

#### **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: 03/05/2003

## ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GYPSUM CITY

**ALTERNATE NAMES:** 

MOHAVE COUNTY MILS NUMBER: 785

LOCATION: TOWNSHIP 41 N RANGE 13 W SECTION 12 QUARTER NE LATITUDE: N 36DEG 58MIN 20SEC LONGITUDE: W 113DEG 38MIN 55SEC

TOPO MAP NAME: PURGATORY CANYON - 7.5 MIN

**CURRENT STATUS: PAST PRODUCER** 

COMMODITY: GYPSUM

BIBLIOGRAPHY:

ADMMR GYPSUM CITY FILE

GYPSUM CITY

MOHAVE COUNTY

RRB WR 2/22/85: Carl Freeberg of Zonah Corp., P O Box 850, St. George, Utah 84770, was in the office to get acquainted and check the file on the Baxter Gypsum Deposit. He reports that Zonah has acquired the property and is getting set up to operate. they currently have markets in Los Angeles and the cement plant in Victorville to which they will ship a 2" sized prodect. They expect to develop a market in Cedar City, Utah after they get into production. The only processing currently planned is crushing and screening.

NJN WR 10/24/86: James Mott, State mIne Inspector's office, reports that Zonah Corp (c) is in litigation over title to their portion of the Baxter Gypsum Deposit (f) Mohave County. thus, they are not currently in production, but do have some equipment on site.

NJNWR 4/15/88: Don Mezler of Pentarcos reports that he owns 8% of black Rock Gypsum Mohave County. He reports that the effort 2 years ago to produce pharmaceutical gypsum was a total failure. Due to attempts by some to keep production costs very low, over 200,000 tons of material was drilled and broken but unsalable due to contamination by two, 1' thick hematite zones. The contamination by the hematite was so bad they have not been able to sell the material even as wallboard grade.

COMPLETE AND MAIL TO

STATE MINE INSPECT OR STATE MINE INSPECTOR

MAR 28 1989 PHOENIX, ARIZONA 85007-2627

GYPSUM CITY (+) MOHING FOR OFFICE USE ONLY 1608/ STATE NUMBER 09 DEPUTY NUMBER. MOYE.

# NOTICE TO ARIZONA STATE MINE INSPECTOR

In compliance with the Arizona Revised Statute , we are submitting this written notice to the Arizona State Mine Inspector of our intent to start —, stop, move an operation.
Please check the appropiate boxes: Contractor , Owner , Operator . Open Pit Mine , Underground Mine , Mill , Quarry , Aggregate Plant , Hot Plant , Batch Plant , Smelter , Leach Plant .  If this is a move, please show last location:
COMPANY NAME: DGJanes & Son Co.
DIVISION:
MINE OR PLANT NAME: Gaypanin City TELEPHONE: 6738567
CHIEF OFFICER: Louis Jours
COMPANY ADDRESS: 16/64/3/33
CITY: St. State: STATE: STATE: ZIP CODE: 847777
MINE OR PLANT LOCATION: (Include county and nearest town, as well as directions for locating property by vehicle:
TYPE OF OPERATION: (1215/21/29 PRINCIPAL PRODUCT: (64/5/4/2)
STARTING DATE:CLOSING DATE:
PERSON COMPLETING NOTICE: Any Jones TITLE: Levident
FORM 101-106 REV. 01/88  APR 12 1989

#### ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

## FIELD VISIT AND INTERVIEW

1. Information from: Don Cecala, Western Gypsum Address: P. O. Box 850, St. George, Utah 84770

Phone: (801) 628-3916

3. Mine: Gypsum Mine

- 4. ADMMR Mine File: Gypsum City
- 5. County: Mohave
- 6. MILS Number:

7. District: (mining) or (mineral)

8. Township: T 41N Range: R 13W Sec(s): NE 1, Sec. 12

9. USGS Topographic Map: Purgatory Canyon 7.5

10. Location (descriptive):11. Number of Claims:

Patented

Unpatented

12. Owner(s): (if different from above) Western Gypsum

13. Address:

- 14. Operating Company: Western Gypsum
- 15. Pertinent People and/or Firm:

16. Commodities: Gypsum

17. Operational Status: Past producers - partially reclaimed

18. Summary of information received, comments, etc.:

Don Cecala reported that the Gypsum City quarry is used by Western Gypsum as a truck and equipment storage and maintenance site and for fuel storage. The pit has been reclaimed.

