007163

Ward - could you pass this to whoever is doing industrial minerals for NE BC - over the claim (Dean de la Motte) contacted me - he is very concerned lest this be overlooked in the evaluation. Here then look at page 3 for tonnage & quality estimate

FAXMEMO

FAX NO. (604) 952-0381 NO. OF PAGES: 1 OF 11

TO: Joanne Nelson

B.C. Geological Survey. DATE: March 24/95

FROM: STEPHEN BUTRENCHUK
FAX: (403) 328-4481
PHONE: (403) 381-0561

SUBJECT: Barite - Muncho Lake.

MESSAGE:

Here is a copy prepared for Dean Del-la-Mothe w.r.t. barite deposits in the Muncho Lake area. There was also some correspondence between Mountain Minerals w.r.t. exploration in this area.

If you have any questions please give me a call.

Thanks!
JoAnne

SIGNED: Stephen B. Butrenchuk.

Stephen B. Butrenchuk
34 Temple Cres.W., Lethbridge, Alberta, Canada T1K 4T4

S. B. BUTRENCHUK

CONSULTING GEOLOGIST

BARITE DEPOSITS

MUNCHO LAKE AREA

OF

NORTHEASTERN BRITISH COLUMBIA

Report Prepared for:

DES EXPLORATION

March 23, 1995

Stephen B. Butrenchuk,
P. Geol.

34 Temple Cres. W., Lethbridge, Alberta, T1K 4T4 • (403) 381-0561 • Fax (403) 328-4481

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INTRODUCTION:

Extensive bedded barite deposits occur in the Muncho Lake area. While these deposits have been known for many years, it has only been recently that their economic potential and uniqueness have been recognized. These deposits were originally staked as a potential source of drilling mud barite for the oil and gas industry. Recent exploration and evaluation of these deposits has been for their use as high value products for the paint and filler industry. No other suitable deposits exist in British Columbia. Barite of this quality and brightness is being imported from China.

This report summarizes the resource potential of barite deposits in the Muncho Lake area. Although there are numerous showings and occurrences in this region of the province, only four are considered to be of some economic significance. These are the MUN, MO, BV and Nonda (Blanco) deposits. The first three deposits are of the bedded variety while the Nonda deposit is a high grade pod of barite and calcite associated with a thrust fault.

REGIONAL GEOLOGY:

Regionally, carbonate rocks of Silurian to Upper Devonian occur in broad north-northwest trending folds that have been displaced along northerly trending faults.

DESCRIPTION OF DEPOSITS:

1. BV

The BV barite deposit is located along McMeachan and Barite Creeks approximately 6.4 kilometres east of Muncho Lake (Figure 1). Barite can be observed in outcrop for a length of almost 4 kilometres over thicknesses up to 33 metres thick.

Dolomite of the Devonian Stone Formation outcrops in this area and is host to the barite. Stratigraphically below the Stone Formation are dolomitic sandstone and sandstone of the Early Devonian Wokkpash Formation.

