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#### DRILLING AND SAMPLING REPORT

on the

#### 1989 EXPLORATION OF THE LAREDO CLAIMS

Skeena Mining Division British Columbia

Latitude 52° 42' Longitude 129° 03'

NTS 103 A/11 E

CLAIM GROUP

NUMBER OF CLAIMS

212-409 Granville St.

LAREDO LIMESTONE LTD.

Vancouver, B.C. V6C 1T2

DOLMAGE CAMPBELL LTS.

Vancouver, B.C. V6E 2E9

1970-1055 West Hastings St.

2

NUMBER OF UNITS

Laredo

Owner and Operator

Consultant:

December 15, 1989 Vancouver, B.C.



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#### 1.0 EXECUTIVE SUMMARY

During 1989 two exploration programs were conducted on the Laredo 1 and 2 claims (32 units) which comprise the Laredo property on Aristazabal Island. In January, 1989, a program of reconnaissance mapping, linecutting and collection of surface samples defined the limits of the carbonate beds on the Laredo Property and allowed a total resource estimate to be completed.

With an estimated potentially quarryable tonnage of 1 billion tonnes of limestone, a second program was initiated to define proven and probable reserves.

In the spring of 1989 detailed surface sampling (60 samples) and 11 diamond drill holes totalling 304.5 metres (46 samples) were completed in conjunction with additional linecutting. This program provided sufficient geological and analytical data to complete an estimate of the limestone reserves in a postulated 20 year quarry. In addition, limestone reserve estimations were completed for an area defined by previous investigations.

To date, the total proven and probable reserves of high calcite limestone and limestone are estimated to be 60 million tonnes.

#### 2.0 INTRODUCTION

#### 2.1 GENERAL

The Laredo property, owned and operated by Laredo Limestone Ltd. with offices at 212-409 Granville St., Vancouver, B.C., is located on Aristazabal Island (Figure 1) on the north coast of British Columbia. It is largely underlain by carbonate rocks of the Alexander Terrane striking north by northwest and dipping  $30^{\circ}$  to  $50^{\circ}$  to the southwest.

Work on the property by previous owners includes quarrying in 1899 and 1954 and small programs of surface sampling in 1962, 1969 and 1984 and the completion of five diamond drill holes in 1969.

The current mineral claims were staked in November 1988.

A review of all the available data in January 1989 indicated that the estimated reserves of limestone available for quarrying could be greatly increased by additional surface sampling and diamond drilling.

As a result of this study Dolmage Campbell Ltd. was retained by Laredo Limestone Ltd. to complete a reconnaissance mapping and surface sampling program in January 1989.

Due to positive results from that program a more detailed surface sampling program and a diamond drilling program were completed in the spring of 1989.

This report presents the results of all of the work completed in 1989.

#### 2.2 PROPERTY AND OWNERSHIP

Laredo Limestone Limited is the sole owner of the two mineral claims, Laredo 1 and Laredo 2, totalling 32 units, which comprise the Laredo claim group.

The configuration of these claims are shown in Figure 2.

#### 2.3 LOCATION AND ACCESS

The Laredo property is located on Aristazabal Island on the north coast of British Columbia. The property is situated at Latitude 52° 42' north and Longitude 129° 03' west in the Skeena Mining Division, approximately half way between Bella Bella and Prince Rupert (Figure 1).

Access to the site can be gained by air from Bella Bella (90 km) and Port Hardy (250 km) or by water from Bella Bella.





#### 2.4 TOPOGRAPHY

The topography of the property is generally a hummocky plateau with little to moderate relief ranging from sea level to a maximum elevation of approximately 150 metres. On a local scale, the topography is rugged with possible karstic collapse areas surrounded by near vertical cliffs 5 to 10 metres in height.

Numerous small lakes and ponds occur on the upper flats at approximately 80 metres elevation and the property is traversed by major creeks at the southerly and northerly limits of the claims.

In addition, numerous dry valleys and two creeks which disappear into the limestone were noted during the sampling program.

#### 2.5 HISTORY

In 1899, a quarry license was obtained for Lot 299 on Aristazabal Island for the quarrying of limestone. Two quarries have been worked at different times and records indicate that in 1954 12,000 tons of high quality limestone (98 to 99% CaCO<sub>3</sub>) were shipped to a pulp mill at Prince Rupert.

The property was re-examined in 1962 by Dr. Campbell who emphasised the consistent purity of the limestone.

In 1969, Dr. Fawley directed additional surface sampling and five X-ray holes were drilled to depths of 40 to 300 feet.

In 1983, control of the property was obtained by Laredo Limestone Ltd. In 1984, the reserves of limestone were re-assessed by Mr. Tribe who conducted a sampling and mapping program in and around the existing quarries for Laredo Limestone Ltd.

In November 1988, Laredo Limestone Ltd. staked two mineral claims: Laredo 1 and Laredo 2, comprising 32 units.

#### 3. GEOLOGY

#### 3.1 REGIONAL GEOLOGY

#### 3.1.1 Lithology

Aristazabal Island is located at the western contact of the Mesozoic intrusive masses of the Coast Plutonic Complex and sediment dominated Paleozoic, and older, rocks of the Alexander Terrane.

Carbonate rocks within this area, are likely to be Silurian or older in age and are underlain by granitoid gneiss and overlain by mafic volcanics, now metamorphosed to amphibolitic gneiss (Roddick, 1970, Baer, 1972). Regionally, the occurrence of pure limestone units is extremely limited. Typically, carbonates are thinly interbedded with quartz rich and argillaceous sediments, and unlikely to form high quality limestone. The limestone of Aristazabal Island appears to be the exception to this general trend in that it is free from significant clastic sedimentary contaminants.

#### 3.1.2 Structural Geology

A north by northwest structural grain is predominant within the project area. A northwest striking dextral fault, the Principe-Laredo Fault, projects through Laredo Channel and forms the dominant structural feature in this area. Strike relations of supracrustal rocks are subparallel to this structure, trending southeastward and dipping  $30^{\circ}$  to  $50^{\circ}$  southwesterly. Bedding attitudes are locally contorted due to the inherent ductility of the carbonate units and to the intensity of regional, upper greenschist - lower amphibolite, metamorphism. Tight isoclinal northwest trending folds are documented within sediments at the regional scale and are suggested to be the oldest deformation structures in the map area, (Roddick, 1970).

#### 3.2 PROPERTY GEOLOGY

Three principle rock units are identified on the Laredo Limestone property, (Fig. 3). Most of the claim group is underlain by homogenous, white coarse grained limestone. This carbonate unit has the appearance of a limestone roof pendant bounded by intrusive rocks.

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A pronounced west-northwest-trending drainage system into Quarry Bay defines a faulted diorite-limestone contact to the north. A second major drainage system on the property, located in the southeast corner, follows along another faulted intrusive-limestone contact. South of this drainage, moderately foliated hornblende granodiorite is abruptly juxtaposed against the Aristazabal Limestone, (Fig. 3). Contact relations on the western margins of the property are not as well defined. Approximately 2.5 kilometers west of the main (south) quarry, interdigitated granodiorite-limestone contacts predominate. The main granodiorite intrusive mass is likely to lie west of L10W.

#### 3.2.1.1 Limestone

Much of the claim group is underlain by medium to coarse grained limestone. The rock weathers grey to buff but on the fresh surface is typically white, occasionally streaked with thin discontinuous grey interbeds. Grey limestone interbeds are estimated to comprise less than 10 percent of the volume of the Aristazabal Limestone.

The samples along the six traverse lines across the property indicate a general homogeneity and purity of the limestone that is a distinctive feature of this deposit. None of the specimens collected contain micas or phyllosilicates, calc-silicates or silica rich interbeds. Very limited sulphide contamination, less than 0.5% pyrite, may occur near the major intrusive contacts. Weakly disseminated pyrite was noted in the southeast corner of the map area. No evidence for widescale silica, alumina or iron contamination of this carbonate unit has been found.

#### **3.2.1.2** Diorite-Diabase Dykes

Local, fine grained mafic dykes occur within limited areas of the limestone unit. Contact relations suggest more than a single stage of dyke emplacement. Volumetrically, these intrusive units are generally not significant. A shoreline traverse between the north and south limestone quarries indicates that mafic dykes account for approximately 4 percent of the total rock volume. This compares closely to the estimate from previous diamond drilling on the property (Fawley, 1969).

Dykes, generally less than 5.0 meters in true thickness, display well developed chilled contacts and are preferentially orientated subparallel to the bedding. A subordinate dyke set locally truncates both bedding and older dykes at high angles. These intrusive bodies are locally boudinaged and deformed into tight southwest-plunging fold structures.

#### 3.2.1.3 Granodiorite

Moderately foliated hornblende granodiorite forms the dominant rock unit on the extreme southern and western portions of the map area. Planar fabric development is relatively weak and foliation measurements are difficult to obtain. This medium crystalline intrusive appears to be generally homogeneous, does not show widespread quartz veining and lacks significant sulphide or oxide development. Granodiorite exposures occur most commonly on selected topographic highs in the western portions of the property.

#### 3.2.2 Structural Geology

Within the boundaries of the property only general trends have been identified by the mapping completed to date. The massive nature of the limestone precludes an accurate determination of the attitude of the limestone with existing data.

#### 4. 1989 FIELD WORK

During 1989 two programs of exploration work were completed on the Laredo claims. An initial reconnaissance surface sampling, mapping and linecutting program was completed in January, 1989. A follow-up program of diamond drilling and detailed surface sampling was completed in the spring.

#### 4.1 JANUARY PROGRAM

Between January 17 and 29, 1989, Dolmage Campbell Ltd. completed a reconnaissance mapping and surface sampling program in conjunction with preliminary linecutting. A total of 43 chip samples were collected and 5,100 kilometers of line were cut.

For this work access to the site and camp facilities were provided by using a 70 foot tug. All personnel travelled by air to Shearwater, B.C. where they boarded the tug. Due to high wind warnings, the tug was moored at Klantue for two days in transit.

All personnel were demobilized by air from Aristazabal Island.

#### 4.2 SPRING PROGRAM

Between April 21 and May 19, 1989, Dolmage Campbell Ltd. supervised an exploration program of the Laredo property which consisted of linecutting, diamond drilling, core logging, surface sampling and geological mapping.

During this program, Drilcor completed eleven drill holes totalling 304.5 meters of drilling using a gas powered Winkie drill (Table I, Appendix I). Forty-six chip samples were obtained from these holes. (Appendix III).

A grid of cut lines totalling 5,800 meters was laid out to aid in surface sampling and mapping around the drill holes. A total of 60 chip samples were obtained from this phase of the work. (Appendix II).

The drill holes and sample lines were located and tied in to Swan Wooster survey monuments by means of a stadia traverse using a TI-A theodolite.

Due to the rugged bedrock microrelief on the property and the distance of the drill sites from Quarry Bay it was decided to mobilize a tent camp on or near the baseline.

All of the drilling equipment and camp gear was mobilized to the site via coastal freighter (Coastal Ferries) to Beale Bay and thence by helicopter (Vancouver Island Helicopters) to the campsite at 4+00 south on the baseline.

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Support for the site was provided by helicopter from Bella Coola.

All personnel were mobilized to Bella Bella via Waglisla Airlines. From Bella Bella the linecutters and project geologist travelled to the site by helicopter. The drillers and camp cook travelled to the site by float plane (Beaver).

All personnel except the project geologist were demobilized by boat to the Waglisla Air Fish Camp, thence by Beaver to Shearwater and a scheduled run from Shearwater to Vancouver via Waglisla Airlines.

The project geologist completed a regional reconnaissance survey of Aristazabal Island (follow up report) with the helicopter and demobilized through Bella Coola via Wilderness Airlines to Vancouver.

All of the drilling equipment, supplies and camp gear were left on site for future work.

#### LAREDO LIMESTONE LTD. RECORD OF COMPLETED DRILL HOLES

PROJECT: Aristazabal Island

DATE: April - May, 1989

	DATA AI	HOLE CC	LLAR			DIP	TESTS		DATES	DF	ILLIN	LENG	THS (FI	r.)	
Hole No.	Ccordinates	DIP (deg.)	AZIM. (deg.)	Elevat Refer.	ion Ground*	Depth ( <sup>m</sup> ,)	DIP (deg.)	AZIM. ( <sup>deg</sup> )	Start End	Type	From	To	0.B.	B.R.	REMARKS
													*		
L-89-1	0.0N/0.0E	90	-	-	235 'ASL	-	-	-	Apr.25-26	AX	0	100'	0	100'	Limestone.
L-89-2	0.0N/200E	90	-	-	215'	-	-		Apr.27-28	AX	0	100'	0	100'	Limestone.
L-89-3	0.0N-400E	90	-		200'	-	-	-	Apr.28-30	AX	0	100'	0	100'	Blocky
															Ground,
															lower 20'.
L-89-4	0.0N/600E	90	-		215'			-	30-May 2	AX	0	100'	0	100'	Limestone,
															some dikes.
L-89-5	0.0N/800E	90	-		230'		-	-	May 2-3	AX	0	101'	0	101'	Lower 60'
															dolomitic.
L-89-6	0.0N/1000E	90	-	-	220'	-	-	-	May 4-9	AX	0	100'	0	100'	Much waste,
															siltstone.
L-89-7	200S/1000E	90	-	-	250'	-	-	-	May 9-11	AX	0	100'	0	100'	Much waste,
T 00 0	0000 (0000	~~									•		•		siltstone.
L-89-8	2005/800E	90	-	-	235	-	-	-	May 11-12	AX	0	100,	0	100,	Many thin
<b>T</b> 00 0	1000 (0000	~~									•		•		beds waste.
T-88-8	400S/800E	90	-	-	230	-	-	-	May 13-14	AX	0	100'	0	100.	Interbedded
															limestone/
r 00 10	6000 (000p	00			0551				N. 35		•		•		dolomitic.
P-03-10	6005/800E	90		-	255.	-	-	-	May 15	AX	U	17.	U	17.	Collared in
															lg. vert.
7 00 100	(000 /0000	00			0551						~		•		dike.
Г-83-TNY	000S/800E	90		-	255.	-	-	-	May 16	AX	0	8T.	U	8T.	Interbedded
															limestone/
															aolomite.

