CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 12/11/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BOWIE AREA TUFA

ALTERNATE NAMES:
CLARK DEPOSIT

COCHISE COUNTY MILS NUMBER: 904

LOCATION: TOWNSHIP 12 S RANGE 29 E SECTION 1 QUARTER E2
LATITUDE: N 32DEG 25MIN 00SEC LONGITUDE: W 109DEG 20MIN 00SEC
TOPO MAP NAME: MARTIN WELL - 7.5 MIN

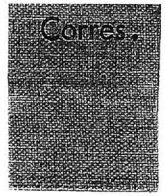
CURRENT STATUS: UNKNOWN

COMMODITY:
STONE TUFA
ZEOLITES
CALCIUM TUFA

BIBLIOGRAPHY:
ADMMR BOWIE AREA TUFA FILE

Bowie Aluminum Deposit

Clark Deposit


Carres

Box 4097, Tucson, Arizona

April 24, 1961

Memorandum

To: Joel N. Van Sant, Denver, Colorado

From: Lincoln A. Stewart, Tucson, Arizona

Subject: Bowie aluminum (?) deposit (Clark property)

Another exciting news clipping enclosed. What a press agent this outfit has!

We are sending them the information on the sample testing by Sugden, but doubt that it will slow them down to any extent.

Lincoln A. Stewart

CC R. W. Goshon
J. Van Sant
A. S. Konselmon
P. V. Fillo
552 -aluminum ✓
DF

LAStewart:frj

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

DIVISION OF MINERAL RESOURCES

BUILDING 20, FEDERAL CENTER
DENVER 25, COLORADO

April 21, 1961

Memorandum

To: Lincoln A. Stewart

From: Joel N. Van Sant

Subject: Bowie aluminum ? deposit (Clark property)

Enclosed are copies of test data for five samples collected from the subject deposit. Apparently Sugden was hungry for clay work because he sure got this group out in record time. Based on the test data, I estimate that the Al_2O_3 content of the clay ? will not exceed 15 percent; at best it is sorry material.

Van

Joel N. Van Sant

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

SALT LAKE CITY
METALLURGY RESEARCH CENTER

1600 EAST 1ST SOUTH STREET
SALT LAKE CITY 12, UTAH

April 18, 1961

Memorandum

To: J. N. Van Sant, Mining Engineer, Denver Mining Research Center, Region III

From: Physical Science Technician, Salt Lake City Metallurgy Research Center, Region III

Subject: Evaluation of five clay samples from Arizona

Enclosed are copies of the work sheets giving the results obtained in testing a suite of five clay samples from the F. W. Clark property, Cochise County, Ariz. The owners of this property insist that the deposit contains high-grade bauxite.

The slow firing tests made on the five samples indicate the material is a low-quality clay rather than bauxite. P. C. E. tests were not made because each of the five samples melted at 2,100° F. This low-melting impure clay might be used as a plasticizer for blending with less plastic clays, sand, or grog to make common brick.

Sample 1A taken from the bed that overlies the clay deposit was identified as being composed of volcanic ash.

David P. Sugden

D. P. Sugden

Encl.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

SALT LAKE CITY
METALLURGY RESEARCH CENTER

1600 EAST 1ST SOUTH STREET
SALT LAKE CITY 12, UTAH

April 20, 1961

Memorandum

To: L. A. Stewart, Project Leader, Division of Mineral Resources, Region III, Tucson, Ariz.

From: Research Director, Salt Lake City Metallurgy Research Center, Region III

Subject: Clay samples from the Clark property, Cochise County, Ariz.

The five clay samples submitted from the Clark property by sample report dated March 23, 1961, have already been tested and the results of the firing tests reported to Van Sant. His memorandum to you and yours to Sugden crossed our report to Van Sant in the mails. Because the samples melted in the preliminary slow-firing tests, we did not run the usual P. C. E. tests. The charge for the examination and evaluation of these samples, therefore, will be confined to the cost of the slow-firing tests only.

The five samples are similar in composition and properties. All are low-quality clays that have no refractory properties. Each sample melted at 2,100° F. and therefore is not even suitable for the manufacture of common brick let alone refractories.

The samples contain no bauxite. Although chemical analyses were neither requested nor made, a cursory examination suggests the samples contain perhaps 15 to 20 percent alumina. Such materials cannot be classed as aluminum ores. The sample of capping material was, as you suspected, composed of volcanic ash.