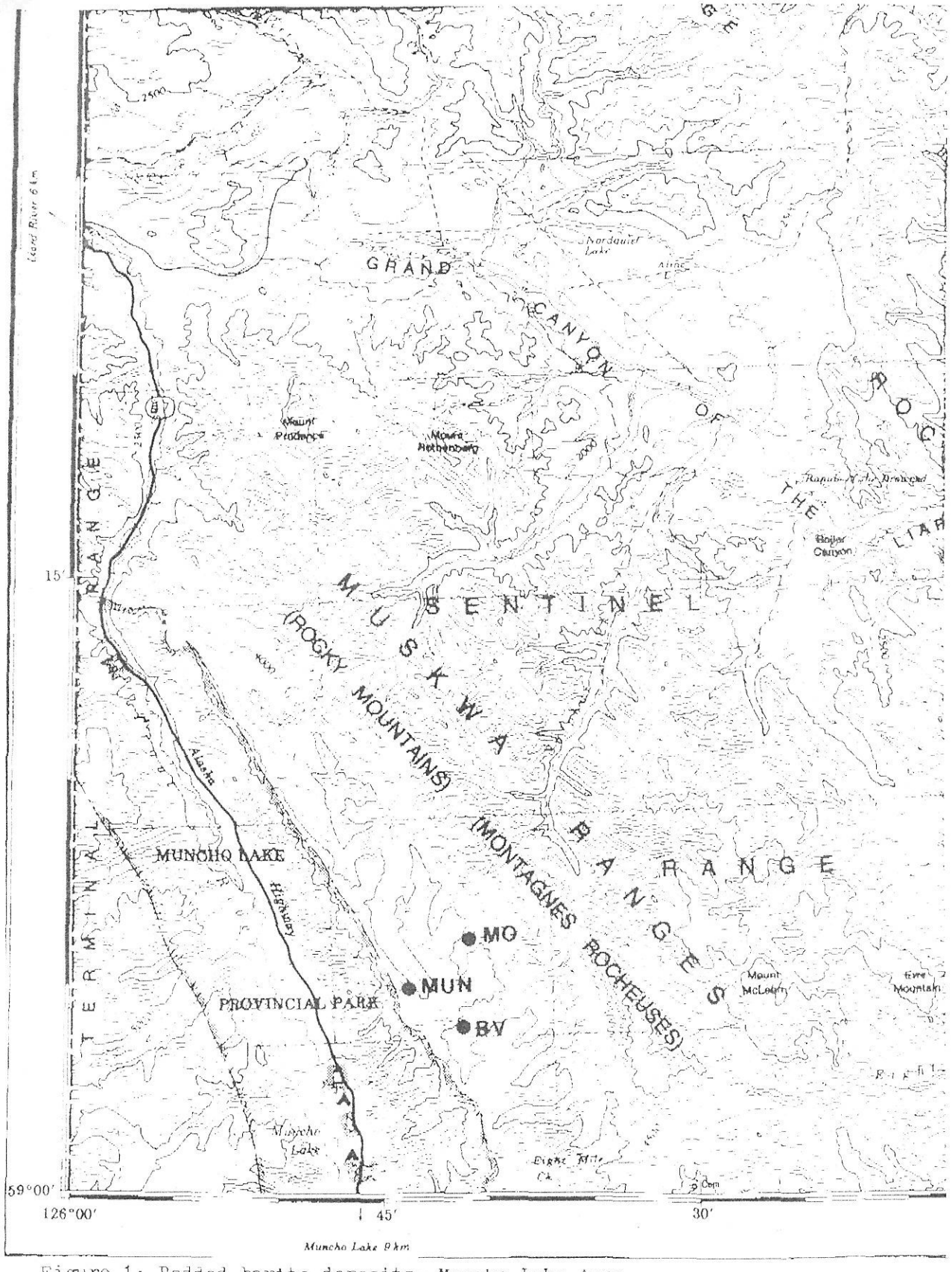

Figure 1: Bedded barite deposits- Muncho Lake Area

Barite occurs in four modes. Most of it is present as massive, white, coarsely crystalline material in beds up to 4.7 metres thick. The specific gravity varies from less than 4 to 4.30. Above the main barite zone is a dolomite breccia containing varying amounts of barite.

Dawson (1968) reported that there was a potential for 90,000,000 tonnes grading 65% $BaSO_4$ with at least part of the deposit being amenable to open pit mining. Observations by the author would confirm that the resource potential of this deposit is enormous and would rank as a world-class deposit. Individual beds contain barite that is as good or of better quality and brightness than barite presently being imported from China.

2. MO

The MO barite deposit is located in a valley of a tributary to Sulphur Creek, 5 kilometres northeast of Muncho Lake (Figure 1).

The MO barite deposit is hosted by the Middle Devonian Stone Formation. This unit is comprised predominantly of pale grey, fine to medium crystalline dolomite. It is underlain by dolomitic sandstone and sandstone of the Lower Devonian Wokkpash Formation. Barite occurs as both bedded and breccia filling varieties.

