Ministry of Forests, Mines and Lands
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geological and Diamond Drilling

TOTAL COST: $197,228.41

AUTHOR(S): Christopher Gallagher, M.Sc. **SIGNATURE(S):**

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-1-626/April 1, 2010 **YEAR OF WORK:** 2012

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5425418; January 08, 2013

PROPERTY NAME: Kalum

CLAIM NAME(S) (on which the work was done): 516372

COMMODITIES SOUGHT: Au, Ag, Cu, Mo

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: Minfile 103I018, 19, 20, 51, 73, 74, 211, 213

MINING DIVISION: Skeena **NTS/BCGS:** 103I066, 075, 076, 085, 086, 087

LATITUDE: 54 ° 45 ' " **LONGITUDE:** 128 ° 54 ' " **(at centre of work)**

OWNER(S):

1) Eagle Plains Resources Ltd 2)

MAILING ADDRESS:

Suite 200, 44-12th Ave S.
Cranbrook, BC, V1C 2R7

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

1) Clemson Resources Corp. 2)

MAILING ADDRESS:

918-1030 Georgia St W
Vancouver, BC, V6E 2Y3

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Coast Crystalling Complex,. Cretaceous, Granodiorite, I-Type Magnetite Series, Bowser Lake Group, Jurassic-Cretaceous, Epithermail-Mesothermal veins, intermediate sulphidation, propylitic, ankerititic, sericitic, pyritic, Au, Ag, Galena, Arsenopyrite, Chalcopyrite, pyrite, Molybdenite, Sedimentary-Intrusive Contact, Roof Pendant, VTEM Geophysics, Structurally Linked Sher Zones

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: MEMPR ASSRPT 10523, 13303, 16026, 16411, 1795, 10128, 15455, 13455, 8393, 16302, 9329, 10827, 8201, 17890, 10821, 10045, 32174

Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
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)			
Core	419.11 m		
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$197,228.41

2012 GEOLOGICAL and DIAMOND DRILLING REPORT

for the

KALUM PROPERTY

Terrace B.C. Skeena MD

128°54'W / 54°45' N

TRIM Map sheets 103I066, 075, 076, 077, 085, 086, 087

Prepared for

Clemson Resources Corp.

918-1030 Georgia St W

Vancouver, BC

V6E 2Y3

By

Chris Gallagher, Project Manager

TerraLogic Exploration Inc.

Suite 200, 44-12th Ave S.

Cranbrook, BC

V1C 2R7

778-520-2000

March 7th, 2013

Summary

The Kalum Property, located about 35 kilometers northwest of Terrace, British Columbia, is comprised of 13850.22 hectares of contiguous claim units. The claims are 100% owned by Eagle Plains Resources Ltd., and subject to a 1% NSR in trust for Bernard Kreft. Clemson Resources can earn a 60% interest in the project by completing $3,000,000 in exploration, making cash payments of $250,000 and issuing 1,100,000 common shares to Eagle Plains Resources Ltd. Over a 4 year period.

The Property is centered upon a Cretaceous-age granodioritic stock of the Coast Crystalline Complex that has intruded Jurassic to Cretaceous-age sedimentary rocks of the Bowser Lake Group. A number of high-grade, vein-type gold occurrences are associated with the contact zone and magnetic signature of the intrusive stock. These occurrences have been explored by various operators and to various degrees over the past 80 years. All previous exploration efforts have been directed toward the discovery of high-grade stand-alone mineralization. The current Eagle Plains tenure represents the first time the gold occurrences have been consolidated by a single company. The 2012 exploration program focused on the Bling-Rico structure which is located in the Hat Structural Zone.

The Bling-Rico area was discovered in 2003. Mineralization occurs along the western margin of the main Allard Stock, just north of Mayo Creek. Numerous quartz veins are hosted in greywacke along a N to NNW-striking structural corridor. These veins are interpreted to represent en echelon sets of the main Rico vein and have historically returned high grade gold values (BRKMR019 – 12.1 g/t Au; CGKMV036 – 12.6 g/t Au). A highly gossanous, silicified, and pyritiferous fault zone was also sampled and returned anomalous gold values of up to 600 ppb Au (CGKMR007).

In 2004, a total of 5 diamond drill holes (414.3 m) were drilled at the Rico Vein which intersected a highly-sheared sub-vertical sinusoidal quartz-carbonate vein hosted in an altered andesitic dyke. The vein was typically heavily mineralized with ~5-10% pyrite, 1-5% chalcopyrite and 1-2% sphalerite; despite high gold grades, no visible gold was noted. Sampling of the drill core returned values of 2.5m @ 33.5 g/t Au including 0.5m @ 106.7 g/t Au.

Similar structural trends in the Hat Structural Zone are host to high-grade polymetallic showings such as the Babit and God occurrences, which represent both sub-vertical and flat-lying, possibly structurally imbricated, vein sets.

The 2012 exploration program consisted of a total of 2 diamond drill holes (420 m) from one drill pad and focused on southern strike extension of the Bling-Rico structure at lower elevations than the 2004 drilling. It was successful in intersecting the Bling-Rico structure in both holes along with similar geology and alteration styles. Although the 2012 drilling failed to intersect notable mineralization in the two holes, the pervasive alteration assemblages and their relationships to geology are similar to previous mineralization intersections and suggest that the Bling-Rico zone is a large scale continuous hydrothermal feature. Total expenses for the 2012 exploration program were $197,228.41.

The results from the 2008-2012 programs continue to support the potential for the Kalum Property to host both high-grade Au - Ag deposits and lower-grade bulk-tonnage type Au mineralization. This report includes recommendations for additional work on the property, specifically in the Hat Structural Zone and along the recently developed Northwest Transmission Line.

Total expenditures on the property by Eagle Plains and partners since 2003 are approximately $2,300,682.00.

Table of Contents

List of Figures

List of Tables

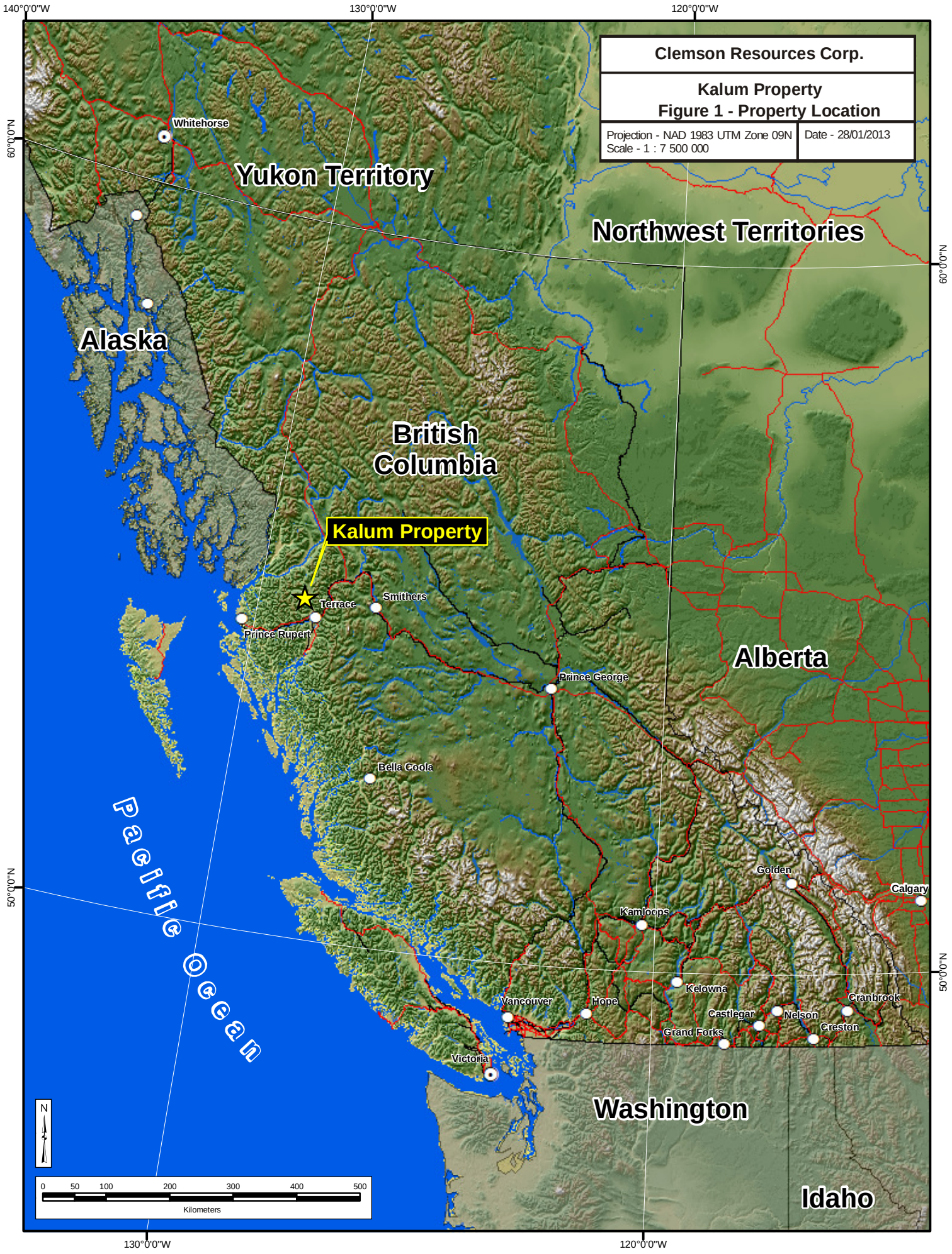
List of Appendices

Location and Access

The project area is situated 35 kilometers northwest of the city of Terrace, B.C., approximately 600 km north of Vancouver (Figure 1). The Kalum property consists of 13850.22 hectares centered at UTM 6069000 N / 504550 E on NTS mapsheets 103I066, 075, 076, 077, 085, 086 and 087. Terrace is located along the Yellowhead Highway, approximately 100km east of the major port of Prince Rupert, and 60km north of the port of Kitimat. Rail service is provided in Terrace, and direct air service is provided twice-daily from Vancouver. The project area is accessed by a network of B.C. Forest Service and private logging roads which cover most of the project area. Review of existing (year 2000) 5-year logging plans provided by Skeena Cellulose indicate that extensive roadwork and logging activities are planned for the project area, with some of the proposed activity now underway. A hydroelectric power line runs north-south along the eastern boundary of the project area.

The Property is located within the Kitimat Range of the Coast Mountains in the area of Mount Allard (1,505 meters above sea level). Elevation varies from 300 to 1,500 meters above sea level and topography is steep to moderately steep. Outcrop is present within numerous drainages and along ridges and escarpments but is sparse on timbered slopes. Much of the Property has a thin to moderate veneer of glacial till; total outcrop exposure is estimated at 10 to 20 percent. The eastern part of the claim block borders Kitsumkalum Lake and the Nelson River drainage is located directly north of the southern claim boundary. A number of small creeks and several Alpine lakes are also found on the claims. Tributary streams to the main drainages are deeply incised where they enter the larger U-shaped valleys.

The weather is typically coastal with wet summers and heavy snowfall in the winters. Large snow-drifts cover parts of the property until mid-June, with minor areas of permanent snow found only at the highest elevations and in sheltered areas. Vegetation varies from heather, blueberry and huckleberry on the upper slopes to Douglas fir, hemlock, alder and devil's club on the lower slopes below tree line.


Clemson Resources Corp.
Kalum Property
Figure 1 - Property Location
Projection - NAD 1983 UTM Zone 09N
Scale - 1 : 7 500 000
Date - 28/01/2013
140°0'0"W
130°0'0"W
120°0'0"W
60°0'0"N
50°0'0"N
Whitehorse
Yukon Territory
Northwest Territories
Alaska
British Columbia
Alberta
Kalum Property
Terrace
Smithers
Prince Rupert
Prince George
Bella Coola
Pacific Ocean
Golden
Calgary
Kamloops
Kelowna
Vancouver
Hope
Castlegar
Nelson
Cranbrook
Creston
Grand Forks
Victoria
Washington
Idaho
N
0 50 100 200 300 400 500
Kilometers

Tenure

The property consists of 34 MTO mineral claims totalling 13850.22 Ha, located within NTS mapsheets 103I066, 075, 076, 077, 085, 086 and 087 (Figure 2). All claims are currently good to January 08, 2016. Eagle Plains Resources Ltd. owns a 100% unencumbered interest in the Property, and holds a 1% Net Smelter Return in trust for Bernard Kreft.

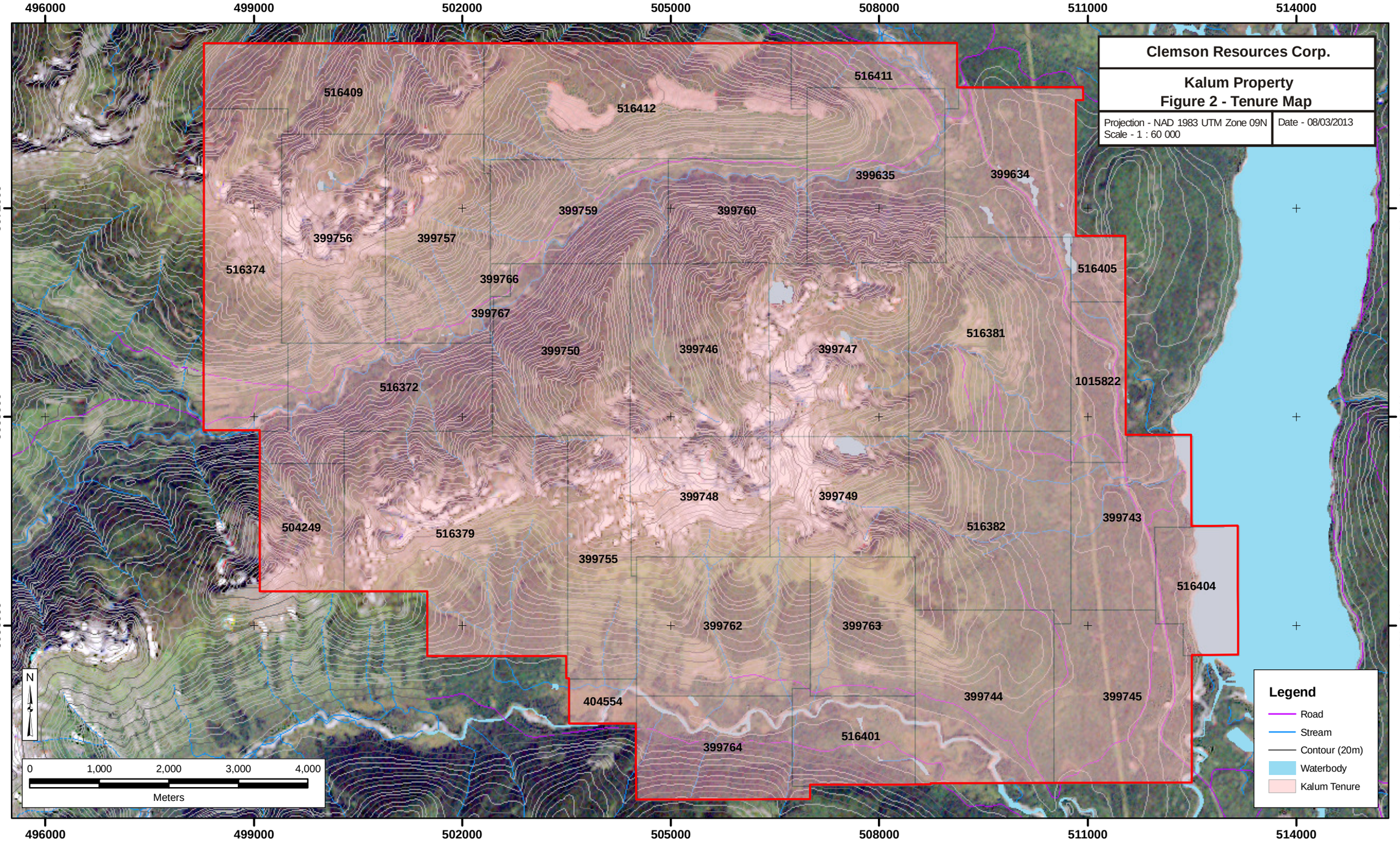
The property was optioned to Clemson Resources Corp. on July 16, 2012, where as they can earn a 60% interest in the property, by completing $3,000,000 in exploration expenditures, making cash payments of $250,000 and issuing 1,100,000 common shares to EPL over a four year period.

Table 1 – Kalum Tenure Summary

Tenure Number	*Owner**	*Good To Date*	*Ha*	*Claim Name in MTO*
399634	138073 (100%)	2016/jan/08	500.00	YCC 1
399635	138073 (100%)	2016/jan/08	500.00	YCC 2
399743	138073 (100%)	2016/jan/08	500.00	YCC 6
399744	138073 (100%)	2016/jan/08	500.00	YCC 7
399745	138073 (100%)	2016/jan/08	500.00	YCC 8
399746	138073 (100%)	2016/jan/08	500.00	YCC 9
399747	138073 (100%)	2016/jan/08	500.00	YCC 10
399748	138073 (100%)	2016/jan/08	400.00	YCC 11
399749	138073 (100%)	2016/jan/08	400.00	YCC 12
399750	138073 (100%)	2016/jan/08	500.00	YCC 13
399755	138073 (100%)	2016/jan/08	350.00	YCC 18
399756	138073 (100%)	2016/jan/08	450.00	YCC 19
399757	138073 (100%)	2016/jan/08	450.00	YCC 20
399759	138073 (100%)	2016/jan/08	450.00	YCC 22
399760	138073 (100%)	2016/jan/08	300.00	YCC 23
399762	138073 (100%)	2016/jan/08	500.00	YCC 25
399763	138073 (100%)	2016/jan/08	300.00	YCC 26
399764	138073 (100%)	2016/jan/08	375.00	YCC 27
399766	138073 (100%)	2016/jan/08	25.00	YCC 64
399767	138073 (100%)	2016/jan/08	25.00	YCC 65
404554	138073 (100%)	2016/jan/08	100.00	DREAM 19
504249	138073 (100%)	2016/jan/08	223.91	HAT 3
516372	138073 (100%)	2016/jan/08	522.20	

Tenure Number	***Owner****	***Good To Date***	***Ha***	***Claim Name in MTO***
516374	138073 (100%)	2016/jan/08	559.20	
516379	138073 (100%)	2016/jan/08	933.08	
516381	138073 (100%)	2016/jan/08	671.30	
516382	138073 (100%)	2016/jan/08	671.76	
516401	138073 (100%)	2016/jan/08	280.15	
516404	138073 (100%)	2016/jan/08	205.31	
516405	138073 (100%)	2016/jan/08	74.58	
516409	138073 (100%)	2016/jan/08	503.03	
516411	138073 (100%)	2016/jan/08	223.58	
516412	138073 (100%)	2016/jan/08	857.13	
1015822	138073 (100%)	2016/jan/08	186.50	

*138073 is Eagle Plains Resources Ltd.


Clemson Resources Corp.
Kalum Property
Figure 2 - Tenure Map
Projection - NAD 1983 UTM Zone 09N
Scale - 1 : 60 000
Date - 08/03/2013
496000
499000
502000
505000
508000
511000
514000
6072000
6069000
6066000
516409
516411
516412
399635
399634
399759
399760
399756
399757
516374
516405
399766
399767
516381
399750
399746
399747
516372
1015822
399748
399749
504249
516379
399743
516382
399755
516404
399762
399763
404554
399744
399745
516401
399764
N
0
1,000
2,000
3,000
4,000
Meters
Legend
Road
Stream
Contour (20m)
Waterbody
Kalum Tenure

History and Previous Work

Previous exploration on the Property was directed at evaluating a number of separate mineral showings now located within the Kalum Property boundaries. Prior to Eagle Plains involvement in the project, each showing area had been worked at various times by various owners and operators; the current Eagle Plains land position represents the first time the mineral showings have been consolidated and evaluated as a whole by a single owner. The locations of the Minfile Showings with respect to the Property boundaries are shown in Figure 2.

Kalum Lake and Burn Occurrences

MINFILE NAME **KALUM LAKE**; OTHER NAMES PORTLAND, BAV, GOLD BAR, BURN

MINFILE NUMBER **103I 019**

and

MINFILE NAME **BURN**; OTHER NAMES KALUM LAKE, PORTLAND

MINFILE NUMBER **103I 211**

The earliest recorded activity on the Kalum Lake and Burn showing area is 1919 when C.A. Smith of Terrace staked the original Lakeside claims. The Portland and West Portland claims were staked in 1922. Between 1923 and 1925 the newly-formed Kalum Mines Ltd. conducted considerable work on the Property which consisted of shaft-sinking and drift-development along the main (Portland - #1) vein discovered in 1919. Two shafts were sunk with the east shaft reaching 9.1 meters (m) (30 feet) depth and the main or west shaft developed to 18.2 meters (60 feet) with 64 meters (210 feet) of drifting westerly along the vein. A selected grab sample collected in 1930 assayed 21.3 grams per tonne (g/t) (0.62 ounces per ton (oz/t)) gold and 75.4 g/t (2.2 oz/t) silver. Approximately 90 meters (295 feet) southeast of the main vein, Kalum Mines Ltd. put in a 26-meter (85 foot) adit along a second vein (#2 Vein). Assay values from samples of this vein collected in 1937 contained only minor amounts of gold and silver.

In 1972 the original claims were restaked as the Bav 1 - 4 by J. Apolczer of Terrace, B.C. One drill hole 114 m (374 feet) in length was drilled in an attempt to intersect the main vein and a zone of silicification lying adjacent to the known mineralized structure and workings. Drill records indicate that the main vein was not located but granodiorite with areas of quartz veining and weak alteration were intersected. Gold and silver values ranged from 0.07 to 0.38 g/t (0.002 - 0.011 oz/t) and 2.7 g/t to 0.68 g/t (0.08 - 0.02 oz/t) respectively. It is believed that this hole was drilled almost parallel to the strike of the main vein (Cavey and Chapman, 1987). The total cost of the 1972 program was $9408.07.

In November of 1983 the property owner was Bradner Resources. Kalum Lake Mining Group was formed at this time and they trenched and sampled along the Main and #2 veins. Values up to 251 grams per tonne (g/t) (7.32 oz/t) gold and 225.6 g/t (6.58 oz/t) silver were obtained in a few grab samples collected from the #2 vein. Five trenches were dug using a tracked hoe accompanied by blasting and hand trenching. Several of the trenches did not reach bedrock and were abandoned due to slope stability concerns. This work was not filed for assessment and no record of the costs have been located.

In 1984 OreQuest Consultants was retained by Bradner Resources to complete a soil geochemical survey over the southwestern portion of the claim block (Burn Showing area). A total of 576 soil samples and 17 rock samples were collected. A four-kilometer cut base line was used for control. Results from the survey indicated a coincident gold - silver - arsenic anomaly in the area of a granodiorite knob (Cavey and Howe, 1984). The highest gold value returned from the soil geochemical survey was 9400 ppb. The total cost of the 1984 program was $18,540.62.

In 1987 a 395-meter (1300 foot) NQ diamond drilling program was undertaken on the Kalum property under the supervision of OreQuest Consultants Ltd. At the time the claims were owned by Terracamp Development Limited through an option with the Kalum Lake Mining Group. The objective of the program was to test the known gold bearing quartz veins and to locate additional mineralized zones. Two holes were drilled from one setup, with a third hole collared approximately 60 meters southeast. The continuity of the vein systems and mineralization was established to a depth of 120 meters and 65 meters for the #1 and #2 veins respectively. Strike extensions of 150 meters on the #1 vein and 60 meters on the #2 vein were also proven. Visible gold was encountered in the #2 vein in holes DDH-TR-87-1 and 87-2, and was also present at surface in the #1 vein. Assay values of up to 63.22 gm/t (1.86 oz/t) gold and 170 gm/t (4.9 oz/t) silver were returned from drill intersections which were comparable with high grade surface samples of up to 250.3 gm/t (7.3 oz/t) gold and 476.6 gm/t (13.9 oz/t) silver. Anomalous gold values were also recorded for up to 5 meters on either side of the #2 vein (Cavey and Chapman, 1987). Drillcore from the 1987 program was stored at the drillsites but was not found during the recent property visit.

A 52.4 kilogram bulk sample taken from these veins assayed 11.86 grams per tonne gold and 15.43 grams per tonne silver. Inferred reserves reported for the two main veins are estimated at 9434 tonnes grading 16.1 grams per tonne gold to a depth of 45 meters (Collins and Arnold, 1987). The authors of this report do not believe that this inferred reserve estimate is in accordance with sections 1.3 and 1.4 of the Instrument. Further diamond drilling was recommended to test the vertical and lateral extensions of the vein systems. Additional mapping, sampling and trenching with follow up diamond drilling was also recommended for the south (Burn) showing area. Reconnaissance sampling of historical trenches in the area of the Burn showing returned values of up to 16.8 gm/t (0.49 oz/t) gold, 242.1 gm/t (7.06 oz/t) silver and 0.5% copper. The total cost of the 1987 program was $65,780.48.

In 1987, Terracamp Developments Ltd. retained Guillermo Salazar, P.Eng. to evaluate the potential grade and tonnage available in the Main (#1) and #2 veins on the Kalum Lake property. The Salazar report relied on data generated by past work programs, mainly that by OREQUEST Consultants Ltd. (Cavey and Howe, 1984; Cavey and Chapman, 1987).

The 1987 Salazar report recommended a multi-stage revenue-producing program designed to confirm the resources on the Kalum Lake property. Stage One recommendations included preparation of a topographic contour map from 1:20,000 scale air photos, re-opening of the trench between the high grade pit and hole TR-87-3 in the #2 vein and drilling into the Main and #2 veins. Salazar suggested the material extracted from the trench be processed and the gold thus recovered sold. Stage Two recommendations included re-opening of the 1923 adit after confirmation that it followed the #2 vein and/or trenching to the northeast from the high-grade pit. Stage Three recommendations included driving an adit into the upper fifteen meters of the #2 vein. Stage Three work was dependent on results from the first two stages. The total cost estimated for completion of Stage One, Two and Three was approximately $300,000.00. (Salazar, 1987).

The last work recorded on the Kalum Lake property was in 1988. Terracamp Developments Ltd. retained Richard E. Arndt, P.Eng., P.Geol., to carry out an underground exploration program. The purpose of this work was to obtain a bulk sample of material from a quartz vein exposed at the surface by trenching, and to determine the lateral and "at depth" size and grade of the #2 Vein. The planned work consisted of driving a crosscut to the vein from the north and then drifting along the vein to collect a sample of "ore grade" material. A small underground diamond drilling program was also anticipated.

McElhanney Associates of Terrace was retained to prepare a detailed topographic map of the site surrounding the proposed mining activity and to be involved in surveying of the portal and underground workings. The map was done at a scale of 1:500 with 2 m contour intervals. Based on the results from this work, an under ground program of approximately 100 meters was anticipated, consisting of an initial 2.45 m by 2.45 m (8 ft by 8 ft) crosscut and a 2.13 m by 2.13 m (7 ft by 7 ft) drift. The design also included three diamond drill stations. The mine design was for a tracked crosscut with a timbered trestle at the portal to dump muck cars. Northward Mining Contractors was mobilized to the site on September 6, 1988 and the portal was collared on September 9. On October 11th, the #2 Vein was intersected at 91.6 m from the portal mouth and the crosscut was terminated at 94.18 m. This face is also approximately the south wall of the 1920's drift, with the back of the 1920's drift one meter below the floor of the 1988 crosscut. A bulkhead was placed in front of the break into the old drift and a slash was started to turn on the #2 Vein.

On October 12, 1988, due to budget considerations, work was halted on the slash and Northward started demobilization of their equipment and crew. After the mining contractor left the site, OreQuest Consultants Ltd. surveyed, mapped and sampled the crosscut and sampled the old drift. However, the area where the crosscut broke into the old drift was very unstable, with bad ground on the back of the drift. Therefore, no detailed mapping or sampling program was attempted.

Recommendations from the program included surface diamond drilling to test the #2 Vein carefully along its strike length and down dip extension to better establish control for further underground exploration drifting. There was no statement of costs included with the 1988 report.

Quartz-Silver and Allard Occurrences

MINFILE NAME **QUARTZ – SILVER**; OTHER NAMES QS1 - 6

MINFILE NUMBER **103I 018**

and

MINFILE NAME **ALLARD**

MINFILE NUMBER **103I 151**

The original discovery was made by Mr. John Apolczer in 1968 who exposed a well mineralized quartz-sulfide vein during road building for logging operations. The Quartz - Silver claims were located by Mr. Apolczer and a Mr. Bates to cover this showing. Subsequently trenching and blasting were undertaken to increase exposure of the discovery showing and several other zones were identified. The first record of work on the Quartz - Silver claims was carried out by W.M. Sharp for Atlantis Mines in 1969. This consisted of preliminary geological mapping and sampling, primarily along the road cut. In 1970 Mr. Apolczer and Mr. Bates had the property returned to them and completed two

pack-sack diamond drill holes in the vicinity of the quartz-sulfide vein. Recovery was poor, however sludge samples were collected and assayed. No record of the results was found.

In 1985 Imperial Metals acquired an option on the property and conducted geological mapping and soil sampling (EMPR ASS RPT 13455). The bulk of this work was carried out in the vicinity of the main showing. A 3.5 kilometer grid was established and approximately 112 hectares was mapped on a scale of 1:5000. A total of 132 soil samples were collected and analyzed by multi element I.C.P. with gold analyzed by atomic absorption. Some weak coincident gold - lead soil anomalies were reported from this work; however no follow up was implemented. A 60 centimeter chip sample across the main sulphide vein returned values of 0.34 g/t (0.01 oz/t) gold, 78.9 g/t (2.3 oz/t) silver, 7.74% lead and 15.38% zinc. The total cost of the 1985 program was $7025.00.

The last recorded work on the Quartz - Silver MinFile showing was in 1987, at which time the ground was held by Mount Allard Resources through an option agreement with the Kalum Mining Group. The work was carried out by OreQuest Consultants Limited (EMPR ASS RPT 16411), and the program included geological mapping, soil and rock geochemistry, prospecting, VLF and magnetometer surveying. Cut lines were established over two zones on the property for survey control. A total of 828 soil samples, 90 silt samples, 8 rock chip samples, and 14 rock samples were collected. Soil and silt geochemical surveys outlined a number of weak to moderate gold - silver - lead - zinc - copper anomalies. Results of the VLF and magnetometer surveys were largely inconclusive, with a weak east - west trend identified by the magnetometer on the northern grid. Mapping was limited to creek beds and road cuts due to overburden cover over most of the property. A number of felsic dykes, as well as minor quartz - sulphide veins were noted. A program of additional geochemical sampling and trenching was recommended. The cost of the program was not included in the assessment report.

Misty Occurrence

MINFILE NAME **MISTY;** OTHER NAMES MOSS, CREEK

MINFILE NUMBER **103I 213**

The Misty Claim was staked by C.C.H. Resources Ltd. during 1979 on the basis of a stream sediment anomaly indicated by a B.C. Ministry of Mines regional silt sampling program. Geological mapping, prospecting, silt sampling and reconnaissance soil sampling were carried out during 1979 and 1980. The soil geochemistry indicated widespread anomalous gold and arsenic values to the east of the Misty Claim and led to the staking of the Misty I Claim during 1981. The total costs of the programs were $2193.98 and $8210.99 respectively.

In August 1980, the Misty claim was sold to C.C.H. Resources Ltd.'s parent company, Campbell Chibougamu Mines Ltd. which later changed its name to Campbell Resources Inc. The claims were then sold to another wholly owned subsidiary, C.C.H. Minerals Ltd. on April 6th 1981 with Campbell Resources remaining as operator. Campbell Resources completed geological mapping and soil sampling in 1981 (EMPR ASS RPT 10128). A total of 303 soil samples and 6 rock samples were collected and analyzed for Au, Ag, and As. The soil geochemistry indicated a large area with anomalous gold values. The total cost of the 1981 program was $17,959.75.

An extensive program was carried out by Campbell Resources during 1982 to investigate the gold anomalies (EMPR ASS RPT 10827). This included staking the Misty II Claim and hand-trenching and rock geochemistry over the soil geochemical anomalies. A total of 40 soil samples and 113 rock chip

samples were collected and a total of 102 meters of trenching and 270.21 meters of NQ diamond drilling was completed. A system of auriferous quartz veins and veinlets in a fracture zone was found in the soil geochemical anomaly on the Misty I Claim. Assays of up to 77.30 gms per tonne (2.25 oz/ton) gold were obtained from the narrow veinlets. Chip sampling in the trenches returned values of up to 21.6 g/t Au over 60 centimeters and 4.9 g/t over 1.1 meters. The geochemical results indicated good correlation between bedrock gold sources and anomalous soil samples. Five diamond drill holes tested the fracture zone and gold soil geochemical anomaly in the area of the "Wishbone" anomaly trenches. Core recoveries were very poor and led to inconclusive results. Further work was recommended including detailed mapping, soil geochemistry, trenching and diamond drilling. The total cost of the 1982 program was $68,825.56.

Mascot Gold Mines Ltd. purchased the claims in 1984. In 1986, Mascot Gold carried out prospecting and soil geochemical and geophysical surveys (EMPR ASS RPT 15455). A total of 336 soil samples, 3 silt samples and 87 rock samples were collected. The results extended existing soil geochemical anomalies and located additional gold soil anomalies. A total of 8.725 line kilometers of VLF and 7.8 kilometers of total field magnetics were run. The magnetic survey was successful in locating the contact between sedimentary and intrusive rocks. The results from the VLF survey were largely inconclusive. The total cost of the 1986 program was $36,532.00.

1987 work by Mascot consisted of linecutting, prospecting and soil and rock geochemical sampling (EMPR ASS RPT 16302). Several gold geochemical anomalies with coincidental arsenic, lead and zinc anomalies were found. The Creek and Moss Veins were also located during this time, and the Misty 3 and 4 Claims were staked. Further work was recommended including geological mapping, trenching, soil sampling and diamond drilling. The total cost of the 1987 program was $50,879.77.

In 1988, the property was acquired by Corona Corporation with the 1988 field program on the Misty claims funded by Goldways Resources Ltd. The 1988 program concentrated on investigating the gold geochemical anomalies and quartz veins on the Misty 4 and Misty Claims (EMPR ASS RPT 17952). Soil sampling, magnetometer and VLF EM surveying, geological mapping and prospecting was carried out. A total of 110 rock samples and 560 soil samples were collected and analysed for 31 element ICP plus gold by fire assay.

No broad gold soil geochemical anomalies were located by the 1988 program. A number of quartz bedrock and float samples located on the property gave anomalous values in gold and silver. Prospecting of the previously-located soil anomalies indicated that trenching would be required to determine the causes of the anomalies. A total of 20.5 kilometers of VLF Electromagnetic and 20.8 kilometers of Total Field Magnetic ground surveying were completed. The magnetic survey appeared to be partially successful in distinguishing contacts between intrusive and sedimentary rocks. The VLF EM survey indicated four main northwest-trending conductor systems. A limited program of trenching was carried out on the Creek and Moss veins. Recommendations for further work included:

1) Completing the magnetometer and VLF EM surveys on the 1987 and 1988 grids.

2) Completing the geological mapping and prospecting over the remaining parts of the property.

3) Investigating the VLF EM conductor systems by prospecting and/or trenching to test their association with shearing and possibly quartz veining and precious metal mineralization.

4) Investigating the 1987 gold and arsenic soil geochemical anomalies by hand trenching.

5) Completing the trenching and sampling on the Creek and Moss veins to fully evaluate them.

The total cost of the 1988 program was $55,000.00. The 1988 program is the last work recorded on the Misty Property and Misty showing area.

Chris Occurrence

MINFILE NAME **CHRIS;** OTHER NAMES ORO, IKE, BEAVER, MAYOU, LAURA

MINFILE NUMBER **103I 174**

The Chris vein showing was first staked in 1945 by S.R. Ling and W. Jorgenson. Minimal work was done by the original stakers. The first physical work, in the form of a number of trenches, was done in 1950 by Lake Expanse Gold Mines Ltd. No further work was done until 1959 when Conwest Exploration Co. Ltd. located a number of new trenches and put in a good walking trail to the property from the existing logging road system. Samples from their trenching averaged 0.5 oz/ton Au and 2.8 oz/ton Ag, with assays up to 4.96 oz/ton Au and 173 oz/ton Ag. Conwest dropped their option on the property and nothing was done on it until 1962 when Kootenay Base Metals drove a 57.1m (202') adit into the vein structure.

No other significant work was done on the Property until Prism Resources Limited staked the Chris claims in September 1979. Prism's 1980 work consisted of clearing the portal, cleaning and mapping the adit. (EMPR ASS RPT 8393). The 1980 report concluded that the 1962 adit was in sound shape, but appeared to have missed the major shear vein system exposed on surface in the area of the portal. Recommendations included detailed sampling of veins, surface prospecting and geophysics to determine the presence of parallel structures to the main vein system, and underground diamond drilling. The total cost of the 1980 program was $7179.82.

1981 work by Prism Resources included: l22.7m (402.5') of IAX drilling in five holes; geological mapping at a scale of 1:1000 over a grid 300m x 200m; cleaning, blasting and sampling of 23 old and new trenches; installing a geochemical grid 400m x 250m with a 50m line spacing and a 25m sample spacing; collecting a total of 99 samples and conducting a topographic survey of the two previously mentioned grids.

The results from the 1981 program indicated that gold and silver values were relatively consistent throughout the 300m length of the main vein system: the average value of chip samples collected along the entire 300 meter length of the vein was 11.25 g/t Au, 80.57 g/t Ag and 1.4% Pb. The greatest widths of the vein are at the east and west ends; the west end is cut off by cliffs but the east end is still open to further exploration. Sampling of another vein 40 meters to the south of the Main vein returned an average value of 2.09 g/t Au, 8.23 g/t Ag and 0.1 % Pb over approximately 35 meters of strike length. Soil geochemichal results indicate the presence of a possible mineralized structure along strike to the east of the known Main vein and continuing for another 300m.