We hope the foregoing discussion gives you information that you can pass on to the owner.

C. H. Schack

C. H. Schack, Acting for
B. H. Clemmons

cc: J. N. Van Sant

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

SALT LAKE CITY
METALLURGY RESEARCH CENTER

1600 EAST 1ST SOUTH STREET
SALT LAKE CITY 12, UTAH

April 20, 1961

Memorandum

To: L. A. Stewart, Project Leader, Division of Mineral Resources, Region III, Tucson, Ariz.

From: Research Director, Salt Lake City Metallurgy Research Center, Region III

Subject: Clay samples from the Clark property, Cochise County, Ariz.

The five clay samples submitted from the Clark property by sample report dated March 23, 1961, have already been tested and the results of the firing tests reported to Van Sant. His memorandum to you and yours to Sugden crossed our report to Van Sant in the mails. Because the samples melted in the preliminary slow-firing tests, we did not run the usual P. C. E. tests. The charge for the examination and evaluation of these samples, therefore, will be confined to the cost of the slow-firing tests only.

The five samples are similar in composition and properties. All are low-quality clays that have no refractory properties. Each sample melted at 2,100° F. and therefore is not even suitable for the manufacture of common brick let alone refractories.

The samples contain no bauxite. Although chemical analyses were neither requested nor made, a cursory examination suggests the samples contain perhaps 15 to 20 percent alumina. Such materials cannot be classed as aluminum ores. The sample of capping material was, as you suspected, composed of volcanic ash.

We hope the foregoing discussion gives you information that you can pass on to the owner.

C. H. Schack, Acting for
B. H. Clemmons

cc: J. N. Van Sant

Box 4077, Tucson, Arizona

April 20, 1961

Memorandum

To: Joel N. Van Sant, Div. of Mineral Resources, Denver, Colo.

From: Lincoln A. Stewart, Tucson, Arizona

Subject: Bowie aluminum (?) deposit (Clark deposit)

Enclosed find two news clippings concerning the deposit. Although we can't seem to become enthusiastic over the property, there seem to be others that can!

Two of the owners were in the office again today. Their latest story is that a spectrographic analysis of the tuff (pumicite?) had reveals a gallium content, so now they figure they can mine the capping for gallium and the formation below for aluminum. They insist upon calling the mud bed bauxite. What characters! Maybe we are missing the boat?

Lincoln A. Stewart

CC J. Van Sant
R. W. Geehan
A. S. Kongelmon
552-A1
DF

LAStewart:frj

Box 4097, Tucson, Arizona April 18, 1961

Memorandum

To: Dave Sugden, Metallurgical Research Center, Salt Lake City, Utah

From: Lincoln A. Stewart, Tucson, Arizona

Subject: Bowie aluminum (?) deposit (Clark property).
Re Samples 16127-131 recently sent you.

According to enclosed copy of request from Joel Van Sant we submit the following:

We have no choice relative to the sample that should be tested first. They looked very similar to us.

As you are a specialist in refractory clay characteristics, we suggest that you make a choice of one for preliminary testing. If you see no difference in the samples, it would be well to composite the five samples and make one test, even though you expect to demonstrate that the clay is worthless.

We will have to report something to the owners, who went to the trouble of guiding Fillo on this investigation. In fact they already have called at the office twice to find out what our determination was.

Lincoln A. Stewart

CC D. Sugden
R. W. Geehan
A. S. Konselman
J. Van Sant
P. V. Fillo
552 Aluminum
DF

LAStewart:frj

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

DIVISION OF MINERAL RESOURCES

BUILDING 20, FEDERAL CENTER
DENVER 25, COLORADO

April 14, 1961

Memorandum

To: Lincoln A. Stewart

From: Joel N. Van Sant

Subject: Bowie aluminum ? deposit (Clark property)

Thank you for the description of the subject deposit. I approve of your question marks after aluminum and clay. I didn't have much faith that the newspaper report was true, but I realize that we have to follow up these wild claims as self protection.

Because Fillo's examination indicates the deposit is not refractory, I question whether all five samples should be tested. Perhaps he could select one sample that is better than the others to test first. If Sugden finds the material refractory, have all samples tested. If not, the one test should be enough to demonstrate that the clay ? is worthless as a source of alumina and for refractory use. Each test costs about $55.00; that is why I suggest this procedure. Because you submitted the sample to Salt Lake I think it would be best for you to handle this matter if you agree with the suggestion.