The barite zone is exposed along a length of 650 metres over thicknesses up to a maximum of 15 metres. This zone extends from the north side of Mo Creek to a point high on the south valley slope. It strikes northerly with dips of 30° to 60° westerly.

The main zone of interest lies between the creek at an elevation of 1340 metres and the south valley at an elevation of 1500 metres, a distance of 350 metres. Faults occur at both ends. This zone consists of a lower bedded barite unit overlain by a barite breccia zone.

In the bedded barite zone, individual barite beds range in thickness from several centimetres to 2 metres thick and are interbedded with barren dolomite. The barite is fine crystalline, white, finely bedded and contains coarse radiating barite crystals with interstitial secondary calcite and thin intercalations of very fine-grained greenish calcareous mudstone (Watson and Peto, 1979). Dolomite interbeds often contain veins of calcite and barite.

The barite breccia zone is more extensive and up to 75 metres thick. The breccia is chaotic, irregular in form and consists of angular fragments and blocks of dolomite ranging in

size from a few centimetres to over 2 metres. Barite and calcite comprise the matrix.

Analytical results from the bedded barite indicate grades of 3 to 87% $BaSO_4$ for individual beds. The breccia zone varies from 4 to 54% $BaSO_4$.

Resource potential based on a downdip projection of 150 metres is estimated at 2.85 million tonnes with a barite content of 50.7% and a stripping ratio of 10:1. The northern half of the deposit has the potential for development as it contains the lowest stripping ratio. Combining the breccia and bedded barite zones, the resource potential is estimated to be 3.4 million tonnes with a barite content of 35% and a stripping ratio of 0.9:1. This calculation is based on a downdip projection of 75 metres.

3. MUN

The MUN barite deposit is located in the Sentinel Range, 6 kilometres easterly from the north end of Muncho Lake (Figure 1). Bedded barite occurs in dolomite and limestone of the Middle Devonian Stone Formation over thicknesses of 13 to 17 metres with grades of approximately 50% $BaSO_4$.

Bedded barite outcrops at a number of localities. The thickest zone is exposed on the west side of a valley and extends across the ridge marking the Muncho Lake Park boundary. Barite beds can be traced in outcrop over a length of 300 metres. Resource potential for this deposit is estimated in excess of 2 million tonnes.

4. NONDA (BLANCO)

The Blanco claims covering the Nonda barite deposit are located north of Nonda Creek, east of Muncho Lake (Figure 2). Underlying the property is a grey micritic limestone of the Devonian Dunedin Formation. Occurring within the limestone is a breccia zone along a west dipping thrust fault. High purity white barite, together with calcite, is present in a pod approximately 100 metres long and 5 to 6 metres wide. Assuming a downdip extension of 20 metres and a S.G. of 4.30, there is a potential for approximately 50,000 tonnes of high quality barite.

The quality of the barite is suitable for high value paint and filler applications. Even though this is a remote location the quality of the barite is such that it can withstand substantial transportation costs.

