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The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

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PRINTED: 06/06/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BLUE BELL MINE

ALTERNATE NAMES:

PATENTED CLAIMS MS 1528
BLUE COAT VEIN
BLUE BUCK CLAIM

YAVAPAI COUNTY MILS NUMBER: 1210

LOCATION: TOWNSHIP 11.5N RANGE 1 E SECTION 34 QUARTER NE
LATITUDE: N 34DEG 20MIN 23SEC LONGITUDE: W 112DEG 14MIN 28SEC
TOPO MAP NAME: CLEATOR - 7.5 MIN

CURRENT STATUS: PRODUCER

COMMODITY:

COPPER SULFIDE
COPPER OXIDE
STONE DM SCHIST
SILVER
IRON
SILICON
GOLD

BIBLIOGRAPHY:

ANDERSON, C.A. PRECAMBRIAN ROCKS-CORDES AREA
USGS BULL 1345
USGS CLEATOR QUAD
BIG BUG MINING DISTRICT CLAIM MAP
YAVAPAI MAGAZINE MAR. 1918 P 4-6
BLM MINING DISTRICT SHEET 12
ADMMR BLUE BELL MINE FILE
ADMMR AZBM MAPS-1 X SECTION, VERTICAL N SHFT
LINDGREN, W. ORE DEPTS OF THE JEROME AND
BRADSHAW MTS QUADS USGS BULL 782 1926
P 143-145
CLAIMS EXTEND INTO SEC. 34
AZBM BULL. 125, P. 70
AZBM BULL. 129, P. 59
AZBM BULL. 137, P. 35
USBM 6905 P. 50

CONTINUED ON NEXT PAGE

CONTINUATION OF BLUE BELL MINE

UDBM 8236 P. 65

USGS BULL 1345 P 18, 34

ADMMR BLUE BELL COLVO FILE

ARIZONA MINING JOURNAL 1917 SEPT P10, 1918

APRIL P25, JUNE P17,44 AUGUST P20, 1919

JUNE P60, JULY P27, AUGUST P15, OCTOBER P22

DECEMBER P30, 1920 MAY P53, 1921 JAN P7

10/29/92

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TOPO MAP NAME: CLEATOR - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER SULFIDE
COPPER OXIDE
STONE MISC DM
SILVER
IRON
SILICON
GOLD

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CONTINUATION OF BLUE BELL MINE

UDBM 8236 P. 65

USGS BULL 1345 P 18, 34

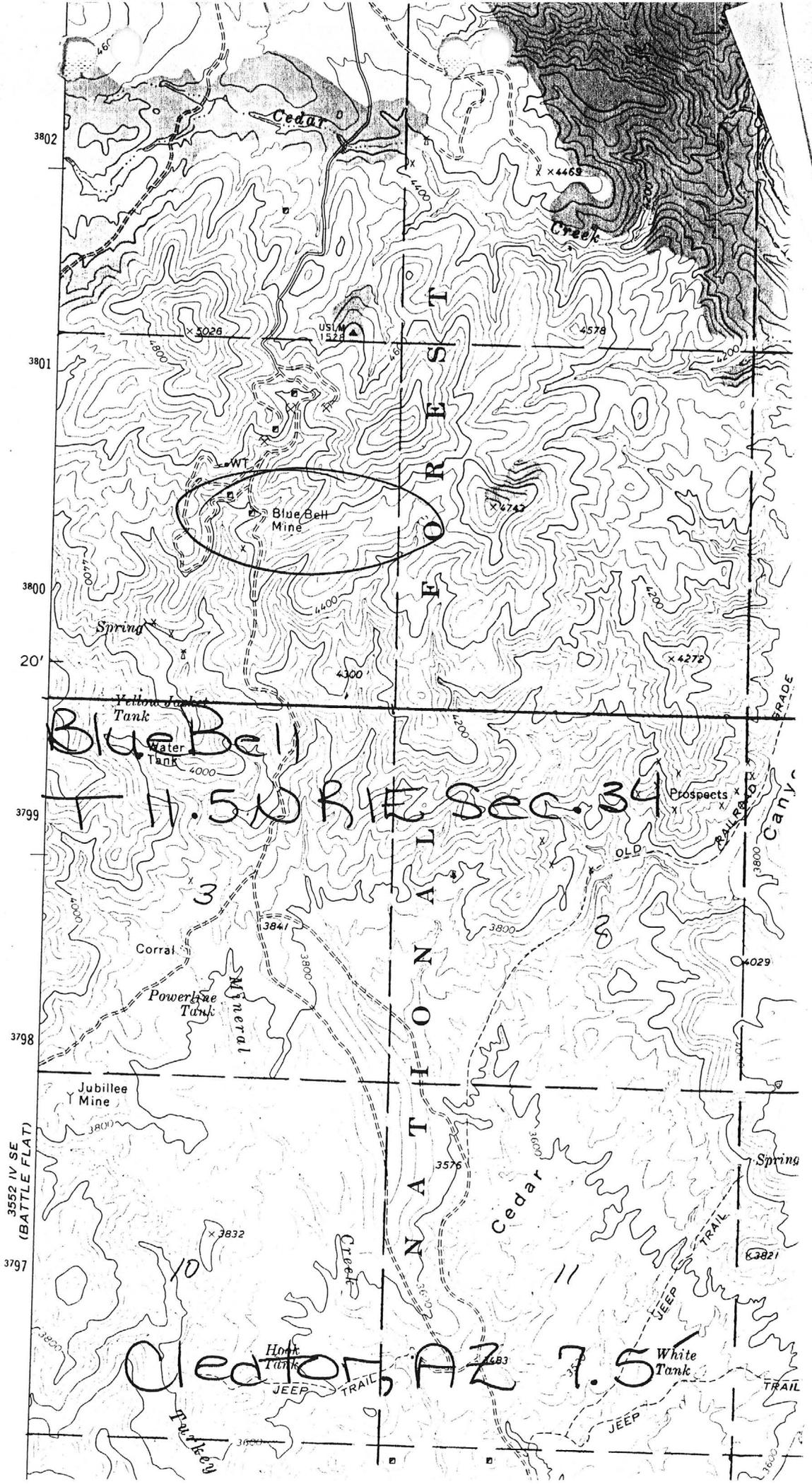
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JUNE P60, JULY P27, AUGUST P15, OCTOBER P22

DECEMBER P30, 1920 MAY P53, 1921 JAN P7



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3552 IV SE
(BATTLE FLAT)

FOREST
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O
N
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L

