12	66	3.43	<0.01	296
B875236 Dup			0.9	0.12	10	34	<2	>10	<0.5	10	13	69	3.29	<0.01	311
QCV1011-00410-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							128	1124	690			
B875254	Rock		1.0	0.11	11	28	<2	>10	<0.5	10	10	91	3.87	0.02	328
B875254 Dup			1.3	0.11	11	27	<2	>10	<0.5	10	9	90	3.74	0.02	325
QCV1011-00410-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							123	1088	686			
B875272	Rock		<0.5	0.23	10	18	<2	>10	<0.5	7	9	7	2.14	0.02	133
B875272 Dup			<0.5	0.23	10	18	<2	>10	<0.5	7	13	7	2.22	0.02	139
QCV1011-00410-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							123	1118	682			
B875290 Dup	Rock		<0.5	0.19	<5	366	<2	>10	<0.5	7	7	6	2.93	0.11	305
B875290 Dup Dup			1.0	0.19	<5	356	<2	>10	<0.5	6	9	3	2.96	0.10	301
QCV1011-00410-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
B875236	Rock		98.60												
B875236 Dup			98.68												
QCV1011-00413-0002-BLK			<0.01												
B875254	Rock		99.50												
B875254 Dup			99.01												
QCV1011-00413-0005-BLK			<0.01												
B875272	Rock		98.50												
B875272 Dup			98.38												
QCV1011-00413-0008-BLK			<0.01												
B875290 Dup	Rock		101.20												
B875290 Dup Dup			101.54												
QCV1011-00413-0011-BLK			<0.01												
QCV1011-00413-0013-BLK			<0.01												
STD-SY-4 expected															
STD-SY-4 result			99.33												



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
B875236	Rock	8.15	5616	<1	0.02	<1	>10000	236	<5	6	3175	0.02	<10	18	<10
B875236 Dup		8.21	5350	<1	0.02	<1	>10000	242	<5	6	3205	0.02	<10	18	<10
QCV1011-00410-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454								
STD-OREAS-45P-4A result		0.30			0.07	391	491								
B875254	Rock	8.27	4396	<1	0.04	<1	>10000	355	<5	7	2897	0.02	<10	30	<10
B875254 Dup		8.25	4199	<1	0.03	<1	>10000	347	<5	6	2869	0.02	<10	30	<10
QCV1011-00410-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454								
STD-OREAS-45P-4A result					0.07	385	448								
B875272	Rock	8.55	2394	<1	0.07	<1	>10000	45	<5	4	492	0.05	<10	41	<10
B875272 Dup		8.56	2507	<1	0.06	<1	>10000	44	<5	4	491	0.05	<10	41	<10
QCV1011-00410-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454								
STD-OREAS-45P-4A result					0.07	379	466								
B875290 Dup	Rock	4.57	2504	<1	0.14	<1	>10000	43	<5	4	4300	0.07	<10	57	<10
B875290 Dup Dup		4.42	2497	<1	0.14	<1	>10000	30	<5	4	4242	0.07	<10	57	<10
QCV1011-00410-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00410-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
B875236	Rock	15	37												
B875236 Dup		16	41												
QCV1011-00410-0002-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		143													
B875254	Rock	14	52												
B875254 Dup		14	54												
QCV1011-00410-0005-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		144													
B875272	Rock	6	60												
B875272 Dup		5	58												
QCV1011-00410-0008-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		143													
B875290 Dup	Rock	27	83												
B875290 Dup Dup		27	65												
QCV1011-00410-0011-BLK		<2	<1												
QCV1011-00410-0013-BLK		<2	<1												
B875236	Rock			877.0	20.4	6.8	19.5	44.8	<0.1	2.5	460.7	<0.1	364.1	101.5	56.5
B875236 Dup				822.6	20.3	6.0	19.1	44.4	<0.1	2.3	432.4	<0.1	346.8	97.0	54.7
QCV1011-00411-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875254	Rock			750.5	22.7	7.1	21.4	43.4	<0.1	2.7	383.1	<0.1	329.5	88.8	55.6
B875254 Dup				785.4	23.7	7.1	22.3	45.9	0.2	3.0	394.4	<0.1	345.3	96.3	58.4
QCV1011-00411-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875272	Rock			737.5	21.7	7.8	15.8	37.6	<0.1	3.0	404.6	<0.1	299.1	84.6	49.5
B875272 Dup				761.6	22.0	7.9	16.0	39.4	<0.1	2.9	409.6	<0.1	304.8	84.9	46.7
QCV1011-00411-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
B875290 Dup	Rock			801.5	26.3	9.3	19.4	46.1	<0.1	3.6	406.9	<0.1	346.4	95.2	56.3
B875290 Dup Dup				732.8	26.2	9.0	18.7	43.1	<0.1	3.0	388.4	<0.1	321.3	88.6	53.3
QCV1011-00411-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00411-0013-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				129.6	19.7	14.7	1.8	15.1	11.1	4.0	63.3	1.9	59.8	15.8	13.0



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.2	0.1
B875236	Rock	4.3	<0.1	3.8	70.0			
B875236 Dup		4.0	<0.1	3.9	66.3			
QCV1011-00411-0002-BLK		<0.1	<0.1	<0.1	<0.10			
B875254	Rock	4.3	<0.1	4.4	75.7			
B875254 Dup		4.7	<0.1	4.3	79.3			
QCV1011-00411-0005-BLK		<0.1	<0.1	<0.1	<0.10			
B875272	Rock	4.2	0.2	5.1	81.0			
B875272 Dup		4.2	0.3	5.9	84.2			
QCV1011-00411-0008-BLK		<0.1	<0.1	<0.1	<0.10			
B875290 Dup	Rock	5.0	0.4	6.3	92.8			
B875290 Dup Dup		4.7	0.3	5.0	86.2			
QCV1011-00411-0011-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00411-0013-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	15.9	121.9			
B875236	Rock					15.31	63.7	4.3
B875236 Dup						14.67	74.7	4.2
QCV1103-01176-0002-BLK						<0.05	<0.2	<0.1
B875254	Rock					35.28	186.0	15.4
B875254 Dup						36.94	180.3	16.0
QCV1103-01176-0005-BLK						<0.05	<0.2	<0.1
B875272	Rock					101.54	36.2	126.4
B875272 Dup						94.94	36.1	121.9
QCV1103-01176-0008-BLK						<0.05	<0.2	<0.1
B875290 Dup	Rock					82.57	100.9	153.7
B875290 Dup Dup						87.29	97.5	143.4
QCV1103-01176-0011-BLK						<0.05	<0.2	<0.1
QCV1103-01176-0013-BLK						<0.05	<0.2	<0.1



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Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
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<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/15/2010 Date Completed: 05/10/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-027</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">67</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	67	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
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Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912536	Rock	0.33	0.22	<0.01	33.01	<0.01	3.79	0.02	40.16	17.18	0.54	0.04	5.01	0.44	0.02
912537	Rock	0.30	0.19	<0.01	33.66	<0.01	3.13	0.05	39.73	15.34	0.68	0.04	5.93	0.18	0.01
912538	Rock	0.64	0.16	<0.01	33.47	<0.01	3.93	0.02	38.53	15.27	0.78	0.04	6.20	0.61	0.03
912539	Rock	0.42	0.12	<0.01	33.77	<0.01	3.38	0.02	39.61	15.54	0.76	0.03	5.69	0.13	0.01
912540 Dup	Rock	0.43	0.12	<0.01	33.64	<0.01	3.33	0.02	39.38	16.59	0.76	0.03	5.77	0.11	0.01
912541	Rock	0.20	0.10	<0.01	33.31	<0.01	3.96	0.02	39.99	17.28	0.78	0.04	5.53	0.08	0.02
912542	Rock	0.50	0.21	<0.01	33.49	<0.01	5.24	0.04	38.74	16.11	0.54	0.03	6.18	0.15	0.02
912543	Rock	0.12	0.09	<0.01	35.23	<0.01	3.96	0.01	38.51	15.39	0.78	0.03	7.00	<0.01	0.01
912544	Rock	0.25	0.07	<0.01	32.67	<0.01	4.52	0.01	43.06	16.39	0.90	0.02	1.65	0.49	0.02
912545	Rock	0.31	0.45	0.01	35.79	<0.01	5.86	0.03	38.59	13.39	0.92	0.02	4.48	1.39	0.04
912546	Rock	0.23	0.19	<0.01	32.79	<0.01	4.75	0.02	41.45	16.22	0.82	0.03	3.15	0.88	0.02
912547	Rock	0.54	0.21	0.01	36.42	<0.01	5.14	0.02	37.47	13.15	0.74	0.03	6.37	0.55	0.05
912548	Rock	0.43	0.55	<0.01	33.02	<0.01	4.53	0.03	38.51	15.77	0.72	0.05	5.30	1.61	0.07
912549	Rock	0.22	0.24	<0.01	32.32	<0.01	4.35	0.04	38.99	15.92	0.72	0.04	5.46	1.70	0.05
912550	Pulp	0.68	0.20	0.02	36.68	<0.01	4.74	0.05	37.96	11.98	0.45	0.09	4.38	2.98	0.12
912551	Rock	0.19	0.44	<0.01	31.07	<0.01	5.66	0.10	35.87	14.71	0.71	0.35	4.76	6.09	0.08
912552	Rock	0.37	0.19	<0.01	33.91	<0.01	4.10	0.03	36.88	14.42	0.61	0.06	7.66	1.55	0.06
912553	Rock	0.18	0.20	<0.01	33.07	<0.01	4.04	0.03	37.80	16.29	0.69	0.07	6.64	1.97	0.04
912554	Rock	0.14	0.34	0.01	31.87	<0.01	4.58	0.07	36.46	15.87	0.53	0.23	4.69	6.89	0.08
912555	Rock	0.30	0.34	<0.01	32.93	<0.01	4.95	0.03	37.30	16.97	0.56	0.04	5.88	3.48	0.11
912556	Rock	0.27	0.24	<0.01	31.63	<0.01	4.71	0.02	38.34	17.45	0.73	0.03	4.64	4.39	0.03
912557	Rock	0.21	0.24	<0.01	30.95	<0.01	5.74	0.03	40.56	16.16	0.85	0.02	2.69	2.54	0.03
912558	Rock	0.21	0.16	<0.01	31.63	<0.01	4.73	0.02	41.19	18.10	0.87	0.03	3.06	1.49	0.01
912559	Rock	0.23	0.24	<0.01	33.18	<0.01	3.71	0.01	39.63	16.25	0.76	0.03	5.25	1.33	0.03
912560 Dup	Rock	0.22	0.22	<0.01	32.74	<0.01	3.70	0.01	39.52	16.44	0.75	0.03	5.34	1.26	0.03
912561	Rock	0.17	0.27	0.01	36.26	<0.01	3.96	0.08	37.53	14.18	0.74	0.03	6.47	1.97	0.03
912562	Rock	0.04	0.94	0.04	32.20	<0.01	5.28	0.21	29.81	7.10	0.73	0.17	2.39	22.44	0.10
912563	Rock	0.15	0.44	0.02	32.71	0.01	5.66	0.04	33.69	11.77	0.87	0.03	5.76	9.81	0.05
912564	Rock	0.26	0.40	<0.01	32.56	0.01	3.88	0.08	36.71	14.70	0.69	0.09	5.31	5.02	0.03
912565	Rock	0.18	0.11	<0.01	31.41	<0.01	4.42	0.02	42.74	17.51	0.86	0.03	1.80	0.72	<0.01
912566	Rock	0.07	0.08	<0.01	32.28	<0.01	1.93	0.03	44.38	20.78	0.68	0.02	1.77	<0.01	<0.01
912567	Rock	0.08	1.67	<0.01	26.00	0.01	4.61	0.07	36.34	16.19	0.77	0.03	1.29	11.98	0.15
912568	Rock	0.10	0.08	<0.01	31.28	<0.01	5.76	0.01	38.78	17.28	0.95	0.03	4.75	0.68	0.02
912569	Rock	0.56	0.16	<0.01	32.67	<0.01	6.83	0.02	37.36	15.90	0.75	0.03	6.31	0.53	0.09
912570	Pulp	0.53	1.84	0.37	46.07	<0.01	4.12	0.73	31.95	2.22	1.03	0.43	2.88	7.42	0.22
912571	Rock	0.39	0.20	<0.01	32.04	<0.01	5.96	0.02	38.06	17.63	0.74	0.04	5.49	1.97	0.08
912572	Rock	1.04	0.41	0.01	28.37	<0.01	18.84	0.08	29.49	11.92	0.61	0.05	7.27	1.58	0.32
912573	Rock	1.17	0.40	0.02	23.82	<0.01	33.47	0.21	21.38	8.55	0.58	0.05	7.99	2.21	0.51
912574	Rock	1.55	0.70	0.02	25.66	<0.01	27.62	0.19	19.79	8.41	0.50	0.06	11.59	3.73	0.70
912575	Rock	0.02	15.06	0.12	4.00	0.04	4.21	3.63	1.05	1.47	0.13	3.37	0.43	66.07	0.43



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Certificate of Analysis

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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912576	Rock	1.45	0.85	0.06	22.65	<0.01	35.90	0.45	16.54	6.52	0.60	0.07	10.31	4.20	0.69
912577	Rock	0.56	2.14	<0.01	27.10	<0.01	8.93	0.02	32.36	16.52	0.48	0.03	4.99	6.52	0.40
912578	Rock	0.59	2.18	0.01	28.17	<0.01	10.83	0.31	30.13	12.94	0.61	0.06	5.08	8.45	0.48
912579	Rock	0.45	0.20	<0.01	33.27	<0.01	5.32	0.02	38.50	16.64	0.68	0.03	5.18	0.84	0.04
912580 Dup	Rock	0.44	0.20	<0.01	32.17	<0.01	5.37	0.02	38.44	16.97	0.70	0.03	5.23	0.86	0.05
912581	Rock	0.26	0.25	<0.01	32.06	<0.01	6.32	0.01	38.73	18.90	0.63	0.03	4.54	0.57	0.06
912582	Rock	0.25	0.31	<0.01	34.85	<0.01	6.65	<0.01	31.67	13.11	0.50	0.04	11.63	1.72	0.17
912583	Rock	0.18	0.09	<0.01	32.05	<0.01	6.25	0.02	39.96	19.20	0.83	0.03	2.82	0.68	0.04
912584	Rock	1.05	0.12	<0.01	36.47	<0.01	6.55	0.01	32.94	14.55	0.58	0.03	6.77	0.89	0.06
912585	Rock	0.20	0.74	0.03	27.42	<0.01	4.91	0.49	33.94	16.83	0.62	0.44	3.36	10.98	0.08
912586	Rock	0.41	0.50	<0.01	30.62	<0.01	4.88	0.09	40.09	16.34	0.73	0.03	2.22	3.48	0.06
912587	Rock	0.25	0.62	0.01	33.72	<0.01	5.30	0.12	37.11	14.68	0.64	0.03	4.39	2.97	0.12
912588	Rock	0.22	0.08	0.01	32.29	<0.01	4.65	0.02	39.17	18.41	0.70	0.03	4.98	0.07	0.02
912589	Rock	0.16	1.10	0.03	30.51	<0.01	4.62	0.58	36.96	15.73	0.55	0.19	3.58	5.78	0.10
912590	Pulp	0.40	0.25	<0.01	32.39	<0.01	5.71	0.05	39.08	15.03	0.57	0.05	4.79	1.33	0.11
912591	Rock	0.50	0.48	<0.01	32.37	<0.01	6.53	0.07	37.78	14.33	1.06	0.04	3.30	2.93	0.05
912592	Rock	0.24	1.25	0.01	28.46	<0.01	4.76	0.54	32.89	15.03	0.60	0.41	4.22	11.13	0.08
912593	Rock	0.37	0.30	0.01	34.51	<0.01	5.70	0.10	38.18	12.81	0.91	0.05	3.54	3.59	0.04
912594	Rock	0.27	0.19	0.02	36.36	<0.01	4.21	0.02	37.18	13.44	0.90	0.05	6.62	1.54	0.04
912595	Rock	0.21	0.56	0.01	27.22	<0.01	5.68	0.30	34.86	15.26	0.78	0.77	1.83	11.87	0.10
912596	Rock	0.09	2.33	0.08	22.47	<0.01	6.98	1.02	16.43	12.61	0.59	2.59	2.61	33.26	0.25
912597	Rock	0.86	0.38	0.01	30.90	<0.01	11.94	0.07	33.72	13.34	0.82	0.10	5.62	2.80	0.23
912598	Rock	0.24	2.09	<0.01	30.53	0.01	5.21	0.04	34.26	14.16	0.60	0.03	4.81	7.83	0.18
912599	Rock	0.11	0.23	<0.01	31.99	<0.01	6.66	0.02	39.46	14.52	1.09	0.02	2.01	3.05	0.03
912600 Dup	Rock	0.10	0.24	<0.01	31.67	<0.01	6.78	0.03	39.63	14.41	1.04	0.02	2.09	2.62	0.03
912601	Rock	0.10	0.39	<0.01	33.00	<0.01	4.56	0.02	37.23	14.18	0.54	0.03	5.36	3.77	0.13
912602	Rock	0.06	0.20	<0.01	33.80	<0.01	6.01	0.01	36.33	13.63	0.84	0.03	6.30	2.02	0.03
912603	Rock	0.11	0.19	<0.01	32.50	<0.01	3.78	0.01	39.88	17.07	0.62	0.03	4.44	1.78	0.04
912604	Rock	0.06	0.25	<0.01	33.37	<0.01	4.94	<0.01	37.01	14.94	0.47	0.03	5.87	2.60	0.07
912605	Rock	0.10	0.13	<0.01	33.36	<0.01	6.24	0.01	38.14	15.60	0.70	0.03	3.73	1.05	0.05

Certificate of Analysis

10-360-03576-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912536	Rock	100.43	1.7	0.11	21	39	<2	>10	<0.5	5	8	19	2.60	0.01	710
912537	Rock	98.96	1.0	0.09	<5	41	<2	>10	<0.5	2	9	17	2.03	0.02	195
912538	Rock	99.05	1.4	0.09	<5	44	<2	>10	<0.5	3	9	34	2.55	0.01	267
912539	Rock	99.07	0.6	0.05	<5	38	<2	>10	<0.5	2	9	24	2.09	<0.01	225
912540 Dup	Rock	99.77	0.7	0.06	<5	38	<2	>10	<0.5	2	9	26	2.11	<0.01	240
912541	Rock	101.11	1.5	0.04	<5	42	<2	>10	<0.5	3	8	15	2.52	0.01	238
912542	Rock	100.76	0.7	0.11	7	35	<2	>10	<0.5	8	9	32	3.69	0.02	247
912543	Rock	101.01	<0.5	0.03	10	49	<2	>10	<0.5	6	10	9	2.89	<0.01	276
912544	Rock	99.81	1.5	0.02	7	46	<2	>10	<0.5	7	10	15	3.07	<0.01	230
912545	Rock	100.97	1.0	0.23	13	91	<2	>10	<0.5	8	11	21	4.24	0.02	328
912546	Rock	100.33	1.2	0.10	9	34	<2	>10	<0.5	5	9	14	3.44	0.01	371
912547	Rock	100.18	<0.5	0.11	11	80	<2	>10	<0.5	6	10	29	3.36	0.01	305
912548	Rock	100.17	0.8	0.26	<5	49	<2	>10	<0.5	5	12	25	3.05	0.02	284
912549	Rock	99.84	0.8	0.13	6	33	<2	>10	<0.5	6	11	16	3.05	0.01	243
912550	Pulp	99.67	1.3	0.10	6	166	<2	>10	<0.5	4	5	39	3.52	0.03	246
912551	Rock	99.85	0.8	0.22	<5	60	<2	>10	<0.5	9	10	12	3.97	0.06	253
912552	Rock	99.47	1.6	0.09	7	42	<2	>10	<0.5	7	9	23	2.89	0.02	359
912553	Rock	100.85	1.8	0.12	9	39	<2	>10	<0.5	5	10	12	2.90	0.02	372
912554	Rock	101.63	1.0	0.17	14	96	<2	>10	<0.5	6	11	9	3.36	0.04	498
912555	Rock	102.60	1.3	0.18	14	33	<2	>10	<0.5	7	10	19	3.38	<0.01	545
912556	Rock	102.21	0.9	0.11	<5	36	<2	>10	<0.5	5	13	17	3.43	0.01	234
912557	Rock	99.82	0.9	0.12	9	31	<2	>10	<0.5	7	12	12	3.90	0.02	267
912558	Rock	101.30	1.3	0.08	<5	33	<2	>10	<0.5	5	20	15	3.22	0.01	206
912559	Rock	100.44	0.7	0.13	<5	32	<2	>10	<0.5	4	8	14	2.71	<0.01	228
912560 Dup	Rock	100.04	0.8	0.12	5	32	<2	>10	<0.5	4	9	14	2.51	<0.01	235
912561	Rock	101.54	1.3	0.14	11	97	<2	>10	<0.5	6	11	12	2.94	0.05	225
912562	Rock	101.42	<0.5	4.61	14	294	<2	>10	<0.5	5	34	2	4.04	0.15	349
912563	Rock	100.87	<0.5	0.23	17	117	<2	>10	<0.5	6	25	11	4.06	0.03	560
912564	Rock	99.49	1.0	0.21	5	68	<2	>10	<0.5	5	21	17	2.98	0.06	237
912565	Rock	99.64	1.6	0.06	5	39	<2	>10	<0.5	7	10	11	2.95	0.01	270
912566	Rock	101.98	1.2	0.03	<5	37	<2	>10	<0.5	1	9	5	1.30	<0.01	125
912567	Rock	99.10	0.9	0.85	<5	41	<2	>10	<0.5	5	29	6	3.31	0.04	136
912568	Rock	99.63	<0.5	0.04	25	38	<2	>10	<0.5	8	10	8	4.23	<0.01	972
912569	Rock	100.65	0.5	0.10	20	28	<2	>10	<0.5	11	9	34	4.89	<0.01	822
912570	Pulp	99.28	1.4	0.94	24	2755	<2	>10	<0.5	4	8	19	2.90	0.56	951
912571	Rock	102.23	1.2	0.10	32	31	<2	>10	<0.5	16	11	37	4.10	0.01	1326
912572	Rock	98.96	1.2	0.22	<5	89	<2	>10	<0.5	22	8	84	>10	0.06	542
912573	Rock	99.20	1.8	0.22	<5	148	<2	>10	<0.5	35	9	78	>10	0.15	520
912574	Rock	99.00	1.5	0.41	6	138	<2	>10	<0.5	53	12	151	>10	0.14	763
912575	Rock	100.03	1.3	7.84	<5	792	<2	3.21	<0.5	10	122	54	3.21	3.09	40



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03576-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912576	Rock	98.85	0.7	0.44	<5	457	<2	>10	<0.5	28	12	63	>10	0.34	787
912577	Rock	99.51	1.5	1.14	9	49	<2	>10	<0.5	19	19	48	6.54	0.01	581
912578	Rock	99.27	1.8	1.10	16	111	<2	>10	<0.5	29	22	83	7.36	0.23	819
912579	Rock	100.72	0.6	0.11	13	33	<2	>10	<0.5	8	10	40	3.71	0.02	530
912580 Dup	Rock	100.06	0.7	0.10	11	34	<2	>10	<0.5	7	10	46	3.72	0.01	486
912581	Rock	102.11	1.1	0.12	11	27	<2	>10	<0.5	5	8	46	4.44	<0.01	487
912582	Rock	100.68	1.1	0.17	16	29	<2	>10	<0.5	10	9	39	4.86	<0.01	614
912583	Rock	101.98	<0.5	0.03	17	33	<2	>10	<0.5	7	9	23	4.46	<0.01	686
912584	Rock	99.00	<0.5	0.06	<5	41	<2	>10	<0.5	12	10	84	4.83	<0.01	346
912585	Rock	99.85	<0.5	0.36	5	196	<2	>10	<0.5	6	14	18	3.39	0.39	311
912586	Rock	99.04	<0.5	2.51	20	57	<2	>10	<0.5	6	16	37	3.40	0.07	788
912587	Rock	99.70	<0.5	0.31	20	73	<2	>10	<0.5	5	12	23	3.64	0.09	724
912588	Rock	100.43	<0.5	0.04	<5	84	<2	>10	<0.5	4	9	18	3.26	0.01	262
912589	Rock	99.73	<0.5	0.57	<5	189	<2	>10	<0.5	6	18	17	3.18	0.45	271
912590	Pulp	99.37	<0.5	0.12	8	43	<2	>10	<0.5	6	7	32	3.88	0.03	365
912591	Rock	98.96	<0.5	0.26	80	42	<2	>10	<0.5	7	13	35	4.60	0.05	3873
912592	Rock	99.39	<0.5	0.65	11	108	<2	>10	<0.5	4	11	17	3.27	0.42	514
912593	Rock	99.74	<0.5	0.15	54	101	<2	>10	<0.5	4	10	24	3.82	0.08	2382
912594	Rock	100.58	<0.5	0.10	13	147	<2	>10	<0.5	3	10	22	3.03	0.01	555
912595	Rock	99.24	<0.5	0.27	8	87	<2	>10	<0.5	5	13	15	4.04	0.22	365
912596	Rock	101.23	<0.5	1.27	21	578	<2	>10	<0.5	7	15	6	4.75	0.86	885
912597	Rock	99.94	<0.5	0.23	45	94	<2	>10	<0.5	18	11	67	8.86	0.05	1974
912598	Rock	99.76	<0.5	1.11	18	54	<2	>10	<0.5	8	25	21	3.65	0.03	653
912599	Rock	99.11	<0.5	0.12	123	34	<2	>10	<0.5	6	15	9	4.67	<0.01	6031
912600 Dup	Rock	98.58	<0.5	0.12	145	33	<2	>10	<0.5	6	16	7	4.54	<0.01	6088
912601	Rock	99.21	<0.5	0.21	44	47	<2	>10	<0.5	6	11	3	3.00	<0.01	1995
912602	Rock	99.21	<0.5	0.11	80	29	<2	>10	<0.5	7	12	5	4.50	<0.01	3643
912603	Rock	100.35	0.5	0.10	10	29	<2	>10	<0.5	5	9	10	2.67	<0.01	429
912604	Rock	99.58	<0.5	0.13	17	23	<2	>10	<0.5	8	13	4	3.65	<0.01	708
912605	Rock	99.05	<0.5	0.07	31	34	<2	>10	<0.5	7	13	5	4.30	<0.01	1420

Certificate of Analysis

10-360-03576-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
912536	Rock	>10	3600	3	0.03	<1	>10000	24	<5	8	2401	<0.01	<10	21	<10
912537	Rock	>10	4707	2	0.03	<1	>10000	19	<5	4	3769	<0.01	<10	11	<10
912538	Rock	9.98	5329	2	0.03	<1	>10000	16	<5	5	4684	0.02	<10	4	<10
912539	Rock	>10	5445	2	0.03	<1	>10000	17	<5	6	4774	<0.01	<10	2	<10
912540 Dup	Rock	>10	5342	3	0.03	<1	>10000	17	<5	6	4666	<0.01	<10	2	<10
912541	Rock	>10	5490	3	0.03	<1	>10000	19	<5	7	3866	<0.01	<10	6	<10
912542	Rock	9.79	3539	2	0.03	<1	>10000	22	<5	10	2037	<0.01	<10	41	<10
912543	Rock	9.61	5301	2	0.02	<1	>10000	22	<5	7	3176	<0.01	<10	<1	<10
912544	Rock	>10	5892	2	0.02	<1	5521	24	<5	9	3298	<0.01	<10	<1	<10
912545	Rock	8.25	6081	2	0.02	<1	>10000	22	<5	13	2335	0.01	<10	12	<10
912546	Rock	9.72	5145	2	0.02	<1	>10000	17	<5	10	2879	<0.01	<10	10	<10
912547	Rock	7.82	4713	2	0.03	<1	>10000	16	<5	6	3420	0.02	<10	24	<10
912548	Rock	>10	4983	2	0.03	<1	>10000	18	<5	8	4229	0.02	<10	21	<10
912549	Rock	>10	4980	2	0.02	<1	>10000	21	<5	7	3438	0.02	<10	12	<10
912550	Pulp	8.07	3247	3	0.06	<1	>10000	19	<5	7	2439	0.06	<10	71	<10
912551	Rock	9.06	4663	3	0.28	<1	>10000	16	<5	7	3064	0.03	<10	30	<10
912552	Rock	>10	4498	2	0.04	<1	>10000	17	<5	7	3664	0.03	<10	19	<10
912553	Rock	9.50	4645	2	0.05	<1	>10000	18	<5	7	3159	0.01	<10	10	<10
912554	Rock	9.03	3771	2	0.20	<1	>10000	16	<5	8	2193	0.03	<10	26	<10
912555	Rock	8.81	3593	2	0.03	<1	>10000	18	<5	7	1687	0.03	<10	29	<10
912556	Rock	9.88	4909	2	0.02	<1	>10000	15	<5	8	2832	0.01	<10	13	<10
912557	Rock	9.57	5308	2	0.02	<1	9024	16	<5	8	1832	0.01	<10	12	<10
912558	Rock	9.83	5438	2	0.02	<1	>10000	17	<5	6	3070	<0.01	<10	3	<10
912559	Rock	>10	5014	2	0.02	<1	>10000	15	<5	7	3565	0.01	<10	6	<10
912560 Dup	Rock	9.41	4597	1	0.02	<1	>10000	14	<5	7	3259	0.01	<10	6	<10
912561	Rock	8.91	5246	2	0.02	<1	>10000	21	<5	8	3389	0.01	<10	8	<10
912562	Rock	4.21	4947	2	0.13	<1	8565	17	<5	24	1450	0.04	<10	66	<10
912563	Rock	6.94	5718	2	0.02	2	>10000	23	<5	21	2080	0.02	<10	34	<10
912564	Rock	9.69	4904	2	0.06	<1	>10000	15	<5	11	3387	0.01	<10	15	<10
912565	Rock	>10	5598	2	0.02	<1	6353	18	<5	9	2830	<0.01	<10	4	<10
912566	Rock	>10	4247	1	0.02	<1	6323	18	<5	7	3230	<0.01	<10	<1	<10
912567	Rock	>10	5018	3	0.02	2	4412	16	<5	12	2717	0.03	<10	29	<10
912568	Rock	9.69	6254	3	0.02	<1	>10000	21	<5	11	2390	<0.01	<10	20	<10
912569	Rock	9.00	4975	1	0.03	<1	>10000	20	<5	8	2572	0.04	<10	39	<10
912570	Pulp	1.28	6711	15	0.33	<1	9976	76	<5	4	>10000	0.15	<10	162	<10
912571	Rock	8.94	4474	2	0.02	<1	>10000	27	<5	10	2532	0.03	<10	27	<10
912572	Rock	7.06	3775	3	0.03	1	>10000	24	<5	6	2411	0.17	<10	184	<10
912573	Rock	5.37	4126	2	0.04	2	>10000	22	<5	5	2960	0.22	<10	321	<10
912574	Rock	5.34	3552	3	0.05	2	>10000	31	<5	5	3326	0.19	<10	239	<10
912575	Rock	0.86	734	3	2.73	5	1586	32	<5	5	649	0.28	<10	57	<10

Certificate of Analysis

10-360-03576-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912576	Rock	4.00	3898	3	0.06	6	>10000	28	<5	4	2516	0.21	<10	394	<10
912577	Rock	>10	3381	3	0.02	6	>10000	18	<5	11	1788	0.14	<10	88	<10
912578	Rock	7.53	4056	3	0.05	7	>10000	27	<5	12	1739	0.17	<10	105	<10
912579	Rock	9.80	4675	3	0.02	<1	>10000	28	<5	8	2711	0.01	<10	15	<10
912580 Dup	Rock	>10	4691	2	0.02	<1	>10000	23	<5	8	2954	0.01	<10	15	<10
912581	Rock	>10	4144	3	0.02	<1	>10000	29	<5	10	2284	0.01	<10	22	<10
912582	Rock	7.90	3106	2	0.03	<1	>10000	28	<5	11	1936	0.04	<10	33	<10
912583	Rock	>10	5255	5	0.02	2	9881	23	<5	10	2073	<0.01	<10	14	<10
912584	Rock	8.80	3645	2	0.03	8	>10000	22	<5	6	3100	0.04	<10	43	<10
912585	Rock	9.72	3993	3	0.35	1	>10000	20	<5	18	2731	0.04	<10	39	<10
912586	Rock	9.69	4631	4	0.02	2	8130	24	<5	9	2389	0.03	<10	14	<10
912587	Rock	>10	4485	5	0.02	3	>10000	29	<5	9	2415	0.03	<10	21	<10
912588	Rock	>10	4939	3	0.02	<1	>10000	16	<5	4	3825	<0.01	<10	24	<10
912589	Rock	9.77	3564	3	0.15	2	>10000	18	<5	7	2203	0.05	<10	27	<10
912590	Pulp	>10	4153	4	0.04	<1	>10000	17	<5	7	2291	0.03	<10	36	<10
912591	Rock	9.98	7611	5	0.03	<1	>10000	26	<5	11	2601	0.03	<10	17	<10
912592	Rock	>10	4281	1	0.36	<1	>10000	21	<5	10	2912	0.04	<10	33	<10
912593	Rock	8.18	6167	5	0.04	<1	>10000	21	<5	10	2255	0.02	<10	16	<10
912594	Rock	8.51	6070	7	0.04	<1	>10000	20	<5	7	3539	0.01	<10	17	<10
912595	Rock	9.43	4985	4	0.61	<1	6531	20	<5	12	2124	0.04	<10	69	<10
912596	Rock	7.38	3663	2	2.15	<1	9509	26	<5	16	1710	0.15	<10	125	<10
912597	Rock	7.96	5598	7	0.08	<1	>10000	22	<5	9	2661	0.14	<10	143	<10
912598	Rock	8.84	3735	4	0.02	5	>10000	20	<5	10	2052	0.05	<10	38	<10
912599	Rock	9.46	7550	17	0.02	<1	7193	32	<5	13	1638	0.01	<10	16	<10
912600 Dup	Rock	9.62	7486	15	0.02	<1	7185	33	<5	14	1590	0.01	<10	15	<10
912601	Rock	9.69	3664	3	0.02	<1	>10000	21	<5	8	1469	0.03	<10	23	<10
912602	Rock	9.50	6009	5	0.02	<1	>10000	28	<5	11	1848	0.01	<10	10	<10
912603	Rock	>10	4020	3	0.02	<1	>10000	19	<5	6	2477	0.02	<10	14	<10
912604	Rock	>10	3271	2	0.02	<1	>10000	25	<5	7	868	0.02	<10	23	<10
912605	Rock	9.64	4356	6	0.03	<1	>10000	26	<5	8	1518	0.01	<10	15	<10



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Certificate of Analysis

10-360-03576-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912536	Rock	11	24	>1000	21.1	7.1	18.3	46.3	<0.1	2.8	>1000	<0.1	401.0	137.2	51.6
912537	Rock	12	16	588.6	19.5	7.0	14.8	33.5	<0.1	2.8	298.1	<0.1	249.6	71.4	39.4
912538	Rock	16	40	591.5	22.0	6.8	16.3	34.5	<0.1	2.9	290.8	<0.1	263.0	74.2	42.7
912539	Rock	16	39	461.0	31.8	12.6	13.9	33.6	<0.1	5.7	218.5	<0.1	205.8	58.1	35.2
912540 Dup	Rock	16	41	491.2	31.9	12.2	14.3	34.2	<0.1	5.8	230.0	<0.1	219.7	61.9	37.3
912541	Rock	18	26	568.0	40.1	18.3	15.0	37.3	<0.1	7.6	308.7	0.2	233.8	67.0	39.2
912542	Rock	12	47	520.1	34.4	12.9	16.3	40.8	<0.1	6.1	270.5	<0.1	236.3	64.5	40.2
912543	Rock	15	39	678.5	45.1	17.1	16.7	46.4	<0.1	7.8	347.1	0.3	292.6	84.1	47.6
912544	Rock	18	16	419.7	24.3	10.8	11.9	29.8	<0.1	4.4	223.0	<0.1	178.4	51.3	30.2
912545	Rock	21	55	656.7	64.6	29.1	22.7	58.4	0.4	13.0	350.8	1.3	287.5	82.8	55.5
912546	Rock	19	29	762.3	28.5	10.0	14.1	40.6	<0.1	4.7	385.4	<0.1	339.6	95.1	50.0
912547	Rock	19	40	642.2	24.0	8.4	16.8	39.0	<0.1	3.7	307.4	<0.1	282.0	79.3	44.7
912548	Rock	18	42	728.4	19.1	6.1	14.8	33.4	<0.1	2.5	389.3	<0.1	298.8	87.6	43.6
912549	Rock	16	32	577.0	28.6	12.1	14.9	36.8	<0.1	5.4	294.8	<0.1	253.7	71.9	40.9
912550	Pulp	10	40	873.5	25.2	8.5	20.7	45.8	<0.1	3.6	442.6	<0.1	355.6	104.9	56.4
912551	Rock	26	34	554.0	18.4	7.5	12.6	29.6	<0.1	2.8	277.9	<0.1	240.6	69.0	35.2
912552	Rock	16	29	744.6	23.1	8.4	18.0	41.5	<0.1	3.3	365.9	<0.1	339.8	93.8	52.5
912553	Rock	20	30	789.9	20.5	7.8	16.6	38.4	<0.1	3.2	418.7	<0.1	333.4	97.6	48.8
912554	Rock	25	29	948.0	20.6	7.0	17.0	41.6	<0.1	2.8	577.4	<0.1	346.0	105.0	48.7
912555	Rock	15	26	>1000	23.4	7.2	21.1	48.9	<0.1	2.9	812.0	<0.1	433.8	138.0	58.0
912556	Rock	20	24	686.5	18.3	8.2	12.4	29.7	<0.1	2.7	405.1	<0.1	255.7	77.2	34.9
912557	Rock	20	22	545.7	13.1	5.8	11.1	23.8	<0.1	1.7	319.0	<0.1	200.4	60.8	28.2
912558	Rock	22	23	459.9	12.1	4.0	8.8	21.0	<0.1	1.1	239.7	<0.1	195.5	56.7	27.8
912559	Rock	18	22	488.6	18.7	7.4	12.4	29.7	<0.1	2.7	249.4	<0.1	225.2	61.2	35.1
912560 Dup	Rock	17	23	474.7	18.6	7.7	12.7	29.7	<0.1	2.8	236.7	<0.1	217.4	59.8	34.1
912561	Rock	21	43	444.3	21.9	10.2	13.1	29.3	<0.1	3.8	225.0	<0.1	201.7	55.2	34.1
912562	Rock	62	45	661.0	16.7	7.4	12.7	29.5	2.1	2.3	371.4	<0.1	267.5	77.3	37.7
912563	Rock	33	63	>1000	39.8	21.3	24.0	58.7	<0.1	7.7	736.1	0.9	572.9	166.0	78.6
912564	Rock	22	37	564.2	25.3	11.3	16.3	37.3	<0.1	4.5	288.6	<0.1	260.6	73.4	43.0
912565	Rock	23	22	748.0	13.9	5.8	10.5	28.9	<0.1	1.7	412.0	<0.1	299.8	86.9	39.2
912566	Rock	17	11	318.6	10.5	4.0	5.4	15.7	<0.1	0.9	160.0	<0.1	133.9	37.8	19.7
912567	Rock	23	17	640.9	25.8	11.5	13.1	34.3	<0.1	4.5	368.9	<0.1	259.1	74.6	39.9
912568	Rock	29	24	>1000	72.2	29.9	54.0	153.4	<0.1	13.2	>1000	1.6	>1000	532.6	186.5
912569	Rock	22	32	>1000	33.9	13.2	28.7	68.6	1.2	5.6	>1000	<0.1	698.8	238.1	81.3
912570	Pulp	426	88	>1000	14.6	4.9	17.2	41.7	<0.1	1.2	981.7	<0.1	471.0	166.6	52.1
912571	Rock	22	58	>1000	33.4	15.2	24.4	56.0	<0.1	6.3	>1000	0.4	515.4	173.1	63.2
912572	Rock	65	76	>1000	21.4	8.2	18.9	43.7	8.2	2.8	625.0	<0.1	391.8	121.3	52.4
912573	Rock	115	81	938.6	19.0	4.9	18.7	41.5	11.2	2.1	508.6	<0.1	388.2	112.8	55.1
912574	Rock	78	45	>1000	24.0	6.2	27.5	61.5	14.6	2.9	776.9	<0.1	559.4	163.8	78.1
912575	Rock	66	9	86.1	2.7	1.2	1.1	4.2	0.2	<0.1	47.1	<0.1	34.7	9.2	4.8



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912576	Rock	149	64	>1000	22.3	6.0	24.9	59.0	7.4	2.7	790.0	<0.1	579.5	173.1	76.6
912577	Rock	21	49	>1000	23.8	8.9	22.3	45.8	4.1	3.5	682.1	<0.1	406.9	124.0	56.7
912578	Rock	35	44	>1000	17.5	6.2	16.3	41.7	4.2	2.1	806.3	<0.1	441.9	140.6	52.3
912579	Rock	23	48	847.2	20.8	9.3	14.0	34.7	<0.1	3.4	510.2	<0.1	310.3	96.8	39.9
912580 Dup	Rock	25	47	833.6	20.1	9.6	13.5	32.1	<0.1	3.3	491.2	<0.1	299.8	87.3	37.0
912581	Rock	30	70	776.5	24.9	12.1	13.6	34.8	0.8	4.7	493.7	<0.1	274.4	84.8	37.5
912582	Rock	26	77	>1000	60.7	28.2	25.6	66.1	2.1	12.7	679.3	1.3	423.7	127.4	65.4
912583	Rock	23	21	>1000	15.9	6.0	12.0	34.6	<0.1	2.0	714.0	<0.1	361.7	116.1	41.1
912584	Rock	17	59	760.2	21.3	7.3	22.1	41.8	1.8	3.2	395.8	<0.1	325.9	92.8	51.2
912585	Rock	40	41	577.1	11.2	3.8	10.2	24.7	1.0	0.9	323.0	<0.1	225.6	66.8	31.7
912586	Rock	27	26	>1000	14.7	5.1	15.7	39.8	<0.1	1.6	845.2	<0.1	388.3	126.2	47.7
912587	Rock	32	30	>1000	18.1	6.3	15.0	39.5	0.4	2.2	805.5	<0.1	388.9	126.4	49.4
912588	Rock	25	19	483.2	11.9	3.3	10.8	26.1	<0.1	1.0	266.5	<0.1	209.1	58.9	33.4
912589	Rock	36	37	507.8	14.5	5.4	10.8	25.4	<0.1	1.7	289.8	<0.1	202.2	58.8	31.6
912590	Pulp	23	34	756.0	20.1	6.6	18.3	40.9	<0.1	2.5	404.3	<0.1	317.4	91.3	51.5
912591	Rock	41	37	>1000	18.2	4.4	25.1	71.0	<0.1	1.7	>1000	<0.1	928.0	352.8	82.5
912592	Rock	50	55	856.9	12.3	3.3	13.7	31.5	1.6	1.0	547.1	<0.1	298.9	92.3	39.7
912593	Rock	37	24	>1000	16.3	4.2	20.1	53.8	0.4	1.5	>1000	<0.1	640.8	236.0	64.5
912594	Rock	29	26	856.6	15.8	4.6	15.3	35.4	<0.1	1.5	552.2	<0.1	310.9	93.9	45.2
912595	Rock	52	87	607.0	8.3	2.5	7.4	20.3	<0.1	0.4	378.6	<0.1	206.7	65.7	26.2
912596	Rock	114	247	>1000	10.3	3.0	11.6	31.2	0.5	0.7	883.6	<0.1	357.3	121.0	40.3
912597	Rock	48	45	>1000	19.5	4.9	27.3	67.7	12.4	1.9	>1000	<0.1	753.8	259.7	85.2
912598	Rock	25	49	992.6	16.3	5.4	15.0	35.3	<0.1	2.1	681.1	<0.1	313.9	101.1	42.0
912599	Rock	30	9	>1000	19.2	2.6	34.0	98.5	<0.1	0.9	>1000	<0.1	>1000	567.6	108.4
912600 Dup	Rock	29	10	>1000	18.7	2.4	36.5	103.3	<0.1	1.0	>1000	<0.1	>1000	587.2	110.2
912601	Rock	20	16	>1000	27.1	8.2	27.1	71.0	<0.1	3.4	>1000	<0.1	700.1	237.9	83.0
912602	Rock	31	24	>1000	24.8	6.8	29.5	77.9	<0.1	3.0	>1000	<0.1	941.3	364.7	87.8
912603	Rock	20	18	720.2	15.2	5.5	12.5	29.6	<0.1	1.7	467.4	<0.1	245.7	76.5	35.6
912604	Rock	15	25	>1000	21.2	7.3	21.5	50.9	<0.1	2.8	>1000	<0.1	524.6	181.9	63.6
912605	Rock	15	20	>1000	22.4	6.8	20.3	56.1	<0.1	3.0	>1000	<0.1	587.9	207.2	67.7

Certificate of Analysis

10-360-03576-01

Aley Corporation
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 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912536	Rock	3.7	0.2	4.2	75.1	26.56	107.50	4.21
912537	Rock	3.5	<0.1	3.9	73.9	35.19	93.41	4.76
912538	Rock	3.5	<0.1	3.7	83.4	9.82	135.05	2.58
912539	Rock	5.1	0.7	6.4	135.6	6.06	176.79	2.41
912540 Dup	Rock	5.6	1.0	6.8	136.7	6.60	192.16	2.48
912541	Rock	6.7	1.9	11.1	185.9	7.33	102.46	3.78
912542	Rock	6.3	1.0	7.7	133.4	30.54	308.46	3.75
912543	Rock	8.1	1.7	9.9	177.4	0.76	134.33	2.51
912544	Rock	4.4	0.6	6.6	129.6	0.43	80.76	2.19
912545	Rock	11.4	4.0	17.8	295.4	9.90	330.81	6.29
912546	Rock	4.8	0.6	6.8	115.8	1.41	112.76	2.30
912547	Rock	4.4	0.4	4.9	102.0	4.29	130.44	3.05
912548	Rock	3.1	<0.1	3.8	78.6	22.00	125.52	20.60
912549	Rock	5.0	0.9	6.8	131.0	10.38	117.27	6.79
912550	Pulp	4.5	0.3	6.2	95.2	41.62	153.79	2.28
912551	Rock	2.9	<0.1	3.6	80.3	8.95	85.01	3.98
912552	Rock	4.3	<0.1	4.3	91.8	10.70	102.63	3.58
912553	Rock	3.8	0.1	4.2	85.5	4.52	128.78	2.98
912554	Rock	3.9	0.1	4.9	80.3	10.18	85.26	2.57
912555	Rock	4.1	<0.1	4.8	80.2	20.19	107.38	7.59
912556	Rock	2.9	0.2	5.6	83.2	10.71	101.66	8.88
912557	Rock	2.0	<0.1	4.2	62.3	40.41	113.17	15.58
912558	Rock	1.6	<0.1	2.8	48.5	30.47	114.58	13.31
912559	Rock	2.9	<0.1	5.6	79.3	3.98	98.96	2.79
912560 Dup	Rock	3.0	0.1	5.5	83.7	3.78	97.63	2.60
912561	Rock	3.3	0.7	6.6	99.3	18.23	168.68	5.46
912562	Rock	2.6	<0.1	5.0	73.7	1.29	76.89	2.80
912563	Rock	6.5	3.0	15.7	190.5	12.36	316.82	4.48
912564	Rock	4.5	1.0	7.9	120.0	1.33	128.97	2.41
912565	Rock	2.0	<0.1	3.9	65.7	1.28	70.80	2.34
912566	Rock	0.9	<0.1	2.3	44.7	0.75	51.85	0.63
912567	Rock	4.5	0.7	6.8	115.7	3.14	64.25	2.72
912568	Rock	13.4	4.4	19.5	293.5	1.83	65.95	3.86
912569	Rock	5.9	1.1	8.3	138.3	5.54	72.32	3.07
912570	Pulp	2.1	<0.1	3.3	56.0	41.64	52.77	26.80
912571	Rock	6.0	1.7	11.5	151.7	6.65	259.96	5.39
912572	Rock	4.0	<0.1	4.6	81.7	8.00	227.58	4.07
912573	Rock	3.7	<0.1	2.9	62.8	0.16	158.15	3.93
912574	Rock	5.0	<0.1	3.4	76.9	0.46	138.59	6.22
912575	Rock	<0.1	<0.1	1.3	16.7	1.68	10.89	3.63



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
912576	Rock	4.6	<0.1	3.8	74.1	0.44	160.53	9.21
912577	Rock	4.3	0.3	5.7	94.0	44.60	166.17	20.31
912578	Rock	3.0	<0.1	4.3	68.0	3.88	178.65	24.62
912579	Rock	3.3	0.5	6.1	99.1	5.05	173.65	5.39
912580 Dup	Rock	3.1	0.4	5.8	94.4	5.54	187.33	5.14
912581	Rock	4.1	1.0	7.7	124.9	5.48	194.75	5.69
912582	Rock	11.2	3.5	17.3	287.0	10.41	367.20	9.92
912583	Rock	2.4	<0.1	3.5	63.8	1.34	108.77	3.20
912584	Rock	4.1	<0.1	4.0	82.6	13.24	148.58	3.68
912585	Rock	1.6	<0.1	2.2	45.6	5.49	58.51	4.31
912586	Rock	2.3	<0.1	2.9	60.3	55.08	111.86	63.12
912587	Rock	3.2	<0.1	4.1	72.8	11.45	98.89	8.28
912588	Rock	1.9	<0.1	1.9	45.5	1.36	50.41	2.44
912589	Rock	2.3	<0.1	4.4	59.5	7.41	89.84	4.33
912590	Pulp	4.1	<0.1	3.9	76.5	23.57	160.34	9.69
912591	Rock	2.4	<0.1	3.0	58.5	5.74	139.74	3.34
912592	Rock	2.0	<0.1	2.0	45.0	15.34	61.70	8.22
912593	Rock	2.2	<0.1	2.8	52.7	8.47	125.30	6.34
912594	Rock	3.0	<0.1	2.5	55.1	3.14	60.43	5.36
912595	Rock	0.8	<0.1	2.0	30.9	20.98	47.18	4.35
912596	Rock	1.2	<0.1	2.3	38.1	13.31	45.91	8.80
912597	Rock	3.4	<0.1	3.5	63.7	4.57	133.10	9.69
912598	Rock	2.7	<0.1	3.2	64.0	54.88	128.05	10.58
912599	Rock	1.9	<0.1	1.8	49.6	10.67	17.14	7.18
912600 Dup	Rock	1.9	<0.1	1.4	50.3	11.51	16.98	7.61
912601	Rock	5.5	0.3	6.2	100.6	0.11	83.12	4.74
912602	Rock	4.0	<0.1	4.4	79.6	9.04	105.01	6.99
912603	Rock	2.6	<0.1	3.0	57.7	4.66	57.80	5.20
912604	Rock	3.6	0.2	5.3	79.4	38.59	93.92	27.56
912605	Rock	4.1	<0.1	4.2	78.1	30.88	105.85	29.00

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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912536	Rock	0.33													
912536 Dup		0.33													
QCV1011-00491-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.55													
912554	Rock	0.14													
912554 Dup		0.13													
QCV1011-00491-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.55													
912572	Rock	1.04													
912572 Dup		1.08													
QCV1011-00491-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912590	Pulp	0.40													
912590 Dup		0.40													
QCV1011-00491-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
QCV1011-00491-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
912536	Rock		0.22	<0.01	33.01	<0.01	3.79	0.02	40.16	17.18	0.54	0.04	5.01	0.44	0.02
912536 Dup			0.22	<0.01	33.02	<0.01	3.80	0.03	40.19	16.94	0.53	0.04	5.07	0.42	0.02
QCV1011-00495-0002-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54		7.10		49.90	0.29
STD-SY-4 result			19.77	0.04	8.06	<0.01	6.44	1.78	4.50	0.53		6.82		51.74	0.29
912554	Rock		0.34	0.01	31.87	<0.01	4.58	0.07	36.46	15.87	0.53	0.23	4.69	6.89	0.08
912554 Dup			0.35	0.01	31.96	<0.01	4.58	0.07	36.32	15.91	0.54	0.24	4.76	7.01	0.08
QCV1011-00495-0005-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912572	Rock		0.41	0.01	28.37	<0.01	18.84	0.08	29.49	11.92	0.61	0.05	7.27	1.58	0.32
912572 Dup			0.34	0.01	28.60	<0.01	18.85	0.08	29.61	12.41	0.61	0.05	7.33	1.51	0.32
QCV1011-00495-0008-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912590	Pulp		0.25	<0.01	32.39	<0.01	5.71	0.05	39.08	15.03	0.57	0.05	4.79	1.33	0.11
912590 Dup			0.25	<0.01	32.51	<0.01	5.56	0.04	38.92	15.90	0.57	0.05	4.98	1.32	0.11
QCV1011-00495-0011-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00495-0013-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54		7.10		49.90	0.29
STD-SY-4 result			20.75	0.04	8.08	<0.01	6.28	1.70	4.51	0.54		7.11		50.01	0.29

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Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912536	Rock		1.7	0.11	21	39	<2	>10	<0.5	5	8	19	2.60	0.01	710
912536 Dup			1.1	0.11	21	39	<2	>10	<0.5	5	8	18	2.50	0.01	729
QCV1011-00492-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101									6130			
STD-CDN-ME-6 result			>100									6346			
912554	Rock		1.0	0.17	14	96	<2	>10	<0.5	6	11	9	3.36	0.04	498
912554 Dup			0.9	0.18	12	97	<2	>10	<0.5	6	13	9	3.08	0.05	486
QCV1011-00492-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101									6130			
STD-CDN-ME-6 result			>100									6077			
912572	Rock		1.2	0.22	<5	89	<2	>10	<0.5	22	8	84	>10	0.06	542
912572 Dup			1.2	0.18	<5	93	<2	>10	<0.5	22	8	99	>10	0.06	575
QCV1011-00492-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			62.0									973			
912590	Pulp		<0.5	0.12	8	43	<2	>10	<0.5	6	7	32	3.88	0.03	365
912590 Dup			<0.5	0.14	8	44	<2	>10	<0.5	6	6	32	3.90	0.03	361
QCV1011-00492-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.3									978			
QCV1011-00492-0013-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							125	1084	700			
912536	Rock	100.43													
912536 Dup		100.28													
QCV1011-00495-0002-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.26													
912554	Rock	101.63													
912554 Dup		101.83													
QCV1011-00495-0005-BLK		<0.01													
912572	Rock	98.96													
912572 Dup		99.73													
QCV1011-00495-0008-BLK		<0.01													
912590	Pulp	99.37													
912590 Dup		100.22													
QCV1011-00495-0011-BLK		<0.01													
QCV1011-00495-0013-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		99.56													



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912536	Rock	>10	3600	3	0.03	<1	>10000	24	<5	8	2401	<0.01	<10	21	<10
912536 Dup		>10	3750	3	0.03	<1	>10000	20	<5	8	2484	<0.01	<10	21	<10
QCV1011-00492-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9986							
912554	Rock	9.03	3771	2	0.20	<1	>10000	16	<5	8	2193	0.03	<10	26	<10
912554 Dup		8.28	3446	1	0.18	<1	>10000	15	<5	8	2009	0.03	<10	27	<10
QCV1011-00492-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
912572	Rock	7.06	3775	3	0.03	1	>10000	24	<5	6	2411	0.17	<10	184	<10
912572 Dup		7.51	3986	2	0.03	1	>10000	26	<5	6	2562	0.18	<10	187	<10
QCV1011-00492-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
912590	Pulp	>10	4153	4	0.04	<1	>10000	17	<5	7	2291	0.03	<10	36	<10
912590 Dup		>10	4068	5	0.04	<1	>10000	20	<5	7	2280	0.03	<10	34	<10
QCV1011-00492-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00492-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.08	375	432	19							



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912536	Rock	11	24												
912536 Dup		13	23												
QCV1011-00492-0002-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5185													
912554	Rock	25	29												
912554 Dup		25	28												
QCV1011-00492-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5187													
912572	Rock	65	76												
912572 Dup		67	77												
QCV1011-00492-0008-BLK		<2	<1												
912590	Pulp	23	34												
912590 Dup		22	33												
QCV1011-00492-0011-BLK		<2	<1												
QCV1011-00492-0013-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		133													
912536	Rock			>1000	21.1	7.1	18.3	46.3	<0.1	2.8	>1000	<0.1	401.0	137.2	51.6
912536 Dup				>1000	20.8	7.0	17.8	46.1	<0.1	3.1	>1000	<0.1	398.5	137.0	52.4
QCV1011-00493-0002-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0		57.0	15.0	12.7
STD-SY-4 result				122.6	19.5	14.6	1.8	14.8	10.6	4.2	59.7		60.0	15.6	13.0
912554	Rock			948.0	20.6	7.0	17.0	41.6	<0.1	2.8	577.4	<0.1	346.0	105.0	48.7
912554 Dup				998.4	23.1	8.0	18.5	44.7	<0.1	3.1	612.0	<0.1	368.3	111.0	51.8
QCV1011-00493-0005-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912572	Rock			>1000	21.4	8.2	18.9	43.7	8.2	2.8	625.0	<0.1	391.8	121.3	52.4
912572 Dup				>1000	21.3	7.3	19.1	44.3	8.9	3.1	624.8	<0.1	394.2	120.6	52.0
QCV1011-00493-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912590	Pulp			756.0	20.1	6.6	18.3	40.9	<0.1	2.5	404.3	<0.1	317.4	91.3	51.5
912590 Dup				773.6	22.0	6.5	20.1	43.9	<0.1	2.9	422.0	<0.1	325.8	93.0	54.7
QCV1011-00493-0011-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
QCV1011-00493-0013-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0		57.0	15.0	12.7
STD-SY-4 result				128.5	19.1	14.8	1.8	15.0	10.4	4.4	62.0		62.4	16.4	13.6



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912536	Rock	3.7	0.2	4.2	75.1			
912536 Dup		3.6	<0.1	3.9	76.4			
QCV1011-00493-0002-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	14.7	116.2			
912554	Rock	3.9	0.1	4.9	80.3			
912554 Dup		4.2	0.1	4.7	85.7			
QCV1011-00493-0005-BLK		<0.1	<0.1	<0.1	<0.10			
912572	Rock	4.0	<0.1	4.6	81.7			
912572 Dup		4.2	0.2	5.5	84.5			
QCV1011-00493-0008-BLK		<0.1	<0.1	<0.1	<0.10			
912590	Pulp	4.1	<0.1	3.9	76.5			
912590 Dup		4.5	<0.1	4.6	79.9			
QCV1011-00493-0011-BLK		<0.1	<0.1	<0.1	<0.10			
QCV1011-00493-0013-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.5	2.3	15.5	122.3			
912536	Rock					26.56	107.50	4.21
912536 Dup						27.85	100.60	4.41
QCV1105-00511-0002-BLK						<0.05	<0.20	<0.10
912554	Rock					10.18	85.26	2.57
912554 Dup						10.74	95.56	2.96
QCV1105-00511-0005-BLK						<0.05	<0.20	<0.10
912572	Rock					8.00	227.58	4.07
912572 Dup						9.00	225.55	3.90
QCV1105-00511-0008-BLK						<0.05	<0.20	<0.10
912590	Pulp					23.57	160.34	9.69
912590 Dup						23.78	153.01	11.77
QCV1105-00511-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00511-0013-BLK						<0.05	<0.20	<0.10



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<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/16/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: ALEY 2010-029</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">68</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p>Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	68	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
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The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912919	Rock	0.27	0.11	<0.01	33.13	<0.01	2.92	0.02	41.66	16.97	0.73	0.05	3.33	0.16	0.01
912921	Rock	0.39	0.21	<0.01	32.83	<0.01	3.46	0.02	41.30	17.29	0.71	0.04	3.37	0.39	0.02
912922	Rock	0.25	0.09	<0.01	32.74	<0.01	3.62	0.01	41.27	17.86	0.71	0.04	3.61	0.31	0.02
912923	Rock	0.42	0.13	<0.01	32.51	<0.01	4.15	0.01	40.74	16.56	0.72	0.04	3.56	0.54	0.02
912924	Rock	0.82	0.21	<0.01	31.26	<0.01	11.81	0.09	33.57	14.27	0.65	0.05	5.86	1.52	0.11
912925	Rock	0.01	14.37	0.13	4.30	0.04	3.84	3.26	1.39	1.48	0.12	3.37	0.29	66.58	0.45
912926	Rock	0.79	0.22	<0.01	34.99	<0.01	6.09	0.04	35.98	15.03	0.60	0.06	6.95	0.94	0.09
912927	Rock	0.97	0.43	<0.01	31.42	<0.01	14.10	0.11	31.59	12.76	0.59	0.05	6.45	1.89	0.34
912928	Rock	0.24	0.23	<0.01	33.39	<0.01	3.90	<0.01	40.85	16.12	0.47	0.04	4.07	0.08	0.01
912929	Rock	0.63	0.35	<0.01	34.42	<0.01	3.22	<0.01	39.75	16.03	0.47	0.04	4.74	0.31	0.01
912930	Pulp	0.71	0.20	0.02	37.46	<0.01	4.62	0.04	38.06	11.40	0.42	0.09	3.80	3.24	0.13
912931	Rock	0.18	0.15	<0.01	34.36	<0.01	2.97	0.02	41.66	17.03	0.79	0.06	3.73	<0.01	<0.01
912932	Rock	0.26	0.12	<0.01	34.28	<0.01	3.03	0.02	41.70	16.07	0.78	0.05	3.63	<0.01	<0.01
912933	Rock	0.69	0.19	<0.01	35.12	<0.01	3.40	0.02	38.06	15.24	0.66	0.04	6.06	0.29	0.03
912934	Rock	1.02	0.42	<0.01	31.87	<0.01	10.58	0.17	33.35	15.02	0.69	0.06	6.32	1.84	0.15
912935	Rock	0.39	0.17	<0.01	34.94	<0.01	3.42	0.01	38.97	16.74	0.69	0.04	5.71	0.63	0.02
912936	Rock	0.21	0.20	<0.01	33.33	<0.01	6.89	0.01	37.23	14.30	0.67	0.05	5.57	0.19	0.02
912937	Rock	0.27	0.16	<0.01	32.10	<0.01	4.64	0.02	40.01	15.75	0.73	0.03	3.86	1.68	0.02
912938	Rock	0.35	0.15	<0.01	35.41	<0.01	4.61	0.02	35.26	14.03	0.69	0.06	9.08	0.09	0.03
912939	Rock	0.12	0.77	<0.01	31.03	<0.01	5.69	0.03	38.70	16.54	0.68	0.05	3.26	3.98	0.04
912941	Rock	0.86	0.49	<0.01	36.06	<0.01	3.79	0.03	33.36	13.43	0.64	0.07	9.03	1.93	0.05
912942	Rock	0.71	2.52	<0.01	29.94	<0.01	6.59	0.03	31.20	15.99	0.49	0.05	7.15	5.50	0.13
912943	Rock	0.61	0.25	<0.01	34.44	<0.01	5.62	0.02	36.46	14.13	0.65	0.04	6.89	0.76	0.08
912944	Rock	0.24	0.20	<0.01	33.18	<0.01	5.72	0.02	38.42	16.05	0.81	0.03	5.19	0.81	0.02
912945	Rock	0.14	0.09	<0.01	35.36	<0.01	4.01	0.01	37.48	15.55	0.77	0.03	5.67	1.23	<0.01
912946	Rock	0.38	0.36	<0.01	33.37	<0.01	5.38	0.02	34.74	15.21	0.44	0.04	5.77	5.11	0.24
912947	Rock	0.70	0.24	<0.01	35.23	<0.01	4.81	0.01	34.86	14.60	0.63	0.05	7.15	1.63	0.05
912948	Rock	0.37	0.31	<0.01	32.38	<0.01	5.12	0.02	38.07	15.74	0.54	0.04	5.01	2.07	0.08
912949	Rock	0.44	0.11	0.01	39.29	<0.01	4.48	0.03	37.28	12.21	0.80	0.04	4.93	0.51	0.04
912950	Pulp	0.78	0.55	0.02	29.56	<0.01	17.22	0.10	31.32	11.86	0.49	0.06	5.36	2.02	0.60
912951	Rock	0.35	0.16	<0.01	34.73	<0.01	5.38	0.02	39.37	13.74	0.61	0.03	4.46	0.36	0.06
912952	Rock	0.30	0.36	<0.01	34.25	<0.01	5.03	0.04	36.44	15.48	0.50	0.04	6.36	0.65	0.10
912953	Rock	0.48	0.10	<0.01	33.35	<0.01	4.79	0.02	39.57	16.44	0.78	0.04	4.45	0.34	0.05
912954	Rock	0.28	0.18	<0.01	34.47	<0.01	4.64	0.04	36.74	15.41	0.69	0.03	5.94	1.07	0.06
912955	Rock	0.14	0.11	<0.01	34.98	<0.01	4.49	<0.01	39.72	13.66	0.68	0.03	4.47	0.71	0.02
912956	Rock	0.60	0.64	<0.01	33.85	<0.01	6.46	0.09	35.08	13.62	0.55	0.08	6.51	2.75	0.12
912957	Rock	0.65	0.69	<0.01	34.59	<0.01	7.93	0.05	32.48	10.93	0.51	0.04	8.49	3.26	0.20
912958	Rock	0.47	0.30	<0.01	33.88	<0.01	5.81	0.03	39.63	13.25	0.85	0.03	2.97	2.13	0.04
912959	Rock	0.25	1.57	<0.01	29.56	<0.01	4.85	0.14	36.10	14.22	0.74	0.03	3.37	8.92	0.06
912960 Dup	Rock	0.26	1.49	<0.01	29.69	<0.01	4.78	0.14	36.52	14.07	0.74	0.03	3.42	8.68	0.06



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		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912961	Rock	0.14	0.19	<0.01	31.92	<0.01	4.52	0.02	40.73	16.59	0.83	0.03	3.01	2.23	0.02
912962	Rock	0.15	1.16	<0.01	29.57	<0.01	4.37	0.07	36.75	16.15	0.70	0.03	4.12	6.64	0.19
912963	Rock	0.16	0.88	<0.01	29.94	<0.01	4.27	0.04	34.66	15.00	0.65	0.03	4.83	9.67	0.06
912964	Rock	0.32	1.55	<0.01	28.27	<0.01	5.64	0.04	32.63	14.92	0.52	0.04	4.12	13.27	0.11
912965	Rock	0.14	0.14	<0.01	35.47	<0.01	5.30	0.02	34.50	14.32	0.76	0.03	8.02	1.71	0.05
912966	Rock	0.04	0.05	<0.01	33.84	<0.01	5.68	0.03	37.10	15.48	0.98	0.04	4.96	1.17	0.01
912967	Rock	0.08	0.12	<0.01	32.48	<0.01	6.39	0.02	41.07	16.06	1.04	0.03	2.05	0.95	0.01
912968	Rock	0.16	0.21	<0.01	33.47	<0.01	4.69	0.03	39.93	16.10	0.69	0.03	4.04	1.22	0.06
912969	Rock	0.14	0.36	0.01	34.76	<0.01	3.94	0.03	37.44	13.70	0.56	0.04	5.68	2.87	0.18
912970	Pulp	0.53	1.74	0.36	45.83	<0.01	4.13	0.70	31.95	2.18	0.91	0.44	2.51	8.45	0.24
912971	Rock	0.45	0.45	<0.01	31.67	<0.01	4.18	0.15	40.30	16.42	0.80	0.06	2.82	2.63	0.03
912972	Rock	0.15	1.54	0.02	27.25	<0.01	5.23	0.63	34.61	14.38	0.70	0.30	2.62	11.31	0.23
912973	Rock	0.18	1.41	0.02	30.51	<0.01	4.62	0.34	36.67	14.32	0.63	0.24	4.33	5.44	0.19
912974	Rock	0.18	1.06	0.02	31.86	<0.01	4.20	0.28	37.63	15.93	0.69	0.11	4.51	4.19	0.13
912975	Rock	0.03	0.14	<0.01	32.49	<0.01	4.52	<0.01	41.40	16.41	0.95	0.04	2.58	1.37	0.01
912976	Rock	0.11	0.37	<0.01	31.48	<0.01	4.20	0.02	40.45	15.76	0.80	0.07	2.52	3.94	0.03
912977	Rock	0.05	0.11	<0.01	32.92	<0.01	3.19	0.01	42.90	18.13	0.85	0.04	2.18	<0.01	<0.01
912978	Rock	0.19	0.11	<0.01	36.15	<0.01	3.58	0.01	40.19	14.29	0.85	0.03	4.09	0.23	0.02
912979	Rock	0.25	0.14	0.01	37.44	<0.01	5.72	0.01	40.52	12.17	0.97	0.02	2.37	0.33	0.03
912980 Dup	Rock	0.22	0.14	0.01	37.10	<0.01	5.72	0.02	40.54	11.84	0.96	0.02	2.34	0.29	0.03
912981	Rock	0.11	0.12	<0.01	34.63	<0.01	4.09	0.02	39.78	15.72	0.81	0.04	4.65	<0.01	0.01
912982	Rock	0.13	0.13	0.01	33.56	<0.01	4.51	0.03	40.97	16.67	0.82	0.05	3.12	0.33	0.01
912983	Rock	0.17	0.06	0.01	34.94	0.01	3.52	0.06	38.85	18.33	0.83	0.06	4.26	0.26	0.01
912984	Rock	0.13	0.24	<0.01	34.83	<0.01	4.09	0.02	37.29	15.67	0.81	0.04	4.78	0.71	0.03
912985	Rock	0.07	0.19	<0.01	34.76	<0.01	3.70	0.01	39.70	17.32	0.85	0.04	3.88	0.59	0.02
912986	Rock	0.17	0.08	<0.01	33.49	<0.01	4.28	0.01	41.55	16.69	0.87	0.04	2.76	0.46	0.02
912987	Rock	0.07	0.06	<0.01	34.14	<0.01	6.77	<0.01	40.85	13.78	1.05	0.02	2.00	0.61	0.05
912988	Rock	0.05	0.06	<0.01	32.67	<0.01	5.01	<0.01	43.19	16.42	0.98	0.02	0.99	0.13	<0.01
912989	Rock	0.13	0.13	<0.01	35.07	<0.01	5.29	<0.01	38.73	14.27	0.73	0.03	4.79	0.87	0.05
912990	Pulp	0.71	0.20	0.02	37.05	<0.01	4.78	0.04	37.83	11.75	0.42	0.10	3.89	3.19	0.14
912991	Rock	0.10	0.10	<0.01	33.96	<0.01	5.23	<0.01	41.40	15.78	0.96	0.02	2.18	1.21	0.02
912992	Rock	0.26	0.21	0.01	35.77	<0.01	5.86	<0.01	37.95	12.35	0.76	0.03	3.68	3.39	0.12