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#### 5. SAMPLING

#### 5.1 SAMPLING PROCEDURES

During the course of the work standard methods were used to collect samples for analytical purposes.

Composite samples obtained during the January, 1989 sampling program were assembled by taking baseball-sized samples from freshly exposed bedrock at approximately 50 metre intervals over traverse lengths of 250 metres.

Composite detailed surface samples were collected in the spring of 1989 by chipping golf ball sized chips from outcrops at approximately 4 to 5 metre intervals along the sample line. These chips were taken only from limestone but unsampled intervals were noted in the sample log. (Appendix II). Unless otherwise specified, each composite sample was collected over 100 metres of sample line.

Samples were obtained from diamond drill core by taking approximately 1 cm long pieces of core every 10 to 15 cm for up to 7.5 metres of core length. Impure sections less than 0.3 m in length were included in the samples while most intrusive rocks were not. Details of these samples are given in Appendix II.

#### 5.2 ANALYTICAL METHODS

All of the chip samples obtained from the surface and drill hole sampling programs were analyzed by whole rock geochemistry methods for eleven oxides including CaO and MgO and for loss on ignition.

Details of the analytical methods are given in Appendix IV.

#### 6. RESULTS

The results of the analyses on the surface and drill core sampling programs are given in Appendix V. The estimated  $CaCO_3$  content of each sample is given in Figures 2 to 6. These estimates are based upon calculations using atomic weights and the percentage CaO listed in Appendix V.

#### 7.0 DISCUSSION

Based upon the reconnaissance program sampling a general trend in the  $CaCO_3$  content can be defined. The analytical results indicate the existence of three major units trending parallel to measured bedding planes in a broad concave fold open to the northeast. These units strike nearly east-west at the southeasterly limit of the property and nearly north-south in the northwest corner of the property.

The most easterly unit underlying approximately half of the property consists of a high calcite limestone  $(95\% \text{ CaCO}_3)$ . To the south and southwest of this unit the property is underlain by a thick unit of dolomitic limestone  $(80\% \text{ to } 90\% \text{ CaCO}_3)$  approximately 450 metres wide on surface. Sandwiched between the dolomitic limestone and the granodiorite in the extreme south-west and western limits of the property is a unit of limestone  $(90\% \text{ to } 95\% \text{ CaCO}_3)$ .

The average characteristics of these major units are summarized in Table II.

#### TABLE II

#### ARISTAZABAL

#### AVERAGE CHARACTERISTICS OF MAJOR UNITS

Unit	CaCOz	CaCO <sub>z</sub> *MqCO <sub>z</sub> *CaCO <sub>z</sub>			INSOLUBLES		
(%)	(%)	- (9	<b>ž</b> )	SiO <sub>2</sub>	AlO <sub>2</sub>	Fe203	
High Ca Limestone		4.5	99.5	0.4	0.07	0.15	
Dolomitic Limestone	0.08	18.0	98.0	0.2	0.02	0.22	
Limestone	93.5	6.0	99.5	0.3	0.03	0.04	

\* Percentages of CaCO<sub>3</sub> MgCO<sub>3</sub> and CaCO<sub>3</sub> Equivalent are based upon molecular weight conversions from CaO and MgO to CaCO<sub>3</sub> and MgCO<sub>3</sub>. This conversion assumes that all of the CaO and MgO are derived from carbonates. Hence the total percentages including the insolubles and other trace compounds may vary from 99.5% to 100.5%.

#### 8.0 CONCLUSIONS

Assuming continuity of the carbonate beds with depth, the total potential quarryable tonnage of limestone available on the Laredo property is estimated to be in excess of one billion tons. High calcite limestone is estimated to comprise approximately 50% of this tonnage.

Detailed surface sampling and diamond drilling have defined two areas of high Ca limestone and limestone that are immediately available for quarrying. The first area, at sea level around the old quarry, defined by previous drilling and sampling, has been confirmed by results from the present sampling programs. Area 2 was investigated in detail by diamond drilling and surface sampling during the 1989 exploration program. The estimated limestone reserves within these areas are summarized in Table III.

#### TABLE III

			High Ca	·····	<u> </u>
Area	Elevation	Class	Limestone	Limestone	Total
			Tonnes	Tonnes	Tonnes
			(×10 <sup>6</sup> )	(×10 <sup>6</sup> )	(×106)
1	20m	Proven(Z)	8.00	1.50	9.50
2	80m	Proven	2.25	3.00	5.25
<u>Total</u> P	roven Reserv	/es	10.25	4.50	14.75
1	20m	$Probable(^3)$	8.00	2,00	10.00
2	80m	Probable	17.25	18.75	36.00
Total P	robable Rese	rves	25.25	20.75	46.00
Total P	roven and P	robable Reserves	35.50	25.25	60.75

#### (1) ESTIMATED LIMESTONE RESERVES

(1) Reserves estimated for Areas 1 and 2 are within the depth of present investigations, 30 metres from surface.

(2) Proven ore is defined by detailed surface sampling and/or diamond drill samples to a maximum of 100 metres from the sample with a 95% degree of confidence in grade and tonnage.

(3) Probable ore is defined by reconnaisance samples on the same trend as proven ore and areas between blocks of proven ore on the same trend. Probable ore is estimated with a 65% degree of confidence in grade and tonnage.

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## 9.0 <u>COSTS</u>

The total cost of exploration completed on the Laredo property during 1989 was \$111,164.67. A breakdown of these costs is summarized in Table IV and a detailed breakdown is given in Appendix VI.

#### TABLE IV

#### Summary of Costs

Description	January program	<u>April-May</u>	Total
Planning	\$ 1,000.00	\$ 2,650.00	\$ 3,650.00
Mobilization	-	3,000.00	3,000.00
Mapping & Supervision	5,000.00	10,000.00	15,000.00
Diamond Drilling	-	34,484.68	34,484,68
Line Cutting/Labourers	6,200.00	12,000.00	18,200.00
Analytical Costs	1,032.00	2,594.25	3,626,25
Helicopter Support	-	13,124.50	13,124.50
Field Supplies	338.71	-	338.71
Camp Costs	6,000.00	-	6,000.00
Groceries	192.05	1,135.80	1,327.85
Travel Expenses	2,403.63	2,968.72	5,372.35
Freight, communications	-	263.53	263.53
Report Preparation	3,615.68	3,161.12	6,776.80
Total	\$ 25,782.07	\$ 85,382.60	\$111,164.67
	===========	===========	=================

Respectfully submitted, DOLMAGE CAMPBELL LTD. Joe Rotzien, P.Eng. VOIN

#### 10.0 REFERENCES

Baer, A.J. (1972): Bella Coola-Laredo Sound Map Area, British Columbia; Map 1328A, 1:250,000, Geological Survey of Canada, Memoir 372.

Campbell, D.D. (1962) Report on Aristazabal Island Limestone, Hecate Strait, B.C.

De Carlo, M. (1988), Letter report to Laredo Resources Ltd.

Fawley, Dr. A.P. (1988), Letter report to Laredo Resources Ltd.

Fawley, Dr. A.P. (1960) Aristazabal Island Limestone Deposit, British Columbia of Laredo Limestone Ltd.

#### 11.0 STATEMENT OF QUALIFICATIONS

#### J.L. ROTZIEN

I, J.L. Rotzien of Coquitlam, B.C. hereby certify that:

1. I received a Bachelor of Applied Science degree from the University of British Columbia in 1972.

2. I have been practising my profession as a consulting geological engineer since 1974.

3. I am a member of the Association of Professional Engineers of British Columbia.

4. I indirectly supervised the field sampling and mapping program and reviewed the analyses of the marble samples and completed the marble reserve estimate.

5. I own no direct, indirect or contingent interest in any of the subject property nor any shares or securities of Laredo Limestone Ltd., nor do I expect to receive any.

Dated at Vancouver this 15th day of December, 1989

J.L. Rotzien, P.Eng.







91.4

#### NOTE: VERTICAL SCALE EXAGGERATED 5 : 1

#### FOR LEGEND SEE FIGURE No. 2









To accompany a report by Dol	mage Campbell Ltd, June, 1989				
	CAMPBELL LTD. IEERS, VANCOUVER, CANADA				
LAREDO LIN	IESTONE LTD.				
ARISTAZABAL ISLAND PROPERTY					
SECTION C - C' LINE 10+00 EAST					
SCALE : HOR. I : 2000 VER. I : 1000	FIGURE No. 6				





APPENDIX I DIAMOND DRILL CORE LOGS

Coord Elev. Size	. <u>B.L.</u> 0.0 mE 235' ASL AX	Length <u>100'</u> Azimuth Dip 90 <sup>0</sup>	DRILL RECORD - DOLMAGE CAMPBELL LTD.       Page 1 of 2         Project       Laredo Limestone Ltd.       Hole No.       L-89-1         Location       Aristazabal Island, B.C.       Date       April 27, 1989         Purpose       Logged by       R.F. M <sup>C</sup> Intyre			
FOO	TAGE (ft.)			FROM	<u>TO</u>	
FROM	TO	ROCK TYPE	DESCRIPTION		<u>_</u>	
		Note:	Lost Water return, 0.6'			
0	0.6	Limestone	White, coarsely crystalline	0	0.6	-
0.0		•		0.6	3.0	0.6
U.6	1.2	Vold		3.0	4.0	
1 2	<b></b>	<b>.</b> •		4.0	7.0	0.1
1.2	24.5	Limestone	White to sparry. Completely recrystallized. Zoned	7.0	12.0	
			approx. 40% white and massive, 60% of coarsely $(0.3 - 1.0)$	12.0	17.0	-
			cm) crystalline appears greyer due to transparency of the	17.0	22.0	-
			large crystals. Occasional rusty fracture surfaces.	22.0	25.0	-
			fine exercise (delemite2) to should 250 pale greenish-grey	25.0	30.0	-
			fine mystals (dolomite?) to about 25%; also about 1% very	30.0	35.0	-
24 5	39.0	Limestone	Similar to above mainly white and maggine Contains.	35.0	40.0	-
27.0	57.0	milescone	Similar to above, mainly white and massive. Contains	40.0	43.0	
			include very fine dark erystals and eccasional very fine	43.0	4/.0 E0.0	0.1
			discominated purite	47.0	50.0	0.1
39.0	60.5	Limestone	Similar to $1.2 - 24.5$ above Mainly white coarsely	55.0	60.0	
		22.000000000	crystalline At $48.6 - 50.01$ some core ground hale buff	50.0	65.0	_
			calcareous mud on fracture surfaces: no shearing visible	65.0	60 N	_
			Rarely very fine grained disseminated pyrite.	69.0	74.0	
60.5	96.4	Limestone	Similar to 24.5 - 39.0' above. Includes light grey, fine	74.0	79 0	
			grained marble $63.8 - 66.3'$ , $86.6 - 87.9'$ , $89.0 - 91.1'$ .	79.0	84:0-	
			93.4 - 94.1'. Lower 2.3' mottled light to medium grev.	84.0	89.0	
			Minor very fine grained pyrite in narrow bands 60 - 80° to	89.0	94.0	<b>—</b> , ·
			core axis 65.2', 68.2', 74.0', 77.3', 88.8', 89.2', 89.3',	94.0	97.0	_
			91.2', 92.3', 94.4'.			
96.4	96.5	Diorite	Dark grey, fine grained, very thin chill margins. Traces	97.0	100.0	-
			of disseminated pyrite. Some chlorite alteration,			
			non-calcareous.		E.O.H.	

1

e e e e e e e e e e e e e

			Hole No: <u>L-89-1</u>
LEN	GTH		Page: 2 of 2
FROM	TO	ROCK TYPE	DESCRIPTION
96.5	100.0	Limestone	Same as 24.5 - 39.0' above, 3 mm veinlet at 99.5', calcite margins and very soft (H=1), pale grey non-calcareous core.

