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GEOCHEMICAL REPORT ON THE MEGA, BOOT, ANGELA 1, AND GOLD CLAIMS CLINTON MINING DIVISION, B.C. ON BEHALF OF

VALERIE GOLD RESOURCES LTD.

920/12E

BY

R.A. GONZALEZ, MSC, FG.E.O.LOGICAL BRANCH ASSESSMENT REPORT

JUNE 1992

51°36' NORTH LATITUDE; 123°40' WEST LONGITUDE

OPERATOR: VALERIE GOLD RESOURCES LTD.

OWNER: VALERIE GOLD RESOURCES LTD.

CONSULTANT: ADDER EXPLORATION AND DEVELOPMENT LTD.

APPROVAL NO: KAM 91-0300258-1272

LOCATION:

GEOCHEMICAL REPORT ON THE MEGA, ANGELA 1, BOOT, AND GOLD CLAIMS CLINTON MINING DIVISION, B.C.

SUMMARY

VALERIE GOLD RESOURCES LTD. has purchased and staked a total of 18 Modified Grid Claims comprised of 326 units. The property is approximately 120 kilometres southwest of the city of Williams Lake and is readily accessible by 95 kilometres of paved highway and 65 kilometres of allweather, graded gravel road. The claims roughly straddle the east side of the Taseko River valley approximately 10 kilometres north of the Fish Lake Cu-Au deposit.

The claims cover several large magnetic lows outlined by a low-level airborne geophysical survey flown in the mid-1980's. A reconnaissance geochemcial soil sampling survey was carried out over the property in September 1992 by Valerie. That survey defined a broad mercury and arsenic anomaly over this same magnetic feature. This magnetic feature (the MEGA-GOLD Zone) is currently believed to be the principal target on the property.

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•

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ii.

3 /

GEOCHEMICAL REPORT ON THE MEGA, ANGELA 1, BOOT, AND GOLD CLAIMS CLINTON MINING DIVISION, B.C.

1.0 INTRODUCTION

In September 1991, VALERIE GOLD RESOURCES LTD. purchased ten Modified Grid Claims, totalling 174 units, in the Taseko River area of the Clinton Mining Division. The company also staked eight addition Modified Grid Claims totalling 152 units. The writer was retained to do a geological assessment of the property, review previous work, appraise this areas potential, and if warranted, to make recommendations for further spent nine days examining exploration. The writer and sampling the area between September 18 and September 26, 1991. This report discusses the results of that field examination and sampling program.

1.1 LOCATION AND ACCESS

The prospect is located in central British Columbia at 51° 36'N, 123° 40'W (NTS 92 O/12E), 120 kilometres southwest of the city of Williams Lake and approximately 10 kilometres east of Elkin Lake (Figure 1).

The MEGA, BOOT, and GOLD claims cover an area of approximately 60 square kilometres, roughly straddling the Taseko River (Figure 2). A good quality, all-weather, graded gravel road connects the property to B.C. Highway 30 at Hanceville, 65 kilometres to the north. Hanceville is approximately 95 kilometres, by paved highway, west of Williams Lake.

Access to the claims on the east side of Taseko River is aided by a network of cattle roads, recent logging roads, and seismic lines across relatively flat topography. Access to the small portion of the claims that are on the west side of the river is more difficult; however, the main road crosses the river near the south boundary of Gold 3.

1.2 TOPOGRAPHY, CLIMATE, AND PHYSIOGRAPHY

The area is in the physiographic division known as Fraser Plateau (Holland, 1965), which is an upland of low relief (approximately 500 metres). Topography is largely controlled by extensive flat-lying basalt flows which forms a nearly flat plateau with a surface at approximately 1400 metres (4600 feet) above sea level. Relief on the plateau is very gentle and alkaline lakes are common. This plateau is cut by the Taseko River and by the Elkin Creek drainage to the west, both form steep-sided valleys with 250 to 300 metres (800 to 1000 feet) relief. Cone Hill located on the southern boundary of the claims, is the highest feature in the area with an elevation of approximately 1770 metres (5800 feet).

The north flowing Taseko River and a minor 10 kilometres long tributary, Vick Creek, are the only significant drainage features on the property.

Tree cover is extensive and consists mostly of lodgepole pine which is well spaced and movement through the forest is easy. The area has been devastated by a mountain pine beetle infestation and vast tracts of standing dead pines are visible. To control the infestation, the entire region is very rapidity being logged. Extensive areas of clear-cut logging, with the associated road network provides easy access to the entire claim block. Large areas of grassland occur around the alkali lakes and the flat drainages. These grasslands are used for cattle grazing.

The climate in this portion of interior British Columbia is generally warm and dry with a moderately long cold winter. Frost may occur at any time: however, day time temperatures in excess of 10°C are normal from early May until mid to late October. Temperatures in excess of 30°C are common during the summer months while winter lows below -40°C are rare. The greatest accumulation of moisture (average of 25 mm per year) occurs during the fall, winter, and early spring in the form of snow. The remainder of the year is generally dry. Moisture in the form of rainfall is confined to afternoon showers during the warm months.

Most of the area was covered by the Wisconsin ice-sheet which flowed northeastwardly toward the Fraser Depression. It was this ice-sheet that was responsible for the present shape of the plateau, mountains and valleys. During the height of this last glacial advance it is likely that most of the claim was covered by ice. As the ice retreated a thin mantle, varying from 2-20 metres of generally unsorted sand and gravels with little clay covered the property. The glacial till covering the area has been little altered to soil, and, in general, the 'B' soil horizon is poorly developed. Glacial erratics, resting on the surface, up to several metres in diameter, are common.

1.3 PROPERTY STATUS

The property is composed of 18 Modified Grid Claims consisting of 326 units (Figure 2). All claims were staked in 1991. The claims, record numbers, size, and anniversary dates are listed in Table I.

