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.

06/19/91

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: RHODES SPAR MINE

ALTERNATE NAMES:
SPAR FLUORITE GROUP
REFUGE CLAIMS
MT JACKSON

GRAHAM COUNTY MILS NUMBER: 134

LOCATION: TOWNSHIP 6 S RANGE 22 E SECTION 6 QUARTER SE
LATITUDE: N 32DEG 56MIN 13SEC LONGITUDE: W 110DEG 07MIN 45SEC
TOPO MAP NAME: JACKSON MTN - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
FLUORINE FLUORSPAR

BIBLIOGRAPHY:
ADMMR U FILE
BLM MINING DISTRCIT SHEET 767
ELEVATORSKI, E.A., AZ FLUROSPAR, ADMMR 1971, P. 17-18
BLM AMC FILE 50176
UNPAT. CLAIMS EXTEND INTO SEC. 5, 7 & 8
ADMMR RHODES SPAR MINE FILE
ADMMR ARIZONA EASTERN FLUORSPAR CORP. FILE

MORRISON, L, U.,W.F.,D.L.,& L.L. et al(OWNERS)
Box 87, Ft. Thomas, Arizona.

MINE - SPAR MINE- (formerly Jackson Properties) Black Rock District
Graham County. - Nov. 7-1952.

MINING WORLD 6/1953

GRAHAM COUNTY
T6S R22E Sec. 5, 6, 7 and 8

USBM "U" file

BLM Mining District Sheet 767

MILS #134

ADMR Flourspar Publication, p. 17-18

MILS Sheet sequence number 0040090324

MAPS _ upstairs in the flat storage area - Drawer 7

See: Duncan Fluorspar Mill (file)

AKA: Refugee Claims, Spar Mine, Mt. Jackson, Spar Fluorite,

Geology File - Calder, Susan, Vol 2, 1982

ARIZONA EASTERN FLUORSPAR CORP. REFERENCES GRAHAM COUNTY
CLARK DIST.
T6S R22E Sec. 6

Graham County MILS Index #134

AKA: Jackson Mt 1 and 2 M S 4673; Rhodes Spar; Mt. Jackson; Unpatented Claims - Mt Jackson; Spar Fluorite Group

"U" File

BLM Mining District Sheet 767

Elevatorski, E A, AZ Flourspar ADMR 1971, p. 17-18

BLM Mining Claims Lead file 50176 July 1980

Unpatedted Claims extend into section 5, 7, 8

Rhodes Spar Mine (file) Graham

Jackson Mtn, AZ 15' Topo (included in file)

Az Eastern Fluorspar Corp.
T6S R22E Sec. 6

Jackson Mtn, Az 15'

January 10, 1978

Robert Key
Resource Commitee
San Carlos Apache Tribe
San Carlos, AZ 85550

Dear Mr. Key:

I have a Fluorspar mine located in Section 6, Township 6 South, Range 22 East.

Our road takes off from the Black Rock road at the YL ranch going South and our road crosses your Reservation boundary fence close to the middle of the West line of Section 5, Township 6 South, Range 22 East.

I would like to request that you leave a gate at the point of our road intersecting your fence.

This is a producing Fluorspar mine and there is no other way to get in and out. Ours is a dead end road to the mine and will not be used by the public.

Your consideration in this matter will be appreciated.

Yours very truly,

329
Pfd. In U.S.A.

5-13

COPY OF PURCHASE INVOICE

FROM Lyon Mining Co.
Lyon Mine
Duncan, Arizona

TO GENERAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORPORATION

DATE Aug 6, 1953
ORDER NO. _____ REQ. NO. _____
CAR _____ DESTINATION _____
ROUTE _____
TERMS _____
AT Duncan, Ariz.

6.68	N.T.	1.0 % H_2O ~ .09 N.T.				
5.59	N.T.					
		(13.82 + .75)		14	59	125
		63.7 % CaF_2				
Cert Correct:						

DUP. CHECK FOR PAYMENT

Rhodes

ARIZONA EASTERN FLUORSPAR CORP.

DUNCAN, ARIZONA

CERTIFICATE OF ANALYSIS

Description	Ca F2	Ca Co3	Si O2	~~Fe2 O3~~ Fe	Pb	Zn	Cu	Mn			
Rhodes of											
Ft Thomas											
3 Loads											
58,880 #											
Nos 80-81-145	71.8	1.6	24.8	1.8							

Date 11/12/53 Charges _____ Chemist _____

RECEIVED
Jan 24 1978
DEPT. OF MINES & MINERAL RESOURCES

ARIZONA EASTERN FLUORSPAR CORP.

DUNCAN, ARIZONA

CERTIFICATE OF ANALYSIS

Description	Ca F2	Ca Co3	Si O2	Fe2 O3	Pb	Zn	Cu	Mn			
High Grade Piece	85.1	4.x	10.0	0.7							

Date 8/27/53

Charges

Chemist

ARIZONA EASTERN FLUORSPAR CORP.

DUNCAN, ARIZONA

CERTIFICATE OF ANALYSIS

Description	Ca F2	Ca Co3	Si O2	Fe2 O3	Pb	Zn	Cu	Mn			
W.C. Rhodes											
Ft Thomas											
Load											
17 620 #											
Ticket 116	75.x	4.6	18.x	2.0							

Date 9/3/53

Charges

Chemist

ARIZONA EASTERN FLUORSPAR CORP.