Five IAX-size drill holes, three from surface (107.0m) and two underground (15.5m), with an aggregate length of 122.7m (402.5') of IAX-size core were drilled to test for surface and underground extensions of the Main vein. Core recoveries were very poor and although mineralized quartz veins were intersected, the size and grade of the veins could not be evaluated (Cavey, 1981). The drill contract was terminated because the drill was not getting the recoveries necessary to properly evaluate the property.

Recommendations included in the 1981 report were for further diamond drilling using a larger drill to improve core recovery. The report also concluded that consideration must be given to road access to the property from the existing system of logging roads. The total cost of the 1981 program was $48,591.87.

Martin Occurrence

MINFILE NAME **MARTIN;** OTHER NAMES NOBLE, REX, GLEN NO.1

MINFILE NUMBER **103I 020**

No assessment work has been recorded on the MARTIN showing area. The MARTIN mineralization consists of gold-bearing quartz veins near the contact between sediments and granodiorite. A 30.0 centimeter sample collected from the main vein assayed 8.2 grams per tonne gold, 137 grams per tonne silver and 4.0 per cent lead (Minister of Mines Annual Report 1928). A second parallel vein, 50 meters from the main vein assayed 6.8 grams per tonne gold and 12.3 grams per tonne silver over 0.18 meters (Geological Survey of Canada Memoir 205).

Hat Occurrence

MINFILE NAME **HAT;** OTHER NAMES DRUM, KIT

MINFILE NUMBER **103I 173**

Don Young and Peter Ogryzlo staked the KM and Drum claims in 1979 to follow up a reconnaissance geochemical survey sponsored by the B.C. Dept. of Mines and Petroleum Resources which indicated that the Mayo Creek ridge was anomalous in arsenic and silver. Reconnaissance prospecting and following float and stream sediment dispersion trains led to the discovery and acquisition of the Hat and Flare claims in 1980. The first recorded assessment work on the HAT showing area is 1981(EMPR ASS RPT 10045). The property owners undertook stream sediment sampling, prospecting, and geological mapping. Detailed sampling was conducted on the projection of the CHRIS vein mineralization onto the KM9 claim, and on the DRUM arsenopyrite showing. A total of 40 stream sediment samples, fifteen soil samples and ten rock chip samples were collected and analyzed for Au, Ag, Hg, Cu, Pb, Zn, As and Co. The report concluded that precious metal values appeared to be associated with quartz-arsenopyrite veins, which in turn appear to be associated with a diorite intrusion. Further work including detailed soil geochemistry, trenching and diamond drilling was recommended. The total cost of the 1980 - 81 work was $7682.00.

The last-recorded work on the property was conducted by the owners during the 1982 field season (EMPR ASS RPT 10821). The goal of the project was to map and sample veins on the Property. Geological mapping was included in the sampling program, and float prospecting was used to search for other veins. Geochemical rock analyses were performed to clarify trace element associations with the precious metals. A total of 16 float samples, 19 grab samples, 11 chip samples and one stream sediment sample were collected. The samples were analysed using a thirty-element ICP package. A number of quartz veins with arsenopyrite, galena, sphalerite and pyrite were noted, generally associated with a later diorite intrusive. The best geochemical values returned were 41.10 g/t Au and 9587.8 g/t Ag from a chip sample of vein material. The total cost of the 1982 work was $5890.00.

The Full and Moon claims were staked in 1986 by Don Young and Peter Ogryzlo to cover mineralized quartz veins discovered approximately 3 kilometers southwest of the CHRIS showing. The veins were discovered by following up stream-sediment geochemical anomalies and quartz float dispersion trains.

No previous reference to these veins is known, and therefore the largest vein may have been exposed by retreating snow and ice shortly before the discovery.

The object of the 1987 program was to chip sample and map the most highly-mineralized veins discovered during the initial exploration, to sample the mineralized stockwork zones, and to extend the area of mapping and prospecting (EMPR ASS RPT 17890). Geological mapping located a number of precious-metal-bearing quartz veins clustered in and around a younger composite multiphase stock of predominately diorite composition. A total of 7 soil and 26 rock samples were collected and analyzed by induced coupled plasma (ICP) for Cu, Pb, Ag and AS, with all samples analyzed for Au using AA.

Over thirty veins were noted associated with the diorite stock, fifteen of which had significant precious metal values. The 5000 vein returned values of 6.1 g/t Au and 17.3 g/t Ag from a 100-cm chip sample, the 4700 vein returned values of 7.3 g/t Au and 1077 g/t Ag from a 45-centimeter chip, and the PICK vein returned 4.8 g/t Au and 380 g/t Ag over a 70-cm chip. Samples from veins discovered during the 1987 program also returned precious metal values of up to 5.7 g/t Au and 429.6 g/t Ag from a 30-centimeter chip. Also significant was a grab sample of ankeritic vein material collected from a talus field which returned a value of 50.4 g/t Ag. Further work was recommended for the Full and Moon claims including more detailed sampling at depth of the 5000, 4700 and PICK veins to determine potential for economic tonnage and grade, as well as more detailed sampling on the veins discovered during 1987. The report also recommended further exploration of ankeritic alteration zones. The total cost of the 1987 program was $4824.95. Work by Eagle Plains Resources in 2003 indicated that the Full / Moon showing is likely the same structure referred to as the Hat.

History of work by Eagle Plains Resources Ltd.

2003 Exploration by Eagle Plains Resources Ltd.

Eagle Plains Resources Ltd. completed a significant exploration program on the Kalum Au-Ag property between June and August 2003. The program included geological mapping and prospecting, rock grab and channel sampling, and stream sediment and soil sampling. The program was very successful and defined numerous new, high-grade zones of Au-Ag mineralization. These included four new showings: Bling/Rico, Tuppie, Tojo and Nelson Creek. In addition, many of the historical showings on the property were located, sampled and surveyed. This work confirmed that the Kalum property is highly prospective for economically viable, Au-Ag epithermal vein-type deposits.

The 2003 exploration program consisted of silt sampling, soil sampling, geological mapping, and prospecting. A total of 1225 soil samples, 408 rock samples and 341 silt samples were collected with 1:10000 scale geological mapping traverses over approximately 100 square kilometers. For a detailed account of the 2003 exploration program and results, please refer to Downie and Mosher, 2003 and Downie and Stephens, 2003. Total expenditures for the 2003 exploration program were C$258,745.60.

2004 Exploration by Eagle Plains Resources Ltd.

2004 work by Eagle Plains followed up on recommendations generated by the 2003 work. This consisted of a three-phase program that included a 1512.3 km winter VTEM airborne geophysical survey and a very extensive geochemical program that included 1578 soil samples, 158 rock samples, 152 vein samples and 7 silt samples. A two week, 5-person fly camp was also established just below the Tuppie showing. This program also included a 19 hole diamond drill program which intersected

high-grade Au mineralization at every showing tested. For a detailed account of the 2004 exploration program and its results, please refer to Downie and Gallagher, 2004. Total expenditures for the 2004 exploration program were C$909,719.

2005 Exploration by Eagle Plains Resources Ltd.

Analytic results derived from the 2003 - 2004 geologic, geophysical, and geochemical dataset is consistent with the Hat area of the Kalum property possessing the best potential to host high-grade and bulk-tonnage Au mineralization. Eagle Plains Resources Ltd. developed an exploration program to test this new theory. It consisted of a two week, 10 person fly camp in the Hat area, from which surficial geology and geochemistry exploration programs were based. A modest diamond drilling program, consisting of 3 holes from one pad totaling 568.75m was also based from this camp. Although the limited drill program did not intersect ore grade Au-Ag mineralization, results from the surface programs were very encouraging, resulting in the discovery of three new high-grade polymetallic Au – Ag showings. Total 2005 exploration expenditures by Eagle Plains Resources Ltd. on the Kalum property was $327,086.87.

On October 09, 2007 Mountain Capital Inc. and Eagle Plains Resources Ltd. signed a letter of intent pursuant to an option agreement on the Kalum Property. Under the terms of the option agreement MCI can earn a 60% interest in the Kalum Property, commencing on the date of signing of a formal Agreement by both parties, by making make cash payments to Eagle Plains totalling $500,000, carrying out $4,000,000 in exploration expenditures on the Property and issuing an aggregate of 500,000 common shares of MCI.

2008 Exploration by Eagle Plains Resources Ltd.

The 2008 exploration program by funded by option partner Mountain Capital Inc. was directed towards exploring and attempting to define a broad zone of gold mineralization in a satellite granodiorite "stock" located on Tenure #399745 in the SE corner of the property. The work program consisted of 7.75 line km of grid establishment, collection of 55 soil samples, 8 rock samples, 4.1 line km of I.P. survey and the drilling of 11 NQ diamond drill holes. .W. Murton and Associates conducted the program on behalf of Mountain Capital Inc.

The results from the 2008 exploration program revealed that the granodiorite "stock" that was the focus of exploration is in fact a thrust emplaced granodiorite mass overlying a sequence of argillite / greywacke. Weak but pervasive gold mineralization associated with pyritic quartz stringers and veinlets is widespread in the stock.

The total expenditure on the property by Mountain Capital Inc. in 2008 was $311,282.16. $305,252.56 of this amount was filed for assessment purposes and resulted in the extension of the valid dates for all tenures listed to November 30, 2010.

2009 Exploration by Eagle Plains Resources Ltd.

The 2009 fieldwork by Eagle Plains at the Kalum included an Induced Polarization geophysical program that extended the grid in the area of the Burn showing, as well as a prospecting and geochemical sampling program in the areas of the Hat, Cirque, Tuppie, Babit and Misty showings. The results were very favourable, with the discovery of a new high grade gold showing in the Cirque area,

and the definition of high priority geophysical targets.

It has been interpreted that the majority of showings in the area, including the Tuppie, the HAT, the Trango, the Cirque Zone and collectively referred to as the Hat Structural Zone, are structurally linked and represent a single large- scale mineralized system over 1 km^2 in size. As part of the 2009 exploration program, two days were spent in the area of the Hat Structural Zone which confirmed the widespread nature of the mineralization. The best sample collected during the 2009 program was a grab sample from the Cirque Zone, DKKMR002, which returned 973 g/t Au and 502 g/t Ag. Another occurrence near this location returned 2.54 g/t Au and 32.3 g/t Ag (AHKMR039), while a third occurrence returned 0.12 g/t Au, 100 g/t Ag, 2.5 % Pb and 7.2 % Zn (AHKMR038).The area is attractive because these zones are structurally repeated on a scale of 50m, over a thickness of 300m, making it an excellent target for a bulk-tonnage, low-grade, open pit operation.

The total cost of the 2009 program was $109,835.43.

2010 Exploration by Eagle Plains Resources Ltd.

An 18 day helicopter supported diamond drill program was conducted on the Kalum property from 6th to the 24th of August, 2010. The program consisted of two days of geologic mapping in the Cirque and Tuppie Zones and a total of thirteen days of drilling from three pads including mob and demob. A total of 419.11m of NQ core was drilled from six holes.

The goal of the program was to drill test high-grade shear-hosted quartz-carbonate veins and breccias that are present in the cupola of the Allard Stock. These north-south striking shear-hosted veins are interpreted to be continuous from the Cirque Zone to the Tuppie Zone (Figure 4).

Unfortunately results from the program at the Cirque and Tuppie Zones were disappointing and did not confirm the presence of high-grade structurally controlled Au mineralization in quartz-carbonate breccias in the subsurface. The drill program did identify anomalous Au and As values within these weakly developed breccias and their iron carbonate alteration halos.

Total expenditures for the 2010 exploration program were $180 848.85.

Geology

Regional Geology

The geology in the Terrace area is dominated by a broadly anticlinal structure that trends NNE from Kitimat, has core of Paleozoic carbonate rocks and is flanked to the east and west by Mesozoic volcanics. This axis is the locus of hot springs and two stockwork-molybdenum deposits at Nicholson (Shannon) and Fiddler Creeks (Figure 3a). Evidence of rifting and extensional tectonics is seen in the Kitsumkalum valley, where Mesozoic volcanics are exposed in the valley adjacent to Paleozoic carbonates on the valley slopes. The Tseaux lava field, some 40 km north of the property, is the site of recent (400 year old) volcanic activity.

The Kalum Property lies within the Kitimat Range of the Coast Mountains physiographic subdivision, 10 km west of the boundary with the Nass Range section of the Hazelton Mountains physiographic subdivision. The Coast Mountains are comprised of Jurassic-age and older sedimentary and volcanic rocks that have been intruded by the Cretaceous Coast Crystalline Complex. This belt of granitic rocks stretches from Vancouver into the Yukon, and is comprised chiefly of granodiorite, quartz diorite and diorite.

Local Geology

The Kalum Property is located on the northeast-trending contact between dioritic intrusions of the Cretaceous-age Coast Crystalline Complex, and the fine-grained sedimentary and volcanic sequence of the Upper Jurassic to Lower Cretaceous-age Bowser (Lake) Group. The Bowser Lake Group consists mainly of marine and freshwater shale, arenite, greywacke, conglomerate, argillite, and minor tuff. Intrusions range in composition from quartz monzonite to granodiorite and diorite and vary in size from small stocks to large batholiths. Contacts between the intrusions and sedimentary rocks are generally irregular. Hypabyssal rocks, in the form of porphyritic, aplitic, and basaltic dikes and sills, intrude both the sediments and Coast granitoids. On the northern part of the Property, in the area of the Chris occurrence, cross cutting rhyolite dykes have also been reported (Young and Ogryzlo, 1988).

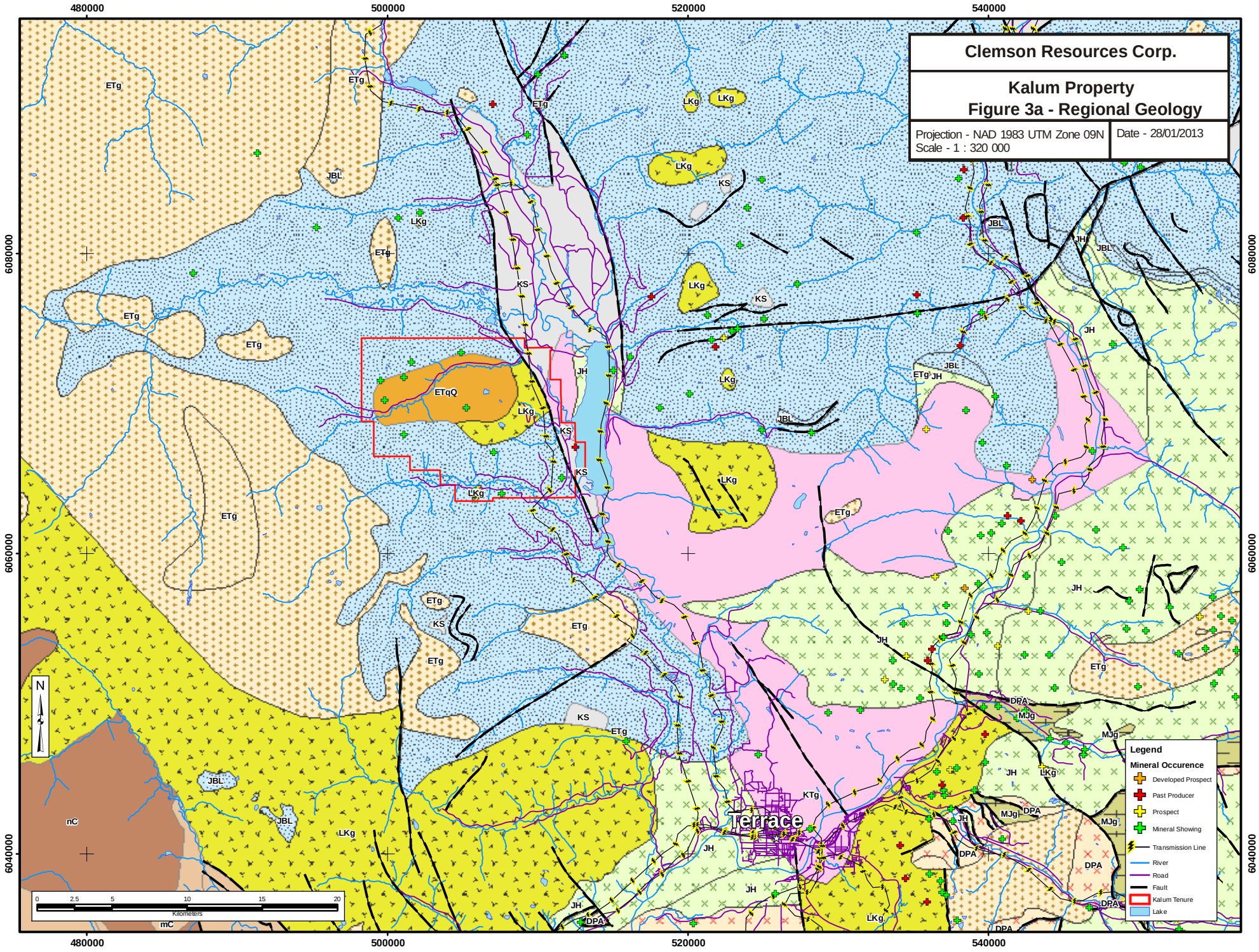

Clemson Resources Corp.
Kalum Property
Figure 3a - Regional Geology
Projection - NAD 1983 UTM Zone 09N
Scale - 1 : 320 000
Date - 28/01/2013
480000
500000
520000
540000
6080000
6060000
6040000
Terrace
Legend
Mineral Occurence
Developed Prospect
Past Producer
Prospect
Mineral Showing
Transmission Line
River
Road
Fault
Kalum Tenure
Lake
Kilometers
ETg
ETqQ
LKg
KS
JBL
JH
DPA
MJg
KTg
nC
mC

Figure 3b - Regional Geology Legend

after Journeay J.M. and Williams S.P., 1996

Tertiary

ETqQ — **Quanchus Suite** - hbl-biotite-granite - Terrane-stitching plutons of the Omineca / Intermontane / Coast / and Insular belts

ETg — **Undivided plutonic assemblage** - granodiorite / leucogranodiorite / qtz-monzonite / qtz-diorite / tonalite

Cretaceous

KTg — **Undivided plutonic assemblage** - granodiorite / leucogranodiorite / qtz-monzonite / qtz-diorite / tonalite

LKg — **Undivided plutonic assemblage** - granodiorite / leucogranodiorite / qtz-monzonite / qtz-diorite / tonalite

KS — **Skeena** - greywacke / sandstone / siltstone / shale / conglomerate / coal - easterly derived back-arc clastics

Jurassic

MJg — **Undivided foliated plutons** - hbl-bt-diorite / granodiorite - amalgamated by Latest Jurassic/accreted to continental margin in Late Jurassic and Cretaceous time

JH — **Hazelton volcanics** - basalt / andesite / rhyolite / dacite / pyroclastics - amalgamated by Latest Triassic time and accreted to Ancestral North America in the Jurassic

JBL — **Bowser Lake** - conglomerate / sandstone / siltstone / shale / limestone / coal - post-Accretion back-arc (?) and foredeep clastic wedge on Stikinia

Devonian - Permian

DPA — **Asitka** - basalt / rhyolite / pyroclastics / limestone / shale / sandstone / chert - amalgamated by Latest Triassic time and accreted to Ancestral North America in the Jurassic

nC — **Central Gneiss Complex** - orthogneiss - undifferentiated metaplutonic rocks of the Central Gneiss Complex

mC — **Central Gneiss Complex** - schist/gneiss - undifferentiated metamorphic rocks of uncertain protolith

Property Geology

The Kalum Property is centered on an irregularly shaped granodioritic pluton of the Coast Crystalline Complex that has surface dimensions of approximately 8 by 12 km. This pluton and many associated smaller intrusions were emplaced into Upper Jurassic to Lower Cretaceous Bowser Lake Group sedimentary rocks.

Lithology

The Bowser Lake Group

Bowser Lake Group rocks on the property comprise a monotonous package of arenite, greywacke, siltstone and mudstone, with lesser carbonaceous mudstone and conglomerate. Bedding is generally upright with variable strike, although all dips are generally shallow and mostly under 40°. Three broad, stratigraphic units were identified during the 2003 field season. The lower greywacke unit that comprises mostly greywacke, with lesser conglomerate, siltstone and mudstone, dominates the southern portion of the property. The central mudstone unit dominates the central portion of the property and consists of mudstone with lesser greywacke, siltstone and carbonaceous mudstone. The upper greywacke unit that consists of massive greywacke, with some interbedded mudstone and minor carbonaceous mudstone, dominates the northern part of the property. Bowser Lake Group rocks south of Nelson Creek locally have a penetrative foliation. The more pelitic units contain muscovite and chlorite, and indicate pre-Coast Plutonic Complex metamorphism of sub- to lower greenschist facies.

Hand sample rock descriptions were done on three of the types of Bowser units, the greywacke, the feldspathic arenite and the mudstone/shale were done during the geological mapping around the Hat showing in 2005. The sedimentary units, especially the sandstones, are very difficult to distinguish and have highly irregular contacts, and so are mapped for the most part as undifferentiated Bowser sediments.

The greywacke is dark grey in colour and for the most part massive. It is moderately well sorted, with fine to medium-grained quartz grains that are difficult to distinguish with the naked eye. The rock is comprised roughly of 70% grains, most of which are quartz and 30% calcite matrix. Calcite is also very commonly seen on fractured surfaces.

The feldspathic arenite is usually green-grey in colour and poorly sorted. The rock is comprised mostly (50%) of medium to coarse-grained sub-angular feldspar grains. The rest of the rock is comprised of medium to coarse-grained calcite (25%), some kind of medium-grained dark grain (10%) and medium to coarse-grained quartz (5%). The matrix is comprised of calcite and quartz and represents 5-10% of the rock. Calcite veinlets of up to 2cm wide are common throughout. The rock can also occur with a more silica rich matrix but still has the same rock classification.

The shale/mudstone unit is dark black and very fine grained. The rock is usually very fissile and fractured and has a common rusty surface, evidence of some sort of low metamorphism. There is little to no mineralization, other than the rare patch of disseminated euhedral pyrite.

Instrusive Suites

The Coast Plutonic Complex and associated hypabyssal intrusions on the property have a large range in composition and texture. Two main intrusive suites, the Allard Pluton, and Hat quartz diorite – diorite have been mapped in detail (Figure 3).

The main pluton, here named the Allard Pluton, has an irregular, east-west elongate shape, with a large embayment of Bowser Lake Group sedimentary rocks on the western side Figure 4. The outcrop pattern along the northern margin indicates that the contact here is likely to be steeply dipping, perhaps to the north. Exposed contacts and outcrop patterns across the central and southern portions of the property indicate an irregular, shallowly dipping, partially bedding-controlled sill-like geometry for the main pluton in this area. The eastern portion of the pluton is cut by a NNW-striking, steep fault that may have experienced normal movement.

The Allard pluton is dominated by coarse-grained hornblende-porphyritic tonalite (locally poikilitic) and medium-grained hornblende-biotite granodiorite. The cupola of the pluton is exposed at the Tuppie Zone Figure 4. Dykes and sills of similar lithologic composition are common and display a strong foliation and / or carbonate alteration. A K/Ar cooling age of 100.2 ± 6.8 Ma was derived from the pluton (Godwin, unpublished in Breitsprecher and Mortensen, 2004).

The Hat Quartz Diorite – Diorite is an east – west trending elongate body north of Mayo Creek (Figure 4). It occurs as a weakly to strongly folded and foliated hornblende – pyroxene quartz diorite or diorite. Pyroxene remains fresh, while hornblende is altered to chlorite and pompellyite (Mihalynuk and Friedman, 2004). Mihalynuk and Friedman (2004) obtained a U-Pb crystallization age of 93.8 ± 0.5 Ma for this intrusive.

Many sills, dykes and plugs of variable composition and texture intrude Bowser Lake Group rocks around the margins of the main plutons, in particular in the embayment region on the pluton's western side and to a much lesser extent the Allard pluton itself. The embayment of sedimentary rocks on the pluton's western side hosts numerous sills of medium and coarse-grained granodiorite that range in thickness from 300 metres to less than 1 m. Numerous other, generally thin (0.5 to 10 m), sills and dykes of granodiorite to diorite generally are fine- to medium-grained and have plagioclase as the main phenocryst phase. A sill of pyroxene-porphyritic diorite with unknown width intrudes the Allard pluton near its northern margin. A fine- to medium-grained lamprophyre sill crops out north of the northern margin of the Allard pluton. At least two small intrusions of garnet-plagioclase-muscovite granite crop out north of the main pluton. Plagioclase-porphyritic granite (rhyolite) sills and/or dykes crop out near the Chris adit (Young and Ogryzlo, 1988) and in the western embayment area. A small plug or sill of medium-grained quartz-syenite crops out NW of the Misty Moss Creek showing. Aplitic and pegmatitic dykes, and vein-dykes are also common around the main pluton boundaries, but have highest densities in the western embayment area.

Metamorphism

A weak contact metamorphic and metasomatic aureole exists around the main Allard stock and is normally 100 to 300 m in width. In most areas it is defined by limonitic fractures, weak silica alteration and disseminated pyrite, chalcopyrite and arsenopyrite. Rocks within the aureole, particularly the mudstones, have a distinctive rusty appearance. In general, no metamorphic minerals could be identified in hand sample in the contact aureole. However, a number of country rock roof

pendants have contact metamorphic andalusite and biotite. This indicates low-pressure greenschist facies metamorphism in these areas.

Alteration

A number of different alteration assemblages associated with Au-Ag mineralization were observed in different areas across the property. These assemblages are summarized as follows:

1. Propylitic alteration (chlorite-epidote) associated with vein-dykes and aplite dykes (e.g. Moly zone), as pervasive alteration in more mafic portions of the stock (e.g. east of Hat vein) and associated with mineralized veins on the eastern side of the property (e.g. Kalum veins);
2. Ankeritic/silicic/pyritic alteration associated with mineralized veins hosted in granodiorite and diorite (e.g. Tojo, Hat);
3. Argillic/silicic/pyritic alteration around and distal to mineralized veins (e.g. Kalum, Burn and north Kalum);
4. Silicic and pyritic (lesser chalcopyrite and arsenopyrite) alteration as a pervasive phase in the contact aureole of the main stock;
5. Meter-scale carbonate alteration envelopes are commonly associated with polymetallic Au-Ag veins; particularly at the Tuppie and Hat zones (the most promising zones on the property).

Carbonate alteration is also associated with magnetite destruction and may be responsible for the magnetic low along the eastern margin of the Allard pluton.

Paragenesis

The 2003 field-mapping program by Stephens led to the recognition of the following broad, generalized magmatic-hydrothermal sequence (from oldest to youngest);

1. Granodiorite and diorite plutonism, contact metamorphism and metasomatism
2. Hypabyssal dykes and sills, mostly granodiorite to diorite in composition
3. Hypabyssal dykes and sills, more fractionated phases including plagioclase porphyritic granite (rhyolite), quartz-rich granite
4. Aplite dykelets with associated propylitic alteration
5. Vein-dykes of varying composition
6. Smoky quartz veins, some with feldspar selvages
7. Molybdenite-bearing veins with K-feldspar selvages hosted in main pluton
8. Main stage of Au-Ag bearing veins

It should be noted that many of these stages are transitional and overlap in both time and space. For example, many sills and dykes would be forming at the same time the main pluton was crystallizing, and aplite dykelets, vein-dykes and molybdenite-bearing veins are all closely associated with each other.

Structural Geology

The structural architecture of the rocks on the Kalum property can be described in terms of five main structural elements. These are: bedding, intrusive bodies (sills/dykes and pluton contacts), mineralized veins, faults and joints.

Bedding

Bedding in the Bowser Lake Group sedimentary rocks on the property has variable strikes and shallow to moderate dips. Cross-bedding in the greywacke units indicates that bedding is upright across the entire property. Stereonets show that the maximum density of bedding is at 240°/36° NW, with other sub-maxima at 236°/18° NW, 308°/30° NE, 020°/33° SE and 126°/36° SW. These data and field observations indicate broad warping of the bedding across a SSW-trending axis.

Intrusive bodies

Coast Plutonic Complex intrusive rocks on the property occur in the major pluton and as sills and dykes. In general, sills are more abundant than dykes. The sills and dykes are mostly granodiorite to diorite in composition (c.f. Property Geology section). Sills are mostly bedding parallel, and thus have variable orientations across the property. The stereonet maximum density for the sills is 162°/30° W and for the dykes is 129°/90°.

Faults

The faults measured in the field are dominated by a NNE-striking set with moderate to vertical dips and have a stereonet maxima at 026°/84° E. These faults cut all other geological features on the property and have a normal movement sense. The largest displacement observed was about 2 m (Fig lamprophyre photo offset). A minor set of NW-striking, steeply dipping faults, parallel to mineralized veins is also apparent.

The predominance of variably dipping, NNE-striking normal faults is consistent with a late extensional event that had a vertically plunging σ_1 and horizontally plunging, ESE-directed σ_3.

Joints

Joints measured on the property fall into three major sets that have stereonet maxima at 139°/66° SW, 352°/72° E and 236°/72° NW. The first two sets have NW strikes and thus are likely to be related to the NW-striking set of shear veins. The minor NE-striking joint set corresponds with the NW-striking set of vein-dykes.

2012 Exploration Program

The 2012 exploration program consisted of a total of two helicopter supported diamond drill holes (420 m) from one drill pad. Diamond drilling was contracted to FB Drilling of Cranbrook, BC; helicopter support was supplied by Lakelse and Quantum Helicopters of Terrace, BC. Drill pad and helicopter pad construction was contracted to Progressive Ventures, also of Terrace, BC. TerraLogic Exploration Inc., out of Cranbrook, provided all other exploration staff, including: a logging geologist, data manager, drill core processing geotechnicians and an overall project manager. The field work was completed over a span of 20 days, between September 8th and 27th. The exploration crew was based out of Terrace, BC.

The original proposal involved testing of two targets (Figure 5)– the Bling-Rico structure at lower elevations than the 2004 drilling (KMPADN) and a prominent gossen / breccia located further down the slope on the southern bank of Mayo Creek (KMPADQ). Initial reconnaissance and XRF analysis of the breccia suggests that it may be some form of "ferricrete" as the result of mass wasting and is very likely not of hydrothermal provenance. It was therefore decided not to drill the lower target and all drilling was focused on the Bling-Rico structure.

KMPADN was located such that as little overburden, due to the presence of a substantial alluvial fan over the target zone, would be encountered while remaining close enough to the target to test the zone with two holes. Two westerly orientated holes were drilled across the zone over a four day period.

Core was flown down to the staging area and brought to Terrace for processing where it was geoteched, logged, photographed and sampled. Sampling focused on mineralized shear zones, their contact zones and major alteration zones; a total of 140 samples were taken.

Samples were submitted to AGAT laboratories for 0.5g AR / ICP-OES multi-element analysis and 30g FA Au analysis. Au standards and blanks were inserted at least once per hole.

Projected expenditures, including report writing, were $197,228.41.

Clemson Resources Corp.

Kalum Property
Figure 5 - Hat Structural Zone Geology

Projection - NAD 1983 UTM Zone 09N
Scale - 1 : 5 000

Date - 29/01/2013

499500 500000 500500 501000 501500

6077500 6077000

GOD
BABIT
BLING
RICO
KMPADO
KMPADM
KMPADP
KMPADN
KMPADQ
KRC04004
KM12001
KM12002
Bling - Rico Structure
Gossaneous Breccia
Mayo Creek

1300 1200 1100 1000 900 800 700 600 500

14 22 52 65 43

N

50 25 0 50 100 150 200
Meters

Legend

Silt Samples - Au (ppb)	Soil Samples - Au (ppb)	Rock Samples - Au (ppb)
0 - 20	0 - 25	0 - 100
21 - 71	26 - 75	101 - 500
72 - 154	76 - 100	501 - 1000
155 - 302	101 - 300	1001 - 10000
303 - 565	301 - 1000000	10001 - 983000

Legend

- DDH Collar
- DDH Pad Loc
- Showings
- DDH Trace
- Vein
- Mapped Veins

Geology

Unit		
LAMP	***Lamprophyre***
GPGRAN	***Garnet - Plag Granite***
SYEN	***Syenite***
GRAN	***Granite***
GRANO	***Granodiroite***
DIO	***Diorite***
PYDIO	***Pyroxene Diorite***
CONG	***Conglomerate***
CBMUD	***Carbonaceous Mudstone***
GW	***Greywacke***
HFLS	***Hornfels***
MUD	***Mudstone***
BOWSER	***Undifferentiated Bowser Basin***

2012 Exploration Program Results

DDH Results

KMPADN (KM12001 and 12002) : 419.41m

Pad KMPADN was located to test the southern extension of known mineralization (Bling and Rico showings) hosted in the Bling-Rico structure. The structure itself is interpreted to be sub-vertical although the orientation of shear-hosted quartz-carbonate veins within this zone might be oblique to the general trend. A DDH section and DDH strip logs are presented as Figures 6 and Appendix 4.2 respectively.

Holes KM12001 and KM12002 intersected a sedimentary package of massive / poorly bedded alternating greywackes and minor siltstones. This package has been intruded by several m-scale feldspar porphyry dykes which appear to be bounded by discrete, brittle to transitional shear zones which may have acted as conduits for alteration fluids. Alteration was generally very weak except in proximity to the poprphyry dykes. Hydrothermally related sulphide mineralization in the form of Py, Cpy and Gal was very weak and limited to sub meter scale shear zones.

The holes were dominated by a sequence of light grey, massive, fine-medium grained greywackes interbedded with 0.5m-1m thick, grey, massive, fine grained siltstones. A light grey, medium-coarse grained gritty quartz sandstone interbed was observed in both holes at ~26.5m. Flame structures and graded bedding were observed, and are consistent with upright bedding; rip-up clasts are also noted and suggest periodic higher energy environments.

Intrusive rocks are the least weathered in hole KM12002 and are characterized by a light greenish-grey feldspar porphyry. For the most part, the porphyritic rocks appear to be structurally bounded but they do rarely display m-scale chilled margins consistent with primary igneous contact relationships. The rock is comprised of approximately 2% mm-scale biotite knots (partially altered to chlorite) and 10 – 15% equant to tabular feldspar porphyroclasts. The intrusives are variably altered (see below). The fresh intrusives are slightly magnetic.

Throughout the stratigraphic section carbonate rich crackle-mosaic breccia systems were localized around dark black shear zones, with a true thickness no more than 1m and chlorite commonly occurring along framework boundaries. No mineralization was noted in these breccia zones. Numerous mm scale quartz-carbonate veins were intersected throughout the hole, often intensifying into a stockwork and then crackle breccia.

Alteration throughout the section is generally weak and occurs as bleaching, with minor chlorite / sericite overprinting the sedimentary rocks. Cm-scale greenish-grey chlorite alteration halos concentrated around mm-scale quartz-carbonate veinlets are common. Significant alteration was restricted to the intrusive feldspar porphyry body as pervasive chloritic and silicic alteration and patchy potassic alteration. This resulted in porphyroclasts with diffused grain boundaries and the primary igneous textures completely overprinted in selected areas. Increased alteration was not noted in the country rocks proximal to the intrusive bodies.

Mineralization in the section is very minor and limited to fracture controlled/ disseminated pyrite and pyrrhotite. Some blebby pyrrhotite and pyrite up to 4mm was observed within the pervasively altered

intrusives. Very fine shear-hosted chalcopyrite, sphalerite and galena was also noted at 143m in hole KM12002.

The structure throughout the section is limited to cm-scale discrete shear zones that range from brittle to transitional in nature. The brittle shear zones occur as greenish-grey mesocataclasite gouge, whereas the transitional shear zones commonly contain cm-scale quartz-carbonate stockwork veins and healed breccias. A dark black, fine grained, brecciated siltstone(?) was commonly observed on the hanging wall and foot wall of these shear zones. Thin sections have been submitted to Vancouver Petrographics to confirm the nature of these zones. A number of continuous shear zones are noted from hole to hole on section defining numerous structural panels (Figure 6). Most notable of all is the possible steeply-east-dipping Bling-Rico shear zone the could be a conduit for fluids responsible for alteration in the intrusives. Distribution of the shear bounded intrusives is consistent with an apparent reverse off-set (Figure 6).

Representative angles (relative to core axis) of quartz-carbonate stockwork veins were recorded and ranged from 20°-75° with an average angle of 47°. Throughout the section bedding is consistently within the range of 20°-55° to the east.

Geochemical results were received from AGAT Labs on the 19th of November; samples were analyzed via 0.5g AR / ICP-OES multi-element analysis and 30g FA Au analysis. The QAQC data is consistent with AGAT labs performing well within acceptable industry standards and the data is to be considered final. Blanks showed no signs of contamination and all standards submitted returned acceptable values for Au. QAQC analysis was not performed on other elements.

Although no notable sulphide mineralization was intersected, it was hoped that the pervasive alteration assemblage (KM12001 88.26m to 140.88m) and well developed structures would return some spotty Au numbers. Unfortunately this was not the case and no anomalous Au values are to be reported. Table 1 presents statistics for key economic elements for the 140 samples taken during the program. Note that Cu, Pb, Zn, Ag and As do show weak anomalous values.

Table 2 – DDH Geochemical Statistics

2012 KM DDH Geochem	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	As (ppm)	Au (ppb)
Count Numeric	140	140	140	140	140	140
Minimum	0.25	0.25	11.9	0.1	0.5	1
Maximum	514	1430	925	9.9	414	40
Median	28.2	2.5	77.6	0.1	6.0	1.0
Geometric Mean	21.4	1.9	74.2	0.2	6.8	1.4
Standard Deviation	45.2	136.3	79.3	1.1	81.3	4.9
Interquartile Range	22.1	7.3	24.7	0.1	135.5	0.0
75 percentile	35.7	7.6	88.6	0.2	136.0	1.0
90 percentile	48.2	13.5	108.8	0.6	173.5	6.0
95 percentile	61.6	21.0	140.8	0.8	199.8	9.9
99 percentile	359.4	1149.2	690.1	9.0	364.8	38

Kalum DDH Sample Petrographic Summary

The following descriptions are taken from Vancouver Petrographics report by Dr. Craig Leitch.

