

XX

March 12, 1942

AIR MAIL

Mr. Paul I. Allsman
U. S. Bureau of Mines
1800 N. 1st South
Salt Lake City, Utah

Dear Mr. Allsman:

We are attaching hereto copy of a report on analysis of dolomite samples submitted sometime ago by Mr. Vera Battershell of Lovell, Wyo. Inc.

It is noted that the Lovell samples check very closely with the analysis of the Utah dolomitic marble reported by our U.S.G.S. Laboratory here under date of February 23rd, copy of which analysis was furnished you by the Casper Chamber of Commerce. A number of the samples from both Wheatland and Lovell areas show MgO values equal to or in excess of the theoretical 21.7% of pure dolomite.

The U.S.G.S. Laboratory here is also testing a sample of Cody dolomite, the analysis of which will be completed at an early date. We anticipate that you may desire to check with these analyses and we like to turn to you first, a copy of the reports for your files.

We are also attaching copy of analyses of iron ores made by the U.S.G.S. Laboratory in January. Sample number one was from the area we tried to reach on the road, March 4th, but which is inaccessible because of deep snow. The sample number two iron ore which the writer gave you while you were here is from the same location as sample number two in this analysis.

With respect to petroleum coke utilized in the ferro-silicon process, two Casper oil refineries produce jointly from 20 to 30 thousand tons of plant run coke per year, which is marketed outside the State, and in addition to the quantities sold to employees. We assure that this production as well as other coke production in this State, can be made available for magnesium processing in Wyoming by negotiation.

Mr. Paul T. Allsman

-2-

March 12, 1942

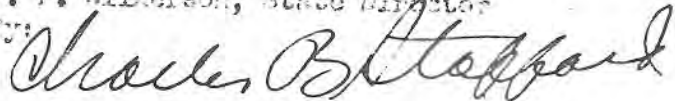
This fuel enjoys a good market at present. The agency that handles the Standard Oil Company plant coke is the Republic Coal and Coke Company, Willoughby Tower, Number 6, South Michigan Avenue, Chicago, Illinois, and the Texas Company coke is marketed by the Great Lakes Carbon Corporation, 910 South Michigan Avenue, Chicago, Illinois. Coke is also produced by other Wyoming refineries and if you are interested in having us do so, we will be glad to investigate the output of other plants in the State.

Assuring you of our appreciation of your continuing interest, and trusting that you will call on us whenever we can be helpful, we are,

Very truly yours,

W. F. Wilkerson, State Director

By:



Charles B. Stafford
Contractual Engineer

CBS:nc

WAR PRODUCTION BOARD

~~XXXXXXXXXXXXXXXXXXXX~~
P.O. Box 1211,
Casper, Wyoming.

IN REPLY REFER TO:

Dr. Horace D. Thomas,
State Geologist,
care Wyoming University,
Laramie, Wyoming.

Dear Dr. Thomas :

We are enclosing copy of report recently recieved from Mr. Weir Battershell of Lovell concerning dolomite and other materials of the Big Horn Basin. We are also enclosing page 4 of the original report bearing his map. The complete set (our copy) which we are enclosing does not have the map. Please return the original page 4 at your convenience.

You will note that Mr. Battersshell uses the Title of " Minerals Specialist ". Do you know whether he is a graduate geologist? Apparently he is familiar with the geology of the Big Horn Basin. He has quoted a long bibliography of reference bulletins and professional papers from the U.S.G.S. Bureau of Mines and other sources which indicates that he has read extensively on the subject.

After reading his letters and the report, I wonder if we can rely on the soundness of his representations and conclusions. It is my notion that his percentages run high. It is quite evident that the element of promotion is present. We can expect that of course.

The Bureau of Mines and the War Production Board have agreed to send one of their investigators out here later on. We want to be able to make the best possible report, consistent with the quality quantity and availability of our raw materials. We want to keep our feet on the ground and we cannot afford to overlook any thing. You will note at the bottom of page 5 sample of dolomite showed " 26.61 % MgO content." I believe pure dolomite runs 21.7 % MgO. The percentage for pure dolomite is quoted by him in several places in the report.

You will note reference to Aluminum page 8 part six. We will appreciate having your reaction to the report if you can conveniently give it to me.

The writer is looking forward to the coming of the representative of the Bureau of Mines, to look over and check our raw materials and I trust that it will be convenient for you or one of your associates to go with us. We will advise you in advance of his coming.



Sincerely yours,
W.F. Wilkerson, State Director
Charles B. Stafford
Charles B. Stafford,
Contractual Engineer.

