GEOLOGICAL REPORT

ON THE

OLEY1, OLEY2 CLAIMS

LAC LA HACHE, BRITISH COLUMBIA

CARIBOO MINING DIVISION

NTS 93A3/W

LATITUDE: 52°05' NORTH

LONGITUDE: 121°15' WEST

FOR

G.W.R. RESOURCES INC.
204-20641 LOGAN AVE.
LANGLEY, B.C.
V3A 7R3

BY

David E. Biann, P.Eng.
Norian Resources Corp.

October, 1994

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,685
TABLE OF CONTENTS

Summary .......................................................................................................................... 1.
Introduction.................................................................................................................. 2.
Location and Access .................................................................................................... 2.
Physiography and Climate .......................................................................................... 2.
Property Status ........................................................................................................... 2.
History ......................................................................................................................... 3.
Regional Geology ......................................................................................................... 4.
Property geology ........................................................................................................... 4.
Discussion ...................................................................................................................... 5.
Conclusions ................................................................................................................... 5.
Recommendations ......................................................................................................... 6.
References .................................................................................................................... 7.
Statement of Costs ....................................................................................................... 8.
Statement of Qualifications ......................................................................................... 9.

Appendix A Assay certificates

LIST OF TABLES

Table 1 Claim status ........................................................................................................ 3.

LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location map 1:1,000,000</td>
</tr>
<tr>
<td>2</td>
<td>Claim location 1:50,000</td>
</tr>
<tr>
<td>3</td>
<td>Regional geology 1:750,000</td>
</tr>
<tr>
<td>4</td>
<td>Regional magnetics 1:83,500</td>
</tr>
<tr>
<td>5</td>
<td>Property geology, sample locations 1:20,000</td>
</tr>
</tbody>
</table>
SUMMARY

The Oley 1 and Oley 2 claims are located at the northern end of Murphy lake, 40 kilometres northeast of Lac La Hache, in south central British Columbia. The claims are predominantly covered by glacial till and glaciofluvial deposits. Outcrop consisting of moderately to strongly magnetic, medium grained pyroxinite-gabbro, is limited to the extreme northeast corner of the Oley 2 claim. Boulders of weakly magnetic biotite-quartz-feldspar granite with minor magnetite and epidote filled fractures also occur near the northeastern corner of the property. Large boulders of moderately to strongly magnetic hornblende diorite and granodiorite occur in glacial till near the centre of the claims.

The claims are located on the northeastern end of a regional annular magnetic anomaly. Geological work during the 1994 program suggests the regional airborne magnetic high anomaly over the Oley 1 and 2 claims is due to underlying magnetic, mafic intrusive rocks that are generally unaltered. The northeastern corner of the Oley 2 claim may be near the contact between the mafic intrusive rocks and more felsic rocks of the Takomkane batholith. This area may represent a north trending contact zone between Upper Triassic-Jurassic Nicola Group rocks to the northwest, border phases of a large monzonite stock to the south, and the Takomkane batholith to the east.

Silt samples taken in 1993 and during the 1994 work program returned very low to non-detectable values for copper, silver and gold from sandy glacial till.

The extensive glacial till and glaciofluvial deposits that cover the JR claims impedes reliable surface geology and geochemical exploration techniques. Biogeochemical sampling followed by induced polarization geophysics are recommended methods of exploration for areas near the eastern termination of the regional airborne magnetic anomaly. An airborne radiometric survey may locate potassium geochemical anomalies in the glacial till. Well sorted, and locally clean sand and gravel deposits (eskers) may be of interest for aggregate purposes.
INTRODUCTION

During the Spring of 1994 the writer performed a 4 day geological reconnaissance of the Oley 1 and 2 claims to determine the geology and effective exploration methods. The targets sought are porphyry related copper-gold deposits.