Most samples appear to be strongly phyllic or propylitic altered, plagioclase and mafic (originally hornblende?) phyric hypabyssal intermediate intrusive rocks; sedimentary rocks were not conclusively identified. Sulfides are minor (mainly pyrrhotite, pyrite and trace chalcopyrite); veinlets are mainly quartz or carbonate, local chlorite, epidote or albite. Capsule descriptions are as follows:

KM12002-001 (30.0m): appears to be strongly phyllic/propylitic (sericite-carbonate-chlorite-minor biotite-pyrrhotite ±chalcopyrite, ilmenite, apatite) altered high-level intermediate intrusive rock (hypabyssal diorite?), cut by thin carbonate-quartz-chlorite ±albite veinlets.

KM12001-002 (175.0m): appears to represent intensely propylitic (carbonate-epidote-quartz-albite?-chlorite ±Kspar?-sphene) altered, fine-grained hypabyssal (quartz) diorite cut by planar calcite veins and thinner, diffuse calcite-quartz veinlets.

KM12001-003 (95.0m): could represent strongly albite-actinolite-carbonate-quartz-sphene/rutile altered, very fine diorite (?) cut by zones of stronger epidote-carbonate-quartz-chlorite-sphene alteration cored by veins of quartz, hairline quartz-chlorite-epidote-minor Kspar, or later carbonate.

KM12002-004 (90.0m): probably hypabyssal (fine-grained, weakly porphyritic) hornblende quartz diorite or quartz andesite, possibly potassic altered to oligoclase-quartz-biotite-sericite-chlorite-actinolite-epidote-carbonate-rutile-trace sulfides, cut by hairline plagioclase and calcite veinlets.

KM12001-005 (Shear Zone @ 120.95m): This sample is enigmatic; it could represent either strong sericite-chlorite-quartz?-rutile altered siltstone (this would not explain the rectangular domains of sericite-quartz, but would explain the minute opaques, which could be carbon?) or strongly altered

hypabyssal plagioclase-phyric intermediate dyke (?)in which plagioclase has been altered to sericite-quartz and interstitial mafics to chlorite-sericite-quartz with accessory rutile. Veinlets are of quartz or carbonate (calcite?)

Detailed petrographic descriptions and photomicrographs are presented in Appendix VI.

QEM Scan

A total of 10 samples were submitted to ALS Metallurgy of Kamloops, BC for QEMSCAN analysis to determine whole rock geochemistry and Bulk Mineral Analysis (BMA). The analysis provides detailed mineralogical data which will be used to help classify intrusive suites and possibly aid in alteration vectoring. Modal mineralogical data is presented in Table 3 below and detailed descriptions are presented in Appendix VII.

Table 3 – QEM SCAN Mineral Compositions

Minerals	AHKMRO34	CGKMRO22	CGKMRO25	CGKMRO26	CGKMRO27
Chalcopyrite	0	<0.1	0	<0.1	0
Pyrite	0.2	0.3	0	<0.1	<0.1
Iron Oxides	0.3	0.8	0.2	2.2	0.3
Quartz	10.6	37	18.6	20.8	11.2
Feldspars	45.4	20.6	49.4	49.3	50.5
Chlorite	11	9	12.8	13.7	10.4
Muscovtie	1.9	26.2	2.6	0.7	9.3
Biotite/Phlogopite	0.1	1.8	0.5	1	0.8
Amphibole/Pyroxene	10.5	0.4	2.8	4.2	8.4
Calcite	1	<0.1	<0.1	0.9	0.2
Epidote	10.1	<0.1	7.2	2	3.1
Kaolinite	0.3	2.5	0.1	0.2	0.4
Garnet	4.3	0.7	2.9	1.2	3.2
Ti Minerals	2.9	0.5	1.3	2.2	0.9
Apatite	0.5	<0.1	0.6	1	0.5
Others	0.8	0.3	0.9	0.5	0.9

Table 3 (Cont) - QEM SCAN Mineral Compositions

Minerals	CGKMRO29	CGKMRO30	KM05001:12.14m	KM5001:73.39m	KM05002:92m
Chalcopyrite	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrite	<0.1	<0.1	<0.1	0	<0.1
Iron Oxides	0.1	0.2	1	0.5	0.2
Quartz	22	16.7	3.9	17	4.9
Feldspars	39.4	36.5	39.6	50.3	23.8
Chlorite	23.1	12.2	6.9	5	13.8
Muscovtie	2.5	<0.1	9.4	4.3	3.7
Biotite/Phlogopite	0.1	0.3	9.8	1	0.4
Amphibole/Pyroxene	2.6	11.2	20	13.5	41.8
Calcite	1	<0.1	1.7	0.1	2.8
Epidote	0.2	17.6	1.6	2.8	2.1
Kaolinite	2.7	0.1	0.4	0.2	0.1
Garnet	4.2	1.2	2.3	2.8	3.1
Ti Minerals	0.7	2.6	1.3	0.8	1.4
Apatite	1.1	0.7	0.6	0.8	0.7
Others	0.4	0.6	1.5	0.9	1.2

1) Chalcopyrite includes Trace amounts of Bornite and Chalcocite/Covellite.

2) Iron Oxides include Hematite, Geothite, Limonite, and Magnetite.

3) Feldspars include Plagioclase Feldspar, Feldspar-Albite, K-Feldspar, and Alkali Feldspar.

4) Calcite includes Wollastonite and Ankerite.

5) Kaolintite includes Talc and Tourmaline.

6) Garnet includes Pyrope, Spessartine, Grossular, Andradite, and Almadine.

7) Ti Minerals include Sphene, Rutile/Anatase, and Ilmenite.

8) Others includes Sphalerite, Fe-Olivine, Spinel, Galena, and unresolved mineral species.

Conclusions

The Kalum property consists of a large land package containing 14 separate historical showings co-incident with a regional airborne magnetic anomaly and the contact zone of Cretaceous intrusive plutons. Since initiating property acquisition in 2003, Eagle Plains and it's partners have spent approximately $2,300,000 on exploration on the Kalum property. The programs included airborne and ground based geophysics, regional- and property-scale geologic mapping, geochemical surveying and diamond drilling. In addition to locating, sampling and surveying many of the historical showings, a number of new showings including the Tuppie, the HAT, the Trango, the Cirque Zone and the Babbit have been discovered. This work confirmed that the Kalum property is highly prospective for economically significant, Au-Ag epithermal vein-type deposits. Recent historical drilling has generated high-grade Au intercepts including hole KRC04001, drilled at the Rico Zone which returned 35g/t Au over 2.5m from 101.8m to 104.3m; including a 0.5m interval that assayed 107g/t Au.

Although most of the known showings have seen some evaluation, the HAT and the Burn areas have been the focus of more detailed work.

Mineralization at the HAT can be classified into two main styles:

1. a series of stacked NW-dipping, shear-hosted, high-grade Au-Ag ± Zn ± Pb quartz veins. These veins strike up to 350 meters in length, range in thickness from 15cm to 2.5 meters and are additionally associated with Fe-carbonate alteration halos up to 4 meters in thickness. Fieldwork has shown that these alteration zones with visible arsenopyrite mineralization have the potential to host disseminated and fracture controlled Au grading up to 0.5 g/T Au;
2. massive Aspy + Cpy veins, of unknown relationship to local tectonics, grading up to 20 g/T Au.

Mineralization at the HAT is associated with flat lying shear zones that form an anastomosing / ramp – flat structure that sets the stage for structurally repeated mineralized zones. It has been interpreted that the majority of showings in the area, including the Tuppie, the HAT, the Trango, the Cirque Zone, collectively referred to as the Hat Structural Zone, are structurally linked and represent a single large-scale mineralized system over 1 km^2 in size.

The basic geology (with the exception of base / precious metal mineralization) intersected in 2012 is identical to that of the Rico Zone. Data from 2004 / 2012 drilling supports the theory that the Bling-Rico structure has acted as a conduit for precious metal bearing hydrothermal fluids, so one must consider the reason for lack of mineralization lower in the system – what is controlling deposition? Two main candidates would include the depth of burial (temperature / pressure) and / or structural control (presence of dilational jogs and cross-structures); further work is required to answer this question.

The massive alternating greywacke and siltstone units intersected in 2012 drilling are typical of the Bowser Basin and are observed over the entire Kalum property. As typical in the Bowser Basin the main sedimentary package is quite silicious and massive, and does not alter easily. Although the 2012 drilling failed to intersect notable mineralization in the two holes, it did manage to intersect the Bling-Rico structure and associated altered porphyritic dykes in the predicted location. The geology, alteration and structure is similar to what was encountered in the 2004 drilling at the Rico Zone and suggests that the Bling-Rico zone is a large scale continuous structural / hydrothermal feature.

There remains many other high priority targets on the property, ready for grassroots and diamond drill exploration; these include: the Martin vein, the Tuppie Zone and the southern extension of the Hat structural zone. Most of the high-grade mineralization on the property is located near the margins of the main Allard pluton, both within the granodiorite and in the surrounding sedimentary country rocks. This indicates that most fluid-flow was focused near the intrusion margins, and in country-rock roof pendants around the main pluton. Only a relatively small portion of the sedimentary-intrusive contact zone has been explored to date. Potential exists along the unexplored contact zones, especially in areas that have a favorable geophysical signature. In areas of known mineralization, new discoveries are possible through soil geochemical sampling, prospecting and airborne geophysics. Ground work has been greatly aided due to the low annual snow pack which currently exists at the higher elevations in the Coast Mountains, which in turn has exposed many mineralized veins, structures and favorable geology for the first time in modern history.

Recommendations

The Hat Structural Zone remains a highly prospective zone on the Kalum property and continued mapping, prospecting, geochemical surveys along strike of the Bling – Rico structural zone to the south of Mayo Creek is highly recommended. Also recommended is firming up a number of drill ready targets that are present along the eastern portions of the Hat Structural Zone through detailed mapping. These include the Babit Showing (6.0m @ 7.3 g/T Au-Channel), and similar showings in the area (Figure 5).

Recent development of the Northwest Transmission Line Project, which transects the Kalum Property, has lead to substantial road building, clearing and blasting along the eastern margin of the claims in the vicinity of the Burn and Kalum showings; recently developed infrastructure has resulted in increased exposure and should be mapped, prospected and possibly covered by detailed geochemical surveys. A budget of $200,000 is proposed for this phase of exploration.

There remain many other high priority targets on the property, ready for grassroots and diamond drill exploration; including the Martin vein and Tuppie Zone. Most of the high-grade mineralization on the property is located near the margins of the main Allard pluton; only a relatively small portion of the sedimentary-intrusive contact zone has been explored to date. Potential exists along the unexplored contact zones, especially in areas that have a favorable geophysical signature.

An XRF geochemical orientation of the 2004 - 2006 soil and silt sample pulps to determine pathfinder element trends and overall pXRF detection limits for the geologic environment would also be warranted.

Contingent on favorable results from Phase 1, a diamond drilling program should be undertaken to test the highest priority targets. This should include drilling at the HAT Structural Zone and other areas identified as favorable targets by the Phase 1 interpretation. The estimated cost of the Phase 2 program is $500,000.

References

Arndt, Richard E. (1989) : Report on Underground Exploration Program on the Kalum Lake Property; for Terrracamp Developments Ltd.

Baker, T. (2003) : Intrusion-Related Gold Deposits: Explorable Characteristics; Gold Short Course, Cordilleran Exploration Roundup, January 2003

Bates, R.H. (1979) : Report on Diamond Drilling on BAV Mineral Claims #'s 1 – 4 Inclusive; MEMPR AR 8299

Cavey, G. (1981) : Geological Report Chris Claims; for Prism Resources Limited, MEMPR AR 10523

Cavey, George and Howe, Diane (1984) : Report on the Kalum Lake Claim Group; for Bradner Resources Ltd., MEMPR AR 13303

Cavey, George and Chapman, Jim (1987) : Report on the 1987 Drilling Program, Kalum Lake Claims; for Terrracamp Developments Ltd., MEMPR AR 16026

Cavey, G. and Chapman, J. (1987) : Summary Report on the Quartz – Silver Claims; for Mt. Allard Resources Ltd., MEMPR AR 16411

Chapman, J. (1988) : Summary Report on the Quartz – Silver Claims; for Mt. Allard Resources Ltd.

Corbett, Greg (2002) : Epithermal Gold for Explorationists; AIG Journal Paper 2202-01

Crooker, G.F. (1988) : Geochemical and Geophysical Report on the Misty and Misty 1 – 4 I Mineral Claims; for Corona Corporation, MEMPR AR 17952

Downie, C.C. and Mosher, G.Z. (2003) Geological Report on the Kalum Gold Property; internal report prepared for Eagle Plains Resources Ltd.

Downie, C.C. and Stephens, J.R. (2003) : Preliminary 2003 Geological Report for the Kalum Property;

internal report prepared for Eagle Plains Resources Ltd.

Downie, C.C. and Gallagher, C.S. (2004): 2004 Exploration and Geological Report for the Kalum Property; for Eagle Plains Resources Ltd.; MEMPR AR 27892

Downie, C.C. and Gallagher, C.S. (2006): 2005 Exploration and Geological Report for the Kalum Property; internal report prepared for Eagle Plains Resources Ltd.

Downie, C.C. and Gallagher, C.S. (2006): 2005 Exploration and Geological Report for the Kalum Property; internal report prepared for Eagle Plains Resources Ltd. MEMPR AR 28462

Form 43-101F1 Technical Report

Friedman, R.M., Diakow, L.J., Lane R.A. and Mortensen, J.K., (2001): New U-Pb age constraints on latest Cretaceous magmatism and associated mineralization in the Fawnie Range, Nechako Plateau, central British Columbia: Canadian Journal of Earth Sciences, Volume 38, pages 619-637.

Gravel, J. (2002) : Methods and Specifications for Group 7AR; Acme Analytical Laboratories Ltd Fact Sheet

Gravel, J. (2002) : Methods and Specifications for Group 6; Acme Analytical Laboratories Ltd Fact

Sheet

Gravel, J. (2003) : Methods and Specifications for Group 1D and 1DX; Acme Analytical Laboratories Ltd Fact Sheet

Hedenquist, J.W. (2003) ; Epithermal high sulfidation gold deposits : Characteristics, related ore types, and exploration

Jorgensen, Neil B. (1981) : Geological and Geochemical Report on the Misty 1 Claim; for C.C.H. Minerals Ltd., MEMPR AR 10128

McNaughton, Ken (1987) ; Geochemical and Geophysical Report on the Misty, Misty I and Misty II Mineral Claims; for Mascot Gold Mines Limited, MEMPR AR 15455

Mihalynuk, M. and Friedman, R. (2005) Gold in the Kalum Area, Terrace, BC; BCGS – Eagle Plains Resources GeoScience Partnership, Poster

Morton, J.W. (1985): A Geological and Geochemical Survey of a Potion of the Quartz-Silver (Q.S.) Claim Group (Quartz Hill Project); for Imperial Metals Corporation MEMPR AR 13455

Panteleyev, A. (1991): Gold in the Canadian Cordillera – A Focus on Epithermal and Deeper Environments; in Ore Deposits, Tectonics and Metallogeny in the Canadian Cordillera; BC MEMPR Paper 1991-4

Salazar, G. (1987): Evaluation of the Kalum Lake Project; for Terrracamp Developments Ltd.

Stacey, J.S. and Kramers, J.D., (1975)L: Approximation of terrestrial lead isotope evolution by a two-stage model: Earth and Planetary Science Letters, v. 26, p. 207-221.

Stacey, Norman W. (1980) : Geological Report Mineral Claims Chris 1 – 4; for Prism Resources Limited, MEMPR AR 8393

Stephens, J. and Downie, C. (2003) : Exploration and Geological Report for the Kalum Gold Silver Project; for Eagle Plains Resources Ltd.

Tindall, M. (1987) : Geological and Geochemical Report on the Misty and Misty 1 – 4 Mineral Claims; for Mascot Gold Mines, MEMPR AR 16302

Wilson, Robert G. (1981) : Report on Geology and Soil Geochemistry on the Misty Claim; for Campbell Resources Inc., MEMPR AR 9239

Wilson, Robert G. (1982) : Report on Geology, Geochemistry, and Drilling on the Misty 1 Claim; for C.C.H. Minerals Ltd., MEMPR AR 10827

Wilson, Norma J. (1979) : Report on Prospecting Misty Claim; for CCH Resources Ltd., MEMPR AR 8201

Young, D. and Ogryzlo, P. (1988) : Geological and Geochemical Assessment of the Full and Moon Mineral Claims, MEMPR AR 17890

Young, D. and Ogryzlo, P. (1982) : Geological and Geochemical Assessment of the Hat and Flare Mineral Claims, MEMPR AR 10821

Young, D. and Ogryzlo, P. (1981) : Geological and Geochemical Assessment of the KM 9, KM 10 and Drum Mineral Claims, MEMPR AR 10045

EMPR MINFILE 103I 018, 103I019, 103I020, 103I151, 103I173, 103I174, 103I211, 103I213

Appendix I
Statement of Qualifications

I, Christopher S. Gallagher of 616 Nelson St., in the city of Nelson in the Province of British Columbia hereby certify that:

I am currently employed as Chief Geologist for Eagle Plains Resources Ltd. with a business address: Suite 200, 44-12 Ave.S., Cranbrook, BC V1C 2R7.

I am a graduate of Carleton University with the degree of Master of Science in Geology (1999).

I am a graduate of Carleton University with the degree of Bachelor of Geology (1997).

I have practiced my profession in North America since 1999, having worked for various Junior Resource Companies and government surveys.

I have authored this report titled 2012 GEOLOGICAL and DIAMOND DRILLING REPORT for the KALUM PROPERTY, based on data collected through research and on observations and results from physical work on the property. I spent 20 days on the Kalum Property between September 8th and 27th, 2012. Data sources include British Columbia Ministry of Energy and Mines Map Place, British Columbia Ministry of Energy and Mines Microfiche, and direct contact with persons involved with past exploration programs on the Kalum property.

I have authored and co-authored numerous other assessment reports on the Kalum property from 2004 to 2010.

I hold an option to purchase 140,000 and 130,000 Common Shares of Eagle Plains Resources at a price of $0.40 and $0.25 per share respectively.

Dated this 7th day of March, 2013, in Cranbrook, British Columbia.

Christopher S. Gallagher, M. Sc.

Appendix II

Statement of Expenditures

Kalum 2012 Exploration Expenditures

Exploration Work type	Comment	Days			Totals
Pre-field Office Studies		**Days**	**Rate**	**Subtotal**	
Chris Gallagher, Project Manager	Project planning/permitting	1.90	$725.00	$1,377.50	
Brad Robison, GIS Specialist	Maps	0.47	$525.00	$246.75	
Aaron Higgs, Project Geologist	Project planning	2.25	$625.00	$1,406.25	
Jim Ryley, Geologist	Permitting	1.67	$675.00	$1,127.25	
James Price, Jr. Geologist	Field Prep	3.00	$375.00	$1,125.00	
T Laing Gahr, Human Resources	First Nations Relations	0.67	$525.00	$351.75	
				$5,634.50	**$ 5,634.50**
Field	**Personnel**	**Days**	**Rate**	**Subtotal**	
Chris Gallagher, Project Manager	Project Management	14.67	$725.00	$10,635.75	
James Price, Jr. Geologist	Core Logging	14.00	$450.00	$6,300.00	
Chris Shook, Geotech	Geoteching Core	17.00	$375.00	$6,375.00	
Jade Wright, Geotech	Core Splitting	5.50	$375.00	$2,062.50	
				$25,373.25	**$ 25,373.25**
Report Writing	**Comments**	**Days**	**Rate**	**Subtotal**	
Chris Gallagher, Project Manager	Report writing/filing	5.1	$725.00	$3,668.50	
James Price, Jr. Geologist	Report Writing	5.5	$375.00	$2,062.50	
Jason Kolcun, GIS Specialist	Database Management	6.6	$350.00	$2,320.50	
Nathan Taylor, GIS Specialist	Maps and Figures	0.2	$425.00	$85.00	
				$8,136.50	**$ 8,136.50**
Contractors and Subcontractors					
Road/Pad Building	Progressive Ventures	1.0	$ 9,912.51	$9,912.51	
Petrographic Report	Vancouver Petrographics	1.0	$ 1,440.00	$1,440.00	
QEMSCAN Analysis	ALS Canada	1.0	$ 3,553.00	$3,553.00	
				$14,905.51	**$ 14,905.51**
Geochemical Analysis	**Number of Samples**	**No.**	**Rate**	**Subtotal**	
Core	140	1	$3,559.75	$3,559.75	
Rock Samples	*10*	0	$0.00	$0.00	
Portable XRF		0.24	$6,600.00	$1,584.00	
				$5,143.75	**$ 5,143.75**
Drilling	**No. of Holes, Size of Core and Me**	**No.**	**Rate**	**Subtotal**	
Diamond Drilling	420 meters	1	$ 62,980.73	$62,980.73	
Meals and Accomodation		1	$ 2,926.84	$2,926.84	
				$65,907.57	**$65,907.57**
Transportation		**No.**	**Rate**	**Subtotal**	
Helicopter	Lakelse Air Ltd.	1.00	$31,476.00	$31,476.00	
Helicopter	Quantum Air	1.00	$2,145.00	$2,145.00	
Helicopter Fuel		1.00	$5,274.68	$5,274.68	
Truck Fuel		1.00	$1,210.02	$1,210.02	
Airfare	To Terrace	1.00	$1,273.03	$1,273.03	
Other	Baggage, ect.	1.00	$37.50	$37.50	
				$41,416.23	**$41,416.23**

Kalum 2012 Exploration Expenditures

Exploration Work type	Comment	Days			Totals
Accommodation & Food	**Rates per day**				
Hotel	total cost	1.00	$3,137.89	$3,137.89	
Meals	total cost	1.00	$3,211.62	$3,211.62	
TerraLogic Field House	total cost	5.00	$30.00	$150.00	
				$6,499.51	**$6,499.51**
Geological and Geochemical					
Geological Supplies				$99.99	
Sampling Consumables	sample bags, tags, flagging, etc...			$319.19	
				$419.18	**$419.18**
Equipment Rentals		**No.**	**Rate**		
Truck rental	F150	1.00	$ 3,583.15	$3,583.15	
Ttruck mileage		1.00	1155	$1,155.00	
Field Vest	pack with gear	0.67	$200.00	$134.00	
Trailers		0.67	$2,000.00	$1,340.00	
ATV Kabota		0.67	$3,000.00	$2,010.00	
SPOT		0.67	$100.00	$67.00	
Sat Phone		1.34	$250.00	$335.00	
Hand Held Radios		4.00	$364.43	$364.43	
Chainsaw		0.67	$150.00	$100.50	
Core Splitter		0.67	$350.00	$234.50	
Computer		0.67	$220.00	$147.40	
Printer		1.00	$0.00	$0.00	
Digital Camera		0.00	$0.00	$0.00	
Large Format Plots		1.00	$156.00	$156.00	
Survival Kit		0.00	$0.00	$0.00	
Tools		1.00	$223.65	$223.65	
Core Storage		1.00	$250.00	$250.00	
				$10,100.63	**$10,100.63**
Freight				$29.05	
				$29.05	**$29.05**
Repairs and Maintenance				$0.00	
				$0.00	**$0.00**
TerraLogic Exploration Handling and Adminstration Fees				$13,662.73	
				$13,662.73	**$13,662.73**

TOTAL Expenditures **$197,228.41**

Appendix III
AGAT Geochemical Protocol

AGAT Method Code: 201 073 **AGAT SOP:** MIN-200-12018

Method Description: This uses the Aqua Regis Digestion technique and the ICP-OES.

Solubility of elements can be dependent on the mineral species present and as such, data reported from the aqua regia leach should be considered as representing only the leachable portion of a particular analyte.

Sample split size: 1 g

Steps

1. Aqua Regia Digestion
2. Prepared samples are digested with Aqua Regia for one hour using temperature controlled hot blocks.
3. Resulting digests are diluted to 50 mL with de-ionized water.
4. To finish, ICP-OES/ICP-MS instrumentation are used for analysis

Blanks, sample replicates, duplicates and internal reference materials, both aqueous and geochemical standards are routinely used as part of AGAT Laboratories' quality assurance program.

Instrumentation and Techniques

- PerkinElmer 7300DV and 8300DV ICP-OES instruments and PerkinElmer 9000 and PerkinElmer NexION ICP-MS instruments are used in the analysis.
- Inter-Element Correction (IEC) techniques are used to correct for any spectral interferences.

AGAT Method Code: 202 052, 202 054 **AGAT SOP:** MIN-200-120006

Method Description: Lead Fusion Fire Assay with Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) are conducted to determine the content of gold, platinum and palladium in geological samples

Sample split size: 30 g

Steps

- Prepared samples are fused using accepted fire assay techniques
- After the samples are cupelled and parted in nitric acid and hydrochloric acid

Blanks, sample replicates, duplicates and internal reference materials, both aqueous and geochemical standards are routinely used as part of AGAT Laboratories' quality assurance program.

Instrumentation Used

- PerkinElmer 7300DV and 8300DV ICP-OES instruments are used in the analysis.

AGAT Method Code: 202 064 **AGAT SOP:** MIN-200-120004

Method Description: Lead Fusion Fire Assay with Gravimentric finish are performed to find the determination of gold and silver in mineralogical samples.

Sample split size: 30 g

Steps

- Prepared samples are fused using accepted fire assay techniques
- After the samples are cupelled and parted in nitric acid.

Blanks, sample replicates, duplicates, and internal reference materials (both aqueous and geochemical standards) are routinely used as part of AGAT Laboratories' quality assurance program.

Instrumentation Used

- Mettler Toledo XP6 microbalances are used in the analysis.

Appendix IV
DDH Logs and Stip Logs
4.1 – DDH Logs

Appendix 4.1.1 - Alteration

29-Jan-13

Hole Number	From	To	Alteration	Alteration Description	Degree	Note
KM12001	15.6	17.53	Chlorite	Vein-Halo	1	very low chlorite alteration along fractures and vein edges
KM12001	17.53	18.86	Chlorite	Vein-Halo	1	very minor dark green chlorite alteration along factures and vein edges
KM12001	19.24	20.43	Chlorite	Vein-Halo	1	minor chlortie alteration, doesn't penetrate breccia clasts, small patchy alteration smaller than 2mm concentrated within veins and quartz/carb breccia matrix
KM12001	20.43	22.27	Chlorite	Vein-Halo	1	minor chlorite alt in veins less than 5mm, alterted veins cross cut by unaltereed whispy carbonate veins less then 2mm thick
KM12001	24.94	25.56	Silica	Patchy	2	moderate silica flooded
KM12001	38.18	40.54		Vein-Halo	1	minor chlorite alt within crackle breccia,within carb veins less than 2mm thick
KM12001	40.7	41.15	Potassic	Patchy	2	moderate potassic alt, patchy but throughout gwk host and veins
KM12001	72.98	73.11	Potassic	Vein-Halo	2	minor potassic alteration, well developed biotite crystal formation within vein, 1cm potassic alt within host across vein
KM12001	83.08	84.37		Vein-Halo	1	minor chlorite alt within veins/ carbonate cement
KM12001	89.39	91.02	Chlorite	Pervasive	3	moderate alt throughout, potassic, silica, chlorite
KM12001	89.39	91.02	Potassic	Patchy	2	moderate alt throughout, potassic, silica, chlorite
KM12001	89.39	91.02	Silica	Pervasive	3	moderate alt throughout, potassic, silica, chlorite
KM12001	94.39	106.42	Chlorite	Pervasive	4	pervassive alt throughout interval, mainly silica, chlorite slightly less pervassive concentrations within fractures, veins and grain halos, patchy potassic alt, grain boundaries very altered, well defined sharp alteration front in the upper and lower alteration interval
KM12001	94.39	106.42	Potassic	Patchy	3	pervassive alt throughout interval, mainly silica, chlorite slightly less pervassive concentrations within fractures, veins and grain halos, patchy potassic alt, grain boundaries very altered, well defined sharp alteration front in the upper and lower alteration interval

Hole Number	From	To	Alteration	Alteration Description	Degree	Note
KM12001	94.39	106.42	Silica	Pervasive	4	pervassive alt throughout interval, mainly silica, chlorite slightly less pervassive concentrations within fractures, veins and grain halos, patchy potassic alt, grain boundaries very altered, well defined sharp alteration front in the upper and lower alteration interval
KM12001	106.42	108.37	Chlorite	Vein-Halo	1	weak chloritic alteration, within carbonate fractures/veinlets, overprint from adjacent intrusives
KM12001	108.37	110.44	Chlorite	Pervasive	4	similar intrusive feldspathic porphry with silica, chlorite, patchy potassic alt
KM12001	108.37	110.44	Potassic	Patchy	2	similar intrusive feldspathic porphry with silica, chlorite, patchy potassic alt
KM12001	108.37	110.44	Silica	Pervasive	4	similar intrusive feldspathic porphry with silica, chlorite, patchy potassic alt
KM12001	119.1	122.03				similar as previous alteration interval
KM12001	119.1	122.03			1	similar as previous alteration interval
KM12001	119.1	122.03	Chlorite	Pervasive	4	similar as previous alteration interval
KM12001	119.1	122.03	Potassic	Patchy	2	similar as previous alteration interval
KM12001	119.1	122.03	Silica	Pervasive	4	similar as previous alteration interval
KM12001	122.03	131.75	Chlorite	Vein-Halo	1	minor chlorite bleaching
KM12001	131.75	140.61	Chlorite	Pervasive	4	major alteration similar alt throughout feldspathic intrusive, grain boundaries undefined, chlorite halos surrounding veinlets
KM12001	131.75	140.61	Potassic	Vein-Halo	4	major alteration similar alt throughout feldspathic intrusive, grain boundaries undefined, chlorite halos surrounding veinlets
KM12001	131.75	140.61	Silica	Pervasive	4	major alteration similar alt throughout feldspathic intrusive, grain boundaries undefined, chlorite halos surrounding veinlets
KM12001	131.75	140.85	Chlorite	Pervasive	4	similar as previous alt interval, silica, chlorite, sme patchy potassic bleaching
KM12001	131.75	140.85	Potassic	Patchy	2	similar as previous alt interval, silica, chlorite, sme patchy potassic bleaching
KM12001	131.75	140.85	Silica	Pervasive	4	similar as previous alt interval, silica, chlorite, sme patchy potassic bleaching
KM12001	140.61	162.5	Chlorite	Vein-Halo	1	minor chlorite bleaching around vein halos, random subtle patchy potassic allteration

Hole Number	From	To	Alteration	Alteration Description	Degree	Note
KM12001	140.61	162.5	Potassic	Patchy	1	minor chlorite bleaching around vein halos, random subtle patchy potassic allteration
KM12001	140.61	194.82	Chlorite		1	minor chlorite bleaching around vein halos, random subtle patchy potassic allteration, vry minor decreasing intensity throughout the interval moving away from the intrusive
KM12001	140.61	194.82	Potassic		1	minor chlorite bleaching around vein halos, random subtle patchy potassic allteration, vry minor decreasing intensity throughout the interval moving away from the intrusive
KM12001	175.13	176.12	Silica		2	intermediate altered dike, moderately silicified, minor bands of patchy potassic alteration
KM12001	199.26	199.56	Sericitic		2	moderate sericite alteration, veinlets have surrounding sericite halos, relatively softer than surrounding gwks
KM12001	199.91	200.21	Chlorite		4	highly altered alteration front, sharp upper and lower contacts, mainly silicified, strong chloritic alt, some minor patchy potassic alt, small 3mm nodules of pyrrhotite, some disseminated pyrite
KM12001	199.91	200.21	Potassic		2	highly altered alteration front, sharp upper and lower contacts, mainly silicified, strong chloritic alt, some minor patchy potassic alt, small 3mm nodules of pyrrhotite, some disseminated pyrite
KM12001	199.91	200.21	Silicic		4	highly altered alteration front, sharp upper and lower contacts, mainly silicified, strong chloritic alt, some minor patchy potassic alt, small 3mm nodules of pyrrhotite, some disseminated pyrite
KM12001	200.81	213.11	Chlorite		2	minor chloritic overprint, mainly through fractures/veinlets, some minor halos around veinlets
KM12001	201.91	203.68	Sericitic		2	minor sericitic alt throughout sheared intrusive, mainly visible as coarser grained bleaching
KM12001	215.98	231.7	Chlorite		1	very minor chlorite bleaching, concentrated to breccia zones, patchy bleaching
KM12002	17.23	20.95	Chlorite		1	minor chloritic within veinlets with halos, concentrated to shear zones, minor silicification of breccias
KM12002	17.23	20.95	Silica		2	minor chloritic within veinlets with halos, concentrated to shear zones, minor silicification of breccias

Hole Number	From	To	Alteration	Alteration Description	Degree	Note
KM12002	32	46.05	Chlorite		1	very minor chlorite alteration, concentrated to breccia zones and fracture/vein surfaces
KM12002	52.65	61.75	Chlorite		1	minor chlorite alteration halos, areas of patchy bleaching
KM12002	70.73	78.46	Chlorite		1	minor chlorite alteration throughout this interval, sub cm scale halos around veins
KM12002	74.74	75.81	Silicic		3	moderately silicified and chlorite alteration, relatively sharp contacts
KM12002	85.58	97.57	Chlorite		1	minor chloritic alteration, overprint from deeper intrusive body?, alt mainly halos and around veins, very fresh intrusive body
KM12002	104.56	105.68	Chlorite		1	very minor chlorite alteration, spotty qrtz nodules throughout, into a crackle breccia then terminates at a brittle shear below this
KM12002	114.63	123.4	Chlorite		1	very minor chloritic alteration, halos around veinlets
KM12002	143.02	162.12	Chlorite		1	very minor chloritic alltration, halos surrounding fine grained carb veinlets
KM12002	154.19	156.09	Silica		3	moderate alteration front, silicified with some minor chlorite bleaching
KM12002	156.09	183.53	Chlorite		1	very minor chlorite alteration, halos surrounding fine qrtz/calcite veinlets, patchy chlorite bleaching

Appendix 4.1.2 - Lithology

29-Jan-13

Hole Number	From(m)	To(m)	Unit	Rock Type	Minor Rock Type	Pri Colour	Sec Colour	Grain Size	Pri Texture	Notes
KM12001	4.57	14.75		Overburden						
KM12001	14.75	15.6		Siltstone		light grey	bluish	very fine	veined	
KM12001	15.6	17.53		Greywacke		light grey	bluish	medium		
KM12001	17.53	18.86		Siltstone		grey	greyish	pebble	brecciated	Quartz carbonate breccia
KM12001	18.86	19.24		Greywacke		grey	light grey	medium	sandy	
KM12001	19.24	20.43		Siltstone		grey	greyish	very coarse	brecciated	quartz carnbonate breccia, smaller clast size than previous
KM12001	20.43	22.27		Siltstone		light grey	greyish	very fine		
KM12001	22.27	23.6		Greywacke		light grey	greyish	medium		
KM12001	23.6	24.3		Greywacke		light grey	greyish	fine		
KM12001	24.3	26.5		Siltstone		light grey	greyish	fine	massive	grading into gritty siltstone, 20mm thick qrtz carb vein with some patchy limenite
KM12001	26.5	30.48		Sandstone	quartz	light grey	grey	coarse	gritty	massive qrtz grit with interbedded fine pale grey siltstones, very fine min in 2mm fracture at 28.64m disseminated pyrite, some expyrites
KM12001	30.48	36.58		Greywacke		light grey	grey	medium	massive	massive bands up to 10 cm of thin 2mm qrtz carb stockwork veins
KM12001	36.58	59.21		Greywacke		light grey	grey	fine	brecciated	one 20 cm band of minor chlorite altered rip up clast, large section of homogeneous massive light grey fine grained greywacke with 3.3m section of crackle breccia, thin bands of interbedded siltstones,
KM12001	59.21	62.3		Siltstone		light grey	grey	fine	massive	Some bands of fine stockwork qrtz veins
KM12001	62.3	90.52		Greywacke		light grey	greyish	fine	bedded	interbedded siltstone layers up to 10cm thick, sections of gradational qrtz carb stockwork veins into crackle breccias
KM12001	90.52	94.39		Greywacke		light grey	greyish	fine-medium	massive	few carb dom veinlets less than 2mm
KM12001	94.39	106.42		Feldspar Porphyry		light grey	greyish	fine	intrusive	highly altered intrusive, poorly sorted phenocryts, grain boundaries undefined, square feldspar phenos up to 5mm, poorly sorted,
KM12001	106.42	108.37		Greywacke		grey	greyish	fine	massive	band of very fine greywacke within the larger intrusive, weak chloritic alt overprint, fluids from intrusive??
KM12001	108.37	110.44		Feldspar Porphyry		light grey	greyish	fine-medium	intrusive	similar as previous intrusive, very altered, kffeldspars silicified
KM12001	110.44	119.1		Greywacke		grey	greyish	fine	massive	homo greywacke, chlorite through carbonate veinlets/fractures
KM12001	119.1	121.98		Feldspar Porphyry		light grey	greyish	fine-medium	intrusive	
KM12001	121.98	131.88		Greywacke		light grey	greyish	fine	massive	massive homo greywacke grading into tectonic shear zone then to intrusive

