GEOLOGICAL BRANCH
ASSESSMENT REPORT

13,401
ADAMS LAKE PROPERTY

PROPOSAL FOR A THREE STAGE EXPLORATION PROGRAM

Kamloops Mining District

NTS 82 M/4

Latitude 51°10'N
Longitude 119°40'W

by
G.J. Dickie, Ph.D., F.G.A.C.
of
MineQuest Exploration Associates Ltd.

for
Omni Resources Inc.

May, 1984
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1.0 INTRODUCTION

Omni Resources Inc. holds mineral title to 14 located claims in the Adams Lake Area (Figure 1). Some of the claims are in dispute but the disputed areas have not been considered for this report. The property lies between the newly discovered Hilton massive sulphide Au-Ag-Cu-Pb-Zn-Ba deposit on the west and the Ag-Pb-Zn-bearing sulphide deposits of the Adams Plateau on the east. Numerous smaller showings of base and precious metals are known in the vicinity of the property.

Recent geological mapping (Preto, 1981; Schiarizza, 1984) has clarified the complex stratigraphy and structure in the area and enabled better correlation of mineralization with stratigraphy. Exploration from the Hilton deposit is trending to the southeast within a greenschist belt towards the Twin Mountain showing and the western portion of the Omni claims, making this portion of the property immediately prospective. Other parts of the property are underlain by similar straligraphy but little exploration has been conducted there.

The author has not examined the claims discussed in this report in the field except briefly during regional exploration in 1981. However the author has conducted exploration programs in the area since 1979 and has prepared papers on the geology and mineral deposits.
2.0 ACCESS AND TOPOGRAPHY

Paved highways and gravel logging roads provide access to the claims on the west side of Adams Lake either from Barriere (25km to the west) or from Squilax on the Trans-Canada highway (35km to the south). The parts of the property that are logged have excellent access and optimum exposure but most of the property is heavily timbered in relatively steep terrain so ground access between road cuts is difficult.

Steep slopes lead away from Adams Lake (elevation 650 metres) to rolling topography of the plateaux at 1,400 metres. The upper elevations on the property are accessible only between late May and mid November and the area has a heavy winter snowfall.

Access to the property on the east side of the lake is difficult because of a lack of road connection on the eastern lakeshore. Forestry operations are moving in from the north but at this time access would have to be by boat. Trails from older logging activities could be traversed by trail bike or on foot.
3.0 REGIONAL GEOLOGY

The property is underlain by strata of the Eagle Bay Formation of probable Devonian-Mississippian age described by Preto (1981) in his report on a regional mapping survey in the Barriere-Adams Lake area. The predominant lithology covered by the claims is greenschist which consists of metamorphosed mafic volcanic flows and tuffs with units of sediments and possibly felsic volcanics. This greenschist unit is the host for many of the mineral deposits in the area (Figure 2).

Structure in the area is complex with three phases of folding recognized on the regional and property scale. The first phase of folding is now isoclinal and difficult to recognize but is typified by the large Nikwikwaia Synform on the Adams Plateau. Similar folded repetitions of strata can be expected throughout the property.

It has been suggested (Schiarizza, 1984) that there is a major structural break between the greenschist unit and the felsic volcanic unit to the southwest, which would separate the Hilton showing host rock from the greenschist belt underlying the Omni property. As yet there is no field evidence for this structure.
4.0 PROPERTY GEOLOGY

The most prospective stratigraphic unit on the property is the greenschist which occurs in a southern and a northern belt separated by the Tshinakin Limestone. Little detail is known of the geology of the greenschist belt but it consists predominantly of metamorphosed mafic volcanics with lesser quantities of felsic volcanics and chlorite-rich sediments. There is no obvious geologic difference between the two greenschist belts but mapping on the east side of Adams Lake has been very limited. Prior to 1983, the felsic volcanic unit which hosts the Hilton deposit was not recognized within the greenschist belt. Exploration in 1984 by Falconbridge-Rea Gold is concentrating on tracing this stratigraphy along a southeasterly trend towards the Twin Mountain showing.

