

9-19-60

Ersek Mine w Hawk Box

overall
Trend vein about N 37° E
steep dip NE

lowest drift 23 95 (A)
next drift 24 80
85'

New Drift about 2500
Trends N 10° W for 35'
Took sample in face

Upper drift right hand
~~drift~~ ^{exposed} (about 15' in
± 12' N to vein)
strikes N 45° W dip 52° NE

see samples UG -
247 248 249 & 250

owners Harry E. Hawk, Ashland &
Sharon H. Hawk, Medford
see also UG 202 203

Telephone 363-3302

Hand Sample Serial.....11297-11309

ASSAY REPORT UNION ASSAY OFFICE, Inc.

W. C. WANLASS, President
G. P. WILLIAMS, Vice President
A. S. JOLLIFFE, Treasurer
GERALDINE A. WANLASS, Secretary
P. O. Box 1528
Salt Lake City, Utah 84110

Mine.....

Geoff Garcia
12303 Galice Rd
Merlin, OR

RESULTS PER TON OF 2000 POUNDS

Apr 13, 1979

NUMBER	GOLD Ozs. Per Ton	SILVER Ozs. Per Ton	LEAD Per Cent	COPPER Per Cent	INSOL. Per Cent	ZINC Per Cent	SULPHUR Per Cent	IRON Per Cent	LIME Per Cent	Per Cent	Per Cent
1	0.140	0.2									
2	0.010	0.1									
3	none	none									
4	0.020	none									
5	0.370	0.2									
6	0.010	none									
7	0.130	none									
8	0.030	none									
9	0.050	none									
10	Trace	none									
11	0.010	none									
12	0.090	none									
P-3	0.280	none									

Remarks.....

Charges \$ 78.00 Paid

G. P. Williams

Appendix II

123



Geochemical Lab Report

REPORT# 121-2040

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	As PPM	Au PPB	NOTES	
						Width	Location
4871	ROCKS	2800	1860	5.8	2410	5.1 ft.	Days Gulch prospect, lower adit
4872		700	102	4.2	945	5.5	" " " , " "
4873		480	290	4.1	1930	3.4	" " " , " "
4874		1640	1910	2.3	1450	4.2	" " " , upper adit
22951		56	58	0.2	30	?	Eureka Mine, trench above adit
22952		22	34	0.2	45	10.2	" " , " " "
22953		40	64	0.5	1560	10.1	" " , adit
22954		72	146	0.7	2180	11.5	" " , adit

~~SECRET~~

CLIENT: DENISON MINES

REPORT NUMBER: BV121-2040

GEOLOGIST: PARKER, R

AGEOLOGIST: ,

PROJECT:

NUMBER OF SAMPLES: 8

PRIORITY: 2

DATE: AUGUST 10, 1981

SEE APPENDIX FOR EXPLANATION OF DIGESTION, ANALYSIS, SAMPLE TYPE, AND SIEVE SIZE CODES.

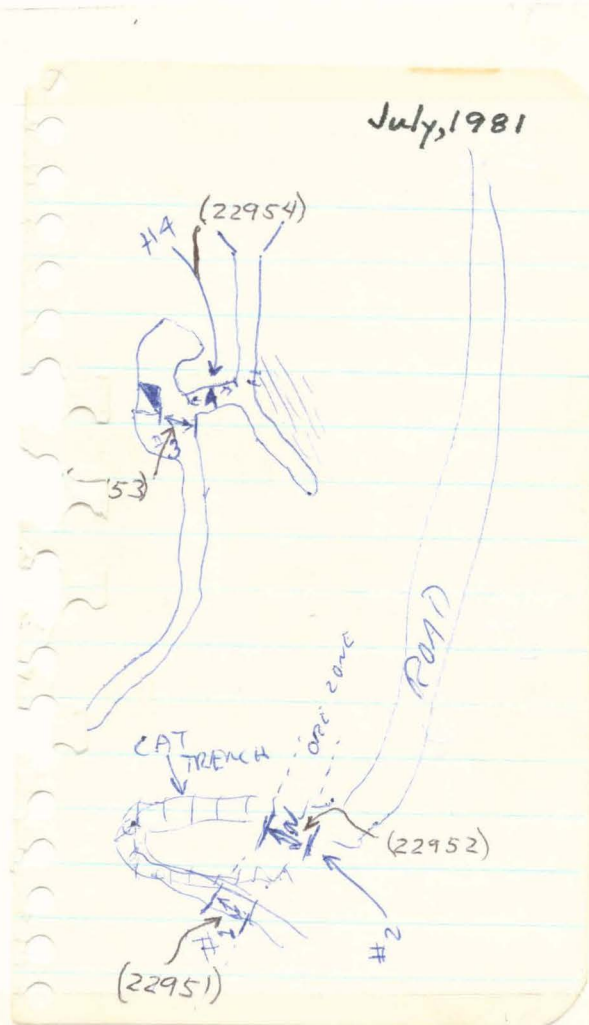
REC#	/SAMP	NUMB/	T/	S	CU/J1	ZN/J1	AG/J1	AU/T1
					PPM	PPM	PPM	PPM
0001		4871	R	7	2800	1860	5.8	2410
0002		4872	R	7	700	102	4.2	945
0003		4873	R	7	480	290	4.1	1930
0004		4874	R	7	1640	1910	2.3	1450
0005		22951	R	7	56	58	0.2	30
0006		22952	R	7	22	34	0.2	45
0007		22953	R	7	40	64	0.5	1560
0008		22954	R	7	72	146	0.7	2180

