PRODUCER(PAST OR PRESENT):
MAJOR PRODUCTS.. AU
MINOR PRODUCTS.. AG

OCCURRENCE(S) OR POTENTIAL PRODUCT(S):
POTENTIAL.....
OCCURRENCE..... CU MN TE

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

COMMODITY SUBTYPES OR USE CATEGORIES:
4.61 AU:AG

COMMODITY COMMENTS:
FREE MILLING & "BASE"

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. B

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
LODE
FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA
SIZE OF DEPOSIT..... SMALL
COMMENTS(DESCRIPTION OF DEPOSIT):
2 VEINS INTERSECT TO FORM ORE SHOOT

DESCRIPTION OF WORKINGS
SURFACE ADITS 60°, 94°, THREE CUTS

COMMENTS(DESCRIP. OF WORKINGS):
ABOUT 300 FEET OF WORKINGS IN SEVERAL ADITS AND INCLINED SHAFTS

PRODUCTION
YES
SMALL PRODUCTION

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

ITEM	ACC	AMOUNT	THOUS.UNITS	YEAR	GRADE,REMARKS
1 ORE (SM)		936	TONS		

ITEM	ACC	AMOUNT	THOUS.UNITS	YEAR	GRADE,REMARKS
15 AU	EST	0000.250	OZ	PRE-1979	
23 ORE SML		.036	TONS	1933-1948	2.05 AU, 0.44 AG

PRODUCTION YEARS..... 1933-1948

SOURCE OF INFORMATION (PRODUCTION).. USBM

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... PERM-TRI
HOST ROCK TYPES..... GREENSTONE
IGNEOUS ROCK TYPES..... SERPENTINE

PERTINENT MINERALOGY..... QUARTZ

IMPORTANT ORE CONTROL/LOCUS.. FAULT ZONE

GEOLOGY (SUPPLEMENTARY INFORMATION)
REGIONAL GEOLOGY
MAJOR REGIONAL STRUCTURES.. THRUST FAULT BETWEEN APPLEGATE GROUP AND UNDERLYING GALICE FORMATION

LOCAL GEOLOGY
NAMES/AGE OF FORMATIONS,UNITS,OR ROCK TYPES
1) NAME: APPLEGATE GROUP
AGE: PERM-TRI
2) NAME: GALICE FORMATION
AGE: JUR

COMMENTS (GEOLOGY AND MINERALOGY):
MINERALIZATION SIMILAR TO THAT AT THE GREENBACK MINE

GENERAL COMMENTS
RECORD NUMBER (M013440) HAS BEEN MERGED WITH THIS RECORD AND DELETED FROM THE OREGON FILE

GENERAL REFERENCES
1) RAMP, L. AND PETERSON, N.V., 1979, GEOLOGY AND MINERAL RESOURCES OF JOSEPHINE COUNTY, OREGON; ODGMI BULL. 100, 45P
2) BROOKS, H.C. AND RAMP, L., 1968, GOLD AND SILVER IN OREGON; ODGMI BULL. 61, P. 227
3) OREGON METAL MINES HANDBOOK, 1942, ODGMI BULL. 14-C, VOL. 2, SEC. 1, P. 108

CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION
RECORD NO..... M061238
RECORD TYPE..... X1M
COUNTRY/ORGANIZATION. USGS
DEPOSIT NO..... ODGMI 100-52
MAP CODE NO. OF REC..

REPORTER
NAME..... JOHNSON, MAUREEN G.
UPDATED..... 81 03
BY..... SMITH, ROSCOE M.
FERNS, MARK L. (BROOKS, HOWARD C.)
FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION
DEPOSIT NAME..... HORSESHOE LODE

MINING DISTRICT/AREA/SUBDIST. GREENBACK

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

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

COUNTY..... JOSEPHINE
DRAINAGE AREA..... 17100310 PACIFIC NORTHWEST
PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION..... 01

QUAD SCALE	QUAD NO OR NAME
1: 62500	GLENDALE

LATITUDE	LONGITUDE
42-40-44N	123-18-14W

UTM NORTHING	UTM EASTING	UTM ZONE NO
4724996.6	475111.5	+10

TWP..... 33S
RANGE.... 05W
SECTION.. 28
MERIDIAN. W.M.