DUNCAN, ARIZONA

CERTIFICATE OF ANALYSIS

Description	Ca F2	Ca Co3	Si O2	~~Fe2 O3~~ Fe	Pb	Zn	Cu	Mn			
Rhodes 3rd											
Ft Thomas											
Load											
40, 320 #											
Ticks 150 & 137	66.1	3.4	27.6	2.4							

Date 12/1/53

Charges

Chemist

RHODES FLUORSPAR CLAIMS (originally Refuge Claims)

Graham

Owners: Charles and John Rhodes

WR KP 1/19/78 - The Rhodes Fluorspar Claims, originally the Refuge Claims, are located in SW 1/4, Sec. 6, T6S, R22E, G & S.R. B & M and require access by dirt road through a portion of the San Carlos Apache Indian Reservation. The Tribe is erecting a fence across country which will cutoff their (the Rhodes') access to the property. They have written the Tribe a request to allow them to put a gate across the road. They are continuing with a patent application on the property. 3/21/78 sef

SPAR MINE
(Mt. Jackson)

GRAHAM COUNTY

Conference with Mr. John Rhodes of Safford to discuss mining activity within the area, and especially any activity pertaining to Fluorspar. The engineer told him about the activity at the North Star Mine near Benson, and that the Company had said that they might be interested in Mr. Rhodes property.

CONFERENCE Safford 6/6/67 GWI

ABM Bull. 180, p. 349, 352

Went to Charles Rhodes home for directions to his fluorspar property SW of Ft. Thomas; but he wasn't in, his wife gave directions to his brother John's place in Safford. Finally found John Rhodes who drew a sketch map of the rail to the mine. GW WR 11/20/74

Followed Mr. John Rhodes directions to their fluorspar mine which is about 14 miles SW of Ft. Thomas. The last 2 miles of the trail has been washed out considerable, it hasn't been used for 15-20 years. Here the 4 ft. vein strikes N35°W and dips steeply east in gneissic granite. It is opened for perhaps 1000 ft. by prospect pits. The largest excavation is about 100 feet long by 35 feet deep; mucked with a slusher. GW WR 11/21/74

Went to Mr. Rhodes place but he was away at work; will see him tomorrow. Went on to his mine about 13 miles SW of Ft. Thomas and completed the mapping. Here there is an 11 foot wide open cut about 40 feet deep at the deepest point and about 115 feet long. There is another excavation about 400 feet west on the same vein but it is only about 30 feet long by 4 feet wide by 5 feet deep. The vein strikes about N40W and dips stteply to the NE. Near the NW extremity a short adit has been started on the vein which is only about 2 feet wide. Found Mr. Rhodes at home and he said they had 6 unpatented claims; Mt. Jackson #1 through #6 in Sec. 6,7,8, T6S, R22E. Cut 5 samples at various places on the outcrop near the several excavations. The mineralization doesn't extend more than 30 feet from any prospect pit. Here, as in the Duncan district, the fluorspar appears to have replaced quartz in a shear zone and is quite pockety or lenticular. Mr. Rhodes came out to the mine and pointed out a couple of small veins, one parallel to the main one and one about 200 feet NE of it, the other is probably an offshoot of the main vein from the hanging wall, it can only be traced about 25 feet. Mr. Rhodes said their main production of some 1200 tons came from the large excavation and appeared to be a shoot 4-7 feet wide that plunges 50-60° to the NW. This shoot formed after the diabase dike about 1½ feet thick on the front wall cut through the mineralization to the hanging wall and became about 6 feet thick. GW WR 3/1,2/75

Stopped at Graham County Recorder's office to find the recording of the Mt. Jackson claims of the Rhodes brothers. GW WR 3/7/75

Mt. Jackson Mine

Rhodes Spar Mine

	col.	14 Type of Deposit Position Location Description		
	3-5	County	Graham	
4-1	42	current product. status	post producer	2
	43	type of mining	surface-underground	3
	44-6	land status (claim, lease, etc.)	2 patented claims	2
A2	14-46	name of mine	Mt. Jackson Mine	
	47-9	other names	Rhodes Spar Mine	
43	17	owner or operator or etc.		
	18-73	owner/operator name & address		
	79-80	% of ownership		
.4	14-30	lat. & long. (pinpoint on topo map)	N32.93600° W110.12963°	
	47	reference pt of loc (adit, etc., h. frame)	trench or pit (shown as shaft on topo map)	2
	48	precision of loc. meas.	10 m	1
	51-55	T	T6S	6
	56-60	R	R22E	2
	61-2	sec.	6	6
	63-5	1/4, 1/4, 1/4	se 1/4	
	66	P.L.S status (surveyed etc. superimposed grid)	surveyed	2
	67-71	elevation	3990' (=2030 m.)	
	73	precision of " meas.	10 m.	
	74-6	USGS 2° sheet	Tucson	259
45	14	distance to nearest road	2 mi	<1 km 2
	15	" " adequate water	2 mi.	<10 cm 3
	16	" " " elec.	10 mi	<50 3
	17	mining district		
	32-3	mineral domain (BLM etc.)	BLM	49
	34	drainage basin		.15C 1503
	38	nature of topography	rugged	5
	39-42	annual pptn	15 in. (38.1 cm)	38
	45	vegetation grassland, little, desert	desert	3
	46	soil texture		
	47	primary land use	grazing	6
	48	working season	all year	1
	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

	Land	Veg.	W.L.	H_2O	Air	Aesth.	Sound	Over
Short Term	50 minor 2	52 minor 2	54 minor 2	56 minor 2	58 minor 2	60 minor 2	62 minor 2	63 minor 2
Long Term	51 minor 2	53 minor 2	55 nil 1	57 nil 1	59 nil 1	61 minor 2		64 minor 2

A5 cont.

