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PRINTED: 02-02-2011

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: CHICAGO PIT

ALTERNATE NAMES:

ELVA MS 4677, PATENTED
SANDY NO. 1, MS 4677, PAT.
NORD SIL FLO PIT
SIL-FLO
ADAMS

PINAL COUNTY MILS NUMBER: 77C

LOCATION: TOWNSHIP 2 S RANGE 12 E SECTION 9 QUARTER W2
LATITUDE: N 33DEG 16MIN 12SEC LONGITUDE: W 111DEG 07MIN 35SEC
TOPO MAP NAME: PICKETPOST MTN - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
PERLITE

BIBLIOGRAPHY:

ADMMR CHICAGO PIT FILE
PIERCE, H.W. 1986, INDUSTRIAL MINERALS FIELD
TRIP No.4, (GEOLOGY FILE)

ABSTRACTED FROM ADMMR DIRECTORY OF ACTIVE MINE IN ARIZONA, 1998

HARBORLITE CORPORATION

P.O. Box 960, Superior, AZ 85273 - Phone (520) 689-5723, Fax (520) 689-2362 - Employees: 13 - Perlite crushing, screening, and drying plant located 2 miles west of Superior - Two open pit perlite mines, located 2 miles southwest of Superior - Used in the manufacture of filter media for filtering pharmaceuticals, chemicals, sugar, and beverages and as an agricultural fertilizer carrier.

Plant Manager

Louie Lucero

Assistant Manager

Mike Putz

Secretary - Orders & Transportation

Jackie Alvarez

Superior Perlite T2S R12E Sec. 9

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1992

*Chicago Pit
Pinal County*

NORD PERLITE COMPANY

Chicago Pit (AKA Nord Sil-Flo Pit) T2S R12E Sec. 16

Box 127, Superior, AZ 85273 - Phone 689-5631 - Employees: 10 - Plant at Superior, 45438 North Silver King Road, north of railroad track - Open pit perlite mine located two miles southwest of Superior - Major markets are in Louisiana, Illinois, Wyoming, Pennsylvania, Texas, and Indiana - Filter aid used in filtering pharmaceuticals, chemicals, sugar, and beverages.

President Terence Lang
General Manager Andres Vaska
Production Manager Sam Cooper
Plant Manager Louis R. Lucero

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1991

NORD PERLITE COMPANY

Chicago Pit (AKA Nord Sil-Flo Pit) T2S R12E Sec. 16

Box 127, Superior, AZ 85273 - Phone 689-5631 - Employees: 7 - Plant at Superior on Silver King Road north of railroad track - Open pit perlite mine located two miles southwest of Superior - Major markets are in Louisiana, Illinois, Wyoming, Pennsylvania, Texas, and Indiana - Filter aid used in filtering pharmaceuticals, chemicals, sugar, and beverages.

President
Terence Lang
General Manager Andres Vaska
Production Manager Sam Cooper
Plant Manager Louis R.
Lucero

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1990

NORD PERLITE COMPANY

Chicago Pit (AKA Nord Sil-Flo Pit) T2S R12E Sec. 16
Box 127, Superior, AZ 85273 - Phone 689-5631 - Employees: 7 - Plant
at Superior on Silver King Road north of railroad track - Open pit
perlite mine located two miles southwest of Superior - Major markets
are in Louisiana, Illinois, Wyoming, Pennsylvania, Texas, and Indiana
- Filter aid used in filtering pharmaceuticals, chemicals, sugar,
and beverages.

President Terence Lang
General Manager Andres Vaska
Production Manager Sam Cooper
Plant Manager Louis R. Lucero

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1989

NORD PERLITE COMPANY

Chicago Pit

T2S R12E Sec. 16

Box 127, Superior 85273 - Phone 689-5631 - Employees 5 - Plant at Superior on Silver King Mine Road north of railroad track - Open pit perlite mine located two miles southwest of Superior - Major markets are in Louisiana, Illinois, Wyoming, Pennsylvania, Texas, and Indiana - Filter aid used in filtering pharmaceuticals, chemicals, sugar, and beverages.

Plant Manager Louis R. Lucero

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1988

NORD PERLITE COMPANY

Chicago Pit

T2S R12E Sec. 16

Box 127, Superior 85273 - Phone 689-5631 - Employees 5 - Plant at Superior on Silver King Mine Road north of railroad track - Open pit perlite mine located two miles southwest of Superior - Major markets are in Louisiana, Illinois, Wyoming, Pennsylvania, Texas, and Indiana - Filter aid used in filtering pharmaceuticals, chemicals, sugar, and beverages.

Plant Manager Louis R. Lucero

09/22/98

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: FILTERS INTERNATIONAL 1

ALTERNATE NAMES:
AZ. PERLITE ROOF CO.

PINAL COUNTY MILS NUMBER: 108B

LOCATION: TOWNSHIP 2 S RANGE 12 E SECTION 4 QUARTER NW
LATITUDE: N 33DEG 17MIN 26SEC LONGITUDE: W 111DEG 07MIN 25SEC
TOPO MAP NAME: SUPERIOR - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
PERLITE

BIBLIOGRAPHY:
SEE ADMMR CHICAGO PIT FILE
BLM AMC FILE 94569
ADMMR DIRECTORY OF ACTIVE MINES IN AZ.,
JAN. 1980

CHICAGO PIT (Old Cliff)

WR - KP - 5-20-77

Box Z, Superior, Ariz. 85273 - Phone 689-5631 - Employees 6-8 - Plant at Superior on Silver King Mine Road - Open Pit Mine 2 miles southwest of Superior - Perlite - Major markets in Louisiana, Illinois, Wyoming and Texas - Used as "Filter Aid" in filtering and processing pharmaceuticals, chemicals, sugar, and alcoholic and nonalcoholic beverages.

General Manager Lewis Williams

The perlite is blasted, loaded from the pit and trucked 3 to 4 miles to the plant. At the plant the perlite is crushed and ground to -30 mesh. For some customers and some processes the -200 fines are removed by air suction. Prior to shipping the free moisture is removed by drying in a gas fired dryer. The dryer consumes approximately 1000 cubic feet of gas per hour. No expansion (popping) takes place in the dryer. The material is shipped bulk in enclosed

rail cars to users in Louisiana, Texas, Illinois and Wyoming where it is expanded and used for various filtering processes. Approximately 10 to 15 percent of the material is discarded as fines in and after expansion. Purity, quality and free silica content of resultant "Filter Aid" is regulated by the U.S. Food and Drug Administration. Free silica is below 1.0 percent. The "Filter Aid" is used in filtering and clarifying liquids in the production of pharmaceuticals, sugar, syrups, beer, wine and in uranium milling.

Lewis Williams of Filters International reported he has received some inquiries regarding a perlite popping plant. The minimum natural gas requirement for a popping plant would be approximately 7,000 cubic feet per hour of 1,000 BTU per cubic foot gas. Apparently neither financing for such a plant or markets for the product are considered by Williams to be problems. The most significant obstacle to such an endeavor is the natural gas hookup; for in essence no new hookups or significant increases in existing usage are being permitted. However, a good "case" for the use of natural gas for perlite expansion can be made when the expanded perlite will be used for building insulation which will reduce fuel consumption for heating and cooling. Some factual data on this subject will be gathered.

09/22/98

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: FILTERS INTERNATIONAL 2

ALTERNATE NAMES:

CHICAGO
OLD CLIFF
ADAMS MINE
AZ. PERLITE ROOF CO.
PERLITE INDUSTRIES NO. 2
UNPAT. CLAIMS 4703, 4704, 4705

PINAL COUNTY MILS NUMBER: 115B

LOCATION: TOWNSHIP 2 S RANGE 12 E SECTION 16 QUARTER N2
LATITUDE: N 33DEG 15MIN 32SEC LONGITUDE: W 111DEG 07MIN 26SEC
TOPO MAP NAME: SUPERIOR - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

PERLITE

BIBLIOGRAPHY:

SEE ADMMR CHICAGO PIT FILE
BLM AMC FILE 66087
BLM MINING DISTRICT SHEET 610
ADMMR DIRECTORY OF ACTIVE MINES, 1980, P. 8

09/22/98

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: FILTERS INTERNATIONAL 3

ALTERNATE NAMES:

OLD CLIFF
CHICAGO PIT
ADAMS
ARIZONA PERLITE ROOF CO.
PERLITE INDUSTRIES NO. 2

PINAL COUNTY MILS NUMBER: 156

LOCATION: TOWNSHIP 2 S RANGE 12 E SECTION 22 QUARTER C
LATITUDE: N 33DEG 14MIN 30SEC LONGITUDE: W 111DEG 06MIN 16SEC
TOPO MAP NAME: TEAPOT MOUNTAIN - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

PERLITE

BIBLIOGRAPHY:

SEE ADMMR SUPERIOR AREA PERLITE FILE
SEE ADMMR CHICAGO PIT FILE
ADMMR FILES
ADMMR DIRECTORY OF ACTIVE MINES IN AZ.,
JAN. 1980

Visited Williams at Arizona Perlite Roof Company plant, now called Filters International Inc., Rt. 1, Box 720, Miami, Arizona. Mining the Chicago Pit (old Cluff claim). They were shut down and were installing dust collecting equipment. Capital Supply Company, 321 South 27th Avenue, Phoenix, bought Arizona Perlite Roof plant and moved it to the Phoenix address. FTJ WR 6/15/72

Arizona Perlite Roofs is now Filters International Inc., Rt. 1, Box 720, Miami, Arizona. They mine perlite from the old Cluff deposit. They were installing dust collectors when last visited (mid-June). FTJ 4 ½ '72

To Superior, visited perlite plants - operations as usual. FTJ WR 12/15/72

To Filters International and Harborlite plants. Both have installed dust collecting equipment. FTJ WR 2/15/73

To perlite plants; both operating. FTJ WR 6/15/73

Filters International Inc. installed dust collecting equipment and was shipping perlite to Texas and California. FTJ Annual Report 6/28/73

Went to Filters International and had an interview with Buster Williams who stated there were no changes in operations. He said that the dust problem was fairly well solved. FTJ WR 10/11/73

To Filters International Inc. Buster Williams, supt., no changes. FTJ WR 5-24-74

Stopped at the perlite mill west of Superior where Williams is working part-time. GW WR 1/13/76

NJN WR 8/26/83: It was reported that Sil-Flo Inc., a Texas based firm, bought the Chicago Pit (Old Cliff) (Filters International Inc.) Pinal County, from Filters International at the beginning of 1983. Their new address is Sil-Flo Inc., P.O. Box 127, Superior, Arizona 85273.