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		DRILL RECORD - DOLMAGE CAMPBELL LTD.		Page 1 of 1
Coord.B.L. 200 mE Elev. 215' ASL Size AX	Length 100' Azimuth Dip 900	Project <u>Laredo Limestone Ltd.</u> Location <u>Aristazabal Island, B.C.</u> Purpose	Hole No. Date Logged by	L-89-2 April 29, 1989 R.F. M <sup>c</sup> Intyre

				(	ORE LOS	S (ft
FROM	TO	RACK TYPE	DESCRIPTION	FROM	TO	LOS.
		Note.	Lost Water return 1.3!			
0	1.3	Limestone	White, coarsely crystalline	0	2	0.5
			mille, coalsely crystalline	0	2	0.5
1.3	1.8		Void	2	3	
				3	5	-
1.8	10	Limestone	White, coarsely crystalline Lost 0.61 in block, around	2	8	0.3
			Often misty on fracture surfaces - Bisty sono 1 81 - 1 01	0	10	0.3
			offen rabey on fracture suffaces. Musty 20he 1.0 - 1.9".	10	15	
10	53.7	Limestone	White to snarry marsely crystalling (manajonal manajon	15	20	
			white to light grey intervals especially $10 - 20!$ Vor	20	25	
			fine grained pyrite in parrow zones 60-809 to core avia	23	30	-
			23.4 - 23.7! 24.2! 25.8 - 25.9! 27.1! 43.1! and on	30	35	-
			Occasional fracture surfaces Total purite content your	30	40	
			low except $1 = 28$ at 25.8 = 25.9! Dolomitic sections	40	45	
			24.1 - 24.4!, 25.8 - 25.9!	45	50	
43.7	86.5	Limestone	Similar to above but few coarse intervals Commonly		22	·····
			massive to marbley, white to bale grey with occasional	55	60 ·	· -
			medium grey features Traces of purite and purphotite	60 65	70	· · · · · · · · · · · · · · · · · · ·
			$60.2^{\circ}, 64.2^{\circ}, 72.8^{\circ}, 74.5^{\circ}, 78.6^{\circ}, 84.8^{\circ}$ Burito	70	70	·····
			associated with darker markings Also extremely fine	70		
			black mineral on some fracture surfaces o g 62.0!	75	00	
			Unusual soft white mineral (fibrous aggregate?) on	0U 95	00	
			fracture surface 58.5' is flexible while dame	00	90	-
86.5	89.0	Limestone	Light grev, medium to fine grained sugary textured	90	100	
			Dolomitic-reacts much less strongly to acid Minor your	30	TOO T	0.0
			fine grained pyrite throughout		с.0.п.	,
89.0	100.0	Limestone	White to light grev, coarsely crystalline Traces of			
			pyrite $94.9'$ , $96.0'$ , $96.8'$ . Similar to $10 - 43.7'$ above			
		5. C	End of Hole			

		DRILL RECORD - DOLMAGE CAMPBELL LTD.		Page 1 of 2
Coord.B.L.	Length 100'	Project Laredo Limestone Ltd.	Hole No. Date	L-89-3 April 30, 1989
Elev. 200' ASL Size AX	Azimuth Dip 900	Location <u>Aristazabal Island</u> , B.C.	Logged by	R.F. MCIntyre

					ORE LOS	<u>S (ft</u>
FOO	TAGE (ft.)			FROM	TO	LOS
FROM	10	ROCK TYPE	DESCRIPTION			
0		Note: La	ost Water return, 2.0'			
0	26.2	Limestone	White to light grey, variable texture, coarse grained to	0	2	0.4
			massive, often splotched light-medium grey. Some rust on	2	4	1.7
			fractures to 5'. Minor very fine grained pyrite, heavier	4	5	-
			at 22.0 - 22.8'.	5	10	
26.2	26.6	Sulfide Zone	Grey marble with up to 5% sulphides. Mainly pyrite,	10	15	-
			possible pyrrhotite, trace of chalcopyrite. Black and	15	20	-
			brown platy minerals may be biotite-phlogopite. Some	20	25	-
			silicification.	25	30	-
26.6	39.0	Limestone	Same as 0-26.2' above except some light brown zones.	30	35	
			Pyritiferous as 26.2 - 26.6' above at 28.9', traces 33.6',	35	40	_
			34.6', 38.0'.	40	45	-
39.0	56.7	Limestone	Mainly white, massive. Some coarser intervals, some light	45	50	-
			grey marbley bands. Minor pyrite rarely throughout.	50	55	
			Dolomitic 50.9 - 51.3', 54.5 - 54.8'.	55	60	
56.7	70.9	Limestone	White to light grey, coarsely crystalline. Some coarsely	60	65	-
			brecciated sections. Minor sulphides 58.0', 59.0',	65	70	-
			66.6'. Heavier sulphides 58.6 - 58.7', 67.0 - 67.5'.	70	75	_
			Dolomitic 67.0 - 67.5'.	75	80	-
70.9	72.0	Quartz Diorite	Light grey-green. No discernible K-feldspar.	80	85	
			Non-calcareous. Medium to fine grained. Mafics heavily	90	95	
			chloritized. Less than 1% of pyrrhotite and pyrite	95	100	
			disseminated throughout. No distinct chill margins.			
72.0	93.8	Limestone	White to pale grey. Variable, massive to coarse grained		E.O.H.	
			as 0 - 26.2' above. Traces pyrite 77.2'.			
93.8	94.2	Quartz Diorite	Fine to very fine grained, otherwise like 70.9 - 72.0'			
			above. Both margins sharp, core coarser. About 0.5 - 1.0			
			cm very soft (H=1) translucent material on both margins:			
			Non calcareous, non-crystalline, apparantly an alteration			
			selvage.			

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			Hole No:	<u>L-89-3</u>
LEN	KTTH		Page:	2 of 2
FROM	TO	ROCK TYPE	DESCRIPTION	
94.2	100.0	Limestone	White to pale grey, same as 72.0 - 9	3.8' above.

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Page 1 of 2

Coord.	<u>B.L.</u>					Hole No.	L-89-4
	600 mE	Length	100'	Project	Laredo Limestone Ltd.	Date	May 3, 1989
Elev.	200' ASL	Azimut	h	Location	Aristazabal Island, B.C.	. Logged by	R.F. MCIntyre
Size	AX	Dip	900	Purpose		•	

				C	ORE LOSS	S (It
FOOT	TAGE (ft.)			FROM	TO	LOS
FROM	TO	ROCK TYPE	DESCRIPTION			
		Note: Lost Wat	er return, 1.5'			
0	11.7	Limestone	White to light grey, usually very fine grained, often	0	5	2.1
			banded light to medium grey. Void 1.5 - 3.6'. Occasional	5	10	
			minor pyrite. About 25% of section is dolomitic.	10	15	-
11.7	12.6	Diabase Dike	Very fine grained, black, distinct chill margins and	15	20	-
			altered adjacent wall rock.	20	25	0.1
				25	30	0.1
12.6	23.2	Limestone	Same as 0 - 11.7' above. Some sections pale grey, coarse	30	35	0.1
			grained. Occasional rust on fracture surfaces. Some	35	40	-
			dolomitic sections.	40	45	-
23.2	23.8	Diabase Dike	Same as 11.7 - 12.6' above. Traces of pyrite. Broken in	45	50	-
	. –		drilling.	50	55	-
23.8	45	Limestone	Same as 0 - 11.7' above. Mainly light grey, fine grained	55	60	-
			about 25% of section is dolomitic. Occasional coarse	60	65	0.1
	_		intervals. Occasional minor pyrite.	65	70	0.2
45	58.8	Limestone	White to pale grey, coarsely crystalline. No dolomitic	70	75	0.1
			intervals. Occasional minor pyrite, especially 58.0',	75	80	0.1
			58.4'.	80	85	-
58.8	62.1	Diabase-Replacement Zon	e Fine grained, dark grey dike. About 5% fine grained		90 <u></u>	. <del>.</del>
			pyrite throughout. Locally coarse pyrite, especially near	90	95	
			margins and along some fractures shows replacement of	95	100	1.8
			limestone. Possible minor silicification near margins.		1.1	1 at 1, 1
			Includes 0.2' limestone with coarse pyrite 60.4 - 60.6'.			
			During drilling this zone swelled and pinched the rods.		E.O.H.	
62 1	88 0	Limestone	Same as $23.8 - 45'$ above. Tower 8' more heavily handed			
02.01	00.0	milescone	For dolomitic intervals Minor purito 65 4! 79 1! Some			
			Corres contions Randing about 600 to core axis			
88.0	95	Limestone	Light grey coarsely crystalline Minor pyrite 89 8'			
00.0			90.7', 90.8', 91.0', 91.2'.			

			Bole No: <u>L-89-4</u>	
			Page: 2 of 2	
LEN	GTH			
FROM	TO	ROCK TYPE	DESCRIPTION	
95	100	Xenolithic Breccia	Light grey, fine grained diorite intruding dark grey very fine grained diabase. Minor disseminated pyrit throughout. 96.1 - 98.1' lost 1.8', only 0.2' grey limestone recovered. Note: significant chlorite alteration 95 - 99'.	'-black .e

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			DRILL RE	CORD - DOLMAGE CAMPBELL LTD.		Page 1 of 1
Coord.	B.L.				Hole No.	L-89-5
	800 mE	Length 101 '	Project	Laredo Limestone Ltd.	Date	May 3, 1989
Elev.	230' ASL	Azimuth	Location	Aristazabal Island, B.C.	Logged by	R.F. MCIntyre
Size	AX	Dip 900	Purpose			

		·		(	ORE LOSS	3 (ft.
FOOT	AGE (ft.)			FROM	TO	LOST
FROM	TO	ROCK TYPE	DESCRIPTION			
		Note: Had water	r return for entire hole.			
0	40.4	Limestone	White to pale grey, usually massive, very little marbley	0	5	0.3
			texture. Minor pyrite occasional in bands about $40^{\circ}$ to	5	10	0.2
			core axis or disseminated. No dolomitic sections.	10	15	-
				15	20	-
40.4	43.3	Replacement Zone	Grey, sulphide enriched, calcareous. Roughly banded.	20	25	_
			Includes diabase 41.0 - 41.1'. Mainly pyrrhotite (2-3%	25	30	
			over 3') with less than 1% pyrite.	30	35	-
				35	40	-
43.3	85.7	Dolomitic Limestone	Light grey, medium to fine grained. Some sections react	40	45	
			strongly with acid but $+$ 60% is dolomitic, has	45	50	-
			characteristic mottled appearance due to white dolomite	50	55	-
			crystals on pale grey calcite background. Minor pyrite	55	60	
			visible, heavier in dolomitic intervals. Some banding,	60	65	<del>-</del>
			usually 60 - 85 <sup>0</sup> to core axis.	65	70	<b>—</b> <sup>1</sup> A
85.7	97.7	Limestone	White to light grey, coarsely crystalline. Includes some	70	75	0.2
			massive intervals. Pyrite rare.	75	80	· <del>-</del> 11-
				80	85	-
97.7	99.6	Dolomitic Limestone	Same as 43.3 - 85.7' above. He have a second statement of a second	85	90 :	: .
				90	95	0.1
99.6	99.8	Diabase	Very fine grained, dark grey to black. Altered wall rock approx. 3/4" on both margins.	95	101	
					Е.О.Н.	
99.8	101	Dolomitic Limestone	Same as 43.3 - 85.7' above.			

