

REPORT ON THE

### HUMP CLAIMS

### TAKLA LAKE AREA

### OMINECA MINING DISTRICT

55° 35' 30" N 125° 45' 00" W

### FOR

West Lake Resources Inc.

By

V. RYBACK-HARDY

July 25, 1981

93 N 12 E & W

Hinterland Resource Services Ltd., 11691 Trumpeter Drive, Richmond, B. C. V7E 3X4 (604) 271-5922

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### SUMMARY

During May and June 1981, West Lake Resources Inc. conducted a preliminary evaluation of the recently staked Hump Claims, situated approximately 16 km east northeast of Takla Landing, B. C. The claims were staked as a result of previous research indicating that the region is in a geologically favourable environment for the occurrence of gold deposits.

The field evaluation consisted of grid establishment, geochemical soil sampling, VLF-EM and magnetometer surveying. Two hundred and eight soil samples were collected along 12.8 km of grid line.

Due to a restricted budget, only a portion of the claims could be covered. However, a gold- and nickel-insoil geochemical soil anomaly was partially delineated. A strong EM conductor was also partially delineated and is roughly co-incident with the gold-in-soil anomaly. A strong linear magnetic anomaly was also detected.

In order to extend and delineate the geochemical



and geophysical anomalies indicated by the 1981 field program, a two stage work program is recommended for 1981 and 1982. Stage I is estimated to cost \$81,535.00 and Stage II is estimated to cost \$120,000.00

### INTRODUCTION

At the request of West Lake Resources Inc. the author commenced a preliminary evaluation of the recently staked Hump Claims located approximately 16 km east of Takla Landing, B. C. The claims are in the Omineca Mining District and are located approximately 4 km northwest of the southwest end of Humphrey Lake. The claims were staked as a result of the occurrence of weakly to strongly anomalous geochemical gold in silts collected during a regional reconnaissance program conducted by the author on behalf of Kennco Explorations (Western) Ltd. in 1974. Kennco showed no further interest in the area and the Hump claims were staked in June, 1981.



### LOCATION AND ACCESS

The Hump Claims are located about 16 km northeast of Takla Landing, B. C. The west edge of the claim block lies 2 km east of the peak of Mt. Bodine. Access to the claims is by rough 4-wheel drive road from Takla Landing. This road is subject to flooding during high runoff in the Spring. Takla Landing lies on the northern extension of the British Columbia Railway from Ft. St. James. The area receives weekly rail service. Takla Landing may also be reached by road from Fort St. James. The road trip requires eight to ten hours depending on road conditions. The road from Manson Creek onward is poorly maintained. Takla Landing is approximately 134 km by air eastward from Smithers, B. C. (42 minutes by helicopter.) Food, lodgings and fuel is available at the Takla Trading Post.

#### TOPOGRAPHY AND VEGETATION

The claims lie in the heart of the Vital Mountains of the Hogem Range. Physiographically, the area lies on the

west edge of Omineca Belt. The Claims lie between 1050 and 1850 metres in elevation. They straddle a northwesterly trending ridge. The portion to the north slopes steeply to a flatter sub-alpine meadow. The south and west slopes are slightly less steep (40  $\pm$ ) and extend to the northeasterly trending valley known as Hogem Pass.

Vegetation fvaries from tree-less sub-alpine on the higher slopes to scrub timber to medium sized lodge pole pine and black spruce on the lower slopes. Here timber does not exceed 25 cm in diameter.

#### PROPERTY

The property consists of 3 mineral claims consisting of 20 units each for a total of 60 units. They are as follows:

Claim Name	Record No.	Tag No.	Expiry Date
Hump 1	3795	77875	June 8, 1982
Hump 3	3796	77877	June 8, 1982
Hump 4	3797	77878	June 8, 1982

The claims are owned by V. Ryback-Hardy of Richmond, B. C. A bill of sale is pending to West Lake Resources Inc., 790 - 885 Dunsmuir Street, Vancouver, B. C.