A small area in the central part of the claims is underlain by graphitic and siliceous phyllite, similar to the stratigraphy hosting the Ag-Pb-Zn deposits of the Adams Plateau.

The Tshinakin Limestone is a prominent bluff-forming unit trending northwest-southeast and consisting of massive limestone and dolostone, within the greenschist. A contact with underlying greenschist was penetrated in the Amy Dee DDH82-1 (Figure 3) and indicated shearing at the contact but no significant displacement. This hole was drilled to test the only known mineral showing the the Tshinakin, a 2 metre thick Zn-bearing quartz layer at White Bluffs.
4.1 Structure

The rocks underlying the property have undergone at least three phases of deformation with the result that the original bedding is now folded isoclinally. The isoclinal folding on regional to local scale causes difficulty in correlating geology. This folding also concentrates sulphides in the hinge zones of these folds (Dickie, 1983) and attenuates the sulphides beds on the limbs.

The major regional synform mapped on the Adams Plateau south of the property can be projected across Adams Lake towards the Twin Mountain showing through the Omni property (Figure 2). The overturned syncline containing the Hilton deposit is probably associated with that structure.
5.0 PREVIOUS WORK

Very few reports of exploration on the Omni Resources property itself are publicly available but exploration in the Adams Lake area has been intermittently active since 1927. The most explored properties have been Homestake, Twin Mountain, Agate and Lucky Coon (Figure 2) and numerous assessment reports are available on these areas.

The only assessment report which actually covers some of the property is a soil geochemical and ground magnetometer survey by Sinmax Mines Limited in 1968 on the Twin Mountain property. Some Pb and Zn soil geochemical anomalies were defined by this survey very close to the Omni property boundary but it is doubtful that the grid could be relocated because of the age of the survey. Twin Mountain, a quartz-carbonate vein containing galena, sphalerite and chalcopyrite has been traced over a strike length of 6km. The mineralization is erratic within the vein and generally grades only 1 to 2% combined Pb+Zn+Cu with 0.5 oz/ton Ag and .02 oz/ton Au. Exploratory drilling of the recently discovered Hilton deposit in 1983 defined in two lenses 150,000 tons of 0.43 oz/ton Au, 3.5 oz/ton Ag, 0.7% Cu, 3.6% Zn and 3.1% Pb.

A VLF-EM and magnetics survey was carried out on the southern boundary of the claims on the eastern side of the lake in 1982. No significant geophysical anomalies were defined.
# Claim Status

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DISCUSSION

The focus of exploration on the Adams Lake property should be precious metal-bearing massive sulphide deposits in the greenschist unit of the Eagle Bay Formation. These deposits are known to occur in geochemically anomalous felsic volcanics near a contact with overlying sediments. The volcanics are depleted in Na and enriched in Ba, Si and As, in addition to the expected base and precious metals. The greenschist belt has been mapped only on a regional scale and there is considerable potential for lithologic variation to be defined by detailed mapping.

A secondary target is Ag-Pb-Zn sulphides in graphitic and siliceous phyllites similar to the Lucky Coon deposit on the Adams Plateau. No showings of this type are known but the continuation of structures from the Plateau to the northwest indicates some potential.

The structural complexity of the area is well demonstrated (Preto, 1981; Schiarizza, 1984) and structural features must be recorded from all outcrops. Indications of structural repetition are important because they could define hinge areas of isoclinal folds where sulphides are concentrated.
7.1 Exploration Plan (Figure 3)

Exploration of the property would be most effective if separated into three stages so that results can be evaluated and applied sequentially.

