



CONTACT INFORMATION

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Arizona Department of Mines and Mineral Resources Mining Collection

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09/20/85

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: TONTO MILLING AND MINING MILL

ALTERNATE NAMES:

GILA COUNTY MILS NUMBER: 313

LOCATION: TOWNSHIP 6 N RANGE 10 E SECTION 13 QTR. W2
LATITUDE: N 33DEG 51MIN 50SEC LONGITUDE: W 111DEG 17MIN 30SEC
TOPO MAP NAME: TONTO BASIN - 7.5 MIN

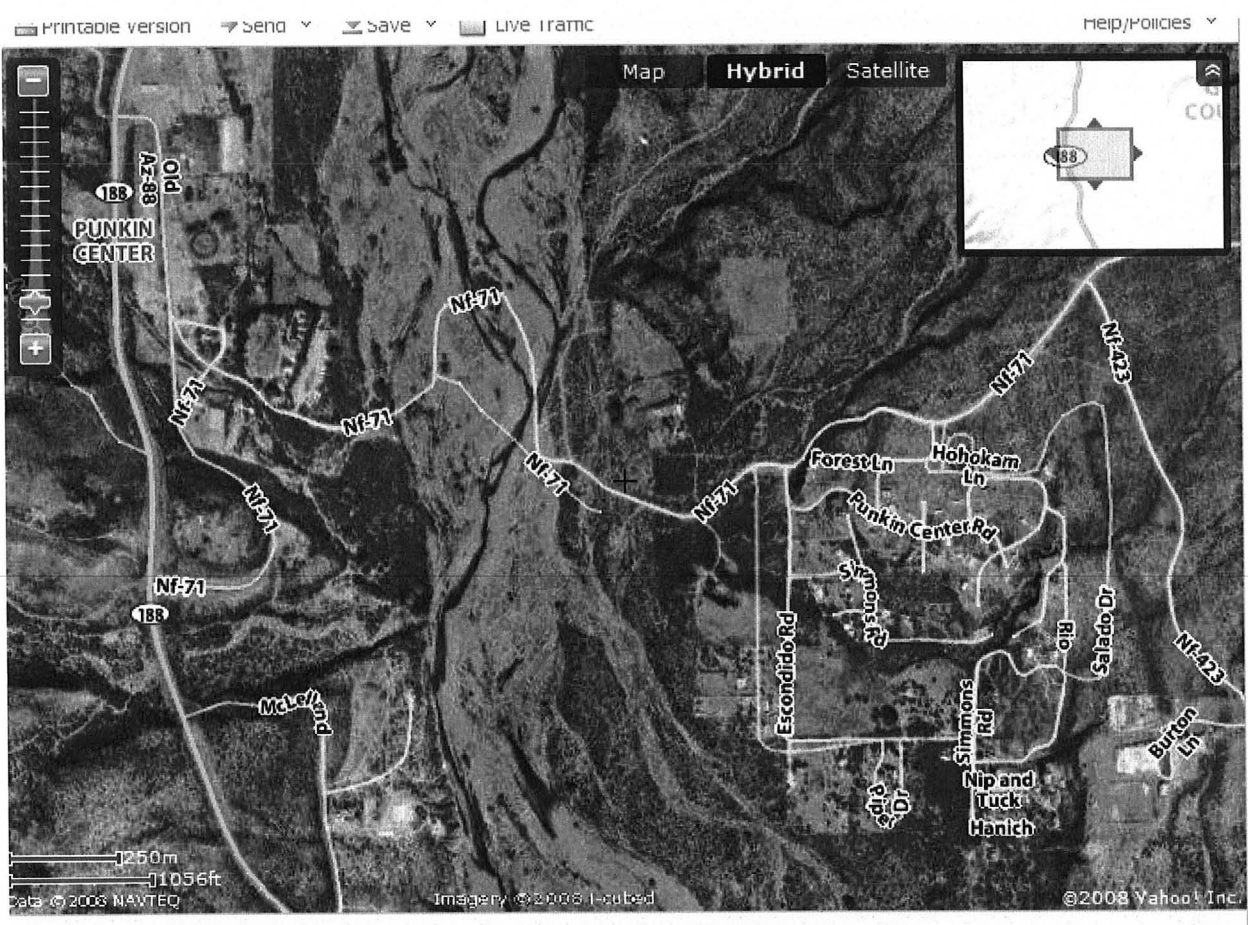
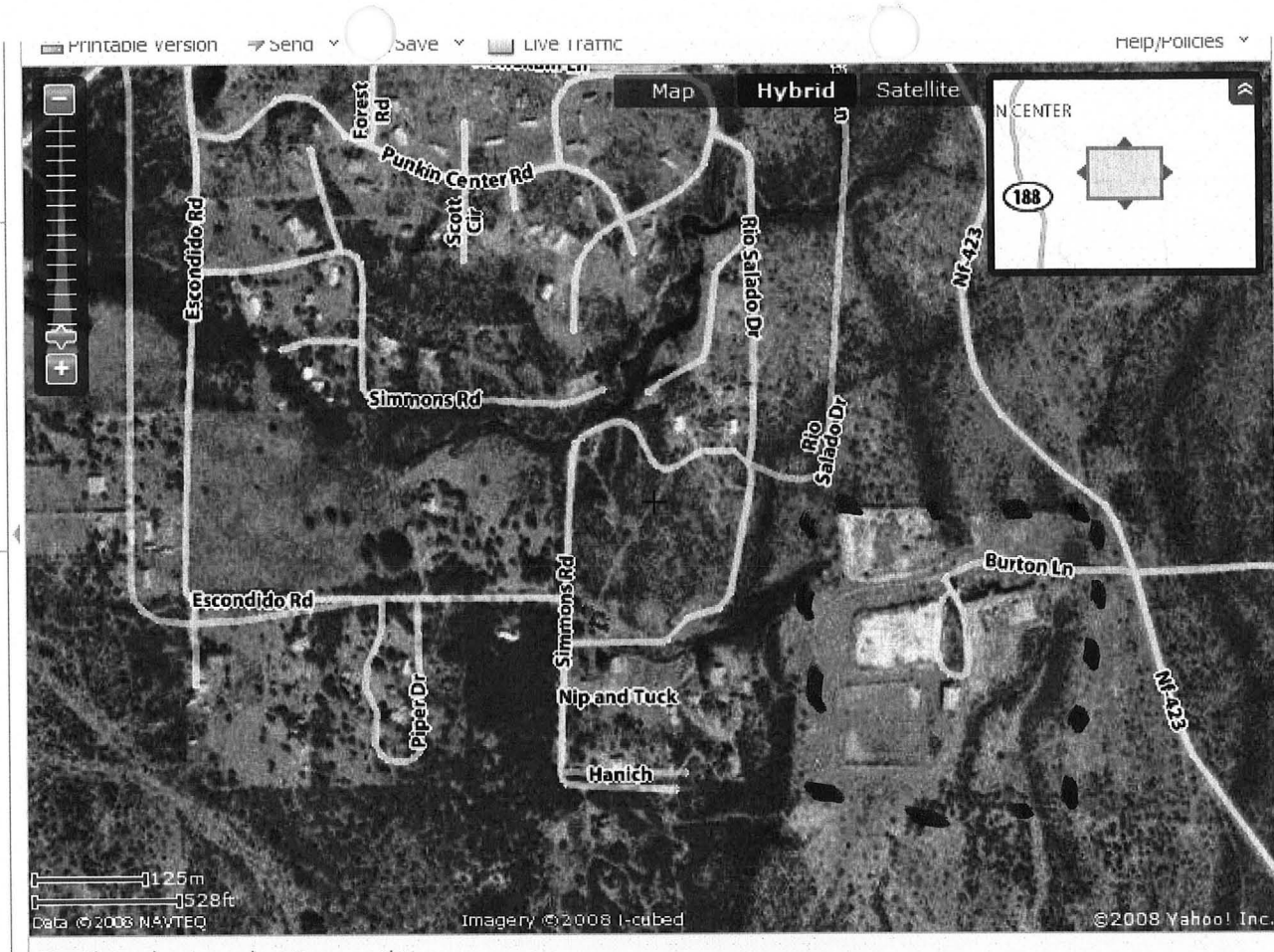
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COMMODITY:

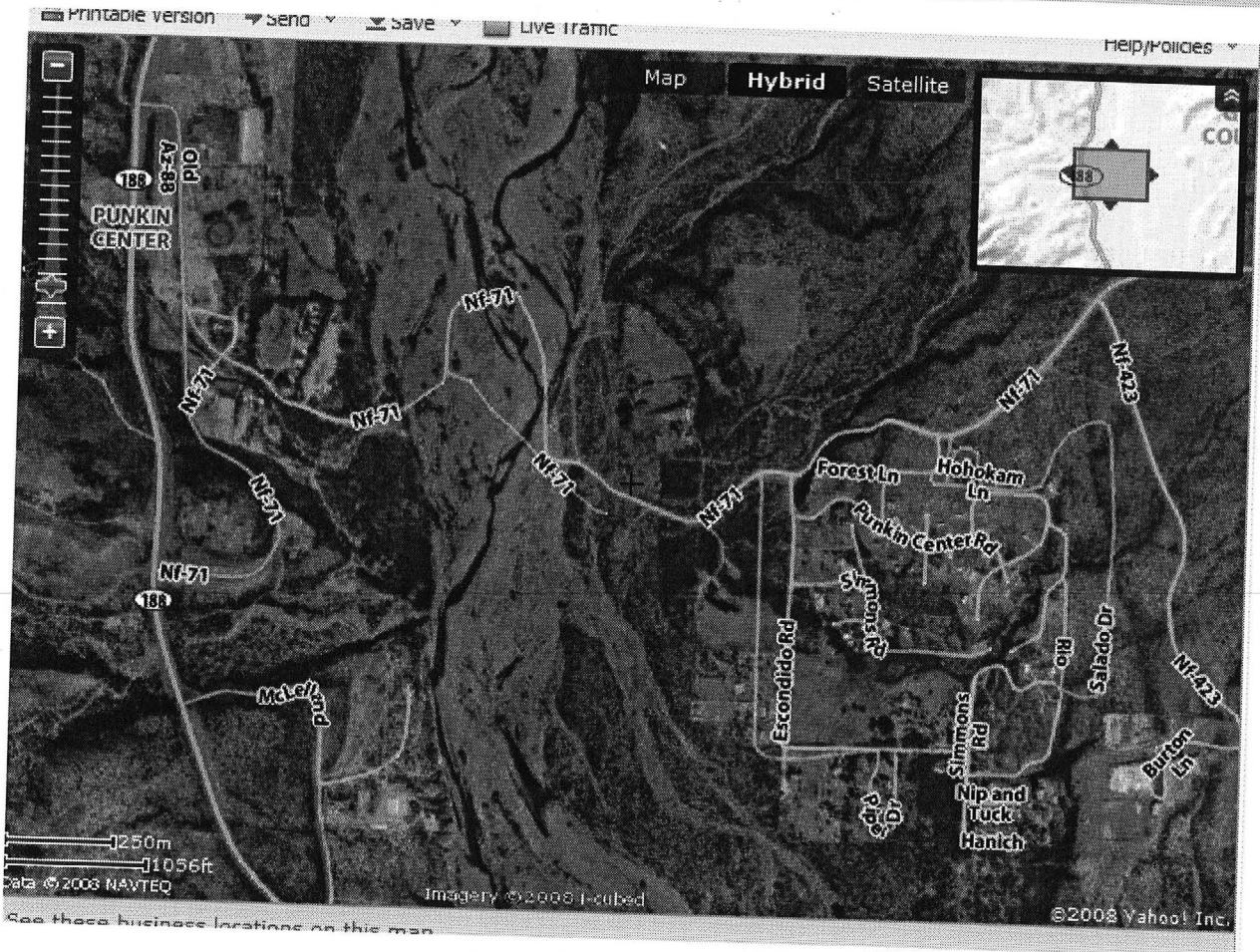
FLUORSPAR FLOTATION MILL

BIBLIOGRAPHY:

ADMMR TONTO MINING & MILLING FILE
MSHA MINE INFORMATION SUPPLEMENT
THE MILL ALSO CONCENTRATED LEAD ZINC ORE
MINING ENGINEERING, FEB. 1974, P. 110
"MINERAL & WATER RESOURCES" AZBM BULL 180, P
351
ADMMR TONTO BASIN FLUORSPAR DIST FILE
ADMMR BRICK MINE FILE - SANTA CRUZ CO.



See these business locations on this map



NILE BUILDING

480-941-0751
300 Ambassador Drive, Tempe, AZ 85281

FAX

Date: 4-1-01
 Number of pages including cover sheet:

To: Nyle W.