Hope to see you tomorrow - W.F.

February 17, 1942

Mr. Weir Battershell
Box 394
Lovell, Wyoming

Dear Mr. Battershell:

I have before me your favor of February 12th, telling me of your dolomite deposits.

I am glad to have this information and am forwarding the same to the Geological Department at the University of Wyoming, with the request that they cooperate with you fully in the investigation of the matter referred to in your letter.

With best wishes, I am

Sincerely yours,

Nels H. Smith
Governor

NHS:GAS

Lovell, Wyoming
February 12, 1942

Box 394



Governor Nels Smith,
State Capital Building,
Cheyenne, Wyoming.

Dear Governor:

you may know that an investigation
is now being made of the dolomite
deposits of Wyoming, for possible use to produce critical ^{magnesium} metal. _{for planes.}

This was started through work of
Dr. Geo. T. Beck of Cody and my work.

Dolomite which tests to 26.61% MgO
has been found. Pure dolomite tests only
21.79% MgO , located in my work as
a by-product. Hundreds of square miles accessible.

Now, I know clay which tests 36%
 Al_2O_3 and unlimited amounts of 25% -
28% Al_2O_3 in shales. Good research problem now!!!

Suggest these two raw materials
be investigated and recorded by
State as well as Bureau of Mines,
and War Production Board, of Casper.

I would aid you, only on condition you
add to tests and work now done.
These two metals - magnesium and aluminum
no doubt can be produced here. Too bad, men
in office have so little foresight for national welfare,
you're for defense,
complacency will lose the war.
W. H. Patterson.

Box 982
Thermopolis, Wyo.
November 29, 1942

Dr. Horace D. Thomas
University of Wyoming
Laramie, Wyoming

Dear Dr. Thomas:

Sorry to have delayed so long in replying to your request of October 22, but it came just before I left for an extended trip East, and I just returned last week.

The natural conditions of mineral, fuel, etc. are ideal for manufacture of magnesium from dolomite by the Pidgeon process in Central Wyoming, but neither the government or anyone else, so far, are sufficiently interested to invest in the proposition. I completed my part of the task, until further activity is excited, wrote a report, and now am looking toward other fields.

Several chemical analyses, together with an actual plant run in Canada of a ton sample of the Wind River Canyon dolomite, indicate that it is of the best in yield of good quality magnesium, good conversion with no hindrances, such as objectionable impurities.

The following table is taken from my report of October 10, 1942. It is a condensed summary of the daily quantities of raw materials, power and fuel required for a 20-ton magnesium plant; also the quantities immediately available:

	<u>Required</u>	<u>Available Now</u>
<u>For manufacture of 20 tons metallic magnesium, daily</u>		
Raw Dolomite rock	220 tons	unlimited
Ferro-silicon (75% silicon)	20 tons	to be bought temporarily
Electricity, rotary power, only	1,500 KW	5,000 KW
Fuel:		
(either) Natural gas, cu.ft.	5,000 M	3,000 M plus*
(or) Fuel oil	900 bbls.	ample
<u>For manufacture of 20 tons Ferro-silicon (75% silicon), daily</u>		
Silica	45 tons	unlimited
Iron: (either) Scrap	6 tons	30 to 70 tons
(or) Hematite ore	10 tons	unlimited
Petroleum coke	30 tons	30 to 70 tons
Electricity	10,000 KW	5,000 KW less the above 1,500 **

* 47,000 M cu.ft. additional natural gas is contemplated.

** 30,000 KW additional electric power is contemplated.

I trust that the above information is what you want. It is the gist of my report.

Respectfully,

F. F. Minner

Madh-13-42

Dear Mr. Thomas,

It occurred to the writer that you might be interested in the enclosed.

So pressed for time we could not get out our list today for invitations, but will do so tomorrow with out fail.

Some letters from Mrs. Battershede advising they are going ahead with construction of wheel plant. He says they need the decision part of their own

from scrap steel plate, and that he likes the difficulty. His enthusiasm is to be commended, but I wonder if he has had the necessary experience —

Wm

Dolomite

Dr. H. D. Thomas
Confidential

February 3, 1944

Dr. W. H. Dow
Chairman, President & General Mgr.
Executive Offices
Midland, Michigan

Dear Dr. Dow:

Not being a scientist, it has occurred to me that comparatively recent reports of technological developments might have resulted in conditions under which your company may be interested in expansion for which Wyoming can provide raw materials and natural resources.