) Eureka Mine
) (see sketch)
)

RECEIVED
AUG 11 1981

DENISON MINES (U.S.)
SPOKANE, WA

---END---



REPORT ON THE EUREKA MINE

Respectfully submitted to

FRED KRAUSS

By

Geoff Garcia

and

Charlotte Kautzer

May 3, 1979

TABLE OF CONTENTS

Summary..... 1

Conclusions..... 2

Location and Access..... 3

Geography and Land Status..... 3

History..... 3 and 4

Regional Geology Map..... 5a

General Geology..... 5

Geology of Eureka Mine..... 6

Sampling..... 7

Sample Descriptions..... 7a

Recommendations..... 8

Bibliography..... 9

Appendix I Report by Lloyd Frizzell.....10

Appendix II Assay Returns.....

Map in back.....

SUMMARY

3

The Eureka Mine is a gold mine near the Illinois River in Southern Oregon. The mine is said to have produced over 40,000 ounces of gold from two gold-quartz veins. These veins occur along a serpentine-greenstone contact. The best exploration target at the Eureka Mine is a continuation of these veins below the upper workings. The veins could be mined by a small operator with a chance of profits in the millions. Complex structure and a history of shallow deposits in the area make subsurface exploration a high risk capital.

CONCLUSIONS

High grade gold ore in the upper 200' of workings at the Eureka Mine is worked out. A potential exists for high grade ore 100' below the level of the main adit where the vein reportedly dipped out of the winze. If Mr. Roy Hansen's statement is true, that \$800,000 worth of gold was shipped from veins #1 and #2 between the 100 foot level and the main drift; then the approximately 4,000 tons of ore would be worth over \$8,000,000 at todays prices of \$200+ an ounce. An extension of these veins below the 100 foot level could be economically mined by a small operation.

Factors against finding more ore at depth are:

1. The area has a history of shallow veins.
2. The Eureka winze was reported to reach 180 feet in depth, yet only the top 100 feet was mined.
3. The spotty nature of gold values in the veins and complex structure would make exploration difficult. These factors make any subsurface exploration a high risk venture.

Gold values of up to 0.13 oz/ton over 5' channel in the Brecciated quartz and serpentine near the contact indicate a low grade resource which could be blended with the high grade ore below to increase tonnage and gold production.

5

LOCATION AND ACCESS

The Eureka Mine is located in Section 22, Township 37S, Range 9 W, W.N., in the Illinois mining district of Josephine County, Oregon. The mine can be reached by a good gravel road from Selma, Oregon by travelling west seven miles along the Illinois River road and eight miles further up Six Mile road. There is year round access by two wheel drive vehicles.

GEOGRAPHY AND LAND STATUS

The claims are in the Siskiyou National Forest. The area is under multiple use classification by the U.S. Forest Service. The mine is at 2,500 feet elevation in an area of moderately high relief. Slopes are forested with conifers. Brush and soil generally obscure outcrops in the area. There is a small spring on the property which could supply adequate water for mining purposes.