Blue Bell

T. 11.5 W. R. 12 E. Sec. 34

Cleaton, AZ

7.5

US 1528

Horn Tank

JEEP TRAIL

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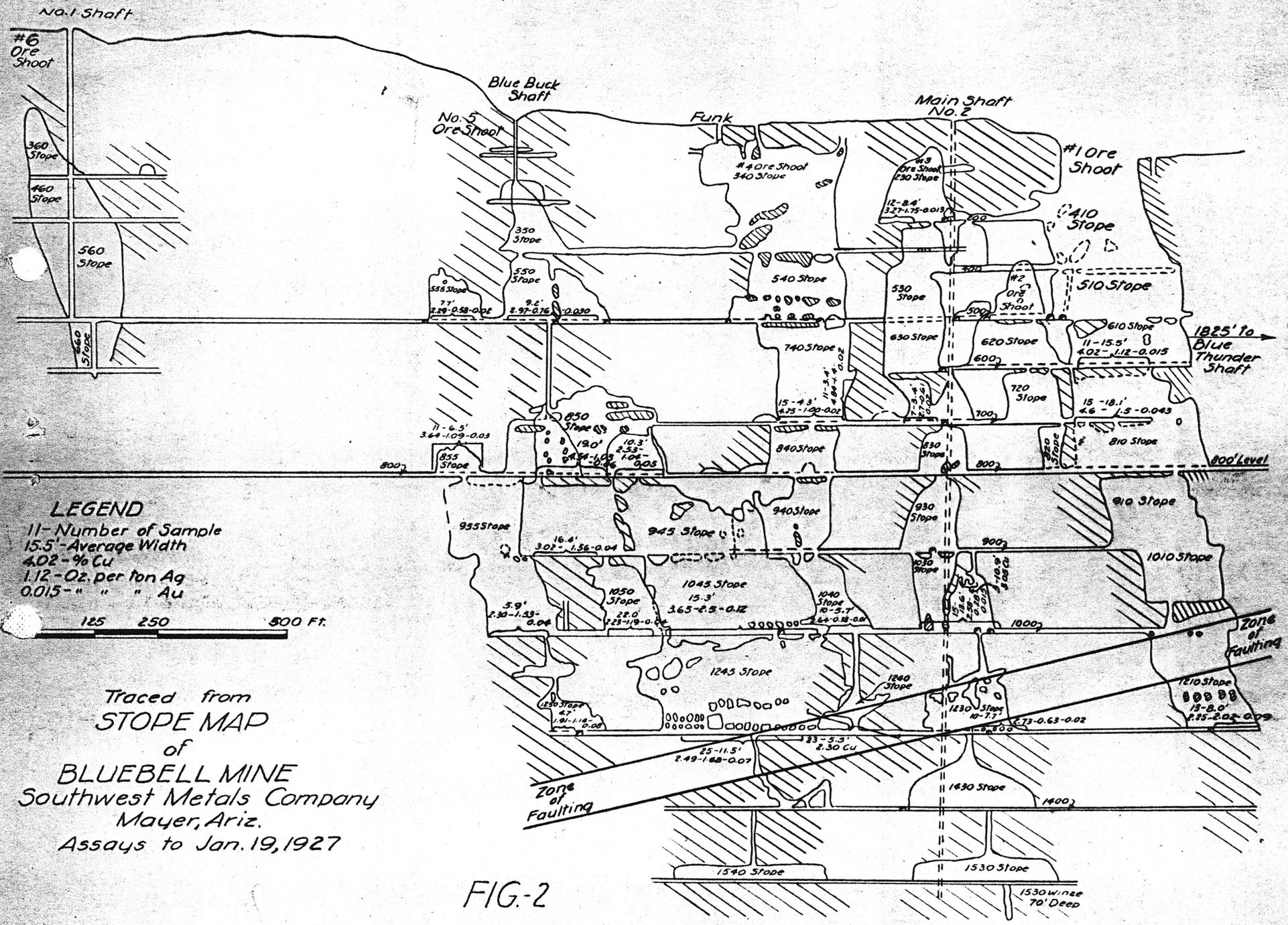
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NAME OF MINE: **BLUE BELL** COUNTY: **YAVAPAI**
 OWNER: Southwest Metals Co., Ford Bldg., Detroit DISTRICT: **BIG BUG**
 METALS: **CU**

OPERATOR AND ADDRESS:		MINE STATUS	
DATE:		DATE:	
5/1/44	Lessees: Western Machinery Company, San Francisco	5/1/44	Closed down
✓	E. J. Bumstead, Mgr. Hartin, Apartments, Prescott	6/2/44	Developing 4 men working per BROWN
6/44	✓ E. J. Bumstead, Mgr., Mayer Box 222	12/44	Dev. & Shipping
9/45	L. L. Farnham, Meyer & Al Adams	9/45	Developing
		2/46	Shipping
		7/46	Idle
		8/46	Shipping

BLUE BELL

Cu

Yavapai

13 - 5

T 12 N, R 1 E

E. J. Bumstead, Box 222, Mayer *Massachusetts Hotel, Prescott '45*

Here with a copy of letter rec'd 12/11/45

Today in connection with Prudium transfer on Blue Bell

This closes the matter, evidently, as far as I am concerned.

L. L. Barnham

Sorry I missed seeing you last Tuesday.

October 9, 1942

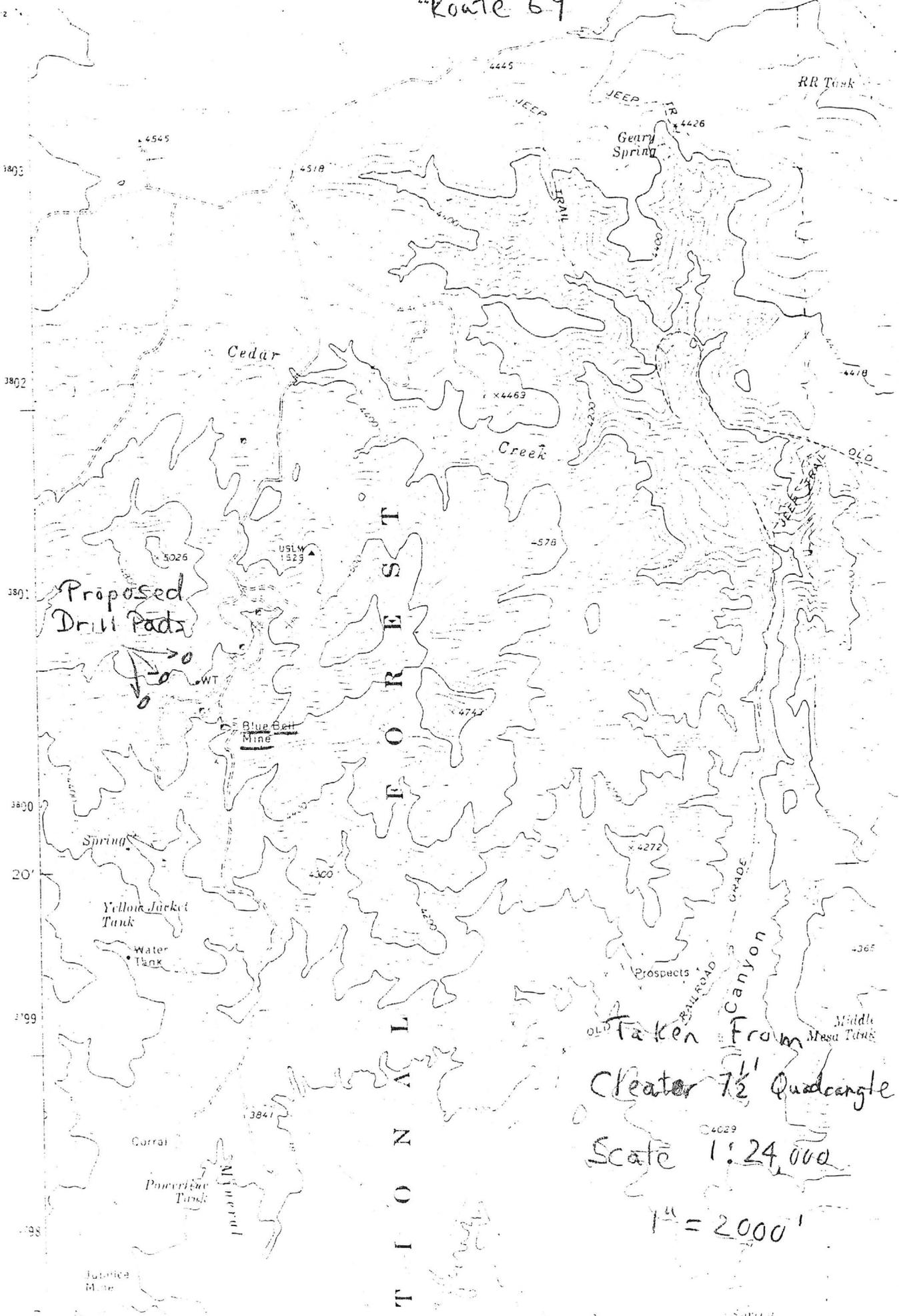
Memorandum for Earl Hastings

Please file the attached with the Blue Bell and DeSoto files as it shows the reason why there is no immediate prospect of operation of those mines.