KAP WR 4/12/85: Attended the Symposium on the Geology of Industrial Minerals in Tucson. The program included talks on a number of Arizona properties and field trips to the Chicago Pit, Pinal County.

Mr. Buster Williams, mgr. of the Supreme Perlite Co., Inc., 2123 E. Buckeye Rd. and associated with the Adams Perlite Plant in Superior, was in to get a description and map of the perlite plant location at Superior. He is planning on moving the Buckeye Rd. perlite plant and the aluminum drossing plant to the Superior site. He was referred to the BLM for township and patented claims maps of the area. Mr. Williams says his aluminum drossing plant has been inactive for several months, but will be started up again when it and the perlite plants are moved to Superior. CLH WR 5-11-68

Active Mine List Oct. 1968 - 6 men

Arizona Perlite Roofs, Inc. expanding and shipping 9-14 cars per week to Chicago, Los Angeles and Texas. FTJ WR 3-28-69

Active Mine List May 1969 - 7 men

Active Mine List Oct. 1969 - 7 men - Lewis Williams, Mgr. - S9, 2S, 12E

Active Mine List May 1970 - 7 men - " " " " " "

Visited the Arizona Perlite Co. Plant and met Mr. Robbins the foreman. He says they have 7 men on 2 shifts and produce about 150 t/24 hrs. of -30 mesh perlite. The State Anti-pollution authority is bringing more pressure on the perlite grinders to reduce the escaping dust. GW WR 6-19-70

The Arizona Perlite Co. is producing about 150 tons of ground perlite per day. GW QR 7-1-70

Went to Superior and visited Mr. Robbins of the Arizona Perlite Co. who said they were producing approximately 75 tons per day with 7 men. He complained of production being somewhat curtailed by the lack of railroad cars. GW WR 10-21-70

Active Mine List Oct. 1970 - 7 men - Lewis Williams, Mgr.

Both perlite plants at Superior are operating at reduced rates due to the installation of dust controls. GW QR 4-8-71

At the Adams (Williams) perlite plant, work was along similar lines as that at Harborlite. The State Pollution Administration has given both these plants 90 days to abate their dust effluent. Both Lewis and Buster Williams as well as "Curley" Robins were on hand as supervisors; 6 men are employed. GW WR 6-21-71

Dir. of Mining - 6-8 men August 1971

Both the Williams and the Harborlite perlite plants at Superior had to curtail operations due to the installation of dust control equipment. GW QR 9/71

According to "Curly" Robbins, Foreman for Lewis Williams, Arizona Perlite Roofing Industries, Inc. shipped 25 cars in January and will ship about this much in February. This is 4-5 cars less than in 1965. The large mill stockpile helped considerably during the bad weather period, but its volume was heavily reduced. No increase has yet been ordered. Memo LAS 2-16-66

According to Lewis Williams, Mgr. of Perlite Roofing Industries, Inc., they were running about 30 cars per month and have sufficient orders for 40 cars per month, but the plant will not make that much. He said they were up against a trial with C.W. (Doc) Bowen. Bowen lost a similar case to Superior Perlite last year. Doc Bowen claims there was an error in the first trial. Memo LAS 6-1966

C. W. (Doc) Bowen was in and stated that he now was "favored" for a patent of 210 acres of perlite ground(not including Chemi-Cote claims) but the Sil Flo Claims were up for adjudication. The court hearing was complete but no decision has been rendered. LAS WR 9-30-66

Visit and Conference with J. "Curley" Robbins, foreman, Arizona Perlite Roof Co., Inc. at Superior

According to Robbins they are mining and processing about 40 cars per month as compared to 30-35 cars during most of the 3rd quarter. They could, he believes, do better with certain plant improvements. No decision on the "Doc" Bowen court case has been received. Lewis Williams, Mgr. was away. 7 men are currently employed. All hauling between the pit and the mill is done with a 5-yard (No. 80) Chevrolet dump truck. Loading is done with a No. 60, Pay Loader (Frank H. Hough Co., Libbertyville, Illinois, makes these) In addition another front loader and a cat are available at the pit. Some difficulty with wet ore was recently experienced. This now appears to have been eliminated. Memo LAS 10-19-66

Arizona Perlite Roofing Co., Inc. is shipping about 20-25 cars per month of 35-mesh perlite to Sil Flo in San Antonio. Some rearrangement of the crushing unit may be in the offing. 5-6 men work here. Memo LAS 2-23-67

Due to a shortage of cars the rate at present is about 6-7 cars per week, but the demand is greater perhaps (33-35 cars). No decision as to the claims (Doc Bowens suit) has been rendered. The material is still going to Sil Flo Corp., Fort Worth, Texas. Memo LAS 6-21-67

At the time of my call Mr. Lewis Williams, mgr., was not present - I talked with Mr. Robbins the foreman. He reported they are operating 5 days a wk., two 12-hr. shifts per day, employing five men and shipping 9-12 80 ton cars per week. All of their production goes to Texas. They do not expand the perlite. They ship a dried perlite product screened to -30 mesh. Robt. F. Playter 10-18-67

Active Mine List Nov. 1967 - 5 men

Active Mine List April 1968 - 6 men

Williams stated that, so far during 1965, the production had held at a rate of 30-31 cars of 35-mesh perlite per month, even though the dock strikes had slowed the rate a little. The pit is now being mined in an area where dark colored perlite predominates. Difficulties were caused by heavy rains that flooded a part of the pit and wetted the ore so that it was hard to process it. However, these problems are now nearly eliminated. The market for filter stock is very good and may continue thus for some time. Williams is looking for a new or good secondhand crusher of the tornado type.
Visit and conference with Lewis Williams Memo LAS 2-17-65

Visit and conference with Lewis Williams

The Adams Mine & Mill are operating steadily at a rate of 5-6 cars per week, a little below the 27 cars in February. The ore, at present, contains very few "apache tears" and is somewhat darker in color. However, Williams said it was very good. 6 men are employed.
Memo LAS 6-16-65

The Adams Mine and Mill were active throughout the last quarter, averaging 20-21 cars of crushed perlite per month, as compared to an average of 27-28 cars during the second quarter. The decrease is attributed to dock strikes and plant damage in Fort Worth because of a tornado. However, the rate should return to near normal this quarter.
Visit LAS 10-20-65

ADAMS MINE & MILL

MARICOPA COUNTY

It was learned that Williams is shipping some fine-ground perlite to the Bermuda Tile Co. of Phoenix, and 3-4 cars of ground perlite to Texas for Sil-Flo. Harborlite is working at the same rate, and is using 2-3 cars of perlite per month. Williams is still taking some perlite from the Iberri Group next to the Great Lakes Carbon Group. The latter is "black" perlite.

LEWIS A. SMITH, Superior Conference - 10-20-60

ADAMS MINE & MILL

PINAL COUNTY

Perlite Industries of Arizona, Inc.
2123 E. Buckeye Road
Phoenix, Arizona

Buster Williams, Treas. (Agent)
Lewis Williams, Pres.
(Williams Bros.)

Mill at Superior
Fabricating at 2123 E. Buckeye Rd., Phoenix - Phone 252-3291

Perlite Industries of Arizona (Adams Mine & Mill) mines perlite for Sil Flo Corp., P.O. Box 7086, Ft. Worth, Texas. FPK 2-3-59

Now shipping 4 cars of crushed perlite per week to Sil Flo. LAS WR 2-19-59

Both Superior Perlite (now owned by Harborlite of Calif.) and Sil Flo (Williams contract mining and milling) are active. Superior Perlite is repairing the mill and shipping several truckloads of milled perlite to California. Williams is shipping 30 cars of crushed perlite to Sil Flo per month. 9 men working at the two plants. Both are shipping 30 (plus or minus) mesh material, the bulk of which is being used in filters. LAS WR 9-25-59

Brief conference at the Williams mill revealed that the dock strike had curtailed their activities for a time but that production was now up again. LAS WR 11-13-59

Mr. Williams stated that production of perlite for filters was limited only by the availability of covered cars. During the past two weeks the cars supply has increased. The present rate is 27 to 30 cars per month.

He is collecting "Apache Tears" and sells them at 15 cents per pound in 100 pound lots for mine run. Selected sizes are sold at 25 cents per pound. Small lots sell at 35-40 cents per pound. An old pit is shot periodically so that the visitors can dig a few for themselves. Dealers are not permitted in this.

Memo LAS 1-28-63

Conference with Lewis Williams

Mr. Williams reported that he was running at capacity, or 28-30 cars of 35-mesh perlite per month. The demand for perlite filter material is the best in three years. The car shortage, that hampered deliveries earlier in 1963, has apparently been removed.

Memo LAS 5-27-63

Interview with Lewis Williams and pit visit.