<u>TABLE I</u>														
	LIST OF CLAIMS													
CLAIM	NAME	TENURE NO.	NO. OF UNITS	EXPIRY	DATE									
MEGA	1	301053	20	JUNE 13,	1995									
MEGA	2	301043	20	JONE 13,	1995									
BOOT	1	209404	20	MAY 5,	1993									
BOOT	2	209405	20	MAY 6,	1993									
BOOT	3	209406	20	MAY 6,	1993									
BOOT	4	209407	20	MAY 7,	1993									
BOOT	5	209408	20	MAY 8,	1993									
BOOT	6	209409	20	MAY 8,	1993									
BOOT	7	209410	10	MAY 8,	1995									
BOOT	8	209411	4	MAY 8,	1993									
GOLD	1	304584	20	SEPT. 16,	1993									
GOLD	2	304585	12	SEPT. 14,	1993									
GOLD	3	304586	20	SEPT. 14,	1993									
GOLD	4	304587	20	SEPT. 14,	1993									
GOLD	5	304588	20	SEPT. 17,	1995									
GOLD	6	304589	20	SEPT. 16,	1995									
GOLD	7	304590	20	SEPT. 17,	1995									
GOLD	8	304591	<u>_20</u>	SEPT. 16,	1995									
		TOTAL UNITS	326											

1.4 HISTORY AND PREVIOUS EXPLORATION

The earliest record of exploration in the area dates to the early 1930's when prospectors followed float to exposures of narrow pyrite, chalcopyrite and gold-bearing zones associated with diorite or feldspar porphyry dykes a few kilometres south of the claims. The porphyry copper potential of the area was recognized in the 1960's. Since that time, most exploration activities have been concentrated on the Fish Lake deposit, 10 kilometres to the south and to a much lesser extent, on the Scum Lake deposit 15 kilometres to the north. The Fish Lake deposit is now in an advanced stage of definition drilling. This deposit may prove to be the largest tonnage, copper porphyry deposit in Canada with reserves in excess of 750 million tonnes at a grade of approximately 0.9% copper equivalent (approximately 0.34% copper and 0.02 ounces of gold/tonne.

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In 1984, the area now covered by the Mega, Boot, and Gold claims was staked by Brinco Mining Limited. In late 1984. Brinco contracted an aeromagnetic and VLF electromagnetic of survey, consisting of 1,162 line kilometres data collection, over their claims. At the same time. thev contracted a geological and geochemical survey on selected portions of the property. In 1985, Brinco did additional geochemical sampling, ground magnetometer and VLF-EM surveys to complement and aid in the geological and structural This work was followed by percussion interpretations. drilling of the highest priority targets. Four, downhole hammer percussion drill holes were completed for a total of 492 metres of drilling.

The property was eventually allowed to lapse and the ground remained open until 1991. The area was restaked in 1991 by a number of individuals and private companies, following an announcement by Taseko Mines Ltd. of its plan to complete a major drill program over the nearby Fish Lake deposit.

1.5 WORK DONE BY VALERIE GOLD RESOURCES LTD., IN 1991:

In 1991, Valery Gold Resources Ltd. purchased, optioned and staked the 18 modified grid claims that comprise the present property. From August to December of 1991 Valerie carried out the following work over the property.

- 1) Prospecting and reconnaissance mapping was carried out over the entire property.
- 2) A reconnaissance ground magnetometer survey was carried out over the MEGA 1 & 2 claims.
- 3) Reconnaissance soil sampling was carried out over the MEGA 1 & 2 claims.
- 4) A reconnaissance induced polarization survey was carried out along existing roads and cut lines on the property.

2.0 REGIONAL GEOLOGY

The Taseko River area is located near the northeastern erosional edge of rocks forming part of the Tyaughton Trough (Jeletsky and Tipper, 1968) and lies at the east end of a belt of east-trending folds, faults and feldspar porphyry dykes (Tipper, 1963). The Tyaughton Trough, a mid-Jurassic to late Cretaceous successor basin, contains both marine and nonmarine sedimentary and volcanic rocks. The last major marine transgression occurred in early Cretaceous time. During the remainder of the Cretaceous, continental sedimentation and volcanism were dominant, accompanied by transcurrent movement on the northwest-trending Yalakom Fault. Structures related to the Yalakom Fault may have provided controls important in the localization of mineral deposits in the region.

The regional geology of the Taseko River area was compiled by Tipper in 1978. An older basement of Middle Jurassic granodiorite occurs in scattered outcrops throughout the region. Overlying folded sedimentary and volcanic strata were assigned to the Upper Cretaceous Kingsvale Group. Units within this Group were intruded in various places by Eocene felsic igneous rocks. The area was later capped by Miocene to Holocene basalts (Mathews and Rouse, 1984), and subsequently further covered by variable thicknesses of glacial till and river gravels.

Tipper (1978) mapped a series of arcuate, normal faults trending NNW along the Taseko River. He considered these faults to be relatively recent (i.e. post-Eocene), and later than the main transcurrent movement on the Yalakom Fault system. These faults are evident along the western portion of the present claim block.

2.1 PROPERTY GEOLOGY

Exposures of bedrock on the property is minimal, probably less than one per cent. Rock types in the area can be broadly classified, irrespective of age, into basalt flows, andesitic pyroclastics, andesitic flows, andesitic breccias, quartz diorites, sandstones, greywackes, and siltstones. Hydrothermally altered equivalents of the above types are observed locally.

The youngest rocks in the area are areally extensive, flatlying crystalline, highly vesicular Miocene basalt flows which created tableland plateau topography. Most of MEGA 2 and the western portion of MEGA 1 appear to be underlain by a complex series of volcanic andesites and pyroclastics of pre-Miocene age. In the central portion of MEGA 2, these volcanics are locally overlain by Miocene age vesicular basalts. In Vick Creek valley, which divides the MEGA claims into north and south halves, a sequence of Kingsvale volcanics and minor sediments is exposed in the dissected valley. Near the southern border of the Boot claims a contact between sediments, to the north, and a quartz diorite intrusive, to the south was observed. The intrusive shows weak propylitic alteration, with secondary chlorite, silicification, and minor pyrite. The sediment-intrusive contact is marked by a narrow band of hornfelse.

Two days were spent prospecting along the claim line of the Angela 1 claim. Flat lying crystalline, highly vesicular Miocene basalt flows cover a triangular area formed by connecting the southeastern, northeastern and northwestern corners of the claims. The triangular area formed by connecting the southeastern, northwestern and southwestern corners of the claims is underlain by Kingsvale sediments. Tete Angela Creek crosses the claims form east to west and offers an excellent view of the claim's stratigraphy.

3.0 EXPLORATION CONCEPT AND DISCUSSION

The exploration objective of the present project is to discover a disseminated Au deposit in Cretaceous Kingsvale Group sediments and volcanics or a Cu/Au porphyry type deposit near an intrusive contact. Examples of the former are the Round Mountain and Borealis deposits in Nevada, and an example of the latter is the Fish Lake deposit ten kilometres to the south.