As a first priority, the claims on the west side of Adams Lake should be explored because of their ease of access and their proximity to known showings. Within that area, the geochemically anomalous east end of the 1968 Twin Mountain grid would be an attractive starting point. Detailed geological mapping, prospecting and stream silt sampling could expand from there to define and evaluate the greenschist belt covered by the claims. Regular rock chip sampling and analysis for a broad spectrum of elements would define geochemically anomalous lithologies.

As a result of this initial stage, specific areas of geological, prospecting, or geochemical interest would be selected for continued exploration. Suitable targets for this follow-up would be:

1. felsic volcanics, graphitic phyllites or sulphide zones with elevated base or precious metals in the greenschist and phyllite sequence
2. persistent anomalies in base metals, As or Ag in stream silts
3. rock geochemical enrichment in Ba, Si, As, or depletion in Na

The next stage of exploration would then concentrate on Stage 1 targets west of Adams Lake and evaluate the property on the eastern side of the lake.
Results from the first phase of exploration should be sufficiently definitive to allow grids to be located. Significant geochemical or geophysical anomalies on the second stage grids could be trenched easily because of the proximity to logging roads. This trenching would establish whether there was a possible drill target in the anomalous area.

Another aspect of the second stage program would be exploration of the property on the eastern side of the lake. Information obtained from geological and geochemical exploration on the western side of the lake could be projected across to the eastern part of the property where access is more difficult. Again the initial emphasis should be on geologic mapping including rock chip sampling, prospecting and stream silt geochemistry.

The third phase of exploration would entail drilling any promising mineralization exposed in the trenches. This drilling should take into account the local structural complications and would be searching for sulphide concentrations in fold hinges. Detailed surface geology must be correlated with the drill results to enable the structure to be interpreted and to optimize future drilling.
8.0 RECOMMENDATIONS

A three stage exploration program is recommended for the property.

8.1 Stage 1 - Geology, Prospecting and Geochemistry on the West Side of Adams Lake

Examine the mineralization at the Hilton, Homestake, and Twin Mountain deposits to identify geological features associated with the mineralization.

Attempt to relocate the Twin Mountain 1968 grid and examine in detail the geochemically anomalous eastern end of the grid. Map the geology in detail and sample outcrops for rock chip geochemistry.

Expand the geological mapping in the greenschist belts concentrating on lithology and structure along roads, stream beds, and lakeshores. Look specifically for clastic to intermediate volcanics, metamorphosed sediments, increases in sulphide content, and evidence of structural repetition.

Sample the greenschist and any of the above lithologies for rock chip geochemical analysis. Analyses should preferably be a 30 element ICP but should at least include standard base metals and As, Ba, Na, Ti.
Stream silt geochemical sampling of the greenschist belt drainage with samples at 100 metre spacing and analysed for the standard base metals and also As, Ba, and Ag.

8.2 Stage Two - Detailed Exploration West of Adams Lake and Reconnaissance on the Eastern Side of Adams Lake

Lay out sampling grids over areas which have shown encouragement in Stage 1.

Sample the B horizon of the soils on 20 metres spacing on lines crossing the strike of the beds and analyse the soils for base metals plus Ag, As, Au.

Map the geology of the grids in detail and rock chip sample all accessible outcrops, analysing for 30 elements (ICP).

Run VLF-EM survey over the grid.

Trench across anomalous zones.

Regionally explore the eastern side of the lake, mapping geology, prospecting and taking widely spaced stream silt sediments using the same analytical procedures as on the western side of the lake.
8.3 Stage Three - Drill Testing of Targets

Geophysical surveys (MAX-MIN EM, IP) over areas where favourable results were obtained from trenching or rock geochemistry. The geochemical surveys should be oriented perpendicular to the axis of isoclinal folds and cylindrical sulphide targets should be expected.

Drilling to be located to test geophysical anomalies where structural concentrations of sulphides are to be expected. Drilling program should be planned to test the targets at depth. Detailed surface geological mapping in conjunction with the drilling and core logging.