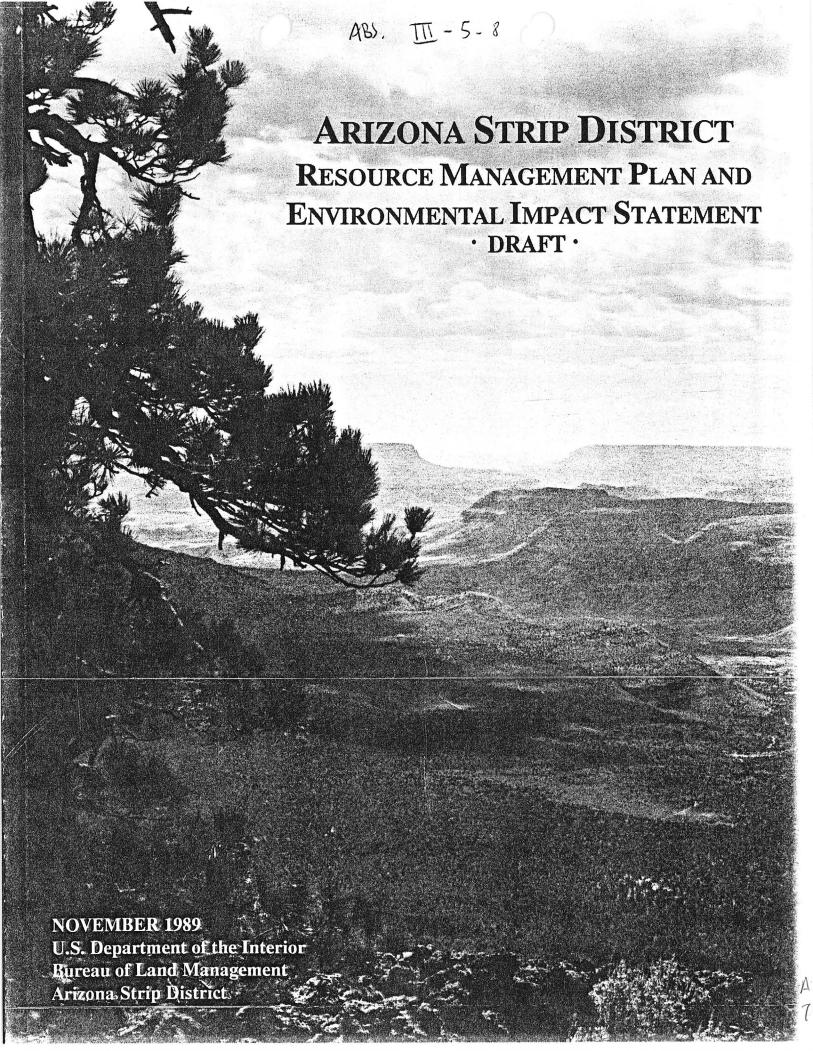
The holdings of American Gypsum Company's Gypsum City Placer Mine have been bought by Western Gypsum.

Ken A Phillips Date: August 10, 1990

A-5

UTAH
ARIZONA

Jeep 36 Trail R 13 W 26 R 12 W 27 (SAINT GEORGE) R 11 W 15 ittle Black Mountain 1068 -T 42 N Big Valley purgatory AMERICAN BYPSUM Canyon • Water Tank SNOW FLAKE BYPSUM MINE 1317 Canyon 36 31 36 31 36 T 41 N T 40 N 6



grams per tonne and occurs in the alluvial gravels along the Beaver Dam Wash. Exploration for these gold deposits is taking place immediately north of the Arizona Strip District in Utah (Spooner, 1988). Based on the geologic environment, the inferred geologic processes, and reported occurrence of gold in this area, the alluvial material along Beaver Dam Wash has a moderate potential for the occurrence of gold. Gold exploration is occurring although development potential is speculative at the present time.