The production rate of 6-7 cars of 35-mesh perlite continues steady. Since the previous visit Williams has stocked 1000-1200 tons of ore in a surge pile at the mill so as to utilize his men's time better and to prevent delays due to poor weather. This also allows more facility in sorting out Apache Tears that, now, are a by-product. The surge pile can be partly covered by a large canvas sheet to prevent the ore from soaking up too much water during rains. When the perlite is shot in the pit it is rapidly stocked at the plant. The next shot is then drilled out against a clean bench face permitting full use of the blast holes and more economic hole placing. Previously delays were caused by flooding by Queen Creek, and of the lower benches of the pit, during heavy rains. The necessity of hauling over soft wet roads is also removed. Memo LAS 6-19-63

Mr. Lewis Williams said that they were running at peak production and had been since early spring, the demand for filter perlite being very heavy. Production currently is 7 cars per week. The surge pile of mine run perlite, created at the mill last spring, has been largely used up. This proved very useful during the heavy rains in August, since the mine to mill road was washed out and the pit ore was very wet. Memo LAS Visit 9-26-63

The mill is running 24 hours (two 12hour shifts) and a car of 38-mesh perlite is being shipped each day. During September 30 cars were shipped. In addition 25 tons per week is trucked to Buster Williams (Supreme Perlite Corp., 2123 E. Buckeye) Williams said some minus 38-mesh material is finding some use in roofing. The ore in the pit seems to come in two types, one that breaks with 35 percent of fines, and one that breaks generally coarser. The former should be screened prior to crushing. Williams did not think that he could appreciably increase production to over 30 cars per month, without plant revisions.

Memo LAS 10-21-64

Lewis Williams stated that the perlite mill was operating full blast due to an increased market for Sil Flo Company's filters. LAS WR 1-19-62

Due to the separation of the William's brothers the Supreme Perlite Co., Inc. operates the Supreme Perlite Plant at 2123 E. Buckeye Road, Phoenix (Buster Williams, Mgr.) and Louis Williams, as Arizona Perlite Roofs Co., operates the Adams Mine and Mill at Superior on a contract basis for Sil Flo Corp., P.O. Box 7086, Fort Worth, Texas.

Supreme manufactures expanded perlite for roofs while Arizona Perlite Roofs Co. mines and crushes perlite to 30-35 mesh for shipment to Sil Flo Corp., which company fabricates the crushed perlite for filters and other uses. Memo LAS 3-1-62

Active Feb. 1962

Williams stated that he was maintaining shipments of 38 mesh perlite at the rate of 25-26 cars per month to Texas. The peak, recently, was 28 cars in March. The mine is operating on two 25 foot benches and reserves are considered to be adequate for a long time. Memo LAS 6-21-62

Mr. Williams said he was still shipping 22-25 cars of ground perlite per month to Sil Flo in Dallas. He is interested in other uses that can be found especially under 150 mesh.

The perlite reserves in the Adams Mine are entirely adequate for the foreseeable future, according to Williams.

Mr. Williams will save 75-100 pounds of perlite with obsidian (apache tears) in it for the museum. Lee Hammons says these are desirable trading material. Memo LAS 9-20-62

CHICAGO PIT

PINAL COUNTY

NJN WR 11/27/87: Louis Lucero, plant manager for Nord Sil-Flo's Chicago Pit (file) Pinal County reported their production comes from a perlite deposit located in T2S R12E Sec 16. He additionally reported that they have acquired a new market for their perlite in Indian this year.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

| | | | |
|----------|--------------------------------|----------|----------------|
| Mine | Adams Mine and Mill | Date | 11-21-62 |
| District | Pioneer District, Pinal County | Engineer | Lewis A. Smith |
| Subject: | Mine and Mill Visit | | |

A visit to the Adams Mine and Mill revealed that the filter aid market is very good. The orders from Sil Flow were 11 cars of crush perlite for the week preceding the visit. The rub seemed to be that sufficient closed cars are not available to ship this much. The perlite, being treated at present, is darker in color than previously, but it appears to be ideal material. A shot at the mine was made during the visit, and it was evident that this material fragments very well. The mill has been working 6 to 7 days, of late.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Perlite Industries Mill

Date September 21, 1961

District Pioneer District, Pinal County

Engineer Lewis A. Smith

Subject: Mill visit

According to Mr. Williams the perlite production had increased materially during the last half of August and so far during September. The September production reached 26 cars during the first 21 days as compared to 3-4 cars per week in the rest of the summer months. The same grade (38 mesh) is being shipped.



United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS
INTERIOR BOARD OF LAND APPEALS
4015 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22203

UNITED STATES

v.

ESTATE OF ARTHUR C. W. BOWEN, DECEASED AND
SUPERIOR PERLITE MINES, INC. (CONTESTEES)
HARBORLITE CORP. (INTERVENOR)

IBLA 78-426

Decided January 8, 1979

Appeal from decision of Administrative Law Judge Robert Mesch holding that the contestees had held and worked part of the Superior perlite placer claims to the extent necessary to qualify for patent under 30 U.S.C. § 38 (1976). Arizona 030706.

Affirmed.

1. Mining Claims: LODE LOCATIONS; PLACER LOCATIONS; WORDS AND PHRASES--Lode Mining Claim--Placer Mining Claim.

"Lode" and "placer." A placer mining claim has been defined as ground within defined boundaries which contain mineral in its earth, sand, or gravel; ground that includes valuable deposits not in place, that is, not fixed in rock, but which are in a loose state, and may in most cases be collected by washing or amalgamation without milling. Whereas, a lode or vein has been defined as any zone or belt of mineralized rock lying within boundaries clearly separating it from the neighboring rock; a body of mineral or mineral bearing rock within defined boundaries.

When mining claims have been located as placer claims for perlite which lies in a "blanket" or "pancake" in an almost horizontal plane and in its original state is encased between two different types of rock, where in places, the upper rock or layer has been eroded away leaving the perlite exposed at the surface and in other places on the claims the upper layer is still present, and

INDEX CODE:

None

38 IBLA 390

GFS(MIN) 8(1979)

the mining of the perlite is characterized as essentially a hard rock operation, and when it is first extracted from the ground and then processed or, in effect, milled to produce a marketable product, the perlite is properly classified as a lode deposit which will not sustain a placer location.

2. Mining Claims: LOCATION PROCEDURES--Lode Locations--Placer Locations; LODE LOCATIONS; PATENTS--Adverse Proceedings--Application--Surveys and Development Work; PLACER LOCATIONS; POSSESSORY RIGHTS; PRACTICE AND PROCEDURE--Contests--Adverse interest--Hearings--jurisdiction; STATUTORY CONSTRUCTION.

Where it is determined that a person or association, they and their grantors, have met the fundamental requirements of the possessory rights section of the mining laws, 30 U.S.C. § 38 (1976), i.e., where they have held and worked their claims in this instance for the qualifying period of 5 years under the Arizona statute of limitations covering actions to recover real property, they are entitled to a patent to those areas where there are no conflicting mining claims, regardless of the fact that the claims were improperly located as placer claims for perlite lode deposits.

APPEARANCES: Fritz L. Goreham, Esq., Office of the Solicitor, Department of the Interior, Phoenix, Arizona, for contestant; Dean Estep, Esq., Engdahl, Jerman & Estep, Phoenix, Arizona, for contestees; Sidney B. Wolfe, Esq., Wolfe & Harris, P.A., Phoenix, Arizona, for intervenor.

OPINION BY ADMINISTRATIVE JUDGE STUEBING

Harborlite Corp. as intervenor in the contest of United States v. Estate of Arthur C. W. Bowen, Deceased and Superior Perlite Mines, Inc., has appealed from a decision by Administrative Law Judge Robert Mesch dated April 10, 1978. The Judge held that the contestees had qualified under 30 U.S.C. § 38 (1976) for patent for part of the Superior Perlite placer claims which had been the subject of the proceeding. The contest challenged the validity of the Superior Perlite No. 1 except that portion embraced in the Elva No. 1 lode mining claim, Survey No. 4677; the Superior Perlite No. 2 (amended) except that portion embraced in the Sandy No. 1 lode mining claim, Survey No. 4677; the Superior Perlite No. 3; and the Superior Perlite No. 4. The claims are located in secs. 8, 9, and 16, T. 2 S., R. 12 E., Gila and Salt River meridian, Pinal County, Arizona.

The contest proceedings were originally instituted by a complaint filed by the Arizona State Office, Bureau of Land Management (BLM), dated February 20, 1976, pursuant to a ruling of this Board in Estate of Arthur C. W. Bowen, Deceased, 18 IBLA 379 (1975),^a in which we directed that a contest be brought to determine whether the contestee is entitled to a patent under the provisions of 30 U.S.C. § 38 (1976) and pertinent regulations, and whether the perlite on the four placer claims in question is properly characterized as lode or placer.

The Bureau's contest complaint specifically charged:

1. The claims, by the nature of the deposits, were improperly located as placer claims.
2. The contestees have not held and worked the claims in such a manner as to qualify them for patent under the provisions of 30 U.S.C. sec. 38.
3. Valuable minerals have not been found within the limits of the claims so as to constitute a valid discovery within the meaning of the mining laws.

A hearing was held September 27 and 28, 1977, at Phoenix, Arizona. Harborlite Corp. was allowed to intervene at the hearing based on its position that it had acquired an interest in the four placer claims by quitclaim deed from the contestee, Superior Perlite Mines, Inc.

The Administrative Law Judge found the evidence presented supported the first charge of the complaint that the four claims were improperly located as placer claims. He ruled the claims were therefore invalid because a lode deposit will not sustain a placer location.

Irrespective of this improper location and designation of the claims, the Administrative Law Judge found that the contestees were still entitled to a patent under the possessory rights section of the mining laws, 30 U.S.C. § 38 (1976) 1/, for those areas of the four Superior claims that were openly held and worked for the qualifying period under the Arizona 5-year statute of limitations covering actions to recover real property. The Judge, however, sustained the second charge of the complaint in part as to those areas of the four Superior claims that were held in conflict with other mining locations, i.e.,

1/ This section of 30 U.S.C. § 38 (1976) provides in pertinent part:
 "Where such persons or association, they and their grantors, have held and worked their claims for a period equal to the time prescribed by the statute of limitations for mining claims of the State or Territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto * * * in the absence of any adverse claim; * * *."

a) GFS(MIN) 9(1975)

the area of the Superior Perlite No. 1 that is embraced within (1) the Guzman lode mining claim that contains the workings known as the "Indian Caves" (which is apparently the Divide lode claim), (2) the Guzman lode claim that contains a business establishment known as a "Rock Shop" (which is apparently the Look-Out Wedge lode claim), and (3) the Guzman lode claim known as the Cruzalite.