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Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912919	Rock	99.10	1.5	0.05	<5	36	<2	>10	<0.5	3	10	19	1.98	0.01	158
912921	Rock	99.65	1.7	0.12	<5	34	<2	>10	<0.5	3	9	26	2.36	0.01	193
912922	Rock	100.28	1.4	0.03	<5	32	<2	>10	<0.5	3	9	17	2.43	<0.01	182
912923	Rock	99.00	1.3	0.06	<5	37	<2	>10	<0.5	5	9	30	2.77	0.01	188
912924	Rock	99.41	1.2	0.10	<5	42	<2	>10	<0.5	9	11	51	8.46	0.06	269
912925	Rock	99.61	1.0	8.10	<5	877	<2	3.40	<0.5	9	160	<1	2.88	3.08	32
912926	Rock	100.99	1.7	0.12	<5	39	<2	>10	<0.5	6	9	55	4.30	0.03	305
912927	Rock	99.74	1.0	0.21	<5	50	<2	>10	<0.5	8	12	60	9.90	0.09	308
912928	Rock	99.17	2.3	0.12	<5	23	<2	>10	<0.5	4	9	20	2.65	<0.01	209
912929	Rock	99.36	1.6	0.16	<5	24	<2	>10	<0.5	1	9	43	2.25	<0.01	273
912930	Pulp	99.48	1.7	0.10	11	164	<2	>10	<0.5	6	7	24	3.24	0.03	378
912931	Rock	100.79	2.3	0.06	7	48	<2	>10	<0.5	2	9	11	1.91	<0.01	348
912932	Rock	99.68	2.2	0.06	5	46	<2	>10	<0.5	1	9	18	2.16	<0.01	327
912933	Rock	99.12	2.3	0.11	<5	58	<2	>10	<0.5	3	10	46	2.35	<0.01	261
912934	Rock	100.47	1.4	0.22	<5	63	<2	>10	<0.5	8	10	65	7.04	0.13	459
912935	Rock	101.35	2.3	0.09	6	33	<2	>10	<0.5	5	9	26	2.11	<0.01	292
912936	Rock	98.48	2.2	0.11	159	44	<2	>10	<0.5	10	9	12	4.64	<0.01	6323
912937	Rock	99.01	2.3	0.08	12	30	<2	>10	<0.5	7	12	20	3.24	<0.01	459
912938	Rock	99.45	1.9	0.09	13	75	<2	>10	<0.5	9	13	10	3.11	0.01	491
912939	Rock	100.77	2.5	0.38	14	36	<2	>10	<0.5	11	13	8	3.74	0.02	383
912941	Rock	98.88	2.6	0.23	6	41	<2	>10	<0.5	<1	11	59	2.71	0.02	411
912942	Rock	99.58	2.6	1.32	11	31	<2	>10	<0.5	4	19	47	4.57	0.02	662
912943	Rock	99.37	1.9	0.10	9	31	<2	>10	<0.5	7	12	44	3.92	0.02	385
912944	Rock	100.45	1.8	0.10	12	36	<2	>10	<0.5	12	11	18	3.86	0.01	365
912945	Rock	100.21	1.9	0.05	<5	30	<2	>10	<0.5	3	12	11	2.66	<0.01	271
912946	Rock	100.69	1.8	0.21	12	23	<2	>10	<0.5	9	13	33	3.53	<0.01	459
912947	Rock	99.27	2.0	0.09	8	31	<2	>10	<0.5	6	12	46	3.29	<0.01	336
912948	Rock	99.38	1.9	0.17	<5	28	<2	>10	<0.5	7	11	25	3.56	<0.01	341
912949	Rock	99.75	1.8	0.05	<5	71	<2	>10	<0.5	4	10	29	2.97	<0.01	281
912950	Pulp	99.16	2.1	0.26	<5	135	<2	>10	<0.5	12	8	62	>10	0.07	353
912951	Rock	98.94	1.4	0.09	10	35	<2	>10	<0.5	11	11	26	3.77	<0.01	348
912952	Rock	99.25	2.1	0.18	12	28	<2	>10	<0.5	9	13	25	3.47	0.02	376
912953	Rock	99.95	2.4	0.05	10	36	<2	>10	<0.5	7	11	35	3.47	0.01	418
912954	Rock	99.28	1.9	0.09	9	44	<2	>10	<0.5	7	12	20	3.19	0.02	323
912955	Rock	98.88	3.0	0.05	22	58	<2	>10	<0.5	5	11	9	2.98	<0.01	809
912956	Rock	99.77	3.1	0.30	27	47	<2	>10	<0.5	9	12	38	4.44	0.07	890
912957	Rock	99.19	3.1	0.32	16	66	<2	>10	<0.5	10	10	43	5.35	0.04	533
912958	Rock	98.95	3.3	0.17	32	69	<2	>10	<0.5	4	13	28	3.91	0.02	1320
912959	Rock	99.57	3.3	0.84	9	65	<2	>10	<0.5	5	24	17	3.46	0.11	368
912960 Dup	Rock	99.64	3.2	0.79	8	62	<2	>10	<0.5	4	21	17	3.26	0.10	357



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912961	Rock	100.09	3.3	0.09	9	42	<2	>10	<0.5	6	12	9	3.03	0.02	328
912962	Rock	99.75	3.2	0.60	9	35	<2	>10	<0.5	7	20	11	3.01	0.05	301
912963	Rock	100.04	3.6	0.45	11	45	<2	>10	<0.5	6	18	11	3.11	0.03	405
912964	Rock	101.12	3.5	0.83	8	36	<2	>10	<0.5	13	26	20	3.84	0.03	326
912965	Rock	100.31	3.7	0.07	16	94	<2	>10	<0.5	10	12	9	3.62	<0.01	457
912966	Rock	99.34	<0.5	0.02	36	32	<2	>10	<0.5	8	16	5	3.95	<0.01	1655
912967	Rock	100.22	<0.5	0.06	51	31	<2	>10	<0.5	9	12	2	4.47	<0.01	2226
912968	Rock	100.49	<0.5	0.12	14	70	<2	>10	<0.5	8	10	11	3.07	0.02	394
912969	Rock	99.59	0.6	0.19	21	90	<2	>10	<0.5	6	10	9	2.65	0.02	367
912970	Pulp	99.44	0.8	0.91	23	2859	<2	>10	<0.5	4	10	37	2.82	0.53	944
912971	Rock	99.53	0.8	0.23	19	59	<2	>10	<0.5	4	11	34	2.83	0.11	685
912972	Rock	98.82	0.6	0.80	19	131	<2	>10	<0.5	7	26	14	3.65	0.46	375
912973	Rock	98.72	0.7	0.79	30	146	<2	>10	<0.5	6	14	16	3.20	0.25	378
912974	Rock	100.61	<0.5	0.50	17	149	<2	>10	<0.5	6	14	13	2.87	0.21	327
912975	Rock	99.92	1.3	0.07	14	58	<2	>10	<0.5	5	10	4	3.01	<0.01	284
912976	Rock	99.66	<0.5	0.17	13	68	<2	>10	<0.5	3	14	8	3.14	0.02	402
912977	Rock	100.36	0.8	0.07	11	67	<2	>10	<0.5	3	16	5	2.33	<0.01	406
912978	Rock	99.57	0.6	0.06	7	70	<2	>10	<0.5	4	10	16	3.25	<0.01	261
912979	Rock	99.75	1.1	0.08	8	90	<2	>10	<0.5	5	10	13	3.85	<0.01	252
912980 Dup	Rock	99.01	0.9	0.08	9	98	<2	>10	<0.5	5	10	13	4.06	<0.01	265
912981	Rock	99.90	1.2	0.06	10	67	<2	>10	<0.5	5	10	10	2.81	0.01	386
912982	Rock	100.20	1.2	0.07	20	95	<2	>10	<0.5	13	9	10	3.20	0.02	606
912983	Rock	101.21	0.9	0.04	9	55	<2	>10	<0.5	5	11	13	2.43	<0.01	372
912984	Rock	98.53	0.8	0.12	15	61	<2	>10	<0.5	5	9	13	2.79	0.01	539
912985	Rock	101.08	1.3	0.11	19	63	<2	>10	<0.5	3	11	7	2.55	<0.01	680
912986	Rock	100.27	1.4	0.04	38	85	<2	>10	<0.5	3	10	13	2.92	<0.01	1684
912987	Rock	99.34	1.8	0.02	133	75	<2	>10	<0.5	5	11	4	4.58	<0.01	5540
912988	Rock	99.49	0.9	0.03	39	42	<2	>10	<0.5	5	10	4	3.22	<0.01	1629
912989	Rock	99.97	1.4	0.06	22	68	<2	>10	<0.5	8	11	11	3.90	<0.01	710
912990	Pulp	99.42	1.5	0.10	12	165	<2	>10	<0.5	5	7	46	3.52	0.03	373
912991	Rock	100.88	1.8	0.04	23	49	<2	>10	<0.5	6	11	7	3.74	<0.01	778
912992	Rock	100.15	1.6	0.11	33	86	<2	>10	<0.5	11	13	18	4.15	<0.01	884

Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
912919	Rock	>10	5039	2	0.03	<1	>10000	75	<5	4	4888	<0.01	<10	6	<10
912921	Rock	>10	4925	5	0.03	<1	>10000	106	<5	6	4470	<0.01	<10	9	<10
912922	Rock	>10	4969	2	0.03	<1	>10000	72	<5	5	4028	<0.01	<10	13	<10
912923	Rock	>10	5103	2	0.03	<1	>10000	114	<5	5	3869	<0.01	<10	13	<10
912924	Rock	9.57	4723	2	0.04	<1	>10000	205	<5	4	4117	0.05	<10	124	<10
912925	Rock	0.99	718	3	2.77	5	1150	10	<5	5	677	0.29	<10	54	<10
912926	Rock	9.84	4235	4	0.04	<1	>10000	193	<5	5	3702	0.04	<10	54	<10
912927	Rock	8.55	4160	14	0.04	2	>10000	248	<5	6	3654	0.19	<10	214	<10
912928	Rock	>10	3174	2	0.03	<1	>10000	72	<5	9	1868	<0.01	<10	23	<10
912929	Rock	>10	3328	2	0.03	<1	>10000	164	<5	8	2194	<0.01	<10	18	<10
912930	Pulp	7.77	2920	2	0.06	<1	>10000	98	<5	7	2250	0.05	<10	74	<10
912931	Rock	>10	5066	2	0.03	<1	>10000	48	<5	5	3765	<0.01	<10	7	<10
912932	Rock	>10	5488	3	0.03	<1	>10000	72	<5	5	4136	<0.01	<10	9	<10
912933	Rock	>10	4497	3	0.03	<1	>10000	180	<5	6	4274	0.02	<10	17	<10
912934	Rock	8.85	4544	2	0.04	<1	>10000	249	<5	4	4263	0.07	<10	97	<10
912935	Rock	9.45	4140	3	0.03	<1	>10000	102	<5	5	3730	<0.01	<10	10	<10
912936	Rock	8.68	4380	7	0.03	<1	>10000	69	<5	15	2062	<0.01	<10	23	<10
912937	Rock	>10	5174	2	0.02	<1	>10000	83	<5	7	3317	<0.01	<10	15	<10
912938	Rock	9.07	4789	3	0.04	<1	>10000	22	<5	4	3931	<0.01	<10	13	<10
912939	Rock	>10	4637	10	0.03	<1	>10000	41	<5	9	2730	<0.01	<10	22	<10
912941	Rock	9.11	4660	2	0.05	<1	>10000	233	<5	9	4239	0.03	<10	18	<10
912942	Rock	9.66	3505	2	0.03	1	>10000	184	<5	13	2980	0.04	<10	68	<10
912943	Rock	9.40	4617	2	0.03	<1	>10000	162	<5	8	2862	0.03	<10	48	<10
912944	Rock	9.83	5647	2	0.02	<1	>10000	68	<5	7	3119	<0.01	<10	25	<10
912945	Rock	>10	5150	2	0.02	<1	>10000	45	<5	6	3162	<0.01	<10	15	<10
912946	Rock	9.14	2879	2	0.03	<1	>10000	109	<5	8	1403	0.08	<10	48	<10
912947	Rock	9.24	4168	2	0.03	<1	>10000	185	<5	7	2586	0.03	<10	18	<10
912948	Rock	9.62	3728	1	0.03	<1	>10000	109	<5	8	2510	0.04	<10	53	<10
912949	Rock	7.99	5423	4	0.03	<1	>10000	122	<5	10	3684	0.02	<10	21	<10
912950	Pulp	7.75	3422	3	0.04	2	>10000	209	<5	6	1815	0.16	<10	209	<10
912951	Rock	9.93	4449	2	0.02	<1	>10000	98	<5	10	2576	0.02	<10	23	<10
912952	Rock	9.75	3533	1	0.03	3	>10000	86	<5	14	2018	0.03	<10	54	<10
912953	Rock	>10	5747	2	0.03	<1	>10000	129	<5	8	3793	0.02	<10	16	<10
912954	Rock	9.73	4993	2	0.02	<1	>10000	78	<5	7	2732	0.01	<10	21	<10
912955	Rock	9.53	4700	2	0.02	<1	>10000	52	<5	9	1987	<0.01	<10	21	<10
912956	Rock	9.37	3920	2	0.06	<1	>10000	164	<5	10	1810	0.04	<10	48	<10
912957	Rock	8.27	3433	2	0.03	1	>10000	181	<5	10	1889	0.05	<10	83	<10
912958	Rock	9.27	5687	3	0.02	<1	>10000	131	<5	10	1854	0.02	<10	24	<10
912959	Rock	9.59	5165	1	0.02	1	>10000	75	<5	12	2490	0.02	<10	29	<10
912960 Dup	Rock	9.31	4971	2	0.02	<1	>10000	76	<5	12	2418	0.02	<10	28	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912961	Rock	>10	5696	1	0.02	<1	>10000	46	<5	7	2895	<0.01	<10	15	<10
912962	Rock	>10	4995	1	0.02	<1	>10000	54	<5	8	2658	0.04	<10	30	<10
912963	Rock	9.85	4733	2	0.02	<1	>10000	51	<5	13	2835	0.02	<10	28	<10
912964	Rock	9.03	3529	2	0.03	3	>10000	91	<5	10	2111	0.03	<10	65	<10
912965	Rock	8.93	5301	2	0.02	<1	>10000	35	<5	7	2612	0.01	<10	21	<10
912966	Rock	9.99	6876	2	0.02	<1	>10000	27	<5	9	2688	<0.01	<10	18	<10
912967	Rock	>10	7408	3	0.02	<1	8067	23	<5	9	3144	<0.01	<10	21	<10
912968	Rock	>10	4689	2	0.02	<1	>10000	50	<5	7	2654	0.02	<10	26	<10
912969	Rock	9.17	3874	2	0.03	<1	>10000	42	<5	8	2640	0.04	<10	32	<10
912970	Pulp	1.33	6481	13	0.32	<1	>10000	74	<5	4	>10000	0.14	<10	172	<10
912971	Rock	>10	5539	2	0.04	<1	>10000	127	<5	6	3520	0.01	<10	13	<10
912972	Rock	9.70	5012	2	0.21	4	>10000	48	<5	13	3069	0.08	<10	51	<10
912973	Rock	9.58	4582	4	0.17	3	>10000	56	<5	9	3253	0.05	<10	41	<10
912974	Rock	9.46	4748	4	0.07	2	>10000	53	<5	10	3445	0.04	<10	35	<10
912975	Rock	9.88	6381	6	0.03	<1	>10000	20	<5	8	3878	<0.01	<10	13	<10
912976	Rock	>10	5967	8	0.05	<1	>10000	39	<5	11	3789	<0.01	<10	24	<10
912977	Rock	>10	6251	7	0.03	<1	8793	26	<5	8	4378	<0.01	<10	12	<10
912978	Rock	>10	6467	3	0.02	<1	>10000	62	<5	7	4134	<0.01	<10	12	<10
912979	Rock	8.16	7256	6	0.02	<1	9079	58	<5	9	2261	<0.01	<10	25	<10
912980 Dup	Rock	8.26	7172	5	0.02	<1	9390	56	<5	9	2449	<0.01	<10	26	<10
912981	Rock	9.91	5663	4	0.03	<1	>10000	43	<5	7	3762	<0.01	<10	15	<10
912982	Rock	>10	5914	6	0.03	<1	>10000	47	<5	9	3745	<0.01	<10	11	<10
912983	Rock	>10	5760	2	0.03	<1	>10000	52	<5	7	4218	<0.01	<10	9	<10
912984	Rock	>10	5568	2	0.03	<1	>10000	51	<5	8	3705	<0.01	<10	15	<10
912985	Rock	>10	5791	2	0.03	<1	>10000	28	<5	9	3575	<0.01	<10	18	<10
912986	Rock	>10	6060	3	0.03	<1	>10000	60	<5	10	3126	<0.01	<10	15	<10
912987	Rock	9.56	7253	6	0.02	<1	8012	43	<5	15	2138	<0.01	<10	24	<10
912988	Rock	>10	6571	3	0.01	<1	3867	28	<5	10	3432	<0.01	<10	16	<10
912989	Rock	>10	5494	2	0.02	<1	>10000	52	<5	8	3212	0.02	<10	36	<10
912990	Pulp	8.50	3204	3	0.06	<1	>10000	180	<5	8	2461	0.06	<10	76	<10
912991	Rock	>10	7002	3	0.02	<1	8419	36	<5	8	3283	<0.01	<10	19	<10
912992	Rock	8.36	5548	4	0.02	<1	>10000	74	<5	9	2629	0.03	<10	43	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912919	Rock	16	17	375.9	8.4	1.6	5.9	19.8	<0.1	<0.1	165.7	<0.1	166.4	45.2	25.3
912921	Rock	18	23	422.5	10.9	2.5	7.7	23.9	<0.1	0.1	193.2	<0.1	190.6	51.9	33.2
912922	Rock	16	22	362.0	10.0	2.5	6.4	20.8	<0.1	0.4	167.3	<0.1	155.6	43.3	26.0
912923	Rock	16	26	409.8	9.6	3.2	6.6	20.5	<0.1	0.2	191.3	<0.1	165.1	47.3	26.2
912924	Rock	45	78	618.1	14.1	3.1	10.6	31.8	2.4	0.9	278.6	<0.1	269.0	74.8	41.4
912925	Rock	54	8	69.2	1.4	0.5	<0.1	3.1	<0.1	<0.1	35.4	<0.1	27.9	6.8	3.6
912926	Rock	22	66	698.8	21.0	7.0	12.8	40.8	2.0	2.4	314.7	<0.1	296.1	82.6	50.3
912927	Rock	53	47	773.4	25.8	9.1	14.2	42.9	2.8	3.5	350.8	<0.1	339.2	93.0	54.8
912928	Rock	11	41	550.7	24.0	9.4	8.5	31.8	<0.1	3.8	260.4	<0.1	221.4	63.5	36.2
912929	Rock	11	67	591.2	20.9	7.9	11.0	34.9	<0.1	2.9	279.6	<0.1	248.1	68.7	42.2
912930	Pulp	12	36	852.7	20.8	8.5	13.9	43.1	<0.1	2.9	403.0	<0.1	345.1	96.9	53.4
912931	Rock	16	19	722.9	11.6	3.0	7.2	27.1	<0.1	0.4	350.7	<0.1	276.0	81.2	38.2
912932	Rock	16	29	691.5	11.8	2.9	6.7	27.3	<0.1	0.5	373.8	<0.1	255.3	75.5	34.4
912933	Rock	14	56	701.4	22.6	8.2	13.8	42.9	<0.1	3.5	304.1	<0.1	305.9	84.5	51.1
912934	Rock	42	85	>1000	16.1	3.9	13.8	42.4	3.2	1.2	577.8	<0.1	388.0	114.0	56.1
912935	Rock	16	27	733.9	15.3	4.5	10.8	35.0	<0.1	1.5	376.0	<0.1	294.5	83.7	44.7
912936	Rock	16	30	>1000	41.0	9.4	45.3	163.1	<0.1	4.5	>1000	<0.1	>1000	740.7	197.1
912937	Rock	18	29	981.8	21.2	8.5	13.1	43.6	0.7	3.1	573.5	<0.1	350.3	103.6	52.1
912938	Rock	17	25	>1000	39.6	16.3	21.1	68.0	<0.1	6.9	574.4	<0.1	482.8	134.9	80.2
912939	Rock	20	38	905.5	18.2	6.3	11.2	40.9	1.6	2.0	472.4	<0.1	350.6	103.6	55.0
912941	Rock	20	44	>1000	36.3	11.4	23.7	72.3	<0.1	5.3	593.9	<0.1	550.5	156.5	89.6
912942	Rock	21	38	>1000	42.0	14.2	27.7	87.3	12.1	6.0	>1000	<0.1	748.0	223.3	111.3
912943	Rock	19	63	>1000	36.3	16.3	19.2	59.8	4.8	6.6	483.5	0.1	433.5	123.8	74.4
912944	Rock	21	85	903.3	20.0	7.7	11.1	40.7	0.5	2.7	468.1	<0.1	358.0	104.2	52.5
912945	Rock	20	71	672.3	18.4	7.4	9.4	34.9	<0.1	2.1	331.5	<0.1	280.5	78.3	44.0
912946	Rock	15	31	>1000	25.9	10.3	17.2	55.4	5.4	3.8	550.4	<0.1	456.8	129.3	71.3
912947	Rock	17	54	815.0	27.1	10.7	16.9	49.7	0.6	4.3	379.8	<0.1	353.9	98.6	60.2
912948	Rock	14	43	726.3	15.6	5.3	12.1	37.9	2.0	1.6	355.2	<0.1	291.2	82.3	44.3
912949	Rock	21	21	716.6	17.4	5.0	12.7	36.7	<0.1	1.8	325.9	<0.1	308.5	86.0	47.5
912950	Pulp	58	62	863.0	21.9	6.6	14.9	44.9	4.6	2.6	416.5	<0.1	360.0	101.2	56.9
912951	Rock	17	29	748.8	19.9	6.9	12.7	39.8	1.8	2.4	385.4	<0.1	296.3	86.7	47.0
912952	Rock	17	26	889.0	22.6	8.3	15.3	43.9	1.8	3.0	460.1	<0.1	351.7	101.9	55.2
912953	Rock	21	35	886.1	17.6	6.3	12.4	37.4	<0.1	2.0	463.5	<0.1	341.7	98.9	49.4
912954	Rock	19	65	755.4	19.6	7.6	11.4	37.0	1.2	2.6	392.4	<0.1	299.5	86.1	45.1
912955	Rock	19	56	>1000	24.9	8.8	18.2	67.6	1.3	3.1	>1000	<0.1	689.3	208.8	92.2
912956	Rock	18	54	>1000	38.8	13.5	30.9	96.8	2.5	6.0	>1000	<0.1	958.4	290.3	125.2
912957	Rock	20	64	>1000	48.6	19.4	30.9	84.1	14.3	8.2	915.1	0.1	634.5	187.9	100.8
912958	Rock	19	55	>1000	16.6	4.6	15.9	53.2	<0.1	1.4	>1000	<0.1	637.3	212.8	70.3
912959	Rock	24	35	767.2	18.2	7.0	11.5	36.0	2.3	2.2	405.9	<0.1	297.6	85.8	43.7
912960 Dup	Rock	22	35	753.2	17.7	6.1	11.2	34.1	2.2	2.2	398.9	<0.1	284.6	84.7	43.4



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912961	Rock	18	38	661.3	10.9	3.4	7.5	26.0	<0.1	0.5	349.3	<0.1	247.5	72.8	33.5
912962	Rock	20	52	610.9	15.4	6.0	8.3	26.5	<0.1	1.6	332.8	<0.1	226.1	66.0	33.1
912963	Rock	23	42	918.2	17.3	6.3	11.8	38.7	0.7	1.7	479.5	<0.1	343.6	101.1	49.7
912964	Rock	24	36	868.1	16.5	5.0	12.0	39.0	2.2	1.7	429.7	<0.1	345.4	100.6	50.3
912965	Rock	21	115	985.0	33.3	15.0	17.1	55.3	1.0	5.7	519.6	<0.1	402.8	113.7	62.9
912966	Rock	24	83	>1000	34.3	13.1	23.1	84.0	<0.1	5.2	>1000	<0.1	964.6	296.2	121.8
912967	Rock	24	17	>1000	33.9	12.9	18.9	72.4	<0.1	5.2	>1000	<0.1	760.7	269.9	79.3
912968	Rock	16	35	823.8	17.6	6.4	10.5	34.6	<0.1	2.1	454.9	<0.1	297.9	88.5	41.7
912969	Rock	15	19	853.8	20.8	6.5	12.9	43.6	0.2	2.2	448.5	<0.1	338.0	96.9	51.7
912970	Pulp	433	87	>1000	14.1	4.6	14.3	45.1	<0.1	1.1	>1000	<0.1	525.3	182.7	58.3
912971	Rock	25	22	>1000	11.3	2.7	8.9	30.0	<0.1	0.3	774.9	<0.1	291.8	100.8	34.3
912972	Rock	37	27	719.7	12.5	3.5	7.2	26.9	<0.1	0.8	398.8	<0.1	264.9	78.7	38.3
912973	Rock	27	16	711.1	13.9	4.3	9.5	30.9	0.2	1.1	390.0	<0.1	258.8	77.6	38.1
912974	Rock	25	24	673.1	15.4	5.1	10.1	31.9	<0.1	1.6	351.3	<0.1	259.4	76.7	37.7
912975	Rock	19	10	631.9	9.3	2.1	6.4	24.1	<0.1	<0.1	322.3	<0.1	241.9	71.6	31.2
912976	Rock	23	15	>1000	13.5	3.5	11.1	37.6	<0.1	0.7	541.0	<0.1	369.2	111.0	50.7
912977	Rock	23	12	874.2	11.8	3.1	8.4	31.7	<0.1	0.4	478.2	<0.1	301.3	93.3	40.0
912978	Rock	20	19	635.5	14.3	4.8	8.7	32.0	<0.1	1.2	301.0	<0.1	258.4	75.0	38.8
912979	Rock	25	36	583.8	18.4	7.3	8.4	30.7	<0.1	2.6	301.9	<0.1	228.6	66.3	35.3
912980 Dup	Rock	26	38	628.7	19.2	7.1	8.3	32.4	<0.1	2.6	323.1	<0.1	244.9	71.4	38.9
912981	Rock	24	36	815.0	22.5	8.5	10.8	39.4	<0.1	3.2	439.0	<0.1	310.9	91.2	47.7
912982	Rock	21	16	>1000	16.1	4.4	12.4	44.0	<0.1	1.1	800.6	<0.1	431.1	141.2	56.5
912983	Rock	20	20	872.0	15.1	4.0	10.4	36.6	<0.1	1.2	444.3	<0.1	321.0	98.7	44.9
912984	Rock	18	40	>1000	20.3	6.6	13.7	44.2	<0.1	2.4	634.0	<0.1	391.9	120.2	54.4
912985	Rock	20	27	>1000	17.9	5.9	10.9	40.5	<0.1	1.9	833.9	<0.1	402.9	131.2	48.6
912986	Rock	21	35	>1000	20.3	6.3	13.8	52.6	<0.1	2.1	>1000	<0.1	613.1	227.9	60.1
912987	Rock	23	46	>1000	29.9	6.7	27.9	112.9	<0.1	2.7	>1000	<0.1	>1000	614.7	136.6
912988	Rock	22	22	>1000	11.3	2.1	13.2	48.0	<0.1	0.1	>1000	<0.1	637.1	228.8	59.7
912989	Rock	21	61	>1000	22.0	8.6	10.9	38.0	0.1	2.9	827.3	<0.1	337.9	112.9	42.3
912990	Pulp	12	42	925.7	23.4	8.0	15.3	49.2	<0.1	2.9	440.4	<0.1	366.0	105.3	57.7
912991	Rock	23	25	>1000	12.1	3.1	7.6	27.2	<0.1	0.6	920.6	<0.1	325.6	115.9	32.7
912992	Rock	20	33	>1000	21.6	8.2	14.2	43.0	0.3	2.8	>1000	<0.1	429.6	149.6	46.4



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912919	Rock	0.5	<0.1	0.4	30.4	6.01	44.31	1.00
912921	Rock	0.8	<0.1	1.0	39.3	6.75	97.07	1.93
912922	Rock	0.7	<0.1	1.2	40.4	7.76	96.26	1.29
912923	Rock	0.6	<0.1	1.4	42.7	6.00	106.97	1.34
912924	Rock	1.6	<0.1	1.5	50.1	12.19	169.37	2.23
912925	Rock	<0.1	<0.1	0.5	15.2	1.69	10.15	4.07
912926	Rock	3.0	<0.1	3.8	82.5	14.57	192.70	4.25
912927	Rock	3.4	<0.1	5.5	105.4	14.58	229.22	4.49
912928	Rock	2.7	<0.1	6.9	100.6	37.74	250.84	5.28
912929	Rock	2.7	<0.1	5.6	92.4	100.21	554.43	13.00
912930	Pulp	3.1	<0.1	5.9	91.6	2.06	186.24	2.12
912931	Rock	0.9	<0.1	2.1	45.0	8.24	154.61	1.32
912932	Rock	1.0	<0.1	1.5	49.9	8.01	190.17	1.36
912933	Rock	3.1	<0.1	4.9	99.5	12.94	253.61	2.70
912934	Rock	2.1	<0.1	1.8	57.3	18.19	218.70	2.97
912935	Rock	2.0	<0.1	2.4	62.0	11.52	120.55	3.09
912936	Rock	5.7	<0.1	7.5	136.5	1.77	260.01	8.53
912937	Rock	2.8	<0.1	5.8	96.2	2.16	216.70	4.69
912938	Rock	6.1	0.9	9.9	171.1	2.26	209.18	9.44
912939	Rock	2.4	<0.1	3.7	76.1	58.47	202.79	29.01
912941	Rock	5.6	0.1	8.2	140.2	6.01	205.93	6.59
912942	Rock	6.5	0.5	9.3	158.6	5.27	117.95	6.40
912943	Rock	5.1	1.0	11.6	168.3	4.84	347.49	9.61
912944	Rock	2.3	<0.1	6.7	92.4	2.62	354.81	5.65
912945	Rock	2.2	<0.1	5.9	82.7	1.41	271.61	4.30
912946	Rock	4.0	<0.1	6.9	116.3	6.01	120.05	4.08
912947	Rock	3.8	0.2	8.1	128.1	3.37	264.59	8.08
912948	Rock	2.0	<0.1	3.0	65.3	31.91	91.48	6.22
912949	Rock	2.0	<0.1	2.9	71.0	1.51	70.45	4.09
912950	Pulp	3.1	<0.1	4.2	82.0	37.05	316.91	9.26
912951	Rock	2.6	<0.1	4.9	87.7	28.99	156.02	7.77
912952	Rock	3.2	<0.1	5.9	96.6	13.35	116.44	8.37
912953	Rock	2.0	<0.1	4.6	76.0	5.38	182.26	8.49
912954	Rock	2.4	<0.1	5.7	89.1	1.80	221.41	8.73
912955	Rock	3.5	<0.1	8.2	100.2	1.29	206.07	6.48
912956	Rock	5.8	0.5	10.7	150.6	37.16	256.40	14.55
912957	Rock	7.5	1.6	13.3	199.6	37.14	397.93	12.89
912958	Rock	1.7	<0.1	3.5	68.1	40.56	427.33	10.48
912959	Rock	2.1	<0.1	5.1	85.2	6.17	196.54	7.15
912960 Dup	Rock	1.9	<0.1	5.3	80.4	5.78	190.25	6.80



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03593-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912961	Rock	0.9	<0.1	2.0	50.2	13.27	165.55	17.78
912962	Rock	1.7	<0.1	4.7	72.0	9.70	216.91	12.12
912963	Rock	2.1	<0.1	4.4	71.9	9.75	217.54	8.76
912964	Rock	2.3	<0.1	3.8	67.0	12.07	125.04	10.24
912965	Rock	4.8	0.9	11.8	152.6	2.75	533.56	20.20
912966	Rock	4.7	0.4	8.8	138.2	1.58	761.79	11.44
912967	Rock	4.1	0.3	8.2	145.5	0.63	160.76	7.82
912968	Rock	2.0	<0.1	4.0	75.6	58.30	155.45	10.93
912969	Rock	2.7	<0.1	4.2	81.1	15.02	99.76	6.80
912970	Pulp	1.3	<0.1	3.7	62.8	44.94	60.30	32.43
912971	Rock	0.8	<0.1	0.9	46.0	11.33	139.66	6.25
912972	Rock	1.1	<0.1	1.9	51.6	10.58	186.84	7.07
912973	Rock	1.6	<0.1	2.5	57.3	8.06	128.33	7.84
912974	Rock	1.7	<0.1	2.7	65.7	11.77	107.52	10.81
912975	Rock	0.6	<0.1	0.6	34.4	2.81	100.42	4.71
912976	Rock	1.6	<0.1	1.9	50.2	6.63	155.15	4.74
912977	Rock	1.2	<0.1	1.3	46.3	0.39	140.15	1.72
912978	Rock	1.5	<0.1	2.3	61.7	18.36	119.40	4.31
912979	Rock	2.0	<0.1	4.3	83.7	0.40	339.27	5.49
912980 Dup	Rock	1.9	<0.1	4.6	85.1	0.29	327.38	5.30
912981	Rock	2.8	<0.1	4.6	97.0	9.78	331.09	4.64
912982	Rock	1.9	<0.1	2.2	61.0	3.02	118.71	2.86
912983	Rock	1.8	<0.1	2.0	60.3	8.16	154.82	5.66
912984	Rock	2.7	<0.1	3.9	79.5	49.37	269.76	17.98
912985	Rock	2.1	<0.1	3.4	72.3	9.31	209.13	4.97
912986	Rock	2.0	<0.1	4.5	80.8	5.94	269.25	6.04
912987	Rock	2.7	<0.1	4.8	99.1	0.29	399.97	4.88
912988	Rock	0.8	<0.1	1.1	44.2	0.92	164.01	2.67
912989	Rock	2.2	<0.1	5.8	98.7	11.77	275.67	5.66
912990	Pulp	3.3	<0.1	6.7	97.0	47.24	207.49	2.55
912991	Rock	0.6	<0.1	1.9	49.2	12.82	158.29	5.86
912992	Rock	2.3	<0.1	5.4	98.4	21.72	218.02	11.37



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912919	Rock	0.27													
912919 Dup		0.28													
QCV1011-00526-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.55													
912938	Rock	0.35													
912938 Dup		0.35													
QCV1011-00526-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
912957	Rock	0.65													
912957 Dup		0.67													
QCV1011-00526-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
912975	Rock	0.03													
912975 Dup		0.03													
QCV1011-00526-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1011-00526-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.55													
912919	Rock		0.11	<0.01	33.13	<0.01	2.92	0.02	41.66	16.97	0.73	0.05	3.33	0.16	0.01
912919 Dup			0.11	<0.01	33.18	<0.01	2.92	0.02	41.71	17.03	0.72	0.04	3.34	0.17	0.01
QCV1011-00537-0002-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result											0.26	2.44	0.09		
912938	Rock		0.15	<0.01	35.41	<0.01	4.61	0.02	35.26	14.03	0.69	0.06	9.08	0.09	0.03
912938 Dup			0.15	<0.01	35.34	<0.01	4.54	0.02	35.36	13.97	0.68	0.06	8.93	0.10	0.02
QCV1011-00537-0005-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result											0.27	2.48	0.10		
912957	Rock		0.69	<0.01	34.59	<0.01	7.93	0.05	32.48	10.93	0.51	0.04	8.49	3.26	0.20
912957 Dup			0.70	<0.01	34.85	<0.01	7.81	0.05	32.51	11.04	0.52	0.04	8.41	3.37	0.19
QCV1011-00537-0008-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result											0.25	2.37	0.10		
912975	Rock		0.14	<0.01	32.49	<0.01	4.52	<0.01	41.40	16.41	0.95	0.04	2.58	1.37	0.01
912975 Dup			0.13	<0.01	33.08	<0.01	4.56	<0.01	41.38	16.29	0.97	0.04	2.57	1.34	0.01



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
QCV1011-00537-0011-BLK		0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result											0.26	2.46	0.10		
QCV1011-00537-0013-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.19	0.04	8.21	<0.01	6.37	1.60	4.58	0.53	0.12	7.60	0.14	50.08	0.31

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10-360-03593-01

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Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
912919	Rock	0.01	1.5	0.05	<5	36	<2	>10	<0.5	3	10	19	1.98	0.01	158
912919 Dup			1.5	0.05	<5	37	<2	>10	<0.5	3	10	18	1.90	0.01	163
QCV1011-00527-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										119	1006	661			
912938	Rock		1.9	0.09	13	75	<2	>10	<0.5	9	13	10	3.11	0.01	491
912938 Dup			2.0	0.08	14	74	<2	>10	<0.5	7	11	12	3.25	0.01	494
QCV1011-00527-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			63.7									988			
912957	Rock		3.1	0.32	16	66	<2	>10	<0.5	10	10	43	5.35	0.04	533
912957 Dup			3.2	0.32	22	90	<2	>10	<0.5	10	10	42	5.24	0.04	710
QCV1011-00527-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			99.1									6234			
912975	Rock		1.3	0.07	14	58	<2	>10	<0.5	5	10	4	3.01	<0.01	284
912975 Dup			1.1	0.07	14	62	<2	>10	<0.5	5	10	3	3.17	<0.01	280
QCV1011-00527-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			64.3									1003			
912919	Rock		99.10												
912919 Dup			99.26												
QCV1011-00537-0002-BLK			<0.01												
912938	Rock		99.45												
912938 Dup			99.17												
QCV1011-00537-0005-BLK			<0.01												
912957	Rock		99.19												
912957 Dup			99.50												
QCV1011-00537-0008-BLK			<0.01												
912975	Rock		99.92												
912975 Dup			100.38												
QCV1011-00537-0011-BLK			<0.01												
QCV1011-00537-0013-BLK			<0.01												
STD-SY-4 expected															
STD-SY-4 result			99.77												



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912919	Rock	>10	5039	2	0.03	<1	>10000	75	<5	4	4888	<0.01	<10	6	<10
912919 Dup		>10	4869	3	0.03	<1	>10000	73	<5	5	4726	<0.01	<10	6	<10
QCV1011-00527-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454								
STD-OREAS-45P-4A result					0.08	355	448								
912938	Rock	9.07	4789	3	0.04	<1	>10000	22	<5	4	3931	<0.01	<10	13	<10
912938 Dup		9.45	5007	2	0.04	<1	>10000	62	<5	5	4109	0.01	<10	14	<10
QCV1011-00527-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
912957	Rock	8.27	3433	2	0.03	1	>10000	181	<5	10	1889	0.05	<10	83	<10
912957 Dup		8.07	3345	3	0.03	1	>10000	182	<5	11	1843	0.06	<10	86	<10
QCV1011-00527-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9962							
912975	Rock	9.88	6381	6	0.03	<1	>10000	20	<5	8	3878	<0.01	<10	13	<10
912975 Dup		>10	6781	6	0.02	<1	>10000	21	<5	8	4060	<0.01	<10	13	<10
QCV1011-00527-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00527-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912919	Rock	16	17												
912919 Dup		16	16												
QCV1011-00527-0002-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		143													
912938	Rock	17	25												
912938 Dup		17	34												
QCV1011-00527-0005-BLK		<2	<1												
912957	Rock	20	64												
912957 Dup		20	70												
QCV1011-00527-0008-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5267													
912975	Rock	19	10												
912975 Dup		19	10												
QCV1011-00527-0011-BLK		<2	<1												
QCV1011-00527-0013-BLK		<2	<1												
QCV1011-00529-0001-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912919	Rock			375.9	8.4	1.6	5.9	19.8	<0.1	<0.1	165.7	<0.1	166.4	45.2	25.3
912919 Dup				356.7	7.8	1.7	5.9	18.9	<0.1	<0.1	157.4	<0.1	155.2	42.0	26.1
912938	Rock			>1000	39.6	16.3	21.1	68.0	<0.1	6.9	574.4	<0.1	482.8	134.9	80.2
912938 Dup				>1000	39.2	15.0	19.7	64.8	<0.1	6.3	557.7	<0.1	464.5	132.8	76.2
912957	Rock			>1000	48.6	19.4	30.9	84.1	14.3	8.2	915.1	0.1	634.5	187.9	100.8
912957 Dup				>1000	46.6	18.6	31.0	84.5	13.5	8.2	913.0	0.1	638.7	187.7	100.4
912975	Rock			631.9	9.3	2.1	6.4	24.1	<0.1	<0.1	322.3	<0.1	241.9	71.6	31.2
912975 Dup				637.9	9.3	2.1	6.4	24.8	<0.1	<0.1	321.2	<0.1	244.6	71.8	32.1
QCV1011-00529-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				124.1	17.8	14.0	1.6	14.1	9.8	4.0	57.5	1.9	57.1	14.2	11.8



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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
QCV1011-00529-0001-BLK		<0.1	<0.1	<0.1	<0.10			
912919	Rock	0.5	<0.1	0.4	30.4			
912919 Dup		0.4	<0.1	0.4	30.9			
912938	Rock	6.1	0.9	9.9	171.1			
912938 Dup		5.7	0.9	9.6	158.6			
912957	Rock	7.5	1.6	13.3	199.6			
912957 Dup		7.3	1.4	14.0	199.5			
912975	Rock	0.6	<0.1	0.6	34.4			
912975 Dup		0.5	<0.1	0.5	34.2			
QCV1011-00529-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.2	14.4	117.8			
912919	Rock					6.01	44.31	1.00
912919 Dup						5.46	44.20	1.03
QCV1105-00527-0002-BLK						<0.05	<0.20	<0.10
912938	Rock					2.26	209.18	9.44
912938 Dup						2.30	212.24	9.85
QCV1105-00527-0005-BLK						<0.05	<0.20	<0.10
912957	Rock					37.14	397.93	12.89
912957 Dup						36.27	416.11	12.28
QCV1105-00527-0008-BLK						<0.05	<0.20	<0.10
912975	Rock					2.81	100.42	4.71
912975 Dup						3.02	97.68	4.70
QCV1105-00527-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00527-0013-BLK						<0.05	<0.20	<0.10

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10-360-03595-01

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/16/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: ALEY 2010-030</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">74</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-ICP</td> <td>Thorium, 4 Acid, Low Level by ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	74	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Th-4A-LL-ICP	Thorium, 4 Acid, Low Level by ICP	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																					
Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps																																					
Vancouver, BC	74	Rock	SP-RX-2K/Rock/Chips/Drill Core																																					
Location	Method	Description																																						
Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																						
Vancouver, BC	REE-LB-MS	REE Group by ICP-MS																																						
Vancouver, BC	Th-4A-LL-ICP	Thorium, 4 Acid, Low Level by ICP																																						
Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level																																						
Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP																																						
Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																						
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																						
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																						

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By 
Mike Caron, Lab Manager



INSPECTORATE

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Certificate of Analysis

10-360-03595-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
875308	Rock	0.18	0.10	<0.01	32.68	<0.01	102.68	4.29	0.04	40.67	18.16	0.75	0.05	3.62	0.31
875309	Rock	0.22	0.08	<0.01	31.88	<0.01	240.71	5.34	0.04	40.51	17.90	0.86	0.04	3.33	0.08
875310	Pulp	0.47	0.18	0.02	34.92	<0.01	210.52	5.07	0.06	36.94	13.46	0.39	0.09	3.90	3.13
875311	Rock	0.33	0.12	<0.01	31.96	<0.01	65.98	5.13	0.05	39.14	18.31	0.69	0.05	4.27	0.24
875312	Rock	0.31	0.11	<0.01	32.09	<0.01	74.10	4.44	0.04	38.56	18.70	0.58	0.05	4.84	0.19
875313	Rock	0.22	0.12	<0.01	30.31	0.01	68.94	5.31	0.04	40.36	18.18	0.62	0.05	3.61	0.27
875314	Rock	0.20	0.07	<0.01	32.32	<0.01	111.17	4.48	0.03	39.34	17.97	0.64	0.04	4.46	0.23
875315	Rock	0.43	0.16	<0.01	31.82	<0.01	207.38	5.01	0.03	38.68	17.55	0.67	0.04	4.42	0.48
875316	Rock	0.60	0.24	<0.01	29.51	<0.01	239.84	10.78	0.11	35.39	15.81	0.50	0.05	5.22	1.24
875317	Rock	0.25	0.11	0.01	30.84	<0.01	271.99	5.82	0.03	40.78	17.58	0.70	0.04	2.33	0.23
875318	Rock	0.29	0.08	<0.01	31.72	<0.01	129.43	4.67	0.03	40.21	17.55	0.74	0.05	4.20	0.27
875319	Rock	0.24	0.14	<0.01	31.06	<0.01	129.05	4.40	0.04	40.83	18.93	0.60	0.05	3.83	0.23
875320 Dup	Rock	0.26	0.14	<0.01	31.29	<0.01	129.47	4.38	0.05	39.77	19.36	0.60	0.05	3.87	0.27
875321	Rock	0.19	0.07	<0.01	33.03	<0.01	108.82	4.73	0.03	40.87	18.51	0.77	0.05	2.79	0.05
875322	Rock	0.19	0.11	<0.01	33.38	<0.01	201.22	4.23	0.03	39.48	17.93	0.65	0.05	4.02	0.18
875323	Rock	0.36	0.08	<0.01	33.22	<0.01	363.61	3.93	0.02	39.05	17.61	0.65	0.05	5.21	<0.01
875324	Rock	0.16	0.06	<0.01	31.92	<0.01	244.87	4.17	0.02	39.53	19.68	0.69	0.05	3.80	0.15
875325	Rock	0.33	0.16	<0.01	34.13	<0.01	433.63	5.69	0.04	39.58	16.48	0.63	0.04	3.19	0.23
875326	Rock	0.36	0.17	0.01	35.44	0.01	492.74	5.00	0.10	36.84	15.87	0.65	0.06	6.21	0.25
875327	Rock	0.36	0.14	<0.01	30.75	<0.01	261.84	4.57	0.04	41.05	17.68	0.65	0.05	2.80	0.22
875328	Rock	0.12	0.06	0.01	32.48	<0.01	207.09	3.77	0.04	42.12	18.08	0.80	0.07	3.29	<0.01
875329	Rock	0.57	0.36	<0.01	32.66	<0.01	280.09	5.40	0.05	35.74	16.38	0.63	0.08	6.74	0.93
875330	Pulp	0.47	0.23	<0.01	31.83	<0.01	166.22	6.06	0.05	38.22	16.58	0.48	0.06	4.03	1.37
875331	Rock	0.73	0.45	<0.01	32.57	<0.01	370.69	6.17	0.05	34.69	15.57	0.59	0.05	6.94	0.93
875332	Rock	0.63	0.11	<0.01	31.87	<0.01	200.27	5.16	0.03	38.12	16.59	0.71	0.05	5.32	0.21
875333	Rock	0.78	0.25	<0.01	32.45	<0.01	273.11	5.82	0.05	37.64	15.99	0.70	0.05	5.47	0.67
875334	Rock	0.54	0.45	<0.01	32.04	<0.01	200.63	7.14	0.08	35.10	14.77	0.61	0.05	6.38	1.17
875335	Rock	0.44	0.14	<0.01	32.72	<0.01	259.05	5.37	0.04	32.93	14.75	0.45	0.06	9.97	1.62
875336	Rock	0.43	0.28	0.04	33.58	<0.01	31.32	28.03	0.17	19.17	4.48	0.34	0.11	10.21	3.81
875337	Rock	0.65	0.12	0.01	34.83	<0.01	126.04	14.37	0.03	27.05	11.77	0.34	0.06	8.13	1.11
875338	Rock	0.64	0.10	<0.01	32.57	<0.01	227.87	6.39	0.02	36.40	16.33	0.53	0.04	4.97	0.32
875339	Rock	0.44	0.15	<0.01	35.95	<0.01	145.26	5.37	0.03	37.34	14.64	0.51	0.04	4.95	1.08
875340 Dup	Rock	0.41	0.17	<0.01	35.88	<0.01	132.11	5.42	0.03	37.54	14.26	0.53	0.05	4.88	1.16
875341	Rock	0.44	0.17	<0.01	32.12	<0.01	237.61	5.67	0.02	36.76	16.06	0.54	0.04	5.31	1.01
875342	Rock	0.29	0.09	<0.01	30.65	<0.01	71.31	5.74	<0.01	40.62	18.41	0.45	0.03	0.93	3.28
875343	Rock	0.26	0.20	<0.01	32.27	0.02	100.48	5.62	0.08	38.22	18.35	0.40	0.04	3.27	1.23
875344	Rock	0.76	0.14	<0.01	32.49	<0.01	292.82	11.86	0.04	31.28	14.93	0.46	0.04	6.24	0.49
875345	Rock	0.93	0.16	<0.01	31.73	<0.01	192.69	6.89	0.05	34.10	16.02	0.56	0.05	5.68	2.10
875346	Rock	0.68	0.33	<0.01	32.61	<0.01	240.37	9.29	0.06	33.07	14.97	0.32	0.05	5.60	0.96
875347	Rock	0.50	0.19	<0.01	32.86	<0.01	118.99	5.60	0.03	37.96	17.12	0.39	0.03	3.75	1.85



INSPECTORATE

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Richmond, British Columbia V7A 4V5
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10-360-03595-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
875348	Rock	0.60	0.34	<0.01	32.29	<0.01	200.71	8.42	0.04	34.02	15.22	0.40	0.04	5.63	0.91
875349	Rock	0.35	0.13	<0.01	35.15	<0.01	158.64	6.44	0.01	36.46	15.02	0.49	0.05	5.07	1.00
912500 Dup	Rock	0.35	0.13	<0.01	32.84	<0.01	162.72	6.00	0.01	37.37	16.92	0.45	0.04	4.96	0.91
912501	Rock	1.03	0.32	<0.01	31.94	<0.01	288.24	9.61	0.04	32.66	14.94	0.32	0.04	4.73	2.97
912502	Rock	0.60	0.19	<0.01	31.80	<0.01	127.76	10.02	0.03	31.36	14.41	0.50	0.05	5.92	3.58
912503	Rock	1.47	0.33	<0.01	27.81	<0.01	73.96	25.39	0.13	22.69	10.71	0.45	0.06	7.18	3.03
912504	Rock	0.05	15.17	0.11	4.72	0.02	12.57	4.62	3.63	1.77	1.75	0.12	3.28	0.54	62.99
912505	Rock	1.25	0.27	<0.01	33.13	<0.01	95.28	13.89	0.10	28.76	12.58	0.32	0.06	7.72	2.20
912506	Rock	0.39	0.67	<0.01	32.19	<0.01	326.34	4.97	0.16	36.11	17.10	0.60	0.04	6.06	1.50
912507	Rock	0.70	0.23	<0.01	31.28	<0.01	318.68	7.82	0.02	34.67	17.77	0.47	0.04	5.51	0.34
912508	Rock	1.28	0.37	<0.01	33.21	<0.01	335.50	6.54	0.05	33.79	16.02	0.61	0.05	6.61	0.62
912509	Rock	0.52	0.19	<0.01	34.35	<0.01	241.87	5.90	0.01	37.64	16.21	0.68	0.04	5.11	0.19
912510	Pulp	0.79	0.65	0.02	29.11	0.01	308.75	17.91	0.17	30.27	13.27	0.50	0.07	6.07	2.31
912511	Rock	0.31	0.11	<0.01	32.04	<0.01	197.57	7.12	0.05	37.87	17.88	0.67	0.04	3.70	0.18
912512	Rock	0.23	0.11	<0.01	33.30	<0.01	223.82	5.51	0.03	39.01	17.89	0.75	0.04	3.37	0.20
912513	Rock	0.43	0.14	<0.01	34.07	<0.01	307.50	4.65	0.01	38.25	17.26	0.78	0.04	4.33	0.08
912514	Rock	1.38	0.69	<0.01	35.06	<0.01	249.61	7.81	0.06	29.92	13.06	0.45	0.07	8.96	1.43
912515	Rock	0.66	0.35	<0.01	33.27	<0.01	276.86	10.17	0.02	31.99	13.61	0.58	0.05	6.67	0.59
912517	Rock	0.66	0.27	<0.01	33.81	<0.01	253.71	8.17	0.01	32.41	15.24	0.63	0.05	6.51	0.57
912518	Rock	0.23	0.07	<0.01	32.16	<0.01	198.32	5.95	<0.01	39.28	17.21	0.74	0.03	3.55	0.03
912519	Rock	0.16	0.05	<0.01	31.96	<0.01	381.21	5.40	0.01	40.41	17.45	0.74	0.03	3.38	<0.01
912520	Rock	0.15	0.05	<0.01	31.85	<0.01	445.55	5.43	<0.01	40.29	17.26	0.72	0.03	3.55	<0.01
912521	Rock	0.35	0.12	<0.01	34.20	<0.01	348.23	6.51	<0.01	37.58	16.44	0.57	0.04	4.74	0.61
912522	Rock	0.38	0.14	<0.01	33.74	<0.01	398.03	7.07	0.01	37.13	16.42	0.65	0.04	5.57	0.25
912523	Rock	0.37	0.21	<0.01	32.09	<0.01	314.12	6.04	0.02	38.15	18.37	0.90	0.04	4.63	0.65
912524	Rock	0.72	0.24	<0.01	32.60	<0.01	294.43	6.48	0.01	35.94	16.13	0.79	0.04	6.63	0.50
912525	Rock	0.04	0.04	<0.01	30.31	<0.01	194.22	5.84	<0.01	42.15	18.06	0.94	0.04	1.64	1.26
912526	Rock	0.17	0.15	<0.01	34.65	<0.01	202.83	5.85	0.02	38.08	14.47	0.78	0.04	5.13	1.71
912527	Rock	0.73	0.23	0.01	39.13	<0.01	100.06	8.66	0.02	32.91	10.55	0.72	0.05	7.32	0.57
912528	Rock	0.22	0.14	0.01	36.89	0.01	163.85	3.86	0.07	40.18	15.30	0.78	0.04	3.60	0.09
912529	Rock	0.34	0.51	0.01	36.94	<0.01	159.92	5.39	0.11	35.62	13.35	0.67	0.17	5.16	3.86
912530	Rock	0.72	0.19	0.02	36.65	<0.01	209.22	4.68	0.06	37.02	14.35	0.42	0.10	3.89	3.50
912531	Rock	0.14	0.88	0.01	33.50	<0.01	115.52	5.59	0.18	32.48	12.88	0.50	0.39	5.99	9.28
912532	Rock	0.18	4.23	0.08	23.60	0.01	56.82	6.70	2.43	27.34	14.75	0.48	0.84	2.69	17.29
912533	Rock	0.34	0.12	<0.01	32.28	<0.01	178.06	3.90	0.03	40.34	18.11	0.58	0.04	4.42	0.59
912534	Rock	0.20	0.17	<0.01	34.21	<0.01	189.40	5.14	0.04	38.27	14.56	0.58	0.04	5.87	1.91
912535	Rock	0.73	0.35	<0.01	32.25	<0.01	205.40	7.19	0.02	32.32	13.10	0.52	0.06	8.99	2.54

Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP % 0.01	WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01
875308	Rock	0.02	100.71	<0.5	0.05	<5	42	<2	>10	<0.5	3	3	28	2.69	<0.01
875309	Rock	0.04	100.10	<0.5	0.04	<5	41	<2	>10	<0.5	3	6	30	3.56	<0.01
875310	Pulp	0.13	98.30	<0.5	0.10	7	42	<2	>10	<0.5	6	2	37	3.80	0.02
875311	Rock	0.16	100.12	<0.5	0.06	<5	57	<2	>10	<0.5	4	3	51	3.33	0.03
875312	Rock	0.03	99.64	<0.5	0.06	5	58	<2	>10	<0.5	6	2	52	2.92	0.02
875313	Rock	0.09	99.01	<0.5	0.07	6	53	<2	>10	<0.5	5	3	40	3.42	0.03
875314	Rock	0.04	99.63	<0.5	0.04	<5	43	<2	>10	<0.5	5	13	34	3.05	0.02
875315	Rock	0.07	98.94	<0.5	0.09	14	47	<2	>10	<0.5	8	4	77	3.29	0.02
875316	Rock	0.16	99.03	1.5	0.13	18	59	<2	>10	<0.5	11	3	97	7.08	0.07
875317	Rock	0.03	98.51	<0.5	0.06	7	83	<2	>10	<0.5	5	3	37	3.83	0.02
875318	Rock	0.02	99.57	<0.5	0.04	<5	44	<2	>10	<0.5	6	3	47	3.08	0.02
875319	Rock	0.05	100.15	<0.5	0.07	7	39	<2	>10	<0.5	5	3	44	2.95	0.03
875320 Dup	Rock	0.05	99.83	<0.5	0.07	6	39	<2	>10	<0.5	5	4	44	3.07	0.03
875321	Rock	<0.01	100.92	<0.5	0.04	<5	46	<2	>10	<0.5	3	2	33	2.97	0.02
875322	Rock	0.02	100.08	<0.5	0.06	<5	36	<2	>10	<0.5	4	5	29	2.49	0.02
875323	Rock	0.02	99.87	<0.5	0.04	6	40	<2	>10	<0.5	4	3	51	2.61	0.01
875324	Rock	0.03	100.09	<0.5	0.03	<5	37	<2	>10	<0.5	5	2	31	2.80	<0.01
875325	Rock	0.04	100.23	<0.5	0.09	10	33	<2	>10	<0.5	7	4	52	3.46	0.02
875326	Rock	0.10	100.71	<0.5	0.09	13	34	<2	>10	<0.5	7	4	51	3.14	0.01
875327	Rock	0.04	97.99	<0.5	0.08	6	51	<2	>10	<0.5	4	5	62	3.10	0.01
875328	Rock	0.02	100.74	<0.5	0.03	<5	94	<2	>10	<0.5	2	4	17	2.41	0.01
875329	Rock	0.17	99.16	<0.5	0.20	11	50	<2	>10	<0.5	12	5	87	3.45	0.02
875330	Pulp	0.12	99.05	<0.5	0.13	7	42	<2	>10	<0.5	6	3	38	3.76	0.02
875331	Rock	0.15	98.18	<0.5	0.23	11	38	<2	>10	<0.5	11	4	107	4.09	0.03
875332	Rock	0.06	98.23	<0.5	0.06	9	38	<2	>10	<0.5	9	4	91	3.46	0.02
875333	Rock	0.05	99.15	<0.5	0.13	15	42	<2	>10	<0.5	9	3	114	3.91	0.03
875334	Rock	0.11	97.91	<0.5	0.24	12	39	<2	>10	<0.5	16	4	138	4.60	0.04
875335	Rock	0.10	98.15	<0.5	0.07	9	25	<2	>10	<0.5	10	4	60	3.78	0.02
875336	Rock	0.56	100.78	<0.5	0.15	<5	284	<2	>10	<0.5	21	<1	36	>10	0.09
875337	Rock	0.19	98.02	<0.5	0.06	9	97	<2	>10	<0.5	21	10	102	8.37	0.01
875338	Rock	0.09	97.77	<0.5	0.05	8	29	<2	>10	<0.5	12	5	93	4.55	0.01
875339	Rock	0.06	100.14	<0.5	0.08	6	20	<2	>10	<0.5	7	6	68	3.23	0.01
875340 Dup	Rock	0.06	99.98	<0.5	0.09	6	20	<2	>10	<0.5	7	6	63	3.19	0.01
875341	Rock	0.06	97.77	<0.5	0.09	7	23	<2	>10	<0.5	9	6	66	3.73	<0.01
875342	Rock	0.03	100.24	<0.5	0.05	8	20	<2	>10	<0.5	13	13	46	3.77	<0.01
875343	Rock	0.06	99.79	<0.5	0.11	8	16	<2	>10	<0.5	14	7	45	3.55	0.01
875344	Rock	0.19	98.18	<0.5	0.07	13	35	<2	>10	<0.5	15	9	116	7.35	<0.01
875345	Rock	0.10	97.44	<0.5	0.08	11	33	<2	>10	<0.5	10	10	138	4.48	0.02
875346	Rock	0.20	97.47	<0.5	0.17	13	25	<2	>10	<0.5	19	10	104	6.07	0.04
875347	Rock	0.11	99.90	<0.5	0.10	7	25	<2	>10	<0.5	10	10	77	3.73	0.02

Certificate of Analysis

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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP % 0.01	WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01
875348	Rock	0.22	97.54	<0.5	0.17	11	24	<2	>10	<0.5	14	8	92	5.47	0.02
875349	Rock	0.07	99.88	<0.5	0.07	7	21	<2	>10	<0.5	8	10	54	4.13	<0.01
912500 Dup	Rock	0.07	99.72	<0.5	0.07	7	22	<2	>10	<0.5	8	8	56	4.04	<0.01
912501	Rock	0.34	97.91	<0.5	0.17	13	28	<2	>10	<0.5	9	15	155	6.33	0.03
912502	Rock	0.22	98.08	<0.5	0.10	9	39	<2	>10	<0.5	12	13	101	6.36	0.01
912503	Rock	0.54	98.34	<0.5	0.17	8	78	<2	>10	<0.5	23	<1	119	>10	0.07
912504	Rock	0.45	99.17	<0.5	7.87	62	817	<2	3.15	<0.5	8	84	15	2.77	2.76
912505	Rock	0.27	99.32	<0.5	0.14	7	88	<2	>10	<0.5	20	3	103	8.80	0.06
912506	Rock	0.09	99.51	<0.5	0.35	11	50	<2	>10	<0.5	6	5	60	3.31	0.11
912507	Rock	0.07	98.23	<0.5	0.12	13	24	<2	>10	<0.5	11	5	116	5.36	0.01
912508	Rock	0.06	97.95	<0.5	0.19	14	39	<2	>10	<0.5	17	5	182	4.67	0.03
912509	Rock	0.07	100.40	<0.5	0.10	8	53	<2	>10	<0.5	8	3	72	3.73	<0.01
912510	Pulp	0.63	101.01	0.5	0.34	15	148	<2	>10	<0.5	13	<1	144	>10	0.06
912511	Rock	0.05	99.72	<0.5	0.06	10	34	<2	>10	<0.5	8	5	51	4.86	<0.01
912512	Rock	0.03	100.24	<0.5	0.06	10	27	<2	>10	<0.5	9	4	44	3.79	<0.01
912513	Rock	0.03	99.65	<0.5	0.07	6	52	<2	>10	<0.5	4	4	69	3.27	<0.01
912514	Rock	0.13	97.65	<0.5	0.36	17	34	<2	>10	<0.5	14	7	222	5.38	0.04
912515	Rock	0.20	97.52	<0.5	0.18	15	33	<2	>10	<0.5	24	5	17	6.58	<0.01
912517	Rock	0.19	97.88	<0.5	0.14	14	35	<2	>10	<0.5	20	5	99	5.88	<0.01
912518	Rock	0.06	99.10	<0.5	0.04	7	29	<2	>10	<0.5	11	4	36	4.19	<0.01
912519	Rock	0.03	99.47	<0.5	0.03	7	19	<2	>10	<0.5	6	4	25	3.11	<0.01
912520	Rock	0.03	99.22	<0.5	0.03	<5	19	<2	>10	<0.5	7	4	26	3.65	<0.01
912521	Rock	0.02	100.83	<0.5	0.06	8	54	<2	>10	<0.5	9	3	58	4.22	<0.01
912522	Rock	0.02	101.05	<0.5	0.07	13	29	<2	>10	<0.5	11	2	64	4.83	<0.01
912523	Rock	0.05	101.15	<0.5	0.11	9	40	<2	>10	<0.5	12	3	59	4.30	0.01
912524	Rock	0.06	99.43	<0.5	0.12	8	39	<2	>10	<0.5	14	3	107	4.54	<0.01
912525	Rock	0.15	100.43	<0.5	0.02	<5	41	<2	>10	<0.5	6	4	5	4.14	<0.01
912526	Rock	0.03	100.90	<0.5	0.08	7	32	<2	>10	<0.5	10	3	27	4.02	<0.01
912527	Rock	0.15	100.32	<0.5	0.12	11	90	<2	>10	<0.5	9	2	56	5.95	<0.01
912528	Rock	0.02	100.99	<0.5	0.07	8	76	<2	>10	<0.5	3	3	82	8.99	<0.01
912529	Rock	0.06	101.85	<0.5	0.27	8	66	<2	>10	<0.5	4	6	101	3.60	0.06
912530	Rock	0.13	101.00	<0.5	0.10	14	161	<2	>10	<0.5	5	1	139	3.36	0.03
912531	Rock	0.12	101.80	<0.5	0.46	9	75	<2	>10	<0.5	9	12	62	3.72	0.12
912532	Rock	0.52	100.95	<0.5	2.24	22	594	<2	>10	<0.5	16	35	82	4.60	2.01
912533	Rock	0.03	100.45	<0.5	0.06	5	43	<2	>10	<0.5	4	2	85	2.66	0.02
912534	Rock	0.09	100.88	<0.5	0.09	<5	45	<2	>10	<0.5	5	3	61	3.24	0.02
912535	Rock	0.20	97.55	<0.5	0.18	8	51	<2	>10	<0.5	5	3	93	4.94	<0.01