	65-9	map. surf area pot. distribut	5 hectares
	70	map series (7½', 15' etc.)	7½ min.
e	71-80	map name (quad name)	Jackson Mtn.
A6	17	how discovered	ore mineral exposed in place
	18-21	yr discovered	
	22-5	yr. 1st signif. production	
	26-9	yr. last production	
	30-1	method of exploration	
	32	extent method employed	
	33	extent method supports reserve val.	
	34-7	year of work	
A7	14-36	formation or group name	
	37-9	geol. age of fm. or group.	
	40-43	type of deformation	
	44-6	age of "	
	47	relation of mineralization to deformation	
	48-50	in situ rock density	
o	51-3	rock names	
o	54-5	relationship to ore	
o	~~A8~~	rock name	
o		relationship to ore	
o A8	14-16	age of mineralization	
o	17	grain size (overall)	
o	18-20	mineral name	
o	23-4	grain size	
o	24-7	%	
o		mineral name	
o		grain size	
o		%	

	geological methods 10	vertical test opening 60	test pit 80
	moderate 2	extensive 3	extensive 3
	moderate 2	moderate 2	moderate 2
	1975		
	faulting 2		
	~~1,6~~ code 4 mineralization after event		
	about 2.8		
	granite 112		
	code 1,6 fractures in other rocks		
	phenocrysts medium 3		
	qtz 212 - 15		
	code 3 phan. med.		
	CaF_2 200 - 06		
	code 3 phan. med.		

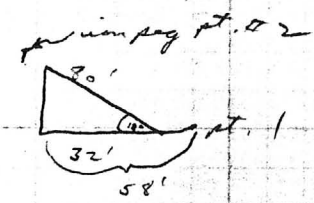
e A9	15-20	type of ore body (other zone, fissure vein)	fissure vein 01	49-52	minimum thickness of unconsol.	0
e	21-2	mode of origin (hydrother.)	hydrothermal 1		isolated mat'l. covering ore zone	
e	23-5	shape of ore body	tabular 3	53-8	ave. thickness of mineralized zone	
e	26-7	ore control (fracturing, lithol.)	faulting 3		∥ to strike 900 feet (=300 meters)	
e	28	degree of wall rock alteration	slight 2	59-62	strike of min. zone	S 50 E
e	29-34	type of " " "	silicification 07	63-8	width " " " (ave) ∥ to dip direction unknown	
e	35-9	ave. depth to mineralized zone	0			
e	40-4	minimum " " "	0	69-71	dip of mineralized zone	60 SW
e	45-8	ave. thickness of unconsolid. material covering ore zone	0	72-5	ave thickness of " " ⊥ to dip	5 feet (= 1.5 meters)

Jackson Mt.

(1.) Pt. #1 Rock @ edge of jeep trail
to open cut in granite, pool of H_2O @ face of open cut.

Bearing: S32E to face of open cut from pt. #1
Distance: 58' to bottom of cut (end)
32' to beginning of cut.

Width of opening 6', Vein of fluorspar is 3' wide
country rock has been silicified outcrops on NE side.
80' to top of cut (end)



Side View

(2.) cut is 27' deep @ far end

(3.) Distance from Pt. 1 to iron peg on top of hill: 183' @ S 40° E

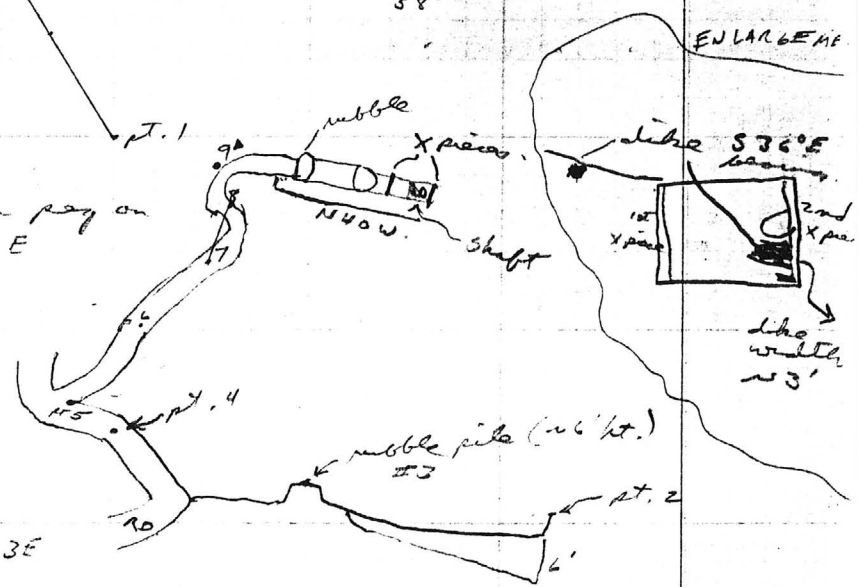
(4) Elevation ∆ from pt. #1 to iron peg 18°

(5.) Iron Peg is Pt #2.

