COPY

THE UNITED STATES GRAPHITE COMPANY Saginaw, Michigan, U.S.A.

Augst 21, 1939

Mr. Semyon E. Krewer 120 West 70th Street New York City

Dear Sir:

Following our Mr. L. B. Lavigne's call, we are pleased to offer you Graphitar, grade DCC, in lots of 1,000 pieces, 12 inches x 4 inches x 4 inches, at \$2.47 each, F.O.B. cars, Saginaw, Michigan.

This material has an apparent density of 1.60 and the average ash content is .07%.

We can assure you of the uniformity of this material and would very much like to supply your requirements.

Very truly yours,

THE UNITED STATES GRAPHITE CO.

signed: L. Field, Treasurer.

THE UNITED STATES GRAPHITE COMPANY

SAGINAW, MICHIGAN, U. S. A.

August 21, 1939

Mr. Semyon E. Krewer, 120 West 70th Street, New York City,

Dear Sir:

Following our Mr. L. B. Lavigne's call, we are pleased to offer you Graphitar, grade DCC, in lots of 1,000 pieces, 12 inches x 4 inches x 4 inches, at \$2.47 each, F.O.B. cars, Saginaw, Michigan.

This material has an apparent density of 1.60 and the average ash content is .07%.

We can assure you of the uniformity of this material and would very much like to supply your requirements.

240/lbs

Very truly yours,

THE UNITED STATES GRAPHITE CO.

leld. Treasurer.

LF:LRD

THE UNITED STATES GRAPHITE COMPANY SAGINAW, MICHIGAN, U. S. A.

November 10, 1939

Dr. Leo Szilard Columbia University Physics Department New York City, New York.

Gentlemen:

As requested from our representative, Mr. L. B. Lavigne, we are pleased to advise that the ash content of USG GRADE DCC GRAPHITAR will average about .07 %. A spectrographic analysis of this material shows there is no vanadium present and that .01 to .1 % of this ash is iron.

We trust that this information is of value to you and remain

Yours very truly,

THE UNITED STATES GRAPHITE COMPANY

etou,

Smith Bolton Assistant Sales Manager

SB:BHA

November 15th, 1939

Mr. Swith Bolton Assistant Sales Manager The United States Graphite Co. Saginaw, Mich.

Dear Sir:

nee 1

I wish to thank you for your letter of November 10 and also wish to refer to the letter of August 21, which was addressed to Mr. S.E. Krewer and signed by Mr. L. Field.

The composition of ash which you state in your letter appears to be satisfactory. May I ask whether the iron content is .01% to .1% of ash as stated in your letter or whether this is a misprint, and whether your statement should read correctly "that .01 to .1 of this ash is iron"?

Referring to your letter of August 21, may I ask whether it would also be possible to obtain the material offered, in slabs of about 12 inches x 12 inches x 1 inch rather than as offered, i.e. 12 inches x 4 inches x 4 inches? I should appreciate your letting me have this information at your earliest convenience since it may be necessary for us to place an order in the near future, and the form of the slabs might be an important factor.

Yours very truly,

(Leo Szilard)

THE UNITED STATES GRAPHITE COMPANY SAGINAW, MICHIGAN, U. S. A.

November 20,1939

Dr. Leo Szilard Columbia University Physics Department New York City, N.Y.

Gentlemen:

T.

With reference to your letter of November 15, we wish to advise that our letter should have stated that .01 to .1 of this ash is iron.

We trust that the above is the information you desire.

Yours very truly,

THE UNITED STATES GRAPHITE COMPANY

N

aturn

Carbon Products Division

RP:BHA

Er.

12

THE UNITED STATES GRAPHITE COMPANY

SAGINAW, MICHIGAN, U. S. A.

December 1, 1939

Dr. Leo Szilard Columbia University Physics Department New York N.Y.

Gentlemen:

1 . . 1

We regret that we did not completely answer your letter of November 15, however, wish to advise that we are unable to supply GRAPHITAR DCC in size 12 x 12.

We trust that the above is the information that you desire.

Yours very truly,

THE UNITED STATES GRAPHITE COMPANY

ausa on Carbon Products Division

RP:BHA

THE UNITED STATES GRAPHITE COMPANY

SAGINAW, MICHIGAN, U. S. A.