The Judge dismissed the third charge rejecting the Government's theory that valuable minerals have not been found within the limits of the claims so as to constitute a discovery based on the "excessive reserves" doctrine. He ruled that the Government did not present any evidence, and there is no evidence of record, from which any conclusions can be drawn concerning the question of excess reserves or whether a valuable mineral deposit has or has not been found within the limits of any one of the claims.

[1, 2] We have reviewed the entire record in this case and the arguments raised by Harborlite Corp. in its statement of reasons. From our review it is clear that Harborlite has not set out any new legal or factual arguments that have not already been thoroughly considered below. Judge Mesch's decision sets out in detail a summary of the chronology of the pertinent litigation involved, the evidence and applicable law as well as his findings and conclusions. We are in agreement with his decision, and therefore, we adopt it as the decision of this Board. A copy of the decision is attached hereto.

The contestees do not appeal from the Judge's findings but instead have filed a response to Harborlite's appeal stating that Harborlite has raised matters of title which the Judge had no jurisdiction to determine. Harborlite has not taken issue with the Judge's ruling that the perlite on the claims is properly classified as lode deposits. Nor does it object to that portion of the Judge's decision which held that areas of the claims not in conflict are properly subject to patent. Appellant objects to the Judge's finding that the area of the conflicting Guzman claims which encroach on the David R No. 1 lode and Superior Perlite No. 1 lode within the Superior Perlite No. 1 placer is not to be included in patent. It makes much of the fact that Bowen's work on the conflicting area preceded the Guzman development and emphasizes that Guzman's improvements are located outside the overlapping area. These arguments merit no lengthy consideration in light of the fact that the contestees specifically admitted at the time of the hearing that patent was not sought in these proceedings for the area encompassed by the David R No. 1 lode claim and the Superior Perlite No. 1 lode claim. It is sufficient to point out that it was established at the hearing that, as a result of a settlement agreement between the estate of Bowen, Superior Perlite Mines, Inc., and Union Trust Company, the successor in interest of Sil Flo

Corporation, the Bowen estate and Superior Perlite Mines, Inc., withdrew any claim of adverse possession which they may have had to the area encompassing the David R No. 1 and the Superior Perlite No. 1 lode claims (Tr. 14-15). The contestees admitted that the only area they were seeking patent to within the Superior No. 1 and No. 2 placer claims, at this time with this patent application, was an area marked in red on Govt. Exh. No. 1. The red area clearly and distinctly did not include these two lode claims (Tr. 17). Accordingly, the Administrative Law Judge appropriately eliminated the area of the David R No. 1 and the Superior Perlite No. 1 lode claims from the realm of his further deliberations.

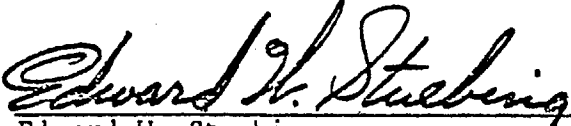
Appellant makes a similar argument as to the Mary T and the Sandy No. 2 lode claims, alleging that the Judge failed to determine their status in this proceeding. It contends that they should have been included in the area which the Judge found qualified for patent.

Again, appellant has misinterpreted the bounds of the Judge's holding. The Judge did not eliminate the area of the Mary T and the Sandy No. 2 claims from his determination. Referring back to that point in the proceeding's where the contestees withdrew their patent application for certain areas within the claims, contestees in discussing Govt. Exh. No. 1, emphasized that only the area marked in red was the subject of this proceeding. That red area on the exhibit clearly includes claims labeled the Sandy No. 2 and the Mary T. The Judge acknowledged the inclusion of this red area in his decision at page three, where he referred to "the land shown in red on the map received in evidence as Exhibit 1," and stated, "This appears to restrict the acreage of the Superior Perlite No. 1 to roughly 80 acres and the land within the Superior Perlite No. 2 to about 25 acres." Also at page six of the decision he alludes to the total area that may qualify for patent when he pointed out what land has been held in a qualifying manner, specifically excepting only the area in the Superior Perlite No. 1 placer which overlapped and conflicted with the Guzman lode claims, stating:

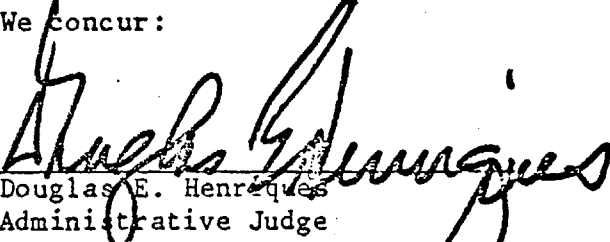
Presumably, with the exception of a portion of the land within the Superior Perlite No. 1, [the Guzman lode claims] the contestant does not question the contestee's assertion that all the land presently being claimed under the four placer locations has been held or possessed in such a manner as to meet the requirements of the law * * *.

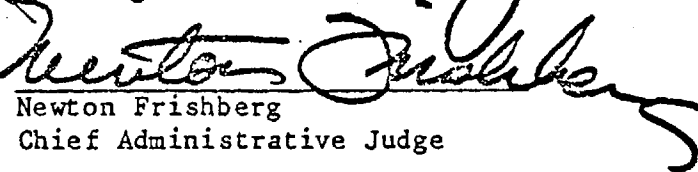
Nowhere in the decision does the Judge single out the Mary T and the Sandy No. 2 claims for separate treatment or in any form to be eliminated from the area for patent. Accordingly, there is no basis for appellant's conclusion.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed, and the case is remanded to the Arizona State Office, Bureau of Land Management, for further appropriate action on mineral patent application Arizona 030706.


Edward W. Stuebing
Administrative Judge

We concur:


Douglas E. Henriquez
Administrative Judge


Newton Frishberg
Chief Administrative Judge



United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS

Hearings Division
6432 Federal Building
Salt Lake City, Utah 84138
(Phone: 801-524-5344)

April 10, 1978

UNITED STATES OF AMERICA, : ARIZONA 030706
Contestant : Involving the Superior
v. : Perlite No. 1 except that
ESTATE OF ARTHUR C. W. BOWEN, : portion embraced in the
Deceased, and SUPERIOR : Elva F. No. 1 lode mining
PERLITE MINES, INC., : claim, Survey No. 4677;
Contestees : Superior Perlite No. 2
HARBORLITE CORPORATION, : (amended) except that portion
Intervenor : embraced in the Sandy No. 1
: lode mining claim, Survey
: No. 4677; Superior Perlite
: No. 3; and Superior Perlite
: No. 4, all association placer
: mining claims, situated in
: Sections 8, 9, and 16,
: T. 2 S., R. 12 E., GSR Mer.,
: Pinal County, Arizona.

DECISION

Appearances: Fritz L. Goreham, Esq., Office of the Solicitor, Department of the Interior, Phoenix, Arizona, for contestant;

Dean Estep, Esq., Engdahl, Jerman & Estep, Phoenix, Arizona, for contestees;

Sidney B. Wolfe, Esq. Wolfe & Harris, P.A., Phoenix, Arizona, for intervenor.

Before: Administrative Law Judge Mesch

This is a proceeding involving the validity of four placer mining claims located under the General Mining Laws of 1872, as amended, 30 U.S.C. § 22 et seq. Pursuant to 43 CFR 4.451, the Arizona State Office, Bureau of Land Management, issued a complaint on February 20, 1976, charging that the subject mining claims are invalid because:

1. The claims, by the nature of the deposits, were improperly located as placer claims.
2. The contestees have not held and worked the claims in such a manner as to qualify them for patent under the provisions of 30 U.S.C. sec. 38.
3. Valuable minerals have not been found within the limits of the claims so as to constitute a valid discovery within the meaning of the mining laws.

The contestees filed a timely answer and denied the charges in the complaint. A hearing was held on September 27 and 28, 1977, at Phoenix, Arizona. At the commencement of the hearing, Harborlite Corporation was permitted to intervene inasmuch as it was asserting an interest in the placer claims by reason of a conveyance from the contestee, Superior Perlite Mines, Inc.

The subject claims are within the Tonto National Forest. They are located approximately two and one-half air miles southwest of the town of Superior, Arizona. They are situated near the base of Picket Post Mountain in an area that has been plastered with mining claims. The contested claims and others in the area were located for perlite, a volcanic rock which, when crushed and heated, expands to a mass of glass bubbles. In the expanded state, perlite has various uses in the construction, oil, chemical, and other industries.

The Superior Perlite No. 1 was located on September 30, 1950. The Superior Perlite No. 2 was located on April 4, 1954. An amended location notice for this claim was executed on May 24, 1954. The Superior Perlite No. 3 was located on December 15, 1960. An amended location notice for this claim was executed on October 22, 1963. The Superior Perlite No. 4 was located on February 10, 1961. The Superior Perlite Nos. 1 and 2, as originally located or as amended, cover 160

acres each. The Superior Perlite No. 3 contains 80 acres and the Superior Perlite No. 4 covers 40 acres. The four claims are contiguous.

At the hearing the contestees stated they were not asserting any rights under the placer locations in the Superior Perlite Nos. 1 and 2 except as to land within the two claims shown in red on a map received in evidence as Exhibit 1. This appears to restrict the acreage of the Superior Perlite No. 1 to roughly 80 acres and the land within the Superior Perlite No. 2 to about 25 acres.

The contested mining claims and other claims in the area have a tortuous history of litigation. This is summarized in part in an appendix attached to this decision.