C. F. W.

04900m N
T 12 1

To May 7
Route 69 ~ 2 miles



3803
3802
3801
3800
20'
1999
1998

Taken From
Clearer 7 1/2 Quadangle
Scale 1:24,000
1" = 2000'

CLAIMS:

- R = Rain
 - O = Only
 - V = Victory
 - C = Cedar
 - B.Sky = Blue group
- } Owens option

PEL = Pronto Explorations

(P) = patented

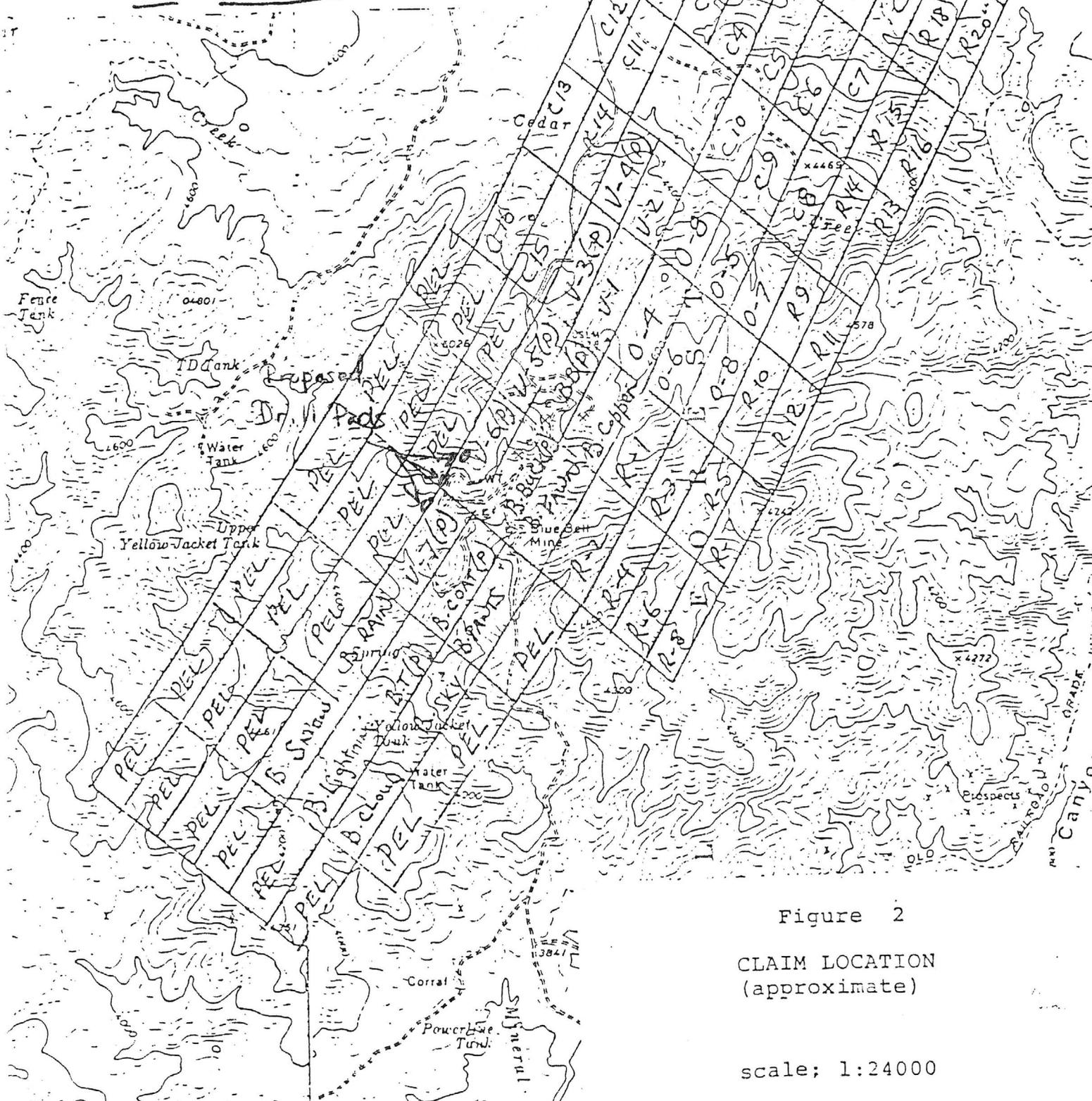


Figure 2
 CLAIM LOCATION
 (approximate)
 scale; 1:24000

P

Patented claims

UP

Unpatented claims

○ ○

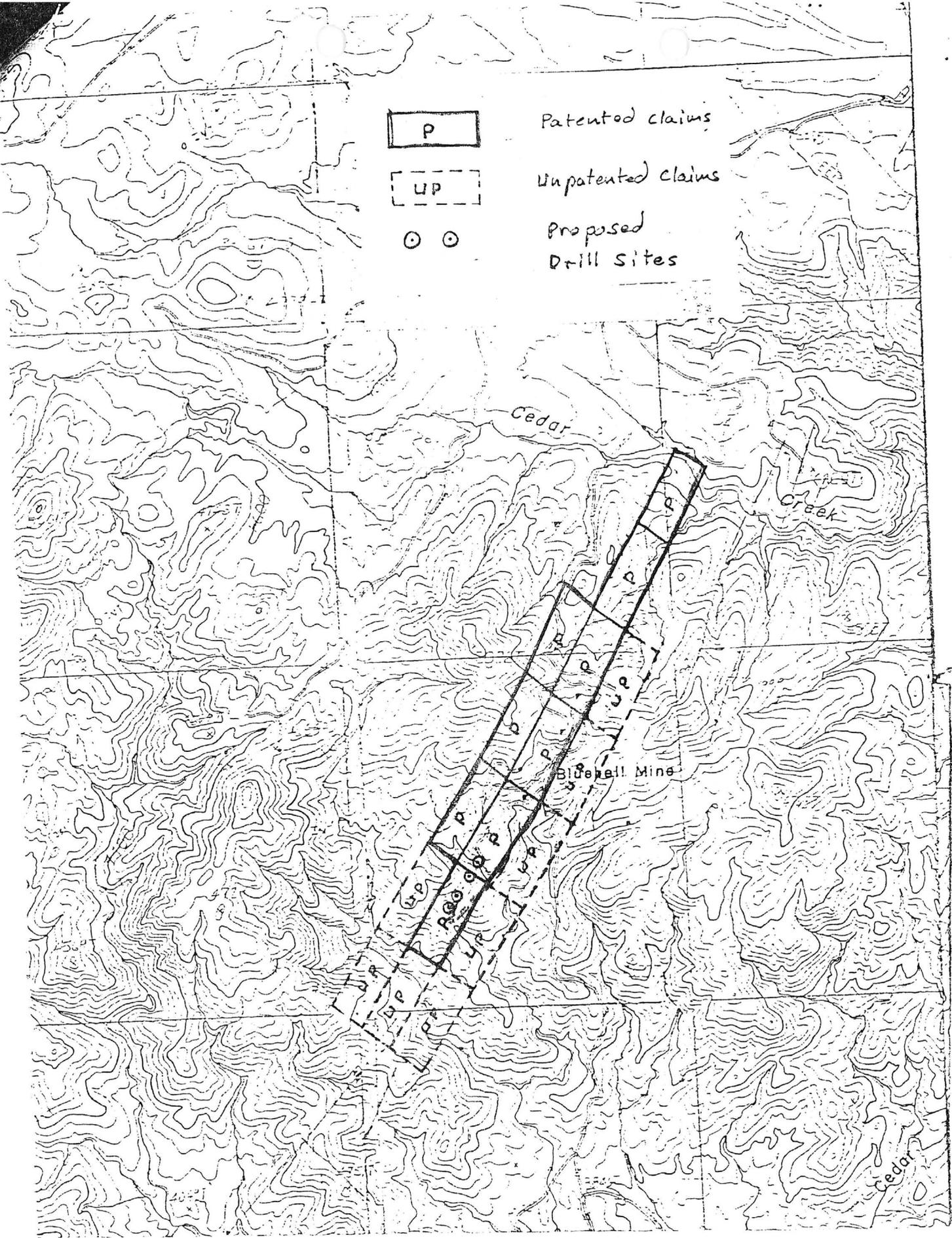
Proposed
Drill Sites

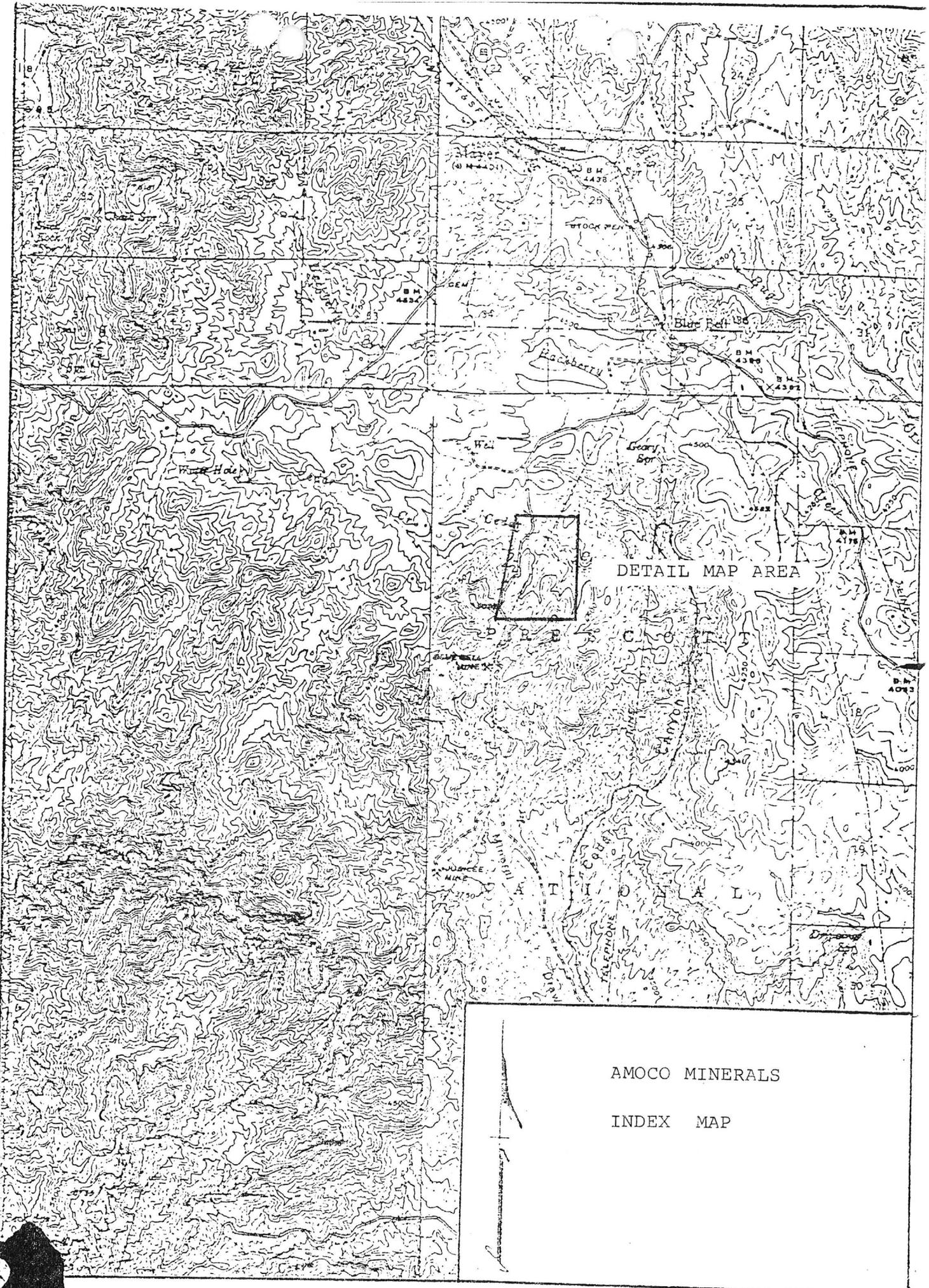
Cedar

Creek

Bluebell Mine

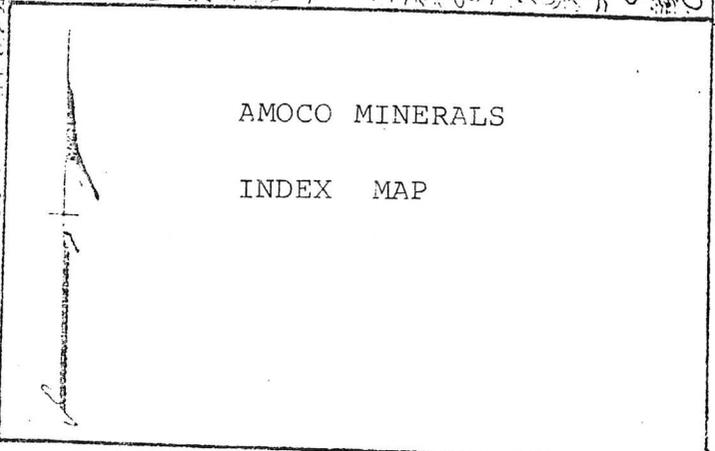
Cedar





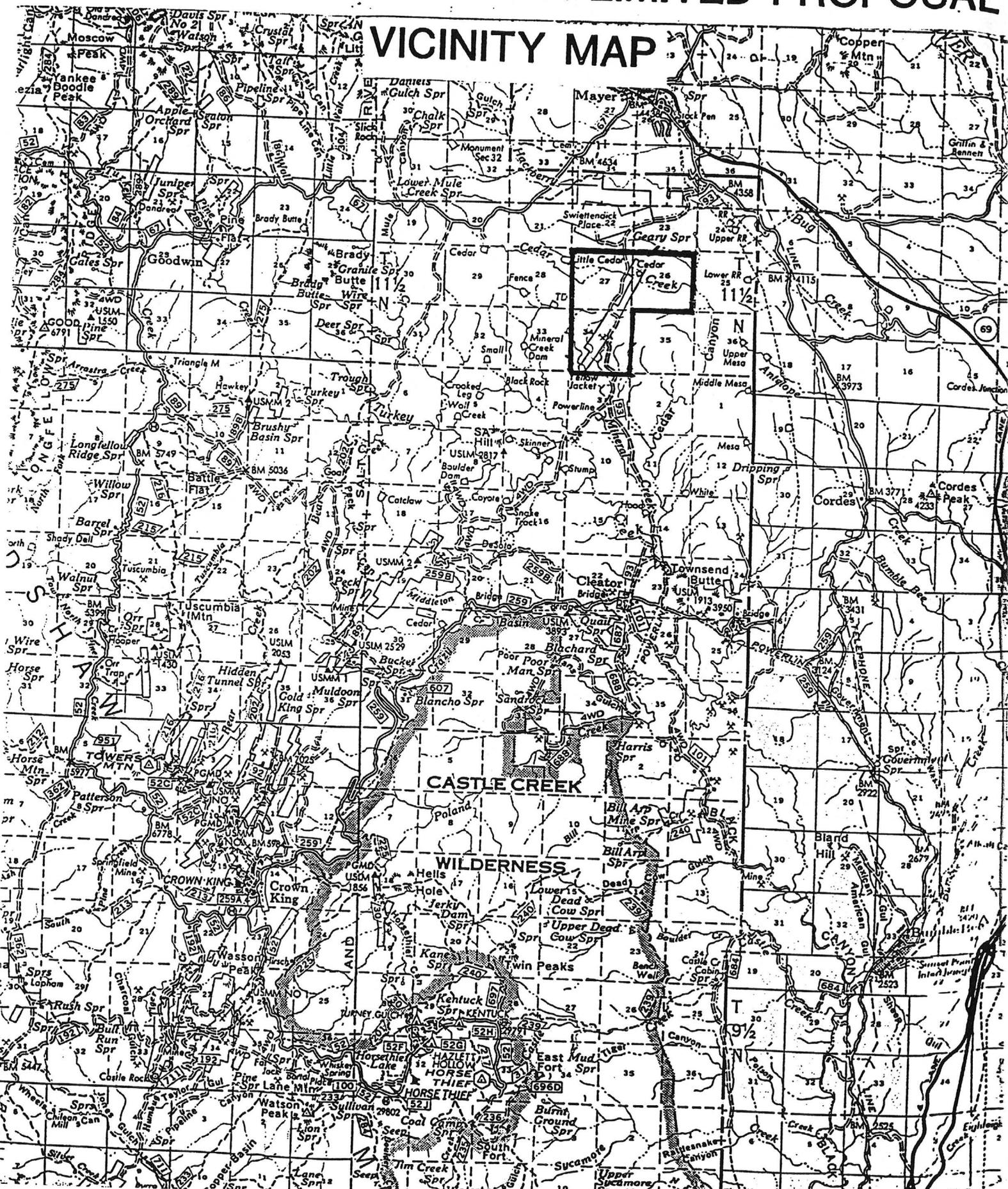
AMOCO MINERALS

INDEX MAP



NEWMONT EXPLORATION LIMITED PROPOSAL

VICINITY MAP



BLUE BELL

YAVAPAI COUNTY

NJN WR 1/16/87: Rich Lundin (c) reported that Pronto Exploration Limited (c) has conducted extensive surface geochemical testing at the Blue Bell (file) Yavapai County. The testing indicates definite potential for a bulk tonnage gold deposit.

NJN WR 3/25/88: Dick Mieritz (card) visited and provided a sketch map on the Blue Bell Mine (file) Yavapai County which is controlled by Mr. Mieritz's client, Sherwood Owens (card). Mr. Mieritz believes the property has in-situ leach potential. He estimates that underground workings at the Blue Bell contains 30 million gallons of copper bearing solution and that one of the lower adit levels discharge deposits of chalcantite upon exiting the mine. Thus it would appear that this massive sulfide deposit has active bacteria oxidizing the sulfides, making copper available to solutions.

YAVAPAI COUNTY

Blue Bell

NJN WR 11/6/81: Pronto Exploration LMTD. Of North Bay, Ontario now is purchasing the Blue Bell Mine, Yavapai County. They now have retained Dick Meritz as their geologist. James M. Proudfoot P.E. is a principal of Pronto Exploration. His address is 157 Campbell Ave., North Bay, Ontario P1A, 1W2. Phone 705-474-4728. Mr. Proudfoot was looking for level maps for the Blue Bird Mine.

KAP WR 11/20/81: James M. Proudfoot of James M. Proudfoot Limited, 157 Campbell Ave., North Bay, Ontario P1A 1W2, Phone (705) 474-4728 reported he is working with Pronto Exploration Ltd. (a penny stock), Suite 3001 South Tower, Royal Bank Plaza, Toronto, Ontario M5J5J1 phone (416) 865-0005. He explained that they have purchased (making payments under a purchase contract) the Blue Bell Mine, Big Bug District. They plan to dewater the mine and sample.