Both of these targets owe their origin to hydrothermal systems. Such hydrothermal systems have characteristic alteration and geochemical dispersion patterns which serve as indicators for locating the precious metal concentrations. Because of their great areal extent, these indirect indicators of mineralization are often considered more diagnostic of the mineral bearing system than the presence of precious or base metal anomalies.

The important alteration types are propylitic, argillic, and silicic. Propylitic alteration is characterized by chlorite development and is usually the most pervasive throughout the mineralization. Argillic is characterized by clay mineral development and is caused by hydrothermal fluids at or close to the boiling point. This alteration usually indicates proximity to a vent system. Silicic alteration is the flooding of the host rock by quartz usually in the form of chalcedony (microcrystalline silica) along microfractures or in rocks of high porosity and permeability. Silicification, which can be mixed with the argillic alteration, occurs just above the precious metal mineralization.

Distinctive trace elements around hydrothermal deposits are the same elements characteristic of epithermal systems: As, Sb, Hg, and Tl. Other indicator elements are Ba, Cu, Fe, Mn, Mo, Pb, and Zn. Determinations of Au concentrations are usually considered unreliable in glaciated terrane.

4.0 GEOPHYSICS:

4.1 Magnetometer Surveys:

In late 1984, Brinco contracted an aeromagnetic and VLF electromagnetic survey, consisting of 1,162 line kilometres of data collection, over their Taseko property. The area surveyed included the area of the present Mega, Boot and Gold The results of the survey outlined three areas which claims. have magnetic signatures similar to that found over the Fish Lake deposit. 1) A five kilometre long, east-west trending, magnetic low covered by the MEGA 1, MEGA 2 and Gold 6 claims is believed to be a buried intrusive. 2) A long, linear, magnetic trend striking north-northwest and covered by the Gold 1 to 4 claims may represent a hydrothermally altered shear zone. This linear feature is displaced and interrupted, at several locations, by northeast trending features believed 3) A large magnetic low on the north side of to be faults. the Cone Hill intrusive may represent an area of hydrothermal This area is presently covered by the Boot claims alteration. (Figure 3).

In September 1991 Valerie Gold Resources Ltd. contracted a reconnaissance ground magnetometer survey over the MEGA 1 and 2 claims. Readings were taken at 25 metre intervals along 200 or 400 metre spaced east-west lines. The results of this survey located and confirmed the existence of the large magnetic low defined by the Brinco airborne survey.



5.0 GEOCHEMISTRY:

In September 1991 Valerie Gold Resources Ltd. contracted a reconnaissance soil sampling survey over the MEGA 1 and 2 claims. Samples were taken at 400 metre intervals along the 400 metre spaced east-west magnetometer lines. The purpose of this sampling program was to identify any significant geochemical signatures across the area covered by the aeromagnetic survey.

Samples were collected, whenever possible, from the 'B' soil horizon. Generally, the soil development is good in the flat timbered areas and poor in stream cut valleys and moist area; nonetheless, the desired horizon was generally available and easy to identify. Samples were collected using a prospector's mattock and placed into Kraft, wet-strength paper envelopes. After air drying for several days the samples were boxed and shipped to Chemex Labs. in North Vancouver, B.C. A total of 60 soils and two HMC samples were collected.

At Chemex Labs. Ltd., the samples were analyzed for 32 elements using the I.C.P. technique for both the soils and the HMC samples. In addition, gold was analyzed by standard atomic absorption after pre-concentration by Fire Assay extraction for the soil samples.

The results of this survey are showed on Figure 4 with copies of the assay certificate presented in Appendix 1. The geochemical work identifies an extensive mercury soil anomaly as defined by the 1,000 ppb contour. The anomaly is centred over the magnetic low and locally carries anomalous arsenic values. The anomaly extends beyond the soil grid both to the east and west.



6.0 DISCUSSIONS AND CONCLUSIONS:

The results of work completed to date over Valerie's MEGA, GOLD and BOOT property may be summarized as follows:

- 1) The property is located over an area of favourable geology situated between the Fish Lake porphyry Cu-Au deposit and the Scum Lake porphyry Cu-Au deposit.
- 2) A low level airborne magnetometer survey has defined three extensive magnetic lows over the claims. The magnetic signature of these zones is believed to be representative of magnetic mineral destruction caused by hydrothermal alteration that can accompany the emplacement of epithermal gold and porphyry Cu-Au deposits.
- 3) A percussion drill program completed by Brinco in 1985 intersected intense, pervasive epithermal alteration along a magnetic low situated just 2,000 metres west of the present property. The alteration was comprised of intense silica-kaolinite altered quartz diorite porphyry, containing disseminations, stringers and patches of realgar and pyrite.
- 4) A reconnaissance ground magnetometer survey completed by Valerie in 1991 located and confirmed the existence of the large magnetic low defined by the Brinco airborne survey.
- 5) At the same time as the ground magnetic survey a reconnaissance soil sampling survey was completed and discovered an extensive mercury and arsenic soil anomaly centred over a five km long magnetic low on the MEGA 1, MEGA 2 and GOLD 6 claims. Both elements are well known pathfinders for epithermal gold mineralization.

Respectfully submitted at Vancouver, British Columbia,

Som les

Ralph A. Gonzalez, MSc., F.G.A.C.

7.0 REFERENCES:

Butterworth, B.P., Epp, W.R., 1985; Geology, Geochemistry, Geophysics and Percussion Drilling of the Taseko Claims, Southwestern British Columbia: Unpubl. Assessment Report, B.C. Dept. of Mines and Petroleum Resources File No. 14,159.

Dickie, G.J., 1984; Tas Project, Report on 1984 Exploration in the Taseko River Area, Southwestern British Columbia: Unpubl. Report Prepared by MineQuest Exploration Associates Ltd. for Brinco Mining Limited, Ref. RM1301.

Holland, S.S., 1964; Landforms of British Columbia - A Physiographic Outline: B.C. Dept. of Mines and Petroleum Resources, Bulletin 48. p. 69.

Jeletsky, J.A., and Tipper, H.W., 1968; Upper Jurassic and Cretaceous rocks of Taseko Lakes Map Area and their Bearing on the Geological History of Southwestern British Columbia: Geol. Surv. Canada, Paper 67-54.