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		DRILL RECORD - DOLMAGE CAMPBELL LTD.		Page 1 of 2
Coord.B.L.			Hole No.	L-89-6
1000 mE	Length 100'	Project Laredo Limestone Ltd.	Date	May 9, 1989
Elev. 220' ASL	Azimuth	Location Aristazabal Island, B.C.	Logged by	R.F. MCIntyre
Size AX	Dip 900	Purpose		<u></u>

				(	ORE LOSS	S (ft
FOO	TAGE (ft.)			FROM	TO	LOS
FROM	TO	ROCK TYPE	DESCRIPTION		ï	
		Note: Had water	return for entire hole.			
0	35.8	Limestone	Light grey to white, mainly coarsely crystalline. Top 11'	0	5	0.2
			blocky drilling. Includes 0.3' brown, fine grained	5	10	0.2
			siltstone 8.0 - 8.3', 65° to core axis. (siderite?) Minor	10	15	0.1
			pyrite bands 60-70 <sup>0</sup> to core axis - 0.8', 4.2', 5.9',	15	20	0.3
			21.4', 18.4', 30.3', 33.7', 34.7'. No visible dolomite.	20	25	0.2
35.8	38.6	Siltstone	Medium to dark grey, very fine grained, slightly	25	30	0.2
			calcareous. Internal structure somewhat chaotic.	30	35	-
			Contacts pyritized, 65° to core axis. Pyrite replacement	35	40	0.5
			zone at 37.8'. Very fine grained pyrrhotite 0.5 - 5%	40	45	0.1
			throughout - this corresponds to the "rusty metasediments"	45	50	0.1
			found in outcrop.	50	55	
38.6	43.2	Limestone and Siltstone	Irregular beds and lumps of siltstone in coarse marble.	55	60	
			Possible slump breccia. Bedding 60 - 850 to core axis.	60	65	
			Lower 0.8' is a replacement zone with pyrite, pyrrhotite	65	70	° <del>-</del> - °
			and large amounts of a very soft (H=1-2), black, amorphous	70	75	-
			mineral (Cuprite or Argentite?) Fine to very fine pyrite	75	80	-
			and pyrrhotite to several percent, sulphides showing	80	85	
			strong affinity for clastic sections	85	90	, <b></b>
43.2	52.7	Limestone	Same as 0 - 35.8' above. Some coarse calcite crystals to	90	95	<b></b>
			+2 cm. Occasional minor pyrite.	95	100 -	-
52.7	79.1	Siltstone	Dark greenish grey, fine grained. Some sections slightly		E.O.H.	•
			calcareous, also occasional irregular limestone inclusions and bed 68.4 - 69.5'. Heavily altered. Internal texture		A ( MARS	
			variable, no original sedimentary structures. Lower (69.5			
			- 79.1') bed somewhat more heavily altered than upper.	-		
			Hard and siliceous. Lower sections show light foliation 50 - 60° to core axis. Secondary hornblende common			
			throughout - rock could be called a greenstone. Very fine, disseminated pyrrhotite 1.5%			

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			Hole No: <u>L-89-6</u>
LEN	GTH		Page: 2 of 2
FROM	TO	ROCK TYPE	DESCRIPTION
			throughout. Pyrite much less common, usually on fracture surfaces. Sphalerite(?) in zones, often with calcite, 55.3', 55.4', 55.7', 61.6', 61.7', 62.0'.
79.1	100.0	Limestone	White to light grey, coarsely crystalline, similar to 0 – 35.8' above. Top 0.4' grey, bedded, impure with "salt and pepper" appearance near contact with siltstone. Next 4' fairly massive, some coarse sections. Occasional minor pyrite and pyrrhotite in faint bands, mostly in top 10'. Bed 96.0 - 96.1' of silty limestone 60° to core axis, about 10 - 15% pyrrhotite with minor pyrite.

		DRILL R	ECORD - DOLMAGE CAMPBELL LTD. Page 1 of 2			
Coord Elev. Size	L.1000mE /200 mS 250' ASL AX	Length <u>100'</u> Project Azimuth Location Dip 90 <sup>0</sup> Purpose	Hole No. L-89-7 Laredo Limestone Ltd. Date May 11, 1989 Aristazabal Island, B.C. Logged by R.F. M <sup>C</sup> Intyre			
FOO	TAGE (ft.)			FRCM	TO	55 (: L
FROM	TO	ROCK TYPE	DESCRIPTION			
0	28.7	Limestone	Variable. White, massive to light grey, coarsely crystalline. Occasional minor pyrrhotite and pyrite. Minor dolomite in some finer grained sections.	0 5 10	5 10 15	0 0.
28.7	30.2	Feldspar Porphyry	Medium to fine subhedral plagioclase in block, very fine groundmass. Moderately hard, non-calcareous, not silicified. Possible chilled margins, texture obscured by	15 20 25	20 25 30	
			marginal alteration and pyritization. Minor pyrite on fracture surfaces and very finely disseminated. Attitude approx. $55 - 60^{\circ}$ to core axis.	30 35 40	35 40 45	- - -
30.2	44.7	Limestone	Mainly light grey, coarsely crystalline. Occasional short, massive intervals. Minor pyrrhotite and pyrite in bands 45 - 60° to core axis 31.5', 35.4', 35.5', 35.7',	45 50 55	50 55 60	
44.7	54.5	Dolomitic Limestone	Medium grey, fine grained, sugary texture. Includes intervals of white to light grey, non-dolomitic limestone - approximately 40% of section. Occasional minor pyrite and pyrrhotito. Bedding in dolomitic sections 60% to core	65 70 75	70 -75 80	
- 54.5	65.6	Siltstone	and pyrhotite. Bedding in dolonitit sections do to core axis. Highly altered bed of metal - sedimentary rock. Upper contact 65° to core axis. Lower contact sheared and altered, 30° to core axis. Mainly dark grey. Lower 1.5'	85 90 95	90 95 - 100	-
65.6	89.2	Limestone	and some fractures altered to light greenish grey and silicified. Some portions slightly calcareous. Minor pyrite visible on fractures throughout. Minor coarse pyrrhotite on lower contact. Variable. Light grey to white, coarse and fine. Includes dolomitic sections, about 20% of total. Finer sections banded, 55 - 65° to core axis, bands often include minor pyrrhotite and pyrite. Some fractures coated with soft, non-calcareous, white to pale blue		- E.O.H	l <b>-</b>

			Hole No: <u>L-89-7</u>
LEN	GTH		Page: 2 of 2
FROM	TO	ROCK TYPE	DESCRIPTION
			mineral, flexible when wet.
89.2	96.0	Siltstone(?)	Origin uncertain, heavily altered, probably metamorphosed siltstone or shale. Greenish black, hard, some silicification. Secondary alteration near fractures. Very heavily altered near both margins with veinlets of soft, green talc-like mineral, heavy pyrrhotite and traces of chalcopyrite. Pyrrhotite visible in heaviest alteration zones, usually with quartz. Minor pyrite on fracture surfaces.
96.0	100.0	Limestone	Same as 65.6 - 89.2' above. Little dolomite.
			End of Hole.

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DRILL RECORD - DOLMAGE CAMPBELL LTD.Page 1 of 2Coord.L. 800E/200 SLength 100'ProjectLaredo Limestone Ltd.Hole No.L-89-8Elev. 235' ASLAzimuthLocationAristazabal Island, B.C.DateMay 14, 1989Size AXDip90°PurposePurposeLocationLocation

<u> </u>					CORE LOS	35 (İt
F007.	TAGE (ft.)		·	FROM	TO	<b>IO</b> ?
FROM	TO	ROCK TYPE	DESCRIPTION			
0	6.6	Dolomitic Limestone	White, mainly dolomitic medium grained. Some rust visible	0	5	0.5
			throughout. Lowest 0.1' bedded with black altered shale,	5	10	-
			55 <sup>0</sup> to core axis.	10	15	0.5
6.6	8.9	Meta-sediments	Very heavily altered with pyrrhotite and pyrite visible	15	20	-
			throughout. Fine grained, hard, slightly calcareous, dark	20	25	-
			grey to dark grey-green. Upper contact 60° to core axis.	25	30	0.1
8.9	12.9	Dolomitic Limestone	Same as 0 - 6.6' above. White to light grey. At 12.6'	30	35	-
			includes minor pyrrhotite and dark green-black secondary	35	40	-
			mineral.	40	45	-
12.9	14.6	Meta-sediments	Same as 6.6 - 8.9' above. Lost 0.5' of core. Badly	45	50	-
			broken in drilling.	50	55	-
14.6	18.4	Limestone	White to light grey, fine grained. Some dolomitic	55	60	
			marble. Pyrrhotite in band at 17.1'.	60	65	
18.4	18.9	Dike?	Medium grey fine grained, hard, very siliceous. Altered -	65	. 70	
			original crystalline texture virtually gone. Original	70	75	. <del>-</del> 1
			composition possibly dacite, possibly sandstone.	75	80	
18.9	51.4	Limestone	Light grey to white, mainly coarsely crystalline.	80	:. 85 .	
			Includes dolomitic limestone 41.7 - 42.9'. Pale	85	90	· —
			bluish-white, non-calcareous, very soft mineral on	90	95	-
			fracture surfaces 22 - 29'. Traces of pyrrhotite and	95	100	<b>-</b>
			pyrite.		5 T - 6	
51.4	55.4	Meta-sediments	Very heavily altered, grey to brownish-grey to greenish		E.O.H	•
			grey. Similar to 6.6 - 8.9' above. Pyrrhotite and pyrite			
			common throughout. Upper contact 850 to core axis, lower			
	6 <b></b> .	- •	contact 40° to core axis.			
55.4	65.2	Limestone	Mainly light grey, fine grained. Some dolomitic			
			sections. Includes gneissic limestone 55.8 - 56.1'.			
			Occasional minor pyrrhotite and pyrite. Vague bedding			
			approximately 600 to core axis.			
65.2	67.3	Gneissic Limestone	White calcite with soft, dark mineral. Foliation $45-60^{\circ}$ to			

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Hole No: L-89-8

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Page: 2 of 2 LENGTH TO ROCK TYPE FROM DESCRIPTION 67.3 69.2 White to light grey, non-dolomitic. Limestone 69.2 69.4 Meta-sediments Same as 51.4 - 55.4' above. 69.4 72.0 Same as 67.3 - 69.2' above. Limestone 72.0 74.6 Meta-sediments Same as 51.4 - 55.4' above. Soft, black mineral, probably same as in gneissic marble, about 10 - 15% of rock near upper contact. 74.6 81.3 White to light grey, coarsely crystalline. Some impurity Limestone 79.8'. 81.3 82.0 Calcareous Dolomite Light grey, medium grained, some calcite present. Granular texture. 82.0 82.8 Same as 18.4 - 18.9' above. Soft, talc-like mineral on Dike? both margins. Fine grained, light grey, heavily altered. 82.8 83.3 Same as 81.3 - 82.0' above. Calcareous Dolomite 83.3 88.6 Limestone Light grey, coarsely crystalline. Dike? Same as 82.0 - 82.8' above. Heavily altered. 88.6 88.9 88.9 91.6 Light grey, coarsely crystalline. Limestone 91.6 94.2 Dike? Fine grained, light-medium grey, heavily altered. May be of sedimentary origin - possible bedding 60 - 65° to core axis. Green alteration products similar to those of meta-sediments, may have been guartz-rich sandstone, or heavily altered acidic intrusive. Occasional pyrrhotite and pyrite visible throughout. 94.2 100.0 Calcareous Dolomite Medium grained, light grey to white, granular texture. Some calcite present. Occasional minor pyrrhotite and pyrite. Upper 0.4' more calcareous.

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		DRILL RECORD - DOLMAGE CAMPBELL LTD.		Page 1 of 1
Coord.L. 800mE			Hole No.	<u>I-89-9</u>
/400mS	Length 100'	Project Laredo Limestone Ltd.	Date	May 14, 1989
Elev. 230' ASL	Azimuth	Location Aristazabal Island, B.C.	Logged by	R.F. MCIntyre
Size AX	Dip 900	Purpose		

······					CORE LO	SS (f
FOO	TAGE (ft.)			FROM	TO	<u> </u>
FROM	10	ROCK TYPE	DESCRIPTION			
0	13.0	Limestone	Light grey to white, mainly coarsely crystalline. Some	0	5	-
			vague banding approx. 60° to core axis. Non-dolomitic.	5	10	
			No visible sulphides.	10	15	0.
13.0	14.4	Dolomitic Limestone	Light grey, medium grained. Includes some more calcareous	15	20	-
	06.4		intervals.	20	25	
14.4	26.4	Limestone	Variable light grey to white, mainly coarsely crystalline	25	30	-
			with some fine, massive intervals, occasional dolomitic	30	35	-
			zones. Includes 20.95 - 21.00' siliceous band 50° to core	35	40	-
			axis - possible altered acid dike or thin sandstone bed.	40	45	-
26.4	28.3	Dolomitic Limestone	Grey to white, medium grained, granular texture. Includes	45	50	0.
<u></u>	27.0	<b>.</b> .	some calcareous zones.	50	. 55	-
28.3	37.8	Limestone	White to light grey, mainly medium to fine grained, often	55	60	0.
<b>77</b> 0	10.0		massive. Includes some dolomitic zones.	60	65	0.1
37.8	46.0	Dolomitic Limestone	Same as 26.4 - 28.3' above. Some sections 1 - 2%	65		-
			pyrrhotite with minor pyrite. Includes some calcareous	70		0.
10 0	51 0	*	zones.	75		_
40.0	51.9	Limestone	Grey and white, often mottled, usually coarsely states	80	2085	U.,·
510	64 0	Timeshava	crystalline. Includes some dolomitic limestone.	85	- 90	
51.9	04.0	Limestone	Variable coarse to fine grained, medium grey to white.	90	95	0.0
			includes about 50% doiomittic limestone. Occasional minor	95	100	-
			Some banding 40 w 600 be some avia White to make some			•
64.8	80.8	Limostono	Some banding, 40 - 60° to core axis.white to pare grey,		E.O.H	i
04.0	00.0	millescolle	white genes and small amounts of delemite			
80.8	100 0	Polomitia Limostopo	White zones and shall anounts of dolonite.			
00.0	100.0	broattie mastone	calcaroous zones and some intermals of fairly pure grou			
			Granular dolomito. Some banding 40 - 550 to core axis but			
			normally massive granular			
			End of Hole			

			DRILL RECORD - DOLMAGE CAMPBELL LTD. Page 1 of 1			
Ccord Elev. Size	L. 800E/ 600mS 255' ASL AX	Length <u>17'</u> Azimuth Dip 90 <sup>0</sup>	Project <u>Laredo Limestone Ltd.</u> Location <u>Aristazabal Island, B.C.</u> Purpose <u>Hole No. I-89-10</u> Date <u>May 17, 1989</u> Logged by <u>R.F. M<sup>C</sup>Intyre</u>			
				C	DRE LOSS	<del>5 (f</del>
FOO	TAGE (ft.)			FROM	TO	LC
FROM	TO	ROCK TYPE	DESCRIPTION			
0	12.2	Intrusive?	Dark greenish grey with vaguely crystalline texture. Metamorphic rock of uncertain parentage. Surface form	0	10	0.
			suggests an old dike, about 10m thick, roughly vertical,	10	15	0.
			striking about 120°. True Top 1.5' grey, weathered. Rock	15	17	-
			sulphides - both consistent features of the similar appearing meta-siltstone of previous drill holes. No foliations or laminations.		E.O.H.	•
12.2	17					

End of Hole.