Thank you again for your cooperation in this work.

Van

Joel N. Van Sant

Box 4097, Tucson, Arizona March 30, 1961

Memorandum

To: Joel N. Van Sant, Div. of Min. Res., Denver, Colorado

From: Lincoln A. Stewart, Tucson, Arizona

Subject: Bowie aluminum (?) deposit. (Clark property)

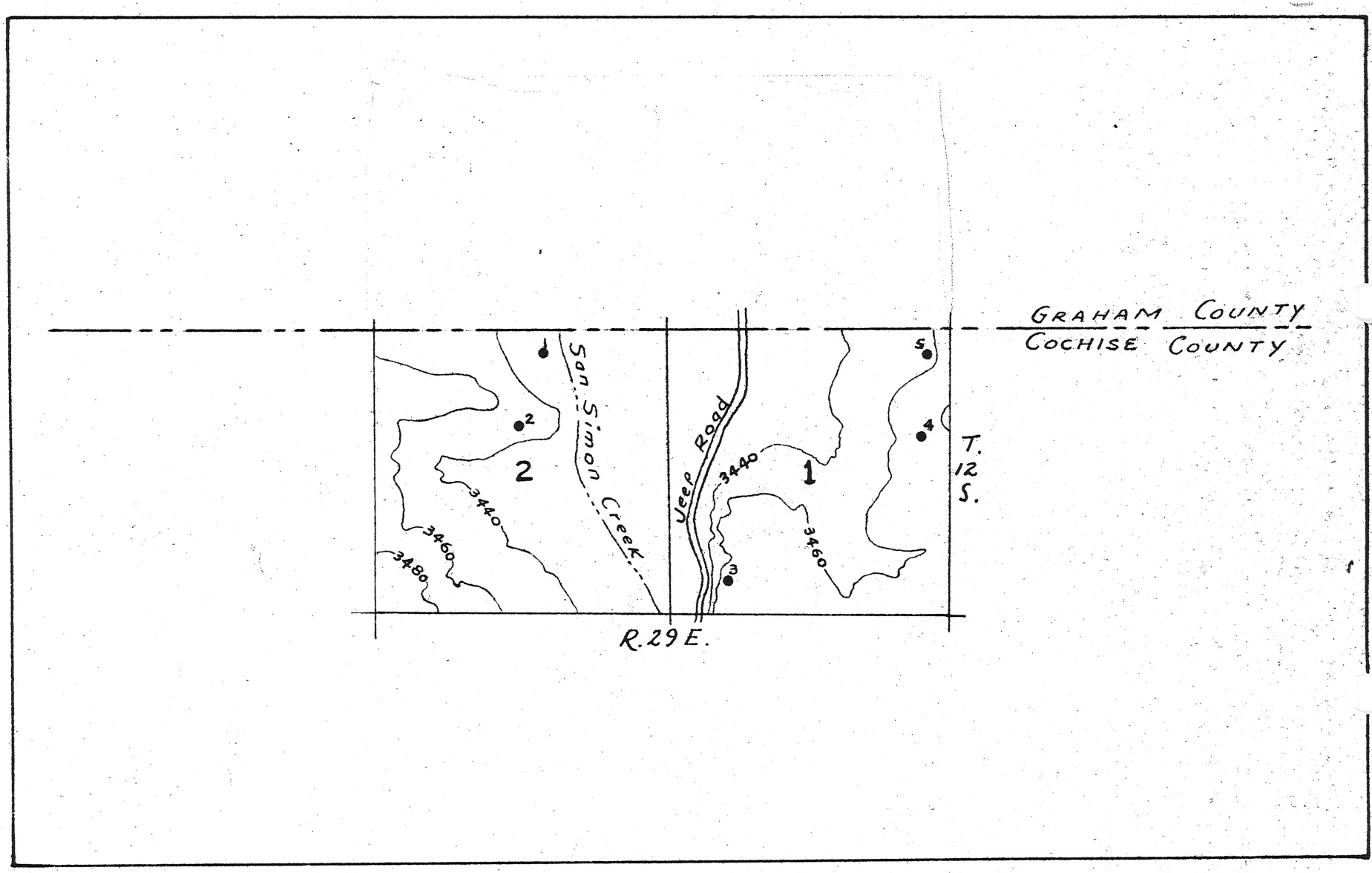
Enclosed is copy of memo from Fillo concerning the "vast aluminum deposit" he examined at your request (memo of February 24). As the samples of clay (?) have been sent to Salt Lake City, thought you would be interested in a description of the occurrence.

