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PRINTED: 06/14/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SNAFFLE CLAIMS

ALTERNATE NAMES: BIMETALS ORO MINING CO. PROPERTY ZENO PROPERTY

YAVAPAI COUNTY MILS NUMBER: 753

LOCATION: TOWNSHIP 11 N RANGE 1 E SECTION 35 QUARTER SW LATITUDE: N 34DEG 14MIN 53SEC LONGITUDE: W 112DEG 13MIN 44SEC TOPO MAP NAME: BUMBLE BEE - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY: LEAD ZINC SILVER GOLD PLACER

BIBLIOGRAPHY:

ADMMR SNAFFLE MINE FILE USGS BUMBLE BEE QUAD USGS CRIB PROJECTS LOCATION 10N, 1E, SEC. 14 BLM AMC FILE 46037

DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT

heren

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Mine		Bi-Metals. Cu., Pb., Zn.	Date	June 24, 1943
Distri	ct	Black Canyon	Engineer	Earl F. Hastings
Subje	ect:	Reconstruction Finance Corporation Mine Loan		x
	Dock Date Date	et No. Application Received of Report		Phx C-216 June 18, 1943 June 23, 1943
3.	1.	Name and address of applicant (correspon Neil B. McGinnis, 1401 S. Central Avenue	ident): 9, Phoenix, An	rizona.
	2.	Character of project and estimated cost Cu. Unwater and rehabilitate 115 foot a \$5,000.00.	thereof: shaft and late	eral workings therefrom.
	3.	Location of property: Black Canyon Mining District, Yavapai Co	ounty, Arizona	≎
	4.	Applicant's interest in or ownership of Applicant holds lease and option at 10 p	proparty: percent royal	ty•
	5.	Loan requested: \$5,000.00.	8	
	6.	Loan recommended: None.		· · · · · · · · · · · · · · · · · · ·
	7.	Comments: (Å) The only base metal ore referred t levels on the N.W. side of the main sha The James P. Cleator affidavit avoids r although states it is on the vein. Cle unquestionably would describe any ore e	o is a lense ft. This has eference to o ator performe exposed and le	between the 50 and 100 foot been removed and shipped. re in the 170 SE drift d this development work and ift on this level.
		(B) Future recommended work is to sink sulphide zone. The present lowest leve zone; but still apparently lacks any im-	an additionant is, according to the second sec	l 200 feet to develop in the ng to Orem, in the sulphide long a 200 foot lateral length
		(C) The project appears to be one of y the vein material will become less alter is further hoped, apparently, that rest in quantity during the course of such d	prospecting at pred and incre idual bunches levelopment.	; greater depth in hopes that ease in sulphide content. It of ore will be encountered
		While these may be logical probabilitic early or appreciable production possible	es the project Llities and re	t does not appear to have ecommendation is declined

for that reason.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

Earl F. Hastings, Projects Engineer

* GENERAL REFERENCES FI (ABGMT CLIPPINGS DEFERENCE 1 F2 (ABGMT-. USBM FILE DATA REFERENCE 2 FS (JEROME, S.E. 1956 UNPUB Ph.D. UMIN OF UTAM, 145 PGD REFERENCE 3 F4 C. EFERENCE 4 U.S. CRIB-SITE FORM RECORD IDENTIFICATION 820 (X, 1, M) DEPOSIT NUMBER 840 4 RECORD NUMBER B10 < RECORD TYPE FILE LINK IDENT. 850 (USBM 004 025 0217 G1 (81 K.O.G.X INFORMATION SOURCE BSD < 1,2 REPORT DATE REPORTER(SUPERVISOR) 62 < DEW ITT. ED, (last, first, middle initial) (last, first, middle initial) SITE NAME ATO BI- METALS MINE REPORTER AFFILIATION GS < ALGMT ATT SNAFFLE MINE SNEFFELL MINE SANTA ROSA MINE SYNONYMS LOCATION MINING DISTRICT/AREA ASO CBLACK CANYON COUNTRY A40 (U.S.) AGO . NAWAPAN > STATE ASO (AZ) COUNTY A63 (1.2. K. PHYSIOGRAPHIC PROV 1. (A62 (1,5,0,7,0,1,0,2,F LAND STATUS AGA (LOIDIE DRAINAGE AREA (,1,9,6,9,),> QUADRANGLE SCALE A100 (2,4,0,0,0,) QUADRANGLE NAME ADO C BUMBLE BEE) \ SECOND QUAD SCALE ANI CL SECOND QUAD NAME A92 < A107 < , 2, B, 6, 0, K, F.T.) ELEVATION *ACCURACY GEODETIC UTM A120 < 3,7,9,0, L.7.0.) N.) LATITUDE ATO < NORTHING ACCURATE ACO (circle) W. > LONGITUDE AND EASTING A130 (3.8.6.8.6.0) ESTIMATED EST < ZONE NUMBER ATTO CADASTRAL //N/ IE, 35 SW Projecter *RANGE(S) A78 < 0.0.1 .E. : . . ATT (0, 1.0.N. : TOWNSHIP(S) A79<14 1,10 . . SECTION(S) SECTION FRACTION(S) AT6 SE DE NW ABIS GILA AND SAT RIVER RIDIAN(S) POSITION FROM NEAREST PROMINENT LOCALITY AB2 (2.5 MILES SOUTH OF CLEATOR, ARIZONA LOCATION COMMENTS ABS <. * ESSENTIAL INFORMATION

+ ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

4	COMMODITY	INFORMATION	
COMMODITIES PRESENT	CIO < A. U. WAG		
ORE MINERALS	CON (GOLD, ARGENTI FEBOUS GALENA, CHALCO LYRITE	SPHALERITE	
GEN ANALYTICAL DATA			
COM. INFO. COMMENTS	CS0 <		
+ SIGNIEICANCE			
SIGNIFICANCE	PRODUCER	NON-PRODUCER	
MAJOR PRODUCTS	MAJOR < [A. W. , # A.G. , # ZN , , # P.B.]>	MAIN COMMODITIES PRESENT CIT	الاس
MINOR PRODUCTS	MINOR (C.U., W	MINOR COMMODITIES PRESENT CI2	
OCCURRENCES			. 1
			the state of the s
	*PRODU	JCTION	
	PRODUCER	NON-PRODUCER	*
PRODUCTION (ES) (circ	e) PRODUCTION SIZE MID MED LGE (circle one)	PRODUCTION UND NO (circle one)	
* STATUS	EXPLORATION C	R DEVELOPMENT	
	PRODUCER	NON-PRODUCER	
	STATUS AND ACTIVITY A20 (14)		
		SIAIUS AND ACIMITY AZU	
DISCOVERER			
PRESENT/LAST OWNED	A12 ROY POTTS (1641)	OF FIRST PRODUCTION LAD < 1908 YEAR OF LAST PRODUCTION L	45 < 1961
PRESENT/LAST OPERATOR	A13		······
EXPL./DEV.COMMENTS	L110<		
	·		
8°			
	DESCRIPTION	I OF DEPOSIT	
DEPOSIT TYPE(S)	CAO (VEIN		
DEPOSIT FORM/SHAPE	MIO TABULAR		
DEPTH TO TOP	M20 () UNITS M21 ()	MAXIMUM LENGTH M40 (13 DD) UNITS M41 ()	FT :
SDEPTH TO BOTTOM	MIS (SMALL) MIS (MEDILIM) MIS (LARGE) (SITIS AND		ET
STRIKE	M70 (N 20 W	DIP MB0 (DINITS MD (DINITS MD (>
RECTION OF PLUNGE	M100 <	> *PLUNGE M90 <	>
P. DESC. COMMENTS	M110 \		>
i A			1
	DESCRIPTION	OF WORKINGS	
Workings are SURFAC	FM120 UNDERGROUND M130 BOTH M140 (circle one)	OVERALL LENGTH M190 (D UNITS M191 ()	FT
DEPTH BELOW SURFACE	M160 () UNITS M161 ()	OVERALL WIDTH M200	FT
LENGTH OF WORKINGS	M170< 200 > UNITS M171 < FT >	OVERALL AREA M210	······································
DESC. OF WORK. COM.	M220 <		
	GEC	DLOGY	
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+HOST ROCK TYPE(S)	KIA AMPHIBOLITE SCHIST	A THINK TO ITTO MILLION YEARS	
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* ORE CONTROL/LOCUS	KO FAULTING SHEARING		
* MAJ. REG. TRENDS/ST	RUCT. NS FOLIATION TREMPS N 20 W		
* TECTONIC SETTING	NISC VEN PARALLELS FOLIATION		
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*FORMATION AGE	NSO(P.R.D.T	CHTER INTEN 11720 MILLON VERES	
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SECOND FM AGE			
SECOND PM NAME	NSO(P.R.O.T W. WPB ZIRCON ES	aut TO 1720 MILLION VEARS	
TICHEOUS UNIT NAME	NEDA CRAZY BASIN QUARTZ MONZON ITE		

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GENERAL COMMENTS

GENERAL COMMENTS GEN .