Certificate of Analysis

10-360-03595-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V
		30-4A-TR ppm 10	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR ppm 1	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR ppm 5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR ppm 10	30-4A-TR ppm 1
875308	Rock	190	9.89	5942	<1	0.03	<1	>10000	97	<5	6	4586	<0.01	<10	7
875309	Rock	520	9.74	6827	9	0.02	<1	>10000	105	<5	7	3919	<0.01	<10	16
875310	Pulp	318	9.33	3140	<1	0.06	<1	>10000	34	<5	7	2408	0.06	<10	32
875311	Rock	186	9.96	5603	<1	0.03	<1	>10000	171	<5	5	4715	0.04	<10	31
875312	Rock	203	>10	4704	<1	0.03	<1	>10000	171	<5	5	4494	0.01	<10	22
875313	Rock	162	9.90	5119	<1	0.04	<1	>10000	127	<5	5	4553	0.02	<10	38
875314	Rock	284	9.78	5273	<1	0.03	<1	>10000	108	<5	6	4404	<0.01	<10	17
875315	Rock	214	9.55	5281	<1	0.03	<1	>10000	237	<5	7	4304	0.02	<10	32
875316	Rock	197	8.60	4101	<1	0.03	<1	>10000	298	<5	6	3571	0.05	<10	100
875317	Rock	376	9.57	5554	54	0.02	<1	9943	128	<5	8	3457	<0.01	<10	21
875318	Rock	191	9.56	5943	2	0.03	<1	>10000	147	<5	6	4388	<0.01	<10	15
875319	Rock	167	>10	4917	1	0.03	<1	>10000	140	<5	7	4255	0.01	<10	22
875320 Dup	Rock	165	>10	5129	1	0.03	<1	>10000	141	<5	7	4441	0.01	<10	21
875321	Rock	143	>10	6119	4	0.03	<1	>10000	108	<5	6	4362	<0.01	<10	7
875322	Rock	178	9.76	4830	<1	0.03	<1	>10000	104	<5	6	3977	<0.01	<10	8
875323	Rock	205	9.59	5221	<1	0.03	<1	>10000	178	<5	6	4283	<0.01	<10	8
875324	Rock	204	>10	5741	4	0.03	<1	>10000	108	<5	6	4493	<0.01	<10	11
875325	Rock	643	8.97	4608	4	0.02	<1	>10000	169	<5	9	2830	0.01	<10	20
875326	Rock	318	8.64	4963	2	0.03	<1	>10000	171	<5	7	3488	0.02	<10	15
875327	Rock	221	9.62	5478	<1	0.03	<1	>10000	159	<5	6	3524	0.01	<10	13
875328	Rock	194	9.84	6524	1	0.04	<1	>10000	61	<5	5	4660	<0.01	<10	7
875329	Rock	274	8.92	5064	<1	0.05	<1	>10000	247	<5	5	4121	0.04	<10	30
875330	Pulp	308	9.03	3957	2	0.04	<1	>10000	37	<5	6	2187	0.03	<10	34
875331	Rock	326	8.47	4723	2	0.03	<1	>10000	320	<5	5	3602	0.05	<10	47
875332	Rock	395	9.03	5744	3	0.03	<1	>10000	286	<5	5	4178	0.02	<10	20
875333	Rock	336	8.70	5408	2	0.03	<1	>10000	365	<5	5	3794	0.03	<10	22
875334	Rock	468	8.04	4694	<1	0.03	<1	>10000	432	<5	5	3622	0.04	<10	39
875335	Rock	423	8.03	3834	<1	0.03	<1	>10000	193	<5	12	2947	0.03	<10	34
875336	Rock	478	2.44	2712	<1	0.07	<1	>10000	65	<5	20	4604	0.21	<10	398
875337	Rock	353	6.41	2750	<1	0.04	<1	>10000	278	<5	12	3181	0.08	<10	203
875338	Rock	274	8.89	4487	<1	0.02	<1	>10000	272	<5	6	2796	0.04	<10	49
875339	Rock	352	7.97	3819	<1	0.03	<1	>10000	214	<5	9	2105	0.02	<10	40
875340 Dup	Rock	344	7.76	3819	<1	0.03	<1	>10000	201	<5	8	2090	0.02	<10	40
875341	Rock	331	8.74	4270	<1	0.03	<1	>10000	211	<5	8	2350	0.03	<10	46
875342	Rock	237	>10	3523	<1	0.02	3	3693	139	<5	9	868	0.01	<10	17
875343	Rock	278	9.99	3049	<1	0.02	11	>10000	128	<5	10	1460	0.02	<10	43
875344	Rock	272	8.13	3530	<1	0.02	<1	>10000	348	<5	9	2058	0.08	<10	125
875345	Rock	371	8.72	4512	<1	0.03	<1	>10000	431	<5	14	3546	0.05	<10	71
875346	Rock	297	8.15	2529	<1	0.03	<1	>10000	320	<5	10	949	0.06	<10	116
875347	Rock	484	9.32	3068	<1	0.02	<1	>10000	238	<5	7	1564	0.05	<10	71

Certificate of Analysis

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Aley Corporation
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 Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	
		30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR	30-4A-TR
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
875348	Rock	336	8.29	3039	<1	0.02	<1	>10000	283	<5	8	1563	0.08	<10	96	
875349	Rock	246	8.17	3591	<1	0.03	<1	>10000	172	<5	11	1884	0.02	<10	34	
912500 Dup	Rock	255	8.21	3516	<1	0.03	<1	>10000	191	<5	12	1910	0.02	<10	35	
912501	Rock	373	8.13	2600	<1	0.03	<1	>10000	471	<5	21	879	0.09	<10	163	
912502	Rock	321	7.84	3995	<1	0.03	<1	>10000	301	<5	17	3266	0.08	<10	121	
912503	Rock	326	5.83	3575	<1	0.04	<1	>10000	345	<5	14	3073	0.21	<10	290	
912504	Rock	31	0.95	816	<1	2.46	4	2091	40	<5	6	703	0.25	<10	12	
912505	Rock	349	6.85	2495	<1	0.04	<1	>10000	293	<5	8	2202	0.10	<10	152	
912506	Rock	259	9.31	4770	<1	0.03	<1	>10000	184	<5	8	3450	0.02	<10	19	
912507	Rock	287	9.67	3671	<1	0.03	<1	>10000	342	<5	7	1849	0.03	<10	42	
912508	Rock	292	8.72	4740	<1	0.03	<1	>10000	547	<5	6	3679	0.03	<10	35	
912509	Rock	258	8.82	4882	<1	0.02	<1	>10000	226	<5	6	3481	0.02	<10	21	
912510	Pulp	290	7.22	3836	<1	0.04	<1	>10000	373	<5	6	1932	0.16	<10	188	
912511	Rock	248	9.73	5235	<1	0.02	<1	>10000	153	<5	6	3293	0.01	<10	20	
912512	Rock	295	9.74	5839	<1	0.02	<1	>10000	120	<5	7	3286	<0.01	<10	15	
912513	Rock	282	9.40	6113	<1	0.02	<1	>10000	211	<5	7	3686	0.01	<10	11	
912514	Rock	428	7.11	3432	<1	0.04	<1	>10000	659	<5	7	2767	0.06	<10	64	
912515	Rock	406	7.41	4231	<1	0.03	<1	>10000	57	<5	6	2854	0.04	<10	53	
912517	Rock	339	8.30	5071	<1	0.03	<1	>10000	310	<5	6	3482	0.08	<10	84	
912518	Rock	258	9.37	6159	<1	0.02	<1	>10000	118	<5	6	3284	0.02	<10	16	
912519	Rock	1134	9.50	4912	1	0.02	<1	>10000	86	<5	9	1361	<0.01	<10	27	
912520	Rock	1351	9.39	5659	<1	0.02	<1	>10000	84	<5	9	1602	<0.01	<10	27	
912521	Rock	516	8.95	4299	<1	0.02	<1	>10000	174	<5	9	1469	<0.01	<10	44	
912522	Rock	357	8.94	5130	<1	0.02	<1	>10000	200	<5	7	2219	<0.01	<10	31	
912523	Rock	1600	10.00	7144	<1	0.02	<1	>10000	191	<5	8	3136	0.02	<10	20	
912524	Rock	2138	8.78	6111	<1	0.02	<1	>10000	332	<5	8	2722	0.02	<10	25	
912525	Rock	3442	9.83	7427	3	0.03	<1	7483	30	<5	10	2681	<0.01	<10	24	
912526	Rock	308	7.87	5944	<1	0.02	<1	>10000	81	<5	7	3032	<0.01	<10	16	
912527	Rock	500	5.75	5737	3	0.03	<1	>10000	36	<5	4	2973	0.03	<10	73	
912528	Rock	265	8.33	6282	<1	0.02	<1	>10000	109	<5	7	3670	<0.01	<10	9	
912529	Rock	273	7.26	5067	<1	0.11	<1	>10000	165	<5	11	3139	0.02	<10	25	
912530	Rock	333	7.81	3187	<1	0.06	<1	>10000	308	<5	7	2423	0.06	<10	70	
912531	Rock	353	7.01	3758	<1	0.27	<1	>10000	72	<5	10	1892	0.04	<10	40	
912532	Rock	281	8.03	3906	<1	0.60	12	>10000	85	<5	12	2257	0.24	<10	50	
912533	Rock	263	9.86	4689	1	0.02	<1	>10000	143	<5	5	3058	0.01	<10	13	
912534	Rock	757	7.92	4389	<1	0.03	<1	>10000	90	<5	6	2705	0.02	<10	37	
912535	Rock	728	7.13	4354	<1	0.04	<1	>10000	144	<5	6	2804	0.04	<10	71	



INSPECTORATE

A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03595-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	W	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr
		30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
875308	Rock	<10	22	36	522.8	15.6	5.9	9.6	37.8	0.9	2.3	244.2	0.3	220.4	59.9
875309	Rock	<10	25	54	>1000	19.3	7.5	13.0	59.0	1.6	2.7	654.6	0.4	373.7	109.9
875310	Pulp	<10	12	46	919.8	24.7	10.5	15.1	61.2	0.6	3.8	409.0	0.9	325.0	94.3
875311	Rock	<10	47	53	529.9	11.5	4.3	8.2	33.3	1.1	1.6	234.9	0.2	210.1	55.3
875312	Rock	<10	23	57	559.5	13.6	4.8	9.7	38.0	0.8	1.8	255.1	0.2	245.6	62.0
875313	Rock	<10	26	55	436.8	11.6	4.3	8.2	30.8	1.4	1.6	191.4	0.2	193.1	50.4
875314	Rock	<10	18	47	735.2	16.2	6.2	11.8	48.9	1.1	2.3	344.8	0.3	280.2	76.6
875315	Rock	<10	16	52	604.0	21.7	8.3	12.9	47.3	0.6	3.4	264.0	0.4	251.9	68.4
875316	Rock	<10	35	117	587.0	18.1	6.7	12.0	42.6	4.9	2.7	248.1	0.4	244.5	64.1
875317	Rock	<10	22	55	835.7	22.1	7.7	18.6	65.7	1.1	3.0	454.4	0.4	316.9	89.1
875318	Rock	<10	19	50	555.7	18.0	6.5	11.1	43.4	0.8	2.6	237.9	0.4	236.0	63.0
875319	Rock	<10	17	57	447.0	16.8	6.2	9.8	37.9	0.9	2.4	197.3	0.4	203.6	52.3
875320 Dup	Rock	<10	16	53	451.8	16.3	6.0	10.0	36.5	1.0	2.4	200.1	0.4	209.5	53.7
875321	Rock	<10	20	40	389.0	13.6	5.3	7.5	29.4	0.6	2.1	185.0	0.3	158.7	43.0
875322	Rock	<10	15	56	478.3	22.5	9.0	11.1	42.1	0.9	3.7	220.4	0.6	212.8	56.9
875323	Rock	<10	17	43	573.2	37.5	14.8	15.6	56.9	0.7	6.1	248.3	0.9	238.5	68.3
875324	Rock	<10	18	41	518.0	24.3	9.5	11.2	44.0	1.0	3.9	251.8	0.5	207.9	55.9
875325	Rock	<10	18	58	>1000	32.1	12.5	20.8	85.7	1.3	4.7	829.6	0.8	463.8	137.4
875326	Rock	<10	31	81	868.7	51.5	21.5	19.3	74.8	1.5	8.5	408.0	1.5	334.6	90.1
875327	Rock	<10	86	67	561.3	21.9	8.8	11.0	41.7	0.9	3.3	292.5	0.6	222.4	61.6
875328	Rock	<10	32	51	508.9	24.7	10.1	10.0	41.3	1.2	4.0	246.5	0.7	215.0	56.1
875329	Rock	<10	27	63	794.4	29.0	11.2	15.3	55.2	1.2	4.4	356.4	0.7	301.8	84.7
875330	Pulp	<10	23	55	894.0	20.9	8.2	14.0	56.4	1.1	3.1	428.1	0.6	327.9	91.9
875331	Rock	<10	21	66	919.5	41.9	16.8	20.8	72.9	1.4	6.6	408.6	1.1	361.3	99.3
875332	Rock	<10	21	59	>1000	26.1	10.2	15.5	67.8	0.8	3.8	493.2	0.6	393.0	113.4
875333	Rock	<10	20	69	898.0	30.8	13.0	16.4	63.3	0.9	4.7	387.6	0.8	347.9	100.3
875334	Rock	<10	22	55	>1000	34.4	14.2	21.8	84.4	0.9	5.0	643.8	0.8	490.6	146.4
875335	Rock	<10	14	66	>1000	38.3	15.6	21.1	86.1	2.2	5.9	603.1	1.1	503.0	139.4
875336	Rock	<10	101	196	>1000	27.7	10.5	20.5	81.2	2.9	3.6	640.9	0.6	498.7	141.4
875337	Rock	<10	29	102	>1000	29.4	12.1	19.9	69.9	10.3	4.4	450.3	0.9	406.2	110.6
875338	Rock	<10	17	84	812.0	26.3	12.1	13.6	53.7	1.3	4.4	357.4	0.8	325.3	86.7
875339	Rock	<10	13	46	976.4	25.1	10.8	13.7	58.4	0.7	3.9	462.6	0.9	353.6	106.4
875340 Dup	Rock	<10	13	45	990.8	26.0	11.0	13.5	57.4	0.9	3.9	464.0	0.8	373.7	105.2
875341	Rock	<10	15	68	966.3	25.1	11.3	13.8	55.8	1.6	3.9	445.3	0.8	365.3	98.5
875342	Rock	<10	13	48	660.5	16.7	7.6	9.7	38.7	1.8	2.7	311.6	0.6	247.0	69.5
875343	Rock	<10	13	49	788.9	20.7	9.1	11.8	47.6	1.2	3.4	363.5	0.8	304.6	82.4
875344	Rock	<10	17	112	833.5	30.5	13.2	16.1	57.4	6.5	5.1	354.8	1.0	311.2	88.2
875345	Rock	<10	20	52	997.4	26.0	11.2	18.2	58.9	2.0	3.9	474.3	0.7	364.0	107.0
875346	Rock	<10	13	88	828.3	32.6	13.5	22.3	68.0	5.5	5.0	391.1	0.9	346.4	96.5
875347	Rock	<10	12	55	>1000	26.7	11.0	16.7	64.1	1.2	4.0	640.7	0.8	402.4	121.3

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Canada

Sample Description	Sample Type	W	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr
		30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
875348	Rock	<10	15	74	>1000	27.0	11.9	16.5	58.5	2.6	4.3	483.7	0.9	335.5	100.6
875349	Rock	<10	18	65	878.4	29.5	13.7	15.8	65.1	2.2	4.7	413.3	1.1	377.6	105.7
912500 Dup	Rock	<10	18	61	921.3	29.8	14.1	15.5	63.7	2.4	5.1	432.1	1.0	364.2	105.5
912501	Rock	<10	18	86	>1000	36.0	15.7	20.8	74.4	3.2	5.7	487.1	1.2	449.9	127.1
912502	Rock	<10	23	72	914.2	22.4	8.9	16.6	58.7	2.8	3.2	422.5	0.6	367.0	105.8
912503	Rock	<10	56	169	>1000	21.1	8.6	17.3	61.2	10.7	3.0	453.8	0.5	420.6	119.6
912504	Rock	<10	61	103	98.4	3.7	2.1	2.1	7.4	2.4	0.7	49.3	0.3	41.4	11.4
912505	Rock	<10	30	107	>1000	27.7	11.0	18.9	73.1	4.4	3.9	516.5	0.8	464.5	134.6
912506	Rock	<10	23	69	735.5	33.3	14.9	14.0	54.0	1.6	5.5	342.4	0.9	311.1	89.3
912507	Rock	<10	18	90	943.1	34.2	15.9	19.5	65.5	4.1	5.7	433.3	1.1	364.9	112.8
912508	Rock	<10	23	81	863.7	29.3	13.0	17.9	62.0	2.0	4.5	397.7	0.9	380.0	105.1
912509	Rock	<10	32	69	760.8	28.5	13.1	14.0	54.4	1.6	4.7	340.0	0.8	337.4	94.6
912510	Pulp	<10	55	140	866.7	21.5	8.7	15.1	55.4	10.3	3.1	400.6	0.6	352.8	102.5
912511	Rock	<10	19	70	675.4	22.6	9.8	11.9	45.9	3.0	3.6	313.2	0.7	279.5	80.2
912512	Rock	<10	22	62	821.1	19.1	8.5	10.7	46.0	1.4	3.1	381.4	0.5	322.2	90.8
912513	Rock	<10	20	58	727.6	29.7	14.2	12.7	50.7	0.8	5.2	342.7	0.9	298.2	89.2
912514	Rock	<10	14	60	>1000	44.3	17.5	28.1	92.1	3.6	6.4	654.9	1.0	554.1	161.7
912515	Rock	<10	19	90	>1000	44.5	21.0	21.0	80.2	8.0	7.6	511.9	1.3	460.9	127.1
912517	Rock	<10	18	91	>1000	34.5	15.1	19.5	71.2	9.0	5.6	458.5	0.9	408.6	117.8
912518	Rock	<10	24	70	645.0	28.5	13.2	12.2	49.4	2.3	4.9	323.1	0.8	282.8	78.9
912519	Rock	<10	20	98	>1000	34.5	14.9	28.1	132.1	2.3	4.5	>1000	0.8	>1000	318.8
912520	Rock	<10	21	95	>1000	33.7	15.1	27.3	136.2	2.5	4.6	>1000	0.8	>1000	324.3
912521	Rock	<10	14	73	>1000	29.2	13.1	17.9	71.6	1.7	4.6	673.2	0.9	494.6	150.7
912522	Rock	<10	15	84	978.6	30.7	14.3	16.2	62.1	2.8	5.1	513.2	0.9	348.3	105.3
912523	Rock	<10	21	90	>1000	29.9	14.0	19.2	91.5	1.7	4.7	>1000	0.8	600.0	213.1
912524	Rock	<10	19	98	>1000	42.3	19.9	29.6	131.2	2.5	6.6	>1000	1.1	954.1	306.9
912525	Rock	<10	23	81	>1000	25.4	12.8	23.9	134.2	1.4	3.5	>1000	0.6	>1000	380.7
912526	Rock	<10	20	70	778.2	19.9	9.7	10.9	43.9	3.5	3.4	413.1	0.6	272.4	81.6
912527	Rock	<10	40	76	>1000	18.1	7.9	13.2	51.8	7.3	2.8	643.3	0.5	329.9	105.5
912528	Rock	<10	511	109	705.8	13.3	5.7	8.6	32.8	0.7	2.0	361.4	0.4	206.4	60.1
912529	Rock	<10	36	82	745.7	16.2	7.3	10.7	39.0	1.0	2.6	347.5	0.5	238.7	70.6
912530	Rock	<10	20	59	944.2	23.0	9.7	13.7	53.9	0.7	3.5	425.9	0.8	310.3	93.0
912531	Rock	<10	35	80	847.5	19.7	8.4	12.0	46.5	3.1	3.0	413.1	0.6	281.2	81.1
912532	Rock	<10	91	135	659.3	10.5	4.6	7.5	31.7	2.6	1.5	329.0	0.3	210.0	64.9
912533	Rock	<10	23	58	684.9	14.3	6.3	9.2	34.5	0.8	2.2	329.1	0.4	223.0	67.7
912534	Rock	<10	28	71	>1000	17.8	7.4	12.6	59.5	2.2	2.5	975.5	0.4	367.3	130.6
912535	Rock	<10	41	95	>1000	23.3	10.5	15.2	67.4	6.5	3.6	975.4	0.7	466.5	146.1

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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Sm	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
875308	Rock	36.2	3.6	0.6	2.9	57.0	2.84	102.68	0.99
875309	Rock	53.2	5.0	0.7	3.4	70.1	2.85	240.71	2.11
875310	Pulp	55.5	5.7	1.2	6.4	102.1	27.00	210.52	2.60
875311	Rock	31.7	2.9	0.4	2.0	44.3	2.66	65.98	1.04
875312	Rock	37.2	3.4	0.4	2.2	49.6	3.36	74.10	0.57
875313	Rock	29.8	2.9	0.4	2.0	43.2	3.34	68.94	0.83
875314	Rock	44.9	4.2	0.6	2.9	65.3	2.62	111.17	1.31
875315	Rock	43.4	5.0	0.8	4.1	93.0	23.43	207.38	4.89
875316	Rock	42.0	4.2	0.7	3.5	76.3	39.85	239.84	9.57
875317	Rock	68.2	5.5	0.7	3.7	83.3	3.34	271.99	2.27
875318	Rock	40.4	4.1	0.6	3.2	72.0	4.82	129.43	1.47
875319	Rock	35.2	3.7	0.6	3.2	64.6	7.48	129.05	2.95
875320 Dup	Rock	35.1	3.8	0.6	3.2	66.9	7.52	129.47	2.97
875321	Rock	26.4	3.0	0.5	2.5	59.2	3.63	108.82	1.88
875322	Rock	36.7	4.8	1.0	5.2	101.4	33.32	201.22	12.90
875323	Rock	50.4	7.1	1.6	8.1	160.2	4.46	363.61	6.99
875324	Rock	36.9	4.9	1.0	4.7	107.0	1.98	244.87	3.36
875325	Rock	87.4	7.8	1.2	6.4	124.1	7.66	433.63	4.92
875326	Rock	59.5	9.6	2.5	11.9	242.7	38.37	492.74	19.61
875327	Rock	36.6	4.4	1.0	5.2	91.2	50.59	261.84	21.77
875328	Rock	36.0	4.9	1.2	6.1	113.3	8.38	207.09	3.44
875329	Rock	50.3	5.9	1.2	6.2	121.4	14.14	280.09	8.42
875330	Pulp	51.7	5.2	0.8	4.8	82.5	23.73	166.22	11.14
875331	Rock	61.7	8.1	1.8	9.4	192.5	16.63	370.69	12.93
875332	Rock	60.8	6.3	1.0	5.4	115.8	4.65	200.27	4.13
875333	Rock	57.4	6.6	1.3	6.8	124.6	14.24	273.11	5.91
875334	Rock	76.0	7.6	1.4	7.1	149.3	10.81	200.63	6.99
875335	Rock	82.7	8.4	1.7	9.3	154.6	2.82	259.05	6.95
875336	Rock	76.8	7.1	0.9	5.3	102.1	0.13	31.32	3.78
875337	Rock	65.3	6.8	1.3	7.2	123.2	0.92	126.04	3.67
875338	Rock	49.0	5.5	1.3	7.0	117.3	2.85	227.87	7.29
875339	Rock	54.0	5.5	1.2	6.4	104.4	0.82	145.26	4.01
875340 Dup	Rock	54.2	5.5	1.2	6.7	109.5	0.73	132.11	3.84
875341	Rock	52.2	5.2	1.2	6.6	115.1	1.88	237.61	8.15
875342	Rock	36.3	3.8	0.8	4.7	75.6	0.97	71.31	1.99
875343	Rock	43.7	4.6	1.0	5.4	91.5	0.53	100.48	2.50
875344	Rock	51.3	6.5	1.4	7.8	141.2	7.58	292.82	8.91
875345	Rock	54.5	5.7	1.1	5.8	111.4	3.30	192.69	5.28
875346	Rock	69.2	7.1	1.5	8.0	141.6	6.59	240.37	8.22
875347	Rock	55.9	5.9	1.4	6.8	107.8	2.25	118.99	3.17

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Canada

Sample Description	Sample Type	Sm	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.1	0.10	0.05	0.20	0.10
875348	Rock	53.4	5.8	1.3	7.3	126.0	2.41	200.71	8.55
875349	Rock	58.2	6.5	1.6	8.3	124.7	0.84	158.64	9.28
912500 Dup	Rock	56.8	6.4	1.5	8.4	136.8	0.92	162.72	9.34
912501	Rock	70.2	7.8	1.8	10.0	156.9	2.23	288.24	11.75
912502	Rock	53.8	5.3	0.9	4.8	90.9	1.79	127.76	4.89
912503	Rock	57.9	5.6	0.8	4.3	73.1	0.16	73.96	1.87
912504	Rock	6.6	0.8	0.3	1.9	20.5	1.68	12.57	4.83
912505	Rock	71.2	6.8	1.1	5.9	99.6	0.10	95.28	2.04
912506	Rock	50.2	6.4	1.6	7.7	145.9	5.79	326.34	14.10
912507	Rock	61.5	7.1	1.8	9.4	157.9	15.93	318.68	11.46
912508	Rock	58.0	6.3	1.4	7.4	123.0	23.28	335.50	14.56
912509	Rock	50.7	5.6	1.4	6.9	122.0	9.05	241.87	7.68
912510	Pulp	51.0	5.0	0.8	4.8	74.3	35.22	308.75	8.59
912511	Rock	42.5	5.0	1.2	5.5	95.3	18.65	197.57	6.82
912512	Rock	41.2	4.2	0.9	4.5	82.2	2.33	223.82	4.84
912513	Rock	44.2	5.7	1.5	7.8	142.0	5.11	307.50	6.26
912514	Rock	86.9	9.3	1.8	9.4	168.3	16.41	249.61	12.84
912515	Rock	72.8	9.0	2.3	11.9	199.7	0.18	276.86	10.79
912517	Rock	64.8	7.5	1.6	8.2	156.4	10.95	253.71	7.64
912518	Rock	43.4	5.6	1.4	7.0	119.7	4.28	198.32	6.18
912519	Rock	130.3	9.5	1.3	6.8	114.9	2.07	381.21	5.25
912520	Rock	131.2	9.7	1.3	7.0	119.0	2.15	445.55	5.39
912521	Rock	69.7	6.7	1.4	7.0	110.8	6.89	348.23	6.34
912522	Rock	55.0	6.7	1.6	7.8	128.2	6.07	398.03	8.29
912523	Rock	68.2	7.0	1.4	6.8	124.1	2.41	314.12	7.98
912524	Rock	101.2	10.0	1.8	9.5	172.5	28.35	294.43	17.12
912525	Rock	96.7	7.8	0.9	4.8	90.3	0.55	194.22	2.97
912526	Rock	38.7	4.4	1.1	5.6	87.2	2.80	202.83	5.11
912527	Rock	46.0	4.3	0.8	4.0	80.0	0.14	100.06	9.48
912528	Rock	30.2	3.1	0.6	3.1	61.8	10.86	163.85	4.61
912529	Rock	36.8	3.9	0.8	3.9	73.8	3.88	159.92	5.27
912530	Rock	49.3	5.3	1.1	6.1	96.5	45.85	209.22	2.30
912531	Rock	43.9	4.6	0.9	4.9	85.6	6.73	115.52	3.45
912532	Rock	28.3	2.6	0.5	2.8	43.7	5.22	56.82	3.58
912533	Rock	32.8	3.3	0.7	3.5	59.1	20.08	178.06	7.67
912534	Rock	46.5	4.5	0.7	3.7	68.7	21.36	189.40	41.16
912535	Rock	59.4	5.8	1.0	5.8	99.2	4.44	205.40	13.01

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Canada

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
875308	Rock	0.01	0.01	0.01	0.01	0.01	102.68	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
875308 Dup							106.05								
QCV1011-00538-0002-BLK							<4								
875326	Rock						492.74								
875326 Dup							496.18								
QCV1011-00538-0005-BLK							<4								
875344	Rock						292.82								
875344 Dup							303.21								
QCV1011-00538-0008-BLK							<4								
912512	Rock						223.82								
912512 Dup							194.11								
QCV1011-00538-0011-BLK							<4								
912531	Rock						115.52								
912531 Dup							115.47								
QCV1011-00538-0014-BLK							<4								
875308	Rock	0.18													
875308 Dup		0.17													
QCV1011-00539-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
875326	Rock	0.36													
875326 Dup		0.37													
QCV1011-00539-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
875344	Rock	0.76													
875344 Dup		0.75													
QCV1011-00539-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912512	Rock	0.23													
912512 Dup		0.22													
QCV1011-00539-0011-BLK		<0.01													
912531	Rock	0.14													
912531 Dup		0.14													
QCV1011-00539-0014-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
875308	Rock		0.10	<0.01	32.68	<0.01		4.29	0.04	40.67	18.16	0.75	0.05	3.62	0.31
875308 Dup			0.11	0.01	32.68	0.01		4.26	0.03	40.65	18.18	0.79	0.05	3.63	0.30

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Canada

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Th	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	Th-4A-LL-ICP ppm	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
		0.01	0.01	0.01	0.01	0.01	4	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
QCV1011-00542-0002-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
875326	Rock		0.17	0.01	35.44	0.01		5.00	0.10	36.84	15.87	0.65	0.06	6.21	0.25
875326 Dup			0.16	<0.01	35.99	<0.01		5.12	0.06	36.86	15.12	0.65	0.05	6.26	0.09
QCV1011-00542-0005-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
875344	Rock		0.14	<0.01	32.49	<0.01		11.86	0.04	31.28	14.93	0.46	0.04	6.24	0.49
875344 Dup			0.14	<0.01	32.61	<0.01		11.87	0.03	30.94	14.96	0.46	0.04	6.24	0.50
QCV1011-00542-0008-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912512	Rock		0.11	<0.01	33.30	<0.01		5.51	0.03	39.01	17.89	0.75	0.04	3.37	0.20
912512 Dup			0.11	<0.01	33.94	<0.01		5.58	0.02	38.93	17.34	0.77	0.04	3.42	0.19
QCV1011-00542-0011-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912531	Rock		0.88	0.01	33.50	<0.01		5.59	0.18	32.48	12.88	0.50	0.39	5.99	9.28
912531 Dup			0.86	0.01	32.33	<0.01		5.34	0.18	32.33	13.82	0.48	0.40	5.86	9.13
QCV1011-00542-0014-BLK			<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05			6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90
STD-SY-4 result			20.62	0.04	7.71	<0.01		6.27	1.67	4.48	0.54	0.11	7.10	0.14	50.18



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP % 0.01	WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01
875308	Rock			<0.5	0.05	<5	42	<2	>10	<0.5	3	3	28	2.69	<0.01
875308 Dup				<0.5	0.06	<5	42	<2	>10	<0.5	3	3	27	2.67	<0.01
QCV1011-00540-0002-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-CDN-ME-6 expected				101.0									6130		
STD-CDN-ME-6 result				97.1	5.94	269	515	<2	1.34	3.2	1	54	5815	6.26	1.16
875326	Rock			<0.5	0.09	13	34	<2	>10	<0.5	7	4	51	3.14	0.01
875326 Dup				<0.5	0.09	13	35	<2	>10	<0.5	7	4	54	3.20	0.02
QCV1011-00540-0005-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-CDN-ME-6 expected				101.0									6130		
STD-CDN-ME-6 result				99.5	5.77	281	466	<2	1.37	4.8	2	53	6017	6.01	1.15
875344	Rock			<0.5	0.07	13	35	<2	>10	<0.5	15	9	116	7.35	<0.01
875344 Dup				<0.5	0.07	13	33	<2	>10	<0.5	15	9	114	7.45	<0.01
QCV1011-00540-0008-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-OREAS-45P-4A expected				0.3		13		0			122	1103	749		
STD-OREAS-45P-4A result				<0.5	5.79	72	264	<2	0.25	<0.5	116	1056	681	>10	0.30
912512	Rock			<0.5	0.06	10	27	<2	>10	<0.5	9	4	44	3.79	<0.01
912512 Dup				<0.5	0.06	9	26	<2	>10	<0.5	9	4	40	3.75	<0.01
QCV1011-00540-0011-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-CDN-ME-6 expected				101.0									6130		
STD-CDN-ME-6 result				95.5	5.91	278	162	<2	1.38	3.4	2	55	6177	6.34	1.16
912531	Rock			<0.5	0.46	9	75	<2	>10	<0.5	9	12	62	3.72	0.12
912531 Dup				<0.5	0.46	9	75	<2	>10	<0.5	9	11	67	3.69	0.12
QCV1011-00540-0014-BLK				<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01
STD-OREAS-45P-4A expected				0.3		13		0			122	1103	749		
STD-OREAS-45P-4A result				<0.5	6.55	67	270	<2	0.26	<0.5	110	1061	719	>10	0.30
875308	Rock	0.02	100.71												
875308 Dup		0.03	100.73												
QCV1011-00542-0002-BLK		<0.01	<0.01												
875326	Rock	0.10	100.71												
875326 Dup		0.10	100.47												
QCV1011-00542-0005-BLK		<0.01	<0.01												
875344	Rock	0.19	98.18												
875344 Dup		0.19	98.01												
QCV1011-00542-0008-BLK		<0.01	<0.01												
912512	Rock	0.03	100.24												
912512 Dup		0.03	100.37												
QCV1011-00542-0011-BLK		<0.01	<0.01												
912531	Rock	0.12	101.80												
912531 Dup		0.12	100.87												
QCV1011-00542-0014-BLK		<0.01	<0.01												



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	TiO2	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
		WR-FS-ICP %	WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
STD-SY-4 expected		0.01	0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01
STD-SY-4 result		0.30	99.16												



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V
		30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
875308	Rock	190	9.89	5942	<1	0.03	<1	>10000	97	<5	6	4586	<0.01	<10	7
875308 Dup		199	9.90	5929	1	0.03	<1	>10000	90	<5	6	4602	<0.01	<10	7
QCV1011-00540-0002-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-CDN-ME-6 expected									10200						
STD-CDN-ME-6 result		<10	1.22	2044	25	1.69	26	466	>10000	404	10	182	0.23	<10	31
875326	Rock	318	8.64	4963	2	0.03	<1	>10000	171	<5	7	3488	0.02	<10	15
875326 Dup		311	8.23	5080	3	0.03	<1	>10000	169	<5	7	3464	0.02	<10	16
QCV1011-00540-0005-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-CDN-ME-6 expected									10200						
STD-CDN-ME-6 result		<10	1.23	2001	26	1.67	27	488	>10000	413	10	187	0.23	<10	33
875344	Rock	272	8.13	3530	<1	0.02	<1	>10000	348	<5	9	2058	0.08	<10	125
875344 Dup		271	8.14	3586	<1	0.02	<1	>10000	356	<5	9	2080	0.08	<10	125
QCV1011-00540-0008-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-OREAS-45P-4A expected									10200						
STD-OREAS-45P-4A result		10	0.24	1367	<1	0.07	365	491	15	<5	55	34	1.04	<10	175
912512	Rock	295	9.74	5839	<1	0.02	<1	>10000	120	<5	7	3286	<0.01	<10	15
912512 Dup		279	9.44	5808	<1	0.02	<1	>10000	108	<5	6	3244	<0.01	<10	15
QCV1011-00540-0011-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-CDN-ME-6 expected									10200						
STD-CDN-ME-6 result		<10	1.25	2072	26	1.68	27	481	>10000	409	10	189	0.23	<10	34
912531	Rock	353	7.01	3758	<1	0.27	<1	>10000	72	<5	10	1892	0.04	<10	40
912531 Dup		344	7.52	3761	<1	0.27	<1	>10000	69	<5	10	1875	0.04	<10	40
QCV1011-00540-0014-BLK		<10	<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1
STD-OREAS-45P-4A expected									10200						
STD-OREAS-45P-4A result		11	0.24	1036	<1	0.07	348	440	22	<5	56	35	1.07	<10	177



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	W	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr
		30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
875308	Rock	<10	22	36											
875308 Dup		<10	21	35											
QCV1011-00540-0002-BLK		<10	<2	<1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
STD-CDN-ME-6 expected			5170												
STD-CDN-ME-6 result		<10	5248	135											
875326	Rock	<10	31	81											
875326 Dup		<10	32	89											
QCV1011-00540-0005-BLK		<10	<2	<1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
STD-CDN-ME-6 expected			5170												
STD-CDN-ME-6 result		<10	5092	132											
875344	Rock	<10	17	112											
875344 Dup		<10	19	104											
QCV1011-00540-0008-BLK		<10	<2	<1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
STD-OREAS-45P-4A expected			142												
STD-OREAS-45P-4A result		<10	143	387											
912512	Rock	<10	22	62											
912512 Dup		<10	20	55											
QCV1011-00540-0011-BLK		<10	<2	<1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
STD-CDN-ME-6 expected			5170												
STD-CDN-ME-6 result		<10	5256	136											
912531	Rock	<10	35	80											
912531 Dup		<10	34	83											
QCV1011-00540-0014-BLK		<10	<2	<1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
STD-OREAS-45P-4A expected			142												
STD-OREAS-45P-4A result		<10	140	393											
QCV1011-00543-0001-BLK					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
875308	Rock				522.8	15.6	5.9	9.6	37.8	0.9	2.3	244.2	0.3	220.4	59.9
875308 Dup					530.2	14.9	5.7	8.8	35.7	0.8	2.2	247.6	0.3	208.8	55.5
875326	Rock				868.7	51.5	21.5	19.3	74.8	1.5	8.5	408.0	1.5	334.6	90.1
875326 Dup					837.3	50.6	21.2	19.0	74.7	1.4	8.4	388.9	1.3	334.4	92.0
875344	Rock				833.5	30.5	13.2	16.1	57.4	6.5	5.1	354.8	1.0	311.2	88.2
875344 Dup					805.5	31.7	13.9	16.3	59.2	6.7	5.2	356.1	1.0	337.0	95.5
912512	Rock				821.1	19.1	8.5	10.7	46.0	1.4	3.1	381.4	0.5	322.2	90.8
912512 Dup					816.9	19.3	8.8	10.4	45.7	1.3	3.1	384.5	0.5	294.9	92.1
912531	Rock				847.5	19.7	8.4	12.0	46.5	3.1	3.0	413.1	0.6	281.2	81.1
912531 Dup					822.2	21.0	9.1	13.1	50.1	3.2	3.2	399.9	0.6	289.8	84.5
QCV1011-00543-0011-BLK					<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected					122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0
STD-SY-4 result					124.0	16.9	13.2	1.8	15.3	10.7	3.9	56.6	1.9	52.4	14.2



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Sm	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.1	0.10	0.05	0.20	0.10
QCV1011-00543-0001-BLK		<0.1	<0.1	<0.1	<0.1	<0.10			
875308	Rock	36.2	3.6	0.6	2.9	57.0			
875308 Dup		33.2	3.4	0.6	2.8	60.9			
875326	Rock	59.5	9.6	2.5	11.9	242.7			
875326 Dup		59.2	9.9	2.3	11.7	232.0			
875344	Rock	51.3	6.5	1.4	7.8	141.2			
875344 Dup		53.5	6.4	1.5	8.3	136.9			
912512	Rock	41.2	4.2	0.9	4.5	82.2			
912512 Dup		42.8	4.2	0.9	4.7	82.7			
912531	Rock	43.9	4.6	0.9	4.9	85.6			
912531 Dup		46.7	4.7	0.9	5.2	85.6			
QCV1011-00543-0011-BLK		<0.1	<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		12.7	2.6	2.3	14.8	119.0			
STD-SY-4 result		11.6	2.5	2.1	13.5	119.3			
875308	Rock						2.84	102.68	0.99
875308 Dup							2.57	106.05	1.13
QCV1105-00530-0002-BLK							<0.05	<0.20	<0.10
875326	Rock						38.37	492.74	19.61
875326 Dup							42.01	496.18	20.63
QCV1105-00530-0005-BLK							<0.05	<0.20	<0.10
875344	Rock						7.58	292.82	8.91
875344 Dup							8.08	303.21	9.26
QCV1105-00530-0008-BLK							<0.05	<0.20	<0.10
912512	Rock						2.33	223.82	4.84
912512 Dup							2.60	194.11	4.66
QCV1105-00530-0011-BLK							<0.05	<0.20	<0.10
912531	Rock						6.73	115.52	3.45
912531 Dup							6.89	115.47	3.54
QCV1105-00530-0014-BLK							<0.05	<0.20	<0.10



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10-360-03616-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/17/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: ALEY 2010-031</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">66</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p>Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	66	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
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Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP																																			
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager

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10-360-03616-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912606	Rock	0.40	0.08	<0.01	35.86	<0.01	4.42	0.02	39.76	15.25	0.56	0.03	4.55	0.69	0.04
912607	Rock	0.17	0.10	<0.01	32.40	<0.01	4.22	0.03	42.09	16.86	0.67	0.04	2.57	0.46	0.03
912608	Rock	0.28	0.27	<0.01	34.94	0.01	5.47	0.10	39.77	14.53	0.76	0.04	4.15	1.19	0.06
912609	Rock	0.25	0.10	<0.01	34.47	<0.01	4.68	0.05	40.63	14.85	0.70	0.03	3.55	1.06	0.04
912610	Pulp	0.44	0.26	<0.01	34.89	<0.01	5.61	0.05	38.85	13.80	0.53	0.06	4.24	1.45	0.17
912611	Rock	0.31	0.16	<0.01	35.69	<0.01	4.74	0.05	40.74	14.96	0.61	0.03	3.67	0.54	0.06
912612	Rock	1.69	0.64	0.03	22.75	<0.01	45.42	0.28	14.09	5.20	0.46	0.07	7.57	3.53	1.13
912613	Rock	0.67	0.51	<0.01	27.53	<0.01	24.33	0.23	27.60	11.60	0.55	0.04	5.54	2.71	0.64
912614	Rock	<0.01	15.46	0.12	4.36	0.03	3.84	3.17	1.30	1.60	0.12	3.21	0.30	66.07	0.48
912615	Rock	0.50	0.20	<0.01	34.03	<0.01	6.25	0.06	37.78	14.33	0.71	0.05	5.38	0.84	0.12
912616	Rock	0.81	0.29	<0.01	33.71	<0.01	11.79	0.16	31.32	12.99	0.52	0.06	7.62	1.70	0.22
912617	Rock	1.57	0.39	0.01	31.08	<0.01	23.77	0.07	21.71	7.64	0.40	0.07	10.60	2.49	0.33
912618	Rock	0.45	0.10	<0.01	31.74	<0.01	9.50	0.01	36.67	14.85	0.58	0.04	4.82	1.72	0.09
912619	Rock	0.20	0.07	<0.01	33.16	<0.01	4.63	0.01	41.01	14.56	0.69	0.04	3.43	1.07	0.02
912620 Dup	Rock	0.19	0.07	<0.01	33.20	<0.01	4.41	<0.01	41.30	14.79	0.66	0.04	3.37	0.92	0.02
912621	Rock	0.34	0.09	<0.01	34.44	<0.01	4.01	<0.01	39.89	15.02	0.57	0.04	4.51	0.58	0.03
912622	Rock	0.19	0.05	<0.01	33.65	<0.01	3.87	<0.01	41.71	16.33	0.71	0.03	3.03	0.40	0.02
912623	Rock	0.19	0.04	<0.01	32.58	<0.01	3.79	<0.01	42.11	16.02	0.76	0.03	2.70	0.61	0.01
912624	Rock	0.16	0.05	<0.01	33.94	<0.01	3.61	<0.01	41.80	15.00	0.77	0.03	3.16	0.44	0.01
912625	Rock	<0.01	0.08	0.01	33.47	0.02	3.14	0.08	43.99	16.37	0.78	0.05	1.62	<0.01	0.01
912626	Rock	0.11	0.12	0.01	34.68	0.01	3.29	0.05	41.43	14.43	0.73	0.05	3.74	0.14	0.01
912627	Rock	0.40	0.10	<0.01	33.29	0.01	6.00	0.04	39.62	14.42	0.72	0.04	3.98	0.22	0.05
912628	Rock	0.42	0.09	<0.01	34.85	<0.01	4.46	0.02	37.93	14.87	0.66	0.04	5.94	0.33	0.03
912629	Rock	0.34	0.34	<0.01	33.57	<0.01	4.99	0.04	38.10	15.05	0.67	0.04	4.92	0.70	0.03
912630	Pulp	0.70	0.16	0.02	36.32	<0.01	4.68	0.04	37.98	12.42	0.40	0.08	3.69	3.00	0.12
912631	Rock	0.36	0.41	<0.01	34.47	<0.01	4.69	0.01	36.15	14.23	0.68	0.04	6.82	0.89	0.06
912632	Rock	0.46	0.15	<0.01	34.96	<0.01	5.43	<0.01	37.97	13.38	0.73	0.04	5.37	0.75	0.04
912633	Rock	0.48	0.18	<0.01	35.02	<0.01	5.14	<0.01	38.70	14.04	0.61	0.04	5.08	0.39	0.07
912634	Rock	0.36	0.09	<0.01	33.20	<0.01	5.99	<0.01	39.18	14.84	0.69	0.03	4.38	0.41	0.05
912635	Rock	0.29	0.06	<0.01	34.14	<0.01	3.72	<0.01	39.58	15.26	0.67	0.04	4.85	0.11	0.02
912636	Rock	0.39	0.15	<0.01	34.10	<0.01	4.14	0.01	39.94	15.42	0.60	0.04	4.10	0.83	0.03
912637	Rock	0.89	0.55	<0.01	32.78	<0.01	7.84	0.07	34.78	13.57	0.54	0.05	6.63	1.44	0.23
912638	Rock	0.32	0.10	<0.01	33.81	<0.01	3.38	<0.01	40.27	16.33	0.69	0.04	4.54	0.11	0.02
912639	Rock	0.22	0.07	<0.01	33.35	<0.01	3.81	<0.01	40.35	15.76	0.69	0.04	4.40	0.17	0.03
912640 Dup	Rock	0.25	0.08	<0.01	33.20	<0.01	3.72	0.02	40.13	15.50	0.70	0.05	4.37	0.24	0.03
912641	Rock	0.48	0.15	<0.01	34.37	<0.01	5.26	0.01	38.86	14.61	0.58	0.04	4.38	0.36	0.04
912642	Rock	0.88	0.29	<0.01	32.58	<0.01	9.95	0.01	35.28	13.24	0.47	0.05	5.52	0.86	0.19
912643	Rock	0.56	0.22	<0.01	33.77	0.01	7.38	0.07	37.68	13.57	0.39	0.05	4.91	0.84	0.13
912644	Rock	0.54	0.25	<0.01	33.73	<0.01	5.59	0.03	38.50	15.00	0.49	0.04	4.48	1.18	0.07
912645	Rock	0.68	0.43	0.01	31.42	<0.01	14.94	0.12	32.94	12.15	0.57	0.04	4.62	1.46	0.27



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912646	Rock	0.81	0.30	<0.01	35.27	<0.01	5.14	<0.01	35.94	13.80	0.55	0.05	6.75	0.65	0.07
912647	Rock	0.80	0.35	<0.01	35.37	<0.01	5.22	0.09	36.87	13.30	0.67	0.05	5.62	1.11	0.08
912648	Rock	0.83	0.26	0.01	36.46	<0.01	9.79	0.02	35.47	10.98	0.53	0.03	4.92	0.58	0.26
912649	Rock	0.40	0.09	<0.01	34.18	<0.01	4.41	<0.01	40.11	15.22	0.39	0.03	4.13	0.31	0.03
912650	Pulp	0.43	0.25	<0.01	34.34	<0.01	5.35	0.04	38.94	14.43	0.50	0.06	3.84	1.48	0.11
912651	Rock	0.21	0.03	<0.01	33.08	<0.01	4.02	<0.01	40.15	16.57	0.69	0.03	4.09	0.55	0.03
912652	Rock	0.50	0.17	<0.01	34.71	<0.01	3.36	0.01	37.66	15.53	0.54	0.05	6.43	0.42	0.04
912653	Rock	1.21	0.43	<0.01	37.13	<0.01	6.74	0.01	27.38	12.44	0.47	0.07	11.99	1.17	0.38
912654	Rock	0.42	0.16	<0.01	35.38	<0.01	4.02	0.01	36.97	15.13	0.58	0.04	6.28	0.25	0.07
912655	Rock	0.22	0.05	<0.01	34.51	<0.01	2.97	<0.01	41.20	15.45	0.62	0.04	3.78	0.08	0.03
912656	Rock	0.47	3.30	0.03	27.81	<0.01	6.10	1.04	28.24	12.96	0.47	0.30	4.58	13.48	0.54
912657	Rock	0.26	0.11	<0.01	33.83	<0.01	4.38	<0.01	41.82	14.83	0.56	0.03	2.92	0.53	0.05
912658	Rock	0.28	1.17	<0.01	31.98	<0.01	4.42	0.02	38.43	15.30	0.62	0.04	3.97	2.62	0.13
912659	Rock	0.26	0.12	0.01	35.05	<0.01	4.23	0.01	40.04	14.25	0.73	0.03	3.98	0.46	0.02
912660 Dup	Rock	0.26	0.13	0.02	35.02	0.01	4.20	0.05	40.04	14.59	0.76	0.04	4.01	0.48	0.03
912661	Rock	0.25	0.18	0.01	35.69	<0.01	4.86	0.05	36.95	13.37	0.66	0.04	6.45	0.84	0.04
912662	Rock	0.52	0.10	<0.01	34.33	<0.01	4.97	0.04	37.48	14.19	0.59	0.04	5.56	1.71	0.06
912663	Rock	0.11	0.03	<0.01	34.60	<0.01	3.93	0.01	37.57	14.68	0.72	0.05	6.83	0.48	0.01
912664	Rock	0.09	0.13	<0.01	35.00	<0.01	3.77	0.03	36.03	13.82	0.59	0.03	8.14	1.09	0.04
912665	Rock	0.60	0.16	<0.01	35.28	<0.01	5.28	0.03	37.33	13.10	0.62	0.03	5.59	0.84	0.07
912666	Rock	1.28	0.38	<0.01	36.39	<0.01	4.46	0.03	36.68	13.78	0.59	0.03	5.01	1.54	0.07
912667	Rock	0.24	0.09	<0.01	32.22	<0.01	3.69	0.02	40.91	17.00	0.70	0.04	3.71	0.36	0.03
912668	Rock	0.29	0.06	<0.01	33.98	<0.01	3.89	0.01	39.90	15.23	0.82	0.05	4.09	1.27	0.03
912669	Rock	0.35	0.92	<0.01	31.02	<0.01	4.74	0.06	35.13	15.50	0.62	0.06	3.85	7.28	0.11
912670	Pulp	0.71	0.17	0.02	37.55	<0.01	4.85	0.04	38.05	10.73	0.42	0.09	3.62	3.32	0.13
912671	Rock	0.28	0.35	<0.01	34.84	<0.01	3.53	0.03	37.70	14.16	0.62	0.05	4.87	2.42	0.04
912672	Rock	0.10	1.66	<0.01	28.67	<0.01	4.71	0.39	30.66	12.74	0.56	0.38	2.50	17.11	0.09
912673	Rock	0.11	1.83	<0.01	27.43	<0.01	5.00	0.33	31.50	13.64	0.53	0.31	2.51	15.89	0.08
912674	Rock	0.06	0.04	<0.01	32.69	<0.01	3.71	0.01	41.99	16.20	0.74	0.03	2.53	0.76	<0.01
912675	Rock	0.31	0.15	<0.01	33.41	<0.01	4.37	0.02	39.85	15.65	0.79	0.04	3.30	1.17	0.03

Certificate of Analysis

10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912606	Rock	101.28	<0.5	0.04	8	40	<2	>10	<0.5	4	9	65	2.97	0.02	405
912607	Rock	99.48	<0.5	0.05	12	38	<2	>10	<0.5	5	8	34	2.73	0.02	504
912608	Rock	101.30	<0.5	0.12	14	48	<2	>10	<0.5	11	7	30	3.44	0.06	647
912609	Rock	100.17	<0.5	0.04	16	38	<2	>10	<0.5	5	12	25	2.95	0.02	675
912610	Pulp	99.91	<0.5	0.12	<5	48	<2	>10	<0.5	4	4	36	3.61	0.03	424
912611	Rock	101.26	<0.5	0.11	11	39	<2	>10	<0.5	7	7	28	2.94	0.04	554
912612	Rock	101.17	<0.5	0.32	<5	228	<2	>10	<0.5	22	5	167	>10	0.26	478
912613	Rock	101.30	<0.5	0.26	<5	84	<2	>10	<0.5	26	6	75	>10	0.22	384
912614	Rock	100.04	<0.5	8.09	<5	871	<2	3.34	<0.5	9	94	9	2.65	2.52	30
912615	Rock	99.77	<0.5	0.10	7	74	<2	>10	<0.5	9	15	39	4.03	0.03	455
912616	Rock	100.38	<0.5	0.16	<5	67	<2	>10	<0.5	7	5	19	7.40	0.16	428
912617	Rock	98.56	<0.5	0.21	<5	109	<2	>10	<0.5	24	6	28	>10	0.07	528
912618	Rock	100.13	<0.5	0.06	<5	50	<2	>10	<0.5	9	7	15	6.23	<0.01	400
912619	Rock	98.71	<0.5	0.04	<5	47	<2	>10	<0.5	5	6	16	2.97	<0.01	272
912620 Dup	Rock	98.79	<0.5	0.03	<5	45	<2	>10	<0.5	5	6	16	3.02	<0.01	257
912621	Rock	99.18	<0.5	0.05	7	34	<2	>10	<0.5	4	5	27	2.51	<0.01	445
912622	Rock	99.80	<0.5	0.02	5	45	<2	>10	<0.5	4	5	16	2.36	<0.01	271
912623	Rock	98.67	<0.5	0.02	<5	39	<2	>10	<0.5	4	6	15	2.32	<0.01	160
912624	Rock	98.84	<0.5	0.02	<5	39	<2	>10	<0.5	2	6	12	2.34	<0.01	238
912625	Rock	99.63	<0.5	<0.01	<5	54	<2	>10	<0.5	3	6	4	2.09	<0.01	183
912626	Rock	98.71	<0.5	0.05	7	54	<2	>10	<0.5	1	6	12	2.20	<0.01	336
912627	Rock	98.50	<0.5	0.08	35	43	<2	>10	<0.5	9	7	31	4.12	0.01	1840
912628	Rock	99.24	<0.5	0.04	6	45	<2	>10	<0.5	4	6	29	3.03	0.01	417
912629	Rock	98.45	<0.5	0.19	35	36	<2	>10	<0.5	5	5	30	3.42	0.03	2201
912630	Pulp	98.91	<0.5	0.09	10	185	<2	>10	<0.5	4	4	31	3.24	0.03	471
912631	Rock	98.47	<0.5	0.22	8	40	<2	>10	<0.5	6	7	34	3.19	0.01	522
912632	Rock	98.84	<0.5	0.07	<5	39	<2	>10	<0.5	6	6	38	3.61	<0.01	395
912633	Rock	99.28	<0.5	0.09	5	35	<2	>10	<0.5	7	5	40	3.39	<0.01	397
912634	Rock	98.88	<0.5	0.03	<5	37	<2	>10	<0.5	4	6	26	2.89	<0.01	334
912635	Rock	98.46	<0.5	0.03	5	28	<2	>10	<0.5	5	5	54	3.06	<0.01	297
912636	Rock	99.35	<0.5	0.07	6	44	<2	>10	<0.5	12	5	89	5.61	<0.01	426
912637	Rock	98.49	<0.5	0.30	<5	35	<2	>10	<0.5	8	6	30	4.22	0.06	318
912638	Rock	99.30	<0.5	0.05	<5	39	<2	>10	<0.5	3	6	24	2.37	<0.01	333
912639	Rock	98.69	<0.5	0.04	5	37	<2	>10	<0.5	5	7	21	2.78	0.01	265
912640 Dup	Rock	98.04	<0.5	0.04	<5	37	<2	>10	<0.5	5	6	21	2.72	0.01	274
912641	Rock	98.69	<0.5	0.08	<5	41	<2	>10	<0.5	4	5	35	3.92	0.01	263
912642	Rock	98.43	<0.5	0.13	<5	37	<2	>10	<0.5	7	5	54	6.93	0.02	369
912643	Rock	99.03	<0.5	0.09	5	29	<2	>10	<0.5	12	5	46	5.33	0.02	352
912644	Rock	99.38	<0.5	0.12	5	25	<2	>10	<0.5	8	6	39	4.43	<0.01	336
912645	Rock	98.96	<0.5	0.23	<5	101	<2	>10	<0.5	20	6	50	>10	0.09	248



INSPECTORATE

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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912646	Rock	98.53	<0.5	0.16	<5	50	<2	>10	<0.5	4	6	56	4.07	<0.01	329
912647	Rock	98.72	<0.5	0.17	<5	56	<2	>10	<0.5	4	6	53	3.87	0.07	337
912648	Rock	99.32	<0.5	0.14	<5	90	<2	>10	<0.5	12	6	50	7.37	0.02	424
912649	Rock	98.91	<0.5	0.05	<5	26	<2	>10	<0.5	6	5	32	3.31	<0.01	322
912650	Pulp	99.35	<0.5	0.13	7	50	<2	>10	<0.5	5	4	32	4.08	0.03	414
912651	Rock	99.26	<0.5	0.03	<5	43	<2	>10	<0.5	5	6	19	2.80	<0.01	338
912652	Rock	98.93	<0.5	0.09	5	36	<2	>10	<0.5	3	6	39	2.46	<0.01	362
912653	Rock	98.22	<0.5	0.22	6	61	<2	>10	<0.5	8	7	75	4.71	<0.01	578
912654	Rock	98.91	<0.5	0.08	9	35	<2	>10	<0.5	2	7	36	2.88	<0.01	582
912655	Rock	98.74	<0.5	0.03	<5	45	<2	>10	<0.5	1	6	19	2.09	<0.01	194
912656	Rock	98.86	<0.5	1.93	<5	267	<2	>10	<0.5	10	14	50	4.26	0.83	391
912657	Rock	99.07	<0.5	0.06	<5	32	<2	>10	<0.5	6	7	23	3.08	<0.01	315
912658	Rock	98.72	<0.5	0.66	<5	49	<2	>10	<0.5	4	8	18	3.15	0.02	312
912659	Rock	98.93	<0.5	0.05	6	94	<2	>10	<0.5	3	7	17	3.05	<0.01	327
912660 Dup	Rock	99.38	<0.5	0.05	7	97	<2	>10	<0.5	4	5	17	3.08	<0.01	327
912661	Rock	99.15	<0.5	0.09	18	81	<2	>10	<0.5	5	7	19	3.51	0.02	901
912662	Rock	99.06	<0.5	0.06	12	37	<2	>10	<0.5	8	16	40	3.57	0.02	615
912663	Rock	98.93	<0.5	0.02	11	46	<2	>10	<0.5	3	7	13	2.83	<0.01	761
912664	Rock	98.67	<0.5	0.07	25	44	<2	>10	<0.5	5	7	11	2.60	0.04	643
912665	Rock	98.33	<0.5	0.10	6	56	<2	>10	<0.5	4	6	40	3.80	0.02	329
912666	Rock	98.99	<0.5	0.21	16	73	<2	>10	<0.5	<1	14	77	3.32	0.03	1220
912667	Rock	98.75	<0.5	0.05	6	42	<2	>10	<0.5	4	7	19	2.66	0.02	331
912668	Rock	99.33	<0.5	0.03	<5	46	<2	>10	<0.5	4	8	30	2.97	0.01	335
912669	Rock	99.29	<0.5	0.52	7	46	<2	>10	<0.5	6	15	28	3.42	0.06	369
912670	Pulp	99.00	<0.5	0.09	10	192	<2	>10	<0.5	2	4	49	3.43	0.03	402
912671	Rock	98.61	<0.5	0.19	6	42	<2	>10	<0.5	6	7	22	2.61	0.02	285
912672	Rock	99.48	<0.5	0.95	<5	88	<2	>10	<0.5	7	22	10	3.36	0.35	233
912673	Rock	99.06	<0.5	1.17	6	74	<2	>10	<0.5	7	28	12	3.61	0.28	355
912674	Rock	98.70	<0.5	0.02	5	41	<2	>10	<0.5	4	7	8	2.50	<0.01	248
912675	Rock	98.78	<0.5	0.09	<5	50	<2	>10	<0.5	3	8	23	2.98	0.02	341

Certificate of Analysis

10-360-03616-01

Aley Corporation
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Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
912606	Rock	9.08	3654	<1	0.03	2	>10000	171	<5	7	2405	0.01	<10	253	<10
912607	Rock	8.95	4776	5	0.02	1	>10000	76	<5	9	3176	<0.01	<10	260	<10
912608	Rock	8.46	5345	<1	0.02	2	>10000	135	<5	8	3160	0.02	<10	256	<10
912609	Rock	8.75	4899	<1	0.02	2	>10000	110	<5	8	2872	<0.01	<10	255	<10
912610	Pulp	8.49	3654	6	0.04	2	>10000	180	<5	8	2028	0.04	<10	274	<10
912611	Rock	9.11	4094	<1	0.03	2	>10000	140	<5	6	2614	0.02	<10	268	<10
912612	Rock	3.16	2994	<1	0.05	7	>10000	351	<5	4	2438	0.48	<10	608	<10
912613	Rock	6.43	3620	<1	0.03	4	>10000	148	<5	4	2479	0.28	<10	446	<10
912614	Rock	1.04	758	<1	2.84	6	1107	22	5	5	586	0.34	<10	93	<10
912615	Rock	8.31	4830	2	0.03	4	>10000	189	<5	6	3748	0.06	<10	279	<10
912616	Rock	7.14	3560	<1	0.04	3	>10000	94	<5	4	3729	0.08	<10	321	<10
912617	Rock	4.53	2921	<1	0.05	4	>10000	34	<5	4	2917	0.14	<10	402	<10
912618	Rock	7.92	4278	<1	0.03	2	>10000	68	<5	10	2855	0.04	<10	295	<10
912619	Rock	9.18	5067	1	0.03	1	>10000	90	<5	9	4060	<0.01	<10	260	<10
912620 Dup	Rock	9.54	5149	1	0.03	2	>10000	86	<5	8	4230	<0.01	<10	254	<10
912621	Rock	8.75	4030	<1	0.03	2	>10000	149	<5	6	3281	0.01	<10	254	<10
912622	Rock	9.46	4953	2	0.02	1	>10000	75	<5	7	4024	<0.01	<10	254	<10
912623	Rock	9.41	5291	3	0.02	1	>10000	70	<5	6	4101	<0.01	<10	252	<10
912624	Rock	>10	5657	5	0.02	1	>10000	65	<5	7	4517	<0.01	<10	249	<10
912625	Rock	9.82	6077	4	0.03	1	6951	12	<5	6	4304	<0.01	<10	275	<10
912626	Rock	9.41	5741	<1	0.04	1	>10000	49	<5	7	4147	<0.01	<10	270	<10
912627	Rock	8.47	5645	19	0.03	3	>10000	159	<5	11	3031	0.02	<10	248	<10
912628	Rock	8.59	5101	2	0.03	2	>10000	166	<5	8	3594	0.01	<10	240	<10
912629	Rock	8.50	5097	2	0.03	2	>10000	149	<5	10	2910	0.01	<10	244	<10
912630	Pulp	6.98	2994	1	0.06	3	>10000	177	<5	9	2277	0.07	<10	254	<10
912631	Rock	8.70	4894	3	0.03	2	>10000	158	<5	7	3429	0.02	<10	234	<10
912632	Rock	9.11	5318	<1	0.03	2	>10000	191	<5	7	4152	0.02	<10	247	<10
912633	Rock	8.92	4355	<1	0.03	2	>10000	195	<5	7	2976	0.02	<10	247	<10
912634	Rock	9.86	5644	<1	0.02	2	>10000	121	<5	6	4483	0.01	<10	253	<10
912635	Rock	9.56	4918	<1	0.02	2	>10000	152	<5	8	3335	0.02	<10	259	<10
912636	Rock	8.17	4283	2	0.03	4	>10000	304	<5	9	2829	0.13	<10	295	<10
912637	Rock	8.77	5266	<1	0.02	2	>10000	148	<5	7	3384	0.02	<10	262	<10
912638	Rock	9.16	5588	1	0.03	2	>10000	116	<5	8	4526	<0.01	<10	255	<10
912639	Rock	9.63	5838	<1	0.03	2	>10000	83	<5	7	4969	0.01	<10	262	<10
912640 Dup	Rock	9.30	5776	<1	0.03	2	>10000	88	<5	7	4955	0.01	<10	254	<10
912641	Rock	9.22	4773	<1	0.03	2	>10000	181	<5	7	4224	0.02	<10	276	<10
912642	Rock	8.55	3628	<1	0.03	4	>10000	291	<5	10	2708	0.07	<10	294	<10
912643	Rock	8.66	3098	<1	0.03	2	>10000	198	<5	10	1565	0.05	<10	267	<10
912644	Rock	>10	4375	<1	0.03	2	>10000	191	<5	10	2642	0.04	<10	270	<10
912645	Rock	7.36	4625	<1	0.03	4	>10000	231	<5	6	3497	0.19	<10	346	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912646	Rock	9.36	4822	<1	0.03	4	>10000	292	<5	9	3823	0.04	<10	267	<10
912647	Rock	9.37	5527	<1	0.03	3	>10000	299	<5	8	4407	0.05	<10	264	<10
912648	Rock	6.58	4339	2	0.02	4	>10000	262	<5	11	2004	0.13	<10	256	<10
912649	Rock	9.39	3195	<1	0.02	3	>10000	152	<5	10	1635	0.02	<10	261	<10
912650	Pulp	9.10	4053	4	0.05	3	>10000	166	<5	8	2175	0.04	<10	272	<10
912651	Rock	9.43	5247	<1	0.03	2	>10000	93	<5	10	4341	0.01	<10	262	<10
912652	Rock	9.48	4222	<1	0.03	2	>10000	205	<5	7	3990	0.02	<10	248	<10
912653	Rock	7.06	3443	<1	0.04	4	>10000	368	<5	7	3612	0.17	<10	337	<10
912654	Rock	8.83	4487	<1	0.03	2	>10000	178	<5	8	3167	0.03	<10	246	<10
912655	Rock	9.51	4876	<1	0.03	1	>10000	100	<5	6	3289	<0.01	<10	253	<10
912656	Rock	7.54	3672	2	0.24	10	>10000	182	<5	16	2280	0.34	<10	287	<10
912657	Rock	9.75	4482	<1	0.02	3	>10000	101	<5	6	2573	0.01	<10	263	<10
912658	Rock	9.68	4972	<1	0.03	4	>10000	105	<5	9	3055	0.02	<10	268	<10
912659	Rock	9.03	5912	<1	0.02	2	>10000	100	<5	9	3199	0.01	<10	242	<10
912660 Dup	Rock	9.26	5885	<1	0.02	2	>10000	105	<5	9	3247	0.01	<10	244	<10
912661	Rock	9.01	5254	<1	0.02	3	>10000	99	<5	9	2712	0.02	<10	224	<10
912662	Rock	9.39	4741	<1	0.02	3	>10000	190	<5	9	2925	0.03	<10	251	<10
912663	Rock	9.26	5939	<1	0.04	2	>10000	59	<5	9	4089	<0.01	<10	233	<10
912664	Rock	8.39	4607	<1	0.03	2	>10000	51	<5	8	3099	<0.01	<10	227	<10
912665	Rock	8.31	4975	<1	0.02	4	>10000	221	<5	9	2586	0.03	<10	235	<10
912666	Rock	7.97	4702	1	0.02	7	>10000	440	<5	14	1766	0.05	<10	234	<10
912667	Rock	9.55	5572	<1	0.03	3	>10000	98	<5	8	3974	0.02	<10	262	<10
912668	Rock	9.92	6790	<1	0.04	2	>10000	115	<5	9	5299	0.01	<10	253	<10
912669	Rock	8.36	4787	<1	0.04	4	>10000	146	<5	15	3580	0.05	<10	267	<10
912670	Pulp	7.37	3219	1	0.07	3	>10000	271	<5	9	2393	0.08	<10	266	<10
912671	Rock	9.14	5042	<1	0.04	2	>10000	116	<5	9	4106	0.02	<10	256	<10
912672	Rock	8.60	4523	<1	0.34	6	>10000	54	<5	15	3271	0.05	<10	286	<10
912673	Rock	8.78	4353	2	0.29	4	>10000	50	<5	15	2696	0.04	<10	269	<10
912674	Rock	9.52	5794	1	0.02	2	>10000	44	<5	8	3810	<0.01	<10	273	<10
912675	Rock	9.24	6083	2	0.03	2	>10000	142	<5	6	4222	0.02	<10	268	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912606	Rock	21	39	779.8	23.1	11.1	12.9	44.9	1.1	3.9	389.9	0.7	293.4	81.6	46.6
912607	Rock	21	20	944.9	18.6	7.8	11.8	45.6	1.1	2.5	492.3	0.5	324.7	95.2	50.5
912608	Rock	22	32	>1000	17.9	7.5	12.6	43.1	1.9	2.6	622.0	0.5	325.8	98.3	43.1
912609	Rock	21	28	>1000	16.9	7.4	11.5	45.1	1.4	2.5	685.2	0.5	339.7	103.2	42.8
912610	Pulp	25	35	794.5	22.3	8.9	13.8	47.6	2.4	3.4	404.5	0.6	298.9	86.1	49.1
912611	Rock	17	23	941.5	16.9	7.2	11.8	39.3	1.0	2.5	546.7	0.5	293.6	88.7	42.2
912612	Rock	138	97	920.2	20.0	7.4	15.3	52.6	15.3	2.7	421.7	0.4	371.2	101.7	57.4
912613	Rock	79	44	789.2	18.6	7.1	12.8	42.0	8.4	2.6	381.0	0.5	315.4	86.1	48.2
912614	Rock	59	8	73.4	3.2	1.9	1.6	4.7	2.4	0.6	40.6	0.3	27.4	8.0	5.1
912615	Rock	24	34	924.7	25.8	10.5	17.8	58.6	3.6	3.9	425.2	0.6	386.2	106.9	67.2
912616	Rock	49	48	872.5	20.2	7.6	14.5	49.8	7.3	2.8	395.4	0.4	346.6	92.7	52.9
912617	Rock	68	86	>1000	29.4	11.5	20.7	69.8	33.0	4.2	512.3	0.7	478.6	132.1	75.9
912618	Rock	43	52	777.3	16.6	7.2	11.6	41.1	4.6	2.6	398.2	0.5	280.5	80.7	43.5
912619	Rock	26	16	516.9	12.5	5.2	8.8	30.7	1.4	1.8	251.4	0.4	223.5	60.8	34.6
912620 Dup	Rock	25	15	526.8	12.8	5.0	8.8	29.4	1.1	1.8	243.9	0.3	211.0	60.9	34.1
912621	Rock	18	28	838.0	16.4	6.8	12.5	45.3	0.7	2.5	413.6	0.4	337.8	94.6	47.2
912622	Rock	22	17	504.5	12.8	5.1	8.4	31.0	1.0	1.9	251.6	0.3	207.6	57.3	34.3
912623	Rock	24	18	295.9	14.2	5.9	6.8	25.0	1.0	2.2	136.3	0.3	143.0	37.4	23.9
912624	Rock	24	16	429.8	17.3	7.6	8.9	30.1	0.7	2.8	212.7	0.4	199.2	50.3	35.4
912625	Rock	25	7	330.6	9.3	4.1	5.1	19.5	0.1	1.5	165.5	0.3	138.1	36.6	22.7
912626	Rock	28	28	605.2	35.0	15.9	13.2	49.2	1.1	6.3	305.4	1.1	284.9	78.6	46.8
912627	Rock	33	46	>1000	49.3	23.0	29.2	127.6	2.5	7.7	>1000	1.3	>1000	300.2	138.4
912628	Rock	28	63	772.8	40.5	18.9	17.8	59.1	1.8	6.9	380.9	1.3	359.6	98.6	58.1
912629	Rock	33	49	>1000	41.0	17.9	30.7	119.6	1.9	5.9	>1000	1.1	>1000	297.7	131.5
912630	Pulp	16	38	817.3	23.9	10.8	15.5	54.4	0.8	3.8	396.6	0.9	358.7	101.4	56.5
912631	Rock	27	78	944.1	46.4	21.5	19.5	66.7	2.3	7.9	481.5	1.5	419.0	114.6	65.6
912632	Rock	25	47	772.7	20.9	8.9	15.0	50.3	2.2	3.2	369.4	0.5	357.6	98.0	52.8
912633	Rock	27	65	685.0	22.8	9.2	13.7	44.9	1.8	3.4	321.6	0.7	302.7	81.9	46.6
912634	Rock	25	34	586.9	16.3	7.5	9.6	33.7	2.9	2.6	295.5	0.5	223.2	61.7	34.1
912635	Rock	22	39	580.6	17.6	7.8	10.8	37.7	1.1	2.8	280.2	0.5	260.6	70.8	38.6
912636	Rock	31	103	584.5	16.5	7.2	11.0	35.7	1.0	2.6	279.7	0.5	240.6	65.5	36.7
912637	Rock	27	50	830.9	36.5	17.7	16.8	56.3	6.2	6.4	385.9	1.2	348.1	96.1	56.3
912638	Rock	20	27	673.7	19.1	9.0	10.3	37.9	0.6	3.2	314.3	0.6	285.2	74.4	39.1
912639	Rock	21	12	507.8	16.2	6.5	9.4	33.2	1.0	2.4	226.9	0.4	233.2	63.8	34.4
912640 Dup	Rock	23	13	517.3	17.2	7.1	9.9	35.5	1.2	2.7	236.5	0.4	237.1	64.1	35.8
912641	Rock	23	45	529.0	16.6	6.5	10.2	35.3	1.1	2.4	231.7	0.4	240.9	61.1	35.4
912642	Rock	30	59	747.2	26.2	11.2	15.9	50.7	6.5	4.1	348.5	0.8	337.3	89.5	52.5
912643	Rock	23	45	712.2	34.3	16.2	14.2	51.3	3.9	6.1	330.4	1.2	314.9	82.3	48.0
912644	Rock	19	42	647.8	33.0	15.4	14.5	47.6	1.3	5.8	308.1	1.2	296.1	75.7	46.3
912645	Rock	59	42	575.2	17.7	7.2	11.9	37.5	4.6	2.5	249.8	0.5	243.7	65.4	38.8