Matthews, W.H., and Rouse, G.E., 1984; The Gang Ranch - Big Bar Area, South-central British Columbia, Stratigraphy, Geochronology, and Palynology of the Tertiary Beds and their Relationship to the Fraser Fault: Canadian Journal of Earth Sciences, Vol. 21, pp. 1132-1144.

Tipper, H.W., 1963; Geology, Taseko Lakes, British Columbia: Geol. Surv. Canada, Map 29-1963.

Tipper, H.W., 1968; Mesozoic and Cenozoic Geology of the Northeast Part of Mount Waddington Map-Area (92 N), Coast District, British Columbia: Geol. Surv. Canada, Paper 68-33.

Tipper, H.W., 1978; Taseko Lakes (92 O) Map Area, British Columbia: Geol. Surv. Canada, Open File 534.

Wolfhard, M.W., 1976; Fish Lake: in Porphyry Deposits of the Canadian Cordillera, CIM Special Volume No. 15, A. Sutherland Brown (Editor), pp. 317-322.

Woolham, R.W., 1984; Report on the Helicopter-Borne Magnetic and VLF Electromagnetic Surveys, Taseko Project: Unpubl. Report prepared by Derry, Michener, Booth & Wahl Ltd. for Brinco Mining Limited, Ref. 84-57.

Valarie Gold Resources Ltd. and Dauntless Developments Ltd. Taseko Area Properties 9 September - 20 December 1991

Prospecting, Geological and Geochemical Surveys

FOOD & ACCOMMODATION: 3 pers, 10mdays @ \$40.92	\$ 409.15
SUPPLIES AND SUNDRY:	1,163.74
FUEL:	97.59
SHIPMENTS:	60.83
FIXED WING: Air Canada, 2 Wms Lk Rtns	749.56
RENTALS:	
HLE, Field Equipment 10mdays @ \$10 \$ 100.00	
Adder, 4wd Jimmy 9days @ \$94.94 854.48	
Jerry's Auto Centre, Aerostar 2days <u>229.07</u>	1,183.55
DRAFTING:	444.15
CONTRACTORS:	
Adder Exploration and Developments Ltd.	3,300.00
Archean Engineering Ltd.	1,391.00
FEES:	1,000.00
ASSAYS & ANALYSES: Chemex Labs	
60 Soil for 32-element ICP @ \$8.69	521.52
60 pulp for Au @ \$7.50	481.50
2 HMC for 32-element ICP @ \$14.72	29.43
REPORT PREPARATION:	1,806.50
TOTAL COST PROSPECTING, GEOLOGY, GEOCHEMISTRY:	\$ 12,638.52

Geophysical Surveys

Geophys	ical Surveys		1
CONTRACTOR: P.E. WALCOTT & AS Magnetometer, 30 1km Report and Drafting I.P., 59.9 1km Report and Drafting TOTAL COST GEOPHYSICS:	SSOCIATES \$ 10,422.78 <u>1,687.13</u> 61,321.80 <u>3,377.99</u>	\$ 12,109.91 <u>64,699.79</u> \$ <u>76,809.70</u>	AR 2225
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Cost Summary

Prospecting, Geological and Geochemical Surveys Geophysical Surveys	\$ 12,638.52 76,809.70
GRAND TOTAL:	\$ 89,448.22

GRAND TOTAL:

T.K.

Soil only in this report \$2500

9.0 CERTIFICATE:

I, Ralph A. Gonzalez, do hereby certify that:

1. I am a geologist and reside at 2784 Lawson Ave., West Vancouver, British Columbia.

2. I am a graduate of the University of New Mexico, U.S.A. with a B.Sc. in geology (1965) and a M.Sc. in geology (1968).

3. I have practiced my profession, since 1965, in Canada, North and South America, and Asia as indicated on the following page.

4. I am a Fellow in the Geological Association of Canada, Registration Number 4523.

5. I am a registered member of the Association of Professional Engineers of the Province of Manitoba, Registration Number 3970.

6. I have based this Report on work done by myself or under my supervision. I was physically on the property for the purpose of geologic mapping and supervision on September 18th to 26th, 1991, inclusive. Information obtained from the Geological Survey of Canada, B.C. Dept. of Mines, and engineering reports and other support documents provided by Valerie Gold Resources Ltd. were also used as background and reference data.

7. I have no past or present, direct or indirect interest in any of the listed Mineral Claims.

8. This report may be used by VALERIE GOLD RESOURCES LTD. or their agents for a Statement of Material Facts or Shareholders' newsletter, etc. either in whole or in part.

Dated at Vancouver, British Columbia, this 22th day of June, 1992.

What Somiles

R.A. Gonzalez, M. Sc., P. Eng., F.G.A.C.

10.0 STATEMENT OF QUALIFICATIONS:

R.A. Gonzalez, M. Sc., P. Eng., F.G.A.C.

ACADEMIC:

1965 B.Sc. in Geology The University of New Mexico, USA.
1968 M.Sc. in Geology The University of New Mexico,

USA.

PROFESSIONAL:

1984 to present Adder Exploration & Dev. Ltd. President 1983-1984 Archean Engineering Limited **Overseas Manager** 1980-1983 Placer Development Y Cia Ass't. Exploration Ltd. (Chile) Manager 1977-1980 Consultant attached to the Ass't. Project Manager Geol. Survey of Malaysia on a CIDA supported mineral exploration survey in Peninsular Malaysia 1977 Registered with the Association of Professional Engineers of the Province of Manitoba 1975-1977 Province of Manitoba Resident Geologist for the Manitoba Dept. of Mines 1971-1975 Giant Mascot Mines Ltd. Senior Geologist 1970-1971 New Jersey Zinc (Canada) Exploration Geologist Ltd. 1968-1970 Anaconda American Brass Research Geologist Ltd. 1965-1966 Mex-Tex Mining Co. (USA) Geologist

APPENDIX 1

CHEMEX LABS LTD. ASSAY CERTIFICATES



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

HUGHES LANG EXPLORATIONS LTD.

1000 - 1177 W. HASTINGS ST. VANCOUVER, BC V6E 2K3

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UK!

Comments: CC: RALPH GONZALEZ

A9122663

CERTIFICATE

A9122663

HUGHES LANG EXPLORATIONS LTD.

Project: P.O. # :

Samples submitted to our lab in Vancouver, BC. This report was printed on 6-OCT-91.