*IGNEOUS UNIT NAME

SECOND IG. UNIT AGE

N55<

Norma Thomas		
News Items		del
/ .	Date	0/8/40
Mine BI-M	ETALS	
Location / C	-LEATOR	
Owner V JI	M'CLEATE	hennell your web
Address	11	•
Operating Co. 🧷	PTIONED &	BY JIM VASSHR
Address OF	CLEATOR	80 ⁸
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Pres. BAL	h MILL -	TABLES -
Genl. Mgr. Pa	ANS TO P	UT IN
Mine Supt. /-	LUTATION	3
Mill Supt.		
Principal Metals	MAIN WORI	T IS ON
Men Employed	SNAFFL	LE CLAIM.
Production Rate		
Mill, Type & Capa	icity	
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DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT

Mine BI#Metals

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Date Sept. 20, 1954

District Black Canyon

Engineer Mark Gemmill

Subject: Present Status

This property has had no operation other than assessmant work for some years. There seems little chance of it operating

SNAFFLE MINE

Bi-motal

YAVAPAI COUNTY

Learned that the Snaffle-Silver Christmas-Silver Cord operation was suspended early in April but is expected to resume soon. The people are the Montague Bros. and Potts. TPL WR 4-29-61

Interviewed Reasoner at Cleator. Learned that Tom Cleator and Lynn Montague, Star Route, Bumble Bee, Arizona, have delivered a batch of ore from the Silver Cord Mine to their mill on the Snaffle property. They are repairing a serious break-down at the mill. TPL WR 7-15-61

A small gravity table is being installed at the Snaffle mine, near Cleator, Arizona, owned by the Tom Cleator estate. Operators are Montague and Potts, partners, of Salt Lake City, Utah. They propose first to mine the narrow silver veins at the Silver Christmas claims, then to work the Snaffle when the market for lead-zinc improves. Mining World May 1961 p. 47

Active Oct. 1961

Two Canadians, a geologic engineer and a promoter, were in to see the Snaffle Mine file. They had been out to the mine property and observed that in addition to the shaft mentioned in our file, an incline had been sunk on the N.W. side of the shaft, southeaxtward toward the shaft. A small pile of ore had been sorted from the incline muck and was visible near the collar of theincline. The two men are looking for silver properties with development potential. KAP WR 3/14/75

DEPARTMENT OF MINERAL RESOURCES state of arizona field engineers report

Mine		SILVER C	HRISTMAS	MINE		Date	Januar	y 3	30, 1961	
	θ	SNAFFLE I	MINE							
District		YAVAPAI (COUNTY			Engineer	Prank	P.	Knight,	Director

Subject:

Mine visited 1-28-61

Montague and Potts, partners, are putting in a gravity mill (table) at the Snaffle mine owned by the Tom'Cleator estate and which they have leased. There are two Montague brothers at the property and the partners are from Salt Lake City.

They plan to start mining the reportedly narrow silver ores at the Silver Christmas to begin with, and to work the Snaffle when lead-zinc prices rise. They count on a change of Washington policy to help the prices.

YAVAPAI COUNTY

No information on this property. 5-27-57 Mark Gemmill

Deserver and and the second second second

Reterener: Snaffle Mine (file)

REPORT ON

ORO MINING COMPANY'S PROPERTY

TOWN OF CLEATOR

YAVAPAI COUNTY, ARIZONA

PURPOSE AND SCOPE OF REPORT: -

In determining whether to call this property a prospect or a partially developed mine, I would say that it was the latter. Due to several major geologic occurances this property, or the properties of the Oro Mining Co., is of sufficient merit for consideration Geologically and Economically.

An estimate of the financial outcome of this property based on the following assumption as herein set forth in this report shall determine the amount of expenditure and the returns expected, which shall be ascertained by the metal content of the ore. This would determine the production capacity of the mine; the financial outcome and also the price which might be paid for the mine.

SUMMARY AND CONCLUSION:

This property does not show, at this time, an extremely high value, but it could be classed as being an intermediate one, with several very encouraging know indications.

In summarizing this property and the adjoining districts, it could be made to produce successfully by using the proper modern equipment, as is here used by one of the adjoining properties which from all indications as to the reduction of the ore coincides with the Oro Mining Company's Claims. I refer to the Golden Turkey property in this immediate vicinity. Their mill set up should be carried out on the Oro Mining Company's ore. In the metallurgical test made, a recovery of at least 90 percent of the concentrates should be maintained.

The ideal climate in this vicinity is indeed an asset to the property, and work cound be carried on the year around.