ALTITUDE.. 1920 FT

MILLER SAMPLE

Each numbered step is explained on attached procedure "Estimating Weight of Gold in Hand Samples"

1. Phases present and initial estimate of volume %: Quartz=87.85%, pyrite=0.28%, wall rock (treat as andesite)=9.07%, calcite=1.01%, gold alloy=1.77%
Visually estimated volume of sample ~ 64.17 cc
Volume of wall rock and pyrite ~ 6 cc, 97% wall rock, 3% pyrite
Volume of quartz, gold, and calcite ~ 58.17 cc
Visually estimated volume of gold bearing layer ~16.32 cc
Volume percent gold alloy in gold bearing layer ~ 7%. **Revised** to 12 %
Volume of gold alloy in gold bearing layer ~ 1.14 cc **Revised** to 1.96 cc
Volume percent calcite in gold bearing layer ~ 4%
Volume of calcite in gold bearing layer ~ 0.65 cc
Volume percent quartz in gold bearing layer ~ 89. **Revised** to 84%
Volume of quartz in gold bearing layer ~ 14.52 cc **Revised** to 13.71 cc
Volume of quartz not in gold bearing layer ~41.85 cc
Total volume of quartz ~56.37 cc **Revised** to 55.56 cc

Revised volume %: Quartz=86.58%, pyrite=0.28%, wall rock=9.07%, calcite=1.01%, gold alloy=3.05%

2. Composition of gold alloy: Assume 10 weight percent silver, therefore density of 17.8075 g/cc

3. Quartz 87.85 x 2.65 = 232.80, pyrite 0.28 x 5.02 = 1.41, wall rock 9.07 x 2.89 = 26.21, calcite 1.01 x 2.71 = 2.74, gold alloy 1.77 x 17.8075 = 31.52

Revised quartz 86.58 x 2.65 = 229.44, pyrite 1.41, wall rock 26.21, calcite 2.74, gold alloy 3.05 x 17.8075 = 54.31

4. 232.80 + 1.41 + 26.21 + 2.74 + 31.52 = 294.68 g in 100 cc of sample

Revised 229.44 + 1.41 + 26.21 + 2.74 + 54.31 = 314.11 g

5. Weight percent of: quartz 79.00%, pyrite 0.48%, wall rock 8.89%, calcite 0.93 %, gold alloy 10.70%

Revised: quartz 73.04%, pyrite 0.45%, wall rock 8.34%, calcite 0.87%, gold alloy 17.29%

6. 2.94 g/ cc average density

Revised: 3.14 g/cc average density

7. 212.7 g

8. 144.9 g

9. 212.7 - 144.9 = 67.8 g or 67.8 cc volume

10. 212.7 / 2.95 = 72.10 cc

11. 72.10 cc estimated volume from actual weight and estimated density based on estimated volumes of phases is too large relative to true volume of 67.8 cc. Visually estimated volume of 64.17 cc is too small.

Revised volume estimate based on 3.14 g/cc is 67.8 cc

12. 212.7 / 67.8 = 3.14 g/cc

13. Skip.

14. True density is 3.14, estimated density is 2.95, **revised** density is 3.14

15. Estimated density is low so phases with density greater than 2.95 are more prevalent than estimated. **Revise** numbers by substituting gold for quartz in gold bearing layer to increase mean density.

16. Mean density of non-gold phases = 259.8 / 96.95 = 2.68 g/cc (229.44 + 1.41 + 26.21 + 2.74 = 259.8 g in 100 - 3.05 = 96.95 cc of sample)

17. dr = 3.14, dg = 17.81, dp = 2.68; Volume % = ((3.14-2.68) / (17.81-2.68)) x 100 = 3.04%

18. 3.04% x 67.8 cc / 100 = 2.06 cc gold alloy

19. 2.06 x 17.81 = 36.69 g = 1.18 troy oz of gold alloy

20. 0.9 x 1.18 = 1.06 troy oz gold; 0.1 x 1.18 = 0.12 troy oz silver

ESTIMATED CONTENTS: 1.06 TROY OUNCES GOLD, 0.12 TROY OUNCES SILVER

Notes on potential for error and errors that would result from simplifying the calculations. Figures were generally truncated two places right of the decimal point for calculations; this understates the error since the best actual measurements had only three significant figures.

Most likely error is an overestimation of gold by about 0.1 volume percent due to underestimating pyrite volume. (Pyrite volume percent of 0.6% instead of 0.28%; understated by 53%). This would reduce gold content to 1.02 troy oz and silver to 0.113 troy oz.

