

FEB 27 1920

4-683

MINERAL SURVEY No. 3645

Arizona Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

HOWARD COPPER COMPANY.

KNOWN AS THE

Copper Schist No.5, Copper Schist No.6, Copper Schist No.2, Copper Schist No.1, Millsite, Oregon No.1, Strip, Oregon No.3 lodes

Black Canyon Mining District,

Yavapai County, Arizona

Section 30, 31 Unsur., Township 10 N., Range 2 E. G. & S. R. B. & M.

Surveyed under instructions dated Dec. 11, 1919

by Alfred B. Colwell U. S. Mineral Surveyor.

Claim located See location notices, 19

Survey commenced Dec. 14, 1919

Survey completed Jany. 28, 1920

Address of claimant Ralph Roseberry General Manager 523 I.W. Hellman Bldg. Los Angeles, Cal.

DATES OF AMENDED LOCATIONS.

MINERAL SURVEY NO. 3645			
Claims	M & B Desc.	Improvements	Loc. Notices
		Pg.	Pg. <u>Red</u>
Copper Schist No.	1	4	4
"	"	3	5
"	"	1	6
"	"	2	7
Millsite		5	7
Oregon No.	1	8	3
"	3	8	1
Strip		7	8

Mineral Survey No.3645

Feet

Copper Schist No.5 lode.

Beginning at Cor.No.1

Identical with Cor.No.4 Copper Schist No.6 lode of this survey.

A schist rock 5 x 10 x 22 ins. set 14 ins.in the ground chiseled + at exact corner point and C.S.5-1,C.S.6-4-3645 with mound of rock alongside

Whence

The S. $\frac{1}{4}$ Cor.Sec.31 T.10 N.,R.2 E.unsurveyed G. & S.R.P.& M. bears S.19°05'E.=3017.43 ft.

No other bearings available.

Thence N.1°35'E.

1500.00 To Cor.No.2

Identical with Cor.No.3 Copper Schist No.6,Cor.No.4 Copper Schist No.1 and Cor.No.1 Copper Schist No.2 lodes of this survey.

A 5 x 5 in.post 4 ft.long set 18 ins.in the ground with mound of earth and rock,nail at exact corner point,scribed

C.S.5-2,C.S.6-3,C.S.1-4,C.S.2-1-3645

Whence

Prominent quartz outcrop bears N.15°16'E.=225 ft.

Thence N.88°25'W.

300.00 North End Center.

Identical with South end center Copper Schist No.2 lode.

A 5 x 5 in.post set in ground with mound of rock.

600.00 To Cor.No.3

Identical with Cor.No.4 Copper Schist No.2 lode of this survey also with the S.E.Cor.Copper Schist No.3 and the N.E. Cor.Copper Schist No.4 lodes,unsurveyed,claimant herein.

A 5 x 5 in.Post 4 ft.long set 18 ins.in the ground with mound of rock,nail at exact ^{corner} center point,scribed C.S.5-3,

C.S.2-4-3645

Whence

No bearings are available.

Thence S.1°35'W.

1500.00 To Cor.No.4

Identical with the S.E.Cor. Copper Schist No.4 lode,unsur.

A schist rock 3 x 12 x 27 ins.set 16 ins.in the ground chiseled + at exact corner point and C.S.5-4-3645 Mound of rock alongside