 Phone: _____
 Fax phone: _____
 CC: _____

From: ROBERT L. LANGGUTH

 Phone: 480 (480) 941-0751
 Fax phone: 480 (480) 941-0377

REMARKS: Urgent For your review Reply ASAP Please comment

The name of the power attorney that we had was called "Overable"
Here is the list of the equipment at Tonto Basin.
The person is Don Howe
Phone (cell) 602-341-8024

MILL BUILDING

- 1 Marcy Ball Mill 6' X 9' -100 hp motor and drive with controller and grids controls-rubber liners and grates except head liners of manganese with ball charge.
- 1 4 X 3 Galliger vac seal pump with 10 hp U.S. Vari-drive
- 1 D-10-B Krebs cyclone and redocer cone
- 1 5' X 5' conditioner (no motor)
- 3 Fag cells 36" with 10 hp motor each cell - 1
- 2 Fag cells 55" no belts
- 1 6 cell bank Denver 18 sp. float cells - 3 motors
- 1 6 cell bank Denver 21 sp. float cells - 4 motors
- 1 3' X 2' Galliger vacseal pump
- 1 16' thickener -Denver Thickener #3
- 1 6' J disc American filter with Nash vac pump and accessories
1 disc/M/R
- 1 10' thickener - Denver with 2" Denver adj. diaphragm pump-
outside
- 1 thickener with Wemco diaphragm pump 17' x 6' outside (N) side
- 1 Herdinge Ball Mill with drive -safety screen - 50 hp
- 1 Steam boiler - McKee -100 hp -gas fired.
- 1 6' J disc Oliver filter - I.R. -with fac pump -1 disc /M/M
- 1 Galligher sump pump
- 1 Rota clone dust collector
- 1 10'6" x 7'6" thickner tank or agitate (green) north side (with no
- 5 Clarkson reagent feeders?
- 1 4 x 5 conditioner (inside) (B tank-no motor)
- 1 mine vent fan - 5 hp motor
- 1 Complete Elec. Ind. oven large 6 pieces aprox. 6 tons.+G.E.

200
Ton Bin
R500
Main

Ther M... GE
Hypertherm Model H600

480 V Load 215 2600 lbs D-564088
Inductive Voltage Generator

KAP WR 6/19/81: Mike McCarthy of Pro Met Inc. (Tonto Mill) reported that a trucker is making hauls from Bishop, California to the Salt River Valley and could be available to backhaul tungsten ores or concentrates to Union Carbide at Bishop, California. He can be contacted through Mike McCarthy at Pro Met.

NJN WR 10/9/81: Tom Camm with UBM, East 360 3rd. Ave., Spokane, Washington 99202 is doing a MAS study of some flourspar properties. He was seeking information on the Red Rock and Quartz Ledge properties.

RRB WR 10/1/82: John Roberts, Box 513, Miami, Arizona 473-2267, reports that he has filed claims on the White Cow Group, Red Rock Group, and Blue Bird Group, (Tonto Mining & Milling) because the current "owner", Cimieron Corporation failed to do any assessment work prior to noon, September 1, 1982. He filed his claims at 12:01 p.m., September 1, 1982 and is now monumenting them.

RRB WR 10/8/82: John Roberts reports that the "previous" owners of the White Cow Group, Red Rock Group and Blue Bird Group in Gila County have threatened to blow in his tunnel or blow him away. Also that they are trying to get an injunction to remove him from the property. He says that they are reported sampling and assaying costs as assessment work.

KAP WR 6/22/84: The Tonto Mill has, over the last number of years, changed ownership from Tonto Mining and Milling to Pro-Met (c) to Cimieron Industries and now to a trust which is going to sell off the property. He said that to his knowledge, neither Pro-Met nor Cimieron ever did much at the mill.

RRB WR 6/21/85: Orville Green, Pro-Met, P O Box 551, Tonto Basin, Arizona 85553, phone 479-2227 reports that the Wagner Corp of Portland, Oregon is the current owner of the Tonto Basin Mill (Tonto Mining and Milling Co - file). Mr. Green is their local representative.

RRB WR 8/28/87: Visited the Tonto Basin Mill now owned by Frontier Mining and Milling Inc. It appears to be intact and in good condition. No one was there but I later talked to Don Martin by telephone. He reports that in concert with a Canadian Company they are going to spend \$3.2 million to strip out all of the old equipment and install a new mill. Initially they will treat their own ore from various sources and concentrates from Nevada. Eventually they hope to function as a custom mill.

FLUORSPAR MILL

Horace Miller reported that Jack Hamilton told him that Excell Minerals, Taft, California, paid within a week on shipments. GWI WR 8/4/75

The Grasmoen Brothers have delivered samples to Tonto Mining and Milling Company. (Brick Mine file) VBD WR 9/9/75

Don Howe, general manager of Tonto Mining and Milling Company, has sold his interest in the operation and no longer works for the company. Jack Hamilton is now v.p. and gen. mgr. VBD WR 9/23/75

I drove to the Tonto Mining and Milling Company mill near Punkin Center to discuss custom and toll milling plants with Jack Hamilton. He provided copies of his present lead and zinc sales contracts, which I agreed to keep confidential. He also provided cost estimates, etc., The mill has now been modified to receive fluorspar from the mine in the McFadden Peak area, and is operating one shift daily. The road to the mine precluded hauling sufficient tonnage to keep the mill busy three shifts. Work has commenced to decrease road grades. Hamilton advised that a chemical plant to make zinc sulphate has been erected in Mesa. The plant can handle five tons of zinc concentrates (sphalerite) per week, and will increase tonnage to 10 tons later. VBD WR 4/5/76

In a telephone conversation with Jack Hamilton at Tonto Mining and Milling Company, learned that they are milling fluorspar from Woody Nichols property on McFadden Peak. The McFadden Peak property (claim names not known) had been previously explored by U.S. Steel Corp. Road access to the mine has been completed but is reportedly difficult to negotiate with tonto's large highway ore trucks. The fluorspar (fluorite ore) runs 60% CaF₂; 800 tons are piled at the mill and 200 tons are piled at the mine. Jack Hamilton also reported that a contractor is working Tonto's Bluebird mine and has blocked out 7000-8000 tons of fluorspar. They are about to start pulling ore of variable grade for shipment to the mill. KAP WR 3/25/76

Accompanied Ken Phillips to Tonto Milling Co. Mr. Jack Hamilton took us on a tour of the mill. GAM WR 4/28/76

Field interview with Jack Hamilton at Tonto Mining & Milling. They are still milling fluorspar from the McFadden Peak property. He stated that if there were one or more mines which had proven reserves to justify he could assemble a 60 tpd lead-zinc circuit within the mill. KAP WR 4/28/76

RRB WR 6/19/81: Assisted Mike McCarthy of Pro-Met (Tonto Mill) find information on the White Cow, Quartz Ledge, Packard, Bluebird and Walnut Fluorspar Mine in Gila County.

Went to Tonto Mining and Milling Company mill at Punkin Center where Mr. Howe said they had been closed for several months due to the fall in price of acid grade fluorspar. He gave the impression that if and when the price of spar goes to \$70.00/ton that they will probably get spar from the McFadden Peak deposit, which was recently drilled and turned down by U. S. Steel Company. GW WR ~~11-2-73~~

10/30/73

Stopped at the mill of the Tonto Mining and Milling Co. at Punkin Center where both Don Howe, manager, and Jack Hamilton, supt., said they were custom milling Pb-Zn ore from various mines but were needing more ore to keep the mill operating on a steady basis. They charge \$25.00/ton for milling and return the concentrate to the miner; however, very recently Jack has made a firm arrangement with Tony Kroha, ore buyer for AS&R, to take 50 tons of Pb con and 100 tons of Zn con each month. Jack said that AS&R were very desirous of obtaining Zn but were stockpiling the Pb. GW WR 10/17/74

Drove to Tonto Mining and Milling Company near Punkin Center where I talked to Jack Hamilton and Don Howe. This milling operation is the best of the small mills, and the company has good lead and zinc smelter contracts. VBD WR 2/6/75

Called Ed Grasmoe, Prescott, to advise of market at Tonto Mining & Milling for ores from the Choctaw lode claim in Santa Cruz County. VBD WR 2/11/75

Vic and Bill examined both the White Cow and the Red Rock mines of the Tonto Mining and Milling Company. I got the production records of the fluorspar operation; 18,223.08 tons were milled from 10/12/71 to 6/15/73 which produced some 13,000 tons of +95% cons. GW WR 5/30/75

Went to Tonto Mining & Milling Company office and discussed the cost of the mill and its operation with the mill supt., Jack Hamilton. He said the mill cost a total of approximately \$500,000 and the cost of its operation on fluorspar was \$10 to \$15 per ton depending on the daily tonnage milled. He thought the total cost of mining was about \$15/ton including development work. The Tonto Mining & Milling Co. mill site is on patented land. GW WR 6/2/75

I rode with Ken Phillips to the Punkin Center mill to talk to Jack Hamilton about a mill in southern Arizona. Neither he nor his company are interested in a mill in southern Arizona. Jack believes the small lead-zinc producers will do better to ship his ores to the Punkin Center mill. Since he has the only lead-zinc marketing contracts in the state, there is little else that can be done. Lead concentrates go to Asarco's smelter at El Paso and zinc concentrates to National Metals' zinc smelter at Bartlesville, Oklahoma. VBD WR 7/23/75

I called Jack Hamilton to tell him that Wolfe Model representing International Minerals and Metals Corp., was soliciting purchases of copper concs. and precipitates for sale of copper to foreign markets. Hamilton said he needed such a market and would call immediately. He also said that he now had a long term sales contract for zinc concs. with National Zinc at their Bartlesville, Oklahoma, smelter. They pay 65% of market quotation for silver in the zinc concentrates for all above four ounces. VBD WR 8/12/75

TONTO BASIN MINING & MILLING

GILA

Went to Punkin Center but couldn't cross the Tonto Creek ford to Tonto Basin Mining and Milling Company operation, but at least the dryer was observed to be in operation. GW WR 10/26/72

Hal Susie, BLM, called to inquire about the closing of the Tonto Mining Company fluorspar mill. Although we have no official word on it closing, Mr. Pendergast, Tolleson, said he had contacted them regarding leasing the mill to concentrate his cinnabar; it is therefore, assumed fluorspar milling has stopped. GW WR 10/1/73

(602) 479-2521
(602) 479-2510

FAX No. _____

FRONTIER



MINING & MILLING
INC.

Drawer 840
Tonto Basin, Az. 85553

STATE MINE INSPECTOR

SEP 04 1987

TONTO MILLING AND MINING MILL (F) GILA

September 2, 1987

Gary Cothrun
Deputy Mine Inspector
Office of State Mine Inspector
1624 W. Adams Room 208
Phoenix, AZ 85007-2606

RE: Mill at Tonto Basin, AZ,; operated by Frontier Mining & Milling, Inc.

Dear Gary,

As of this date, we are still waiting for the completion of our financing before any of the repairs can be started. Hoping this will be completed by the middle of this month. I will have one electrical contractor, F & R. Electric, Payson, AZ. doing some small electrical repairs.

To this date, there are only three people at the mill, myself, my wife, and my son.

I will contact your office immediately upon completion of the financing.

Sincerely,

A handwritten signature in dark ink, appearing to read "Don Martin". The signature is written in a cursive, flowing style.

Don Martin, President,
Frontier Mining & Milling Inc.

DM;1km

File - Tonto Mining & Milling file
TONTO MINING & MILLING CO., INC.

TONTO BASIN, ARIZONA 85553

GENERAL OFFICE & MILL
P.O. BOX 275
TONTO BASIN, ARIZONA 85553
602/467-2350

MMO M
ADMINISTRATIVE OFFICE
P.O. BOX 2314
MUSCLE SHOALS, ALABAMA 35660
205/383-7322

March 25, 1982

Pay Dirt
P. O. Drawer 48
Bisbee, Arizona 85603

Re: Tonto Mining & Milling Co., Inc.
An Arizona Corporation

Gentlemen:

This letter is to advise you that Tonto Mining & Milling Co., Inc., an Arizona Corporation, no longer owns or operates the Tonto Mill located near Punkin Center in Tonto Basin, Arizona, nor does it own or operate any mining claims in that area.

This ownership and operation terminated December 5, 1980. Should any person represent to you in connection with any transaction that they are Tonto Mining & Milling Co., Inc. or any variation of that name, you should be advised that such reference is not to the undersigned and any credit or other action that you take in reliance upon such representative should be at your own risk, and not at the risk of the undersigned unless prior thereto you check with Tonto Mining & Milling Co., Inc. at its operations in Muscle Shoals, Alabama and specifically with Perry Bigbee, Bill Post or Lin Michael at that address.