If all non-gold phases had been assigned the density of quartz in steps 1-20, then results would have been: gold = 0.9 x 1.25 = 1.13 troy oz; silver = 0.1 x 1.25 = 0.125 troy oz. This would overestimate precious metal content by about 7%.

If all other phases had been treated as andesite wallrock and assuming that pyrite content cancels out quartz content in steps 1-20 then results would have been: gold = 0.9 x 0.65 = 0.59 troy oz; silver = 0.1 x 0.65 = 0.065 troy oz; underestimating gold content by more than 40%.

As calculated the ore contains 4538 troy oz per short ton.

ESTIMATING WEIGHT OF GOLD IN HAND SAMPLES

An example is given in parentheses. Density is used for these calculations; however the procedure is similar for specific gravity.

STEP 1. Estimate % volume of each phase. (Quartz 74.375%, pyrite 4.5%, wall rock (andesite)=10.5%, gold alloy=10.625%)

STEP 2. Estimate fineness, impurities, and density of gold alloy. (Gold 900 fine w/ 10 weight % silver; density of pure Au is 19.3 g/cc, density of pure Ag is 10.5 g/cc, density of gold alloy 900 fine with 10 weight percent silver is 17.8075 g/cc)

IF ONLY ONE OTHER PHASE IS PRESENT WITH THE GOLD THEN SKIP TO STEP 7

STEP 3. Multiply % volume by density for each phase. (Substitute volume in cc for % and sums to weight for model 100 cc sample--for this calculation it doesn't matter what the weight of the actual sample is; quartz=74.375 cc x 2.65 g/cc=197.094 g, pyrite=4.5 x 5.02=22.59, wall rock (andesite)=10.5 x 2.89=30.345, gold alloy=10.625 x 17.8075=189.205)

STEP 4. Sum results for all phases to obtain weight of 100 cc of sample (197.094+22.59+30.345+189.205= 439.234 g for 100cc)

STEP 5. Find weight percent of each phase by dividing phase weight by total weight and multiplying by 100. (Weight % quartz=197.094/439.234x100=44.872%, weight % pyrite=22.59/439.234x100=5.143%, weight % wall rock (andesite)=30.345/439.234x100=6.909%, gold (900 fine)=189.205/439.234x100=43.076%)

STEP 6. Estimate mean density by dividing weight of 100 cc sample in STEP 4 by 100. (439.234/100=4.392 g/cc)

STEP 7. Weigh rock in grams. (Sample weighs 10 oz avdp = 283.49 g. Useful conversions: 1 oz troy =31.103 g; 1 oz avdp=28.349 g)

STEP 8. Weigh rock again suspended in water. (Sample weighs 220 g. Weigh in grams or convert to grams.)

STEP 9. Calculate true volume of sample by subtracting STEP 8 from STEP 7. (Volume of sample = weight of rock in air - weight of rock in water = STEP 7 - STEP 8 = 283.49 - 220 = 63.49 weight of water displaced in grams = volume of sample in cc)

IF ONLY ONE OTHER PHASE IS PRESENT WITH THE GOLD THEN SKIP TO STEP 17

STEP 10. Estimate volume of the sample by dividing weight in STEP 7 by density from STEP 6. (283.49g / 4.392g/cc = 64.55cc)

STEP 11. Compare true volume in STEP 9 to estimated volume in STEP 10. (True volume is 63.49cc, estimated is 64.55cc)

STEP 12. Calculate true density of sample by dividing weight from STEP 7 by volume from STEP 9. (283.49 / 63.49 = 4.465g/cc)

STEP 13. Skip for good luck.

STEP 14. Compare true density STEP 12 to estimated density STEP 6. (True density = 4.465g/cc, estimated density = 4.392g/cc)

STEP 15. Adjust phase volumes estimated in STEP 1 to bring estimated volumes and densities into agreement with true values. (Estimated density is low and estimated volume is high, therefore the volumes assigned the phases lighter than the mean density were too high initially. Repeat STEPS 1-6, 10, 11, 13.)