HISTORY

The Eureka Mine operated around 1900 and later in the 1930's. Recent attempts at mining using a bulldozer have obscured the surface. The mine was reported to have produced over 40,000 ounces of gold. The best source of historical information regarding the Eureka Mine can be found in a 1972 report in which Lloyd Frizzell interviewed former owners and workers of the mine since 1910. (Appendix 1)

HISTORY, cont.

The Eureka Mining Company was reported to have shipped \$800,000 worth of gold to the mint in the early 1900's. Most of the gold came from high grade shoots along two veins. The veins were mined over a vertical range of 250'. The mine was reopened in the 1930's and approximately \$30,000 in gold was taken from a small area by John Shade and Roy Hansen. There are probably over 1000 feet of unerground workings, most of which are inaccessible at this time.

GEOLOGY

The geology of this report is based on two days of mapping with a compass and chain. Regional geology is based on work by State geologist, Len Ramp in Grants Pass.

REGIONAL

The gold-quartz veins at the Eureka Mine occur near a contact serpentine and Jurrassic-aged metavolcanics of the Rogue formation. The metavolcanics consist of greenstone with some interbedded chert and siltstone. A Cretaceous-aged granite intrudes an area one half mile to the northwest. Amphibolite gneiss probably derived from the Galice and Rogue formations occur approximately one mile to the northeast. Major faults in the area trend north 30 degrees east.

Numerous lode gold mines occur along serpentine-greenstone contacts in the area. Most are relatively shallow and of small production. A notable exception is the Greenback Mine situated in a similar geologic environment about sixty miles to the northeast. It produced over 200,000 ounces of gold and was mined to a depth of over 500 feet*.

* Wes Pieron personal communication.

REPORT ON THE EUREKA MINE, SEC. 22, TWP. 37S, RANGE 9 WWM
ILLINOIS MINING DISTRICT, JOSEPHINE COUNTY, OREGON

I INTRODUCTION

A. Purpose & Scope.

The purpose of this report is to compile under one cover the data on the Eureka Mine, coupled with the information gathered from individuals who have actively worked in the mine. Interviews were held with Mrs. Winnie Shade, 738 S.W. K Street, Grants Pass, Oregon; Mr. Roy Hansen, 739 S.W. K Street, Grants Pass, Oregon; Mr. Carl Stevens, 787 Grandview Avenue, Grants Pass, Oregon; Mr. Fran Adams, 5100 Riverbanks Road, Grants Pass, Oregon; and Mr. S. H. Hawks, 1446 Morrow Road, Medford, Oregon. The information obtained from each of the above persons will be presented in the summary.

The writer is familiar with the regional geological features of the Eureka Mine area. The mine area is covered on the Kerby Quadrangle geological sheet by Francis Wells. This report is not a detailed geological report of the Eureka Mine as no detailed surveys nor sampling programs have been conducted by the writer. The information gathered from the interviews does provide knowledge of the mine that would be lost if not recorded now, as several of the persons involved are elderly.

II SUMMARY

The Eureka Mine is located in the N.W. 1/4 Sec. 22, Twp. 37S, R. 9WWM, Josephine County, at an elevation of approximately 2500 feet above sea level. A new access road will soon connect the mine with the Illinois River road at Little Six Mine Creek. The Eureka Mine is approximately 8 miles northwest of the town of Selma, Oregon, which is located on Highway 199.

The Eureka Mine is located in a complex geological environment. The mine is located in the footwall block of a steep southwest dipping fault. The rock types in the mine area consist of Jurassic metavolcanics of the Galice formation that are in contact with serpentized peridotite. The volcanic serpentine contact strikes approximately N 30° E almost at right angles to the main fault. A younger stock of H.B. diorite has invaded the mine area. (This stock does not show up on the regional geological map.) The underground map of the Eureka Mine shows the main workings have explored 2 parallel veins that strike N 30° to 50° W and dip 60° to 75° to the N.E. The strike of the veins is parallel to the main fault and at right angles to the vol-serpentine contact but dipping towards the contact. This produces a very complex structural pattern. The writer was unable to find any detailed geological maps of the underground working, so at this time it is impossible to determine how important the structure was to the control of the ore shoots. The underground map obtained by the writer shows 4 levels to have been opened in the mine through a vertical range of 40 ft. The adits consist primarily of drifting, totalling approximately 450 ft. of workings. Besides the adits,

