



## **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](mailto: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.

12/05/90

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: AMERICAN GYPSUM

ALTERNATE NAMES:

MOHAVE COUNTY MILS NUMBER: 786

LOCATION: TOWNSHIP 41 N RANGE 12 W SECTION 19 QUARTER NE  
LATITUDE: N 36DEG 58MIN 17SEC LONGITUDE: W 113DEG 39MIN 01SEC  
TOPO MAP NAME: PURGATORY CANYON - 7.5 MIN

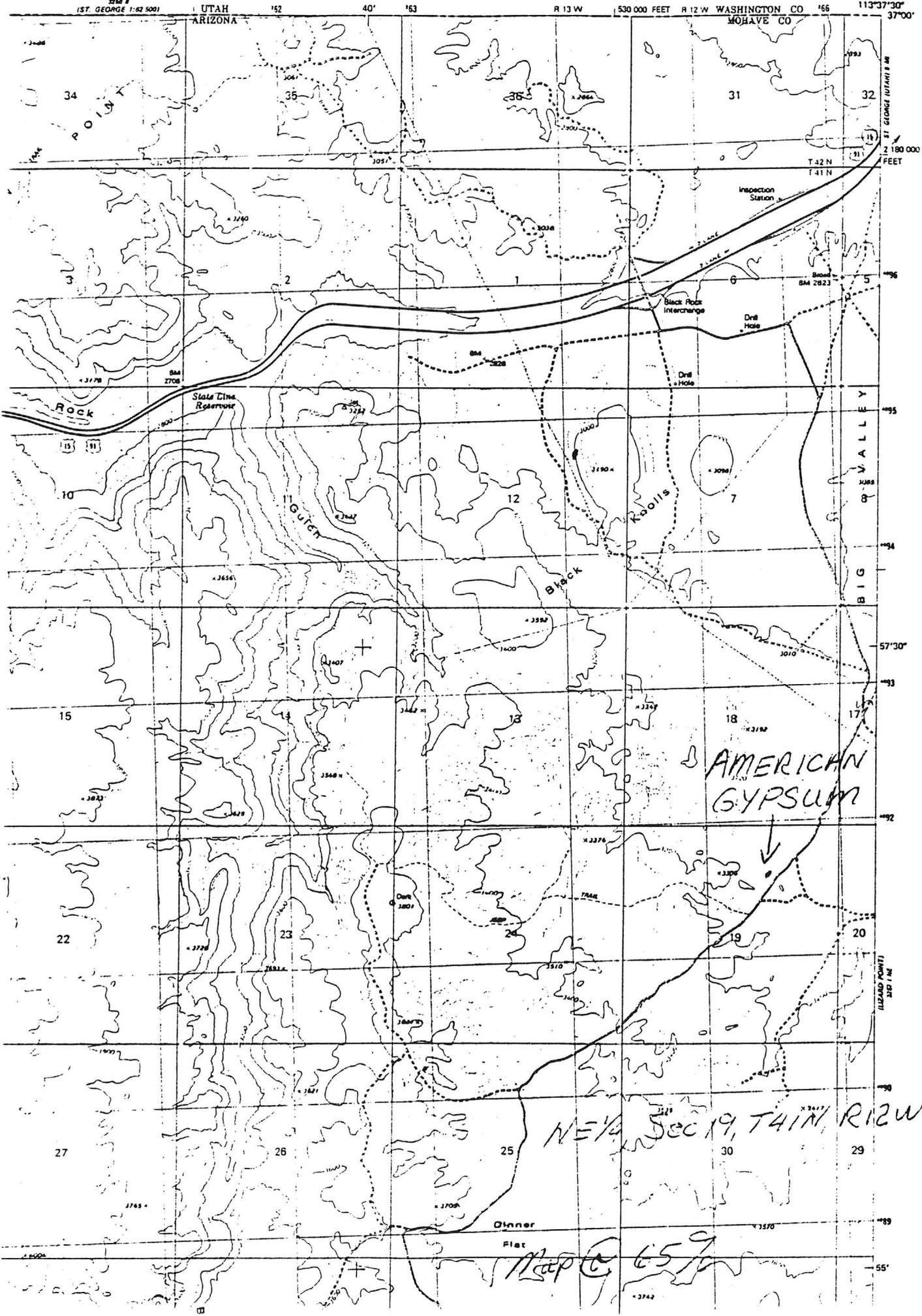
CURRENT STATUS: ACTIVE

COMMODITY:

GYPSUM  
GEMSTONE ALABASTER

BIBLIOGRAPHY:

ADMMR AMERICAN GYPSUM FILE



AMERICAN GYPSUM

NE 1/4 SEC 19, T41N, R12W

Map C 659

UTAH ARIZONA 152 40' 63 R 13 W 530 000 FEET R 12 W WASHINGTON CO 66 113°37'30" 37°00'

3250 #  
ST. GEORGE 1:62 5001

LEAD POINT  
310' / 310'

310' / 310'

310' / 310'

AMERICAN GYPSUM

MOHAVE COUNTY

MG WR 9/12/86: Received report from the BLM that the Baxter Gypsum deposit (Mohave County) has ownership problems, i.e. many claimants. Deposits which is also known as the Black Rock property is a good source of gypsum. Bed is 30 to 40 feet thick, readily accessible, and not in a wilderness area. Apparently the area most developed is in the NE 1/2, Sec. 19, T41N R12W.