STEP 16. Estimate mean density of non-gold phases using STEPS 1, 3, 4, 5, 6 as if gold were not present. (74.375 x 2.65 + 4.5 x 5.02 + 10.5 x 2.89 = 246.88 grams in 74.375 + 4.5 + 10.5 = 89.375 cc; 246.88 g / 89.375 cc = 2.76 g/cc)

STEP 17. Calculate volume % of gold alloy present using density for gold alloy from STEP 2 (dg), estimated mean density of non-gold phases from STEP 16 (dp, or use single phase density here if only gold and one other phase), and true density of sample from STEP 12 (dr). Volume % = ((dr - dp) / (dg - dp)) x 100. (Volume % = ((4.465 - 2.76) / (17.8075 - 2.76)) x 100 = 11.33)

STEP 18. Calculate volume of gold alloy in sample by multiplying volume % from STEP 17 by true volume from STEP 9 and dividing by 100. (11.33 x 63.49 / 100 = 7.1934 cc)

STEP 19. Calculate weight of gold alloy by multiplying volume of gold alloy from STEP 18 by density of gold allow from STEP 2. (7.1934 cc x 17.8075 g/cc = 128.096 g gold alloy = 4.118 troy ounces.)

STEP 20. Calculate weight of gold and impurities based on ratios from STEP 2. (Gold = 900/1000 gold alloy x 4.118 troy oz = 3.706 troy ounces of gold; Silver = 100/1000 gold alloy x 4.118 troy oz = 0.4118 troy ounces of silver)

March 16, 1942

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

HORSEHOE LODE (gold) Greenback Area

Owner: Mr. & Mrs. G. H. Miller.

Location: NW¼ sec. 28, T. 33 S., R. 5 W., about a mile north of the Greenback Mine.

Area: One mining claim of 19,988 acres, recorded in Deeds of Josephine County, Vol. 73, p. 271.

Topography: Property is at an elevation of 1800 feet and is accessible the year around by good country road up Coyote Creek.

Development: Improvements consist of one discovery cut, 2 open cuts, 2 tunnels, and 2 inclined shafts. One tunnel drifted 60 feet on vein #1 cutting the vein at a depth of 30 feet. Tunnel #2 drifted 94 feet to vein #1, cutting it at a depth of 84 feet.

Geology: Country rocks are serpentine and greenstone. These are two exposed veins; #1 strikes east-west and dips north; #2 strikes NW-SE and dips to the west cutting #1. The vein is a "true fissure" vein in which iron pyrite, chalcopyrite, gold and silver are found in quartz. There is a trace of tellurides. The veins contain some rhodochrosite. Horizontal cross fractures cut vein #1 without displacement. The cross fractures contain quartz which has been mineralized.

The known pay shoots lie between cross fractures at their junction with the veins. The ore is both free milling and "base".

Mining & Metallurgy: A Lane 7 foot mill was installed but never used. About $5,000 has been produced.

Informant: R. V. Miller report, dated March 11, 1940.

HORSESHOE LODE MINING CLAIM

This property known as the, "HORSESHOE LODE", and designated as mineral survey No. 840, situated in N. W. ¼ of Section 28, Township 33, South of Range 5, West of the Willamette Meridian, in the Wolf Creek mining district, Josephine County, Oregon, more particularly described in Deeds of Josephine County, Oregon, Volume 73, Page 271, and is six miles from the Wolf Creek Station of the Southern Pacific Railroad, accessable, the year around, by a good county road. The said property is at an altitude of 1800 feet abowe the sea level.

The claim embraces 19.988 acres of lode claim, map No. 1 illustrating fully.

The map is constructed from the notes of a survey made by Henry M. Lancaster, U. S. Mineral Surveyor. It is made on a scale of one-hundred feet to the inch, and is fairly correct, representing the metes and bounds and claim area of the property, as designated to me by Mr. Lancaster, surveyor.

The improvements for the patent issue belonging to the property consist of: One (1) discovery cut, Two (2) open cuts, two (2) cross-cut tunnels, and two (2) incline shafts, totaling in value $4656.00. There is a suffiency of timber on the claim

suitable for mining and fuel. A mountain stream nearby will furnish an adequate supply of water for milling the year around.

There are no adjoining mines that are being worked at the present. There are two mines in the immediate vicinity that are being worked. One the "SPOTTED FAWN", located one (1) mile north is being worked on a small scale, using a Lane type mill with a weir discharge, plate and mortar amalgamation. The "GREENBACK", mine located one (1) mile south was operated first in the early nineteen hundreds. During the period of operation the mine produced over $2,500,000. in gold. A forty stamp mill was used with mortar and plate amalagamation, concentrators and cyaniding making a 90% recovery. In the past few years considerable development work has been carried on, and they are now operating a reduction plant of 10 stamps. Practicing amalgamation and concentration.