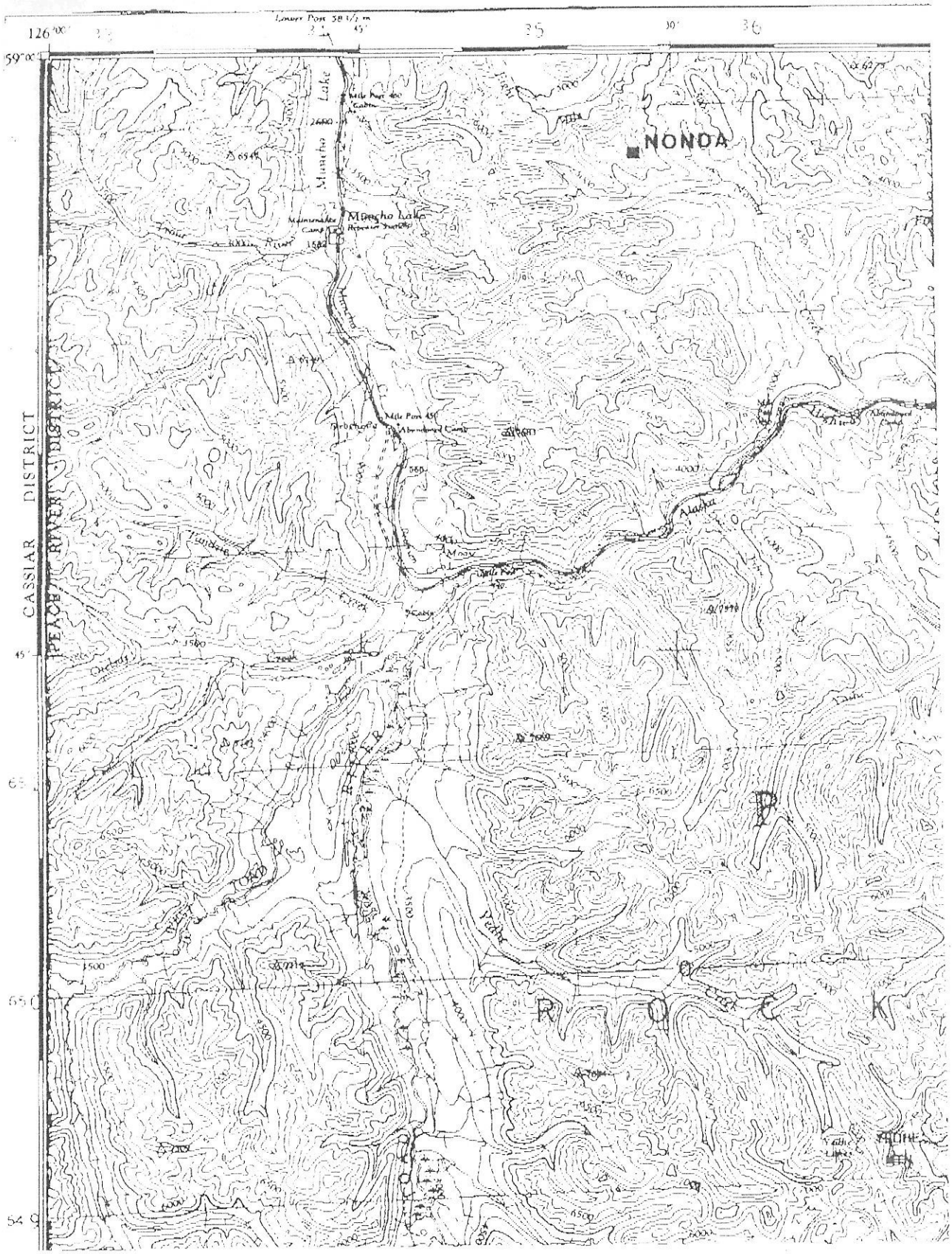

Figure 2: Stratabound barite deposits- Muncho Lake Area

CONCLUSIONS:

The above-described deposits are world-class and represent a significant barite resource in the province of British Columbia. They potentially represent a resource with significant economic value. It is the opinion of the author that these deposits represent a valuable resource that should not be precluded from exploration or possible future exploitation.

Report by: Stephen B. Butrenchuk

Stephen B. Butrenchuk
P. Geol.

SBB/deb
23 March 1995

REFERENCES

Dawson, R.H. (1968): Geological Report Covering the BV1 to BV15 Mineral Claim Group, B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 1682, 23 pages.

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S. B. BUTRENCHUK

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STATEMENT OF QUALIFICATIONS

I, Stephen B. Butrenchuk, of 34 Temple Crescent West, Lethbridge, Alberta, do hereby certify that:

1. I am a Professional Geologist, registered in the Province of Alberta.

2. I am a Consulting Geologist in mineral exploration.

3. I am a graduate of the University of Manitoba with a B.Sc. in geology (1966) and a M.Sc. in geology (1970).

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FAXMEMO

FAX NO. (604) 952 7500381 NO. OF PAGES: 1 OF 3

C.C TO: Board - Kibby

DATE: March 24, 1995

RE: Muncho L. Barite

FROM: STEPHEN B. TRENCHUK
FAX: (403) 328-4181
PHONE: (403) 381-0561

SUBJECT: Barite - Muncho Lake

MESSAGE:

A copy has been Faxed to Joanne Nelson at the B.C. Geological Survey in Victoria.

