

LOG NO: 1011	RD.
ACTION:	
FILE NO:	

ARBOR RESOURCES INC.

FILMED

GEOLOGICAL AND GEOCHEMICAL
 REPORT ON THE LINDA CLAIM
 ATLIN MINING DIVISION, B.C.
 NTS 104N/12E

BY
 L. DANDY, B.Sc., F.G.A.C.,
 HUGHES LANG EXPLORATIONS LTD.

SEPTEMBER 1989

GEOLOGICAL BRANCH
 ASSESSMENT REPORT
 19,159

CLAIM NAME	UNITS	RECORD NO.	ANNIVERSARY DATE
LINDA	6	3465	SEPTEMBER 26

LOCATION: 59°32' NORTH LATITUDE-133°39' WEST LONGITUDE
 OPERATOR: ARBOR RESOURCES INC.
 OWNER: ARBOR RESOURCES INC.
 PROJECT GEOLOGIST: LINDA DANDY, B.Sc., HUGHES LANG
 EXPLORATIONS LTD.

**ARBOR RESOURCES INC.
GEOLOGICAL AND GEOCHEMICAL
REPORT ON THE LINDA CLAIM
ATLIN MINING DIVISION, B.C.
NTS 104N/12E**

SUMMARY

The Linda claim is a road accessible lode gold property located approximately 4 kilometres southeast of the town of Atlin in northwestern British Columbia. No work had been done on the property prior to 1989. During the 1989 field season, a geological mapping survey was conducted on the property. Four rock chip samples of quartz veins and shear zones were collected during the course of the mapping. All four samples contained elevated gold and silver values.

Rock types encountered on the property are primarily sediments of the Cache Creek Group, although the northeast corner of the claim is underlain by ultramafic rocks. In the Atlin area, gold is known to be found in quartz veins which are marginal to ultramafic bodies; therefore, this property has an excellent potential for gold mineralization.

TABLE OF CONTENTS

	PAGE
SUMMARY	i
TABLE OF CONTENTS	ii
FIGURES AND TABLES	iii
1. INTRODUCTION	1
1.1 LOCATION AND ACCESS	1
1.2 PHYSIOGRAPHY, VEGETATION, AND CLIMATE	2
1.3 CLAIM INFORMATION	5
1.4 HISTORY	5
1.5 WORK DONE BY ARBOR RESOURCES INC. IN 1989	7
2. GEOLOGY	8
2.1 REGIONAL GEOLOGY	8
2.2 PROPERTY GEOLOGY	8
2.3 ECONOMIC GEOLOGY	9
3. GEOCHEMISTRY	9
3.1 ROCK CHIP SAMPLING	9
3.1.1 SAMPLING AND SAMPLE TREATMENT	9
3.1.2 DISCUSSION OF RESULTS	12
4. CONCLUSIONS	12
REFERENCES	13
STATEMENT OF QUALIFICATIONS	14
COSTS STATEMENT	15
APPENDIX	16

FIGURES

	PAGE
FIGURE 1 LOCATION MAP 1:2,000,000	3
2 CLAIM MAP 1:50,000	4
3 REGIONAL GEOLOGY MAP 1:50,000	10
4 PROPERTY GEOLOGY AND ROCK SAMPLE LOCATION MAP 1:10,000	11

TABLES

TABLE I CLAIM STATUS	5
TABLE II GOLD RECOVERY FROM PRODUCTIVE CREEKS IN THE ATLIN AREA, 1898 TO 1946	7
TABLE III ROCK SAMPLE DESCRIPTIONS AND RESULTS	12

APPENDIX

ROCK SAMPLE RESULTS, CHEMEX LABS LTD, CERTIFICATE OF ANALYSIS	APPENDIX A
--	------------

**ARBOR RESOURCES INC.
GEOLOGICAL AND GEOCHEMICAL
REPORT ON THE
LINDA CLAIM**

1. INTRODUCTION

The Linda claim is a lode-gold prospect located in the historic Atlin Placer Camp in northwestern British Columbia (Figure 1). The claim was staked in 1983 after both Yukon Revenue Mines Ltd. and Standard Gold Mines Ltd. reported gold values obtained from quartz veins within or adjacent to ultramafic bodies. These discoveries in the Atlin area led to the staking of many new claims.

No work had been done on the property prior to 1989, although the claim has been held since 1983. In 1989, geological mapping was done on the claim, and four rock samples were collected. The mapping showed sediments of the Cache Creek Group to be intruded by ultramafics in the northeast corner of the property. All four rock samples returned elevated levels of gold and silver.

1.1 LOCATION AND ACCESS

The Linda claim is located within the Atlin Placer Camp, which consists of about 380 square kilometres of mountainous country, in the Atlin Mining Division in northwestern British Columbia. This placer area is east of Atlin which is centrally located on the east side of Atlin Lake. The area trends northeastward and is approximately 26 kilometres long and 20 kilometres wide. Most of the area is drained to the west by Fourth of July Creek in the north, Pine and Spruce Creeks in the central portion, and McKee and Eldorado Creeks in the south. The eastern portion of the district is drained by the north flowing Snake, Otter, and Wright Creeks and the south flowing Birch, Boulder and Ruby Creeks, and the east and south flowing Feather and Slate Creeks.

Atlin is, and has been since the early days of the Klondike Gold Rush of 1897 and 1898, the principal population and supply centre of northwestern British Columbia. It is approximately 150 kilometres south of Whitehorse, the capital and principal Yukon city. Atlin, since 1949, has had a road connecting it with Jake's Corner on the Alaska Highway in the Yukon Territory. This road is open all year except for short periods when some of the hills are iced over. From Jake's Corner another road goes to Carcross, Y.T. The Alaska Highway extends from Dawson Creek, B.C., to Whitehorse, Y.T., and beyond to Alaska and is open all year. Both Carcross and Whitehorse are on the White Pass and Yukon Railway line, which extends from Skagway, U.S.A. to Whitehorse; however, at present the railroad is not in service.

