



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: 09/12/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: WINKELMAN GYPSUM

ALTERNATE NAMES:
SUPERIOR COMPANIES

PINAL COUNTY MILS NUMBER: 390A

LOCATION: TOWNSHIP 6 S RANGE 16 E SECTION 27 QUARTER SE
LATITUDE: N 32DEG 52MIN 43SEC LONGITUDE: W 110DEG 41MIN 28SEC
TOPO MAP NAME: DUDLEYVILLE - 7.5 MIN

CURRENT STATUS: PRODUCER

COMMODITY:
GYPSUM ROCK GYPSUM

BIBLIOGRAPHY:
ADMMR WINKELMAN GYPSUM FILE
ADMMR U FILES
AZBM BULL. 180, MINERAL AND WATER RESOURCES
OF AZ. 1975, P. 329, 338 & 375
ELEVATORSKI, E.A., AZ INDUSTRIAL MINRALS
1980, P. 54
ADMMR DIRECTORY OF ACTIVE MINES '74 - '94

ARIZONA GYPSUM CORPORATION

PINAL

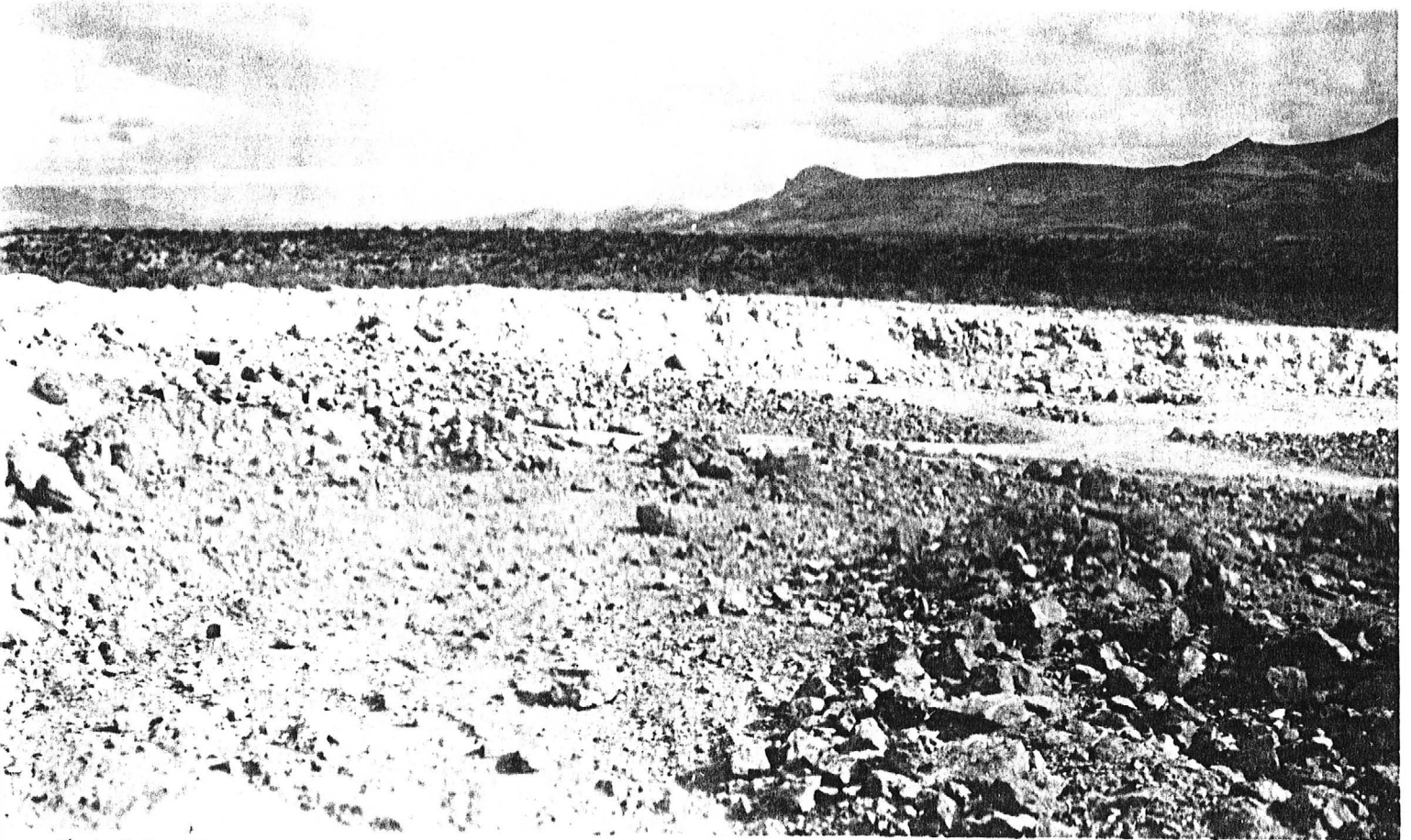
ABM Bull. 180, p. 329, 338, 375



A-220-16

