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# ASSESSMENT REPORT

on the

## SOLO CLAIM GROUP

NTS 82J/13E 
Latitude 50° 50'N Longitude 115° 40'E 
Golden Mining Division

for:

Wild Horse Resources Ltd. 3010, 300-5th Ave. S.W. Calgary, Alberta T2P-3C4

by:

Tim J. Termuende, P.Geo. Toklat Resources Inc. 2720-17th St. S. Cranbrook, BC V1C-4H4

FILMED

Submitted: January 3rd, 1994

GEOLOGICAL BRANCH ASSESSMENT REPORT

23,209

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#### SUMMARY

The Solo claim group hosts significant quantities of MgO-enriched dolomite up to 150m thick in section. Analysis of selected burned samples within Cathedral Formation stratigraphy confirms that concentrations consistently range from 40-44% MgO. These values reflect sampling of weathered, surficial exposures only, and it is expected that purity will increase with depth of sampling.

Considering the proximity of the claims to the Mt. Brussilof magnesite mine now in operation 5 km to the south and along strike, it would appear that the claims overly rocks representing significant economic potential.

The property was intended for diamond drilling in the fall of 1993, and as such, this report is based on a single one-day property visit by representatives of Wild Horse Resources Ltd., owners of the property. The intention of the visit was to locate suitable camp and drill site locations, and to measure distances for access, waterline, lift, etc. The visit was not intended to include any further geological investigation, however two samples of magnesian material were taken from the claims, the locations and results which are described, following.

Subsequent to the site inspection, it was learned that the area was recently designated within the Protected Area Strategy program, and as such, held some degree of risk as to future development. The property owners decided to suspend drilling activity until the status of the area became more clear.

It was earlier expected therefore, that assessment on the property would be based on diamond drilling, but unfortunately it will have to be based on the physical work in choosing suitable drill and camp-site locations, and on limited geological data received from two rock samples.

#### INTRODUCTION

One of the largest and purest Magnesite (magnesium carbonate) deposits in the world is mined by Baymag Mines at the Mount Brussilof deposit, located in the Main Ranges of the Canadian Rocky Mountains 10km south of Mount Assiniboine Provincial Park, equidistant between Canmore, Alberta, and Radium, BC. The deposit, which was first discovered in 1955, was put into production in 1982, and produces high purity magnesite grading over 95% magnesia (calcined product). Baymag ships its ore by truck to Exshaw, Alberta, where it is reconstituted into high quality caustic magnesia and fused magnesia.

The **Solo** claims, which are the subject of this report, are contiguous with the Mt. Brussilof claims, and are located northeast of the deposit.