An estimate of the expenditures that this property would require is approximately as follows:

100 ton daily capacity mill	\$25,000.00
Buildings and Camp	5,000.00
Fauinment	500.00
Dam	10,000.00
Development	
Old, retimbering etc. \$5,000.00	10 000 00
New, mining, etc. 5,000.00	10,000.00
TOTAL	\$50,500.00

LOCATION AND DESCRIPTION:

This property comprises 9 unpatented lode mining claims situated in the Black Canyon Mining District, Yavapai County, Arizona, and are named as follows; to wit:

[®] Bi-Metal	Bi-Metal #1	Bi-Metal #2		
Georgiana	Golden Gate			
Puzzler #1	"The Kid			

They are the usual 600 feet x 1500 feet, and are recorded in the Book of Mines in the

REPORT ON ORO MINING COMPANY 'S PROPERTY, TOWN OF CLEATOR, Y APAI COUNTY, ARIZONA #2

Recorder's Office of Yavapai County, Arizona. The County seat being Prescott, Arizona.

They are reached by an improved automobile road (dirt) from Phoenix or Prescott to the little town of Cleator, thence to the property on an unimproved, but passable, dirt road, which would serve for light trucking at this time.

This latter dirt road into the property has two short grades beginning from Poland Greek which could be eliminated by following a lower contour of the hillside. Poland Creek flows about eight months, runs through and across the property. At the junction of the road and the creek a small bridge would be necessary to eliminate any future difficulties in crossing at any time, however, the road is passable at this point, and is only difficult to traverse during the winter rainy season, a period of about two months.

The general contour of the hills on the Oro Group of claims is of a low rounded, flat topped aspect, and the greator portion of the claims lie on the slopes of the hillsides, which do not rise in altitude from the bottom of Poland Creek more than 300 feet. This Creek cuts the property about 3,000 feet from the South end-line of the Oro Group, and in the rainy seasons is approximately 25 feet wide, ranging from one to five feet deep where it crosses the property. Poland Creek originates from an altitude of more than 6,000 feet above sea level, and at the point where it crosses the Oro Group the altitude is 3,000 feet. From the property upstream to the 6000 foot altitude is a distance of more than fifteen miles. There are many intermittant streams and gulches over this distance. During the winter months the adjoining mountain area is snow-capped at the 6000 foot elevation. This is about five miles from the Oro Group. The adjoining area, the Bradshaw Mountain area, is composed mostly of granite and this proves itself to be the watershed in this immediate vicinity.

2500 feet west of the Oro's main working shaft the selected natural dam-site occurs. The fall is approximately one-quarter of an inch to the foot from the dam site to the mill site near the main shaft.

HISTORY:

The Black Canyon Mining District covers a considerable area in the souther-central portion of Yavapai County, Yavapai County itself lies a trifle North and East of the center of the State of Arizona.

The Black Canyon Mining District has been known of since the latter part of the Nineteenth Century. Due to it's mines operating some thirty years ago a railroad was constructed to the Crown King. This railroad is not, however, in operation at the present time having been discontinued from the Crown King to Mayer, a small town located on the Santa Fe and being about twenty miles from the town of Cleator.

The railroad bed is still good condition and now serves as an automobile road to the Crown King. This Crown King Mine has been one of the outstanding mines of the District, and has the reputation of having produced several millions of dolars for its owners. It works a vertical vein, and due to the depth reached (said to be about 4500 feet) and the low prices paid for gold and silver within recent years the Crown King has been worked desultorily, if at all, within the past few years. However, now that prices have increased it is again being put into production.

Within three miles of the Oro Group the Golden Turkey, Golden Belt and the Swastika are working. The Golden Turkey is mining a flat vein at a profit. Having stated operations only last August they claim to have paid off the purchase price of REPORT ON ORO MINING COMPAN. S PROPERTY, TOWN OF CLEATOR, YAVAPAI COUNTY, ARIZONA

their claims, and their 50 ton mill. They have constructed an adequate camp, and are operating pleasantly, as they say, 'on velvet'.

Almost directly south of the Oro Group is the Thunder Bolt and the Silver Cord group. The Thunder Bolt is now constructing a mill and getting thier property in shape to start work at once. Adjoining the Oro Group also are the French Lilly and the Golden Lily properties. A Government loan of \$50,000.00 was recently approved for the construction of a 50 ton mill on the French Lily. This property lies North and East of the Oro Claims.