Yours very truly,

TONTO MINING & MILLING CO., INC.

Perry Bigbee

Perry Bigbee
President

kr

cc. Susan

*R
EFT
REVIEWS*

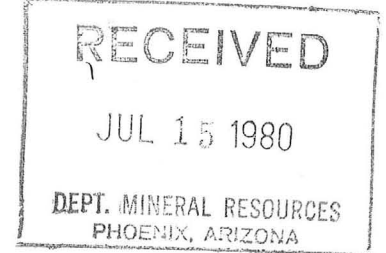
TONTO MINING & MILLING CO., INC.

TONTO BASIN, ARIZONA 85553

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602 / 467-2350

ADMINISTRATIVE OFFICE
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MUSCLE SHOALS, ALABAMA 35660
205 / 383-7322

July 11, 1980



Ms. Ann Turney
Department of Mineral Resources
Mineral Building, Fairgrounds
Phoenix, Arizona 85007

Dear Ms. Turney:

I received your letter of July 8, and appreciate your interest in our operations.

We have closed our mill in Tonto Basin, perhaps not permanently, but at least for an indefinite period. The mill is for sale. It was advertised in the Phoenix, Las Vegas, and Denver papers this Spring, and will be advertised shortly in the EMJ and Wall Street Journal.

Mr. John Jett of your department has some knowledge of our operation; Mr. Bigbee had a short telephone conversation with him on July 10 regarding the mill.

I am enclosing an inventory of our equipment for your files.

Thanks again for your interest.

Sincerely,

TONTO MINING & MILLING CO., INC.

A handwritten signature in cursive script that reads "Bill Post".

Bill Post
Controller

kr

Enclosure

TONTO MINING & MILLING CO., INC.

TONTO BASIN, ARIZONA 85553

GENERAL OFFICE & MILL
P.O. BOX 275
TONTO BASIN, ARIZONA 85553
602 /467-2350

ADMINISTRATIVE OFFICE
P.O. BOX 2314
MUSCLE SHOALS, ALABAMA 35660
205 /383-7322

BUILDINGS

- 1 40 x 80' shop-office-supply building (insulated)
- 1 25 x 50' chemical building (insulated)
- 1 mill buildings

RECEIVED

JUL 15 1980

DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

- 1 crusher covering building 19 x 70'
- 1 steam boiler building 14 x 15'

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CHEMICAL BUILDING

Mill Equipment

1	25 hp submerisble pump
1	30 hp submersible pump
1	5 hp gear reduced motor
1	vertical compressor - Chicago - pneumatic 5 x 4"
1	new 5 hp motor for water pumps
1	used 5 hp motor for water pumps
1	15 hp rebuilt motor for deep well pump
19	motors - various sizes
7	new troughing idlers for conveyor belt
1	Deming water pump - 1-1/2"
2	filter blowers
1	3 hp pump - filtrate
	various V-belt pulleys
	various bearings
1	set of used Timken bearings for Ball Mill roller
	1300 lbs Quebracho
	25# Separan MP-10
3	bags copper - sulfate crystals
	1200 lbs hydrated lime
11	10' pieces 4" pipe - new
36	10' pieces 2" pipe
	used valve parts for filter
1	set conveyor belt take-ups (small)
	various V-belts
	25'6" channel iron
	60'1" round steel
	20'4" schedule 80 PVC pipe
	15' 1/4 x 4" flat steel
	10' 3/8 x 2-1/2" angle iron
	10' 3/16 x 3" angle iron
	20' 5/8 round steel
1	3" flange valve
	various pieces roller chain
1	deep well pump for 40' setting

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MILL BUILDING

1 Jeffrey vibrating feeder - operating
1 Jeffrey vibrating feeder - less controls
1 Universal jaw crusher 10 x 20 with hp motor & v-belts
1 conveyor belt 16" x 40'
1 Symons cone crusher - 20 hp motor
1 vibrating screen 3' x 5' - 5 hp motor
1 conveyor belt gear reducer 24" x 21 drive - 1 hp
1 elevator
1 wooden ore bin
1 feeder conveyor - vari-speed drive 16" x 13'
1 cross conveyor 20" x 18'
1 Marcy Ball Mill 6' x 5' - 100 hp motor and drive with controller
1 and grids controls - rubber liners and grates except head
1 liners of manganese with ball charge
1 4 x 3 Galliger vac sel pump with 10 hp U. S. vari-drive
1 D-10-B Krebs cyclone
1 5' x 5' conditioner
3 Fab cells 66" with 10 hp motor each cell
3 Fag cells 55"
1 6 cell bank Denver 18 sp. flot cells
1 6 cell bank Denver 21 sp. flot cells
1 3" x 2" Galliger vacseal pump
1 4" x 4" Galliger vacseal pump
3 1-1/2" x 1" Galliger vacseal pump (300 ea.)
1 16' thickener - Denver
1 4" Denver adj. diaphragm pump
1 6' 3 disc American filter with Nash vac. pump and accessories
1 10' thickener - Denver with 2" Denver adj. diaphragm pump
1 Thickener with WEMCO diaphragm pump
1 conveyor with drive
1 short 4' screw conveyor to dryer
1 x 30 gas fired concentrate dryer
1 12" x screw conveyor
1 12' x 30' coned silo supported
1 6" x 5" x 60' chain elevator for dry concentrate
1 Hardinge Ball Mill with drive
1 Dorr duplex rake classifier Model C
1 Steam boiler - McKee - 100 hp - gas fired
1 6'3 disc Olver filter - complete I.R. - with vac pump
2 5 hp 2" water pumps
1 12,000 gal propane tank
1 Galliger sump pump
1 Roto clone dust collector
1 submersible pump - hp

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MILL BUILDING - CONTINUED

1 submerisble pump - hp
1 23-ton soda ash bin tank - steel
1 400 amp electric welder (electric driven)
12" Denver dry reagent feeder
1 18" Denver dry reagent feeder
8 Clarkson reagent feeders
1 4 x 5 conditioner
1 time clock
2 stainless reagent tanks
1 Denver 10" laboratory pressure filter
1 Denver pulp scale
1 3 hp air compressor (shop)
4 Fire extinguishers
1-1/2 tons of 3" steel grinding balls
1 3" diaphragm pump - Denver
1 2" Allen-Sherman Hoff sand pump
1 pipe vise
1 1" Denver vertical pump
1 Platform scale for feed weight
1 Drill hammer

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SHOP EQUIPMENT

1 300 amp Airco DC welder - gasoline driven - portable
1 60 gal air receiver tank with 3 25' lengths 3/8 air hose
1 set gas welding and cutting equipment
1 oxygen bottle
1 Acetylene bottle
1 1-ton chain hoist
1 1/2 hp Sears grinder on stand
1 Wilton bench vise
1 work bench
1 2 hp water pump
6 C clamps - various sizes
2 new Alemite lever grease guns
2 used grease guns
1 oil suction gun
1 O ring kit
1 oxygen regulator
1 hose repair tool (welding hose)
4 rolls various gasket material
1 oil pump for 80-14D oil for transmissions
2 conduit benders
2 rolls emery cloth
1 electric grinder (Sears)
1 Sears 1/2" electric drill
1 Sears electric chain saw
1 hand saw
1 Sears 7" electric saw
1 Scroll saw with blades
1 4 amp battery charger
1 large puller - 3 leg
1 small puller - 3 leg
1 pipe vise
1 4" pipe threader
1 set bolt dies
1 set 1/8 to 2" pipe threaders
1 pipe cutter to 2"
1 set end wrenches 3/8 to 1-1/4"
1 set Allen wrenches
1 wood bit brace
4 pipe wrenches 8-14-14-24"
1 tin snips
2 chain binders
5 fire extinguishers
1 set 1/2" sockets

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SHOP EQUIPMENT - CONTINUED

1	15 Kva transformer
1	4# hammer
1	chipping hammer
1	claw hammer
1	floor jack
1	20-ton jack
1	5-ton jack
1	gas hot water heater
1	barrel pump
1	station gasoline pump
1	new 1000-20 tire
2	new 1000-22 tires for Black Mack
1	5 gal can oil pump for 90 wt. oil
1	5 gal grease gun filler pump
1	Tachometer
1	Sears 3/8" drill
1	Mine vent fan - 5 hp motor
1	100 KW Cat Power plant

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SUPPLY ROOM

2 4" PVC female adapter couplings
6 3" PVC couplings
3 3" PVC ells
5 3" PVC splicing couplings
3 3" PVC male adapters
3 2-1/2" PVC tees
3 2-1/2" PVC ells
8 2-1/2" PVC couplings
2 3" x 1-1/2" PVC reducer
2 2-1/2" x 2" PVC bushings
3 2-1/2" x 1-1/2" PVC reducers
3 2-1/2" PVC tees
1 2-1/2" PVC adapter, male
37 assorted pipe bushings
23 assorted pipe couplings
18 assorted pipe bell reducers
66 assorted pipe unions
52 assorted pipe ells
22 assorted pipe tees
53 assorted pipe nipples
large amount PVC small pipe fittings
1 1 HP Teel water pump (new)
3 cans Nordback crusher liner cement
1 band-it tool with stainless strap
2 bearings and seals for concentrate trailer wheels
assorted nuts & bolts
assorted all thread
small amounts of lock washers & cotterpins
1 set 3/4" sockets
1 1/4 & 3/8 socket sets
parts for Clarkson reagent feeders
various filters for trucks
4 diaphragms for 3" diaphragm pump
assortment of roller chain
5 10' pieces of 1/2" conduit
2 10' pieces of 1-1/2" conduit
4 gal. Ridgid threading oil
various wood nails
1 box baler wire
various cans of paint
1 bronze worm for thickener
various small V-belts
1 box block grease for Ballmill trunions

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SUPPLY ROOM - CONTINUED

56	100 W H.D. bulbs
6	F40 CW Flor.
	assorted elec. cond. fittings, boxes, etc.
3	600V 200,000 amp fuses
23	Motor heater coils 1023 - 1035
1	3" valve

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TONTO BASIN, ARIZONA 85553
602 /467-2350

ADMINISTRATIVE OFFICE
P.O. BOX 2314
MUSCLE SHOALS, ALABAMA 35660
205 /383-7322

CHEMICAL BUILDING - CONTINUED

Mine Equipment

1	20' long hole drill steel 7/8
1	15' long hole drill steel 7/8
14	2' drill steel - used 7/8
20	4' drill steel - used
22	6' drill steel - used
10	8' drill steel - used
	various pieces ventilation tubing
1	mine air tugger - Ingersoll Rand single drum
2	Copco sump pumps - air
1	air timber saw
9	air legs
2	stoper drill machines
2	pavement breakers - air
8	jack-leg drill machines
	various air hoses 1/2" to 1-1/2"
1	rail-bender
2	oilers for drill machines
1	3 sheave rop block
7	snatch blocks

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ASSAY OFFICE

1 Electric furnace - Thermolyne 1500
1 hot plate and hood - gas
1 water still - Wheaton - electric
1 pH meters
1 Voland 100 pulp balance with weights
7 large Nalgen bottles for water and acids
all glass-ware and chemicals to assay fluorspar
2 Burets stands with 4 vurettes
2 Guth spray bottles
4 100 cc graduates
1 1000 cc graduates
1 suction fan with 440 motor
drying pans
20 galvanized sample buckets - various sizes
1 small sample splitter
1 Braun pulverizer with spare plates
1 Ohaus sample scale
1 set weights - 100 to 1000 grams
1 sample pulverizer
1 sample jaw crusher 4 x 3
1 sample splitter - 10 x 18 with pans
1 1000 gram Denver test cell
1 set screens 100-150-200-325
1 2000 gram Denver test cell

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OFFICE

- 1 6-drawer desk
- 1 secretary chair
- 1 straight back chair
- 1 book case
- 1 Underwood typemaster typewriter
- 1 paper punch
- 2 staplers
- 3 desk top paper file baskets (stacked)
- 1 4-drawer file cabinet
- 1 Texas Instrument model TI-5100 calculator
- 1 Apeco Super Stat II copy machine
- 1 Titan dual watt heater
- 1 First Aid kit
- 1 fire extinguisher
- 1 Kenmore air conditioners (window)
- 2 postal scale
- 1 pencil sharpener
- 1 various office supplies - pencils, pens, paper clips, etc.

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P.O. BOX 2314
MUSCLE SHOALS, ALABAMA 35660
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BLACK DIAMOND MILLING PROJECT

(On Loan with Option to Purchase the Following Equipment)

1 pH meter
1 Clarkson reagent feeder
1 Denver dry reagent feeder
1 filter blower

TONTO MINING & MILLING CO., INC.