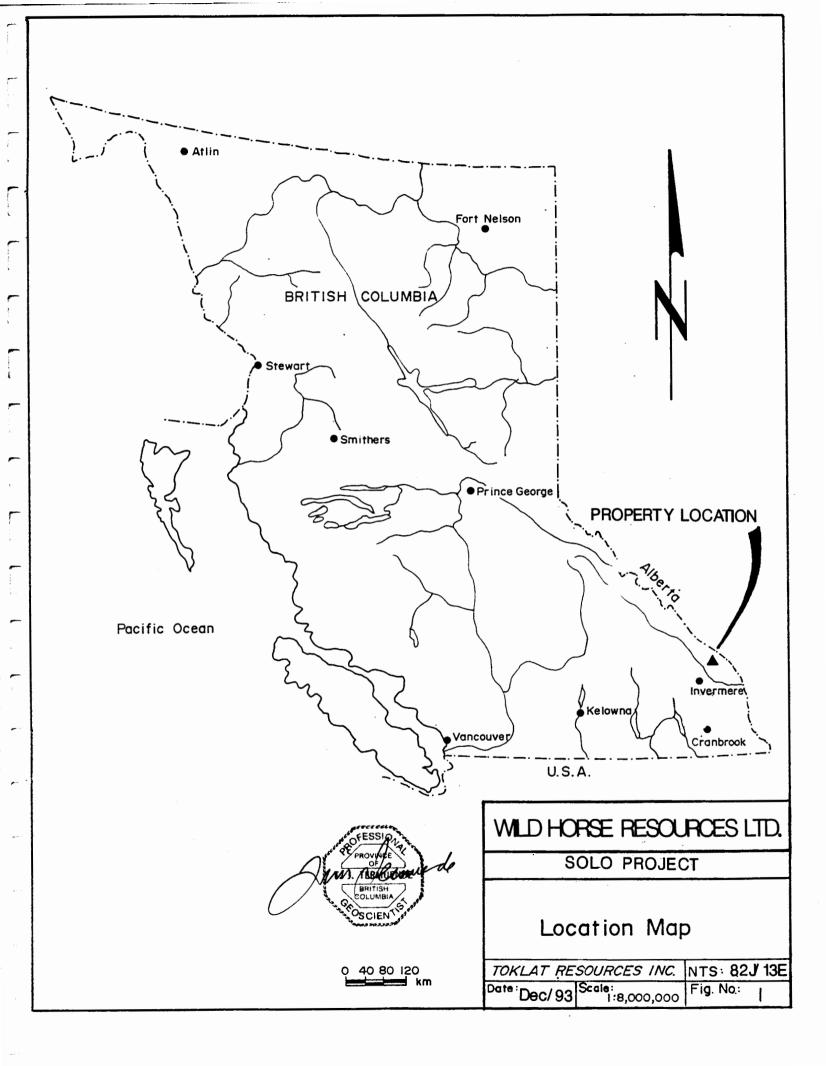
This report is based on a visit made to the property on September 23, 1993 by Ralph Newson, consulting geologist for Wild Horse Resources, R.W. Termuende, optionor of the property, and T. Termuende, author of this report. The purpose of the visit was to locate a suitable campsite and drill location for a now-suspended drill program, originally planned to commence in early October. Two rock samples were taken during the visit, and are described in this report.