### HISTORY

There are no known workings on these claims. Old posts found indicate that the area was last staked in the early 1960's as the Hogem Claims. No known work was done. In 1974, Kennco Explorations (Western) Ltd., conducted a regional geological mapping and reconnaissance silt sampling program. Several weakly anomalous to strongly anomalous geochemical gold in silts were detected in several creeks draining the area. Although the area was known to contain altered zones of quartz ankerite and mariposite, Kennco showed no further interest in the area.

The claims were staked by V. Ryback-Hardy on May 26, 1981 and recorded in Vancouver on June 8, 1981.

Although no lode mineralization has been developed, the area has had an extensive history of placer mining. Reports of placer discoveries are known from as early as 1920. Placer gold was produced from the Humphrey Lake area as late as the mid 1940's. Significant amounts of gold were produced from Harrison Creek, Tom Creek,

Humphrey Creek, Vital Creek and Kenny Creek. Recently a new placer operation was commenced in Kenny Creek above the junction with Silver Creek.

#### GEOLOGY

The area in general is underlain by Permian eugeosynclinal rocks of the Cache Creek Group cut by Upper Triassic ultramafic plugs.

The claims overlie a deformation zone consisting of foliated mixed intermediate volcanics and sediments. Foliation trends northwesterly and dips steeply eastward. To the west, the volcanic suite is in sheared contact with slivers of altered ultramafic rocks consisting of talcose minerals, antigorite, serpentine and olivene. Further west, in the creek between Mt. Bodine and the ridge on which the claims are located, the serpentinites are in contact with felsic fragmental volcanics of the Sitlika Assemblage (Patterson, 1974).

Within the claims a narrow (15m to 50m) band of weakly pyritic altered quartz-ankerite-mariposite rock

trends northwesterly along the southwest facing slope, crosses the top of the ridge about 100 metres west of the Legal Corner Post, and extends into the valley floor to the north northwest. This zone is visible along strike for more than 6000 metres.

Within this well-defined quartz ankerite (siderite) mariposite zone, numerous narrow quartz veins transcect the enveloping rock. The veins appear barren however, an occasional oxidized grain of geothite indicates that some pyrite was present in the vein locally and has been leached. Occasionally the quartz tends to have a dark cloudy color with a jasperoidal texture.

This zone is analogous to the alteration zones proximal to vein-type gold mineralization related to eruptive felsic to intermediate volcanism. This geological environment is similar to several gold deposits both in the Cordillera and the Canadian Shield. Examples of this environment are the Porcupine camp in Ontario, Erickson Creek Gold Mine near Cassiar B. C., Carolin

Gold Mine near Hope, B. C., as well as several gold producing areas in California, Nevada, and Arizona.

No economic gold mineralization has been found to date, however, the claims area has not been prospected nor mapped to any extent.

#### GRID ESTABLISHMENT

A grid was established on the property to tie in the geological, geochemical and geophysical data collected on the property. A base line was run with a compass and hipchain due north along the common boundary of Hump 3 and Hump 4. The baseline commences at the common southeast and southwest corner post of Hump 3 and Hump 4 respectively (0+00 N). Cross-lines spaced at 100 metre intervals were run out 500 metres east and 1000 metres west of the baseline. The lines were flagged and stations were marked at 50 metre intervals. Several lines in the southwest quadrant were shortened because of the wide creek flowing southerly along the east slope of Mt. Bodine. Due to a restricted budget, only a small

portion of the claim area could be covered.

### GEOCHEMISTRY

Soil Samples were collected at 50 metre intervals along the grid lines spaced at 100 metre intervals. The soils were collected using a mattock to dig a shallow hole (usually less than 1/2 metre) and red-brown mineral soil was collected from the 'B' horizon. The soils were collected in number coded Kraft paper envelopes, dried, catalogued and shipped to Min-En Laboratories Ltd. Two hundred and eight soil samples were collected along 12.8 km of grid line.

At the laboratory the samples were further dried and then seived. The -80 mesh fraction was then analysed using standard geochemical analytical techniques (atomic absorption - AA). The samples were analysed for copper, lead, zinc, nickel and gold. The metal results were plotted and anomalous values for metals were determined by inspection as follows:

Metal	Possibly Anomalous	Probably Anomalous	Definitely
Cu	55-65	65-100	100
Zn	80-100ppm	110-130ppm	130
Ni	450-600ppm	600-700ppm	700
РЪ	Not Contoure	d	

20-30ppb

30

Using the above parameters, the plotted metal values were contoured and several signature anomalies were delineated.