(6) 48' to end of trench from iron peg.
(7) 101' to pile of rubble from iron peg. } S23E

(8) Rubble pile is pt. #3

(9.) Road - 76' from pt. 3 to road curve @ bearing S 82°E
Road N87°E - from pt. 3 to pt. 4
198' to pt. 4



(10.) Pt. 4 is in the road
(11) pt. 5 is @ fork in the rd. N81E 64'
(12) pt. 6 is on right fork @ 148' from pt. 5 S23E in center of rd.
(13) pt. 7 is on rt. fork 198' from pt. 6. [165° mag bearing (S11E ? dech)]
(14) Pt. 8 is 131' from pt. 7 @ S11E in a st. line from pt. 7
(15) Pt. 9 " 57' " " 8 @ S6E (but road curves)
claim stake - 12' to the SW.
29' to beginning of the cut. 50' to 1st rubble pile.
(16) Pt. 10 128' to outcrop over middle of the cut.
(17) 205' to 2nd X-piece pt. 11 N40W

N Jeep 881.0
E 883.1

893.4 @ T junction
896.4 @ jeep end. 1
to mine

908.1 Hwy
896.4

Jackson MT.

(18) cut dimensions

Width @ 1st X-piece – 11'

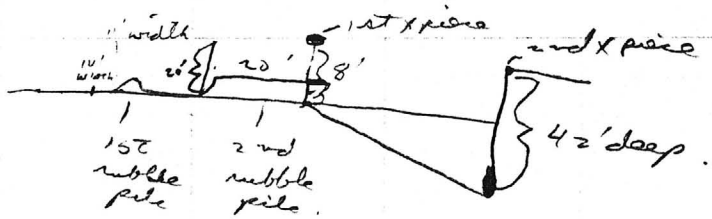
Width @ ~20' SE of 2nd X-piece – 13'

Opening: ~6' wide. widens to 10 & then closes down again.

(19.) ~20' ~~from~~ across 2nd rubble pile

11' width @ 2nd rubble pile (beginning)

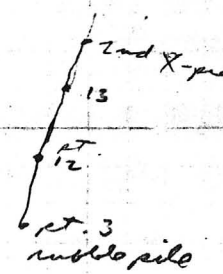
(20) 14' width @ beginning of trench.



(21.) 42' deep @ upper end of cut (beneath 2nd X-piece

(22) 8' deep from 1st X-piece to top of 2nd rubble pile

(23) 15' deep to base of 2nd rubble pile @ pt. where width was measured (i.e. at its beginning – second)



(24.) Pt. 3 to pt. 12

200' S33°E

(25.) pt. 12 to pt. 13

184' @ S38E

Varied & taken to pt. 13 from 12 ~170°

Note: Geology: Rock is gneiss-granite + granite. Barber dikes run thru it.

(26.) pt. 13 to 2nd X piece 31' @ S50°E.

(27) 114' from pt. 9 to outcrop w/ slickensides – bearing S48E

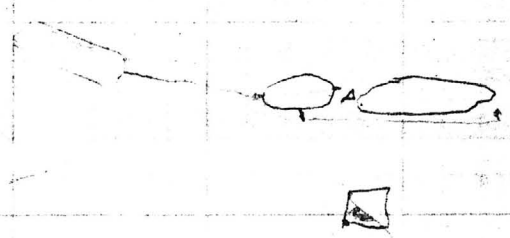
Jackson Mt.

Geology Notes

Trench @ pt. #2

Granite on SW side of trench
Veins of fluorspar in granite on NE side.
Extensive iron staining on NE side

Generally
Fluorspar is white to colorless to light green



Jackson MT.

(28) 17' from ~~NW~~ upper corner of trench to stn. 9. Bearing E-W.

(29) 42' from pt. 9 to end of trench on NE side.

Bearing of trench from that pt. is N 86°W.

Width of trench = 6'.

(30.) Outcrop in rd. 55' uproad from pt. 5 @ bearing N17°W

From pt 5 to rubble pile, pt. 3 is 265° (N80°E)

From ~~pt.~~ outcrop in the rd. to pt. 3. N 86°W.

(31.) 2nd cut. 28' long 4' wide Bearing of trench 146° (N34°W.)

238° from NW end of cut to pt. 3. (238° = 58 SW

Vein 1' wide.

Bearing from trench to pt. 5 S64°E.