It has been stated that the separation of the magnesium-calcium salts of dolomite is feasible by calcination, treatment with H₂S, filtration, and recovery of H₂S by use of CO₂ replacement. After separation, chlorination and Dow process electrolysis could be used to recover metallic magnesium, or the recent high-vacuum equipment might render the ferro-silicon or Hansgig methods feasible. As I said, I am not a scientist, not even a chemist.

The short freight haul to Northwest Pacific points, as well as the other advantages available, may lead interest to this area. Do you wish to have me show your engineers what we have?

Very truly yours,

George B. Steele

GBS:LBM

Dolomite - - Large deposits in Wind River Canyon, south of Thermopolis, Wyoming. Investigated by U. S. Bureau of Mines, 1942. Analysis by U.S.B.M., (Average of six samples) CaO 31.7%, MgO 20.9%, SiO₂ 1.0%, Al₂O₃ 0.46%, Fe 0.13%, CO₂ 47.5%. Acreage, 600, traversed by main line of C. B. & Q. Casper-Billings railroad. Material can be mined by open-cut methods. Rail freight to Thermopolis, approximately \$20.00 per car, carload lots.

Fuel - - "Sour" gas from Elk Basin; approximately 20,000 M. Cubic feet per day will be available by end of 1944. Extraction of gasoline at field is planned, but desulphurization is not contemplated. Pipe-line from Elk Basin to Little Buffalo Basin will be necessary, paralleling oil pipe line now authorized for early construction, as well as gas pipe-line from a point approximately ten miles east of Little Buffalo Basin to Thermopolis, paralleling present line of Mountain States Power Co.

"Sweet" gas from Little Buffalo Basin. It is believed that 10,000 M. Cubic feet per day or more will be developed by drilling of 2 to 3 additional wells to meet market demands. Additional gas might be secured from Garland Dome.

Coal - - From Kirby mines of Sheridan, Wyoming, Coal Co. 500 tons per day are available from two well developed, producing mines. Other mines in the vicinity may furnish additional coal if required.

Oil - - Black oils are produced in Oregon Basin, Elk Basin, Hamilton Dome, and Grass Creek. These oils in crude state are suitable for fuel. Refined fuel and other oils are available from refineries at Greybull, Cody and Casper.

Power - - The U. S. Bureau of Reclamation operates a power-grid connecting hydro-electric generating plants at Shoshone Dam (Cody), and Seminoe (southwest of Casper). No excess over current requirements now exists, but credible sources report that moderate expansion of generating capacity at Shoshone can provide 7500 K.W., and from the Hart Mountain Diversion Tunnel (near Cody), 10,000 K. W. It is stated that the Reclamation Service will undertake such expansion to meet market demands. Price is reported to be 3/4¢ per K.W.h. or less. Reclamation officials have stated privately that the Bureau might undertake the erection of a steam generating plant to utilize the Elk Basin "sour" residue gas above mentioned. The project, which would be undertaken to meet demands, would involve removal and re-erection of a 25,000 K.V.A. steam-electric plant now located at Midwest, Wyoming to add an additional 17,000 to 18,000 K.V.A. net to the available power. Total power available with these developments would then be: Shoshone 7,500, Hart Mountain 10,000, Elk Basin 14,000, Total 31,500 K.W.

Water - - The Big Horn River flows through the dolomite deposits in Wind River Canyon, and through Thermopolis and Kirby. Adequate water for mining and plant operations is available at all seasons.

Transportation - - Chicago, Burlington, & Quincy Railroad runs through dolomite deposits, Thermopolis, Kirby and connects at Billings, Montana with transcontinental road to northwest Pacific states, and at Cheyenne, Wyoming, with Union Pacific. Main state highway runs through Wind River Canyon, Thermopolis and Kirby.

Miscellaneous - - In addition to the dolomite, large exposures of dolomitic limestones and limestones occur north of the Wind River deposits. Occurrences of magnesium sulphate crystals in some sandstones have been noted, but these are probably of no commercial importance.

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
305 Federal Building
Casper, Wyoming

Handwritten signature/initials

April 6, 1942

War Production Board,
P. O. Box 1211,
Casper, Wyo.

Attention: Mr. Charles W. Stafford.