1 shaft and 2 winzes are indicated on the map. The main winze is called the Eureka Winze, which is 180 ft. deep. This winze is located approximately 100 ft. from the portal on the No. 1 vein of the main adit. The winze is reported to be vertical and that at approximately 100 ft. of depth the vein dipped out of the winze. The old Eureka Mine Co. is reported to have lagged off the winze at approximately the 100 ft. level and then stopped back up to the main level on both the No. 1 and No. 2 veins. (See Map - Upper Level Eureka Mine.) The other winze is reported to be very shallow, only a few feet deep on the floor of the No. 2 vein approximately 70 ft. from the portal of the main workings. The Shade Shaft, located on the No. 2 vein, is reported to be 20-30 ft. deep. The shaft was sunk at the portal of the 2490 ft. level, or 40 ft. above the main level, and has since been removed by bulldozing.

According to Mr. Roy Hansen who worked with Mr. Jack Shade, owner of the mine in 1931-1935, they took approximately \$30,000.00 in gold from the Shade Shaft in 1932-33. Mr. Hansen stated that during his period at the mine he obtained the mint receipts for the period of time the Eureka Mining Co. operated the mine (1890? to 1904?). Mr. Hansen states the mint receipt showed shipments of \$800,000.00 in gold to the mint. This production is reported to have come from the Eureka Winze and the stoping of the No. 1 and No. 2 veins from the 100 ft. level up to the main drift.

The information obtained from the interviews is as follows:

Mrs. Winnie Shade: Mrs. Shade is the widow of Henry Shade, one of the brothers who owned the Eureka Mine. The Shade Bros. obtained the mine from the Mr. H. H. Buhnne estate. Mr. Buhnne was one of the original founders of the Eureka Mining Co. The Shades were caretakers at the mine from 1910 to 1920, and obtained the mine on a labor lease. Mrs. Shade states that while Mr. Buhnne was alive, the mine was neither for lease nor sale. Mrs. Shade states she was told that the Eureka Mining Co. recovered their entire investment in both the mine and mill with 90 days of production. In 1921 Mrs. Shade said that an engineer offered to buy the mine for \$60,000.00. He offered Mr. Jack Shade a check for \$31,000.00 as a down payment. Mr. Jack Shade refused the check, wanting the payment in cash. Mr. Jack Shade's refusal of the check caused the deal to fall through, and she and her husband left the mine. They returned to the mine in the mid-1930's when Mr. Hansen and Mr. Jack Shade were taking out the enrichment in the Shade Shaft. Mrs. Shade states that some of the ore was laced with free gold. In part of the ore, the gold actually bound the fracture quartz together. Mrs. Shade thinks more rich ore will be found up on the ridge 100 ft. or so beyond the end of the old workings. She states that small stringers of rose quartz carrying free gold were found in this area. Mrs. Shade sold the mine to the Hawk Bros. in 1960.

Mr. Roy Hansen. Mr. Hansen, now retired, was an old-time prospector and miner. During 1932-34 Mr. Hansen worked with Mr. Jack Shade at the Eureka Mine. Their original plan was to pump out the Eureka Winze and follow the vein down from the point where it dipped out of the winze. They got side-tracked on this plan, to remove the high-grade ore shoot in the Shade Shaft. Mr. Hansen states that some of the ore in this shoot went \$13.00 in gold per pound of ore. Mr. Jack Shade suffered a severe heart attack during the sinking of the shaft and was unable to carry on. Mr. Hansen couldn't get a working agreement from Mr. Shade, so left the mine. Mr. Hansen thinks there is a good chance of more ore up on the ridge along the strike of the vein. Also he thinks the vein where it dips out of the winze could still carry values. Mr. Hansen warns anyone interested in mining at the Eureka that much of the vein is very low grade, but that the enriched ore shoots could more than compensate

for the low-grade ore.

Mr. Carl Stevens. Mr. Carl Stevens is among other things a miner. In the late 1950's he had a lease on the Eureka Mine. Mr. Stevens opened up the main level, repaired the adit and set up a drilling program underground on the No. 2 vein. Mr. Stevens blocked out an ore-shoot between the main level and the bottom of the Shade Shaft. Mr. Stevens estimates the drilling blocked out approximately 500 tons of \$214.00-per-ton ore. Later the lease was converted over to the Hawk Bros. who, Mr. Stevens states, removed the ore-shoot by bulldozer and front-end loader and dumped the ore into the canyon. Mr. Stevens sold out his interest in his lease to the Hawk Bros. for \$1.00 and left the mine. Mr. Stevens estimates that with less than a 300 ft. adit driven in from the canyon, the area below the Eureka Winze could be intersected. Mr. Stevens also believes the Eureka vein could be faulted off to the southeast. This, he thinks, could be proven by detailed mapping and sampling.