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3		3 3 3	3 3 3 3 3 3 3 3 3	ł	ţ	ţ
Ccord Elev. Size	L. 800E/ 600mS 255' ASL AX	DRILL R Length <u>81'</u> Project Azimuth Location Dip 90° Purpose	ECORD - DOLMAGE CAMPBELL LTD. Page 1 of <u>2</u> Hole No. <u>L-89-10A</u> Date May 17, 1989 Logged by R.F. M <sup>C</sup> Intyre			
					MPF IN	<u>cs (f</u>
FOO	TAGE (ft.)			FROM	TO	$\frac{1}{21}$
FROM	TO	ROCK TYPE	DESCRIPTION			<u></u>
0	24.2	Limestone	Extremely variable. Coarse and fine, white to medium grey, some sections dolomitic. At 3.5 to 5.0' contains dark grey to black inclusions. Occasional minor pyrrhotite and pyrite, especially 11.3'. Some sections lightly brecciated. Rubble at 0.5 - 1.3', 1.8 - 2.3'. No	0 5 10 15 20	5 10 15 20 25	1. 0. 0. -
24.2	25.2	Granodiorite	Dike. Medium to fine grained, grey. Margins 40° and 60° to core axis, no chill zonation. Not strongly altered,	30 35 40	35 40 45	0.
25.2	32.7	Limestone	Light grey to white, mainly fine grained. Minor dolomite present.	45 50	50 55	-
32.7	34.0	Calcareous Dolomite	Light grey, medium grained, granular texture to massive.	55	60	-
34.0	35.0	Granodiorite	Dike. Only 0.2' of rubble recovered. Same as 24.2 - ( 25.2' above.	50 55	65 70	· •••
35.0	39.5	Calcareous Dolomite	Same as 32.7 - 34.0' above. Light grey, massive to granular, medium grained.	70 ° 75 ·	75 80	- 0.
39.5	46.9	Limestone	Same as 25.2 - 32.7' above.	30	<b>81</b>	
46.9	58.7	Calcareous Dolomite	Same as 35.0 - 39.5' above. Includes short intervals of			· . ·
58.7	65.9	Limestone	Mainly light grey, fine grained. Some white zones, some coarser sections. Includes short intervals of dolomite,		E.U.I	1.
65.9	70.0	Calcareous Dolomite	Top 2.5' same as dolomite units above. Lower section increasingly calcareous, contains black impurities.			
70.0	71.0	Siltstone	Bedding approximately 50° to core axis. Heavily altered metasediment. Chlorite and epidote at upper contact. Color green to grey to brown. Minor pyrite on fractures. Minor pyrrhotite disseminated in rock. Intruded by siliceous material.			

Hole No:	L-89-10A
Page:	2 OI 2

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LENGTH DESCRIPTION ROCK TYPE FROM TO Light grey, same as 24.2 - 25.2' above. Variable fine to 71.0 71.6 Granodiorite coarse grained. Same as 70.0 - 71.0' above. Intruded along fractures. Siltstone 71.6 72.5 Less altered than previous bed. Coarse grained. Contains thin biotite books greater than 72.5 72.8 Granodiorite 1 cm across. Similar to 71.6 - 72.8' above but more massive, mainly 72.8 75.4 Siltstone brownish grey. Contains coarser white, soft, non-calcareous crystals. Rock mainly hard, silicified. Coarse. Same as 72.5 - 72.8' above, 45° to core axis. 75.4 75.9 Granodiorite Same as 72.8 - 75.4' above. Lower 2' fractured, rubbly. 75.9 81.0 Siltstone

APPENDIX II SURFACE SAMPLE LOG

#### Page 1 of 2

DATE: 24 January 1909 COMPANY. Datedo Encescone Edd. Thouley. Alistatabal Island	

Sample								Sample	True	Assay	
Number	Type	Location	From	To(m)		Description		Width	Width		
62201	ŝ	T15+00 F	10+009		Marhle			Spot	_	CaO.MgO.SiOn.AloO.	FeaDaLOI
62201	CP CD	T15+00 E	11+005		n			Spot		"	""
62202	Ср ~	TT2+00 E	12+002	12+500	n			50m	-	81	
62203	Cp C	TT2+00 E	13+000	12+303	11			Spot	_	**	11
62204	Cp Co	T12+00 E	15+005		11			Spot	-	85	11
62205	Ср С	LT2+00 E	16+005		n			Spot		11	11
62200	Cp Co	T10+00 E	37266	1+750	**			140m	-	**	11
62207	Ср С	L10+00 E	5+000	4+122	н			160m	_	et .	11
62200	CP CD	TT0+00 E	12+405	01005	17			Spot	-	**	67
62209	Cp Cp	10+00 E	1/1+0.00		11			Spot		10	89
62210	ср Ср	L10+00 E	11+005		n			Spot	-	**	16
62211	Cp Cp	110+00 E	10+005		N			Spot	_	**	19
62212	CP CD	TT0+00 E	0+005		n			Spot		**	**
62213	CP CD	L10+00 E	8+005		n	_		Spot	_	**	11
62214	Cp S	L10+00 E	13+005		\$1			Spot		"	11
62251	Cp Ch	LL0+00 B	2+755	5+005	п			225m		1 <b>H</b>	88
62252	CP CD		7+759	8+705	п			50m		• <b>1</b> • • • • • • • • • • • • • • • • • • •	11
62253	Cp Cp	110+00 W	9+005	10+305	п			60m	· ·	<b>11</b>	14
62253	CP CP	TJUTUU M	12+555	14+305	n		· ·	.80m	- <u>-</u>		11
62255	Č,	T10+00 W	15+305	17+755	n			50m	сал — с С <b>—</b> — у		II .
62255	CP CD	110+00 W	17+005	10+009	n			50m		n an	<b>H</b>
62257	Cp Cn	110+00 W	19+905	171700	Marble	with dyke rocks		Spot		H	18
62257	CP CD	T30+00 G	6+300	8+80W	Marhle			110m	· 🛶 '	89	11
62250	Cp Cp	120+00 S	5+00w	6+00W	"			50m	-	"	17
62233	℃p ∽	120100 D	15+005	17+505	п			230m			19
62260	Cp Cp	L 5+00 W I 5+00 W	12+505	15+005	11			210m	-	н	11
62201	$\tilde{c}_{\mathcal{D}}$	I 5+00 W	10+005	12+505	n			260m	-	40	18
62262	CP CD	I 5+00 W	7+505	10+005	п			250m	-	11	11
62261	~ ~	T 5±00 W	5+009	7+505	n			200m	-	72	81
62265	CP CP	1. 0+00 F	17+509	20+005	Marhle	with metasediments		280m	-	58	11
62265	CP CD	L 0+00 E	12+509	15+005	Marble			280m	-	11	11
02200	СÞ		12,000	10.000				_ • • • • •			

#### Page 2 of 2

DATE: 24 January 1989 COMPANY: Laredo Limestone Ltd.

PROJECT: Aristazabal Island

						Sample	True	Ass	say
Sample	Type	Location	From	To(m)	Description	Width	Width		
Number 62267 62268 62269 62270 62271 62272 62273 62274 62275 62276 62277 62277	17 29 29 29 29 29 29 29 29 29 29 29 29 29	L 0+00 E L 0+00 E L 0+00 E L 0+00 E L 0+00 E L 5+00 E	10+00S 7+70S 5+00S 2+50S 0+00S 2+50S 5+00S 6+20S 7+50S 10+00S 12+50S 15+00S	12+50S 10+00S 7+50S 5+00S 2+50S 5+00S 6+20S 7+50S 10+00S 12+50S 15+00S 17+50S	Marble " " Marble with dyke rocks Marble " "	250m 200m 235m 275m 200m 205m 200m 190m 230m 220m 250m 220m	-	CaO, MgO, SiO <sub>2</sub> , A " " " " " " " " " "	4203 <sup>Fe203</sup> LOI " " " " " " " " "

#### DRILL HOLE SAMPLE RECORD - DOLMAGE CAMPBELL LTD.

#### Page 1 of 2

DATE:	April-	May, 1989	COMPA	NY: Lar	lo Limestone Ltd. PR	ROJECT:	Arista	azabal Island	
Sample Number	Туре	Location	From	То	Sa Description Wi	ample idth	True Width	••••••••••••••••••••••••••••••••••••••	
2701	Core	DDH-L-89-1	0	25	Limestone 25	5'	-	CaO,MgO,SiO <sub>2</sub> ,Al	03Fe203LOI
2702	Core	п	25	50	" 25	5'	-	"	2 J "2 J
2703	Core	n	50	75	• 25	5'	-	69	11
2704	Core	**	75	100	" 25	5'	-	11	ŧī
2705	Core	DDH-L-89-2	0	25	Limestone 25	5'	-	61	11
2706	Core	n n	25	50	25	5'	-	19	n
2707	Core	n	50	75	" 25	5'	-	63	<b>61</b>
2708	Core	IF	75	100	" 25	5'	-	n	"
2709	Core	DDH-1-89-3	0	25	Limestone 25	5'	-	10	II
2710	Core	"	25	50	25	5'	-	11	<b>H</b>
2711	Core	n	50	75	Limestone Diorite 70.9-72.0' not 24 sampled.	4'	-	*1	11
2712	C	ore	11		75 100 Limestone 25	5'	-	**	н
2712	Core	DDH-L-89-4	0	25	Limestone. Diabase intervals not 24 sampled.	4'	-	n	IJ
2714	Core	11	25	50	Limestone 25	5'	-	11	TI
2715	Core	**	50	75	Limestone. Diabase 58.8 - 62.1' not 21 sampled.	1.5'	-	- 11	
2716	Core	11	75	95	Limestone. Intrusives 95-100' not 20 sampled.	0"-	-	ада <b>П</b> аналанан алар	
2717	Core	DDH-1-89-5	0	20	Limestone 20	01 .		, <b>H</b>	H
2718	Core	"	20	40.4	Limestone 20	0.4'	-		n in sta
2719	Core	11	40.4	43.3	Replacement Zone 2.	.9'	-	<b>11</b>	н
2720	Core	11	43.3	65.0	Limestone - Dolomitic 21	1.7'	-	11	R
2721	Core	81	65.0	85.7	Limestone - Dolomitic 20	0.7'	-	11	н
2722	Core	п	85.7	101	Limestone 15	5.3'		11	н
2722	Core	DDH-I-89-6	0	35.8	Limestone 35	5.8'	-	0T	n
2724	Core	"	35.8	38.6	Siltstone. High in pyrrhotite. 2.	.81	-	п	11
2725	Core	**	38.6	43.2	Limestone and siltstone, heavy 4.	6'	-	"	85
2726	Core	11	43.2	52.7	sulphides 9.	.5'	_	16	"

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#### DRILL HOLE SAMPLE RECORD - DOLMAGE CAMPBELL LTD.

