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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GUNSIGHT MOUNTAIN MINE

ALTERNATE NAMES:

FLO-BER
FLUROSPAR MINES, INC.

PIMA COUNTY MILS NUMBER: 308

LOCATION: TOWNSHIP 17 S RANGE 11 E SECTION 8 QUARTER NW
LATITUDE: N 31DEG 58MIN 16SEC LONGITUDE: W 111DEG 14MIN 55SEC
TOPO MAP NAME: TWIN BUTTES - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

FLUORINE FLUORSPAR
COPPER

BIBLIOGRAPHY:

E.S. ELEVATORSKI, ARIZONA FLUORSPAR, 1971,
P. 31-38
ADMMR GUNSIGHT MOUNTAIN MINE FILE
ALSO IN SEC. 7

GUNSIGHT MT. MINE

PIMA COUNTY
PIMA DIST.
T17S, R11E, Sec 8

See: DMR Fluorspar p. 131

See: Duncan Fluorspar Mill (Mine file)

MILS GUNSIGHT MOUNTAIN MINE

May 27, 1957

This property idle.

MARK GEMMILL

Vic Haynes, secretary-treasurer of Southern Minerals, Inc., came in to discuss the procedure in disposing of their fluorspar properties saying the company is no longer in business. It was suggested he contact a number of companies with interest in fluorspar with the idea of either selling or leasing the properties. Their Gunsight mine is on five 20 acre State leases. GW WR 7/7/75

Ivan Knopf called to discuss the possibility of selling their fluorspar claims. He is president of the Southern Minerals & Mining Co. who are going out of business. GW WR 7/25/75

Walt Rogers called to request visit to his Gunsight CaF_2 prospect southeast of Robles Junction. He has completed his water well to 280 feet, and got water at 125 feet.

GW WR 4-10-73

Visited the Gunsight fluorspar mine about 35 miles west of Tucson where the Southern Minerals & Mining Company has begun a 20° incline on a 6-7 foot fault containing two 1 foot veins of spar. They have drilled a 284 foot water well (water @ 124') from which they expect to get enough water to operate two 36" Pan American jigs in up-grading the vein matter to met grade. The fault strikes N5W and dips 70° west and is traceable for approximately 1000 feet horizontally and about 150 feet vertically. Mr. Roseveare, ABM, conducted a gravity concentration test on the material with the following results:

Heads	34.98%	CaF_2	100%	distribution	
Jig Con.	84.68	"	27.8%	"	"
Table Con.	68.91	"	7.3%	"	"
Tails	26.7	"	64.9%	"	"

Note: -10 mesh was tabled, +10 mesh was jigged.

GW WR 4-15-73

Went on to the Gunsight fluorspar mine in Sec. 7 or 8 T17S R11E, where Walt Rogers and associates are attempting to jig fluorspar. The concern is named Southern Minerals & Milling Company headed by Mr. Rogers, Robert Vomcil, Ivan Knopp, Milton Gustafson, David Woods, Eugene Krueger and Dan Williams. The last two men hold the mineral lease on 160 acres from the State. They have been experiencing considerable difficulty with obtaining a clean jig product. The mine run material, which is mostly -4", is passed through a hammer mill with a 1" grate opening. The spar shatters into $\frac{1}{2}$ " material but some of the rock particles are -1" and those stay in the finished product. It was suggested the discharge of the mill be reduced to at least $\frac{1}{2}$ ". The well, which was drilled early this spring, has caved in the bottom 20-30 feet thereby limiting the inflow of water so that presently water is being hauled in a 6000 gal. tank truck about 7 miles. Jigs require a great amount of water for their successful operation, therefore, it is doubtful the operation can long continue without a well on the property. Since last visited a new 40 foot vertical shaft has been sunk and a used steel head-frame about 30 feet high is being erected. GW WR 11/5/73

At the north end of the Sierrita Mountains the Gunsight fluorspar property shut down. GWI AR 73-74