One placer mine is operating on Coyote Creek, below the Horseshoe property, employing four men yearly. There are no operating placer mines above the Horseshoe property.

The geological horizon for several miles in any direction is compressed of granites alternating with gabbros, serpentines, greenstones, slates and shists, the serpentines being an intrusive. The formation being of the Mesozoic, ara, and the Triassic and Jurassic period. The most productive mines of this district have been fissure veins cut through gabbros. This property has a true fissure vein cut through gabbro and connecting serpentine at right angles, the dip of serpentine being west. There are two exposed veins, Vein No. 1 strikes east and west and dips to the north, Vein

No. 2 strikes NW and SE dipping to the west and cutting vein No. 1.

The development work consists of two (2) cross-cut tunnels, one drifted sixty feet to vein No. 1, cutting the vein at a depth of thirty feet. Cross-cut tunnel No. 2 was drifted ninety-four feet to vein No. 1, cutting vein No. 1 at a depth of eighty-four feet. Drifts on vein No. 1 east of the cross cut tunnel No 2 total one-hundred and four feet. It is possible to drift approximately one-hundred feet further at this level. Drifts to the west total forty-six feet, and is possible to drift two hundred feet further at this level. The junction of veins No. 1 and 2 is fifty-five feet east of cross-cut tunnel No. 2. Vein No. 2 is drifted sixty-five feet from the junction of veins. The quartz in the gangue varies in size from six inches to three feet. The gangue of vein No. 1 holds a definite size of four feet.. There is a winze thirty feet deep at the junction of veins, also a stope of forty-nine feet.

The mineralization in and around the veins consists of: Iron Pyrites, Chalocpyrites, Gold and Silver, and a trace of Telurides. The veins also contain some Rhodoshrosite and Cholorite.

There are four horizontal cross fractures cut by vein no. 1. From cross cut tunnel No. 2 east they are numbered 1 through 4,. They contain quartz in ribbon form, with mineralizationof Chalocpyites, Iron Pyrites, Gold and Silver and having an average width of one inch. No. 1 and 2 have a dip of forty-five degrees. No 3 has a dip of thirty degrees . No 4 has a dip of about forty degrees. There is no vein displacement along any of the fault planes. However, there is adisplacement at the junctions of veins 1 and 2 varying zero to four feet..

The known pay chutes lies between cross-fractures 1 and 2. and on the junction of veins. The pay occurrs in free milling and sulphide form. The free milling being bunchy while the sulphides hold fairly uniform. It is possible that the ore between the other cross fractures would develope in paying quanaties but will take exploration work to determine definitly. Pict. No 1 shows the junction of veins in the stope . Pict. No 2 shows the vein in the winze. Vein No 1 being the older as it is cut by No 2. The pay is found namely on vein No 1.

It would be advisable to continue the winze, at the junction of veins for approximately ten feet also about the same distance on the cross-fracture 1 and 2 to determine the definitly the continuation of the pay chute. If the pay chute is found to continue at the junction of veins it would then warrent a cross-cut tunnel driven at creek level and fifty-five (55) feet east of the present tunnel. If the pay chute is found to continue along the cross fracture plane the tunnel would then be driven at creek level and one-hundred fifty (150) east of the present cross-cut tunnel. For further exploration work it would be advisable to stope on the other cross fractures to locate further pay chutes.

There has been no systematic operation of this mine. All operations have been with the lack of equipment and proper supervision. These are probably cretited for the lack of success of the mine. Past records show that approximately five thousand dollars in gold and silver has been sold from the lode, however, the only government mint receipt available is to the amount of two thousand and ninty-five dollars. This being hand mortared from fifty pounds of selected ore.

A Lane 7' mill has been installed on the property but, as funds gave out, the mill was never placed in operation. The Lane mill seems to be ideal for this ore. It allows the practice of inside amalgamation and as the Gold from this mine is extremely coarse ninety (90) per cent will amalgamate in the mortar thus never reaching the plates. For the sulphides, table concentration seems to be sufficient to save the values. The addition of cyaniding would not be warrented unless larger ore bodies are found. Pict. No. 3 shows the Lane mill as installed.