Summary and letter report will be sent through channels when results of the testing are at hand.

Lincoln A. Stewart

CC J. Van Sant
R. W. Geehan
A. S. Konselman
P. V. Fillo
552 – aluminum
DF

LAStewart:frj



LOCATION MAP, SHOWING SAMPLE SITES, CLARK CLAY DEPOSIT
COCHISE COUNTY, ARIZ.

Box 4077, Tucson, Arizona March 29, 1961

Memorandum

To: Lincoln A. Stewart, Tucson, Arizona

From: Paul V. Fillo, Tucson, Arizona

Subject: Examination of the Clark clay deposit, Cochise County, Ariz.

An examination of the Clark property was made March 9, 1961. The owners had stated they had discovered "a vast aluminum deposit". The examiner was accompanied by Yuell Shawhan, a part owner of the property.

The property consists of 24 lode and 8 placer claims, owned by F. W. Clark, Yuell Shawhan, and Sid Warner. Mr. F. W. Clark, whose address is P. O. Box 334, Bowie, Arizona, is spokesman for the partners. The property is located approximately 12 miles northeast of Bowie, Arizona in secs. 1 and 2, T. 12 S., R. 29 E. The claims can be reached from Bowie, Ariz. by driving 0.2 mile north from the railroad depot on a well travelled dirt road, thence take right hand fork for 3.8 miles, thence right hand fork for 0.9 mile, thence left hand fork for 4.4 miles, thence turn right on the road following the County line of Graham and Cochise Counties for a distance of 2.6 miles to the property.

The claims lie in relatively flat terrain in the broad San Simon Creek valley. The area is covered with cacti and greasewood. Surface water is scarce on the property, although it was noted in traveling to the property from Bowie that a considerable amount of irrigation was used in areas a mile or two from the property. San Simon Creek here flows northward and minor tributaries from the east and west complete the drainage pattern.

CC J. Van Sant
R. W. Goshon
A. S. Konselman
P. V. Fillo ✓
552-aluminum
DF

PVFillo:frj

There are no improvements on the property. Several opencuts constitute the assessment work.

The formations consist of loosely consolidated deposits of gravel, sand, and clays. The deposit occurs in a broad, flat, valley approximately 2 miles wide and 1 mile in length. This could be considered as a sedimentary clay (?) deposit. At higher ground on either side of the San Simon Creek a capping formation overlies the clay (?) deposit. The capping rock appears to be pumiceous and may be pumicite. Two or three truckloads of this varicolored rock have been sold for ornamental purposes.

Just north of this property, in Graham County, a hole was drilled to a depth of over 600 feet. The drill hole was near the San Simon Creek channel and Mr. Shawhan states that the drill cuttings or the drill muds did not change in texture or color the 600 feet plus before the drill hole was abandoned. Thus, it is the owners' contention that the deposit is over 600 feet thick.

No claim maps of the property were available. Five samples were taken on the property and the locations of the samples are shown on the accompanying map. The samples have been forwarded to Salt Lake City for testing.

Paul V. Fillo

Paul V. Fillo

Box 4097, Tucson, Arizona February 27, 1961

Mr. Frank Clark
Bowie, Arizona

Dear Mr. Clark:

We noted with interest a news item in the Arizona Daily Star stating that you have a deposit of aluminum ore some 12 miles north of Bowie.

We would be interested in looking at the property to determine the type of rock in which this mineralization occurs and to take a sample or sapples for analysis.

If this meets with your approval we would appreciate a note from you stating where one of our engineers could contact you in Bowie for directions to the deposit. It would be better if you or your partner could accompany the engineer on this inspection trip.