---

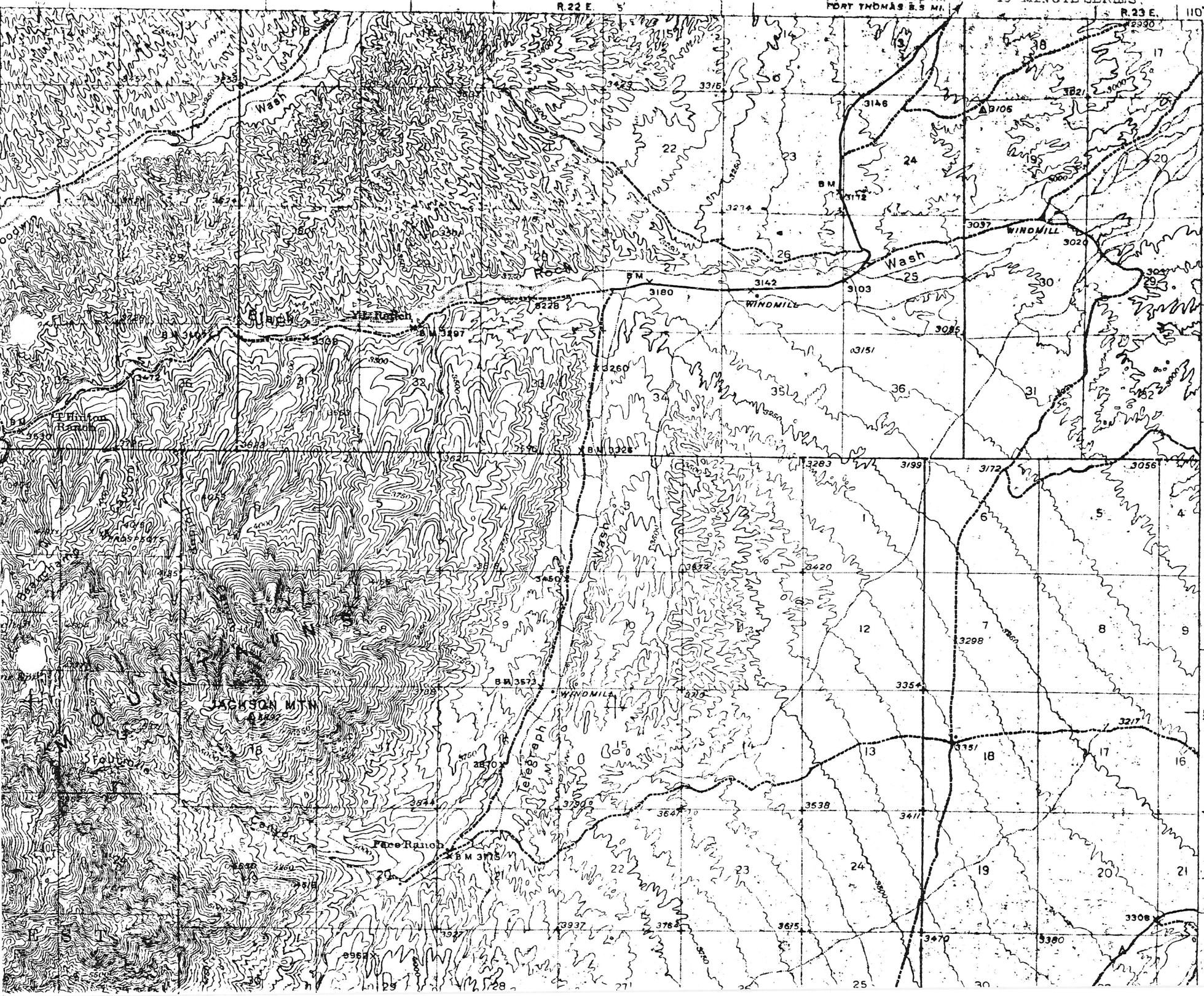
questions

1. where is trench @ pt. 2 ?

2. put note 27 on sep. paper.

3. note on geol. @ trench 2 - put on map when know where trench is

238
180
58 NE


R.22 E.
R.23 E.
FORT THOMAS 8.5 MI.
T.5 S.
T.6 S.
Wash
Rock
Wash
Black
Wash
Wash
Telegraph
WINDMILL
WINDMILL
WINDMILL
WINDMILL
Y.U. Ranch
Thinton Ranch
Face Ranch
JACKSON MTN
Canyon
JUNC. U.S. NO. 70 7.3 MI.
PIMA 12.6 MI.
FORT THOMAS 14.6 MI.

Gl sight Mountain Mine

Summary

Fluorite - quartz - calcite mineralization is associated with pegmatite + 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 ~~metal~~ metallurgical grade fluorspar.

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

MT. JACKSON MINE
also called
RHODES SPAR MINE

SUMMARY

Mineralization consisting of quartz and fluorite occurs in a fault in gneissic granite country rock. There has been production of approximately 1200 tons from the property and sampling has discolsed mineralization of possible commercial interest.

However, more detailed work would be necessary to determine the amount of ore reserves.

The property was examined on March 1 and 2, 1975 by John Earl, Glen Walker, and William Hirt.

LOCATION

The Mt. Jackson mine is located in Graham County, Arizona in the southeast quarter of section 6, T6S, R22E, in the Santa Teresa Mountains. The nearest town is Ft. Thomas, about 15 miles to the northeast. The mine is now inactive.

PHYSICAL FEATURES

The immediate mine area is hilly desert terrain with a sparce covering of vegetation. Annual precipitation is about 15 inches. Adequate water and power supplies are availabel at 5-10 miles from the mine. The last 2-3 miles of road leading to the mine are in very poor condition.

HISTORY

In 1953 300 tons of ore were mined and sent to the Duncan flotation mill. Two truckloads of this ore assayed 67% CaF_2, 3.4% $CaCO_3$, 27.0% SiO_2, and 2.4% Fe.

OWNERSHIP

The mine is owned by the Rhodes brothers, of Ft. Thomas, Arizona.

GEOLOGY

The fluorspar mineralization occurs in a fault, which strikes approximately S50E, and dips about 60° SW, in a gneissic granite country rock. Slickensides in place indicate that the fault movement was approxiamtely horizontal, but the relative movement and its magnitude are unknown. The main vein was along a single fault, but running sub-paralles to it is at least one and possibly more subsidiary veins or stringers of fluorspar.