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10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912646	Rock	17	38	726.5	29.6	11.7	17.4	53.2	1.2	4.8	312.1	0.7	307.1	83.1	50.1
912647	Rock	24	29	683.7	22.2	8.7	13.5	46.6	0.7	3.2	309.6	0.6	303.3	79.1	46.8
912648	Rock	30	49	807.3	38.8	17.3	15.8	55.6	5.7	6.5	391.7	1.4	313.1	92.5	52.9
912649	Rock	14	48	622.1	30.8	14.7	11.7	42.3	1.2	5.4	301.2	1.2	275.3	68.6	41.9
912650	Pulp	26	32	874.0	22.8	9.2	15.0	57.3	1.4	3.3	482.8	0.7	379.9	109.1	57.3
912651	Rock	24	15	624.7	17.1	6.6	9.8	38.1	1.6	2.4	301.4	0.4	272.1	76.8	39.2
912652	Rock	22	42	690.3	25.9	11.4	13.5	47.6	0.8	4.3	307.2	0.8	315.0	81.9	47.7
912653	Rock	25	57	>1000	60.9	27.2	29.6	94.9	7.1	10.7	521.2	1.8	553.0	139.3	90.4
912654	Rock	25	49	>1000	26.9	11.7	15.8	57.8	1.0	4.1	541.8	0.8	376.1	113.4	57.1
912655	Rock	28	43	339.7	17.0	8.0	7.7	28.7	0.9	3.0	167.6	0.6	173.5	45.6	27.9
912656	Rock	61	101	631.8	21.8	10.4	11.1	40.5	8.6	3.6	347.9	0.7	273.4	75.5	40.1
912657	Rock	25	31	528.2	15.5	6.7	8.6	31.6	1.2	2.4	293.5	0.5	206.5	59.0	31.7
912658	Rock	29	43	571.2	21.0	9.5	10.9	39.5	1.1	3.3	279.0	0.7	253.1	71.9	40.4
912659	Rock	28	50	620.5	20.4	8.9	11.2	38.2	1.4	3.2	299.3	0.6	262.5	75.4	40.1
912660 Dup	Rock	28	53	604.0	19.4	7.8	10.2	38.3	1.5	3.0	297.2	0.6	245.6	71.3	39.8
912661	Rock	31	87	>1000	27.2	11.7	17.3	64.3	3.4	4.2	854.6	0.9	458.9	140.6	64.1
912662	Rock	26	65	>1000	51.2	23.5	24.4	83.8	1.5	8.8	537.9	1.8	490.3	129.9	79.6
912663	Rock	29	49	>1000	36.9	16.8	21.4	85.8	1.4	5.8	744.3	1.1	626.6	169.4	90.9
912664	Rock	28	77	>1000	27.8	12.2	18.0	69.2	3.0	4.1	607.2	1.0	499.7	141.0	74.9
912665	Rock	28	65	642.2	24.1	10.7	14.5	46.0	1.7	3.9	290.2	0.8	282.6	73.2	46.1
912666	Rock	30	95	>1000	36.9	15.0	29.9	103.7	0.9	5.2	883.6	0.9	770.7	211.3	117.9
912667	Rock	24	25	664.0	18.5	7.6	11.6	41.0	1.4	2.8	292.5	0.5	262.2	73.0	41.7
912668	Rock	25	11	683.7	15.6	6.0	10.8	40.3	1.0	2.2	303.0	0.3	279.2	74.4	42.6
912669	Rock	27	20	787.5	18.8	7.6	13.4	45.3	1.0	2.7	361.0	0.5	328.4	84.7	48.7
912670	Pulp	15	42	948.0	25.0	10.7	15.3	56.3	0.8	4.0	433.4	0.9	365.8	99.1	58.2
912671	Rock	22	24	630.5	18.8	7.9	11.2	37.6	0.8	2.8	291.7	0.6	244.7	67.7	40.1
912672	Rock	40	57	432.1	13.6	5.8	7.7	29.3	5.1	2.1	207.8	0.4	205.7	52.9	29.5
912673	Rock	37	46	707.7	17.2	7.7	10.1	39.1	2.6	2.7	342.0	0.6	280.2	75.1	40.0
912674	Rock	26	20	468.1	16.9	7.7	6.9	27.4	1.2	2.8	239.2	0.5	188.5	49.2	28.6
912675	Rock	26	22	721.4	21.4	9.0	12.5	45.9	1.0	3.4	325.9	0.5	295.2	83.6	45.8



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Certificate of Analysis

10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
912606	Rock	4.9	1.2	6.4	91.4	7.92	159.65	3.45
912607	Rock	4.3	0.8	4.1	67.7	2.60	130.02	1.60
912608	Rock	4.0	0.8	4.3	68.5	14.97	136.38	4.23
912609	Rock	3.9	0.8	4.2	65.7	6.24	125.57	2.57
912610	Pulp	5.1	1.0	5.5	79.0	22.21	136.59	7.34
912611	Rock	3.7	0.7	4.1	71.4	16.34	126.22	2.78
912612	Rock	5.1	0.7	3.9	68.4	11.65	274.42	7.49
912613	Rock	4.2	0.7	4.2	68.1	1.94	154.47	4.99
912614	Rock	0.6	0.3	1.9	17.6	2.05	8.01	2.80
912615	Rock	5.7	1.0	5.1	93.8	8.16	172.55	4.72
912616	Rock	4.9	0.8	3.9	80.0	0.98	100.74	1.67
912617	Rock	7.0	1.1	6.3	104.1	0.54	178.89	10.67
912618	Rock	3.8	0.7	4.1	65.9	0.50	171.64	3.33
912619	Rock	2.9	0.5	2.8	45.8	3.42	74.61	1.50
912620 Dup	Rock	3.0	0.5	2.6	46.1	3.13	73.73	1.29
912621	Rock	4.2	0.7	3.7	57.9	6.26	81.07	1.28
912622	Rock	3.1	0.5	2.8	48.0	2.13	76.66	1.03
912623	Rock	2.9	0.6	3.0	58.0	1.44	94.02	1.12
912624	Rock	3.4	0.9	4.0	78.0	1.80	98.43	1.07
912625	Rock	2.0	0.5	2.2	37.7	0.25	64.25	0.41
912626	Rock	6.3	1.8	9.4	154.3	3.59	153.76	1.53
912627	Rock	11.1	2.3	11.6	192.3	6.74	241.68	2.73
912628	Rock	7.7	2.1	10.8	183.6	11.33	268.29	3.60
912629	Rock	10.3	1.7	8.4	149.0	7.72	253.96	3.60
912630	Pulp	5.7	1.2	6.8	91.4	4.68	206.34	2.14
912631	Rock	8.2	2.5	13.0	194.4	23.97	317.53	9.86
912632	Rock	5.0	0.9	4.8	77.9	13.03	200.96	4.12
912633	Rock	5.0	1.0	5.7	87.8	48.13	253.17	7.61
912634	Rock	3.6	0.8	4.4	74.6	3.96	132.99	1.92
912635	Rock	3.8	0.8	4.4	69.7	7.24	146.55	1.93
912636	Rock	3.8	0.8	4.5	70.0	19.24	413.54	5.34
912637	Rock	6.8	2.0	10.2	156.6	7.65	175.57	3.51
912638	Rock	4.1	1.0	4.6	86.8	4.36	131.99	1.56
912639	Rock	3.6	0.7	3.3	59.5	2.31	48.91	0.89
912640 Dup	Rock	3.7	0.7	3.4	57.1	2.62	50.72	1.01
912641	Rock	3.5	0.7	3.4	58.1	5.92	110.64	1.67
912642	Rock	5.5	1.2	6.5	102.0	5.67	261.89	3.62
912643	Rock	6.1	1.8	10.0	137.9	3.71	214.10	2.59
912644	Rock	6.2	1.8	9.4	147.9	4.64	187.26	2.22
912645	Rock	3.8	0.7	4.0	64.1	7.86	91.06	4.61



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
912646	Rock	6.2	1.2	6.0	113.0	4.98	120.03	2.05
912647	Rock	4.9	0.9	4.6	78.9	5.29	99.77	1.81
912648	Rock	6.8	2.0	10.6	156.5	1.81	223.14	4.11
912649	Rock	5.4	1.7	9.6	126.9	4.05	154.40	1.94
912650	Pulp	5.4	1.0	5.5	72.4	20.74	139.93	7.55
912651	Rock	3.8	0.7	3.5	52.8	1.17	66.86	1.62
912652	Rock	5.3	1.3	6.4	104.6	5.04	110.25	2.97
912653	Rock	11.1	3.0	15.4	261.7	11.39	204.06	12.91
912654	Rock	6.0	1.2	6.6	107.6	2.88	157.47	4.82
912655	Rock	3.2	0.9	5.0	63.1	1.35	88.93	2.25
912656	Rock	4.2	1.2	6.0	86.1	6.33	88.45	3.14
912657	Rock	3.4	0.7	4.3	63.4	16.19	97.75	5.20
912658	Rock	4.4	1.0	5.6	74.3	17.61	150.17	6.24
912659	Rock	4.3	0.9	5.0	71.4	30.05	137.20	6.04
912660 Dup	Rock	4.0	0.9	5.1	67.8	31.22	144.88	6.49
912661	Rock	6.1	1.2	6.6	104.1	57.44	188.82	8.68
912662	Rock	10.0	2.6	14.6	218.9	5.53	159.79	5.59
912663	Rock	8.2	1.9	9.9	150.2	0.68	271.60	2.78
912664	Rock	6.8	1.4	7.4	99.4	4.33	262.20	4.68
912665	Rock	5.0	1.2	6.8	94.2	9.85	166.48	8.70
912666	Rock	9.2	1.5	8.0	131.5	41.88	369.98	30.57
912667	Rock	4.2	0.8	4.2	66.3	12.95	97.69	5.88
912668	Rock	3.6	0.6	2.8	51.8	1.98	58.83	2.08
912669	Rock	4.4	0.8	4.0	68.4	17.39	105.99	8.03
912670	Pulp	5.6	1.2	6.6	96.7	46.55	190.28	2.16
912671	Rock	3.9	0.9	4.9	77.0	5.70	91.87	5.11
912672	Rock	3.0	0.7	3.4	50.2	2.32	42.42	2.91
912673	Rock	3.8	0.9	4.5	69.1	6.53	63.06	3.99
912674	Rock	3.1	0.8	4.0	71.5	1.64	137.10	1.84
912675	Rock	4.6	1.0	4.7	79.7	33.82	122.28	26.62



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		Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
Sample	Sample	Nb2O5-AD3-OR-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP
Description	Type	%	%	%	%	%	%	%	%	%	%	%	%	%	%
912606	Rock	0.40													
912606 Dup		0.42													
QCV1011-00577-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
912624	Rock	0.16													
912624 Dup		0.16													
QCV1011-00577-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.55													
912642	Rock	0.88													
912642 Dup		0.87													
QCV1011-00577-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
912660 Dup	Rock	0.26													
912660 Dup Dup		0.26													
QCV1011-00577-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.51													
QCV1011-00577-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
912606	Rock		0.08	<0.01	35.86	<0.01	4.42	0.02	39.76	15.25	0.56	0.03	4.55	0.69	0.04
912606 Dup			0.09	<0.01	34.69	<0.01	4.31	0.02	39.90	15.42	0.55	0.03	4.49	0.68	0.04
QCV1011-00580-0002-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912624	Rock		0.05	<0.01	33.94	<0.01	3.61	<0.01	41.80	15.00	0.77	0.03	3.16	0.44	0.01
912624 Dup			0.04	<0.01	33.94	<0.01	3.58	<0.01	41.84	14.91	0.77	0.03	3.17	0.49	0.01
QCV1011-00580-0005-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912642	Rock		0.29	<0.01	32.58	<0.01	9.95	0.01	35.28	13.24	0.47	0.05	5.52	0.86	0.19
912642 Dup			0.30	0.01	31.87	0.02	10.19	0.09	35.34	13.75	0.49	0.06	5.58	0.91	0.20
QCV1011-00580-0008-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912660 Dup	Rock		0.13	0.02	35.02	0.01	4.20	0.05	40.04	14.59	0.76	0.04	4.01	0.48	0.03
912660 Dup Dup			0.11	0.01	34.99	<0.01	4.18	0.05	40.04	14.54	0.74	0.04	3.98	0.44	0.03
QCV1011-00580-0011-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00580-0013-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.74	0.05	8.09	0.01	6.25	1.65	4.54	0.54	0.12	6.93	0.15	50.06	0.31

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Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912606	Rock		<0.5	0.04	8	40	<2	>10	<0.5	4	9	65	2.97	0.02	405
912606 Dup			<0.5	0.05	10	39	<2	>10	<0.5	4	9	62	3.02	0.02	415
QCV1011-00578-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			97.4									6133	5.66	1.34	
912624	Rock		<0.5	0.02	<5	39	<2	>10	<0.5	2	6	12	2.34	<0.01	238
912624 Dup			<0.5	0.02	<5	40	<2	>10	<0.5	3	5	14	2.35	<0.01	236
QCV1011-00578-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			97.1									6535	6.23	1.34	
912642	Rock		<0.5	0.13	<5	37	<2	>10	<0.5	7	5	54	6.93	0.02	369
912642 Dup			<0.5	0.13	<5	37	<2	>10	<0.5	8	5	55	7.06	0.02	361
QCV1011-00578-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected													6.00	1.37	
STD-CDN-ME-6 result															
912660 Dup	Rock		<0.5	0.05	7	97	<2	>10	<0.5	4	5	17	3.08	<0.01	327
912660 Dup Dup			<0.5	0.04	8	95	<2	>10	<0.5	3	6	17	3.02	<0.01	337
QCV1011-00578-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							121	1045	690	>10	0.34	
QCV1011-00578-0013-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							123	1151	708	>10	0.34	
912606	Rock	101.28													
912606 Dup		100.23													
QCV1011-00580-0002-BLK		<0.01													
912624	Rock	98.84													
912624 Dup		98.78													
QCV1011-00580-0005-BLK		<0.01													
912642	Rock	98.43													
912642 Dup		98.80													
QCV1011-00580-0008-BLK		<0.01													
912660 Dup	Rock	99.38													
912660 Dup Dup		99.15													
QCV1011-00580-0011-BLK		<0.01													
QCV1011-00580-0013-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		99.47													



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10-360-03616-01

Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912606	Rock	9.08	3654	<1	0.03	2	>10000	171	<5	7	2405	0.01	<10	253	<10
912606 Dup		8.94	3672	<1	0.03	2	>10000	171	<5	7	2420	0.02	<10	263	<10
QCV1011-00578-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result		1.31	1783					9857							
912624	Rock	>10	5657	5	0.02	1	>10000	65	<5	7	4517	<0.01	<10	249	<10
912624 Dup		9.55	5648	5	0.02	1	>10000	64	<5	7	4456	<0.01	<10	263	<10
QCV1011-00578-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result		1.34	1976					>10000							
912642	Rock	8.55	3628	<1	0.03	4	>10000	291	<5	10	2708	0.07	<10	294	<10
912642 Dup		8.50	3656	<1	0.03	3	>10000	289	<5	10	2746	0.07	<10	300	<10
QCV1011-00578-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected															
STD-CDN-ME-6 result		1.32	1887												
912660 Dup	Rock	9.26	5885	<1	0.02	2	>10000	105	<5	9	3247	0.01	<10	244	<10
912660 Dup Dup		9.13	5837	<1	0.02	3	>10000	93	<5	9	3220	0.01	<10	241	<10
QCV1011-00578-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result		0.26	1363		0.08	374	452	21							
QCV1011-00578-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result		0.28	1518		0.08	376	456	22							



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912606	Rock	21	39	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
912606 Dup		21	42												
QCV1011-00578-0002-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5106													
912624	Rock	24	16												
912624 Dup		24	16												
QCV1011-00578-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5397													
912642	Rock	30	59												
912642 Dup		30	56												
QCV1011-00578-0008-BLK		<2	<1												
912660 Dup	Rock	28	53												
912660 Dup Dup		27	52												
QCV1011-00578-0011-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		148													
QCV1011-00578-0013-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		148													
QCV1011-00581-0001-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912606	Rock			779.8	23.1	11.1	12.9	44.9	1.1	3.9	389.9	0.7	293.4	81.6	46.6
912606 Dup				802.9	23.7	10.7	12.5	43.9	1.1	3.8	398.7	0.8	283.4	81.3	44.8
912624	Rock			429.8	17.3	7.6	8.9	30.1	0.7	2.8	212.7	0.4	199.2	50.3	35.4
912624 Dup				427.7	18.6	8.0	9.0	33.4	1.1	3.1	203.7	0.5	199.9	54.3	36.6
912642	Rock			747.2	26.2	11.2	15.9	50.7	6.5	4.1	348.5	0.8	337.3	89.5	52.5
912642 Dup				716.5	26.2	11.7	15.5	52.8	6.8	4.1	338.6	0.8	336.5	88.7	50.7
912660 Dup	Rock			604.0	19.4	7.8	10.2	38.3	1.5	3.0	297.2	0.6	245.6	71.3	39.8
912660 Dup Dup				633.8	18.6	8.5	10.3	38.0	1.6	3.0	298.4	0.6	256.4	71.2	39.3
QCV1011-00581-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				123.3	18.8	13.7	1.9	14.8	11.0	4.3	57.0	2.1	55.8	14.0	13.0



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10-360-03616-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
QCV1011-00581-0001-BLK		<0.1	<0.1	<0.1	<0.10			
912606	Rock	4.9	1.2	6.4	91.4			
912606 Dup		4.8	1.2	6.5	97.9			
912624	Rock	3.4	0.9	4.0	78.0			
912624 Dup		3.7	0.9	4.5	78.2			
912642	Rock	5.5	1.2	6.5	102.0			
912642 Dup		5.3	1.3	6.8	98.5			
912660 Dup	Rock	4.0	0.9	5.1	67.8			
912660 Dup Dup		4.1	0.9	4.9	71.4			
QCV1011-00581-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.6	2.4	15.1	118.8			
912606	Rock					7.92	159.65	3.45
912606 Dup						7.39	174.43	3.69
QCV1105-00535-0002-BLK						<0.05	<0.20	<0.10
912624	Rock					1.80	98.43	1.07
912624 Dup						1.77	103.60	1.14
QCV1105-00535-0005-BLK						<0.05	<0.20	<0.10
912642	Rock					5.67	261.89	3.62
912642 Dup						5.85	245.98	3.64
QCV1105-00535-0008-BLK						<0.05	<0.20	<0.10
912660 Dup	Rock					31.22	144.88	6.49
912660 Dup Dup						30.15	138.54	6.22
QCV1105-00535-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00535-0013-BLK						<0.05	<0.20	<0.10



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Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/17/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-032</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">3</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">67</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	3	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	67	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
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Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP																																			
Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



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10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912676	Rock	0.27	0.22	<0.01	34.48	<0.01	5.64	0.04	38.41	14.79	0.68	0.03	4.61	0.05	0.07
912677	Rock	0.56	0.18	<0.01	34.65	<0.01	4.41	0.03	38.35	16.52	0.64	0.04	4.79	<0.01	0.04
912678	Rock	0.58	0.21	<0.01	33.76	<0.01	5.30	0.03	38.65	15.87	0.57	0.04	4.94	0.17	0.08
912679	Rock	0.45	0.20	<0.01	34.59	0.02	6.49	0.03	37.62	15.10	0.70	0.05	4.80	0.12	0.08
912680 Dup	Rock	0.45	0.19	<0.01	34.26	<0.01	6.65	0.02	37.33	14.67	0.70	0.04	4.97	0.13	0.08
912681	Rock	0.35	0.16	<0.01	33.93	<0.01	5.46	0.03	38.82	15.58	0.66	0.03	4.45	<0.01	0.06
912682	Rock	1.01	0.38	<0.01	36.73	<0.01	4.84	0.08	36.34	14.15	0.67	0.04	5.67	0.39	0.07
912683	Rock	0.98	0.51	<0.01	35.84	<0.01	7.37	0.08	33.33	13.07	0.55	0.04	7.40	0.59	0.21
912684	Rock	0.60	0.39	<0.01	35.68	<0.01	6.09	0.06	36.52	14.18	0.61	0.04	5.69	0.65	0.17
912685	Rock	0.78	0.33	<0.01	34.47	<0.01	8.01	0.03	34.93	13.73	0.68	0.04	6.38	0.24	0.23
912686	Rock	1.12	1.05	<0.01	30.21	<0.01	15.38	0.16	29.78	13.48	0.48	0.05	5.99	1.95	1.39
912687	Rock	0.25	0.46	<0.01	33.27	<0.01	5.78	0.09	38.09	15.77	0.60	0.03	4.77	0.47	0.14
912688	Rock	0.29	0.22	<0.01	37.26	<0.01	5.48	0.05	34.07	13.67	0.49	0.03	8.86	0.11	0.04
912689	Rock	0.18	0.15	<0.01	35.11	<0.01	4.12	0.02	38.89	14.94	0.69	0.03	5.17	<0.01	0.02
912690	Pulp	0.50	0.30	<0.01	33.21	<0.01	5.58	0.04	38.70	15.47	0.51	0.06	3.74	1.53	0.12
912691	Rock	0.27	0.15	<0.01	34.03	<0.01	4.10	0.03	40.33	16.01	0.62	0.03	3.82	0.03	0.02
912692	Rock	0.26	0.22	<0.01	35.66	<0.01	4.05	0.05	38.28	15.02	0.59	0.04	5.21	0.21	0.04
912693	Rock	0.19	0.15	<0.01	33.84	<0.01	3.87	0.03	39.81	16.42	0.54	0.03	4.45	<0.01	0.03
912694	Rock	0.16	0.58	<0.01	33.79	<0.01	3.59	0.11	40.06	16.01	0.64	0.03	3.83	0.54	0.06
912695	Rock	0.34	0.12	<0.01	32.65	<0.01	4.28	0.02	42.30	16.87	0.80	0.03	1.81	<0.01	0.02
912696	Rock	0.16	0.13	<0.01	32.40	<0.01	4.97	0.02	42.59	16.71	0.89	0.05	1.47	<0.01	0.03
912697	Rock	0.19	0.12	<0.01	33.10	<0.01	3.88	0.02	42.49	17.64	0.77	0.04	1.81	<0.01	0.02
912698	Rock	0.78	0.39	<0.01	37.87	<0.01	3.68	0.10	35.34	13.28	0.58	0.05	7.93	0.33	0.04
912699	Rock	0.35	0.19	<0.01	35.00	<0.01	4.28	0.03	39.27	15.80	0.65	0.04	4.17	<0.01	0.03
912700 Dup	Rock	0.36	0.20	<0.01	34.80	<0.01	4.48	0.03	39.12	15.98	0.63	0.04	4.39	<0.01	0.03
912701	Rock	0.10	0.13	<0.01	33.66	<0.01	4.74	0.02	42.43	16.86	0.93	0.03	1.65	<0.01	0.01
912702	Rock	0.77	0.38	<0.01	35.40	<0.01	6.25	0.05	36.39	14.12	0.61	0.04	5.30	0.30	0.12
912703	Rock	0.66	0.31	<0.01	35.51	<0.01	6.69	0.05	36.61	14.53	0.61	0.04	4.91	0.29	0.12
912704	Rock	0.36	0.41	<0.01	35.55	<0.01	5.64	0.06	38.12	14.33	0.62	0.03	4.22	0.37	0.40
912705	Rock	0.32	2.42	<0.01	30.69	<0.01	4.98	0.24	36.77	16.98	0.55	0.03	3.53	3.46	0.18
912707	Rock	0.75	0.18	<0.01	36.07	<0.01	3.84	0.04	37.14	15.64	0.54	0.05	5.33	0.06	0.05
912708	Rock	0.19	2.44	0.01	26.34	<0.01	4.76	0.23	30.94	12.51	0.36	0.50	2.88	17.73	0.27
912709	Rock	0.31	0.70	<0.01	35.27	<0.01	4.27	0.20	39.58	15.56	0.50	0.03	3.37	0.98	0.13
912710	Pulp	0.80	0.58	0.02	31.22	<0.01	16.80	0.09	30.74	12.43	0.43	0.06	4.81	2.04	0.59
912711	Rock	0.35	0.37	<0.01	36.01	<0.01	5.42	0.07	37.11	13.99	0.56	0.03	5.14	0.44	0.11
912712	Rock	0.41	0.42	<0.01	34.43	<0.01	4.73	0.06	37.33	16.06	0.56	0.04	5.25	0.42	0.06
912713	Rock	0.34	1.03	0.01	35.19	<0.01	4.00	0.16	36.66	15.01	0.53	0.04	5.28	1.30	0.08
912714	Rock	0.21	0.31	0.01	33.61	<0.01	4.70	0.09	39.32	15.84	0.68	0.04	3.49	0.86	0.05
912715	Rock	0.15	0.11	<0.01	34.40	<0.01	3.42	0.02	40.95	16.88	0.65	0.03	3.38	<0.01	0.01
912716	Rock	0.83	0.20	<0.01	35.99	<0.01	3.84	0.04	37.04	15.65	0.56	0.05	5.79	0.04	0.06



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912717	Rock	0.14	3.55	0.02	28.49	0.01	4.50	0.36	35.79	16.38	0.57	0.05	3.08	5.72	0.50
912718	Rock	0.32	0.17	<0.01	32.14	<0.01	3.64	0.03	41.83	18.20	0.63	0.03	2.25	<0.01	0.04
912719	Rock	0.13	0.50	<0.01	31.47	<0.01	4.73	0.12	39.68	16.93	0.65	0.04	2.73	2.80	0.06
912720 Dup	Rock	0.13	0.50	<0.01	31.35	<0.01	4.82	0.10	39.49	16.46	0.64	0.04	2.94	2.87	0.05
912721	Rock	0.44	0.23	<0.01	34.26	<0.01	5.28	0.04	39.22	15.60	0.65	0.04	3.43	0.21	0.26
912722	Rock	0.48	0.12	<0.01	34.14	<0.01	3.80	0.02	41.80	16.30	0.69	0.03	2.22	<0.01	0.03
912723	Rock	0.14	0.12	<0.01	34.63	<0.01	3.80	0.02	40.09	15.91	0.72	0.05	4.05	<0.01	<0.01
912724	Rock	0.42	0.20	<0.01	35.87	<0.01	3.89	0.05	39.40	15.61	0.57	0.04	4.05	<0.01	0.04
912725	Rock	0.22	0.21	<0.01	34.42	<0.01	3.99	0.05	40.01	16.23	0.59	0.04	3.77	<0.01	0.05
912726	Rock	0.22	0.19	<0.01	34.03	<0.01	3.39	0.04	41.13	16.85	0.64	0.04	2.85	<0.01	0.03
912727	Rock	0.14	0.14	<0.01	34.44	<0.01	3.57	0.03	41.47	15.96	0.77	0.04	2.49	0.17	0.02
912728	Rock	0.44	0.21	0.02	39.30	<0.01	3.60	0.04	37.40	12.70	0.69	0.04	5.16	0.21	0.03
912729	Rock	0.35	0.23	0.01	37.17	<0.01	3.97	0.03	38.66	14.26	0.71	0.05	4.39	0.24	0.06
912730	Pulp	0.45	0.30	<0.01	34.75	<0.01	5.42	0.04	38.94	14.46	0.49	0.06	3.67	1.41	0.12
912731	Rock	0.46	0.19	0.01	33.25	<0.01	12.88	0.05	35.44	12.92	0.65	0.05	3.48	0.41	0.26
912732	Rock	0.06	0.09	<0.01	34.50	<0.01	3.17	<0.01	40.76	16.22	0.73	0.05	3.72	<0.01	<0.01
912733	Rock	0.05	0.08	<0.01	33.70	<0.01	2.98	0.01	42.26	16.95	0.75	0.03	2.35	<0.01	<0.01
912734	Rock	0.08	0.08	<0.01	34.11	<0.01	3.27	<0.01	41.88	17.18	0.81	0.04	2.73	<0.01	<0.01
912735	Rock	0.36	0.23	0.01	36.70	<0.01	4.47	0.05	37.14	13.99	0.73	0.06	5.58	0.23	0.04
912736	Rock	0.23	0.17	<0.01	36.21	<0.01	4.40	0.04	39.95	15.22	0.74	0.04	3.72	<0.01	0.03
912737	Rock	0.11	0.11	<0.01	33.91	<0.01	3.50	0.02	41.34	16.62	0.81	0.04	2.91	<0.01	0.01
912738	Rock	0.24	0.17	<0.01	34.77	<0.01	3.92	0.04	40.86	16.03	0.66	0.04	3.07	<0.01	0.02
912739	Rock	0.13	0.13	0.01	35.35	<0.01	4.33	0.02	40.64	16.27	0.76	0.03	2.21	<0.01	0.01
912740 Dup	Rock	0.13	0.12	0.01	35.03	<0.01	4.36	0.02	40.80	16.22	0.74	0.03	2.20	<0.01	0.01
912741	Rock	0.30	0.17	<0.01	35.09	<0.01	4.01	0.04	40.42	16.32	0.70	0.03	3.50	<0.01	0.05
912742	Rock	0.29	0.22	<0.01	33.56	<0.01	4.34	0.05	39.99	16.44	0.51	0.03	3.81	<0.01	0.06
912743	Rock	0.31	0.19	<0.01	33.91	<0.01	3.94	0.04	40.64	17.08	0.61	0.03	3.42	<0.01	0.02
912744	Rock	0.65	0.33	<0.01	31.91	<0.01	10.57	0.11	35.47	15.20	0.61	0.05	4.56	0.86	0.16
912745	Rock	0.01	15.18	0.11	4.04	0.03	3.82	3.56	1.07	1.45	0.11	3.43	0.24	65.98	0.45
912746	Rock	0.09	0.28	<0.01	33.07	<0.01	3.66	0.06	40.77	18.05	0.54	0.04	3.49	0.14	0.05

Certificate of Analysis

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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912676	Rock	99.04	<0.5	0.09	11	47	<2	>10	<0.5	8	8	24	3.96	0.03	310
912677	Rock	99.65	<0.5	0.08	10	37	<2	>10	<0.5	3	8	40	3.06	0.02	435
912678	Rock	99.64	<0.5	0.10	17	38	<2	>10	<0.5	5	6	44	3.96	0.02	726
912679	Rock	99.79	<0.5	0.08	<5	53	<2	>10	<0.5	16	6	35	4.27	0.02	310
912680 Dup	Rock	99.05	<0.5	0.08	6	52	<2	>10	<0.5	16	5	34	4.09	0.02	320
912681	Rock	99.20	<0.5	0.06	10	36	<2	>10	<0.5	7	5	26	3.57	0.02	379
912682	Rock	99.37	<0.5	0.19	7	51	<2	>10	<0.5	3	5	69	3.32	0.06	381
912683	Rock	99.00	<0.5	0.27	9	55	<2	>10	<0.5	11	5	73	5.26	0.06	406
912684	Rock	100.10	1.0	0.17	10	41	<2	>10	<0.5	12	6	48	4.10	0.04	321
912685	Rock	99.07	<0.5	0.15	11	44	<2	>10	<0.5	19	5	62	5.25	0.02	307
912686	Rock	99.94	0.6	0.63	<5	66	<2	>10	<0.5	24	6	90	>10	0.13	396
912687	Rock	99.47	<0.5	0.25	19	62	<2	>10	<0.5	6	7	18	3.70	0.07	671
912688	Rock	100.29	<0.5	0.10	11	43	<2	>10	<0.5	8	5	22	3.71	0.03	359
912689	Rock	99.15	1.0	0.06	10	42	<2	>10	<0.5	4	6	14	2.67	0.02	360
912690	Pulp	99.28	1.0	0.15	5	43	<2	>10	<0.5	5	3	33	3.60	0.03	310
912691	Rock	99.17	0.6	0.07	8	42	<2	>10	<0.5	4	5	20	2.82	0.02	303
912692	Rock	99.38	0.7	0.12	9	44	<2	>10	<0.5	5	6	20	2.83	0.03	290
912693	Rock	99.17	<0.5	0.06	14	30	<2	>10	<0.5	3	5	14	2.69	0.02	506
912694	Rock	99.25	<0.5	0.30	7	55	<2	>10	<0.5	3	8	12	2.45	0.08	308
912695	Rock	98.92	<0.5	0.05	6	40	<2	>10	<0.5	3	5	24	2.78	0.02	285
912696	Rock	99.26	<0.5	0.04	8	57	<2	>10	<0.5	5	7	11	3.51	0.01	239
912697	Rock	99.90	<0.5	0.04	6	43	<2	>10	<0.5	3	5	13	2.84	0.01	257
912698	Rock	99.60	<0.5	0.18	11	58	<2	>10	<0.5	2	8	54	2.70	0.07	474
912699	Rock	99.46	0.7	0.08	10	46	<2	>10	<0.5	4	7	28	3.09	0.02	301
912700 Dup	Rock	99.72	0.8	0.09	7	45	<2	>10	<0.5	4	6	27	3.11	0.02	309
912701	Rock	100.47	0.7	0.04	14	49	<2	>10	<0.5	4	8	7	3.16	<0.01	505
912702	Rock	98.96	<0.5	0.21	9	41	<2	>10	<0.5	14	5	56	4.19	0.03	405
912703	Rock	99.68	<0.5	0.14	7	57	<2	>10	<0.5	9	6	48	4.28	0.03	299
912704	Rock	99.76	0.7	0.20	5	47	<2	>10	<0.5	8	9	24	3.79	0.04	254
912705	Rock	99.86	<0.5	1.27	7	79	<2	>10	<0.5	4	30	23	3.57	0.18	343
912707	Rock	98.97	0.7	0.10	9	41	<2	>10	<0.5	4	6	27	2.62	0.03	399
912708	Rock	98.97	<0.5	1.26	<5	102	<2	>10	<0.5	6	48	12	3.27	0.18	279
912709	Rock	100.61	<0.5	0.43	8	57	<2	>10	<0.5	4	10	25	3.02	0.16	367
912710	Pulp	99.79	<0.5	0.30	<5	138	<2	>10	<0.5	12	4	67	>10	0.07	340
912711	Rock	99.27	<0.5	0.19	16	91	<2	>10	<0.5	5	6	24	3.56	0.05	492
912712	Rock	99.37	2.2	0.20	11	59	<2	>10	<0.5	8	7	29	3.15	0.04	388
912713	Rock	99.30	0.8	0.56	9	111	<2	>10	<0.5	2	12	24	2.84	0.11	429
912714	Rock	99.02	0.9	0.15	13	112	<2	>10	<0.5	4	8	14	3.26	0.06	475
912715	Rock	99.87	<0.5	0.04	<5	45	<2	>10	<0.5	2	6	10	2.55	0.01	252
912716	Rock	99.25	0.9	0.09	<5	38	<2	>10	<0.5	2	6	51	2.80	0.03	307

Certificate of Analysis

10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912717	Rock	99.00	0.6	1.78	<5	140	<2	>10	<0.5	7	35	8	3.02	0.26	182
912718	Rock	98.96	1.1	0.07	<5	40	<2	>10	<0.5	4	6	23	2.62	0.03	229
912719	Rock	99.71	1.0	0.23	6	49	<2	>10	<0.5	10	9	13	3.19	0.08	191
912720 Dup	Rock	99.26	1.6	0.22	8	50	<2	>10	<0.5	11	10	14	3.45	0.08	196
912721	Rock	99.23	1.3	0.09	<5	55	<2	>10	<0.5	8	6	30	3.68	0.03	254
912722	Rock	99.15	1.0	0.03	8	39	<2	>10	<0.5	3	6	30	2.78	0.01	444
912723	Rock	99.41	0.5	0.03	10	42	<2	>10	<0.5	4	8	9	2.63	<0.01	434
912724	Rock	99.72	0.8	0.08	<5	38	<2	>10	<0.5	5	6	29	2.91	0.03	313
912725	Rock	99.37	0.7	0.07	6	56	<2	>10	<0.5	6	7	16	2.90	0.04	275
912726	Rock	99.20	1.1	0.08	<5	47	<2	>10	<0.5	4	7	16	2.48	0.03	238
912727	Rock	99.10	0.9	0.06	<5	74	<2	>10	<0.5	3	7	11	2.75	0.02	286
912728	Rock	99.40	1.0	0.09	6	146	<2	>10	<0.5	4	6	34	2.61	0.03	305
912729	Rock	99.79	1.1	0.10	<5	88	<2	>10	<0.5	6	6	28	2.88	0.03	281
912730	Pulp	99.67	1.1	0.15	8	48	<2	>10	<0.5	6	7	40	3.79	0.03	399
912731	Rock	99.59	<0.5	0.10	<5	93	<2	>10	<0.5	14	8	30	9.03	0.04	216
912732	Rock	99.26	<0.5	0.02	5	45	<2	>10	<0.5	4	6	6	2.21	<0.01	250
912733	Rock	99.14	0.9	0.02	<5	53	<2	>10	<0.5	3	9	8	2.13	<0.01	177
912734	Rock	100.13	0.5	0.02	6	46	<2	>10	<0.5	3	7	10	2.47	<0.01	299
912735	Rock	99.25	0.7	0.10	5	95	<2	>10	<0.5	7	6	29	3.28	0.04	338
912736	Rock	100.54	1.1	0.10	<5	56	<2	>10	<0.5	6	6	20	3.06	0.02	234
912737	Rock	99.27	1.6	0.03	<5	51	<2	>10	<0.5	3	7	10	2.50	<0.01	192
912738	Rock	99.59	0.5	0.07	6	55	<2	>10	<0.5	3	6	20	2.73	0.02	321
912739	Rock	99.77		0.05	8	94	<2	>10	<0.5	3	7	13	2.97	0.02	369
912740 Dup	Rock	99.55	<0.5	0.04	10	97	<2	>10	<0.5	3	7	12	3.02	0.02	391
912741	Rock	100.33	<0.5	0.07	<5	49	<2	>10	<0.5	3	6	25	2.76	0.03	278
912742	Rock	99.01	0.9	0.11	6	35	<2	>10	<0.5	4	6	22	3.01	0.04	322
912743	Rock	99.89	<0.5	0.09	8	44	<2	>10	<0.5	3	6	25	2.63	0.03	394
912744	Rock	99.84	0.7	0.18	<5	51	<2	>10	<0.5	4	7	43	6.59	0.08	356
912745	Rock	99.46	<0.5	7.01	<5	903	<2	3.21	<0.5	10	122	2	2.60	2.97	38
912746	Rock	100.16	0.5	0.15	6	48	<2	>10	<0.5	4	6	9	2.54	0.04	282

Certificate of Analysis

10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
912676	Rock	8.89	5433	3	0.02	<1	>10000	14	<5	8	2938	0.02	<10	32	<10
912677	Rock	9.19	5009	3	0.02	<1	>10000	13	<5	7	3381	0.02	<10	14	<10
912678	Rock	9.72	4824	2	0.02	<1	>10000	13	<5	8	2690	0.03	<10	26	<10
912679	Rock	8.49	5197	4	0.03	<1	>10000	13	<5	6	3759	0.03	<10	42	<10
912680 Dup	Rock	8.14	4960	4	0.03	<1	>10000	14	<5	6	3601	0.03	<10	42	<10
912681	Rock	9.10	4939	2	0.02	<1	>10000	14	<5	7	3086	0.02	<10	27	<10
912682	Rock	8.72	5095	2	0.03	<1	>10000	10	<5	7	3471	0.04	<10	36	<10
912683	Rock	8.30	4396	2	0.03	<1	>10000	15	<5	8	2883	0.08	<10	125	<10
912684	Rock	8.72	4574	2	0.03	<1	>10000	15	<5	7	2939	0.06	<10	74	<10
912685	Rock	8.17	5010	2	0.03	<1	>10000	17	<5	10	3073	0.06	<10	63	<10
912686	Rock	7.07	3557	4	0.03	4	>10000	11	<5	9	1835	0.40	<10	233	<10
912687	Rock	8.89	4314	4	0.02	<1	>10000	23	<5	23	1579	0.02	<10	52	<10
912688	Rock	8.28	3733	4	0.02	<1	>10000	20	<5	10	1960	0.01	<10	20	<10
912689	Rock	9.06	5049	3	0.02	<1	>10000	17	<5	7	3270	<0.01	<10	7	<10
912690	Pulp	9.10	3865	4	0.04	<1	>10000	13	<5	7	2107	0.03	<10	32	<10
912691	Rock	>10	4930	4	0.02	<1	>10000	17	<5	9	3216	<0.01	<10	13	<10
912692	Rock	9.90	4722	3	0.02	<1	>10000	16	<5	7	3393	0.02	<10	16	<10
912693	Rock	9.71	4234	1	0.02	<1	>10000	17	<5	9	1967	0.01	<10	11	<10
912694	Rock	>10	5135	2	0.02	<1	>10000	16	<5	8	3258	0.01	<10	7	<10
912695	Rock	9.61	5977	3	0.02	<1	8547	18	<5	7	3553	<0.01	<10	2	<10
912696	Rock	>10	7100	8	0.03	<1	6671	13	<5	7	4540	<0.01	<10	4	<10
912697	Rock	>10	6343	4	0.02	<1	8008	14	<5	8	4066	<0.01	<10	4	<10
912698	Rock	8.66	4785	4	0.03	<1	>10000	14	<5	8	3041	0.02	<10	13	<10
912699	Rock	9.84	5388	3	0.02	<1	>10000	17	<5	7	3570	0.01	<10	13	<10
912700 Dup	Rock	9.53	5145	3	0.02	<1	>10000	17	<5	7	3412	0.02	<10	15	<10
912701	Rock	>10	7134	3	0.02	<1	7022	18	<5	8	4032	<0.01	<10	<1	<10
912702	Rock	8.34	4676	4	0.03	2	>10000	17	<5	6	3142	0.05	<10	56	<10
912703	Rock	8.31	4599	3	0.02	1	>10000	8	<5	5	3607	0.05	<10	70	<10
912704	Rock	8.47	4821	3	0.02	2	>10000	11	<5	6	3272	0.11	<10	136	<10
912705	Rock	9.95	4497	3	0.02	9	>10000	13	<5	12	2515	0.04	<10	42	<10
912707	Rock	8.64	4085	2	0.03	<1	>10000	21	<5	6	3265	0.03	<10	28	<10
912708	Rock	7.97	2770	2	0.35	10	>10000	15	<5	12	767	0.09	<10	95	<10
912709	Rock	9.76	4277	2	0.02	1	>10000	16	<5	8	2782	0.04	<10	59	<10
912710	Pulp	6.67	3337	3	0.04	2	>10000	13	<5	6	1740	0.14	<10	208	<10
912711	Rock	7.44	4232	3	0.02	<1	>10000	14	<5	13	1811	0.03	<10	40	<10
912712	Rock	8.53	4240	4	0.02	<1	>10000	16	<5	10	3028	0.06	<10	27	<10
912713	Rock	8.64	4441	3	0.02	<1	>10000	12	<5	10	2729	0.02	<10	31	<10
912714	Rock	8.87	5451	5	0.02	<1	>10000	16	<5	11	3014	0.01	<10	14	<10
912715	Rock	>10	5710	5	0.02	<1	>10000	15	<5	8	3928	<0.01	<10	3	<10
912716	Rock	8.97	4540	3	0.03	<1	>10000	8	<5	9	3507	0.03	<10	25	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912717	Rock	9.49	4395	3	0.03	12	>10000	10	<5	15	2990	0.09	<10	55	<10
912718	Rock	>10	5164	3	0.02	<1	>10000	10	<5	8	3276	0.02	<10	14	<10
912719	Rock	9.34	5001	6	0.03	<1	>10000	14	<5	10	2948	0.02	<10	18	<10
912720 Dup	Rock	9.81	5295	7	0.03	2	>10000	16	<5	10	3137	0.02	<10	18	<10
912721	Rock	9.37	5289	4	0.02	<1	>10000	9	<5	6	3658	0.06	<10	35	<10
912722	Rock	>10	5833	4	0.02	<1	>10000	12	<5	8	3259	0.01	<10	5	<10
912723	Rock	9.78	5715	7	0.03	<1	>10000	17	<5	8	4307	<0.01	<10	<1	<10
912724	Rock	9.91	4848	5	0.03	<1	>10000	10	<5	7	3463	0.02	<10	17	<10
912725	Rock	9.95	4941	7	0.02	<1	>10000	13	<5	8	2900	0.02	<10	25	<10
912726	Rock	>10	5327	3	0.03	<1	>10000	12	<5	8	3893	0.01	<10	9	<10
912727	Rock	>10	6626	4	0.03	<1	>10000	14	<5	7	4220	<0.01	<10	<1	<10
912728	Rock	7.66	5456	3	0.03	<1	>10000	16	<5	7	3745	0.01	<10	6	<10
912729	Rock	8.90	5959	2	0.03	<1	>10000	17	<5	6	3885	0.03	<10	26	<10
912730	Pulp	9.42	3998	5	0.05	<1	>10000	71	<5	7	2162	0.03	<10	35	<10
912731	Rock	8.11	5269	3	0.03	1	>10000	11	<5	6	3650	0.15	<10	147	<10
912732	Rock	>10	5779	3	0.03	<1	>10000	17	<5	8	4419	<0.01	<10	<1	<10
912733	Rock	>10	6209	2	0.02	<1	>10000	17	<5	6	4716	<0.01	<10	<1	<10
912734	Rock	>10	6837	2	0.02	<1	>10000	17	<5	7	4578	<0.01	<10	<1	<10
912735	Rock	9.05	6115	2	0.04	<1	>10000	15	<5	6	4695	0.02	<10	10	<10
912736	Rock	>10	5835	3	0.03	<1	>10000	15	<5	7	4097	0.01	<10	9	<10
912737	Rock	>10	6703	3	0.03	<1	>10000	16	<5	7	5000	<0.01	<10	<1	<10
912738	Rock	>10	5217	3	0.02	<1	>10000	14	<5	7	2979	<0.01	<10	3	<10
912739	Rock	9.99	5908	3	0.02	<1	9836	15	<5	9	2668	<0.01	<10	11	<10
912740 Dup	Rock	9.89	5914	3	0.02	<1	9955	18	<5	9	2641	<0.01	<10	11	<10
912741	Rock	>10	5461	3	0.02	<1	>10000	16	<5	7	3509	0.02	<10	12	<10
912742	Rock	>10	4069	2	0.02	<1	>10000	16	<5	7	1918	0.02	<10	27	<10
912743	Rock	>10	4762	3	0.02	<1	>10000	16	<5	8	2398	0.01	<10	8	<10
912744	Rock	8.59	4622	4	0.04	<1	>10000	13	<5	9	3377	0.07	<10	146	<10
912745	Rock	0.86	772	4	2.79	7	1166	20	<5	5	723	0.28	<10	54	<10
912746	Rock	>10	4540	3	0.03	<1	>10000	20	<5	7	2629	0.01	<10	12	<10



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912676	Rock	19	58	721.6	20.3	8.0	11.5	37.8	2.8	3.0	382.5	0.3	278.5	77.8	44.7
912677	Rock	18	51	968.8	23.5	8.3	16.4	49.5	<0.1	3.5	500.0	0.3	367.8	103.4	57.4
912678	Rock	19	44	>1000	27.4	7.0	23.4	73.1	0.1	3.3	921.7	0.2	628.8	177.4	93.3
912679	Rock	25	30	722.3	17.8	5.6	12.0	37.7	3.6	2.2	345.4	0.1	303.9	83.0	45.3
912680 Dup	Rock	25	32	720.6	17.7	5.7	12.4	38.2	3.9	2.4	361.0	<0.1	293.1	81.0	44.7
912681	Rock	20	45	771.2	18.4	6.3	11.5	36.2	2.1	2.5	402.3	0.1	297.0	84.6	44.4
912682	Rock	19	87	875.5	22.3	7.4	17.2	45.8	<0.1	2.8	443.8	0.2	319.2	92.1	50.4
912683	Rock	17	73	964.1	31.0	10.9	19.1	53.7	7.7	4.4	462.8	0.5	375.2	108.7	59.0
912684	Rock	17	57	688.8	23.6	9.0	13.3	38.1	3.4	3.7	344.4	0.3	286.0	77.5	46.3
912685	Rock	21	61	820.0	25.1	9.6	14.3	42.5	4.8	4.0	388.9	0.4	319.8	91.9	48.4
912686	Rock	51	74	985.6	26.2	8.9	18.3	51.2	14.5	3.7	481.8	0.5	358.5	107.7	54.6
912687	Rock	27	46	>1000	25.9	10.0	13.1	48.4	2.7	4.1	749.3	0.5	402.4	123.6	51.3
912688	Rock	15	61	706.5	37.8	16.6	14.8	50.0	1.9	6.6	395.9	0.7	262.0	72.4	49.0
912689	Rock	18	39	691.7	19.1	8.1	10.4	35.4	0.8	2.9	381.7	0.1	262.0	73.1	39.5
912690	Pulp	21	32	782.7	19.0	6.5	13.4	40.3	1.0	2.6	411.4	0.2	293.4	82.3	47.4
912691	Rock	18	31	653.4	17.6	6.2	9.9	31.4	<0.1	2.5	334.0	0.1	245.6	71.1	36.5
912692	Rock	16	50	619.1	20.1	7.5	11.4	35.1	0.3	3.1	320.0	0.2	239.9	66.9	38.6
912693	Rock	14	54	>1000	23.0	8.3	12.8	45.5	0.4	3.4	583.9	0.4	365.6	107.9	52.2
912694	Rock	18	54	624.9	17.1	5.3	9.2	30.5	<0.1	2.1	330.1	0.1	236.5	67.4	35.0
912695	Rock	23	33	579.3	14.7	4.5	8.9	27.3	<0.1	1.9	307.4	<0.1	233.2	64.5	34.8
912696	Rock	23	17	432.8	10.1	3.4	6.7	21.9	<0.1	1.4	244.3	<0.1	159.7	44.4	24.3
912697	Rock	21	17	461.4	11.0	3.9	6.5	21.0	<0.1	1.4	261.3	<0.1	174.6	49.5	26.0
912698	Rock	16	77	945.4	33.5	11.8	17.6	52.8	<0.1	4.9	496.1	0.5	370.0	105.2	58.7
912699	Rock	22	39	607.2	22.5	7.5	11.9	38.4	<0.1	3.2	319.8	0.2	232.8	66.1	38.4
912700 Dup	Rock	21	46	641.9	23.0	7.4	12.8	40.5	<0.1	3.2	333.4	0.2	232.3	67.1	39.8
912701	Rock	23	13	887.9	10.5	3.2	8.5	30.1	<0.1	1.2	543.0	<0.1	305.5	90.1	40.9
912702	Rock	22	50	914.4	22.2	7.2	18.5	49.3	4.1	2.8	493.6	0.2	327.2	94.6	52.9
912703	Rock	18	46	629.6	18.5	6.7	16.4	36.9	4.6	2.7	322.6	0.1	269.8	72.5	43.1
912704	Rock	20	32	532.6	15.1	5.6	10.9	30.0	2.2	2.1	278.1	0.1	219.5	59.2	37.3
912705	Rock	24	55	699.4	18.4	6.3	10.3	33.5	3.0	2.6	393.6	0.2	239.4	71.2	35.5
912707	Rock	19	48	848.5	20.4	7.4	15.6	46.4	<0.1	2.8	452.8	0.2	305.2	87.9	49.9
912708	Rock	32	49	537.3	13.6	5.5	10.9	30.2	4.5	1.9	301.9	0.2	210.1	56.9	35.3
912709	Rock	22	25	793.2	15.5	5.0	10.6	35.1	0.1	2.0	442.6	0.1	259.6	79.7	37.7
912710	Pulp	54	65	785.4	19.9	6.3	13.4	40.5	7.3	2.7	372.8	0.3	312.2	88.1	47.9
912711	Rock	17	68	>1000	30.6	13.8	16.5	56.1	3.8	4.9	656.3	0.8	363.8	112.4	56.4
912712	Rock	19	55	834.2	22.8	9.2	15.2	45.4	1.1	3.5	448.2	0.4	321.3	89.8	49.6
912713	Rock	18	45	>1000	26.7	9.1	14.8	49.5	0.2	3.6	612.7	0.4	377.3	115.9	53.3
912714	Rock	28	32	974.3	21.4	7.6	13.9	44.7	1.7	3.0	555.3	0.2	334.4	97.4	49.6
912715	Rock	19	20	575.7	15.5	5.1	8.3	27.9	0.6	1.9	277.8	0.1	213.9	63.0	32.7
912716	Rock	16	42	789.4	27.1	9.6	18.8	51.7	<0.1	3.8	356.0	0.4	321.0	87.5	52.8



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912717	Rock	22	53	403.6	13.1	3.5	7.8	24.6	3.2	1.5	181.1	<0.1	166.8	45.7	27.0
912718	Rock	17	25	495.7	15.2	5.7	9.8	31.4	<0.1	2.2	253.2	0.2	183.0	51.9	30.9
912719	Rock	20	35	380.6	11.3	4.2	6.4	20.7	0.5	1.5	187.4	<0.1	156.8	44.3	24.8
912720 Dup	Rock	20	40	405.2	11.5	3.8	6.2	21.3	0.6	1.4	192.2	0.1	158.1	44.0	22.2
912721	Rock	22	32	500.2	13.7	4.6	8.8	25.8	1.8	1.7	235.7	<0.1	213.4	57.3	33.7
912722	Rock	17	32	835.9	13.3	4.3	9.7	31.1	<0.1	1.6	456.1	<0.1	311.4	90.7	41.8
912723	Rock	18	14	934.5	12.1	3.5	11.4	37.3	0.1	1.3	535.5	<0.1	365.9	99.8	52.1
912724	Rock	16	20	628.7	15.9	5.4	12.2	33.9	<0.1	2.1	304.2	<0.1	262.9	72.9	42.8
912725	Rock	15	40	551.4	19.9	6.7	11.3	33.0	0.7	2.7	272.8	0.2	239.7	63.9	39.0
912726	Rock	17	23	536.2	13.1	3.7	9.9	30.3	<0.1	1.5	246.3	<0.1	205.0	59.4	33.4
912727	Rock	23	15	589.2	12.2	3.2	7.9	26.7	<0.1	1.4	296.8	<0.1	230.6	64.5	31.4
912728	Rock	21	28	750.8	22.9	6.2	14.7	45.2	<0.1	2.8	325.1	0.2	312.9	89.1	51.0
912729	Rock	24	29	643.8	18.5	6.5	14.4	38.3	<0.1	2.6	313.1	0.2	286.3	74.6	47.7
912730	Pulp	27	35	844.2	24.0	7.9	15.2	49.2	0.9	3.4	442.9	0.4	303.6	86.9	52.0
912731	Rock	58	13	508.3	13.0	3.6	9.4	27.6	2.2	1.5	239.6	<0.1	211.3	59.2	31.6
912732	Rock	19	7	597.2	13.3	2.9	9.9	31.7	<0.1	1.2	279.0	<0.1	227.4	65.4	37.2
912733	Rock	22	10	415.2	9.6	2.4	6.1	20.5	<0.1	1.0	186.4	<0.1	172.4	47.7	24.7
912734	Rock	24	11	689.9	11.9	3.6	9.9	31.9	<0.1	1.3	341.1	<0.1	269.9	74.8	40.9
912735	Rock	24	16	874.5	20.0	4.9	15.4	46.6	<0.1	2.4	400.8	0.1	338.1	95.6	52.5
912736	Rock	20	15	593.8	15.4	4.5	10.2	30.8	<0.1	1.7	255.4	0.1	234.1	66.9	35.6
912737	Rock	23	13	478.1	11.8	2.7	7.5	26.4	0.1	1.3	210.3	<0.1	193.6	54.0	28.6
912738	Rock	17	21	713.4	17.1	5.1	11.4	37.3	<0.1	2.0	361.8	0.1	274.4	74.9	45.2
912739	Rock	20	17	834.7	14.3	3.8	8.6	33.2	<0.1	1.6	415.5	<0.1	304.9	87.9	39.7
912740 Dup	Rock	20	17	832.4	14.6	4.2	9.7	34.1	<0.1	1.7	434.8	0.1	313.3	94.0	42.4
912741	Rock	18	27	629.7	16.1	5.2	11.7	34.1	<0.1	2.0	305.3	0.1	263.9	70.3	43.1
912742	Rock	12	35	800.8	19.8	7.3	14.0	44.0	<0.1	2.7	404.4	0.4	316.0	86.3	53.1
912743	Rock	16	34	821.5	16.9	5.9	12.0	39.5	<0.1	2.3	457.8	0.2	278.6	81.3	43.7
912744	Rock	38	21	868.7	17.2	4.1	13.4	40.6	2.9	1.8	415.0	<0.1	312.7	92.6	45.2
912745	Rock	60	8	78.6	3.3	1.7	1.1	4.5	1.6	0.4	39.1	<0.1	32.2	8.9	5.0
912746	Rock	16	19	631.2	17.9	5.6	10.3	31.3	<0.1	2.4	298.2	0.2	266.5	74.0	40.3

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 Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
912676	Rock	3.4	0.8	4.9	86.3	3.90	70.23	2.60
912677	Rock	4.1	0.8	5.2	95.8	5.43	88.11	2.14
912678	Rock	5.3	0.6	4.7	89.7	7.53	81.56	3.21
912679	Rock	3.0	0.4	3.4	64.7	3.85	60.89	2.08
912680 Dup	Rock	3.1	0.3	3.1	67.4	3.91	60.93	2.08
912681	Rock	3.0	0.4	4.4	72.3	3.49	77.26	2.20
912682	Rock	3.8	0.5	4.3	91.0	36.25	179.76	10.38
912683	Rock	5.3	1.1	7.3	124.0	18.18	206.21	5.73
912684	Rock	3.8	0.8	5.3	101.8	9.09	118.99	3.19
912685	Rock	4.2	0.8	6.1	109.5	10.53	155.33	4.37
912686	Rock	4.6	1.0	7.1	110.1	80.01	204.10	7.75
912687	Rock	4.1	0.9	7.6	110.7	4.51	187.08	2.99
912688	Rock	6.2	1.8	10.0	175.9	2.56	271.83	3.34
912689	Rock	3.2	0.6	4.5	86.9	2.69	121.04	2.31
912690	Pulp	3.4	0.6	5.0	75.4	19.39	142.93	8.33
912691	Rock	2.9	0.4	3.7	70.4	7.63	118.26	2.16
912692	Rock	3.6	0.7	5.2	87.1	24.84	126.95	5.69
912693	Rock	3.8	0.8	5.9	99.5	13.94	131.84	6.59
912694	Rock	2.7	0.5	3.7	66.3	33.61	102.30	14.54
912695	Rock	2.0	0.2	3.0	61.2	4.45	93.53	2.18
912696	Rock	1.6	0.1	2.6	44.3	0.46	62.29	1.43
912697	Rock	1.6	0.2	2.4	46.4	0.74	61.97	1.07
912698	Rock	5.6	1.0	7.5	141.6	11.89	234.69	7.34
912699	Rock	4.0	0.7	4.9	91.4	2.60	89.00	2.77
912700 Dup	Rock	4.3	0.8	5.7	91.1	2.72	90.93	2.97
912701	Rock	1.7	0.1	1.8	38.8	0.71	53.14	0.85
912702	Rock	4.2	0.6	5.2	90.0	6.24	119.88	2.94
912703	Rock	3.1	0.5	4.0	82.9	8.75	94.99	4.23
912704	Rock	2.5	0.5	3.9	67.9	3.62	77.58	2.83
912705	Rock	3.1	0.6	4.4	72.8	7.61	88.44	4.24
912707	Rock	3.9	0.7	5.2	85.9	0.14	140.88	2.27
912708	Rock	2.4	0.4	4.6	62.2	12.64	67.39	3.91
912709	Rock	2.7	0.4	4.4	65.9	7.53	96.82	3.15
912710	Pulp	3.5	0.5	4.5	73.9	32.78	297.57	7.73
912711	Rock	5.5	1.8	10.1	143.9	3.44	283.50	5.33
912712	Rock	3.8	0.9	6.4	104.3	5.35	190.54	4.54
912713	Rock	4.6	0.8	6.2	100.7	12.63	108.61	5.29
912714	Rock	3.6	0.7	5.0	91.5	3.74	179.75	2.33
912715	Rock	2.3	0.2	2.9	56.5	0.55	97.58	0.98
912716	Rock	5.0	0.9	7.0	112.8	2.18	121.57	2.24



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
912717	Rock	2.2	0.2	3.0	50.4	16.50	57.15	7.13
912718	Rock	2.6	0.5	4.0	72.1	2.58	64.92	3.54
912719	Rock	1.7	0.2	2.3	48.7	1.50	72.45	2.11
912720 Dup	Rock	1.8	0.2	2.7	46.6	1.49	74.39	2.59
912721	Rock	2.1	0.3	2.9	54.9	3.83	86.49	3.26
912722	Rock	2.0	0.2	2.9	52.1	7.82	92.46	3.27
912723	Rock	2.0	0.1	2.1	46.3	1.37	20.06	1.07
912724	Rock	2.7	0.3	3.6	62.0	6.11	67.70	2.71
912725	Rock	3.3	0.5	4.8	80.8	27.57	89.95	5.51
912726	Rock	2.6	0.1	3.1	49.0	2.84	41.64	1.83
912727	Rock	2.0	<0.1	2.1	42.7	2.20	50.98	1.88
912728	Rock	4.4	0.5	3.9	78.5	3.09	71.41	3.08
912729	Rock	3.5	0.5	4.5	77.2	3.43	77.87	2.37
912730	Pulp	4.4	0.7	5.4	88.7	21.96	142.36	10.73
912731	Rock	2.4	0.1	2.6	44.1	7.37	45.15	2.09
912732	Rock	2.5	0.1	2.3	42.6	0.57	15.02	0.51
912733	Rock	1.6	<0.1	1.4	31.0	0.71	22.44	0.89
912734	Rock	2.1	<0.1	2.5	41.9	0.92	34.15	1.80
912735	Rock	3.9	0.3	3.7	67.9	6.04	59.54	2.39
912736	Rock	2.8	0.2	3.0	51.6	7.12	39.30	3.38
912737	Rock	2.0	0.1	1.9	39.2	1.98	36.00	1.74
912738	Rock	2.9	0.4	3.8	65.5	8.41	122.20	2.42
912739	Rock	2.4	0.1	2.8	47.5	2.07	86.27	2.40
912740 Dup	Rock	2.4	0.2	3.0	48.6	1.93	85.43	2.36
912741	Rock	2.9	0.3	3.6	63.3	30.69	82.75	6.99
912742	Rock	3.6	0.7	5.9	82.6	33.33	140.26	13.41
912743	Rock	3.0	0.4	4.7	67.1	31.02	187.55	7.27
912744	Rock	3.3	0.1	2.9	54.1	5.92	79.96	4.11
912745	Rock	0.1	<0.1	1.7	18.6	1.57	9.30	4.40
912746	Rock	2.9	0.3	3.6	63.8	25.47	46.88	8.95

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		Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
Sample	Sample	Nb2O5-AD3-OR-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP
Description	Type	%	%	%	%	%	%	%	%	%	%	%	%	%	%
912676	Rock	0.27													
912676 Dup		0.28													
QCV1011-00583-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912694	Rock	0.16													
912694 Dup		0.17													
QCV1011-00583-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
912713	Rock	0.34													
912713 Dup		0.33													
QCV1011-00583-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
912731	Rock	0.46													
912731 Dup		0.41													
QCV1011-00583-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
QCV1011-00583-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
912676	Rock		0.22	<0.01	34.48	<0.01	5.64	0.04	38.41	14.79	0.68	0.03	4.61	0.05	0.07
912676 Dup			0.21	<0.01	34.50	<0.01	5.65	0.05	38.40	14.80	0.69	0.03	4.56	0.05	0.07
QCV1011-00586-0002-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912694	Rock		0.58	<0.01	33.79	<0.01	3.59	0.11	40.06	16.01	0.64	0.03	3.83	0.54	0.06
912694 Dup			0.60	<0.01	33.04	<0.01	3.58	0.11	39.99	16.62	0.65	0.04	3.80	0.65	0.06
QCV1011-00586-0005-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912713	Rock		1.03	0.01	35.19	<0.01	4.00	0.16	36.66	15.01	0.53	0.04	5.28	1.30	0.08
912713 Dup			1.05	0.01	35.21	<0.01	3.97	0.16	36.87	14.91	0.53	0.04	5.30	1.34	0.08
QCV1011-00586-0008-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912731	Rock		0.19	0.01	33.25	<0.01	12.88	0.05	35.44	12.92	0.65	0.05	3.48	0.41	0.26
912731 Dup			0.19	0.01	32.66	<0.01	12.87	0.04	35.42	13.12	0.65	0.05	3.53	0.38	0.26
QCV1011-00586-0011-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00586-0013-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.69	0.04	8.10	<0.01	6.26	1.71	4.45	0.54	0.11	7.16	0.13	50.23	0.30