The history of the Oro Group of claims can be stated briefly. Seven of the claims were located by James P. Cleator, for whom the town of 'Cleator' is named and who owns and operates a store there. Location notices were filed and recorded as follows:

Bi-Metal, Re	corded	Feb.	2,	1934,	Book	141,	Page	161	
Bi-Metal #1	11	Feb.	2,	1934	88	141	88	162	
Bi-Metal #2	88	Feb.	2,	1934	89	141	88	163	
Georgina	斞	Jun.	25,	1933	88	140	88	158	
Golden Gate	81	Apr.	25,:	1922	99	141	89	164	
Puzzler #1	88	Nov .:	27,	1925	88	141	88	165	
Spotlight	81	Jly.	2,	1925	99	141	88	166	

The Babe and the Kid claims were located by Franklin Hunt, February 1935.

The three Bi-Metal claims and the Georgina were known as the 'Bi-Metal Group'. Certain shafts, drifts, etc. have been completed on this group (which I shall explain more fully under the heading of "Development") and certain machinery was set up on these claims, a partial list of which is as follows; to wit:

> 1-25 ton ball-type mill 1- Compressor (two hammer supply) 2- Ore cars 300 feet of track (light weight) 2000 lin. feet of 25" pipe 200 lin. feet of 1" pipe 1-#3-100 ton Samson Jaw Crusher 1- Blacksmith shop, building and equipment 1- Power Hoist with 15 H.P. Fairbanks-Morse Engine 2 Jack Hammers Belting and pulleys Receivers 1- 50 gallon Galvanized Iron Water Tank 2- 2000gallon wood water tanks 1- #6 Camon Water pump 1- Steel Wheelbarrow 1- Concentrating Table (Welfty Type) 1- Skip 1- Bailer 300 feet 3" Cable 1 Small house used as Cook house (with some equipment) Miscellaneous shovels.

Due to poor management and lack of financial backing the then owners were unable to carry on their proposed program of development, the Oro Mining Company came into possession of the claims and the machinery.

#3

LOCATION #3

A cross cut tunnel on Bi-Metal #1 Claim. 153 feet cross cut Northwest to Snaefell Vein. The breast of this tunnel is about 750 feet to the main shaft. 150 feet backs. Sample #3 taken across four feet on breast of this cross cut tunnel.

LOCATION #4

A 40 foot drift on the Snaefell Vein. This drift is 75 feet above location #3 cross cut tunnel.

LOCATION #5

Exposed cross cut #1 one hundred feet above cross cut tunnel. Vein is four and one-half feet wide here. No sample taken.

LOCATION #6

Exposed cross cut #2. 115 feet above cross cut tunnel and about 50 feet North of Location #5. No sample taken.

LOCATION #7

Exposed cross cut #3. 150 feet above cross cut tunnel. Vein 5 feet across here. 300 feet North of cross cut tunnel. Sample #5 taken across 5 feet.

LOCATION #8

Exposed cut #4. 100 feet South of main shaft 5 feet across vein here. No sample taken.

LOCATION #9

Vein exposed at collar of shaft. Sample #6 taken across 7 feet 6 inches.

LOCATION #10

Sample #7 across 6 feet on 62 foot level in stope. 35 feet of drifting North.

LOCATION #11

Sample #6 across 2 feet 8 inches 35 feet from collar of shaft vein narrowed here for six feet.

LOCATION #12

Sample #9 across 5 feet. 50 feet from collar of shaft in 15 foot drift South from shaft. Sample cut 8 feet from shaft.

LOCATION #13

Sample #10 taken across 4½ feet on breast. 50 foot north drift on Snaefell Vein (on Bi-Metal Claim). 40 feet of backs here.

LOCATION #14

Sample #11 taken across 2 feet 6 inches on the Georgina Vein, on the Georgina Claim, 200 feet of drifting Northerly on vein here. Sample taken in 8 foot stope to surface connecting the 200 foot drift on this vein. 50 feet of backs here.

REPORT ON ORO MINING COMPAL S PROPERTY, TOWN OF CLEATOR, Y. APAI COUNTY, ARIZONA #4

GEOLOGY AND MINERALIZATION:

The principal rocks of the region of the Oro Mining Company's claims are Pre-Cambrian Shists, which are in contact with the Pegmatite Granites of the Bradshaw Mountains and which are about 1000 feet West of the Snaefell Vein in the Pre-Cambrian Shist. As stated previously, the Bradshaw Mountains border the Oro Group on the West, and approximately 1300 feet Easterly, protruding through the Shist, is the location of the Snaefell Vein, which trends North 85° West.

The Pre-Cambrian Shist formation continues Eastward for a distance of approximately 5000 feet, where it comes in contact with Quartzsite, and then extends further easterly for more than eight miles. The Shist formation from the Oro Group extends Northerly and Southerly contacting the Granite on the West for more than ten miles in either direction. The Shist formation trends North 75^o West- or nearly the same as the Snaefell vein.