RRB WR 1/8/82: Jim Proudfoot of the Blue Bell Mine, Yavapai County called to ask what was required before drilling an 800 foot dewatering hole and discharging into streams. I referred him to the Department of Water Resources and the Bureau of Water Quality Control, Department of Health Services.

MG WR 12/17/82: Mr. Sherwood B. Owens reports that Pronto Exploration, a subsidiary of Noranda, holds options on his Blue Bell and De Soto mines in Yavapai County. Pronto is interested in the gold potential at the Blue Bell and the copper potential at the De Soto.

KAP WR 7/20/84: Production data was obtained for the Blue Bell Mine (f) Mayer District, Yavapai County. An appropriate form has been filled out for inclusion in the mine file.

KAP WR 8/31/84: Richard Lunden of Wallaby Enterprises reported that Pronto Exploration Limited (c) has a lease work commitment on the Blue Bell Mine (file) Yavapai County. He will be supervising a small drilling project on the property.

NJN WR 12/21/84: Rich Lundin (c) visited and reported he's currently supervising a drilling program at the DeSoto (f) and Blue Bell (f) Mines Yavapai Co. for Pronto Lmtd.

Blue Bell

Yavapai County

Went to the Blue Bell copper mine but no one was there except an employee of Apache Stone Company, Phoenix, who was quarrying altered schist. He said Dexter ~~Dex~~ Broyles was trying to find out who turned their crane over Monday after work hours. He also said not much ore had been produce and none leached so far. GW WR 5-16-73

As of 1/10/74, USBM reports that Mine Management Corporation is operating this mine.

Mine Management Corp., Mr. Pickens manager, of Scottsdale, is building a mill at the old Blue Bell Cu mine SW of Mayer. GW WR 5-2-74

Mr. Pickens is still trying to work out a feasible recovery method for the Cu at the old Blue Bell mine, SW of Mayer. GW WR 8/28/74

Dexter Broyles said Dennis Pickens has the lease on the Savoy and the Blue Bell mines. GW WR 11/18/74

Mine Management, Inc., Denis Pickens, president, has temporarily?closed both the Blue Bell and the Savoy mines. GW WR 1/23/75



