#### ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 89.06.30

ASSESSMENT REPORT 17827

MINING DIVISION: Atlin

PROPERTY:

Lodequest

LOCATION:

59 28 00 LAT LONG 133 34 00

UTM 08 6592684 581230

NTS 104N05E

CLAIM(S):

Lodequest 1-11

OPERATOR(S): AUTHOR(S):

Luek, B. Davidson, G.S.

REPORT YEAR:

1988, 15 Pages

GEOLOGICAL

SUMMARY:

The property is underlain by the Paleozoic Cache Creek Group and

by the Atlin Intrusion. The Atlin instrusives are bodies of serpentinized peridotite. Quartz veining and fracture zones contain gold bearing sulphide minerals are developed in the Cache Creek rocks

close to the sills of serpentinized peridotite.

WORK

DONE:

Geophysical, Physical

LINE 16.0 km MAGG 14.4 km

Map(s) - 1; Scale(s) - 1:2500

ACTION:

FILE '10'

GOLD COMMISSIONER

RECEIVED and RECORDED

' OC I' 11 1988 |

M.R. # N/A

ATLIN, B.C.

ASSESSMENT REPORT

on the

FILMED

LODEQUEST PROPERTY

( Lodequest 1-11 Claims ) NTS 104 N 5/12 Lat. 59 30'N Long. 133 30'W Atlin Mining District

For: LODESTAR EXPLORATIONS INC. 19-4078 Fourth Ave. Whitehorse, Yukon

By: G.S. DAVIDSON, P. Geol.

October, 1988

GEOLOGICAL BRANCH ASSESSMENT REPORT

17,827

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#### INTRODUCTION

The LODEQUEST property is situated 10 km south of Atlin, B.C. in the active "Atlin Gold Camp". The claim block is underlain by Cache Creek Group sedimentary and volcanic units intruded by bodies of ultramafic rock. This geological environment hosts auriferous quartz veins associated with east-northeast trending faults in serpentinite and altered sedimentary rocks on nearby properties.

This report, prepared at the request of B. Lueck, president of Lodestar Exoplorations Inc. describes a magnetometer survey preformed on the LODEQUEST claims in May and June, 1988. The writer visited and supervised the exploration work.

#### LOCATION AND ACCESS

The LODEQUEST claims are located in northwestern British Columbia, approximately 10 km south of the town of Atliin on NTS Map Sheets 104 N-5,12. The property lies between Lina and McKee Creeks and is traversed by the Warm Bay Road. Geographical co-ordinates are latitude 59 30' N and longitude 133 35'W. Figure 1 shows the property location.

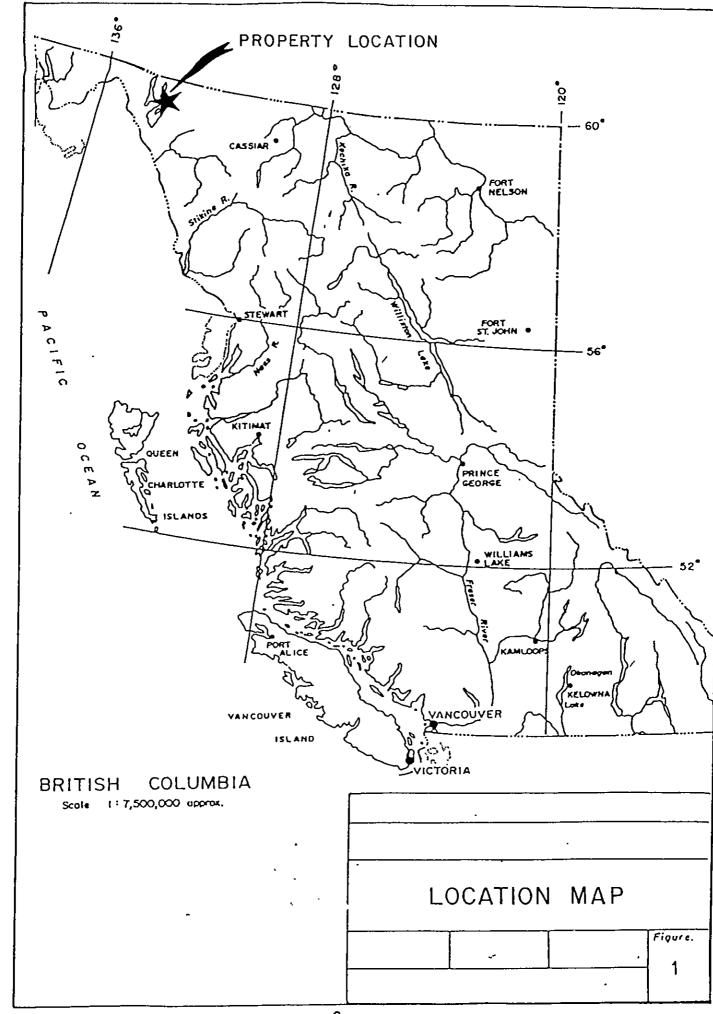
The claims are accessible by the all weather Warm Bay Road.