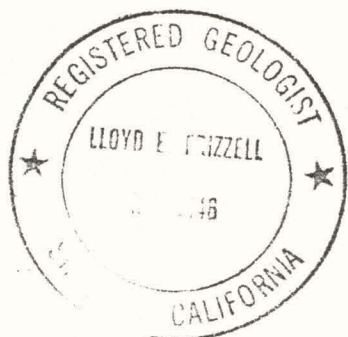
Mr. W. F. (Francis) Adams. Mr. Adams worked with his father at the mine in the late 1930's. The Adams' reopened the main working. Fran Adams states that approximately 50-60 ft. S.E. of the Eureka Winze on the No. 1 vein a shoot of high-grade ore was found and never mined out. He does not know how large the shoot is as an upper level was put in over the area. Fran Adams was at the mine at the time Mr. Earl Young of Grants Pass was cyaniding portions of the Eureka dumps. Mr. Adams says that Mr. Young was recovering a fair amount of gold from the dump, but he does not know just how much the dump was assaying.

Mr. S. H. Hawk. Mr. Hawk and his brother purchased the Eureka Mine from Mrs. Winnie Shade in 1960. The Hawks opened up the surface area in the area of the Shade Shaft. They moved a 15-ton ball mill to the property, but none of their attempts to operate were successful. Mr. Hawk states that a portion of one of the dumps contains \$19.00 per ton in gold, and that \$13.00 per ton can be recovered by cyanide. For the past three years the Hawks have had the mine leased to Mr. E. Bowers of Medford. In April, 1972, the Hawks sold the Eureka Mine to Rough & Ready Lumber Co.

It is apparent from the interviews that the Eureka Mine contained some extremely rich ore in localized ore-shoots. The ratio of rich ore to low-grade ore has never been determined.

The data collected to date does not include any detailed structural or assay maps. This makes it almost impossible to project new zones of enrichment or to establish the past pattern of the ore-shoots. A detailed mapping of the old workings, coupled with a detailed geological map of the surface geology might lead to the projection of new ore zones.

This report is respectfully submitted this 5th day of May, 1972, in Grants Pass, Oregon by:



ASSOCIATED GEOLOGISTS

Lloyd E. Frizzell
Lloyd Frizzell, B.Sc.

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

2033 First Street
Baker, Oregon

1069 State Office Building
Portland 1, Oregon

239 S.E. "H" Street
Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein fully and submit this blank filled out along with the sample.

Your name in full Len Ramp (DOGAMI)

Street or P.O. Box P.O. Box 417 City & State Grants Pass, Oregon

Are you a citizen of Oregon? Yes Date on which sample is sent 9/11/62

Name (or names) of owners of the property Hawk Bros.

Are you hiring labor? _____ Are you milling or shipping ore? Mill testing

Name of claim sample obtained from Eureka Mine

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Josephine Mining District Illinois River

Township 37 S Range 9 W Section 22 Quarter section NW

How far from passable road? At end Name of road Eureka Mine Road

	Channel (length)	Grab	Assay for	Description
Sample no. 1	<u>4 foot chip</u>	<u> </u>	<u>Au, Ag</u>	<u>Mineralized zone & vein to right of 2475' portal.</u>
Sample no. 2	<u>10 foot chip</u>	<u> </u>	<u>Au, Ag</u>	<u>In face of trench 2450' level.</u>
(Samples for assay should be at least 1 pound in weight)				
Sample no. 3	<u> </u>	<u>x</u>	<u>Au, Ag</u>	<u>Mill run from storage pile.</u>

(Signed) Len Ramp

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description #1 - Weathered greenstone and fractured vein quartz.

#2 - Pulverized mixture greenstone, vein quartz and calcite with some pyrite.

#3 - Same as #2.