Skagway is the terminus for several coastal lines; and, until the closure of the rail line in late 1982, most heavy freight to the area went by boat to Skagway, thence by train to Carcross and thence by truck to Atlin. Now that the White Pass and Yukon Railway is closed all heavy cargo must be transported by truck from Skagway or from the east along the Alaska Highway. For passengers travelling to the area, it is best to fly to Whitehorse and go from there to Atlin by plane, car, or bus. Whitehorse is served by scheduled flights from both Vancouver and Edmonton. Planes for charter trips are available at Atlin, Whitehorse, Dease Lake and Lower Post on the Dease River. Helicopters are available in Atlin on a year round basis.

The Linda claim is located in the west-central portion of the placer district approximately 4 kilometres southeast of Atlin on N.T.S. Mapsheet 104N/12E. Terrestrial coordinates for the centre of the claim group are 59°32' North Latitude and 133°39' West Longitude.

Within the area roads extend to all the placer creeks. The roads are in good condition except in the eastern part of the area where the roads are considered to be low-maintenance summer roads. The Linda claim is accessible from Atlin via the Warm Bay road which follows the east side of Atlin Lake south from the town of Atlin. The Warm Bay road roughly parallels the western edge of the claim, and is a good all-weather road.

1.2 PHYSIOGRAPHY, VEGETATION, AND CLIMATE

The Atlin area is located just east of the Coast Mountains on the Teslin Plateau. The town of Atlin lies on the east shore of Atlin Lake, the largest natural lake in British Columbia, at an elevation of 670 metres (2,200 feet). The topography is moderately rugged with slopes of up to 30° rising from the Pine Creek Valley floor at an elevation of 822 metres (2,700 feet) to mountains well over 1830 metres (6,000 feet). On the Linda claim, elevation ranges from 900 metres (3,000 feet) to 1300 metres (4,300 feet) in the northeast.

The tree line is at approximately 1280 metres (4,200 feet) on north facing slopes and 1220 metres (4,000 feet) on south facing slopes. Below 1220 metres, the valleys are forested with lodgepole pine, black spruce, aspen and dwarf birch. Mountain alder and willow grow near streams with stunted buckbrush covering the hills above tree line.

Atlin enjoys a pleasant summer climate with temperatures averaging 20°C and little precipitation. Winter temperatures average -15°C in January with moderate snowfall. Total annual precipitation averages 279.4 millimetres of moisture. "Winter" conditions can be expected from October to April.

ARBOR RESOURCES INC.