Hole Number	From(m)	To(m)	Unit	Rock Type	Minor Rock Type	Pri Colour	Sec Colour	Grain Size	Pri Texture	Notes
KM12001	131.88	140.61		Feldspar Porphyry		light grey	greyish	fine-medium	intrusive	similar intrusive, lower contact grades into crab rich crackle breccia
KM12001	140.61	167.61		Greywacke		light grey	greyish	fine	massive	massive homo gwk
KM12001	167.61	179.12		Greywacke		light grey	greyish	medium	massive	gradational into slightly coarser grained greywacke
KM12001	167.61	175.13		Greywacke		light grey	greyish	medium	massive	gradational into slightly coarser grained greywacke, small 20cm bands coarser grained gritty gwk adjacent to 20cm intervals of very fine grained siltstones, intervals of defined soft sed deformation- flame structures an turbidite flow with sharp baasal contact fining upwards, upright bedding
KM12001	175.13	176.12		Diorite		salt and pepper	greyish	medium	intrusive	highly altered-silicified, intrusive intermediate dike,
KM12001	176.12	202.36		Greywacke		light grey	greyish	medium	massive	massive greywacke, small intervals of finer grained siltstones, small 10cm rip up clasts with very minor localised disseminated pyrrhotite
KM12001	202.36	203.2		Diorite		light grey	greyish	coarse	intrusive	highly altered silicified intrusive, grain boundaries undefined, similar as previous intrusives, poorly sorted, sharp basal contact
KM12001	203.2	205.13		Siltstone		light grey	greyish	fine	massive	fine grained light grey massive siltstone,gradational basal contact
KM12001	205.13	235.67		Greywacke		light grey	greyish	fine-medium	massive	large interval of light grey fine/medium grained massive greywacke, several stockwork vein systems and carbonate rich breccia zones throughout, darker grey 20cm interbeds of finer grained siltstones
KM12002	14.94	15.44		Overburden						
KM12002	15.44	26.95		Greywacke		light grey	greyish	fine	massive	package of interbedded fine grained greywackes, darker finer siltstones, very minor anchorite in carb rich veinlets
KM12002	26.95	31.97		Sandstone		light grey	greyish	coarse	gritty	same interval of gritty quartz sed as seen in hole 1, poorly sorted, quartz grains up to 3mm, grain boundaries undefined, generally massive, upper and lower gradational contacts,
KM12002	31.97	52.88		Greywacke	Siltstone	light grey	greyish	medium	bedded	package of mainly medium grained massive greywacke with sub metre scale dark finer grained ssiltstone interbeds, prominent siltstone laminations throughout interval, occational carb/qrtz veinlets, up to 15 sub cm siltstone bands within lower 3m of the interval
KM12002	52.88	54.03		Diorite		light grey	greyish	medium	intrusive	interval of young fresh intrusive, minor chlorite halos surrounding veinlets, equant grained, non magnetic, grain boundaries undefined, feldspars, finr qrtz
KM12002	54.03	61.79		Greywacke		light grey	greyish	fine	massive	homo greywacke, fine grained massive
KM12002	61.79	62.53		Siltstone		grey	greyish	very fine	massive	massive homo siltstone interbed
KM12002	62.53	87.84		Greywacke		light grey	greyish	medium	massive	massive generic gwk, finer silt laminations throughout

Hole Number	From(m)	To(m)	Unit	Rock Type	Minor Rock Type	Pri Colour	Sec Colour	Grain Size	Pri Texture	Notes
KM12002	87.84	97.57		Feldspar Porphyry	intrusive	grey	salt and pepper	medium	porphyritic	same intrusive feldspar porphyry as hole one, gradational upper contact (chilled margins) coarsening of grains/phenos with depth, sub rounded biotite nodules up to 10mm, feldspars altered with uundefined grain boundaries, less alteration than hole one intrusive, chilled margins towards the basal contact, lower contact=thin 5mm brittle shear plane, very fresh intrusive
KM12002	97.57	111.19		Greywacke		light grey	greyish	fine-medium	massive	homogeneous massive greywack, similar to previuos gwks, small intervals of darker finer grained silts after shears,
KM12002	111.19	111.59		Siltstone		grey	greyish	fine	massive	massive fine silt, same as previous silts
KM12002	111.59	117.16		Greywacke		grey	greyish	fine-medium	massive	same as previous gwks
KM12002	117.16	120.31		Siltstone		grey green	greyish	fine	massive	same as previous siltstones, thin laminated coarser grained gwk interbeds
KM12002	120.31	129.26		Greywacke		light grey	greyish	fine-medium	massive	homo, fine interbedded silts
KM12002	129.26	131.94		Siltstone		grey	greyish	fine	massive	massive siltstone with interbedded gwks,
KM12002	131.94	140.39		Greywacke		light grey	greyish	fine-medium	massive	massive gwk, interbedded bands of siltstone up to 2cm,
KM12002	140.39	143.02		Siltstone		grey	greyish	fine	massive	massive siltstone, similar as previous silts
KM12002	143.02	165.08		Greywacke		light grey	greyish	fine-medium	massive	massive gwk, fine interbedded siltstone laminations, interbeds of moderately altered
KM12002	165.08	168.07		Siltstone		grey	greyish	fine-medium	massive	massive homo siltstone, odd thin carb veinlets
KM12002	168.07	177.07		Greywacke		light grey	greyish	fine-medium	massive	intervals of carb rich stockwork veinlets, finer siltstone interbeds
KM12002	177.07	178.02		Siltstone		grey	greyish	fine	massive	fine grained massive siltstone, thin bands coarser grained gwks
KM12002	178.02	183.53		Greywacke		light grey	greyish	fine-medium	massive	final greywacke unit, high frequency calcite rich veinlets

Appendix 4.1.3 - Mineralization

29-Jan-13

Hole Number	From(m)	To(m)	Min Type	Min Desc	Oxidation
KM12001	19.24	20.43	FRACTURES	0.1% FRACTURES fine grained pyrrhotite	2
KM12001	38.3	38.36	VEINLETS	0.1% VEINLETS very fine grained pyrrhotite	1
KM12001	61.59	74.72	VEINLETS	0.1% FRACTURES fine grained pyrite	1
KM12001	89.39	91.02	DISSEMINATED	0.1% DISSEMINATED very fine grained pyrite, 0.1% DISSEMINATED very fine grained pyrrhotite	1
KM12001	94.39	162.5	FRACTURES	0.1% DISSEMINATED fine grained pyrite, 0.1% FRACTURES fine grained pyrrhotite	1
KM12001	201.91	202.4	BRECCIATED	0.5% BRECCIATED fine grained pyrite, 0.1% BRECCIATED fine grained chalcopyrite, 0.1% BRECCIATED fine grained galena	1
KM12001	202.41	231.4	DISSEMINATED	0.01% DISSEMINATED fine grained pyrite	1
KM12002	52.6	55.49	DISSEMINATED	0.1% DISSEMINATED fine grained pyrite	1
KM12002	87.33	122.6	DISSEMINATED	0.1% DISSEMINATED fine grained pyrite	1
KM12002	145.42	183.5	DISSEMINATED	0.1% DISSEMINATED very fine grained pyrite	1
KM12002	145.66	146.1	NODULAR	0.1% FRACTURES fine-medium grained galena, 0.1% BLEBBY fine grained chalcopyrite, 0.5% FRACTURES fine-medium grained pyrite, 0.1% FRACTURES fine grained pyrrhotite	1

Appendix 4.1.4 - Structure

29-Jan-13

DDH_ID	Depth of Structure (m)	Structure	Angle TCA (alpha)	Angle (beta)	Notes:
KM12001	53.41	shear plane	20	160	located just before shear zone
KM12001	67.61	shear plane	22	158	brittle shear into finer 20cm siltstone interbed
KM12001	76.83	shear plane	10	170	lower shear plane, some well developed quartz groth up to 2mm within shear
KM12001	94.75	veinlet (<10cm)	10	170	hydrothermal alteration front, sharp well defined boundary
KM12001	97	veinlet (<10cm)	25	155	qrtz vein, strong chloritic alt, sharp contact into vein, small amount carb content
KM12001	98.97	shear plane	20	160	sharp well defined small shear within carb/qrtz crackle breccia
KM12001	94.39	contact - lithologic	10	170	sharp planar contact into highly altered intrusive
KM12001	106.42	contact - lithologic	15	165	sharp planar contact from feldspar porphyry into fine greywacke
KM12001	108.37	contact - lithologic	15	165	lower contact, sharp planar
KM12001	108.59	veinlet (<10cm)	25	155	planar sheeted vein, minor pyrhotite in vvein edges
KM12001	116.04	veinlet (<10cm)	45	135	fine carb sheeted vein, rep of veins within 1m interval
KM12001	119.1	shear plane	50	130	shear plane contact from greywacke into intrusive
KM12001	122.8	shear plane	10	170	thin shear plane into cataclastic shear zone
KM12001	134.68	veinlet (<10cm)	30	150	sharp planar contacts into powdery calcite
KM12001	138.9	veinlet (<10cm)	35	145	carb veinlet

DDH_ID	Depth of Structure (m)	Structure	Angle TCA (alpha)	Angle (beta)	Notes:
KM12001	142.11	veinlet (<10cm)	30	150	calcite veinlet
KM12001	144.06	bedding	20	160	darker finer grained interbed
KM12001	163	shear plane	30	150	see shear zone, sharp contact into shear
KM12001	159.45	deformed			1m interval of soft sed deformation, flame structures above a 30 cm turbidite flow, with a sharp basal contact back into the finer grained gwk
KM12001	166.66	bedding	50	130	thin band of dark siltstone within coarser gwk
KM12001	175.13	contact - lithologic	60	120	sharp upper contact, into gritty coarse grained sandstone,
KM12001	176.13	contact - lithologic	80	100	sharp basal contact back into finer grained gwk
KM12001	180	bedding	40	140	fine 3mm band of dark black siltstone
KM12001	159.87	contact - lithologic	60	120	sharp basal contact of turb flow, bedding/strata upright
KM12001	188.57	shear plane	20	160	thin shear, some dark black fine grained gouge
KM12001	195.47	bedding	20	160	fine laminated bedding, darker mm scale fine interbeds, representative of nearby within 1m bedding
KM12001	210.92	veinlet (<10cm)	50	130	fine calcite veins, representative of nearby vein angles
KM12001	220.68	veinlet (<10cm)	50	130	sharp carb rich veinlet
KM12001	225.58	bedding	40	140	dark grey finer interbeds
KM12001	235.3	veinlet (<10cm)	50	130	representative qrtz vein

DDH_ID	Depth of Structure (m)	Structure	Angle TCA (alpha)	Angle (beta)	Notes:
KM12002	27.47	veinlet (<10cm)	60	120	carb rich, representative of adjacent veinlets
KM12002	16.25	shear plane	15	165	sharp planar shear, upper contact into float breccia zone,
KM12002	17.23	shear plane	25	155	sharp planar contact, infilled with fine grained gouge
KM12002	43.76	veinlet (<10cm)	20	160	carb rich veinlet, representative of adjacent veinlet angles
KM12002	44.29	bedding	40	140	wavy dark finer grained siltstone laminations
KM12002	45.9	bedding	45	135	siltstone laminations,
KM12002	47.08	bedding	40	140	siltstone laminations
KM12002	52.9	contact - lithologic	35	145	cryptic upper contact from greywacke into intrusive
KM12002	57.96	veinlet (<10cm)	45	135	carb rich, representative
KM12002	60.09	bedding	30	150	siltatone lamination
KM12002	61.79	contact - lithologic	60	120	sharp contactfrom gwk to siltstone, very fine disseminated pyrrhotite on contact
KM12002	84.3	bedding	35	145	fine grained bands dark black siltstone
KM12002	91.44	veinlet (<10cm)	60	120	qrtz veinlet, representative
KM12002	93.57	veinlet (<10cm)	35	145	thin powdery calcite veinlet
KM12002	97.07	veinlet (<10cm)	40	140	powdery carbonate veinlet, representative
KM12002	97.52	shear plane	30	150	brittle shear between altered intrusive and siltstone
KM12002	101.69	veinlet (<10cm)	40	140	
KM12002	103.01	shear plane	30	150	brittle

DDH_ID	Depth of Structure (m)	Structure	Angle TCA (alpha)	Angle (beta)	Notes:
KM12002	105.98	shear plane	50	130	brittle after altered crackle breccia
KM12002	115.16	veinlet (<10cm)	50	130	carb rich, rep
KM12002	120.42	contact - lithologic	70	110	minor stockwork of carb rich veinlets at contact into greywacke
KM12002	122.96	veinlet (<10cm)	45	135	
KM12002	125.6	veinlet (<10cm)	45	135	qrtz rrep
KM12002	128.59	veinlet (<10cm)	65	115	qrtz
KM12002	133.83	bedding	50	130	fine grained dark silt laminations
KM12002	135.61	veinlet (<10cm)	40	140	qrtz, rep
KM12002	141.45	bedding	55	125	finer grained dark siltstone lamination
KM12002	154.31	veinlet (<10cm)	65	115	fine quartz veinlet
KM12002	155.89	veinlet (<10cm)	45	135	calcite, rep
KM12002	162.5	veinlet (<10cm)	50	130	calcite with minor qrtz, rep
KM12002	168.15	contact - lithologic	40	140	sharp planar contact between siltstone and greywacke
KM12002	172.57	veinlet (<10cm)	60	120	very fine calcite veinlet

Appendix 4.1.5 - Veining Intervals

29-Jan-13

Hole Number	From(m)	To(m)	Density(/m)	Width(cm)	Angle	Colour	Grain Size	Texture	Mineralogy 1	Mineralogy 2	Mineralogy 3	Note
KM12001	22.27	27.74	10	0.1	30	white	fine	STOCKWORK	Quartz	Calcite	Limonite	some patchy limenite from ex sulfides
KM12001	27.74	28.6	7	0.2	30	white	fine	SHEETED	Calcite	Quartz		
KM12001	33.61	34.61	7	0.2	25	white	fine	SHEETED	Quartz	Calcite		
KM12001	72.38	73.88	8	0.2	20	white	fine	SHEETED	Carbonate	Calcite		
KM12001	88.41	88.86	5	0.1	60	white	fine	STOCKWORK	Carbonate			
KM12001	90.54	91.02	8	0.2	40	white	fine	SHEETED	Carbonate	Calcite		well defined sharp boundaries into fine grained powdery carbonate
KM12001	151.2	153.112	21	0.2	50	white	fine	STOCKWORK	Calcite	Carbonate		evenly distributed veinlets throughout
KM12001	158.83	187.9	30	0.2	70	white	fine	STOCKWORK	Calcite	Carbonate		homo stockwork of calcite with minor chlorite formation
KM12002	78.4	78.7	10	0.2	60	white	fine	STOCKWORK	Calcite			
KM12002	102.19	102.69	13	0.2	30	white	fine	STOCKWORK	Calcite			
KM12002	169.64	170.74	35	0.2	75	white	fine	STOCKWORK	Calcite			
KM12002	173.09	173.49	20	0.1	65	white	fine	STOCKWORK	Calcite			
KM12002	179.19	179.72	14	0.3	30	white	fine	STOCKWORK	Calcite			
KM12002	180.97	181.39	14	0.2	70	white	fine	STOCKWORK	Calcite			

Appendix 4.1.5 - Veining

29-Jan-13

Hole Number	From (m)	To (m)	Density (veins/m)	Width (m)	Angle (to CA)	Colour	Grain Size	Texture	Mineralogy 1	Minerlogy 2	Mineralogy 3	Note
KM12001	22.27	27.74	10	0.1	30	white	fine	STOCKWORK	Quartz	Calcite	Limonite	some patchy limenite from ex sulfides
KM12001	27.74	28.6	7	0.2	30	white	fine	SHEETED	Calcite	Quartz		
KM12001	33.61	34.61	7	0.2	25	white	fine	SHEETED	Quartz	Calcite		
KM12001	72.38	73.88	8	0.2	20	white	fine	SHEETED	Carbonate	Calcite		
KM12001	88.41	88.86	5	0.1	60	white	fine	STOCKWORK	Carbonate			
KM12001	90.54	91.02	8	0.2	40	white	fine	SHEETED	Carbonate	Calcite		well defined sharp boundaries into fine grained powdery carbonate
KM12001	151.2	153.112	21	0.2	50	white	fine	STOCKWORK	Calcite	Carbonate		evenly distributed veinlets throughout
KM12001	158.83	187.9	30	0.2	70	white	fine	STOCKWORK	Calcite	Carbonate		homo stockwork of calcite with minor chlorite formation
KM12002	78.4	78.7	10	0.2	60	white	fine	STOCKWORK	Calcite			
KM12002	102.19	102.69	13	0.2	30	white	fine	STOCKWORK	Calcite			
KM12002	169.64	170.74	35	0.2	75	white	fine	STOCKWORK	Calcite			
KM12002	173.09	173.49	20	0.1	65	white	fine	STOCKWORK	Calcite			
KM12002	179.19	179.72	14	0.3	30	white	fine	STOCKWORK	Calcite			
KM12002	180.97	181.39	14	0.2	70	white	fine	STOCKWORK	Calcite			

Appendix 4.1.6- Sampling Log

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-001	16.64	17.39	0.75		SPLIT	KM12-001	
KM12001-002	17.39	18.19	0.8		SPLIT	KM12-001	
KM12001-003	18.19	19.43	1.24		SPLIT	KM12-001	
KM12001-004	19.43	20.05	0.62		SPLIT	KM12-001	
KM12001-005	40.7	41.15	0.45		SPLIT	KM12-001	
KM12001-006	41.15	42.12	0.97		SPLIT	KM12-001	
KM12001-007	42.12	43	0.88		SPLIT	KM12-001	
KM12001-008	53.29	54.09	0.8		SPLIT	KM12-001	
KM12001-009	54.09	54.49	0.4		SPLIT	KM12-001	
KM12001-010	54.49	55.45	0.96		SPLIT	KM12-001	
KM12001-011	55.45	55.83	0.38		SPLIT	KM12-001	
KM12001-012	55.83	56.69	0.86		SPLIT	KM12-001	
KM12001-013	66.75	67.38	0.63		SPLIT	KM12-001	
KM12001-014	67.38	67.7	0.32		SPLIT	KM12-001	
KM12001-015	67.7	68.16	0.46		SPLIT	KM12-001	
KM12001-016	76.15	76.44	0.29		SPLIT	KM12-001	
KM12001-017	76.44	76.83	0.39		SPLIT	KM12-001	
KM12001-018	76.83	77.59	0.76		SPLIT	KM12-001	
KM12001-019	77.59	78.44	0.85		SPLIT	KM12-001	
KM12001-020	83.08	83.44	0.36		SPLIT	KM12-001	
KM12001-021	83.64	84.09	0.45		SPLIT	KM12-001	
KM12001-022	84.09	84.37	0.28		SPLIT	KM12-001	
KM12001-023	86.71	87.29	0.58		SPLIT	KM12-001	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-024	87.29	88.26	0.97		SPLIT	KM12-001	
KM12001-025	88.26	88.99	0.73		SPLIT	KM12-001	
KM12001-026	88.99	89.54	0.55		SPLIT	KM12-001	
KM12001-027	89.54	90.27	0.73		SPLIT	KM12-001	
KM12001-028	90.27	91.02	0.75		SPLIT	KM12-001	
KM12001-029	94.39	96.8	2.41		SPLIT	KM12-001	
KM12001-030	96.8	97.8	1		SPLIT	KM12-001	
KM12001-031	97.8	98.8	1		SPLIT	KM12-001	
KM12001-032	98.8	99.8	1		SPLIT	KM12-001	
KM12001-033	99.8	100.8	1		SPLIT	KM12-001	
KM12001-034	100.8	101.8	1		SPLIT	KM12-001	
KM12001-035	101.8	102.8	1		SPLIT	KM12-001	
KM12001-036	102.8	103.8	1		SPLIT	KM12-001	
KM12001-037	103.8	104.8	1		SPLIT	KM12-001	
KM12001-038	104.8	105.8	1		SPLIT	KM12-001	
KM12001-039	105.8	106.8	1		SPLIT	KM12-001	
KM12001-040	106.8	107.8	1		SPLIT	KM12-001	
KM12001-041	107.8	108.8	1		SPLIT	KM12-001	
KM12001-042	108.8	109.8	1		SPLIT	KM12-001	
KM12001-043	109.8	110.52	0.72		SPLIT	KM12-001	
KM12001-044	119.15	120.15	1		SPLIT	KM12-001	
KM12001-045	120.15	121.15	1		SPLIT	KM12-001	
KM12001-046	121.15	121.85	0.7		SPLIT	KM12-001	
KM12001-047	121.85	122.46	0.61		SPLIT	KM12-001	
KM12001-048	129.05	129.35	0.3		SPLIT	KM12-001	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-049	129.35	130.35	1		SPLIT	KM12-001	
KM12001-050	130.35	131.35	1		SPLIT	KM12-001	
KM12001-051	131.35	131.88	0.53		SPLIT	KM12-001	
KM12001-052	131.88	132.88	1		SPLIT	KM12-001	
KM12001-053	132.88	133.88	1		SPLIT	KM12-001	
KM12001-054	133.88	134.88	1		SPLIT	KM12-001	
KM12001-055	134.88	135.88	1		SPLIT	KM12-001	
KM12001-056	135.88	136.88	1		SPLIT	KM12-001	
KM12001-057	136.88	137.88	1		SPLIT	KM12-001	
KM12001-058	137.88	138.88	1		SPLIT	KM12-001	
KM12001-059	138.88	139.88	1		SPLIT	KM12-001	
KM12001-060	139.88	140.88	1		SPLIT	KM12-001	
KM12001-061	140.88	141.88	1		SPLIT	KM12-001	
KM12001-062	141.88	142.88	1		SPLIT	KM12-001	
KM12001-063	162.42	162.8	0.38		SPLIT	KM12-001	
KM12001-064	162.8	163.2	0.4		SPLIT	KM12-001	
KM12001-065	163.2	163.66	0.46		SPLIT	KM12-001	
KM12001-066	199.26	199.91	0.65		SPLIT	KM12-001	
KM12001-067	199.91	200.21	0.3		SPLIT	KM12-001	
KM12001-068	200.21	200.91	0.7		SPLIT	KM12-001	
KM12001-069	200.91	201.91	1		SPLIT	KM12-001	
KM12001-070	201.91	202.41	0.5		SPLIT	KM12-001	
KM12001-071	202.41	203.21	0.8		SPLIT	KM12-001	
KM12001-072	203.21	204.2	0.99		SPLIT	KM12-001	
KM12001-073	204.2	204.7	0.5		SPLIT	KM12-001	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-074	215.98	216.95	0.97		SPLIT	KM12-001	
KM12001-075	216.95	217.48	0.53		SPLIT	KM12-001	
KM12001-076	217.48	218.48	1		SPLIT	KM12-001	
KM12001-077	218.48	219.48	1		SPLIT	KM12-001	
KM12001-078	219.48	220.48	1		SPLIT	KM12-001	
KM12001-079	220.48	221.48	1		SPLIT	KM12-001	
KM12001-080	221.48	221.89	0.41		SPLIT	KM12-001	
KM12001-081	221.89	222.89	1		SPLIT	KM12-001	
KM12001-082	222.89	223.67	0.78		SPLIT	KM12-001	
KM12001-083	227.5	228.5	1		SPLIT	KM12-001	
KM12001-084	228.5	229.5	1		SPLIT	KM12-001	
KM12001-085	229.5	230.48	0.98		SPLIT	KM12-001	
KM12001-086	230.48	231.17	0.69		SPLIT	KM12-001	
KM12001-087	231.17	231.54	0.37		SPLIT	KM12-001	
KM12001-088	231.54	232.62	1.08		SPLIT	KM12-001	
KM12002-001	15.85	16.85	1		SPLIT	KM12-002	
KM12002-002	16.85	17.85	1		SPLIT	KM12-002	
KM12002-003	17.85	18.85	1		SPLIT	KM12-002	
KM12002-004	18.85	19.7	0.85		SPLIT	KM12-002	
KM12002-005	19.7	20.22	0.52		SPLIT	KM12-002	
KM12002-006	20.22	20.95	0.73		SPLIT	KM12-002	
KM12002-007	31.92	32.62	0.7		SPLIT	KM12-002	
KM12002-008	32.62	33.68	1.06		SPLIT	KM12-002	
KM12002-009	33.68	34.28	0.6		SPLIT	KM12-002	
KM12002-010	34.28	35.25	0.97		SPLIT	KM12-002	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12002-011	35.25	35.78	0.53		SPLIT	KM12-002	
KM12002-012	35.78	36.66	0.88		SPLIT	KM12-002	
KM12002-013	39.44	40.44	1		SPLIT	KM12-002	
KM12002-014	40.44	41.02	0.58		SPLIT	KM12-002	
KM12002-015	41.02	42.02	1		SPLIT	KM12-002	
KM12002-016	43.3	44.3	1		SPLIT	KM12-002	
KM12002-017	52.88	54.03	1.15		SPLIT	KM12-002	
KM12002-018	65.81	66.31	0.5		SPLIT	KM12-002	
KM12002-019	66.31	66.71	0.4		SPLIT	KM12-002	
KM12002-020	66.71	67.01	0.3		SPLIT	KM12-002	
KM12002-021	74.24	74.74	0.5		SPLIT	KM12-002	
KM12002-022	74.74	75.81	1.07		SPLIT	KM12-002	
KM12002-023	75.81	76.31	0.5		SPLIT	KM12-002	
KM12002-024	87.84	89.34	1.5		SPLIT	KM12-002	
KM12002-025	89.34	90.84	1.5		SPLIT	KM12-002	
KM12002-026	90.84	92.34	1.5		SPLIT	KM12-002	
KM12002-027	92.34	93.84	1.5		SPLIT	KM12-002	
KM12002-028	93.84	95.34	1.5		SPLIT	KM12-002	
KM12002-029	95.34	96.84	1.5		SPLIT	KM12-002	
KM12002-030	96.84	97.57	0.73		SPLIT	KM12-002	
KM12002-031	97.57	98.14	0.57		SPLIT	KM12-002	
KM12002-032	100.91	101.91	1		SPLIT	KM12-002	
KM12002-033	101.91	102.91	1		SPLIT	KM12-002	
KM12002-034	102.91	103.91	1		SPLIT	KM12-002	
KM12002-035	108.73	109.48	0.75		SPLIT	KM12-002	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12002-036	112.32	112.82	0.5		SPLIT	KM12-002	
KM12002-037	123.55	124.21	0.66		SPLIT	KM12-002	
KM12002-038	143	144	1		SPLIT	KM12-002	
KM12002-039	144	145	1		SPLIT	KM12-002	
KM12002-040	145	145.66	0.66		SPLIT	KM12-002	
KM12002-041	145.66	146.1	0.44		SPLIT	KM12-002	
KM12002-042	146.1	146.6	0.5		SPLIT	KM12-002	
KM12002-043	153.38	154.23	0.85		SPLIT	KM12-002	
KM12002-044	154.23	154.89	0.66		SPLIT	KM12-002	
KM12002-045	154.89	155.89	1		SPLIT	KM12-002	
KM12002-046	168.69	169.69	1		SPLIT	KM12-002	
KM12002-047	169.69	170.69	1		SPLIT	KM12-002	
KM12002-048	170.69	171.34	0.65		SPLIT	KM12-002	
KM12002-049	177.07	178.02	0.95		SPLIT	KM12-002	
KM12002-050	178.02	178.52	0.5		SPLIT	KM12-002	
KM12002-051	178.52	179.02	0.5		SPLIT	KM12-002	
KM12002-052	179.02	180.02	1		SPLIT	KM12-002	

Appendix 4.1.6- Sampling Log

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-001	16.64	17.39	0.75		SPLIT	KM12-001	
KM12001-002	17.39	18.19	0.8		SPLIT	KM12-001	
KM12001-003	18.19	19.43	1.24		SPLIT	KM12-001	
KM12001-004	19.43	20.05	0.62		SPLIT	KM12-001	
KM12001-005	40.7	41.15	0.45		SPLIT	KM12-001	
KM12001-006	41.15	42.12	0.97		SPLIT	KM12-001	
KM12001-007	42.12	43	0.88		SPLIT	KM12-001	
KM12001-008	53.29	54.09	0.8		SPLIT	KM12-001	
KM12001-009	54.09	54.49	0.4		SPLIT	KM12-001	
KM12001-010	54.49	55.45	0.96		SPLIT	KM12-001	
KM12001-011	55.45	55.83	0.38		SPLIT	KM12-001	
KM12001-012	55.83	56.69	0.86		SPLIT	KM12-001	
KM12001-013	66.75	67.38	0.63		SPLIT	KM12-001	
KM12001-014	67.38	67.7	0.32		SPLIT	KM12-001	
KM12001-015	67.7	68.16	0.46		SPLIT	KM12-001	
KM12001-016	76.15	76.44	0.29		SPLIT	KM12-001	
KM12001-017	76.44	76.83	0.39		SPLIT	KM12-001	
KM12001-018	76.83	77.59	0.76		SPLIT	KM12-001	
KM12001-019	77.59	78.44	0.85		SPLIT	KM12-001	
KM12001-020	83.08	83.44	0.36		SPLIT	KM12-001	
KM12001-021	83.64	84.09	0.45		SPLIT	KM12-001	
KM12001-022	84.09	84.37	0.28		SPLIT	KM12-001	
KM12001-023	86.71	87.29	0.58		SPLIT	KM12-001	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-024	87.29	88.26	0.97		SPLIT	KM12-001	
KM12001-025	88.26	88.99	0.73		SPLIT	KM12-001	
KM12001-026	88.99	89.54	0.55		SPLIT	KM12-001	
KM12001-027	89.54	90.27	0.73		SPLIT	KM12-001	
KM12001-028	90.27	91.02	0.75		SPLIT	KM12-001	
KM12001-029	94.39	96.8	2.41		SPLIT	KM12-001	
KM12001-030	96.8	97.8	1		SPLIT	KM12-001	
KM12001-031	97.8	98.8	1		SPLIT	KM12-001	
KM12001-032	98.8	99.8	1		SPLIT	KM12-001	
KM12001-033	99.8	100.8	1		SPLIT	KM12-001	
KM12001-034	100.8	101.8	1		SPLIT	KM12-001	
KM12001-035	101.8	102.8	1		SPLIT	KM12-001	
KM12001-036	102.8	103.8	1		SPLIT	KM12-001	
KM12001-037	103.8	104.8	1		SPLIT	KM12-001	
KM12001-038	104.8	105.8	1		SPLIT	KM12-001	
KM12001-039	105.8	106.8	1		SPLIT	KM12-001	
KM12001-040	106.8	107.8	1		SPLIT	KM12-001	
KM12001-041	107.8	108.8	1		SPLIT	KM12-001	
KM12001-042	108.8	109.8	1		SPLIT	KM12-001	
KM12001-043	109.8	110.52	0.72		SPLIT	KM12-001	
KM12001-044	119.15	120.15	1		SPLIT	KM12-001	
KM12001-045	120.15	121.15	1		SPLIT	KM12-001	
KM12001-046	121.15	121.85	0.7		SPLIT	KM12-001	
KM12001-047	121.85	122.46	0.61		SPLIT	KM12-001	
KM12001-048	129.05	129.35	0.3		SPLIT	KM12-001	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-049	129.35	130.35	1		SPLIT	KM12-001	
KM12001-050	130.35	131.35	1		SPLIT	KM12-001	
KM12001-051	131.35	131.88	0.53		SPLIT	KM12-001	
KM12001-052	131.88	132.88	1		SPLIT	KM12-001	
KM12001-053	132.88	133.88	1		SPLIT	KM12-001	
KM12001-054	133.88	134.88	1		SPLIT	KM12-001	
KM12001-055	134.88	135.88	1		SPLIT	KM12-001	
KM12001-056	135.88	136.88	1		SPLIT	KM12-001	
KM12001-057	136.88	137.88	1		SPLIT	KM12-001	
KM12001-058	137.88	138.88	1		SPLIT	KM12-001	
KM12001-059	138.88	139.88	1		SPLIT	KM12-001	
KM12001-060	139.88	140.88	1		SPLIT	KM12-001	
KM12001-061	140.88	141.88	1		SPLIT	KM12-001	
KM12001-062	141.88	142.88	1		SPLIT	KM12-001	
KM12001-063	162.42	162.8	0.38		SPLIT	KM12-001	
KM12001-064	162.8	163.2	0.4		SPLIT	KM12-001	
KM12001-065	163.2	163.66	0.46		SPLIT	KM12-001	
KM12001-066	199.26	199.91	0.65		SPLIT	KM12-001	
KM12001-067	199.91	200.21	0.3		SPLIT	KM12-001	
KM12001-068	200.21	200.91	0.7		SPLIT	KM12-001	
KM12001-069	200.91	201.91	1		SPLIT	KM12-001	
KM12001-070	201.91	202.41	0.5		SPLIT	KM12-001	
KM12001-071	202.41	203.21	0.8		SPLIT	KM12-001	
KM12001-072	203.21	204.2	0.99		SPLIT	KM12-001	
KM12001-073	204.2	204.7	0.5		SPLIT	KM12-001	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12001-074	215.98	216.95	0.97		SPLIT	KM12-001	
KM12001-075	216.95	217.48	0.53		SPLIT	KM12-001	
KM12001-076	217.48	218.48	1		SPLIT	KM12-001	
KM12001-077	218.48	219.48	1		SPLIT	KM12-001	
KM12001-078	219.48	220.48	1		SPLIT	KM12-001	
KM12001-079	220.48	221.48	1		SPLIT	KM12-001	
KM12001-080	221.48	221.89	0.41		SPLIT	KM12-001	
KM12001-081	221.89	222.89	1		SPLIT	KM12-001	
KM12001-082	222.89	223.67	0.78		SPLIT	KM12-001	
KM12001-083	227.5	228.5	1		SPLIT	KM12-001	
KM12001-084	228.5	229.5	1		SPLIT	KM12-001	
KM12001-085	229.5	230.48	0.98		SPLIT	KM12-001	
KM12001-086	230.48	231.17	0.69		SPLIT	KM12-001	
KM12001-087	231.17	231.54	0.37		SPLIT	KM12-001	
KM12001-088	231.54	232.62	1.08		SPLIT	KM12-001	
KM12002-001	15.85	16.85	1		SPLIT	KM12-002	
KM12002-002	16.85	17.85	1		SPLIT	KM12-002	
KM12002-003	17.85	18.85	1		SPLIT	KM12-002	
KM12002-004	18.85	19.7	0.85		SPLIT	KM12-002	
KM12002-005	19.7	20.22	0.52		SPLIT	KM12-002	
KM12002-006	20.22	20.95	0.73		SPLIT	KM12-002	
KM12002-007	31.92	32.62	0.7		SPLIT	KM12-002	
KM12002-008	32.62	33.68	1.06		SPLIT	KM12-002	
KM12002-009	33.68	34.28	0.6		SPLIT	KM12-002	
KM12002-010	34.28	35.25	0.97		SPLIT	KM12-002	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12002-011	35.25	35.78	0.53		SPLIT	KM12-002	
KM12002-012	35.78	36.66	0.88		SPLIT	KM12-002	
KM12002-013	39.44	40.44	1		SPLIT	KM12-002	
KM12002-014	40.44	41.02	0.58		SPLIT	KM12-002	
KM12002-015	41.02	42.02	1		SPLIT	KM12-002	
KM12002-016	43.3	44.3	1		SPLIT	KM12-002	
KM12002-017	52.88	54.03	1.15		SPLIT	KM12-002	
KM12002-018	65.81	66.31	0.5		SPLIT	KM12-002	
KM12002-019	66.31	66.71	0.4		SPLIT	KM12-002	
KM12002-020	66.71	67.01	0.3		SPLIT	KM12-002	
KM12002-021	74.24	74.74	0.5		SPLIT	KM12-002	
KM12002-022	74.74	75.81	1.07		SPLIT	KM12-002	
KM12002-023	75.81	76.31	0.5		SPLIT	KM12-002	
KM12002-024	87.84	89.34	1.5		SPLIT	KM12-002	
KM12002-025	89.34	90.84	1.5		SPLIT	KM12-002	
KM12002-026	90.84	92.34	1.5		SPLIT	KM12-002	
KM12002-027	92.34	93.84	1.5		SPLIT	KM12-002	
KM12002-028	93.84	95.34	1.5		SPLIT	KM12-002	
KM12002-029	95.34	96.84	1.5		SPLIT	KM12-002	
KM12002-030	96.84	97.57	0.73		SPLIT	KM12-002	
KM12002-031	97.57	98.14	0.57		SPLIT	KM12-002	
KM12002-032	100.91	101.91	1		SPLIT	KM12-002	
KM12002-033	101.91	102.91	1		SPLIT	KM12-002	
KM12002-034	102.91	103.91	1		SPLIT	KM12-002	
KM12002-035	108.73	109.48	0.75		SPLIT	KM12-002	

Sample Number	From(m)	To(m)	Interval Length(m)	Recovered Length(m)	Sample Method	Shipping Number	Note
KM12002-036	112.32	112.82	0.5		SPLIT	KM12-002	
KM12002-037	123.55	124.21	0.66		SPLIT	KM12-002	
KM12002-038	143	144	1		SPLIT	KM12-002	
KM12002-039	144	145	1		SPLIT	KM12-002	
KM12002-040	145	145.66	0.66		SPLIT	KM12-002	
KM12002-041	145.66	146.1	0.44		SPLIT	KM12-002	
KM12002-042	146.1	146.6	0.5		SPLIT	KM12-002	
KM12002-043	153.38	154.23	0.85		SPLIT	KM12-002	
KM12002-044	154.23	154.89	0.66		SPLIT	KM12-002	
KM12002-045	154.89	155.89	1		SPLIT	KM12-002	
KM12002-046	168.69	169.69	1		SPLIT	KM12-002	
KM12002-047	169.69	170.69	1		SPLIT	KM12-002	
KM12002-048	170.69	171.34	0.65		SPLIT	KM12-002	
KM12002-049	177.07	178.02	0.95		SPLIT	KM12-002	
KM12002-050	178.02	178.52	0.5		SPLIT	KM12-002	
KM12002-051	178.52	179.02	0.5		SPLIT	KM12-002	
KM12002-052	179.02	180.02	1		SPLIT	KM12-002	

Appendix IV

DDH Logs and Stip Logs

4.2 – Strip Logs

Hole Name :KM12001

Length(m) :235.67	Azimuth(Deg) :265	Dip(Deg) :-45
Easting :499935	Northing :6069867	Elevation(m) :584.3