Sample number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
P-27811 WG-173	0.035	\$1.22	Nil	--	---	---	---	---
P-27812 WG-174	0.02	\$0.70	Nil	--	---	---	---	---
7813 WG-175	0.05	\$1.75	Nil	--	---	---	---	---

Report issued _____ Card filed _____ Report mailed 10-5-62 Called for _____

send copy to Hawk Bros did 10/8/62
S.H. Hawk 320 N. Barnsburg Rd. SIR-5
HE Hawk 1163 Bellevue Ave. med pr

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

2033 First Street
Baker, Oregon

1069 State Office Building
Portland 1, Oregon

239 S.E. "H" Street
Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein fully and submit this blank filled out along with the sample.

Your name in full N. V. Peterson (DOGAMI)

Street or P.O. Box P.O. Box 417 City & State Grants Pass, Oregon

Are you a citizen of Oregon? Yes Date on which sample is sent 6/30/60

Name (or names) of owners of the property Carl Stevens - Grants Pass

Are you hiring labor? _____ Are you milling or shipping ore? _____

Name of claim sample obtained from Eureka Mine

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Josephine Mining District Illinois River

Township 37 S Range 9 W Section 22 Quarter section _____

How far from passable road? 200 yards Name of road Eureka Mine Road

Channel (length) Grab Assay for Description

Sample no. 1 x Au, Ag

Sample no. 2 _____
(Samples for assay should be at least 1 pound in weight)

(Signed) N. V. Peterson

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description Greenstone impregnated with quartz and sulfides - arsenopyrite and pyrite

Sample number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
UG-150 P-25362	0.44	\$15.40	0.50	\$0.45	---	---	---	---

Report issued _____ Card filed _____ Report mailed 7-19-60 Called for _____

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
PROJECT SAMPLE RECORD

SAMPLES SUBMITTED BY: Len Ramp ADDRESS: P.O. Box 417, Grants Pass, Ore. DATE: 9/20/60

<u>Sample No.</u>	<u>Mine or Prospect</u>	<u>Type</u>	<u>District</u>	<u>S.</u>	<u>T.</u>	<u>R.</u>	<u>Assay For</u>
UG-247	Bureka mine	22" chip	Illinois Riv. NE/NW 22,	37S.,	9 W.		Au, Ag
-248	"	4 ft. chip	"	"	"	"	"
-249	"	2 ft. chip	"	"	"	"	"
-250	"	4 ft. chip	"	"	"	"	"

Descriptions:

UG-247 From face righthand crosscut upper tunnel = fractured vein quartz with some included chlorite and 2-inch sooty black shear.

UG-248 From face new drift: quartz-calcite veinlets in sheared chloritic greenstone with disseminated pyrite and arsenopyrite. (35 ft. from portal)

UG-249 From vein in right side new drift 30 ft. from portal: quartz with included blotches of chlorite some disseminated pyrite and arsenopyrite.

UG-250 From old cut(2660-A) uphill from main workings: weathered vein quartz in part greenish-gray and vuggy with thin coating clay and Mn and Fe oxides.

Results:

		<u>GOLD</u>	<u>SILVER</u>	<u>value</u>	
UG-247	P-25752	0.06 oz.	Nil	# 2.10	✓
UG-248	P-25753	0.02 oz.	Nil	.70	
UG-249	P-25754	0.24 oz.	Trace	# 8.40	vein right side new drift 50' from portal
UG-250	P-25755	Nil	Nil		

mzko 2 copies send to Army & Sharon Hawk

10-6-60

GEOLOGY OF EUREKA MINE

Two parallel veins were mined at the Eureka. They strike N 60 W and dip approximately 60 degrees to the northeast. An open stope on the (#1) vein northeast of the main adit is mostly within a zone of pyritic-quartz-cemented greenstone breccia. The stope is about 40' long and 4' - 5' wide. The (#2) vein on the southwest side of the main adit has an open stope remaining mostly within serpentine. Most of the area around this vein is caved. Reports indicate that the veins were continuous over 250 vertical feet and contained extremely rich pockets of gold. The ore consisted of quartz, pyrite, dolomite and gold. Faulting at the mine is complex and outcrops are scarce. A fault trending N 50 W dipping 60 degrees to the northeast occurs on or near the #2 vein. Another fault cuts the south end of the #1 vein bringing serpentine into contact with the quartz breccia.

Further examination is necessary to unravel the complex structure at the Eureka.