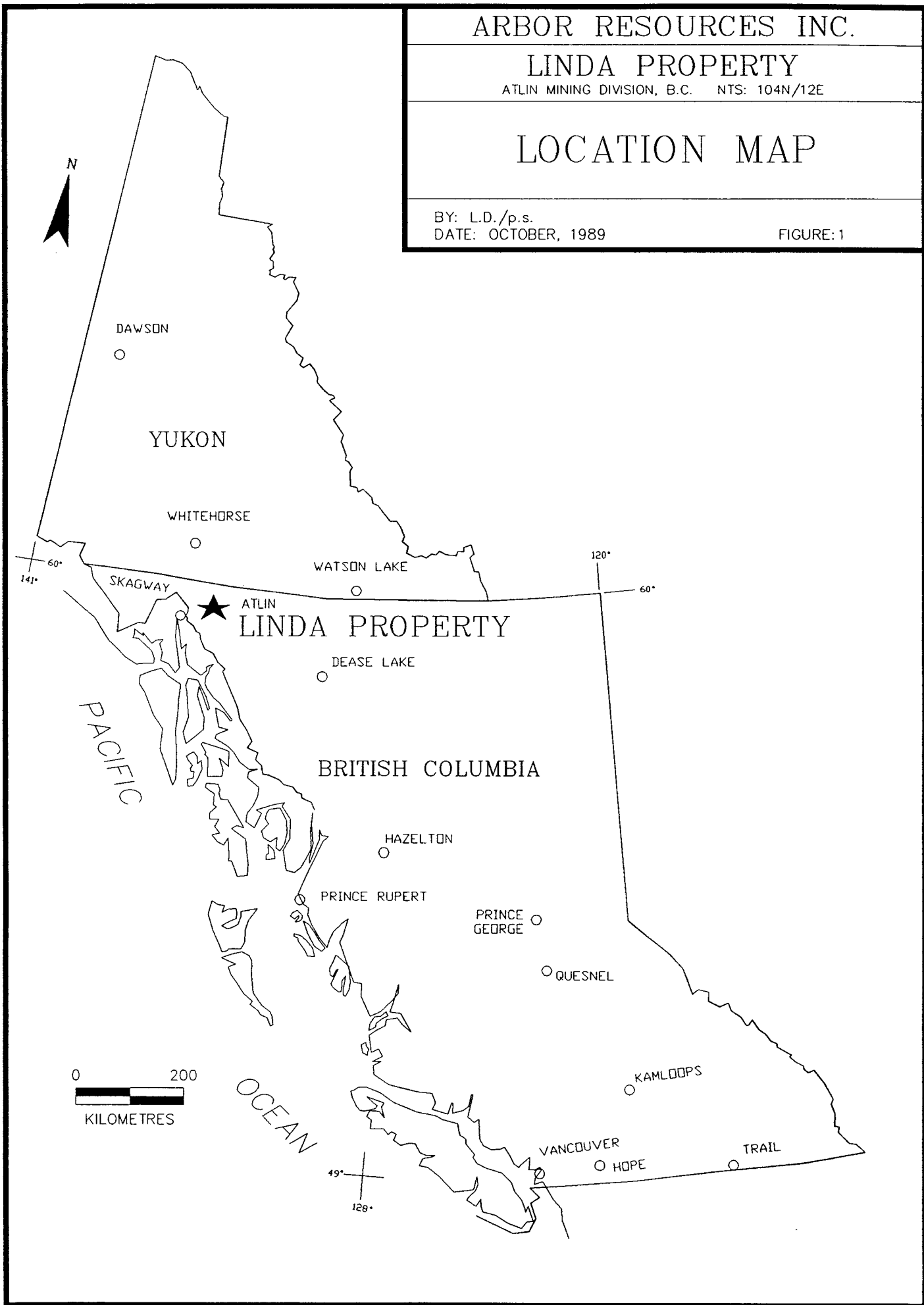
LINDA PROPERTY

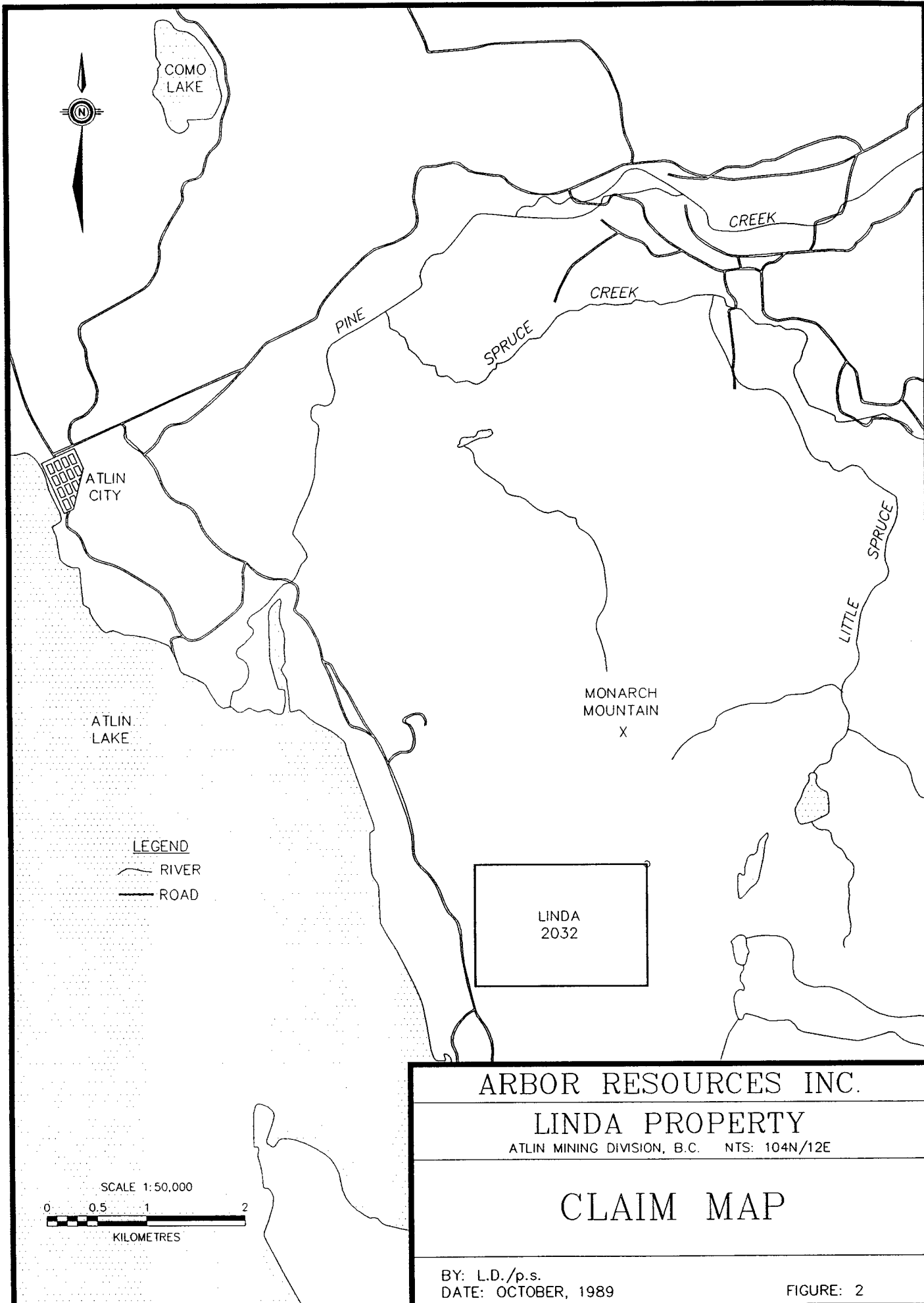
ATLIN MINING DIVISION, B.C. NTS: 104N/12E