10-20ppb

Au

An anomalous geochemical gold-in-soil zone was indicated in the northeast corner of the grid area. In this area the gold in soil content varies from 25ppb to a high of 210ppb. The anomaly extends from line 9+00N to 11+00N and appears to be about 150 metres wide. The anomaly is open to the north and east. Two or three one-station anomalous gold values were detected elsewhere on the grid.

A strong nickel in soil geochemical anomaly trends northerly across line 4+00N to 12+00N along the eastern part

of the grid area. Nickel values range from just over 700ppm up to 1350ppm. The anomalous area appears to be shifted about one hundred to two hundred metres westward relative to the gold-in-soil anomaly.

The other metals, namely copper, lead and zinc were uniformly low and , except for a few weakly anomalous zinc values, are not considered of too much interest.

#### GEOPHYSICS

In conjunction with the geochemical sampling survey, a VLF-EM and a magnetometer survey was also conducted.

The VLF-EM survey makes use of the shallow induced electromagnetic field established by a navigational beacon located near Seattle, Washington. This vertical antenna generates an oscillating electric field which, in turn, produces a near horizontal electromagnetic field radiating outward from the antenna. At a distance of a few miles from the antenna the oscillating EM field may be considered to be a vector tangential to the directional radius vector

pointing to the antenna. In a non-conducting medium, this EM vector may be considered as a horizontal vector perpendicular to the straight line between the EM receiver and the VLF navagational beacon.

In the presence of a conductor the resultant electromagnetic field vector will not be horizontal. This distortion of the field is detected by a sensitive receiver and the amount of 'dip' of the field can be measured with a clinometer attached to the receiver.

The dip angle readings were 'filtered' using Fraser's method. This mathematical filtering technique diminishes the effects of near surface faults and topographic effects which may give spurious anomalies. The readings are filtered by adding two dip angles from adjacent stations and subtracting the sum of the dip angles of the next two adjacent readings, with due regard for algebraic sign.

The filtered dip angle readings indicate a partially delineated strong conductor on the northeast corner of the grid area coinciding with the gold-in-soil anomaly. A

strong conductor was partially delineated at 13+00N and 9+00W.

The magnetic field intensity in gammas was measured with an MP-2 Proton Precession Magnetometer. The readings were corrected for diurnal effects. The station readings were plotted and contoured.

The magnetic data indicates a narrow linear northnorthwesterly magnetic anomaly extending from L600+00N to L13+00N. The anomaly was not completely defined. CONCLUSIONS AND RECOMMENDATIONS

The 1981 field program, although limited in extent, indicated a significant area geologically favourable for the occurrence of gold deposits. The geological, geophysical and geochemical parameters of these deposits would include auriferrous quartz veining and siliceous stringer zones. These zones would be proximally related to the linear belt of quartz ankerite mariposite altered rock extending for several kilometers along a north-northwesterly strike across the main Hump ridge and extending to Diver Peak to

the north and Tom Creek to the south.

The 1981 Geochemical sampling program partially outlined a moderately to strongly anomalous gold-in-soil anomaly along the east end of the grid between line 9+00N and 11+00N (200 metres). The anomaly, open to the north and east, have values that range from 25 ppb to 210 ppb. Several spot highs were also outlined through the grid.

A strong nickel in soil geochemical anomaly extends in a northerly direction between lines 4+00N and 12+00N (700 metres). The anomaly is located on the east part of the grid and is open to the north. The anomaly may reflect the underlying contact between intermediate volcanics and serpentinites.

The VLF-EM Survey filtered dip angle readings indicates a strong conductor in the north east corner of the grid area. A strong cross over is located on Line 13+00N at 9+00W. Unfortunately the adjacent lines were not run, and this EM anomaly has not been completely delineated.

The magnetometer survey indicated narrow linear north northwesterly magnetic anomaly extending from line 6+00N to line 13 +00N. Unfortunately lines 9+00 to 12+00 N were not run for the western part of the grid, therefore the anomaly is incompletely defined. The magnetic anomaly may reflect underlying ultramafic rock.