Bill Hirt and I drove to the Gunsight mine 35 miles southwest of Tucson. Survey the Gunsight mine. Here fluorspar mineralization occurs along 2-3 foot dikes of granite which are pegmatitic in places. These dikes intrude a hornblende schist along its foliation which strikes N5-15W and dips $60-70^\circ$ W. The fluorspar is from 4" to $2\frac{1}{2}$ ' wide and usually occurs along the footwall of the dikes. The schist is about $1\frac{1}{2}$ ' on both sides of the intrusive dikes. The surrounding schist as far as can be seen is intruded by numerous dikes and small stocks of granite. Near the mine there is a granite stock approximately 150' by 300' in areal extent from which no dikes appear to emanate but it probably has changed the strike of the mineralization. Returned to the Gunsight mine and cut 3 samples from the old workings; the later excavations were inaccessible. GW WR 3/18,19,20/75

Mine visit to the Gunsight mine. GWI WR 4/15/75

Walt Rogers, Wenden, phoned to say he has leased the Gunsight CaF_2 mine in the Gunsight Hills southeast of Robles Junction, Pima County, and wanted the Fluorspar report which was sent. GW WR 3/20/72

Walt Rogers, Wenden, came in to discuss the Snowball, Princess Ann and Gunsight fluorspar deposits. He and his partner, Carl Dotson, Socorro, New Mexico, have leased these deposits from Gene Kruger, Dan Williams and Andy Johannsen of Yuma. While here, John Lemons came in and was made acquainted with Mr. Rogers. Lemons inquired about the possibility of building a mill in the area. Rogers said they fully intended to do that and are now investigating the water supply. GW WR 5/2/72

Accompanied Messrs. Rogers and Ferguson to the Gunsight fluorspar prospect in Sec. 7 & 8, T17S R11E about 35 miles SW of Tucson on the extreme north end of the Sierrita Mountains. Here the N-S striking schist is intruded by a tongue of coarse granite which is quite altered and faulted. The brecciated veins strike from S15E to S40E and dip steeply west. On the north side of a prominent plug of granite two open-cuts and an adit explore a 6"-2ft. breccia zone with perhaps 15-20% CaF_2 in it. This vein as traced on the surface either splits or otherwise changes its course from S10E to S40E. On the south side of the granite knob two veins about 60 ft. apart strike S30E and S10E and have been open-cutted for about 150 ft. About 300 ft. south of these 2 open-cuts is a 30 ft. vertical shaft in which a 2 ft. breccia zone is apparent. It was suggested to Mr. Rogers, lessee, that the probability of this prospect becoming economically feasible was rather remote due to its small size and low-grade. GW WR 5/30/72

Walt Rogers, Wenden, called to request another visit to the Gunsight fluorspar claims SW of Tucson for the purpose of spotting a water well. He plans a jig mill on the property. GW WR 12/11/72

Accompanied Walt Rogers to the Gunsight fluorspar property at the north end of the Sierrita Mountains in Sec. 6, T17S R11E. After considerable reconnoitering and discussion, a location for a water well was spotted. On the northside of an east-west wash a shaft purported to be 30 feet deep is reported to have a north trending drift on a $3\frac{1}{2}$ foot vein of spar. Mr. Rogers intends to retimber the shaft and continue drifting. The development ore he will jig to a metallurgical grade of fluorspar. GW WR 12/12/72

Walt Rogers called for advice regarding water well at the Gunsight fluorspar property 7 miles S_e of Robles Junction. He said the drill couldn't make 2 feet a day, 20 feet down at the first location. It was suggested he move east of the shaft and try a different spot. He said he had cleaned out the 20 foot shaft and found 5 feet of good looking spar in the bottom. GW WR 3/6/73

GUNSIGHT MOUNTAIN MINE

Fluorite-quartz-calcite mineralization is associated with pegmatite and schist near a granitic intrusion. The sampling indicated mineralization of 30-40% CaF_2 in veins 0.5 ft. to 2.0 ft. wide. Past production from underground workings was responsible for an unknown tonnage of metallurgical grade fluorspar.