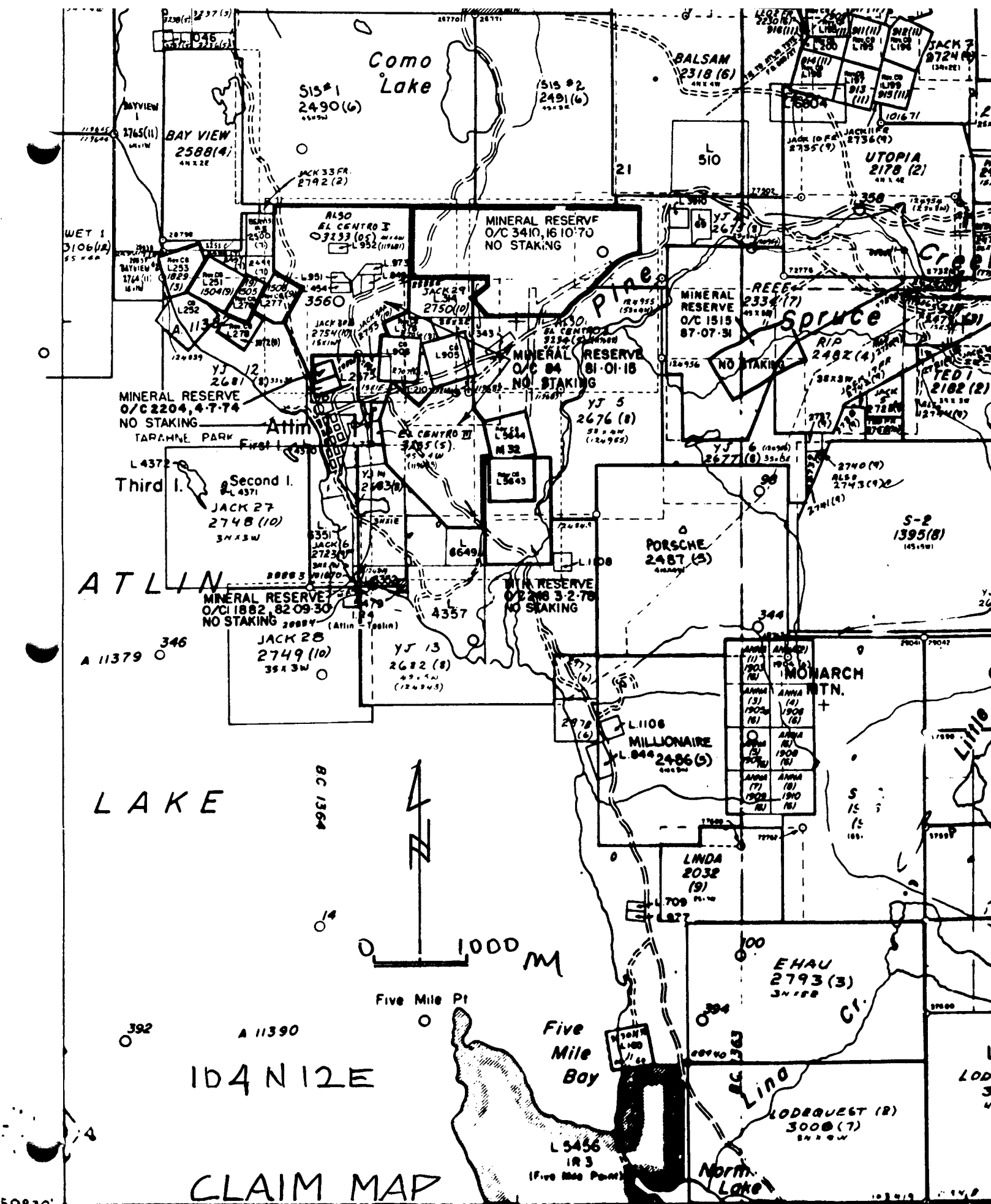
LOCATION MAP

BY: L.D./p.s.
DATE: OCTOBER, 1989

FIGURE: 1







CLAIM MAP

133°45' ATLIN MINING DIVISION

Mining Division Boundary
Indian Reservation

— — — — — Crown Granted
Reverted CG Mineral Claim

TO SOUTH SEE MAP 104N/8E

MINERAL TITLES REF

1.3 CLAIM INFORMATION

The Linda claim is a modified grid claim totalling 6 units, located in the Atlin Mining Division of northwestern British Columbia. Claim information is listed in TABLE I, below:

**TABLE I
CLAIM STATUS**

CLAIM NAME	UNITS	RECORD NO.	ANNIVERSARY DATE
LINDA	6	3465	SEPTEMBER 26

1.4 HISTORY

Before 1898 very little was known of the Atlin country beyond the fact that it contained fur, big game, and a number of large lakes, the largest of which was called "Atlin," meaning "Big Water," by the Tlingit-Tagish Indians. According to the most authenticated sources, B.C. Dept. of Mines, Annual Reports for 1900, 1904, 1932, and 1936, gold was first discovered on Pine Creek about July, 1897, by a man named Miller while driving cattle into Dawson and the Klondike Gold Fields. The information, together with a rough map, was passed on to Miller's brother, Fritz, in Juneau, who together with Kenny McLaren, a Canadian prospector named Hans Gunderson, and another, were on their way to the Klondike. These men decided to investigate and with the aid of the map were able to locate the creek with little difficulty and staked the first claims about July 8, 1898. Public information concerning the new strike reached Alaskan ports on August 5th, and Victoria, B.C. on August 13th, 1898, and resulted in a rush to the area. The first workings were on Pine Creek and by the end of 1898, more than 3,000 people were camped in the Atlin area. Only eight creeks, Spruce, Pine, Birch, Boulder, Ruby, Otter, Wright and McKee, have been important producers in the Atlin camp, although gold has been produced along 21 other creeks including Dominion, Eldorado, Feather, Fox, Rose, Slate, Snake, and O'Donnel River.

Uninterrupted placer mining in the Atlin camp has produced some one million ounces of gold since 1898. Spruce Creek, the richest stream in the camp, has yielded more than 40 per cent of this gold. The pay streak along Spruce Creek is over 5 kilometres long, approximately 2 metres thick, and up to 60 metres wide. Near the southern end of the pay streak, the gravels are reported to have averaged about 80 grams of gold to the cubic metre along a 600 metre section of the creek. TABLE II shows the gold production from the main creeks for the period up to 1946, the last year for which individual creek recoveries were obtained.

Since the late 1970's interest and activity in the placer deposits has increased with the increase in the price of gold. Today the area is swarming with activity, and for five months a year the area is alive with small and medium-sized placer operations re-working or re-examining the area.

Gold-bearing quartz veins were first discovered in the Atlin area in 1899 and by 1905 most of the known showings had been discovered. Although the original showings have been repeatedly worked and re-examined, until the last few years there has been no record of regional exploration for lode mineralization since 1905.

In 1981, Yukon Revenue Mines Ltd. acquired and re-examined the old Lakeview property, located approximately 12 kilometres northeast of the Linda claim. Work done by Yukon Revenue showed low-grade gold values over an extensive but delicate quartz stockwork within a carbonatized and silicified andesite adjacent to a serpentinite intrusive. Cream Silver Mines Ltd. now has the Lakeview property and has obtained surface grab samples with gold values up to 1.5 oz/T and diamond drill core samples grading 0.21 oz/T over 14 feet.

In 1983 and 1984, Standard Gold Mines Ltd. carried out extensive trenching and diamond drilling programmes on their property on upper Dominion Creek, located approximately 3 kilometres east of the Linda claim. They encountered a number of narrow quartz veins within or adjacent to a carbonatized and silicified, mariposite-rich ultramafic body. These veins, although narrow, contained gold values of up to 3.95 oz/T.

Since early 1986, Homestake Mineral Development Co. has been re-examining the old Yellow Jacket property located approximately 6 kilometres northeast of the Linda claim. Due to deep overburden along Pine Creek valley, where the Yellow Jacket property is located, diamond or rotary drilling is the only feasible way to test this ground. The drilling results released to date have given several significant intersections of gold mineralization with values of greater than 0.5 oz/T over 10 foot widths. The gold mineralization is found exclusively within a carbonatized and silicified ultramafic containing varying amounts of mariposite and pyrite.

The initial discoveries by Yukon Revenue Mines Ltd. and Standard Gold Mines Ltd. and the similarity in geology in the vicinity of the Linda claim area led to its staking.