 $\checkmark$ 

In view of the above, the following field program is recommended to commence as soon as feasible.

(1) General prospecting and detailed mapping of the claims area, including detailed rock sampling.

(2) Extension of the geochemical soil survey to completely delineate the indicated gold and nickel anomalies.

(3) Extend the VLF-EM and magnetometer survey to cover more of the claim area and completely delineate conductors and magnetic anomalies already indicated.

(4) If the previously outlined exploration program delineates either surface mineralization or a significant geochemical soil anomaly, limited amount of diamond drilling would be warranted.

#### COST ESTIMATES FOR FUTURE PROGRAM

STAGE I

Extend Grid, Additional Line Cutting, Soil Sampling, VLF-EM

Survey, and Magnetometer Survey, Mapping.

--4 man crew plus 1 geologist for 2 months

\$ 38,400.00 Wages 2,000.00 Supervision Vehicle 2,500.00 Room and Board (Camp Costs) 12,000.00 Geophysical Equipment 4,000.00 12,000.00 Assays 10,635.00 Contingency @ 15% Total 81,535.00 STAGE II seen' to listent 1000 metres of diamond drilling in 5 holes @ \$120/metre

Total Stage II

\$120,000.00

Respectfully Submitted,

Under Tiplack Hurdy

V. Ryback-Hardy, P. Eng.

#### STATEMENT OF QUALIFICATIONS

I Victor P. Ryback-Hardy of Richmond, British Columbia do hereby certify that:

(1) I am a consulting Geological Engineer with Hinterland Resource Services Ltd., at 11691 Trumpeter Drive, Richmond, B. C. V7E 3X4

(2) I am a graduate of the University of British
Columbia in Geological Engineering (B.A.Sc.) in 1970. I
am also a Commissioned British Columbia Land Surveyor (1979).

(3) I have been practising my profession as a Geological Engineer for 8 years.

(4) I am a member of the Association of Professional Engineers of British Columbia, Registration No. 8825.

(5) The work covered by this report was done under my personal supervision between May and June 1981.

(6) I am a director of West Lake Resources Inc. and I own 25,000 shares of the company.

(7) On July 18, 1981, I visited the said property with Mr. T. Schroeter, P. Eng. of Smithers B. C. in

order that Mr. Schroeter may append a corroborative statement.

(8) West Lake Resources Inc. is hereby given permission to reproduce this report, or any part of it, for financing purposes; provided however, that the corroborating statement of Mr. T. Schroeter, P. Eng. forms a part of this report and that no portion may be used out of context in such a manner as to convey a meaning differing from that set out in the whole.

Dated at Richmond, B. C. this 11 day of August, 1981.

View Filach Hardey

Victor Ryback-Hardy, P. Eng.

LUMP | (5N,4W) LUMP 2 (5N,4E) TL.C.P. 1 LUMP 3 (55,4W) LUMP 4 (55,4E) `~ 16+00 N 14+00 N 2 12+00 N οġ 0 Note : Exact location of stream not recorded above 16+00 N and below 6+00 N 10+00 N • 8+00 N • DLOKO ک ک 6+00 N 4+00 N -2 2+00 N ~20 To Camp 975m due south

• • •	FLAGGED LINE
	BLAZED LINE
	LEGAL CORNER POST
0	UNIT POST
××××××××	ROCK OUTCROP
	STREAM
	RIVER
r r r r r r r	RIVER VALLEY RIDGE
+10	CONTOUR INTERVAL 10

N.T.S. MAP REFERENCE 93 N 12W



HINTERLAN	D RESOURCE SE	RVICES LTD.
WEST LAKE RESOURCES INC. HUMP CLAIMS VLF - EM FILTERED DIP ANGLES HUMPHREY LAKE, BRITISH COLUMBIA		
	SCALE 1:10000	
DATA BY: V.R.H. Date: August'81	DRAWN BY: K.L.J. Date: August '81	DRAWING No. : I

LUMP | (5N,4W) LUMP 2 (5N,4E) TL.C.P. LUMP 3 (55,4W) LUMP 4 (55,4E) 16+00 N 14+00 N R. ∛•) 12+00 N Note : Exact location of stream not recorded above 16+00 N and below 6+00 N 10+00 N 8+00 N Lake 6+00 N 4+00 N 2+00 N To Camp 975m due south