The property was examined on March 19, 1975 by Glen Walker and William Hirt.

LOCATION

The mine is in the NE/SW/NE of Sec. 7, T17S, R11E, in Pima County, Arizona. It takes its name from its location on Gunsight Mountain, which is an outlier on the northwest side of the Sierrita Mountain range. Tucson, Arizona lies about 25 miles to the northeast.

The mine can be reached by taking Sierrita Mountain Road south from Arizona Highway 36 for about 9 miles, and then turning left for about half a mile. Then go south on a dirt road for half a mile to the mine.

PHYSICAL FEATURES

Hilly terrain with sparse desert vegetation surrounds the mine. Annual precipitation is 10.63 inches. A well was drilled at the mine but is now shut down, and the amount of water that could be made available from it is reportedly small. Adequate water is likely available in the Altar Valley to the west. Electrical power is transmitted along Highway 36, nine miles north.

HISTORY

The deposit has produced a small amount of metspar. It is presently inactive.

OWNERSHIP

Arizona State Land Department.

GEOLOGY

The country rock for the fluorite mineralization is a quartz-biotite schist, which has been intruded by granite. The granite intrusion forms a prominent hillock. In the schist are numerous subparallel pegmatite dikes striking north to northwest roughly parallel to the schistosity foliations. The dikes are 1-4 feet wide and up to half a mile long. They appear to have been deformed (pushed to the east) along with the schist when the granite intruded. Orthoclase and quartz form the bulk of the pegmatite dikes; minor biotite is also present.

Both the foliations in the schist and the pegmatite dikes dip steeply to the west or southwest at 60-65 degrees.

Fluorite mineralization is associated with one or a few of the dikes near the schist-granite contact. Planes of weakness in the schist probably influenced the location of emplacement of both the dikes and the fluorite, but the pegmatite and fluorite may have invaded the schist at different times.

All of the workings have been made along what is probably a single vein of fluorite which had been bulged out to the east by the granite intrusion (see map). The fluorite appears to have been associated with a single pegmatite dike, but the dike's continuity is uncertain.

The best exposure of the vein is in the underground drift south of the granite. Here the vein is about 2 feet wide and is composed of 0.5-1.0 feet of fluorite with a gangue of quartz, CaCO_3 , and schist.

DEVELOPMENT

Several large trenches or open cuts up to 150 feet long and 10-15 feet wide have been cut along the vein outcrop.

Development

A shaft of unknown depth was sunk at the south end of the workings, and an unknown amount of underground workings is visible at the north end of one of the open cuts. These underground excavations were not examined because of safety reasons. In addition a crosscut and drift totalling about 100 feet long were driven north of the granite intrusion to sample the vein; these workings were mapped.

The remains of a mill (jigging plant) and a concrete storage pad are still visible.

SAMPLING

Three chip samples were cut along the vein or surface and underground exposures. Sample locations are shown on the map by numbers and the analysis is given below.

SAMPLE NO.	SAMPLE DESCRIPTION	&CaF ₂	%SiO ₂
1	5" sample in south face of open cut	38.07	19.04
2	26" vein	41.34	31.00
3	8" + 2" of vein + 6" horse	34.54	33.14

The results indicate that milling would be necessary to produce a marketable product.

William Hirt
June, 1975

GUNSIGHT MOUNTAIN MINE

The property consists of 5-20 acre claims leased until March 7, 1992 from the Arizona State Land Department by Minerals & Milling Company, 5117 North Scottsdale Road, Scottsdale, Arizona.

It is located in section 5, 6 & 7, T17s, R11e, in Pima County, Arizona. The area is shown on USGS 15 minute topographic map, Palo Alto Ranch where the elevation is 4050 feet and the location is $111^{\circ} 15'01''$ Longitude, $31^{\circ} 53'53''$ Latitude.

The mine is reached from Tucson, Arizona by traveling 13 miles on it 3 miles to a cross road, turn left 1/2 mile (east) to a gate, through the gate 1 mile on a good trail.