**TABLE II (from Holland, 1950 and Black, 1953)
GOLD RECOVERY FROM PRODUCTIVE CREEKS, ATLIN AREA, 1898-1946**

STREAM NAME	OUNCES OF GOLD PRODUCED
Spruce Creek	262,603
Pine Creek	138,144
Boulder Creek	67,811
Ruby Creek	55,272
McKee Creek	46,953
Otter Creek	20,113
Wright Creek	14,729
Birch Creek	12,898
All Others (21 creeks)	15,624
TOTAL PRODUCTION	634,147

Note: B.C. Dept. of Mines records show that for this same period 705,229 ounces of gold was sold from the Atlin area suggesting that not all gold production was reported.

1.5 WORK DONE BY ARBOR RESOURCES LTD. IN 1989

The following field work was completed on the Linda claim by Arbor Resources Inc. during the period July 17 and 18, 1989:

1) Geological mapping at a scale of 1:5,000 was conducted over the entire claim area.

2) A total of four rock chip samples were collected during the course of the mapping. Samples were taken from quartz veins and shear zones.

2. GEOLOGY

2.1 REGIONAL GEOLOGY

Geologic mapping of this area was undertaken in 1951-55 by J.D. Aitken of the Geological Survey of Canada (GSC) and compiled as Map 1082A. In 1966-68, J.W.H. Monger, also of the GSC, selectively mapped the Atlin area and published his findings in GSC Paper 74-47. Recent mapping conducted by the British Columbia Ministry of Energy, Mines and Petroleum Resources has produced two geological maps which cover the Atlin area in a regional sense. Open File Map 1989-24 by D.V. Lefebure and M.H. Gunning at 1:20,000 scale and Open File Map 1989-15a by M.A. Bloodgood, C.J. Rees and D.V. Lefebure at 1:50,000 scale both outline geological contacts, faults and mineral occurrences.

The Atlin region is located in a eugeosynclinal area composed of three distinct northwest striking tectonic belts; the St. Elias and Insular Belt, Coast and Cascades Belt, and Intermontane Belt. The rocks of the area belong to the Atlin Terrane, which represents an independent tectonic entity of the oceanic sequence of the Intermontane Belt in the Canadian Cordillera. The Atlin Terrane consists of upper Paleozoic age radiolarian cherts, pelites, carbonates, volcanics, and ultramafics. These rocks are intruded by Mesozoic granite, alaskite and quartz monzonite. The youngest rocks of the Atlin Terrane are composed of Tertiary and Quaternary volcanics. Till deposited by receding Pleistocene glaciers extensively covers the valleys.

The Atlin Terrane is bounded on the northeast by a northwest striking vertical fault and on the southwest by a northwest striking reverse fault. Structurally, the terrane is characterized by compressional deformation which is similar in style and trend to the southwest bounding faults (Monger, 1975). Minor fold axes generally strike northwest or trend southwest.

2.2 PROPERTY GEOLOGY

Outcrop exposure accounts about 10 to 15 percent of the surface area on the property. Felsenmeer is present in alpine areas and is assumed to be close to outcrop. Till covers the valleys below 1220 metres (4,000 feet) elevation.

The property appears to be underlain by Cache Creek Group sediments intruded by post-Pennsylvanian and Permian ultramafics (Figure 3). The Cache Creek Group rocks on the property are Pennsylvanian and Permian in age and consist primarily chert, with minor amounts of argillite and limestone. The chert and argillites are usually grey or black, locally graphitic, and contain up to trace pyrite. Intruding into this sediment package are post-Cache Creek Group

ultramafics, which are considered part of the Atlin Intrusions, and consist of peridotite and serpentinite. These rocks are usually dark green to dull waxy green in colour and locally talcose. Alteration of the ultramafics is extensive. Most of the rocks have been subject to varying intensities of serpentinization or carbonatization. The carbonatized ultramafic is characterized by rusty-orange brown weathering and a recessive nature.

2.3 ECONOMIC GEOLOGY

The Atlin area has enjoyed a history of productive placer mining and to a lesser extent, hard rock mining. All gold recovered from the Atlin area is very coarse and many large nuggets have been found in the camp. The fine gold as well as the nuggets are often found intergrown with quartz, which in many cases, occurs as euhedral crystals. All important placer gold production has been from rich Tertiary gravels buried beneath a thick blanket of barren glacial till.

Work done by other companies in the vicinity indicate that lode gold occurs in quartz stockworks hosted by or adjacent to carbonatized ultramafic bodies. It is because the geologic setting is the same on the Linda claim as on other properties in the Atlin area, which have known gold mineralization, that Arbor Resources Inc. is currently holding this property.