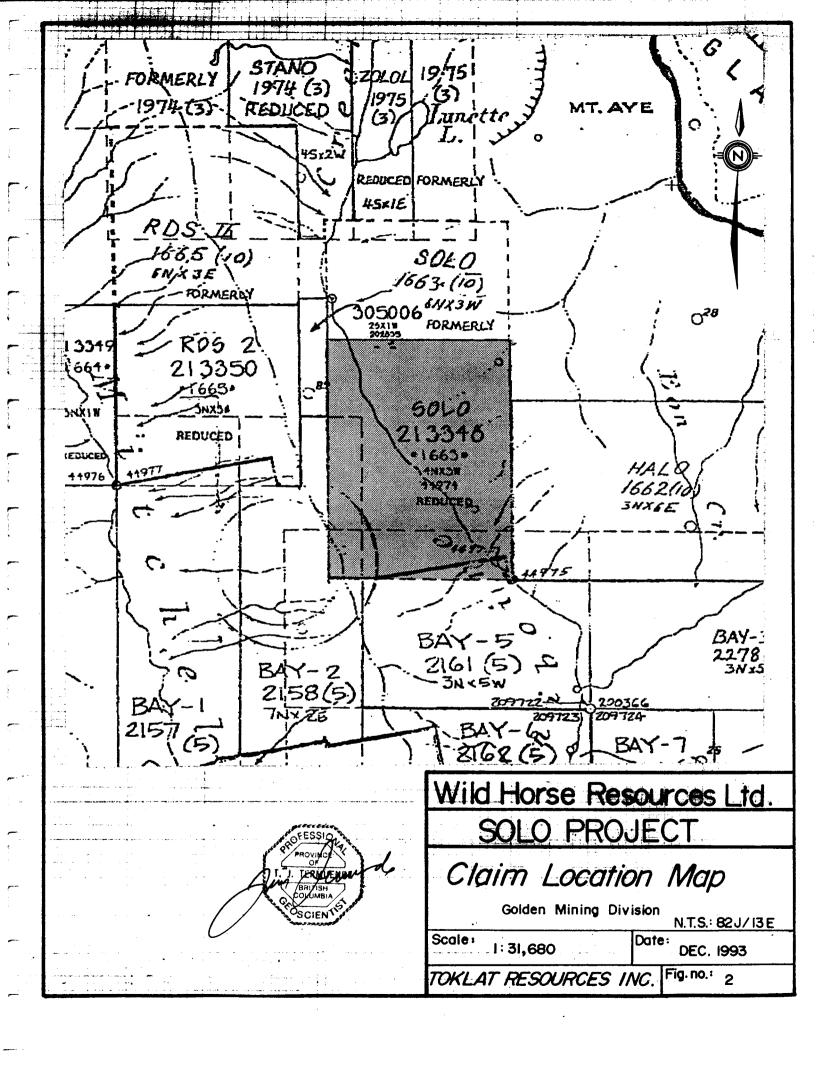
#### LOCATION, ACCESS, PHYSIOGRAPHY AND TITLE

The claim group is located 4-7 km north of the Baymag Mines Ltd. Mt. Brussilof magnesite mine, located at the junction of Mitchell River and Aurora Creek. The property consists of twelve units staked in accordance with the Modified Grid System. The claims cover portions of Assiniboine Creek, and are bound on the north by Mount Assiniboine Provincial Park and on the south by mineral claims owned by Baymag Mines Ltd.

An all weather road leads from Settlers' Road at the Kootenay River and travels north-east up the Cross River to the Baymag minesite. A recent logging road leads north-east from the mine for 3 km to the junction of Assiniboine and Aurora Creeks. Present access to the claims is by foot or helicopter only. A good trail follows Assiniboine Creek north of the Baymag mine to a hunter's camp just south of the park boundary. Helicopter landing sites on the property are limited to ridge tops and slide paths at the valley floor.

The Baymag minesite is located 57 km by road from Radium, BC. One





can drive from the minesite to a recently logged area within 1/2 km of the property's south boundary at Eon and Assiniboine Creeks. Flying time by helicopter is 20 minutes from Invermere, B.C. or 15 minutes from Canmore, Alberta.

The property is very rugged at higher elevations with many cliffs. Slopes decrease gradually to the valley bottom, generally averaging 30  $-40^{\circ}$ . Above 6500 ft. elevation vegetation is sparse and overburden is negligible. Valley bottoms are generally forested with pine and fir. Precipitation is moderate, with the property workable from late May to early November.

The claims are 100% owned by Wild Horse Resources Ltd. of Calgary, Alberta. Registration numbers and expiry dates are summarized below.

Claim Name	Tenure No.	<u>Units</u>	<u>Current Expiry Date</u>
Solo	213348	12	October 6, 1994

#### **HISTORY**

The property was initially staked in September, 1986 by J. A. Chamberlain, who had discovered magnesite float material in the Assiniboine Creek area. A total of 72 units were staked at this time. The claims were later transferred to R.W. Termuende, who supervised further work programs. All claims were allowed to lapse over the years, with the Solo claims being the exception, which itself was reduced from 18 units to 12 units.

In 1988 work was concentrated on the Mitchell River area, where no magnesite material was found, and in Eon Creek, where four samples were collected, with Magnesite grades of between 43% and 48% reported (Larson, A.R. #18203)

In July and August, 1989, work was concentrated in the Assiniboine Creek area. Some 15 traverses were made mainly on the West side of the valley, in the area covered by the Solo claims. Thirty three samples were analyzed with MgO ranging from a low of 12.83% to a high of 43.07% (Cross, A.R. #19092).

The claims were sold to SCC Resources Inc. of Calgary in June, 1991.

Geological Consultants carried M.L. Larson out exploration program in September, 1991 to evaluate a magnesite-rich horizon within Cathedral Formation rocks along the west side of the Assiniboine Creek valley, discovered earlier by Cross. traverses were made across stratigraphy, with sampling carried out throughout. Further to the field program, fluid inclusion studies were made of magnesite from the property, and compared with samples from the Mount Brussilof (Baymag) deposit. It was concluded that "the temperatures of homogenization from the Baymag sample (140-155°C) and those from the Solo Claim (140-170°C) indicate that they were all formed during a single event" (Larson, 1993). hole diamond drilling program was recommended as a result of this work.