The immediate region is traversed by smaller amounts of Pegmatite and Ryolite Dikes parallelling the strike of the Snaefell Vein, and from surface indications nearly come in contact with them in three instances, and protrude through the Shist to the surface contacting the Snaefell Vain on two separate occasions; as shown on the map two Porphry Dykes cut the Snaefell Vein and strike Easterly and Westerly. They stand almost vertical with the hanging wall Shist and the foot wall Andesite for several feet in distance and here again the Andesite grades into Shist. as seen in Jack-o'-the-Green Creek, about 150 feet North of the junction of Poland and Jack-'o-th Green Creek this Porphry Dyke is about 20 feet wide. Further up the Jack-'o-the-Green Creek, about 150 feet further North the outcrop is seen again, and here it turns Northeasterly through the adjoining property. Near the junction of the road and Poland Creek and for a distance of more than 500 feet up the stream the Porphry is exposed on th North bank and forms the bed of Poland Creek.

These Dykes have led the way for the mineralization of the Veins exposed on the Oro Group of claims, namely the two exposed by erosion-- the Snaefell Vein and the Georgina Vein.

The Snaefell Vein is exposed on the surface over the entire length of the six Oro Mining Company Claims, or for a distance of 9000 feet and divides the claims in its Northerly and Southerly trend. In twelve samples taken, where the vein was exposed either by open cuts on the surface, drifts and shafts the width was never less than four and one-half feet and on the two occasions--one, two feet eight inches in the main shaft at 35 feet from the collar of the shaft was here for a distance of only a few feet; the other was three feet six inches at eight feet below the surface.

The average for the twelve samples taken along the Snaefell Vein was more than four feet six inches.

The hanging wall and the foot wall of the Snaefell Vein are of Pre-Cambrian Shist.

The vein matter is made up of disseminated Quartz Veins intruded upward from depths through the fractured Shist.

The deposition of vein matter is made up of Limenite (Iron oxide), Kaloin (decomposed Feldspar) as gouge matter, occasional Copper Stains (Carbonate of Copper). Less than 8% of Zinc and a minimum of Lead in the mineral galena.

REPORT ON ORO MINING COMPA . PROPERTY, TOWN OF CLEATOR, Y AI COUNTY, ARIZONA #7

LOCATION # 15

Surface cut 800 feet from the South and line of the Golden Gate claim. Sample #12 taken across 4 feet on the Snaefell Vein on the Golden Gate Claim.

LOCATION # 16

8 foot shaft

Sample #13 taken across 3 feet Snaefell Vein 1400 feet from the South end of Spotlight Claim.

LOCATION # 17

About 400 feet North of the North end line of the Puzzler #1 Claim, a 100 foot drift, North on the Snaefell Vein, has been driven. This drift is on the Arizona Western property. No sample was taken. The Puzzler #1 Claim is the Northern boundary of the Oro Mining Company's Group of claims.

In summing up the amount of development work that has been done on these claims would say that it is approximately as follows:

1- Double compartment shaft, 100 ft. deep, size 4 x 8 18 Lin. feet of stoping 10 x 18 (180 cu. ft.) 818 Lin. feet of drift tunnelling 600 Cu. Ft. open cuts 10000 Cu. Ft. for Mill Site

SAMPLING & ESTIMATION OF ORE RESERVES:

The samples that have here been set forth were taken across the Vein from foot wall to hanging wall in all instances. A two inch deep cut was made on the veins by four inches wide, perpendicular to both walls. Each sample was then quartered. All samples were cut with a moil and single jack. (I shall state here that assay sampling of a vein or perhaps a few pounds of vein-matter at nearly any chosen place on the vein could discourage, and also extremely enthuse, an investor; but these facts borne in mind are only a part of the total assumptions to consider, but are extremely beneficial to determine the value that must be estimated for consideration.)

The tonnage is estimated to be 40,000 tons. This total represents the ore blocked out. There is some additional tonnage which is only partially blocked out, therefore cannot be estimated.

The ore will weigh approximately 15 cubic feet per ton. The total average of the samples taken, thirteen in number, was 6.07.

ORE TESTS:

Leavings from quartered samples were collected for the metallurgical process, and approximately 100 pounds was taken from all along the veins.

PRODUCTIVE CAPACITY OF MINE

With the main shaft in good shape, and with levels at proper intervals, a capacity tonnage of 100 tons daily should be the minimum output when operations for reductions are completed.

REPORT ON ORO MINING COMPA 'S PROPERTY, TOWN OF CLEATOR, 1 APAI COUNTY, ARIZONA #5

The vein dips North 62° East, strikes North 85° West.