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ROLLING STOCK

1 Mod 500 Bobcat loader - diesel
1 Mod 600 Bobcat loader - diesel
1 Hough Mod 50 front end loader - gasoline
1 Hough Mod front end loader
1 Michigan 125 loader
1 1965 Chev. 2-1/2-ton truck - dump bed flat
1 Mack tractor 1971 - 335 Cummins
1 Hobbs end dump trailer
1 Mack dump truck - 10 wheeler - custom
1 1973 3/4 ton 4WD Chev. pick-up
2 Fruehauf concentrate trailers
1 1978 4WD Chev. 1/2-ton

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YARD MINE EQUIPMENT

- 1 Gardner-Denver truck - wagon drill
- 1 Jaeger 600 cfm compressor with 671 diesel mounted on Chev. truck
- 1 LeRoy 250 cfm compressor with 453 GMC diesel - portable (excellent)
- 1 Gardner-Denver 500 cfm compressor with D-13000 Cat engine - portable
on 4 steel wheels
- 1 Gardner-Denver mucking machine - 18 ga.
- 1 Model ATD 3100 Track drill - Gardner Denver
- 1 Single drum mine hoist

TONTO MINING & MILLING CO., INC.

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ADMINISTRATIVE OFFICE
P.O. BOX 2314
MUSCLE SHOALS, ALABAMA 35660
205 / 383-7322

PATIO

- 1 12" potable screw conv. 30' long
- 1 Gardener Denver mucking machine 18"
- 1 bucket belt elevator 8 x 6 buckets - 45 high
- 1 Eimco mucking machine
- 1 Chicago pneumatic horizontal stationary compressor
- 1 mine hoist - single drum (Hendric)
- 1 Murphy scale - 65 ton - 50' long - portable

July 8, 1980

Mr. Perry Bigbee, President
Tonto Mining & Milling Co., Inc.
P.O. Box 2314
Muscle Shoals, Alabama 35660

Dear Mr. Bigbee:

In an effort to keep our files current, we would like to check the following information with you.

Has the Tonto Mining and Milling Company ceased operations permanently in Tonto Basin, Arizona? Also, is the mill for sale?

As you know, this Department is not a regulatory agency. As part of our service to the public in promoting mines and mining in Arizona, we maintain a rather extensive number of files on Arizona mines. We have these files available to the public for their information. For this reason, we try to keep our information as current as possible, which is why I have written to you.

Any information you could give me would be greatly appreciated.

Sincerely,

Ann Turney
Administrative Assistant

1978

EVALUATION

of the

WHITE COW FLUORSPAR MINE
RED ROCK FLUORSPAR MINE
BLUEBIRD FLUORSPAR MINE

of

GILA COUNTY, ARIZONA

by

JOHN O. RUD
CONSULTING GEOLOGIST

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INTRODUCTION

FOREWORD

An evaluation of Tonto Mining and Milling Company, Inc. fluorspar mines was conducted during June, 1978 at the request of Harry M. Knight. The primary purpose of the examination was to determine the readily accessible ore reserves and economic potential of the White Cow, Red Rock, and Bluebird fluorspar mines.

This report will be based on information obtained from the data covering the district, (1) U. S. Bureau of Mines Bulletins, (2) U. S. Bureau of Mines Investigation of the Bluebird Fluorspar Mine, (3) Arizona Bureau of Mines Bulletins, and (4) Arizona Fluorspar by E. A. Elevatorski.

In addition, geological mapping, surface sampling, underground mapping and sampling was completed on the three fluorspar mines during June, 1978.

VEGETATION AND CLIMATE

The fluorspar mines lie within the Sierra Ancha mountains that border Tonto Basin on the east. The vegetation in the area is sparse and consists of the usual desert variety. (Plate 1)



FIGURE 1 - LOCATION MAP

The summer climate is dry and hot with an average July temperature of 87.5 degrees. The winter climate is moderate with an average January temperature of 44.4 degrees. Rainfall recorded in the Sierra Ancha mountains during 1977 was 15.7 inches.

ORE RESERVES CALCULATIONS

The definition of fluorspar reserves in this report will utilize the terms agreed upon by the U. S. Bureau of Mines and the U. S. Geological Survey to designate respective classes of mineral reserves.

The ore reserve classes are:

MEASURED ORE is ore for which tonnage is computed from dimensions revealed in outcrops, trenches, workings and drill holes and for which the grade is computed from the results of detailed sampling. The sites for inspection, sampling and measurement are so closely spaced and the geological character is so well defined that the size, shape, and mineral content are well established. The computed tonnage and grade are judged to be accurate within limits which are stated, and no such limit is judged to differ from the computed tonnage or grade by more than 20 per cent.

INDICATED ORE is ore for which tonnage and grade are computed partly from specific measurements, samples, or production data and partly from projection for a reasonable distance on geologic evidence. The sites available for inspection, measurement, and sampling are too widely or otherwise inappropriately spaced to outline the ore completely or to establish its grade throughout.

INFERRED ORE is ore for which quantitative estimates are based largely on broad knowledge of the geologic character of the deposit and for which there are few, if any, samples or measurements. The estimates are based on an assumed continuity or repetition for which there is geologic

evidence; this evidence may include comparison with deposits of similar type. Bodies that are completely concealed may be included if there is specific geologic evidence of their presence. Estimates of inferred ore should include a statement of the special limits within which the inferred ore may lie.

The ore reserves will be calculated from the data provided by the mine maps, geology of the mines, and production data from comparable mines in the geologic province. The ore body will be divided into two parts: the ore partly or completely developed (Indicated) and the ore probably present (Inferred) but not proven by drill holes or openings.

A vein depth of 200 feet has been estimated on the data from mines located in the same geologic setting and age of fluorspar mineralization.

The cubic-foot-per-ton factor has been calculated from Examination and Evaluation of Mineral Property by R. D. Parks utilizing the specific gravity of the vein material. An 11.5 cubic foot per ton factor will be employed in all ore reserve calculations.

The average mining width used in the calculations will be 3.5 feet with a cut-off grade of 50% fluorspar.

The dilution of the ore is minimal employing the mining methods of the present operators. For example, the Bluebird mine presently sorts the ore 3 to 5 times before shipping to the mill. In addition, when the fluorspar vein pinches, split

Plate 1 - View of Tonto Basin from Juniper Mountain.

Plate 2 - White Cow Mine head frame and hoist house.

shooting is employed to prevent dilution of the fluorspar with the wall rock.

LACK OF MINE RECORDS

In June of 1977, Tonto Mining and Milling Company's flotation mill had a fire that started in their assay facility. The fire quickly spread through the shop area and offices and destroyed all mine and mill records. Therefore, all fluorspar production from the three mines will be estimated by the amount of development work completed and inspection of the underground drifts, stopes and crosscuts.

WHITE COW MINE

LOCATION

The White Cow mine is located in T.7N., R.11E., section 16 of Gila County, Arizona. The mine lies in a small canyon occupied by Quartz Ledge Spring at an elevation of 3180 feet. The property is on the foothills of the Sierra Ancha mountains that border Tonto Basin on the northeast.

ACCESS

Access to the White Cow mine is via Greenback road from Punkin Center to the Quartz Ledge Spring junction.

Then 7 miles on a non-maintained one-lane road passable by two-wheel drive vehicles to the mine.

MINING HISTORY

The White Cow mine was purchased by Tonto Mining and Milling Co., Inc. during the early 1970's. Tonto Mining and Milling have excavated numerous trenches and sank a 100-140 foot decline on the fluorspar vein. The decline is at a -24 degree angle and has rail, headframe, and hoist house in good condition. (Plate 2)

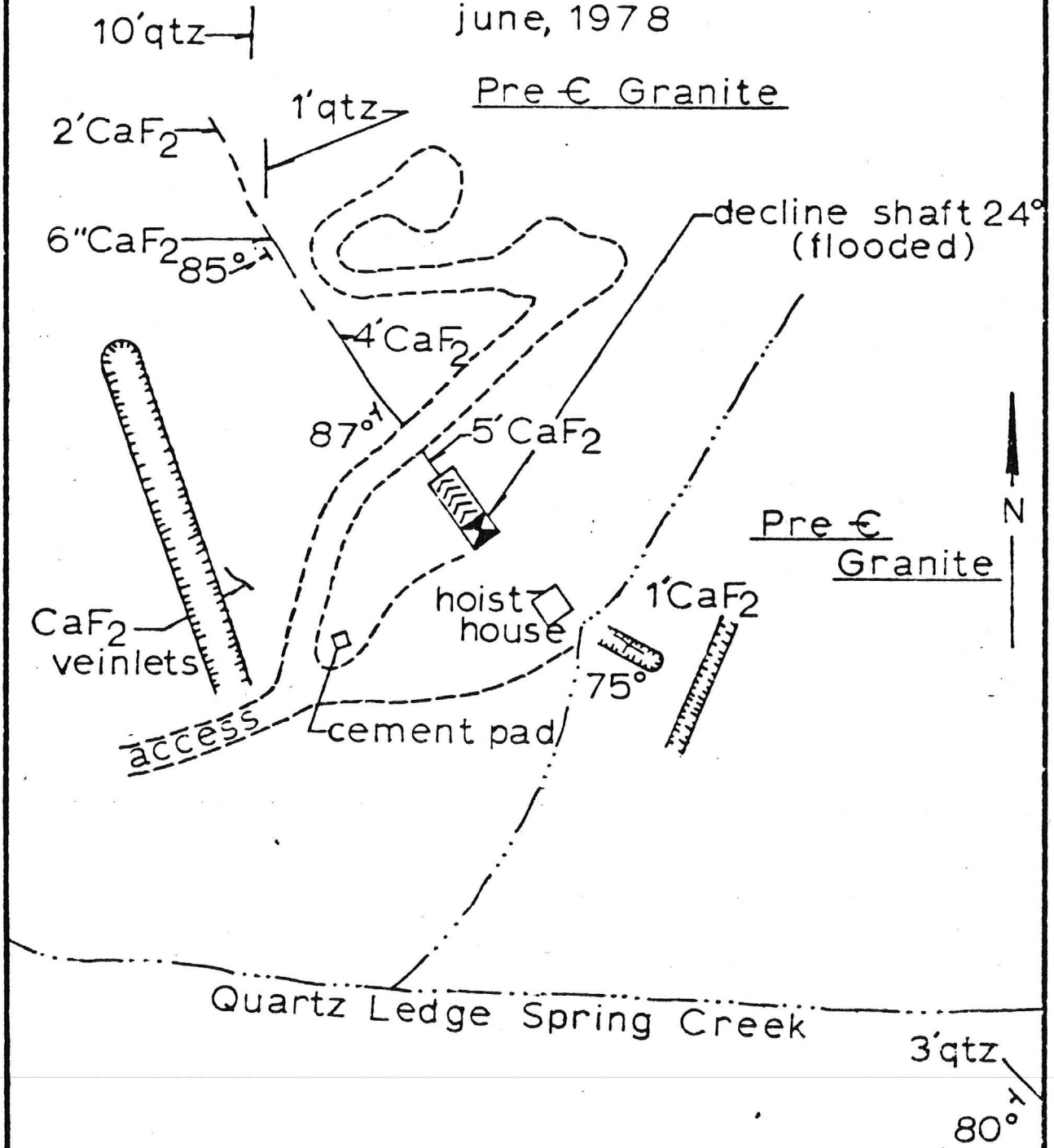
At the present time the decline is full of water and must be pumped before actual mining operations can be resumed. Due to the lack of mine records, no data is available on the amount of ore mined from the White Cow mine. It is estimated by the amount of work completed that less than 500 tons of fluorspar has been produced from this mine.

GEOLOGY

The property is underlain by pre-Cambrian granite. The granite has large pinkish potash feldspar crystals in a hypidiomorphic groundmass. The quartz phenocrysts are clear and the plagioclase occurs in light colored grayish laths.

Plate 3 - White Cow Mine fluorspar vein. Vein is
above decline portal.

WHITE COW MINE
QUARTZ LEDGE CANYON
Gila Co., Arizona
june, 1978



scale: 1" = 200'

FIGURE 3

The fluorspar occurs as a fissure vein in the granitic rock and strikes N45-50W and dips 85 degrees southwest. (Figure 3) The fluorspar occurs as white and purple crystals and has a gangue of quartz with minor calcite. No metallic minerals was observed within the fluorspar mineralization.

The fluorspar vein in the vicinity of the decline is five feet wide (Plate 3) and narrows to 12 inches about 400 feet to the northwest. (Plate 4)

A quartz dike crops out approximately 500 feet northwest (Figure 3) of the portal. The quartz is a pure white color with minor amounts of iron staining and forms a conspicuous ledge for what the area is appropriately named.