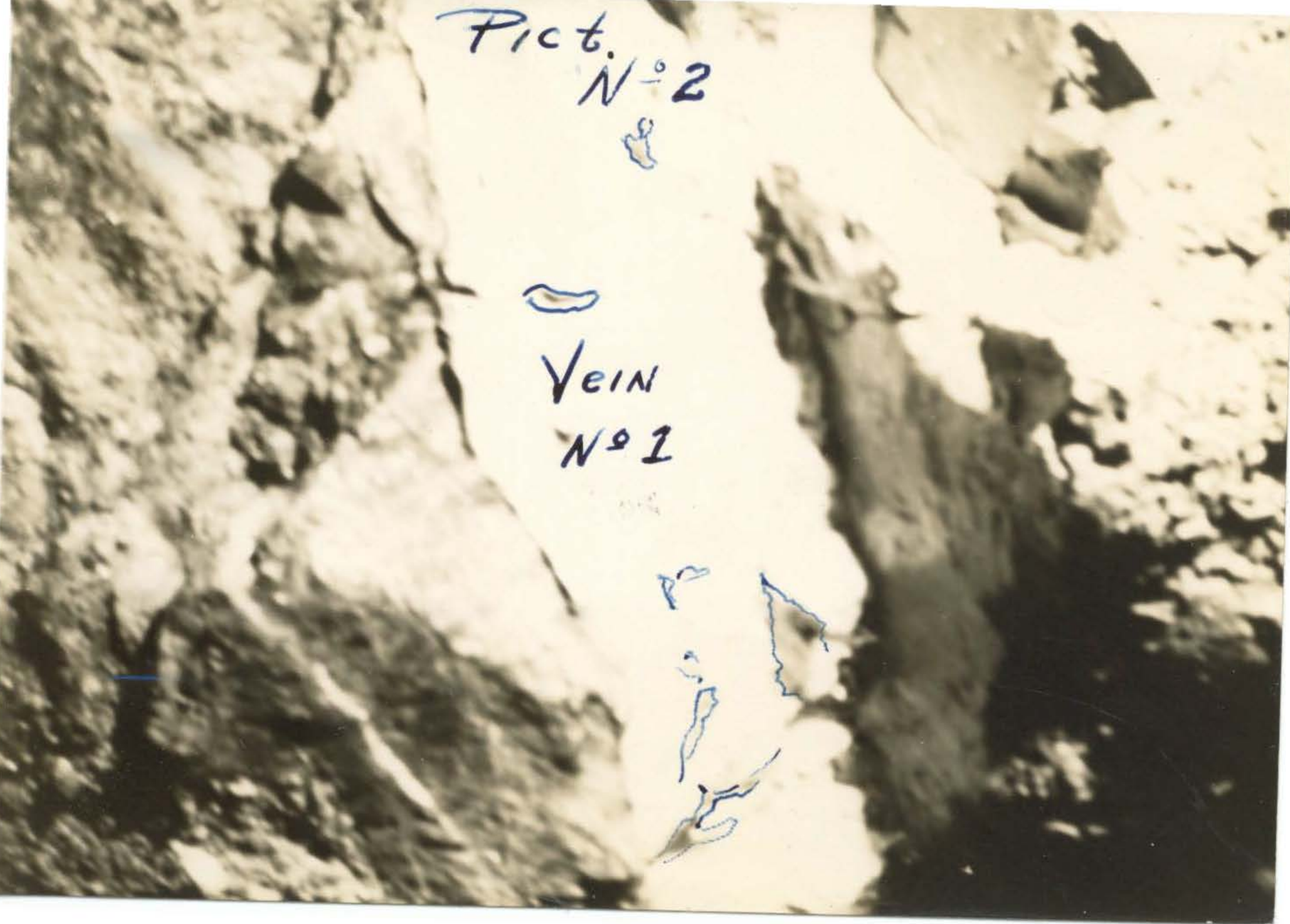
In conclusion I will say: While the property possess considerable merit as a prospect, the development work is not sufficiently extensive to warrent a definite opinion as to the continuation of the pay chute. I am, however, led to believe from the facts given herein, that, further exploration work would result in the discovery of important ore bodies that would place the property in rank with the past paying mines of the district...