Original copy of report and Invoice to follow.

If you require any additional information or have any questions please give me a call.

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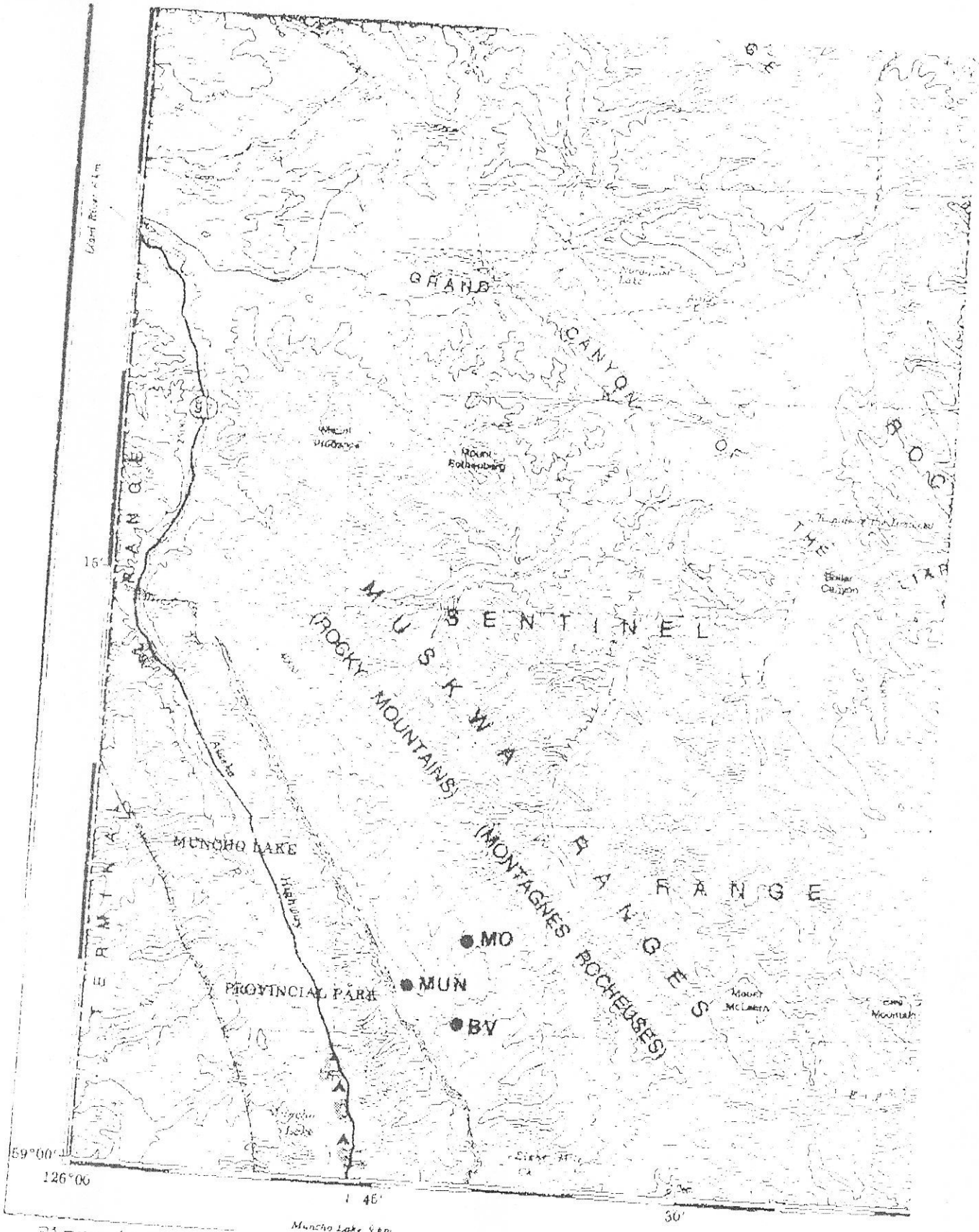