SAMPLING

10

The sparse sampling done during this study is aimed at determining the grade of ore left by earlier mining. Thirteen samples of rock around the Eureka mine were taken. See Appendix 11 and map. Samples were sent to Union Assay in Salt Lake City for analysis. Channel samples indicated that the pyritic-quartz-greenstone breccia runs between 0.03 and 0.13 ounces gold per ton. The best gold values of 0.37 ounces per ton was a grab sample from sloughed material in a stope on the (#2) vein. A pan sample (p-3) was taken from the edge of the roadway in front of the main adit. In this sample approximately two hundred pounds of rock was washed through a vibrating sluice box to yield two pounds of concentrates. These concentrates contained 0.28 oz/ton gold. A sampling of fines near the Wilfey table, sample #11, contained 0.01 oz/ton gold.

Sample Descriptions

1. Serpentine gouge in shear zone
2. Iron-stained zone west of serpentine gouge
3. Quartz - serpentine breccia vein
4. channel sample in quartz - serpentine breccia
5. grab sample from shear zone in N.W. stope
6. channel sample from W. upper workings
7. } channel sample from east upper workings
8. }
9. }
10. grab sample from iron-stained zone in sloughed serpentine
11. sediment sample in vicinity of gravity table
12. channel sample in quartz - serpentine breccia on East wall near winze
- P-3 pan sample taken on the mine dump

RECOMMENDATIONS

Exploration for high grade ore at depth would be the best course for further exploration. The target would be the continuation of two spotty high grade gold quartz veins. Ten to fifteen more days of detailed geologic mapping and sampling would be necessary to determine the exact nature of the faulting in the area and its relationship to the ore zones. From this work a diamond drill hole could be spotted to intersect the veins below the 100 foot level. The drilling should be of relatively large diameter due to the fractured nature of the ground. If the vein is intersected in the first hole with appreciable gold values, more holes would be needed to determine the size and grade of the orebody.

ESTIMATED COST OF DIAMOND DRILLING

Five to ten days initial geologic work_____	\$2000 to \$3000
Diamond drilling 500' NX core_____	\$10,000 to \$15,000
TOTAL ESTIMATE	\$12,000 to \$18,000

A decision at this point would be made to continue project pending assay returns.

If an ore body is established, a small operator could put the mine into production for around \$500,000. If the lower levels are near as rich as the upper levels were reported to have been, profits in the millions of dollars would be realized in a short time.

13

BIBLIOGRAPHY

1. Frizzell, Lloyd "Report on Eureka Mine." 1972

2. Hoskins, J.R. , Green, W.R. Mineral Industry Costs
Northwest Mining Association
Spokane, Washington 1977

3. Oregon State Department of Geology and Mineral Industries,
Oregon
"Metal Mines Handbook Bulletin" #14-C, Vol.11, Sec. 1
Josephine County
Portland, Oregon 1942

4. Wells, Francis G., Holtz, Preston E., Cartes, F.W.
"Preliminary description of the Geology of the
Kerby Quadrangle, Oregon."
State of Oregon Department of Geology and Mineral
Industries
Portland, Oregon 1949

EUREKA MINE (gold)

Illinois River area

Owner: John C. Shade, Selma, Oregon

Location: In sec. 22, T. 37 S., R. 9 W., near the top of the divide between Soldier Creek and the Illinois River. The property can be reached by going eight miles west from Selma on the Illinois River road to Six Mile Creek, thence five miles by trail to the mine. Elevation 2500 feet.

History: The owner was watchman for the Eureka Company for a number of years and finally located three claims, namely, Black Cat, Log Cabin, July. Two different companies have had leases on the property but neither did any development work. Mr. Shade ran a crosscut tunnel 90 feet to cut the vein. This new work is west of the old workings. Mr. Shade reported that other than this tunnel there has been no change in the property since the Diller report. (see reference) Old workings are all caved.

Geology: "The country rocks are greenstone and serpentine and the ore occurs in irregular but abundant veins or bunches of quartz on the contact or near it in the adjacent greenstone, the quartz streaked with a dark ore mineral, reputed to be a telluride, is

richest and is said to run as high as \$500 a ton. Such ore was rare and is not now available. The general average is low, much of it about 40 cents a ton. The ribboned veins of quartz strike N. 50° W. and dip 75° NE. The contact has been worked 250 feet in depth and 500 feet in length horizontally.