The present proceeding arises as a result of a decision of the Interior Board of Land Appeals directing the institution of contest proceedings to determine whether the perlite is properly characterized as lode or placer and, if the claims were improperly located as placers, whether the mining claimants are nevertheless entitled to a patent under the provisions of 30 U.S.C. § 38. Estate of Arthur C. W. Bowen, deceased, 18 IBLA 379 (1975).^b

The mining laws provide for the location of lode claims "upon veins or lodes of quartz or other rock in place bearing gold ... or other valuable deposits", 30 U.S.C. § 23, and for the location of placer claims on "all forms of deposit, excepting veins of quartz, or other rock in place", 30 U.S.C. § 35.

In Iron Silver Mining Company v. Cheesman, 116 U.S. 529 (1886), the court approved the following definitions of a vein or lode:

... the term as used in the acts of congress is applicable to any zone or belt of mineralized rock lying within boundaries clearly separating it from the neighboring rock.

* * *

... a lode or vein is a body of mineral or mineral-bearing rock, within defined boundaries in the general mass of the mountain.

b) GFS(MIN) 9(1975)

In United States v. Iron Silver Mining Company, 128 U.S. 673 (1888), the court defined the term placer claim as:

... ground within defined boundaries which contain mineral in its earth, sand, or gravel; ground that includes valuable deposits not in place, that is, not fixed in rock, but which are in a loose state, and may in most cases be collected by washing or amalgamation without milling.

The perlite in the area of the claims lies in a "blanket" or "pancake" in an almost horizontal plane. In the past, there were a series of volcanic flows that laid down igneous material of different compositions. The perlite resulted from one of the flows. In its original state, the perlite was encased between two different types of rock. In places the upper rock or layer has been eroded away leaving the perlite exposed at the surface. In other places on the claims, the upper layer is still present. A qualified mining engineer called by the contestant characterized the perlite as a blanket lode sandwiched between a lower layer of rock, or foot wall, and an upper layer of rock, or hanging wall. The perlite is a rock and the mining thereof is essentially a hard rock operation. After the perlite is extracted from the ground, it is processed or in effect milled to produce a marketable product. The perlite in the area of the claims is used principally for filtering aids.

The contestees contend that the perlite is not a lode deposit because (1) it is found on the surface and is not covered by a layer of rock of other composition, and therefore, there is no hanging wall and the deposit is not in place; (2) the perlite contains nothing of value other than the rock itself, and therefore, it is not "rock in place bearing gold ... or other valuable deposits"; and (3) the Act of August 4, 1892, 30 U.S.C. § 161, authorizing the entry of lands chiefly valuable for building stone requires the perlite to be located as a placer deposit.

The contestees' contentions can be simply answered by noting (1) the evidence does not support the conclusion that the upper layer of rock has been completely eroded from the area of the claims, and there are areas where the deposit is in place between a foot wall and a hanging wall; (2) the court in the Cheesman case, supra, recognized that a "lode or vein

is a body of mineral or mineral-bearing rock within defined boundaries"; and (3) by no stretch of the imagination are the lands within the claims chiefly valuable for building stone.

The question of whether the perlite within the contested claims is subject to location as a lode or placer deposit has been considered by the Superior Court of Pinal County, Arizona, the Superior Court of Maricopa County, Arizona, and on two occasions by the Arizona Court of Appeals. Bowen v. Chemi-Cote Perlite Corporation, 5 Ariz. App. 28, 423 P.2d 104 (1967), and Bowen v. Sil-Flo Corporation, 9 Ariz. App. 268, 451 P.2d 625 (1969). The same three arguments presented by the contestees in this proceeding were made before the Arizona Courts. The four decisions of the Arizona Courts found that the perlite was properly characterized as a lode deposit. The two decisions of the Arizona Court of Appeals thoroughly considered the question of lode versus placer as applied to the perlite within the claims. I am in agreement with the extensive analyses made by the court and see no reason to repeat them here.

The evidence supports the first charge in the complaint. I find the four Superior Perlite placer mining claims invalid because a lode deposit will not sustain a placer location. Cole v. Ralph, 252 U.S. 286 (1920).

In its remand decision in this proceeding the Board of Land Appeals noted "that a mining claimant who has met certain fundamental requirements of the mining law, such as discovery, citizenship, and expenditure, and who has exclusively held and worked his claim for the period of adverse possession prescribed by the law of the State, is entitled to a patent [under 30 U.S.C. § 38] regardless of the fact that the claim may have been improperly located as a lode or placer".

The possessory rights section of the mining laws, 30 U.S.C. § 38, provides in part:

Where such person or association, they and their grantors, have held and worked their claims for a period equal to the time prescribed by the statute of limitations for mining claims of the State or Territory where the same may be situated, evidence of such possession

and working of the claims for such period shall be sufficient to establish a right to a patent thereto . . .

Arizona has a two-year, a three-year, and a five-year statute of limitations covering actions to recover real property. ARS §§ 12-522, 12-523, and 12-525. The five-year statute appears to be applicable in this case. Eagle-Picher Mining and Smelting Company v. Meyer, 68 Ariz. 214, 204 P.2d 171 (1949).

The Superior Perlite No. 1 placer was located in 1950. The Superior Perlite No. 2 placer was located in 1954. The two claims were conveyed to Arthur C. W. Bowen, one of the original locators, in 1954. In 1955, Bowen entered into a lease arrangement with Sil-Flo Corporation covering the two claims. The agreement with Sil-Flo remained in effect until 1972. The Superior Perlite No. 3 placer was located in 1960. The Superior Perlite No. 4 placer was located in 1961. The two claims were conveyed to Arthur C. W. Bowen, one of the original locators, in 1961. Bowen filed a patent application covering the four claims in 1961. The four claims have been the subject of extensive litigation from 1961 to the present with Bowen and his estate continually asserting an interest in and attempting to protect the claims. Affidavits of annual assessment work have been recorded attesting to the performance of work on the claims each year since they were located with the exception of two years between 1960 and 1962, and seven years between 1964 and 1971.

In support of the charge that the claims have not been held and worked in such a manner as to qualify them for patent under the provisions of 30 U.S.C. § 38, the contestant presented (1) the testimony of three witnesses who stated or implied that they had never seen Bowen or anyone in his behalf working the claims, and (2) evidence that a portion of the land within the Superior Perlite No. 1 placer was not held in a qualifying manner. Presumably, with the exception of a portion of the land within the Superior Perlite No. 1, the contestant does not question the contestees' assertion that all of the land presently being claimed under the four placer locations has been held or possessed in such a manner as to meet the requirements of the law.

Insofar as the "working" requirement is concerned, I cannot give any weight to the testimony of the contestant's three witnesses. The testimony is too general, vague, unreliable, and unconvincing. Among other things, their testimony is in

direct opposition to the undisputed fact that a portion of the lands were actively worked over a period of many years under a lease arrangement between Sil-Flo Corporation and Bowen. I accept the affidavits of assessment work, which were received in evidence without objection from the contestant, as establishing that the claims were worked for a period equal to the five-year time prescribed by the Arizona statute. Cain v. Addenda Mining Company, 24 L.D. 18 (1897); Capital No. 5 Placer Mining Claim, 34 L.D. 462 (1906).

With respect to the "holding" requirement, the contestant presented convincing evidence that a portion of the land within the Superior Perlite No. 1 has been and is claimed by third parties under conflicting mining locations who have, for a period in excess of 20 years as to some of the land and a period in excess of 5 years as to the remaining land, been actively and openly working and producing perlite from the land. The evidence, which is uncontradicted, supports the conclusion that Bowen did not hold and the contestees have not held the land within the Superior Perlite No. 1 that is embraced within (1) the Guzman lode mining claim that contains the workings known as the "Indian Caves" (which is apparently the Divide lode claim), (2) the Guzman lode claim that contains a business establishment known as a "Rock Shop" (which is apparently the Look-Out Wedge lode claim), and (3) the Guzman lode claim known as the Cruzalite.

The contestees contend that evidence relating to the possession of the land within the conflicting lode claims by Guzmans should not have been received and cannot be used to defeat their claim to a patent under 30 U.S.C. § 38. The contestees assert that the Guzmans and their predecessor in interest as to the Cruzalite claim did not institute adverse proceedings with respect to the 1961 patent application filed by Bowen, and, having failed to do so, they lost whatever possessory title they might have had to the lode claims. They argue that as against the Guzmans, Bowen's right to possession was conclusively established by reason of the failure to file an adverse claim.

I do not agree with the contestees' theory. The fact that the Guzmans may not have any right to possession as against Bowen should not prevent the Government from showing that Bowen can not meet the requirements of the law because the Guzmans, and not Bowen, were openly, exclusively, and actively working and holding the land. Under the contestees' theory, a mining claimant could obtain a patent under 30 U.S.C. § 38, not by reason of compliance with the law, but, simply because an adverse claimant who actually possessed and worked

the claim adverse to the patent applicant failed to institute adverse proceedings.

The evidence supports the second charge in the complaint as to any land the contestees are presently claiming within the Superior Perlite No. 1 placer claim that is embraced within the three Guzman lode claims identified above. With respect to the rest of the land the contestees are presently claiming within the four Superior Perlite placer claims, the only conclusion that can be drawn from the evidence is that the contestees have held and worked the claims in a sufficient manner to qualify them for patent under 30 U.S.C. § 38.

In its posthearing brief, the contestant states that the third charge in the complaint, i.e., valuable minerals have not been found within the limits of the claims so as to constitute a valid discovery, is directed basically to the "excessive reserves" doctrine. In addition, the contestant states "there is considerable doubt as to whether a valid discovery has been made" within the Superior Perlite Nos. 3 and 4 and "the question of a valid discovery [within the Superior Perlite No. 2] is suspect".

The contestant did not present any evidence, and there is no other evidence in the record, from which any conclusions can be drawn concerning the question of excess reserves or whether a valuable mineral deposit has or has not been found within the limits of any one of the claims. Accordingly, the charge is dismissed from the proceedings.