#### Page 2 of 2

DATE: April-May, 1989		May, 1989	COMPA	NY: Lar	edo Limestone Ltd.	PROJECT: Aristazabal Island					
Sample Number	Туре	Location	From	To	Description	Sample Width	True Width		· · · · · · · · · · · · · · · · · · ·		
2727	Core	DDH-L-89-6	52.7	79.1	Siltstone. High in pyrrhotite.	26.5'	_	CaO, MgO, SiO, Al	0-Fe-O-LOI		
2728	Core	n	79.1	100.0	Limestone	20.9'	-	" " "	2 3 <mark>1</mark> 2 3		
2729	Core	DDH-L-89-7	0	28.7	Limestone	28.7'		n	11		
		n	28.7	30.2	Not sampled.	1.5'	-	u	17		
2730	Core	n	30.2	44.7	Limestone	14.5'	-	11	<b>H</b>		
2731	Core	n	44.7	54.5	Dolomitic Limestone	9.8	-	11	11		
2732	Core	n	54.5	65.6	Siltstone	11.1'	-	n	11		
2733	Core	M	65.6	89.2	Limestone	23.6'	-	11	<b>11</b>		
2734	Core	n	89.2	96.0	Meta-siltstone	6.8'	-	87	11		
2735	Core	DDH-L-89-7	96.0	100.0	Limestone	4.0'	-		н		
2736	Core	DDH-L-89-8	0	18.9	Dolomitic Limestone interbedded w/3 waste zones	18.9'	-	17	n		
2737	Core	n	18.9	51.4	Limestone	32.5'	-	n			
2738	Core	п	51.4	74.6	Limestone interbedded w/4 waste	23.2'	-	11			
2739	Core	n	74.6	100.0	Dolomitic Limestone interbedded w/3 waste zones.	25.2'	-	N ·			
2740	Core	DDH-L-89-9	0	26.4	Limestone, some dolomite.	26.4'		e de la companya de l			
2741	Core	n	26.4	46.0	Dolomitic Limestone	19.6'	-	Π.	M Constant		
2742	Core	11	46.0	80.8	Limestone, some dolomite	34.8'					
2743	Core	n	80.8	100.0	Dolomitic Limestone	19.2'	-	n	to service and service		
2744	Core	DDH-L-89-10A	0	24.2	Limestone	24.2'		· · · · · · · · · · · · · · · · · ·	0		
2745	Core	n	25.2	46.9	Limestone and dolomite.	21.7'	-	IJ	IT		
2746	Core			46.9	70.0 Dolomite and Limestone.	23.1'	-	11	11		

APPENDIX III

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DRILL CORE SAMPLE LOG

## Page 1 of 3

DATE:	April-	-May, 1989	COMP	ANY: Lar	edo Limestone Ltd.	PROJECT	: Arista	azabal Island	
Sample Number	Type	Location	From	To(m)	Description	Sample Width	True Width		
4401 4402	Chip Chip	Baseline	200mW		Limestone. Sml bed metaseds, 180mW.	100m	-	CaO,MgO,SiO <sub>2</sub> ,Al <sub>2</sub> O	3Fe203LOI
4403	Chip	Baseline		100mF	Limestone No subgroup 15 50-5	TOOM	-		11 - 12
4404	Chip	Baseline	100mE	200mF	Limestone. No outcrop 15-50mE.	100m	-		
4405	Chip	Line 0.0mE	200mS	100ms	Limestone No outgron 100, 165-0		-	"	
			200112	TOOND	Diorite 160-130ms	. 100m	-		
4406	Chip	Line 0.0mE	100mS	0.0mS	Limestone. 1-2m dike @ 100ms	100m	_	11	21
4407	Chip	Line 0.0mE	0.0mN	100mN	Limestone.	100m	-	II.	11
4408	Chip	Line 0.OmE	100mN	200mN	Limestone. Im dike, 160mN, strike	e 100m	-		11
4409	Chip	Line 200mE	200mS	100mS	Limestone.	100-	_		*1
4410	Chip	Line 200mE	100mS	0.0mS	Limestone	100m	-		
4411	Chip	Line 200mE	0.OmN	100mN	Limestone	100m	_	11	11
4412	Chip	Line 200mE	100mN	200mN	Limestone.	100m	_		
4413	Chip	L. 400mE	200mS	100mS	Limestone.	100m	-		
4414	Chip	L. 400mE	100mS	0.0mS	Limestone.	100m		IT	н
4415	Chip	L. 400mE	0.OmN	100mN	Limestone.	100m	-	H	17
4416	Chip	L. 400mE	100mN	200mN	Limestone.	100m			- -
4417	Chip	B.L.	200mE	300mE	Limestone.	100m		. 11.	ti a secondaria de la composición de la compos
4418	Chip	B.L.	300mE	400mE	Limestone.	100m	-		
4419	Chip	B.L.	400mE	500mE	Limestone.	100m	-	- <del>H</del> = ···	11
4420	Chip	B.L.	500mE	600mE	Limestone.	100m	-	1	H .
4421	Chip	L. 600mE	200mS	100mS	Limestone. Narrow dike 170mS, brg 1200.	100m		II .	11
4422	Chip	L. 600mE	100mS	0.OmS	Limestone.	100m	-	"	11
4423	Chip	L. 600mE	0.0mN	100mN	Limestone.	100m	_	10	"
4424	Chip	L. 600mE	100mN	200mN	Limestone.	100m	-	11	11
4425	Chip	L. 800mE	200mS	100mS	Limestone. No outcrop 150-175mS.	100m	-	11	11
					Sml pods rusty meta-seds 120mS.	200.00			
4426	Chip	L. 800mE	100mS	0.OmS	Limestone. Commonly dolomitic. Meta-seds commonrecessive weathering 70-20mS.	50m (app	rox.)		

#### Page 2 of 3

DATE: April-May, 1989 COMPANY: Laredo Limestone Ltd. PROJECT: Aristazabal Island

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Sample Number	Туре	Location	From	To(m)	De	scription			Sample Width	True Width			
4427	Chip	L. 800mE	0.0mN	100mN	Limestone.				100m	-	CaO,MqO,Si	$D_{2}$ , Al <sub>2</sub> $O_{2}$	e-0-IOI
4428	Chip	L. 800mE	100mN	200mN	Limestone.				100m	-		2. 23	n <sup>2</sup> 3
4429	Chip	B.L.	600mE	700mE	Limestone.				100m	-	••		π
4430	Chip	B.L.	700mE	800mE	Limestone.				100m	-	t1		
4431	Chip	B.L.	800mE	900mE	Limestone,	commonly	dolomi	tic poor	100m	-	11		n
	-				exposures	810-840m sc	arse m	eta-seds.					
4432	Chip	B.L.	400mE	1000mE	Limestone, 900-950mE.	quite	2	dolomitic	100m				
4433	Chip	B.L.	1000mE	1100mE	Limestone,	exposures	spotty	•	100m	-	11		11
4434	Chip	B.L.	1100mE	1140mE	Limestone.	Meta-seds	1140-	1200E not	40m	-	"		17
	-				sampled.								
4435		Chip L.	1000mE	6	200mS	100mS	L	imestone.	100m				
4436	Chip	L. 1000mE	100mS	0.0mS	Limestone. brg 305 <sup>0</sup> .	Dark gre	y dike	35-40mS,	100m	-	**		17
4437	Chip	11	0.0mN	100mN	Limestone. brg 040°.	Dark gre	y dike	50-70mN,	100m				
4438	Chip	11	100mN	200mN	Limestone.				100m	-	11		11
4439	Chip	L. 200mS	1100mE	1200mE	Limestone.	Some dolo	mitic s	sections.	100m		· · ·		
4440	Chip	11	1000mE	1100mE	Limestone.				100m		11		n
4441	Chip	n	900mE	1000mE	Limestone.				100m		···· · · ····	4.271	in and a second s
4442	Chip	п	800mE	900mE	Limestone.	Some dolo	mitic s	sections.	100m	<b>—</b>		··	<b>N</b>
4443	Chip	п	700mE	800mE	Limestone.	Rusty di	ike 3-5	5 m wide	100m				n
	-				brg 1000 @	700mE.							
4444	Chip	11	600mE	70 0mE	Limestone.				100m	-	11		11
4445	Chip	L. 1000mE	200mS	300mS	Limestone.	Commonly	dolomit	cic.	100m	-	11		n
4446	Chip	11	300mS	400mS	Limestone.	Dolomitic	320 -	400mS.	100m	-	11		16
4447	Chip	L. 800mE	200mS	300mS	Limestone.	lm dike	brg 13	50/900 @	100m	-	**		13
	-				270mS		2	, -					
4448	Chip	n	300mS	400mS	Limestone.				100m	-	87		11
4449	Chip	Π	400mS	500mS	Limestone. 480mS.	3 m. dil	ke brg.	. 180 <sup>0</sup> @	100m	-	17		n

#### Page 3 of 3

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DATE:	DATE: April-May, 1989		COMPA	NY: Lare	do Limestone Ltd.	PROJECT: Aristazabal Island						
Sample Number	Type	Location	From	To(m)	Description	Sample Width	True Width					
4450	Chip	L. 800mE	500mS	600mS	Limestone 2m dike brg 1100/900 @ 510mS.	100m	-	CaO,MgO,SiO2,Al2	3Fe203LOI			
1851	Chip	L. 400MS	600mE	700mE	Limestone. 5m Granodiorite dike, brg 115° @ 600-620mE.	80m	-	n	If			
1852	Chip	11	700mE	800mE	Limestone.	100m	-	М				
1853	Chip	n	800mE	900mE	Limestone. Some dolomitic sections.	100m	-	rt	11			
1854	Chip	n	900mE	1000mE	Limestone. Dolomitic 925-1000mE.	100m						
1855	Chip	L. 600mS	600mE	700mE	Limestone. Dolomitic 600-660E.	100m	-	n				
1856	Chip	**	700mE	800mE	Limestone. Commonly dolomitic 2m dike brg 100° @ 780mE.	100m	-	n				
1857	Chip	**	800mE	900mE	Limestone. Dolomitic sections. Lq. dike parallel line, 800-850mE.	100m	-	n				
1858	Chip	IT	900mE	1000mE	Limestone. Several dikes, attitude?	100m	-	π	11			
1859	Chip	L. 800mE	600mS	700mS	Limestone.	100m	-	Π	**			
1860	Chip	"	700mS	800mS	Limestone.	100m						

# APPENDIX IV ANALYTICAL METHODS

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Rock Geochem Ring - Chemex Code 205 Assay Ring - Chemex Code 208

Entire sample is crushed in jaw crusher to approximately 3/4". Sample is then crushed in gyratory cone crusher to approximately 1/8", split in Jones Riffler to approximately 150-200 gms. and pulverized using zirconia rings to approximately 100 mesh.

#### WHOLE ROCK ANALYSIS

A 0.1 g sample is added to 0.7 g of lithium metaborate flux, mixed well and fused in a furnace at 1050 degrees C. The bead is dissolved in 100 ml of 4 % HN03 and this solution is analyzed by inductively coupled plasma-atomic emission spectroscopy (ICP-AES).

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#### METHOD FOR LOSS ON IGNITION

A porcelain crucible is cleaned and dried in an oven at 105 degrees C. The crucible is cooled and the weight recorded. A 1.0 g sample is weighed into the crucible and the weight recorded.

The sample is ashed for one hour in a furnace at 1000 degrees C and then placed into a dessicator and cooled. The ashed sample is weighed and loss on ignition calculated.

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## APPENDIX V

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## ANALYTICAL RESULTS



# Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER. BRITISH COLIMBIA. CANADA V7J-2CI

PHONE (604) 984-0221

TO POLMAGE CAMPRELL & ACOPCIATES, LTD 1970 - 1055 W. HASTINGS ST. VANCOUVER, BC V6E 2E9 Project : LAREDO LIMESTONE

Pare, No. 1 1 1 JUL. Pages. 2 Date :16-FEB-89 Invoice # :1-8911199 P.O. # :NONE

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# CERTIFICATE OF ANALYSIS A8911199