Detailed testing of anomalies located in Stage Two regional exploration on the eastern side of the lake (soil grids, VLF-EM) to upgrade them to trenching and drilling stage.
9.0 COST ESTIMATES

Stage 1

Geologist - Mapper 45 days $ 8,500
Prospector 45 days 7,500
2 Samplers 45 days 9,500
Consultant 10 days @ $500/day 5,000

Field Costs

Vehicle Rental 4wd, Trail Bike 2,500
Fuel 500
Supplies 750
Food and Accommodation $40/person day 7,200
Analyses 150 rocks ICP @ $10 1,500
200 silts ICP @ $8 1,600
Data Processing 250
Travel 500
Report Preparation 2,000

$ 47,300

ALLOW 50,000
**Stage 2** - Assume two grids west of Adams Lake. Reconnaissance Exploration East of Adams Lake

### Personnel

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### Field Costs

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**ALLOW**

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MineQuest Exploration Associates Ltd.
**Stage 3 - Approximate Costs for Geophysical Surveys and Drilling**

MaxMin EM and/or I.P.
- 20 line km at $1500/line km  
  30,000

Diamond Drilling
- 2000 metres at $80/metre  
  160,000

Assays, Geological Analysis  
  20,000

**$210,000**
10.0 USE OF REPORT

ADAMS LAKE PROPERTY

PROPOSAL FOR A THREE STAGE EXPLORATION PROGRAM

by

G.J. Dickie

MineQuest Exploration Associates Ltd.

for

Omni Resources Inc.

Permission is given to make use of this report, in its entire and unedited form, in a Prospectus or Statement of Material Facts. Written permission of MineQuest Exploration Associates Limited must be obtained before release of any quotation or summary.
11.0 STATEMENT OF QUALIFICATIONS

I, Geoffrey J. Dickie, certify that:

1. I am a consulting geologist with MineQuest Exploration Associates Ltd. with a business office at 311 Water Street, Vancouver, B.C.,

2. I graduated with a B.Sc. degree in geology from the University of Queensland, Australia in 1965 and with a Ph.D. in geology from the University of Alberta, Edmonton in 1972.

3. I am a Fellow of the Geological Association of Canada and a Member of the Canadian Institute of Mining and Metallurgy.

4. I have practised geology for the past 17 years.

5. The opinions of this report are based on my field experience in the Adams Lake area since 1979. I have not conducted a specific examination of the Omni Resources property.

6. I have no interest, direct or indirect nor do I expect to receive any in the claims or securities of Omni Resources Inc.

Signed G.J. Dickie

Dated at Vancouver, B.C. this
12.0 REFERENCES

Dickie, G.J., 1984
Exploration for Ag-Pb-Zn sulphide deposits in
a multiply-deformed terrain in southern
British Columbia,
Paper presented to Geological Society of
Australia, February, 1984

Preto, V.A., 1981,
Barriere Lakes-Adams Plateau Area in
Geological Fieldwork 1980,
Paper 1981-1 Geological Division, Mineral
Resources Branch, Ministry of Energy,
Mines and Petroleum Resources, Victoria,
B.C.

Schiarizza, P., 1984
Geological Map of Adams Lake - Barriere area.
Geological Division, Mineral Resources
Branch, Ministry of Energy, Mines and
Petroleum Resources, Victoria, B.C. In
Preparation

Relevant Assessment Reports

A.R. 10780 Report on Diamond Drill Hole 82-1
Amy-Dee 1-4 Claims, White Bluffs,
Adams Lake Area,
by Eric Ostensoe, November, 1982
A.R. 9155  Airborne EM and Magnetometer Survey
T.M. 3 Claim, Adams Lake Area,
by W.G. Timmins, May, 1981

A.R. 2093  Geological report on the Twin Mountain
Property, Adams Lake area,
by J.M. Dawson, October, 1969

A.R. 1783  Geochemical - Geophysical Report,
Star 1-14 and adjoining claims,
by W.S. Read, September, 1968