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Richmond, British Columbia V7A 4V5
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10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912676	Rock		<0.5	0.09	11	47	<2	>10	<0.5	8	8	24	3.96	0.03	310
912676 Dup			<0.5	0.09	10	47	<2	>10	<0.5	8	8	21	3.79	0.03	325
QCV1011-00584-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			64.3									979			
912694	Rock		<0.5	0.30	7	55	<2	>10	<0.5	3	8	12	2.45	0.08	308
912694 Dup			<0.5	0.34	7	55	<2	>10	<0.5	3	8	12	2.54	0.08	307
QCV1011-00584-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			63.7									990			
912713	Rock		0.8	0.56	9	111	<2	>10	<0.5	2	12	24	2.84	0.11	429
912713 Dup			0.9	0.53	10	112	<2	>10	<0.5	2	29	22	2.74	0.11	439
QCV1011-00584-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			98.7									6335			
912731	Rock		<0.5	0.10	<5	93	<2	>10	<0.5	14	8	30	9.03	0.04	216
912731 Dup			<0.5	0.09	<5	93	<2	>10	<0.5	14	8	30	8.86	0.04	217
QCV1011-00584-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1011-00584-0013-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected			0.3							122	1103	749			
STD-OREAS-45P-4A result			<0.5							122	1025	719			
912676	Rock		99.04												
912676 Dup			99.03												
QCV1011-00586-0002-BLK			<0.01												
912694	Rock		99.25												
912694 Dup			99.14												
QCV1011-00586-0005-BLK			<0.01												
912713	Rock		99.30												
912713 Dup			99.49												
QCV1011-00586-0008-BLK			<0.01												
912731	Rock		99.59												
912731 Dup			99.21												
QCV1011-00586-0011-BLK			<0.01												
QCV1011-00586-0013-BLK			<0.01												
STD-SY-4 expected															
STD-SY-4 result			99.74												



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Richmond, British Columbia V7A 4V5
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10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912676	Rock	8.89	5433	3	0.02	<1	>10000	14	<5	8	2938	0.02	<10	32	<10
912676 Dup		8.49	5491	2	0.02	<1	>10000	14	<5	8	2811	0.02	<10	32	<10
QCV1011-00584-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
912694	Rock	>10	5135	2	0.02	<1	>10000	16	<5	8	3258	0.01	<10	7	<10
912694 Dup		>10	5320	2	0.02	<1	>10000	16	<5	8	3384	0.01	<10	6	<10
QCV1011-00584-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
912713	Rock	8.64	4441	3	0.02	<1	>10000	12	<5	10	2729	0.02	<10	31	<10
912713 Dup		8.24	4222	3	0.02	<1	>10000	13	<5	10	2595	0.02	<10	32	<10
QCV1011-00584-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9998							
912731	Rock	8.11	5269	3	0.03	1	>10000	11	<5	6	3650	0.15	<10	147	<10
912731 Dup		7.99	5220	3	0.03	1	>10000	14	<5	6	3611	0.15	<10	146	<10
QCV1011-00584-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00584-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.08	379	455	20							



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10-360-03617-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912676	Rock	19	58												
912676 Dup		19	57												
QCV1011-00584-0002-BLK		<2	<1												
912694	Rock	18	54												
912694 Dup		18	52												
QCV1011-00584-0005-BLK		<2	<1												
912713	Rock	18	45												
912713 Dup		19	48												
QCV1011-00584-0008-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5169													
912731	Rock	58	13												
912731 Dup		57	13												
QCV1011-00584-0011-BLK		<2	<1												
QCV1011-00584-0013-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		143													
QCV1011-00587-0001-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912676	Rock			721.6	20.3	8.0	11.5	37.8	2.8	3.0	382.5	0.3	278.5	77.8	44.7
912676 Dup				697.4	20.0	7.7	11.6	35.3	2.7	3.1	371.7	0.3	275.3	75.8	42.8
912694	Rock			624.9	17.1	5.3	9.2	30.5	<0.1	2.1	330.1	0.1	236.5	67.4	35.0
912694 Dup				651.9	15.7	5.3	9.7	31.8	<0.1	2.2	346.3	0.1	228.9	67.3	33.7
912713	Rock			>1000	26.7	9.1	14.8	49.5	0.2	3.6	612.7	0.4	377.3	115.9	53.3
912713 Dup				>1000	24.6	9.8	15.6	50.3	<0.1	3.9	621.9	0.3	367.4	105.6	55.5
912731	Rock			508.3	13.0	3.6	9.4	27.6	2.2	1.5	239.6	<0.1	211.3	59.2	31.6
912731 Dup				506.3	12.4	3.8	9.3	26.0	2.1	1.5	219.2	<0.1	210.2	57.8	31.9
QCV1011-00587-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				120.6	18.7	14.3	1.9	14.0	10.7	4.0	57.3	1.9	59.6	14.3	13.2



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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
QCV1011-00587-0001-BLK		<0.1	<0.1	<0.1	<0.10			
912676	Rock	3.4	0.8	4.9	86.3			
912676 Dup		3.1	0.7	4.8	84.9			
912694	Rock	2.7	0.5	3.7	66.3			
912694 Dup		2.8	0.4	3.4	67.4			
912713	Rock	4.6	0.8	6.2	100.7			
912713 Dup		4.3	0.8	6.2	105.6			
912731	Rock	2.4	0.1	2.6	44.1			
912731 Dup		2.0	0.2	2.2	46.0			
QCV1011-00587-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	13.9	122.6			
912676	Rock					3.90	70.23	2.60
912676 Dup						3.97	76.75	2.49
QCV1105-00539-0002-BLK						<0.05	<0.20	<0.10
912694	Rock					33.61	102.30	14.54
912694 Dup						32.98	99.17	14.76
QCV1105-00539-0005-BLK						<0.05	<0.20	<0.10
912713	Rock					12.63	108.61	5.29
912713 Dup						12.91	104.76	5.79
QCV1105-00539-0008-BLK						<0.05	<0.20	<0.10
912731	Rock					7.37	45.15	2.09
912731 Dup						7.56	46.73	2.17
QCV1105-00539-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00539-0013-BLK						<0.05	<0.20	<0.10



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10-360-03625-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/18/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-034</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">65</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p>Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	65	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																		
Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps																																		
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The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912761	Rock	0.30	0.16	<0.01	35.80	<0.01	3.50	0.04	39.04	14.80	0.63	0.05	4.81	0.20	0.02
912762	Rock	0.26	0.11	<0.01	36.02	<0.01	3.38	0.02	41.14	15.98	0.61	0.03	2.50	<0.01	0.01
912763	Rock	0.29	0.12	<0.01	36.57	<0.01	4.13	0.02	39.94	15.16	0.65	0.04	2.93	<0.01	0.02
912764	Rock	0.31	0.12	<0.01	37.43	<0.01	3.45	0.02	39.59	14.40	0.68	0.04	3.87	<0.01	0.02
912765	Rock	0.26	0.13	<0.01	36.19	<0.01	3.95	<0.01	39.51	15.08	0.64	0.03	3.44	<0.01	0.01
912766	Rock	0.38	0.11	<0.01	36.42	<0.01	4.11	0.01	39.47	15.25	0.69	0.03	3.31	<0.01	0.02
912767	Rock	0.30	0.25	<0.01	37.32	<0.01	3.57	0.02	39.22	14.58	0.65	0.03	3.54	0.25	0.33
912768	Rock	0.11	0.13	<0.01	36.03	<0.01	3.94	0.02	41.90	15.43	0.63	0.03	1.57	<0.01	0.03
912769	Rock	0.28	0.19	<0.01	37.12	<0.01	3.73	<0.01	38.91	14.41	0.56	0.05	3.76	0.20	0.21
912770	Pulp	0.71	0.23	0.02	39.01	<0.01	4.55	0.04	38.78	10.38	0.40	0.09	3.24	2.95	0.12
912771	Rock	0.29	0.14	<0.01	36.94	<0.01	3.77	<0.01	39.31	14.43	0.57	0.03	4.32	<0.01	0.02
912772	Rock	0.44	0.17	<0.01	36.63	<0.01	4.22	0.02	40.37	14.53	0.45	0.03	3.12	0.09	0.05
912773	Rock	0.32	0.15	<0.01	36.89	<0.01	4.29	0.01	39.82	13.79	0.59	0.03	3.50	<0.01	0.04
912774	Rock	0.44	0.18	<0.01	36.10	<0.01	4.59	0.01	39.55	14.97	0.61	0.03	3.73	<0.01	0.05
912775	Rock	0.53	0.19	<0.01	36.03	<0.01	4.94	0.02	38.05	14.65	0.45	0.04	4.99	<0.01	0.07
912776	Rock	0.35	0.22	<0.01	39.44	<0.01	6.02	0.02	38.11	11.59	0.74	0.04	4.44	<0.01	0.08
912777	Rock	0.48	0.28	<0.01	38.33	<0.01	8.24	0.01	34.65	12.52	0.58	0.03	5.22	0.31	0.27
912778	Rock	0.32	0.18	<0.01	34.07	<0.01	4.11	0.01	40.69	16.62	0.60	0.03	2.78	<0.01	0.04
912779	Rock	0.37	0.21	<0.01	36.22	<0.01	3.52	0.02	39.04	14.96	0.65	0.04	5.00	<0.01	0.03
912781	Rock	0.34	0.16	<0.01	36.25	<0.01	3.81	0.02	39.78	14.72	0.68	0.03	3.98	<0.01	0.02
912782	Rock	0.56	0.27	<0.01	37.92	<0.01	5.21	0.04	37.98	12.89	0.58	0.03	5.22	0.09	0.06
912783	Rock	0.50	0.22	<0.01	35.81	<0.01	3.93	0.03	40.65	15.36	0.62	0.03	3.03	0.06	0.03
912784	Rock	0.42	0.24	<0.01	35.17	<0.01	4.01	0.02	39.23	15.41	0.69	0.03	4.01	0.04	0.07
912785	Rock	0.13	0.10	<0.01	34.65	<0.01	3.56	<0.01	40.83	16.35	0.78	0.02	3.34	<0.01	0.01
912786	Rock	0.23	0.14	<0.01	38.89	<0.01	3.81	<0.01	35.42	12.60	0.59	0.03	8.01	<0.01	0.02
912787	Rock	0.22	0.11	<0.01	35.27	<0.01	3.99	0.01	40.93	14.81	0.83	0.03	3.21	<0.01	0.01
912788	Rock	0.33	0.18	<0.01	36.81	<0.01	4.31	<0.01	39.19	14.21	0.69	0.03	4.26	0.05	0.04
912789	Rock	0.68	0.24	<0.01	33.72	<0.01	5.11	0.02	39.34	16.20	0.75	0.04	3.55	0.04	0.07
912790	Pulp	0.45	0.32	<0.01	38.91	<0.01	6.66	0.05	37.77	11.98	0.60	0.06	3.93	1.52	0.14
912791	Rock	0.49	0.16	<0.01	35.98	<0.01	4.66	0.02	36.88	13.87	0.66	0.04	6.68	<0.01	0.02
912792	Rock	0.26	0.18	<0.01	36.09	<0.01	3.55	0.02	40.89	15.21	0.75	0.03	3.11	<0.01	0.02
912793	Rock	0.42	0.92	<0.01	35.19	<0.01	4.44	0.06	36.94	16.63	0.64	0.03	4.55	1.12	0.09
912794	Rock	0.24	0.14	<0.01	35.00	<0.01	4.79	<0.01	41.61	14.52	0.89	0.03	2.10	<0.01	0.02
912795	Rock	0.27	0.14	<0.01	34.89	<0.01	4.19	0.01	40.22	16.02	0.77	0.03	3.38	<0.01	0.02
912796	Rock	0.32	0.32	<0.01	36.24	<0.01	4.95	0.08	38.20	13.50	0.84	0.07	4.51	0.57	0.07
912797	Rock	0.25	0.16	<0.01	36.05	<0.01	4.29	0.01	39.82	14.88	0.85	0.04	3.71	<0.01	0.02
912798	Rock	0.31	0.22	<0.01	37.43	<0.01	3.42	0.01	38.26	14.11	0.63	0.03	5.13	0.07	0.02
912799	Rock	0.40	0.31	<0.01	36.91	<0.01	3.68	0.02	37.96	14.50	0.55	0.04	5.19	0.19	0.03
912801	Rock	0.27	0.19	<0.01	39.22	<0.01	3.76	0.02	37.53	13.63	0.66	0.04	5.66	<0.01	0.02
912802	Rock	0.38	0.24	<0.01	38.92	<0.01	4.14	0.02	38.76	13.21	0.65	0.04	4.27	0.04	0.03

Certificate of Analysis

10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912803	Rock	0.54	0.23	<0.01	38.36	<0.01	6.08	0.04	37.61	11.86	0.74	0.05	4.77	0.11	0.06
912804	Rock	0.22	0.19	<0.01	35.59	<0.01	4.02	0.02	41.36	14.81	0.76	0.04	3.09	0.09	0.03
912805	Rock	0.43	0.15	<0.01	37.67	<0.01	4.56	0.02	40.02	12.32	0.71	0.04	4.10	<0.01	0.06
912806	Rock	0.33	0.20	<0.01	39.28	<0.01	4.39	0.04	38.46	12.25	0.73	0.04	4.65	0.03	0.03
912807	Rock	0.42	0.19	<0.01	35.97	<0.01	4.16	0.03	39.56	14.95	0.66	0.04	3.79	<0.01	0.03
912808	Rock	0.54	0.33	0.01	41.82	<0.01	4.70	0.04	37.51	10.36	0.64	0.04	4.73	0.30	0.05
912809	Rock	0.25	0.26	<0.01	36.16	<0.01	3.69	0.03	40.30	14.83	0.67	0.04	3.23	0.55	0.03
912810	Pulp	0.77	0.22	0.02	37.84	<0.01	4.92	0.04	37.88	11.75	0.42	0.08	3.24	3.05	0.13
912811	Rock	0.30	2.37	0.02	31.19	0.01	4.78	0.65	34.20	14.61	0.58	0.11	3.07	7.51	0.14
912812	Rock	0.21	0.10	<0.01	35.95	<0.01	3.76	0.02	40.63	15.36	0.71	0.04	3.24	<0.01	0.02
912813	Rock	0.50	0.32	<0.01	35.34	<0.01	4.23	0.02	40.10	15.21	0.66	0.04	2.82	0.29	0.33
912814	Rock	0.19	0.17	<0.01	35.77	<0.01	4.70	0.03	39.49	15.55	0.68	0.03	3.43	<0.01	0.07
912815	Rock	0.29	0.25	<0.01	36.64	<0.01	4.20	0.02	39.96	14.32	0.74	0.04	3.43	0.13	0.05
912816	Rock	0.16	0.12	<0.01	36.59	<0.01	3.81	0.02	41.16	15.44	0.73	0.04	2.64	<0.01	0.02
912817	Rock	0.41	0.39	<0.01	33.95	<0.01	4.81	0.08	38.71	13.60	0.75	0.07	3.73	3.20	0.04
912818	Rock	0.17	0.12	<0.01	36.84	<0.01	4.52	0.02	39.15	13.78	0.71	0.04	3.86	0.22	0.02
912819	Rock	0.19	0.11	<0.01	37.10	<0.01	4.16	0.02	40.27	14.69	0.77	0.05	3.10	<0.01	0.02
912821	Rock	0.19	0.91	<0.01	33.06	<0.01	4.64	0.08	39.34	17.07	0.72	0.04	2.12	2.23	0.12
912822	Rock	0.46	0.19	<0.01	36.85	<0.01	6.52	0.06	38.75	12.86	0.63	0.04	2.79	0.28	0.08
912823	Rock	0.31	4.11	0.03	29.04	0.02	4.71	0.88	27.42	10.24	0.47	0.85	3.46	19.03	0.16
912824	Rock	0.33	2.06	0.02	32.82	<0.01	4.42	0.46	33.91	12.73	0.51	0.42	3.23	9.10	0.09
912825	Rock	0.27	0.12	<0.01	36.11	<0.01	4.98	0.03	39.47	15.13	0.70	0.05	2.89	0.06	0.03
912826	Rock	0.20	0.18	<0.01	36.47	<0.01	3.74	0.03	39.50	15.33	0.67	0.04	3.64	0.03	0.04
912827	Rock	0.18	0.09	<0.01	36.25	<0.01	4.43	0.02	39.63	15.36	0.72	0.05	2.88	<0.01	0.02
912828	Rock	0.10	0.30	<0.01	37.62	<0.01	4.57	0.02	38.77	13.46	0.70	0.05	4.47	0.15	0.04
912829	Rock	0.08	0.26	<0.01	38.11	<0.01	4.54	0.02	39.57	12.74	0.74	0.04	3.66	0.07	0.04
912830	Pulp	0.79	0.56	0.02	32.53	<0.01	17.51	0.09	30.69	10.48	0.48	0.06	4.66	2.13	0.65
912831	Rock	0.39	2.20	0.03	33.27	<0.01	5.44	1.21	33.75	12.75	0.60	0.15	2.15	7.56	0.32
912832	Rock	0.23	2.20	0.02	34.07	<0.01	5.08	0.81	33.04	12.70	0.49	0.11	2.67	7.58	0.32



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Certificate of Analysis

10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912761	Rock	99.08	<0.5	0.03	<5	46	<2	>10	<0.5	3	16	55	2.36	0.02	267
912762	Rock	99.82	<0.5	0.02	<5	44	<2	>10	<0.5	3	4	45	2.60	0.01	279
912763	Rock	99.59	<0.5	0.03	<5	43	<2	>10	<0.5	5	3	53	2.85	<0.01	235
912764	Rock	99.61	<0.5	0.03	<5	37	<2	>10	<0.5	4	4	63	2.42	<0.01	229
912765	Rock	98.99	0.6	0.03	<5	31	<2	>10	<0.5	4	4	50	2.97	<0.01	359
912766	Rock	99.43	<0.5	0.02	6	33	<2	>10	<0.5	5	15	65	2.94	<0.01	211
912767	Rock	99.79	<0.5	0.09	<5	37	<2	>10	<0.5	4	4	50	2.47	0.01	297
912768	Rock	99.72	0.7	0.04	<5	51	5	>10	<0.5	5	10	22	2.80	<0.01	236
912769	Rock	99.15	<0.5	0.06	<5	54	<2	>10	<0.5	5	4	45	2.64	<0.01	257
912770	Pulp	99.82	<0.5	0.07	11	165	<2	>10	<0.5	6	2	106	3.35	0.02	343
912771	Rock	99.56	<0.5	0.04	6	41	<2	>10	<0.5	4	3	59	2.72	<0.01	207
912772	Rock	99.69	<0.5	0.05	<5	25	<2	>10	<0.5	4	3	72	3.22	<0.01	271
912773	Rock	99.13	<0.5	0.04	<5	48	<2	>10	<0.5	6	4	60	3.06	<0.01	254
912774	Rock	99.84	<0.5	0.05	7	35	<2	>10	<0.5	4	3	70	3.12	<0.01	361
912775	Rock	99.43	<0.5	0.06	8	26	<2	>10	<0.5	6	2	92	3.69	<0.01	380
912776	Rock	100.69	<0.5	0.05	7	41	<2	>10	<0.5	7	2	63	3.50	<0.01	263
912777	Rock	100.46	<0.5	0.09	13	60	<2	>10	<0.5	10	3	87	5.41	<0.01	240
912778	Rock	99.15	1.0	0.05	8	43	<2	>10	<0.5	6	2	54	2.85	<0.01	181
912779	Rock	99.69	<0.5	0.06	6	41	<2	>10	<0.5	2	2	59	2.15	<0.01	248
912781	Rock	99.47	<0.5	0.04	<5	40	<2	>10	<0.5	4	2	59	2.49	0.01	192
912782	Rock	100.32	<0.5	0.08	7	39	<2	>10	<0.5	9	3	89	3.28	0.02	254
912783	Rock	99.78	<0.5	0.07	<5	44	<2	>10	<0.5	4	2	72	2.59	0.02	205
912784	Rock	98.92	<0.5	0.08	5	35	<2	>10	<0.5	4	3	62	2.68	<0.01	284
912785	Rock	99.65	<0.5	0.01	<5	41	4	>10	<0.5	2	3	19	2.37	<0.01	302
912786	Rock	99.52	<0.5	0.03	6	25	<2	>10	<0.5	4	7	30	2.52	<0.01	717
912787	Rock	99.22	<0.5	0.02	<5	35	3	>10	<0.5	3	2	34	2.71	<0.01	185
912788	Rock	99.80	<0.5	0.05	<5	46	<2	>10	<0.5	4	3	63	2.95	<0.01	209
912789	Rock	99.08	0.8	0.08	8	37	<2	>10	<0.5	6	5	114	3.57	<0.01	215
912790	Pulp	101.94	<0.5	0.10	8	46	<2	>10	<0.5	6	2	74	4.17	0.03	333
912791	Rock	98.98	0.7	0.04	11	37	<2	>10	<0.5	5	3	88	3.24	<0.01	329
912792	Rock	99.86	0.6	0.04	<5	36	<2	>10	<0.5	4	4	41	2.30	<0.01	187
912793	Rock	100.63	<0.5	0.40	12	47	<2	>10	<0.5	6	4	65	3.23	0.04	286
912794	Rock	99.12	<0.5	0.03	<5	38	4	>10	<0.5	5	2	43	3.16	<0.01	287
912795	Rock	99.70	<0.5	0.04	5	44	<2	>10	<0.5	4	5	44	2.92	<0.01	189
912796	Rock	99.37	<0.5	0.11	6	76	<2	>10	<0.5	5	4	53	3.32	0.06	248
912797	Rock	99.84	0.8	0.04	<5	42	<2	>10	<0.5	3	2	45	2.92	<0.01	301
912798	Rock	99.33	0.8	0.07	<5	32	<2	>10	<0.5	2	4	50	2.41	<0.01	665
912799	Rock	99.40	0.9	0.11	6	32	<2	>10	<0.5	5	3	69	2.75	0.01	414
912801	Rock	100.72	<0.5	0.04	<5	28	6	>10	<0.5	3	3	43	2.22	<0.01	281
912802	Rock	100.33	<0.5	0.07	5	29	<2	>10	<0.5	4	12	57	2.70	0.01	350



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912803	Rock	99.92	<0.5	0.06	5	35	<2	>10	<0.5	7	11	83	3.63	0.02	710
912804	Rock	99.99	0.7	0.04	<5	38	<2	>10	<0.5	3	3	31	2.54	<0.01	312
912805	Rock	99.66	1.0	0.03	<5	32	<2	>10	<0.5	4	4	62	3.06	<0.01	253
912806	Rock	100.12	1.3	0.04	<5	37	<2	>10	<0.5	4	4	49	2.66	0.02	586
912807	Rock	99.38	0.8	0.05	5	38	<2	>10	<0.5	5	3	66	2.86	0.02	551
912808	Rock	100.53	1.0	0.10	10	77	<2	>10	<0.5	4	3	84	3.04	0.02	342
912809	Rock	99.81	<0.5	0.07	<5	47	4	>10	<0.5	4	4	41	2.58	0.02	444
912810	Pulp	99.60	1.0	0.06	13	161	<2	>10	<0.5	6	1	112	3.33	0.03	335
912811	Rock	99.21	1.1	1.28	14	114	<2	>10	<0.5	7	29	51	3.23	0.51	330
912812	Rock	99.85	0.8	0.02	<5	48	6	>10	<0.5	4	4	35	2.57	<0.01	270
912813	Rock	99.37	0.8	0.11	<5	36	<2	>10	<0.5	5	4	75	2.94	<0.01	246
912814	Rock	99.93	0.8	0.05	<5	42	6	>10	<0.5	5	4	34	3.04	<0.01	260
912815	Rock	99.81	0.9	0.06	<5	43	<2	>10	<0.5	4	20	49	2.70	0.01	272
912816	Rock	100.58	0.8	0.02	<5	44	6	>10	<0.5	4	2	28	2.55	0.01	246
912817	Rock	99.36	0.6	0.13	7	62	<2	>10	<0.5	7	6	57	3.17	0.05	341
912818	Rock	99.29	<0.5	0.02	<5	56	7	>10	<0.5	4	4	28	3.04	<0.01	772
912819	Rock	100.30	0.8	0.02	<5	57	<2	>10	<0.5	6	5	33	2.85	<0.01	250
912821	Rock	100.34	0.6	0.38	8	50	6	>10	<0.5	8	5	33	3.18	0.06	151
912822	Rock	99.07	0.8	0.05	5	67	<2	>10	<0.5	9	4	72	4.20	0.04	331
912823	Rock	100.42	0.6	2.00	22	222	<2	>10	<0.5	9	52	51	3.02	0.69	276
912824	Rock	99.77	<0.5	0.89	12	137	<2	>10	<0.5	8	28	49	2.86	0.37	307
912825	Rock	99.58	0.5	0.02	<5	43	<2	>10	<0.5	6	5	44	3.38	0.01	219
912826	Rock	99.69	0.6	0.05	<5	44	7	>10	<0.5	5	4	32	2.65	0.02	231
912827	Rock	99.45	0.8	0.01	<5	50	4	>10	<0.5	6	10	30	3.03	<0.01	304
912828	Rock	100.15	0.9	0.09	<5	36	6	>10	<0.5	5	5	16	3.07	<0.01	262
912829	Rock	99.81	1.0	0.06	<5	42	7	>10	<0.5	4	6	13	2.75	0.01	978
912830	Pulp	99.87	1.4	0.23	18	178	<2	>10	<0.5	13	<1	159	>10	0.06	305
912831	Rock	99.43	0.7	0.95	15	253	<2	>10	<0.5	11	14	87	3.66	0.80	474
912832	Rock	99.10	0.9	1.14	15	150	6	>10	<0.5	11	12	45	3.64	0.64	164

Certificate of Analysis

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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
912761	Rock	6.89	4602	10	0.03	<1	>10000	157	<5	6	4465	<0.01	<10	6	<10
912762	Rock	7.22	5280	5	0.02	<1	>10000	134	<5	6	4335	<0.01	<10	6	<10
912763	Rock	7.04	5153	7	0.02	<1	>10000	154	<5	7	4590	0.01	<10	19	<10
912764	Rock	6.90	5294	<1	0.02	<1	>10000	183	<5	8	4740	<0.01	<10	6	<10
912765	Rock	6.96	5410	1	0.02	<1	>10000	129	<5	9	3938	<0.01	<10	10	<10
912766	Rock	6.84	5583	<1	0.02	<1	>10000	175	<5	8	4392	<0.01	<10	6	<10
912767	Rock	6.96	5089	<1	0.02	<1	>10000	151	<5	7	4617	0.05	<10	10	<10
912768	Rock	7.25	5033	<1	0.02	<1	8329	55	<5	7	4199	<0.01	<10	9	<10
912769	Rock	6.96	4365	1	0.03	<1	>10000	125	<5	8	4149	0.03	<10	15	<10
912770	Pulp	5.74	3131	<1	0.06	<1	>10000	317	<5	7	2494	0.06	<10	72	<10
912771	Rock	6.80	4517	5	0.02	<1	>10000	132	<5	7	3827	<0.01	<10	15	<10
912772	Rock	7.04	3930	<1	0.02	<1	>10000	204	<5	7	2459	0.03	<10	36	<10
912773	Rock	6.88	4924	2	0.02	<1	>10000	151	<5	8	3674	0.02	<10	25	<10
912774	Rock	6.89	4874	<1	0.02	<1	>10000	196	<5	8	3421	0.02	<10	30	<10
912775	Rock	6.68	3912	<1	0.02	<1	>10000	262	<5	7	2339	0.03	<10	45	<10
912776	Rock	6.85	4953	<1	0.02	<1	>10000	176	<5	7	3516	0.03	<10	34	<10
912777	Rock	5.93	4419	<1	0.02	<1	>10000	217	<5	7	3297	0.09	<10	83	<10
912778	Rock	7.14	4512	<1	0.02	<1	>10000	173	<5	8	3689	0.02	<10	23	<10
912779	Rock	6.93	4316	<1	0.02	<1	>10000	185	<5	7	4049	0.01	<10	26	<10
912781	Rock	6.95	5013	<1	0.02	<1	>10000	184	<5	6	4147	0.01	<10	18	<10
912782	Rock	6.64	4151	<1	0.02	<1	>10000	265	<5	7	2813	0.03	<10	34	<10
912783	Rock	7.14	4715	<1	0.02	<1	>10000	208	<5	7	3515	0.01	<10	25	<10
912784	Rock	6.88	5271	<1	0.02	<1	>10000	195	<5	7	3625	0.03	<10	32	<10
912785	Rock	6.96	5846	<1	0.02	<1	>10000	68	<5	6	3662	<0.01	<10	7	<10
912786	Rock	6.31	4323	<1	0.02	<1	>10000	114	<5	7	2439	<0.01	<10	11	<10
912787	Rock	7.00	6153	<1	0.02	<1	>10000	118	<5	6	3875	<0.01	<10	6	<10
912788	Rock	6.76	5115	<1	0.02	<1	>10000	173	<5	6	3392	0.02	<10	19	<10
912789	Rock	6.80	5597	<1	0.02	<1	>10000	326	<5	6	3544	0.04	<10	34	<10
912790	Pulp	6.71	4228	2	0.04	<1	>10000	220	<5	7	2305	0.04	<10	37	<10
912791	Rock	6.58	5098	<1	0.02	<1	>10000	274	<5	8	3308	0.01	<10	16	<10
912792	Rock	7.05	5431	<1	0.02	<1	>10000	128	<5	6	4102	<0.01	<10	3	<10
912793	Rock	6.76	5298	<1	0.02	<1	>10000	196	<5	7	3527	0.03	<10	11	<10
912794	Rock	6.94	6899	1	0.02	<1	>10000	134	<5	6	3945	<0.01	<10	6	<10
912795	Rock	6.78	6082	2	0.02	<1	>10000	132	<5	5	3919	0.01	<10	7	<10
912796	Rock	6.44	6275	2	0.05	<1	>10000	153	<5	6	3533	0.03	<10	14	<10
912797	Rock	6.83	6438	6	0.02	<1	>10000	138	<5	6	3676	<0.01	<10	5	<10
912798	Rock	6.75	4933	<1	0.02	<1	>10000	154	<5	7	2958	0.01	<10	5	<10
912799	Rock	6.84	4444	<1	0.03	<1	>10000	207	<5	6	3360	0.02	<10	10	<10
912801	Rock	6.85	4305	<1	0.02	<1	>10000	137	<5	6	3198	<0.01	<10	3	<10
912802	Rock	7.00	4673	<1	0.02	4	>10000	176	<5	6	2623	0.01	<10	5	<10



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Richmond, British Columbia V7A 4V5
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10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912803	Rock	6.72	4715	<1	0.03	<1	>10000	242	<5	6	3166	0.03	<10	28	<10
912804	Rock	7.05	5137	3	0.02	<1	>10000	101	<5	5	3986	<0.01	<10	9	<10
912805	Rock	6.93	4984	<1	0.02	<1	>10000	194	<5	7	3394	0.02	<10	16	<10
912806	Rock	6.90	4663	<1	0.02	<1	>10000	150	<5	7	3290	0.01	<10	12	<10
912807	Rock	6.72	4832	<1	0.02	<1	>10000	194	<5	6	3419	0.01	<10	12	<10
912808	Rock	5.84	4522	<1	0.02	<1	>10000	258	<5	7	2828	0.02	<10	18	<10
912809	Rock	6.88	5135	2	0.02	<1	>10000	123	<5	6	3689	<0.01	<10	6	<10
912810	Pulp	5.74	3117	<1	0.06	<1	>10000	343	<5	7	2488	0.06	<10	72	<10
912811	Rock	6.86	4321	<1	0.08	10	>10000	152	<5	6	3429	0.05	<10	4	<10
912812	Rock	7.05	5351	<1	0.03	<1	>10000	107	<5	6	4462	<0.01	<10	6	<10
912813	Rock	6.89	4869	<1	0.02	<1	>10000	227	<5	7	3289	0.06	<10	11	<10
912814	Rock	6.92	4849	<1	0.02	<1	>10000	100	<5	8	3409	0.02	<10	22	<10
912815	Rock	6.79	5148	<1	0.02	<1	>10000	144	<5	7	4006	0.02	<10	13	<10
912816	Rock	6.98	5277	<1	0.02	<1	>10000	81	<5	7	4027	<0.01	<10	6	<10
912817	Rock	6.65	5250	4	0.05	<1	>10000	164	<5	10	3847	0.01	<10	20	<10
912818	Rock	6.77	5089	1	0.02	<1	>10000	88	<5	8	2847	<0.01	<10	9	<10
912819	Rock	6.95	5632	<1	0.03	<1	>10000	101	<5	6	3806	<0.01	<10	9	<10
912821	Rock	7.02	5204	<1	0.03	<1	>10000	96	<5	4	3688	0.04	<10	18	<10
912822	Rock	6.60	4315	<1	0.03	<1	>10000	215	<5	5	2646	0.03	<10	40	<10
912823	Rock	5.75	3134	<1	0.65	1	>10000	147	<5	6	1974	0.07	<10	16	<10
912824	Rock	6.38	3595	<1	0.34	<1	>10000	148	<5	6	2017	0.04	<10	16	<10
912825	Rock	6.86	5088	<1	0.03	<1	>10000	128	<5	6	3426	0.02	<10	32	<10
912826	Rock	6.96	5144	2	0.03	<1	>10000	101	<5	6	3731	0.01	<10	10	<10
912827	Rock	7.00	5345	<1	0.03	<1	>10000	92	<5	6	3778	0.01	<10	17	<10
912828	Rock	6.85	5064	<1	0.03	<1	>10000	54	<5	11	3193	0.01	<10	12	<10
912829	Rock	6.92	4882	1	0.02	<1	>10000	49	<5	8	3046	<0.01	<10	15	<10
912830	Pulp	5.59	3706	<1	0.04	<1	>10000	415	<5	6	1926	0.16	<10	193	<10
912831	Rock	6.68	4331	2	0.10	3	>10000	197	<5	8	2435	0.13	<10	17	<10
912832	Rock	6.58	3906	<1	0.08	4	>10000	118	<5	7	2800	0.06	<10	22	<10



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Certificate of Analysis

10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
		2	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
912761	Rock	20	39	788.3	21.3	8.2	15.5	49.2	0.7	3.1	360.9	0.4	370.9	103.4	59.5
912762	Rock	20	39	722.9	18.0	7.4	13.2	45.4	0.7	2.5	367.0	0.4	370.4	100.2	56.3
912763	Rock	22	52	630.8	15.6	6.2	12.7	41.9	1.0	2.2	305.5	0.3	323.2	89.3	49.0
912764	Rock	20	59	586.5	18.0	6.6	13.5	40.8	0.8	2.6	282.2	0.4	301.3	82.3	48.8
912765	Rock	19	57	960.0	16.6	6.8	12.3	45.0	1.2	2.3	486.8	0.4	411.5	115.7	54.1
912766	Rock	23	57	542.6	19.8	7.5	13.0	39.0	1.1	2.8	265.8	0.4	280.9	76.2	45.9
912767	Rock	21	46	733.0	16.3	6.1	13.1	42.1	1.1	2.3	388.2	0.3	327.3	92.2	47.4
912768	Rock	26	39	516.2	7.9	3.3	7.0	24.6	0.5	1.1	317.3	0.2	225.8	61.7	28.6
912769	Rock	22	43	656.4	16.6	6.4	13.2	39.2	1.0	2.3	323.2	0.3	302.2	83.5	47.0
912770	Pulp	12	65	907.0	25.6	11.3	17.4	52.5	0.8	4.1	424.9	1.0	379.5	114.1	61.4
912771	Rock	22	55	522.0	19.9	7.8	12.2	37.8	1.1	3.0	263.8	0.5	288.1	73.5	45.5
912772	Rock	13	73	684.3	20.5	8.4	13.9	42.4	1.2	2.9	336.9	0.7	306.7	89.1	50.5
912773	Rock	25	60	592.3	19.9	8.9	11.5	37.9	1.2	3.2	307.9	0.5	265.1	77.2	44.4
912774	Rock	23	60	840.6	24.9	9.8	15.3	50.9	1.0	3.7	424.5	0.6	366.6	105.8	59.3
912775	Rock	15	74	876.1	24.3	10.6	17.5	53.3	1.8	3.7	449.5	0.7	406.6	118.9	62.1
912776	Rock	23	71	660.8	19.1	7.5	12.9	39.1	1.9	2.7	327.8	0.5	278.6	82.0	45.9
912777	Rock	37	93	619.8	18.1	7.1	14.1	40.6	3.2	2.5	306.5	0.4	294.2	81.4	48.4
912778	Rock	28	54	436.2	12.9	4.9	9.7	29.0	0.7	1.8	229.8	0.3	219.2	57.8	33.7
912779	Rock	21	51	636.2	15.6	6.1	14.0	39.0	0.6	2.1	300.1	0.3	312.6	82.0	47.4
912781	Rock	19	49	470.9	13.9	5.4	10.6	31.9	0.8	2.1	232.2	0.3	237.8	64.1	38.3
912782	Rock	16	75	639.9	18.8	7.7	13.3	40.9	1.0	2.9	296.3	0.6	297.8	82.2	48.7
912783	Rock	20	59	535.4	14.2	5.5	10.2	32.1	0.6	2.0	267.4	0.3	260.5	71.5	39.0
912784	Rock	20	58	682.4	19.8	8.3	13.2	43.8	0.9	2.9	343.5	0.5	334.8	90.9	51.1
912785	Rock	24	51	671.5	13.7	5.8	8.4	32.9	1.3	2.0	361.5	0.4	280.9	82.3	38.3
912786	Rock	16	69	>1000	34.7	16.3	20.7	80.9	2.9	5.5	878.5	1.2	637.3	194.4	96.8
912787	Rock	22	51	393.5	14.6	6.8	7.8	26.6	1.2	2.4	219.5	0.5	188.5	50.6	28.8
912788	Rock	29	60	483.5	16.3	6.7	10.8	34.5	1.1	2.4	237.4	0.5	247.8	67.1	39.0
912789	Rock	22	72	523.5	15.8	6.7	12.3	35.1	1.0	2.3	271.4	0.4	283.2	76.6	41.7
912790	Pulp	25	71	755.8	21.7	8.6	14.3	46.4	1.9	3.1	399.0	0.6	328.2	93.9	51.6
912791	Rock	19	65	774.9	21.4	8.7	13.6	45.2	1.0	3.0	388.3	0.6	339.0	95.6	54.1
912792	Rock	19	38	440.5	9.5	3.9	7.2	23.7	0.7	1.3	230.7	0.2	196.5	54.2	27.4
912793	Rock	21	56	714.4	17.9	7.1	12.3	42.1	1.0	2.6	352.6	0.4	310.3	87.2	46.3
912794	Rock	23	52	653.0	11.9	4.9	9.2	33.5	0.8	1.6	352.9	0.3	260.2	77.9	38.1
912795	Rock	21	51	404.6	12.9	4.9	8.6	26.8	1.4	1.8	224.8	0.4	184.5	50.8	29.9
912796	Rock	23	63	608.9	14.7	5.9	9.0	28.8	1.8	2.3	340.2	0.5	216.5	57.5	32.4
912797	Rock	22	57	722.3	15.1	6.2	9.4	30.7	1.4	2.3	435.6	0.5	244.8	70.1	37.0
912798	Rock	16	56	>1000	19.5	8.1	15.9	55.4	0.8	2.7	>1000	0.6	499.9	153.7	69.1
912799	Rock	14	43	>1000	20.3	7.6	15.5	47.7	0.8	2.9	600.2	0.5	386.1	104.3	58.6
912801	Rock	15	45	745.2	16.7	6.6	11.6	36.0	1.1	2.5	399.7	0.5	280.7	73.5	42.9
912802	Rock	12	42	957.3	19.7	7.8	13.0	40.6	0.8	3.0	510.3	0.6	308.0	87.8	48.2



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Richmond, British Columbia V7A 4V5
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10-360-03625-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
912803	Rock	19	56	>1000	39.8	15.6	33.8	109.5	2.8	5.5	>1000	1.1	809.5	274.0	117.8
912804	Rock	19	37	722.6	10.6	4.0	8.1	25.5	0.9	1.5	472.9	0.2	222.7	63.7	29.2
912805	Rock	17	53	696.9	18.1	6.7	11.8	34.9	0.9	2.6	372.1	0.5	260.4	70.7	40.6
912806	Rock	18	44	>1000	18.7	7.4	14.0	45.3	1.1	2.6	881.3	0.5	349.9	115.0	50.5
912807	Rock	19	49	>1000	16.4	6.3	13.2	43.8	0.9	2.3	813.5	0.4	345.5	107.1	47.9
912808	Rock	16	47	854.6	22.7	8.7	15.3	47.1	0.9	3.3	456.2	0.6	319.0	89.8	54.3
912809	Rock	19	40	729.2	12.8	4.7	10.4	31.3	0.8	1.7	443.6	0.3	252.2	70.5	37.3
912810	Pulp	12	67	937.0	23.1	9.8	14.9	44.7	0.7	3.7	470.3	0.8	299.9	90.2	51.6
912811	Rock	32	63	708.5	11.9	4.5	9.6	29.6	0.9	1.7	470.2	0.3	261.1	70.3	34.9
912812	Rock	20	36	649.5	11.0	4.2	9.0	29.5	0.8	1.5	377.3	0.2	251.4	68.5	34.3
912813	Rock	19	42	616.5	14.5	5.4	13.4	30.4	0.8	2.2	339.0	0.4	247.4	65.8	38.0
912814	Rock	21	57	636.8	12.9	4.9	9.4	28.4	1.8	2.0	375.0	0.3	233.1	62.1	33.2
912815	Rock	21	43	654.7	14.2	5.1	11.5	32.3	1.1	2.0	364.5	0.3	265.9	69.2	40.1
912816	Rock	21	36	598.1	10.4	4.0	8.5	26.6	1.1	1.5	345.4	0.2	212.6	59.1	31.3
912817	Rock	24	51	805.9	15.0	5.4	11.8	34.9	1.1	2.1	484.7	0.4	281.5	82.4	42.5
912818	Rock	18	47	>1000	17.8	7.2	15.1	51.7	1.3	2.4	>1000	0.5	476.9	148.9	60.2
912819	Rock	17	38	600.5	10.4	4.0	8.3	25.4	1.2	1.5	342.4	0.3	222.9	62.8	30.9
912821	Rock	20	47	419.8	8.8	3.5	7.1	19.8	1.3	1.4	211.6	0.3	154.9	43.1	24.3
912822	Rock	24	57	902.9	18.3	7.6	11.5	36.1	1.4	2.8	465.4	0.6	281.3	82.2	44.2
912823	Rock	25	69	740.5	16.3	6.7	11.4	35.5	3.1	2.4	400.4	0.5	276.2	77.6	42.2
912824	Rock	17	51	922.3	16.1	6.8	11.8	37.6	1.0	2.5	474.9	0.5	287.9	87.6	45.9
912825	Rock	19	59	558.6	10.5	4.3	8.1	24.3	1.5	1.5	305.0	0.3	210.7	57.8	30.7
912826	Rock	18	40	608.6	15.0	5.9	10.3	31.6	1.3	2.2	315.2	0.4	251.9	69.4	38.5
912827	Rock	18	44	708.8	13.6	4.9	9.3	31.0	1.7	1.9	410.8	0.3	260.2	71.8	36.7
912828	Rock	17	43	692.3	15.5	6.1	10.1	33.7	1.9	2.4	392.9	0.5	283.6	76.5	39.7
912829	Rock	20	46	>1000	16.5	6.4	13.9	53.8	1.1	2.2	>1000	0.3	477.9	175.3	55.1
912830	Pulp	62	177	793.0	19.5	8.0	13.1	40.2	11.2	2.9	405.6	0.6	295.3	85.5	47.1
912831	Rock	119	81	>1000	13.6	5.8	10.5	35.0	1.7	2.1	690.9	0.4	302.3	103.8	38.8
912832	Rock	45	65	468.6	13.2	5.3	8.7	25.8	3.0	2.0	233.6	0.4	197.9	52.0	30.8

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Aley Corporation
 Suite 1020-800 West Pender St.
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Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912761	Rock	5.3	0.8	3.6	72.1	4.90	50.64	0.81
912762	Rock	4.5	0.7	3.3	63.2	2.77	48.73	0.53
912763	Rock	4.2	0.6	2.7	52.6	12.74	75.03	1.73
912764	Rock	4.5	0.7	3.4	63.7	43.33	136.17	7.38
912765	Rock	4.3	0.6	3.2	61.5	26.99	113.46	4.75
912766	Rock	4.6	0.7	3.3	69.9	24.05	76.36	4.31
912767	Rock	4.1	0.6	2.8	58.9	9.77	41.67	4.12
912768	Rock	2.2	0.3	1.5	30.1	0.70	23.82	0.27
912769	Rock	4.2	0.6	2.8	60.2	10.58	52.41	4.91
912770	Pulp	6.0	1.3	6.8	100.2	48.04	224.85	2.35
912771	Rock	4.4	0.8	3.9	71.8	4.86	74.84	0.63
912772	Rock	4.8	1.0	4.9	73.5	4.13	100.51	0.72
912773	Rock	4.6	0.9	4.4	75.7	4.62	94.89	1.38
912774	Rock	5.7	1.0	5.2	87.8	2.08	106.36	0.60
912775	Rock	5.7	1.1	5.8	86.2	3.78	103.39	0.74
912776	Rock	4.3	0.8	4.0	70.0	2.49	93.45	0.70
912777	Rock	4.6	0.7	3.1	61.1	8.89	119.45	2.38
912778	Rock	3.2	0.5	2.2	48.5	2.09	76.13	0.85
912779	Rock	4.2	0.5	2.4	54.9	1.61	98.89	0.28
912781	Rock	3.5	0.5	2.5	51.8	2.79	75.94	0.41
912782	Rock	4.6	0.9	4.3	75.2	7.84	103.76	1.23
912783	Rock	3.4	0.5	2.5	47.8	4.04	96.80	0.89
912784	Rock	4.9	0.8	3.9	75.7	5.99	60.14	1.57
912785	Rock	3.3	0.6	2.8	52.1	0.65	44.27	0.47
912786	Rock	8.2	1.8	9.2	132.4	4.08	88.97	1.46
912787	Rock	3.2	0.8	3.8	63.1	2.22	46.02	0.78
912788	Rock	3.7	0.7	3.4	57.6	5.06	62.18	1.61
912789	Rock	3.6	0.7	3.3	58.4	8.91	83.86	1.41
912790	Pulp	5.1	0.9	4.8	72.2	28.25	172.93	10.36
912791	Rock	5.0	0.9	4.4	72.2	5.69	124.50	1.06
912792	Rock	2.4	0.4	1.8	34.3	6.24	33.90	1.92
912793	Rock	4.4	0.7	3.3	58.4	5.65	49.35	1.73
912794	Rock	3.3	0.4	2.2	40.7	2.29	45.97	0.82
912795	Rock	2.9	0.5	2.7	45.7	2.53	50.66	0.98
912796	Rock	3.4	0.7	3.6	69.9	2.36	40.65	1.16
912797	Rock	3.7	0.7	3.6	69.6	3.18	45.63	0.96
912798	Rock	5.2	0.8	4.4	84.7	3.16	50.43	1.18
912799	Rock	5.1	0.8	4.0	89.9	5.39	55.66	1.41
912801	Rock	4.1	0.8	3.7	76.8	4.01	37.02	1.30
912802	Rock	4.7	0.9	4.4	86.0	5.15	53.26	1.43



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
912803	Rock	10.3	1.6	8.5	160.3	5.61	47.21	1.30
912804	Rock	2.7	0.4	1.9	43.9	0.71	23.92	0.38
912805	Rock	4.0	0.7	3.6	73.2	1.39	42.63	0.57
912806	Rock	4.6	0.7	3.7	68.7	20.41	88.49	1.56
912807	Rock	4.2	0.7	3.2	66.6	5.55	39.75	1.66
912808	Rock	5.3	0.9	4.7	88.5	10.05	57.80	3.73
912809	Rock	3.2	0.4	2.2	49.6	2.97	34.51	1.31
912810	Pulp	5.2	1.2	6.1	104.9	50.37	211.34	2.13
912811	Rock	3.2	0.5	2.2	44.0	3.46	34.96	1.10
912812	Rock	3.0	0.4	1.8	37.0	0.50	20.11	0.47
912813	Rock	3.5	0.6	3.1	56.5	3.58	27.04	1.18
912814	Rock	3.2	0.5	2.6	49.3	22.39	30.46	9.81
912815	Rock	3.6	0.5	2.5	51.4	11.17	36.53	5.45
912816	Rock	2.7	0.4	2.0	37.5	3.30	19.65	2.96
912817	Rock	3.7	0.5	2.6	53.5	13.24	51.60	7.63
912818	Rock	4.8	0.7	3.9	67.8	14.03	34.89	6.54
912819	Rock	2.7	0.4	2.2	39.4	2.85	28.21	2.71
912821	Rock	2.2	0.4	2.0	35.4	1.30	25.94	0.36
912822	Rock	4.3	0.9	4.6	76.2	5.35	55.57	1.70
912823	Rock	3.8	0.7	4.0	71.1	3.75	50.09	2.90
912824	Rock	4.0	0.7	4.1	68.8	3.57	49.23	2.27
912825	Rock	2.5	0.5	2.4	40.6	1.22	44.73	0.31
912826	Rock	3.5	0.6	3.0	54.4	4.17	24.58	1.64
912827	Rock	3.2	0.5	2.8	50.3	0.92	40.32	0.55
912828	Rock	3.7	0.7	3.7	56.7	11.22	26.33	4.85
912829	Rock	4.5	0.6	2.9	55.5	10.02	44.18	6.82
912830	Pulp	4.3	0.8	4.4	73.3	38.49	307.92	7.69
912831	Rock	3.4	0.6	3.0	54.5	21.50	120.18	4.85
912832	Rock	3.0	0.6	3.5	53.1	2.45	22.82	1.49



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		Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
Sample	Sample	Nb2O5-AD3-OR-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP	WR-FS-ICP
Description	Type	%	%	%	%	%	%	%	%	%	%	%	%	%	%
912761	Rock	0.30													
912761 Dup		0.30													
QCV1011-00623-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.56													
912779	Rock	0.37													
912779 Dup		0.38													
QCV1011-00623-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.54													
912798	Rock	0.31													
912798 Dup		0.31													
QCV1011-00623-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912817	Rock	0.41													
912817 Dup		0.38													
QCV1011-00623-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1011-00623-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912761	Rock		0.16	<0.01	35.80	<0.01	3.50	0.04	39.04	14.80	0.63	0.05	4.81	0.20	0.02
912761 Dup			0.15	<0.01	35.80	<0.01	3.50	0.03	39.05	14.78	0.59	0.05	4.82	0.20	0.02
QCV1011-00626-0002-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912779	Rock		0.21	<0.01	36.22	<0.01	3.52	0.02	39.04	14.96	0.65	0.04	5.00	<0.01	0.03
912779 Dup			0.19	<0.01	36.21	<0.01	3.51	0.02	39.05	14.99	0.58	0.04	4.91	<0.01	0.03
QCV1011-00626-0005-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912798	Rock		0.22	<0.01	37.43	<0.01	3.42	0.01	38.26	14.11	0.63	0.03	5.13	0.07	0.02
912798 Dup			0.26	<0.01	35.95	<0.01	3.85	0.02	38.33	13.45	0.70	0.04	6.64	0.08	0.02
QCV1011-00626-0008-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912817	Rock		0.39	<0.01	33.95	<0.01	4.81	0.08	38.71	13.60	0.75	0.07	3.73	3.20	0.04
912817 Dup			0.37	<0.01	33.95	<0.01	4.75	0.08	38.67	13.65	0.71	0.07	3.70	3.20	0.04
QCV1011-00626-0011-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00626-0013-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.82	0.04	8.12	<0.01	6.25	1.70	4.52	0.55	0.12	7.10	0.13	50.29	0.31

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Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912761	Rock		<0.5	0.03	<5	46	<2	>10	<0.5	3	16	55	2.36	0.02	267
912761 Dup			<0.5	0.04	<5	48	<2	>10	<0.5	3	16	56	2.31	0.02	287
QCV1011-00624-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.8									1001			
912779	Rock		<0.5	0.06	6	41	<2	>10	<0.5	2	2	59	2.15	<0.01	248
912779 Dup			<0.5	0.06	<5	42	<2	>10	<0.5	2	2	61	2.21	<0.01	252
QCV1011-00624-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										117	1127	694			
912798	Rock		0.8	0.07	<5	32	<2	>10	<0.5	2	4	50	2.41	<0.01	665
912798 Dup			0.7	0.07	<5	31	<2	>10	<0.5	2	4	51	2.30	<0.01	646
QCV1011-00624-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										115	1065	701			
912817	Rock		0.6	0.13	7	62	<2	>10	<0.5	7	6	57	3.17	0.05	341
912817 Dup			0.5	0.13	6	62	<2	>10	<0.5	7	6	58	3.00	0.05	341
QCV1011-00624-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1011-00624-0013-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			61.6									1049			
912761	Rock	99.08													
912761 Dup		99.00													
QCV1011-00626-0002-BLK		<0.01													
912779	Rock	99.69													
912779 Dup		99.52													
QCV1011-00626-0005-BLK		<0.01													
912798	Rock	99.33													
912798 Dup		99.35													
QCV1011-00626-0008-BLK		<0.01													
912817	Rock	99.36													
912817 Dup		99.20													
QCV1011-00626-0011-BLK		<0.01													
QCV1011-00626-0013-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		99.94													



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
912761	Rock	6.89	4602	10	0.03	<1	>10000	157	<5	6	4465	<0.01	<10	6	<10
912761 Dup		6.94	4555	10	0.03	<1	>10000	156	<5	7	4492	<0.01	<10	7	<10
QCV1011-00624-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
912779	Rock	6.93	4316	<1	0.02	<1	>10000	185	<5	7	4049	0.01	<10	26	<10
912779 Dup		6.95	4460	<1	0.02	<1	>10000	194	<5	7	4078	0.01	<10	27	<10
QCV1011-00624-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385		22							
STD-OREAS-45P-4A result					0.08	356		20							
912798	Rock	6.75	4933	<1	0.02	<1	>10000	154	<5	7	2958	0.01	<10	5	<10
912798 Dup		6.73	4655	<1	0.02	<1	>10000	160	<5	7	2944	0.01	<10	6	<10
QCV1011-00624-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.07	350	469	21							
912817	Rock	6.65	5250	4	0.05	<1	>10000	164	<5	10	3847	0.01	<10	20	<10
912817 Dup		6.72	4977	4	0.05	<1	>10000	171	<5	10	3841	0.02	<10	21	<10
QCV1011-00624-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1011-00624-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10



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Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912761	Rock	20	39												
912761 Dup		20	44												
QCV1011-00624-0002-BLK		<2	<1												
912779	Rock	21	51												
912779 Dup		21	50												
QCV1011-00624-0005-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		144													
912798	Rock	16	56												
912798 Dup		16	45												
QCV1011-00624-0008-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		140													
912817	Rock	24	51												
912817 Dup		25	48												
QCV1011-00624-0011-BLK		<2	<1												
QCV1011-00624-0013-BLK		<2	<1												
QCV1011-00627-0001-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912761	Rock			788.3	21.3	8.2	15.5	49.2	0.7	3.1	360.9	0.4	370.9	103.4	59.5
912761 Dup				749.2	20.1	8.0	15.6	48.6	0.8	2.9	342.1	0.4	366.8	99.1	57.9
912779	Rock			636.2	15.6	6.1	14.0	39.0	0.6	2.1	300.1	0.3	312.6	82.0	47.4
912779 Dup				631.1	15.9	5.9	14.5	39.7	0.6	2.2	302.5	0.3	299.7	82.8	49.0
912798	Rock			>1000	19.5	8.1	15.9	55.4	0.8	2.7	>1000	0.6	499.9	153.7	69.1
912798 Dup				>1000	20.2	8.3	15.7	55.2	0.7	2.8	972.7	0.6	521.5	148.8	69.4
912817	Rock			805.9	15.0	5.4	11.8	34.9	1.1	2.1	484.7	0.4	281.5	82.4	42.5
912817 Dup				810.1	14.1	5.0	11.2	33.3	0.9	1.9	444.8	0.3	257.1	78.1	40.7
QCV1011-00627-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				124.1	19.1	14.7	2.1	13.9	11.0	4.5	59.6	2.2	58.3	14.9	13.3



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10-360-03625-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
QCV1011-00627-0001-BLK		<0.1	<0.1	<0.1	<0.10			
912761	Rock	5.3	0.8	3.6	72.1			
912761 Dup		5.4	0.8	3.5	75.4			
912779	Rock	4.2	0.5	2.4	54.9			
912779 Dup		4.1	0.5	2.5	54.9			
912798	Rock	5.2	0.8	4.4	84.7			
912798 Dup		5.1	0.8	4.4	81.3			
912817	Rock	3.7	0.5	2.6	53.5			
912817 Dup		3.6	0.5	2.5	50.4			
QCV1011-00627-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.7	2.4	15.2	121.0			
912761	Rock					4.90	50.64	0.81
912761 Dup						4.25	57.23	0.77
QCV1105-00555-0002-BLK						<0.05	<0.20	<0.10
912779	Rock					1.61	98.89	0.28
912779 Dup						1.62	103.15	0.29
QCV1105-00555-0005-BLK						<0.05	<0.20	<0.10
912798	Rock					3.16	50.43	1.18
912798 Dup						3.29	49.37	1.19
QCV1105-00555-0008-BLK						<0.05	<0.20	<0.10
912817	Rock					13.24	51.60	7.63
912817 Dup						13.12	51.21	7.63
QCV1105-00555-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00555-0013-BLK						<0.05	<0.20	<0.10



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10-360-03626-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Date Received: 11/18/2010 Date Completed: 05/06/2011 Invoice:</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Purchase Order: ALY 0002 Description: Aley 2010-033</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">4</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">66</td> <td>Rock</td> <td>SP-RX-2K/Rock/Chips/Drill Core</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td>Ta-4A-LL-MS</td> <td>Tantalum, 4 Acid, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>REE-LB-MS</td> <td>REE Group by ICP-MS</td> </tr> <tr> <td>Vancouver, BC</td> <td>U-4A-LL-MS</td> <td>Uraium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>Nb2O5-AD3-OR-ICP</td> <td>Niobium by multi-acid digestion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>Th-4A-LL-MS</td> <td>Thorium, 4 Acid, Low Level</td> </tr> <tr> <td>Vancouver, BC</td> <td>WR-FS-ICP</td> <td>Whole Rock, Lithium Borate Fusion, ICP</td> </tr> <tr> <td>Vancouver, BC</td> <td>30-4A-TR</td> <td>30 Element, 4 Acid, ICP, Trace Level</td> </tr> </tbody> </table> <p>Submittal Information Ta, Th, and U results shown have been revised with accurate detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	4	Pulp	SP-PU/Pulp Handling, submitted pulps	Vancouver, BC	66	Rock	SP-RX-2K/Rock/Chips/Drill Core	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
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Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level																																			
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																			

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912747	Rock	1.01	0.14	0.01	36.28	<0.01	5.70	0.02	35.46	13.77	0.54	0.05	7.00	0.91	0.05
912748	Rock	0.82	0.32	0.01	27.98	<0.01	23.48	0.20	27.24	11.50	0.57	0.05	6.46	1.53	0.52
912749	Rock	0.75	0.22	0.01	33.42	<0.01	7.47	0.05	35.98	13.75	0.59	0.05	6.53	0.84	0.12
912850	Pulp	0.39	0.24	<0.01	31.43	<0.01	5.30	0.04	39.07	16.51	0.48	0.06	4.48	1.28	0.12
912851	Rock	1.35	0.27	0.02	28.37	<0.01	24.17	0.14	25.38	9.95	0.55	0.25	7.41	3.05	0.15
912852	Rock	0.76	0.15	0.01	32.80	<0.01	10.24	0.05	34.22	13.22	0.74	0.05	6.95	1.23	0.09
912853	Rock	1.06	0.21	0.01	35.00	<0.01	5.58	0.06	34.64	13.65	0.72	0.06	8.38	0.93	0.03
912854	Rock	0.21	0.08	<0.01	32.71	<0.01	4.35	0.02	40.95	16.84	0.80	0.03	3.70	0.25	<0.01
912855	Rock	1.13	0.65	0.01	33.51	<0.01	6.19	0.28	32.61	13.70	0.67	0.07	8.91	2.64	0.05
912856	Rock	0.41	0.21	<0.01	31.97	0.01	5.97	0.07	39.26	16.58	0.56	0.04	4.34	1.38	0.05
912857	Rock	0.35	0.16	<0.01	31.44	<0.01	5.50	0.04	40.22	17.28	0.43	0.03	3.60	1.76	0.05
912858	Rock	0.80	0.24	0.01	32.12	<0.01	9.16	0.05	35.78	14.62	0.45	0.05	5.72	1.61	0.11
912859	Rock	0.60	0.23	<0.01	32.68	<0.01	5.48	0.06	36.94	16.07	0.49	0.05	6.08	1.22	0.06
912861	Rock	0.80	0.10	<0.01	34.12	<0.01	7.84	0.04	33.91	14.46	0.49	0.06	7.08	0.93	0.07
912862	Rock	0.46	0.05	<0.01	33.35	<0.01	4.51	0.02	39.01	16.97	0.63	0.04	4.48	0.44	0.06
912863	Rock	0.35	0.05	<0.01	33.45	<0.01	4.64	0.02	38.84	17.33	0.62	0.04	4.85	0.59	0.04
912864	Rock	0.40	0.14	<0.01	33.12	<0.01	6.44	0.03	38.18	16.25	0.59	0.06	4.71	0.97	0.15
912865	Rock	0.75	0.31	0.02	22.82	<0.01	37.76	0.22	21.63	9.12	0.60	0.05	4.66	1.70	0.69
912866	Rock	0.02	16.19	0.13	3.89	0.03	3.91	3.74	1.17	1.60	0.12	3.71	0.28	67.19	0.47
912867	Rock	0.88	0.47	0.01	24.97	<0.01	31.77	0.21	23.61	9.76	0.48	0.08	5.45	2.33	0.69
912868	Rock	0.58	0.18	<0.01	33.87	<0.01	6.73	0.02	37.16	15.02	0.59	0.05	4.55	1.34	0.12
912869	Rock	0.25	0.16	<0.01	32.47	<0.01	5.59	0.02	37.48	16.24	0.59	0.04	4.36	2.39	0.03
912870	Pulp	0.72	0.17	0.02	35.81	<0.01	4.60	0.05	37.89	12.99	0.38	0.09	3.95	3.08	0.13
912871	Rock	0.91	0.20	0.02	27.52	<0.01	31.20	0.09	21.99	10.36	0.50	0.05	5.68	1.84	0.33
912872	Rock	1.25	0.19	0.03	35.62	<0.01	15.04	0.11	27.42	9.18	0.49	0.09	8.74	1.81	0.20
912873	Rock	0.80	0.14	0.03	31.31	0.01	14.38	0.08	31.76	12.96	0.48	0.12	5.87	2.12	0.14
912874	Rock	0.67	0.19	<0.01	32.67	<0.01	6.25	0.03	37.51	15.44	0.54	0.05	5.19	1.12	0.09
912875	Rock	0.57	0.26	0.03	34.56	<0.01	11.75	0.15	34.27	11.91	0.58	0.06	4.79	1.23	0.20
912876	Rock	0.82	0.32	0.01	31.38	<0.01	14.84	0.07	33.51	12.31	0.67	0.04	5.27	1.50	0.69
912877	Rock	0.42	0.15	<0.01	32.28	<0.01	6.70	0.02	40.05	16.00	0.55	0.03	3.75	0.75	0.10
912878	Rock	0.85	0.45	<0.01	29.84	<0.01	16.26	0.12	30.32	13.56	0.53	0.05	6.22	1.87	0.45
912879	Rock	1.70	0.73	0.01	25.42	<0.01	34.55	0.39	16.12	8.12	0.35	0.08	9.84	2.93	0.74
912880 Dup	Rock	1.77	0.74	0.01	25.83	<0.01	34.35	0.42	15.81	8.00	0.35	0.08	9.97	3.00	0.75
912881	Rock	0.31	0.18	<0.01	32.82	<0.01	6.30	0.03	38.83	15.37	0.57	0.04	4.27	1.45	0.11
912882	Rock	0.78	0.27	<0.01	33.07	<0.01	9.68	0.07	34.03	13.85	0.53	0.05	6.46	1.54	0.18
912883	Rock	0.67	0.28	<0.01	29.89	<0.01	15.65	0.14	30.56	13.11	0.58	0.05	6.94	1.32	0.41
912884	Rock	1.63	0.77	0.01	29.34	<0.01	26.93	0.37	21.16	8.23	0.46	0.07	8.92	2.64	0.70
912885	Rock	1.77	0.54	<0.01	38.35	<0.01	9.95	0.02	29.72	8.97	0.45	0.05	9.51	1.23	0.37
912886	Rock	1.04	0.17	<0.01	35.17	<0.01	9.99	0.01	31.81	12.32	0.43	0.05	8.80	1.03	0.14
912887	Rock	0.65	0.17	<0.01	32.92	<0.01	5.77	0.01	36.25	14.82	0.59	0.04	6.79	1.67	0.10



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912888	Rock	0.19	0.06	<0.01	33.41	<0.01	4.55	<0.01	42.37	16.14	0.83	0.03	1.45	0.97	0.02
912889	Rock	0.48	0.18	<0.01	32.54	<0.01	5.11	0.05	41.13	16.62	0.74	0.04	2.68	0.59	0.09
912890	Pulp	0.53	1.89	0.35	46.89	<0.01	4.02	0.75	31.95	2.36	0.88	0.45	2.64	6.45	0.22
912891	Rock	0.27	0.19	<0.01	32.59	<0.01	3.86	0.05	40.94	17.11	0.76	0.04	3.65	0.38	0.03
912892	Rock	0.29	0.10	<0.01	33.22	<0.01	2.98	0.02	40.06	16.85	0.70	0.04	4.69	0.21	0.02
912893	Rock	0.43	0.15	<0.01	32.71	<0.01	3.82	0.02	40.66	16.91	0.78	0.04	3.24	1.34	0.02
912894	Rock	1.34	0.45	<0.01	35.65	<0.01	6.81	0.02	36.38	12.79	0.77	0.04	4.46	1.81	0.12
912895	Rock	0.62	0.31	<0.01	33.07	<0.01	4.79	0.02	37.85	15.59	0.57	0.05	5.45	1.85	0.10
912896	Rock	0.55	0.15	<0.01	32.73	<0.01	6.96	0.03	36.91	15.36	0.68	0.05	5.78	0.99	0.13
912897	Rock	1.26	0.59	<0.01	25.65	<0.01	29.45	0.42	21.57	10.83	0.45	0.07	6.93	2.48	0.75
912898	Rock	1.07	0.23	0.01	31.10	<0.01	16.33	0.12	30.28	13.10	0.52	0.06	5.59	1.45	0.23
912899	Rock	0.16	0.05	<0.01	31.63	<0.01	3.81	0.01	40.98	17.66	0.69	0.04	3.43	0.72	0.03
912901	Rock	0.56	0.14	<0.01	34.22	<0.01	4.14	0.02	37.51	15.93	0.61	0.05	5.83	1.00	0.04
912902	Rock	0.44	0.20	<0.01	26.84	<0.01	22.57	0.16	30.48	13.00	0.60	0.05	3.53	1.06	0.50
912903	Rock	0.10	0.02	<0.01	32.85	<0.01	3.14	<0.01	42.32	17.79	0.67	0.03	2.93	<0.01	<0.01
912904	Rock	0.18	0.04	<0.01	32.83	<0.01	3.52	0.02	41.06	17.68	0.62	0.04	3.36	0.10	0.01
912905	Rock	0.48	0.13	<0.01	35.44	<0.01	7.37	0.03	34.59	14.77	0.59	0.04	6.34	0.39	0.16
912906	Rock	0.35	0.07	<0.01	33.30	<0.01	3.92	0.03	38.81	16.73	0.65	0.04	5.59	0.22	0.03
912907	Rock	0.22	0.09	<0.01	33.16	<0.01	3.44	0.03	39.36	17.45	0.62	0.03	4.93	0.24	0.02
912908	Rock	0.46	0.15	<0.01	34.24	<0.01	4.34	0.05	38.46	17.08	0.47	0.05	4.40	0.38	0.04
912909	Rock	0.52	0.30	<0.01	33.70	<0.01	3.95	0.11	37.56	16.58	0.50	0.04	4.81	1.55	0.05
912910	Pulp	0.44	0.23	<0.01	33.83	<0.01	5.12	0.05	38.83	15.37	0.49	0.06	4.11	1.27	0.11
912911	Rock	0.17	0.08	<0.01	31.89	<0.01	3.11	0.04	41.52	18.18	0.69	0.05	3.31	0.10	<0.01
912912	Rock	0.29	0.12	<0.01	31.76	<0.01	3.77	0.04	41.26	18.10	0.76	0.05	2.94	0.07	0.02
912913	Rock	0.20	0.06	<0.01	32.49	<0.01	3.07	0.03	41.53	17.81	0.80	0.07	3.53	0.07	<0.01
912914	Rock	0.52	0.20	<0.01	35.31	<0.01	3.40	0.07	37.42	16.05	0.49	0.05	6.35	0.50	0.02
912915	Rock	0.50	0.58	<0.01	34.29	<0.01	3.03	0.20	36.69	15.57	0.67	0.07	6.86	1.78	0.05
912916	Rock	0.41	0.15	<0.01	35.23	<0.01	2.97	0.05	37.34	15.34	0.69	0.06	7.45	0.48	0.01
912917	Rock	0.41	0.09	<0.01	34.22	<0.01	5.28	0.04	36.85	15.63	0.36	0.04	6.28	0.68	0.03
912918	Rock	0.30	0.07	<0.01	32.61	<0.01	4.02	0.03	39.68	17.13	0.54	0.04	5.21	0.17	0.01

Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912747	Rock	99.92	<0.5	0.08	73	103	<2	>10	<0.5	8	6	45	3.94	0.01	351
912748	Rock	99.86	0.7	0.18	49	94	<2	>10	<0.5	20	6	64	>10	0.15	288
912749	Rock	99.02	<0.5	0.12	24	96	<2	>10	<0.5	10	6	55	5.01	0.03	424
912850	Pulp	99.00	<0.5	0.14	<5	52	<2	>10	<0.5	7	4	34	3.84	0.03	322
912851	Rock	99.68	<0.5	0.14	<5	160	<2	>10	<0.5	14	12	71	>10	0.10	448
912852	Rock	99.75	<0.5	0.08	12	108	<2	>10	<0.5	8	7	54	6.73	0.03	987
912853	Rock	99.26	<0.5	0.11	9	102	<2	>10	<0.5	4	10	63	3.63	0.05	953
912854	Rock	99.76	<0.5	0.03	26	44	<2	>10	<0.5	4	6	16	3.00	<0.01	1603
912855	Rock	99.30	<0.5	0.34	74	72	<2	>10	<0.5	7	6	69	4.10	0.20	4810
912856	Rock	100.45	<0.5	0.10	28	41	<2	>10	<0.5	10	9	37	3.90	0.04	1431
912857	Rock	100.52	<0.5	0.06	16	29	<2	>10	<0.5	11	13	32	3.68	0.02	743
912858	Rock	99.91	<0.5	0.09	11	81	<2	>10	<0.5	12	7	23	5.89	0.02	829
912859	Rock	99.36	<0.5	0.06	<5	41	<2	>10	<0.5	9	9	43	3.75	0.02	355
912861	Rock	99.10	<0.5	0.06	<5	60	<2	>10	<0.5	6	7	54	5.21	0.02	531
912862	Rock	99.57	<0.5	0.03	<5	52	<2	>10	<0.5	6	7	33	2.95	0.01	249
912863	Rock	100.49	<0.5	0.03	<5	46	<2	>10	<0.5	6	7	24	2.89	0.01	248
912864	Rock	100.65	<0.5	0.07	8	33	<2	>10	<0.5	7	8	33	4.15	0.02	558
912865	Rock	99.59	<0.5	0.15	<5	158	<2	>10	<0.5	28	6	27	>10	0.15	241
912866	Rock	102.45	<0.5	9.69	<5	1221	<2	3.54	<0.5	9	138	6	2.60	3.41	35
912867	Rock	99.84	<0.5	0.24	<5	131	<2	>10	<0.5	19	9	26	>10	0.15	316
912868	Rock	99.62	<0.5	0.09	<5	53	<2	>10	<0.5	10	12	36	4.42	0.01	345
912869	Rock	99.36	<0.5	0.08	16	39	<2	>10	<0.5	13	15	18	3.44	<0.01	900
912870	Pulp	99.16	<0.5	0.09	12	200	<2	>10	<0.5	4	4	44	2.86	0.04	406
912871	Rock	99.79	<0.5	0.11	<5	128	<2	>10	<0.5	84	17	83	>10	0.07	406
912872	Rock	98.92	<0.5	0.10	<5	246	<2	>10	<0.5	18	7	10	9.85	0.08	427
912873	Rock	99.41	<0.5	0.07	<5	225	<2	>10	<0.5	13	9	31	9.45	0.04	309
912874	Rock	99.10	<0.5	0.10	<5	49	<2	>10	<0.5	5	8	42	4.18	0.01	325
912875	Rock	99.81	<0.5	0.13	<5	213	<2	>10	<0.5	15	6	21	7.59	0.10	299
912876	Rock	100.61	<0.5	0.17	<5	101	<2	>10	<0.5	24	7	42	8.90	0.04	336
912877	Rock	100.40	<0.5	0.08	<5	32	<2	>10	<0.5	11	7	32	4.16	<0.01	317
912878	Rock	99.66	<0.5	0.25	<5	73	<2	>10	<0.5	18	9	66	>10	0.09	275
912879	Rock	99.29	<0.5	0.37	<5	114	<2	>10	<0.5	32	8	47	>10	0.30	416
912880 Dup	Rock	99.31	<0.5	0.38	<5	116	<2	>10	<0.5	34	8	42	>10	0.32	412
912881	Rock	99.97	<0.5	0.09	<5	43	<2	>10	<0.5	10	8	28	4.20	0.01	331
912882	Rock	99.74	<0.5	0.14	<5	48	<2	>10	<0.5	16	6	15	6.16	0.05	323
912883	Rock	98.93	<0.5	0.15	<5	49	<2	>10	<0.5	20	6	12	9.79	0.09	334
912884	Rock	99.61	<0.5	0.41	<5	110	<2	>10	<0.5	27	5	39	>10	0.26	370
912885	Rock	99.18	<0.5	0.28	19	84	<2	>10	<0.5	35	6	17	6.23	<0.01	484
912886	Rock	99.92	<0.5	0.08	<5	50	<2	>10	<0.5	13	5	10	6.29	<0.01	419
912887	Rock	99.14	<0.5	0.08	7	33	<2	>10	<0.5	10	8	13	3.74	<0.01	640



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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03626-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912888	Rock	99.85	<0.5	0.04	<5	69	<2	>10	<0.5	5	7	6	2.93	<0.01	139
912889	Rock	99.76	<0.5	0.10	<5	59	<2	>10	<0.5	7	6	11	3.28	0.03	206
912890	Pulp	98.86	<0.5	0.93	15	3057	<2	>10	<0.5	4	7	23	2.81	0.62	1028
912891	Rock	99.60	<0.5	0.11	<5	46	<2	>10	<0.5	3	6	22	2.45	0.03	201
912892	Rock	98.90	<0.5	0.05	<5	45	<2	>10	<0.5	1	6	20	1.98	<0.01	229
912893	Rock	99.70	<0.5	0.08	<5	41	<2	>10	<0.5	2	7	29	2.54	<0.01	233
912894	Rock	99.30	<0.5	0.25	35	72	<2	>10	<0.5	8	6	17	4.59	<0.01	1682
912895	Rock	99.65	<0.5	0.17	<5	35	<2	>10	<0.5	6	7	7	3.19	<0.01	333
912896	Rock	99.78	<0.5	0.09	7	43	<2	>10	<0.5	10	9	36	4.63	0.02	338
912897	Rock	99.20	<0.5	0.32	<5	76	<2	>10	<0.5	18	8	37	>10	0.31	329
912898	Rock	99.03	<0.5	0.12	<5	126	<2	>10	<0.5	24	7	16	>10	0.08	274
912899	Rock	99.04	<0.5	0.02	<5	33	<2	>10	<0.5	5	7	17	2.62	<0.01	212
912901	Rock	99.48	<0.5	0.08	<5	40	<2	>10	<0.5	6	10	38	2.79	<0.01	289
912902	Rock	99.01	<0.5	0.10	<5	65	<2	>10	<0.5	13	7	19	>10	0.11	165
912903	Rock	99.78	<0.5	0.01	<5	39	<2	>10	<0.5	2	7	13	2.16	<0.01	185
912904	Rock	99.28	<0.5	0.02	<5	36	<2	>10	<0.5	2	7	16	2.48	<0.01	380
912905	Rock	99.85	<0.5	0.07	<5	41	<2	>10	<0.5	9	13	34	5.09	0.02	308
912906	Rock	99.40	<0.5	0.04	6	38	<2	>10	<0.5	4	7	25	2.65	0.02	347
912907	Rock	99.38	<0.5	0.05	10	33	<2	>10	<0.5	5	8	20	2.30	0.02	554
912908	Rock	99.68	<0.5	0.07	<5	42	<2	>10	<0.5	7	11	36	2.99	0.02	476
912909	Rock	99.17	<0.5	0.17	7	48	<2	>10	<0.5	8	10	37	2.64	0.07	380
912910	Pulp	99.48	<0.5	0.12	6	53	<2	>10	<0.5	5	4	35	3.54	0.03	375
912911	Rock	98.99	<0.5	0.04	9	60	<2	>10	<0.5	2	8	15	2.11	0.02	497
912912	Rock	98.88	<0.5	0.06	<5	74	<2	>10	<0.5	2	5	21	2.52	0.03	235
912913	Rock	99.48	<0.5	0.03	<5	64	<2	>10	<0.5	2	7	3	2.05	0.02	206
912914	Rock	99.87	<0.5	0.11	<5	49	<2	>10	<0.5	3	8	33	2.26	0.05	242
912915	Rock	99.80	<0.5	0.32	<5	85	<2	>10	<0.5	2	15	31	1.97	0.15	346
912916	Rock	99.79	<0.5	0.08	<5	60	<2	>10	<0.5	<1	8	27	1.94	0.04	345
912917	Rock	99.50	<0.5	0.05	26	29	<2	>10	<0.5	8	9	31	3.56	0.02	1763
912918	Rock	99.52	<0.5	0.04	<5	50	<2	>10	<0.5	4	7	21	2.60	0.02	239

Certificate of Analysis

10-360-03626-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
912747	Rock	7.28	4096	<1	0.03	2	>10000	140	<5	7	3541	0.02	<10	275	<10
912748	Rock	6.96	4482	<1	0.03	5	>10000	158	<5	4	3758	0.26	<10	518	<10
912749	Rock	7.87	4688	<1	0.03	3	>10000	186	<5	6	3860	0.05	<10	294	<10
912850	Pulp	9.24	3642	2	0.04	2	>10000	106	<5	8	2446	0.03	<10	343	<10
912851	Rock	5.77	4142	<1	0.21	9	>10000	224	<5	16	3172	0.05	<10	346	<10
912852	Rock	7.44	5461	<1	0.04	2	>10000	176	<5	11	3687	0.03	<10	306	<10
912853	Rock	7.72	5533	<1	0.04	2	>10000	216	<5	8	4338	0.02	<10	281	<10
912854	Rock	9.78	6330	1	0.02	1	>10000	61	<5	9	3873	<0.01	<10	324	<10
912855	Rock	8.08	4836	2	0.05	2	>10000	252	<5	9	4325	0.03	<10	264	<10
912856	Rock	9.22	4195	<1	0.02	2	>10000	108	<5	10	2204	0.02	<10	335	<10
912857	Rock	9.66	2868	<1	0.02	2	>10000	94	<5	10	1238	0.02	<10	348	<10
912858	Rock	7.87	3271	<1	0.03	2	>10000	64	<5	10	2016	0.03	<10	351	<10
912859	Rock	8.37	3859	<1	0.03	2	>10000	136	<5	9	3271	0.02	<10	335	<10
912861	Rock	7.90	3866	<1	0.04	2	>10000	188	<5	13	3423	0.03	<10	347	<10
912862	Rock	9.17	4284	<1	0.03	1	>10000	111	<5	8	4071	0.02	<10	344	<10
912863	Rock	8.73	4404	<1	0.03	1	>10000	83	<5	8	4132	0.01	<10	325	<10
912864	Rock	8.70	5403	<1	0.03	2	>10000	105	<5	8	2182	0.02	<10	311	<10
912865	Rock	4.79	4315	<1	0.03	5	>10000	33	<5	3	2927	0.26	<10	517	<10
912866	Rock	0.99	846	<1	3.00	7	1226	18	<5	6	774	0.29	<10	107	<10
912867	Rock	5.66	3493	<1	0.04	5	>10000	56	<5	6	2091	0.16	<10	640	<10
912868	Rock	8.33	4242	<1	0.03	1	>10000	129	<5	8	3180	0.04	<10	341	<10
912869	Rock	8.47	4424	1	0.02	2	>10000	68	<5	11	2913	<0.01	<10	315	<10
912870	Pulp	6.96	2986	<1	0.06	2	>10000	163	<5	9	2420	0.05	<10	308	<10
912871	Rock	6.04	3710	<1	0.03	6	>10000	185	<5	5	3133	0.17	<10	415	<10
912872	Rock	5.30	3914	<1	0.06	3	>10000	25	<5	8	4705	0.06	<10	310	<10
912873	Rock	7.16	3226	<1	0.07	3	>10000	114	<5	10	2785	0.05	<10	356	<10
912874	Rock	8.43	3794	<1	0.03	2	>10000	157	<5	7	3341	0.03	<10	332	<10
912875	Rock	6.28	4312	<1	0.03	2	>10000	16	<5	6	4501	0.06	<10	324	<10
912876	Rock	6.59	4903	<1	0.03	3	>10000	127	<5	6	3044	0.16	<10	361	<10
912877	Rock	8.44	4003	<1	0.02	2	>10000	98	<5	7	2440	0.03	<10	339	<10
912878	Rock	7.32	3662	<1	0.03	4	>10000	187	<5	6	2852	0.19	<10	450	<10
912879	Rock	4.57	2690	<1	0.05	6	>10000	50	<5	5	2233	0.24	<10	574	<10
912880 Dup	Rock	4.56	2596	<1	0.05	6	>10000	36	<5	5	2270	0.21	<10	575	<10
912881	Rock	8.80	4299	<1	0.02	2	>10000	84	<5	8	2951	0.03	<10	333	<10
912882	Rock	7.65	3451	<1	0.03	2	>10000	25	<5	8	3090	0.05	<10	372	<10
912883	Rock	7.14	4209	<1	0.03	3	>10000	24	<5	9	3393	0.15	<10	459	<10
912884	Rock	4.47	3247	<1	0.04	5	>10000	28	<5	5	2801	0.21	<10	549	<10
912885	Rock	4.61	3903	2	0.03	3	>10000	33	<5	7	2396	0.05	<10	293	<10
912886	Rock	6.19	3800	1	0.03	3	>10000	25	<5	7	2138	0.03	<10	306	<10
912887	Rock	8.08	5148	<1	0.03	2	>10000	24	<5	9	2895	0.02	<10	309	<10



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Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

10-360-03626-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
912888	Rock	8.70	5977	1	0.02	2	6279	24	<5	10	3979	<0.01	<10	324	<10
912889	Rock	8.72	5253	<1	0.02	1	>10000	25	<5	6	3601	0.01	<10	358	<10
912890	Pulp	1.33	6497	14	0.35	1	>10000	77	<5	3	>10000	0.14	29	190	<10
912891	Rock	9.03	5893	<1	0.02	1	>10000	74	<5	8	4159	0.01	<10	347	<10
912892	Rock	8.78	6048	<1	0.02	<1	>10000	74	<5	7	4757	<0.01	<10	326	<10
912893	Rock	9.02	5773	<1	0.02	1	>10000	108	<5	7	4672	0.01	<10	327	<10
912894	Rock	7.50	5018	2	0.02	2	>10000	53	<5	11	2813	0.04	<10	283	<10
912895	Rock	8.68	3930	1	0.03	2	>10000	20	<5	7	3129	0.02	<10	318	<10
912896	Rock	8.60	4613	<1	0.03	3	>10000	115	<5	10	4099	0.04	<10	358	<10
912897	Rock	5.81	3348	<1	0.04	5	>10000	23	<5	5	3134	0.16	<10	646	<10
912898	Rock	6.80	3428	<1	0.03	3	>10000	26	<5	6	3487	0.07	<10	382	<10
912899	Rock	9.63	5264	<1	0.02	1	>10000	47	<5	10	4475	<0.01	<10	343	<10
912901	Rock	8.50	4509	<1	0.03	2	>10000	137	<5	7	4276	0.02	<10	327	<10
912902	Rock	7.36	4883	<1	0.03	4	>10000	49	<5	6	3721	0.21	<10	492	<10
912903	Rock	9.96	5328	<1	0.02	<1	>10000	42	<5	8	4534	<0.01	<10	342	<10
912904	Rock	>10	4813	<1	0.03	1	>10000	55	<5	9	4306	<0.01	<10	348	<10
912905	Rock	8.78	4315	<1	0.03	2	>10000	117	<5	6	4339	0.06	<10	373	<10
912906	Rock	9.19	4885	1	0.02	1	>10000	79	<5	7	3985	0.01	<10	318	<10
912907	Rock	9.41	4936	<1	0.02	2	>10000	61	<5	7	3992	<0.01	<10	327	<10
912908	Rock	9.68	4171	<1	0.03	2	>10000	122	<5	7	2354	0.02	<10	328	<10
912909	Rock	9.21	4342	2	0.03	1	>10000	126	<5	7	3012	0.02	<10	320	<10
912910	Pulp	9.13	3884	3	0.03	2	>10000	120	<5	8	2264	0.03	<10	333	<10
912911	Rock	9.78	5003	6	0.03	1	>10000	47	<5	6	4599	<0.01	12	342	<10
912912	Rock	9.42	5408	8	0.03	1	>10000	74	<5	8	4882	<0.01	<10	349	<10
912913	Rock	9.38	5602	3	0.04	<1	>10000	20	<5	4	5571	<0.01	51	342	<10
912914	Rock	8.76	3425	2	0.03	1	>10000	120	<5	6	3097	<0.01	<10	333	<10
912915	Rock	8.38	4663	<1	0.04	2	>10000	124	<5	6	5111	0.02	15	306	<10
912916	Rock	8.52	6186	<1	0.04	1	>10000	108	<5	6	4835	<0.01	<10	303	<10
912917	Rock	8.91	2502	<1	0.02	2	>10000	119	<5	11	1391	0.01	<10	345	<10
912918	Rock	9.04	3722	9	0.03	2	>10000	84	<5	8	3120	<0.01	<10	341	<10



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Richmond, British Columbia V7A 4V5
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Certificate of Analysis

10-360-03626-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
912747	Rock	28	57	844.7	23.3	7.4	17.4	43.3	2.2	3.5	386.0	0.4	404.9	104.2	62.2
912748	Rock	116	37	737.9	17.4	5.1	12.5	37.4	4.5	2.4	333.9	<0.1	341.9	88.7	48.5
912749	Rock	34	40	993.1	21.9	6.8	14.0	42.9	5.1	3.1	472.7	0.3	403.4	112.2	57.6
912850	Pulp	26	29	908.6	21.7	7.4	14.6	45.6	1.0	3.3	469.3	0.2	356.8	97.9	54.1
912851	Rock	140	143	>1000	22.5	6.7	15.7	49.3	22.4	3.1	555.9	0.2	413.9	117.8	58.2
912852	Rock	55	77	>1000	21.3	7.2	16.7	54.3	7.3	3.0	>1000	0.1	555.8	159.2	69.3
912853	Rock	34	84	>1000	24.3	7.4	21.0	62.7	1.2	3.5	991.2	0.1	644.5	171.8	87.8
912854	Rock	26	12	>1000	16.3	4.3	12.3	43.2	<0.1	1.9	>1000	<0.1	580.4	182.4	57.5
912855	Rock	33	71	>1000	34.0	6.6	28.3	109.9	1.8	3.5	>1000	<0.1	>1000	481.9	127.1
912856	Rock	23	29	>1000	21.7	8.0	17.8	62.0	1.6	3.0	>1000	0.3	622.9	190.3	75.4
912857	Rock	17	27	>1000	23.2	9.0	16.2	52.0	0.6	3.4	826.4	0.4	474.2	135.7	65.4
912858	Rock	35	81	>1000	27.3	8.3	16.5	54.3	7.3	3.9	851.8	0.5	577.2	166.2	71.0
912859	Rock	20	37	842.9	19.3	6.5	13.2	37.6	0.7	2.8	399.2	0.2	360.9	97.9	51.8
912861	Rock	33	92	>1000	23.1	7.6	19.0	51.0	7.7	3.4	545.8	0.2	498.4	121.3	78.4
912862	Rock	24	34	569.6	15.5	5.1	11.2	31.4	<0.1	2.2	256.1	<0.1	269.3	68.7	42.1
912863	Rock	26	29	544.8	13.8	4.5	10.6	31.1	0.3	1.7	269.6	<0.1	235.2	61.2	38.7
912864	Rock	23	29	>1000	16.8	6.5	13.5	38.2	2.2	2.5	607.2	0.2	399.6	110.5	52.6
912865	Rock	128	45	678.3	14.8	4.2	10.3	30.4	7.2	2.0	310.3	0.1	288.0	78.3	41.5
912866	Rock	57	7	77.7	2.9	1.5	1.3	4.7	2.7	0.3	41.2	<0.1	31.2	8.4	4.8
912867	Rock	132	54	711.0	22.0	8.2	12.9	36.4	5.3	3.8	353.4	0.2	324.5	82.7	50.9
912868	Rock	25	58	771.6	22.6	7.4	13.6	38.9	2.4	3.4	355.4	0.2	336.3	88.4	48.7
912869	Rock	26	46	>1000	34.9	10.5	25.9	77.3	1.0	5.2	901.0	0.2	614.0	157.0	105.8
912870	Pulp	16	40	821.4	25.1	9.6	15.5	43.4	<0.1	3.9	403.2	0.5	374.0	94.6	58.5
912871	Rock	114	41	914.0	16.9	5.1	15.1	44.0	14.9	2.2	494.4	0.1	363.2	98.4	56.6
912872	Rock	80	37	985.7	23.4	6.6	16.6	50.3	8.2	3.1	461.0	0.2	436.1	115.1	65.1
912873	Rock	74	80	733.9	16.7	5.4	13.4	38.2	7.5	2.2	356.9	0.1	313.8	82.5	46.9
912874	Rock	29	48	706.9	16.9	5.4	11.6	31.9	0.9	2.3	324.5	0.1	318.7	82.3	45.4
912875	Rock	70	27	683.6	15.2	5.5	11.3	33.1	3.8	2.3	335.2	<0.1	311.3	79.3	46.1
912876	Rock	58	35	778.4	19.2	7.2	12.9	36.5	8.7	3.0	365.8	0.2	349.6	92.9	51.5
912877	Rock	19	23	691.9	18.5	7.7	13.3	37.8	1.3	2.8	356.6	0.3	297.9	76.6	48.8
912878	Rock	59	69	723.1	22.2	8.0	15.5	42.5	6.8	3.4	339.4	0.3	305.0	81.5	51.0
912879	Rock	126	104	>1000	30.1	9.2	20.5	60.8	14.0	4.4	484.0	0.2	480.5	127.0	77.9
912880 Dup	Rock	128	99	985.9	26.5	9.5	21.7	59.5	12.2	4.0	472.7	0.2	472.7	116.2	80.9
912881	Rock	23	37	810.3	22.0	7.0	13.3	42.0	2.1	3.2	398.3	0.2	337.4	91.3	51.1
912882	Rock	34	20	817.5	18.0	6.3	15.5	41.7	5.2	2.8	412.6	0.2	347.2	90.8	54.0
912883	Rock	61	6	911.8	22.1	6.9	16.1	46.1	5.4	3.1	443.9	0.1	397.5	107.5	61.9
912884	Rock	96	46	>1000	24.4	7.4	18.5	56.9	13.0	3.3	499.2	0.2	440.6	118.4	68.0
912885	Rock	25	19	>1000	46.1	16.1	31.5	88.2	18.6	7.4	687.5	1.0	651.0	171.4	108.9
912886	Rock	36	12	>1000	35.5	13.2	25.2	70.0	16.1	5.6	626.1	0.7	595.1	156.4	94.2
912887	Rock	23	23	>1000	35.9	15.6	27.0	86.6	3.0	5.9	859.5	0.8	690.8	182.3	110.8



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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912888	Rock	32	12	336.1	11.4	4.1	6.7	21.5	<0.1	1.5	183.6	0.1	137.2	35.4	24.6
912889	Rock	27	10	535.0	13.3	4.4	9.0	28.1	<0.1	1.8	267.7	0.1	203.4	57.4	32.3
912890	Pulp	469	87	>1000	16.4	5.4	14.4	47.0	<0.1	2.1	>1000	0.2	569.0	192.4	58.5
912891	Rock	26	20	451.4	16.0	5.3	8.7	26.2	<0.1	2.2	203.1	<0.1	212.9	55.4	35.4
912892	Rock	23	18	510.7	16.4	5.9	10.9	30.8	<0.1	2.5	235.2	<0.1	251.9	64.7	41.3
912893	Rock	25	22	478.0	10.9	3.6	8.5	23.9	<0.1	1.3	225.8	<0.1	228.5	58.8	34.8
912894	Rock	30	53	>1000	29.3	9.0	27.6	79.1	<0.1	4.1	>1000	0.3	857.2	246.0	112.0
912895	Rock	24	24	603.6	22.3	9.7	13.1	35.9	<0.1	3.9	291.3	0.4	284.9	73.1	47.2
912896	Rock	29	47	710.6	24.2	10.1	13.5	41.2	2.5	3.9	345.7	0.5	292.8	78.3	46.9
912897	Rock	78	20	785.1	19.8	5.7	12.7	38.1	2.9	2.6	354.3	0.1	351.8	94.2	49.5
912898	Rock	64	35	684.8	15.0	4.8	12.5	36.1	6.0	2.1	322.6	0.1	274.7	74.9	44.9
912899	Rock	20	17	494.2	11.6	3.8	7.0	23.3	0.5	1.6	226.5	<0.1	202.8	55.6	29.2
912901	Rock	21	43	664.6	18.9	5.2	11.9	36.4	<0.1	2.5	295.5	0.1	276.1	76.9	41.5
912902	Rock	80	14	433.9	11.5	3.6	8.4	23.8	0.7	1.6	190.8	<0.1	206.5	53.6	32.9
912903	Rock	23	14	376.3	13.3	5.0	7.3	22.3	<0.1	2.1	179.3	<0.1	187.2	46.2	31.3
912904	Rock	20	22	755.3	19.8	6.5	9.8	35.1	<0.1	2.8	355.1	0.1	371.2	94.0	52.0
912905	Rock	21	40	748.5	24.6	10.2	15.0	43.6	3.5	3.8	355.8	0.4	309.3	82.4	48.9
912906	Rock	20	44	769.2	22.8	8.8	12.1	41.5	<0.1	3.8	355.9	0.5	323.1	88.2	49.9
912907	Rock	16	44	>1000	20.6	6.5	12.9	47.8	<0.1	2.7	632.9	0.3	404.3	116.6	57.8
912908	Rock	13	38	980.1	26.3	10.0	15.1	47.2	<0.1	4.1	535.3	0.5	385.6	107.9	57.8
912909	Rock	13	42	863.7	25.6	9.8	14.3	44.7	<0.1	4.2	438.3	0.4	327.6	95.6	49.0
912910	Pulp	23	30	997.3	22.8	7.0	15.4	49.0	<0.1	3.3	508.2	0.3	356.7	104.2	54.9
912911	Rock	22	19	854.5	16.9	5.2	10.6	34.9	<0.1	2.1	523.3	0.1	274.2	83.0	41.9
912912	Rock	23	27	491.8	25.0	8.9	9.0	32.0	<0.1	4.0	241.1	0.3	185.4	52.7	32.6
912913	Rock	21	8	452.8	10.8	3.7	6.8	23.9	<0.1	1.5	224.5	<0.1	171.8	48.1	26.6
912914	Rock	12	37	621.5	22.8	9.3	12.8	39.6	<0.1	3.8	308.8	0.4	252.1	67.6	43.2
912915	Rock	18	34	702.2	20.9	7.6	13.9	37.2	<0.1	3.2	342.4	0.2	289.7	77.5	45.7
912916	Rock	19	52	645.8	20.0	8.3	11.0	34.2	<0.1	3.3	339.4	0.3	241.3	66.7	38.5
912917	Rock	10	52	>1000	31.0	11.2	21.1	74.1	0.1	4.4	>1000	0.7	632.0	229.2	76.0
912918	Rock	14	44	556.7	16.2	7.2	10.2	32.1	<0.1	2.7	279.4	0.4	218.0	59.8	35.8

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Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6



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 Richmond, British Columbia V7A 4V5
 Canada

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912747	Rock	4.3	0.6	4.7	77.9	17.31	158.47	5.71
912748	Rock	3.2	0.3	3.1	57.2	9.41	114.48	4.64
912749	Rock	3.9	0.5	4.1	71.4	18.10	140.36	2.81
912850	Pulp	4.6	0.4	4.7	76.5	37.13	159.57	9.33
912851	Rock	4.4	0.5	4.0	73.6	46.70	378.26	9.40
912852	Rock	3.7	0.4	3.7	80.4	26.87	174.09	3.37
912853	Rock	4.2	0.4	3.3	79.9	37.74	171.32	4.62
912854	Rock	2.4	0.1	2.6	47.6	3.97	45.91	1.30
912855	Rock	5.6	0.4	3.3	81.9	27.83	205.92	5.11
912856	Rock	4.1	0.6	5.4	82.0	8.27	91.69	2.04
912857	Rock	4.3	0.8	5.9	94.9	4.94	91.43	1.59
912858	Rock	4.8	0.6	5.1	91.2	0.41	206.83	4.25
912859	Rock	3.6	0.3	3.3	71.4	10.34	119.48	2.05
912861	Rock	4.1	0.5	3.7	87.1	42.52	293.23	7.00
912862	Rock	2.8	0.2	2.6	61.8	6.95	93.95	1.54
912863	Rock	2.8	0.2	2.9	57.3	7.44	90.29	1.83
912864	Rock	2.9	0.4	4.1	71.4	12.06	96.34	3.77
912865	Rock	2.7	0.1	2.6	48.3	3.09	112.34	1.26
912866	Rock	0.2	<0.1	1.7	19.0	1.91	9.48	3.48
912867	Rock	3.7	0.5	4.2	91.9	0.23	172.48	1.95
912868	Rock	3.9	0.5	4.0	86.5	8.39	143.10	2.76
912869	Rock	7.7	0.7	4.8	126.0	8.42	234.89	2.84
912870	Pulp	4.4	0.7	5.4	101.6	46.24	187.79	2.01
912871	Rock	3.4	0.3	3.0	61.7	2.11	130.57	2.07
912872	Rock	4.9	0.5	3.8	77.5	0.42	138.68	3.91
912873	Rock	3.3	0.3	3.8	63.7	0.94	173.20	2.03
912874	Rock	3.0	0.3	3.5	60.4	11.70	144.21	2.32
912875	Rock	2.7	0.3	3.2	59.1	0.41	90.38	7.39
912876	Rock	3.4	0.5	3.7	75.6	0.82	158.56	3.81
912877	Rock	3.4	0.6	4.9	84.3	10.76	99.88	1.85
912878	Rock	4.4	0.7	4.9	95.0	35.40	234.24	7.07
912879	Rock	6.1	0.6	4.5	106.6	1.06	371.96	12.64
912880 Dup	Rock	5.3	0.5	4.3	106.2	1.35	351.41	12.50
912881	Rock	4.0	0.5	4.7	82.5	7.83	112.11	2.41
912882	Rock	3.7	0.5	4.2	74.3	0.24	83.21	2.55
912883	Rock	4.1	0.5	3.4	77.2	0.10	107.00	3.05
912884	Rock	5.5	0.6	4.7	87.2	0.85	220.04	11.15
912885	Rock	9.5	1.6	9.8	173.3	0.43	136.22	11.46
912886	Rock	7.0	1.2	7.5	133.8	0.20	69.91	3.86
912887	Rock	7.7	1.4	9.0	158.2	0.17	144.59	5.11



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Certificate of Analysis

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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
912888	Rock	2.1	0.2	3.1	49.3	0.11	81.58	2.15
912889	Rock	2.6	0.3	4.0	54.1	0.13	83.26	2.97
912890	Pulp	2.0	0.4	4.1	63.2	41.81	54.15	27.25
912891	Rock	2.9	0.3	2.6	57.7	3.46	102.23	1.89
912892	Rock	2.9	0.3	2.9	66.3	5.26	77.81	1.95
912893	Rock	2.0	<0.1	1.6	44.6	10.85	89.43	3.67
912894	Rock	5.2	0.7	4.1	112.4	0.44	274.55	10.93
912895	Rock	4.0	0.8	5.7	106.5	0.08	122.29	2.91
912896	Rock	4.6	0.9	6.5	117.9	2.77	209.78	2.24
912897	Rock	3.7	0.3	3.0	67.3	0.33	136.54	11.29
912898	Rock	3.1	0.3	3.4	58.9	0.36	150.02	2.89
912899	Rock	2.3	0.1	2.0	41.7	1.36	80.64	1.13
912901	Rock	3.8	0.3	3.2	63.7	8.19	153.03	2.75
912902	Rock	2.2	<0.1	1.7	41.2	0.18	90.81	0.92
912903	Rock	2.1	0.2	2.4	58.2	0.79	79.55	0.64
912904	Rock	3.0	0.3	3.4	71.4	1.44	112.92	1.39
912905	Rock	4.5	0.9	5.7	106.9	6.97	164.16	3.90
912906	Rock	4.5	0.7	6.3	91.1	1.67	160.42	2.80
912907	Rock	4.1	0.4	4.7	74.2	4.44	152.32	2.92
912908	Rock	5.0	0.8	6.5	101.8	5.40	149.85	2.68
912909	Rock	4.8	0.9	5.9	105.8	8.47	124.31	3.56
912910	Pulp	4.9	0.6	5.3	79.7	26.53	146.78	8.89
912911	Rock	2.9	0.3	3.1	64.8	0.69	147.62	0.93
912912	Rock	4.6	0.6	5.5	103.0	2.50	142.08	1.32
912913	Rock	2.0	0.1	2.4	43.7	0.31	48.65	3.46
912914	Rock	4.3	0.8	5.7	103.7	15.90	197.22	5.99
912915	Rock	3.8	0.5	4.2	85.8	62.94	111.81	29.82
912916	Rock	3.6	0.8	4.9	87.9	5.93	228.45	3.49
912917	Rock	5.9	1.1	8.2	125.6	9.26	158.31	4.81
912918	Rock	3.3	0.6	5.4	75.5	8.34	134.47	2.83



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
912747	Rock	1.01													
912747 Dup		1.00													
QCV1011-00629-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912866	Rock	0.02													
912866 Dup		0.01													
QCV1011-00629-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912884	Rock	1.63													
912884 Dup		1.62													
QCV1011-00629-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
912903	Rock	0.10													
912903 Dup		0.11													
QCV1011-00629-0011-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1011-00629-0013-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.53													
912747	Rock		0.14	0.01	36.28	<0.01	5.70	0.02	35.46	13.77	0.54	0.05	7.00	0.91	0.05
912747 Dup			0.13	0.01	36.30	<0.01	5.71	0.02	35.42	13.62	0.54	0.05	7.07	0.88	0.05
QCV1011-00632-0002-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912866	Rock		16.19	0.13	3.89	0.03	3.91	3.74	1.17	1.60	0.12	3.71	0.28	67.19	0.47
912866 Dup			16.44	0.12	3.81	0.03	3.78	3.79	1.13	1.62	0.11	3.83	0.30	67.35	0.46
QCV1011-00632-0005-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912884	Rock		0.77	0.01	29.34	<0.01	26.93	0.37	21.16	8.23	0.46	0.07	8.92	2.64	0.70
912884 Dup			0.74	0.01	28.83	<0.01	27.57	0.35	21.02	8.30	0.47	0.07	9.12	2.56	0.71
QCV1011-00632-0008-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
912903	Rock		0.02	<0.01	32.85	<0.01	3.14	<0.01	42.32	17.79	0.67	0.03	2.93	<0.01	<0.01
912903 Dup			0.02	<0.01	32.91	<0.01	3.15	0.01	42.29	17.89	0.67	0.03	2.89	<0.01	<0.01
QCV1011-00632-0011-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1011-00632-0013-BLK		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.86	0.04	8.05	<0.01	6.27	1.71	4.52	0.55	0.11	7.10	0.14	50.14	0.31



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10-360-03626-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP % 0.01	30-4A-TR ppm 0.5	30-4A-TR % 0.01	30-4A-TR ppm 5	30-4A-TR ppm 10	30-4A-TR ppm 2	30-4A-TR % 0.01	30-4A-TR ppm 0.5	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR ppm 1	30-4A-TR % 0.01	30-4A-TR % 0.01	30-4A-TR ppm 10
912747	Rock		<0.5	0.08	73	103	<2	>10	<0.5	8	6	45	3.94	0.01	351
912747 Dup			<0.5	0.07	71	99	<2	>10	<0.5	10	6	44	3.66	0.01	331
QCV1011-00630-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-8 expected			61.7									1030			
STD-CDN-ME-8 result			59.9									1082			
912866	Rock		<0.5	9.69	<5	1221	<2	3.54	<0.5	9	138	6	2.60	3.41	35
912866 Dup			<0.5	9.73	<5	1242	<2	3.50	<0.5	9	144	7	2.57	3.54	35
QCV1011-00630-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			96.7									6569			
912884	Rock		<0.5	0.41	<5	110	<2	>10	<0.5	27	5	39	>10	0.26	370
912884 Dup			<0.5	0.40	<5	110	<2	>10	<0.5	27	5	40	>10	0.26	375
QCV1011-00630-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			99.3									6585			
912903	Rock		<0.5	0.01	<5	39	<2	>10	<0.5	2	7	13	2.16	<0.01	185
912903 Dup			<0.5	0.01	<5	39	<2	>10	<0.5	2	6	12	2.11	<0.01	183
QCV1011-00630-0011-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-OREAS-45P-4A expected										122	1103	749			
STD-OREAS-45P-4A result										121	1115	717			
QCV1011-00630-0013-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-CDN-ME-6 expected			101.0									6130			
STD-CDN-ME-6 result			94.7									6468			
912747	Rock		99.92												
912747 Dup			99.81												
QCV1011-00632-0002-BLK			<0.01												
912866	Rock		102.45												
912866 Dup			102.77												
QCV1011-00632-0005-BLK			<0.01												
912884	Rock		99.61												
912884 Dup			99.76												
QCV1011-00632-0008-BLK			<0.01												
912903	Rock		99.78												
912903 Dup			99.88												
QCV1011-00632-0011-BLK			<0.01												
QCV1011-00632-0013-BLK			<0.01												
STD-SY-4 expected															
STD-SY-4 result			99.82												



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10-360-03626-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm
912747	Rock	7.28	4096	<1	0.03	2	>10000	140	<5	7	3541	0.02	<10	275	<10
912747 Dup		7.18	3927	<1	0.03	2	>10000	152	<5	6	3362	0.01	<10	261	<10
QCV1011-00630-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
912866	Rock	0.99	846	<1	3.00	7	1226	18	<5	6	774	0.29	<10	107	<10
912866 Dup		0.96	880	<1	3.06	7	1226	15	<5	6	768	0.29	<10	107	<10
QCV1011-00630-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								9896							
912884	Rock	4.47	3247	<1	0.04	5	>10000	28	<5	5	2801	0.21	<10	549	<10
912884 Dup		4.88	3910	<1	0.04	5	>10000	28	<5	5	2971	0.21	<10	540	<10
QCV1011-00630-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							
912903	Rock	9.96	5328	<1	0.02	<1	>10000	42	<5	8	4534	<0.01	<10	342	<10
912903 Dup		>10	5437	<1	0.02	<1	>10000	33	<5	8	4438	<0.01	<10	346	<10
QCV1011-00630-0011-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-OREAS-45P-4A expected					0.08	385	454	22							
STD-OREAS-45P-4A result					0.07	375	488	22							
QCV1011-00630-0013-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-CDN-ME-6 expected								10200							
STD-CDN-ME-6 result								>10000							



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Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
912747	Rock	28	57												
912747 Dup		26	44												
QCV1011-00630-0002-BLK		<2	<1												
912866	Rock	57	7												
912866 Dup		56	7												
QCV1011-00630-0005-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		4885													
912884	Rock	96	46												
912884 Dup		96	44												
QCV1011-00630-0008-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5192													
912903	Rock	23	14												
912903 Dup		23	15												
QCV1011-00630-0011-BLK		<2	<1												
STD-OREAS-45P-4A expected		142													
STD-OREAS-45P-4A result		139													
QCV1011-00630-0013-BLK		<2	<1												
STD-CDN-ME-6 expected		5170													
STD-CDN-ME-6 result		5123													
QCV1011-00633-0001-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
912747	Rock			844.7	23.3	7.4	17.4	43.3	2.2	3.5	386.0	0.4	404.9	104.2	62.2
912747 Dup				853.9	23.5	7.2	15.5	44.2	2.2	3.5	375.8	0.2	389.8	101.3	57.3
912866	Rock			77.7	2.9	1.5	1.3	4.7	2.7	0.3	41.2	<0.1	31.2	8.4	4.8
912866 Dup				73.8	2.9	1.8	1.3	4.2	2.5	0.3	40.2	<0.1	32.9	8.1	5.0
912884	Rock			>1000	24.4	7.4	18.5	56.9	13.0	3.3	499.2	0.2	440.6	118.4	68.0
912884 Dup				>1000	28.6	8.6	21.4	62.8	14.7	4.0	552.8	0.3	515.0	136.5	78.6
912903	Rock			376.3	13.3	5.0	7.3	22.3	<0.1	2.1	179.3	<0.1	187.2	46.2	31.3
912903 Dup				391.7	13.4	4.3	6.6	20.4	<0.1	1.8	175.4	<0.1	184.6	47.1	27.0
QCV1011-00633-0010-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				122.6	17.7	14.4	1.6	14.9	10.1	4.0	59.3	1.9	53.3	14.0	12.0



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10-360-03626-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Y	Ta	Th	U
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm
		0.1	0.1	0.1	0.10	0.05	0.20	0.10
QCV1011-00633-0001-BLK		<0.1	<0.1	<0.1	<0.10			
912747	Rock	4.3	0.6	4.7	77.9			
912747 Dup		4.3	0.4	4.0	75.7			
912866	Rock	0.2	<0.1	1.7	19.0			
912866 Dup		0.1	<0.1	1.5	19.3			
912884	Rock	5.5	0.6	4.7	87.2			
912884 Dup		5.9	0.6	4.8	97.6			
912903	Rock	2.1	0.2	2.4	58.2			
912903 Dup		2.1	0.1	2.0	51.6			
QCV1011-00633-0010-BLK		<0.1	<0.1	<0.1	<0.10			
STD-SY-4 expected		2.6	2.3	14.8	119.0			
STD-SY-4 result		2.4	2.1	14.7	115.2			
912747	Rock					17.31	158.47	5.71
912747 Dup						17.15	156.39	5.63
QCV1105-00546-0002-BLK						<0.05	<0.20	<0.10
912866	Rock					1.91	9.48	3.48
912866 Dup						1.87	9.31	3.21
QCV1105-00546-0005-BLK						<0.05	<0.20	<0.10
912884	Rock					0.85	220.04	11.15
912884 Dup						0.82	223.54	10.66
QCV1105-00546-0008-BLK						<0.05	<0.20	<0.10
912903	Rock					0.79	79.55	0.64
912903 Dup						0.86	78.25	0.69
QCV1105-00546-0011-BLK						<0.05	<0.20	<0.10
QCV1105-00546-0013-BLK						<0.05	<0.20	<0.10



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11-360-00937-01

Inspectorate Exploration & Mining Services Ltd.
 #200 - 11620 Horseshoe Way
 Richmond, British Columbia V7A 4V5 Canada
 Phone: 604-272-7818

<p style="text-align: center;">Distribution List</p> <p>Attention: Eric Titley Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6 EMail: erictitley@hdimining.com</p> <p>Attention: Jeremy Crozier EMail: jeremycrozier@hdimining.com</p> <p>Attention: T.Kodata EMail: tkodata@hdimining.com</p>	<p style="text-align: center;">Submitted By: Aley Corporation Suite 1020-800 West Pender St. Vancouver, BC V6C 2V6</p> <p style="text-align: center;">Attention: Eric Titley</p> <p style="text-align: center;">Project: Aley 2010 Project Client Reference: 907550-907587,285054 Description: Rerun for job 10-360-03594-01</p> <p style="text-align: right;">Date Received: 02/17/2011 Date Completed: 05/13/2011 Invoice:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">Samples</th> <th style="text-align: left;">Type</th> <th style="text-align: left;">Preparation Description</th> </tr> </thead> <tbody> <tr> <td>Vancouver, BC</td> <td style="text-align: center;">39</td> <td>Pulp</td> <td>SP-PU/Pulp Handling, submitted pulps</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: left;">Method</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr><td>Vancouver, BC</td><td>Ta-4A-LL-MS</td><td>Tantalum, 4 Acid, ICP</td></tr> <tr><td>Vancouver, BC</td><td>REE-LB-MS</td><td>REE Group by ICP-MS</td></tr> <tr><td>Vancouver, BC</td><td>Y-LB-MS</td><td>Yttrium by Lithium metaborate Fusion, ICP-MS</td></tr> <tr><td>Vancouver, BC</td><td>U-4A-LL-MS</td><td>Uraium, 4 Acid, Low Level</td></tr> <tr><td>Vancouver, BC</td><td>Nb2O5-AD3-OR-ICP</td><td>Niobium by multi-acid digestion, ICP</td></tr> <tr><td>Vancouver, BC</td><td>Th-4A-LL-MS</td><td>Thorium, 4 Acid, Low Level</td></tr> <tr><td>Vancouver, BC</td><td>WR-FS-ICP</td><td>Whole Rock, Lithium Borate Fusion, ICP</td></tr> <tr><td>Vancouver, BC</td><td>30-4A-TR</td><td>30 Element, 4 Acid, ICP, Trace Level</td></tr> </tbody> </table> <p style="margin-top: 10px;">Submittal Information Ta, Th, and U results shown have been revised with accurated detection limits.</p>	Location	Samples	Type	Preparation Description	Vancouver, BC	39	Pulp	SP-PU/Pulp Handling, submitted pulps	Location	Method	Description	Vancouver, BC	Ta-4A-LL-MS	Tantalum, 4 Acid, ICP	Vancouver, BC	REE-LB-MS	REE Group by ICP-MS	Vancouver, BC	Y-LB-MS	Yttrium by Lithium metaborate Fusion, ICP-MS	Vancouver, BC	U-4A-LL-MS	Uraium, 4 Acid, Low Level	Vancouver, BC	Nb2O5-AD3-OR-ICP	Niobium by multi-acid digestion, ICP	Vancouver, BC	Th-4A-LL-MS	Thorium, 4 Acid, Low Level	Vancouver, BC	WR-FS-ICP	Whole Rock, Lithium Borate Fusion, ICP	Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level
Location	Samples	Type	Preparation Description																																	
Vancouver, BC	39	Pulp	SP-PU/Pulp Handling, submitted pulps																																	
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Vancouver, BC	30-4A-TR	30 Element, 4 Acid, ICP, Trace Level																																		

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim or deposit has been determined based on the results of assays of multiple samples of geologic materials collected by the prospective investor or by a qualified person selected by him and based on an evaluation of all engineering data which is available concerning any proposed project. For our complete terms and conditions please see our website at www.inspectorate.com.

By _____
Mike Caron, Lab Manager



INSPECTORATE

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#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

11-360-00937-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
907550	Pulp	0.55	1.80	0.39	46.10	<0.01	5.20	0.66	32.01	2.13	1.03	0.41	2.94	5.90	0.25
907551	Pulp	0.02	0.05	<0.01	32.25	<0.01	6.42	0.15	40.36	13.30	1.12	0.41	3.54	0.19	0.02
907552	Pulp	0.02	0.04	<0.01	32.03	<0.01	6.87	0.17	40.96	13.35	1.19	0.39	2.57	0.22	0.03
907553	Pulp	0.04	0.06	0.05	27.27	<0.01	10.70	0.30	23.38	9.60	0.64	0.50	7.66	1.50	0.29
907554	Pulp	0.09	0.33	0.04	32.51	0.06	6.98	0.35	38.48	14.66	0.76	0.74	2.80	2.54	0.16
907555	Pulp	0.21	0.24	0.01	33.19	<0.01	9.52	0.23	36.66	14.34	0.85	0.46	2.66	3.09	0.10
907556	Pulp	0.06	0.57	<0.01	33.93	<0.01	5.83	0.20	35.31	14.01	0.52	0.37	6.45	3.39	0.22
907557	Pulp	0.17	0.16	<0.01	33.58	<0.01	6.68	0.19	38.77	14.80	0.94	0.32	2.01	2.40	0.06
907558	Pulp	0.08	0.09	<0.01	32.99	<0.01	6.15	0.10	39.47	14.78	1.15	0.32	3.66	1.73	0.04
907559	Pulp	0.16	0.12	<0.01	33.68	<0.01	4.28	0.07	38.67	14.00	0.67	0.32	5.87	2.66	0.05
907560 Dup	Pulp	0.14	0.13	<0.01	35.39	0.03	4.31	0.05	38.15	12.61	0.67	0.03	5.52	2.88	0.05
907561	Pulp	0.06	1.32	0.03	27.85	<0.01	26.36	0.31	27.30	6.44	0.71	0.03	4.00	7.22	0.41
907562	Pulp	0.19	0.20	<0.01	34.91	<0.01	6.09	0.07	36.46	12.44	0.82	0.02	6.58	2.14	0.15
907563	Pulp	0.09	0.24	<0.01	34.41	0.02	6.17	0.06	36.28	13.12	0.74	0.03	5.96	2.24	0.13
907564	Pulp	0.11	0.24	<0.01	34.72	<0.01	4.65	0.11	38.44	13.61	0.57	0.04	4.82	1.36	0.05
907565	Pulp	0.40	0.25	<0.01	34.99	<0.01	4.53	0.06	37.05	13.45	0.62	0.03	7.24	1.25	0.07
907566	Pulp	0.13	0.16	<0.01	33.77	<0.01	5.99	0.04	37.28	14.30	0.61	0.02	5.76	1.74	0.10
907567	Pulp	0.09	0.11	<0.01	31.93	<0.01	6.23	0.03	39.63	14.97	0.84	0.04	4.52	1.02	0.04
907568	Pulp	0.14	0.11	<0.01	32.31	<0.01	6.81	0.02	38.78	14.04	0.81	0.03	4.71	1.46	0.04
907569	Pulp	0.12	0.12	<0.01	32.58	<0.01	6.11	0.04	39.80	14.21	1.03	0.02	3.62	1.38	0.04
907570 Dup	Pulp	0.14	0.10	<0.01	32.84	0.02	6.49	0.05	39.67	14.28	1.06	0.03	3.46	1.61	0.04
285054	Pulp	0.43	0.30	0.01	33.55	0.03	5.58	0.11	38.92	14.46	0.58	0.05	4.87	1.60	0.13
907571	Pulp	0.11	0.25	0.01	34.79	0.03	5.43	0.11	37.47	13.48	0.78	0.04	5.47	3.07	0.07
907572	Pulp	0.12	0.08	<0.01	32.83	<0.01	4.82	0.07	40.98	15.17	0.81	0.03	3.31	0.91	0.05
907573	Pulp	0.07	0.16	<0.01	33.21	<0.01	3.93	0.03	40.49	15.78	0.53	0.03	3.94	1.68	0.09
907574	Pulp	0.02	0.34	<0.01	33.79	<0.01	3.40	0.12	38.90	14.97	0.37	0.03	6.01	1.98	0.12
907575	Pulp	0.02	0.13	<0.01	35.17	<0.01	3.65	0.04	37.73	14.37	0.41	0.02	6.56	3.45	0.13
907576	Pulp	0.03	0.27	<0.01	34.32	<0.01	3.30	0.07	38.75	14.88	0.53	0.04	5.52	2.85	0.05
907577	Pulp	0.02	0.26	<0.01	33.70	<0.01	2.84	0.10	40.92	15.70	0.39	0.02	4.25	1.31	0.05
907578	Pulp	0.04	0.14	<0.01	33.81	<0.01	4.40	0.05	40.54	13.75	0.75	0.02	4.30	1.04	0.03
907579	Pulp	0.01	0.19	<0.01	32.91	0.02	5.63	<0.01	40.28	13.34	0.89	0.03	4.14	0.43	<0.01
907580 Dup	Pulp	0.01	0.16	<0.01	32.22	<0.01	5.87	0.02	40.23	14.13	0.92	0.03	4.11	0.42	0.03
907581	Pulp	0.08	0.21	<0.01	34.08	<0.01	4.28	0.03	39.40	14.06	0.58	0.02	4.75	1.32	0.04
907582	Pulp	0.17	0.55	0.05	24.83	<0.01	31.40	0.14	24.92	11.05	0.69	0.07	4.08	4.13	0.33
907583	Pulp	0.25	0.55	0.08	25.86	0.01	32.66	0.16	19.14	8.43	0.58	0.16	7.91	5.79	0.31
907584	Pulp	0.16	0.28	<0.01	33.71	<0.01	7.21	0.04	33.57	12.93	0.64	0.04	9.15	1.00	0.12
907585	Pulp	0.23	0.38	0.02	29.67	0.04	22.29	0.18	26.58	10.33	0.58	0.25	6.62	4.02	0.20
907586	Pulp	0.12	0.47	0.05	28.82	<0.01	26.95	0.16	22.47	8.09	0.56	0.20	8.95	4.37	0.24
907587	Pulp	0.08	0.13	0.02	33.50	<0.01	4.76	0.13	39.50	14.87	0.75	0.04	4.82	0.95	0.06

Certificate of Analysis

11-360-00937-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
907550	Pulp	98.82	1.4	0.92	22	2732	<2	>10	<0.5	6	6	15	3.27	0.61	940
907551	Pulp	97.81	1.2	0.03	21	42	<2	>10	<0.5	6	9	4	4.24	<0.01	851
907552	Pulp	97.83	1.3	0.04	12	41	<2	>10	<0.5	4	9	3	5.41	0.01	545
907553	Pulp	81.95	1.3	0.47	<5	369	<2	>10	<0.5	22	5	3	7.05	0.22	216
907554	Pulp	100.40	0.5	0.19	11	46	<2	>10	<0.5	9	10	9	4.30	0.02	270
907555	Pulp	101.36	1.1	0.13	36	83	<2	>10	<0.5	8	13	15	6.72	0.06	1384
907556	Pulp	100.81	1.4	0.30	24	37	<2	>10	<0.5	7	9	7	4.01	0.09	727
907557	Pulp	99.93	1.7	0.09	50	36	<2	>10	<0.5	7	10	12	4.54	0.03	2370
907558	Pulp	100.48	1.4	0.05	22	40	<2	>10	<0.5	6	11	7	4.14	0.01	802
907559	Pulp	100.41	1.2	0.07	6	53	<2	>10	<0.5	6	11	13	3.01	0.02	205
907560 Dup	Pulp	99.82	1.0	0.08	6	60	<2	>10	<0.5	6	10	13	3.13	0.02	210
907561	Pulp	101.98	0.8	0.62	<5	259	<2	>10	<0.5	21	4	3	>10	0.17	205
907562	Pulp	99.89	2.4	0.10	29	42	<2	>10	<0.5	7	9	15	4.76	0.02	1363
907563	Pulp	99.40	2.2	0.10	12	31	<2	>10	<0.5	9	8	8	4.50	0.02	4372
907564	Pulp	98.61	2.2	0.13	17	35	<2	>10	<0.5	7	7	11	3.46	0.04	622
907565	Pulp	99.55	2.5	0.13	10	51	<2	>10	<0.5	5	6	60	3.19	0.04	417
907566	Pulp	99.78	2.5	0.08	47	26	<2	>10	<0.5	14	9	23	4.31	0.01	1465
907567	Pulp	99.36	1.7	0.05	27	36	<2	>10	<0.5	7	8	28	4.84	0.02	1278
907568	Pulp	99.14	1.3	0.07	77	39	<2	>10	<0.5	10	12	31	4.99	0.01	3371
907569	Pulp	98.96	1.4	0.07	74	40	<2	>10	<0.5	6	8	20	4.61	0.02	3754
907570 Dup	Pulp	99.65	2.5	0.06	75	42	<2	>10	<0.5	7	8	21	4.89	0.02	3733
285054	Pulp	100.19	<0.5	0.16	7	46	<2	>10	<0.5	5	3	36	4.29	0.03	319
907571	Pulp	101.01	1.5	0.13	33	45	<2	>10	<0.5	7	9	20	4.09	0.05	1440
907572	Pulp	99.08	2.8	0.05	34	42	<2	>10	<0.5	7	7	21	3.49	0.02	1460
907573	Pulp	99.88	1.7	0.09	7	41	<2	>10	<0.5	9	6	18	3.02	0.04	262
907574	Pulp	100.04	1.6	0.19	10	37	<2	>10	<0.5	10	10	17	2.59	0.08	329
907575	Pulp	101.67	2.0	0.07	10	30	<2	>10	<0.5	7	7	16	2.57	0.03	396
907576	Pulp	100.58	2.0	0.15	8	34	<2	>10	<0.5	6	11	18	2.68	0.04	329
907577	Pulp	99.54	2.8	0.14	6	28	<2	>10	<0.5	5	8	12	2.11	0.03	483
907578	Pulp	98.84	<0.5	0.06	7	46	<2	>10	<0.5	5	7	13	3.19	0.01	555
907579	Pulp	97.87	2.6	0.08	6	51	<2	>10	<0.5	7	7	11	4.18	0.01	851
907580 Dup	Pulp	98.15	2.7	0.09	6	53	<2	>10	<0.5	6	8	11	4.15	0.01	836
907581	Pulp	98.78	<0.5	0.12	7	31	<2	>10	1.3	7	9	25	3.08	0.01	320
907582	Pulp	102.24	1.7	0.25	9	366	<2	>10	<0.5	18	8	58	>10	0.13	215
907583	Pulp	101.64	2.6	0.25	10	594	<2	>10	<0.5	21	10	27	>10	0.14	221
907584	Pulp	98.70	3.5	0.17	24	74	<2	>10	<0.5	18	7	20	5.77	0.01	366
907585	Pulp	101.16	2.7	0.21	6	140	<2	>10	<0.5	11	6	16	>10	0.13	307
907586	Pulp	101.32	2.2	0.26	9	354	<2	>10	<0.5	14	7	13	>10	0.13	325
907587	Pulp	99.53	2.8	0.08	<5	43	<2	>10	<0.5	6	6	16	3.65	0.01	657

Certificate of Analysis

11-360-00937-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6



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#200 - 11620 Horseshoe Way
Richmond, British Columbia V7A 4V5
Canada

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
907550	Pulp	1.23	7395	14	0.36	<1	>10000	83	<5	4	>10000	0.12	<10	167	<10
907551	Pulp	6.18	8047	1	0.02	<1	>10000	29	<5	10	2578	<0.01	<10	17	<10
907552	Pulp	6.10	9348	1	0.02	<1	>10000	24	<5	9	2882	<0.01	<10	18	<10
907553	Pulp	5.08	5364	1	0.06	4	>10000	29	<5	16	3091	0.19	<10	144	<10
907554	Pulp	6.36	6008	2	0.02	<1	>10000	54	<5	10	3217	0.04	<10	48	<10
907555	Pulp	6.36	7169	2	0.03	1	>10000	121	<5	13	2635	0.03	<10	51	<10
907556	Pulp	6.22	4351	1	0.08	<1	>10000	42	<5	9	1777	0.03	<10	44	<10
907557	Pulp	6.58	7714	2	0.03	<1	8420	103	<5	12	2790	0.01	<10	31	<10
907558	Pulp	6.39	9255	2	0.02	<1	>10000	58	<5	9	3199	<0.01	<10	24	<10
907559	Pulp	6.46	4711	1	0.02	<1	>10000	102	<5	8	3026	0.01	<10	15	<10
907560 Dup	Pulp	6.40	5216	1	0.02	<1	>10000	84	<5	8	3092	0.01	<10	15	<10
907561	Pulp	4.10	5548	10	0.02	4	>10000	39	<5	16	961	0.14	<10	108	<10
907562	Pulp	6.30	6309	2	0.02	<1	>10000	106	<5	9	2718	0.02	<10	24	<10
907563	Pulp	6.38	5416	2	0.02	<1	>10000	60	<5	19	1460	0.02	<10	29	<10
907564	Pulp	6.71	3942	<1	0.03	1	>10000	66	<5	7	1537	0.01	<10	23	<10
907565	Pulp	6.60	5028	<1	0.03	1	>10000	189	<5	6	3300	0.02	<10	24	<10
907566	Pulp	6.94	4257	4	0.02	<1	>10000	87	<5	9	1218	0.02	<10	34	<10
907567	Pulp	7.12	6480	5	0.03	<1	>10000	63	<5	9	2195	<0.01	<10	14	<10
907568	Pulp	6.59	5844	11	0.02	<1	>10000	93	<5	13	1527	<0.01	<10	22	<10
907569	Pulp	6.81	7591	3	0.02	<1	>10000	79	<5	13	2404	<0.01	<10	17	<10
907570 Dup	Pulp	6.41	8093	2	0.03	<1	>10000	85	<5	13	2551	<0.01	<10	19	<10
285054	Pulp	8.08	3541	4	0.04	<1	>10000	187	<5	7	2211	0.04	<10	41	<10
907571	Pulp	6.22	5602	2	0.03	<1	>10000	61	<5	10	1742	0.01	<10	25	<10
907572	Pulp	6.67	5604	2	0.02	<1	>10000	79	<5	9	2465	<0.01	<10	16	<10
907573	Pulp	6.49	3922	1	0.02	<1	>10000	44	<5	6	2136	0.03	<10	32	<10
907574	Pulp	6.66	2700	2	0.02	<1	>10000	16	<5	5	746	0.04	<10	39	<10
907575	Pulp	6.72	2756	1	0.03	<1	>10000	19	<5	7	838	0.05	<10	31	<10
907576	Pulp	6.42	3753	<1	0.03	<1	>10000	24	<5	7	1810	0.01	<10	20	<10
907577	Pulp	7.08	2769	1	0.02	<1	>10000	23	<5	5	810	0.01	<10	17	<10
907578	Pulp	6.45	5121	2	0.03	<1	>10000	36	<5	6	2558	<0.01	<10	11	<10
907579	Pulp	6.66	6338	4	0.03	<1	>10000	16	<5	8	2264	<0.01	<10	18	<10
907580 Dup	Pulp	6.82	6378	4	0.03	<1	>10000	23	<5	9	2255	<0.01	<10	18	<10
907581	Pulp	6.99	4002	2	0.02	<1	>10000	56	<5	6	2044	0.01	<10	20	<10
907582	Pulp	5.72	4835	<1	0.06	7	>10000	93	<5	14	2020	0.15	<10	279	<10
907583	Pulp	4.05	3298	1	0.14	5	>10000	58	<5	16	1697	0.11	<10	282	<10
907584	Pulp	5.99	4450	2	0.04	1	>10000	96	<5	19	2813	0.04	<10	88	<10
907585	Pulp	5.10	4211	2	0.21	4	>10000	93	<5	18	2340	0.08	<10	187	<10
907586	Pulp	4.16	3987	2	0.18	4	>10000	44	<5	15	2702	0.09	<10	208	<10
907587	Pulp	6.59	5122	2	0.03	<1	>10000	53	<5	8	2052	0.01	<10	30	<10



INSPECTORATE

A Bureau Veritas Group Company

#200 - 11620 Horseshoe Way

Richmond, British Columbia V7A 4V5
Canada

Certificate of Analysis

11-360-00937-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm 2	30-4A-TR ppm 1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1	REE-LB-MS ppm 0.1
907550	Pulp	471	86	>1000	15.4	5.5	15.6	44.2	0.3	2.0	>1000	0.5	489.1	169.7	52.5
907551	Pulp	21	79	>1000	31.3	13.2	19.1	67.2	1.4	4.6	934.9	0.8	700.3	207.2	90.4
907552	Pulp	25	44	>1000	29.0	7.9	11.4	40.8	1.0	2.8	612.0	0.5	404.8	123.0	52.5
907553	Pulp	186	144	>1000	18.2	5.4	11.6	32.9	10.7	2.1	256.3	0.3	246.1	68.3	41.2
907554	Pulp	28	55	641.1	14.4	6.1	8.6	25.3	5.6	2.2	334.3	0.4	221.7	69.6	32.2
907555	Pulp	51	48	>1000	21.3	7.3	16.5	54.3	2.7	2.8	>1000	0.5	605.5	211.8	62.3
907556	Pulp	22	61	>1000	26.8	10.5	18.9	57.7	3.0	3.8	>1000	0.9	527.0	171.3	68.9
907557	Pulp	24	23	>1000	24.4	8.3	20.2	70.9	1.4	3.1	>1000	0.5	794.4	295.0	80.2
907558	Pulp	25	33	>1000	21.7	7.7	13.3	42.7	1.6	3.0	>1000	0.5	426.5	147.9	48.7
907559	Pulp	20	38	529.3	18.1	7.5	9.1	28.2	3.3	2.7	250.7	0.5	206.6	58.4	32.6
907560 Dup	Pulp	21	41	530.3	17.9	7.0	10.1	28.2	2.2	2.6	253.8	0.5	203.1	59.3	33.8
907561	Pulp	214	77	647.5	15.6	6.3	11.2	32.2	17.9	2.3	295.3	0.5	249.9	71.1	38.3
907562	Pulp	28	80	>1000	24.9	8.8	18.3	54.3	3.3	3.6	>1000	0.8	517.0	178.4	58.2
907563	Pulp	22	61	>1000	44.8	13.1	51.6	161.6	2.9	5.3	>1000	0.9	>1000	671.4	183.9
907564	Pulp	15	56	>1000	23.9	10.1	15.7	42.0	1.6	3.6	844.6	0.7	373.7	124.1	45.1
907565	Pulp	23	94	925.5	22.8	8.8	16.4	40.5	3.8	3.3	522.1	0.5	329.1	100.0	47.9
907566	Pulp	15	100	>1000	29.3	10.0	22.8	64.1	2.9	4.0	>1000	0.8	622.9	224.0	68.2
907567	Pulp	22	49	>1000	17.9	6.4	15.9	51.3	1.9	2.2	>1000	0.5	531.8	181.0	61.1
907568	Pulp	20	38	>1000	35.4	9.8	43.4	129.3	2.1	3.9	>1000	0.7	>1000	493.3	152.5
907569	Pulp	23	24	>1000	24.6	7.4	28.5	94.9	0.8	2.8	>1000	0.4	>1000	407.5	100.1
907570 Dup	Pulp	25	16	>1000	26.2	6.9	28.2	94.5	1.0	2.8	>1000	0.4	>1000	411.6	100.3
285054	Pulp	24	30	793.5	20.2	6.9	14.8	41.3	3.3	3.4	410.6	0.5	321.0	95.7	51.4
907571	Pulp	23	41	>1000	27.1	10.3	20.1	62.8	1.2	3.8	>1000	0.8	626.0	211.8	71.6
907572	Pulp	24	37	>1000	22.9	8.1	19.2	59.9	1.4	2.9	>1000	0.6	686.4	233.3	72.5
907573	Pulp	17	19	715.0	16.3	6.2	11.5	32.5	0.9	2.4	357.4	0.4	261.9	76.9	39.2
907574	Pulp	15	24	881.8	26.8	10.2	15.5	47.5	0.8	4.0	421.0	0.7	351.8	99.3	55.3
907575	Pulp	20	39	>1000	25.9	9.7	18.2	52.8	2.1	3.8	495.8	0.7	411.3	118.1	61.2
907576	Pulp	18	22	858.5	22.3	8.2	15.3	44.1	1.3	3.3	411.3	0.6	334.7	97.3	54.0
907577	Pulp	12	33	>1000	20.5	8.1	15.0	46.9	0.6	2.9	564.7	0.6	416.3	122.4	59.3
907578	Pulp	24	30	>1000	20.5	7.7	13.8	38.2	0.8	2.9	659.0	0.5	351.0	110.7	46.7
907579	Pulp	27	47	>1000	21.6	7.8	17.3	53.5	1.2	2.8	>1000	0.7	557.9	172.3	67.2
907580 Dup	Pulp	43	48	>1000	22.1	8.5	16.2	50.3	1.1	3.2	952.0	0.7	525.0	161.6	66.0
907581	Pulp	60	45	696.9	21.4	9.9	11.1	31.0	1.5	3.5	393.2	0.8	228.4	69.8	34.2
907582	Pulp	196	110	537.6	13.0	5.3	9.4	24.6	11.2	1.8	273.3	0.4	189.7	57.9	29.4
907583	Pulp	191	331	628.4	19.8	6.9	14.5	37.5	25.7	2.7	261.7	0.5	271.8	74.5	45.2
907584	Pulp	30	139	863.4	48.1	22.6	18.1	51.5	9.4	8.4	423.2	1.8	329.1	97.4	52.9
907585	Pulp	147	121	708.2	17.5	6.2	12.6	33.5	13.1	2.3	366.2	0.4	259.8	76.3	40.1
907586	Pulp	163	110	787.1	18.9	7.3	14.4	38.3	15.2	2.8	380.0	0.5	302.8	87.8	48.2
907587	Pulp	34	58	>1000	21.9	9.5	13.9	43.7	1.8	3.5	829.1	0.7	399.1	133.0	52.1