Re: Please:

A analysis of the dolomite sample from Wind River (Big Horn) Canyon, near Thermopolis, Wyo., gave the following chemical content:

Sample	Analyses of Dolomite		Total %
	CaO	MgO	
South end of the Wind River Canyon	13.43	27.22	40.65
Inside Wind River Canyon	13.46	22.35	35.81
Another sample from inside Wind River Canyon furnished this office by Mr. Young of the Casper Chamber of Commerce	13.50	22.32	35.82

Please understand that these analyses are made in the interest of National Defense and that we are not authorized to do commercial work.

Very truly yours,

L. C. SUGG,
Acting Supervisor

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
305 Federal Bldg.
Casper, Wyoming

March 11, 1942

War Production Board
P. O. Box 1211
Casper, Wyoming

Attention: Mr. Charles B. Stafford

Gentlemen:

Results of analysis of the dolomite samples from near
Lovell, Wyoming are as follows:

ANALYSES of dolomite from *Chozokoria* (Embar) formation

<u>Plan of Sampling</u>	<u>% Mg</u>	<u>%MgO</u>	<u>%Li₂CO₃</u>
HW - high on the west end of Little Sheep Mountain	13.05	21.64	45.26
LE - low on east end of Little Sheep Mountain	13.17	21.84	45.67
31 - Between east and west end of Little Sheep Mountain	13.25	21.96	45.94
33 - Ditto	10.24	16.98	35.52
34 - Ditto	13.14	21.78	45.55

According to information furnished this Department, all
of these samples were reasonably close to the Lovell water
well, and the stratum from which these samples were obtained
is 105 feet thick at the well.

Please understand that these analyses are made in the
interest of National Defense and that we are not authorized
to do commercial work.

Very truly yours,

H. J. Duncan, Supervisor

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

305 Federal Building
Casper, Wyoming

March 25, 1942

War Production Board,
P. O. Box 1211,
Casper, Wyoming.

Attention: Mr. Charles E. Stafford.

Gentlemen:

Results of analyses of dolomite samples submitted by
Mr. Stafford are as follows:

<u>Sample from</u>	<u>% Mg</u>	<u>% MgO</u>	<u>% H_2CO_3</u>
<i>Put under Pughers</i> { Cody, Wyo., No. 4	10.90	18.07	27.79
{ Cody, Wyo., No. 4 plus 100 yds. Casper Mountain,	15.05	21.64	45.24
<i>Under Thompson</i> { Jackson Canyon, Minnekahta ls.	11.25	18.65	39.30
<i>omit</i> { Casper Mountain			
{ Jackson Canyon (special sample)	0.27	0.45	0.94
<i>Keova</i> { Casper Mountain, west end, From Alcova formation	1.00	1.66	3.47

Please understand that these analyses are made in the
interest of National Defense and that we are not authorized to do
commercial work.

Very truly yours,

/s/ L. G. SMOG
Acting Supervisor

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
305 Federal Building
Casper, Wyoming

February 23, 1942

Mr. Albert B. Bartlett
Wheatland, Wyoming

Dear Mr. Bartlett:

Determination of magnesium in the dolomite samples submitted to our laboratory for analysis, gave the following results:

ANALYSES OF Pre-Cambrian dolomites, Laramie Mountains

<u>Sample No.</u>	<u>Location</u>	<u>% Mg.</u>	<u>CaO</u>	<u>CaCO₃</u>
1	Sec. 6-21N-b9W Platte Co.	12.63	20.95	43.81
2	Sec. 13-23N-70W Platte Co.	13.15	21.80	45.60
3	Secs. 4,5,6,7,8,9,17 T.22N., R.70W. Platte & Albany Co.	13.75	22.80	47.68
4	Same as No. 2	7.08	11.74	24.55
5	Sec. 13-20N-72W	13.13	21.86	45.71
5A	Same as No. 5	12.57	20.83	43.57

Sample 3 contains more magnesium than true dolomite theoretically contains, indicating excess magnesium replacement.

Please understand that these analyses are made in the interest of National Defense and that we are not authorized to do commercial work.

Very truly yours,

H. J. Duncan,
Supervisor.

cc-Chamber of Commerce, Casper

NELS H. SMITH
GOVERNOR



HERBERT B. FOWLER
SECRETARY TO GOVERNOR

THE STATE OF WYOMING
EXECUTIVE DEPARTMENT
CHEYENNE

February 3, 1942

Dr. Horace D. Thomas
State Geologist
Laramie, Wyoming

Dear Doctor Thomas:

The enclosed letter from the Casper Chamber
of Commerce is self-explanatory, and I would appreciate
anything you can do for these people.