(OWNER) Mr. G. H. Miller

(OWNER) Mrs G H Miller
Mrs. G. H. Miller

MARCH 11, 1940

(BY) R V Miller
R. V. Miller


Pict. N° 2
Vein N° 1


1 2 3 4 5 6 7 8 9 10 11
SMITH IRRIGATION & PLUMBING SUPPLY
Complete Irrigation, Plumbing and Pumps Supply
906 S.W. 6th St. (503) 479-3524
Grants Pass, OR 97526
Hunter

Horseshoe Mine
John + Ken Miller
1/97
Pocket
One sample has 48% (weight)
gold in gold bearing zones


1 2 3 4 5 6 7 8 9 10 11 12
906 S.W. 6th St. (503) 479-5524
Grants Pass, OR 97526

Horseshoe Mine
John + Ken Miller
1/97

Pocket found by "drifting downward along original incline"

Etched sample shows gold to be closely associated with small calcite veins in the quartz.


1 2 3 4 5 6 7 8 9 10 11 12
906 S.W. 6th St (503) 479-5524
Grants Pass, OR 97526

Greenback Dist.
Sent by R.C.T.
3/18/40

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The known pay chutes lies between cross-fractures 1 and 2, and on the junction of veins. The pay occurrs in free milling and sulphide form. The free milling being bunchy while the sulphides hold fairly uniform. It is possible that the ore between the other cross fractures would develope in paying quantities but will take exploration work to determine definitely. Pict. No. 1 shows the junction of veins in the stope. Pict. No. 2 shows the vein in the winze. Vein No. 1 being the older as it is cut by No. 2. The pay is found namely on vein No. 1.

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There has been no systematic operation of this mine. All operations have been with the lack of equipment and proper supervision. These are probably credited for the lack of success of the mine. Past records show that approximately five thousand dollars in gold and silver has been sold from the lode, however, the only government mint receipt available is to the amount of two thousand and ninety-five dollars. This being hand mortared from fifty pounds of selected ore.

A Lane 7' mill has been installed on the property but, as funds gave out, the mill was never placed in operation. The Lane mill seems to be ideal for this ore. It allows the practice of inside amalgamation and as the Gold from this mine is extremely coarse ninety (90) per cent will amalgamate in the mortar thus never reaching the plates. For the sulphides, table concentration seems to be sufficient to save the values. The addition of cyaniding would not be warrented unless larger ore bodies are found. Pict. No. 3 shows the Lane mill as installed.

In conclusion I will say: While the property possesses considerable merit as a prospect, the development work is not sufficiently extensive to warrent a definite opinion as to the continuation of the pay chute. I am, however, led to believe from the facts given herein, that, further exploration work would result in the discovery of important ore bodies that would place the property in rank with the past paying mines of the district...

(OWNER)_____
Mr. G. H. Miller

(OWNER)_____
Mrs. G. H. Miller

MARCH 11, 1940

(BY)_____
R. V. Miller

HORSESHOE LODE GREENBACK JOSEPHINE

STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
ASSAY LABORATORIES

REQUEST FOR SAMPLE INFORMATION

The State law governing free analysis of samples sent to State Assay Laboratories requires that certain information be furnished the Laboratory regarding samples sent for assay or identification. A copy of the law will be found on the back of this blank. Please fill in the information called for as completely as possible, and submit it along with your sample. Keep a copy of the information on each sample for your own reference.

Your name in full John H. Miller

Post-office address Room 509, 610 S. W. Broadway, Portland, Oregon

Are you a citizen of Oregon yes Date on which sample is sent March 24, 1948

Name (or names) of owners of the property Mr. & Mrs. Geo. H. Miller

Name of claim sample obtained from Horseshoe Lode

Location of property or source of sample (describe as accurately as possible below):

County Josephine Mining district Greenback

Township 33S Range 5W Section 28 Quarter section

How far from passable road On

For what minerals or elements do you wish the sample(s) analyzed Gold & Silver

	Channel (length)	Grab	Pipe	Description
Sample No. 1	x			
Sample No. 2				

IMPORTANT: A vein sample should be taken in an even channel across the vein from wall to wall. Location of sample in the workings, together with the width measured, should be recorded.

(Signed)

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

Description

Sample Number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
No. 1	0.76	$26.60	Trace					
No. 2	Nil		Nil					

Gold @ $35.00 per ounce.

Report issued Card filed Report mailed Called for

SIR-5