To the southeast the vein pinches out and cross veining occurs. Within a trench cut in the canyon wall to the southeast of the hoist house a cross vein of fluorspar twelve inches wide was mapped. Continuing on strike to the southeast a quartz dike crops out similar to the dikes that crop out on the northwestern portion of the property. (Figure 2)

A 20 by 300 foot trench (Figure 3) has been excavated southwest of the fluorspar vein. It is reported that a 50 foot winze had been sunk in this area on a good fluorspar vein. No evidence of this can be found at the present time due to the caving of the trench walls.

WHITE COW MINE
 QUARTZ LEDGE SPRING, GILA COUNTY, AZ.

LONGITUDINAL SKETCH — LOOKING EAST

SCALE 1" = 200'

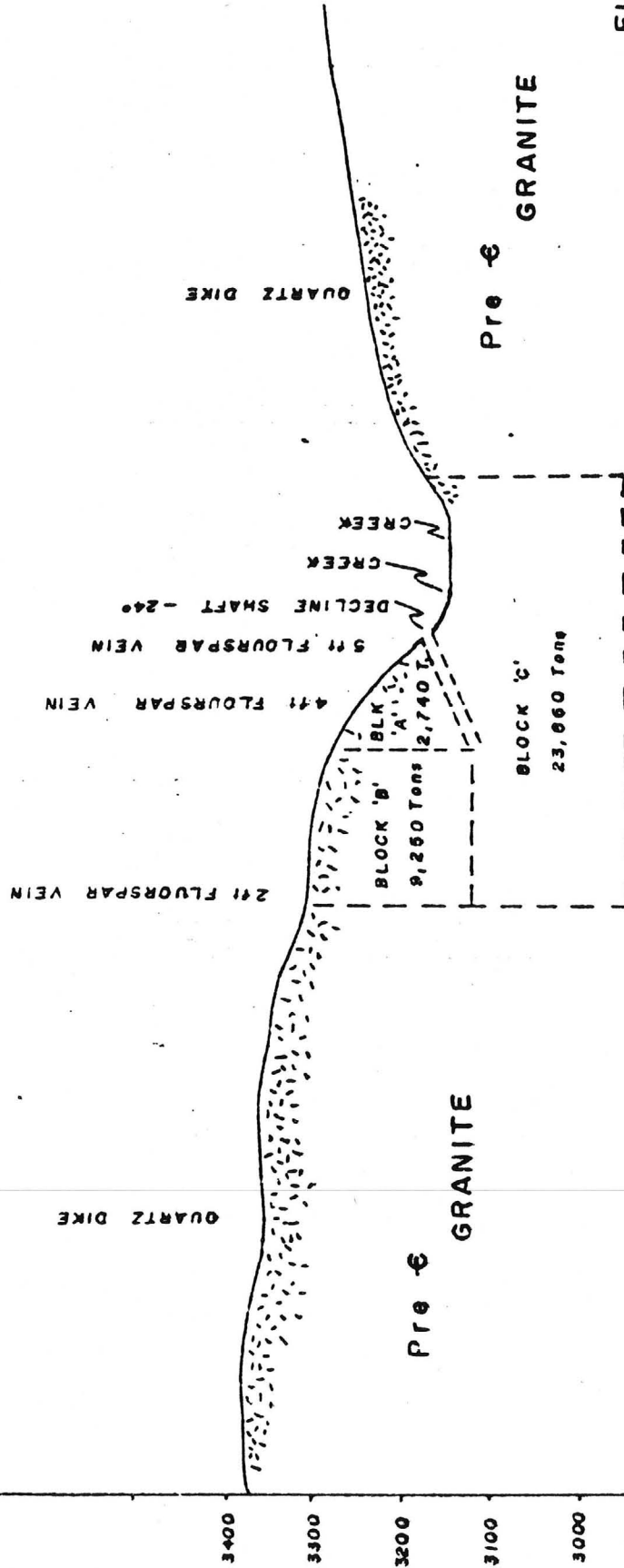


FIGURE 2

FLUORSPAR RESERVES

The White Cow fluorspar reserves are diagrammed in figure 2. The indicated ore reserves are blocked out above the existing decline and is continued as far north as the outcrop of a 2 foot wide fluorspar vein.

The inferred ore block (Block C) extends the fluorspar mineralization to a depth of 200 feet.

Combining the indicated and inferred ore reserves, the White Cow mine is estimated to have 35,850 tons of fluorspar with a grade exceeding 50% fluorspar.

RED ROCK MINE

LOCATION

The Red Rock mine is located in T.7N., R. 12E., section 19 of Gila County Arizona. The mine is in a small narrow canyon cut by Red Rock spring. (Plate 5) The canyon is immediately northwest of Picture Mountain, a well-known landmark in the area. The portal is at an elevation of 5300 feet.

ACCESS

Access to the property is via Greenback road to Forest Service road 416 for a distance of 5 miles. This road is Forest Service owned and maintained by Gila County. The

mine is accessible by two-wheel drive vehicles.

MINING HISTORY

The Red Rock mine was purchased and opened by Tonto Mining and Milling Co., Inc. during the early 1970's. A reported 500 feet of drift was driven on the vein to provide a haulway for the stoping operation above this 1st level. (Plate 5)

The stopes examined indicate an average height of approximately 75-100 feet and a width of 3-8 feet. No record of production is available but it is estimated that less than 5,000 tons has been mined from the 1st level of the Red Rock mine.

A short 30 foot crosscut was driven at a later date approximately 40 feet below the 1st level and a small amount of ore was produced from this area.

During May and June, 1978, Earl Waite and Sons, a mining contractor, drove a 280 foot crosscut and intersected the vein about 70 feet below the 1st level. Upon completion of the crosscut, a drift to be used as a haulway was driven on the vein for a distance fifty feet in a southeast direction. Approximately 75 tons of ore was produced from this drift.

This work completed the contract with Earl Waite and

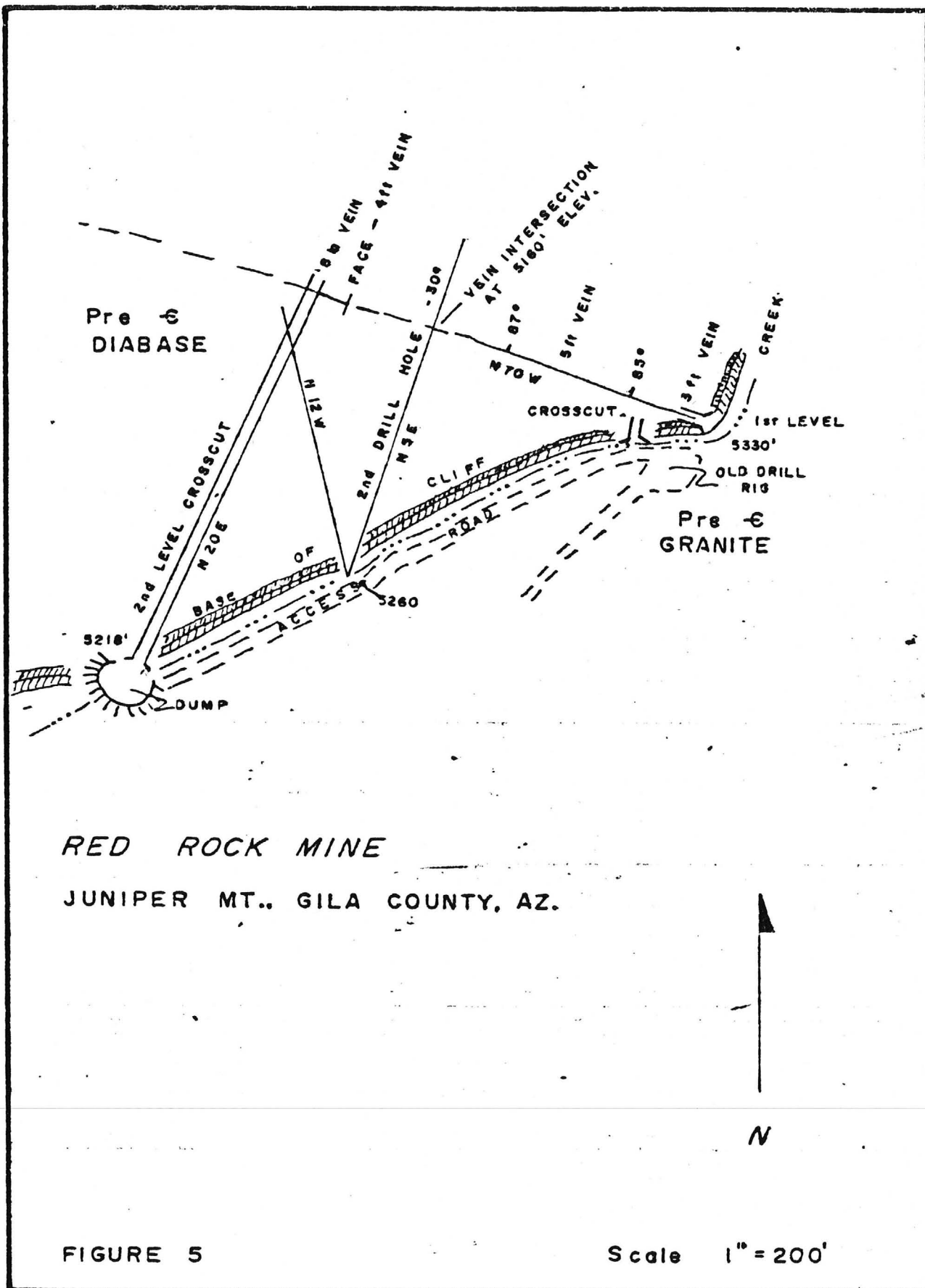
Plate 5 - Red Rock Mine. Note diabase sill forming
cliff above 1st level portal of mine. (arrow)
Fluorspar vein to right of portal.

the mine is now dormant pending approval from the U. S. Forest Service on the construction of a new access road from the new production level to Forest Service road 416. Approval of this project is expected during June and the construction of the three-quarter mile road will then be completed. Mining is expected to resume in July with an estimated daily production of 25 tons.

In addition to the mine development, two drill holes were completed during 1976. The 2nd drill hole intersected the fluorspar vein at 5160 feet of elevation with a vein width of 10 feet. This intersection is 100 feet below the 2nd level or the present working level of the Red Rock mine.

GEOLOGY

The Red Rock mine area is underlain by a diabase sill of pre-Cambrian age. (Figure 5) The diabase is fine to medium grained, medium to dark gray color and has an ophitic texture. The rock weathers to a reddish-brown color and forms a very thin soil cover on the sill. In a few instances, gravity differentiation was noted. Layers of feldspar concentration up to four inches thick were observed from outcrops in the uppermost section of the sill. Olivine



RED ROCK MINE

JUNIPER MT., GILA COUNTY, AZ.

FIGURE 5

Scale 1" = 200'

concentration was noted from float along the base of the cliff. No effort was made to locate the specific zone of olivine concentration at this time.

This intrusive has been mapped by Wilson and Moore of the Arizona Bureau of Mines and Cooper of the U. S. Geol. Survey and the intrusive appears on the geologic map of Arizona as a younger rock unit than the pre-Cambrian granite. The contact between the pre-Cambrian granite and the pre-Cambrian diabase is near the portal of the 1st level of the Red Rock mine. (Figure 5) The sill appears to be discordant in relation to the granite and dip less than 10 degrees to the northeast.

Mapping on the surface of the intrusive, above the mine workings, indicates numerous quartzitic dikes, quartzose aplite dikes and sills associated with the diabase. Fluorspar veins and veinlets also crop out on the surface of this sill and indicate additional fluorspar mineralization may be present.

A quartzitic unit, paralleling the fluorspar vein in the Red Rock mine was sampled and assayed for fluorspar. Results indicate a definite correlation between quartzite and the fluorspar mineralization and may have provided the necessary mechanism for the fluorspar concentration in this area.

The fluorspar vein is exposed in the 1st level haulway for a distance of approximately 300 feet. The haulway is caved at this point and no attempt was made to examine the remaining workings.

The fluorspar vein is a fissure vein along a shear zone in the diabase sill. Silica and minor amounts of calcite are the common gangue minerals in the vein. The fluorspar vein pinches and swells at a random interval. The width varies from 18 inches to 5 feet. The mineralization within the vein also varies in fluorspar content. The swells have zones of high grade surrounded by numerous veinlets.

The vein seldom varies more than 10 degrees from vertical and has a consistent strike of N70W for the 300 feet of haulway examined.

The vein has been exposed in the 2nd level for a distance of 48 feet. It varies in width from 18 inches to 5 feet at the face. The vein has not been exposed for a sufficient distance to observe the pinch and swell characteristics of this type of mineralization. Samples taken from the dump and veins indicate that a grade of 50-60% fluorspar can be maintained during active mining operations.