WINKELMAN GYPSUM

1946



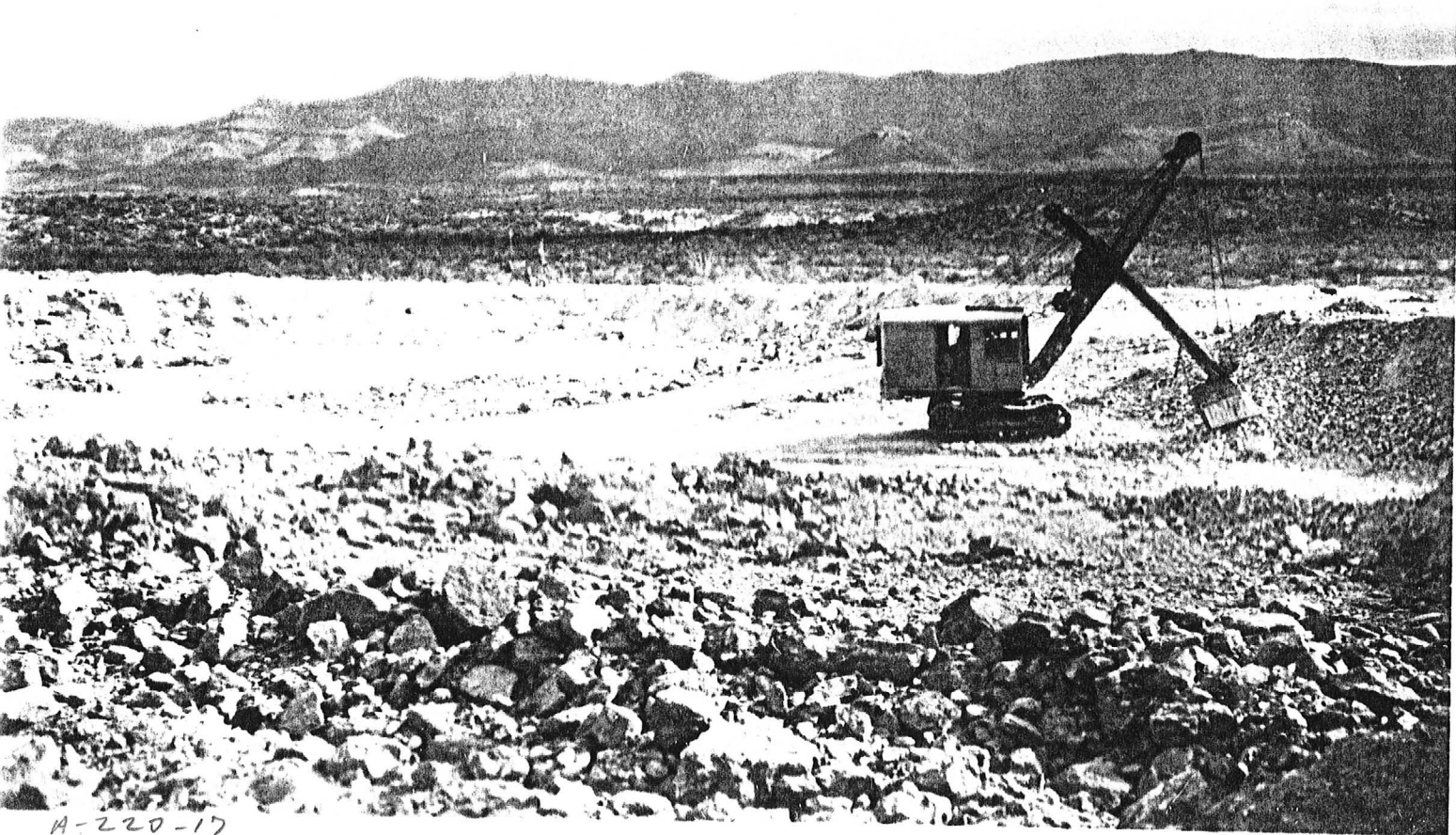
A-220-15

1946



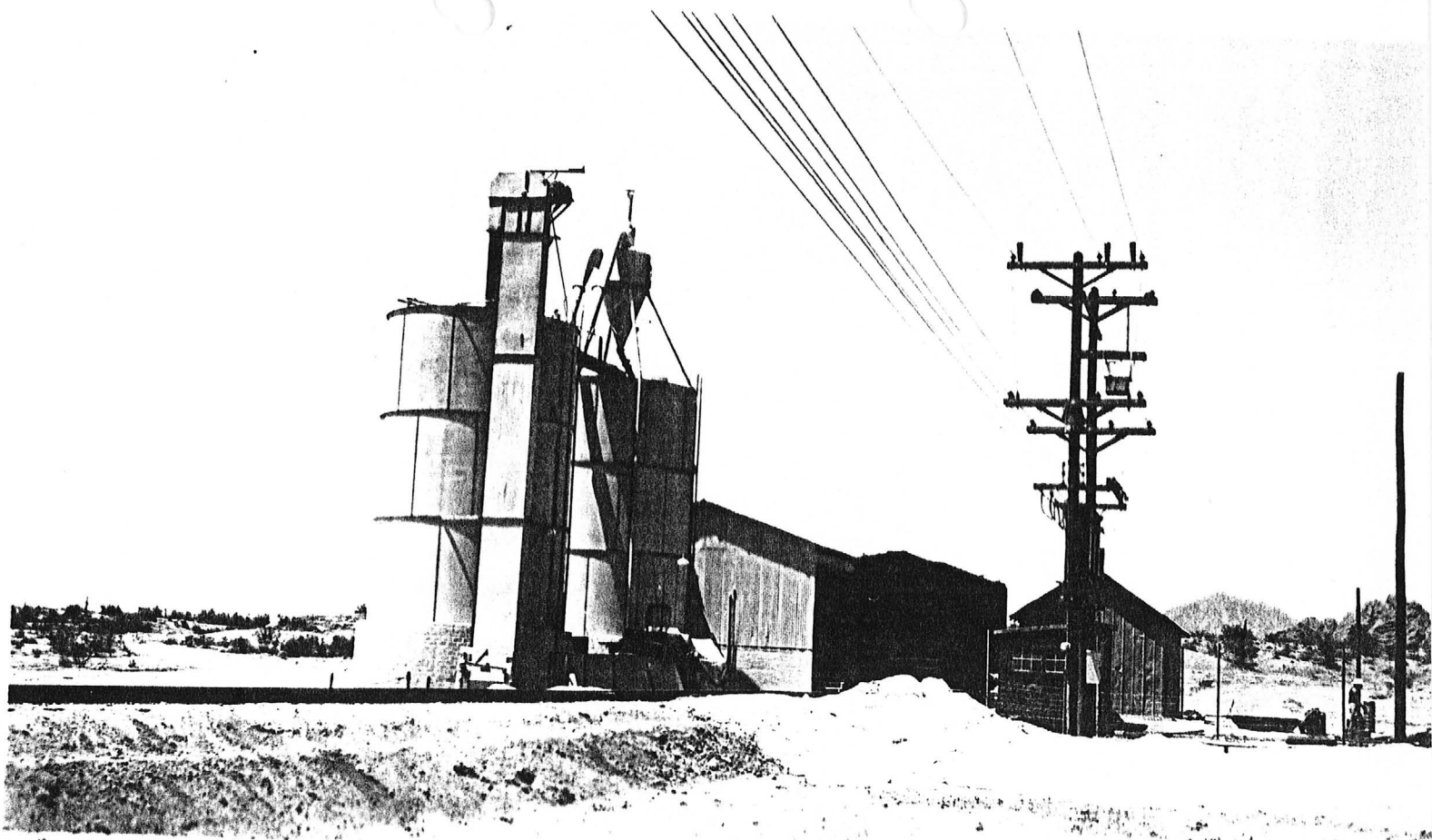
A-220-18

1946



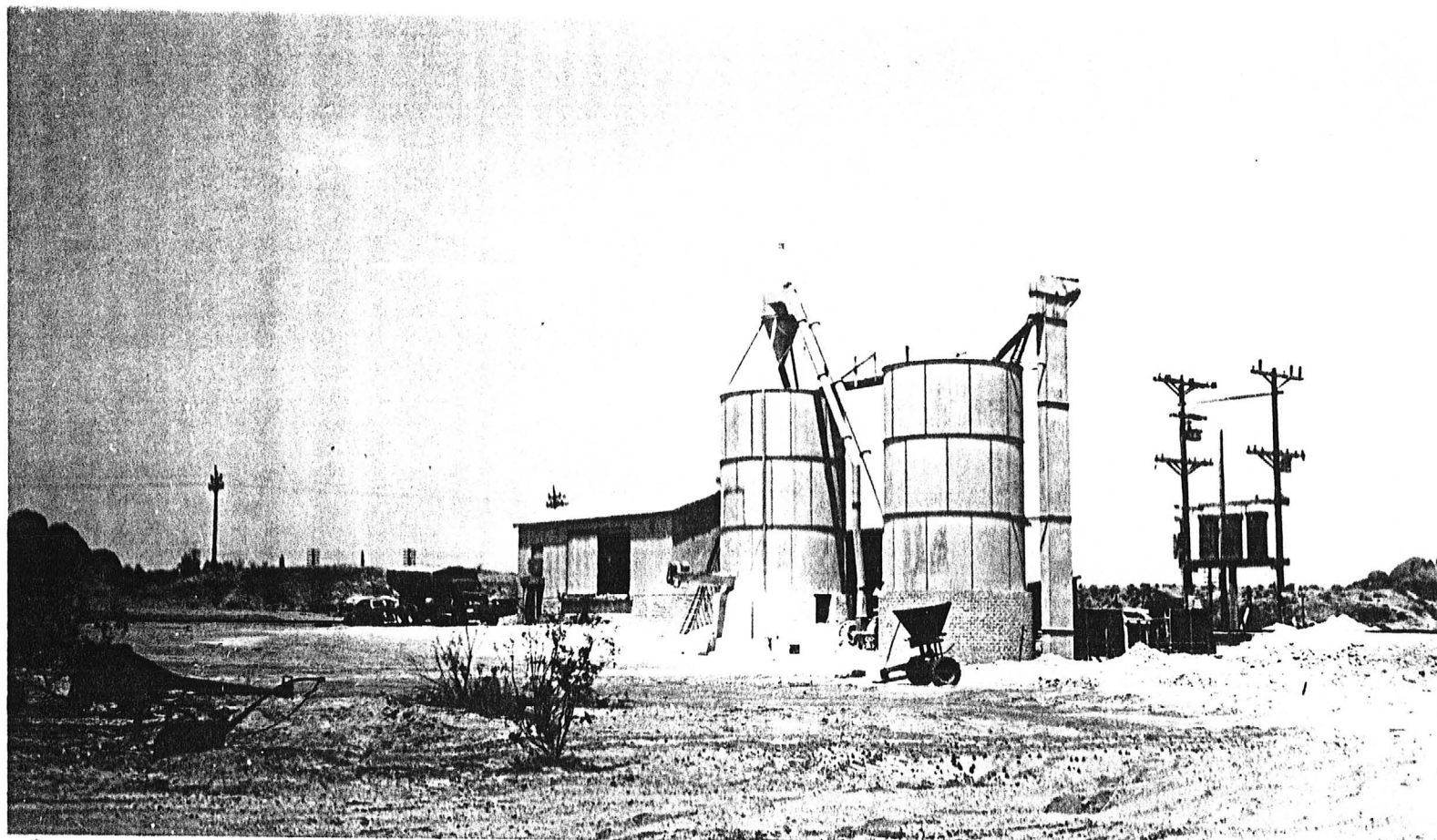
A-220-17

1946



A-220-20

1946



A-220-19

1946

DEPARTMENT OF MINERAL RESOURCES

News Items

Date

Mine

Location

Owner

Address

Operating Co.

Address

Pres.

Genl. Mgr.

Mine Supt.

Mill Supt.