	SAMPLE PREPARATION											
CHEMEX	NUMBER SAMPLES	DESCRIPTION										
235 233	22	Pan con ring to approx 150 mesh Assay AQ ICP digestion charge										
A NOTE	.											

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

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		ANALYTICAL PI	ROCEDURES		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	upper Limit
922 921 923 925 926 927 928 929 930 931 932 933 935 935 936 937 938 935 936 937 938 9340 941 942 943 944 945 944 945 946 947 948 949	~~~~~	Ag ppm: 32 element, soil & rock Al %: 32 element, soil & rock As ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Be ppm: 32 element, soil & rock Ca %: 32 element, soil & rock Cd ppm: 32 element, soil & rock Co ppm: 32 element, soil & rock Cr ppm: 32 element, soil & rock Cr ppm: 32 element, soil & rock Fe %: 32 element, soil & rock Fe %: 32 element, soil & rock K %: 32 element, soil & rock K %: 32 element, soil & rock Mg %: 32 element, soil & rock Mg %: 32 element, soil & rock Nn ppm: 32 element, soil & rock Nn fpm: 32 element, soil & rock Sc ppm: 32 element, soil & rock Th %: 32 element, soil & rock Th %: 32 element, soil & rock Th fpm: 32 element, soil & rock	ICP-AES ICP-AES	$\begin{array}{c} 0.2\\ 0.01\\ 5\\ 10\\ 0.5\\ 2\\ 0.01\\ 0.5\\ 1\\ 1\\ 0.01\\ 10\\ 0.01\\ 10\\ 0.01\\ 10\\ 0.01\\ 10\\ 2\\ 5\\ 1\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\ 10\\$	200 15.00 10000 10000 10000 15.00 100000 10000 10000 10000 10000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000
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Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 HUGHES LANG EXPLORATIONS LTD.

1000 - 1177 W. HASTINGS ST. VANCOUVER, BC V6E 2K3 Page N 3r :1-A Total Payes :1 Certificate Date:06-OCT-91 Invoice No. :19122663 P.O. Number :

Project : Comments: CC: RALPH GONZALEZ

	-									CERTIFICATE OF ANALYSIS A9122663											
SAMPLE DESCRIPTION	PREP CODE		Ag ppm	אן ק	As ppn	Ba ppm	Be ppm	Bi ppm	Ca १	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg Ppm	K ¥	La ppn	Mg f	Mn ppm	Mo
EMC 165522 EMC 26548	235 2 235 2	33 33	3.4 3.6	2.98 1.83	15 < 5	240 60	< 0.5 < 0.5	38 130	1.89 1.04	< 0.5 < 0.5	24 58	180 504	32 29 >1	9.92 15.00	70 70	1 < 1	0.23 0.01	30 50	1.72 2.00	965 3090	1 < 1
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Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 HUGHES LANG EXPLORATIONS LTD.

1000 - 1177 W. HASTINGS ST. VANCOUVER, BC V6E 2K3 Page N 3r :1-B Total Pages :1 Certificate Date:06-OCT-91 Invoice No. :19122663 P.O. Number :

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Project : Comments: CC: RALPH GONZALEZ

										CE	RTIFI	CATE	A9122663		
SAMPLE DESCRIPTION	PREP CODE	Na t	Ni ppm	P Ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	T1 ppm	D D	V PPm	W ppm	Zn ppm	
ENC 165522 ENC 26548	235 233 235 233	0.27 0.11	87 159	860 770	4 8	5 10	11 19	131 56	0.67 4.57	20 < 10	< 10 170	313 1375	30 50	116 370	
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<u></u>		I						<u> </u>						CERTIFICATION	B. Carol.



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

CERTIFICATE

A9122662

HUGHES LANG EXPLORATIONS LTD.

Project: P.O. # :

Samples submitted to our lab in Vancouver, BC. This report was printed on 4-OCT-91.

SAMPLE PREPARATION											
CHEMEX	NUMBER SAMPLES	DESCRIPTION									
201 203 205 298	56 4 4 60	Dry, sieve to -80 mesh Dry, sieve to -35 mesh Geochem ring to approx 150 mesh ICP - AQ Digestion charge									
* NOTE	1.										

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W. HUGHES LANG EXPLORATIONS LTD.

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Comments: CC: RALPH GONZALEZ

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ANALYTICAL PROCEDURES DETECTION UPPER CHEMEX NUMBER METHOD LIMIT LIMIT CODE SAMPLES DESCRIPTION 0.2 200 922 60 Ag ppm: 32 element, soil & rock ICP-AES 0.01 Al %: 32 element, soil & rock ICP-AES 15.00 921 60 ICP-AES 10000 923 60 As pom: 32 element, soil & rock 5 924 60 Ba ppm: 32 element, soil & rock ICP-AES 10 10000 925 Be ppm: 32 element, soil & rock ICP-AES 0.5 100.0 60 Bi ppm: 32 element, soil & rock ICP-AES 2 10000 926 60 Ca %: 32 element, soil & rock ICP-AES 0.01 15.00 927 60 928 Cd ppm: 32 element, soil & rock ICP-AES 0.5 100.0 60 10000 929 Co ppm: 32 element, soil & rock ICP-AES 1 60 10000 ICP-AES 1 Cr ppm: 32 element, soil & rock 930 60 931 ICP-AES 1 10000 Cu ppm: 32 element, soil & rock 60 15.00 932 60 Fe %: 32 element, soil & rock ICP-AES 0.01 933 60 Ga ppm: 32 element, soil & rock ICP-AES 10 10000 Hg ppm: 32 element, soil & rock ICP-AES 1 10000 951 60 0.01 K %: 32 element, soil & rock ICP-AES 10.00 934 60 La ppm: 32 element, soil & rock ICP-AES 10000 935 10 60 0.01 15.00 Mg %: 32 element, soil & rock ICP-AES 936 60 ICP-AES 10000 937 Mn ppm: 32 element, soil & rock 5 60 10000 938 Mo ppm: 32 element, soil & rock ICP-AES 1 60 ICP-AES 0.01 5.00 939 60 Na %: 32 element, soil & rock 940 Ni ppm: 32 element, soil & rock ICP-AES 1 10000 60 941 P ppm: 32 element, soil & rock ICP-AES 10 10000 60 ICP-AES 2 10000 942 60 Pb ppm: 32 element, soil & rock ICP-AES 5 10000 943 60 Sb ppm: 32 element, soil & rock ICP-AES 1 10000 Sc ppm: 32 elements, soil & rock 958 60 944 Sr ppm: 32 element, soil & rock ICP-AES 1 10000 60 945 Ti %: 32 element, soil & rock ICP-AES 0.01 5.00 60 946 60 T1 ppm: 32 element, soil & rock ICP-AES 10 10000 947 60 U ppm: 32 element, soil & rock ICP-AES 10 10000 V ppm: 32 element, soil & rock ICP-AES 10000 948 60 1 W ppm: 32 element, soil & rock ICP-AES 10 10000 949 60 950 Zn ppm: 32 element, soil & rock ICP-AES 2 10000 60

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HUGHES LANG EXPLORATIONS LTD.