The granite is silicified in the area of the veins. The flurospar is white to colorless to light green, and is associated with iron staining and quartz. Elevatorski (1971) reports that the vein in the large cut was 7 feet wide, but it is usually 1-3 feet wide.

Associated with the mineralization in the large open cut area is a diabase dike striking S36E and dipping steeply to the NE (?).

DEVELOPMENT

The most extensive surface excatation on the property is a 200 foot long trench-open cut which connects to some underground workings. These workings were not examined because they were deemed unsafe. In addition, three smaller trenches have been dug along the veins. Most of the production appears to have come from the large open cut and underground area.

SAMPLING

Pick and shovel were use d to expose the vein on the surface in several places. These exposures and outcrops in existing workings were sampled by chip sampling, and assayed for fluorite and silica. The results of the sampling are shown below; the samples are located on the map by number.

SAMPLE NO.	SAMPLE DESCRIPTION	%CaF	%SiO_2
1	12" vein in face of cut	44.22	15.38
2	18" vein located 10' NW of cut	52.19	15.34
3	12" vein on hanging wall of cut plus 6" on footwall	49.66	23.60
4 4	3" vein located 30' NW of cut	28.35	36.56
5	1" vein	47.17	2.52

These samples show some milling grade mineralization.

Some form of benefication would be necessary to make a marketable product.

CONCLUSIONS

There is some potential for further fluorite production from this property.

Beneficiation would be necessary to produce a marketable product.

More work is needed to define the tonnage of reserves.

RHODES MINE

This property contains 6 unpatented claims recorded in the Grhaam County Recorders office as the Jackson Mountain #1 through #6 in docket 98, pages 64 & 65, and docket 184 pages 300, 301, 302 & 303, by Charles R. Rhodes, Ft. Thomas, Arizona.

It is located in sections 6, 7 & 8, T6S, R22E. The USGS 15 minute Jackson Mountain quardrangle sheet covers the claims and indicates the mine elevation to be 4150 feet, and the location 110°07'30" Longitude, 32°56' Latitude.

The mine can be reached from Ft. Thomas, Arizona by traveling 11-1/2 miles SW up Black Rock Wash to .3 miles west of the YL ranch, turn left up a very bad trail 2 miles to the lower mine workings.

Mr. Rhodes states that the mine produced approximately 1200 tons that assayed 60-70% CaF_2 and 25-35% SiO_2. Five surface samples were taken but the underground portion of the mine was not entered as being too dangerous.

6010
extra

Mt. JACKSON MINE (also called RHODES SPAR MINE)

Summary

Mineralization consisting of quartz and fluorite occurs in a fault in gneissic granite country rock. There has been ~~minor~~ production of approx. 1200 tons from the property and sampling has disclosed mineralization of possible commercial interest.

However, more detailed work would be necessary to determine the amount of ore reserves.

The property was examined on March 1 and 2, 1975, by John Earl, Glen Walker, and William Hirt.

Location

The Mt. Jackson mine is located in Graham County, Arizona in the southeast quarter of section 6, T6S, R22E, in the Santa Teresa Mountains. The nearest town is Ft. Thomas, about 15 miles to the northeast. The mine is now inactive.

Physical Features

The immediate mine area is hilly desert terrain with a sparse covering of vegetation. Annual precipitation is about 15 inches. Adequate water and power supplies are available at 5-10 miles from the mine. The last 2-3 miles of road leading to the mine are in very poor condition.

History

In 1953 300 tons of ore were mined and sent to the Duncan flotation mill. Two truckloads of this ore assayed 67% CaF_2, 3.4% $CaCO_3$, 27.0% SiO_2, and 2.4% Fe.

Ownership

The mine is owned by ~~three~~ the Rhodes brothers, of Ft. Thomas, Arizona.

Geology

The fluorspar mineralization occurs in a fault, which strikes approximately S50E, and dips about 60° SW, in a gneissic granite country rock. Slickensides in place indicate that the fault movement was approximately horizontal, but the relative movement and its magnitude are unknown. The main vein was along a single fault, but running sub-parallel to it is at least one and possibly more subsidiary veins or stringers of fluorspar.

The granite is slicified in the area of the veins. The fluorspar is white to colorless to light green, and is associated with iron staining and quartz. Elevaterski (1971) reports that the vein in the large cut was 7 feet wide, but it is usually 1-3 feet wide.

Associated with the mineralization in the large open cut area is a diabase dike striking S36E and dipping steeply to the NE (?).

Development

The most extensive surface excavation on the property is a 200 foot long trench-open cut which connects to some underground workings. These workings were not examined because they were deemed unsafe. In addition, three smaller trenches have been dug along the veins. Most of the production appears to have come from the large open cut and underground area.

Sampling

Pick and shovel were used to expose the vein on the surface in several places. These exposures and outcrops in existing workings were sampled by chip sampling, and assayed for fluorite and silica. The results of the sampling are shown below; the samples are located on the map by number.

Sample No.	Sample Description	% CaF_2	% SiO_2
1	12" vein in face of cut	44.22	15.88
2	18" vein located 10' NW of cut	52.19	15.34
3	12" vein on hanging wall of cut pluss 6" on footwall	49.66	23.60
4	3" vein located 30' NW of cut	28.35	36.56
5	1" vein	47.17	2.52

These samples show some milling grade mineralization.