The proprietor of the Arco Gas Station at the southern end of Mayer said that Mine Management was still involved with the Blue Bell but that there was presently no activity at the property because of the depressed copper price. Mr. Pickens, principal, is still active in the Mayer area and reportedly has plans to start operations when financial conditions improve. Other local residents report that Mine Management is contemplating an in situ leaching project by flooding the old Blue Bell workings. According to Walt Statler the Blue Bell workings contained a mixture of oxide and sulfide ores. Such a mixture of oxide and sulfide ore may cause some problems in leaching. Mine Management presently has a watchman on the Blue Bell property. KAP WR 10/2/75

On the way out, went to Mayer via the old Blue Bell mine; some activity around the mine. A man at the mine said that they should be milling in two or three weeks. Ken and I looked at the equipment. They have a lot of newly painted equipment placed around, but nothing is connected together. There is some rock in the primary crusher, for show I guess. GAM WR 4/26/76

MG/WR 9/7/79 - Mr. Sherwood B. Owens owns the Blue Bell. The Mine Management Co. of Arizona is no longer involved in the Blue Bell Mine.

[Handwritten scribble]

YAVAPAI COUNTY

BLUE BELL

Visited Arizona-Tex Corp. dry mill situated at the Blue Bell siding dump. Mr. G.A. Russell is thought to be president and Frank Brown, their attorney. Mr. Karl Heutter, secretary-treasurer, 116 W. Indian School Road, Phoenix. The mill operated on a screening basis producing 4 sizes. They were finishing installation and will begin operation after a primary crusher has been added. Jack Patrick, 1236 Iron Springs Road, Prescott, is in charge of the operation. The mill is expected to mill 10 tph.
FTJ WR 1-20-67

Interviewed Jack Givens who is quarrying stone at the Blue Bell for Apache stone.
FTJ WR 3-24-67

Visited Arizona-Texas Corp. mill at Mayer. Mill shut down and no one at plant. Mill situated at the Blue Bell siding dump. FTJ WR 3-24-67

Active Mine List April 1967 - 5 men

Visited the Blue Bell. J. E. Lame, Mayer has taken over the Quarry from Givens. FTJ WR 5-19-67

Visited Blue Bell - 2 in quarry. FTJ WR 9-22-67

Active Mine List Oct. 1967 - 2 men
Active Mine List April 1968 - 2 men
Active Mine List Oct. 1968 - 2 men

Melvin Hammon runs the shop and mines onyx west of Mayer and also mines stone at Blue Bell for Apache Stone. FTJ WR 3-21-69