SAMPLE DESCRIPTION	PREP CODE	SiO2 %	A1 2O3 %	Fe 2O3 %	MgO %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MhO %	BaO %	LOI %	TOTAL %
62201 62202 62203 62204 62205	248 232 248 232 248 232 248 232 248 232 248 232	0.90 0.60 0.50 0.20 1.00	0.20 0.10 0.20 0.07 < 0.01	0.40 0.30 1.00 0.30 0.03	1.75 1.83 2.11 1.98 1.75	53.58 53.38 52.38 54.62 53.90	0.06 0.04 0.02 0.02 0.03	0.13 0.06 0.13 0.12 0.02	0.02 0.01 0.03 0.01 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.01 0.01 0.01 0.01 0.01	0.00	2 42.43 1 42.69 1 41.13 1 42.88 1 42.32	99.51 99.04 97.53 100.25 99.10
62206 62207 62208 62209 62210	248         232           248         232           248         232           248         232           248         232           248         232           248         232	0.30 0.60 0.30 0.20 0.20	0.05 0.05 0.05 0.03 < 0.01	0.06 0.05 < 0.01 < 0.01 < 0.01	1.14 1.69 1.15 1.62 2.68	55.07 52.72 55.93 55.34 53.00	0.03 0.03 0.02 0.07 0.02	0.05 0.04 0.05 0.02 < 0.01	0.01 0.01 0.01 0.01 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.02 0.01 0.01 0.01 < 0.01 < 0.01	0.0 0.0 0.0 0.0	43.26 42.77 42.69 42.89 42.53	100.00 97.99 100.25 100.20 98.50
62211 62212 62213 62214 62215	248 232 248 232 248 232 248 232 248 232 248 232	0.20 0.20 < 0.01 0.40 0.60	0.02 0.02 < 0.01 0.06 0.02	0.01 < 0.01 < 0.01 0.02 0.03	2.94 0.38 0.90 1.53 2.48	50.37 53.72 55.64 53.49 52.38	0.03 0.03 0.02 0.02 0.02	< 0.01 0.02 0.02 0.05 0.05	0.01 0.01 < 0.01 0.01 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.01 < 0.01 0.01 0.01 0.01	0.0 0.0 0.0 0.0 0.0	43.27 42.42 41.92 42.74 42.74 42.93	96.89 96.84 98.57 98.35 98.54
62251 62252 62253 62254 62255	248 232 248 232 248 232 248 232 248 232 248 232 248 232	0.10 0.20 < 0.01 0.01 0.05	< 0.01 0.02 < 0.01 < 0.01 < 0.01 < 0.01	0.10 < 0.01 < 0.01 0.02 < 0.01	10.83 1.45 1.45 5.42 1.42	43.21 52.54 50.09 48.76 53.94	$ \begin{array}{c} 0.01 \\ 0.02 \\ < 0.01 \\ 0.01 \\ 0.01 \end{array} $	0.02 0.01 < 0.01 0.03 0.04	< 0.01 0.01 < 0.01 < 0.01 < 0.01 0.01	<pre>&lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	$\begin{array}{c} 0.01\\ 0.01\\ 0.01\\ < 0.01\\ 0.01\\ 0.01\end{array}$	0.01 0.01 0.01 0.01 0.01	44.28 42.78 45.70 43.46 42.63	98.60 97.07 97.33 97.76 98.15
62256 62257 62258 62259 62260	248         232           248         232           248         232           248         232           248         232           248         232           248         232           248         232	0.30 57.30 0.30 0.40 0.90	0.09 15.60 0.04 0.09 0.02	0.09 5.30 0.08 0.20 0.06	3.22 1.57 3.27 13.92 2.11	51.90 6.08 52.65 38.28 52.41	0.01 4.60 0.03 0.02 0.02	0.10 4.77 0.15 0.18 0.16	0.01 1.27 0.01 0.01 0.01	< 0.01 0.39 < 0.01 < 0.01 < 0.01	0.01 0.07 0.01 0.01 0.01	0.01 0.18 0.01 0.01	42.94 2.69 42.97 44.62 41.76	98.69 99.82 99.53 97.75 97.48
62261 62262 62263 62264 62265	248         232           248         232           248         232           248         232           248         232           248         232           248         232	0.02 0.20 0.20 0.50 8.80	< 0.01 0.01 0.02 0.01 3.00	0.05 0.20 0.10 0.20 1.40	3.73 12.99 8.30 7.34 6.44	52.37 42.99 46.34 47.57 41.34	0.01 0.02 0.01 0.02 0.70	0.17 0.19 0.21 0.22 0.42	0.01 0.01 0.01 0.01 0.14	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.01 0.01 0.01 0.01 0.05	0.01 0.01 0.01 0.01 0.03	42.55 42.12 42.90 43.04 36.67	98.95 98.76 98.12 98.94 99.00
62266 62267 62268 62269 62270	248 232 248 232 248 232 248 232 248 232 248 232 248 232	0.10 0.20 < 0.01 0.10 0.10	0.02 0.03 < 0.01 0.01 < 0.01	0.20 0.20 0.07 0.05 0.09	11.00 9.05 3.36 0.89 2.61	41.90 45.52 54.03 54.69 53.60	0.02 0.01 0.01 0.02 0.02	0.21 0.21 0.20 0.25 0.24	0.01 0.01 0.01 0.01 0.01 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.02 0.02 0.01 0.01 0.01	0.01 0.01 0.01 0.01 0.01	45.66 44.14 42.65 43.12 43.53	99.16 99.41 100.40 99.17 100.25
62271 62272 62273 62273 62274 62275	248         232           248         232           248         232           248         232           248         232           248         232           248         232	0.10 1.10 47.60 0.70 0.60	< 0.01 0.30 18.20 0.20 0.10	0.09 0.20 7.00 0.30 0.20	1.89 3.87 1.29 3.74 2.93	54.60 51.00 10.90 49.59 52.69	0.01 0.02 4.00 0.05 0.04	0.24 0.25 1.78 0.29 0.25	0.01 0.02 2.62 0.04 0.02	< 0.01 < 0.01 0.11 < 0.01 < 0.01	0.01 0.01 0.05 0.01 0.01	0.01 0.01 0.06 0.01 0.01	43.28 43.01 5.44 45.37 43.33	100.25 99.80 99.05 100.30 100.20

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#### e a Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE .. NORTH VANCOUVER. BRITISH COLUMBIA, CANADA V7J-2C1 PHONE (604) 984-0221

VANCOUVER, BC V6E 2E9 Project : LAREDO LIMESTONE Comments:

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# CERTIFICATE OF ANALYSIS A8911199

SAMPLE DESCRIPTION	P C	REP ODE	SiO2 %	AI 2O3 %	Fc2O3 %	MgO %	CaO %	Na 20 %	K2O %	TiO2 %	P2O5 %	MinO %	BaO %	LOI %	TOTAL %	
62276 62277 62278	248 248 248	232 232 232	0.30 0.09 0.20	0.09 0.01 0.05	0.20 0.10 0.07	3.94 7.11 2.78	48.18 44.84 50.72	0.03 0.02 0.02	0.24 0.23 0.21	0.01 0.01 0.01	< 0.01 < 0.01 < 0.01	0.01 0.01 0.02	0.01 0.01 0.03	43.49 44.31 42.59	96.51 96.75 96.71	
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# Chemex Labs Ltd.

Analytical Chemists \* Geochamists \* Registered Assayers 212 BROOKSBANK AVE , NURTH VANCOUVER, BRITISH COLUMBIA, CANADA V7,J-2C1 PHONE (604) 984-\*221

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# CERTIFICATE OF ANALYSIS A8916641

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SAMPLE DESCRIPTION	PREP CODE	SiO2 %	A1 2O3 I %	Fe2O3	MgO Fe	CaO %	Na 2O %	К2О %	TiO2 %	P2O5 %	MhO %	BaO %	LOI %	тотаl %
1851 1852 1853 1854 1855	248 200 248 200 248 200 248 200 248 200 248 200	0 43 0 50 0 48 0 67 0 39	0.02 0.05 0.05 < 0.01 0.04	0 - 23 0 - 09 0 - 08 0 - 21 0 - 30	6 - 60 3 - 10 3 - 95 6 - 68 14 - 32	47.31 50.82 51.83 46.89 38.32	0.06 0.10 0.11 0.05 0.05	0.02 < 0.01 < 0.01 0.02 0.02	<pre>&lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	< 0.01 < 0.01 < 0.01 0.01 0.02	0.01 < 0.01 < 0.01 0.01 0.01	0 01 0 01 0 01 0 01 0 01	42.51 42.53 40.91 42.67 44.07	97.21 97.23 97.46 97.23 97.56
1856 1857 1858 1859 1860	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.36 1.13 0.58 3.40 2.28	0.03 0.02 0.02 1.46 0.04	0.27 0.27 0.24 0.40 0.33	9.91 5.82 5.13 7.78 8.02	43.84 48.86 49.61 44.87 46.01	0.07 0.08 0.08 0.11 0.08	0.02 0.02 0.01 0.04 0.02	< 0.01 < 0.01 < 0.01 < 0.07 < 0.01	0.03 0.03 0.03 0.03 0.06 0.05	0.01 0.01 0.01 0.01 0.01 0.02	0.01 0.02 0.01 0.02 0.01	43.29 41.73 42.30 40.43 41.72	97.85 97.99 98.03 98.65 98.59
2701 2702 2703 2704 2705	248 200 248 200 248 200 248 200 248 200 248 200	0.44 0.27 0.29 0.28 0.17	< 0.01 0.02 0.02 < 0.01 < 0.01	$ \begin{array}{r} 0.10 \\ < 0.01 \\ < 0.01 \\ 0.06 \\ 0.07 \end{array} $	3.19 1.98 4.03 3.41 1.84	51.30 52.97 50.15 51.07 53.02	0.09 0.09 0.09 0.05 0.05		<pre>&lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	$ \begin{array}{r} 0 & 01 \\ < 0 & 01 \\ < 0 & 01 \\ < 0 & 01 \\ < 0 & 01 \\ < 0 & 01 \end{array} $	41.87 41.60 42.79 42.86 41.91	97.04 96.99 97.42 97.79 97.13
2706 2707 2708 2709 2710	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.06 0.08 0.09 0.40 0.42	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 0.07	< 0.01 < 0.01 0.05 0.06 0.17	0.68 2.13 3.37 2.55 3.47	54.37 53.52 51.92 52.60 50.69	0.02 0.05 0.07 0.04 0.10	0.01 0.01 0.01 0.01 0.01 0.05	< 0 01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	<pre>&lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 0.01 < 0.01 0.01	41.83 41.25 41.74 41.85 42.57	97.03 97.10 97.29 97.56 97.57
2711 2712 2713 2714 2715	248         200           248         200           248         200           248         200           248         200           248         200           248         200	2.98 1.75 0.68 0.27 0.34	0.53 0.20 < 0.01 0.02 0.04	0.15 0.02 0.15 0.24 0.23	4.70 3.03 4.66 6.09 1.74	47.04 50.21 49.23 47.74 52.79	0.17 0.11 0.05 0.08 0.07	0.28 0.13 0.03 0.02 0.01	< 0 01 < 0 01 < 0 01 < 0 01 < 0 01 < 0 01	<pre>&lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	< 0.01 < 0.01 0.01 0.01 0.01	0 01 0 01 < 0 01 0 01 0 01	41.37 41.89 42.15 42.77 42.08	97.26 97.38 97.00 97.26 97.33
2716 2717 2718 2719 2720	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.42 0.18 0.20 5.10 1.55	$ \begin{array}{r} 0.07 \\ < 0.01 \\ < 0.01 \\ 2.11 \\ 0.14 \end{array} $	0.08 0.12 0.16 4.49 0.28	2.57 4.46 3.98 11.03 14.74	52.08 50.38 50.48 37.96 37.49	0.10 0.07 0.08 0.10 0.09	< 0.01 0.01 0.01 0.34 0.03	< 0.01 < 0.01 < 0.01 0.27 0.01	< 0.01 < 0.01 < 0.01 < 0.01 0.05 0.01	< 0.01 0.01 0.01 0.02 0.01	0.01 0.01 0.01 0.01 0.01 0.01	41.77 42.32 42.42 31.99 42.75	97.14 97.59 97.38 93.47 97.10
2721 2722 2723 2724 2725	248         200           248         200           248         200           248         200           248         200           248         200	0.39 0.93 0.73 42.49 15.77	0.08 0.31 0.23 14.06 5.57	0 38 0 30 0 27 10 24 6 29	10.39 6.57 1.31 3.55 1.17	42.30 46.31 52.34 14.15 36.99	0.08 0.15 0.10 3.65 1.35	0.03 0.03 0.06 1.26 0.42	< 0.01 0.01 < 0.01 2.05 0.79	0.01 0.03 0.01 0.24 0.09	0.02 0.01 0.01 0.06 0.06	0.01 0.01 0.01 0.03 0.02	43.55 42.53 42.01 6.98 22.59	97.25 97.19 97.07 98.76 91.10
2726 2727 2728 2729 2730	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.60 41 13 0.62 0.79 0.23	0.09 13.64 0.16 0.04 0.05	0.42 11.59 0.57 0.16 0.29	1.97 3.19 2.04 2.14 1.30	51.42 16.38 52.92 53.34 55.06	0.12 3.47 0.14 0.11 0.12	0.02 0.64 0.03 0.01 0.01		< 0.01 0.25 < 0.01 0.01 0.05	0.02 0.18 0.01 < 0.01 0.01	0.01 0.05 0.01 0.01 0.01	42.72 5.78 41.64 40.52 40.62	97.41 98.31 98.16 97.15 97.76



ex 2 Analytical Chemists \* Geochemists \* Registered Asseyers

212 BROOKSBANK AVE . NORTH VANCOUVER. BRITISH COLUMBIA. CANADA V7J-2C1

PHONE (684) 984-0221

1970 - 1055 W. HASTINGS ST. VANCOUVER, BC	ÿ	Date ::02-JUN-89 Invoice #:I-8916641
VOE 2E9 Project :		P.O. # :NONE
Comments:		