Some form of beneficiation would be necessary to make a marketable product.

Conclusions

There is some potential for further fluorite production from this property. Beneficiation would be necessary to produce a marketable product.

More work is needed to define the tonnage of reserves.

This property contains 6 unpatented claims recorded in the Graham County Recorders Office as the Jackson Mountain #1 thru #6 in docket 98, pages 64 & 65, and docket 184 pages 300, 301, 302 + 303 by Charles R. Rhodes, Ft. Thomas, Az.

It is located in sections 6, 7 & 8, T6S. R22E. The USGS 15 minute Jackson Mountain quadrangle sheet covers the claims and indicates the mine elevation to be 4150 ft. and the location 110°07'30" longitude, 32°56' latitude.

The mine can be reached from Ft. Thomas, Az. by traveling 11½ miles SW up Black Rock Wash to .3 mi west of the YL ranch, turn left up a very bad trail 2 miles to the lower mine workings.

Mr. Rhodes states that the mine produced approximately 1200 tons that assayed 60-70% CaF_2 & 25-35% SiO_2. Five surface samples were taken but the underground portion of the mine was not entered as being too dangerous.

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date June 8, 1966

1. Mine: MT. JACKSON

2. Location: Sec..... Twp..... Range..... Nearest Town FORT THOMAS Distance 15 miles
Direction S-Westerly Nearest R.R. SOUTHERN PACIFIC Distance 15 miles
Road Conditions 12 miles of good gravel, 3 miles of rough road.

3. Mining District and County: BLACK ROCK---GRAHAM CO. (BLACK ROCK DIST. NO LISTED)

4. Former Name of Mine: "SPAR"

5. Owner: CHARLES R. RHODES; JOHN C. RHODES; FREDDY A. RHODES.
Address: Box 27--- FORT THOMAS

6. Operator:
Address:

7. Principal Minerals: FLUORSPAR

8. Number of Claims: Lode 2 Patented..... Unpatented 2
Placer..... Patented..... Unpatented.....

9. Type of Surrounding Terrain: MOUNTAINOUS

10. Geology and Mineralization: FISSURE VEIN IN GRANITE GNEISS FILLED WITH ALTERED GABBRO AND FLUORSPAR VEINS

11. Dimension and Value of Ore Body: VERTICAL VEIN ABOUT 4 FEET WIDE, 300 FEET LONG, HAS BEEN MINED IN ONE PLACE TO A DEPTH OF 80 FEET.

Please give as complete information as possible and attach copies of engineer's reports, shipment returns, maps, etc. if you wish to have them available in this Department's files for inspection by prospective leasors or buyers.

(over)

12. Ore "Blocked Out" or "In Sight": NOT KNOWN

Ore Probable: 50,000 TONS POSSIBLE

13. Mine Workings—Amount and Condition: A WEDGE WITH THE SMALL END AT THE BOTTOM 80' DEPTH

	No.	Feet	Condition
Shafts			
Raises			
Tunnels			
Crosscuts			
Stopes			

14. Water Supply: NONE AT MINE AVAILABLE IN BLACK ROCK WASH 3 MILES DISTANT

15. Brief History: IN 1952 OPENED AND MINED FROM SURFACE BY TRENCHING AND OPEN CUT. SHIPPED 1208 TONS - 400 TO GENERAL CHEMICAL AND 800 TO EASTERN ARIZONA FLUORSPAR COMPANY

16. Remarks: HIGH SILICA LOW LIME AVERAGE 68%CaF-25%SiO_2-3% LIME- 3% Fe.

17. If Property for Sale, List Approximate Price and Terms: $50,000 via 10% or $1.00 per ton Royalty

18. Signature: s (Charles R. Rhodes)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Spar Mine

Date Oct. 6, 1954.

District Black Rock District ----Graham Co.

Engineer Axel L. Johnson

Subject: Present Status. Information ~~6~~ from William C. Rhodes, Owner.

Mr. Rhodes reported the mine closed about June 1, 1954 at the time of the closing of the Arizona Eastern Fluorspar Corp. mill. Reason for closing was lack of milling and marketing facilities.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Spar Mine Date Mar. 5, 1954

District (Black Rock) Clark District -- Graham County Engineer Axel L. Johnson

Subject: Report of Mining Operations

Location Sec. 6 -- Twp. 6 -- R 22. Property located about 16 miles south-west of Ft. Thomas. The road is good for the first 13 miles, and poor for the last 3 miles.

Number of Claims 2 unpatednted claims,

Owners Spar Mining Co., consisting of the following:- William C. Rhodes, Chas. R. Rhodes, William E. Rhodes, John C. Rhodes, and Joe H. Rhodes. (5 others, who previously held an interest in the company, sold their interest some time ago to the present owners).

Operators Same as above.

Officers William C. Rhodes, Manager.
Chas. R. Rhodes, Secretary.

Principal Minerals Fluorspar.

Number of Men Employed An average of 3 men, working about 1/2 time.

Production Rate About 100 tons of fluorspar ore has been produced monthly, working the mine about 1/2 time. The operators have not worked the mine full time recently on account of the fact that the Arizona Eastern Fluorspar Corporation to whom they have been selling the ore has been rather slow in making payments for same. (1,000 tons produced since Aug.'52)

Geology See previous report on the property under date of Nov. 7, 1952.