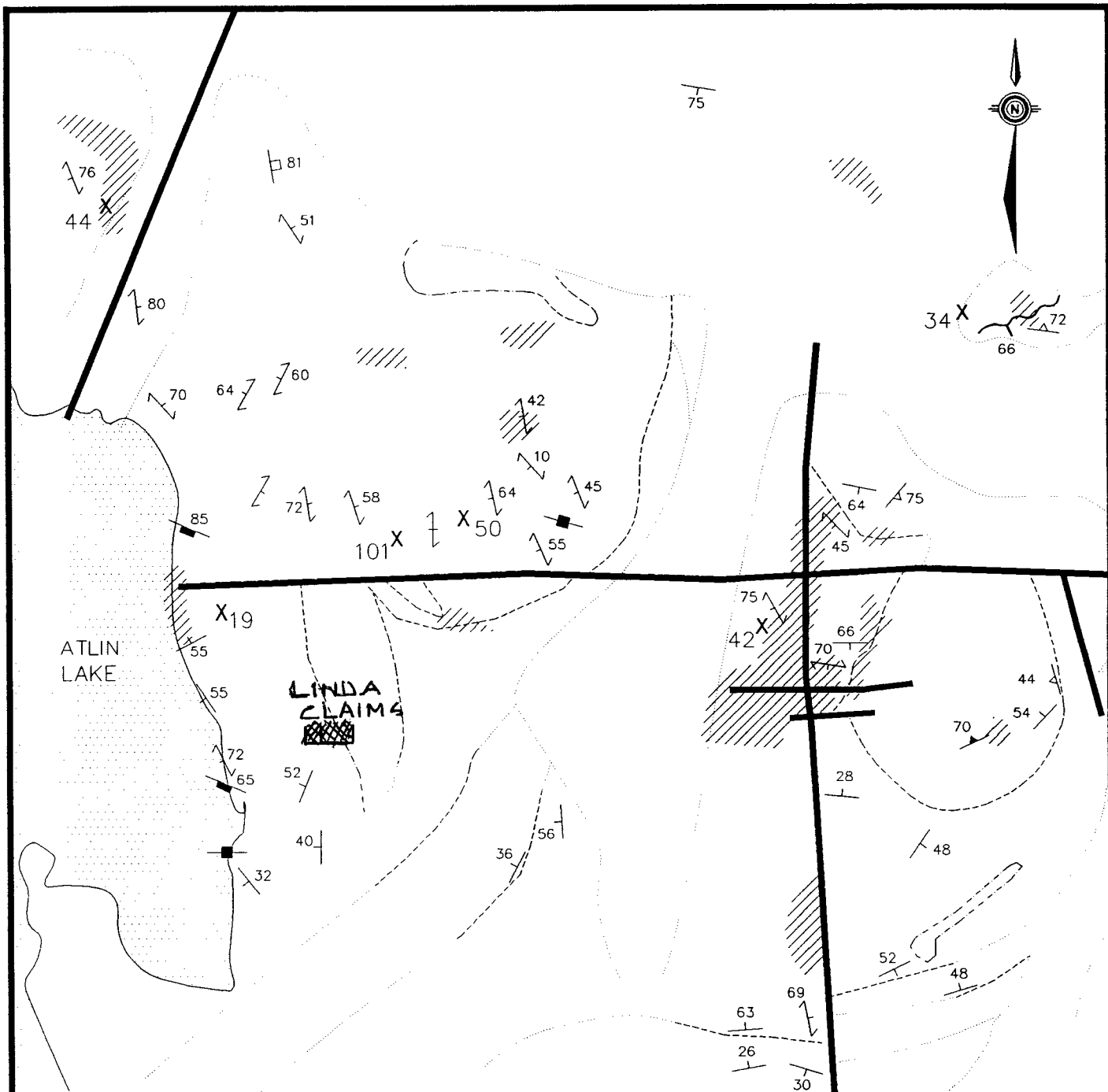
3. GEOCHEMISTRY

3.1 ROCK CHIP SAMPLING

3.1.1 SAMPLING AND SAMPLE TREATMENT

Rock chip samples were collected on the property during the course of mapping. Samples were taken from quartz veins and shear zones. A total of four rock samples were collected with the aid of prospector's hammer. Sample sites were labelled with orange flagging and all samples were placed in correspondingly labelled plastic bags and shipped to Chemex Labs Ltd. in North Vancouver, B.C. for analysis.

In the laboratory, samples were crushed to approximately minus 100 mesh. The coarse fraction was then examined for metallics, while the fine fraction was fire assayed for gold and analysed for 32 additional elements using the ICP technique.



LEGEND

- GEOLOGICAL BOUNDARY (defined, approximate, assumed)
- GEOLOGICAL BOUNDARY FROM ADDITIONAL SOURCES
- LIMIT OF QUATERNARY DEPOSITS
- BIDDING (inclined)
- IGNEOUS FLOW LAYERING (inclined)
- SCHISTOSITY, FOLIATION (inclined, vertical)
- JOINT (inclined)
- DYKE, VEIN (inclined, vertical)
- FAULT (defined)
- MINOR FAULT OR SHEAR ZONE ATTITUDE
- MINIFILE MINERAL OCCURENCE & NUMBER
- ALTERATION & MINERALIZATION

MINIFILE MINERAL OCCURENCES

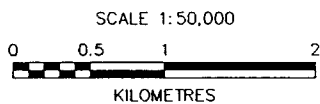
- | | |
|-----------------|---------------------|
| 19 Aitken Gold | 44 Pictou (L.5643) |
| 34 Spruce Creek | 50 Monarch Mountain |
| 42 Golden View | 101 Anna |

ARBOR RESOURCES INC.

LINDA PROPERTY

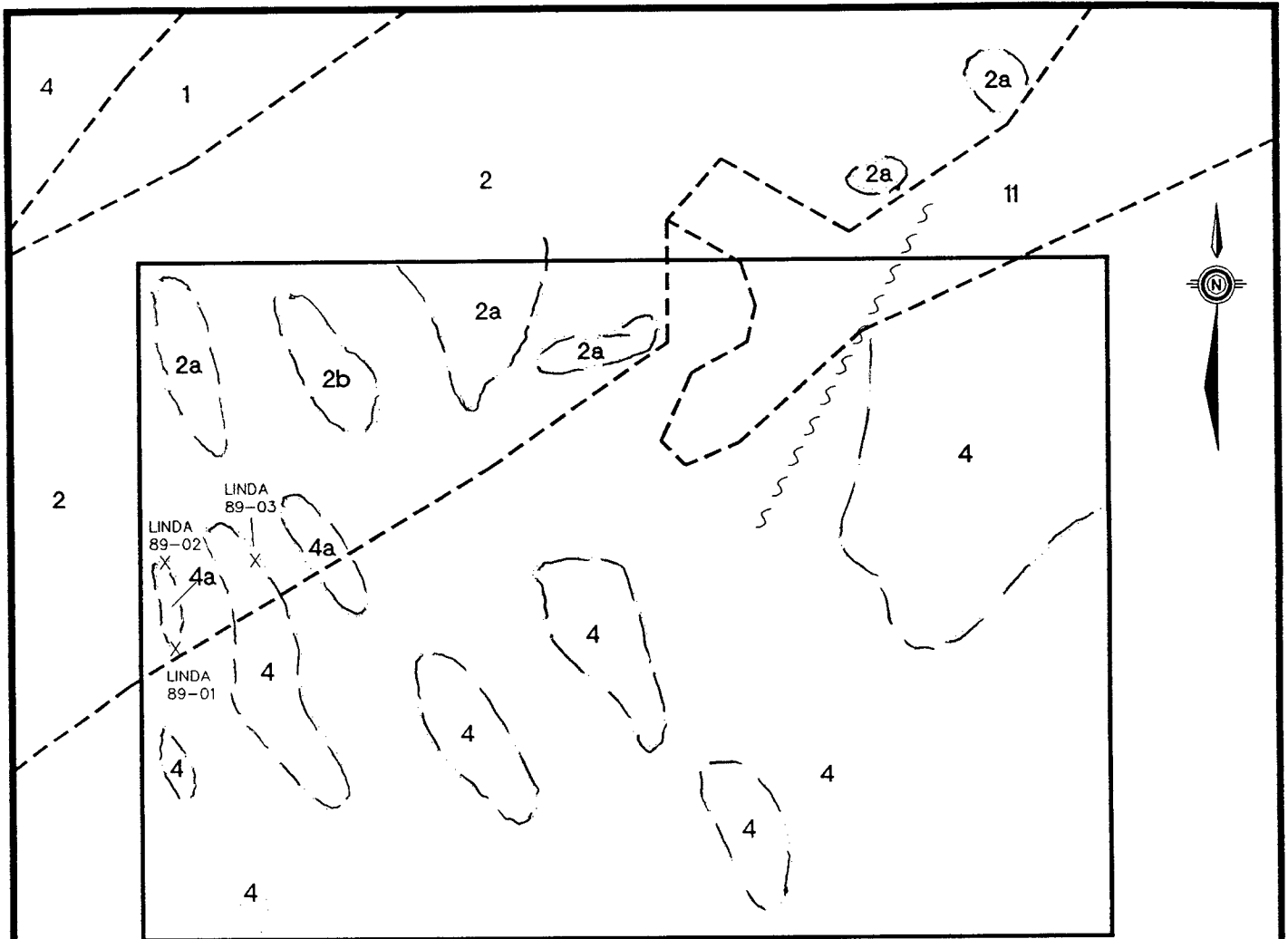
ATLIN MINING DIVISION, B.C. NTS: 104N/12E