CERTIFICATE OF ANALYSIS A8916641

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SAMPLE DESCRIPTION	PREP CODE	SiO2 %	A1 203 %	Fe2O3 %	М <del>с</del> О %	OeC ئ	Na 20 : %	K2O %	TiO2 %	P2O5 %	MhO %	BaO %	101 %	TOTAL To
2731 2732 2733 2734 2735	248 200 248 200 248 200 248 200 248 200 248 200 248 200	1.19 51.17 0.51 46.23 0.83	0.17 17.05 0.10 14.24 0.18	0.33 6.99 0.30 11.41 0.38	10.58 4.15 5.17 7.19 2.91	43.93 10.31 49.17 13.56 53.99	0.14 3.66 0.12 2.38 0.13	0.02 1.95 0.02 0.16 0.02	<pre>&lt; 0.01 0.77 &lt; 0.01 1.43 0.01</pre>	0.04 0.25 0.04 0.20 0.03	0.01 0.11 0.01 0.15 0.01	0.01 0.08 0.01 0.03 0.01	43.24 2.82 43.97 2.18 42.58	99.67 99.31 99.43 99.16 101.05
2736 2737 2738 2739 2740	248         200           248         200           248         200           248         200           248         200           248         200           248         200           248         200	12.34 0.49 14.76 12.06 2.39	3.58 0.06 4.90 2.40 0.35	2.40 0.12 2.45 0.42 0.07	10.95 1.91 5.56 6.16 3.44	35.20 52.33 36.84 39.33 50.26	0.57 0.12 1.12 0.57 0.13	0.37 0.01 0.62 0.96 < 0.01	0.37 < 0.01 0.39 0.02 < 0.01	0.08 0.02 0.11 0.02 < 0.01	0.05 0.01 0.04 0.02 < 0.01	0.01 0.01 0.03 0.02 0.01	34.32 42.71 31.14 36.46 40.87	100 25 97 79 97 95 98 44 97 56
2741 2742 2743 2744 2745	2+8         200           2+8         200           2+8         200           2+8         200           2+8         200           2+8         200	0 81 0.28 0.38 2.11 2.53	0.09 0.03 0.06 0.04 0.22	0.47 0.06 0.23 0.27 0.12	9.98 4.87 13.92 9.05 7.71	42.67 49.34 38.63 43.73 46.29	0.12 0.08 0.12 0.12 0.12	0.01 < 0.01 0.02 0.01 0.10	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.03 < 0.01 0.03 0.02 0.03	0.02 < 0.01 0.01 0.01 < 0.01	0.01 < 0.01 0.01 0.01 0.01	43.21 42.60 44.03 42.16 41.39	97.43 97.31 97.44 97.54 98.54
2746 4401 4402 4403 4404	2+8         200           248         200           248         200           248         200           248         200           248         200           248         200	0.51 1.33 3.29 0.31 0.18	0.09 0.21 0.03 0.05 0.04	0.21 0.25 0.08 0.08 0.08	13.43 6.45 2.13 2.40 1.91	40.40 48.34 52.33 53.32 54.35	0.10 0.12 0.10 0.09 0.08	0.02 0.01 0.02 0.02 0.01	< 0.01 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.04 0.06 0.04 0.03 0.04	0.01 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.01 < 0.01 0.01 < 0.01 < 0.01 < 0.01	44.01 42.71 40.30 42.88 42.98	98.84 99.50 98.34 99.21 99.69
4405 4406 4407 4408 4409	248         200           248         200           248         200           248         200           248         200           248         200           248         200	1.04 0.65 6.44 0.49 0.78	0.11 0.04 1.03 0.07 0.07	0.14 0.07 0.10 0.12 0.11	3.14 1.46 2.17 2.27 3.02	51.93 54.33 49.05 53.49 52.78	0.09 0.09 0.22 0.09 0.09	0.01 0.01 0.56 0.01 0.01	<pre>&lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	0.03 0.03 < 0.01 < 0.01 < 0.01	0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 0.01 < 0.01 < 0.01 < 0.01	43.08 43.11 39.06 42.32 42.64	99.59 99.82 98.67 98.90 99.53
4410 4411 4412 4413 4414	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.18 0.23 0.55 0.88 2.87	0.05 0.05 0.10 0.11 0.41	0.08 0.09 0.18 0.13 0.05	1.15 1.71 1.60 3.11 4.85	55.28 54.43 53.86 52.31 47.39	0.09 0.10 0.08 0.09 0.18	0.01 0.01 0.02 0.02 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 < 0.01 0.01 < 0.01	< 0.01 0.01 < 0.01 < 0.01 < 0.01 0.01	42.59 42.82 43.16 43.15 41.65	99.46 99.47 99.59 99.83 97.45
4415 4416 4417 4418 4419	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.46 0.19 0.16 0.25 0.24	$ \begin{array}{c} 0.09 \\ 0.06 \\ 0.01 \\ < 0.01 \\ < 0.01 \\ < 0.01 \end{array} $		3.i1 2.05 3.48 1.64 2.78	52.70 53.72 52.30 54.57 53.24	0.12 0.08 0.06 0.06 0.05	0.02 0.01 0.01 0.01 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	$\begin{array}{c} 0.01 \\ < 0.01 \\ < 0.01 \\ < 0.01 \\ < 0.01 \\ < 0.01 \end{array}$	42.76 43.44 42.41 43.01 43.54	99.46 99.72 98.47 99.60 99.92
4420 4421 4422 4423 4424	248         200           248         200           248         200           248         200           248         200           248         200           248         200	0.23 0.21 6.48 0.53 0.40	<pre>&lt; 0.01 0.02 1.26 0.07 0.01</pre>	< 0.01 0.03 0.09 0.01 0.03	3.77 4.91 2.36 2.88 1.96	51 94 50 45 48 68 53 09 53 45	0.05 0.06 0.47 0.07 0.09	$\begin{array}{c} 0.01 \\ 0.01 \\ 0.48 \\ 0.02 \\ < 0.01 \end{array}$	< 0.01 < 0.01 0.01 < 0.01 < 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 0.01	0.01 0.01 0.01 0.01 <0.01 <0.01	< 0.01 < 0.01 0.01 < 0.01 < 0.01	43.24 43.92 39.81 41.05 41.29	99.30 99.65 99.66 97.76 97.28
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# Chemex Labs Ltd.

212 BROOKSBANK AVE NORTH VANCOUVER BRITISH COLUMBIA, CANADA V7J-2C1 PHONE (604) 984-0221

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# CERTIFICATE OF ANALYSIS A8916641

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SAMPLE DESCRIPTION	PREP CODE	SiO2 %	A1 2O3 %	Fe2O3 %	MgO %	CaO %	Na 20 %	K2O %	ТіО2 %	P2O5 %	MnO 70	BaO %	101 %	TOTAL Fe	
4425 4426 4427 4428 4429	248 200 248 200 248 200 248 200 248 200 248 200 248 200	0.30 16.22 5.04 0.39 0.28	0.03 3.58 0.79 0.11 0.03	0.12 0.55 0.19 0.23 0.10	6 91 4 63 3 76 4 72 4 59	47.21 38.05 49.66 53.32 49.55	0.09 1.04 0.24 0.09 0.08	< 0.01 0.89 0.33 0.02 < 0.01	< 0.01 0.03 0.01 < 0.01 < 0.01	0.01 0.0- < 0.01 0.01	0.01 0.02 0.01 0.01 0.01	< 0.01 0.01 0.01 < 0.01 < 0.01	43.30 33.42 39.89 42.20 43.05	98.00 98.47 99.94 101.10 97.73	
++30 ++31 ++32 ++33 ++34	248         200           248         200           248         200           248         200           248         200           248         200	0.46 4.12 4.95 0.47 2.35	0.16 1.20 0.75 0.05 0.05	0.20 0.62 0.12 0.21 0.64	4.14 13.93 3.17 1.84 4.40	53.86 36.29 51.72 51.90 51.23	0.09 0.28 0.26 0.10 0.09	0.01 0.35 0.26 0.01 0.01	< 0 01 0.07 0 01 < 0 01 < 0.01	0.01 0.0- < 0.01 0.01 < 0.01	0.01 0.02 0.01 0.02 0.02 0.02	0.01 0.05 0.01 0.01 0.01	42.26 41.72 40.05 42.36 41.43	101.20 98.69 101.30 97.00 100.25	
++35 ++36 ++37 ++38 ++39	2+8         200           248         200           248         200           248         200           248         200           248         200           248         200           248         200	1.94 0.35 4.55 0.30 0.79	0.29 0.04 0.90 0.04 0.05	0.07 0.06 0.12 0.13 0.16	1 89 2 90 1 74 6 87 8 66	54.67 54.52 53.20 50.50 47.22	0.13 0.08 0.27 0.08 0.08	0.14 0.01 0.42 0.01 0.01	< 0 01 < 0 01 < 0 01 < 0 01 < 0 01 < 0 01	0.01 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.01 < 0.01 0.01 0.01 0.02	$ \begin{array}{r} 0.01 \\ < 0.01 \\ 0.02 \\ < 0.01 \\ < 0.01 \\ < 0.01 \end{array} $	41 60 42.06 40.12 42.98 43.33	100.75 100.05 101.35 100.95 100.35	
+++0 +++1 +++2 +++3 ++++	2+8         200           2+8         200           2+8         200           2+8         200           2+8         200           2+8         200           2+8         200	1 . 35 0 . 42 0 . 26 0 . 42 0 . 15	0.21 0.04 0.03 0.03 0.02	0.09 0.04 0.11 0.10 0.03	3.41 2.87 6.30 4.09 3.46	52.65 54.96 49.87 53.87 53.83	0.14 0.09 0.08 0.08 0.08	0.05 0.01 0.01 0.01 0.01 0.01	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01	<pre>&lt; 0.01 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01 &lt; 0.01</pre>	0.01 < 0.01 0.01 0.01 < 0.01	0.01 0.01 < 0.01 < 0.01 < 0.01 < 0.01	42.93 41.66 42.46 42.47 42.11	100.85 100.15 99.16 101.10 99.73	
+++5 +++6 ++47 ++48 ++49	2 48         200           2 48         200           2 48         200           2 48         200           2 48         200           2 48         200	0.37 0.56 0.20 0.82 0.22	0.02 0.02 0.03 0.02 0.01	0.10 0.18 0.07 0.04 0.05	6.96 10.08 5.31 4.82 1.53	49.12 44.89 50.93 51.65 55.58	0.07 0.07 0.08 0.07 0.08	0.01 0.01 0.01 0.01 0.01 0.01	<pre>&lt; 0 01 &lt; 0 01 &lt; 0 01 &lt; 0 01 &lt; 0 01 &lt; 0 01</pre>	< 0.01 < 0.01 < 0.01 < 0.01 < 0.01 < 0.01	0.01 0.02 0.01 < 0.01 < 0.01	< 0.01 < 0.01 0.01 < 0.01 < 0.01	42.83 42.42 41.28 40.41 41.59	99.51 98.28 97.94 97.87 99.10	
4450	248 200	0.29	0.02	0.06	4.75	51.87	0.07	0.01	< 0.01	< 0.01	0.01	< 0.01	43.32	100.45	
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#### APPENDIX VI

DETAILED BREAKDOWN OF EXPLORATION COSTS

#### January Site Work Geological Mapping and Line Cutting

Planning and Organization	400		
M. Macfadven 1 day @ \$400	400 400		
J.A. Chamberlain .5 day @ \$400	200	\$	1,000.00
Geological Mapping M. Macfadyen & J. Oliver			
5 days travel @ \$400	2,000		
4 days standby @ \$150	600		
6 days mapping @ \$400	2,400	\$	5,000.00
Line Cutting (2 man crew) 2 days travel @ \$400	800		
2 days standby @ \$300	600		
8 days linecutting @ \$600	4,800	\$	6,200.00
Camp Costs - Nitnat Chief Charter		\$	6,000.00
GEOCHEMICAL ANALYSES			
43 samples @ \$24.00/sample		\$	1,032.00
FIELD SUPPLIES		\$	338.71
GROCERIES		\$	192.05
TRAVEL EXPENSES (see following for deta	ils)	\$	2,403.63
REPORT PREPARATION M.A. Macfadyen 2 days @ \$400.00 J.L. Rotzien 3.5 days @ \$400.00 J.A. Chamberlain 0.5 days @ \$500.00	800.00 1,400.00 250.00		
Drafting, printing, communication	1,165.68	<u>\$</u>	3,615.68
Total Exploration Expense		\$	25.782.07
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#### TRAVEL EXPENSES

Geologists fly to Shearwater January 17. Overnight at Shearwater and board Nitnat Chief 2 days standby. Return to Vancouver - Charter to Shearwater 25th. Overnight at Shearwater. Fly to Vancouver 26th.

Linecutters. Travel to Aristazabal same as geologists. Return via Nitnat Chief on 28th. Overnight Shearwater, Sea Ferry to Bella Bella.

Air Transportation	1,522.40	
Water Transportation	56.00	
Land Transportation	67.50	
Excess baggage	251.85	
Hotels and Meals	505.88	\$ 2,403.63

# Spring Site Work

Planning and Organization J. Rotzien 5 days @ \$400 J.A. Chamberlain 1.3 days @ \$500 Mobilization (Coast Ferries Ltd.)		\$ 2,000.00 \$ 650.00 \$ 3,000.00
Diamond Drilling (Drilcor) 304.5 metres @ \$54.25 per metre plus rates for reaming, camp charges, con materials etc. 10% Management Fee	hourly sumable \$31,349.71 <u>\$3,134.97</u>	\$ 34,484.68
Analytical (Chemex) 46 surface core samples 60 surface samples Samples @ \$24.25 Sample bags	\$ 2,570.50 \$ 23.75	\$ 2,594.25
Site Supervision, Core Logging and sampling, surface sampling J. Rotzien 4 days @ \$400 R. MacIntyre Apr. 20-May 18 28 days @ \$300 Helpers, linecutters etc. 2 man crew (Donegal Developments April 21-May 18 20 crew days @ \$600	\$ 1,600.00 \$ 8,400.00	\$ 10,000.00 \$ 12,000.00
Helicopter support (Vancouver Island Travel Expenses (incl. overnight) Groceries for camp Freight, communications	Helicopters)	\$ 13,124.50 \$ 2,968.72 \$ 1,135.80 \$ 263.53
REPORT PREPARATION J.L. Rotzien 6.5 days @ \$400 Drafting, Printing, etc.		\$ 2,600.00 \$ 561.12
Total Exploration Expenses		\$ 85,382.60
TOTAL EXPLORATION EXPENSES		\$111,164.67