RED ROCK MINE

JUNIPER MOUNTAIN, GILA COUNTY, AZ.

LONGITUDINAL SKETCH — LOOKING NORTHEAST

SCALE 1" = 200'

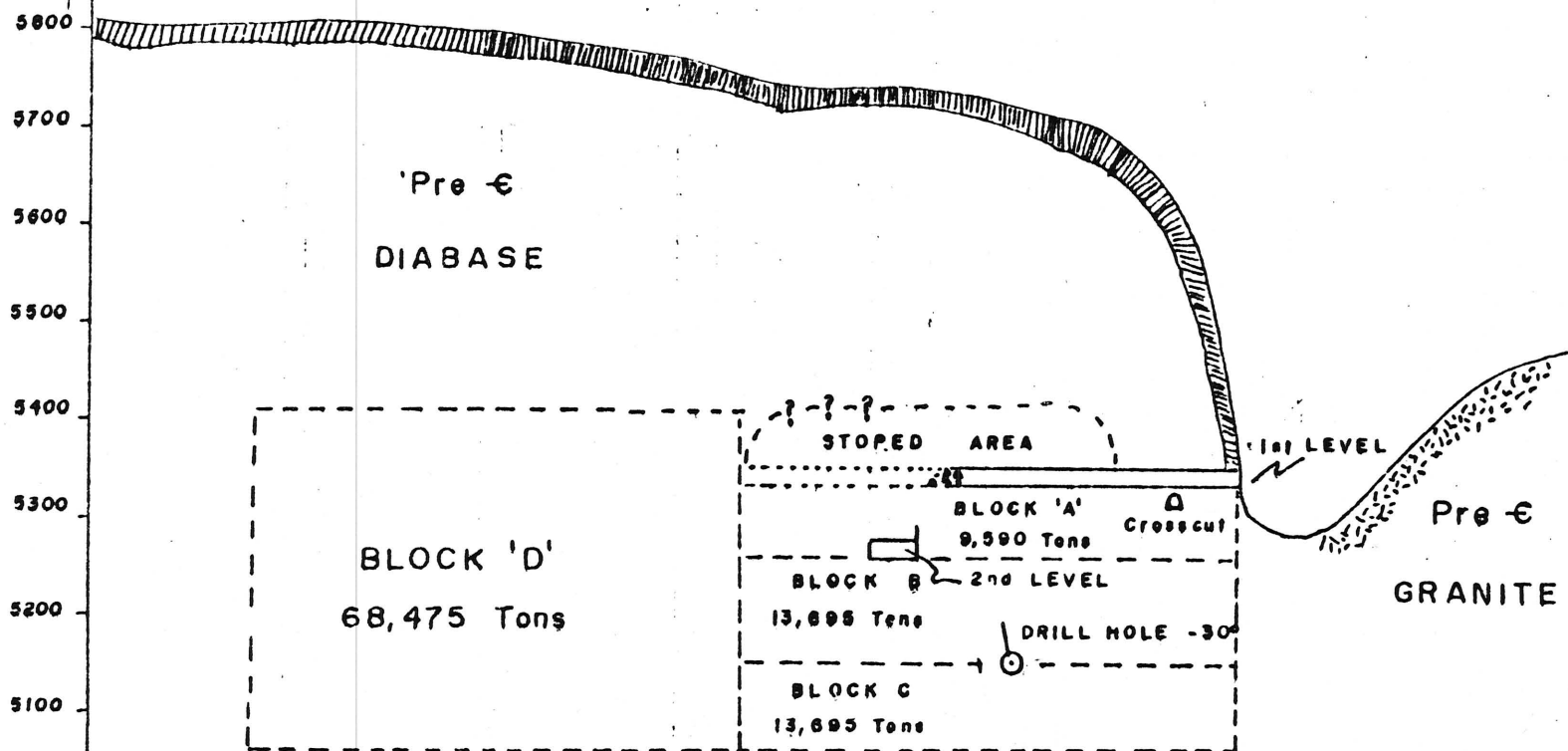


FIGURE 4

FLUORSPAR RESERVES

The Red Rock fluorspar reserves are diagrammed in figure 4. The indicated reserves are located below the 1st level and above the drill hole that intersected the vein at 5160 feet of elevation.

The inferred ore blocks extend the mineralization an additional 100 feet in depth and 500 feet laterally.

The total ore reserves for the Red Rock mine are estimated at 105,455 tons with a grade exceeding 50% fluorspar.

BLUEBIRD MINE

LOCATION

The Bluebird mine is located in T.6N., R.11E., section 9 of Gila County, Arizona. The mine lies in a canyon occupied by Edwards spring at an elevation of 3220 feet.

ACCESS

Access to the mine is from Punkin Center via Greenback Road to Tonto Mining and Milling Co., Inc.'s mill and then on 6 miles of semi-improved single lane road to the mine. The road is passable to a two-wheel drive vehicle.

MINING HISTORY

The Bluebird mine, (Plate 6) also known as the Packard fluorspar property, was examined by the U. S. Bureau of Mines during 1945. The Bureau conducted an exploration program consisting of overburden stripping, trenching, tunneling, surveying and sampling.

During 1958 a limited amount of production was reported from the 1st level of the Bluebird mine. The ore produced was trucked to a 25 ton flotation mill east of Punkin Center. The mill has been reported to have made small shipments of acid grade fluorspar during the year 1958.

During the late 1960's E. A. Elevatorski of the Arizona Bureau of Mines visited the Bluebird mine and reported:

"Principal development working consist of two adits, the lower adit of which was advanced 75 feet, and exposes a white, green and purple, coarse to medium grained crystalline fluorspar vein, about 2 ft. in width. The upper adit extends 320 feet and exposes a 3 ft. wide vein of white, green and purple fine grained crystalline to massive fluorspar."

In the early 1970's Tonto Mining and Milling purchased the mine and began a small mining operation. The 2nd level was advanced over 600 feet on the vein and became the principal haulway. No production records are available and the stopes are presently in unsafe condition, therefore, no estimate on the amount of production can be made at this time.

Plate 4 - View of White Cow fluorspar vein looking northwest. Arrow indicates location of portal.

Plate 6 - Bluebird Mine. A = 1st level, B = 2nd level, C = 3rd level.

A decline has been sunk to establish the 3rd level, approximately 150 feet below the 2nd level and is now the present working level.

A core drilling program was also initiated at this time to intersect the vein near the access road. The drill hole was never completed and the core drill is still on site. (Plate 7)

At the present the mine is operated by John Roberds, mining contractor, and is producing 25-35 tons of fluorspar a day at 60% grade.

GEOLOGY

The Bluebird mine is underlain by pre-Cambrian granite. (Figure 6) The granite has large pinkish potash feldspar crystals in a hypidiomorphic groundmass. The quartz phenocrysts are clear and the plagioclase occurs in light colored grayish laths. The granite weathers into the typical fine granular material that is characteristic of granitic weathering.

The fluorspar vein occupies a fault zone (Plate 8) which strikes N75W and has a 75°NE dip. (Figure 6) In the eastern part of the claims the fault zone is within the creek bed and is largely concealed by overburden. Gouge on the hanging

Plate 7 - Bluebird Mine. Note drill rig still
on location.

Plate 8 - Bluebird Mine. Post mineralized fault is
denoted by broken line.

wall contains fluorspar fragments which indicated the fault is post-mineralization. Numerous cross shears were also noted on the surface of the 3rd level and are believed to have influenced the ore deposition.

The fluorspar vein can be traced for a distance of 2,000 feet in an east-west direction. It varies in width from 18 inches to 6 feet. The vein outcrops in the creek bed approximately 700 feet east of the 2nd level portal. It has a width of 4.5 feet and has a 6 inch zone of gouge with fluorspar fragments on the hanging wall.

The fluorspar occurs as very fine grained material for the most part. In some instances large crystals of white to purple fluorspar can be seen. Quartz, along the hanging wall, up to 5 inches in width, is also common.

The mineralization to the west becomes increasing siliceous and the fluorspar appears to die out approximately 500 feet west of the 1st level portal. A fluorspar outcrop was located about 3500 feet west of the workings and has a vein of 30 inches wide. The vein could not be traced laterally due to the amount of overburden.

FLUORSPAR RESERVES

The Bluebird fluorspar reserves are diagrammed in Figure 7.

The indicated ore blocks are located above the present haulage level and below the 2nd level. The ore is blocked out on three sides and could be classed as measured in most instances. In this case a comprehensive sampling program was not carried out so the ore blocks will be classed as indicated.

The inferred ore blocks extend the mineralization 200 feet below the 3rd level and 1000 feet laterally to the east. The lateral extension is warranted due to the fluorspar outcrops in the creek bed.

The total reserves of the Bluebird mine are estimated at 118,205 tons with a grade exceeding 50% fluorspar.

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United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS
INTERIOR BOARD OF LAND APPEALS
4015 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22203

UNITED STATES
v.
GEORGE R. EDELINE ET AL.

IBLA 74-262

Decided February 17, 1976

Appeal from a decision by Administrative Law Judge Robert W. Mesch finding four mining claims valid.

Remanded.

1. **Mining Claims: DISCOVERY-Nature of Requirement-extent of deposit-prudent man test.**
To constitute a discovery of a valuable mineral deposit under the mining laws, there must be sufficient mineralization shown to warrant a prudent man to invest his time and money with the reasonable expectation of developing a valuable mine.
2. **Mining Claims: PRACTICE AND PROCEDURE-Appeal-evidence outside of record-new evidence.**

Evidence offered on appeal from an initial decision by an Administrative Law Judge after a hearing in a mining contest may not be considered or relied upon in making a final decision but may only be considered to determine if there should be a further hearing.

3. **Mining Claims: PRACTICE AND PROCEDURE-Appeals-new evidence-Hearings-evidence-remand.**

A further hearing may be ordered in a mining contest where the record is

unsatisfactorily confusing and conflicting on the issue of quantity of minerals to satisfy the discovery test, a request for the rehearing has been made with an offer of proof which tends to show a new hearing might result in a different finding, and there has been no objection to the request.

APPEARANCES: W. T. Elsing, Esq., Phoenix, Arizona, for George R. Edeline and Mabel Steinegger; Robert J. Welliever, Esq., Phoenix, Arizona, for Tonto Mining and Milling Company; Dan M. Durant, Esq., Streich, Lang, Weeks, Cardon & French, Phoenix, Arizona, for Carefree Ranches; Richard L. Fowler, Esq., and Demetrie L. Augustinos, Esq., Office of the General Counsel, U.S. Department of Agriculture, for the United States.

OPINION BY ADMINISTRATIVE JUDGE THOMPSON

The Forest Service, United States Department of Agriculture, appeals from that part of the decision by Administrative Law Judge Robert W. Mesch, dated March 5, 1974, which found the Cerro de Oro No. 1 and the Rackensack Nos. 1-3 lode mining claims to be valid because there was a discovery of a valuable mineral deposit.

Two contest proceedings were initiated in 1970 at the request of the Forest Service challenging the validity of the Cerro de Oro Nos. 1-4 lode mining claims (Contest No. A-5320-7) and the Rackensack Nos. 1-3 lode mining claims (Contest No. A-5320-15), charging, as pertinent to this appeal, that the claims were invalid by reason of a lack of discovery of a valuable mineral deposit. The contests were consolidated for hearing and decision. Mable Steinegger and George R. Edeline are the claim holders of record of the Rackensack claims, and Edeline is the holder of record of the Cerro de Oro claims. Both of their interests are subject to a lease which has an option to purchase agreement with Tonto Mining and Milling Company. All three parties were considered contestees in the hearing proceedings. Judge Mesch permitted Carefree Ranches, a limited partnership, to intervene in the proceedings to protect its interest in a proposed land exchange with the Forest Service (A-5320) involving land within the boundaries of all the claims.

Following a hearing held in 1971, Judge Mesch ordered a further hearing in 1973 to develop the facts. In his decision, issued after the second hearing, the Judge found a lack of discovery of a valuable mineral deposit within the Cerro de Oro Nos. 2-4 claims and declared them invalid. The contestees did not appeal from his decision pertaining to those claims. Therefore, the Judge's decision has become final as to the Cerro de Oro Nos. 2-4 claims. The

contestees, however, have answered the Forest Service's appeal pertaining to the Cerro de Oro No. 1 and the Rackensack Nos. 1-3 claims. During the pendency of the appeal, on October 24, 1975, the Forest Service filed a "Motion to Remand for Further Hearing," dated October 21, 1975. Proof of service of the motion on the attorneys of record for the contestees and intervenor has been shown, but no objection or other response has been made to the motion.