Some free gold is found in the vein matter altho a greater portion occurs in the sulphides, and the full extent in value can only be determined by assaying.

THE LODES OF THE ORO GROUP

THE GEORGINA VEIN:

The Georgina Vein is located on the Georgina claim and at the portal of the drift 200 feet along its strike, and approximately 50 feet below the surface is two feet six inches wide for this entire length. It extends North-eastward and intersects the Snaefell Vein about 300 feet North of the South end-line of the Golden Gate claim. At this point the width is about 20 feet across as soon on the surface. The veins were not opened here and no samples taken.

The Snaefell and Georgina Veins here form the East Bank of Junction Gulch.

Due to the intersection of these veins here, and the cutting through of the Porphry Dyke near this point is without a doubt an extremely excellent location for a prospect shaft. Sample #11 was taken at the portal of the tunnel across two feet six inches.

Evidence of Manganese was seen here.

This vein is evidently an off-shoot of the Snaefell Vein.

The hanging wall and foot wall are Shist, and the dip here is North 45° East.

THE SNAFFELL VEIN:

This vein has already been explained quite thoroughly under the head " Geology" and "Mineralization."

FAULTING

Due to the strong Northward twend of these veins on the surface and as observed in the main shaft at a depth of 80 feet, practically no faulting occurred on the veins. The faulting occurred previous to the time of deposition; the vein is in place and the walls are well defined.

DEVELOPMENT

LOCATION #1

650 feet from the South end line of Bi-Metal #2 Claim, a drift 150 feet South Sample #1 was taken across 3 ft. and was taken twenty feet south of the portal of this drift on the Snaefell Vein. The tunnel portal is bout 150 feet below the surface. Backs 150 feet.

LOCATION #2

Open cross cut on Snaefell Vein Sample #2 taken across five feet of vein Quartz, three feet of diseminated vein Quartz and gouge matter. This open cut is 150 feet above location #1.

ESTIMATE OF OUTCOME

The concentrates could be transported by truck to the smelters at a cost of

Smelting Charge Mining Milling

\$10.00 per ton 4.50 per ton 1.50 per ton

APPRAISAL & PRESENT VALUE:

Value of blocked out ore is figured on a basis of 40,000 tons at \$6,00 per ton, bringing a total of \$240,000.00 This tonnage was figured on an average of four feet on the Snaefell Vein and two and one-half feet on the Georgina Vein. I have found, however an average of four and one-half feet on the Snaefell Vein which, of course, would increase this tonnage accordingly.

FUTURE DEVELOPMENT:

I propose the sinking of two shafts to the 100 foot level. (See map.) Also, as mentioned heretofore, the construction of an up-to-date Mill - 100 ton daily capacity and the construction of a dam. Certain development work should be carried on simultaneously with the building of the mill. Such as re-timbering, in places where necessary, etc.

OPERATING EFFECTS:

The labor conditions in the locality are very favorable and good miners and mechanica are available.

There can be had an abundance of water, either from a well or from the proposed dam site on Poland Creek.

I would propose using a Diesel Engine for the power needed.

EQUIPMENT-MINE AND MILL

The ore after being mined would be handled by a power hoist and dumped into a hopper, fed into a jaw crusher followed by a bin of sufficient capacity. A feed regulator from the bin into a ball type Mill, then into a concentrator. This is then followed by a Flotation System.

The vein-matter, being of diseminated Quartz as seen at a depth of 85 feet below the surface, should present no problem in mining.

The walls are well defined and mining methods could be carried on by sinking, drifting and stoping. Air hammers would be used for powder hole drilling.

The mine would make a fair supply of water, which could be handled by a good standard type of pump at all times.

TITLES

In examining the titles of this property I find it is in good standing, and the evidence of ownership is legal and is on record at the Courthouse in Prescott, Arizona.

GENERAL

The property mentioned in the foregoing report is of merit but would require

careful engineering technique, operating methods and a very careful and efficient operating program in order that it might attain it's possible return.

The profits here shown do not present themselves to the fullest extent and value at this time, due to the partially developed condition of the property, but the indications economically and geologically here presented are indicative enough to warrant further exploration.

> E. A. MAYHAN Geologist and Engineer March 1935

May 12, 1944

Mr. C. L. Orem 307 Phoenix National Bank Building Phoenix, Arizona

Dear Mr. Orem:

Enclosed please find a copy of a report on the "Oro Mining Company's Property". The original ' has been returned to Mr. James P. Cleator.