With kind personal regards, I am

Sincerely yours,

A large, elegant handwritten signature in cursive script, reading "Nels H. Smith".
Nels H. Smith
Governor

NHS: CAS

Casper, Wyoming
February 10, 1942

Lovell, Wyoming
February 9, 1942

War Production Board
Production Division
W. F. Wilkerson, State Director
Casper, Wyoming

Dear Director Wilkerson:

In reply to your urgent letter of February 7, 1942, concerning dolomite, located near Lovell, Wyoming.

This report deals principally with a Lovell area, approximately 4-5 miles southeast of Lovell, Wyoming on Little Sheep Mountain. Access to this deposit as other dolomitic deposits is open year around as they are of sedimentary origin, located at 5,000-6,000-7,000 ft. and are exposed in canyons, along roads or on top of mountains. The Yale Oil Corporation deposit is located on top of Little Sheep Mountain and at north end. Maps, charts, well logs, quantitative tests, types of deposits are included for your use in formulating a picture of the greater whole.

Can guide any party if so authorized by corporation to any and all main beds of dolomite, and test qualitatively on spot in matter of seconds.

Personally will cooperate with any authorized government party.

Yours,

Wair Battershell

Partial log of Lovell Water Well - Located on property described.

Embar	0' - 105'	
Red Beds	105' - 110'	Located:
Red Beds	119' - 125'	Lot 73-T56N-R95W
Grey Lime	125' - 130'	Samples 0' - 800'
Grey Shale	130' - 160'	Embar, Tensleep, Amsden and
Blue Shale	160' - 170'	Upper Madison Formations.

Samples referred to in this report are taken 100'-400' East, South, and West of this abandoned water well. (Lost tools in crooked hole before reaching water is report).

Partial Log of Prairie Oil and Gas (Wyoming Corporation)

Line Embar	0' - 140'
Tensleep	140' - 175'
Lime	175' - 185'
Sand(Tensleep)	185' - 235'
Line Aarden	235' - 290'
-----	-----
Fresh water	2858'
Granite	2975'

Located NE 1/4 Sec. 35-T56N-R95E. Drilled 10/16/28-4/11/29. Check at Geologist (Oil) at P.O. Building, Casper, Wyoming.

The Lovell Water Well was drilled on the information given by the Prairie Oil and Gas Well, hoping to strike fresh water at approximately 2800' on top of granite. The dolomite is located in Embar formation, a porous, hard limestone, which is cap rock of Little Sheep Mountain.

Samples listed Tested by:

Yale Research Laboratory, Billings, Montana by Luke Corbett and J. S. Bernier, graduate chemists, using gravimetric method as outlined in "Scotts Complete Analysis", ground to 100 mesh, weighed on accurate assaying scale.

Test - Lovell 5 Dolomite Date 9-23-41 Sampler Battershell 41L-63

SiO2	31.69%	Insolubles	3.10%
Iron	Trace	Si2O3	4.60%
CaO	16.01%	MgO	16.51%

Test No. 14, Lovell Dolomite, 10-3-41, Battershell 41L-65

SiO2	3.23%	Si2O3	3.39%
Iron	Trace	CaO	30.59%
MgO	19.45%	Carbonate	Present

Test No. 17, Lovell Dolomite, 10-3-41, Battershell, 41L-66

SiO2	5.50%	CaO	32.33%
Si2O3	5.50%	MgO	13.26% Lowest found.

Other Tests Quantitative show: 20% plus, 21% plus, 23% plus, 26.61% MgO contents.

Have sample pits marked for rechecking results. Have sample of samples tested. With data at hand 19% plus MgO should not be impossible, as average, including lowest.

Where dolomites are found in Wyoming - By Battershell.

- Big Horn Dolomite Formation
 1. Massive type.
 2. White cracked type.
 3. Massive buff rough surfaced type.

- Madison Lime Formation
 1. As intrusions, which when traced run for many miles, one or more intrusions running lateral to bed. Waste in beet lime production.

- Embar Lime Formation
 1. At Lovell seems generally present after hundreds of qualitative tests and possibly 8-10 quantitatively.

References

- (3) The New World or Cooke City Mining District, Park County, Montana Bulletin 811 A by T. S. Lovering 1929, U. S. Geological Survey.
- (5) Western Wyoming - Eliot Blackwelder, Washington Academy, Science Journal, Volume 8, 1918, and A. R. Schultz, Bulletin 680, 1918.
- (7) North-Central Wyoming, Big Horn Mountains and South half of Big Horn Basin.
N. H. Darton (Prof. Paper 51, 1906, Bulletin 656, 1917) and D. F. Hewett and C. T. Lupton, Bulletin 656, 1917).
- (8) North-Central Montana, Bearpaw Mountains, Frank Reeves, Bulletin 751, 1925, A. J. Collier and S. W. Cathcart, Bulletin 736, 1923.