Principal Metals

Men Employed

Production Rate

Mill, Type & Capacity

Power, Amt. & Type

Signed

(Over)

Present Operations

Lucy Bell shipped
state of Texas 27

Pomona Ma Co.
Building mill at
Harford

New Work Planned

Reef shipping
Jan 15

Misc. Notes

W Pomona
W
S
Reef

W. H. H. H. H. H.

COUNTY:

NAME OF MINE: ✓ ARIZONA GYPSUM
OWNER:

COUNTY: Pinal
DISTRICT: ✓
METALS: Gypsum

OPERATOR AND ADDRESS

MINE STATUS

Date:	OPERATOR AND ADDRESS	Date:	MINE STATUS
1/46	Earl Stark, Mgr., Phoenix Plant in Phoenix - mine near Winkelman	1/46	Manufacturing



SECRET

10. Arizona is mine superm-

MINING WORLD, July, 1960

Active, Sept. 1960, Feb. 1961

DECEMBER 1963, MINING ENGINEERING-

P. X. 5-10 1964

METAL MINING & PROCESSING, May, 1964

See: Metal Mining and Processing May 1964 p60

Appeals. *PAY DIRT 7/1967*

treasurer *PAY DIRT 12/68*



Date Printed: 12/03/97

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION SUMMARY

Information from: Russ Mosier

Company: Rotomil

Address:

City, State ZIP:

Phone:

MINE: Winkleman Gypsum

ADMMR Mine File: Winkleman Gypsum

County: Pinal

AzMILS Number: 390A

SUMMARY

The three page report that follows describes a test application of a rotary excavator at three mines in Arizona.

The mines are the Winkleman Gypsum Mine in Pinal County, the St. Johns Limestone Mine in Apache County, and the Camp Verde Gypsum Mine in Yavapai County. All were owned and operated by Superior Companies at the time of the tests.

Copies of the report are included in the appropriate mine files because it includes some operating and deposit information regarding each operation.

Ken A. Phillips, Chief Engineer Date: December 1, 1996

Mosier on Winkleman Gypsum
Page 10/4

RH

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1992

Pinal County

SUPERIOR COMPANIES

100 W. Coolidge, Phoenix, AZ 85006 - Phone 230-9300 - Employees: 70.
President Archer V. Shelton
Vice President, Administration Mary Kessler
Vice President, Finance Don Fischer

Winkelman Gypsum T6S R16E Sec. 27

P.O. Box 327, Winkelman, AZ 85292 - Phone 357-7002 - Gypsum Quarry - Gypsum
for Arizona Portland Cement Plant at Rillito.
Superintendent John Nevitt

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1991

SUPERIOR COMPANIES

100 W. Coolidge, Phoenix, AZ 85006 - Phone 230-9300 - Employees: 70.

President Archer

V. Shelton

Vice President, Administration Mary Kessler

Vice President, Finance Don Fischer

Winkelman Gypsum T6S R16E Sec. 27

P.O. Box 327, Winkelman, AZ 85292 - Phone 357-7002 - Gypsum Quarry

- Gypsum for Arizona Portland Cement Plant at Rillito.

Superintendent

John Nevitt

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1990

SUPERIOR COMPANIES

100 W. Coolidge, Phoenix, AZ 85006 - Phone 230-9300 - Employees: 70.

President Archer V. Shelton

Vice President, Administration Mary Kessler

Vice President, Finance Don Fischer

Winkelman Gypsum T6S R16E Sec. 27

P.O. Box 327, Winkelman, AZ 85292 - Phone 357-7002 - Gypsum Quarry

- Gypsum for Arizona Portland Cement Plant at Rillito.

Superintendent John Nevitt

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1989

SUPERIOR COMPANIES

100 W. Collidge, Phoenix 85006 - Phone 230-9300 - Employees 70.

President	Archer V. Shelton
Vice President, Operations	Lester Hall
Vice President, Administration	Mary Kessler
Vice President, Finance	Don Fischer

Winkelman Gypsum

T6S R16E. Sec. 27

P.O. Box 327, Winkelman 85292 - Phone 357-7002 - Gypsum Quarry - Gypsum
for Arizona Portland Cement Plant at Rillito.

Superintendent	John Nevitt
----------------------	-------------

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1988

SUPERIOR COMPANIES

1700 N. 7th Street #5, Phoenix 85006 - Phone 253-2116 - Employees 70.

President Archer V. Shelton
Vice President, Operations Lester Hall
Vice President, Administration Mary Kessler
Controller Don Fischer

Winkelman Gypsum

T6S R16E. Sec. 27

P.O. Box 327, Winkelman 85292 - Phone 357-7002 - Gypsum Quarry gypsum for
Arizona Portland Cement Plant at Rillito.

Superintendent John Nevitt

WINKELMAN GYPSUM

PINAL COUNTY

NJN WR 12/4/87: Lester Hall (card) of the Superior Companies (card) reports that Pinal AZMILS #395, T5S R15E Sec 26, is not the site of their Winkelman Gypsum mining operation, but was a loading facility. Their Winkleman Gypsum (file) is located on patented land south of the San Carlos Reservation and north of National Gypsum's Feldman Quarry at Pinal AZMILS 390A, Gypsum Mines. Thus 390A should be renamed Winkelman Gypsum and 395 should be deleted.

NJN WR 9/2/88: Rhyne Simpson Jr. of Sante Fe Resources (card) have acquired the Sante Fe Claims which are located at T6S R16E Secs 21, 23, 24, 28, ~~sur~~ rounding and may include areas of the Fedlman Quarry (file) and Winkleman Gypsum (file) Pinal County which supplies gypsum to National Gypsum Wallboard plant in Phoenix.

D. E. Forty diatom claims, Arizona Gypsum still operating. GWI WR 2-1-69

Jim Nickerson of Mammoth hauls a load of diatomaceous earth to Feldman for Arizona Gypsum each working day. The material is from the D.E. forty. GWI WR 2-1-69

Active Mine List April 1969 - 8 men (gypsum)
2 men (diatomite)
1 man (redimix plant)

Visited the Gypsum plants at Feldman - no change in rate of production or personnel. FTJ WR 9-26-69

Active Mine List Oct. 1969 - 8 men (gypsum)
2 men (diatomite)
1 man (redimix plant) Sec. 35, 6S, 16E

About one truckload a day of diatomaceous earth is being mined near White Cliffs by Arizona Gypsum Company on their 40 acre claim. No activity noticed on the White Cliffs property. GWI QR 2-27-70

Active Mine List May 1970 - 8 men (gypsum)
2 men (diatomite)
1 man (redimix plant) William Kessler, Pres.