Sincerely yours,

Lincoln A. Stewart
Mining Engineer

CC R. W. Geehan
Joel Van Sant
552-aluminum
DF

LAStewart:frj

3/1/61 Phone call from Wilcox
A Mr ——— Warner, Regal gas station,
said he was a partner, and with
Fallo on phone, made arrangements
to show the property. To meet at
Wilcox 8 AM for the trip 3/9/61.
LAS

552 aluminum

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

DIVISION OF MINERAL RESOURCES

BUILDING 20, FEDERAL CENTER
DENVER 25, COLORADO

U.S. BUREAU OF MINES
FEB 27 1961
TUCSON, ARIZONA

February 24, 1961

Memorandum

To: Lincoln A. Stewart, Tucson, Arizona

From: Joel N. Van Sant

Subject: 1. - Bowie Arizona aluminum deposit;
2. - Summary reports of mineral examination, and Review of Examination report

Your note in memorandum February 17, 1961, pertaining to the vast aluminum deposit 12 miles north of Bowie, Ariz., interests me. If it is a potential source of refractory material, I would like to include it in my investigation of Refractory Clays of Arizona. Hence, because you are near the deposit I suggested to Mr. Geehan and he agreed that possibly your office would cooperate by making a field examination of the Bowie deposit.

Samples, 10 to 15 pounds, should be shipped to the Metallurgy Research Center, Salt Lake City, Utah. Slow-firing and P.C.E. tests should be requested and the shipment brought to the attention of Dave Sugden, clay technologist.

I thank you for your consideration of this matter and am looking forward to the results. All expenses for the examination should be charged against Ceramic and Fertilizer materials account No. 16.3823.

In regards to the summary reports, it would be appreciated if you could hereafter, furnish one original and six copies which are required for our files and distribution. Otherwise we have to make extra copies by machine.

Latest information concerning Al Konselman is that he will be absent from the office for two weeks after February 27. According to Horton, who visited Al February 22, Al is doing as well as can be expected.

Joel N Van Sant

Joel N. Van Sant

Box 4077, Tucson, Arizona

April 24, 1961

Mr. Frank W. Clark
Box 334
Bowie, Ariz.

Dear Mr. Clark:

We have just received the results of tests made by our Salt Lake City Metallurgy Research Center on the five samples recently taken by Paul Fillo, as follows:

"The slow firing tests made on the five samples indicate the material is a low-quality clay rather than bauxite. P.C.E. (pyrometric cone equivalent) tests were not made because each of the five samples melted at 2,100° F. This low melting impure clay might be used as a plasticizer for blending with less plastic clays, sand, or grog to make common brick.

"The sample taken from the bed that overlies the clay deposit was identified as being composed of volcanic rock.

"Although chemical analyses were neither requested nor made, a cursory examination suggests the samples contain perhaps 15 to 20 percent alumina. Such materials cannot be classed as aluminum ores."

We have the detailed work sheets of each of the five tests available here in the office should you care to see them.

Sincerely yours,

Lincoln A. Stewart
Mining Engineer

CC J. R. Hagle
290 N. Dobson Rd
Mesa, Ariz.

R. W. Geehan
A. S. Konselman
P. V. Fillo
552-A
DF
LAStewart:frj

WORK SHEET FOR SAMPLE NO. 681

Joel N. Van Sant Denver, Colo. Date Mar. 23, 1961

Submitted by P. V. Fillo

Geology and location F. W. Clark property, Secs. 1, 2. T. 12S., R. 29 E., Cochise County, Ariz. No. 16127

Type Weight received

Analysis

a. Chemical b. Petrographic

c. X-ray d. Spectrographic

Raw Material

Color 5Y7/2 yellowish gray Sand % Grit

Atterberg 42 ml. H_2O 8B 7C pH

Working plastic - smooth - not sticky

Drying defects bricks showed cracking

Drying shrinkage 9.0 percent

Test and Treatment

a. Settling b. Separation

c. Bleaching d. PCE no test

e. Bloa... f. Rotary kiln

g. Paper h. Oil bleach

i. Heat treatment

j. Other tests

Slow Firing

Temp.	Color	Hardness	Shrinkage %	Absorp. %	App. Sp. Gr. %	Remarks
1800	10R5/4 pale red-dish brown	Fair hard	10.0	15.4	2.51	
2000	5R2/6 very dark red	Very hard	18.5	.2	2.27	Cracking and deforming
2100	Mottled-yellow to dark brown	do.	-	5.4	1.41	Cracked in cooling. Melted
2200						
2300						
2400						

Remarks: There would be a possible chance of using this clay for a plastic mixer to be blended with other less plastic clays, sand, or grog to make common bricks if fired around 1,800° F. or less.