Allegedly, the four claims involved in this appeal are valuable principally for gold and also for other minerals including copper and silver. The Judge found that the Forest Service had made a prima facie case of lack of discovery on the Cerro de Oro No. 1 claim, but that the contestees overcame that case. He relied primarily on the testimony and other evidence presented by a geologist for the contestees. The Judge found the evidence on the Rackensack claims "not only conflicting but also confusing." Basically, the confusion and conflict go to the issue of the quantity of mineral which a prudent man could expect to mine from the claims. The Judge relied heavily upon the opinion of the contestees' geologist that there might be sufficient tonnage of ore of a minable quality to return a profit in excess of \$1,000,000 and accepted his opinion over that of the mining engineers who testified. ^{1/} He concluded that there was nothing developed on cross-examination that in any way casts any doubt on the validity of the geologist's findings, opinions and conclusions.

It is evident, even from the geologist's testimony and report upon which the Judge relies, that the mineral occurrences are spotty and irregular. The witnesses differ in their opinions of whether the mineral occurrences would be sufficiently continuous to warrant a prudent man to expect to develop a valuable mine.

In its motion for a further hearing the appellant indicates that new information has become available since the date of the last hearing. It has offered a report by its principal witness to

^{1/} The mining engineers whose testimony was discredited by the Judge included a mining engineer testifying in behalf of the contestees as well as one testifying for the Forest Service. The contestees' mining engineer considered the claims to be a "very unique and very promising prospect" with the "potential to become a very profitable producer" (Ex. M, pp. 5-6), but recommended that before any expenditure for milling equipment is made 15,000 to 20,000 tons should be blocked out. He stated that the cost of this work would be about \$20,000 and that it "would be foolish to spend \$30,000 for a mill, only to find that there was not enough ore to amortize its cost" (Ex. M, p. 8).

support its request. It contends that the Judge relied exclusively on the testimony of the contestees' geologist and was apparently impressed by the stated intention of the Tonto Mining and Milling Company to be in production on the Rackensack claims in a few months. Appellant asserts that subsequent to the hearing Tonto, presumably pursuant to the advice of the geologist, had engaged in blasting operations on one of the claims, but all operations on the claims have since been abandoned. It contends that if the optimistic opinion of the geologist, as to the value and extent of the deposit, had been borne out, the operations would not have ceased.

[1] There is no doubt in this case that there are some minerals within the claims. The problem is whether there is satisfactory evidence of sufficient minerals to constitute a discovery of a "valuable mineral deposit" under the mining laws, 30 U.S.C. § 21 *et seq.* (1970). It is basic that a finding of some minerals is not enough for a discovery; to meet the discovery test there must be sufficient mineralization to warrant a prudent man to invest his time and money with a reasonable expectation of developing a valuable mine. United States v. Coleman, 390 U.S. 599 (1968); Chrisman v. Miller, 197 U.S. 313, 322 (1905), approving Castle v. Womble, 19 L.D. 455, 457 (1894).^b A further hearing might be productive of new evidence which could clarify some of the "conflict and confusion" in the record on this vital issue of probable quantity of mineral.

[2] We have considered appellant's offer of proof solely to determine whether a further hearing should be ordered. Evidence offered on appeal from an initial decision by an Administrative Law Judge after a hearing in a mining contest may not be considered or relied upon in making a final decision but may only be considered to determine if there should be a further hearing. United States v. McKenzie, 20 IBLA 38, 44 (1975);^c United States v. Gunn, 7 IBLA 237, 79 L.D. 588 (1972).^d If, as appellant proposes, further evidence could establish that mining operations ceased upon the claims because the estimate of contestees' geologist on the quantity of minerals was not borne out, this would discredit his opinion and the primary basis for the Judge's finding of discovery within the claims.

[3] We are mindful of the added costs in ordering yet a third hearing in this case. However, this Department has ordered additional hearings where it has been deemed necessary to make a more informed determination. E.g., United States v. McKenzie, *supra*; United States v. Kosanke Sand Corp. (On Reconsideration), 12 IBLA 282, 80 L.D. 538 (1973); United States v. Wells, 11 IBLA 253 (1973).^e See also the discussion in United States v. Taylor, 19 IBLA 9, 82 L.D. 68 (1975).^f We conclude a further hearing is warranted in this case

a) GFS(MIN) JD-1(1968)

b) GFS(MIN) MIN. SUPP. NO. 1

c) GFS(MIN) 27(1975)

d) GFS(MIN) 53(1972)

e) GFS(MIN) 79(1973)

f) GFS(MIN) 67(1973)

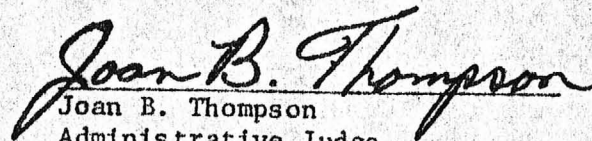
g) GFS(MIN) 13(1975)

because: (1) the record is unsatisfactorily confusing and conflicting on the most vital issue of quantity of minerals to satisfy the discovery test; (2) appellant's offer of proof tends to show there is a likelihood that a new hearing might result in a finding different from the Judge's decision; and (3) there has been no objection to granting the hearing.

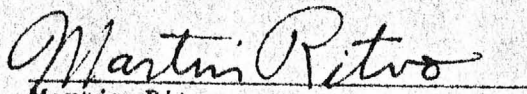
In view of this conclusion, we deem it inappropriate to discuss or decide any of the issues raised in appellant's appeal at this time or to comment further on the Judge's decision.

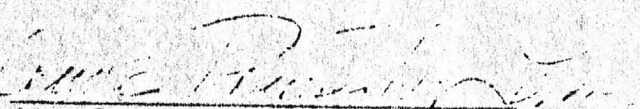
During the rehearing, relevant evidence may be presented by the parties on the material issues pertaining to the claims' validity.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the case is remanded to the Administrative Law Judge for a further hearing and decision.


 Joan B. Thompson
 Administrative Judge

We concur:


 Martin Ritvo
 Administrative Judge


 Anne Poindexter Lewis
 Administrative Judge

FLUORSPAR MILL

Tonto mill is working two shifts at present. Two carloads of concentrates are being shipped weekly. VBD WR 6/12/76

Don Howe, Tonto Mining and Milling, brought in a sample of barite from a property on Mt. Ord, Gila County. The sample is reported as 96+% BaSO₂. A specimen is in the Museum collection as MM2901. KAP WR 5/20/76

Tonto mill is working two shifts at present. Two carloads of concentrates are being shipped weekly. VBD WR 6/7/76

CH/WR 4/24/79 - Mr. Dale Enyart has given financial aid to two men -- Don Adams and Jack DeShago of Lad Mining Co., who are allegedly operating the Golden Wonder 85 Mine near Payson and shipping ore to Tonto Mining and Milling at Punkin Center. 5/3/79 a.p.

KP WR 5/16/79 - The Tonto Mill is presently processing fluorspar ore from the Mc Fadden Peak Mine, Fluorine Dist., Gila Co. The property owned by Woody Nichols of Globe is being operated by Western Fluorspar. J.A. Terteling & Sons, Boise, Idaho through its totally owned Triangle Mining Company, is reported to still be holding an option on the mine. Pincock, Allen & Holt of Tucson have reportedly completed a feasibility study on a 200 tpd mill for the property. The fluorspar concentrate from the Tonto Mill is presently being shipped to Allied Chemical in Southern California. 6/26/79 a.p.

KP WR 5/16/79 - Jack Hamilton reported that the Tonto Mill has recently completed milling 1000 tons of gold ore from Don Adams' property in the Ox Bow area of Gila Co. 6/26/79 a.p.

KP/WR 7/17/79 - The Tonto Mill of Tonto Mining & Milling Co., Tonto Basin, was shut down and the gate locked. Nothing was observed to indicate a long term shutdown and the mill is often down for short stretches of a few days awaiting ore shipments.

KAP WR 4/10/81: A company known as Pro-Met of Arizona, Inc., P.O. Box 275, Tonto Basin, Arizona 85553, phone (602) 479-2256, is reported to be operating the Tonto Mill, which was previously operated by the Tonto Mining & Milling Company. Mike McCarty is Geologist and "Ore Finder" for the company. The operation is owned by Ed Wagner, Bob Carroll and Jack Keller. They are currently looking for a source of custom ore for the mill. They are trying ore from Ox Bow Mine, Green Valley District, Gila County, and Mammoth and Black Queen, Goldfield District, Pinal County.

Maint.
Matr.

Went to the 100 Ton fluorspar flotation mill about $2\frac{1}{2}$ miles southeast of Punkin Center where Mr. Sirgo of El Paso was directing its construction. Neither Mr. Bigbee or Mr. Howe were available. Mr. Sirgo thinks it will be completed in about six weeks. The mines that will supply the mill will be in operation as soon as possible; some rehabilitation work was started today. The mill will produce acid grade "spar" which will be marketed in Japan. GW WR 5-10-71

Took a cut-off road to the fluorspar mill at Punkin Center but arrived too late (5:30 p.) to see the man in charge.

Visited the Tonto Mining Co. fluorspar mill at Punkin Center where a Mr. Davis of Tucson has replaced J. Sirgo as supervisor. Mr. Davis thinks the mill will be ready for operation in about two weeks. He appears to be somewhat less than enchanted with the management and stated he was leaving in about a week. He has 10 men at the three fluorspar mines doing rehabilitation work. GW WR 7-6-71

Del Peterson has very recently visited the Tonto Mining Co. mill & mines near Punkin Center and they now have a Jim Kennedy as mill supt. and Jim Malloy as mine supt. GW WR 8-2-71

A mill was constructed near Punkin Center to beneficiate fluorite ore. FTJ Annual Report 8-19-71

Glen Walker - Weekly report for week ending June 16, 1972

Thursday, June 15 - Went to the fluorspar operation of Tonto Basin Mining & Milling Company at Punkin Center. The second ball mill was placed in operation June 12. It has increased the capacity to 125 tpd. Their Blue Bird mine about $5\frac{1}{2}$ miles E. of mill is developed on two levels approximately 100' apart by adit drifts. In the lower adit there are 9 chutes, the first about 300' from the portal. They are approximately 30' apart. Beyond the last chute it is about 105' to the face, which is barricaded off. Although the stopes were not visited, the foreman, Mr. William McKenzie said they are about 300' long and broken thru to the surface for a length of about 25'. The trend of this adit varies from $N65^{\circ}W$ to $N85^{\circ}W$. The vein dips steeply north and is 3-6 feet wide in red medium grained granite.

The upper adit trends $S75^{\circ}-80^{\circ}W$ for about 150' then turns to about $N80^{\circ}W$. Here there are 2 raise & chutes about 100' apart; the first being 130' from the portal. Present work is stoping between the two levels as most of the minable ore above the upper level has been removed.

A Mr. Don Howe came into office from this operation and stated the name was now called Tonto Mining & Milling Co., also wanted a Fluorspar booklet, which was given to him. He gave the address as: Box 275, Tonto Basin, Arizona 85553. Lp 1/20/72

Lamont West, retired, phoned for directions to the Tonto Basin Fluorspar Company mill and mines. He was directed to Punkin Center and Jim Kennedy, mill superintendent. GW WR 1/24/72

Went to the fluorspar mill of the Tonto Basin Mining Company at Punkin Center where Messrs. Howe, Hamilton and Kennedy were met. Mr. Howe said they had 600 tons of spar concentrates they were unable to sell, hence they had closed the mill and laid off some 35 men. There is estimated to be 600-800 tons of crude ore stockpiled near the mill which Mr. Howe explained resulted from pulling of a shrinkage stop and prospecting at their Blue Bird mine. This ore appears to be clean and of a good grade. GW WR 2/25/72

Glen Walker - Weekly report for week ending June 16, 1972

Thursday, June 15 - Went to the fluorspar operation of Tonto Basin Mining & Milling Company at Punkin Center. The second ball mill was placed in operation June 12. It has increased the capacity to 125 tpd. Their Blue Bird mine about 5½ miles E. of mill is developed on two levels approximately 100' apart by adit drifts. In the lower adit there are 9 chutes, the first about 300' from the portal. They are approximately 30' apart. Beyond the last chute it is about 105' to the face, which is barricaded off. Although the stopes were not visited, the foreman, Mr. William McKenzie said they are about 300' long and broken thru to the surface for a length of about 25'. The trend of this adit varies from N65°W to N85°W. The vein dips steeply north and is 3-6 feet wide in red medium grained granite.

The upper adit trends S75°-80°W for about 150' then turns to about N80W. Here there are 2 raise & chutes about 100' apart; the first being 130' from the portal. Present work is stoping between the two levels as most of the minable ore above the upper level has been removed.