Depth At	BedCoreAngle	ShrCoreAngle	Recovery (%)	Rock Type	Notes	Density(/m)	Class	Ductility	Au_ppb	Si Deg	Chl Deg	K Deg	Py Pct	Po Pct	Cpy Pct	Aspy Pct	Elevation
	QDH - Struc - Bedding	QDH - Struc - Shear	QDH - Geotech	QDH - Lithology		QDH - Vien Interval	QDH - Brecciation	QDH - Major Shear Zones	QDH - Geochem Master	QDH - Alteration - Si	QDH - Alteration - Chl	QDH - Alteration - Potassic	QDH - Mineralization - Py	QDH - Mineralization - Po	QDH - Mineralization - Cpy	QDH - Mineralization - Aspy	
25				Overburden	?												566.62
				Siltstone	?												
				Greywacke	?												
				Siltstone	Quartz carbonate breccia												
				Siltstone	?												
				Siltstone	quartz carnbonate breccia, smaller clast size than previous												
				Greywacke	?												
				Siltstone	?												
				Sandstone	?												
				Greywacke	grading into gritty siltstone, 20mm thick qrtz carb vein with some patchy limenite												
				Greywacke	massive qrtz grit with interbedded fine pale grey siltstones, very fine min in 2mm fracture at 28.64m disseminated pyrite, some expyrites												
				Greywacke	massive bands up to 10 cm of thin 2mm qrtz carb stockwork veins												
50				Greywacke	one 20 cm band of minor chlorite altered rip up clast, large section of homogeneous massive light grey fine grained greywacke with 3.3m section of crackle breccia, thin bands of interbedded siltstones,												548.94
				Siltstone	Some bands of fine stockwork qrtz veins												
75				Greywacke	interbedded siltstone layers up to 10cm thick, sections of gradational qrtz carb stockwork veins into crackle breccias												531.27
				Greywacke	few carb dom veinlets less than 2mm												
100				Feldspar Porphyry	highly altered intrusive, poorly sorted phenocryts, grain boundaries undefined, square feldspar phenos up to 5mm, poorly sorted,												513.59
				Greywacke	band of very fine greywacke within the larger intrusive, weak chloritic alt overprint, fluids from intrusive??												
				Feldspar Porphyry	similar as previous intrusive, very altered, kffeldspars silicified												
				Greywacke	homo greywacke, chlorite through carbonate veinlets/fractures												
				Feldspar Porphyry	?												
125				Greywacke	massive homo greywacke grading into tectonic shear zone then to intrusive												495.91
				Feldspar Porphyry	similar intrusive, lower contact grades into crab rich crackle breccia												
150				Greywacke	massive homo gwk												478.23
				Greywacke	gradational into slightly coarser grained greywacke, small 20cm bands coarser grained gritty gwk adjacent to 20cm intervals of very fine grained siltstones, intervals of defined soft sed deformation- flame structures an turbidite flow with sharp baasal contact fining upwards, upright bedding												
175				Diorite	gradational into slightly coarser grained greywacke												460.56
				Diorite	highly altered-silicified, intrusive intermediate dike,												
				Greywacke	massive greywacke, small intervals of finer grained siltstones, small 10cm rip up clasts with very minor localised disseminated pyrrhotite												
200				Diorite	highly altered silicified intrusive, grain boundaries undefined, similar as previous intrusives, poorly sorted, sharp basal contact												442.88
				Siltstone	fine grained light grey massive siltstone,gradational basal contact												
225				Greywacke	large interval of light grey fine/medium grained massive greywacke, several stockwork vein systems and carbonate rich breccia zones throughout, darker grey 20cm interbeds of finer grained siltstones												425.20

Scale 1:714	01/24/13	16:38:20

Hole Name :KM12001

KM DDH

Start Depth :4.57

End Depth :235.67

Depth At	_ORD	Rock Type	Notes	Elevation
		Overburden	?	
		Siltstone	?	
		Greywacke	?	
		Siltstone	Quartz carbonate breccia	
		Siltstone	?	
		Siltstone	quartz carnbonate breccia, smaller clast size than previous	
		Greywacke	?	
		Greywacke	?	
25		Siltstone	?	566.62
		Sandstone	grading into gritty siltstone, 20mm thick qrtz carb vein with some patchy limenite	
			massive qrtz grit with interbedded fine pale grey siltstones, very fine min in 2mm fracture at 28.64m disseminated pyrite, some expyrites	
		Greywacke	massive bands up to 10 cm of thin 2mm qrtz carb stockwork veins	
50		Greywacke	one 20 cm band of minor chlorite altered rip up clast, large section of homogeneous massive light grey fine grained greywacke with 3.3m section of crackle breccia, thin bands of interbedded siltstones,	548.94
		Siltstone	Some bands of fine stockwork qrtz veins	
75		Greywacke	interbedded siltstone layers up to 10cm thick, sections of gradational qrtz carb stockwork veins into crackle breccias	531.27
		Greywacke	few carb dom veinlets less than 2mm	
100		Feldspar Porphyry	highly altered intrusive, poorly sorted phenocryts, grain boundaries undefined, square feldspar phenos up to 5mm, poorly sorted,	513.59
		Greywacke	band of very fine greywacke within the larger intrusive, weak chloritic alt overprint, fluids from intrusive??	
		Feldspar Porphyry	similar as previous intrusive, very altered, kffeldspars silicified	
		Greywacke	homo greywacke, chlorite through carbonate veinlets/fractures	
		Feldspar Porphyry	?	
125		Greywacke	massive homo greywacke grading into tectonic shear zone then to intrusive	495.91
		Feldspar Porphyry	similar intrusive, lower contact grades into crab rich crackle breccia	
150		Greywacke	massive homo gwk	478.23
		Greywacke	gradational into slightly coarser grained greywacke, small 20cm bands coarser grained gritty gwk adjacent to 20cm intervals of very fine grained siltstones, intervals of defined soft sed deformation- flame structures an turbidite flow with sharp baasal contact fining upwards, upright bedding	
175			gradational into slightly coarser grained greywacke	460.56
		Diorite	highly altered-silicified, intrusive intermediate dike,	
		Greywacke	massive greywacke, small intervals of finer grained siltstones, small 10cm rip up clasts with very minor localised disseminated pyrrhotite	
200		Diorite	highly altered silicified intrusive, grain boundaries undefined, similar as previous intrusives, poorly sorted, sharp basal contact	442.88
		Siltstone	fine grained light grey massive siltstone,gradational basal contact	
225		Greywacke	large interval of light grey fine/medium grained massive greywacke, several stockwork vein systems and carbonate rich breccia zones throughout, darker grey 20cm interbeds of finer grained siltstones	425.20

Au_ppb | Mo_ppm | Cu_ppm | Pb_ppm | Zn_ppm | Ag_ppm | As_ppm | Sb_ppm | Bi_ppm | Mg_% | K_% | W_ppm | Hg_ppm

Scale 1:701

01/24/13

16:39:16

Hole Name :KM12002

Length(m) :183.84	Azimuth(Deg) :265	Dip(Deg) :-57
Easting :499935	Northing :6069867	Elevation(m) :584.3

Depth At	BedCoreAngle	ShrCoreAngle	Recovery (%)	Rock Type	Notes	Density(/m)	Class	Ductility	Au_ppb	Si Deg	Chl Deg	K Deg	Py Pct	Po Pct	Cpy Pct	Aspy Pct	Elevation
	QDH - Struc - Bedding	QDH - Struc - Shear	QDH - Geotech	QDH - Lithology		QDH - Vien Interval	QDH - Brecciation	QDH - Major Shear Zones	QDH - Geochem Master	QDH - Alteration - Si	QDH - Alteration - Chl	QDH - Alteration - Potassic	QDH - Mineralization - Py	QDH - Mineralization - Po	QDH - Mineralization - Cpy	QDH - Mineralization - Aspy	
25				Overburden	?												563.33
				Greywacke	package of interbedded fine grained greywackes, darker finer siltstones, very minor anchorite in carb rich veinlets												
				Sandstone	same interval of gritty quartz sed as seen in hole 1, poorly sorted, quartz grains up to 3mm, grain boundaries undefined, generally massive, upper and lower gradational contacts,												
				Greywacke	package of mainly medium grained massive greywacke with sub metre scale dark finer grained ssiltstone interbeds, prominent siltstone laminations throughout interval, occational carb/qrtz veinlets, up to 15 sub cm siltstone bands within lower 3m of the interval												
50				Diorite	interval of young fresh intrusive, minor chlorite halos surrounding veinlets, equant grained, non magnetic, grain boundaries undefined, feldspars, finr qrtz												542.37
				Greywacke	homo greywacke, fine grained massive												
				Siltstone	massive homo siltstone interbed												
75				Greywacke	massive generic gwk, finer silt laminations throughout												521.40
				Feldspar Porphyry	same intrusive feldspar porphyry as hole one, gradational upper contact (chilled margins) coarsening of grains/phenos with depth, sub rounded biotite nodules up to 10mm, feldspars altered with uundefined grain boundaries, less alteration than hole one intrusive, chilled margins towards the basal contact, lower contact=thin 5mm brittle shear plane, very fresh intrusive												
100				Greywacke	homogeneous massive greywack, similar to previuos gwks, small intervals of darker finer grained silts after shears,												500.43
				Siltstone	massive fine silt, same as previous silts												
				Greywacke	same as previous gwks												
				Siltstone	same as previous siltstones, thin laminated coarser grained gwk interbeds												
125				Greywacke	homo, fine interbedded silts												479.47
				Siltstone	massive siltstone with interbedded gwks,												
				Greywacke	massive gwk, interbedded bands of siltstone up to 2cm,												
				Siltstone	massive siltstone, similar as previous silts												
150				Greywacke	massive gwk, fine interbedded siltstone laminations, interbeds of moderately altered												458.50
				Siltstone	massive homo siltstone, odd thin carb veinlets												
				Greywacke	intervals of carb rich stockwork veinlets, finer siltstone interbeds												
175				Siltstone	fine grained massive siltstone, thin bands coarser grained gwks												437.53
				Greywacke	final greywacke unit, high frequency calcite rich veinlets												

Scale 1:521	01/24/13	16:38:20

Hole Name :KM12002

KM DDH

Start Depth :14.94

End Depth :183.53

Depth At	_ORD	Rock Type	Notes	Elevation
		Overburden	?	
25		Greywacke	package of interbedded fine grained greywackes, darker finer siltstones, very minor anchorite in carb rich veinlets	563.33
		Sandstone	same interval of gritty quartz sed as seen in hole 1, poorly sorted, quartz grains up to 3mm, grain boundaries undefined, generally massive, upper and lower gradational contacts,	
		Greywacke	package of mainly medium grained massive greywacke with sub metre scale dark finer grained ssiltstone interbeds, prominent siltstone laminations throughout interval, occational carb/qrtz veinlets, up to 15 sub cm siltstone bands within lower 3m of the interval	
50		Diorite	interval of young fresh intrusive, minor chlorite halos surrounding veinlets, equant grained, non magnetic, grain boundaries undefined, feldspars, finr qrtz	542.37
		Greywacke	homo greywacke, fine grained massive	
		Siltstone	massive homo siltstone interbed	
75		Greywacke	massive generic gwk, finer silt laminations throughout	521.40
		Feldspar Porphyry	same intrusive feldspar porphyry as hole one, gradational upper contact (chilled margins) coarsening of grains/phenos with depth, sub rounded biotite nodules up to 10mm, feldspars altered with uundefined grain boundaries, less alteration than hole one intrusive, chilled margins towards the basal contact, lower contact=thin 5mm brittle shear plane, very fresh intrusive	
100		Greywacke	homogeneous massive greywack, similar to previuos gwks, small intervals of darker finer grained silts after shears,	500.43
		Siltstone	massive fine silt, same as previous silts	
		Greywacke	same as previous gwks	
		Siltstone	same as previous siltstones, thin laminated coarser grained gwk interbeds	
125		Greywacke	homo, fine interbedded silts	479.47
		Siltstone	massive siltstone with interbedded gwks,	
		Greywacke	massive gwk, interbedded bands of siltstone up to 2cm,	
		Siltstone	massive siltstone, similar as previous silts	
150		Greywacke	massive gwk, fine interbedded siltstone laminations, interbeds of moderately altered	458.50
		Siltstone	massive homo siltstone, odd thin carb veinlets	
		Greywacke	intervals of carb rich stockwork veinlets, finer siltstone interbeds	
175		Siltstone	fine grained massive siltstone, thin bands coarser grained gwks	437.53
		Greywacke	final greywacke unit, high frequency calcite rich veinlets	

Au_ppb | Mo_ppm | Cu_ppm | Pb_ppm | Zn_ppm | Ag_ppm | As_ppm | Sb_ppm | Bi_ppm | Mg_% | K_% | W_ppm | Hg_ppm

Scale 1:511 | 01/24/13 | 16:39:16

Appendix V
Analytic Certificates

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
SUITE 200 44-12 AVE SOUTH
CRANBROOK, BC V1C2R7
(778) 520-2000

ATTENTION TO: Chris Gallagher

PROJECT NO: KM2012-001

AGAT WORK ORDER: 12D645146

SOLID ANALYSIS REVIEWED BY: Kevin Motomura, ICP Supervisor

DATE REPORTED: Oct 17, 2012

PAGES (INCLUDING COVER): 19

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Sample Description RDL:	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5	0.05
KM12001-001	0.06	2.50	8.2	<0.01	<5	73	0.13	0.03	4.45	0.59	9.07	7.5	14.7	0.39
KM12001-002	0.05	1.56	6.8	<0.01	<5	49	0.09	0.03	3.84	0.11	5.83	4.5	15.4	0.35
KM12001-003	0.08	1.90	4.0	<0.01	<5	75	0.09	0.03	1.88	0.12	6.34	6.8	18.9	0.26
KM12001-004	0.25	2.16	15.0	<0.01	<5	68	0.12	0.06	4.29	0.47	5.39	8.8	10.1	0.33
KM12001-005	0.11	1.20	8.6	<0.01	<5	351	0.25	0.03	13.7	0.15	9.21	10.5	17.7	0.32
KM12001-006	0.09	1.80	12.4	<0.01	<5	80	0.17	0.06	5.80	0.27	9.27	13.5	28.0	0.44
KM12001-007	0.10	1.89	8.4	<0.01	<5	75	0.13	0.07	1.11	0.18	5.20	8.4	22.7	0.66
KM12001-008	0.16	2.12	64.0	<0.01	<5	61	0.15	0.01	4.30	0.28	12.2	9.5	14.5	0.59
KM12001-009	0.10	1.58	9.7	<0.01	<5	56	0.19	0.03	1.63	0.16	4.89	4.7	10.7	1.08
KM12001-010	0.15	2.51	8.4	<0.01	<5	118	0.24	0.05	3.17	0.37	11.7	10.1	4.2	1.34
KM12001-011	0.13	2.58	7.1	<0.01	<5	133	0.24	0.06	2.75	0.35	12.6	9.0	1.7	1.47
KM12001-012	0.16	2.05	12.5	<0.01	<5	135	0.26	0.08	1.71	0.27	11.4	10.1	12.6	1.48
KM12001-013	0.10	2.06	8.6	<0.01	<5	96	0.12	0.04	1.02	0.21	6.74	8.9	14.7	0.90
KM12001-014	0.22	1.77	30.7	<0.01	<5	123	0.10	0.05	1.18	0.28	8.31	19.7	18.1	0.75
KM12001-015	0.14	2.28	10.1	<0.01	<5	141	0.13	0.06	2.66	0.36	10.3	11.9	9.0	1.00
KM12001-016	0.28	1.90	10.5	<0.01	<5	106	0.24	0.04	1.08	0.56	4.65	8.2	21.9	1.30
KM12001-017	0.35	1.73	139	0.01	<5	71	0.18	0.05	2.49	1.34	5.16	10.3	9.8	1.36
KM12001-018	0.15	2.11	13.8	<0.01	<5	62	0.13	0.03	2.00	0.15	5.47	12.2	19.4	0.49
KM12001-019	0.11	2.14	10.6	<0.01	<5	75	0.19	0.03	1.39	0.36	7.70	9.7	12.7	1.45
KM12001-020	0.16	1.99	13.7	<0.01	<5	77	0.19	0.03	1.16	0.42	4.36	9.9	14.0	1.25
KM12001-021	0.18	2.27	16.6	<0.01	<5	100	0.15	0.03	4.04	0.33	3.89	11.0	13.3	2.38
KM12001-022	0.12	1.96	16.4	<0.01	<5	121	0.11	0.01	2.29	0.13	6.92	10.2	13.2	2.53
KM12001-023	0.02	1.96	5.9	<0.01	<5	84	0.12	0.02	1.43	0.10	4.27	10.7	34.6	0.96
KM12001-024	0.04	2.87	15.6	<0.01	<5	121	0.09	0.02	1.57	0.10	7.79	19.4	32.1	0.52
KM12001-025	0.02	2.50	6.8	<0.01	<5	38	0.11	0.02	1.39	0.13	5.02	13.4	32.8	0.40
KM12001-026	0.08	2.86	12.8	<0.01	<5	32	0.11	0.10	1.14	0.17	7.11	18.7	34.6	0.43
KM12001-027	0.12	2.01	6.1	<0.01	<5	126	0.16	0.03	4.69	0.15	12.5	10.9	23.8	0.59
KM12001-028	0.10	2.96	7.1	<0.01	<5	30	0.15	0.05	1.29	0.10	7.48	18.6	34.3	0.86
KM12001-029	0.05	1.25	6.6	<0.01	<5	203	0.10	0.03	1.24	0.53	8.35	3.3	12.6	0.46
KM12001-030	0.05	0.60	3.2	<0.01	<5	166	0.08	0.05	1.47	0.16	7.69	0.9	6.4	0.25
KM12001-030S	17.8	1.56	36.5	0.68	<5	336	0.47	3.87	1.44	1.15	14.5	24.6	7.7	2.28
KM12001-031	0.21	0.73	2.2	<0.01	<5	184	0.10	0.13	1.68	0.39	9.19	1.7	11.9	0.28

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Sample Description RDL:	0.01	0.01	0.1	0.01	5	1	0.05	0.01	0.01	0.01	0.01	0.1	0.5	0.05
KM12001-032	0.07	0.71	2.2	<0.01	<5	165	0.10	0.07	1.62	0.27	9.54	0.8	8.0	0.36
KM12001-033	0.07	0.82	3.5	<0.01	<5	180	0.09	0.03	1.43	0.34	8.64	0.3	14.4	0.37
KM12001-034	0.05	0.77	3.8	<0.01	<5	161	0.09	0.04	1.68	0.61	8.23	0.4	9.5	0.29
KM12001-035	0.06	0.73	3.0	<0.01	<5	195	0.10	0.06	1.74	0.52	8.73	0.4	14.8	0.30
KM12001-036	0.05	0.76	4.2	<0.01	<5	165	0.10	0.04	1.66	0.55	7.63	0.4	8.7	0.26
KM12001-037	0.13	0.76	2.3	<0.01	<5	170	0.10	0.03	1.63	0.24	8.80	0.6	14.8	0.25
KM12001-038	<0.01	0.67	0.4	<0.01	<5	69	0.13	<0.01	3.07	0.03	8.83	0.4	3.8	0.14
KM12001-039	0.08	1.14	1.3	<0.01	<5	159	0.11	0.03	1.79	0.20	6.93	2.6	11.2	0.27
KM12001-040	0.08	2.38	8.2	<0.01	<5	102	0.11	0.03	1.17	0.10	7.31	11.8	18.3	0.56
KM12001-041	0.14	2.20	18.9	<0.01	<5	233	0.19	0.07	0.87	0.15	7.38	18.8	16.8	0.40
KM12001-042	0.12	0.97	3.7	<0.01	<5	213	0.08	0.08	1.37	0.54	9.38	2.8	8.6	0.31
KM12001-043	0.15	1.37	3.6	<0.01	<5	196	0.09	0.04	2.00	0.32	9.69	4.7	7.2	0.30
KM12001-044	0.16	0.88	2.6	<0.01	<5	129	0.14	0.14	3.69	0.52	7.44	1.2	11.1	0.30
KM12001-045	0.13	0.89	2.6	<0.01	<5	189	0.12	0.08	1.47	0.53	9.49	0.5	13.3	0.36

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

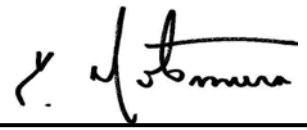
ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
Sample Description RDL:	0.1	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05	0.01
KM12001-001	10.2	3.72	5.81	0.10	<0.02	<0.01	0.018	0.24	3.7	12.8	1.06	1020	0.61	0.01
KM12001-002	5.5	2.21	4.08	0.11	<0.02	<0.01	0.010	0.18	2.3	6.8	0.64	859	0.92	0.01
KM12001-003	10.1	2.68	4.25	0.12	<0.02	<0.01	0.010	0.31	3.0	8.6	0.80	537	1.36	0.02
KM12001-004	47.7	3.55	5.06	0.12	<0.02	<0.01	0.018	0.25	2.2	9.3	0.85	927	0.44	0.01
KM12001-005	21.3	1.52	4.25	<0.05	0.23	<0.01	0.040	0.09	4.1	4.1	0.42	3870	0.56	0.04
KM12001-006	23.5	2.54	5.84	0.10	0.03	<0.01	0.068	0.18	4.1	6.9	0.73	1630	0.96	0.06
KM12001-007	31.3	2.75	5.47	0.13	<0.02	<0.01	0.025	0.33	2.1	8.1	0.78	629	1.07	0.05
KM12001-008	24.1	3.36	5.45	0.11	<0.02	<0.01	0.021	0.25	5.1	9.9	1.00	923	0.79	0.02
KM12001-009	14.4	2.44	4.06	0.13	<0.02	<0.01	0.014	0.15	2.4	6.9	0.50	442	1.11	0.01
KM12001-010	25.9	4.25	7.14	0.12	<0.02	<0.01	0.026	0.26	4.8	11.9	1.03	1020	1.25	0.05
KM12001-011	20.9	4.20	6.90	0.13	<0.02	<0.01	0.024	0.32	5.2	11.9	1.03	1020	1.72	0.06
KM12001-012	25.1	3.04	5.39	0.14	<0.02	<0.01	0.026	0.29	4.7	9.6	0.72	700	1.28	0.03
KM12001-013	17.4	3.27	5.44	0.15	<0.02	<0.01	0.014	0.18	2.7	11.0	0.78	427	0.63	0.03
KM12001-014	36.3	2.72	4.78	0.12	<0.02	<0.01	0.016	0.27	3.2	8.6	0.63	477	0.69	0.07
KM12001-015	27.1	3.69	6.38	0.13	<0.02	<0.01	0.025	0.25	4.0	11.7	0.92	831	1.04	0.06
KM12001-016	21.5	2.48	4.49	0.12	<0.02	<0.01	0.011	0.43	2.0	8.2	0.63	389	3.22	0.02
KM12001-017	22.1	2.77	4.66	0.14	<0.02	<0.01	0.016	0.27	2.3	8.3	0.78	522	1.27	0.02
KM12001-018	25.0	3.49	6.01	0.14	<0.02	<0.01	0.016	0.22	2.5	9.2	1.01	666	3.24	0.05
KM12001-019	23.7	3.10	6.23	0.14	<0.02	<0.01	0.019	0.13	3.1	10.4	0.83	606	0.57	0.03
KM12001-020	15.4	2.77	6.23	0.13	<0.02	<0.01	0.018	0.12	1.9	9.3	0.71	486	0.95	0.03
KM12001-021	19.2	3.10	5.78	0.12	<0.02	<0.01	0.011	0.38	1.6	8.3	1.06	845	2.10	0.03
KM12001-022	8.8	3.17	5.91	0.13	<0.02	<0.01	0.012	0.31	2.7	8.1	0.96	649	2.36	0.02
KM12001-023	0.7	3.23	7.10	0.12	<0.02	<0.01	0.021	0.18	1.9	12.4	1.03	916	1.03	0.06
KM12001-024	3.7	4.38	9.07	0.12	<0.02	<0.01	0.020	0.22	3.1	16.2	1.68	1140	0.51	0.08
KM12001-025	2.4	4.07	8.63	0.12	<0.02	<0.01	0.019	0.07	2.1	15.9	1.29	1130	0.69	0.06
KM12001-026	8.2	4.68	9.35	0.14	0.03	<0.01	0.029	0.06	2.6	16.9	1.54	1100	0.62	0.09
KM12001-027	23.7	2.34	5.83	0.11	0.27	<0.01	0.037	0.04	5.1	6.6	0.76	1690	0.75	0.12
KM12001-028	26.7	4.48	10.5	0.13	<0.02	<0.01	0.036	0.07	2.9	16.4	1.55	791	0.66	0.06
KM12001-029	12.7	1.48	3.49	0.12	<0.02	<0.01	0.011	0.28	3.7	4.6	0.37	842	0.53	0.17
KM12001-030	12.1	0.63	2.00	0.13	<0.02	<0.01	<0.005	0.20	3.5	1.0	0.07	663	0.40	0.10
KM12001-030S	6190	6.75	8.92	0.31	0.29	1.02	4.24	0.21	7.8	7.2	1.01	377	339	0.20
KM12001-031	24.7	0.68	2.49	0.13	0.02	<0.01	0.020	0.24	4.2	1.2	0.06	686	0.69	0.12

Certified By:



AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

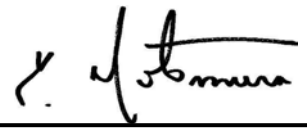
ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%
Sample Description RDL:	0.1	0.01	0.05	0.05	0.02	0.01	0.005	0.01	0.1	0.1	0.01	1	0.05	0.01
KM12001-032	19.5	0.76	2.24	0.13	<0.02	<0.01	0.012	0.23	4.3	1.3	0.08	734	0.74	0.11
KM12001-033	6.9	0.87	2.45	0.13	0.02	<0.01	0.007	0.22	3.9	1.6	0.09	824	0.47	0.15
KM12001-034	9.1	0.85	2.21	0.12	<0.02	<0.01	0.005	0.25	3.7	1.4	0.08	1010	0.49	0.13
KM12001-035	8.9	0.84	2.34	0.12	0.02	<0.01	0.007	0.25	3.9	1.3	0.07	992	0.59	0.13
KM12001-036	12.2	0.85	2.37	0.13	<0.02	<0.01	0.007	0.23	3.5	1.3	0.07	880	0.63	0.16
KM12001-037	12.6	0.82	2.34	0.12	0.02	<0.01	0.006	0.24	4.0	1.2	0.07	879	0.48	0.17
KM12001-038	1.5	0.55	1.51	0.11	<0.02	<0.01	<0.005	0.20	3.9	1.2	0.10	824	0.22	0.16
KM12001-039	23.8	1.61	3.42	0.12	0.02	<0.01	0.009	0.25	3.0	3.6	0.34	857	0.73	0.11
KM12001-040	27.6	4.55	7.63	0.14	<0.02	<0.01	0.021	0.20	2.4	11.5	0.98	995	4.79	0.07
KM12001-041	31.3	3.87	5.69	0.13	<0.02	<0.01	0.015	0.35	2.8	9.0	0.79	729	16.0	0.02
KM12001-042	26.3	1.32	2.54	0.13	<0.02	<0.01	0.010	0.27	4.1	2.3	0.19	871	2.09	0.12
KM12001-043	34.8	2.09	4.11	0.11	0.02	<0.01	0.015	0.25	4.2	4.3	0.49	1110	0.68	0.10
KM12001-044	29.3	0.90	2.44	0.10	<0.02	<0.01	0.010	0.22	3.4	2.0	0.13	672	0.95	0.07
KM12001-045	36.4	0.89	2.56	0.12	0.02	<0.01	0.011	0.22	4.2	1.7	0.08	660	0.70	0.15

Certified By:



AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
Unit:	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Description RDL:	0.05	0.2	10	0.1	0.1	0.001	0.005	0.05	0.1	0.2	0.2	0.2	0.01	0.01
KM12001-001	0.13	2.1	1290	6.6	8.4	<0.001	0.008	0.10	0.5	0.4	<0.2	138	<0.01	0.01
KM12001-002	0.20	2.3	1420	4.8	5.6	<0.001	<0.005	0.07	1.2	0.3	<0.2	212	<0.01	0.01
KM12001-003	0.10	4.4	728	4.0	7.5	<0.001	0.007	0.07	1.7	0.2	<0.2	54.6	<0.01	0.01
KM12001-004	0.10	3.9	1340	8.9	5.9	<0.001	0.009	0.11	1.4	0.4	<0.2	102	<0.01	0.01
KM12001-005	0.39	8.9	585	3.4	3.4	<0.001	<0.005	0.14	3.9	0.7	0.2	313	<0.01	0.01
KM12001-006	0.15	13.0	747	3.8	6.0	<0.001	<0.005	0.12	4.2	0.4	<0.2	142	<0.01	0.01
KM12001-007	0.16	7.6	431	7.0	10.1	0.001	<0.005	0.26	2.1	0.2	<0.2	30.5	<0.01	<0.01
KM12001-008	<0.05	5.8	452	6.3	8.2	<0.001	0.011	0.24	2.7	0.4	<0.2	136	<0.01	0.02
KM12001-009	<0.05	13.6	217	3.1	5.3	0.003	0.035	0.17	1.4	0.6	<0.2	63.9	<0.01	0.01
KM12001-010	0.15	<0.2	2040	9.4	11.0	<0.001	0.104	0.28	1.2	0.6	<0.2	94.3	<0.01	0.02
KM12001-011	0.12	<0.2	1930	5.1	11.9	<0.001	0.094	0.26	0.9	0.6	<0.2	78.8	<0.01	0.02
KM12001-012	0.12	6.6	1170	3.6	11.1	0.002	0.024	0.18	2.4	0.5	<0.2	61.8	<0.01	0.02
KM12001-013	<0.05	9.6	440	5.8	7.0	<0.001	0.025	0.23	2.3	0.2	<0.2	53.0	<0.01	0.02
KM12001-014	0.09	15.7	507	4.2	8.2	<0.001	0.029	0.21	2.5	0.2	<0.2	61.7	<0.01	0.02
KM12001-015	0.10	6.3	1430	9.1	9.4	<0.001	0.067	0.28	2.5	0.4	<0.2	84.0	<0.01	0.01
KM12001-016	0.11	6.1	558	9.7	13.8	<0.001	0.046	0.36	2.0	0.3	<0.2	33.3	<0.01	0.02
KM12001-017	0.08	7.3	524	10.8	11.2	0.002	0.038	0.46	1.8	1.0	<0.2	70.3	<0.01	0.03
KM12001-018	0.11	11.4	473	5.5	7.8	<0.001	0.005	0.09	2.7	0.2	<0.2	67.3	<0.01	0.02
KM12001-019	0.07	8.4	418	10.7	5.0	<0.001	0.013	0.13	3.1	0.3	<0.2	175	<0.01	0.01
KM12001-020	0.09	8.2	392	15.3	4.8	<0.001	0.023	0.16	2.8	0.3	<0.2	187	<0.01	0.03
KM12001-021	0.10	7.9	653	7.4	16.4	0.001	0.050	0.21	2.1	0.3	<0.2	138	<0.01	0.04
KM12001-022	0.15	5.5	710	4.2	16.4	<0.001	0.029	0.20	2.4	0.3	<0.2	169	<0.01	0.03
KM12001-023	0.36	11.0	465	7.0	9.5	<0.001	<0.005	0.11	6.3	0.2	0.3	93.2	<0.01	<0.01
KM12001-024	0.18	17.6	791	2.8	7.7	<0.001	0.006	0.16	5.3	0.2	<0.2	59.6	<0.01	<0.01
KM12001-025	0.27	13.9	592	7.4	2.7	<0.001	0.005	0.12	7.2	0.2	<0.2	58.3	<0.01	<0.01
KM12001-026	0.28	18.0	719	14.5	2.6	<0.001	0.007	0.11	10.8	0.3	<0.2	71.1	<0.01	0.02
KM12001-027	0.50	10.0	659	6.5	1.7	0.003	0.006	0.30	7.2	0.4	0.6	212	<0.01	0.02
KM12001-028	0.34	17.6	698	7.0	2.9	<0.001	0.013	0.10	11.9	0.3	0.4	76.7	<0.01	<0.01
KM12001-029	0.51	3.3	236	8.5	8.2	<0.001	0.080	0.19	1.4	0.2	<0.2	62.9	<0.01	<0.01
KM12001-030	0.63	0.4	106	4.8	4.7	<0.001	0.130	0.24	<0.1	0.2	<0.2	48.9	<0.01	<0.01
KM12001-030S	0.21	8.3	1570	125	13.2	0.021	0.644	34.3	5.4	4.0	2.6	152	<0.01	1.70
KM12001-031	0.74	<0.2	175	5.3	7.1	<0.001	0.137	0.20	0.6	0.3	<0.2	61.6	<0.01	0.01

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te
Unit:	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Description RDL:	0.05	0.2	10	0.1	0.1	0.001	0.005	0.05	0.1	0.2	0.2	0.2	0.01	0.01
KM12001-032	0.70	<0.2	179	5.1	6.5	<0.001	0.127	0.22	0.6	0.2	<0.2	60.6	<0.01	<0.01
KM12001-033	0.96	<0.2	164	7.2	6.5	<0.001	0.161	0.35	0.7	0.2	<0.2	62.2	<0.01	<0.01
KM12001-034	0.84	<0.2	180	8.3	5.1	<0.001	0.180	0.30	0.6	0.2	<0.2	51.4	<0.01	<0.01
KM12001-035	0.90	<0.2	177	7.9	7.1	<0.001	0.205	0.25	0.5	0.2	<0.2	59.7	<0.01	<0.01
KM12001-036	0.91	<0.2	183	6.8	5.3	<0.001	0.215	0.34	0.6	0.3	<0.2	52.4	<0.01	<0.01
KM12001-037	0.98	<0.2	174	5.4	5.6	<0.001	0.198	0.18	0.5	0.2	<0.2	59.6	<0.01	<0.01
KM12001-038	0.58	0.3	208	0.9	5.0	<0.001	0.045	<0.05	0.7	0.3	<0.2	102	<0.01	<0.01
KM12001-039	0.42	2.2	336	5.5	7.4	<0.001	0.102	0.08	1.8	0.3	<0.2	70.5	<0.01	0.01
KM12001-040	0.27	8.2	2210	4.1	7.2	<0.001	0.058	0.10	6.8	0.3	0.2	28.0	<0.01	0.02
KM12001-041	0.26	13.9	700	3.2	11.4	0.001	0.041	0.13	3.4	0.3	<0.2	23.1	<0.01	0.04
KM12001-042	0.66	1.6	286	7.6	7.6	<0.001	0.220	0.18	1.2	0.3	<0.2	53.9	<0.01	0.02
KM12001-043	0.37	<0.2	581	5.6	7.2	<0.001	0.135	0.10	1.6	0.3	<0.2	73.4	<0.01	0.01
KM12001-044	0.77	0.5	169	11.1	7.6	<0.001	0.194	0.11	1.0	0.5	<0.2	128	0.01	0.05
KM12001-045	0.96	<0.2	184	6.6	7.4	<0.001	0.165	0.15	0.8	0.3	<0.2	75.6	0.01	0.02

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

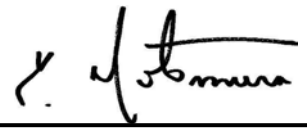
ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Description RDL:	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5
KM12001-001	1.3	0.036	0.08	0.28	11.3	0.21	12.6	83.9	<0.5
KM12001-002	1.0	0.048	0.06	0.21	7.9	0.21	11.2	43.7	<0.5
KM12001-003	1.0	0.057	0.07	0.19	18.4	0.19	8.35	57.5	<0.5
KM12001-004	1.3	0.057	0.07	0.28	13.8	0.24	13.4	70.2	<0.5
KM12001-005	0.9	0.138	0.03	0.27	46.3	0.23	9.33	36.5	5.6
KM12001-006	1.2	0.098	0.06	0.23	55.6	0.22	9.66	68.5	0.6
KM12001-007	1.4	0.099	0.08	0.22	25.5	0.31	6.34	66.7	<0.5
KM12001-008	1.0	0.016	0.07	0.17	23.0	0.06	10.7	62.6	<0.5
KM12001-009	1.1	0.045	0.09	0.14	9.5	0.09	6.99	40.8	<0.5
KM12001-010	1.5	0.078	0.10	0.60	31.1	0.21	15.2	93.9	<0.5
KM12001-011	1.6	0.075	0.11	0.55	22.8	0.17	15.7	89.9	<0.5
KM12001-012	1.5	0.058	0.10	0.29	17.5	0.11	13.1	65.1	<0.5
KM12001-013	1.5	0.033	0.07	0.31	32.3	0.05	6.06	73.6	<0.5
KM12001-014	2.5	0.046	0.07	0.58	27.6	0.10	6.37	71.0	<0.5
KM12001-015	1.6	0.055	0.10	0.35	32.0	0.13	13.2	103	<0.5
KM12001-016	1.4	0.045	0.12	0.33	18.3	0.32	6.54	70.1	<0.5
KM12001-017	1.2	0.045	0.11	0.29	19.2	0.26	7.50	83.5	<0.5
KM12001-018	1.4	0.069	0.07	0.31	32.7	0.15	7.94	64.8	<0.5
KM12001-019	1.2	0.047	0.04	0.38	31.2	0.15	6.86	62.4	<0.5
KM12001-020	1.1	0.062	0.06	0.30	29.4	0.15	5.92	72.5	<0.5
KM12001-021	1.2	0.071	0.18	0.34	33.6	0.40	8.67	84.3	<0.5
KM12001-022	1.1	0.066	0.17	0.27	32.3	0.33	7.77	82.9	<0.5
KM12001-023	0.9	0.125	0.10	0.17	68.7	0.27	5.98	122	<0.5
KM12001-024	1.6	0.120	0.07	0.33	85.2	0.33	8.57	150	<0.5
KM12001-025	1.3	0.136	0.03	0.22	78.1	0.25	6.64	144	<0.5
KM12001-026	1.7	0.180	0.03	0.26	144	0.29	9.19	142	<0.5
KM12001-027	1.2	0.208	0.02	0.36	74.4	0.30	10.6	57.7	5.2
KM12001-028	1.7	0.175	0.03	0.32	138	0.17	9.59	96.7	<0.5
KM12001-029	2.1	0.068	0.09	0.33	12.4	0.13	7.45	71.2	0.6
KM12001-030	2.1	0.017	0.07	0.32	<0.5	0.12	6.23	21.5	<0.5
KM12001-030S	1.1	0.179	0.05	0.70	231	2.90	13.2	156	6.5
KM12001-031	2.3	0.022	0.07	0.35	1.9	0.14	7.50	46.9	0.6

Certified By:



AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Th	Ti	Tl	U	V	W	Y	Zn	Zr
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample Description RDL:	0.1	0.005	0.01	0.05	0.5	0.05	0.05	0.5	0.5
KM12001-032	2.3	0.026	0.08	0.35	2.4	0.10	6.74	44.9	0.5
KM12001-033	2.1	0.033	0.09	0.36	2.8	0.10	6.51	61.4	0.6
KM12001-034	2.2	0.027	0.09	0.34	2.0	0.14	6.52	66.6	0.5
KM12001-035	2.3	0.030	0.08	0.39	2.2	0.14	7.55	63.3	0.5
KM12001-036	2.3	0.032	0.08	0.41	2.0	0.14	7.33	64.2	0.5
KM12001-037	2.5	0.030	0.06	0.44	2.2	0.44	7.30	45.0	0.6
KM12001-038	3.5	0.024	0.04	0.71	5.6	0.14	11.5	10.2	<0.5
KM12001-039	2.6	0.050	0.06	0.42	16.9	0.15	8.33	49.2	0.5
KM12001-040	1.7	0.140	0.06	0.43	61.3	0.32	10.4	104	<0.5
KM12001-041	2.2	0.187	0.11	0.46	44.1	0.38	9.23	99.3	<0.5
KM12001-042	2.0	0.050	0.07	0.23	8.8	0.18	7.78	63.4	0.7
KM12001-043	2.0	0.051	0.06	0.23	21.6	0.24	9.05	58.9	0.6
KM12001-044	2.0	0.029	0.07	0.30	4.8	0.10	8.89	47.5	<0.5
KM12001-045	2.3	0.038	0.07	0.34	3.7	0.13	6.85	74.8	0.7

Comments: RDL - Reported Detection Limit

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Fire Assay - Trace Au, AAS finish (202051)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Sample Login Weight	Au
Unit:	kg	ppm
Sample Description RDL:	0.01	0.002
KM12001-001	2.20	<0.002
KM12001-002	2.02	<0.002
KM12001-003	2.52	0.002
KM12001-004	1.62	<0.002
KM12001-005	1.16	<0.002
KM12001-006	1.10	<0.002
KM12001-007	0.66	0.011
KM12001-008	1.60	<0.002
KM12001-009	0.76	0.007
KM12001-010	1.36	<0.002
KM12001-011	0.70	<0.002
KM12001-012	1.24	<0.002
KM12001-013	1.84	<0.002
KM12001-014	1.28	<0.002
KM12001-015	1.82	<0.002
KM12001-016	1.36	0.008
KM12001-017	1.32	0.040
KM12001-018	2.12	0.002
KM12001-019	1.46	<0.002
KM12001-020	1.42	0.005
KM12001-021	1.74	<0.002
KM12001-022	1.44	<0.002
KM12001-023	1.82	<0.002
KM12001-024	3.62	<0.002
KM12001-025	2.18	<0.002
KM12001-026	1.76	<0.002
KM12001-027	2.10	<0.002
KM12001-028	2.26	<0.002
KM12001-029	6.46	<0.002
KM12001-030	2.82	0.012
KM12001-030S	0.10	0.817

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Fire Assay - Trace Au, AAS finish (202051)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Sample Login Weight	Au
Unit:	kg	ppm
Sample Description RDL:	0.01	0.002
KM12001-031	2.64	<0.002
KM12001-032	3.00	<0.002
KM12001-033	2.48	<0.002
KM12001-034	2.14	<0.002
KM12001-035	2.16	<0.002
KM12001-036	2.02	<0.002
KM12001-037	2.02	0.011
KM12001-038	2.78	<0.002
KM12001-039	2.82	<0.002
KM12001-040	2.80	<0.002
KM12001-041	1.90	<0.002
KM12001-042	3.96	<0.002
KM12001-043	2.12	<0.002
KM12001-044	1.76	<0.002
KM12001-045	1.92	<0.002
KM12001-046	2.60	<0.002
KM12001-047	2.40	<0.002
KM12001-048	1.02	<0.002
KM12001-049	2.72	<0.002
KM12001-050	2.22	<0.002
KM12001-051	0.96	<0.002
KM12001-052	2.66	<0.002
KM12001-053	2.20	<0.002
KM12001-054	2.34	<0.002
KM12001-055	2.78	<0.002
KM12001-056	3.62	<0.002
KM12001-057	2.60	<0.002
KM12001-058	2.72	<0.002
KM12001-059	2.60	0.005
KM12001-060	2.76	<0.002
KM12001-060B	1.28	<0.002

Certified By:

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Fire Assay - Trace Au, AAS finish (202051)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 17, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Sample Login Weight	Au
Unit:	kg	ppm
Sample Description RDL:	0.01	0.002
KM12001-060S	0.10	0.861
KM12001-061	3.60	<0.002
KM12001-062	2.34	<0.002
KM12001-063	1.00	0.010
KM12001-064	1.26	<0.002
KM12001-065	1.36	<0.002
KM12001-066	0.98	<0.002
KM12001-067	0.94	0.002
KM12001-068	2.34	<0.002
KM12001-069	3.08	<0.002
KM12001-070	1.30	0.008
KM12001-071	2.14	0.011
KM12001-072	2.34	<0.002
KM12001-073	1.18	<0.002
KM12001-074	2.84	<0.002
KM12001-075	1.02	<0.002
KM12001-076	2.64	0.008
KM12001-077	2.86	<0.002
KM12001-078	2.78	<0.002
KM12001-079	2.34	<0.002
KM12001-080	0.92	<0.002
KM12001-081	3.38	<0.002
KM12001-082	1.72	<0.002
KM12001-083	2.90	0.007
KM12001-084	3.46	<0.002
KM12001-085	3.12	<0.002
KM12001-086	1.84	<0.002
KM12001-087	1.18	<0.002
KM12001-088	3.30	<0.002

Comments: RDL - Reported Detection Limit

Certified By:

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001
ATTENTION TO: Chris Gallagher

Solid Analysis

RPT Date: Oct 17, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits Lower	Acceptable Limits Upper
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739568	< 0.002	< 0.002	0.0%	< 0.002	0.267	0.263	101%	90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739582	< 0.002	< 0.002	0.0%	< 0.002	1.52	1.52	100%	90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739593	< 0.002	< 0.002	0.0%	< 0.002	0.265	0.263	101%	90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739606	< 0.002	< 0.002	0.0%	< 0.002	1.45	1.52	96%	90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739618	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739632	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739643	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739658	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1	3739613	0.244	0.204	17.9%	< 0.01	14.1	13.0	108%	80%	120%
Al	1	3739613	0.89	0.92	3.3%	< 0.01				80%	120%
As	1	3739613	2.51	2.60	3.5%	0.4				80%	120%
Au	1	3739613	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
B	1	3739613	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3739613	199	207	3.9%	< 1				80%	120%
Be	1	3739613	0.20	0.20	0.0%	< 0.05				80%	120%
Bi	1	3739613	0.067	0.065	3.0%	< 0.01				80%	120%
Ca	1	3739613	1.47	1.47	0.0%	< 0.01				80%	120%
Cd	1	3739613	0.65	0.62	4.7%	< 0.01				80%	120%
Ce	1	3739613	11.8	11.5	2.6%	< 0.01				80%	120%
Co	1	3739613	0.60	0.65	8.0%	< 0.1				80%	120%
Cr	1	3739613	13.3	14.1	5.8%	< 0.5				80%	120%
Cs	1	3739613	0.45	0.42	6.9%	< 0.05				80%	120%
Cu	1	3739613	36.4	35.6	2.2%	0.1	5486	6000	91%	80%	120%
Fe	1	3739613	0.891	0.897	0.7%	< 0.01				80%	120%
Ga	1	3739613	3.46	3.65	5.3%	< 0.05				80%	120%
Ge	1	3739613	0.131	0.121	7.9%	0.13				80%	120%
Hf	1	3739613	0.030	0.023	26.4%	< 0.02				80%	120%
Hg	1	3739613	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
In	1	3739613	0.0168	0.0150	11.3%	< 0.005				80%	120%
K	1	3739613	0.217	0.226	4.1%	< 0.01				80%	120%
La	1	3739613	5.0	5.0	0.0%	< 0.1				80%	120%

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 17, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits Lower	Acceptable Limits Upper
Li	1	3739613	2.63	2.80	6.3%	< 0.1				80%	120%
Mg	1	3739613	0.08	0.08	0.0%	< 0.01				80%	120%
Mn	1	3739613	660	658	0.3%	< 1				80%	120%
Mo	1		< 0.05	< 0.05	0.0%	< 0.05	339	360	94%	80%	120%
Na	1	3739613	0.149	0.157	5.2%	< 0.01				80%	120%
Nb	1	3739613	1.81	1.72	5.1%	< 0.05				80%	120%
Ni	1	3739613	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
P	1	3739613	184	186	1.1%	< 10	709	600	118%	80%	120%
Pb	1	3739613	6.41	6.23	2.8%	< 0.1				80%	120%
Rb	1	3739613	9.0	9.1	1.1%	< 0.1	14	13	106%	80%	120%
Re	1	3739613	< 0.001	< 0.001	0.0%	< 0.001				80%	120%
S	1	3739613	0.165	0.168	1.8%	< 0.005				80%	120%
Sb	1	3739613	0.199	0.170	15.7%	< 0.05				80%	120%
Sc	1	3739613	0.84	0.92	9.1%	< 0.1				80%	120%
Se	1	3739613	0.46	0.42	9.1%	< 0.2				80%	120%
Sn	1	3739613	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
Sr	1	3739613	102	100	2.0%	< 0.2				80%	120%
Ta	1	3739613	0.02	0.02	0.0%	< 0.01				80%	120%
Te	1	3739613	0.02	0.02	0.0%	< 0.01				80%	120%
Th	1	3739613	2.3	2.3	0.0%	< 0.1				80%	120%
Ti	1	3739613	0.0385	0.0408	5.8%	< 0.005				80%	120%
Tl	1	3739613	0.07	0.07	0.0%	< 0.01				80%	120%
U	1	3739613	0.329	0.337	2.4%	< 0.05				80%	120%
V	1	3739613	3.7	3.8	2.7%	< 0.5				80%	120%
W	1	3739613	0.140	0.123	12.9%	< 0.05				80%	120%
Y	1	3739613	10.4	10.6	1.9%	< 0.05	6	7	91%	80%	120%
Zn	1	3739613	74.8	73.7	1.5%	0.7				80%	120%
Zr	1	3739613	1.00	1.17	15.7%	< 0.5				80%	120%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1					< 0.01	13.5	13.0	104%	80%	120%
Cu	1					< 0.1	5709	6000	95%	80%	120%
Mo	1					< 0.05	332	360	92%	80%	120%
P	1					< 10	648	600	108%	80%	120%
Ta	1					< 0.01	0.8	0.9	84%	80%	120%
Y	1					< 0.05	6	7	85%	80%	120%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1	3739568	0.06	0.06	0.0%	< 0.01	11.5	13.0	89%	80%	120%
Al	1	3739568	2.50	2.50	0.0%	< 0.01				80%	120%
As	1	3739568	8.2	8.8	7.1%	0.3				80%	120%
Au	1	3739568	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
B	1	3739568	< 5	< 5	0.0%	< 5	6.28	7.00	90%	80%	120%
Ba	1	3739568	73	70	4.2%	< 1				80%	120%
Be	1	3739568	0.128	0.119	7.3%	< 0.05	0.3	0.4	70%	80%	120%

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 17, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits Lower	Acceptable Limits Upper
Bi	1	3739568	0.03	0.03	0.0%	< 0.01				80%	120%
Ca	1	3739568	4.45	4.40	1.1%	< 0.01				80%	120%
Cd	1	3739568	0.591	0.582	1.5%	< 0.01				80%	120%
Ce	1	3739568	9.07	8.87	2.2%	< 0.01				80%	120%
Co	1	3739568	7.5	7.5	0.0%	< 0.1				80%	120%
Cr	1	3739568	14.7	15.3	4.0%	< 0.5				80%	120%
Cs	1	3739568	0.390	0.374	4.2%	< 0.05				80%	120%
Cu	1	3739568	10.2	8.8	14.7%	< 0.1	5499	6000	91%	80%	120%
Fe	1	3739568	3.72	3.95	6.0%	< 0.01				80%	120%
Ga	1	3739568	5.81	5.94	2.2%	< 0.05				80%	120%
Ge	1	3739568	0.104	0.113	8.3%	0.10				80%	120%
Hf	1	3739568	< 0.02	< 0.02	0.0%	< 0.02				80%	120%
Hg	1	3739568	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
In	1	3739568	0.018	0.018	0.0%	< 0.005				80%	120%
K	1	3739568	0.24	0.24	0.0%	< 0.01				80%	120%
La	1	3739568	3.7	3.6	2.7%	< 0.1				80%	120%
Li	1	3739568	12.8	12.8	0.0%	< 0.1				80%	120%
Mg	1	3739568	1.06	1.09	2.8%	< 0.01				80%	120%
Mn	1	3739568	1020	1050	2.9%	< 1				80%	120%
Mo	1	3739568	0.612	0.627	2.4%	< 0.05	320	360	88%	80%	120%
Na	1	3739568	0.01	0.01	0.0%	< 0.01				80%	120%
Nb	1	3739568	0.128	0.113	12.4%	< 0.05				80%	120%
Ni	1	3739568	2.12	2.42	13.2%	< 0.2				80%	120%
P	1	3739568	1290	1320	2.3%	< 10	599	600	100%	80%	120%
Pb	1	3739568	6.6	6.8	3.0%	< 0.1				80%	120%
Rb	1	3739568	8.4	8.4	0.0%	< 0.1				80%	120%
Re	1	3739568	< 0.001	< 0.001	0.0%	< 0.001				80%	120%
S	1	3739568	0.008	0.008	0.0%	< 0.005				80%	120%
Sb	1	3739568	0.10	0.10	0.0%	< 0.05				80%	120%
Sc	1	3739568	0.54	0.56	3.6%	< 0.1				80%	120%
Se	1	3739568	0.4	0.4	0.0%	< 0.2				80%	120%
Sn	1	3739568	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
Sr	1	3739568	138	142	2.9%	< 0.2				80%	120%
Ta	1	3739568	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Te	1	3739568	0.01	0.01	0.0%	< 0.01				80%	120%
Th	1	3739568	1.3	1.3	0.0%	< 0.1				80%	120%
Ti	1	3739568	0.036	0.035	2.8%	< 0.005				80%	120%
Tl	1	3739568	0.076	0.075	1.3%	< 0.01				80%	120%
U	1	3739568	0.28	0.29	3.5%	< 0.05				80%	120%
V	1	3739568	11.3	10.9	3.6%	< 0.5				80%	120%
W	1	3739568	0.213	0.203	4.8%	< 0.05				80%	120%
Y	1	3739568	12.6	12.8	1.6%	< 0.05	6	7	83%	80%	120%
Zn	1	3739568	83.9	86.4	2.9%	< 0.5				80%	120%
Zr	1	3739568	< 0.5	< 0.5	0.0%	< 0.5				80%	120%

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
AGAT WORK ORDER: 12D645146
PROJECT NO: KM2012-001
ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 17, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
										Lower	Upper
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1	3739593	0.08	0.09	11.8%	< 0.01	11.6	13.0	89%	80%	120%
Al	1	3739593	2.86	2.61	9.1%	< 0.01				80%	120%
As	1	3739593	12.8	12.0	6.5%	< 0.1				80%	120%
Au	1	3739593	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
B	1	3739593	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3739593	32	33	3.1%	< 1				80%	120%
Be	1	3739593	0.11	0.10	9.5%	< 0.05				80%	120%
Bi	1	3739593	0.10	0.10	0.0%	< 0.01				80%	120%
Ca	1	3739593	1.14	1.05	8.2%	< 0.01				80%	120%
Cd	1	3739593	0.170	0.165	3.0%	< 0.01				80%	120%
Ce	1	3739593	7.11	7.40	4.0%	< 0.01				80%	120%
Co	1	3739593	18.7	17.8	4.9%	< 0.1				80%	120%
Cr	1	3739593	34.6	31.2	10.3%	< 0.5				80%	120%
Cs	1	3739593	0.434	0.444	2.3%	< 0.05				80%	120%
Cu	1	3739593	8.19	7.31	11.4%	< 0.1	5496	6000	91%	80%	120%
Fe	1	3739593	4.68	4.30	8.5%	< 0.01				80%	120%
Ga	1	3739593	9.35	8.89	5.0%	< 0.05				80%	120%
Ge	1	3739593	0.14	0.14	0.0%	< 0.05				80%	120%
Hf	1	3739593	0.03	< 0.02		< 0.02				80%	120%
Hg	1	3739593	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
In	1	3739593	0.029	0.028	3.5%	< 0.005				80%	120%
K	1	3739593	0.06	0.06	0.0%	< 0.01				80%	120%
La	1	3739593	2.6	2.7	3.8%	< 0.1				80%	120%
Li	1	3739593	16.9	16.6	1.8%	< 0.1				80%	120%
Mg	1	3739593	1.54	1.42	8.1%	< 0.01				80%	120%
Mn	1	3739593	1100	1010	8.5%	< 1				80%	120%
Mo	1	3739593	0.62	0.57	8.4%	< 0.05	308	360	85%	80%	120%
Na	1	3739593	0.09	0.08	11.8%	< 0.01				80%	120%
Nb	1	3739593	0.28	0.28	0.0%	< 0.05				80%	120%
Ni	1	3739593	18.0	16.6	8.1%	< 0.2				80%	120%
P	1	3739593	719	668	7.4%	< 10	597	600	100%	80%	120%
Pb	1	3739593	14.5	14.6	0.7%	< 0.1				80%	120%
Rb	1	3739593	2.6	2.5	3.9%	< 0.1				80%	120%
Re	1	3739593	< 0.001	< 0.001	0.0%	< 0.001				80%	120%
S	1	3739593	0.007	0.006	15.4%	< 0.005				80%	120%
Sb	1	3739593	0.11	0.11	0.0%	< 0.05				80%	120%
Sc	1	3739593	10.8	9.9	8.7%	< 0.1				80%	120%
Se	1	3739593	0.3	0.3	0.0%	< 0.2				80%	120%
Sn	1	3739593	< 0.2	< 0.2	0.0%	< 0.2				80%	120%
Sr	1	3739593	71.1	66.5	6.7%	< 0.2				80%	120%
Ta	1	3739593	< 0.01	< 0.01	0.0%	< 0.01				80%	120%
Te	1	3739593	0.02	0.02	0.0%	< 0.01				80%	120%
Th	1	3739593	1.71	1.64	4.2%	< 0.1				80%	120%

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 17, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
										Lower	Upper
Ti	1	3739593	0.180	0.171	5.1%	< 0.005				80%	120%
Tl	1	3739593	0.03	0.03	0.0%	< 0.01				80%	120%
U	1	3739593	0.26	0.26	0.0%	< 0.05				80%	120%
V	1	3739593	144	131	9.5%	< 0.5				80%	120%
W	1	3739593	0.29	0.29	0.0%	< 0.05				80%	120%
Y	1	3739593	9.19	8.66	5.9%	< 0.05	6	7	82%	80%	120%
Zn	1	3739593	142	128	10.4%	< 0.5				80%	120%
Zr	1	3739593	< 0.5	< 0.5	0.0%	< 0.5				80%	120%
Aqua Regia Digest - Metals Package, ICP/ICP-MS finish (201074)											
Ag	1					< 0.01	11.6	13.0	89%	80%	120%
Cu	1					< 0.1	5709	6000	95%	80%	120%
Mo	1					< 0.05	332	360	92%	80%	120%
P	1					< 10	648	600	108%	80%	120%
Ta	1					< 0.01	0.8	0.9	84%	80%	120%
Y	1					< 0.05	6	7	82%	80%	120%

Certified By:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12017		ICP-MS
Al	MIN-200-12017		ICP/OES
As	MIN-200-12017		ICP-MS
Au	MIN-200-12017		ICP-MS
B	MIN-200-12017		ICP/OES
Ba	MIN-200-12017		ICP-MS
Be	MIN-200-12017		ICP-MS
Bi	MIN-200-12017		ICP-MS
Ca	MIN-200-12017		ICP/OES
Cd	MIN-200-12017		ICP-MS
Ce	MIN-200-12017		ICP-MS
Co	MIN-200-12017		ICP-MS
Cr	MIN-200-12017		ICP/OES
Cs	MIN-200-12017		ICP-MS
Cu	MIN-200-12017		ICP-MS
Fe	MIN-200-12017		ICP/OES
Ga	MIN-200-12017		ICP-MS
Ge	MIN-200-12017		ICP-MS
Hf	MIN-200-12017		ICP-MS
Hg	MIN-200-12017		ICP-MS
In	MIN-200-12017		ICP-MS
K	MIN-200-12017		ICP/OES
La	MIN-200-12017		ICP-MS
Li	MIN-200-12017		ICP-MS
Mg	MIN-200-12017		ICP/OES
Mn	MIN-200-12017		ICP/OES
Mo	MIN-200-12017		ICP-MS
Na	MIN-200-12017		ICP/OES
Nb	MIN-200-12017		ICP-MS
Ni	MIN-200-12017		ICP-MS
P	MIN-200-12017		ICP/OES
Pb	MIN-200-12017		ICP-MS
Rb	MIN-200-12017		ICP-MS
Re	MIN-200-12017		ICP-MS
S	MIN-200-12017		ICP/OES
Sb	MIN-200-12017		ICP-MS
Sc	MIN-200-12017		ICP-MS
Se	MIN-200-12017		ICP-MS
Sn	MIN-200-12017		ICP-MS
Sr	MIN-200-12017		ICP-MS
Ta	MIN-200-12017		ICP-MS
Te	MIN-200-12017		ICP-MS
Th	MIN-200-12017		ICP-MS
Ti	MIN-200-12017		ICP/OES
Tl	MIN-200-12017		ICP-MS
U	MIN-200-12017		ICP-MS
V	MIN-200-12017		ICP/OES
W	MIN-200-12017		ICP-MS
Y	MIN-200-12017		ICP-MS

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645146

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Zn	MIN-200-12017		ICP-MS
Zr	MIN-200-12017		ICP-MS
Sample Login Weight	MIN-12009		BALANCE
Au	MIN-200-12019	BUGBEE, E: A Textbook of Fire Assaying	AAS

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
SUITE 200 44-12 AVE SOUTH
CRANBROOK, BC V1C2R7
(778) 520-2000

ATTENTION TO: Chris Gallagher

PROJECT NO: KM2012-001

AGAT WORK ORDER: 12D645173

SOLID ANALYSIS REVIEWED BY: Ron Cardinall, Certified Assayer - Director - Technical Services (Mining)

DATE REPORTED: Oct 15, 2012

PAGES (INCLUDING COVER): 16

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

*NOTES

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Sample Description RDL:	0.2	0.01	1	5	1	0.5	1	0.01	0.5	1	0.5	0.5	0.5	0.01
KM12002-001	0.8	1.80	6	<5	68	<0.5	<1	2.33	0.8	6	7.0	14.0	48.4	2.80
KM12002-002	0.7	1.92	<1	<5	54	<0.5	<1	6.91	1.4	6	6.6	4.2	<0.5	2.99
KM12002-003	<0.2	2.21	<1	<5	84	<0.5	<1	1.69	0.8	6	7.0	16.9	<0.5	3.22
KM12002-004	<0.2	1.36	<1	<5	111	<0.5	<1	0.43	<0.5	3	2.9	17.2	1.0	1.67
KM12002-005	<0.2	1.63	6	<5	110	<0.5	<1	0.63	0.5	4	5.2	28.4	6.7	2.22
KM12002-006	<0.2	1.49	6	<5	99	<0.5	<1	1.52	<0.5	5	10.0	14.2	6.3	2.00
KM12002-007	0.5	2.45	15	<5	106	<0.5	<1	2.18	1.1	6	14.5	7.1	74.9	3.75
KM12002-008	1.6	1.41	52	<5	51	<0.5	<1	6.71	1.4	2	10.9	14.8	30.8	2.28
KM12002-009	0.7	2.30	4	<5	113	<0.5	<1	1.56	1.1	5	9.8	10.3	67.0	3.33
KM12002-010	0.5	1.98	30	<5	87	<0.5	<1	1.75	0.9	4	10.2	16.3	21.0	2.84
KM12002-011	0.6	2.16	8	<5	72	<0.5	<1	3.38	0.8	5	10.7	14.3	39.0	2.99
KM12002-012	0.7	2.00	7	<5	53	<0.5	<1	3.46	0.9	5	10.4	12.5	40.5	2.89
KM12002-013	<0.2	2.43	3	<5	66	<0.5	<1	2.62	1.0	5	13.4	22.4	20.7	3.38
KM12002-014	0.7	1.86	<1	<5	33	<0.5	<1	6.63	0.7	3	7.1	17.8	1.1	3.00
KM12002-015	<0.2	2.20	1	<5	58	<0.5	<1	1.99	0.8	5	11.4	19.7	24.6	3.05
KM12002-016	<0.2	2.47	10	<5	79	<0.5	<1	1.88	1.0	4	16.1	21.1	37.5	3.68
KM12002-017	<0.2	3.05	<1	<5	546	1.0	<1	2.19	1.2	9	18.4	17.4	137	4.20
KM12002-018	<0.2	2.00	<1	<5	117	0.6	<1	0.37	0.7	5	8.5	12.7	34.9	2.96
KM12002-019	0.6	1.11	15	<5	96	0.5	<1	3.21	<0.5	5	14.7	32.9	44.1	1.51
KM12002-020	<0.2	1.85	5	<5	175	<0.5	<1	0.84	0.8	5	12.5	18.3	26.4	2.37
KM12002-020S	18.2	1.58	26	<5	346	1.2	<1	1.28	1.8	12	25.0	5.3	5870	6.29
KM12002-021	<0.2	2.85	<1	<5	237	0.6	<1	1.08	0.9	4	17.5	40.0	31.1	3.54
KM12002-022	1.5	0.67	<1	<5	45	<0.5	<1	10.7	<0.5	6	5.3	8.1	19.3	0.57
KM12002-023	<0.2	2.39	<1	<5	253	0.6	<1	0.86	0.8	4	16.6	36.6	24.1	3.49
KM12002-024	<0.2	2.60	<1	<5	368	0.6	<1	1.85	0.9	9	10.1	10.3	40.5	3.53
KM12002-025	<0.2	2.36	<1	<5	287	0.6	<1	1.82	1.0	10	10.0	11.3	61.7	3.34
KM12002-026	<0.2	2.44	<1	<5	571	0.7	<1	1.91	1.1	9	10.1	13.4	29.2	3.38
KM12002-027	<0.2	2.52	<1	<5	455	0.6	<1	1.82	1.0	9	10.0	12.5	28.3	3.49
KM12002-028	<0.2	2.54	<1	<5	373	0.6	<1	2.23	1.3	9	10.3	13.2	31.8	3.50
KM12002-029	<0.2	2.82	<1	<5	448	0.7	<1	2.24	1.0	10	10.9	9.5	32.3	3.73
KM12002-030	<0.2	2.78	<1	<5	101	0.6	<1	3.18	1.1	10	10.0	8.0	38.7	3.93
KM12002-031	<0.2	2.36	<1	<5	110	0.7	<1	1.05	0.9	3	9.8	10.6	46.4	3.16

Certified By: Ron Cardinall

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe
Unit:	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Sample Description RDL:	0.2	0.01	1	5	1	0.5	1	0.01	0.5	1	0.5	0.5	0.5	0.01
KM12002-032	<0.2	2.46	<1	<5	89	0.6	<1	1.00	0.8	6	12.1	22.4	32.3	3.35
KM12002-033	<0.2	2.34	<1	<5	65	<0.5	<1	1.00	0.9	5	8.9	16.2	34.3	3.40
KM12002-034	<0.2	2.10	<1	<5	113	<0.5	<1	0.64	0.8	5	10.4	21.4	45.2	3.05
KM12002-035	0.5	2.18	7	<5	49	0.7	<1	1.89	1.3	3	10.5	12.4	43.4	3.12
KM12002-036	<0.2	1.66	<1	<5	13	<0.5	<1	1.28	<0.5	3	4.9	13.4	8.3	1.21
KM12002-037	<0.2	2.59	<1	<5	78	0.6	<1	0.82	0.8	4	10.2	23.4	31.2	3.16
KM12002-038	<0.2	2.53	<1	<5	176	0.6	<1	1.38	0.8	4	11.4	20.5	31.1	3.00
KM12002-039	<0.2	2.95	<1	<5	103	0.7	<1	1.02	1.1	6	12.1	23.6	37.9	4.29
KM12002-040	0.5	1.93	54	<5	79	<0.5	<1	1.30	0.8	5	11.9	16.9	66.0	2.67
KM12002-041	9.9	1.44	18	<5	60	<0.5	3	2.95	12.5	4	18.8	53.3	514	2.35
KM12002-041B	2.3	0.02	<1	<5	12	<0.5	<1	17.6	<0.5	<1	<0.5	1.4	<0.5	0.36
KM12002-042	<0.2	1.95	5	<5	81	<0.5	<1	0.48	0.7	5	10.9	12.2	18.2	2.96
Km12002-043	<0.2	2.55	3	<5	135	0.8	<1	1.29	1.0	10	17.5	34.4	33.1	4.03
KM12002-044	1.3	0.84	<1	<5	21	0.7	<1	8.08	<0.5	9	5.0	10.2	20.6	0.62
KM12002-045	<0.2	1.89	<1	<5	395	1.0	<1	1.39	0.6	8	12.9	32.0	19.3	2.74
KM12002-046	<0.2	2.28	<1	<5	128	0.9	<1	0.76	0.9	7	9.2	27.5	30.9	3.24
KM12002-047	<0.2	2.22	3	<5	118	0.9	<1	1.44	0.8	6	15.9	26.1	23.9	3.00
KM12002-048	<0.2	2.14	1	<5	131	0.7	<1	0.80	0.8	6	11.9	26.8	31.5	3.23
KM12002-049	<0.2	1.90	10	<5	67	0.6	<1	0.66	0.6	3	13.8	9.9	11.6	2.80
KM12002-050	0.7	2.84	<1	<5	54	0.5	<1	2.86	0.6	3	5.6	23.6	25.9	1.75
KM12002-051	<0.2	2.07	<1	<5	104	0.7	<1	0.62	0.7	5	8.7	11.7	34.1	3.12
KM12002-052	<0.2	2.64	<1	<5	67	0.8	<1	0.91	0.9	6	13.2	31.2	34.4	4.03

Certified By: Ron Cardinall

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Ga	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Rb
Unit:	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
Sample Description RDL:	5	1	1	0.01	1	1	0.01	1	0.5	0.01	0.5	10	0.5	10
KM12002-001	12	<1	2	0.20	3	13	0.78	671	0.9	0.02	2.3	1310	3.2	12
KM12002-002	14	<1	3	0.18	3	14	0.88	1540	<0.5	0.01	2.2	1340	2.7	11
KM12002-003	12	<1	3	0.25	2	15	1.03	651	<0.5	0.01	3.0	1110	<0.5	12
KM12002-004	9	<1	2	0.30	2	8	0.53	330	0.5	0.01	3.0	22	1.8	12
KM12002-005	10	<1	3	0.30	2	9	0.58	357	<0.5	0.02	4.8	110	1.3	11
KM12002-006	10	<1	<1	0.27	2	9	0.55	364	<0.5	0.02	7.7	405	1.3	11
KM12002-007	15	<1	3	0.33	2	15	1.11	752	<0.5	0.04	3.7	1150	<0.5	29
KM12002-008	13	<1	2	0.20	1	8	0.73	1810	12.2	0.01	6.1	343	16.1	14
KM12002-009	13	<1	2	0.34	2	12	0.94	593	<0.5	0.04	5.4	760	4.7	21
KM12002-010	13	<1	2	0.28	2	11	0.83	595	0.9	0.02	8.0	378	6.5	16
KM12002-011	13	<1	1	0.33	2	11	1.00	911	<0.5	0.02	9.5	681	3.3	18
KM12002-012	14	<1	3	0.25	2	11	0.98	935	<0.5	0.02	9.6	702	2.4	14
KM12002-013	15	<1	3	0.26	2	19	1.54	644	<0.5	0.03	13.2	953	<0.5	23
KM12002-014	13	<1	1	0.15	2	12	1.11	1420	0.9	0.01	5.1	517	0.7	14
KM12002-015	14	<1	1	0.19	2	15	1.32	470	<0.5	0.04	11.1	541	<0.5	12
KM12002-016	17	<1	1	0.19	2	17	1.52	541	<0.5	0.05	13.9	587	<0.5	11
KM12002-017	19	<1	3	0.58	5	18	1.72	924	<0.5	0.13	13.6	1280	<0.5	39
KM12002-018	14	<1	1	0.32	2	13	1.01	408	<0.5	0.05	7.1	211	<0.5	16
KM12002-019	9	<1	2	0.25	2	6	0.45	484	1.1	0.03	12.6	74	0.9	12
KM12002-020	14	<1	2	0.37	2	12	0.88	334	<0.5	0.14	20.2	458	<0.5	18
KM12002-020S	16	2	7	0.20	6	12	0.95	353	266	0.20	9.5	1450	92.7	21
KM12002-021	18	<1	3	0.37	2	13	1.25	827	<0.5	0.26	17.9	730	<0.5	20
KM12002-022	7	<1	2	0.09	3	2	0.17	2270	0.6	0.06	5.3	626	5.4	<10
KM12002-023	16	<1	1	0.43	2	16	1.22	976	<0.5	0.16	17.8	693	<0.5	21
KM12002-024	16	<1	3	0.31	4	12	1.18	909	<0.5	0.18	3.2	1520	<0.5	14
KM12002-025	16	<1	4	0.21	4	14	1.13	1030	0.8	0.15	3.2	1550	2.1	<10
KM12002-026	17	<1	4	0.38	5	12	1.16	1190	<0.5	0.15	4.8	1470	0.6	14
KM12002-027	18	<1	<1	0.33	5	12	1.17	1080	0.5	0.16	3.6	1500	<0.5	11
KM12002-028	17	<1	2	0.30	5	14	1.21	1060	0.6	0.15	4.4	1490	<0.5	13
KM12002-029	16	<1	3	0.18	5	17	1.27	1110	<0.5	0.12	4.0	1540	1.8	<10
KM12002-030	19	<1	3	0.19	5	16	1.29	1250	<0.5	0.05	3.6	1470	0.8	12
KM12002-031	14	<1	3	0.26	2	12	0.89	629	1.1	0.03	9.0	186	<0.5	12

Certified By: Ron Cardinall

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Ga	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Rb
Unit:	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
Sample Description RDL:	5	1	1	0.01	1	1	0.01	1	0.5	0.01	0.5	10	0.5	10
KM12002-032	14	<1	3	0.20	3	11	0.84	672	0.7	0.06	11.5	411	<0.5	<10
KM12002-033	15	<1	2	0.16	2	11	0.86	641	<0.5	0.05	7.7	411	<0.5	<10
KM12002-034	13	<1	2	0.19	2	10	0.75	485	0.5	0.07	9.6	411	<0.5	<10
KM12002-035	15	<1	1	0.15	1	15	0.86	787	2.2	0.03	6.2	511	200	<10
KM12002-036	8	<1	1	0.07	1	5	0.23	213	0.8	0.05	4.3	336	0.6	<10
KM12002-037	15	<1	3	0.17	2	16	0.79	471	<0.5	0.07	10.2	766	<0.5	<10
KM12002-038	14	<1	3	0.36	2	11	0.76	459	0.6	0.08	9.2	735	<0.5	21
KM12002-039	17	<1	<1	0.36	2	19	1.10	621	<0.5	0.08	9.7	1370	0.8	24
KM12002-040	13	<1	2	0.27	2	10	0.74	496	2.0	0.03	8.6	478	3.7	11
KM12002-041	12	<1	<1	0.19	2	8	0.35	633	4.0	0.02	11.0	25	745	<10
KM12002-041B	9	<1	<1	0.01	2	<1	12.1	239	0.5	<0.01	1.2	169	3.0	<10
KM12002-042	13	<1	3	0.27	3	11	0.84	469	<0.5	0.04	7.9	44	1.6	10
Km12002-043	17	<1	3	0.24	4	18	1.18	1450	<0.5	0.07	12.4	779	1.2	12
KM12002-044	8	<1	1	0.03	5	2	0.16	2460	0.9	0.02	3.4	754	7.6	<10
KM12002-045	15	<1	2	0.51	4	9	0.83	977	<0.5	0.09	9.1	766	<0.5	20
KM12002-046	15	<1	3	0.21	3	16	0.85	505	<0.5	0.07	8.1	428	<0.5	11
KM12002-047	15	<1	3	0.20	3	15	0.77	536	<0.5	0.05	11.8	282	3.4	11
KM12002-048	14	<1	3	0.31	3	16	0.90	553	<0.5	0.08	10.8	341	0.5	16
KM12002-049	14	<1	1	0.25	1	10	0.79	455	3.1	0.02	10.9	164	0.8	11
KM12002-050	13	<1	2	0.21	2	6	0.51	441	2.3	0.05	3.7	182	<0.5	10
KM12002-051	13	<1	2	0.32	3	11	0.85	503	<0.5	0.03	6.1	136	1.0	15
KM12002-052	16	<1	3	0.18	3	20	1.15	735	<0.5	0.08	10.9	582	<0.5	10