LOCATION AND ACCESS

The Oley 1 and 2 claims are located on NTS mapsheet 93A/3W, 40 kilometres northeast of Lac La Hache, in south central British Columbia. The claims are centred on $52^05'\ N$ latitude and $121^015'\ W$ longitude on the north end of Murphy Lake. The claims are accessible by all-weather paved and gravel road from Lac La Hache via Rail Lake and Two Mile Lake to the north end of Murphy Lake. A major two lane all-weather logging road also connects with Williams Lake (150 Mile House), approximately 40 kilometres to the northwest. Logging roads provide good access through the claims.

Highway 97, B.C. Rail, natural gas and power transmission lines are located in Lac La Hache and Williams Lake. The local economy is primarily dependant on forestry and ranching.

PHYSIOGRAPHY AND CLIMATE

The Oley claims are located in the Central Plateau of B.C. The Central Plateau in the Cariboo is characterized by gentle, rolling hills with elevations between 850 and 1500 metres. Approximately 40% of the spruce-fir-pine forests have been clearcut since the mid 1960's. Many areas are swampy, and lakes and ponds abound in the lower elevations. The climate is cold-temperate with an annual precipitation between 500 and 1000 millimetres, most of which occurs as 1-2 metres of snowfall from November to March. On the Oley claims, snowcover departs by mid April.

PROPERTY STATUS

The Oley 1 and 2 claims are located in the Cariboo Mining Division of south-central British Columbia (Figure 2). They are recorded in the name of Dan Gagne, of Chase, B.C. The claims are held under option by G.W.R. Resources Inc.
TABLE 1
PROPERTY STATUS

<table>
<thead>
<tr>
<th>CLAIM</th>
<th>RECORD NUMBER</th>
<th>UNITS</th>
<th>EXPIRY DATE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oley 1</td>
<td>309297</td>
<td>20</td>
<td>May 7, 1995</td>
</tr>
<tr>
<td>Oley 2</td>
<td>309298</td>
<td>20</td>
<td>May 9, 1995</td>
</tr>
</tbody>
</table>

* Pending assessment approval

HISTORY

The area of the Oley claims was first explored for placer gold during the Cariboo Gold Rush in the 1890's. In 1966, the federal government flew an airborne magnetic survey over the Lac La Hache area resulting in the delineation of a large annular magnetic anomaly. This work was followed by exploration for porphyry and skarn mineralization. In 1966-1967, Coranex Syndicate Ltd. performed reconnaissance soil sampling in the area. This led to the discovery of the WC zone (presently Spout Lake skarn); this zone consists of chalcopyrite-magnetite skarn mineralization. The Ann (Peach) and Tim porphyry copper prospects were also located further east. Between 1991 and 1993, G.W.R Resources Inc. developed a drill indicated reserve of approximately 600,000 tonnes grading 1.79% copper, 50.5% magnetite and 0.12 g/t gold on the Spout Lake skarn (Dunn, 1993). During 1992, Cominco Ltd. performed reconnaissance induced polarization surveys over ground to the south of the Oley claims.

Several work programs have occurred on or near the Oley claims. Sutherland and Brown (1971) performed induced polarization using a McPhar P660 unit on ground covered by the southwest corner of the Oley claims. Results of this survey suggests broad areas of low chargeability and very low resistivity occur. An airborne magnetic and VLF-EM geophysical survey was performed over ground held by the Oley 1 and 2 claims in 1989 by Tide Resources Ltd (Woods, 1989). The area of the Oley claims was interpreted to contain moderate to highly magnetic Upper Triassic Nicola volcanic rocks cut by numerous structures. In 1993, Regional Resources Ltd., under an option agreement with GWR Resources Inc., performed a regional reconnaissance geochemical program over an area of more than 170 square kilometres, which included portions of the Oley 1 and 2 claims (Aulis, 1993). This program resulted in low and erratic copper values and also concluded that glacial till may be greater than 50 metres thickness. The 1994 work program on the Oley 1 and 2 claims consisted of geological mapping and prospecting the property to determine the source of the airborne magnetic anomaly.
Upper Triassic to Lower Jurassic basaltic breccia, minor flows, tuft, sandstone, conglomerate & limestones; includes camagentic alkalic stocks, silts & dykes