Arizona Gypsum continued mining diatomaceous earth on their claim in the White Cliffs area. GWI QR 6-30-70

Arizona Gypsum still mining on their claims in the White Cliffs area. GWI WR 10-31-70

Active Mine List Oct. 1970 - 10 men - G. M. Champie - Supt. - 2255 So. 19th Ave. Phoenix

To Arizona Gypsum plant - no change in operation. FTJ WR 1-29-71

National Gypsum and Superior Companies (Arizona Gypsum) produced at their regular rate. FTJ QR 9/71

Superior Industries gypsum operation and National Gypsums operations were at their regular rate. FTJ QR 71-72 2nd $\frac{1}{4}$

Visited Superior Industries gypsum plant at Feldman. D. N. "Bud" South is the Superintendent and 7 men employed. They deal in RediMix, gypsum and diatomite. FTJ WR 6/16/72

ARIZONA GYPSUM

PINAL COUNTY

Visited Arizona Gypsum who are operating at normal rate. Their gypsum use is diversified. FTJ WR 9-30-67

Visited Gypsum plant - operation is about normal. FTJ WR 1-27-67

Visited Arizona Gypsum quarry and plant - very active - producing both diatomaceous earth and gypsum. FTJ WR 5-31-67

Visited Arizona Gypsum - operating about as usual. FTJ QR 1-26-68

Visited Arizona Gypsum Corp. - White Cliffs - some activity - no one around. GWI WR 1-27-68

Visited Arizona Gypsum who are operating at regular rate, both gypsum and diatomite. FTJ WR 3-29-68

Active Mine List Oct. 1967 - 9 gypsum
3 diatomite

Arizona Gypsum was mining and shipping some diatomaceous earth from their property in the White Cliffs area. GWI QR April 1968

Active Mine List April 1968 - 9 men (gypsum)
" " " " " - 3 men (diatomite)
" " " Oct. 1968 - 9 men (gypsum)
" " " " " - 3 men (diatomite)

Visited Feldman gypsum operations - operating about the same as on my last visit. FTJ WR 5-31-68

Arizona Gypsum mining Diatomaceous earth, no one around. GWI WR 6-30-68

Arizona Gypsum is still mining and shopping diatomaceous earth from the D.E. forty claims that belong to Neil Vogel. GWI QR June 1968

Visited gypsum operations - operating as during last visit. FTJ WR 9-27-68

Visited Arizona Gypsum - they were producing at their regular rate. FTJ WR 1-31-69

Arizona Gypsum continues to mine a truckload per day (approx.) from the D.E. forty claims in the White Cliffs area. This is trucked to their plant for further processing. GWI QR December 1968

ARIZONA GYPSUM, FELDMAN MINE

PINAL COUNTY

VISIT and CONFERENCE with JIM CHAMPIE, Foreman 1/29/64.

A new portable Cedar Rapids jaw crusher and attached vibrating screen is set up in the pit. This machine is 24x36 inches and discharges directly into a hopper. The cleaned gypsum is stock piled near the pit and at the plant, which is 3/4 mile south of the pit. The waste (fines) is dumped into the worked-out portion of the pit. The broken ore is loaded with a No. 1165 Allis-Chalmers, 2-yard Front loader that travels on cats. This machine has long dipper arms allowing for about 11-12 feet of dumping height, into the crusher-feed hopper. The pit yields a fair number of oversize "nigger heads" that must be drilled and shot. A new drilling pattern has been worked out, this breaks the gypsum more consistently smaller than previously. It is also calculated to permit a higher working face. Bill Kessler stated that the agricultural gypsum market is holding well.

MEMO Lewis A. Smith 1/29/64

Visited Arizona Gypsum Co. plant, no activity.

EGW WR 3/27/64

"REVIEW OF RECENT ACTIVITY" Taken from Axel L. Johnson 12/29/64 Report in the Whitecliffs Mine file.

Field engineer visited the property on September 24, 1964. At the time of this visit the mill used by the Arizona Gypsum And Associated Minerals, Sub-Lessee, was still in place and operative. Engineer was informed that it was closed temporarily on account of wet weather.

A short time subsequent to this, it was reported that the mill had been dismantled and removed from the property.

It is reported that the Arizona Diatom Corp. has now acquired the interests of the previous sub-lessees.

No plans have been announced regarding the resumption of mining operations at the property.

ALJ Rep in Whitecliffs file.

Visited Arizona Gypsum plants near Feldman. Arizona Gypsum has moved their diatomaceous earth mill to the Gypsum plant and expect to increase production soon. Some of the production is also going to Portland Cement, Rillito.

EGW WR 3/26/65

Visited Arizona Gypsum Active - 9 men working.

FTJ WR 10/1/65

Arizona Gypsum mill and quarry both operating. Diatomaceous earth bagged in same plant.

FTJ WR 1/28/66

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine ARIZONA GYPSUM Date September 30, 1963
District FELDMAN AREA, SAN PEDRO DISTRICT Engineer LEWIS A SMITH
Subject: Interview with William Kessler, Manager, 9/23/63

Mr. Kessler said they had had a demand lag during the summer, but in September the demand stepped up somewhat. This lag was indirectly attributed to slack off in building in summer. He also mentioned that the demand at the Camp Verde plant had held up well.

12/12/63

Arizona Gypsum Co. advise that the complicated royalty set-up made the Whitecliffs property unattractive to them. They have therefore leased an adjacent property which is said to be somewhat inferior but amenable to beneficiation.(diatomaceous earth).

Memo F.P. Knight 12/63

The stockholders and directors of Arizona Gypsum Corp. and American Diatomites, Inc., have approved a merger, according to John F. Fisher of Phoenix, and A. V. Partipilo, M.D., of Chicago, chairmen of the boards of directors of the two Arizona corporations. The merger effected through an exchange of stock, brings gypsum bentonite clay and diatomite into the same marketing and mine operation.