David P. Sugden

D. P. Sugden

WORK SHEET FOR SAMPLE NO. 682

Joel N. Van Sant Denver, Colo. Date March 23, 1961

Submitted by P. V. Fillo

Geology and location F. W. Clark property, Secs. 1, 2 T. 12 S., R. 29 E., Cochise County, Ariz. No. 16128

Type

Weight received

Analysis

a. Chemical b. Petrographic

c. X-ray d. Spectrographic

Raw Material

Color 5Y7/2 yellowish gray Sand % Grit

Atterberg 43.5 ml. H_2O 8B 7C pH

Working plastic - smooth - not sticky

Drying defects bricks showed cracking

Drying shrinkage 9.0 percent

Test and Treatment

a. Settling b. Separation

c. Bleaching d. PCE no test

e. Bloating f. Rotary kiln

g. Paper h. Oil bleach

i. Heat treatment

j. Other tests

Slow Firing

Temp.	Color	Hardness	Shrinkage %	Absorp. %	App. Sp. Gr. %	Remarks
1800	10R4/6 moderate reddish brown	Fair hard	11.0	13.5	2.51	
2000	10R3/4 dark reddish brown	Hard	17.5	.1	2.40	Cracked in cooling
2100	Mottled-yellow to dark brown	Very hard	-	.6	1.18	Melted
2200						
2300						
2400						

Remarks: Same as test No. 681

David P. Sugden

D. P. Sugden

WORK SHEET FOR SAMPLE NO. 683

Joel N. Van Sant. Denver, Colo. Date March 23, 1961

Submitted by P. V. Fillo
Geology and location F. W. Clark property, Secs. 1, 2, T. 12 S., R. 29 E., Cochise County, Ariz. No. 16129
Type
Weight received

Analysis
a. Chemical
b. Petrographic
c. X-ray
d. Spectrographic

Raw Material
Color 5Y7/2 yellowish gray
Sand % Grit
Atterberg 41 ml. H_2O 8B 7C
pH 8.3 in 10% solution
Working plastic - smooth - not sticky
Drying defects white crystals formed on surface. Some bricks showed cracking.
Drying shrinkage 7.5 percent

Test and Treatment
a. Settling
b. Separation
c. Bleaching
d. PCE no test
e. Bloating
f. Rotary kiln
g. Paper
h. Oil bleach
i. Heat treatment
j. Other tests

Slow Firing

Temp.	Color	Hardness	Shrinkage %	Absorp. %	App. Sp. Gr. %	Remarks
1800	5R5/4 moderate red	Crumbly	9.5	15.5	2.54	
2000	Surface mottled 5R2/2 blackish red	Fair hard	17.5	.0	2.21	Cracked in cooling
2100	Mottled-yellow to dark brown	Very hard	-	.2	1.26	Melted
2200						
2300						
2400						

Remarks: Same as test No. 681

David P. Sugden
D. P. Sugden

WORK SHEET FOR SAMPLE NO. 684

Joel N. Van Sant Denver, Colo. Date March 23, 1961

Submitted by P. V. Fillo

Geology and location F. W. Clark property, Secs. 1, 2, T. 12 S., R. 29 E., Cochise County, Ariz. No. 16130

Type

Weight received

Analysis

a. Chemical b. Petrographic

c. X-ray d. Spectrographic

Raw Material

Color 5Y7/2 yellowish gray Sand ___ % Grit

Atterberg 28 ml. H_2O 6B 7C pH

Working plastic - smooth - not sticky

Drying defects

Drying shrinkage 5.0 percent

Test and Treatment

a. Settling b. Separation

c. Bleaching d. PCE no test

e. Bloating f. Rotary kiln

g. Paper h. Oil bleach

i. Heat treatment

j. Other tests

Low Firing

Temp.	Color	Hardness	Shrinkage %	Absorp. %	App. Sp. Gr. %	Remarks
1800	5R5/4 moderate red	Fair hard	5.0	17.3	2.59	
2000	10R3/4 dark reddish brown	Hard	10.0	8.8	2.57	
2100	5Y6/4 dusky yellow	Very hard	13.0	.0	1.84	Started melting. Cracked in cooling
2200	5Y4/4 moderate olive brown	do.	-	6.5	1.52	
2300						
2400						

Remarks: Not quite as plastic as the other clays of this series but would have to be treated about the same.