According to the State Land Department \$15.96 royalty was received from this lease in 1974 which means approximately \$532.00 worth of jigged spar was sold to a Phoenic foundry. The mine is presently idle.

1. Type of Deposit + T. Description Location Description

ID	Type of Deposit + T. Description	Location Description	Mine
	1T type of deposit description		02
	col. 3-5 County	Pima	019
A-1	42 current product status	past producer	2
	43 type of mining	Underground	2
	44-6 land status (claim, lease, etc)		0
A2	14-46 name of mine	Gunsight Mountain	
	47-9 other names		
A3	17 owner or operator or etc		0
	18-73 owner/operator name + address		
	79-80 % of ownership		
14	14-30 lat. & long. (pinpoint on top map) etc	N 31.96700° W 111.25198°	31.96700 - 111.25198 -
	47 reference pt of loc. (adit, frame, etc)	prospect pit on map	2
	48 precision of loc. meas.	10 m.	1
	51-55 T	T 17 S	017 -
	56-60 R	R 11 E	011 - 3
	61-2 sec.	7	07
	63-5 1/4, 1/4, 1/4	ne 1/4	096
	66 P.L.S. status (surveyed etc, superimposed grid)	surveyed	2
	67-71 elevation	4050 ft* (=1236 m)	1236
	73 precision of " meas.	10m	1
	74-6 USGS 2° sheet	Nogales	258
45	14 distance to nearest road	0	1
	15 " " adequate water	< 10 km	2
	16 " " " elec.	> 10 km	3
	17 mining district	Papago or Sierrita District	
	32-3 mineral domain (BLM etc)	state land	30
	34 drainage basin		1507
	38 nature of topography	hilly	4
	39-42 annual pptn. (little, desert)	10.68 in (27.13 cm)	27.1
	45 vegetation	grassland desert	3
	46 soil texture		
	47 primary land use	grazing	6
	48 working season	all year	4
	49 labor supply	available locally	2
50-64	environmental sensitivity to mineral extraction (nil, minor, mod, signif.)		
	for land, veg, wildlife, water		
	air, aesthetics, sound, overall		
	Short Term	Land 50, Veg 52, W.L. 54, H2O 56, Air 58, Aesth. 60, Sound 62, Over 63	
	Long Term	Land 51, Veg 53, W.L. 55, H2O 57, Air 59, Aesth. 61, Sound 64, Over 64	

0005
2

65-7	map. surf area pot. disturbed	5	sectors		
70	map series (7 1/2, 15' etc.)	15			
71-80	map name (quad name)		Palo Alto Ranch		
A6 17	how discovered		ore mineral exposed in place		1
18-21	yr discovered				
22-5	yr. 1st signif. production				
26-9	yr. last production				
30-1	method of exploration	10	geological methods	80	70
32	method employed		moderate 2	vertical test opening moderate 2	horiz. test opening moderate 2
33	extent method supports resource eval.		moderate 2	" 2	" 2
34-7	year of work		1975		
A7 14-36	formation or group name				
37-9	geol. age of fm. or group				
40-43	type of deformation		faulting, metamorphism		
44-6	age of "				
47	relation of mineralization to deformation		mineral was after the faulting, relation to meta. unknown		
48-50	in situ rock density				
51-3	rock names	11,2	granite	21,2 schist	11,3 pegmatite dikes
54-5	relationship to ore		mafic	6,7 gangue	
A8 19-16	age of mineralization		phosnetic medium		
17	grain size (overall)		qtz + 12-15	CaF2 zone	orthoclase
18-20	mineral name		phosnetic med.	phos. medium	pegmatite
23-4	grain size				
24-7	grain size				
	mineral name				
	grain size				
A9 15-20	type of ore body	(skinning zone)	fissure vein 2'	49-52	minimum thickness of unconsolidated mat. covering ore zone 0
21-2	mode of origin	(hydrothermal)	hydrothermal 1		ore thickness of mineralized zone 11 to strike 1000 feet (= 305 m)
23-5	shape of ore body		tabular 1	53-8	strike of min. zone N30W (approx)
26-7	ore controls	(fracture)	faulting, porous activity, 4		width " " " (ave) 11 to
28	degree of wall rock alteration	(leached)	none or slight 1,2	59-62	dip direction unknown
29-34	type of "		silicification 2,7	63-8	dip of mineralized zone 70 W
35-9	ave. depth to mineralized zone		0	72-5	ave thickness of " " 1 to
40-4	minimum "		0		dip 1 ft (= 0.3 m)
45-8	ave. thickness of unconsolidated material covering ore zone		0		