The equipment consists of a 250 cfm Le Roi portable compressor. Two 14 cu. ft. 18" gauge end dump cars, a 12B Eimco mucker, with an undetermined number of jack-legs and stopers, tungsten insert, solid 7/8" shank steel is used throughout. A Bobcat mucker and a 5 HP air slusher were outside the lower portal. At the upper adit is a 250 cfm G-D portable compressor.

The company is trying to get 22° inclined shaft sunk in a steep, narrow canyon 300 to 400 feet NW of the lower adit. It is 212 feet deep and they are wanting to contract the balance of it. No drill holes were put down therefore, the remaining depth is unknown.

As stated above, the mineralization occurs along a fault in red granite which can be traced at least 1500 feet. From 400-1000 feet east of the lower portal, the fault is in a wash from which about 1000 tons of spar has been mined.

TONTO MINING & MILLING CO., INC.

TONTO BASIN, ARIZONA 85553

GENERAL OFFICE & MILL
P.O. BOX 275
TONTO BASIN, ARIZONA 85553
602 / 467-2350

ADMINISTRATIVE OFFICE
P.O. BOX 2314
MUSCLE SHOALS, ALABAMA 35660
205 / 383-7322

Tonto Mining & Milling Co., Inc.

P. O. Box 275

Tonto Basin, Arizona 85553

(467-2350) in Roosevelt book.

Acid Grade Fluorspar

Flotation Mill *125 T/J*

Perry Bigbee, President

Don W. Howe, Vice Pres. and General Manager

Jack Hamilton, Mill Superintendent

John Allen, Mine Superintendent

Leslie D. Hatfield, Office Manager

Jose Davalos, Assayer

Emp. 35

6N - R11E = Bluebird

7N - R11E = Whit. Cow

7N - R12E = Red Rock

new ball mill on 6/12 now 125 tpd.

Sink: Reading
Alpha: U
File: Santa Mining
& Milling Co

October 13, 1977

U. S. Environmental Protection Agency
Region IX
100 California Street
San Francisco CA 94111

ATTENTION: Mike Reed
Bob Wills

Gentlemen:

Your Public Notice #A-77-36-W, dated August 8, 1977, reached our desk August 25. Unfortunately, it was misplaced and we lost our opportunity to respond.

We would like to know the status of the proposed action. Is it too late for this agency to submit data? Does the State Health Department have any authority in this decision-making or do they merely serve as a depository for your paperwork?

May we hear from you please?

Very truly yours,

John H. Jett
Director

JHJ:klg

✓ Bert Walker
Amigos Claims

Bill Ewing

Santo Mill

B + B Mining

Brick mine

Pittsburgh Plate Glass

Marguerita mine

Bob Crist

Asarco

Maurice Helderman

Vito Brussalo

Duval (Sierrita)

Prover Heinrichs

Aime.

Bill Ewins ?

Bert Walker ?

Amigos Oliver ?

~~John ...~~

Syndall King Don

BT B ...

Brian ...

PPG

Mr ...



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
100 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111

RECEIVED
AUG 25 1977
DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA

JOINT NOTICE OF PROPOSED ACTION

by the

U.S. Environmental Protection Agency, Region IX
100 California St.
San Francisco, CA 94111

State of Arizona
State Department of Health
1740 West Adams Street
Phoenix, AZ 85007

415/556-3450

602/271-5572

On Applications for National Pollution Discharge Elimination System Permits to Discharge Pollutants to Waters of the United States

On Applications for Certification for Compliance with Applicable Effluent Limitations and Appropriate Requirements of State Law

Public Notice #A-77-36-W

August 8, 1977

On the basis of preliminary review of the requirements of the Federal Water Pollution Control Act (the Act), as amended, and implementing regulations, the Regional Administrator, Region IX, EPA proposes to deny an NPDES permit to discharge to the following applicant:

Tonto Mining and Milling Co., Inc.
P.O. Box 275
Tonto Basin, AZ 85553
NPDES permit no. AZ0021817

File in ←

The applicant operates a fluorspar mining and milling facility (Standard Industrial Code 1473) located 2-1/2 miles southeast of the Tonto Basin post office. The discharge consists of decanted water from two mill tailings ponds connected in series. The decanted water is discharged into an unnamed arroyo, tributary to Tonto Creek, at latitude 33°51'30" N, longitude 111°17'30" W. The beneficial uses of Tonto Creek include: partial body contact, cold water fishery, agricultural uses, aquatic life and wildlife propagation, and aesthetic enjoyment.

The Regional Administrator has tentatively determined that the application of best practicable control technology currently available for fluorspar mining and milling will result in no discharge of process generated waste water pollutants. Consequently, the Regional Administrator proposes to deny an NPDES permit to the applicant.

see back page

*Mike Reed
Bot wells*

water quality

*Mary Strawn
271-5453*

The Arizona Department of Health Services is considering a request to certify the discharges described above, pursuant to Section 401 of the Act. The certification will set forth any limitations and monitoring requirements necessary to assure compliance with any applicable effluent limitations and other limitations, under Sections 301 and 302 of the Act, standard of performance under Section 306 of the Act, or prohibition, effluent standard, or pretreatment standard under Section 307 of the Act, and any other appropriate requirement of State law. No permit will be granted if certification is denied by the State.

Persons wishing to comment upon or object to the proposed determinations or request a public hearing pursuant to 40 CFR 125.34 should submit their comments or request in writing within thirty (30) days from the date of this notice, either in person or by mail to:

U.S. Environmental Protection Agency
Region IX, Enforcement Division, E-4-1
(at the address shown above)

All comments or objections received within thirty (30) days from the date of this notice, will be considered in the formulation of the final determinations regarding the applications. If written comments indicate a significant degree of public interest in a proposed permit, the Regional Administrator shall hold a public hearing in accordance with 40 CFR 125.34.

If no public hearing is held, final determinations will be made shortly after the close of the comment period. The final determination will become effective thirty (30) days following the date of signature.

A request for an adjudicatory hearing may be submitted to the Regional Hearing Clerk within ten days following the final determinations, in accordance with 40 CFR 125.36.

Persons wishing to comment upon or object to certification by the Arizona Department of Health Services or request a public hearing should submit their comments or requests in writing within thirty (30) days from the date of this notice, either in person or by mail to:

the Arizona Department of Health Services
(at the address given above)

The application and other pertinent documents may be examined or copied at the offices of the Environmental Protection Agency or the Arizona Department of Health Services.

Copies of pertinent documents may be obtained by calling or writing to the Regional Office of EPA at the above address.

Please bring the foregoing notice to the attention of all persons whom you know would be interested in this matter.

from Mary Stroud

transfer to

Jim Walters

no authority - basically an assignatory
for EPA document

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

~~Mine~~ XXX Operation - Tonto Mill

Date August 18, 1978

District Mazatzal - County - Gila

Engineer Ken A. Phillips and
Cliff Hicks

Subject:

A visit by Department Engineers, Ken Phillips and Cliff Hicks was made to Tonto Mining and Milling Company's Tonto Mill in Pumpkin Center on Friday, August 18, 1978. The engineers met with Dave Hamilton, the supervisor, in the absence of Jack Hamilton.

The floatation mill is presently processing fluorspar from Western Fluorspar Company's mine on McFadden Peak, Gila County and Tonto's Bluebird mine, also Gila County. The acid grade concentrate is shipped to Allied Chemical. The mill is averaging about 72 tons per 2 shift day. At this capacity, the mill consumes about 100 gallons of water a minute.

The McFadden Peak Fluorspar property is leased by Western Fluorspar on a long term basis from Woodie G. Nichols, P. O. Box 1074, Globe, Arizona, 85501. Western Fluorspar's office is in Phoenix. The property was previously evaluated by Kaiser Steel. The crude ore delivered to the Tonto Mill from the mine is commonly called sugar spar and contains an average 56% CaF_2 , 2% lime as CaO and 34.5% SiO_2 .

The crude ore processed through the mill from Tonto's own Bluebird Mine runs 75% CaF_2 or lower. Haulage from both mines during wet weather is dangerous.

The mill has an idle lead circuit which was used in processing lead-silver-fluorspar ore and old tabling tailings from the Castle Dome Mine area, Yuma County. The individual mine in the area may have been the OKT Mine. The table tailings of which there are some 20,000 to 40,000 tons contain over 50% CaF_2 and about 3% lead with silver. Enough ore was processed to produce two car loads of ceramic grade fluorspar for shipment to an undisclosed buyer in Brownsville, Texas. The ore from the OKT was shipped by John Reid (address unavailable). The Tonto Mill has also purchased fluorspar from the Big Bee mine in New Mexico, but shipping costs are high. The Tonto Mill is interested in possible purchase or custom milling of fluorspar and lead-fluorspar ores.

KAP:gg

cc: Tucson office

BLUEBIRD MINE

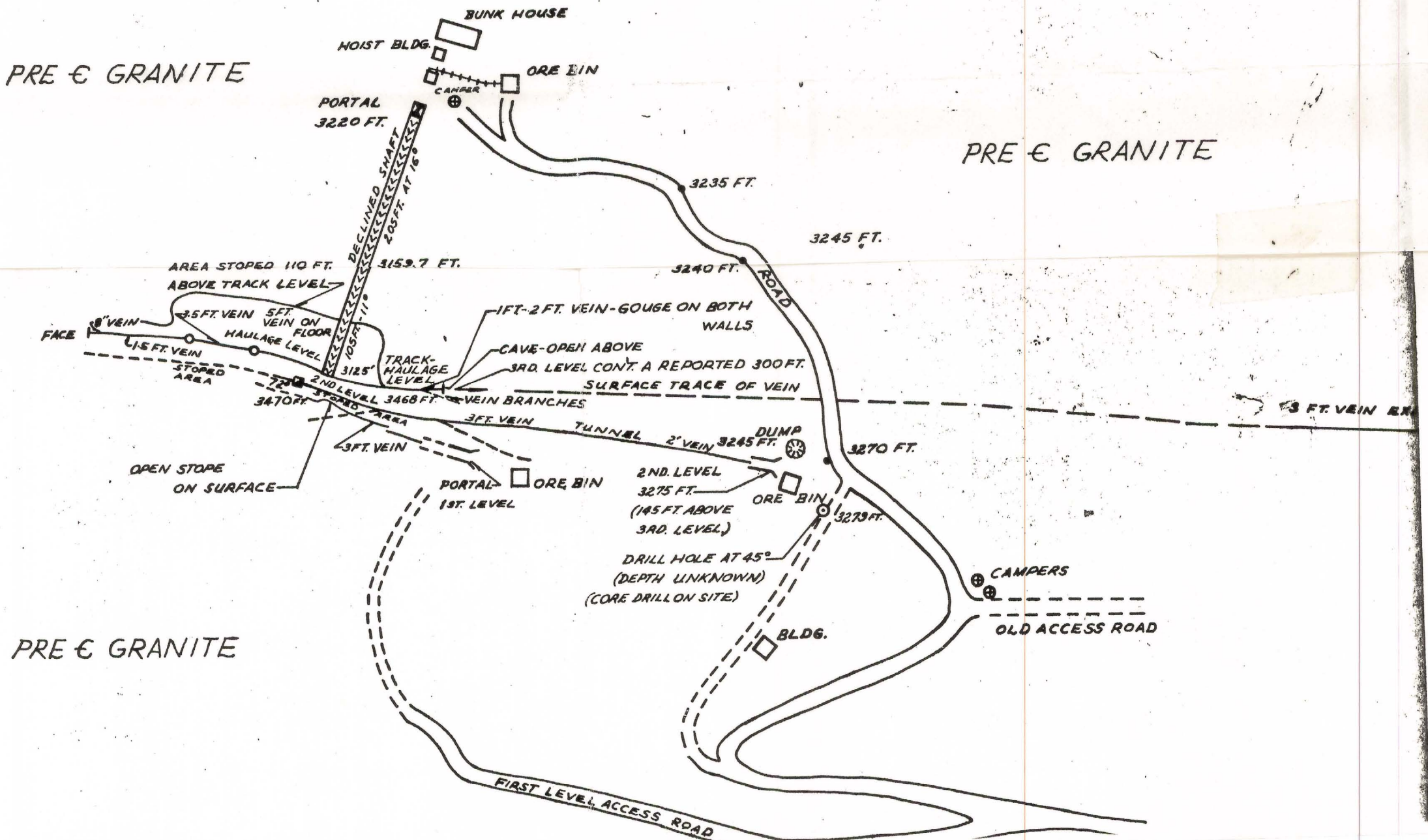
SURVEYED BY BRUNTON COMPASS AND THOMMEN ALTIMETER

JUNE-1978

PRE-GRANITE

PRE-GRANITE

VEIN INCREASING
IN SILICA



BLUEBIRD MINE
GILA CO, ARIZONA

longitudinal sketch

looking south—(decline portal)

scale: 1"=50'

june-1978