REGIONAL GEOLOGY







BY: L.D./p.s.
DATE: OCTOBER, 1989

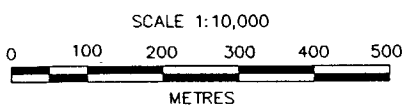
FIGURE: 3



CLAIM BOUNDARY

LEGEND

-  OUTCROP
-  SHEAR
-  ROCK SAMPLE LOCALITY
-  GEOLOGICAL BOUNDARIES
- 1** MAFIC VOLCANIC ROCKS
- 2** LIMESTONE
 - a)** MASSIVE
 - b)** BRECCIA
- 4** CHERT
 - a)** BEDDED
- 11** ULTRAMAFIC ROCKS



ARBOR RESOURCES INC.
LINDA PROPERTY <small>ATLIN MINING DIVISION, B.C. NTS: 104N/12E</small>
PROPERTY GEOLOGY & ROCK SAMPLE LOCATION MAP

BY: L.D./p.s.
DATE: OCTOBER, 1989

FIGURE: 4

3.1.2 DISCUSSION OF RESULTS

Rock sample results can be found in Appendix A. Sample sites are plotted on Figure 3.

Gold and silver values obtained from all four samples, although uneconomic, were significant. High gold values can be expected from quartz veins in the Atlin area, and silver may or may not occur with the gold. Table III gives a description of the rock type sampled as well as its corresponding gold and silver values.

TABLE III
ROCK SAMPLE DESCRIPTIONS AND RESULTS

SAMPLE NUMBER	AU (OZ/T)	AG (PPM)	DESCRIPTION
LINDA 89-01	0.004	0.4	quartz vein in chert
LINDA 89-02	0.002	0.4	quartz vein in chert
LINDA 89-03	0.008	4.2	quartz vein with chalco pyrite, float sample
LINDA 89-04	0.002	<0.2	carbonate-rich shear zone in ultramafic

4. CONCLUSIONS

The results from the 1989 programme indicate that the property has a good potential for the discovery of vein-type gold mineralization. Important findings of the programme can be summarized as follows:

- 1) Geologic mapping of the property shows Cache Creek Group sediments intruded by ultramafics of the Atlin Intrusions. Carbonate alteration of the ultramafic is extensive and characterized by orange-brown weathering and the presence of siderite and mariposite. Quartz veins are present in the sediments marginal to the ultramafics.
- 2) The rock sampling gave elevated gold (up to 0.028 oz/t) and silver (upto 4.8 ppm) values from quartz veins within the sediments and from a shear zone within the ultramafic rocks.

Respectfully submitted,

Linda Dandy
LINDA DANDY, B.Sc., F.G.A.C.,
HUGHES LANG EXPLORATIONS LTD.

REFERENCES

- Aitken, J.D., 1960, Geology, Atlin, Cassiar District, British Columbia: Geological Survey of Canada, Map 1082A, Scale 1:253,440.
- B.C. Minister of Mines, Annual Reports, 1900, 1904, 1932, and 1936.
- Black, J.M., 1953, Report on the Atlin Placer Camp: B.C. Ministry of Energy, Mines and Petroleum Resources, Open File Report, 71 p.
- Bloodgood, M.A., Rees, C.J., and Lefebure, D.V., 1989, B.C. Ministry of Energy, Mines and Petroleum Resources, Open File Map 1989-15a.
- Boyle, R.W., 1979, The Geochemistry of Gold and its Deposits: Geological Survey of Canada, Bulletin 380, 584 p.
- Dandy, L., 1987, Ezekiel Explorations Ltd., Geological, Geochemical and Geophysical Report on the 'S' Claims; Assessment Report dated September 1987.
- Holland, S.S., 1950, Placer Gold Production of British Columbia: B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 28, 89 p.
- Lefebure, D.V. and Gunning, M.H., 1989, B.C. Ministry of Energy, Mines and Petroleum Resources, Open File Map 1989-24.
- Monger, J.W.H., 1975, Upper Paleozoic Rocks of the Atlin Terrane, Northwestern British Columbia and South-Central Yukon: Geological Survey of Canada, Paper 74-47, 63 p. and maps.

STATEMENT OF QUALIFICATIONS

LINDA DANDY, B.Sc.