Gunsight Mine

1. pt. 1 in n. end of open cut in middle of cut, from pt. 1 is 69' on SSE to pt. 1A in open cut, cut is in schist
 from 1A to end of cut is 81' on S12E, cut is 5 1/2' wide here
 CaF₂ veins exposed at end of cut (~6" wide, dips 70° W)
 32' from end back towards 1A is a hole connecting to ug workings ~3' dia x 3' deep, cut is 9' wide &
 - cut is 12 1/2' wide @ 10' back from end
 - " " 10' " " 20' " " "
 - " " 9' " " 40' " " "
 - " " 13 1/2' " " 50' " " "
 - " " 10 1/2' " " 15' s. of pt. 1A
 - " " 8' wide @ pt. 1A
 - " " 9' wide @ 10' n. of pt. 1A
2. from pt. 1 to pt. 2 is 106' on S10W
3. from pt. 2 to pt. 3 is 176' on S14W ; pt. 3 on adit dump
4. from pt. 3 to pt. 4 is 192' on S66E ; pt. 4 @ n. end of trench on vein in schist
 + vertical \pm of 18° up
5. 61' from pt. 4 on the 3-4 line is a "granite" dike going SE43 for 70' approx, dike is ~1-3' wide
6. from pt. 4 is 60' to se corner of trench on vein; trench is 15' long x 5' wide trending from s. end N25W
 to n. end, long dimension is on vein
 or N25W
7. from pt. 4 is 47' on S41E to s. end of trench on vein, ~6-7' wide, is in a "granite" dike in schist, schist from sidewalls, some CaF₂ seen in loose sch but no vein seen
8. from pt. 4 is 58' on S28W to intrusion (granite?)
 " " " " 52' on S4E " " " " " "
9. from pt. 4 is 138' on S41E to pt. 5 (rock pile), vertical \pm is 23° up
 - pt. 5 is on a "granite" dike ~4' wide striking N11W for ~ 1/2 mile to N
10. from pt. 5 is 26' on S62W to upstanding intrusion of pt. 8 note 8
 " " " " 45' on S28W " " " " " "
11. from pt. 5 is 136' on S16E to another "granite" dike ~4.5' wide striking N-S, runs N for ~100', s. for 100'
 and 22° down \downarrow pt. 6
12. from pt. 6 is 67' on N55W to a trench ~7' x 3' wide x 1' deep, trace CaF₂ in loose rocks
13. from pt. 6 is 66' on N80W to n. end of open cut, cut is ~10' wide here
14. " " is 91' on N75W to intrusion