Upper Triassic argillite, argilite-porphyry breccia, basaltic to andesitic tuft; possible dykes & silts

Tertiary Volcanic Rocks

Regional Magnetic High (See Fig. 4)

GOLD OCCURRENCES

• Au Stratbound
• Upper Triassic argillite, argilite-porphyry breccia, basaltic to andesitic tuft; possible dykes & silts

• Cu-Au porphyry
• Miracite – Porphry Copper/Gold
• Tim – Porphry Copper/Gold

GWR RESOURCES INC.
OLEY 1 & 2 CLAIMS
REGIONAL SETTING

Drawn By: Ibex Drafting
NTS: 93A/3
Date: Nov. 1994
Mining Div.: Clinton
Figure No.: 3
4.

REGIONAL GEOLOGY

The Oley claims are situated within the Quesnel Trough, an allochthonous volcanic island arc sequence composed of Upper Triassic-Jurassic aged intermediate to mafic volcanic and sedimentary rocks intruded by coeval plutons and Jurassic to Cretaceous batholiths. The Takomkane batholith lies to the east of the Oley claims and is comprised of a composite granodiorite intrusion over 50 kilometres in diameter; its age is reported as between 187 and 198 million years (Campbell and Tipper, 1971). A large monzonite stock occurs to the west of the Takomkane batholith and south of the Oley claims (Figure 3). Tertiary to recent volcanic rocks unconformably crosscut and overlie older intrusive and volcanic-sedimentary rocks to the south and west. Glaciation has removed portions of the Tertiary volcanic cover in areas of high relief.

A regional airborne magnetometer survey flown in 1966 outlined an annular anomaly over 15 kilometres in its long axis. The Oley claims are located at the northeastern end of this anomaly (Figure 4).

Hydrothermal alteration and associated copper skarn mineralization occur near the contact between intrusive and Nicola volcanic rocks on the south side of Spout Lake (Dunn, 1993). In 1993, Regional Resources Ltd., located significant bornite-chalcopyrite mineralization associated with skarn alteration near the contact between the Takomkane batholith and Nicola volcanic-sediments (Von Guttenburg, 1994). Porphyritic monzodiorite, diorite and syenite intrusions are associated with alkalic copper-gold deposits at the southern end of the regional airborne magnetic high (Blann, 1994).

PROPERTY GEOLOGY

The Oley claims are dominantly covered by glacial till and glaciofluvial deposits. Glacial till is comprised of finely sorted to coarse deposits of clay, sand, gravel, boulders and mixtures of these. Outcrop on the Oley claims is limited to the northeastern corner of the property. These outcrops are composed of medium to locally coarse grained magnetite-hornblende gabbro and pyroxinite; they are strongly magnetic, and unaltered. Outcrop located to the northwest of the claims are comprised of weakly chloritic and epidote altered augite porphyritic volcanic flows. Several areas of large boulder fields occur in the central portion of the Oley claims. Large boulders from 1-2 metres diameter are composed of magnetite-hornblende diorite and granodiorite; they are moderately to strongly magnetic and unaltered. Northeast of the gabbro outcrop, in the extreme northeast corner of the property, boulders of coarse grained biotite-quartz-feldspar granite occur; these boulders contain very minor occurrences of epidote and magnetite in quartz-k-feldspar veinlets less than 1 mm in thickness.
Glacial features include kettle lakes, eskers and possibly moraines. Eskers form south to southwest trending ridges 5-20 metres in height and are comprised of locally clean, sorted gravel and sand.

**DISCUSSION**

The Oley claims are located on the northeastern end of a regional magnetic high in an area underlain by Upper Triassic-Jurassic Nicola volcanic rocks, a large monzonite stock, and the Takomkane batholith. A regional airborne magnetic high may be associated with the contact between a large monzonite stock and Nicola volcanic rocks.

Outcrop on the Oley 1 and 2 claims is limited to the northeastern corner where magnetic gabbro and pyroxinite occur. This area corresponds to a portion of the regional airborne magnetic high, and suggests intrusive rocks may be the source of the anomaly in this area.