Ore Values Ore ran from 66 to 67 % CaF until 2 months ago. Ore is now running about 60 %. Operators hope to be able to average about 65 % on future production.

Ore in Sight and Probable Very little ore in sight, as the operators have not been able to do any exploration and development work on account of limited finances. Ore in sight is limited to the ore showings in the open cut where they are working, which is about 150 ft. long, and shows fluorspar ore in the bottom of same.

It is probable that considerable ore can be developed, as the ore vein can be traced on the surface for over 1,000 ft.

Milling and Marketing Facilities Operators haul the ore in their own trucks to the Arizona Eastern Fluorspar Corporation mill near Duncan----a distance of about 80 miles. Ore is sold to the Arizona Eastern Fluorspar Corporation at a sliding scale price, dependent on the CaF content. Ore is milled at the mill near Duncan, which operates intermittently.

Present Mine Workings Operators are mining the ore by open pit method, using a double drum slusher, scraping the ore up an incline and directly into the truck. This open cut is now getting quite deep in the lower end, and operators will have to sink a shaft very soon in order to continue mining this part of the vein. (open cut now 65 ft. deep)

Proposed Plans Operators plan to sink an inclined shaft (incl about 85 deg.) at the location of the present open cut.

Operators also plan to open up the vein from the surface at other locations.

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date Nov. 7, 1952.

1. Mine: Spar Mine

2. Location: Sec. 6 Twp. 6 Range 22 Nearest Town Ft. Thomas

   Distance 16 miles Direction south-west Road Condition Good for 13 miles. Poor for 3 mi.

3. Mining District & County: ~~Black Rock~~ Clark District ------ Graham County

4. Former Name of Mine: Jackson Properties

5. Owner: Spar Mining Co. composed of following 10 ----William C.& William E. Rhodes; John C., Joe H., & Chas. R. Rhodes; L.U., W.F., D.L., & L.L. Morrison; and G. W. Salyer.
   Address: L. U. Morrison, Box 87, Ft. Thomas, Arizona.-----Supt.

6. Operator: Same

   Address:

7. Principal Minerals: Fluorspar

8. Number of Claims: two Lode yes Placer
   located May 20, 1952
   Patented no Unpatented yes

9. Type of Surrounding Terrain: Rather rough and rocky. On northern slopes of Johnson Mountain on Santa Teresa Range.

10. Geology & Mineralization: Country rock is Schist. Fissure veins, almost vertical are found in the schist. Main vein strikes NNW---SSE, and is almost vertical. Vein material is about 12 ft. wide, but only the west 18 inches of the vein has any appreciable amount of fluorspar. This 18 inch streak has 12 inches of very good grade fluorspar in the centre, followed by about 3 inches of milling grade of poorer quality on each side. The remaining 10 1/2 ft. of vein material contain very little fluorspar. The fluorspar in this part of the vein occurs as small streaks, particles, and veins of milling grade fluorspar mixed in with soft decomposed schist. From 100 ft. to 200ft. east of this main vein, there are several narrower veins--5 to 12 inches wide.

11. Dimension & Value of Ore Body: Length is about 1000ft. Width is 16 to 18 inches. About 10 inches of this has fluorspar of about 90 % CaF_2. About 6 to 8 inches of this, representing the remainder of the vein, has fluorspar of about 50 % CaF_2.

12. Ore "Blocked Out" or "In Sight": From 150 to 200 tons

Ore Probable: From 2,000 to 5,000 tons

13. Mine Workings—Amount and Condition:

	No.	Feet	Condition
Shafts	1	100	Upper 40 ft. cut by trench. Lower 60 ft. filled in.
Raises			
~~xxxxxx~~ Trench	1	125 ft. long	From 0 to 20 ft. in depth.
Crosscuts			
Stopes			

14. Water Supply: No water available. Water for mine and domestic use will have to trucked from Ft. Thomas. Wells at Ft. Thomas would have enough water to supply the requirements of a small mill of about 50 tons.

15. Brief History: This property was located originally by Cornelius Jackson about 1903. Mr. Jackson had 10 to 12 claims, and he called it the Jackson Properties. Mr. Jackson sank the 100 ft. shaft, which is now cut by the trench dug by the Spar Mining Co. He was looking for Gold, Silver, And Lead---not Fluorspar. The ore was reported to have run about ~~$~~ $5.00 per ton in Gold, $2.00 per ton in Silver. A small quantity of Lead was sometimes found also.

Jackson held on to the claims for several years, and then allowed them to lapse on account of not doing the assessment work.

The present owners described above located 2 of these claims on May 20, 1952, and is calling it the Spar Mine, and calling themselves the Spar Mining Co.

Marketing Facilities (1) $ 22.95 per ton for 90 % CaF_2 f.o. b. Ft. Thomas offered by Sheffield Steel.

(2) $ 24.00 per ton for 90 % CaF_2 laid down in Deming, N. Mex. offered them by Allied Chemical and Dye Corp.

(3) $ 22.55 per ton for 80 % CaF_2 laid down in Deming, N. Mex. offered them by Allied Chemical and Dye Corp.

16. Signature: Abel L. Johnson, Field Engineer, Arizona Dept. of Mineral Resources.

Information contained in this report is from personal inspection and also information submitted by the owners.

17. If Property for Sale, List Approximate Price and Terms: The owners of this property say that they do not care to sell or lease same, but wish to operate it themselves.