Bulletins U. S. Geological Survey

See plate 8, Bulletin 811, pictures A, B, and C for types of Big Horn Dolomites.
 See Bulletins of U. S. Geological Survey of Cody Area, Big Horn Mountain areas, etc.
 Topographic sheets of various Quadrangles.
 Geologic maps of areas to be studied.

Grab Sample, Wind River Canyon

Test - Sample by Battershell, 1941.

SiO2	2.80%	Insoluble	nil
Iron	Trace	Al2O3	8.36%
CaO	32.58%	MgO	16.35%

This material was from great rocks in canyon, float from heights above.
Can be loaded by gravity onto rail cars or trucks.

The amount of material is unlimited of this type and no doubt better,
on a thorough survey of various formations as this was conglomerate
type not massive type, which is usually better. This material may
aid you in formulating ideas for a more thorough investigation.

There is no doubt in my mind that several deposits can produce 17% H_2O
and a few 19% plus for possible averages, less objectionable iron,
silica, etc. or in commercial tolerances.

Yours for defense,

Weir Battershell, /s/
Box 394
Lovell, Wyoming

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

305 Federal Building
Casper, Wyoming

March 11, 1942

War Production Board,
P. O. Box 1211,
Casper, Wyo.

Attention: Mr. Charles B. Stafford.

Gentlemen:

Results of analysis of the dolomite samples from near Lovell, Wyo., are as follows:

<u>Plan of Sampling</u>	<u>SiO₂</u>	<u>CaO</u>	<u>MgCO₃</u>
NW - high on the west end of Little Sheep Mountain	13.05	21.64	45.26
LE - low on east end of Little Sheep Mountain	13.17	21.34	45.67
31 - Between east and west end of Little Sheep Mountain	13.25	21.96	45.94
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According to information furnished this Department, all of these samples were reasonably close to the Lovell water well, and the stratum from which these samples were obtained is 105 feet thick at the well.

Please understand that these analyses are made in the interest of National Defense and that we are not authorized to do commercial work.

Very truly yours,

/s/ H. J. BUSHN,
Supervisor

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

305 Federal Building
Casper, Wyoming

January 21, 1942.

Chamber of Commerce,
328 East Second,
Casper, Wyoming.

Dear Sirs:

Analysis of samples of iron ore furnished by your Mr. Stafford gave the following results:

	<u>% Fe₂O₃</u>	<u>% Fe</u>
Sample No. 1, 10 miles south of Douglas	35.7	60.0
Sample No. 2, on Deer Creek	32.8	23.0

Please understand that these analyses are made in the interest of national defense, and that we are not authorized to do commercial work.

Very truly yours,

/s/ L. G. Snow,
Acting Supervisor.

CASPER, WYOMING, CHAMBER OF COMMERCE

January 30, 1942



Hon. Nels H. Smith, Governor
State of Wyoming
Capitol Building
Cheyenne, Wyoming

Dear Governor Smith:

Two processes for refining magnesium have been presented recently to the Casper Chamber of Commerce with a view of the possible construction of a plant for refining the metal.

Due to the fact that there is a large supply of power available here almost immediately, along with the necessary crude oil and natural gas which is piped to the city, Casper has received this consideration.

We feel from preliminary information there are suitable deposits of dolomite, from which these two processes would produce magnesium, lie within a radius of from 15 to 150 miles of Casper.

Low cost power is an important factor in both processes, one of which asks for 5,000 horsepower and the other 10,000 horsepower. There is now 5,000 horsepower available, with an additional 15,000 horsepower available within a very short time at a low cost. With federal cooperation, this supply could be delivered at not more than 5 mills per kilowatt hour.

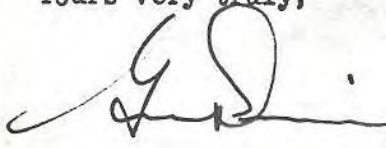
Naturally, we are interested in the location of a magnesium plant here if our situation is suitable. Much depends, however,



Page 2 - Smith, January 30, 1942

upon the quality and quantity of the dolomite available, and for that reason we would like to have the state geologist make an investigation and survey as to deposits that are available and what the content of those deposits may be.

Yours very truly,



Gene Denning,
Manager

GD:js