Boulders of magnetic diorite and granodiorite located in the central portion of the claims are also located in proximity to the regional magnetic high. These large boulders occur in clusters suggesting they may have originated fairly close to their present position; they are moderately to strongly magnetic and may be one possible source of the 4500 gamma contour airborne magnetic anomaly. Induced polarization surveys to the west of the property in 1971 returned widespread but low chargeability values; the high magnetite content of rocks located in the general area of the survey suggests magnetite may be a possible cause for the I.P. anomaly.

Boulders of weakly magnetic biotite-quartz-feldspar granite occur in the extreme northeast corner of the Oley 1 and 2 claims. Glacial features on the property suggest the origin for these boulders to be northeast of the claims; this area corresponds to a regional magnetic low. The general composition, low magnetic content and weak alteration suggest these rocks may be part of the western contact zone of the Takomkane batholith.

**CONCLUSIONS**

The Oley claims are located on the north end of Murphy Lake, approximately 40 kilometres northeast of Lac La Hache, in south central British Columbia. The property is almost entirely covered by glacial till and glaciofluvial deposits. It is suggested that the bedrock geology consist of Upper Triassic-Jurassic Nicola volcanic rocks to the northwest and intrusive rocks composed of generally unaltered, magnetic hornblende diorite, granodiorite, gabbro and pyroxinite over the central and eastern portion of the claims.
6.

These intrusive rocks may be the source of the northeastern portion of the regional airborne magnetic anomaly. Boulders of biotite-quartz-feldspar granite containing weak chlorite-epidote alteration may have originated from near a north trending contact with the Takomkane batholith to the east.

The property contains fairly clean, sorted gravel and sand in the form of eskers; these deposits may be of interest for aggregate purposes.

**RECOMMENDATIONS**

The extensive glacial till and outwash coverage of the Oley 1 and 2 claims impedes surface geology and geochemical exploration techniques. Work programs since the 1960's have failed to return encouraging geochemical or geological results in this area, in part due to the extensive and possibly very deep glacial coverage. Reconnaissance style induced polarization geophysics or biogeochemical sampling are methods recommended to determine bedrock characteristics near the eastern termination of the regional airborne magnetic anomaly, where a north trending contact occurs with the Takomkane batholith. The feasibility of using the sand and gravel deposits for aggregate could be investigated.

Biogeochemical sampling

500 samples @ $50/sample (all-in) $25,000.00

I.P. Geophysics

10 line kilometres @ $ 2,000/L km(all-in) $20,000.00

Total $45,000.00

D. Blann, P.Eng.
7.

REFERENCES


Campbell, R.B. and Tipper, H.W; G.S.C. Memoir 363, 1972 "Geology of Bonapart Map Area".

Dunn, D. St. C., 1993, Diamond drilling report on the Dora claims, Lac La Hache, Cinton Mining Division, B.C., G.W.R. Resources Inc.


Von Guttenburg, R., Lloyd, J., 1994, Geophysical, geochemical, geological report on the Nemrud (bornite skarn) property, Lac La Hache, Clinton Mining Division, B.C., Regional Resources Ltd., G.W.R. Resources Inc.

8.

**STATEMENT OF COSTS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mob/Demob Pro rata</td>
<td>$500.00</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
</tr>
<tr>
<td>D.Blann, P.Eng. 7 days @ $300.00/day</td>
<td>$2,100.00</td>
</tr>
<tr>
<td>Room/Board 6 days @ $70.00/day</td>
<td>$420.00</td>
</tr>
<tr>
<td>Transportation: 4X4 truck 5 days @ $70/day</td>
<td>$350.00</td>
</tr>
<tr>
<td>Assays 5 X $15.00</td>
<td>$75.00</td>
</tr>
<tr>
<td>Field supplies, rentals, communications</td>
<td>$50.00</td>
</tr>
<tr>
<td>Report drafting, reproductions</td>
<td>$750.00</td>
</tr>
</tbody>
</table>

Subtotal $4,245.00
Office management@ 10% $424.50

Total $4,669.50
9.