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Certificate of Analysis

11-360-00937-01

Aley Corporation
 Suite 1020-800 West Pender St.
 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Ta	Th	U	Y
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm	Y-LB-MS ppm
		0.1	0.1	0.1	0.05	0.20	0.10	0.1
907550	Pulp	2.5	0.6	4.1	20.00	50.00	28.00	58.8
907551	Pulp	5.1	1.6	8.0	3.00	401.00	7.00	137.8
907552	Pulp	3.2	0.9	5.0	2.00	293.00	4.00	78.3
907553	Pulp	3.0	0.6	3.4	31.00	71.00	4.00	56.4
907554	Pulp	2.3	0.7	3.7	15.00	174.00	7.00	65.8
907555	Pulp	3.5	0.8	4.9	8.00	200.00	5.00	84.3
907556	Pulp	4.6	1.4	7.8	8.00	308.00	9.00	112.3
907557	Pulp	4.1	0.9	5.2	5.00	216.00	5.00	95.3
907558	Pulp	3.4	0.9	4.9	2.00	299.00	5.00	82.5
907559	Pulp	2.9	0.9	5.4	4.00	192.00	4.00	76.0
907560 Dup	Pulp	3.0	0.8	4.5	4.00	178.00	4.00	71.5
907561	Pulp	2.7	0.7	4.3	34.00	124.00	34.00	61.5
907562	Pulp	4.0	1.2	7.0	19.00	323.00	13.00	98.8
907563	Pulp	7.8	1.7	8.7	8.00	114.00	9.00	145.7
907564	Pulp	3.9	1.2	6.0	84.00	175.00	62.00	97.0
907565	Pulp	3.8	0.9	4.9	137.00	343.00	106.00	88.0
907566	Pulp	4.8	1.2	6.9	50.00	258.00	21.00	109.0
907567	Pulp	3.1	0.8	4.7	3.00	176.00	5.00	66.1
907568	Pulp	6.1	1.2	7.1	2.00	257.00	5.00	114.3
907569	Pulp	4.1	0.8	4.5	6.00	214.00	5.00	87.8
907570 Dup	Pulp	4.3	0.8	4.2	5.00	201.00	4.00	87.2
285054	Pulp	4.7	0.8	4.6	26.00	165.00	12.00	75.1
907571	Pulp	4.4	1.2	6.5	5.00	217.00	6.00	112.2
907572	Pulp	3.6	0.9	4.9	1.00	248.00	4.00	89.8
907573	Pulp	3.0	0.7	4.1	3.00	86.00	2.00	67.2
907574	Pulp	4.6	1.3	6.4	6.00	124.00	3.00	119.8
907575	Pulp	4.8	1.1	6.4	6.00	124.00	3.00	104.2
907576	Pulp	4.0	0.9	5.3	9.00	95.00	4.00	86.8
907577	Pulp	3.7	0.9	5.7	9.00	138.00	3.00	88.0
907578	Pulp	3.3	0.9	5.2	21.00	165.00	10.00	82.6
907579	Pulp	3.7	1.0	5.7	10.00	271.00	5.00	83.5
907580 Dup	Pulp	3.7	1.1	6.0	10.00	272.00	5.00	87.8
907581	Pulp	3.3	1.2	6.7	35.00	149.00	26.00	96.1
907582	Pulp	2.3	0.6	3.5	186.00	164.00	143.00	54.9
907583	Pulp	3.4	0.7	4.2	9.00	307.00	398.00	73.9
907584	Pulp	7.2	2.9	14.2	112.00	559.00	46.00	230.0
907585	Pulp	3.0	0.6	3.7	22.00	120.00	22.00	64.5
907586	Pulp	3.4	0.8	4.9	49.00	157.00	33.00	74.5
907587	Pulp	3.6	1.2	6.4	41.00	235.00	24.00	98.6



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Certificate of Analysis

11-360-00937-01

Aley Corporation
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 Vancouver, BC V6C 2V6

Sample Description	Sample Type	Nb2O5	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	LOI	MgO	MnO	Na2O	P2O5	SiO2	TiO2
		Nb2O5-AD3-OR-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %	WR-FS-ICP %
QCV1102-01049-0002-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1102-01049-0005-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1102-01049-0008-BLK		<0.01													
STD-OKA-1 expected		0.53													
STD-OKA-1 result		0.52													
QCV1102-01053-0002-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
QCV1102-01053-0008-BLK			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
STD-SY-4 expected			20.69		8.05		6.21	1.66	4.56	0.54	0.11	7.10	0.13	49.90	0.29
STD-SY-4 result			20.81	0.04	8.02	<0.01	6.30	1.83	4.52	0.55	0.14	7.13	0.22	50.20	0.30



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Certificate of Analysis

11-360-00937-01

Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Total	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
		WR-FS-ICP %	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR %	30-4A-TR ppm
		0.01	0.5	0.01	5	10	2	0.01	0.5	1	1	1	0.01	0.01	10
QCV1102-01050-0002-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1102-01050-0005-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
QCV1102-01050-0008-BLK			<0.5	<0.01	<5	<10	<2	<0.01	<0.5	<1	<1	<1	<0.01	<0.01	<10
STD-DS-1 expected			0.5	4.48	6930					10		27			
STD-DS-1 result			0.5	4.86	6949					9		29			
QCV1102-01053-0002-BLK		<0.01													
QCV1102-01053-0008-BLK		<0.01													
STD-SY-4 expected															
STD-SY-4 result		100.06													



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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	V	W
		30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR ppm	30-4A-TR %	30-4A-TR ppm	30-4A-TR ppm
		0.01	5	1	0.01	1	10	2	5	1	1	0.01	10	1	10
QCV1102-01050-0002-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1102-01050-0005-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
QCV1102-01050-0008-BLK		<0.01	<5	<1	<0.01	<1	<10	<2	<5	<1	<1	<0.01	<10	<1	<10
STD-DS-1 expected		2.76	437			49	340	14							
STD-DS-1 result		2.76	464			50	352	13							



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Certificate of Analysis

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Aley Corporation
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Vancouver, BC V6C 2V6

Sample Description	Sample Type	Zn	Zr	Ce	Dy	Er	Eu	Gd	Hf	Ho	La	Lu	Nd	Pr	Sm
		30-4A-TR ppm	30-4A-TR ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm
QCV1102-01050-0002-BLK		<2	<1												
QCV1102-01050-0005-BLK		<2	<1												
QCV1102-01050-0008-BLK		<2	<1												
STD-DS-1 expected		206													
STD-DS-1 result		205													
QCV1102-01051-0008-BLK				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
STD-SY-4 expected				122.0	18.2	14.2	2.0	14.0	10.6	4.3	58.0	2.1	57.0	15.0	12.7
STD-SY-4 result				128.6	18.2	14.1	2.2	14.2	10.4	4.3	62.0	2.0	58.3	16.0	12.7



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Canada

Certificate of Analysis

11-360-00937-01

Aley Corporation
Suite 1020-800 West Pender St.
Vancouver, BC V6C 2V6

Sample Description	Sample Type	Tb	Tm	Yb	Ta	Th	U	Y
		REE-LB-MS ppm	REE-LB-MS ppm	REE-LB-MS ppm	Ta-4A-LL-MS ppm	Th-4A-LL-MS ppm	U-4A-LL-MS ppm	Y-LB-MS ppm
		0.1	0.1	0.1	0.05	0.20	0.10	0.1
QCV1102-01051-0008-BLK		<0.1	<0.1	<0.1				<0.1
STD-SY-4 expected		2.6	2.3	14.8				119.0
STD-SY-4 result		2.5	2.2	14.4				124.2
QCV1105-01148-0002-BLK					<0.05	<0.20	<0.10	
QCV1105-01148-0005-BLK					<0.05	<0.20	<0.10	
QCV1105-01148-0008-BLK					<0.05	<0.20	<0.10	

APPENDIX D
ANALYTICAL PROCEDURES

DRILLING

Drill Site



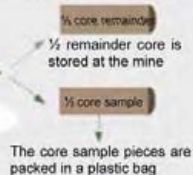
LOGGING

Gibraltar Mine Core Logging Facility



SAMPLING

Gibraltar Mine



SAMPLE PREPARATION

Richmond, BC



Port Kells, BC

Duplicates shipping to Acme Labs

Vancouver, BC

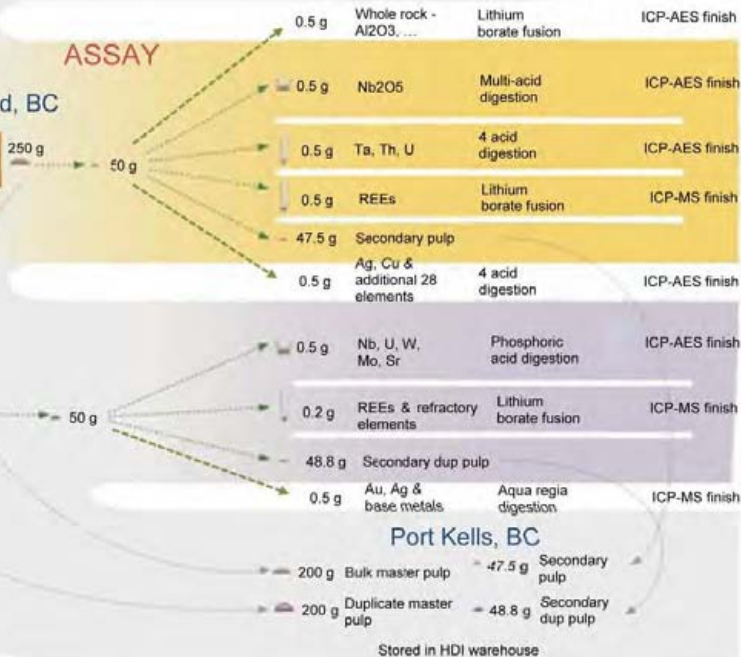
Acme Labs
(Check lab)

250 g

Richmond, BC

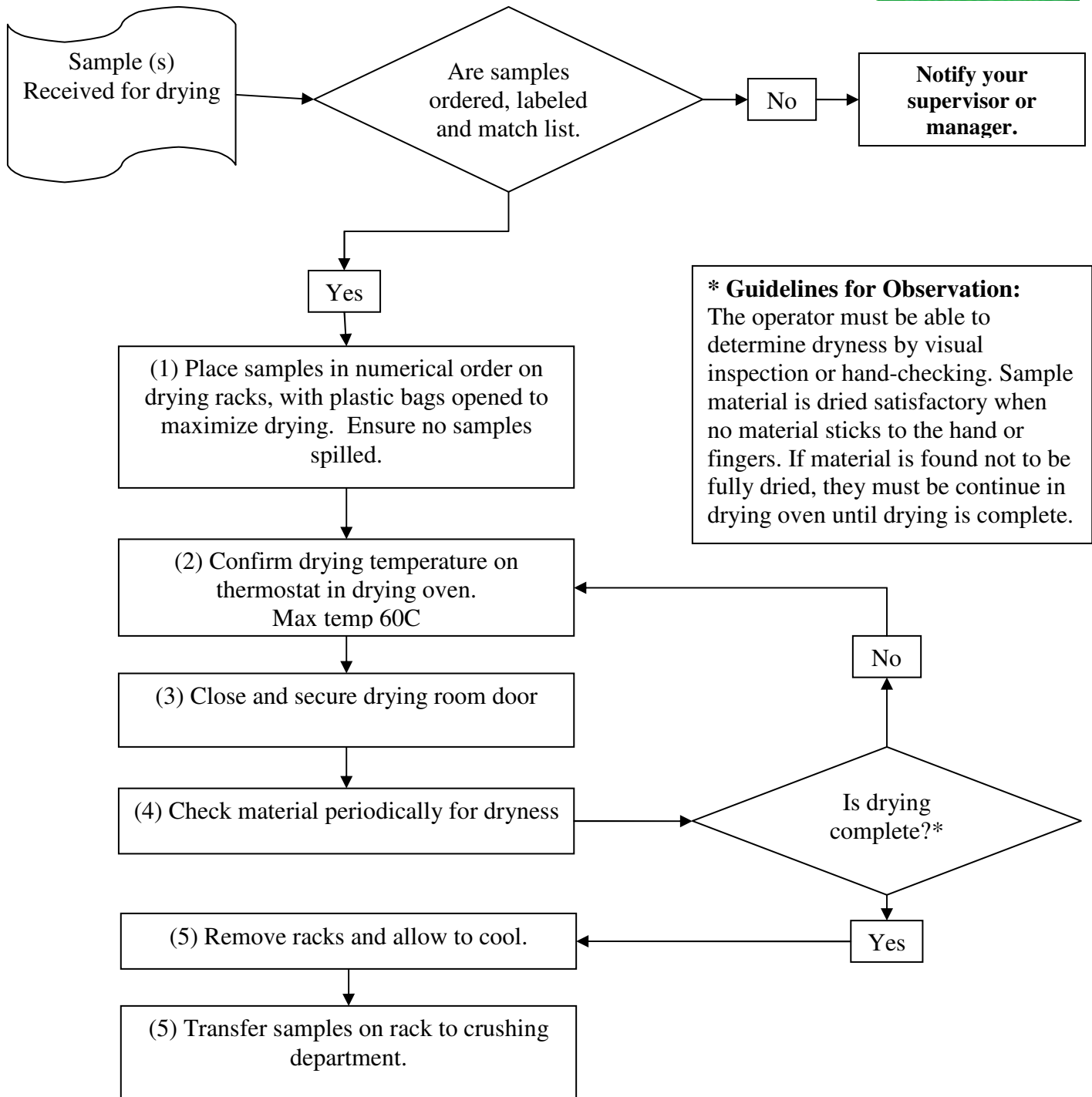
Inspectorate Exploration & Mining Services
(Primary lab)

ASSAY



Port Kells, BC

SOP: Drying Oven



SOP: Crushing QC



Sample Crushing QC must be checked:

- 1) At the beginning of each shift for each crusher that may be used.
- 2) After Lunch
- 3) When there is a significant change in rock type

(1) Select a sample* and record in; 'Control Document: Crusher QC Log'.

*If total sample is less than 500g, select a different sample

(2) Crush the entire sample and split 150-250 grams (the QC Split), weigh the split and enter weight in column 'A' in QC logbook.

Important Note:
Always discard the QC Split after sieve test

(3) Screen the sample through a 10 mesh (2mm) sieve

(4) Weigh the +10 mesh fraction and record weight in column 'B' in QC logbook.

(5) Calculate the % passing $((A-B)/A) \times 100$ and enter result in QC logbook.

Is sample >80% -10 mesh?

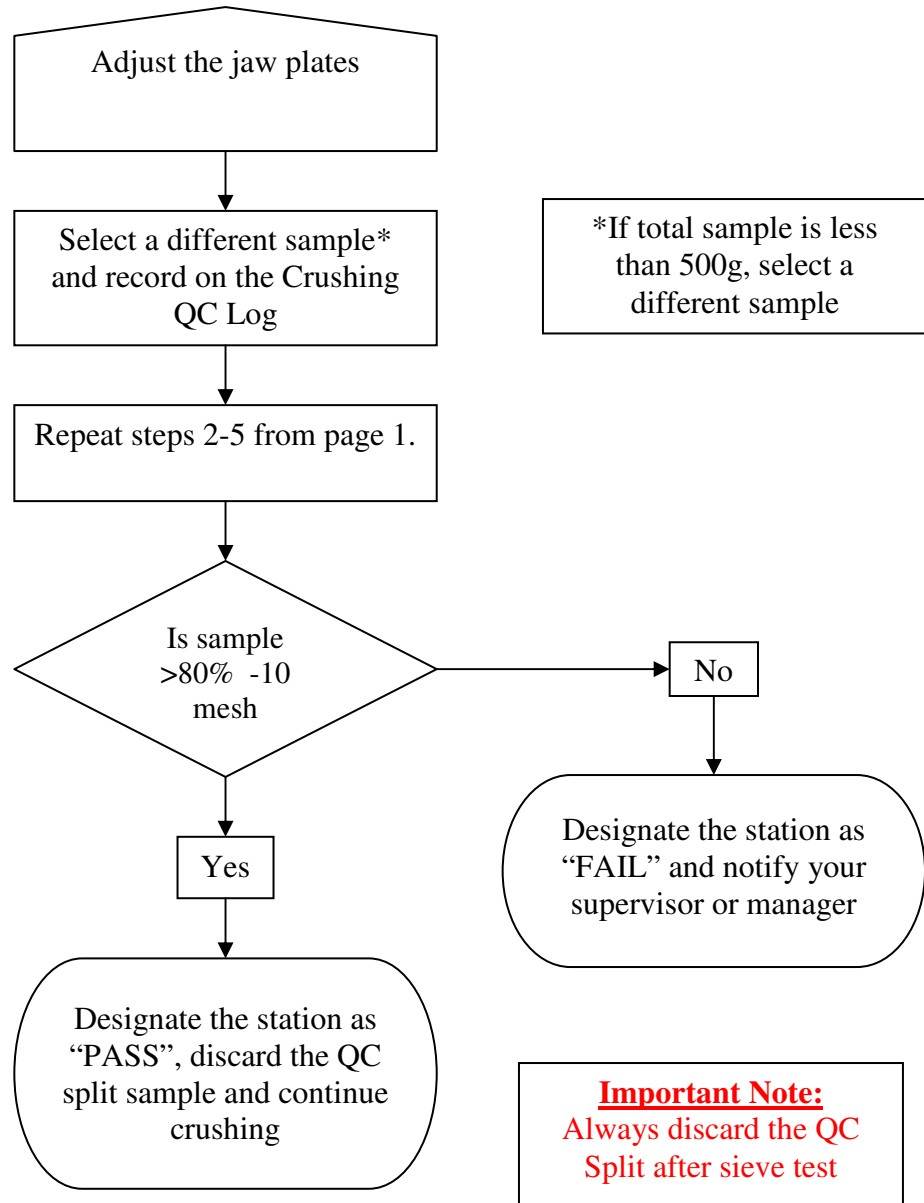
No

See page 2.

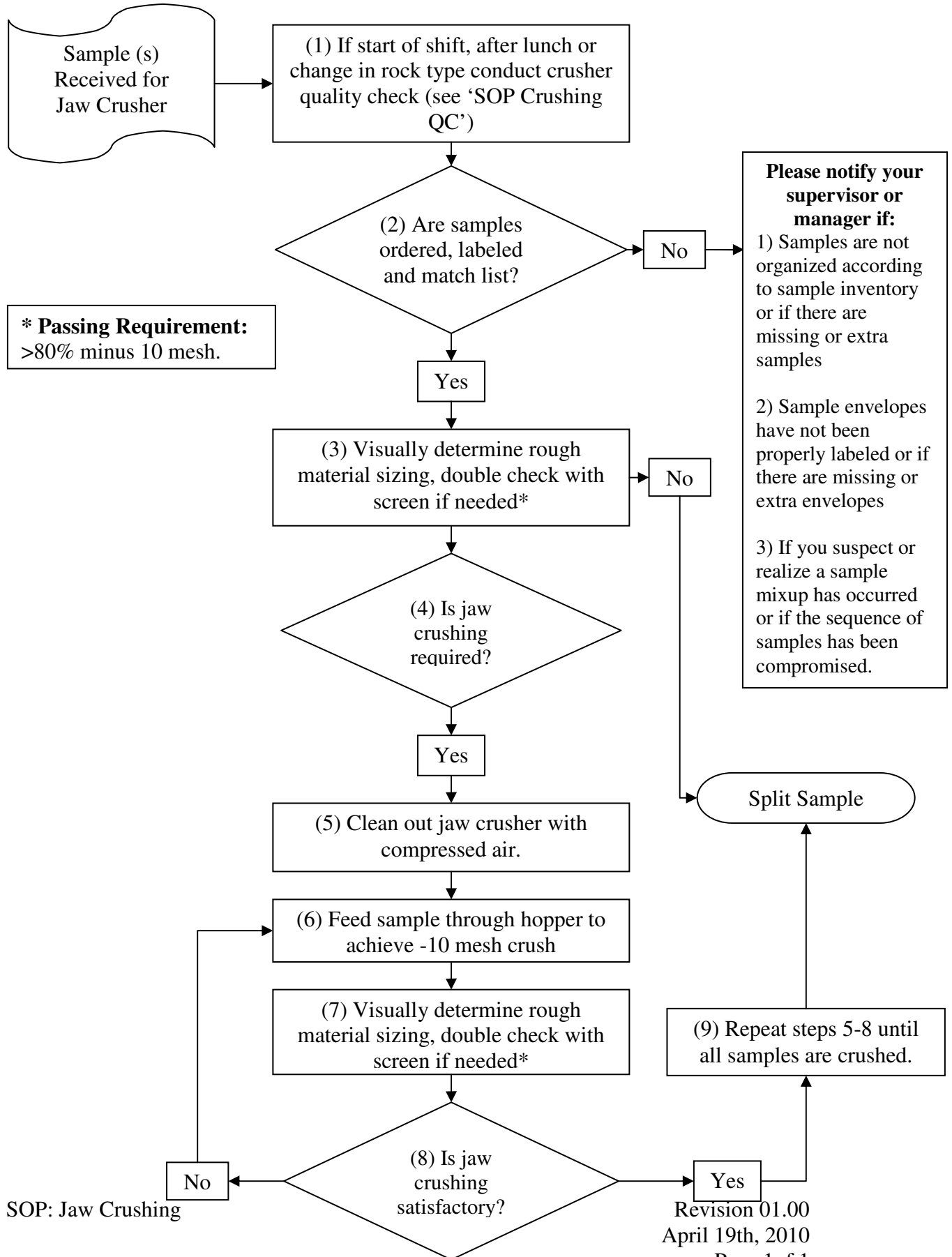
Yes

Designate the station as "PASS", discard the sample and continue crushing

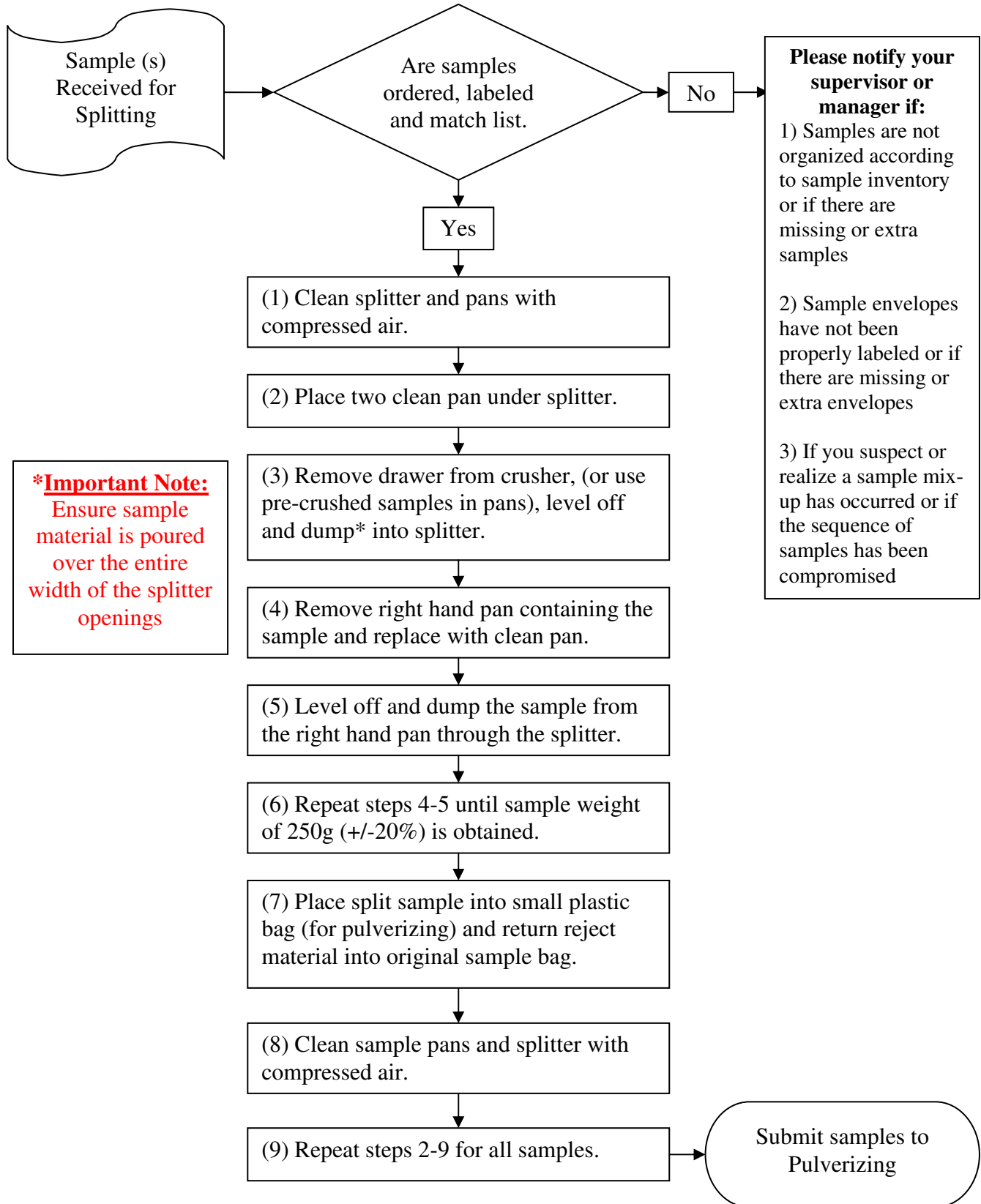
SOP: Crushing QC



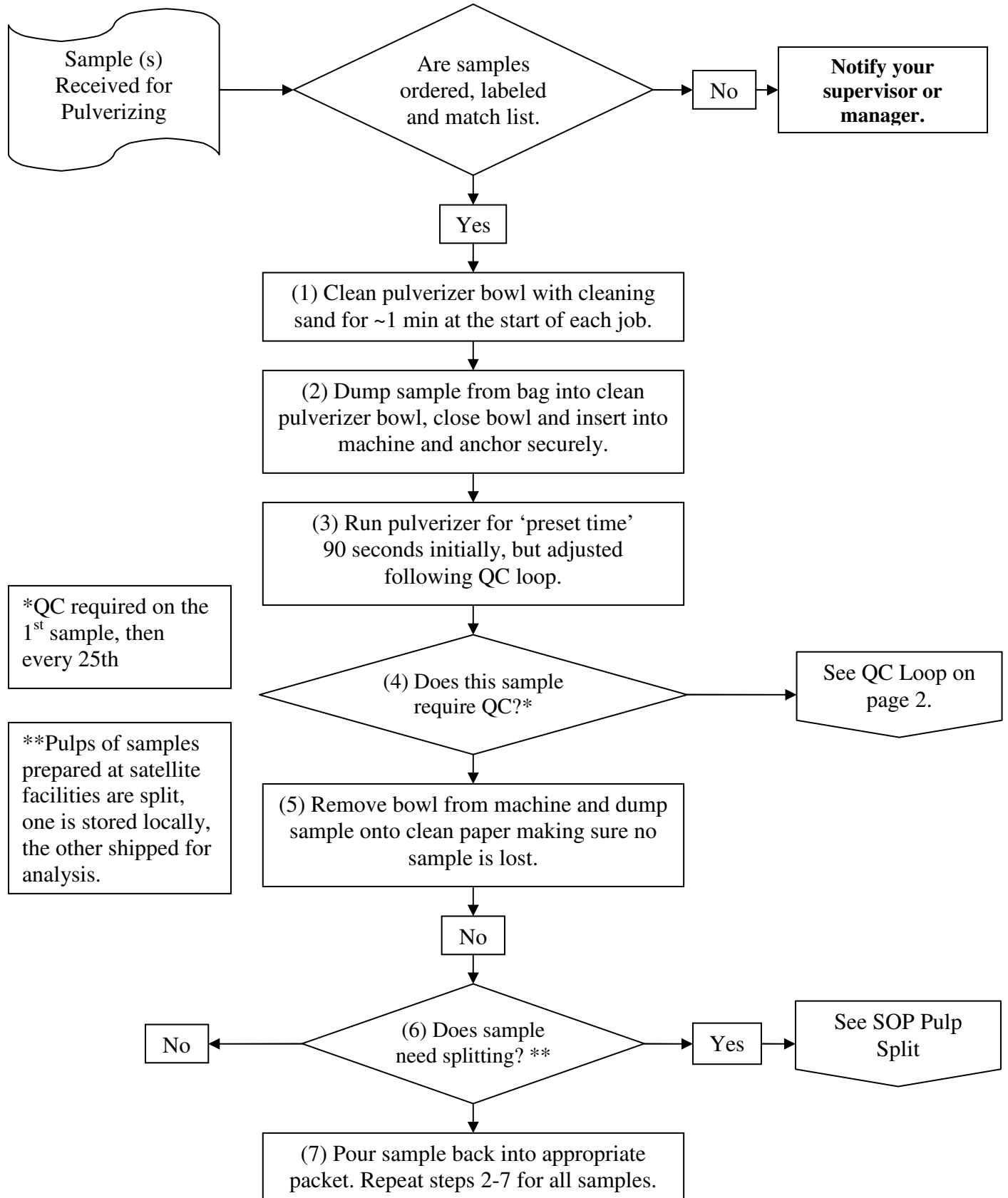
SOP: Jaw Crushing



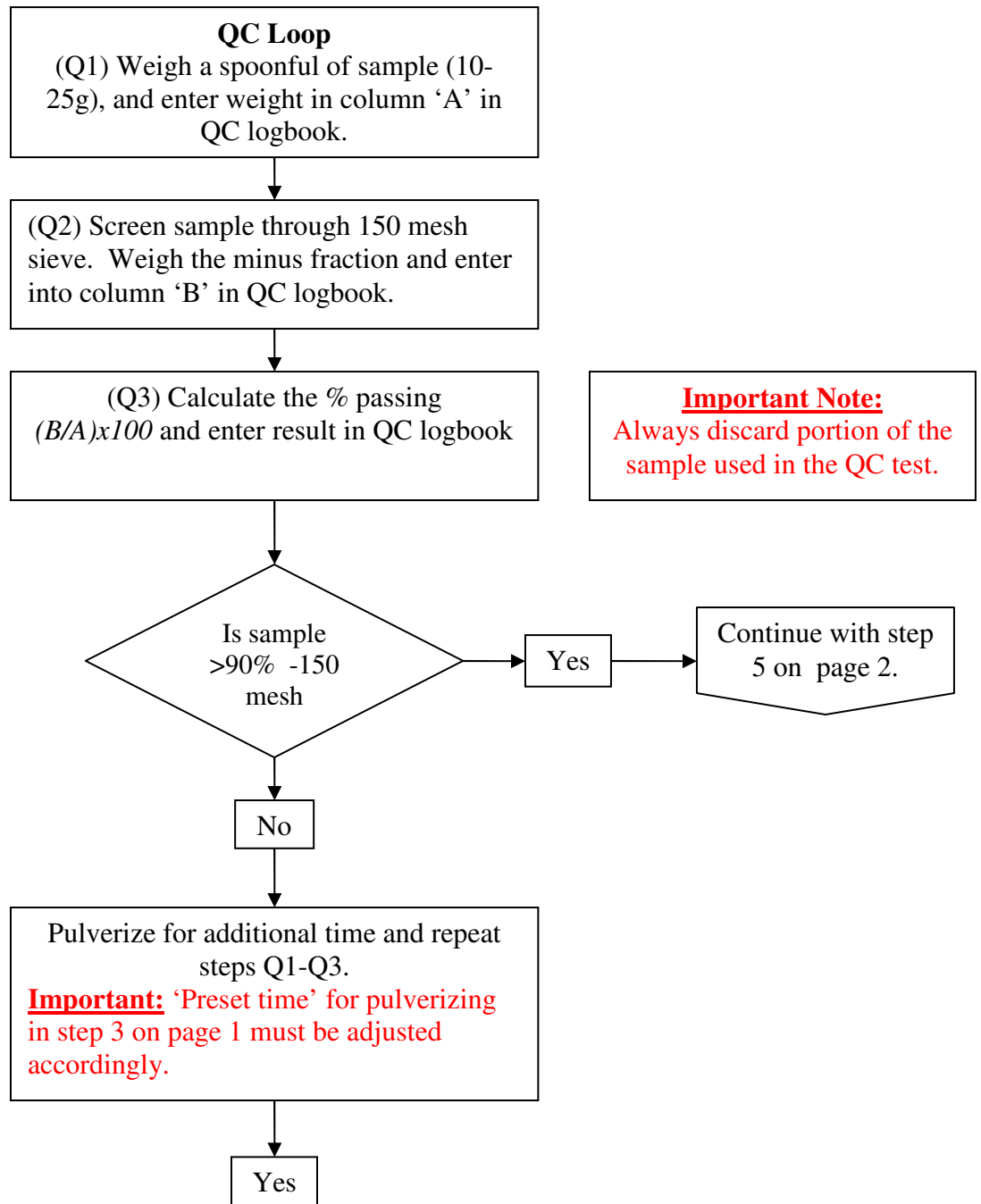
SOP: Sample Splitting



SOP: Pulverizing and QC



SOP: Pulverizing and QC





Method of Multi-element analysis a by Multi-acid digestion/ICP-MS

- (a) A measured portion of sample was mixed with lithium metaborate and fused in high temperature furnace for an hour, removed and leached in weakly diluted HNO₃ acid, cooled, then bulked up to a fixed volume with de-mineralized water, and thoroughly mixed.

- (b) The specific elements are determined using an Inductively Coupled Plasma Mass Spec (MS) spectrophotometer. All elements are corrected for inter-element interference. All data are subsequently stored in LIMS.

QUALITY CONTROL

The ICP Spectrometer analysis is first calibrated using three sets of Certified Standards and a blank. The test samples are then run in batches.

A batch of sample consists of 38 or less. An In-house standard and an acid blank are placed in-front of each set, which are both digested along with the samples. A known standard with characteristics best matching the samples is chosen and placed after every fifteenth sample, and again at the end of every batch. Every 20th sample is re-assayed using a new sample cut, weighed, digested placed at end of the batch. The results from these know standards are closely examined to detect any calibration drift.

Method of Whole rock analyses by ICP

- (a) A measured portion of the sample is mixed with lithium metaborate and fused in high temperature furnace for an hour, removed and leached in weakly diluted HNO₃ acid, cooled, then bulked up to a fixed volume with di-mineralized water, and thoroughly mixed.
- (b) The specific elements were determined using a Inductivity Coupled Argon Plasma Spectrophotometer. All major interfering, as well as trace, elements are inter-element corrected. All data is subsequently stored in LIMS.
- (b) Loss of Ignition (LOI) is perform separately by weighing 1.0 grams of sample in a clay crucible and ignited at 1000C, the weight loss in percent is reported as LOI.

* The whole rock package includes following elements:
Al₂O₃, BaO, CaO, Fe₂O₃, K₂O, LOI, MgO, MnO, Na₂O, P₂O₅, SiO₂ and TiO₂

QUALITY CONTROL

The ICP instrument is first calibrated using six certified standards and a blank. The test samples are then run in batches. A sample batch consists of 38 or less samples. Two solutions are placed before a batch. These are in-house standard and acid blank, which are both digested along with the samples. A known standard with characteristics best matching the samples is chosen and placed after every fifteenth sample. After every 38th sample (not including standards), two samples, chosen at random, are re-weighed and analyzed. At the end of a batch, the standard and blank used at the beginning is re-analyzed. Results from both sets of standards are compared to detect any calibration drift.

A Certified Reference Standard is carried through with the analysis and a duplicate analysis is done for every 20 samples. The acceptance level is within 5% relative difference in both cases.



Method of Nb and Ta analysis a by HF-HCl-H₃PO₄ digestion/ICP-MS

A measured portion of sample is weighed and transferred into a Teflon test tube, HF, HCl, and H₃PO₄ acids are added and digested on hot plate until strong H₃PO₄ fumes persisted and color change takes place. The solution is left to cool and re-boiled with a known amount of diluted HCl then left to cool. Once cool it is bulked up to a fixed volume with de-mineralized water, and thoroughly mixed. This process takes approximately 7 hours.

- (b) The specific elements in solution are determined using an Inductively Coupled Plasma Mass Spec (MS) spectrophotometer. All elements are corrected for inter-element interference. All data are subsequently stored into LIMS.

QUALITY CONTROL

The ICP Spectrometer analysis is first calibrated using three sets of Certified Standards and a blank. The test samples are then run in batches.

A batch of sample consists of 38 or less. An In-house standard and an acid blank are placed in-front of each set, which are both digested along with the samples. A known standard with characteristics best matching the samples is chosen and placed after every fifteenth sample, and again at the end of every batch. Every 20th sample is re-assayed using a new sample cut, weighed, digested placed at end of the batch. The results from these know standards are closely examined to detect any calibration drift.

I:\analytical method\icpmuac-ms

Method study on the analysis of Fluoride in ore samples

Introduction

When found in nature, fluorspar is known by the mineral name *fluorite*. Fluorspar (fluorite) is calcium fluoride (CaF_2). It is found in a variety of geologic environments. Fluorspar is found in granite (igneous rock), it fills cracks and holes in sandstone, and it is found in large deposits in limestone (sedimentary rock). The term fluorspar, when used as a commodity name, also refers to calcium fluoride formed as a byproduct of industrial processes.

Chemical Properties Available:

- 1 Crude ore- 25 to 30%
- 2 Metallurgical grade- 75 to 82%
- 3 Ceramic grade- 94 to 96%
- 4 Acid grade- 97%
- 5 Crystalline grade- 99%

There are two main grades of Fluorspar in industrial production:

1. Acid grade (95 ~ 98%) which is applicable to fiberglass, ceramic, welding rod, glass, blending with burned lime & dolomite for steel industry and most commonly in the manufacturing of Hydrofluoric acid.
2. Metallurgical grade (~ or > 80%) gravel Fluorspar for the steel industry

There are various standard methods in the analysis of both grade of Fluorspar:

ASTM E815 – 99 Standard test method for determination of Calcium Fluoride in Fluorspar by complexometric titration

ASTM E1506 – 97 Standard test methods for analysis of acid-grade calcium fluoride (Fluorspar)

However, these methods are targeted on Fluorspar specifically, which may mean that they are good for the quality control or specification variation of Fluorspar only. The theme is to analyze the calcium content and then compute the CaF_2 by applying a factor.

Obviously that may not be applicable to natural crude sample, which may contain some other calcium constituents like CaCO_3 and CaO .

The following paragraphs are focused on the analysis of Fluoride content in such samples.

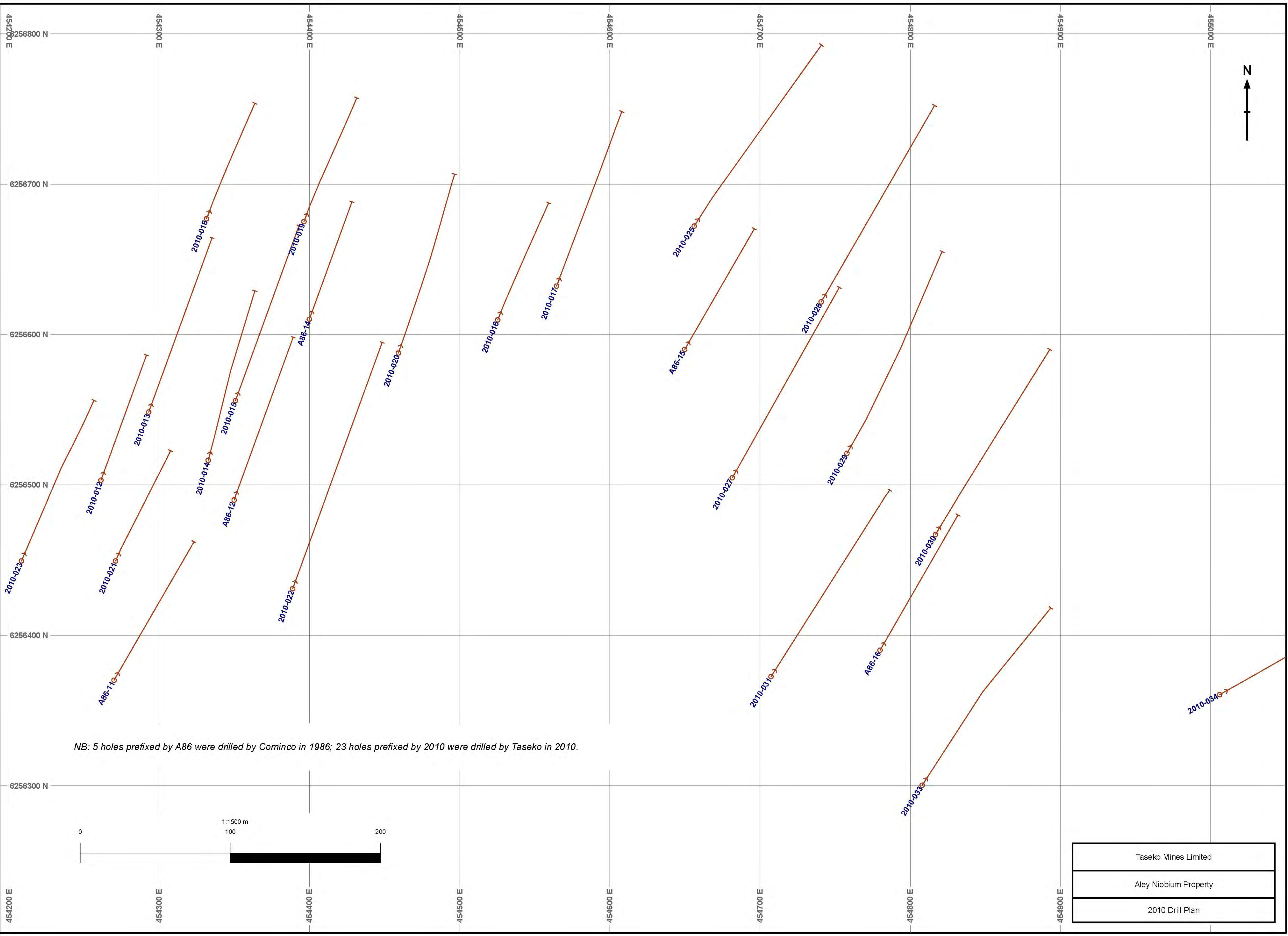
Summary of test method

A measured portion of sample is mixed with a known amount of LiBO_2 . The mixture is transferred into a graphite crucible and fused at 700°C for 15 min. The molten material is poured into a 150 mL Polypropylene beaker containing 80 mL of 4% HNO_3 . The mixture is shaken for 30 min to complete dissolution. Make up to 100 mL with distilled water.

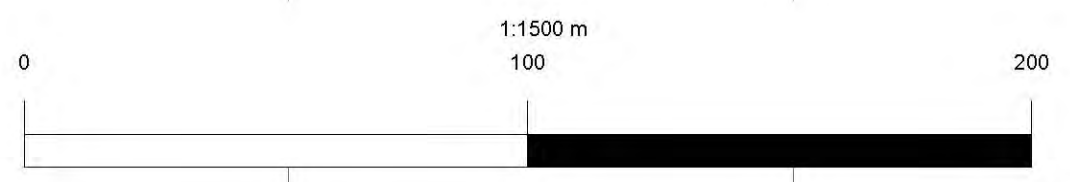
Transfer 20 mL aliquot into a polypropylene beaker containing 2 mL of TISAB with magnetic stirring bar. Measuring the Fluoride content with ion-selective electrode method.

The actual fluoride content is calculated taking the sample volume and weight into account.

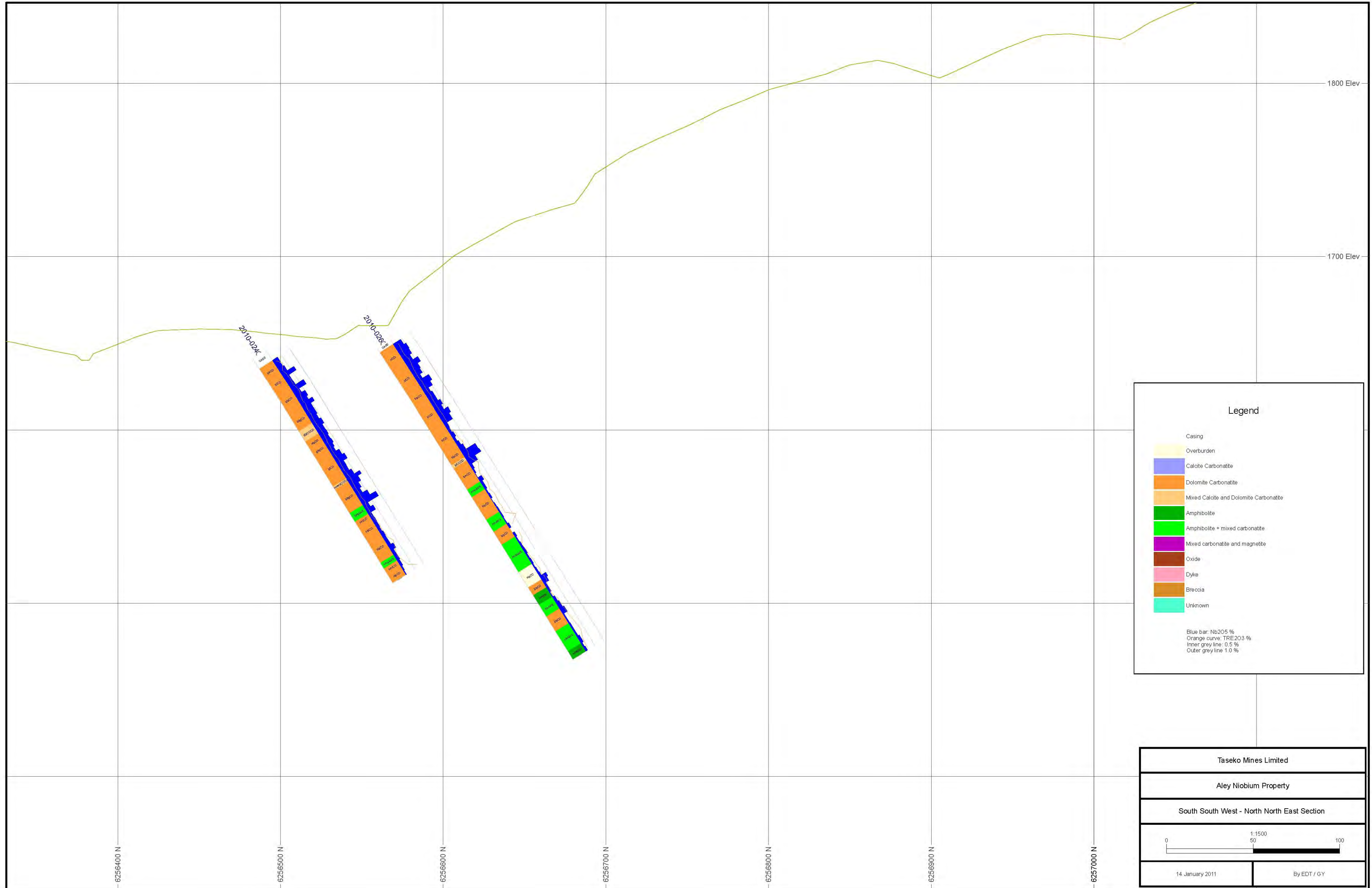
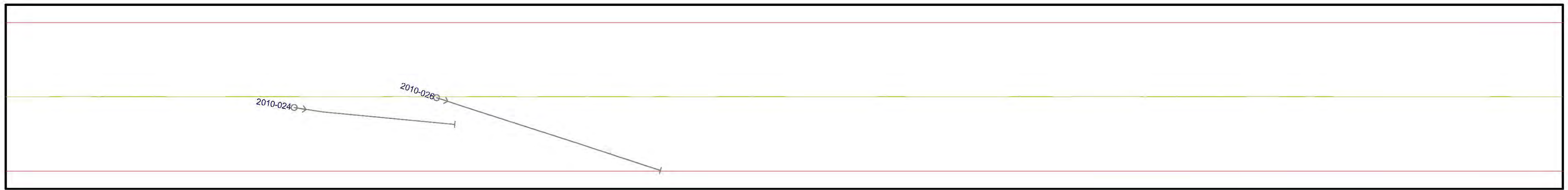
APPENDIX E
DRILL SECTIONS



NB: 5 holes prefixed by A86 were drilled by Cominco in 1986; 23 holes prefixed by 2010 were drilled by Taseko in 2010.



Taseko Mines Limited
Aley Niobium Property
2010 Drill Plan



Legend

- Casing
- Overburden
- Calcite Carbonatite
- Dolomite Carbonatite
- Mixed Calcite and Dolomite Carbonatite
- Amphibolite
- Amphibolite + mixed carbonatite
- Mixed carbonatite and magnetite
- Oxide
- Dyke
- Breccia
- Unknown

Blue bar: Nb2O5 %
 Orange curve: TRE203 %
 Inner grey line: 0.5 %
 Outer grey line: 1.0 %

Taseko Mines Limited

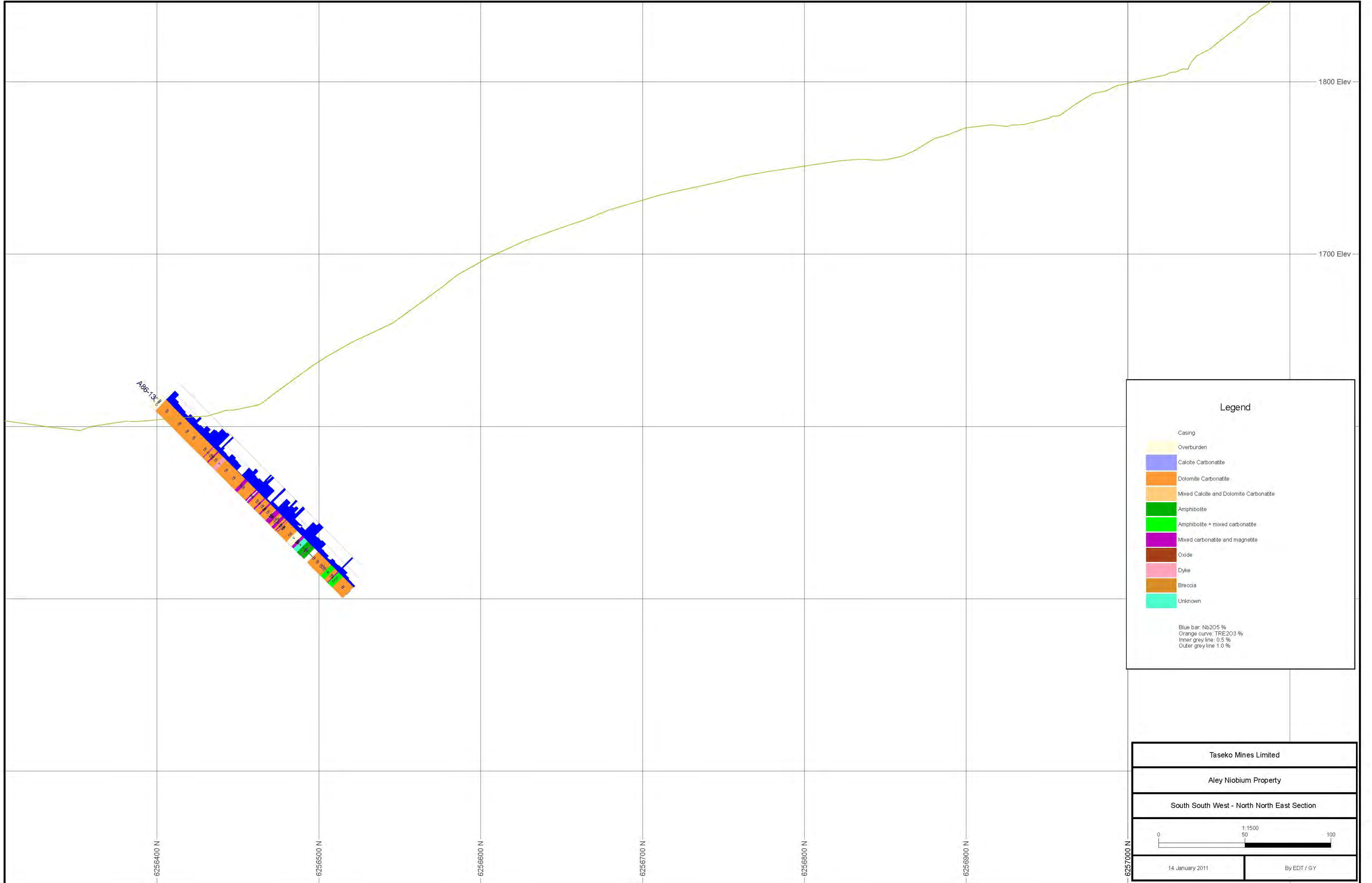
Aley Niobium Property

South South West - North North East Section

14 January 2011

By EDT / GY

A86-13G →



Legend

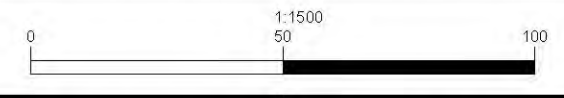
- Casing
- Overburden
- Calcite Carbonate
- Dolomite Carbonate
- Mixed Calcite and Dolomite Carbonate
- Amphibolite
- Amphibolite + mixed carbonate
- Mixed carbonate and magnetite
- Oxide
- Dyke
- Breccia
- Unknown

Blue bar: Nb205 %
Orange curve: TRE203 %
Inner grey line: 0.5 %
Outer grey line: 1.0 %

Taseko Mines Limited

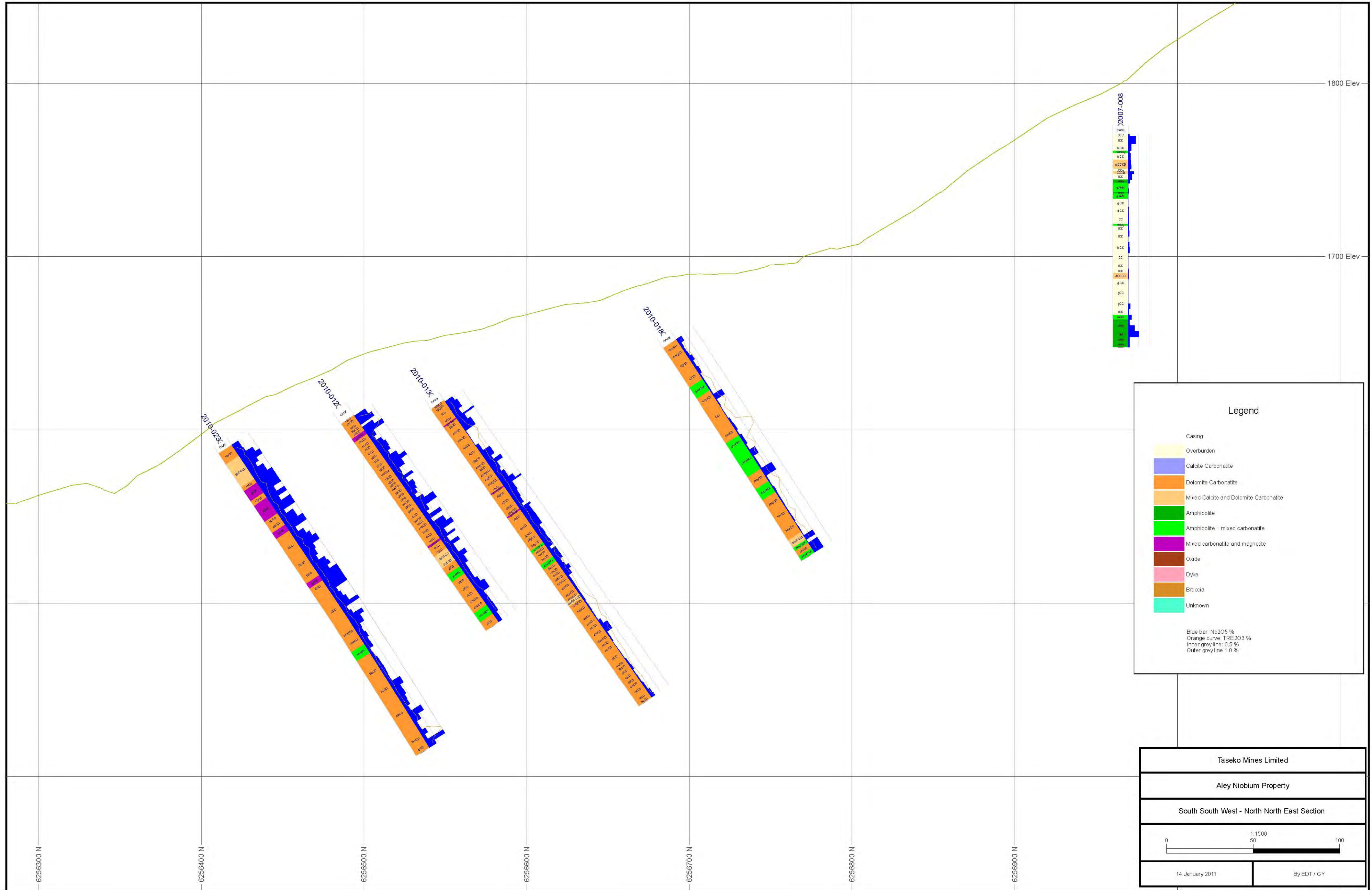
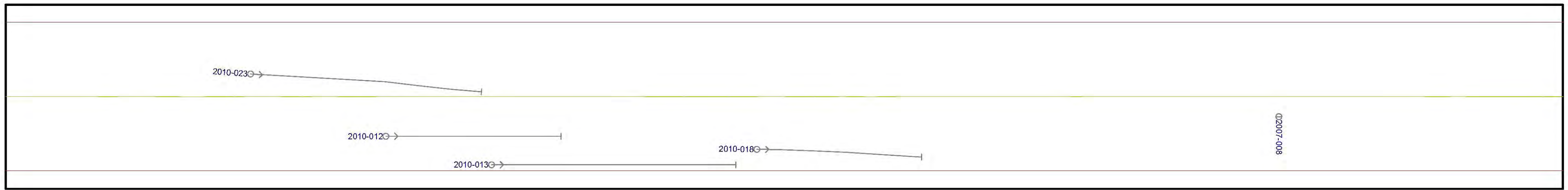
Aley Niobium Property

South South West - North North East Section



14 January 2011

By EDT / GY



D2007-008

D2007-008

Legend

- Casing
- Overburden
- Calcite Carbonate
- Dolomite Carbonate
- Mixed Calcite and Dolomite Carbonate
- Amphibolite
- Amphibolite + mixed carbonate
- Mixed carbonate and magnetite
- Oxide
- Dyke
- Breccia
- Unknown

Blue bar: Nb205 %
 Orange curve: TRE203 %
 Inner grey line: 0.5 %
 Outer grey line: 1.0 %

Taseko Mines Limited

Aley Niobium Property

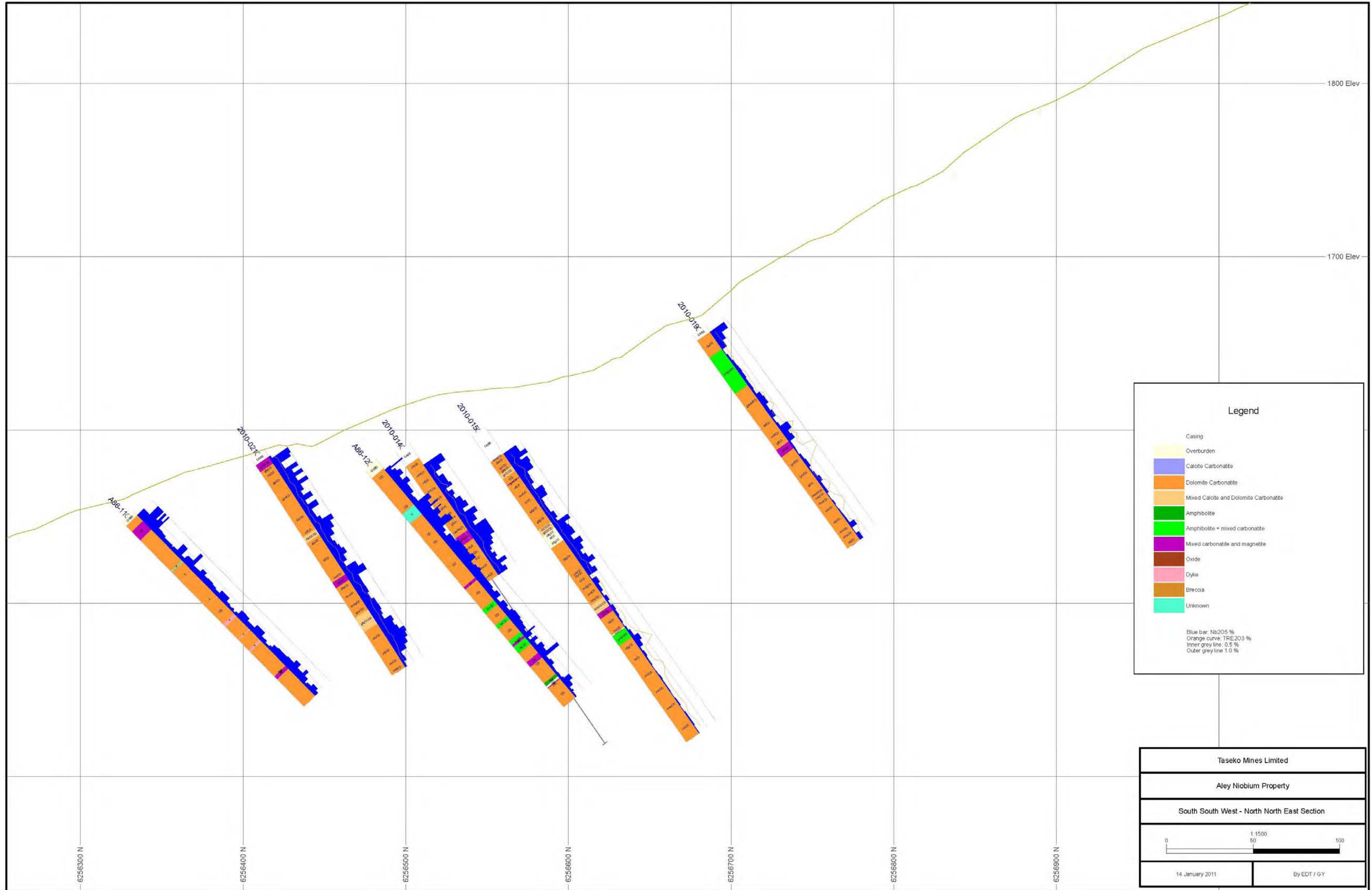
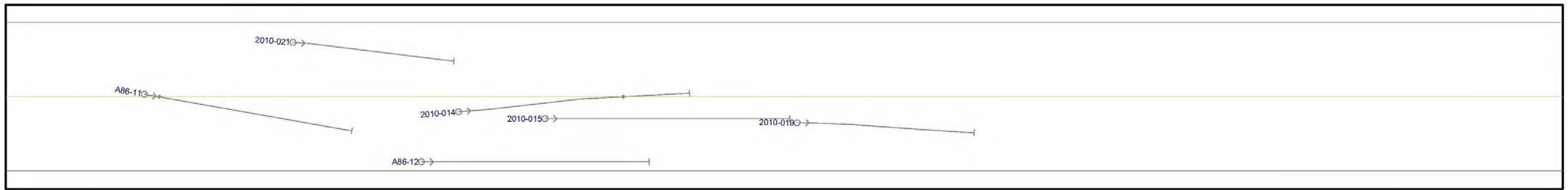
South South West - North North East Section

0 50 100

1:1500

14 January 2011

By EDT / GY



Legend

- Casing
- Overburden
- Calotte Carbonate
- Dolomite Carbonate
- Mixed Calotte and Dolomite Carbonate
- Amphibolite
- Amphibolite + mixed carbonate
- Mixed carbonate and magnetite
- Oxide
- Dyke
- Breccia
- Unknown

Blue bar: Nb205 %
 Orange curve: TRE203 %
 Inner grey line: 0.5 %
 Outer grey line: 1.0 %

Taseko Mines Limited

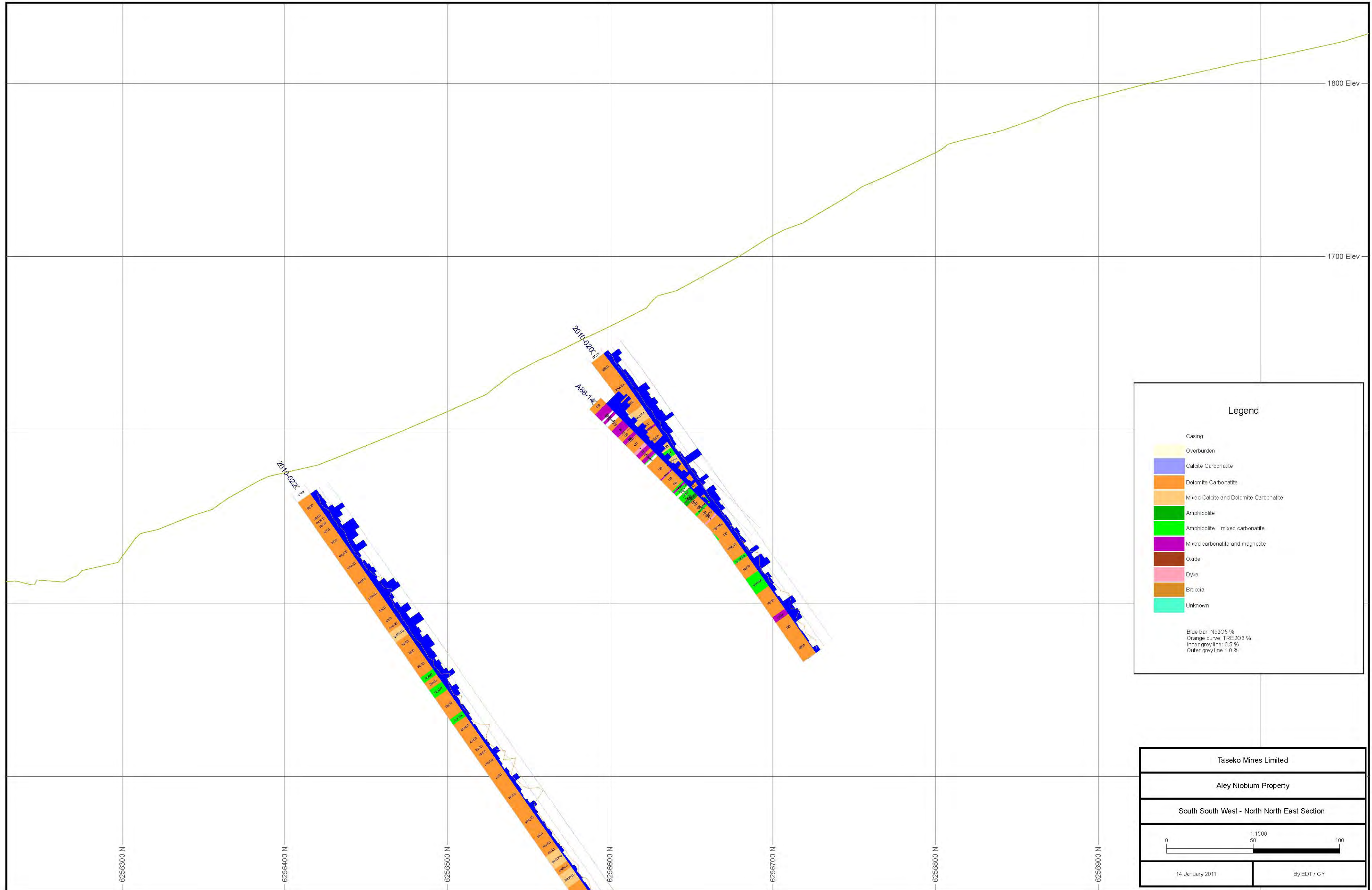
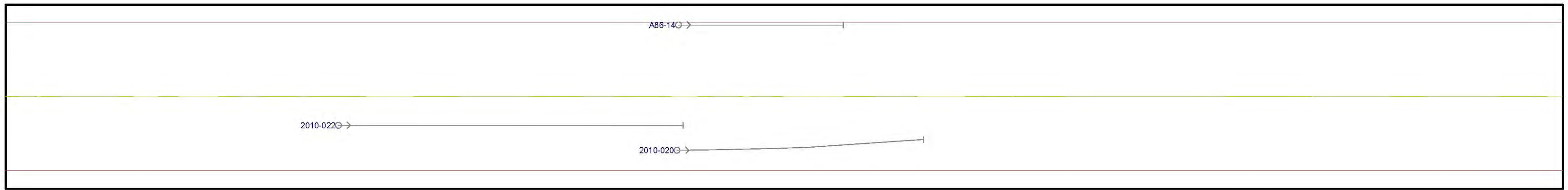
Aley Niobium Property