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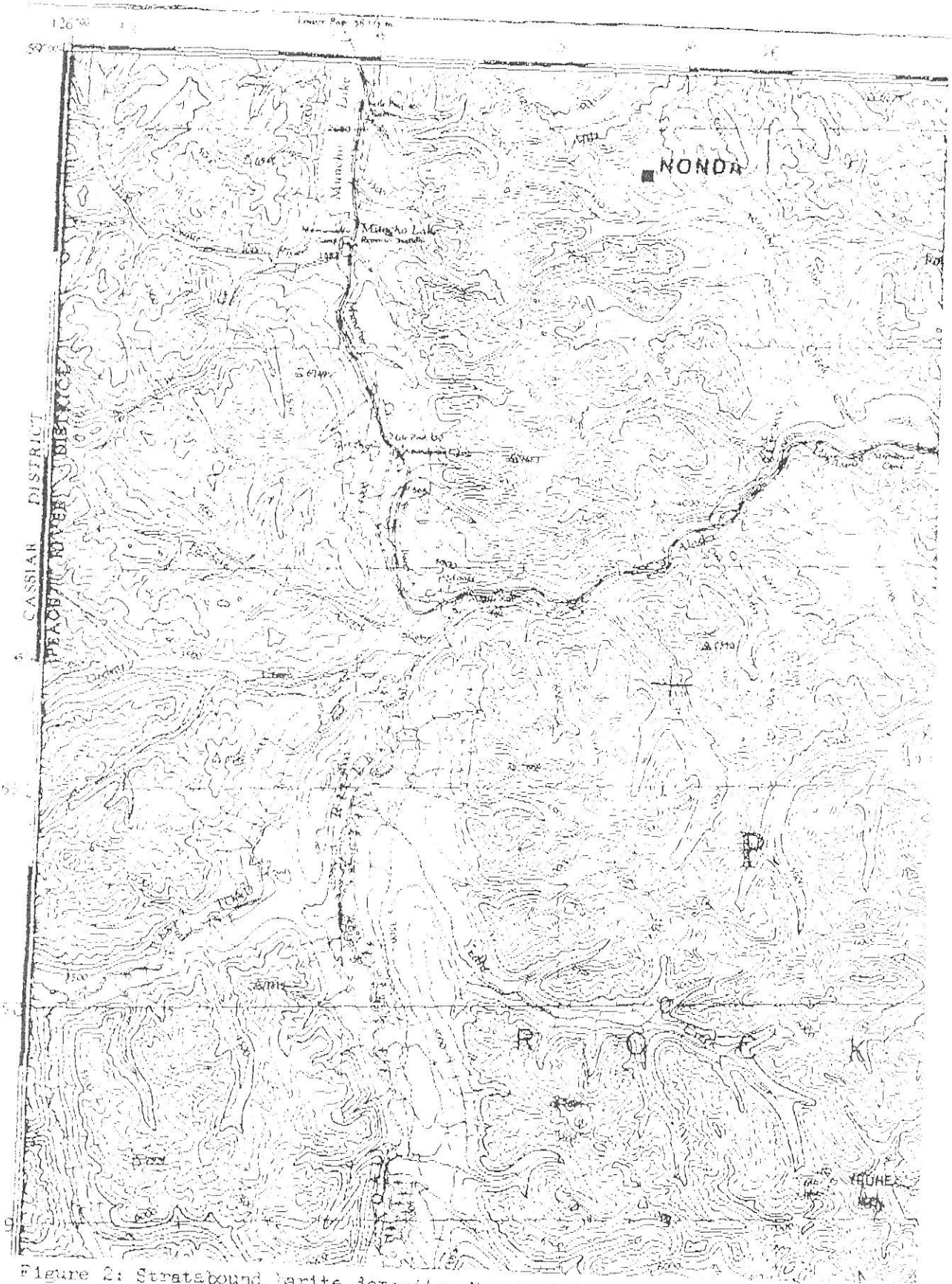

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