Since a patent application has been filed, a problem arises as to whether a further hearing should be ordered to obtain sufficient evidence to make a determination on the questions of excess reserves and discovery. United States v. Taylor, 19 IBLA 9, 82 I.D. 68 (1975).^c Under the circumstances, I am not inclined to order a further hearing. The question of the validity of the contested claims has been pending for an unreasonable length of time. The contestant has had more than adequate opportunity to fully and properly litigate the discovery issues. It appears to me that the contestant has not, as yet, even firmed up its reasons for contending that valid discoveries have not been made. A question exists as to whether upon adequate analysis the contestant will reach the conclusion that there is substance to the discovery issues. Accordingly, I am not willing to assume that the contestant, after engaging in a two-day hearing, is still

c) GFS(MIN) 13(1975)

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desirous of litigating the issues and compel the parties to participate in another hearing that may or may not be productive of additional information.

In its posthearing brief, the intervenor asserts that it has obtained all of the contestees' right, title and interest in the four contested placer claims, requests that it be substituted as the real party in interest and the applicant for patent, and asks for a ruling in favor of granting a patent in its name. I have no authority to determine the ownership of the contested claims. My sole function is to decide, on the basis of the evidence presented, whether the contested mining claims are invalid as alleged by the Bureau of Land Management in its contest complaint.

The contest complaint is sustained as to charge 1, sustained in part and dismissed in part as to charge 2, and dismissed as to charge 3.

Robert W. Mesch

Robert W. Mesch
Administrative Law Judge

APPEAL INFORMATION

The parties have the right of appeal to the Interior Board of Land Appeals. The appeal must be in strict compliance with the regulations in 43 CFR Part 4. (See enclosed information pertaining to appeals procedures.)

If an appeal is taken the adverse party or parties can be served at the addresses listed under the distribution shown below.

Enclosure: Information Pertaining to Appeals Procedures

TO: Frank P. Knight, Director
Arizona Dept. of Mineral Resources

June 26, 1957

FROM: Lewis A. Smith,
Field Engineer

SUBJECT: Superior Area Perlite (file)

A visit (June 20, 1957) was made to the Plants and Mines of the Superior Area.

Two companies are working: -

- (1) Superior Perlite Industries. ✓
- (2) Perlite Industries of Arizona. ✓

The properties of the area are as follows:

- ✓(1) Perlite Industries #1 - Sec. 9, T2S, R12E - Adams Mine (file)
- ✓(2) Superior Perlite - Sec. 9, 16" " - Chemi-Cote Mine (file)
- ✓(3) Great Lakes Carbon Co. - Sec. 16, " " ✓(file) X
- ✓(4) Perlite Industries #2 - Sec. 22, " " - (Williams Mine +) (file)
- ✓(5) Snow White - Sec. 30, T1S, R12E ✓ (file)

The Perlite area ranges over a length of 10 miles and a width of 2½ miles, and trends northwest. The perlite rests on a tuff, or breccia, and is underlain or affiliated with glassy rhyolite. Some occurrences, such as the Perlite #1 have widths up to a few hundred feet.

The Superior Perlite Industries (Chemi-Cote) are shipping 2 carloads of crushed perlite, per week, to Dallas, Texas.

The Perlite Industries of Arizona (Williams Bros.) are shipping 1,000 to 1500 tons per month to Fort Worth, Texas, from their #1 Mine, which lies 1 mile east of the Superior airport.

In addition they are shipping 100-125 tons per month, to their Phoenix Plant. This is used for building purposes, such as plaster, insulation, etc. The No. 1 product, like that from Superior Perlite Industries, is used in filtering and insulation. This is from their #2 mine.

The specifications for Texas shipments are as follows:-

| | |
|------------|------|
| - 30 mesh | none |
| - 30-50 " | 18 % |
| - 50-100" | 37 % |
| - 100-200" | 30 % |
| - 200 " | 15 % |

WILLIAMS
BROS.

Rhyolite content is limited to -20% - New specifications will be: -

| | |
|------------|------|
| + 30 mesh | None |
| - 30-50 " | 20 % |
| - 50-100" | 35 % |
| - 100-200" | 35 % |
| - 200 " | 10 % |
| Rhyolite | 15 % |

The mine run of perlite, averages 6-8% moisture. This is removed from the crushed material by rotary kilns. 2% is added before loading for shipment. The dry perlite is blown to reduce the -200 mesh content to requirements. 2% moisture is required to minimize shipping losses and for "puffing".

The Perlite #1 mine, has to be mined selectively to keep down the amount of rhyolite. Two areas are satisfactory now but with the reduced rhyolite allowance will have to be more carefully mined in the future. A new area, now being drilled, appears to be better.

The Superior Perlite Pit lies some 400-500' south of the Perlite Industries No. 1 Pit and is similarly worked.

The "ore" is broken by air drill blasting. Loading is done by trackscavator and by scraper into a loading bin and hauled in 12-15 ton trucks.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine ✓ Adams Mine and Mill ✓

Date 6-9-58

District Pioneer (Mineral Hill) Superior, Pinal Co. Engineer Lewis A. Smith

Subject: Mine and mill visit.

Location: The mine lies 1 mile east of the Superior Airport, and 1½ miles south of Superior.

The mill is across the highway (Mesa-Superior) from the airport.

Owner: ✓ Perlite Industries of Arizona, Inc., 2123 E. Henshaw Road, Phoenix, Arizona
✓ Buster Williams, Treasurer (Agent)
✓ Lewis Williams, President

Mineral: ✓ Perlite

The mine is active, using two miners and one truck-trackscavator operator. Most of the present production is coming from the north face of the pit and considerable stripping is necessary to clear the perlite. The material is very good and clean as delivered to the mill by two 5 yard Chevrolet dump trucks. The mine is equipped with a compressor, trackscavator and drill equipment.

The mill consists of a hammer mill, in closed circuit, with classifier screens. The mill product is delivered by means of a bucket conveyor to the kiln feeders which send the perlite to two cylindrical revolving kilns for drying. The kilns deliver the dried perlite (ranging from 8 to #100 mesh) by means of suction fans to hoppers which feed automatically at variable desired rates to a double set of screens. The upper shaking screen removes oversize which is returned to the hammer mill and the undersize is dropped to a finer shaking screen which carries 30 mesh material to the central mixing hopper. The two products are then proportionally mixed after screen analyses are made. The average product at present specifications is about 30-38 mesh depending upon what is desired. The mixed material is delivered by bucket conveyor to the top of a forty foot tower from whence it will be distributed by means of 4" pipes to two cylindrical bins, (plus and minus 30 mesh) 20' high by 12' in diameter. A belt conveyor from under these bins is used to load trucks for car loading and for blending. The cars are of the covered cement type. The material is quite dusty and must be protected from wind while in transit. Other pipes send mixed perlite from the mixing hopper directly to railroad cars or to 3 other hoppers which in turn load directly into the cars by means of spouts.

Shipments are now averaging 4 cars per week to Texas. The material is used in filters.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Superior Perlite Mine

Date October 22, 1959

District Mineral Hill Dist., Pinal Co.

Engineer Lewis A. Smith, Engineer

Subject: Mine and mill visit.

Property: 2 placer claims east of the Sil Flo Pit and over 1 mile east of Superior airport.

Owner: Harborlite Corp., Box 458, Escondido, Calif.

Supt.: M. C. Magnette, Box 583, Superior, Arizona.

Mine: The perlite is being mined by air drill shooting. Two jackhammers (Sullivan) and a 105 Ingersall Rand compressor are used. A trackscavator loads a Ford 5 yard truck. 2 men are employed here.

Mill: The revised mill consists of a storage bin (capacity of 16 yards) which feeds automatically into a Gates jaw crusher. The bin is covered by a grizzly with 5 x 6 inch openings. The crusher reduces the feed to a minus $1\frac{1}{4}$ inch sizing. The crusher product is delivered by belt conveyor to a Tornado Impact crusher which reduces the perlite to 80 percent through 30 mesh. The Impact crusher product is conveyed by bucket conveyor to a shaking screen which separates the 30 mesh material. This is delivered to a cyclone to remove fine dust (-100 mesh). The oversize is returned by belt conveyor to the Impact crusher. The product is used for filters. One car per week is now being shipped to Escondido. The Tornado Impact machine consists of a disc on which are four attached shoes. The revolving shoes "impact" the perlite against the lining reducing it to a maximum of $1/16$ inch. The disc in this machine is 16 inches in diameter. The shaking screen is 6 x 6 feet square and operates on an eccentric.

(The Sil Flo mine and plant was curtailed briefly by the dock strikes but is now back to 4 cars per week.)

Geology: The perlite appears to have been derived from obsidian by weathering. The obsidian lies near the top of the pre-dacite rhyolitic flows and as yet the depth of the obsidian is unknown. However, in the bottom of one pit and in an area further west the perlite is becoming darker. The "onion" structure appears to have been induced by successive layers of material separating from the core by temperature variation, much as happens in the weathering of jointed granites. The perlite is well distributed over a wide area and the reserve is adequate for several years' operations at the present rate.