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Page N 3r :1-A Total Pagus :2 Certificate Date:04-OCT-91 Invoice No. :19122662 P.O. Number :

Project : Comments: CC: RALPH GONZALEZ

											CERTIFICATE OF ANALYSIS							9122			
SAMPLE DESCRIPTION	PRE COD	PE	Ag ppm	Al %	As ppm	Ba PPm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppn	Fe %	Ga ppm	Hg	K Ş	La ppm	Mg ¥	Mn ppm	Mo ppm
164533 165522 166533 262548 267542	201 201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.73 1.77 1.60 0.97 1.63	< 5 5 5 10 5	160 150 80 80 200	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 2 2 2 2	0.85 0.95 0.92 0.49 0.90	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	11 10 10 17 11	30 37 31 55 34	22 33 25 19 24	3.49 3.29 3.08 5.25 3.07	< 10 < 10 < 10 < 10 < 10 < 10	2 < 1 < 1 < 1 < 1	0.08 0.10 0.10 0.04 0.12	10 10 < 10 < 10 10	0.89 0.95 0.94 1.31 0.89	2090 480 355 475 970	< 1 < 1 < 1 < 1 < 1 < 1
271534 LO 00+00E LO 04+00E LO 08+00E LO 12+00E	201 203 201 201 201	298 205 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.58 2.22 2.48 1.75 1.75	< 5 < 5 < 5 < 5 < 5 < 5	180 120 130 100 80	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 2 < 2 < 2 2 2 2	0.85 0.47 0.38 0.36 0.32	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	12 9 8 10 12	35 71 45 40 61	22 20 16 18 20	3.11 3.07 3.03 2.91 3.72	< 10 < 10 < 10 < 10 < 10 < 10	< 1 < 1 1 < 1 2	0.12 0.17 0.14 0.16 0.08	10 10 < 10 < 10 < 10	0.89 0.48 0.46 0.44 0.41	460 330 500 240 310	< 1 < 1 < 1 < 1 < 1 < 1
LO 16+00E LO 20+00E LO 24+00E L4N 00+00E L4N 04+00E	201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.60 2.23 2.40 3.17 2.78	10 15 < 5 < 5 30	110 80 90 200 130	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	2 < 2 4 < 2 2	0.33 0.39 0.64 0.42 0.37	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5	6 7 8 9 9	37 45 43 43 50	14 14 16 17 16	2.46 2.79 3.03 2.91 3.17	< 10 < 10 < 10 < 10 < 10	< 1 4 < 1 1 2	0.08 0.10 0.04 0.13 0.11	< 10 < 10 < 10 < 10 < 10 < 10	0.31 0.44 0.49 0.53 0.45	230 300 260 510 510	1 < 1 < 1 < 1 < 1 < 1
L4N 08+00E L4N 12+00E L4N 16+00E L4N 20+00E L4N 23+00E	201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.84 1.71 1.80 1.43 2.06	10 < 5 15 10 < 5	110 80 110 70 190	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 4 2 < 2 < 2	0.35 0.32 0.61 0.89 0.42	< 0.5 < 0.5 < 0.5 < 0.5 0.5	7 10 9 9	40 47 37 32 42	19 18 26 31 17	2.73 3.33 3.20 2.95 3.18	< 10 < 10 < 10 < 10 < 10 < 10	1 2 1 2 2	0.09 0.12 0.07 0.04 0.17	< 10 < 10 < 10 10 < 10	0.37 0.49 0.83 1.07 0.46	250 245 325 220 335	1 < 1 < 1 < 1 < 1 < 1
L4S 00+00E L4S 04+00E L4S 08+00E L4S 12+00E L4S 16+00E	201 201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.69 1.70 1.87 1.76 2.71	< 5 < 5 5 < 5 5	100 100 90 110 150	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	4 4 < 2 < 2 < 2	0.55 0.62 0.41 0.32 0.41	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	7 11 13 9 12	33 38 38 45 40	14 23 23 19 17	2.61 3.19 3.36 3.33 3.25	< 10 < 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1 < 1	0.21 0.11 0.17 0.07 0.13	< 10 < 10 < 10 < 10 < 10 < 10	0.51 0.59 0.68 0.36 0.50	320 270 345 180 415	< 1 < 1 < 1 < 1 < 1 < 1
L4S 20+00E L4S 24+00E BL7+50S L8S0+33E L8N 00+00E L8N 04+00E	201 201 203 201 201	298 298 205 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.38 2.30 2.23 2.47 2.93	< 5 5 10 < 5 10	90 110 130 130 150	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	4 < 2 < 2 2 < 2	0.35 0.35 0.86 0.39 0.32	< 0.5 < 0.5 < 0.5 0.5 < 0.5 < 0.5	11 8 6 11 14	56 46 67 46 50	25 18 19 20 24	3.28 2.86 3.16 3.29 3.62	< 10 < 10 < 10 < 10 < 10 < 10	1 < 1 < 1 < 1 < 1 < 1	0.08 0.05 0.09 0.14 0.11	< 10 < 10 10 < 10 < 10	0.47 0.45 0.67 0.44 0.66	205 190 250 375 440	< 1 < 1 < 1 < 1 < 1 < 1
L8N 08+00E L8N 12+00E L8N 16+00E L8N 20+00E L8N 24+00E	201 201 203 201 201	298 298 205 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.01 1.73 2.22 2.47 2.02	< 5 10 < 5 10 5	130 90 120 150 100	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.40 0.33 0.45 0.45 0.38	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	8 9 9 16 9	42 43 68 46 43	18 16 21 21 16	2.98 2.56 3.21 3.54 2.88	< 10 < 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1	0.10 0.10 0.10 0.11 0.09	< 10 < 10 < 10 < 10 < 10 < 10	0.42 0.36 0.64 0.63 0.37	335 235 240 855 420	< 1 < 1 < 1 < 1 < 1
L8N 04+00W L8N 08+00W L8N 12+00W L8N 16+00W L8N 20+00W	201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.79 1.97 2.87 2.73 2.35	< 5 < 5 10 15 5	130 220 240 170 130	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	4 < 2 < 2 < 2 2 2	0.46 0.37 0.45 0.54 0.45	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	13 14 9 10 9	56 34 37 41 49	24 24 17 21 17	3.63 3.18 3.11 3.71 3.29	< 10 < 10 < 10 < 10 < 10 < 10	3 < 1 < 1 < 1 2	0.17 0.35 0.20 0.26 0.18	10 10 10 10 < 10	0.59 0.63 0.52 0.70 0.51	390 720 415 350 325	< 1 < 1 < 1 < 1 < 1 < 1
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1000 - 1177 W. HASTINGS ST. VANCOUVER, BC V6E 2K3 Page N∟ ər :1-B Total Pages :2 Certificate Date:04-OCT-91 Invoice No. :19122662 P.O. Number :