South South West - North North East Section

0 50 100

14 January 2011

By EDT / GY



Legend

- Casing
- Overburden
- Calcite Carbonatite
- Dolomite Carbonatite
- Mixed Calcite and Dolomite Carbonatite
- Amphibolite
- Amphibolite + mixed carbonatite
- Mixed carbonatite and magnetite
- Oxide
- Dyke
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- Unknown

Blue bar: Nb205 %
 Orange curve: TRE203 %
 Inner grey line: 0.5 %
 Outer grey line: 1.0 %

Taseko Mines Limited

Aley Niobium Property

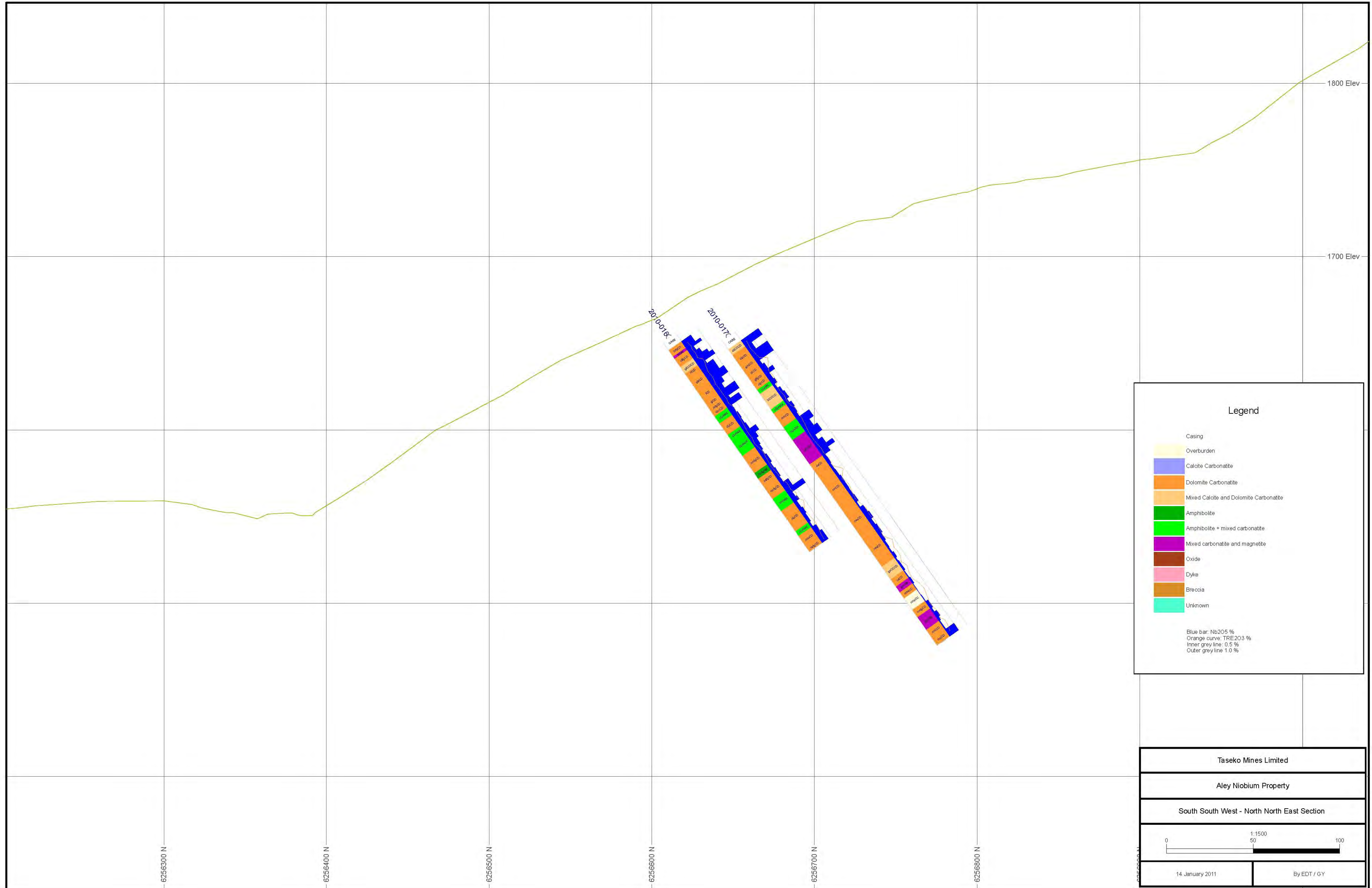
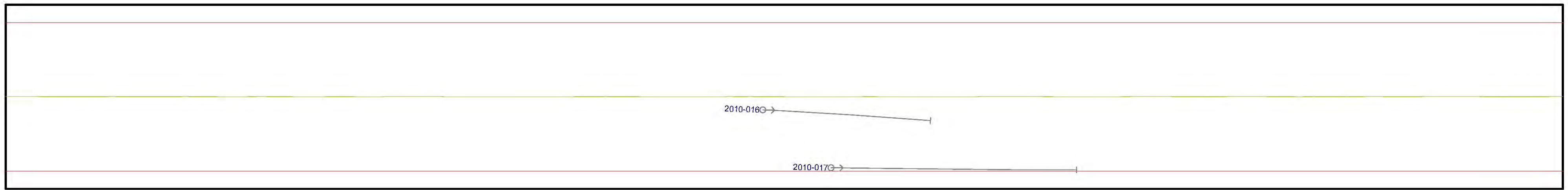
South South West - North North East Section

0 50 100

1-1500

14 January 2011

By EDT / GY



Legend

- Casing
- Overburden
- Calcite Carbonate
- Dolomite Carbonate
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Blue bar: Nb205 %
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Taseko Mines Limited

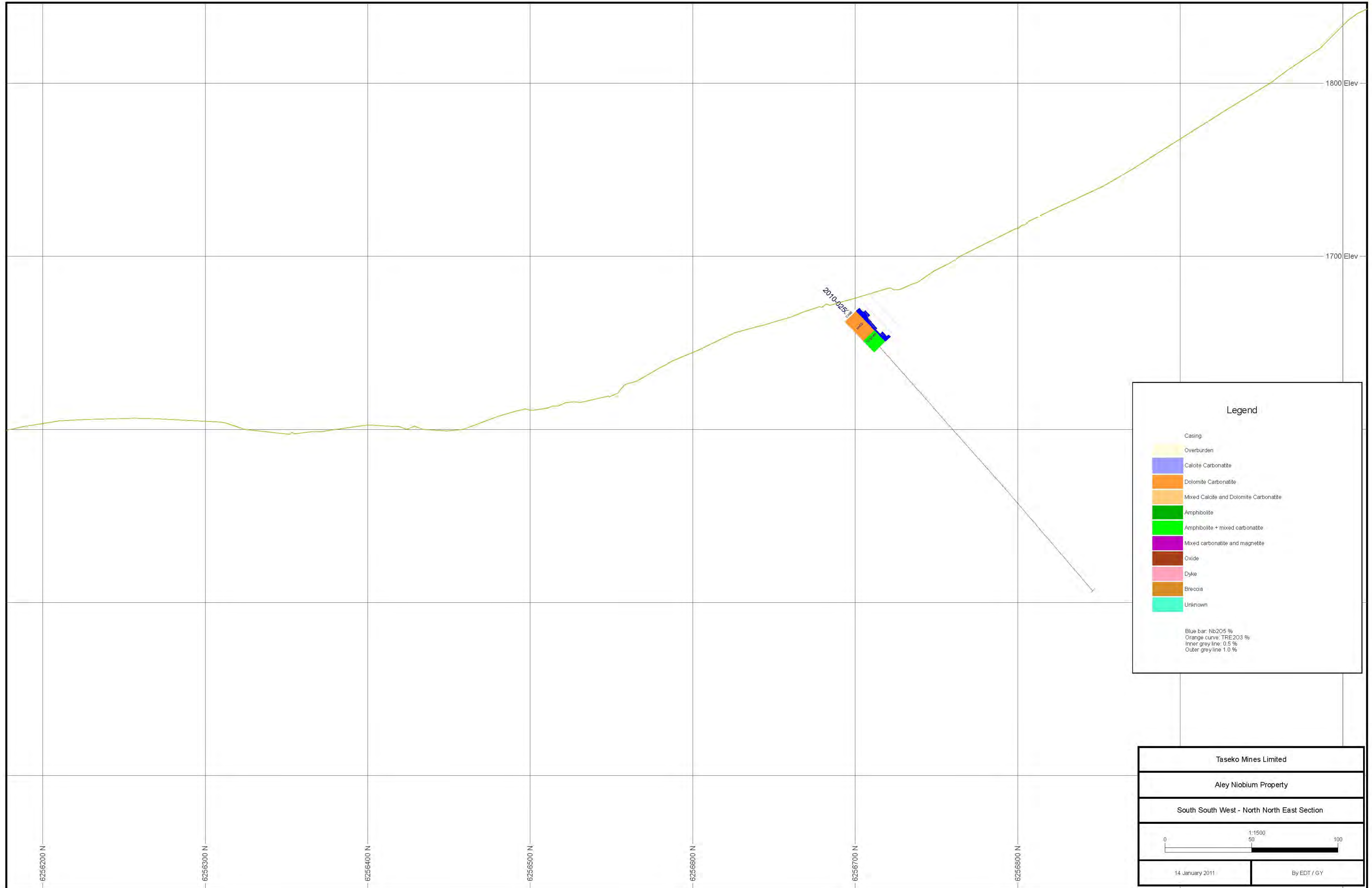
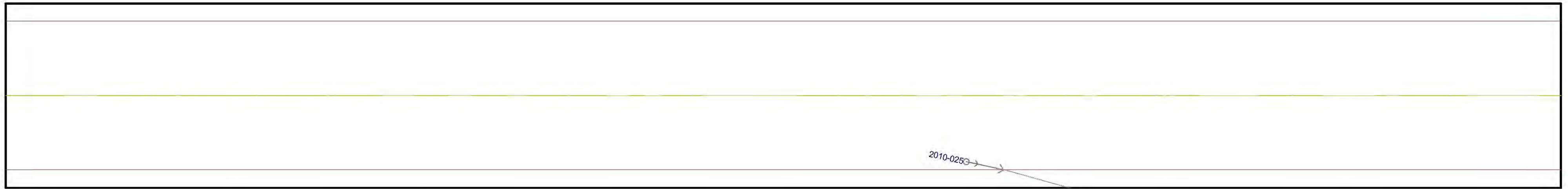
Aley Niobium Property

South South West - North North East Section

0 50 100

1:1500

14 January 2011 By EDT / GY



Legend

- Casing
- Overburden
- Calcite Carbonatite
- Dolomite Carbonatite
- Mixed Calcite and Dolomite Carbonatite
- Amphibolite
- Amphibolite + mixed carbonatite
- Mixed carbonatite and magnetite
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- Dyke
- Breccia
- Unknown

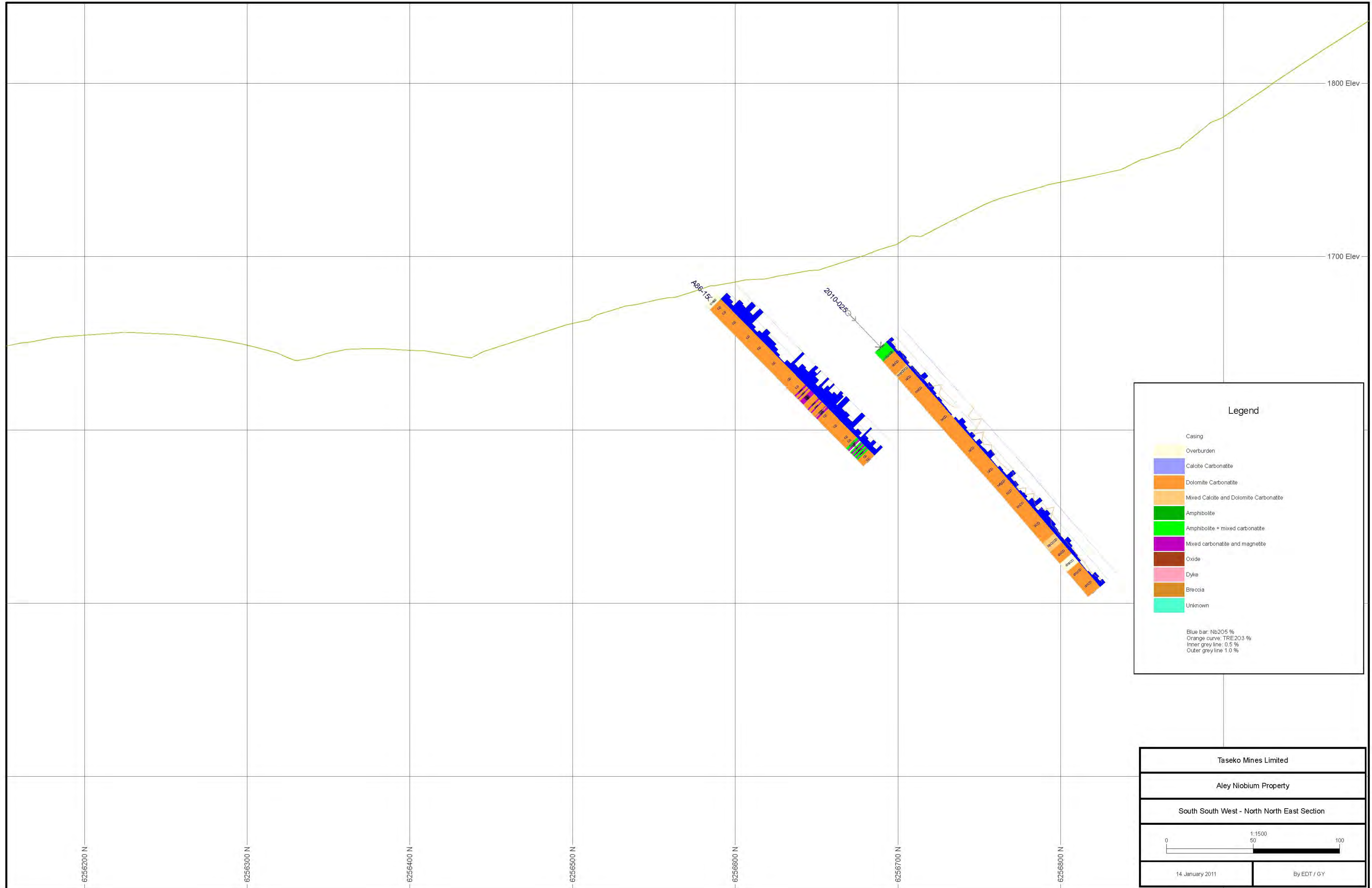
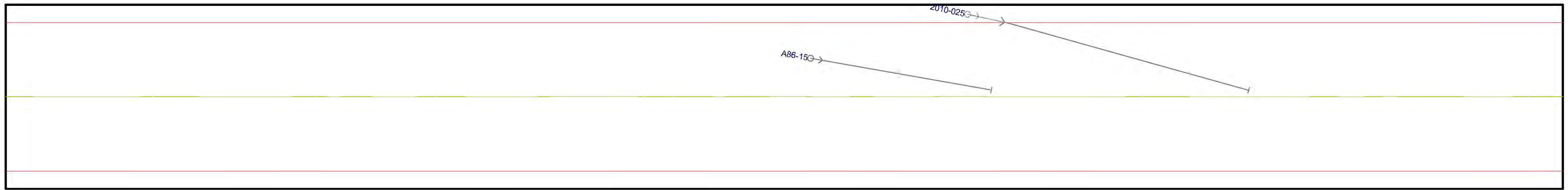
Blue bar: Nb205 %
 Orange curve: TRE203 %
 Inner grey line: 0.5 %
 Outer grey line: 1.0 %

Taseko Mines Limited

Aley Niobium Property

South South West - North North East Section

14 January 2011	By EDT / GY
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Legend

- Casing
- Overburden
- Calcite Carbonate
- Dolomite Carbonate
- Mixed Calcite and Dolomite Carbonate
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- Amphibolite + mixed carbonate
- Mixed carbonate and magnetite
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- Dyke
- Breccia
- Unknown

Blue bar: Nb2O5 %
 Orange curve: TRE203 %
 Inner grey line: 0.5 %
 Outer grey line: 1.0 %

Taseko Mines Limited

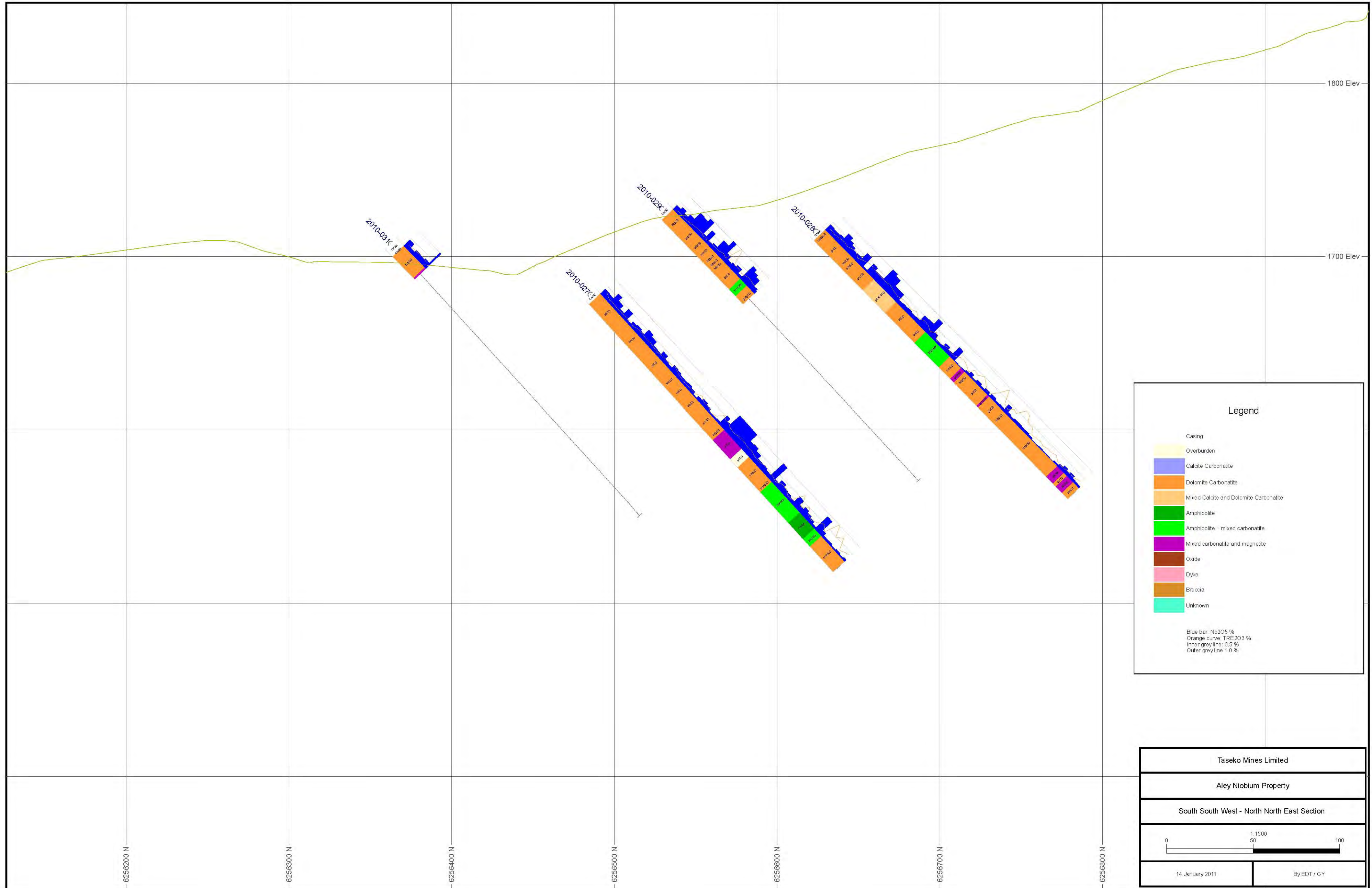
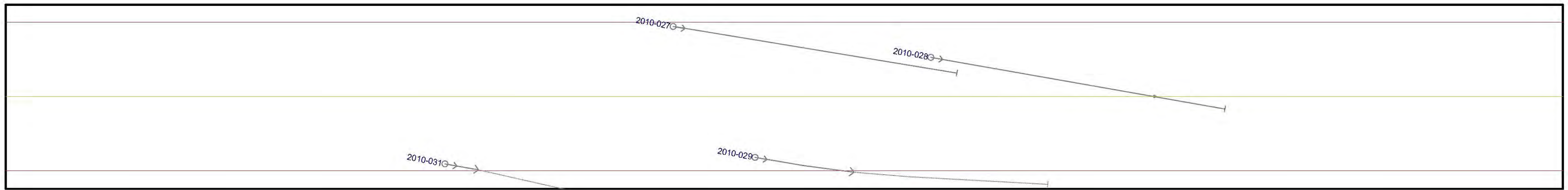
Aley Niobium Property

South South West - North North East Section

0 50 100

14 January 2011

By EDT / GY



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- Casing
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Taseko Mines Limited

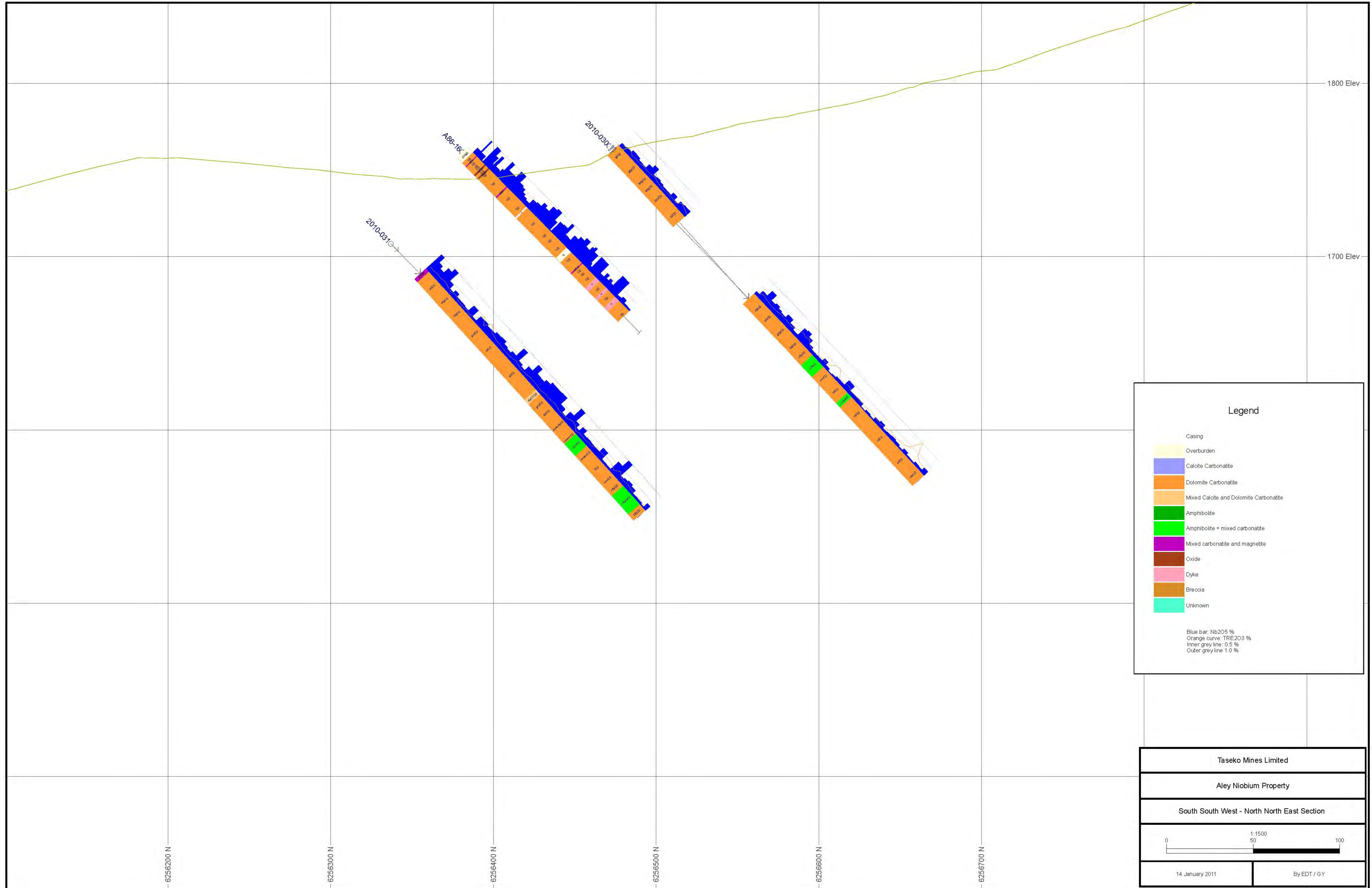
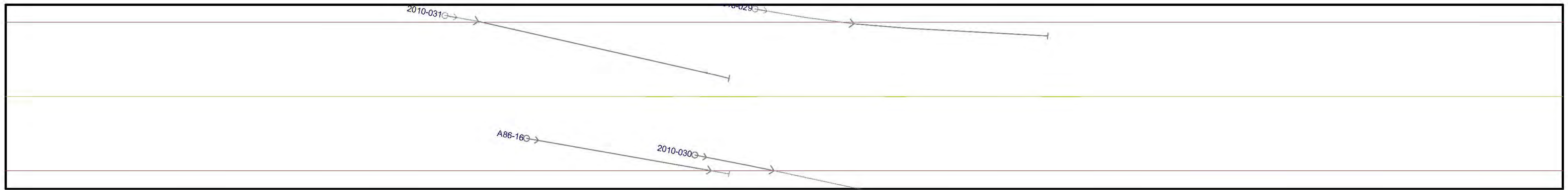
Aley Niobium Property

South South West - North North East Section

0 50 100

1:1500

14 January 2011 By EDT / GY



Legend

- Casing
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- Calcite Carbonate
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 Inner grey line: 0.5 %
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Taseko Mines Limited

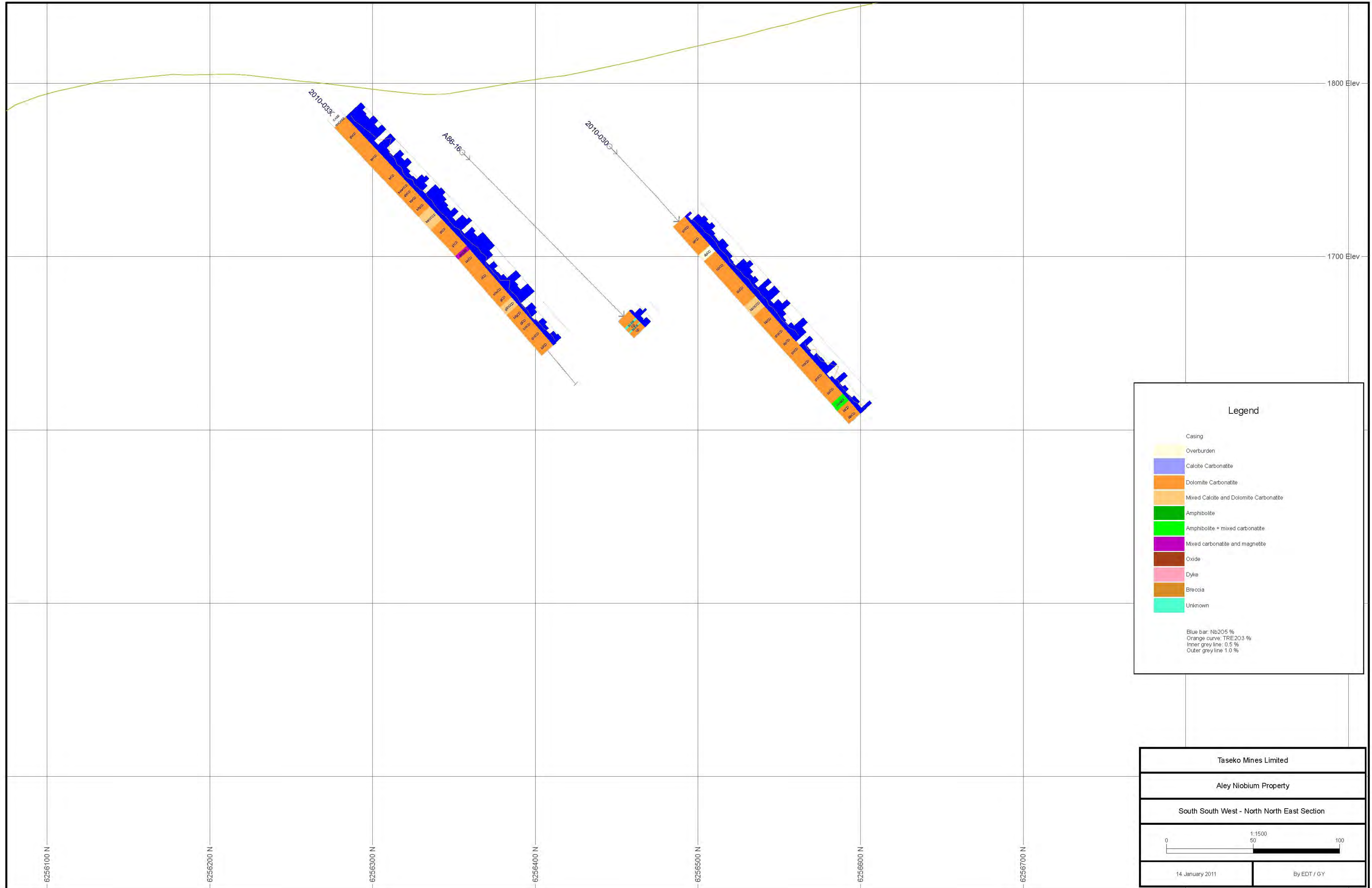
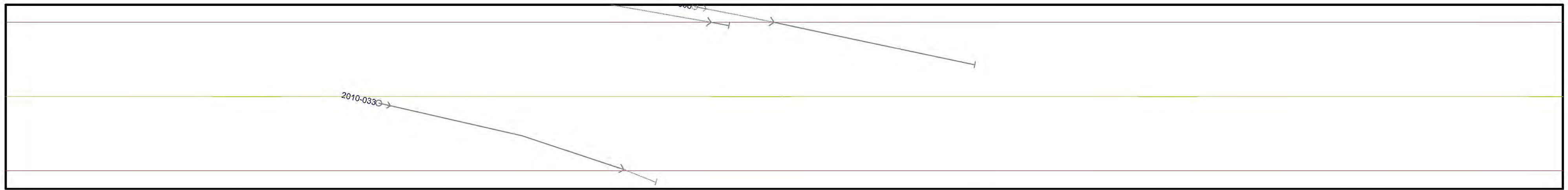
Aley Niobium Property

South South West - North North East Section

0 50 100

14 January 2011

By EDT / GY



Legend

- Casing
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- Calcite Carbonate
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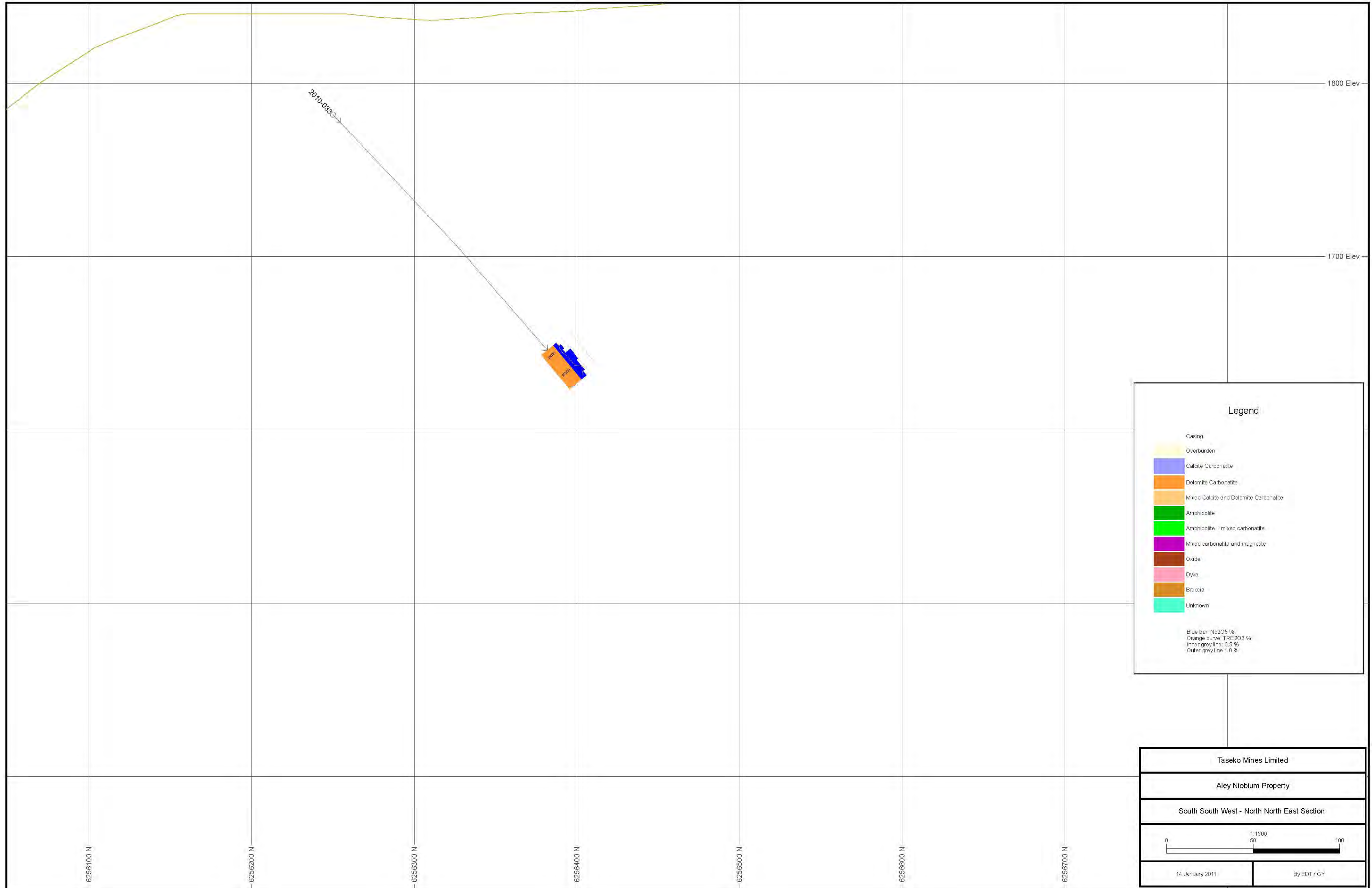
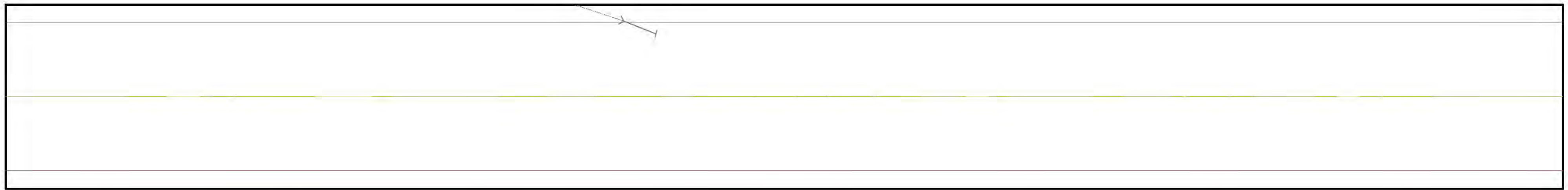
Taseko Mines Limited

Aley Niobium Property

South South West - North North East Section

0 50 100

14 January 2011 By EDT / GY



Legend

- Casing
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Taseko Mines Limited

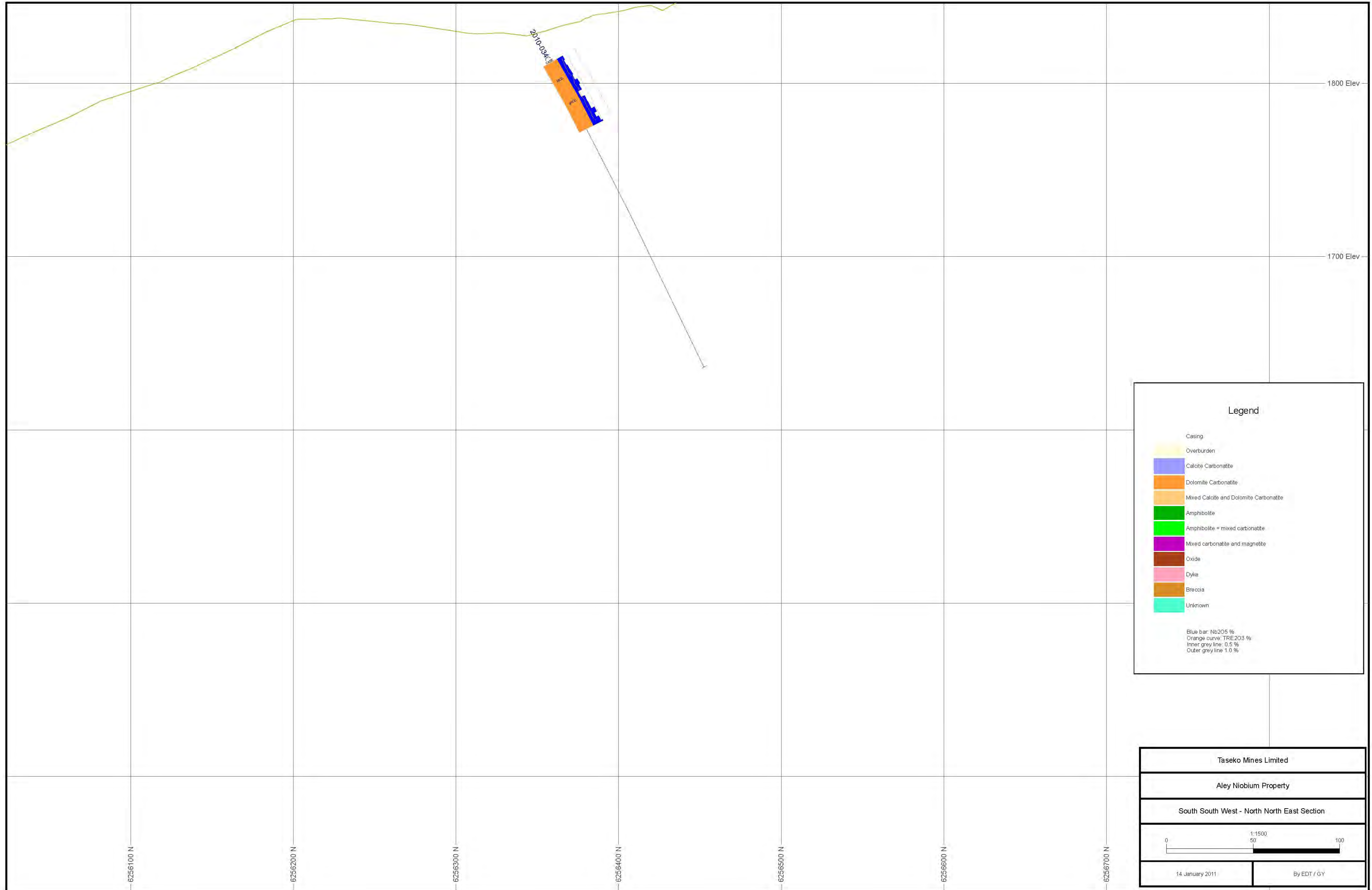
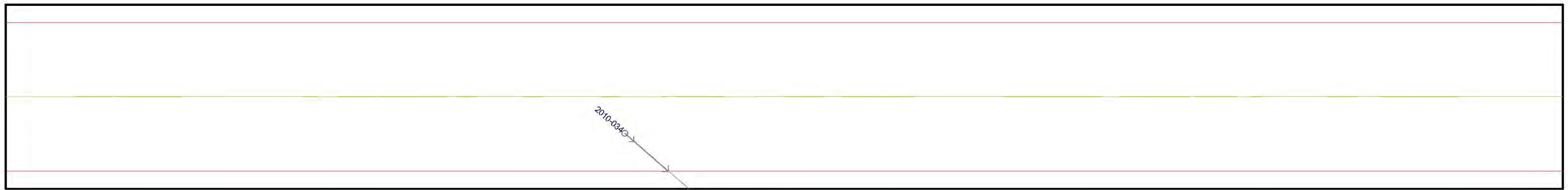
Aley Niobium Property

South South West - North North East Section

0 50 100

14 January 2011

By EDT / GY



Legend

- Casing
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Taseko Mines Limited

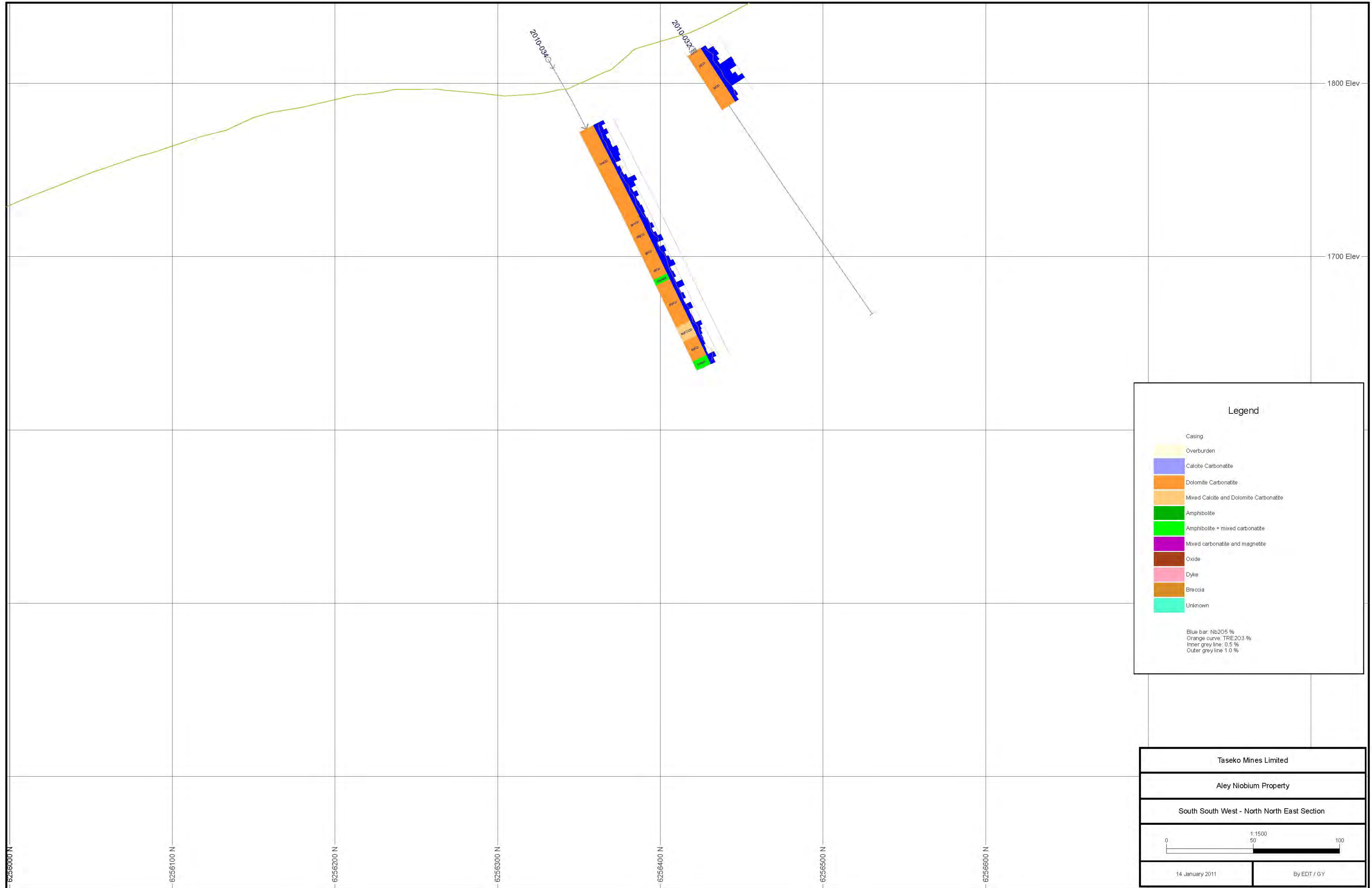
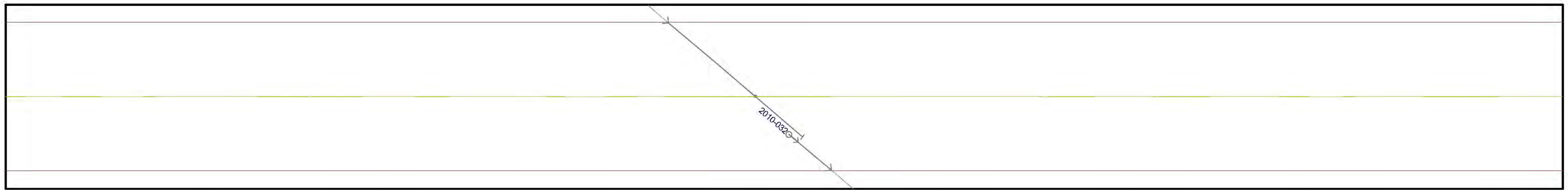
Aley Niobium Property

South South West - North North East Section

0 50 100

14 January 2011

By EDT / GY



Legend

- Casing
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Taseko Mines Limited

Aley Niobium Property

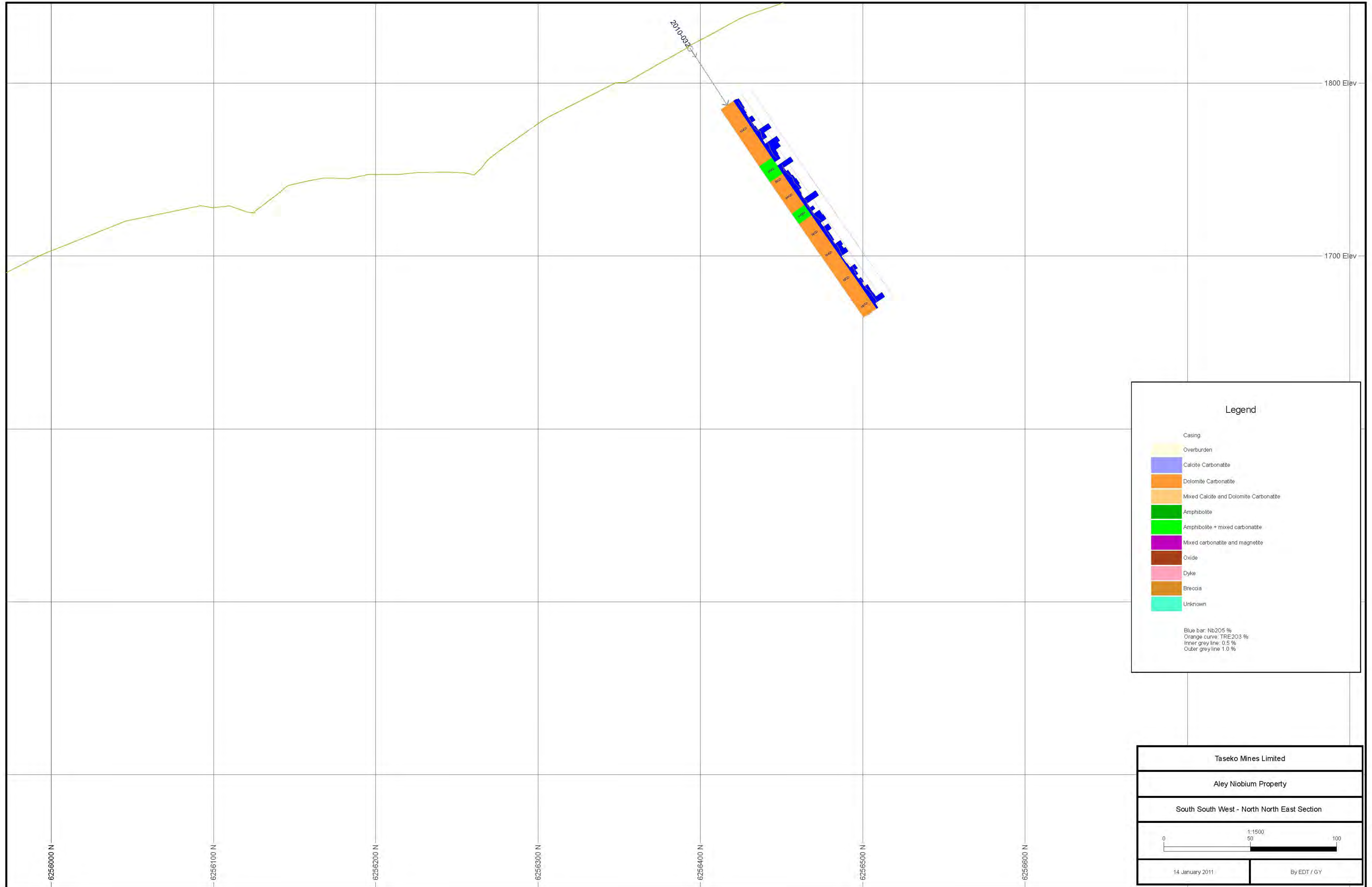
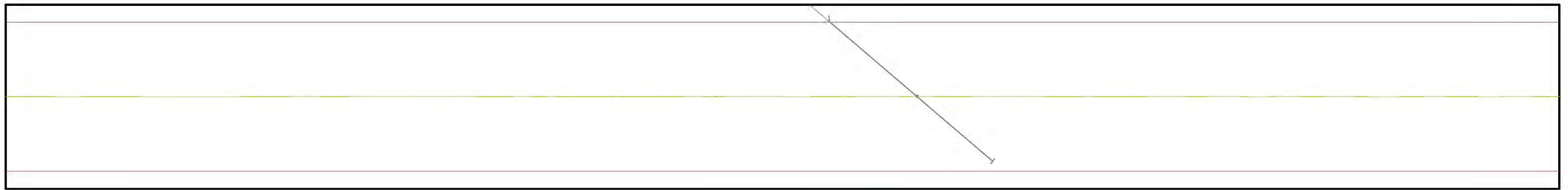
South South West - North North East Section

0 50 100

1-1500

14 January 2011

By EDT / GY



Legend

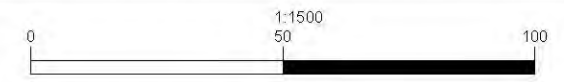
- Casing
- Overburden
- Calcite Carbonate
- Dolomite Carbonate
- Mixed Calcite and Dolomite Carbonate
- Amphibolite
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Taseko Mines Limited

Aley Niobium Property

South South West - North North East Section

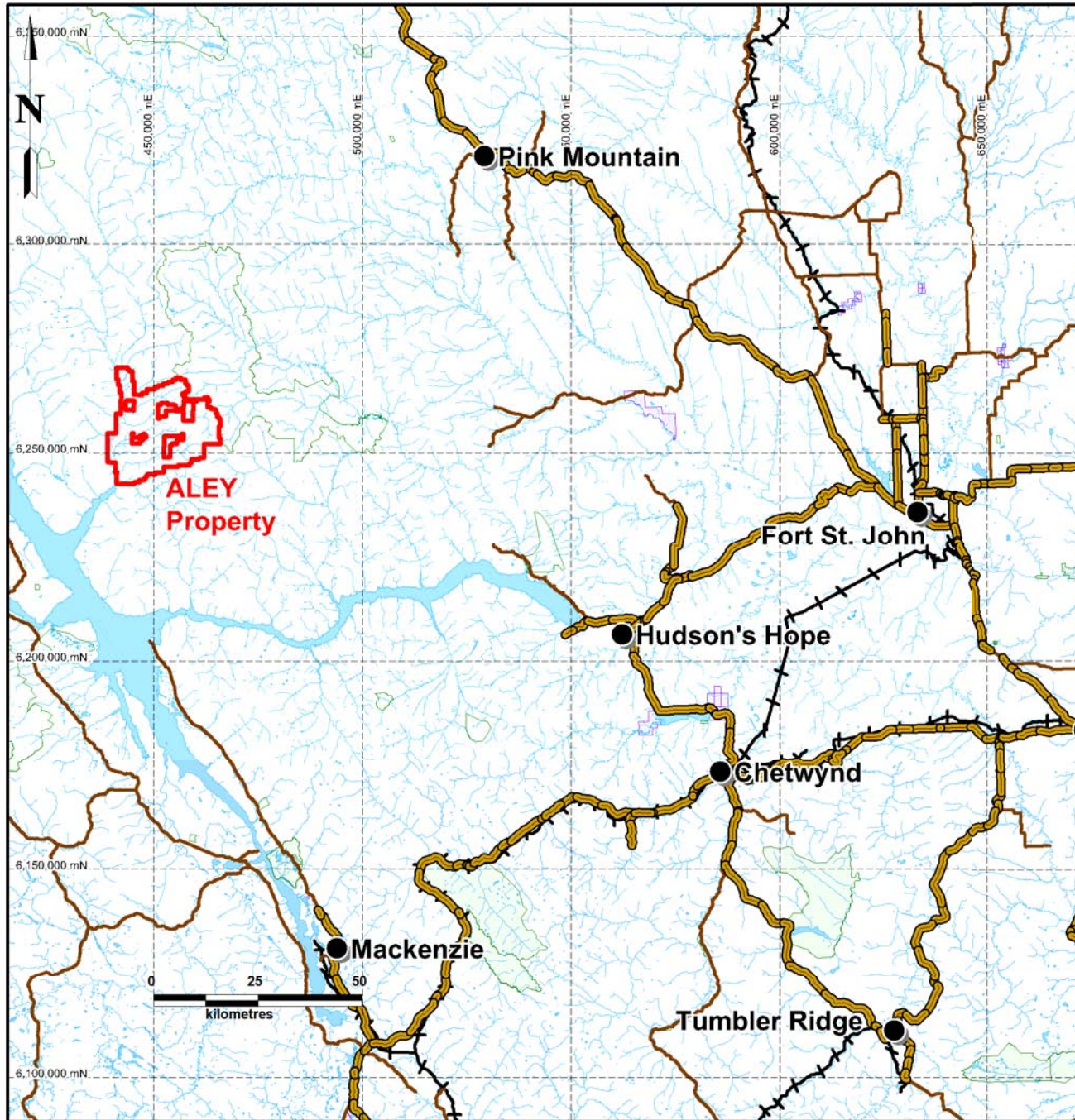




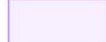


14 January 2011

By EDT / GY

APPENDIX F

FIGURES AT THEIR ORIGINAL SCALE

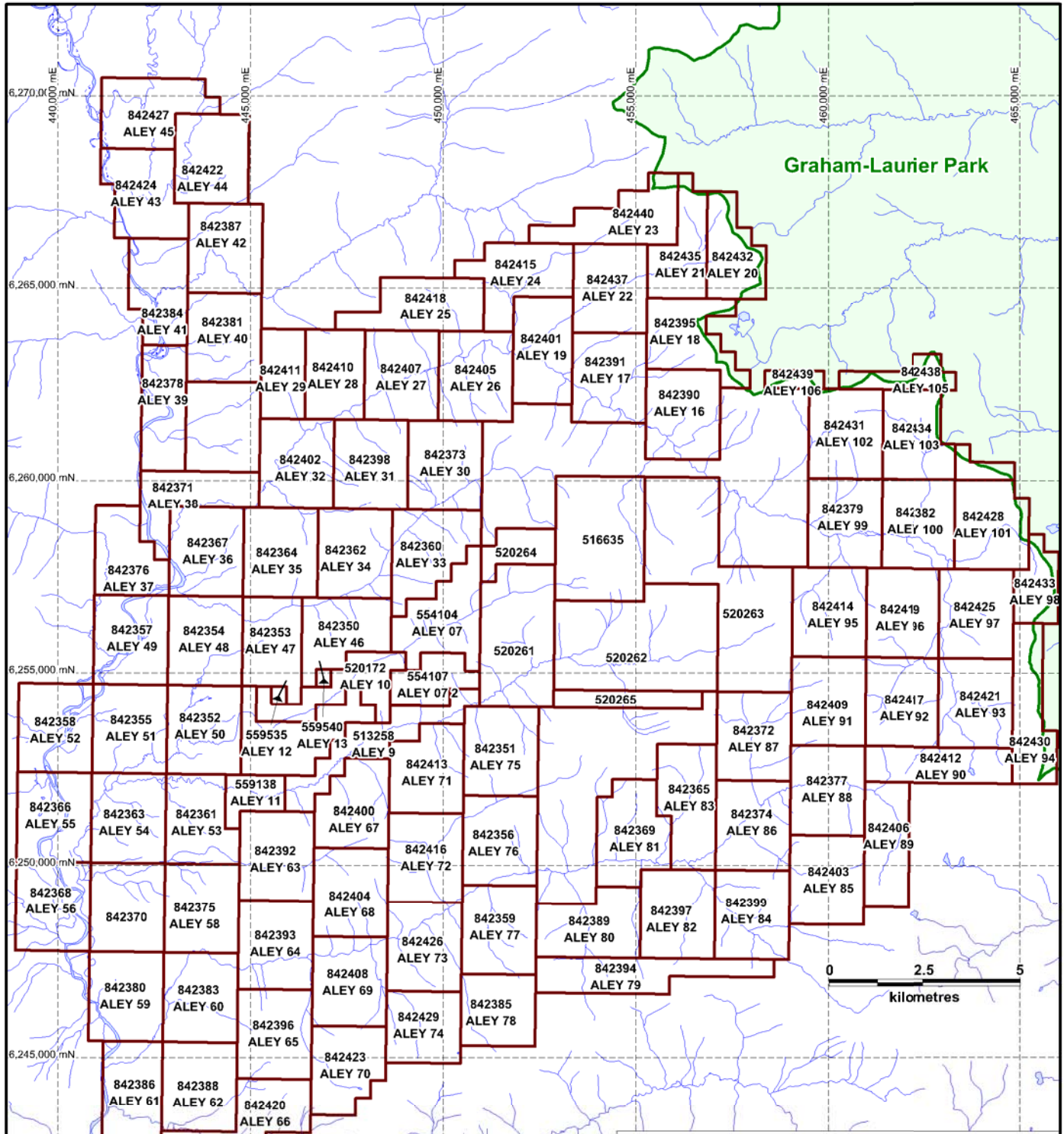


-  Claim boundary
-  Park or staking reserve
-  Indian Reserve
-  Paved road
-  Logging road

 Taseko Mines Limited

ALEY
Figure 1
Property Location

Date: July 29, 2011	Scale: 1 : 1 500 000
ALEY_Property\Loc_Jul2911.WOR UTM NAD 83, Zone 10	Plotted by : KJ



Graham-Laurier Park

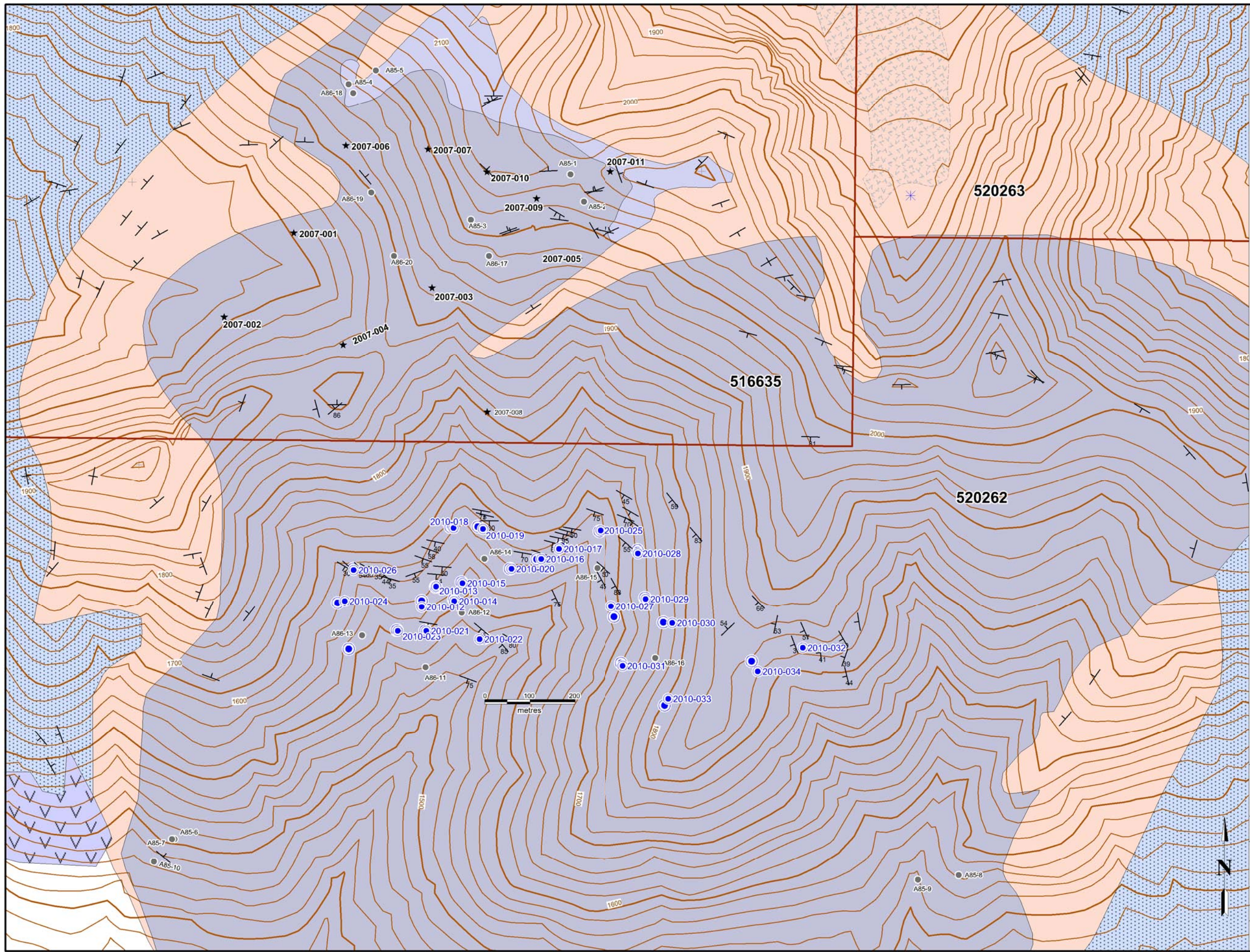
- Aley Claim
- Lake
- River
- Park



Taseko Mines Limited

ALEY Figure 2 Mineral Tenure

BCGS: 94B.031,032,033,041, 042, 043, 051, 052, 053	NTS: 94B/05, 12
Date: July 29, 2011	Scale: 1 : 150 000
ALEY_claimmap_Jul2911.WOR UTM NAD83 Zone 10	Plotted by : KJ

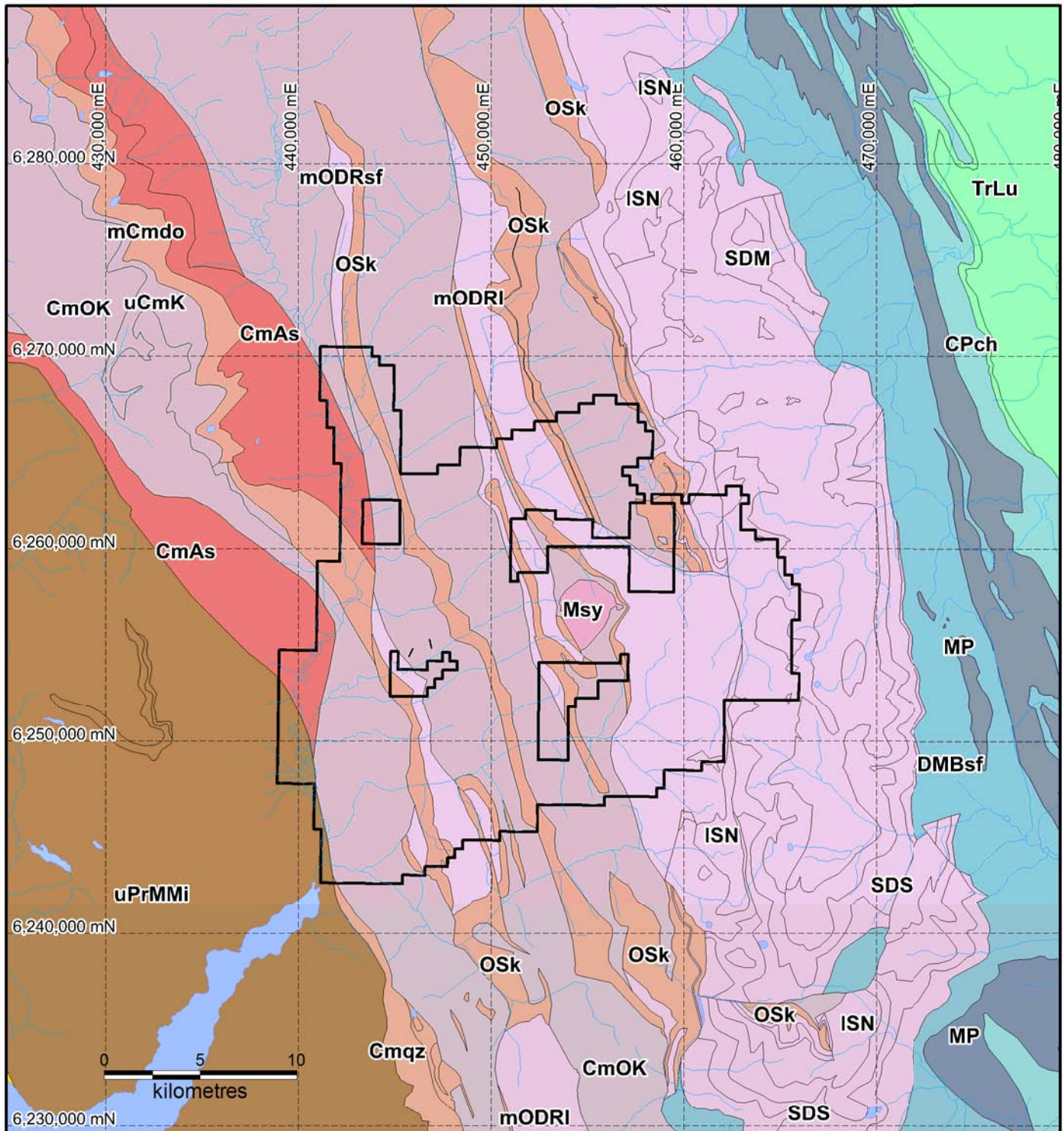


- ROAD RIVER GROUP**
- Dolomite
 - Sandstone, shale
 - Shale
- SKOKI FORMATION**
- Dolomite, volcanics
- KECHIKA FORMATION**
- Limestone, marble, siltstone
- Alkali syenite
 - Dolomite carbonatite
 - Calcite carbonatite
 - Diatreme - Ospika Pipe
- 2010 Drillhole
 - 2007 Drillhole
 - 1986 Drillhole
 - Aley claim boundaries

Taseko Mines Limited

ALEY
Figure 3
Geology and Drillhole Locations

BCGS: 94B.042	NTS: 94B/05
Date: November 21, 2011	Scale: 1 : 8 000
ALEY_DDHGeol_Aug0211.WOR	Plotted by : KJ
UTM NAD83 Zone 10	



- Aley Claim Outline
- Lake
- River

For Geological Legend please see Figure 4b

 **Taseko Mines Limited**

ALEY

Figure 4a

Regional Geology

Date: November 21, 2011

ALEY_RegGeol_Nov1811.WOR
UTM NAD83 Zone 10

N°S: 94B/03,04,05,06,
11,12;94C/01,08,09

Scale: 1 : 300 000

Plotted by : KJ