Certified By: Ron Cardinall

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit:	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Sample Description RDL:	0.005	1	0.5	10	5	0.5	10	10	5	0.01	5	5	0.5	1
KM12002-001	0.045	<1	0.5	<10	<5	63.5	<10	<10	<5	0.02	<5	<5	10.6	<1
KM12002-002	0.060	<1	0.6	<10	<5	212	<10	<10	<5	0.02	<5	<5	9.4	<1
KM12002-003	0.005	2	0.7	<10	<5	50.9	<10	<10	<5	0.03	<5	<5	12.2	<1
KM12002-004	0.005	<1	0.8	<10	<5	11.3	<10	<10	<5	0.08	<5	<5	6.8	<1
KM12002-005	<0.005	<1	1.2	<10	<5	17.7	<10	<10	<5	0.04	<5	<5	13.1	<1
KM12002-006	<0.005	<1	1.5	<10	<5	31.1	<10	<10	<5	0.05	<5	<5	15.9	<1
KM12002-007	0.076	<1	2.1	<10	<5	39.5	<10	<10	<5	0.06	<5	<5	24.9	<1
KM12002-008	0.145	<1	1.3	<10	<5	162	<10	<10	<5	0.03	<5	<5	9.3	<1
KM12002-009	0.030	<1	1.8	<10	<5	66.7	<10	<10	<5	0.05	<5	<5	29.7	<1
KM12002-010	0.055	<1	1.8	<10	<5	91.7	<10	<10	<5	0.04	<5	<5	19.4	<1
KM12002-011	0.025	<1	2.0	<10	<5	121	<10	<10	<5	0.05	<5	<5	23.6	<1
KM12002-012	0.026	<1	1.8	<10	<5	124	<10	<10	<5	0.04	<5	<5	22.3	1
KM12002-013	0.007	<1	4.5	<10	<5	72.1	<10	<10	<5	0.07	<5	<5	70.2	<1
KM12002-014	0.011	<1	2.7	<10	<5	272	<10	<10	<5	0.04	<5	<5	36.1	<1
KM12002-015	0.013	<1	3.1	<10	<5	56.5	<10	<10	<5	0.06	<5	<5	47.9	<1
KM12002-016	0.008	<1	4.8	<10	<5	52.5	<10	<10	<5	0.07	<5	<5	67.7	<1
KM12002-017	0.038	3	9.2	<10	<5	162	<10	<10	6	0.26	<5	<5	179	1
KM12002-018	0.012	<1	3.1	<10	<5	38.4	<10	<10	<5	0.13	<5	<5	29.4	<1
KM12002-019	0.015	2	1.5	<10	<5	62.1	<10	<10	<5	0.12	<5	<5	14.8	<1
KM12002-020	0.005	2	5.5	<10	<5	63.1	<10	<10	<5	0.13	<5	<5	39.1	<1
KM12002-020S	0.627	27	4.0	<10	<5	113	<10	<10	<5	0.15	7	7	209	2
KM12002-021	0.010	1	8.3	<10	<5	59.4	<10	<10	<5	0.16	<5	<5	125	<1
KM12002-022	0.011	3	1.5	<10	<5	89.6	<10	<10	<5	0.13	<5	<5	21.8	<1
KM12002-023	0.011	<1	9.5	<10	<5	71.4	<10	<10	<5	0.18	5	<5	119	<1
KM12002-024	0.089	2	4.0	<10	<5	90.6	<10	<10	<5	0.15	<5	<5	62.9	<1
KM12002-025	0.111	1	3.9	<10	<5	98.2	<10	<10	<5	0.15	<5	<5	62.6	<1
KM12002-026	0.102	2	4.3	<10	<5	91.5	<10	<10	<5	0.18	<5	<5	71.9	<1
KM12002-027	0.149	2	4.5	<10	<5	99.3	<10	<10	<5	0.17	<5	<5	65.9	<1
KM12002-028	0.291	<1	4.2	<10	<5	127	<10	<10	<5	0.15	<5	<5	68.6	<1
KM12002-029	0.249	4	4.5	<10	<5	132	<10	<10	<5	0.17	<5	<5	69.9	<1
KM12002-030	0.041	<1	4.2	<10	<5	86.8	<10	<10	<5	0.12	<5	<5	60.3	<1
KM12002-031	0.031	2	2.7	<10	<5	45.1	<10	<10	<5	0.16	<5	<5	22.5	<1

Certified By: Ron Cardinall

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W
Unit:	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Sample Description RDL:	0.005	1	0.5	10	5	0.5	10	10	5	0.01	5	5	0.5	1
KM12002-032	0.007	<1	3.6	<10	<5	54.3	<10	<10	<5	0.12	<5	<5	38.9	<1
KM12002-033	0.005	<1	3.4	<10	<5	42.8	<10	<10	<5	0.10	<5	<5	33.5	1
KM12002-034	0.010	2	3.5	<10	<5	43.3	<10	<10	<5	0.10	5	<5	40.7	<1
KM12002-035	0.217	1	3.5	<10	<5	71.0	<10	<10	<5	0.12	<5	<5	32.9	<1
KM12002-036	0.034	<1	3.8	<10	<5	70.9	<10	<10	<5	0.06	<5	<5	35.8	<1
KM12002-037	0.010	<1	4.4	<10	<5	103	<10	<10	<5	0.13	<5	<5	53.1	<1
KM12002-038	0.021	<1	5.0	<10	<5	194	<10	<10	<5	0.13	<5	<5	47.0	<1
KM12002-039	0.018	2	7.0	<10	<5	59.0	<10	<10	<5	0.16	6	<5	68.8	<1
KM12002-040	0.091	<1	2.5	<10	<5	34.0	<10	<10	<5	0.05	<5	<5	21.3	<1
KM12002-041	0.721	<1	1.4	<10	<5	89.0	<10	<10	<5	0.01	<5	<5	7.5	<1
KM12002-041B	<0.005	<1	<0.5	<10	<5	23.0	<10	<10	<5	<0.01	<5	<5	5.0	<1
KM12002-042	0.022	<1	2.4	<10	<5	24.6	<10	<10	<5	0.10	<5	<5	20.5	<1
Km12002-043	0.034	1	12.1	<10	<5	60.2	<10	<10	<5	0.21	6	<5	127	<1
KM12002-044	0.008	3	2.0	<10	<5	91.8	<10	10	<5	0.16	<5	<5	22.4	<1
KM12002-045	0.007	3	9.0	<10	<5	49.2	<10	11	<5	0.28	<5	<5	95.0	<1
KM12002-046	0.006	2	5.4	<10	<5	63.3	<10	<10	<5	0.20	5	<5	54.5	<1
KM12002-047	0.007	3	5.3	<10	<5	63.2	<10	<10	<5	0.22	<5	<5	59.0	<1
KM12002-048	0.009	1	5.9	<10	<5	43.4	<10	<10	<5	0.17	<5	<5	59.4	<1
KM12002-049	0.056	2	2.6	<10	<5	21.6	<10	<10	<5	0.13	<5	<5	18.1	<1
KM12002-050	0.127	2	1.9	<10	<5	125	<10	<10	<5	0.07	<5	<5	11.3	<1
KM12002-051	0.058	1	2.8	<10	<5	20.6	<10	<10	<5	0.15	<5	<5	23.2	<1
KM12002-052	0.027	2	7.5	<10	<5	41.0	<10	<10	<5	0.19	<5	<5	77.4	<1

Certified By: Ron Cardinall

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Y	Zn	Zr
Unit:	ppm	ppm	ppm
Sample Description RDL:	1	0.5	5
KM12002-001	8	70.9	<5
KM12002-002	9	101	<5
KM12002-003	7	70.8	<5
KM12002-004	3	35.6	<5
KM12002-005	4	43.3	<5
KM12002-006	6	45.1	<5
KM12002-007	8	93.2	<5
KM12002-008	7	98.1	<5
KM12002-009	7	82.3	<5
KM12002-010	5	64.4	<5
KM12002-011	7	66.0	<5
KM12002-012	7	67.8	<5
KM12002-013	8	81.9	<5
KM12002-014	7	59.7	<5
KM12002-015	6	74.1	<5
KM12002-016	7	95.6	<5
KM12002-017	9	74.8	<5
KM12002-018	8	72.3	<5
KM12002-019	9	30.7	<5
KM12002-020	7	72.4	<5
KM12002-020S	12	166	9
KM12002-021	7	90.7	<5
KM12002-022	5	32.6	6
KM12002-023	7	90.7	<5
KM12002-024	8	76.8	<5
KM12002-025	8	82.7	<5
KM12002-026	8	88.5	<5
KM12002-027	8	84.4	<5
KM12002-028	9	109	<5
KM12002-029	9	86.9	<5
KM12002-030	11	81.5	<5
KM12002-031	8	67.1	<5

Certified By: Ron Cardinall

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Aqua Regia Digest - Metals Package, ICP-OES finish (201073)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Y	Zn	Zr
Unit:	ppm	ppm	ppm
Sample Description RDL:	1	0.5	5
KM12002-032	9	75.4	<5
KM12002-033	9	78.4	<5
KM12002-034	7	80.3	<5
KM12002-035	10	114	<5
KM12002-036	5	34.4	<5
KM12002-037	7	89.2	<5
KM12002-038	7	67.9	<5
KM12002-039	11	83.4	<5
KM12002-040	6	72.8	<5
KM12002-041	7	352	<5
KM12002-041B	<1	10.3	<5
KM12002-042	5	77.8	<5
Km12002-043	13	113	<5
KM12002-044	8	27.1	10
KM12002-045	11	63.9	<5
KM12002-046	10	85.3	<5
KM12002-047	9	84.1	<5
KM12002-048	7	84.4	<5
KM12002-049	7	69.3	<5
KM12002-050	6	34.3	<5
KM12002-051	9	76.3	<5
KM12002-052	9	84.0	<5

Comments: RDL - Reported Detection Limit

Certified By: Ron Cardinall

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Fire Assay - Trace Au, AAS finish (202051)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Sample Login Weight	Au
Unit:	kg	ppm
Sample Description RDL:	0.01	0.002
KM12002-001	3.54	<0.002
KM12002-002	2.32	0.006
KM12002-003	2.70	<0.002
KM12002-004	2.18	0.002
KM12002-005	1.40	0.006
KM12002-006	2.18	0.003
KM12002-007	1.28	<0.002
KM12002-008	2.44	0.009
KM12002-009	1.36	<0.002
KM12002-010	2.86	0.003
KM12002-011	1.52	<0.002
KM12002-012	2.04	<0.002
KM12002-013	2.84	<0.002
KM12002-014	1.62	<0.002
KM12002-015	2.82	<0.002
KM12002-016	2.76	<0.002
KM12002-017	3.30	<0.002
KM12002-018	1.56	<0.002
KM12002-019	0.96	<0.002
KM12002-020	1.14	0.004
KM12002-020S	0.10	0.761
KM12002-021	1.32	<0.002
KM12002-022	3.20	<0.002
KM12002-023	1.66	<0.002
KM12002-024	4.60	<0.002
KM12002-025	5.28	<0.002
KM12002-026	4.42	<0.002
KM12002-027	4.64	0.004
KM12002-028	4.48	<0.002
KM12002-029	4.62	<0.002
KM12002-030	2.16	<0.002

Certified By: Ron Cardinall

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

ATTENTION TO: Chris Gallagher

Fire Assay - Trace Au, AAS finish (202051)

DATE SAMPLED: Sep 24, 2012 | DATE RECEIVED: Sep 24, 2012 | DATE REPORTED: Oct 15, 2012 | SAMPLE TYPE: Drill Core

Analyte:	Sample Login Weight	Au
Unit:	kg	ppm
Sample Description RDL:	0.01	0.002
KM12002-031	1.54	<0.002
KM12002-032	3.34	<0.002
KM12002-033	2.38	<0.002
KM12002-034	3.18	<0.002
KM12002-035	1.68	0.005
KM12002-036	1.30	<0.002
KM12002-037	1.68	<0.002
KM12002-038	3.08	<0.002
KM12002-039	2.68	<0.002
KM12002-040	1.78	0.006
KM12002-041	0.88	0.035
KM12002-041B	1.46	<0.002
KM12002-042	1.46	<0.002
Km12002-043	2.52	<0.002
KM12002-044	2.40	<0.002
KM12002-045	3.32	<0.002
KM12002-046	2.54	<0.002
KM12002-047	2.18	<0.002
KM12002-048	4.18	<0.002
KM12002-049	1.30	<0.002
KM12002-050	1.10	<0.002
KM12002-051	1.54	<0.002
KM12002-052	3.66	<0.002

Comments: RDL - Reported Detection Limit

Certified By: Ron Cardinall

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
AGAT WORK ORDER: 12D645173
PROJECT NO: KM2012-001
ATTENTION TO: Chris Gallagher

Solid Analysis

RPT Date: Oct 15, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
										Lower	Upper
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739846	< 0.002	< 0.002	0.0%	< 0.002	0.261	0.263	99%	90%	110%
Aqua Regia Digest - Metals Package, ICP-OES finish (201073)											
Ag	1	3739846	0.8	0.7	13.3%	< 0.2	13.2	13.0	101%	80%	120%
Al	1	3739846	1.80	1.85	2.7%	< 0.01				80%	120%
As	1	3739846	6	4		< 1				80%	120%
B	1	3739846	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3739846	68	67	1.5%	< 1				80%	120%
Be	1	3739846	< 0.5	< 0.5	0.0%	< 0.5				80%	120%
Bi	1	3739846	< 1	< 1	0.0%	< 1				80%	120%
Ca	1	3739846	2.33	2.40	3.0%	< 0.01	2.65	2.21	120%	80%	120%
Cd	1	3739846	0.8	0.8	0.0%	< 0.5				80%	120%
Ce	1	3739846	6	7	15.4%	< 1				80%	120%
Co	1	3739846	7.0	7.0	0.0%	< 0.5				80%	120%
Cr	1	3739846	14.0	13.9	0.7%	< 0.5				80%	120%
Cu	1	3739846	48.4	47.9	1.0%	< 0.5	5461	6000	91%	80%	120%
Fe	1	3739846	2.80	2.90	3.5%	< 0.01				80%	120%
Ga	1	3739846	12	12	0.0%	< 5				80%	120%
Hg	1	3739846	< 1	< 1	0.0%	< 1				80%	120%
In	1	3739846	2	< 1		< 1				80%	120%
K	1	3739846	0.20	0.20	0.0%	< 0.01				80%	120%
La	1	3739846	3	3	0.0%	< 1				80%	120%
Li	1	3739846	13	13	0.0%	< 1				80%	120%
Mg	1	3739846	0.78	0.80	2.5%	< 0.01				80%	120%
Mn	1	3739846	671	682	1.6%	< 1				80%	120%
Mo	1	3739846	0.9	0.5		< 0.5	310	360	86%	80%	120%
Na	1	3739846	0.02	0.02	0.0%	< 0.01				80%	120%
Ni	1	3739846	2.28	2.35	3.0%	< 0.5				80%	120%
P	1	3739846	1310	1330	1.5%	< 10	576	600	96%	80%	120%
Pb	1	3739846	3.19	2.61	20.0%	< 0.5				80%	120%
Rb	1	3739846	12	12	0.0%	< 10				80%	120%
S	1	3739846	0.0454	0.0458	0.9%	< 0.005				80%	120%
Sb	1	3739846	< 1	< 1	0.0%	< 1				80%	120%
Sc	1	3739846	0.5	0.5	0.0%	< 0.5				80%	120%
Se	1	3739846	< 10	< 10	0.0%	< 10				80%	120%
Sn	1	3739846	< 5	< 5	0.0%	< 5				80%	120%
Sr	1	3739846	63.5	64.7	1.9%	< 0.5				80%	120%
Ta	1	3739846	< 10	< 10	0.0%	< 10				80%	120%
Te	1	3739846	< 10	< 10	0.0%	< 10				80%	120%
Th	1	3739846	< 5	< 5	0.0%	< 5				80%	120%
Ti	1	3739846	0.02	0.02	0.0%	< 0.01				80%	120%
Tl	1	3739846	< 5	< 5	0.0%	< 5				80%	120%
U	1	3739846	< 5	< 5	0.0%	< 5	0.8	0.8	97%	80%	120%
V	1	3739846	10.6	10.9	2.8%	< 0.5				80%	120%

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
AGAT WORK ORDER: 12D645173
PROJECT NO: KM2012-001
ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 15, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits Lower	Acceptable Limits Upper
W	1	3739846	< 1	< 1	0.0%	< 1				80%	120%
Y	1	3739846	8	8	0.0%	< 1				80%	120%
Zn	1	3739846	70.9	72.6	2.4%	< 0.5				80%	120%
Zr	1	3739846	< 5	< 5	0.0%	< 5				80%	120%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739858	< 0.002	< 0.002	0.0%	< 0.002	1.52	1.52	100%	90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739871	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739883	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Fire Assay - Trace Au, AAS finish (202051)											
Au	1	3739896	< 0.002	< 0.002	0.0%	< 0.002				90%	110%
Aqua Regia Digest - Metals Package, ICP-OES finish (201073)											
Ag	1	3739871	< 0.2	< 0.2	0.0%	< 0.2	13.8	13.0	106%	80%	120%
Al	1	3739871	2.36	2.40	1.7%	< 0.01				80%	120%
As	1	3739871	< 1	< 1	0.0%	< 1				80%	120%
B	1	3739871	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3739871	287	292	1.7%	< 1				80%	120%
Be	1	3739871	0.6	0.6	0.0%	< 0.5				80%	120%
Bi	1	3739871	< 1	< 1	0.0%	< 1				80%	120%
Ca	1	3739871	1.82	1.85	1.6%	< 0.01	2.24	2.21	101%	80%	120%
Cd	1	3739871	1.0	1.0	0.0%	< 0.5				80%	120%
Ce	1	3739871	10	10	0.0%	< 1				80%	120%
Co	1	3739871	10.0	10.0	0.0%	< 0.5				80%	120%
Cr	1	3739871	11.3	11.4	0.9%	< 0.5				80%	120%
Cu	1	3739871	61.7	62.8	1.8%	< 0.5	5685	6000	94%	80%	120%
Fe	1	3739871	3.34	3.39	1.5%	< 0.01				80%	120%
Ga	1	3739871	16	17	6.1%	< 5				80%	120%
Hg	1	3739871	< 1	< 1	0.0%	< 1				80%	120%
In	1	3739871	4	3	28.6%	< 1				80%	120%
K	1	3739871	0.21	0.21	0.0%	< 0.01				80%	120%
La	1	3739871	4	5	22.2%	< 1				80%	120%
Li	1	3739871	14	14	0.0%	< 1				80%	120%
Mg	1	3739871	1.13	1.13	0.0%	< 0.01				80%	120%
Mn	1	3739871	1030	1040	1.0%	< 1				80%	120%
Mo	1	3739871	0.8	< 0.5		< 0.5	323	360	89%	80%	120%
Na	1	3739871	0.15	0.15	0.0%	< 0.01				80%	120%
Ni	1	3739871	3.2	3.0	6.5%	< 0.5				80%	120%
P	1	3739871	1550	1540	0.6%	< 10	580	600	97%	80%	120%
Pb	1	3739871	2.1	1.4		< 0.5				80%	120%
Rb	1	3739871	< 10	< 10	0.0%	< 10				80%	120%
S	1	3739871	0.111	0.109	1.8%	< 0.005				80%	120%

AGAT Laboratories
5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES
AGAT WORK ORDER: 12D645173
PROJECT NO: KM2012-001
ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 15, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits Lower	Acceptable Limits Upper
Sb	1	3739871	1	2		< 1				80%	120%
Sc	1	3739871	3.92	4.00	2.0%	< 0.5				80%	120%
Se	1	3739871	< 10	< 10	0.0%	< 10				80%	120%
Sn	1	3739871	< 5	< 5	0.0%	< 5				80%	120%
Sr	1	3739871	98.2	98.8	0.6%	< 0.5				80%	120%
Ta	1	3739871	< 10	< 10	0.0%	< 10				80%	120%
Te	1	3739871	< 10	< 10	0.0%	< 10				80%	120%
Th	1	3739871	< 5	< 5	0.0%	< 5				80%	120%
Ti	1	3739871	0.154	0.165	6.9%	< 0.01				80%	120%
Tl	1	3739871	< 5	< 5	0.0%	< 5				80%	120%
U	1	3739871	< 5	< 5	0.0%	< 5				80%	120%
V	1	3739871	62.6	62.9	0.5%	< 0.5				80%	120%
W	1	3739871	< 1	< 1	0.0%	< 1				80%	120%
Y	1	3739871	8	8	0.0%	< 1				80%	120%
Zn	1	3739871	82.7	82.3	0.5%	< 0.5				80%	120%
Zr	1	3739871	< 5	< 5	0.0%	< 5				80%	120%
Aqua Regia Digest - Metals Package, ICP-OES finish (201073)											
Ag	1	3739896	< 0.2	< 0.2	0.0%	< 0.2	14.3	13.0	110%	80%	120%
Al	1	3739896	1.90	1.96	3.1%	< 0.01				80%	120%
As	1	3739896	10	10	0.0%	< 1				80%	120%
B	1	3739896	< 5	< 5	0.0%	< 5				80%	120%
Ba	1	3739896	67	70	4.4%	< 1				80%	120%
Be	1	3739896	0.6	0.6	0.0%	< 0.5				80%	120%
Bi	1	3739896	< 1	< 1	0.0%	< 1				80%	120%
Ca	1	3739896	0.66	0.67	1.5%	< 0.01	2.25	2.21	101%	80%	120%
Cd	1	3739896	0.6	0.6	0.0%	< 0.5				80%	120%
Ce	1	3739896	3	3	0.0%	< 1				80%	120%
Co	1	3739896	13.8	13.9	0.7%	< 0.5				80%	120%
Cr	1	3739896	9.9	10.3	4.0%	< 0.5				80%	120%
Cu	1	3739896	11.6	11.6	0.0%	< 0.5	5926	6000	98%	80%	120%
Fe	1	3739896	2.80	2.85	1.8%	< 0.01				80%	120%
Ga	1	3739896	14	14	0.0%	< 5				80%	120%
Hg	1	3739896	< 1	< 1	0.0%	< 1				80%	120%
In	1	3739896	1	2		< 1				80%	120%
K	1	3739896	0.255	0.267	4.6%	< 0.01				80%	120%
La	1	3739896	1	1	0.0%	< 1				80%	120%
Li	1	3739896	10	10	0.0%	< 1				80%	120%
Mg	1	3739896	0.793	0.810	2.1%	< 0.01				80%	120%
Mn	1	3739896	455	469	3.0%	< 1				80%	120%
Mo	1	3739896	3.1	3.1	0.0%	< 0.5	326	360	90%	80%	120%
Na	1	3739896	0.02	0.02	0.0%	< 0.01				80%	120%
Ni	1	3739896	10.9	11.1	1.8%	< 0.5				80%	120%
P	1	3739896	164	167	1.8%	< 10	593	600	99%	80%	120%
Pb	1	3739896	0.8	2.1		< 0.5				80%	120%

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

Solid Analysis (Continued)

RPT Date: Oct 15, 2012		REPLICATE				Method Blank	REFERENCE MATERIAL				
PARAMETER	Batch	Sample Id	Original	Rep #1	RPD		Result Value	Expect Value	Recovery	Acceptable Limits	
										Lower	Upper
Rb	1	3739896	11	12	8.7%	< 10				80%	120%
S	1	3739896	0.0564	0.0602	6.5%	< 0.005				80%	120%
Sb	1	3739896	2	2	0.0%	< 1				80%	120%
Sc	1	3739896	2.62	2.70	3.0%	< 0.5				80%	120%
Se	1	3739896	< 10	< 10	0.0%	< 10				80%	120%
Sn	1	3739896	< 5	< 5	0.0%	< 5				80%	120%
Sr	1	3739896	21.6	21.8	0.9%	< 0.5				80%	120%
Ta	1	3739896	< 10	< 10	0.0%	< 10				80%	120%
Te	1	3739896	< 10	< 10	0.0%	< 10				80%	120%
Th	1	3739896	< 5	< 5	0.0%	< 5				80%	120%
Ti	1	3739896	0.13	0.13	0.0%	< 0.01				80%	120%
Tl	1	3739896	< 5	< 5	0.0%	< 5				80%	120%
U	1	3739896	< 5	< 5	0.0%	< 5				80%	120%
V	1	3739896	18.1	19.3	6.4%	< 0.5				80%	120%
W	1	3739896	< 1	< 1	0.0%	< 1				80%	120%
Y	1	3739896	7	8	13.3%	< 1	7	7	100%	80%	120%
Zn	1	3739896	69.3	70.1	1.1%	< 0.5				80%	120%
Zr	1	3739896	< 5	< 5	0.0%	< 5				80%	120%
Aqua Regia Digest - Metals Package, ICP-OES finish (201073)											
Ag	1					< 0.2	14.7	13.0	113%	80%	120%
Cu	1					< 0.5	5900	6000	98%	80%	120%
Mo	1					< 0.5	325	360	90%	80%	120%
P	1					< 10	602	600	100%	80%	120%
Y	1					< 1	7	7	100%	80%	120%

Certified By: Ron Cardinall

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: TERRALOGIC EXPLORATION SERVICES

AGAT WORK ORDER: 12D645173

PROJECT NO: KM2012-001

ATTENTION TO: Chris Gallagher

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Ag	MIN-200-12020		ICP/OES
Al	MIN-200-12020		ICP/OES
As	MIN-200-12020		ICP/OES
B	MIN-200-12020		ICP/OES
Ba	MIN-200-12020		ICP/OES
Be	MIN-200-12020		ICP/OES
Bi	MIN-200-12020		ICP/OES
Ca	MIN-200-12020		ICP/OES
Cd	MIN-200-12020		ICP/OES
Ce	MIN-200-12020		ICP/OES
Co	MIN-200-12020		ICP/OES
Cr	MIN-200-12020		ICP/OES
Cu	MIN-200-12020		ICP/OES
Fe	MIN-200-12020		ICP/OES
Ga	MIN-200-12020		ICP/OES
Hg	MIN-200-12020		ICP/OES
In	MIN-200-12020		ICP/OES
K	MIN-200-12020		ICP/OES
La	MIN-200-12020		ICP/OES
Li	MIN-200-12020		ICP/OES
Mg	MIN-200-12020		ICP/OES
Mn	MIN-200-12020		ICP/OES
Mo	MIN-200-12020		ICP/OES
Na	MIN-200-12020		ICP/OES
Ni	MIN-200-12020		ICP/OES
P	MIN-200-12020		ICP/OES
Pb	MIN-200-12020		ICP/OES
Rb	MIN-200-12020		ICP/OES
S	MIN-200-12020		ICP/OES
Sb	MIN-200-12020		ICP/OES
Sc	MIN-200-12020		ICP/OES
Se	MIN-200-12020		ICP/OES
Sn	MIN-200-12020		ICP/OES
Sr	MIN-200-12020		ICP/OES
Ta	MIN-200-12020		ICP/OES
Te	MIN-200-12020		ICP/OES
Th	MIN-200-12020		ICP/OES
Ti	MIN-200-12020		ICP/OES
Tl	MIN-200-12020		ICP/OES
U	MIN-200-12020		ICP/OES
V	MIN-200-12020		ICP/OES
W	MIN-200-12020		ICP/OES
Y	MIN-200-12020		ICP/OES
Zn	MIN-200-12020		ICP/OES
Zr	MIN-200-12020		ICP/OES
Sample Login Weight	MIN-12009		BALANCE
Au	MIN-200-12019	BUGBEE, E: A Textbook of Fire Assaying	AAS

Appendix VI

Kalum DDH Sample Petrographic Report

PETROGRAPHIC REPORT ON 5 SAMPLES

Report for: James Oliver Price/Chris Gallagher
Terralogic Exploration Inc.
Suite 200-44-12th Avenue South
Cranbrook, B.C. V1C 2R7 (250)421-6838

Invoice 120957

Nov. 16, 2012.

SUMMARY: Most samples appear to be strongly phyllic or propylitic altered, plagioclase and mafic (originally hornblende?) phyric hypabyssal intermediate intrusive rocks; sedimentary rocks were not conclusively identified. Sulfides are minor (mainly pyrrhotite, pyrite and trace chalcopyrite); veinlets are mainly quartz or carbonate, local chlorite, epidote or albite. Capsule descriptions are as follows:

KM12002-001: appears to be strongly phyllic/propylitic (sericite-carbonate-chlorite-minor biotite-pyrrhotite ±chalcopyrite, ilmenite, apatite) altered high-level intermediate intrusive rock (hypabyssal diorite?), cut by thin carbonate-quartz-chlorite ±albite veinlets.

KM12001-002: appears to represent intensely propylitic (carbonate-epidote-quartz-albite?-chlorite ±Kspar?-sphene) altered, fine-grained hypabyssal (quartz) diorite cut by planar calcite veins and thinner, diffuse calcite-quartz veinlets.

KM12001-003: could represent strongly albite-actinolite-carbonate-quartz-sphene/rutile altered, very fine diorite (?) cut by zones of stronger epidote-carbonate-quartz-chlorite-sphene alteration cored by veins of quartz, hairline quartz-chlorite-epidote-minor Kspar, or later carbonate.

KM12002-004: probably hypabyssal (fine-grained, weakly porphyritic) hornblende quartz diorite or quartz andesite, possibly potassic altered to oligoclase-quartz-biotite-sericite-chlorite-actinolite-epidote-carbonate-rutile-trace sulfides, cut by hairline plagioclase and calcite veinlets.

KM12001-005: This sample is enigmatic; it could represent either strong sericite-chlorite-quartz?-rutile altered siltstone (this would not explain the rectangular domains of sericite-quartz, but would explain the minute opaques, which could be carbon?) or strongly altered hypabyssal plagioclase-phyric intermediate dyke (?)in which plagioclase has been altered to sericite-quartz and interstitial mafics to chlorite-sericite-quartz with accessory rutile. Veinlets are of quartz or carbonate (calcite?)

Detailed petrographic descriptions and photomicrographs are appended (by email attachment). If you have any questions regarding the petrography, please do not hesitate to contact me.

Craig H.B. Leitch, Ph.D., P. Eng. (250) 653-9158 dromore61@gmail.com
492 Isabella Point Road, Salt Spring Island, B.C. Canada V8K 1V4

KM12002-001: STRONGLY PHYLLIC/PROPYLITIC (SERICITE-CARBONATE-CHLORITE-MINOR QUARTZ-BIOTITE-ILMENITE-PYRRHOTITE±CHALCOPYRITE-APATITE) ALTERED, CARBONATE-QUARTZ-CHLORITE VEINED HYPABYSSAL DIORITE (?)

Described as grit/coarse grained sandstone, calcareous, massive, interstitial biotite/calcite, very fine disseminated pyrite within quartz/calcite fractures, diffuse grain boundaries, very weak silicification; hand specimen shows dark greenish grey, fine/medium grained intermediate intrusive rock characterized by small relict plagioclase phenocrysts, cut by local thin veinlets. The rock is locally weakly magnetic, shows widespread modest reaction to cold dilute HCl, and no stain for K-feldspar in the etched offcut. Modal mineralogy in polished thin section is approximately:

Relict (sericitized) plagioclase (albite-oligoclase?)	35%
Sericite (mainly after plagioclase)	20%
Carbonate (calcite/dolomite?)	20%
Chlorite	15%
Quartz (primary interstitial, minor secondary in veinlets)	~5%
Secondary biotite	1-2%
Pyrrhotite, trace chalcopyrite	1-2%
Ilmenite	1-2%
Apatite	<1%

This sample is actually a somewhat porphyritic intrusive rock, composed of relict (sericitized) plagioclase with interstitial relict mafics (altered to carbonate-chlorite-accessory sulfides-Fe/Ti oxides-minor apatite) and quartz, cut by veinlets of carbonate-quartz-chlorite.

Relict plagioclase crystals display somewhat rounded, tabular sub/euhedral outlines up to about 2 mm long, with random orientations. They are typically 15-50% replaced by sericite (fine randomly oriented sub/euhedral flakes mostly <30 um in size, with minor carbonate as ragged anhedra to about 0.1 mm, likely calcite?). Remnant plagioclase shows only vague relict twinning with extinction on 010 up to about 18 degrees, suggestive of albite, but relief against quartz is difficult to judge (only slightly negative?) so it could be albite or oligoclase; in either case, it is likely secondary in light of the general degree of alteration to sericite and minor carbonate.

The matrix of secondary minerals is mostly after former mafics, which have somewhat irregular to subhedral lath-like or rectangular outlines up to about 2 mm (3 mm where glomeratic) suggestive of former amphibole (hornblende?). They are now pseudomorphed by fine-grained, somewhat variable mixtures of carbonate (interlocking sub/anhedra mostly <0.15 mm, likely calcite and dolomite since some are pale brownish, and reaction is muted in hand specimen), chlorite (subhedral flakes to 0.2 mm, with pale green colour/pleochroism and near-zero to slightly length-slow, anomalous blue birefringence suggestive of Fe:Fe+Mg, or F:M, ratio around 0.5?) plus accessory sulfides (pyrrhotite as subhedra mostly <0.3 mm and trace chalcopyrite as rounded subhedra <0.1 mm, in ragged aggregates up to ~1 mm across) and oxides (mostly ilmenite as minute tabular euhedra <60 um long, intergrown with chlorite). Minor fine-grained secondary biotite forming subhedral flakes mostly <0.1 mm in size may be after original amphibole (?).

Minor quartz forming subhedra mostly 0.15 mm, interstitial to plagioclase and mafic sites, is likely primary in origin although typically strongly recrystallized to sub-domains <50 um in size, with mild strain indicated by undulose extinction.

Veinlets up to about 1 mm thick make up about 7% of the slide, mainly composed of carbonate (elongated subhedra to ~1 mm long, sub-parallel to vein walls, mostly calcite?) with selvages or ribbons <0.2 mm thick of quartz (sub/anhedra mostly <0.1 mm) and local chlorite (as described above) or albite (where crossing relict plagioclase crystals). Sulfides are not visibly associated with the veinlets.

In summary, this appears to be strongly phyllic/propylitic (sericite-carbonate-chlorite-minor biotite-pyrrhotite ±chalcopyrite, ilmenite, apatite) altered high-level intermediate intrusive rock (hypabyssal diorite?), cut by thin carbonate-quartz-chlorite ±albite veinlets.

KM12001-002: INTENSELY PROPYLITIC (CARBONATE-EPIDOTE-QUARTZ-ALBITE?-CHLORITE-MINOR KSPAR?-SPHENE) ALTERED, CARBONATE±QUARTZ VEINED HYPABYSSAL (QUARTZ) DIORITE (?)

Described as medium grained intermediate intrusive, moderately silicified with diffuse grain boundaries and weak fabric, very minor fracture controlled pyrrhotite; hand specimen shows greenish grey, fine/medium grained intermediate intrusive rock characterized by small relict plagioclase phenocryst and mafic sites, cut by white calcite veinlets. The rock is unscratched or barely scratched by steel, locally slightly magnetic, shows widespread strong reaction to cold dilute HCl, and trace stain for K-feldspar in the etched offcut (away from veins only). Modal mineralogy in polished thin section is approximately:

Carbonate (calcite/dolomite?)	40%
Epidote-group (clinozoisite, zoisite?)	35%
Quartz (minor primary, mostly secondary, trace in veinlets)	10%
Relict (albitized?) plagioclase	7%
Chlorite	5%
K-feldspar (primary or secondary?)	1-2%
Ilmenite, sphene/“leucoxene”	1-2%
Pyrrhotite, possible sphalerite?	traces

This is a very fine-grained, strongly altered rock in which former plagioclase appears to have been mainly replaced by epidote and interstitial mafics by carbonate, secondary quartz and minor chlorite plus opaque Fe-Ti oxides; there may have been minor primary quartz and Kspar, now recrystallized.

Relict plagioclase sites have rounded-off to irregular, locally subhedral tablet-like outlines up to about 1.5 mm across, now mostly replaced by very fine-grained aggregates of epidote-group mineral (with brownish rather than yellowish colour, and variable birefringence, either moderate, possibly indicative of clinozoisite, or mostly very low/anomalous grey and blue, possibly zoisite?) forming tightly interlocking, ragged sub/anhedral crystals mostly <50 um in diameter. Rarely, remnant plagioclase is recognizable by vague vestiges of twinning (extinction on 010 up to 17 degrees, suggestive of secondary albite composition) in subhedra up to 0.5 mm long, and in and adjacent to some of these sites minor Kspar occurs, although whether it is primary or secondary is not certain (it is really only recognizable by the yellow stained areas in the offcut; not in thin section).

Interstitial relict mafic sites have less regular, anhedral shapes mostly <1 mm in size, now pseudomorphed by variable mixtures of carbonate (tightly interlocking sub/anhedra mostly <0.1 mm, mainly clear and likely calcite, but locally brownish, possibly dolomite?) and lesser secondary quartz (sub/anhedra mostly <50 um, but rarely to 0.1 mm) and chlorite (subhedral flakes <50 um with pale green colour and near-zero birefringence indicative of F:M around 0.5?) mostly so intimately intergrown with carbonate that it is difficult to recognize. Opaque oxides mostly associated with the intersertal relict mafic sites display crudely tabular sub/euhedral outlines up to about 0.35 mm long, composed of relict ilmenite partly to largely replaced by very fine-grained sphene or locally “leucoxene” (sphene and rutile) plus rare traces of sulfide <15 um in size (could be pyrite or pyrrhotite?). There are also rare traces of bright red-brown, possibly isotropic mineral <30 um in size that could be sphalerite (Fe-rich?).

In some portions of the slide, small rounded subhedral quartz crystals <0.5 mm in diameter (partly recrystallized to sub-domains with undulose extinction) have the appearance of relict microphenocrysts, now partly altered by secondary quartz activity.

Veins up to 4 mm thick consist mainly of carbonate (mainly calcite, interlocking rounded subhedra <1 mm) or thinner, <1.5 mm thick, diffuse carbonate (subhedra mainly <0.2 mm)-minor quartz (subhedra mainly <35 um).

In summary, this appears to represent intensely propylitic (carbonate-epidote-quartz-albite?-chlorite ±Kspar?-sphene) altered, fine-grained hypabyssal (quartz) diorite cut by planar calcite veins and thinner, diffuse calcite-quartz veinlets.

KM12001-003: ALBITE-ACTINOLITE-CARBONATE ALTERED ROCK CUT BY ZONES OF EPIDOTE-CARBONATE-QUARTZ-CHLORITE±SPHENE, LOCAL KSPAR VEINLETS

Described as highly altered greywacke, very fine grained, pervasively silicified with pervasive chloritic alteration, patchy potassic bleaching, calcite veinlets, nodules of pyrrhotite, sharp planar alteration front; hand specimen shows medium greenish grey, fine grained rock cut by zones of bleaching associated with thin irregular grey quartz veinlets, and later hairline veinlets associated with secondary Kspar. The rock is unscratched or barely scratched by steel, locally slightly magnetic, shows widespread slow reaction to cold dilute HCl, and trace stain for K-feldspar in the etched offcut (along veinlets only). Modal mineralogy in polished thin section is approximately:

Epidote-group (clinozoisite, zoisite?)	40%
Quartz (mostly secondary, and in veinlets)	15%
Carbonate (mainly calcite/dolomite?)	15%
Relict (albitized?) plagioclase	15%
Amphibole (secondary, actinolitic?)	10%
Chlorite	2-3%
K-feldspar (mainly secondary?)	1%
Sphene/rutile (“leucoxene”)	1%
Pyrrhotite (?)	trace

This sample is partly so fine-grained that individual minerals are piled on top of each other in the (~30 um thick) section, making identification and quantification difficult. However, it appears to consist largely of relict areas (greenish) composed of relict plagioclase, actinolitic amphibole and minor carbonate and quartz (accessory opaque Fe-Ti oxides) cut by broad zones of intense epidote-carbonate-quartz-chlorite alteration (associated with irregular quartz veins) and hairline veinlets of quartz-chlorite-epidote-minor Kspar, or later carbonate.