Active Mine List April 1969 - 2 men

The Blue Bell dump was not being worked according to reports. A man named Ellet was reported to have a \$50,000 mill and to be putting a mill at Prescott. FPK WR 6-4-69

To Blue Bell - idle. FTJ WR 5-22-70

To Blue Bell - equipment idle but understand that they quarry only for orders received.
FTJ WR 1-22-71

Mine visit to the Blue Bell quarry. A Mr. Lee Getchell is quarrying chlorite and sericite schist as flagstone for Apache Stone and Supplies, Inc., in Phoenix. Five different color types are produced, ranging from a reddish-brown to a nearly white. Mr. Getchell has one man working for him now, but sometimes he has as many as five. For the last 3 or 4 months the quarry has been operating from 5 to 7 days a week. Equipment includes a rubber tire front end loader, air compressor and air hammers. Much of the quarrying is done by hand methods with wedges and pry bars. KAP report of 12/14/72



BLUE BELL MINE

YAVAPAI COUNTY

Visited the Blue Bell mine with Cleo Walker to check his surface interpretation of the probable location of a faulted segment of the main vein. TPL WR 5-26-62

Production to 1926 - \$14,117,673 - major metal copper - J.W. Still figures (corres. file)

Learned Andy Zinkl and George Freeman are going to try in place leaching at the Blue Bell mine. EGW WR 3-25-64

Visited Blue Bell - no activity. EGW WR 5-26-64

Rumors that there was activity at the Blue Bell - no one at property but indications of geophysical work was evident. FTJ WR 7-23-65

Blue Bell mining schist for building stone. Jack Givens and Ralph Bennett and 2 men mine about 15-20 tpd depending on demand. FTJ WR 9-24-65

Phone call from E. W. Mercer, Phoenix, wanting address of owners of Blue Bell mine, Yavapai County. Plans to precipitate the mine water. FTJ WR 8-27-65

Visited Blue Bell mine - Marion Davis is mining about 7 tpd flagstone for Apache Stone & Supplies, Inc., 2631 E. Indian School Road, Phoenix. When time permits he chlorides a 4' vein of good copper ore that lies in the footwall of the Blue Bell vein. 2 men working. FTJ WR 11-22-65

Visited Blue Bell mine - mining building stone continues. FTJ WR 5-20-66

Learned that Robert Ford has an option on the Blue Bell. Plans are to drill through caved section and obtain samples of what is said to be high grade copper water. FTJ WR 6-24-66

Visited Blue Bell - Davis still shipping stone. McAlester Fuel have a deal with Sherwood Owens for the property and are drilling shallow holes on 50' centers south of shaft to develop a leachable body of ore. FTJ WR 7-22-66

Visit to Blue Bell - interview Marion Davis who said Robert Ford & Assoc. have dropped the Blue Bell. FTJ WR 9-23-66

Active Mine List Oct. 1966

Visited at the Blue Bell with Marion Davis. They were loading two 20 ton trucks with building stone. FTJ WR 11-18-66



BLUE BELL MINE

YAVAPAI COUNTY

Information at Mayer - McFarland & Hullinger had quit their work at the Blue Bell mine about the middle of June. TPL 7-1-59

Do Not Copy

BLUE BELL PROJECT - BASIC (INSTALLED - FOR PATAGONIA LEASING COMPANY

(Not including Mine Management Machinery & Equipment List 8/8/73 - see attached)

No.	Major Equipment & Material	New or Used	Location	Condition	Owner	New Price	Purchase Price	Remarks
1.	<u>Unitized Crushing & Screening Unit, including 4 x 12 heavy duty pan feeder, 48" Telsmith Separator Crusher, feed belts, Hewitt Robbins Hammer Mill, Link Belt 4x8 Screen and 50' Stack - all drivers, motors, and switchgear - mounted in 2 30' x 8' sections for easy over road haulage</u>	Built in 1960-used about 6 months	Rosamond, Calif.	Very good- inspected & operated	Calcite Corp.	\$65,000	\$20,000	Loaded on trucks, under option to MMC
2.	<u>Crushed Ore Bin - 100 ton Bolted - 60° Cone Bottom</u>	Used	Riverside, Calif.	Excellent	V-Sons Corp.	\$12,500	\$ 5,000	Subject to prior sale-hard to find item.
3.	<u>16 x 24 Denver Duplex Jig</u>	Used	Salt Lake City, Utah	Very good Completely reconditioned	Machinery Center, Inc.	\$ 5,200	\$ 2,500	Subject prior sale-very scarce-new are 4 months delivery
4.	<u>Belt Feeder & Weighing Device</u>	Used	Humboldt, Arizona	Good	Nelson Machinery	\$ 6,500	\$ 2,000	Subject prior sale
5.	<u>Wilfly 6-G Concentrating Tables (2)</u>	Used	Salt Lake City, Utah	Reconditioned with new rubber decks	Machinery Center, Inc.	\$15,000	\$ 5,000	Subject prior sale-held on first refusal basis
6.	<u>Flotation Machine - 4 cell Denver #24-\$-Sub A</u>	Used	Salt Lake City, Utah	Very Good	Machinery Center, Inc.	\$ 6,000	\$ 3,000	Subject prior sale
7.	<u>2 - 83FL Gardner-Denver Jack Leg Drills & Aux.</u>	New	Phoenix	New	Gardner-Denver	\$ 5,000	\$ 5,000	In stock
8.	<u>T-6 Diesel Mucker</u>	Used	On property	Good	D. Broyles	\$15,000	\$ 3,000	MMC has used on contract
9.	<u>Rubber-tired Tanks (3) 8' x 8'</u>	Used	Los Angeles	Good	Ellis Piper & Co.	\$12,000	\$ 5,750	Subject prior sale very scarce
10.	<u>Acid Storage Tank 5000 gal.</u>	Used	Prescott, Az.	Good	Pete Heydorn		\$ 2,000	Optional
11.	<u>Water Pump & Pipe (Installed)</u>	New	Phoenix	New	Gilbert Pump & Equipment	\$ 4,500	\$ 4,500	In stock-price is installed-Gilbert lowest bidder
12.	<u>Misc. Tanks, Water Valves, Connection Pipe, Steel, etc.</u>	Used	Humboldt, Az.	Good	Nelson Machinery		\$ 5,000	@ 10¢ lb.
<u>TOTAL MACHINERY COSTS</u>							\$64,750 (1)	
13.	<u>Other Costs (Installation)</u>							
	a) Freight in (est.)						\$ 5,000	
	b) Misc. Supplies						3,000	
	c) Labor & Supervision- 6 men 3 Mo. incl. insurance, etc.						18,000	
	d) Electrical & welding contractors						4,000	
<u>TOTAL INSTALLED COST</u>							\$30,000 (2)	
<u>TOTAL FOR PATAGONIA LEASING COMPANY</u>							\$94,750	

Notes: (1) In some instances minor discounts for cash. If any sold before can purchase, cost could be higher or lower. MMC believes total figure safe. Figures have been rounded to nearest thousand except where firm.

(2) Does not include working capital - to be supplied by participants either directly or by loan as needed. Estimated working capital requirement \$25,000.

Blue Bell Extension
Copper Company
YAVAPAI
COUNTY

BLUE BELL EXTENSION COPPER COMPANY

Report of Operations

Jan. 29 to Feb. 28, incl., 1918

Balance, Jan. 29			
Com'l Trust & Savings Bank	\$ 1,314.75		
Cash	62.50	\$ 1,377.25	
Stock Sales: 1,550 shares @ 25¢	387.50		
Less: Paid on Account	312.50	75.00	
To J. E. Garber, Commissions			\$ 77.50
20% of \$387.50			
To Com'l Trust & Sav. Bank			14.52
February Premium Compensation Policy			
To Labor - Shaft-sinking			265.25
To Supplies, Powder, timber, tools, etc			126.56
To Misc. Expense, Auto Hire, Hauling, etc			42.00
Balance, Feb. 28			926.42
Com'l Trust & Savings Bank			
		\$ 1,452.25	\$ 1,452.25

Depth of Shaft, Feb. 28 - - - - 36 ft, last six feet drilling in sulphides.