# PHYSIOGRAPHY, CLIMATE, VEGETATION

The property is situated in the Lina Range of the Teslin Plateau. Elevations range from Atlin Lake level at 668m a.s.l. to 1690m a.s.l. In the claim area moderate to steep southwesterly facing slopes desend to a low lying flat beside Atlin Lake. Outcrop is common on steeper slopes.

Exploration is possible on a year round basis at lower elevations in the Atlin area. However, at higher elevations, winters are sever with high winds, deep snow and low temperatures. Summer temperatures average 12 C and are fairly dry. Precipitation is 28cm per annum.

Low-lying areas feature spruce, pine and poplar forest while rocky southwesterly facing slopes feature patchy evergreen and poplar trees, and grassy areas. Buckbush is common at treeline (1300m).



#### PROPERTY

The LODEQUEST 1-11 mineral claims are located in the Atlin mining district of northestern B.C.

The claims are under option to Lodestar Explorations Inc. subject to an agreement with the property owner, B. Lueck of Whitehorse, Y.T. Claim data is presented in Table 1 and the claim plan is shown in Figure 2.

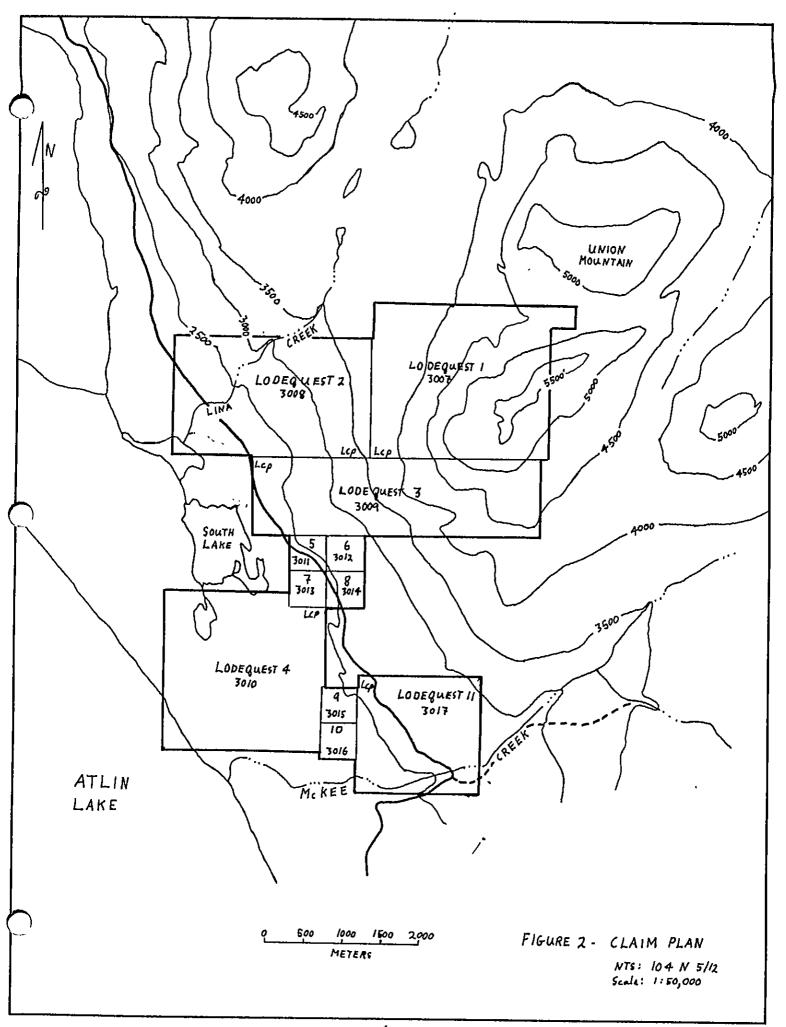
# TABLE 1 CLAIM DATA

CLAIM NAME	UNITS	RECORD NUMBER	RECORDING DATE	*EXPIRY DATE* (applied for)
LODEQUEST 1	20	3007	6 July, 1987	8 July, 1989
LODEQUEST 2	15	3008	6 July, 1987	8 July, 1989
LODEQUEST 3	16	3009	6 July, 1987	8 July, 1989
LODEQUEST 4	16	3010	8 July, 1987	9 July, 1989
LODEQUEST 5	1	3011	8 July, 1987	9 July, 1989
LODEQUEST 6	1	3012	8 July, 1987	9 July, 1989
LODEQUEST 7	1	3013	8 July, 1987	9 July, 1989
LODEQUEST 8	1	3014	8 July, 1987	9 July, 1989
LODEQUEST 9	1	3015	8 July, 1987	9 July, 1989
LODEQUEST 10	1	3016	8 July, 1987	9 July, 1989
LODEQUEST 11	9	3017	8 July, 1987	9 July, 1989

#### HISTORY

The region was initially explored in the 1890's by prospectors travelling along the larger lakes and rivers of the Yukon River watershed. The first gold-bearing quartz veins were discovered in ultramafic rocks around Pine Creek. By 1905 most of the known gold showings had been located. Limited development was undertaken on several prospects however no significant deposits were outlined.

In the 1980's all of the known gold showings are being reevaluted. The Atlin area has systematically been staked forming a large belt of mineral claims. Homestake Mineral Development Co. has the largest claim holdings and is presently exploring gold bearing structures at the Yellow Jacket property.



## LEGEND

## QUATERNARY

17	Glacial drift, alluvium	
	PENSYLVANIAN and PERMIAN	/
9	Atlin Intrusions; peridotite, meta-gabbro, 9a serpentinite	
8 7 6	Cache Creek Group Limestone and limestone breccia Greenstone and volcanic greywacke, amphiboli Chert, argillite, chert-pebble conglomerate chert breccia, derived quartzite and schist	te and