---

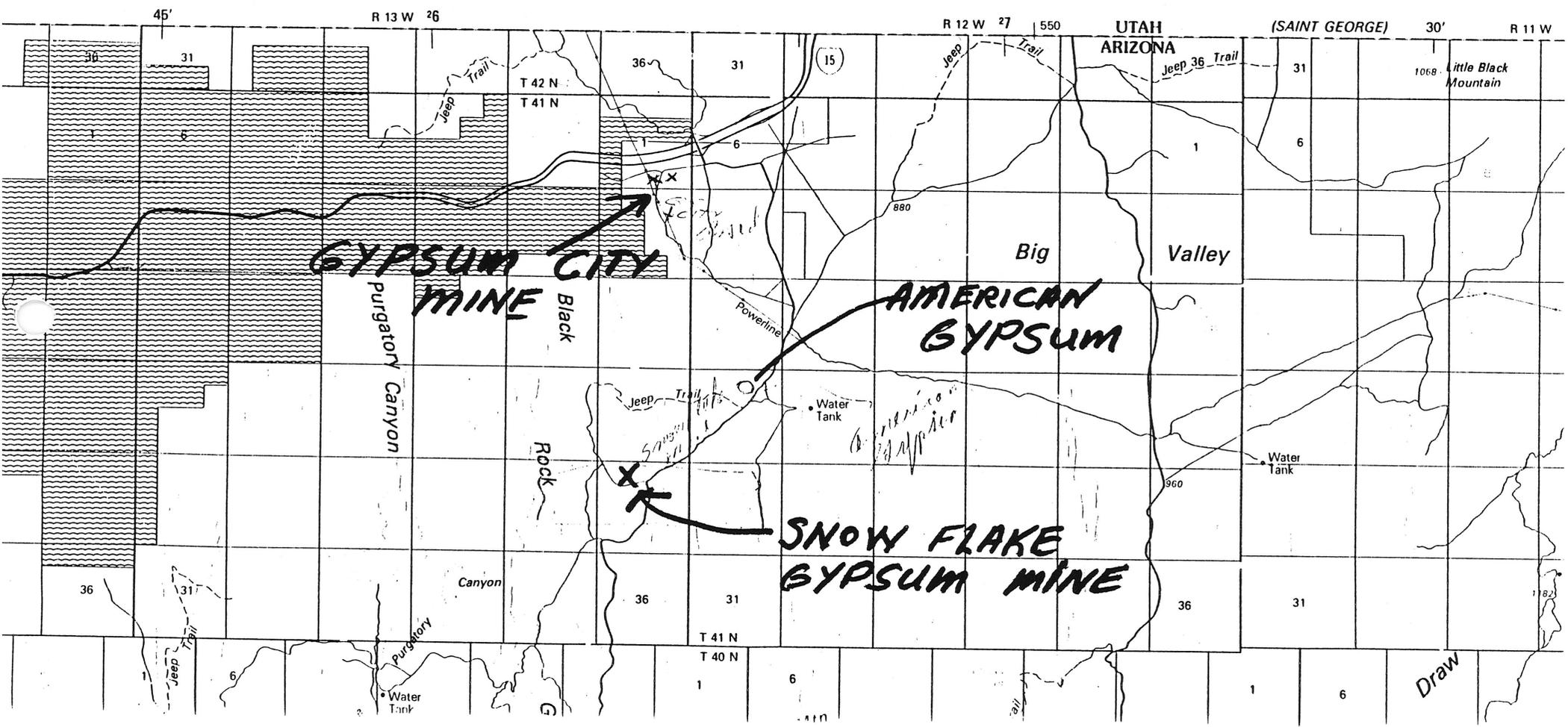
## ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

FIELD VISIT AND INTERVIEW

1. Information from: Don Cecala, Western Gypsum  
Address: P. O.Box 850, St. George, Utah 84770
2. Phone: (801) - 628-3916
3. Mine: American Gypsum
4. ADMMR Mine File: American Gypsum
5. County: Mohave
6. MILS Number:
7. District: (mining) or (mineral)
8. Township: T 41N Range: R 12W Sec(s): NE  $\frac{1}{4}$ , Sec. 19
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, Gemstone - Alabaster
17. Operational Status: Active
18. Summary of information received, comments, etc.:

Don Cecala reported Western Gypsum is currently mining this quarry along with the Snowflake Gypsum Mine Material mined includes selenite and alabaster of carving quality. The quarry bench is in a low hill with the highest face less than 25 feet. The floor of the quarry measures approximately 50' wide by 150' long. A stockpile of approximately 2,000 tons of minus 2" gypsum is located on a pad east of the quarry. Sample ADMMR 077505.

Date: Ken A. Phillips August 20, 1990



45'

R 13 W 26

R 12 W 27 550

UTAH

(SAINT GEORGE)

30'

R 11 W

ARIZONA

Jeep 36 Trail

1068 Little Black Mountain

T 42 N  
T 41 N

**GYPSUM CITY MINE**

Purgatory Canyon

Black

**AMERICAN GYPSUM**

Big Valley

Jeep Trail

Water Tank

**SNOW FLAKE GYPSUM MINE**

Water Tank

Canyon

T 41 N  
T 40 N

900

Draw

Water Tank

111

ABS. III - 5 - 8

**ARIZONA STRIP DISTRICT  
RESOURCE MANAGEMENT PLAN AND  
ENVIRONMENTAL IMPACT STATEMENT  
• DRAFT •**

**NOVEMBER 1989  
U.S. Department of the Interior  
Bureau of Land Management  
Arizona Strip District**

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 Red-wall 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.

## GYP SUM

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