Additional Stockholders

John Kmetick	250 shares	\$ 62.50
Frank Chamis	750 "	187.50
Peter Staranick	550 "	137.50
	<u>1,550 "</u>	<u>387.50</u>

Post Office Address of all stockholders reported,
Bluebell Mine, Mayer, Arizona.

I hereby swear that the above is a true and correct report of the operations of the Blue Bell Extension Copper Company for the period above specified.

Sworn to and subscribed before me this 4th day of March, 1918. (Seal) J. Adelman

John Kmetick
Secretary

Sec'y

Humboldt Smelter Handles Much Copper During June

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Mayer Miner: After many weeks of anxious waiting the Humboldt smelter has blown in and already several bars of copper have been run. When the smelter gets down to business the force will be increased to about 250 men and the output at the Blue Bell mine increased to capacity, which means a good healthy increase of employes at the mine also. Two shifts will be worked at the Siding and every pound of ore possible will be taken out and shipped to the smelter as rapidly as it can be done. It means lots of work for many men and the circulation of a large amount of money every payday.

An exemplification of what deep mining has determined in another instance in this field, and which is occasioning more than ordinary interest at the present time, was the statement made on Monday by Superintendent DeCamp of the Blue Bell near Mayer, in which he voluntarily mentioned the fact that on the 800-foot level there had been opened up the biggest bodies of copper ore in the history of that property.

The driving of the 1,000-foot level is now going on to intersect this condition, and it is practically assured that this realization is only a matter of carrying out development. The producing ability of the Blue Bell has now reached 250 tons daily, and ore of six per cent. With the Humboldt plant increased to handle double the capacity that heretofore was treated, the immense ore reserve determined in new workings of the Blue Bell may be weighed with that substantial consideration as to place this copper on a basis of permanency from which there is nothing to anticipate but the making of another desirable property and from which mining operators of the future may receive the benefits in applying the principle which lies behind deep development. This method of operating is causing many mines to come to the front and is the third notable achievement in recent months where practical effort has been rewarded, in the Little Daisy at Jerome, the Nelson at Crown King, and the Blue Bell, situated midway between the two.

Mining Man Visits.

Superintendent J. L. White, of the Blue Bell mine, motored to the city yesterday on a brief business trip, returning to the camp later. Ore production, he states, continues to the standard.

BLUEBELL TALE GOES ROUNDS, IS DENIED

MINE REPORTED SHUT DOWN, BUT ONLY ONE SHIFT IS LOST AS RESULT OF REDUCTION OF WAGES AND FORCE.

The Bluebell did not close down yesterday, except in the minds of the people who take pleasure in starting and passing on rumors. This was the gist of a short statement made by officials of the company last evening.

As a result of a cut in wages Saturday, about 30 men left the work. Several others, who did not leave voluntarily upon announcement of the cut, were allowed to leave for the convenience of the company, their services being no longer required, nor their presence wanted. Sunday, one shift of work was lost, but that night, the works were full of men again, and since then, there has been no slack in the work.

Similarly, at the Binghamton, there was a reduction of about half a dozen men as a result of the wage drop, but no time was lost in the mine.

Southwestern Progress
The smelter at Humboldt, Ariz., is running with a force of 145 men, and the Blue Bell has on the pay roll seventy-five miners. It has announced that there will be no further curtailment of the operating forces in prospect. It is said both properties will continue to operate until copper gets below 8 cents per pound.

DEVELOPMENT APR 22 1916

An official of the Consolidated Arizona Smelting Company, which owns and is operating the Blue Bell copper mine, situated near Mayer, made the statement a few days ago, that development on the 1,000-foot level had exposed a 20-foot copper ore body that would average in value fully 4 per cent.

"This determination," he said "is conclusive, and is especially pleasing for the important reason that this huge body of ore was determined at the deepest working point, an essentially important matter from which may be accurately judged what immense mineral resources are behind the property. I do not wish to classify this discovery, made only a few days ago, as a strike. It is a clear-cut demonstration of practical development and was no surprise. The Blue Bell, I am pleased to state, is bigger and better today than at any time in its history, and from this termination is able to take its place in line with other big coppers, and has certainly a very attractive outlook. I will also state that the De Soto holding of the company in the Bradshaws are making a strong productive record, and new development would indicate another fine property as nearing the copper goal."

The Humboldt smelter, this authority stated, is treating 600 tons per day, and with both mines actively producing the affairs of the Consolidated are in a decidedly healthy condition.

MAY 15 1916
Arrivals yesterday from the East reported that John Patten had closed a bonding deal for his copper holdings in that belt, in which the consideration was \$18,000, with a first cash payment to be made later. The new operators have taken charge, and will place machinery on the ground to begin deep sinking. This deal is due to the property being located on what is said to be the Blue Bell condition, situated a few miles south. Patten had been operating his group single-handed for nearly 20 years.

HIGH STRIKES ARE REPORTED AT MAYER

(BY F. W. BOWER)

MAYER, Ariz., March 28.—Undoubtedly, the most important strikes in the copper mines of the Mayer section are those recently made in the Blue Bell mine on the 800 and the 1200 foot levels.

There are six lenses of ore in this mine that outcrop or have been worked from the first level down through the intervening levels to the 1,000, the pay ore averaging in width from eight to forty feet. On the newly opened 1200-foot level, two of the largest ore bodies have recently been opened up and there is every reason to expect the other shoots to come through to this new level. But the interesting thing is the finding of two new ore lenses which did not outcrop but have been found apexed at the 800 and the 1200 levels. Basing the length of these two new ore lenses upon what has been proven in the development of the other six ore shoots, which are stronger and higher grade on the 1000-foot level and the two shoots on the 1200 level, there is reason to expect that the depth of the mine will be at least another 1200 feet.

Mine Superintendent De Camp is just as much at sea as to the future depth of the mine as anyone, yet he firmly believes that the ore lenses have only just commenced to appear. The "bottom" may be reached in 3,000 feet or it may be 5,000 or 10,000 feet.

At any rate, the management of both the Blue Bell and the De Soto, for the De Soto mine has much the same formation as the Blue Bell, are planning big things. Superintendent DeCamp expects to be breaking 150 tons daily on the newly opened 1200 level and soon three shifts will be working on the drift that is

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BLUE BELL OPENS NEW ORE BODY AT TWO LOW LEVELS

Managements of Mines in District of Mayer Plan Big Development Programs for Future Consummation.

MAYER, Ariz., March 30.—Undoubtedly the most important strikes in the copper mines of the Mayer section are those recently made in the Blue Bell mine on the 800 and the 1200 foot levels. There are six lenses of ore in this mine that outcrop or have been worked from the first level down through the intervening levels to the 1,000, the pay ore averaging in width from eight to forty feet. On the newly opened 1,200 foot level, two of the largest of these ore bodies have recently been opened up and there is every reason in the world to expect the other shoots to come through to this new level. But the interesting thing so pleasing to the mine management and to everyone who has at heart the future of the Mayer district, is the finding of two new ore lenses which did not outcrop but have been found apexed at the 800 and the 1,200 levels. Basing the length of these two new ore lenses upon what has been proven in the development of the other six ore shoots, which are stronger and higher grade on the 1,000 foot level and the two shots on the 1,200 level, there is reason to expect that the depth of the mine will be at least another 1,200 feet but there is no one to say there will not be other lenses developed when the present depth is doubled.