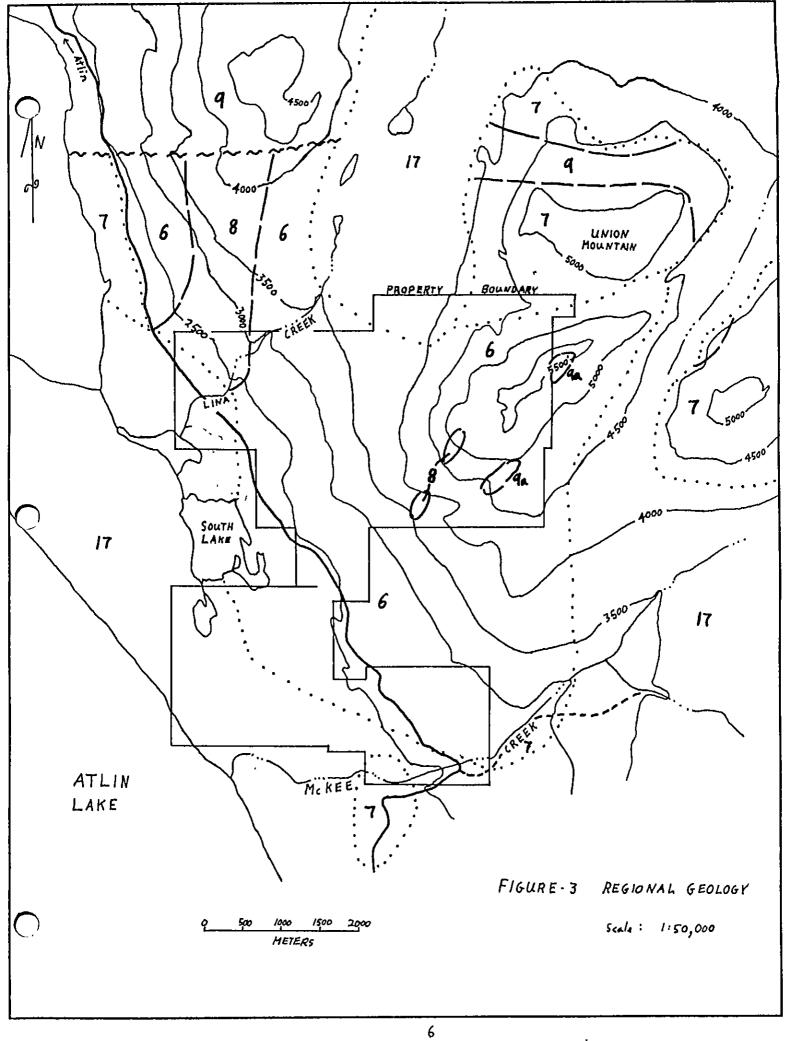
# SYMBOLS

 Geological	contact,	defined,	assumed
 Main road,	side road	<b>i</b>	

GOLD COMMISSIONER RECFIVED and RECORDED

OCT 17 1988 ,

M.R. # \_\_\_\_*N/A* ATLIN, B.C.



### EXPLORATION PROGRAM

#### INTRODUCTION

In August-September, 1987 B. Lueck completed several preliminary mapping and prospecting traverses to locate claim boundaries, roads and favourable areas for geophysical surveys. Altered serpentinite float was discovered on the LODEQUEST 11 claim.

In May and June, 1988 a 1.4km baseline was cut in a north-south direction on the LODEQUEST 11 claim. Crosslines (13.4km) were extended to the west at 100m centers and stations were flagged at 25m intervals on the crosslines. Figure 4 shows the grid plan.

L. Lebedoff and R. Smith performed a magnetometer survey on the grid in June, 1988.

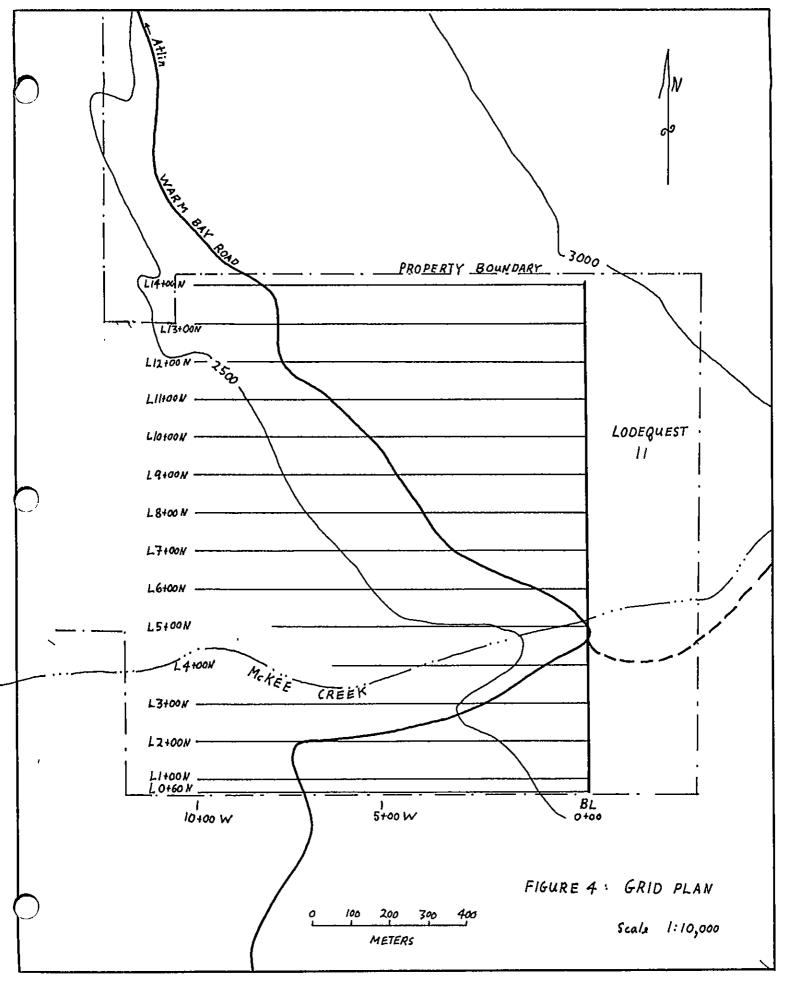
#### PROPERTY GEOLOGY

The property is primarily underlain by interbedded chert and argillite. Lenses and beds of limestone, greywacke, greenstone and conglomerate occur within the sediments. Bodies of serpentinized peridotite outcrop on the LODEQUEST 3 claim and are thought to underlie the eastern margin of the LODEQUEST 11 claim.