In the relict wallrock, remnant plagioclase forming ragged or rounded subhedra mostly <0.25 mm in size (rarely phenocrystic, to 0.5 mm) and minor quartz (rare rounded subhedra <0.2 mm) are scattered throughout a matrix of finer-grained pale green amphibole and (possibly secondary) quartz plus accessory opaque oxides. The plagioclase (highlighted by the white-etched areas in the offcut) and the interstitial relict mafic material, with accessory opaque oxides, are more suggestive of relict very fine-grained intrusive (diorite?) similar to the two previous samples than to greywacke, although obviously this is a very small sample and the petrographer does not know the field relations. Relict plagioclase rarely shows vague twinning with extinction on 010 difficult to measure, but slightly negative relief compared to quartz, suggestive of albite or albite-oligoclase (?) composition, and this is likely secondary. Amphibole forms acicular subhedra mostly <50 um long with pale green pleochroism and small extinction angle, suggestive of actinolitic composition, and is also likely secondary; it is partly altered to carbonate (ragged subhedra mostly <0.1 mm, likely dolomite?) and secondary quartz (anhedra mostly <25 um), and associated with accessory sphene and rutile as minute euhedra mostly <20 um long, plus traces of sulfide <10 um (possibly pyrrhotite?).

In the well-developed alteration front, epidote-group mineral (mostly with brownish colour or rarely visible very pale yellow pleochroism suggestive of low Fe content, and moderate normal birefringence, possibly Fe-poor epidote or clinozoisite?) forms tightly interlocking subhedra mainly <0.15 mm in size. It is typically intergrown with lesser carbonate as ragged, irregular sub/anhedra to 0.25 mm (clear core/brownish rims, possibly mainly calcite/dolomite?) and secondary quartz as minute anhedra <25 um, local chlorite as subhedral flakes to 75 um with pale green pleochroism, length-fast anomalous greenish birefringence indicative of F:M around 0.4?), plus accessory sphene as sub/euhedra mostly <25 um. The altered zone is cored by irregular veinlets <2 mm thick of quartz (subhedra to ~1.5 mm), cut by hairline veinlets <0.1 mm thick of quartz-chlorite-epidote-minor Kspar (all subhedra <50 um), or later carbonate (subhedra up to 0.5 mm long by <50 um thick).

In summary, this could represent strongly albite-actinolite-carbonate-quartz-sphene/rutile altered, very fine diorite (?) cut by zones of stronger epidote-carbonate-quartz-chlorite-sphene alteration cored by veins of quartz, hairline quartz-chlorite-epidote-minor Kspar, or later carbonate.

KM12002-004: HYPABYSSAL HORNBLENDE QUARTZ DIORITE/QUARTZ ANDESITE ALTERED TO OLIGOCLASE-BIOTITE-QUARTZ-SERICITE-CHLORITE-EPIDOTE-CARBONATE-RUTILE-TRACE PYRITE

Described as medium equant grained/partly porphyritic granodiorite/tonalite, with diffuse grain boundaries, no obvious fabric, very fine white powdery calcite infilling fractures, feldspars to 2.5 mm, quartz <1 mm, fine biotite/possible hornblende; hand specimen shows greenish grey, fine/medium grained intermediate intrusive rock characterized by small relict plagioclase and mafic phenocrysts, cut by thin white veinlets. The rock is unscratched or barely scratched by steel, locally slightly magnetic, shows minor slow reaction to cold dilute HCl, and no stain for K-feldspar in the etched offcut. Modal mineralogy in polished thin section is approximately:

Plagioclase (relict, sericite-epidote altered oligoclase?)	40%
Amphibole (brownish primary, minor secondary actinolitic)	15%
Biotite (mainly secondary, after amphibole)	15%
Quartz (mainly primary, interstitial; partly secondary)	15%
Sericite (after plagioclase)	5%
Chlorite (after biotite, amphibole)	3-5%
Epidote-group (zoisite?)	2%
Carbonate (mainly dolomite?; rare calcite veinlets)	2%
Ilmenite, rutile	1-2%
Pyrite (after pyrrhotite?), trace chalcopyrite	<1%

This sample consists of relict plagioclase and mafic (amphibole partly altered to biotite and chlorite) crystals with lesser, interstitial primary quartz, altered to an assemblage of biotite-sericite-chlorite-epidote-carbonate-rutile-trace sulfide, cut by rare thin veinlets of calcite or of albite.

Relict plagioclase occurs in rounded-off, sub/euhedral crystals with somewhat seriate texture (graduated in size from about 1 mm down to 0.25 mm and random orientations. Most show partial (15-35%) replacement by very fine-grained sericite (randomly oriented subhedral flakes mostly <25 um) and local epidote-group mineral (subhedra mostly <30 um with very pale colour, anomalous grey/blue birefringence suggestive of Fe-poor, clinozoisite or zoisite?). Remaining plagioclase appears to have relief mainly nearly neutral against quartz, suggesting composition near oligoclase (An20?), possibly a secondary composition to judge by the altered nature of the plagioclase crystals.

Relict amphibole crystals have somewhat rounded-off, sub/euhedral outlines mostly <1.5 mm in size, with typically brownish green pleochroism and extinction angle around 15 degrees (likely hornblende, except for local pale greenish more actinolitic amphibole around some margins). The amphibole is commonly partly to locally replaced by secondary biotite as small sub/euhedral flakes mainly <0.2 mm, with either random orientations or sub-parallel to the length of the host amphibole. Both amphibole and biotite are also further replaced by chlorite as ragged subhedral flakes up to 0.2 mm with very pale green pleochroism and near-zero birefringence, suggestive of F:M around 0.4-0.5 (?), accompanied by sagenitic rutile as brown acicular sub/euhedra mainly <30 um long, or locally by ilmenite as tabular euhedra of similar size (loose aggregates to 0.15 mm). Traces of sulfide accompanying the mafic sites are mostly pyrite <0.15 mm (but with porous/lamellar texture suggestive of having formed after pyrrhotite?) and local minor chalcopyrite of smaller size.

Interstitial to the plagioclase and amphibole/biotite, possibly partly replacing the plagioclase, quartz forming ragged sub/anhedra mostly <0.25 mm (local aggregates to 0.5 mm, or strung along discontinuous veinlet-like aggregates) appears to be partly primary and partly secondary, or at least recrystallized. Narrow veinlets <0.25 mm thick are filled with either plagioclase (similar relief to that in the matrix, subhedra to 0.35 mm) or with carbonate (subhedra to 0.2 mm long, likely calcite).

In summary, this would be classified as probably hypabyssal (fine-grained, weakly porphyritic) hornblende quartz diorite or quartz andesite, possibly potassic altered to oligoclase-quartz-biotite-sericite-chlorite-actinolite-epidote-carbonate-rutile-trace sulfides, cut by hairline plagioclase and calcite veinlets.

KM12001-005: STRONGLY SERICITE-CHLORITE-QUARTZ-UNIDENTIFIED-RUTILE ALTERED FINE INTERMEDIATE HYPABYSSSAL DYKE (?) OR SILTSTONE (THIN QUARTZ, MINOR CARBONATE VEINLETS)

Described as dark black, very fine grained, massive siltstone adjacent to calcite healed shear zones (possibly related to faulting?); no hand specimen remains, but offcut shows greenish black, fine grained rock of uncertain origin characterized by small relict phenocryst sites (?), cut by rare thin white veinlets. The rock is fairly readily scratched by steel, locally very slightly magnetic, shows no reaction to cold dilute HCl, and no stain for K-feldspar in the etched offcut. Modal mineralogy in polished thin section is approximately:

Sericite (after plagioclase or ?)	30%
Chlorite	30%
Quartz (partly to largely secondary?, and veinlets)	30%
Unidentified (sub-microscopic) opaque	5%
Carbonate (mainly in veinlets)	2%
Rutile (after ilmenite?)	2%
Pyrite	<<1%

This sample consists of about 40-45% small rectangular domains of fine-grained sericite and quartz (the light-coloured areas in the offcut, with sub/euhedral outlines suggestive of former plagioclase crystals or perhaps merely "spots" of alteration in a sedimentary rock?) in a matrix of chlorite, lesser quartz (?) and minute opaques that are difficult to identify plus aggregates of slightly coarser opaques that are mostly rutile, trace sulfides. The abundance of Ti mineral suggests an igneous protolith (?)

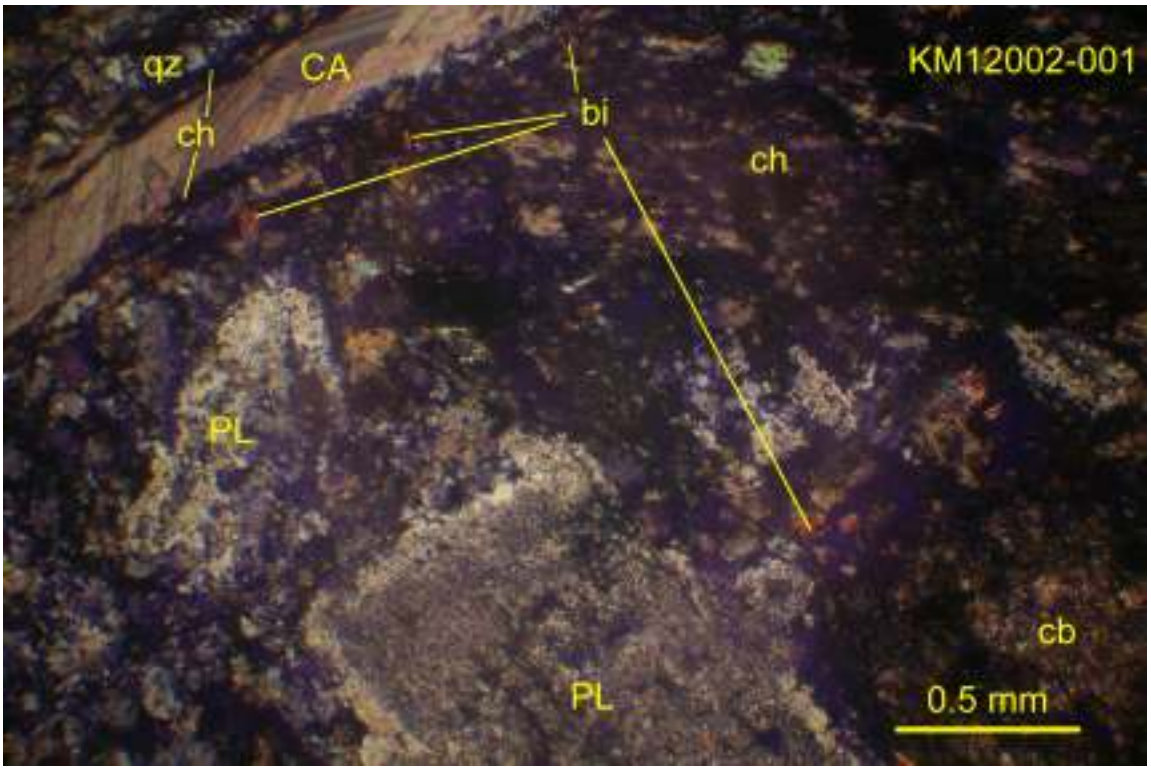
The light-coloured domains, which are mainly rectangular to somewhat lath-like outlines up to about 0.6 mm long, with random orientations, are pseudomorphed by extremely fine-grained sericite (minute matted subhedral flakes mostly<15 um) intimately intergrown with lesser quartz, possibly secondary, u to about 20 um in size, and very little of the sub-microscopic opaques that make up the bulk of the dark-coloured adjacent matrix.

Local small aggregates of quartz up to about 0.2 mm in maximum dimension consist of subhedra mostly <50 um in size; these are of uncertain origin but could represent either minor primary quartz or replacements of secondary quartz (?).

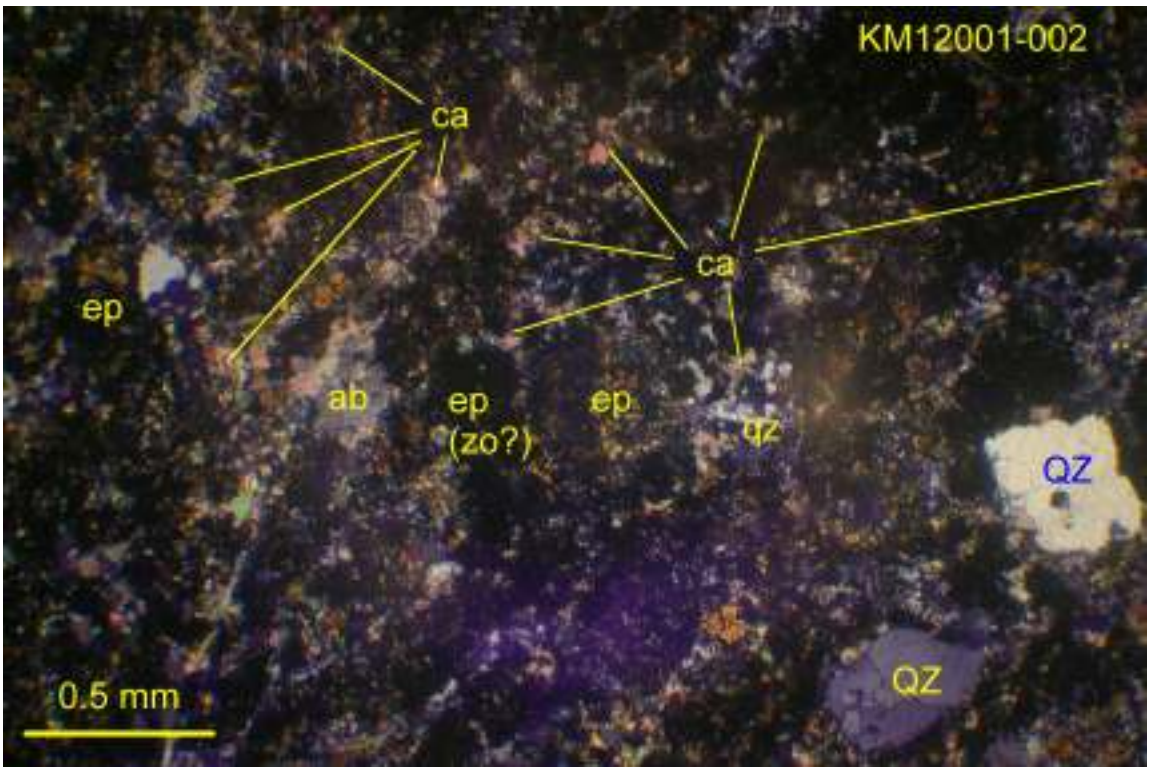
The matrix consists of very fine-grained chlorite (subhedral flakes mostly <25 um, with pale green pleochroism and birefringence/orientation obscured by the abundant sub-microscopic opaques, making determination of F:M difficult), sericite (similar-sized or smaller flakes), possible quartz (<25 um, secondary?) and identifiable opaques that are mostly rutile as sub/euhedra <25 um long (locally in aggregates to 0.15 mm, especially in/along veinlets, suggesting alteration strong enough to mobilize TiO_2). Rare sulfides appear to be mostly pyrite as cubic euhedra <15 um in size. However, the sub-microscopic opaques (mostly<4 um) are too fine to identify.

Veinlets mostly <1 mm in thickness are mostly filled with quartz as slender sub/euhedral bladed crystals mostly <0.25 mm long, with either random orientations of locally sub-comb texture. Thinner veinlets are filled with carbonate (elongated anhedra up to 0.6 mm long by <50 um thick, likely calcite?) or with quartz (subhedra <50 um).

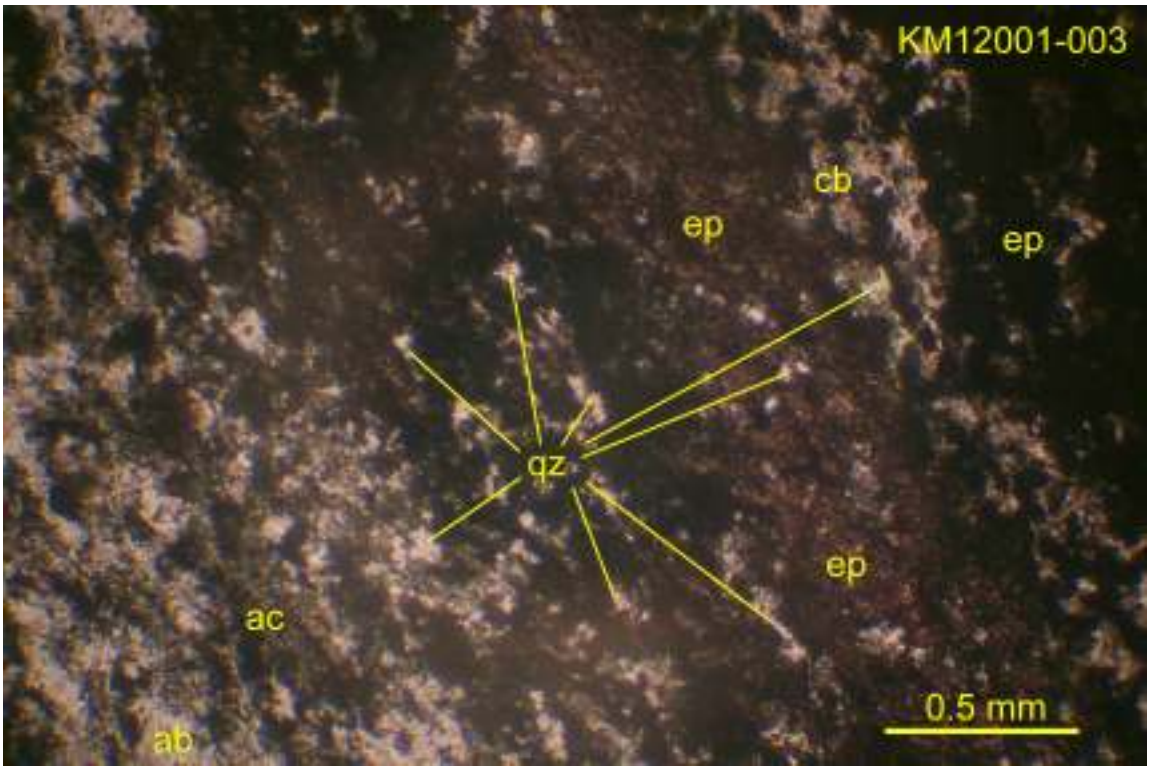
This sample is enigmatic; it could represent either a siltstone that has undergone strong sericite-chlorite-quartz?-rutile alteration (this would not explain the rectangular domains of sericite-quartz, but would explain the minute opaques, which could be carbon?) or perhaps strongly altered hypabyssal plagioclase-phyric intermediate dyke (?) rock in which former plagioclase has been altered to sericite-quartz and interstitial mafics to chlorite-sericite-quartz with accessory rutile. Veinlets are of quartz or carbonate (calcite?)



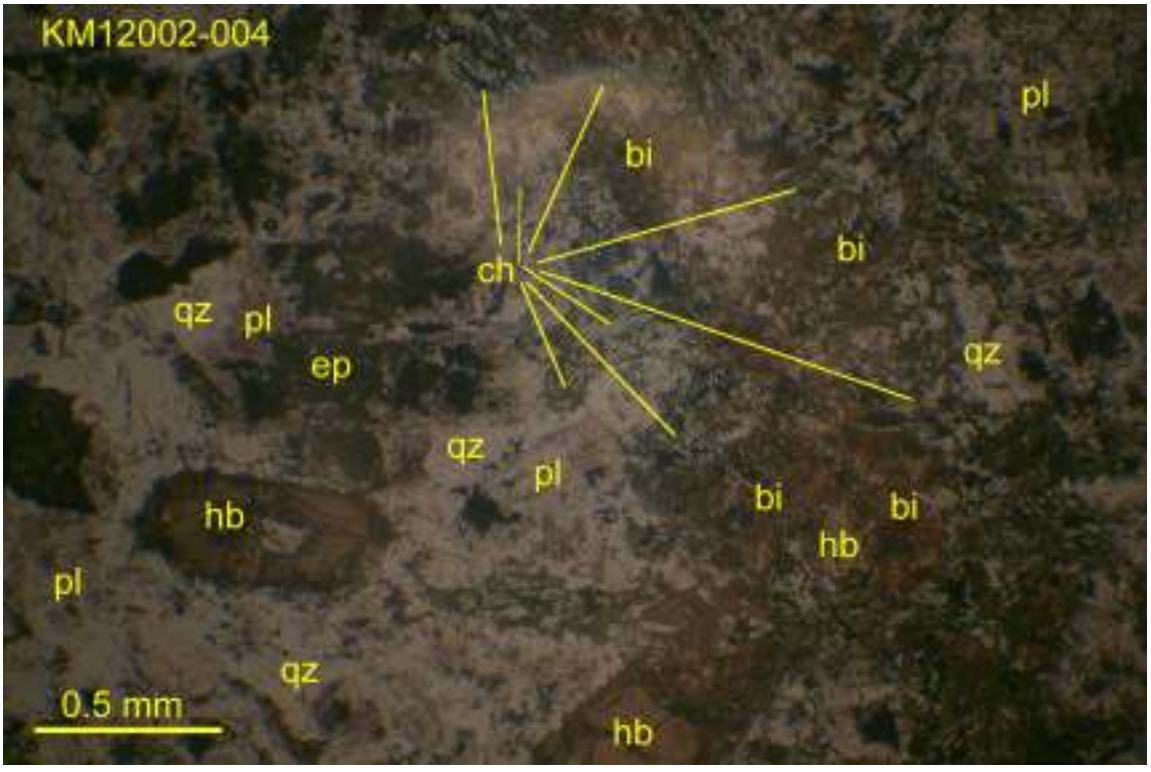
KM12002-001: Porphyritic diorite composed of relict plagioclase (PL, clouded by sericite) and mafic (pseudomorphed by chlorite, ch, and carbonate, cb, minor biotite, bi, and pyrrhotite/ilmenite, both opaque) phenocrysts/phenocryst sites, cut by veinlet of calcite (CA), quartz (qz) and chlorite. Transmitted light, crossed polars, field of view 3.0 mm wide.



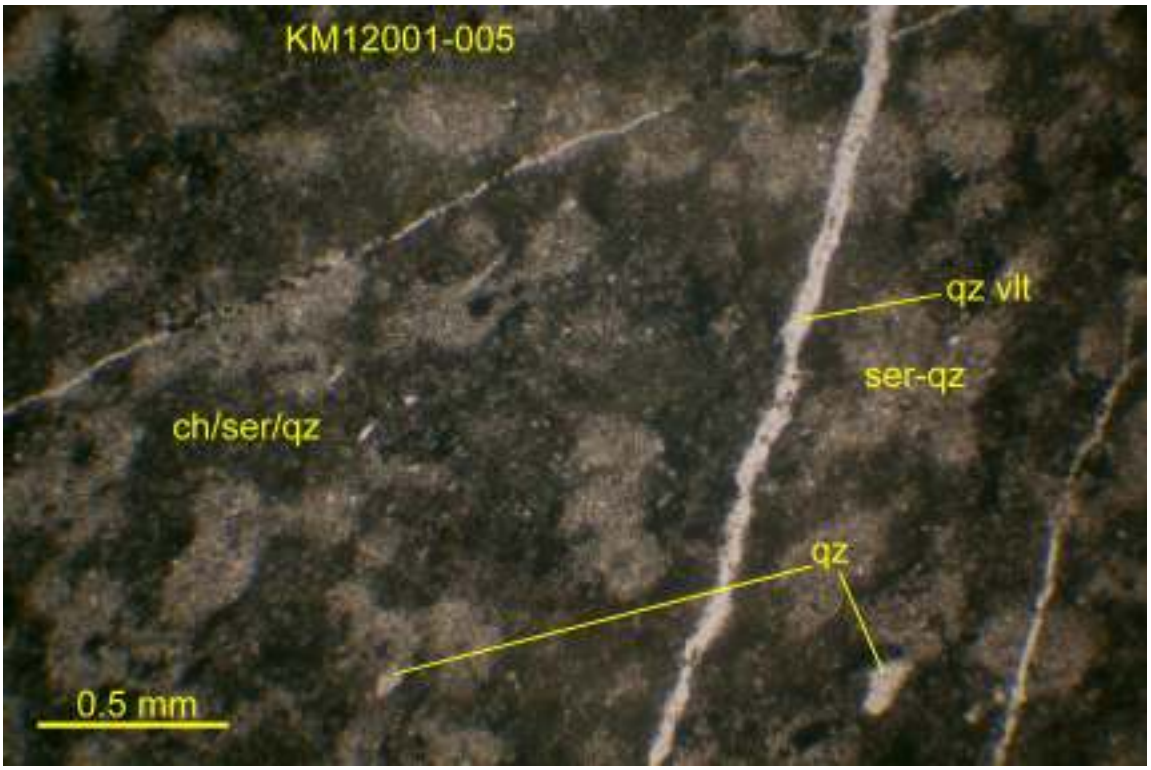
KM12001-002: (Quartz) diorite composed of relict plagioclase sites pseudomorphed by epidote (ep) group mineral (rare albite, ab), interstitial mafic sites by carbonate (mainly calcite, ca) and secondary quartz (qz), with local relict quartz phenocrysts (QZ), cut by thin veinlets of calcite-quartz. Transmitted light, crossed polars, field of view 3.0 mm wide.



KM12001-003: Sharp transition from relict albite (clear)-actinolite (dark) altered rock (on left) to intensely epidote-lesser carbonate-secondary quartz altered rock behind alteration front (on right). Epidote is dark and brownish partly due to very fine grain size; carbonate is difficult to distinguish, and quartz is clear. Transmitted plane light, field of view 3.0 mm.



KM12002-004: Hypabyssal quartz diorite/andesite composed of brownish hornblende (hb) partly altered to secondary biotite (bi) or chlorite (ch) with sagenitic rutile/ilmenite (opaque), in matrix of plagioclase (pl) clouded by sericite or replaced by epidote (ep) or quartz (qz) which is clear by comparison. Transmitted plane light, field of view 3.0 mm wide.



KM12001-005: Euhedral to lath-like domains of very fine sericite-quartz (after plagioclase or merely alteration "spots"?) in dark-coloured matrix of very fine-grained chlorite-sericite-quartz?-minute opaques and identifiable rutile (ru), with local small aggregates of quartz (qz), cut by veinlets of quartz. Transmitted plane light, field of view 3.0 mm wide.

Overview of thin sections and offcuts (blue semi-circles mark photomicrograph locations).

Appendix VII

Kalum QEMSCAN Report

February 21, 2013

Mr. Chris Gallagher
Geologist and Chief Database Administrator
TerraLogic Exploration Inc.
Suite 200 – 44, 12th Avenue South
Cranbrook, BC V1C 2R7

Dear Mr. Gallagher;

Re: Mineralogical Investigation – Kalum Mineral Samples – KM3711

We are pleased to report that we have now completed the mineralogical assessment on ten mineral samples, which were reportedly from the Kalum deposit. The principal objective of this study was to identify and quantify the mineral composition of each sample. To achieve the objective, a Bulk Mineral Analysis (BMA) was performed on each un-sized sample.

The analysis was completed on February 16, 2013. All information produced in this program is presented in detail in two appendices of data: Appendix I – Sample Origin and Appendix II - Mineralogical Data.

The following comments summarize our findings based on the available data:

- There were almost no sulphides in these samples. Copper sulphide content in all samples was less than 0.1 percent. Pyrite content in all samples was less than 0.3 percent.

- For most of the samples, feldspar was the dominant gangue mineral class with content ranging from 37 to 51 percent. Significant quartz, chlorite and muscovite was also observed.

Thank you for the opportunity to participate in your mineralogical studies. If you have any questions regarding this report, or the results generated by this program, please contact us directly.

Regards,

Calvin Chan, EIT
Junior Metallurgist

Helen Johnston, P. Eng.
Senior Metallurgist

February 21, 2013
KM3711

Report Distribution:
Chris Gallagher, TerraLogic Exploration Inc., Cranbrook, BC

APPENDIX I – KM3711

SAMPLE ORIGIN

1.0 Sample Origin

On January 28, 2013, ten mineral samples reportedly from the Kalum deposit were received at ALS Metallurgy Kamloops. The weight of the samples ranged from about 200 to 1,000 grams each. The weights of each sample are listed in Table I-1. Representative sub-samples of the concentrate samples were removed and a whole rock analysis conducted. The resulting assays are shown in Table I-2.

TABLE I-1
MASS AND IDENTIFICATION OF SAMPLES RECEIVED

Sample ID	Sample Form	Weight – kg
CG KMR022	quarter core	0.8
CG KMR025	quarter core	0.4
CG KMR026	quarter core	0.6
CG KMR027	quarter core	0.5
CG KMR029	quarter core	0.4
CG KMR030	quarter core	0.4
CG KMR05002	quarter core	0.2
AH KMR034	quarter core	1.0
KM05001 12.14m	quarter core	0.7
KM05001 73.39m	quarter core	0.3
Total		5

TABLE I-2
WHOLE ROCK ANALYSIS OF THE CONCENTRATE SAMPLES

Composite	Assays – percent											
	Al_2O_3	BaO	CaO	Cr_2O_3	Fe_2O_3	K_2O	MgO	MnO	Na_2O	P_2O_5	SiO_2	TiO_2
CG KMR022	17.6	0.11	0.43	0.020	4.37	2.59	2.04	0.03	2.22	0.06	66.8	0.81
CG KMR025	16.8	0.12	6.09	0.009	6.83	1.57	2.31	0.14	3.75	0.27	59.6	0.55
CG KMR026	15.0	0.20	3.80	0.015	7.11	3.36	3.02	0.12	3.95	0.46	59.6	1.04
CG KMR027	17.7	0.18	5.72	0.010	6.88	1.47	2.30	0.14	4.32	0.27	60.2	0.52
CG KMR029	17.3	0.02	3.11	0.019	7.25	0.37	4.56	0.13	4.33	0.38	61.0	0.90
CG KMR030	16.4	0.08	7.46	0.011	7.27	0.94	3.48	0.12	3.79	0.35	56.3	1.03
CG KM05002	14.4	0.13	11.8	0.021	11.6	1.25	6.78	0.21	2.73	0.30	49.5	1.12
AH KMR034	18.3	0.15	8.34	0.011	8.84	0.49	2.73	0.20	4.24	0.22	54.6	0.91
KM05001 12.14m	19.6	0.14	8.90	0.009	12.3	2.63	4.62	0.21	3.16	0.29	47.6	1.32
KM05001 73.39m	17.5	0.19	6.02	0.019	6.22	2.42	1.83	0.16	4.36	0.24	65.0	0.56

In preparation for mineralogical analysis, about 100 grams of each sample was assayed. The samples were then mounted and polished in preparation for Bulk Modal Analysis.

APPENDIX II – KM3711

MINERALOGICAL DATA

INDEX

TABLE II-1A
MINERAL COMPOSITION OF TERRALOGIC COMPOSITES
KM3711

Minerals	AHKMRO34	CGKMRO22	CGKMRO25	CGKMRO26	CGKMRO27
Chalcopyrite	0.0	<0.1	0.0	<0.1	0.0
Pyrite	0.2	0.3	0.0	<0.1	<0.1
Iron Oxides	0.3	0.8	0.2	2.2	0.3
Quartz	10.6	37.0	18.6	20.8	11.2
Feldspars	45.4	20.6	49.4	49.3	50.5
Chlorite	11.0	9.0	12.8	13.7	10.4
Muscovtie	1.9	26.2	2.6	0.7	9.3
Biotite/Phlogopite	0.1	1.8	0.5	1.0	0.8
Amphibole/Pyroxene	10.5	0.4	2.8	4.2	8.4
Calcite	1.0	<0.1	<0.1	0.9	0.2
Epidote	10.1	<0.1	7.2	2.0	3.1
Kaolinite	0.3	2.5	0.1	0.2	0.4
Garnet	4.3	0.7	2.9	1.2	3.2
Ti Minerals	2.9	0.5	1.3	2.2	0.9
Apatite	0.5	<0.1	0.6	1.0	0.5
Others	0.8	0.3	0.9	0.5	0.9
Total	100	100	100	100	100

Note: 1) Chalcopyrite includes Trace amounts of Bornite and Chalcocite/Covellite.
2) Iron Oxides include Hematite, Geothite, Limonite, and Magnetite.
3) Feldspars include Plagioclase Feldspar, Feldspar-Albite, K-Feldspar, and Alkali Feldspar.
4) Calcite includes Wollastonite and Ankerite.
5) Kaolintite includes Talc and Tourmaline.
6) Garnet includes Pyrope, Spessartine, Grossular, Andradite, and Almadine.
7) Ti Minerals include Sphene, Rutile/Anatase, and Ilmenite.
8) Others includes Sphalerite, Fe-Olivine, Spinel, Galena, and unresolved mineral species.

TABLE II-1A CONTINUED
MINERAL COMPOSITION OF TERRALOGIC COMPOSITES
KM3711

Minerals	CGKMRO29	CGKMRO30	KM05001:12.14m	KM5001:73.39m	KM05002:92m
Chalcopyrite	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrite	<0.1	<0.1	<0.1	0.0	<0.1
Iron Oxides	0.1	0.2	1.0	0.5	0.2
Quartz	22.0	16.7	3.9	17.0	4.9
Feldspars	39.4	36.5	39.6	50.3	23.8
Chlorite	23.1	12.2	6.9	5.0	13.8
Muscovtie	2.5	<0.1	9.4	4.3	3.7
Biotite/Phlogopite	0.1	0.3	9.8	1.0	0.4
Amphibole/Pyroxene	2.6	11.2	20.0	13.5	41.8
Calcite	1.0	<0.1	1.7	0.1	2.8
Epidote	0.2	17.6	1.6	2.8	2.1
Kaolinite	2.7	0.1	0.4	0.2	0.1
Garnet	4.2	1.2	2.3	2.8	3.1
Ti Minerals	0.7	2.6	1.3	0.8	1.4
Apatite	1.1	0.7	0.6	0.8	0.7
Others	0.4	0.6	1.5	0.9	1.2
Total	100	100	100	100	100

Note: 1) Chalcopyrite includes Trace amounts of Bornite and Chalcocite/Covellite.
2) Iron Oxides include Hematite, Geothite, Limonite, and Magnetite.
3) Feldspars include Plagioclase Feldspar, Feldspar-Albite, K-Feldspar, and Alkali Feldspar.
4) Calcite includes Wollastonite and Ankerite.
5) Kaolintite includes Talc and Tourmaline.
6) Garnet includes Pyrope, Spessartine, Grossular, Andradite, and Almadine.
7) Ti Minerals include Sphene, Rutile/Anatase, and Ilmenite.
8) Others includes Sphalerite, Fe-Olivine, Spinel, Galena, and unresolved mineral species.

TABLE II-1B
CHEMICAL COMPOSITION OF TERRALOGIC COMPOSITES
KM3711

Element	Assay Methods	AHKMRO34	CGKMRO22	CGKMRO25	CGKMRO26	CGKMRO27
Al	QEMSCAN	8.38	9.61	8.45	7.70	10.3
	Chemical	9.69	9.32	8.89	7.94	9.37
Ca	QEMSCAN	4.86	0.24	2.57	2.19	3.28
	Chemical	5.96	0.31	4.35	2.72	4.09
Fe	QEMSCAN	7.04	2.18	4.73	4.46	4.71
	Chemical	6.18	3.06	4.78	4.97	4.81
K	QEMSCAN	0.32	3.54	1.03	2.08	1.44
	Chemical	0.41	2.15	1.30	2.79	1.22
Mg	QEMSCAN	1.81	1.13	1.26	1.90	1.49
	Chemical	1.65	1.23	1.39	1.82	1.39
Na	QEMSCAN	3.11	1.07	3.42	2.86	3.01
	Chemical	3.15	1.65	2.78	2.93	3.20
P	QEMSCAN	0.10	0.00	0.12	0.18	0.09
	Chemical	0.10	0.02	0.12	0.20	0.12
Si	QEMSCAN	25.2	30.3	28.4	28.0	26.2
	Chemical	25.5	31.2	27.8	27.8	28.1
Ti	QEMSCAN	0.90	0.38	0.31	0.59	0.33
	Chemical	0.55	0.49	0.33	0.62	0.31

TABLE II-1B CONTINUED
CHEMICAL COMPOSITION OF TERRALOGIC COMPOSITES
KM3711

Element	Assay Methods	CGKMRO29	CGKMRO30	KM05001:12.14m	KM5001:73.39m	KM05002:92m
Al	QEMSCAN	9.18	6.55	9.42	8.31	5.97
	Chemical	9.16	8.68	10.38	9.26	7.62
Ca	QEMSCAN	2.59	4.86	5.75	3.29	7.56
	Chemical	2.22	5.33	6.36	4.30	8.43
Fe	QEMSCAN	4.28	7.84	6.03	4.67	8.72
	Chemical	5.07	5.08	8.60	4.35	8.11
K	QEMSCAN	0.29	0.49	2.37	1.74	0.89
	Chemical	0.31	0.78	2.18	2.01	1.04
Mg	QEMSCAN	2.53	2.38	3.88	1.71	5.53
	Chemical	2.75	2.10	2.79	1.10	4.09
Na	QEMSCAN	2.27	2.88	1.90	2.92	2.09
	Chemical	3.21	2.81	2.34	3.23	2.03
P	QEMSCAN	0.21	0.13	0.11	0.14	0.13
	Chemical	0.17	0.15	0.13	0.10	0.13
Si	QEMSCAN	26.0	26.4	22.5	28.4	22.6
	Chemical	28.5	26.3	22.2	30.3	23.1
Ti	QEMSCAN	0.48	0.52	0.60	0.25	0.52
	Chemical	0.54	0.62	0.79	0.34	0.67

FIGURE II-1
ASSAY RECONCILIATION
KM3711