15. from pt. 6 is 70' on $S16W$ to n. end of trench $\rightarrow +20^\circ$ down
16. from pt. 6 is 127' on $32^\circ SW + 13^\circ$ down to pt. 7
17. from pt. 7 is 32' on $N38E$ to a dike striking $N10E$ for $\sim 60'$ to the mouth
18. from pt. 7 to s. end of trench is 35' on $N20E$, trench is 12' long x 5' wide, schist on side walls, is on a dike of "granite"?
19. from pt. 7 is 51' on $N-0^\circ$ to s. end of open cut of note 13, open cut is $\sim 10'$ wide, sidewalls are schist, is on a "granite" dike, trace of CaF_2 , vein $\sim 6''$ wide @ n. end of open cut, cut strikes $\sim N4E$, schist dips $66^\circ W$
20. from pt. 7 is 44' on $74NW$ to outcrop of intrusion (granite)
21. from pt. 7 is 25' on $47SE$ to s. end of trench of note 15, trench strikes $N38E$ schist on sidewalls dips $\sim 60^\circ W$, trench is on a dike ("granite")
22. from pt. 7 is 40' on $51SE$ to n. end of open cut connecting w. v. workings, schist on both sidewalls
23. " " " " 108' on $58E$ " " " " " " " "
24. from pt. 7 to pt. 8 is 149' on $51W$
25. from pt. 8 is 68' to e. end of trench on $58E$, is 37' to w. end, trench is $\sim 8'$ wide, goes across rein. projection but don't see any outcrops at all in it except for a little "granite"? w. no CaF_2
26. from pt. 8 is 182' on $51E$ to nw corner of shaft $\sim 10'$ ew x 6' n-s, depth unknown, no bedrock seen here, e-w (long) side runs @ $N80E$
27. from pt. 8 is 45' on $51W$ to well, depth unknown
28. from pt. 8 is 198' on $N43W$ to a rk pile, the line crosses water rkt + tailing, 5' from rk pile to ne is a outcrop of intrusion that runs \sim due east to $\sim 20'$ s. of outcrop of note 20
29. 5' n. of rk pile is middle of concrete slab 40' x 20' oriented $N-S + E-W$ w. long side $E-W$
30. from rk pile is 75' on $57SE$ to middle of steel cone for rock flat?
31. from pt. 9 (rock pile) is 198' on $N49W$ to pt. 10, intrusion outcrop runs along the e. side of the line + on the line
32. from pt. 9 is 10' on to n. end of retaining wall next to slab of note 29, wall runs $N-S$ + is $\sim 2'$ long to s. side of slab on its s. end (of the wall)
33. 10' back from pt. 10 is a wall of a dam running $56W$, $\sim 30'$ long, line of note 31 crosses it @ $\frac{1}{3}$ back from e. end, returns H_2O to the se of it over on area $\sim 30' x 30'$
34. from pt. 10 is 72' to where intrusion outcrop goes to e $\sim 50'$ on line to pt. 11 \rightarrow pt. 11 is 200' on due N from pt. 10

- 35. from pt. 11 is 103' on 45 NE to pt. 3, this line is on granite intersecn outcrop
- 36. from pt. 3 is 60' on 53 SE to granite int. outcrop, borders schist; from here the granite goes ^{very app} ~ 50 E to the 15' outcrop of granite that I measured in coming from the n. end of the mine
- 37. from pt. 3 is 56' on 70 SE to a schist outcrop striking NS 8 W, dip 65° SW
- 38. from pt. 3 is 33' ^{into cut leading to adit, @ 33' is a "granitic" dike ~ 1' wide going 40 SE}
~~on N 86 E~~ ^{→ about 4' wide}
 - schistosity here str. 42 SE, dips 65° SW
 - @ portal = dike running S 28 E for 75', middle is @ portal of adit, dike ~ 2-3' wide
 - is 49' from pt. 3 to portal, most of cut leading to portal is schist
 ^{→ all except for dike}
- 39. 30' n. of portal schist runs S 12 E & dips 65 SW
- 40. from pt. 3 is 93' on N 86 E to a pt. in the adit mg
- 41. from pt of note 40 is 20' on N 80 E to pt in X cut (low con)
- 42. from ben con is 11' on N 12 W to ^{rein at} end of tunnel on north, rein is @ nw corner of drift
- 43. from ben con is 22' on S 15 E to s. end of tunnel, rein @ ^{rein @} middle of face

Geol. note: the "granite" dikes are peg. dikes of qtz, Ksp, & minor biotite; schist is qtz-biotite schist

- Sample #1 on 4" rein @ s. end of north open cut ^{course X/s}
- Sample GS-2 on in a 2.2 ft rein @ n. end of drift } the ug rein is ~ 2' wide w. variable CaF₂, CaCO₃, flint & schist (alt & unalt), rein goes along roof between the 2 sampling pts.
- Sample GS-3 on 10" of a 2' rein @ s. end of drift