Very truly yours,

J. S. Coupal Director

JSC: JES enc. May 12, 1944

Mr. James P. Cleator Cleator Arizona

Dear Mr. Cleator:

Under separate cover I am sending the original and two copies of the report on the "Oro Mining Company's Property" to you. Copies have been made for our files.

Very truly yours,

J. S. Coupal. Director

JSC:JES

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YAVAPAI COUNTY

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Snaffle Mine (file)

ZENO MINING CORP.

Active Oct. 1961 Active Feb. 1962 - 3 men - A. J. Hubbard, Pres. Zeno Mining Corp., Star Route, Bumble Bee, Arizona Active Oct. 1962

ZENO MINE

Frank Hemenet, 5719 N. 38th Place, wanted information on second hand machinery to supplement that now being hauled into the old Zeno mine near Cleator. He is to furnish this equipment for an interest in the mine. The projected mill is supposed to handle 100 tons per day. It was suggested that he first check on the ore reserves before he goes into the deal. He had made arrangements for Gerald Weathers to examine the mine. LAS WR 10-26-62

(治中水田)(1)

Closed down April 1963. EGW

DEPARTMENT OF MINERAL RESOURCES state of arizona FIELD ENGINEERS REPORT

Mine Zeno

Date May 22, 1962

District Black Canyon, Yavapai Co.

Engineer Travis P. Lane

Subject: Visit of May 22, 1962

The Property comprises 5 contiguous unpatented claims located on Poland Creek, $3\frac{1}{2}$ miles south of Cleator.

The Operator is Zeno Mines Corp. (an Arizona corporation), A.J. Hubbard, Pres. & Gen. Mgr.; Address, Star Route, Bumble Bee, Arizona.

The country rock is a porphyritic rhyolite containing occasional bands of schist and limestone and transversed by a number of broad pegmatite dikes. Gold, silver and lead values have been noted in the pegmatite and in thin quartz stringers along the contacts of schist with pegmatite or rhyolite, also in a shear zone wholly within the rhyolite. The first interest and subsequent development of the property followed the exposure of a good grade of material in a shallow pit on the steep hillside bank of Poland Creek at some 300' elevation above the camp on the creek. According to Mr. Hubbard a shaft was put down some 15' on the showing and then, because of the extremely rough topography the work was stopped and it was decided to continue development by crosscut adits driven in lower down the slope. The shaft filled with washed-in debris soon after and is now inacessible. A crosscut is being driven at 325° E at the base of the slope and is now in approximately 200'. The elevation of the shaft collar is some 300' above the crosscut. According to Mr. Hubbard the vein dips toward the tunnel and the present face must be advanced about 40' to intersect the vein on its dip. This assumes a vein dip of 45° or less. In the absence of a survey and in view of the caved condition of the shaft it was not possible to verify this.

A shear zone some 30' wide has been explored by an adit some 175' easterly from the 200' adit and at about 30' higher elevation. This is very old work and is caved in its inner portion. However, the vein is visible for a distance of about 80' in the roof of drift. Hubbard calls this the "Frenchman" tunnel. No record is available re its length or other features. Mr. Hubbard has started a cut-out for another adit 20' directly below the portal of this old adit. He states he has obtained assays of 1/2 oz. gold across about 15' in the cut and that better assays have been obtained in the Frenchman tunnel.

Mr. Hubbard desires to build a mill. It was pointed out that although he has obtained a number of good assays at scattered points it would be wise to survey surface features and the workings and do some systematic sampling. This would afford a firm basis for determining ore reserve tonnages and grade of ore.



Visited the Zeno Mining Corporation property some 3 miles south of Cleator. A.J. Hubbard is president and general manager; Address: Star Route, Bumble Bee, Arizona. The property comprises 5 unpatented claims located on the steep hillside of the west bank of Poland Creek. Mr. Hubbard and his wife live at a camp in a flat on the edge of the creek. The work to date has shown a main vein traceable for some 3500' on the surface. Values are gold, silver, and lead. Work is to concentrated on a vein section in a shallow pit where Hubbard obtained a sample across 4 feet which his assay certificate shows to contain $5\frac{1}{2}$ oz. Au; $7\frac{1}{2}$ oz. Ag and 20.63% Pb. No work was in progress at the time of visit. Mr. Hubbard, however, is expecting to have a rented dozer working soon on a road up from the camp to his workings. Also, he has arranged for a man to join him within a few days to continue work at the site of his good showing where he intends to sink a shaft. TRAVIS P. LANE, WR - 8-13-60

SAC G 2/6/ Zeno Mines ix Gazette. NEAR CLEATOR **Couple Describes** Strange Sky Lights