#### MAGNETOMETER SURVEY

## SURVEY METHOD

A Scintrex FM-3 Magnetometer was utilized to measure fluctuations in the total magnetic field. The survey was conducted using the standard method of establishing a magnetic baseline and then proceeding along crosslines, starting and returning to the baseline in a loop pattern. The crossline readings are taken at 25m stations and later, corrected relative to the diurnal magnetic variation.



#### SURVEY RESULTS

A contour plan of the magetometer survey is presented in Figure 5 (in pocket). The total magnetic field in the survey area ranges from 57,000 to 59,500 gammas. The 500 gamma contour corresponds to total field reading of 57,500 gammas.

A strong magnetic high has been located at the northwest end of the grid. A corresponding magnetic low lies east of the anomaly. On adjoining properties magnetometer lows are reported to outline quartz-caronate-talc alteration zones in serpentinized peridotites.

A second magnetic high is located on Line 7+00N at 7+50W. It forms a spot high approximately 1000 gammas above the surrounding readings.

## DISCUSSION AND RECOMMENDATIONS

The magnetometer survey anomalies located on the LODEQUEST 11 claim are difficult to interpret as the grid area is covered in overburden. The most significant anomaly is the magnetic low from Lines 12+00N to 14+00N at 3+00W. This anomaly may overline a quartz-carbonate-talc alteration zone. On the Yellow Jacket property auriferous quartz veins and shears occur in similar alteration zones in close proximity to east-northeast trending faults.

The magnetic highs and low on the LODEQUEST 11 claim are very accessible and should be soil sampled on the existing grid lines at 25m intervals. Samples should be analysed for Au-As-Sb-Mo-W. Also, a VLF-EM survey set on the Jim Creek and Lualualei frequencies should be undertaken on the grid to try and outline fault structrures and geological contacts.

The rest of the property has received only reconaissance level evaluation. More detailed surface exploration consisting of geological mapping, grid development, geochemistry and geophysics is recommended on the LODEQUEST property. The following program is proposed:

# SURFACE EXPLORATION

Geological mapping		4,500
Grid development (50km)	ŧ	15,000
Geochemistry 500 samples		8,500
VLF-EM and magnetometer surveys		15,000
Camp and support		4,500
Report and assessment		2,500
Contingency		5,000
TOTAL		\$55,000

#### CERTIFICATE

- I, GRAHAM DAVIDSON, of the City of Whitehorse, in the Yukon Territory, HEREBY CERTIFY:
- 1. That I am a consulting geologist and that I supervised the work program described in this report.
- 2. That I am a graduate of the University of Western Ontario (H.B.Sc., Geology, 1981).
- 3. That I am registered as a Professional Geologist by the Association of Professional Engineers, Geologists and Geophysicists of Alberta (#42308).
- 4. That I have been engaged in mineral exploration on a full and part time basis for seven years, of which have been spent in the Yukon, Northwest Territories and British Columbia.

SIGNED at Whitehorse, Yukon this 7th day of October, 1988.

G.S. Davidson, P. Geol.

# STATEMENT OF COSTS

Personnel:	<ul><li>B. Lueck (geologist)</li><li>L. Lebedoff</li><li>R. Smith</li><li>G. Davidson (geologist)</li></ul>	2 days 4 days 2 days 1 day	500 840 420 300	
Grid developments:				
	Golden Eagle Exploration		3,800	
EXPENSES:	Accommodation and supplies Transportation	<b>3</b>	300 500	
REPORT:	preparation drafting typing and printing		1300 129 115	
Total Costs	1		8,200	

# REFERENCES

Aitken, J.D., 1959: G.S.C. Memoir 307, Atlin Map-Area, B.C. Ballantyne, S.B. et al, 1985: Gold in the Atlin Terrane Collins, D.A. et al, 1988: Geological and Geochemical Report on the Heart of Gold Claim Group.