David P. Sugden

D. P. Sugden

WORK SHEET FOR SAMPLE NO. 685

Joel N. Van Sant Denver, Colo. Date March 23, 1961

Submitted by P. V. Fillo

Geology and location P. V. Clark property, Secs. 1, 2, 3, 12 S., R. 29 E., Cochise County, Ariz. No. 16131

Type _____ Weight received _____

Analysis

a. Chemical _____ b. Petrographic _____

c. X-ray _____ d. Spectrographic _____

Raw Material

Color 5Y7/2 yellowish gray Sand ___ % Grit _____

Atterberg 42 ml. H_2O 8S 7C pH _____

Working plastic - smooth - not sticky

Drying defects some bricks showed cracking

Drying shrinkage 8.0 percent

Test and Treatment

a. Settling _____ b. Separation _____

c. Bleaching _____ d. PCE no test

e. Bloating _____ f. Rotary kiln _____

g. Paper _____ h. Oil bleach _____

i. Heat treatment _____

j. Other tests _____

Slow Firing

Temp.	Color	Hardness	Shrinkage %	Absorp. %	App. Sp. Gr. %	Remarks
1800	5R5/4 moderate red	Fair hard	9.5	14.3	2.37	
2000	5R2/6 mottled very dark red	Hard	17.5	.9	2.42	Cracking on edges
2100	Mottled-yellow to dark brown	Very hard	-	.5	1.18	Melted
2200						
2300						
2400						

Remarks: Same as test No. 681

David P. Sugden

D. P. Sugden

T-Met-6
7-11-60

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
TUCSON METALLURGY RESEARCH LABORATORY

SAMPLE REPORT

Date: March 22, 1961

To: Metallurgy Research Center
Attention Dave Sugden
1600 E. 1st South St.
Salt Lake City 1, Utah

From: Lincoln A. Stewart
Box 4077
Tucson, Arizona

Name and location of property or project:
F. W. Clark property, secs. 1, 2, T. 12 S., R. 29 E., Cochise County, Ariz.

Number of samples in shipment: 5 in 5 bags. Total weight 15 lbs.

Shipped: _____; GBL No. _____ Carrier _____

Nature of ore and general comments:

May be silt rather than clay. Owners insist this is an aluminum ore (bauxite)

Identiffication of samples with tests or analyses desired:

Nos. 16127, 16128, 16129, 16130, 16131

Van Sant requests slow-fluing and F.C.E. tests. Charged to 16.3023.

No. 1-A. Sample of 12-inch capping overlying the clay (?) bed. Appears to be pumicite. For general information, but probably no test required.

Clay (?) bed exposed in flat valley two miles wide by one mile in length, and extends under the capping into higher ground.

Samples 16127 to 16131 taken from five widespread places in the deposit. Could be combined into one sample if mineral assemblage justifies.

CC Metallurgy (Orig. & 1)
P. V. Fillo
532 - aluminum
DF

PVFillo:fj

Box 4097, Tucson, Arizona May 2, 1961

Memorandum

TO: A. S. Konselman, Acting Chief, Div. of Min. Resources

From: Lincoln A. Stewart, Tucson, Arizona

Subject: Summary Report of Minerals Examination and Narrative Report, Clay deposit, Cochise County, Ariz.

Enclosed find original and three copies of Summary Report and Narrative Report on Fillow No. 33, covering examination of the F. W. Clark Clay Deposit, Cochise County, Ariz. This was requested by Joel Van Sant in connection with his report on refractory clays of Arizona.

Lincoln A. Stewart

CC A. S. Konselman
R. W. Gephan
552-Al ✓
DF

Box 4097, Tucson, Arizona May 1, 1961

Memorandum

To: Lincoln A. Stewart, Tucson, Arizona

From: P. V. Fillo, Tucson, Arizona

Subject: Narrative report to accompany Summary Report Fillo No. 32, Clark property, Cochise County, Ariz.

An examination of the Clark property was made March 9, 1961. The owners had stated they had discovered "a vast aluminum deposit". The examiner was accompanied by Uel Shewhan, a part owner of the property.

The property consists of 26 lode and 8 placer claims, owned by F. W. Clark, Uel Shewhan, and Sid Warner. Mr. F. W. Clark, whose address is P.O. Box 334, Bowie, Arizona, is spokesman for the partners. The property is located approximately 12 miles northeast of Bowie, Arizona in secs. 1 and 2, T. 12 S., R. 29 E. The claims can be reached from Bowie, Ariz. by driving 0.2 mile north from the railroad depot on a well travelled dirt road, thence take right hand fork for 3.8 miles, thence right hand fork for 0.7 mile, thence left hand fork for 4.4 miles, thence turn right on the road following the County line of Graham and Cochise Counties for a distance of 2.6 miles to the property.