March 1, 1940

Dr. Leo Szilard Columbia University Physics Laboratory New York City, N.Y.

Gentlemen:

1

At the request of our representative, Mr. Smith Bolton, who recently had the pleasure of visiting with you, we are pleased to advise that in sawing the $12 \times 4 \times 4$ blocks that we are to ship to you, we would recommend a carborundum saw 12"OD x 3/4 ID x 3/32 thick grade N 2494. These saws may be purchased from the Precision Grinding Wheel Company, Holmesburg, Philadelphia, Penna.

In drilling these blocks the drill speeds would range from 600 RPM for a 1" drill to 2,000 RPM for a 1/2" drill. It must be remembered, however, that in drilling this type of material a greater clearance on the drill should be allowed than for materials, such as, steel or iron.

We trust that the above is the information you desire.

Yours very truly,

THE UNITED STATES GRAPHITE COMPANY

Robert Paterson

Sales Department

. .

RP:BHA

cc: 1 - Pegram 1 - Szilard 2 - Mitchell

February 20, 1941

Mr. Smith Bolton U. S. Graphite Company Saginaw, Michigan

Dear Mr. Smith Bolton:

Professor Pegram sent you a telegram today and has asked me to give you some indication of the questions which might arise during the discussion which we hope to have with you in the near future.

1. Is there a very large variation in the boron content of various petroleum cokes, and would it be worthwhile for us to make an extended investigation in order to find some type of coke which is particularly free from boron?

2. Is there any danger that some boron might get into the graphite in the graphitizing furnace during the period during which the graphite is cooling off and during which substances contained in the envelope might distill over into the graphite?

3. Are you able to supply graphite powder of a similar purity as our graphite bricks in quantities of about a half ton?

4. How large are the furnaces which you propose to use for manufacturing our graphite, i.e. how much graphite do they take in one charge and how long does one charge stay in the furnace?

5. Would it be a good plan to process the coke in order to free it from boron completely before subjecting it to the graphitizing process? Is the use of boron-free coke a guaranty of obtaining boron-free graphite?

We hope to discuss with you these and other questions which may arise in the meantime on the occasion of your next visit to New York.

Very truly yours,

(Leo Szilard)

THE UNITED STATES GRAPHITE COMPANY Saginaw, Michigan, U. S. A.

March 1, 1940

Dr. Leo Szilard Columbia University Physics Laboratory New York City, N. Y.

Gentlemen:

At the request of our representative, Mr. Smith Bolton, who recently had the pleasure of visiting with you, we are pleased to advise that in sawing the $12 \times 4 \times 4$ blocks that we are to ship to you, we would recommend a carborundum saw 12^m OD x 3/4 ID x 3/32 thick grade N 2494. These saws may be purchased from the Precision Grinding Wheel Company, Holmesburg, Philadelphia, Penna.

In drilling these blocks the drill speeds would range from 600 RPM for 1" drill to 2,000 RPM for a 1/2" drill. It must be remembered, however, that in drilling this type of material a greater clearance on the drill should be allowed than for materials, such as, steel or iron.

We trust that the above is the information you desire.

Yours very truly,

THE UNITED STATES GRAPHITE COMPANY

Robert Paterson Sales Department COPY

IV. Percentage of ash

National Carbon Co. -- 0.075 percent

U.S. Graphite Co. -- .053

It will be noted that the values obtained in the drying and in the hygroscopicity tests are approximately equal, and indicate that the graphite "as received" has reached the equilibrium which will obtain in graphite handled and installed under ordinary conditions. It seems reasonable, therefore, to belive that the percentages of hydrogen indicated in the "as received" graphites represent the hydrogen contents that may be expected. If the blocks could be dried and protected from moisture during installation and use, the percentages of hydrogen would approximate 0.003 for the National Carbon Co. and 0.001 for the U. S. Graphite Co. blocks.

Sincerely yours,

Lyman J. Briggs, Director.

Will you now please advise whether graphite from either source would be acceptable; if so competition bids may be secured.

We are planning to ask for bids on 8,800 pounds graphite 4,400 " paraffin 100 " cadmium