The board of directors of the combined companies will include John F. Fisher of United Materials, Inc., W. O. Wood of Wood Concrete Co., John Hazelett of Superior Equipment Co., and William J. Kessler, Gordon R. French, James M. Champie and Woodrow W. Diehl, all of the Arizona Gypsum Corp. The company will retain the name of Arizona Gypsum Corp. with offices in Phoenix. Mr. Fisher will serve as president.

MINING ENGINEERING DECEMBER 1963

Active Mine List Oct. 1963 - 6 men

TEST & EVALUATION OF CAT MODEL PR450 PROFILER (ROTOMILL) IN LIMESTONE AND GYPSUM QUARRIES

On Tuesday, February 10, 1987, we began testing and evaluation of a CAT model PR450 Rotomill for harvesting gypsum and limestone in quarries operated by Superior Companies. This report will summarize our observations.

Our objective is to determine if a rotomill is capable of singlehandedly excavating, crushing and loading gypsum and limestone.

Winkleman - At this operation, gypsum is drilled and shot, loaded into a 35 ton off-highway truck, hauled to a stockpile for crushing and screening, and then stockpiled off of conveyors.

We established that the PR450 could get adequate production in this material without overloading the machine. Travel speeds ranged from 25 to 75 feet per minute, the depth of cut from 2 to 6 inches. We timed and weighed two loads and established the 450 was producing 203 tons per hour working on the level, and 237 tons per hour working down a 7% grade.

The material here is not very abrasive; wear life of the teeth will be measured in weeks and months, not hours or days.

The water spray system on the 450 does wonders for dust control and has no significant adverse affect on loading and handling material.

Amount of Fines - Right from the start, our main concern at this site was to harvest material with minimum fines; they prefer two inches and larger particle size. In order to increase particle size, we ran the PR450 with one half of the teeth removed, and with two thirds of the teeth removed. We found that a four inch depth of cut, 40 feet per minute travel speed, going up a 7% grade, with one-half of the teeth removed produces the least amount of fines with mostly two inch and larger particle size.

The concern about fines is specifically a concern about clay material which may be predominant in the fines; this diminishes the purity of the gypsum product. Gypsum fines are no problem, but clay fines are. Perhaps the best way to deal with this is to avoid mixing the two materials. At this operation, there are relatively thin layers of clay inbetween the thicker layers of gypsum. When you drill and shoot this formation, you can't help but mix the two. The Rotomill gives you the ability to be very selective about what you harvest. You can work a gypsum seam right down to where the clay layer starts, then either stop milling and remove the clay with a loader or a broom, or continue milling but divert the clay as it comes off of the belt to a separate windrow as waste. One thing for certain regarding sizing of material: the PR450 won't leave material that must be dealt with with an air hammer and chisel.

Stockpiles The finished product coming off of the PR450 belt can be loaded directly into trucks, or stockpiled in windrows two or three passes high on 25 foot centers. This type of stockpiling may present less segregation problems and may dry out quicker and more completely following rainfall than a tall stockpile.

Mosier on Winkleman Gypsum

Page 2 of 4

St. Johns, Arizona - Limestone Quarry

precipitating agent

Here, Superior Companies is harvesting porous limestone which is used primarily at the St. John's power plant as a precipitate in their pollution control system. Material is normally ripped and dozed to the crusher. The typical production rate is about 135 tons an hour.

We ran the PR450 here on February 16 and 17; we started with one half of the teeth removed, but found that this material is so tough that you need all of the teeth working at it. Surprisingly, going to the full set of teeth didn't seem to affect material size much; we consistently saw a fairly large percentage (say 10%) of slabs about six inches across and maybe one inch thick - that's just the way it broke out. We should be able to reduce the amount of this slabbing by running the machine down a seven to ten percent grade and thereby retaining the material in the cutter housing longer.

The PR450 was able to excavate and load 150 - 155 tons per hour in the red and white limestone formation picked for this test - thought to be the toughest material in this pit. Travel speed was typically about 20'/minute. On the 2nd day, average production increased to 195 tons per hour.

We expect to see more tooth wear here, but nothing excessive. We did break six teeth. The machine is shipped with asphalt teeth, and as they break, we're replacing them with a concrete tooth which is more resistant to impact like we have in this limestone. We've replaced another six or so that wore unevenly due to nonrotation. Some of those teeth showed signs of rust on retainers, and that may have been caused by weathering before the machine was shipped from the factory.

This material is tough enough that it caused some chunks of rubber to be torn loose from the track shoes.

CAMP VERDE

Here, gypsum is ripped, either with a dozer tractor, or with rippers installed on the rear of a Euclid TS-14 scraper, then loaded by the scraper and hauled to their screening and crushing plant. Typical production rates are approximately 115 tons per hour. The PR450 was able to excavate and load 211 tons per hour going up a 6% grade, and 301.5 tons per hour going down that same grade. Some 90-95% of the material produced was 2" minus. The depth of cut varied from 6" to 12". Since fines are desirable here, we ran with all teeth installed.

Here, the distance from the material face to the screening/crushing plant will require more than a pair of trucks to keep up with the PR450. One solution to this may be to run an adequate number of 'pups' (4 wheel trailers) that can be towed behind the PR450, loaded, and then towed by the truck/tractor to the dump location.

Mosier on Winkelman Gypsum

Page 3 of 4

Job Layout and Machine Utilization

Perhaps the best way to get maximum utilization of the PR450 in Superior's operations would be as follows:

1. Work the PR450 on as long of a pass as possible, thus reducing turnaround and maneuver time. You can control slopes and grades for run off and drainage purposes, and you'll soon have a very smooth pit surface.
2. Load trucks off of the belt during cutting operation; loading the material while you've got it 'on the move' eliminates one more time that it must be handled, and gets it away from the cut area and out of the way immediately.
3. Dump the truck loads into a separation device, and let the material that is sized suitably as the finished product go directly to a stockpile, with over-sized material diverted to a separate stockpile which will require crushing.