In December, 1993, SCC Resources Inc. transferred its interest in the property to Wildhorse Resources Ltd., a Calgary-based exploration company.

As the Larson program was the latest major exploration effort on the property, the reader is referred to his report for a detailed explanation of magnesite mineralogy, grade, and location.

#### **GEOLOGY**

Overall stratigraphy in the area consists of stratified middle and upper Cambrian carbonates and shales consisting of miogeoclinal sediments and thrusted sheets overlying archean cratonic rocks. A major facies change from predominantly carbonates in the east to mainly shales in the west occurs in this area and is marked by the Cathedral Escarpment whose position more or less coincides with the course of the Mitchell River.

The Solo claims are located 2km east of the Cathedral Escarpment, and overly thick stratabound beds of coarse grained MgO-enriched dolomite corresponding to the Cathedral Formation, an alternating series of carbonates prevalent in the area. "The magnesite occurs as beds, lenses, pods and irregular masses ranging in thickness from 65-75m. The texture varies from very coarse-crystalline (sparry) to medium sucrosic (granola) and the colour varies from pure white to beige. The high grade magnesite deposits occur exclusively near the base of the Cathedral formation." (Larson, The top of the magnesite-rich horizon is marked by a 1993). conformable grey-brown, thin-bedded argillaceous limestone approximately 75m thick, itself overlain by a distinctive cliffforming limestone unit.

The Cathedral formation is underlain by the Naiset shale unit, and overlain by the Stephen shale unit. The Naiset/Cathedral contact is not exposed within the claim area.

Rocks within the claim area form the western flank of a broad antiform, with the axial plane roughly coincident with the course of the Assiniboine River, Beds dip consistently 10-20° to the west, with a 30° Az. strike. The above stratigraphic package overlies a major west-dipping thrust fault known as the Main Range Fault.

### 1993 PROGRAM

It was intended that a 1500 foot diamond drilling program would be carried out in the fall of 1993, however the discovery that the claims were within a Protected Area Strategy area precluded such work. Camp and drill-site layout was completed, however, and two samples were taken of magnesian material in the area of Larsons "L" traverse (see Map, in pocket).

Samples were shipped to Loring Labs in Calgary where they were analyzed by atomic absorbtion methods (detailed analytical procedure is appended, following this report).

#### RESULTS

Results of the 1993 sampling failed to agree with results obtained by Larson in 1991. Sample N-1 returned 22.98% MgO, while sample N-2, taken some 8m away returned only 20.86% MgO. Compared with values reported in this general area of up to 42.69% MgO, it is suggested that lateral homogeneity within the magnesite horizon may be lacking. It should be noted, however, that exposure in this area is poor, and that sampling did not necessarily focus on the purest magnesite horizon. Samples taken were of weathered, surficial material, and owing to the solubility of the carbonate material, it is thought that these values will increase on fresh, unweathered surfaces.

With respect to an upcoming drilling program, should the area be removed from the Protected Area Strategy program, a suitable camp location was identified, and measurements made for water supply. The total distance from a potential pump location on Assiniboine Creek to the proposed drillpad area is 425m. The pitch of the slope is  $-30^{\circ}$ , and the total horizontal lift is  $600^{\circ}$ .

#### CONCLUSIONS AND RECOMMENDATIONS

As only a cursory sampling program was carried out on the property in 1993, no new significant geological conclusions can be drawn from the property. It is suggested therefore, that conclusions and recommendations outlined by Larson be considered.

In summary, the Solo claims overlie a 60-75m thick interval of high purity magnesite within dolomitic rocks of the Cambrian Cathedral formation. Considering the close proximity of the claims to Baymag's Mt. Brussilof Magnesite Mine, the potential for economic-grade magnesite occurring within the claim area is significant.

A 3000- foot, three-hole program should be initiated along the west side of the Assiniboine Creek valley. The total projected costs of this program is \$150,545.