Project : Comments: CC: RALPH GONZALEZ

											CE	RTIFI	CATE	OF A	NALYSIS	A9122662
SAMPLE DESCRIPTION	PRE COD	P E	Na ¥	Ni ppm	P ppm	Pb ppm	Sb ppn	Sc ppm	Sr ppm	Ti %	T1 ppm	U PPm	v ppm	w ppm	Zn ppm	
.64533 .65522 .66533 262548 267542	201 201 201 201 201 201	298 298 298 298 298 298	0.03 0.03 0.02 0.02 0.03	27 31 28 71 36	690 610 580 450 510	2 4 2 < 2 < 2	<pre>< 5 < 5 < 5 < 5 < 5 < 5</pre>	5 5 4 5	89 86 70 46 113	0.10 0.11 0.08 0.20 0.10	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	69 69 63 140 61	< 10 < 10 < 10 < 10 < 10 < 10	68 80 70 72 68	
271534 .0 00+00E .0 04+00E .0 08+00E .0 12+00E	201 203 201 201 201	298 205 298 298 298	0.03 0.03 0.02 0.02 0.02	39 25 31 26 46	460 260 360 140 340	< 2 2 < 2 2 4	< 5 < 5 < 5 < 5 < 5 < 5	5 7 5 4 6	115 60 38 38 33	0.12 0.18 0.21 0.15 0.24	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	65 76 68 56 73	< 10 < 10 < 10 < 10 < 10 < 10	62 62 144 56 88	
0 16+00E 0 20+00E 0 24+00E 4N 00+00E 4N 04+00E	201 201 201 201 201	298 298 298 298 298 298	0.01 0.02 0.03 0.01 0.02	21 26 24 31 31	250 280 190 460 360	< 2 4 2 < 2 4	< 5 < 5 < 5 < 5 < 5 < 5	4 4 6 5	40 35 50 45 35	0.17 0.21 0.17 0.18 0.20	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	56 66 56 67 71	< 10 < 10 < 10 < 10 < 10 < 10	62 90 56 152 112	
LAN 08+00E LAN 12+00E LAN 16+00E LAN 20+00E LAN 23+00E	201 201 201 201 201 201	298 298 298 298 298 298	0.01 0.01 0.03 0.03 0.01	23 32 27 33 26	250 240 230 350 310	4 8 8 < 2 2	< 5 < 5 < 5 < 5 < 5 < 5	5 5 6 4 6	42 35 57 71 44	0.16 0.17 0.11 0.10 0.16	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	58 61 53 46 73	< 10 < 10 < 10 < 10 < 10 < 10	54 56 52 48 84	
L4S 00+00E L4S 04+00E L4S 08+00E L4S 12+00E L4S 12+00E L4S 16+00E	201 201 201 201 201	298 298 298 298 298 298	0.02 0.02 0.02 0.01 0.01	13 30 30 30 34	240 260 250 180 570	8 < 2 < 2 2 2	<pre>< 5 < 5 < 5 < 5 < 5 < 5 < 5</pre>	4 5 5 5 5 5	49 68 40 41 40	0.13 0.13 0.16 0.17 0.16	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	50 63 56 69 70	< 10 < 10 < 10 < 10 < 10 < 10	50 56 62 60 128	
L4S 20+00E L4S 24+00E 3L7+50S L8S0+33E L8N 00+00E L8N 04+00E	201 201 203 201 201	298 298 205 298 298	0.02 0.01 0.05 0.01 0.01	33 27 17 43 42	300 270 150 260 520	< 2 < 2 4 6 6	< 5 < 5 < 5 < 5 < 5 < 5	6 5 6 5 5	41 40 79 49 30	0.20 0.19 0.17 0.18 0.15	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	66 61 60 62 69	< 10 < 10 < 10 < 10 < 10 < 10	56 78 46 94 112	
L8N 08+00E L8N 12+00E L8N 16+00E L8N 20+00E L8N 20+00E	201 201 203 201 201	298 298 205 298 298	0.01 0.01 0.03 0.01 0.02	22 28 31 50 25	260 210 210 670 300	6 4 12 6 < 2	<pre>< 5 < 5 < 5 < 5 < 5 < 5 < 5</pre>	6 5 7 4 5	47 34 49 38 35	0.19 0.17 0.20 0.16 0.19	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	71 56 62 52 72	< 10 < 10 < 10 < 10 < 10 < 10	70 66 78 152 86	
LSN 04+00W LSN 08+00W LSN 12+00W LSN 16+00W LSN 20+00W	201 201 201 201 201	298 298 298 298 298 298	0.02 0.02 0.01 0.01 0.01	35 31 23 32 27	380 190 390 410 400	6 2 8 8 4	< 5 < 5 < 5 < 5 < 5 < 5	7 6 8 5	47 54 75 64 61	0.23 0.13 0.17 0.13 0.21	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	77 53 70 65 70	< 10 < 10 < 10 < 10 < 10 < 10	122 62 104 94 88	

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Project : Comments: CC: RALPH GONZALEZ

Page N ər :2-A Total Pages :2 Certificate Date: 04-OCT-91 Invoice No. :19122662 P.O. Number :