Based on annual production requirements of approximately 40,000 tons at both Winkleman and St. John's, and approximately 30,000 tons at Camp Verde, one PR450 could harvest these annual production requirements as follows:

1. Winkleman - 2.0 months of operating time.
2. St. John's - 3.0 months operating time.
3. Camp Verde - 1.4 months operating time.

(Based on single shift, 176 hours per month, 50% machine efficiency.)

This would leave some 47% reserve time for moving the machine, for maintenance and repair, or for expansion of production.


Russ Mosier

dt

cc: Grant Baecker
Frank Vukov

Mosier on Winkleman Gypsum
Page 4 of 4

DEPARTMENT OF MINERAL RESOURCES

**STATE OF ARIZONA
FIELD ENGINEERS REPORT**

Mine Winkelman Gypsum Plant

Date December 11, 1973

District Garcia Canyon

Engineer R.E. Lehner

Subject: Report on mine visit.

Location: Approx. 8 miles S of Winkelman (T 6 S, R 16 E, Sec. 26.)

Supt. Bud South, P.O. Box 327, Winkelman, Arizona 85292 - Phone: 356-7002

Owners: Superior Companies, 2402 S. 19th Ave., Phoenix, Arizona 85009. Phone: 253-2116

Commodity: Gypsum for Arizona Portland Cement plant at Rillito

Production: 800 tons/day

Operations: The gypsum occurs as essentially flat-lying beds or lenses in a sequence of lakebeds consisting of gravels, sands, silts, and clays. The mining methods consist of strip mining and shallow open-pit mining. Holes are drilled for blasting; after blasting the rubble is loaded on trucks with a front-end loader and hauled to the primary crusher which reduces the material to 4-6 inches in size. This material is screened and removes everything from 5/8 inches or smaller as rejects. The coarser material is hauled to Rillito (Portland Cement plant) for cement.

Another operation is a redimix plant in Winkelman. The sand and gravel is obtained from the river bed, crushed, screened to size and is used as a sand-gravel cement mixture.

Business

Phoenix, Sunday, Oct. 7, 1962 The Arizona Republic B-17



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Arizona Gypsum
 (Near Feldman)
District San Pedro Dist., Pinal Co.

Subject: Mill Visit.

Date 9-24-62
Engineer Lewis A. Smith

It was learned that the mine and mill operation had returned to near normal after having been slowed by a strike at the Rillito cement plant. Considerable "Desert Diamond Fertilizer" ground gypsum is being sold for agricultural use, in addition to that sent to Rillito for cement manufacture.

10 men are employed at present, including truckers.

Location: Sec's 25-26, 34-35, T 6 S, R 16 E.

per telephone conversation with William
Kessler, - LAS - WR - 5-3-63

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Arizona Gypsum Co.

Date May 18, 1961

District San Pedro District, Gila Co. (near
Feldman)

Engineer Lewis A. Smith

Subject: Mine Visit 5-18-61

Little change in operations is reported since the last visit, since the Rillito Cement Plant has been operating steadily. However, the production of 100 mesh gypsum for agricultural purposes has been good, even though the tonnage sold is not relatively large. This gypsum is sacked in 100 pound paper bags.

This property active 10-1961

This property active 2-1962 - William Kessler, Mgr., 2255 S. 19th Ave., Phoenix 9.
10 men working.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Arizona Gypsum Mine

Date May 19, 1960

District San Pedro Dist., Pinal Co.

Engineer Lewis A. Smith

Subject:

Location: 11 miles south of Winkelman and $1\frac{1}{2}$ mile east of the Winkelman-Mammoth highway.

J. M. Champie, Supt., Winkelman, Arizona, lives at the mine.

The pit is about 600 x 200 feet and averages 15 feet in depth. The ore bed is about 90 feet deep, but contains thin seams of clay at intervals of 5 or more feet. The average gypsum shipped to Rillito cement plant is above 90% CaSO_4 . The gypsum for agricultural uses is ground to 85% through 100 mesh. The current rate of cement gypsum is about 10 cars per week. The material shipped to Rillito ranges from $1\frac{1}{2}$ -6 inches, the average being about 3 inches. The ore is loaded by means of a $\frac{3}{4}$ yard Marion shovel and is hauled to the screening plant by 2 Ford trucks (about 10-12 tons). A larger 18-19 ton Euclid truck hauls to the railroad. The agricultural gypsum is sold in 100 pound paper bags, but this phase is relatively minor. The drilling is done by means of wagon drills and a 600 compressor. The area has tremendous reserves of good gypsum. Some gypsite is also mined west of the present pit. This lies in a layer, 3 inches-1 foot thick, overlying the regular gypsum.

ARIZONA GYPSUM CO.,^{RP} Winkleman, Ariz.

PINAL CO. Dec. 20 - 56
(Active)

Box 6192, Phoenix, Ariz.

✓ Pres. J. F. Fisher, Fisher Const. Co., Phoenix

✓ Sec. Wm Kessler, " " "

(Same as above)

✓ Agent: Jim Champie, Sr., 106 W. Sunland, Phoenix

2500 tons per mo.

L.A.S.

Plant on Active Mine List 9-1958

On Active Mine List 2-1959 - A. A. Barr, Mgr., Box 3732, Phoenix

On Active Mine List 10-1959 - Wm. Kessler, Mgr., 2255 S. 19th Ave., Phoenix

On Active Mine List 2-1960 - Wm. Kessler, Mgr., 2255 S. 19th Ave., Phoenix

ARIZONA GYPSUM CO.