The claims lie in relatively flat terrain in the broad San Simon Creek valley. The area is covered with cacti and greasewood. There are no improvements on the property. Six openings constitute the assessment work.

The formations consist of loosely consolidated deposits of gravel, sand, and clays. The deposit occurs in a broad, flat, valley approximately 2 miles wide and 1 mile in length. This could be considered as a sedimentary clay deposit. At higher ground on either side of the San Simon Creek a capping formation overlies the clay deposit. The capping rock is volcanic ash. Two or three truckloads of this rock have been sold for ornamental purposes.

CC A. S. Kamelson (Orig. & 3)
~~468-552-A1~~ ✓
DF
P.V. Fillo
PVFillo:lu

North of this property, in Graham County, a hole was drilled to a depth of over 600 feet. The drill hole was near the San Simon Creek channel and Mr. Sheehan states that the drill cuttings or the drill rods did not change in texture or color the 600 feet plus before the drill hole was abandoned. It is the owners' contention that the deposit is over 600 feet thick.

No claim maps of the property were available. Five samples were taken on the property and the locations of the samples are shown on the accompanying map. The samples were tested by six-firing and the results indicated the material to be a low-quality clay rather than bauxite. The clay could be used as a plasticizer for blending with less plastic clays and sands to make common brick.

P. V. Fillo

6-803
(January 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

FILLO NO. 33

SUMMARY REPORT OF MINERALS EXAMINATION

State Arizona County Cochise Mineral Products Clay bed (low quality)

Name of property or deposit F. W. Clark

Date examined 3-9-61 Engineer P. V. Fillo Date of this report 5-1-61

Reason for examination Requested by Joel Van Sant for his report on refractory clays of Ariz.

Engineer accompanied by Uel Shawhan Address Bowie, Ariz.

Extent of property 24 unpatented claims and 8 unpatented placer claims

Owner F. W. Clark, Sid Warner and Uel Shawhan Address P. O. Box 334 Bowie, Ariz.

Leased or optioned to Address

Location of property (be specific) Approx. 12 miles northeast from Bowie, Ariz. in secs. 1, 2, T. 12 S., R. 29 E.

Type of deposit and mineralogy (brief description) It may be considered a sedimentary clay (?) bed, exposed in flat valley. The bed extends under a 12- to 15-inch capping of volcanic ash into higher ground

Known dimensions of the deposit

Length 1 mile Width 2 mile (but in excess of 600 ft.) Depth not known, A

Attitude of the deposit (strike, dip, etc.) Follows San Simon Creek channel bed

Possible extensions; correlation of known showings Could conceivably extend for at least 2 to 3 miles along creek bed area.

Mine workings (brief description or attach map or sketch) (indicate whether accessable) Six open cuts, averaging 20 to 30 feet long, 5 ft. wide and 6 ft. deep and all are accessible.

CC A. S. Konselman (Orig. & 3); ~~467-Ba~~ 532-A1; P. V. Fillo; DF

(over)

Mining and milling equipment on property None

Past production (if any) Two truck loads of capping rock (volcanic ash) for ornamental use

Present rate of production (if any) None

Sampling (describe briefly, or attach sketch) Using the slow firing test on 5 samples, indicated the material to be a low-quality clay rather than bauxite. All samples melted at 2100° F.

Tentative Estimate of Reserves

(Subject to revision when assays are received or after engineering calculations)

Measurable ..... tons ..... Grade .....

Indicated ..... tons ..... Grade .....

Inferred ..... tons ..... Grade .....

Mining method (actual or suggested) None suggested

Milling or processing method (actual or suggested) None suggested

Processing tests suggested None

Tentative conclusion and decision The slow firing test proved the material to be low-quality clay rather than bauxite. The impure clay might be used as a plasticizer for blending with less plastic clays and sands to make common brick.

To be accompanied by brief letter giving examining engineer's general impression of the deposit, his impression of the owner, and any other confidential information he may care to submit. Refer to any known prior examinations and reports. May be executed in pencil. Should be mailed within 24 hours after examination is completed.

Send original and one copy to Washington Office.

Interior--Duplicating Section, Washington, D. C. 76412