Breccia pipe related precious and base metal deposits are known to occur along the lower Grand Wash Cliffs and Virgin Mountains. These deposits reportedly contain copper (up to 23 percent), silver (up to 10 ounces/ton), and relatively minor amounts of lead, zinc, uranium, and gold (Keith and others, 1983). Germanium and Gallium are also known to occur in the Apex deposit in Utah (Bernstein, 1986). It is possible that these elements could occur in breccia pipes located along the lower Grand Wash Cliffs and Virgin Mountains. Based upon the geologic environment, inferred geologic processes and mines in these areas, they have been rated as having a high potential for the occurrence of metallic mineral resources (Map III-3). The available data provide abundant direct and indirect evidence to support the existence of the resource.

# **URANIUM**

Exploration for and development of uranium resources are currently the most active mineral related operations on the district. There are two mines in operation, three in various stages of development, and three that have been closed and reclaimed. These mines lie to the north and west of the Kanab Creek drainage. The uranium occurs in collapse features known as breccia pipes (Figure III-1).

Breccia pipes in the Arizona Strip originate in Redwall Limestone and form collapse features in overlying rocks as young as the Chinle Formation. Uranium mineralization occurs in the Supai through Toroweap Formations (Krewedl and Carisey, 1986). Eight deposits of uranium, presently economical to develop, have been identified by Energy Fuels Nuclear in the Kanab Creek area. These deposits are almost exclusively uranium bearing, though other metals are known to exist. Active exploration programs have been undertaken by several companies in search of additional deposits on the Arizona Strip.

Sandstone type uranium deposits are known to occur in the Petrified Forest and Shinarump members of the Chinle Formation. Uranium was produced from deposits

in these members in the 1950s (Keith and others, 1983; Scarborough, 1981; Baillieu and Zollinger, 1980). Approximately 1,524 tons of uranium ore averaging 0.201 percent U308 was produced from the Vermillion Cliffs deposits between 1954 and 1957 (Scarborough, 1981). These deposits are located within the present day Vermillion Cliffs Wilderness Area. Uranium was also produced from the Rainbow Hills mining district though no production figures are available. Based on the geologic environments, inferred geologic processes and numerous mines in these areas; they have been rated as having a high potential for the occurrence of uranium resources (Map III-4). This rating is supported by abundant direct and indirect evidence.

# **GYPSUM**

On the Arizona Strip District, gypsum occurs in the Pakoon Dolomite, the Seligman and Woods Ranch members of the Toroweap Formation (Nielson, 1986; Hintze, 1986; Moore, 1972), the Harrisburg Member of the Kaibab Formation (Nielson, 1986; Cheevers and Rawson, 1979); and the Lower Red Member of the Moenkopi Formation (Stewart et al, 1972; Wilson, 1962). Gypsum in the Kaibab and Moenkopi formations appears to be of good quality. Based on the known occurrence of gypsum in these formations, areas overlain by the Toroweap. Kaibab, and Moenkopi Formations have a high favorability for containing gypsum. The thick gypsum deposit in the Pakoon Dolomite appears to be an isolated occurrence in the Cedar Pockets area and, as such, the Pakoon Dolomite has been rated highly favorable in that area (Map III-2). The certainty that gypsum occurs in these areas is also high, supported by abundant direct and indirect evidence.

Large gypsum deposits are found in the northwestern portion of the district around Black Rock Gulch, the north end of the Sunshine Trail and in Cedar Pockets. Operators are actively mining in two locations and another mine is currently inactive. Assays show the Cedar Pockets and Black Rock Gulch deposits to be of high quality and good potential exists for gypsum mining from these areas.

# SAND AND GRAVEL

In the western portion of the district, gravel is abundant along the lower slopes of the Virgin and Beaver Dam Mountains. Here alluvial fans have formed and the gravel is expected to be unsorted but of good quality. Well sorted, good quality gravel is also expected to occur in