STATEMENT OF QUALIFICATIONS

I, David E. Blann, of Squamish, B.C., do hereby certify:

1.) That I am a Professional Engineer registered in the Province of British Columbia.

2.) That I am a graduate in Geological Engineering from the Montana College of Mineral Science, Butte, Montana (1986).

3.) That I am a graduate in Mining Engineering Technology from the B.C. Institute of Technology (1984).

4.) That I performed work on the subject property between April 25 and 30, 1994, and information, conclusions and recommendations in this report are based on my work on the property and previous reports and literature.

5.) That I have no direct or indirect interest in the subject property.

Dated at Vancouver, B.C., October 20, 1994

[Signature]
David E. Blann, P.Eng.
APPENDIX A

OLEY 1 AND 2 CLAIMS

ASSAY CERTIFICATE
| Et #  | Tag #   | Au (ppb) | Ag | Al %  | As | B   | Ba  | Be | Ca % | Cd | Co | Cr | Cu | Fe % | K %  | La | Mg %  | Mn | Mo | Na %  | Ni | P   | Pb | Bb | Br | Sr | Ti % | U  | V   | W   | Y   | Zn |
|-------|---------|----------|----|-------|----|-----|-----|----|-------|----|----|----|----|------|------|----|--------|----|----|--------|----|-----|----|----|----|----|------|----|-----|-----|-----|
| 1     | OLEY 94DB-51 | <5 <2 1.02 | 20 | 4    | 110 | <5  | 0.39 | <1 | 9    | 15 | 34  | 2.32 | 0.04 | <10 | 0.24 | 574 | <1 | <0.1  | 10 | 500 | 18 | <5 | <20  | 34 | 0.05 | <10 | 54 | <10 | 5 | 19 |
| 2     | OLEY 94DB-52 | <5 <2 0.54 | 55 | 4    | 70  | <5  | 0.39 | <1 | 5    | 7  | 14  | 1.04 | 0.02 | <10 | 0.16 | 295 | <1 | <0.1  | 6  | 570 | 4  | 5  | <20  | 25 | 0.03 | <10 | 21 | <10 | 3 | 13 |
| 3     | OLEY 94DB-53 | <5 <2 0.63 | 55 | 6    | 60  | <5  | 0.39 | <1 | 5    | 10 | 18  | 1.50 | 0.02 | <10 | 0.23 | 151 | <1 | <0.1  | 6  | 570 | 4  | 5  | <20  | 27 | 0.04 | <10 | 33 | <10 | 4 | 15 |
| 4     | OLEY 94DB-54 | <5 <2 0.59 | 55 | 6    | 60  | <5  | 0.27 | <1 | 6    | 15 | 18  | 1.40 | 0.03 | <10 | 0.25 | 134 | <1 | <0.1  | 11 | 540 | 4  | 5  | <20  | 24 | 0.05 | <10 | 33 | <10 | 4 | 16 |
| 5     | OLEY 94DB-55 | <5 <2 0.44 | 55 | 4    | 45  | <5  | 0.23 | <1 | 5    | 9  | 12  | 1.26 | 0.07 | <10 | 0.24 | 325 | <1 | <0.1  | 13 | 450 | 8  | 5  | <20  | 16 | 0.04 | <10 | 27 | <10 | 3 | 16 |

**QC DATA:**
- **Repeat:**
  - OLEY 94DB-51
    - <2 1.00 <5 6 110 <5 0.37 <1 8 13 | 25 2.21 0.04 <10 0.24 554 <1 <0.1 11 480 8 5 <20 32 0.04 <10 40 <10 6 19
  
- **Standard 1991:**
  - 1.2 1.82 60 6 170 <5 1.71 2 20 66 65 4.08 0.39 <10 0.89 683 <1 <0.1 22 700 20 10 <20 59 0.09 <10 78 <10 9 75

---

GWR RESOURCES ETK344
STE 204-20641 LOGAN AVE
LANGLEY, B.C.
V5E 7R3

ATTENTION: DAVID BLANN

5 Soil samples received June 23, 1994

---

Page 1