• • •	FLAGGED LINE
	BLAZED LINE
	LEGAL CORNER POST
0	UNIT POST
*******	ROCK OUTCROP
	STREAM
	RIVER
r	RIVER VALLEY RIDGE
	CONTOUR INTERVAL 500 GAMMAS

N.T.S. MAP REFERENCE 93 N 12W



# HINTERLAND RESOURCE SERVICES LTD.

# WEST LAKE RESOURCES INC. HUMP CLAIMS MAGNETOMETER GAMMAS (-57 KG)

HUMPHREY LAKE, BRITISH COLUMBIA

DATA BY : V.R.H.	DRAWN BY . KLJ	DRAWING No. :
DATE : AUGUST'81	DATE: AUGUST '81	2



• • •	FLAGGED LINE
	BLAZED LINE
	LEGAL CORNER POST
0	UNIT POST
******	ROCK OUTCROP
	STREAM
	RIVER
r	RIVER VALLEY RIDGE
	CONTOURS : < 80 P.P.M. = BACKGROUND 80 TO 110 P.P.M. POSSIBLY ANOMALOUS 110 TO 130 P.P.M. PROBABLY ANOMALOUS > 130 P.P.M. DEFINITELY ANOMALOUS
N.T.S. MAP REFER	ENCE 93 N 12W



# HINTERLAND RESOURCE SERVICES LTD.

# WEST LAKE RESOURCES INC. HUMP CLAIMS

GEOCHEMICAL SOILS

ZINC IN P.P.M.

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HUMPHREY LAKE, BRITISH COLUMBIA

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• • •	FLAGGED LINE
	BLAZED LINE
	LEGAL CORNER POST
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******	ROCK OUTCROP
•••	STREAM
	RIVER
<del>}</del>	RIVER VALLEY RIDGE
	CONTOURS : < 450 P.P.M. = BACKGROUND 450 TO 600 P.P.M. PROBABLY ANOMALOUS > 700 P.P.M. DEFINITLY ANOMALOUS

N.T.S. MAP REFERENCE 93 N 12W



# HINTERLAND RESOURCE SERVICES LTD.

# WEST LAKE RESOURCES INC. HUMP CLAIMS GEOCHEMICAL SOILS

NICEL IN PPM.

HUMPHREY LAKE, BRITISH COLUMBIA

DATA BY : V.R.H.	DRAWN BY : K.L.J.	DRAWING No. :
DATE : AUGUST'81	DATE: AUGUST '81	4



• • •	FLAGGED LINE
	BLAZED LINE
	LEGAL CORNER POST
0	UNIT POST
******	ROCK OUTCROP
••••	STREAM
	RIVER
r	RIVER VALLEY RIDGE
	CONTOURS: < 55 P.P.M. = BACKGROUND 55 TO 65 P.P.M. POSSIBLY ANOMALOUS 65 TO 100 P.P.M. PROBABLY ANOMALOUS > 100 P.P.M. DEFINITELY ANOMALOUS
N.T.S. MAP REFER	ENCE 93 N 12W



HINTERLAND RESOURCE SERVICES LTD.

WEST LAKE RESOURCES INC. HUMP CLAIMS GEOCHEMICAL SOILS COPPER IN P.P.M.

HUMPHREY LAKE, BRITISH COLUMBIA

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DATE : AUGUST'81	DATE: AUGUST '81	5



••••	FLAGGED LINE
	BLAZED LINE
	LEGAL CORNER POST
0	UNIT POST
××××××××	ROCK OUTCROP
••••	STREAM
	RIVER
	RIVER VALLEY RIDGE
	CONTOURS: <20 P.P.B. = BACKGROUND 20 TO 30 P.P.B. WEAKLY ANOMALOUS >30 P.P.B. STRONGLY ANOMALOUS

N.T.S. MAP REFERENCE 93 N 12W

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WEST LAKE RESOURCES INC. HUMP CLAIMS GEOCHEMICAL SOILS

GOLD IN P.P.B.

HUMPHREY LAKE, BRITISH COLUMBIA

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