The flows, which contain the obsidian, are separated from the dacite by an erosional unconformity and in some places by an intervening agglomerate flow. These acid flows have been tentatively placed in the Miocene Period. The rhyolite flows are mineralized in many places, mainly by lead and silver, whereas the dacite and agglomerate appear to be post-mineral. The Pickett Post Mountain flow series butts against the older Apache and pre-Cambrian formations along the Concentrator Fault to the east. The Dacite and some agglomerate cap the Dripping Spring Range further to the east. The complicated fault mosaic in the sediments makes the determination of the throw, between Pickett Post and the crest of the Dripping Springs Range,

Superior Perlite Mine (continued)

difficult. It must amount to many hundreds of feet. Further south, toward the Raymert and the Silver Belle Martinez mines, the erosion of the rhyolite and underlying andesitic flows has been severe. In many places the dacite and agglomerate fill deep valleys eroded in the earlier flows and the still older formations. In most cases the Paleozoic has been entirely removed and the earlier pre-Cambrian formations penetrated by this long erosional epoch. The rhyolitic flows there occupy the lower portions of the old valleys and the dacite and agglomerate the upper portions. As near as the picture can be pieced together, the perlite occupies the upper part of the rhyolite flows.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Harborlite Mill - Chemi-Cote Perlite

Date September 21, 1961

District Pioneer District - Pinal County

Engineer Lewis A. Smith

Subject: Interview with M.C. Magnette

Harborlite has been averaging 3-4 cars of 38 mesh perlite per month. However, during the past two weeks they have increased a little. Some additional Harborlite perlite is being shipped to the Bermuda Perlite Company plant in Phoenix (2123 Buckeye Road) which company is using 7 tons a week for a patented roofing mix.

Property active Feb. 1962 - 3 men working

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Chemi-Cote Mine & Harborlite Mill Date 11-21-62
District Pioneer District, Pinal Co. Engineer Lewis A. Smith
Subject: Interview with M. C. Magnette.

Harborlite is now using about 6 cars per month on the average, of 38-mesh perlite for filter aids. Much of the time, the special cars for perlite shipping have been in short supply, necessitating the use of freight cars. The perlite is bagged for this type of shipping, and costs a little more. Magnette also said the market had rapidly expanded during the past few months, and was showing little or no indication that it would slow any in the immediate future. This perlite is the white-gray, "onion" type.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Harborlite Perlite Mill - Chemi-Cote Perlite Date February 21, 1962
District Pioneer District - Pinal County Engineer Lewis A. Smith
Subject: Mill visit and conference with M. C. Magnette

The mill has been revamped somewhat since the last visit. It now consists of a 11 x 12 ft. grizzly constructed of 40 pound rails crossed by 1½ inch reinforcing bars, allowing for 6 inch clear spacing. The bin material is screened to remove minus 1 inch material and the oversize is pan fed to an 8 x 20 inch Wheeler Jaw Crusher which reduces the feed to minus 1 inch size. The crusher discharge is screened to remove fines and the oversize sent by bucket conveyor to a 26 inch Tornado impact machine. The Tornado reduces the material to 30 mesh or less. The oversize is returned to the Tornado. The undersize is sent to a 30 foot by 4 foot cylindrical kiln which is fired at less than 1000 degrees F, or insufficient temperature to expand the perlite. The dried material is then bucket conveyed to a multiple shaking screen assembly. The fines, or minus 30 mesh, is then run through a cyclone and the dust eliminated. The oversize is belt conveyed to the impact machine feed bin. The minus 30 mesh end product is stored in 2 large circular bins for loading on covered cars, similar to ore concentrate cars. Recent shipments have amounted to about 4 cars per month. The perlite is shipped to California where it is expanded and ground to 325 mesh and used as filter base. The demand for perlite filter stock has recently stepped up considerably. The plant is capable of producing 50-55 tons per day.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Superior Perlite Mine & Mill

Date October 20, 1965

District Pioneer District - Pinal County

Engineer Lewis A. Smith

Subject: Visit

The Harborlite people operated the Superior Perlite Mine and Mill continuously yielding an average of 20 cars per month, or double the rate made in the second quarter. The increase is attributed to an increase in demand from Texas firms rather than in California. It is believed that this rate will hold during the 4th quarter. The mill has been revamped and the blasting revisions, previously mentioned, have resulted in much finer fragmentation. This was mainly due to proper hole placement. The finer fragmentation has resulted in double crushing capacity.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Chemi-Cote Perlite Mine & Mill

Date October 19, 1966

District Pioneer District - Pinal County

Engineer Lewis A. Smith

Subject: Visit to mill and conference with M. C. Willis, Supervisor

During October orders for 18 cars of 30 mesh perlite ore on record. This is shipped to Azurich, Illinois; Gardenia and Escondido, California and to Filter Media in Fort Worth, Texas. As far as is known, the bulk of this goes into filter media. According to Mr. Willis the demand ranges 15-20 cars per month. After an experimental blasting program, the fragmentation of the ore in the Pit has been improved and the burden on the crushing plant correspondingly reduced. Up until recently, the ore was wet and had to be partly dried before grinding in the tornado.

PINAL COUNTY

✓
SUPERIOR PERLITE MINE & MILL
Dallas, Texas
(CHEMI-COTE PERLITE MINE & MILL)

PINAL COUNTY

Sec. 16, T2S, R12E

They operate a mill and a pit, the pit being
500' SE of the Perlite Co. smaller operation.
Smaller operation than the Perlite Co.,
shipping 2 cars per week to Dallas.

Have similar operations and perlite
specifications to those of Perlite Co.
Same uses for perlite, namely to filter
and insulation.

BJS

DEPARTMENT OF MINERAL RESOURCES

REPORT TO OPA ON ACTIVE MINING PROJECT

Date..... 4/2/45

Name of Mine..... Clemente Perito Co

Owner or Operator..... Clemente Perito Co

Address..... 435 W 3rd Ave Phoenix

Mine Location..... 2 mi SW Superior

Filing Information

File System.....

File No.....

This chart to be used for gallons of gasoline required per month.

PRESENT OPERATIONS: (check X)

Production.....; Development.....; Financing.....; Sale of mine.....;

Experimental (sampling).....; Owner's occasional trip.....;

Other (specify).....

PRODUCTION: Past and Future.

Tons

Approx. tons last 3 months

Approx. present rate per 3 months

Anticipated rate next 3 months

If in distant future check (X) here

EQUIPMENT OPERATED:

| Type | Quantity or Horse Power | Miles or Hours Per Month | Gallons Required Per Month |
|--------------------------|-------------------------|--------------------------|----------------------------|
| Personal Cars | | | |
| Light or Service Trucks | | | |
| Ore Hauling Trucks | | | |
| Compressors | <u>35 HP Handheld</u> | | <u>825 gtr</u> |
| Other Mine or Mill Eqpt. | | | |

PRODUCT PRODUCED OR CONTEMPLATED: Name metals or minerals.

REMARKS:

This is a new operation + will
be producing in short time

ARIZONA DEPARTMENT OF MINERAL RESOURCES

By George W. DeLaney

November 15, 1944

Chemi-cote Perlite Company
435 South Third Avenue
Phoenix, Arizona

Gentlemen:

We have received the following communication
from Bill Broadgate which I am passing on to you.

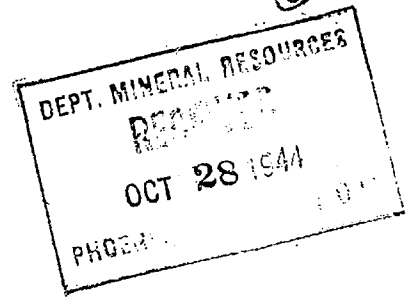
"As far as I can determine, the Chemi-cote
application is still somewhere in the
field, and not in the WFB here. I wish
you would have the field office checked
and find out whether it has been lost
there or here, so I can go after it
further."

Yours very truly,

Chas. H. Dunning
Director

CHD:EP

Oct. 25, 1944



SUBJECT: Chemi-Cote Chemical Co. Plant.

Because of the nature of the deal, which is for priorities for what is in fact a factory, I am routing it through Haden's office to a Senate subcommittee which does the best work in expediting this sort of a deal and with which I work.

I shall, of course, follow it all the way and do what I can also, but Bowen will probably hear from others on this matter.

Naturally, I will check it closely.

Bill Broadgate

October 20, 1944

MEMORANDUM

TO: W. C. Broadgate

FROM: Chas. H. Dunning

Herewith is copy of application to construct a plant for processing perlite, by the Chemi-cote Chemical Company in which Dr. Bowen is interested.

The original has been submitted to the W.P.B. here but Dr. Bowen asks that you do whatever possible to push it along.

CHD:LP
Enc.

LONG LIFE
Chicken Litter

Ph. 3-6785

CHEMI-COTE



CORPORATION

Ceiling and Wall
INSULATION

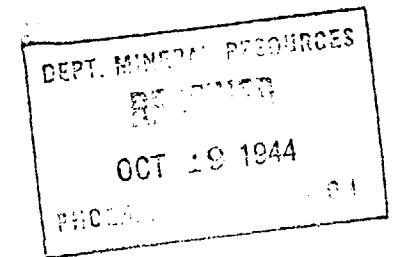
Bonded and Insulated
ROOFING

435 South Third Avenue

Phoenix, Arizona, U.S.A.

Oct. 18, 1944.

Mr. F. O. Billings,
Bonnevile Power Administration,
Portland 8, Oregon.



Dear Mr. Billings:-

Through courtesy of Mr. Charles H. Dunning, Director of the State Department of Mineral Resources of Arizona, we are in receipt of copy of your letter of Sept. 7, 1944, requesting samples and information relative to Perlite.

Under separate cover we are sending you the following:
Piece of Crude perlite from our mines
Two samples of Chemi-Cote processed Perlite (in bottles)
Sample of Insulation brick - marked (1)
Sample of perlite with chemicals, insulation - marked (2)
Perlite with chemicals, insulation - marked (3)
Perlite with chemicals, refractory brick - marked (4)
Perlite with chemicals, bonded on plywood - use as insulated wallboard - marked (5)

We have made a great many experiments and done much research with our Chemi-Cote Perlite, and it seems that almost every day new uses develop. We have a number of results of tests that no doubt will interest you, and we enclose herewith copy of the following:

1. Results of tests made on Beam, Perlite as Light-weight aggregate (Chemi-Cote Perlite)
2. Results of tests made for heat and cold by AiResearch (using Chemi-Cote Perlite)
3. Letter from Architects showing approved used.