ACADEMIC

1981 B.Sc. Geology University of British Columbia
1987 Fellowship Geological Association of Canada

PRACTICAL

1981 - Present Geologist with Mark Management Ltd.,
Hughes-Lang Group,
Vancouver, B.C.

1986 Project Geologist - 12,000 foot diamond drill
programme in northwestern B.C.

1985 Project Geologist - geological mapping,
geochemical and geophysical surveys and backhoe
trenching programmes in northwestern and
southeastern B.C., the Yukon, and northeastern
Washington

1984 Project Geologist - mapping, geophysical and
geochemical surveys backhoe trenching and diamond
drilling programmes in northwestern B.C.

1983 Geologist involved in geological mapping
(1:50,000, 1:10,000, and 1:1,000), geophysical and
geochemical surveys in northern and central B.C.
and the Yukon

1982 Geologist involved in geochemical and geophysical
surveys in central B.C.

1981 Geologist involved in detailed mapping,
geochemical and geophysical surveys in central
B.C.

**COST STATEMENT
LINDA CLAIM
12-22 JULY, 1989.**

GENERAL COST

Food and accommodation: 1pers, 11m days @ \$53		\$ 583.49
Supplies		255.78
Helicopter, Capitol Helicopters		357.88
Fixed Wing, CAI, CMA		1,108.00
Telephone		36.00
Shipments		21.44
Rentals:		
Norcan 4WD, 12-19 Jul, 9days @ \$92	\$828.04	
Ezekiel field equipment, 11m days @ \$10	<u>110.00</u>	<u>938.04</u>
TOTAL GENERAL COST		<u>\$3,300.63</u>

GEOLOGICAL MAPPING COST

Salaries, wages and benefits:		
1pers, 4m days @ \$172.50		\$ 690.00
Assays - Chemex Labs.		
4 rock for Au + 32 element ICP @ \$19		76.00
Consultant fees		
Archean Engineering Ltd.		650.00
Report preparation		1,262.50
General cost apportioned (4/11 x \$3,300.63)		<u>1,200.23</u>
TOTAL GEOLOGICAL MAPPING COST		<u>\$3,878.73</u>

APPENDIX A

ROCK SAMPLE RESULTS

**CHEMEX LABS LTD.
CERTIFICATE OF ANALYSIS**



Chemex Labs Ltd.
 Analytical Chemists * Geochemists * Registered Assayers
 212 BROOKSBANK AVE., NORTH VANCOUVER,
 BRITISH COLUMBIA, CANADA V7J-2C1
 PHONE (604) 984-0221

To: HUGHES LANG EXPLORATIONS LTD.

1900 - 999 W. HASTINGS ST.
 VANCOUVER, BC
 V6C 2W2

A8922757

Comments: ATTN: ART TROUP CC: LINDA DANDY

CERTIFICATE A8922757

HUGHES LANG EXPLORATIONS LTD
 PROJECT : ARBOR/LINDA
 P O # :

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 14-AUG-89.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	4	Assay: Crush,split,ring
238	4	ICP: Aqua regia digestion

* 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.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
398	4	Au oz/T: 1/2 assay ton	FA-AAS	0.002	20.00
921	4	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	4	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	4	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	4	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	4	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	4	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	4	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	4	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	4	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	4	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	4	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	4	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	4	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	4	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	4	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	4	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	4	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	4	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	4	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	4	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	4	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	4	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	4	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	4	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	4	Sc ppm: 32 elements, soil & rock	ICP-AES	1	100000
944	4	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	4	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	4	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	4	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	4	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	4	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	4	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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

PHONE (604) 984-0221

To : HUGHES LANG EXPLORATIONS LTD.

1900 - 999 W. HASTINGS ST.
VANCOUVER, BC
V6C 2W2

Project : ARBOR/LINDA

Comments: ATTN: ART TROUP CC: LINDA DANDY

Page No. : 1-A
Tot. Pages: 1
Date : 14-AUG-89
Invoice #: I-8922757
P.O. # :

CERTIFICATE OF ANALYSIS A8922757

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
LINDA 89-01	208 238	0.004	0.22	0.4	< 5	200	< 0.5	4	3.63	< 0.5	7	139	25	1.59	< 10	< 1	0.09	< 10	0.34	2010
LINDA 89-02	208 238	0.002	1.14	0.4	< 5	1770	< 0.5	6	7.95	< 0.5	20	189	54	2.70	< 10	< 1	0.48	< 10	1.93	1020
LINDA 89-03	208 238	0.008	0.11	4.2	15	3090	< 0.5	2	1.61	< 0.5	5	341	182	0.76	< 10	< 1	0.03	< 10	0.73	125
LINDA 89-04	208 238	0.002	0.24	< 0.2	5	200	< 0.5	2	10.00	< 0.5	5	77	18	1.57	< 10	< 1	0.09	< 10	1.50	305

CERTIFICATION :



Chemex Labs Ltd.
 Analytical Chemists * Geochemists * Registered Assayers
 212 BROOKSBANK AVE., NORTH VANCOUVER,
 BRITISH COLUMBIA, CANADA V7J-2C1
 PHONE (604) 984-0221

To: HUGHES LANG EXPLORATIONS LTD.

1900 - 999 W. HASTINGS ST.
 VANCOUVER, BC
 V6C 2W2

Project: ARBOR/LINDA
 Comments: ATTN: ART TROUP CC: LINDA DANDY

Page No. : 1-B
 Tot. Pages: 1
 Date : 14-AUG-89
 Invoice #: I-8922757
 P.O. # :

CERTIFICATE OF ANALYSIS A8922757

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
LINDA 89-01	208 238	6	< 0.01	16	80	14	< 5	4	68	< 0.01	< 10	< 10	4	< 10	28
LINDA 89-02	208 238	5	0.04	64	2080	< 2	5	6	531	0.05	< 10	< 10	68	< 10	42
LINDA 89-03	208 238	3	< 0.01	8	30	74	< 5	< 1	55	< 0.01	< 10	< 10	2	< 10	258
LINDA 89-04	208 238	1	< 0.01	10	180	< 2	5	2	78	< 0.01	< 10	< 10	10	< 10	24

CERTIFICATION :