General: "The Eureka Mine on a branch of Soldier Cree, about 12 miles northwest of Kerby, is owned by a company in Eureka, California. The property embraces 6 or more claims and is reached by trail only. There are probably 1000 feet of underground workings, also air drills, electric lights, and a 10-stamp mill with concentrator and cyaniding plant now idle. The mine was operated more or less irregularly for about 4 years, beginning in 1901, with a Huntington mill. The output, though considerable, is not definitely known.

Reference: Diller, 14:62-63 (quoted); also in Parks & Swartley, 16:92

Informant: J. E. Morrison, 38 (not visited)

RECORD IDENTIFICATION

RECORD NO..... N060542
RECORD TYPE..... X1M
COUNTRY/ORGANIZATION. USGS
DEPOSIT NO..... DDGMI 100-244A
MAP CODE NO. OF REC..

REPORTER

NAME..... JOHNSON, MAUREEN G.
UPDATED..... 81 02
BY..... SMITH, ROSCOE M.
FERN, MARK L. (BROOKS, HOWARD C.)
FERN, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... EUREKA MINE
SYNONYM NAME..... ~~BLACK CAT~~, LOG CABIN, JULY

MINING DISTRICT/AREA/SUBDIST. ILLINDIS RIVER

COUNTRY CODE..... JS
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... JOSEPHINE
DRAINAGE AREA..... 17100311 PACIFIC NORTHWEST
PHYSIOGRAPHIC PRDV..... 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION..... 41

QUAD SCALE QUAD NO OR NAME
1: 62500 SELMA

LATITUDE LONGITUDE
42-20-42N 123-44-56W

UTM NORTHING UTM EASTING UTM ZONE NO
4688142.8 438313.0 +10

TWP..... 37S
RANGE..... 09W
SECTION..... 22
MERIDIAN. W.M.

LOCATION COMMENTS: NE 1/4 NW 1/4

MAJOR PRODUCTS.. AJ
MINOR PRODUCTS.. AG

OCCURRENCE(S) OR POTENTIAL PRODUCT(S):
POTENTIAL.....
OCCURRENCE..... TE?

ORE MATERIALS (MINERALS, ROCKS, ETC.):
FREE GOLD, PYRITE; TELLURIDES?

COMMODITY SUBTYPES OR USE CATEGORIES:
3.752 AU:AG

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 8

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
VEIN / SHEAR ZONE
FORM/SHAPE OF DEPOSIT: RIBBONS, STREAKS, BUNCHES

SIZE/DIRECTIONAL DATA
SIZE OF DEPOSIT..... SMALL
STRIKE OF DREBODY.... N50W
DIP OF DREBODY..... 75NE

DESCRIPTION OF WORKINGS
UNDERGROUND
LENGTH OF WORKINGS..... 1000 FT

COMMENTS (DESCRIP. OF WORKINGS):
1000 FEET OF WORKINGS, LARGELY CAVED

PRODUCTION
YES
SMALL PRODUCTION

ANNUAL PRODUCTION (ORE, COMMOD., CONC., OVERBURD.)

ITEM	ACC	AMOUNT	THOUS. UNITS	YEAR	GRADE, REMARKS
1 ORE SML		.422	TONS		
2 AU SML		.176	OZ	.416	OZ/T
3 AG SML		.047	OZ	.111	OZ/T
23 ORE, SML	.422*	TONS		1901-1948	0.4 AU, 0.1 AG

PRODUCTION YEARS..... 1932-1943 (INTERMITTENT)

PRODUCTION COMMENTS: RECORDED CONSIDERABLE, SPOTTY VALUES

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... JUR
HOST ROCK TYPES..... GREENSTONE
IGNEOUS ROCK TYPES..... SERPENTINE, QUARTZ DIDRITE

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES

- 1) NAME: ROGUE VOLCANICS
AGE: JUR

COMMENTS (GEOLOGY AND MINERALOGY):

RIBBONS, STREAKS, AND BUNCHES OF VEIN QUARTZ WITH PYRITE AND FREE GOLD IN SHEARED GREENSTONE.

GENERAL COMMENTS

RECORD NUMBER (M013474) HAS BEEN MERGED WITH THIS RECORD AND DELETED FROM THE OREGON FILE.

GENERAL REFERENCES

- 1) BROOKS & RAMP, 1968
- 2) OMMH, 1952, V14C, SEC.1
- 3) DILLER, 1914