Mine Superintendent DeCamp is just as much at sea as to the future depth of the mine as anyone. Yet, he firmly believes that the ore lenses have only just commenced to appear. The "bottom" may be reached in 3000 feet or it may be five or ten thousand feet. It has not yet been determined what the eruptive formation of the Blue Bell district is but the theory most generally held is that it is the granite of the Brazos which makes its first appearance south and west of the DeSoto mine which would make it about five miles from the Blue Bell mine. Basing the possible depth to the granite at the Blue Bell on its

found to contain upper levels to the deepest level, 600 feet. Some of the best ore bodies in the mine have apexed on the lower levels. In the Copper Queen mine, the same condition exists. At the present time, an excellent grade of chalcopyrite ore is appearing in the new work in the winze approaching the 500-foot level below the adit which is supposed to be the same lens that was encountered 200 feet higher up where 8 feet of 6 per cent copper was crosscut.

These ore lenses can be likened to cigarettes packed so tightly in a box that they become oblong. Now that their occurrence is understood, it is not difficult to find them as a new level is being opened up.

Diamond drilling for exploratory work in the big mines in this district, is to be extensively used in the future, in the place of drifting with tunnels. Both the Blue Bell and the Arizona Binghamton mines have tried the system thoroughly. The plan is to drive a straight drift north and south and diamond drill every ten feet on each side, which will crosscut the formation and all ore can be blocked out on the level. The cost is from two to three dollars per foot of core and a great deal of unnecessary work and expense is saved. Some of the cores in the Binghamton mine on the 600-foot level, showed returns of 6 per cent copper. After the level has been drilled, the ore can then be broken most advantageously with no false moves.

Mine owners are greatly encouraged, in this district, by the deep findings of ore in the several larger mines. The Yavapai schist has many times been turned down as an unknown quantity in mining. Some of the best mines now producing in this section, have been repeatedly condemned by the best mining engineers of the country. These same mines are now making good and there is reason to expect them to develop into a class among the largest mines in the state.

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The development of other mines in this Mayer district at depth is proving up the Blue Bell in every case. In the Arizona Binghamton, the ore in the lenses just the same which have been found to continue unbroken from the upper levels to the deepest level, 600 feet. Some of the best ore bodies in the mine have apexed on the lower levels. In the Copper Queen mine, the same condition exists. At the present time, an excellent grade of chalcopyrite ore is appearing in the new work in the mine approaching the 500-foot level below the adit which is supposed to be the same lens that was encountered 200 feet higher up where 8 feet of 6 percent copper was crosscut.

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(By F. W. Bower)

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At any rate the management of both the Blue Bell and the DeSoto, for the DeSoto mine has much the same ore formation as the Blue Bell, are planning big things. Superintendent De Camp expects to be breaking 150 tons daily on the newly opened 1,200 level and soon, three shifts will be working on the dritt that is being run on the 800 foot level south, to tap the Blue Thunder ore 2,200 feet from the main shaft. There is reason to expect that new ore bodies will be found between the shaft and the Blue Thunder strike, for it is practically all virgin ground, with excellent surface outcroppings.

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Prescott Courier: The Blue Bell and De Soto mines, located to the south of the Arizona-Binghamton near Mayer, are operated in conjunction with the Humboldt smelter. Their output represents about one-third of the ore treated at that plant. The ore from the Copper Queen mine, adjoining the Arizona Binghamton, was treated in the latter's mill. The ore from the Commercial mine, located in Copper Basin, and owned by the Phelps-Dodge company, was sent as a flux to the United Verde and Humboldt smelters. A portion of the United Verde Extension ore was forwarded to the Humboldt smelter, but the greater portion was shipped to the Phelps-Dodge smelters at outside points. The Henrietta and Butternut ores were reduced at the smelter at Mayer. The Copper Hill ore was shipped to the sampler at Wickenburg. The ore from the Copper Hill runs high in molybdenite and is being mined and shipped at a generous profit.

The Humboldt smelter will resume operations in June. The Bluebell mine has sent as much ore as the plant could handle, and a concentrating plant was erected. This mine is developing well.

Blue Bell Mine Closed Down

Last Saturday word was received to lay off most of the men at the Blue Bell mine, and to 'suspend' operations until further notice, but to make all needed repairs so that work can be resumed at a moment's notice, when necessary.

About nine men are left at work repairing the tramway, towers, splicing new strips of cable in wherever necessary, and making repairs on machinery, etc.

How long the mine will remain closed down, is problematical. There are many rumors flying around, one of which is that Senator Clark is preparing to take over the property and that work will soon begin on a larger scale than ever, which, we hope, is true.

The fact that work continues on the erection of the new smelter at Humboldt and that about 160 men are rushing it to completion, and the fact that the ore being taken out of the mine recently is the richest yet encountered on that property, causes much speculation, for at the present time the Blue Bell is in a better position than ever to pay dividends.

Regardless of the cause of the closing of the Blue Bell, it means that the Mayer merchants will lose about \$1000 a month business, that can not be replaced unless other properties nearby open up.

Getting Ready for Long Run.

As the improvements at the Humboldt smelter progress, preparations for the resumption of work at the Blue Bell mine are also being made by the company, and it is reported that when mining is resumed there will be a larger force employed than when the mine shut down to await smelter improvements. A force of mechanics has been recently employed at the mine, and a general overhauling of buildings is taking place.

Resumes Mining Operations.

Word comes from the Blue Bell mine that work has been resumed below ground, and that about twenty-

Two shifts are now at work at the Blue Bell mine, twenty men going to work on the second shift, which was put on Tuesday night.

The extra men are stoping ore and doing development work on the lower level and the surplus ore is being put into the bins at the mine.

Supt. Wirtz is getting maximum results with a minimum force and everything is running with clock-like regularity. The efficient force he has gathered around him, working as a unit, are producing even better results than anticipated and the fact that the ore is coming out of the mine at a less cost per ton, and faster than ever before with the same number of men employed, is the only comment necessary.

Fifty men are employed at the mine at present, and the force will again be increased as soon as the new smelter at Humboldt is completed, which will be in a very short time, the force now at work on the plant rushing the work as rapidly as it is possible to do.

The ore that is now being received at Humboldt, daily, from the Blue Bell, is run through the mill and the concentrates shipped to Hayden for treatment.

As soon as the furnaces are completed and in running order the concentrates will be treated at our neighboring city and the increased number of men all around spells 'prosperity' to the good people of Humboldt and here in Mayer as well.

The force of six men at the Blue Bell Siding, are kept on the qui vive under the able supervision of Louis Price and every pound of ore that can be rushed over to the Siding on the tramway is handled with the greatest celerity during the daily nine hour shift. One hundred and sixty tons a day is the regular shipment and to increase this means that another shift must be put on at the Siding.

When the smelter has been completed the force employed by the Blue Bell company at Humboldt, the mine and the Siding will be larger than ever before in its history. Every able man who wants to work will be given employment and at the present time the number of idle men around town are so few that they can be counted on the fingers of one hand, and more men will, therefore, be brought here and given employment.

Arrivals in the city from the Blue Bell mines near Mayer, and the De Soto camp, in the Bradshaws, of the Consolidated Arizona Smelting Company, give quite an interesting review of these two holdings. So far as the Blue Bell is to be considered, it is reaching the zenith of its producing ability in copper, shipping to the smelter at Humboldt an average of six cars a day. Its payroll, also, has reached a new high water mark of 100 miners.

The management is said to be contemplating the installing of a big hoist, to facilitate sinking from the 850 level to the 1200 foot level, and the machinery will be on the ground in due time. Another attractive condition has been demonstrated on this property in that the greater the depth reached, the higher the percentage of copper in the rock.

The De Soto is also undergoing important consideration. The tramway from Middleton, on the Bradshaw mountain railroad, is being repaired and preliminary exploration in the old workings from the tunnel level is under headway. Conditions are encouraging, and it is believed that active development has been decided upon. New ground is being opened and good values are shown in the red metal.

The Humboldt plant is reported to be turning out an average of approximately 60,000 pounds of blister copper every six days, and this production will be increased as rapidly as mechanical facilities being tried out are perfected. Considerable custom ore is being received, mainly in car load lots for the present, and until treatment facilities are provided for hauling smaller tonnages and which are under contemplation.