Upon receipt of this information and samples sent under separate cover, we would be glad to hear from you further.

Very truly yours,

Duncan MacDonald.

FY
Encls.

cc: Chas. H. Dunning

CHARLES H. DUNNING

OFFICE
817 W. MADISON ST.
PHONE ALPINE 3-6272

MINING ENGINEER
PHOENIX, ARIZONA

RESIDENCE
1635 W. EARLL DR.
PHONE AMHERST 5-1132

October 25, 1963

Chemi-Cote Perlite Company
5907 La Vista Drive
Dallas 6, Texas

Gentlemen:

Per request of Mr. Heber Smith, on October 22, 1963, I made a new examination of your perlite mining claims near Superior, Arizona.

I had made an examination and rendered a report on these claims on December 29, 1952. The new examination disclosed no reason why I wish to change that report in any respect, and I quote it completely and verbatim herewith:

"Per your request I have made an examination of your perlite holdings near Superior, Arizona, and will give you my opinion as to the value thereof.

In this instance theoretical geology has an important bearing on any evaluation. Perlite is a volcanic flow, either extrusive or intrusive, and in that region covered a vast area of the east side of Picket Post Mountain, where the original vent was no doubt located. Being such a flow, it is reasonable to expect that it is fairly continuous laterally and not in the form of some mineral deposits which emanated more or less vertically through veins.

You have two claims with a total acreage of about 40. One claim, the Mary T has a quarry pit started and gives a good insight as to the extent and reasonable depth of the perlite deposit. The other claim, lying a short distance to the east, is within the general flow area, but has been less developed. It is cut in places by natural erosion and man-made cuts and shows the same general structure and quality.

While the Perlite area is extensive on the east side of the Picket Post it is not by any means of uniform or top quality. In the margins of the area inclusions of rhyolite, or prominences of the then underlying rock interfere with obtaining a uniform grade of good quality. You are fortunate that in your instance your area was selected by Mr. Duncan MacDonald, the pioneer of the perlite industry, who, long before there was any demand for perlite, had the opportunity to select the best areas for quarry sites.

The quarry pit on your Mary T claim has dimensions of about 80' x 50' x 50' deep. Below this pit perlite still crops in a small gulch indicating a total depth of over 100 ft.

CHARLES H. DUNNING
MINING ENGINEER

Page 2 -

To the north of this claim other owners have small pits for at least a mile, proving the continuous extent of the flow.

It seems most reasonable therefore, to assume a very positive area of at least 500' x 500' x 100' deep in the vicinity of the pit, and such an area would produce over 1,500,000 tons.

All of the 40 acres is in the flow area but because of lack of development can only be considered as probable ore. If we consider that one-half of this area will be commercial ore to a depth of 50 feet (instead of 100) we would have over 5,000,000 tons additional.

The present market value of perlite, according to the trade journals, varies from \$3.00 to \$10.75 per ton, F.O.B. mines, mined and crushed and loaded. The variation in price is due to variations in grade, and the requirements of the buyer. Your perlite should fulfill the specifications for the best grade, but it is not practical that your entire output could or should go entirely into the highest brackets. Therefore, it seems reasonable to assume that you should average a price of \$5.00 per ton for your product.

Again cutting your probable ore in half you can very reasonably expect to produce at least four million tons.

Multiplying this by the intrinsic value of \$5.00 per ton brings a gross valuation figure of \$20,000,000.00. This valuation (as is the quoted price) is predicated at a mined, crushed, and loaded point, and does not imply that the above is a net value or net profit value. However, you are admirably situated to obtain low operating costs.

It is therefore my opinion that your property should have a gross valuation of about \$20,000,000.00."

I hope however that I was not misleading in mentioning a gross valuation of \$20,000,000. It was not meant to imply a net valuation. We miners often talk in terms of gross production and production figures are always reported and recorded in gross amounts. The net always depends on the market, operating conditions, and the ability of the management.

The new examination revealed that the quarry pit now has dimensions of about 200 x 100 feet with an average depth of about 10 feet. There is also another pit of lesser size. A rough estimate of the total tonnage which has been removed would be about 15,000.

Our large open pit mining companies have found that their best economy in drilling, blasting, and mining is obtained when they carry a quarry face about 50 feet high. It takes little more drilling and explosives to break a face that high than a shallower one.

CHARLES H. DUNNING
MINING ENGINEER

Page 3 -

Nature arranged your deposit ideally for such technique. But the recent operators seemed to prefer to carry a quarry face only 10 to 15 feet high. This must not only have increased their costs considerably, but has created permanent injury because it would now be more difficult to institute the more efficient method.

I had expected that occasional inclusions of wall material such as rhyolite would be encountered in the open pit, and would, in the course of mining, be mined and dumped to waste. It is probable that the reason for having the two separate but close together pits was the operators desire to avoid mining such a spot. Dodging or leaving such spots of course detracts from the value of your property for future operations.

I would recommend that a new quarry or open pit level be established about 35 feet below the present floor. Access is easy. If inclusions of unwanted material are encountered they should be mined and dumped to waste.

In that way I feel sure you can realize the tonnages I originally estimated with best overall economy.

But any operation based on "gutting" the best spots will eventually ruin both the mine and the operator.

Respectfully submitted,

Charles H. Dunning
Mining Engineer

CHD:amr

SECURITIES AND EXCHANGE COMMISSION
Washington, D. C.

The Securities and Exchange Commission reported today that Judge T. Whitfield Davidson in United States District Court for the Northern District of Texas entered a final judgment permanently enjoining Chemi-Cote Perlite Corporation and Otto T. Ball from further violations of the registration and anti-fraud provisions of the Securities Act of 1933 in the sale of shares of Chemi-Cote Perlite Corporation. The defendants consented to the entry of the decree.

The decree enjoins the defendants from making untrue statements of material facts to purchasers and prospective purchasers of the shares, concerning the financial condition of the company, the value of the company's mining claims, the market for the sale of ore, the operations and plant facilities of the company, the application of the proceeds from the sale of shares, the safety of an investment in the company, the availability of the company's shares, and the results or findings of any audit of the company.

The decree also enjoins the defendants from using the mails or any means or instruments of transportation or communication in interstate commerce to sell any securities of Chemi-Cote Perlite Corporation until the shares are registered with the Commission.

The Commission's complaint had charged the defendants with falsely representing that the corporation was in excellent financial condition, with assets in excess of \$23,000,000, when in fact the company had a deficit of about \$185,000 and assets not exceeding \$100,000. The Commission's complaint also charged the defendants falsely represented that the company's perlite mining claims in Pinal County, Arizona, were worth \$4,500,000 and that the company had a volume market for raw and processed perlite at profitable prices, when in fact there was no reasonable basis for such valuation and the company had developed no such market. The complaint further charged mis-use of an audit report of the company.

The Commission was represented in the action by O. H. Allred, Regional Administrator of its Fort Worth Regional Office, and Warren C. Logan, Jr., attorney of that office. The investigation was conducted by F. A. Kennamer, Jr., attorney, under the supervision of Howard A. Judy, Regional Administrator of the San Francisco Regional Office, and C. E. Booth, securities investigator, Fort Worth Regional Office, under the supervision of O. H. Allred.

Charles H. Dunning
Mining Engineer

817 West Madison
Phoenix, Arizona

December 29, 1952

Mr. O. T. Ball
Box 454
Dallas, Texas

Dear Mr. Ball:

Per your request I have made an examination of your perlite holdings (Chemi-Cote Perlite Corporation) near Superior, Arizona, and will give you my opinion as to the value thereof.

In this instance theoretical geology has an important bearing on any evaluation. Perlite is a volcanic flow, either extrusive or intrusive, and in that region covered a vast area of the east side of Picket Post Mountain, where the original vent was no doubt located. Being such a flow, it is reasonable to expect that it is fairly continuous laterally and not in the form of some mineral deposits which emanated more or less vertically through veins.

You have two claims with a total acreage of about 40. One claim, the Mary T has a quarry pit started and gives a good insight as to the extent and reasonable depth of the perlite deposit. The other claim, lying a short distance to the east, is within the general flow area, but has been less developed. It is cut in places by natural erosion and man-made cuts and shows the same general structure and quality.

While the Perlite area is extensive on the east side of the Picket Post it is not by any means of uniform or top quality. In the margins of the area inclusions of rhyolite, or prominences of the then underlying rock interfere with obtaining a uniform grade of good quality. You are fortunate that in your instance your area was selected by Mr. Duncan MacDonald, the pioneer of the perlite industry, who, long before there was any demand for perlite, had the opportunity to select the best areas for quarry sites.

The quarry pit on your Mary T claim has dimensions of about 80' x 50' x 50' deep. Below this pit perlite still crops in a small gulch indicating a total depth of over 100 ft.

To the north of this claim other owners have small pits for at least a mile, proving the continuous extent of the flow.

It seems most reasonable therefore, to assume a very positive area of at least 500' x 500' x 100' deep in the vicinity of the pit, and such an area would produce over 1,500,000 tons.

All of the 40 acres is in the flow area but because of lack of development can only be considered as probable ore. If we consider that one-half of this area will be commercial ore to a depth of 50 feet (instead of 100) we would have over 5,000,000 tons additional.

The present market value of perlite, according to the trade journals, varies from \$3.00 to \$9.00 per ton, F.O.B. mines, mined and crushed and loaded. The variation in price is due to variations in grade, and the requirements of the buyer. Your perlite should fulfill the specifications for the best grade, but it is not practical that your entire output could or should go entirely into the highest brackets. Therefore, it seems reasonable to assume that you should average a price of \$5.00 per ton for your product.

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It is therefore my opinion that your property should have a gross valuation of about \$20,000,000.00.

Respectfully submitted,

Chas. H. Dunning,
Mining Engineer
Member of the American Institute
of Mining and Metallurgical Engineering
Institute since 1945.

(Former Director of Arizona
Department of Mineral Resources.)