											CERTIFICATE OF ANALYSIS						4				
SAMPLE DESCRIPTION	PRE COD	P	Ag ppm	A1 %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cđ ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo PPm
L8N 24+00W L8S 04+00E L8S 04+75E L8S 08+00E L8S 12+00E	203 201 201 201 201 201	205 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	3.28 2.76 1.44 2.87 2.01	< 5 < 5 < 5 < 5 < 5	90 180 390 110 160	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	0.52 0.41 1.66 0.53 0.33	0.5 < 0.5 0.5 < 0.5 < 0.5 < 0.5	16 9 11 17 9	104 36 30 53 44	35 12 27 37 17	4.98 2.84 3.57 4.42 3.11	< 10 < 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1 2	0.19 0.11 0.10 0.14 0.12	10 < 10 10 10 < 10	0.95 0.43 0.59 0.87 0.34	360 710 5990 510 280	< 1 < 1 < 1 < 1 < 1 < 1
L8S 16+00E L8S 20+00E L8S 24+00E L8S 04+00W L8S 08+00W	201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.23 2.18 2.75 2.76 2.60	< 5 < 5 10 10 < 5	130 130 140 200 220	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2 < 2	1.19 0.37 1.32 0.68 0.69	0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	6 12 10 10 8	30 38 50 32 34	32 22 23 17 19	2.84 3.42 3.57 3.17 3.00	< 10 < 10 < 10 < 10 < 10 < 10	1 < 1 < 1 < 1 < 1 < 1	0.12 0.10 0.11 0.21 0.20	10 < 10 10 10 10	1.05 0.57 0.72 0.66 0.60	190 515 340 560 430	< 1 1 < 1 1 < 1
BL11+45S 00+00E BL11+45S 04+00E BL11+45S 04+75E BL11+45S 08+00E BL11+45S 12+00E	201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	2.99 2.21 1.85 1.82 3.07	25 < 5 < 5 10 30	160 110 400 140 280	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	4 < 2 < 2 < 2 < 2	0.44 0.50 1.98 0.38 0.40	< 0.5 < 0.5 0.5 < 0.5 < 0.5	9 7 11 7 8	35 48 33 33 46	12 18 29 14 31	3.11 3.20 4.20 2.51 3.54	< 10 < 10 < 10 < 10 < 10 < 10	< 1 1 < 1 < 1 < 1	0.15 0.14 0.10 0.10 0.21	< 10 < 10 10 < 10 10	0.50 0.55 0.66 0.33 0.40	635 555 8660 410 265	< 1 < 1 < 1 < 1 < 1
BL11+45S 16+00E BL11+45S 20+00E BL11+45S 24+00E BL11+45S 04+00W BL11+45S 08+00W	201 201 201 201 201	298 298 298 298 298 298	< 0.2 < 0.2 < 0.2 < 0.2 < 0.2 < 0.2	1.79 2.49 2.53 2.13 2.44	< 5 < 5 < 5 < 5 5	70 110 100 210 250	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 < 2 < 2	0.41 0.46 0.41 0.46 0.61	< 0.5 < 0.5 < 0.5 0,5 < 0.5	5 13 11 9 8	34 53 51 35 42	10 29 26 15 17	2.04 3.81 3.53 2.89 3.06	< 10 < 10 < 10 < 10 < 10 < 10	< 1 4 < 1 < 1 < 1	0.06 0.07 0.06 0.24 0.30	< 10 < 10 < 10 10 10	0.42 0.81 0.61 0.52 0.60	160 350 235 395 495	1 < 1 < 1 < 1 < 1 < 1
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1000 - 1177 W. HASTINGS ST. VANCOUVER, BC V6E 2K3 Page N 3r :2-B Total Payos :2 Certificate Date: 04-OCT-91 Invoice No. :19122662 P.O. Number :

Project :

Comments: CC: RALPH GONZALEZ

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SAMPLE DESCRIPTION	PREP CODE	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	n Dbu	V ppm	W ppm	Zn ppm	
L8N 24+00W L8S 04+00E L8S 04+75E L8S 08+00E L8S 12+00E	203 20. 201 29 201 29 201 29 201 29 201 29	5 0.03 8 0.01 8 0.03 8 0.02 8 0.01	68 26 25 58 30	610 500 1430 360 330	8 < 2 < 2 2 < 2 < 2	< 5 < 5 < 5 < 5 < 5 < 5	11 5 3 8 5	49 39 151 58 44	0.24 0.14 0.04 0.14 0.15	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	63 63 49 65 65	< 10 < 10 < 10 < 10 < 10 < 10	110 148 64 54 94	
L8S 16+00E L8S 20+00E L8S 24+00E L8S 04+00W L8S 08+00W	201 29 201 29 201 29 201 29 201 29 201 29	8 0.03 8 0.01 8 0.03 8 0.02 8 0.01	25 38 25 16 22	380 430 120 460 450	< 2 < 2 < 2 < 2 6 < 2	< 5 < 5 < 5 < 5 < 5 < 5 < 5	5 4 8 6 6	83 34 87 96 96	0.11 0.15 0.15 0.11 0.13	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	50 55 70 60 67	< 10 < 10 < 10 < 10 < 10 < 10	62 136 54 66 80	
BL11+45S 00+00E BL11+45S 04+00E BL11+45S 04+75E BL11+45S 08+00E BL11+45S 12+00E	201 29 201 29 201 29 201 29 201 29 201 29	8 0.01 8 0.02 8 0.03 8 0.01 8 0.01	22 32 24 16 32	590 380 1450 200 610	< 2 6 4 6	< 5 < 5 < 5 < 5 < 5 < 5	5 6 5 4 6	43 41 189 44 75	0.16 0.21 0.05 0.16 0.07	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	78 68 51 62 72	< 10 < 10 < 10 < 10 < 10 < 10	122 124 68 66 102	· ·
BL11+45S 16+00E BL11+45S 20+00E BL11+45S 24+00E BL11+45S 04+00W BL11+45S 08+00W	201 29 201 29 201 29 201 29 201 29 201 29	8 0.02 8 0.02 8 0.01 8 0.01 8 0.01 8 0.01	19 49 38 22 20	120 330 310 290 270	4 < 2 < 2 4 4	< 5 < 5 < 5 < 5 < 5	4 6 6 8	42 43 44 81 126	0,18 0.18 0.18 0.17 0.20	< 10 < 10 < 10 < 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	46 63 67 63 72	< 10 < 10 < 10 < 10 < 10 < 10	52 98 58 78 72	
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