Discussions by the author with Ministry of Mines geological personnel in the fall of 1993 left the impression that the area overlain by the Solo claims would <u>likely</u> be released from the Protected Area Strategy program in early 1994. It is recommended that no further work on the property be completed until such time as the status of the area is made clear.

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## CERTIFICATE OF QUALIFICATION

- I, Tim J. Termuende, of 2720-17th St. S. in the city of Cranbrook in the province of British Columbia do hereby certify that:
- I am a Professional Geoscientist registered with the Association of Professional Engineers and Geoscientists of British Columbia.
- 2) I am a 1987 graduate of the University of British Columbia with a B.Sc. degree in geology, and have practised my profession as exploration geologist continuously since graduation in 1987.
- 3) This report is based on my personal examination of the Solo property, and on publicly available data from past programs.
- 4) This report is supported by data collected during fieldwork conducted on September 23, 1993.
- 5) I have no direct interest in the Solo claims, nor do I anticipate receiving any interest in the Solo claims in the future. I do not beneficially own, directly or indirectly, any securities of Wild Horse Resources Ltd.

Dated this 3rd day of January, 1994.

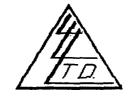
T.J. Termuende, P.Geo.

# APPENDIX 1

Analytical Results and Method of Analysis

To: WILD HORSE RESOURCES LTD.,
3010, 300 - 5th Avenue S.W.,
Calgary, Alberta T2P 3C4

ATTN: Doug Amy



File No. 36165

Date October 29, 1993

Samples Rock

# Certificate of Assay LORING LABORATORIES LTD.

SAMPLE NO.

% Mg()

"Assay Analysis"

N-1

22.98

N-2

20.86

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month. Pulps retained one month unless specific arrangements are made in advance.

Solden.

## MAGNESITE ANALYSIS

- 1 gm sample into 250 ml beaker.
- Add 2 to 3 mls H2O + 20 mls HCl.
- Boil for 10-15 minutes on a 2 switch plate.
- Add 10 mls HNO3 and boil for a further 20-25 minutes.
- Wash lids and sides down and take to dryness on a 1 switch plate.
- After dryness, cool and add 5 mls HCl and take to dryness again.
- Bake for 10-15 minutes to dehydrate SiO2.
- Take up in 10 mls HCl + 10 mls H2O. Heat, do not boil.
- Filter thru # 40 S.F. with P.P. into 200 ml flask.
- Wash in with 30% HCl policing beakers.
- Wash 4 times with 30% HCl and 4 times with hot H2O.
- Cool to room temperature and bulk.
- Take aliquots for MgO, Fe, Ca.
- Analyze on Atomic Absorption.

# APPENDIX 2

Statement of Expenditures

# Statement of Expenditures-1993 Program

The following expenses were incurred on the **Solo Claim Group** as defined in this report for the purposes of mineral exploration on September 23rd, 1993.

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PERSONNEL					
T. Termuende, P.Geo	0.5	đavs x	\$350/day		\$ 175.00
R. Termuende, P.Geo			\$400/day.		400.00
N.R. Newson, P.Geol			3450/day.		450.00
		cajb x +	, 150, 447.		100.00
HELICOPTER AND FUEL					
(Bighorn Helicopters	s 1.td)				1,551.50
(Dignorn morrooptor	<i>.</i>			• • • • •	1,001.00
ACCOMMODATION					
(R. Newson)					85.00
(					
ANALYTICAL					
(Loring Laboratories	5)				60.00
	•				
EQUIPMENT RENTAL					
Radios (2)	1.0 days	x \$10/da	ay		20.00
• •	-		-		
FIELD SUPPLY	1.0 man-d	lays x \$2	20/day		20.00
		-	•		
REPORT AND REPRODUCTION					
T. Termuende, P.Geo	: 1.25 day	/s <b>x</b> \$350	0/day		437.50
J. Termuende, Draft:					50.00
Materials	-				5.00
Reproduction					70.00

TOTAL, SOLO PROJECT: \$3,323.00