Gypsum

Pinal

11-3

S 35 T 6 S R 16 E

S. T. Benson, Mgr., Phoenix

Box 3732

8-2-46

48

DEPARTMENT OF MINERAL RESOURCES

State of Arizona

MINE OWNER'S REPORT

Date Aug. 2, 1946

1. Mine: Arizona Gypsum Co.
2. Location: Sec. 35 Twp. 6 S Range 16 E Nearest Town Feldman
Distance 2 Direction W Road Condition Good
3. Mining District & County: Mammoth Pinal
4. Former Name of Mine: none
5. Owner: S. T. Benson, Mgr.
Address: Phoenix, Ariz.
6. Operator: _____
Address: _____
7. Principal Minerals: Gypsum
8. Number of Claims: 27 Lode _____ Placer ☒
Patented _____ Unpatented ☒
9. Type of Surrounding Terrain: Low hills

10. Geology & Mineralization: _____

11. Dimension & Value of Ore Body: _____

Pictures of Mine & Plant in file.

Pinal 11-3

C-C 46

12. Ore "Blocked Out" or "In Sight":

Ore exposed on surface on most of claims. No overburden, except about 3" top soil in places.

Ore Probable:

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts.....		open cut.
Raises.....		
Tunnels.....		
Crosscuts.....		
Stopes.....		

14. Water Supply:

15. Brief History:

Mill located on highway 60, 79, 89, 89 between Phoenix and Tempe.

200 Ton capacity 24 Hrs.

Product ground to 200 mesh and sold mostly as soil conditioner to agriculturalists.

16. Signature:

17. If Property for Sale, List Approximate Price and Terms:

Pictures in file.

OFFICERS

J. C. CALLAGHAN, PRESIDENT
F. H. KEDDINGTON, VICE-PRES.
T. M. DRENNAN, SEC. AND TREAS.

ARIZONA GYPSUM COMPANY

28 SOUTH CENTRAL AVENUE
PHOENIX, ARIZONA

PROPERTY AT FELDMAN
PINAL COUNTY, ARIZONA

DIRECTORS

A. L. MOORE
H. M. FENNIMORE
J. C. CALLAGHAN
H. B. WILLSON
A. R. TAVERNER
F. H. KEDDINGTON
W. L. BARNUM
T. M. DRENNAN
G. W. HARTMAN

Aug. 22, 1917.

Mr. W. E. Defty,
618 N. 3rd. Ave.,
City.

Dear Sir:

It will be of interest to every citizen of Phoenix and the Salt River Valley to know that--

The ARIZONA GYPSUM COMPANY, composed of substantial business men of Phoenix, has just been organized for the purpose of placing on the local market and elsewhere, Gypsum and Gypsum products as follows:--

1. FIRE PROOF BUILDING MATERIAL, made out of Gypsum, that will be cheaper and better than any building material on the market.

2. CRUDE GROUND GYPSUM for use as a FERTILIZER. Gypsum "kills" alkali and corrects the condition of the clay, adobe and "slick" soils, thus making it possible to extend and improve the agricultural conditions of the Valley.

3. ALL KINDS OF GYPSUM PLASTER that can be sold for much less than the present price of plaster.

Our market will not only be LOCAL but will extend all over Arizona and Southern California.

This being a HOME Company we want HOME people to share with us the fruits of our enterprise.

Read the enclosed Prospectus carefully, investigate our proposition thoroughly, and become a real live BOOSTER for a HOME enterprise that is sure to be a great success.

Are you interested? Call or write

ARIZONA GYPSUM COMPANY,

T. M. Drennan
Secretary.

Telephone 1324.

DEPARTMENT OF MINERAL RESOURCES

State of Arizona

MINE OWNER'S REPORT

Date Aug. 2, 1946

1. Mine: Arizona Gypsum Co.
2. Location: Sec. 35 Twp. 6 S Range 16 E Nearest Town Feldman
Distance 2 Direction W Road Condition Good
3. Mining District & County: Mammoth Pinal
4. Former Name of Mine: none
5. Owner: S. T. Benson, Mgr.
Address: Phoenix, Ariz.
6. Operator: _____
Address: _____
7. Principal Minerals: Gypsum
8. Number of Claims: 27 Lode _____ Placer ☒
Patented _____ Unpatented ☒
9. Type of Surrounding Terrain: low hills

10. Geology & Mineralization: _____

11. Dimension & Value of Ore Body: _____

Pictures of Mine & Plant in file

Pinal 11-3

C-C

46

OFFICERS

J. C. CALLAGHAN, PRESIDENT
F. H. KEDDINGTON, VICE-PRES.
T. M. DRENNAN, SEC. AND TREAS.

DIRECTORS

A. L. MOORE
H. M. FENNIMORE
J. C. CALLAGHAN
H. B. WILLSON
A. R. TAVERNER
F. H. KEDDINGTON
W. L. BARNUM
T. M. DRENNAN
C. W. HARTMAN

ARIZONA GYPSUM COMPANY

28 SOUTH CENTRAL AVENUE
PHOENIX, ARIZONA

PROPERTY AT FELDMAN
PINAL COUNTY, ARIZONA

Aug. 22, 1917.

Mr. W. E. Defty,
618 N. 3rd. Ave.,
City.

Dear Sir:

It will be of interest to every citizen of Phoenix and the Salt River Valley to know that--

The ARIZONA GYPSUM COMPANY, composed of substantial business men of Phoenix, has just been organized for the purpose of placing on the local market and elsewhere, Gypsum and Gypsum products as follows:--

1. FIRE PROOF BUILDING MATERIAL, made out of Gypsum, that will be cheaper and better than any building material on the market.
2. CRUDE GROUND GYPSUM for use as a FERTILIZER. Gypsum "kills" alkali and corrects the condition of the clay, adobe and "slick" soils, thus making it possible to extend and improve the agricultural conditions of the Valley.
3. ALL KINDS OF GYPSUM PLASTER that can be sold for much less than the present price of plaster.

Our market will not only be LOCAL but will extend all over Arizona and Southern California.

This being a HOME Company we want HOME people to share with us the fruits of our enterprise.

Read the enclosed Prospectus carefully, investigate our proposition thoroughly, and become a real live BOOSTER for a HOME enterprise that is sure to be a great success.

Are you interested? Call or write

ARIZONA GYPSUM COMPANY,

T. M. Drennan
Secretary.

Telephone 1324.