Whence

Feet	No bearings are available. Thence S.88°25'E.
300.00	South End Center A monument of rock
600.00	To Cor.No.1, The place of beginning. Copper Schist No.6 lode. Beginning at Cor.No.1 Identical with the S.W.Cor.Copper Schist No.7 lode, unsurveyed, claimant herein. A schist rock 2 x 8 x 25 ins. set 15 ins. in the ground chiseled + at exact corner point and C.S.6,1-3645 Mound of rock alongside. Whence The S.¼ Cor.Sec.31 T.10 N., R.2 E. unsurveyed, G. & S.R.B. & M. bears S.9°17'E.-2874.80 ft. Old Cabin at Bland Mine bears N.50°41'E. Thence N.1°35'E.
1500.00	To Cor.No.2 Identical with Cor.No.1 Copper Schist No.1 lode also with the N.W.Cor.Copper Schist No.7 and the S.W.Cor.Copper Schist No.8 lodes unsurveyed, claimant herein. A schist rock 6 x 15 x 20 ins. set 12 ins. in the ground chiseled + at exact corner point and C.S.6-2-3645 Whence Old Cabin at Bland Mine bears N.62°25'E. Thence N.88°25'W.
300.00	North End Center Identical with South end center Copper Schist No.1 lode A monument of rock.
523.00	To Cor.No.3 Identical with Cor.No.2 Copper Schist No.5 lode, Cor.No.1 Copper Schist No.2 lode and Cor.No.4 Copper Schist No.1 lode previously described. Thence S.1°35'W.
1500.00	To Cor.No.4 Identical with Cor.No.1 Copper Schist No.5 lode, previously described. Thence S.68°25'E.

2 Feet
 223.00 South End Center -
 A monument of rock
 523.00 To Cor.No.1, The place of beginning.
 Copper Schist No.2 lode.
 Beginning at Cor.No.1
 Identical with Cor.No.2 Copper Schist No.5, Cor.No.3 Copper Schist No.6 and Cor.No.4 Copper Schist No.1 lodes.
 Previously described Whence
 The S. $\frac{1}{4}$ Cor.Sec.31 T.10 N,R.2 E.unsurveyed G.& S.R.B.& M.
 bears S.12°15'17"E.-4452.50 ft.
 Thence N.1°35'E.
 1260.00 Middle of Turkey Creek, course Southeasterly. 50ft.wide.
 1500.00 To Cor.No.2
 Identical with Cor.No.3 Copper Schist ^{N^o1} lode.
 On line 4-1 Oregon No.1 lode of this survey.
 A pine post 5 x 5 ins.4 ft.long, set 20 ins.in the ground
 with mound of earth and rock, nail at exact corner point,
 described C.S.2-2, C.S.1-3-3645 Whence
 No bearings are available.
 Thence N.88°25'W.
 235.00 Cor.No.4 Oregon No.1 lode and Cor.No.1 Millsite lode of
 this survey.
 300.00 North End Center
 A monument of rock.
 330.00 Middle of Turkey Creek, 50 ft.wide, course Southeasterly.
 535.00 South End Center Millsite lode.
 600.00 To Cor.No.3
 Identical with the N.E.Cor.Copper Schist No.3 lode, unsur.
 On line 4-1 Millsite lode.
 A schist rock 4 x 16 x 32 ins.set 18 ins.in the ground,
 chiseled + at exact corner point and C.S.2-3-3645 Mound of
 rock alongside.
 No bearings are available.
 Thence S.1°35'W.
 1500.00 To Cor.No.4
 Identical with Cor.No.3 Copper Schist No.5 lode.
 previously described.

Mineral Survey No. 3645

Feet	
300.00	<p style="text-align: center;">Thence S.88°25'E.</p> <p>South End Center</p> <p>Identical with North end center Copper Schist No.5 lode Previously described.</p>
600.00	<p>To Cor.No.1, The place of beginning.</p> <p style="text-align: center;">Copper Schist No.1 lode.</p> <p>Beginning at Cor.No.1</p> <p>Identical with Cor.No.2 Copper Schist No.6 lode, previous ly described</p> <p style="text-align: right;">Whence</p> <p>The S.¼ Cor.Sec.31 T.10 N.R.2 E.unsurveyed G.& S.R.B.& M. bears S.5°33'42"E.-4357.09 ft.</p>
1150.00	<p style="text-align: center;">Thence N.1°35'E.</p> <p>Middle of Turkey Creek, 50 ft.wide, course Easterly.</p>
1500.00	<p>To Cor.No.2</p> <p>Identical with the N.WCor.Copper Schist No.8 lode, unsur, On line 4-1 Strip lode of this survey.</p> <p>A pine post 5 x 5 ins.4 ft.long, set 20 ins.in ground with mound of earth and rock, nail at exact corner point, scribed C.S.1-2-3645</p> <p style="text-align: right;">Whence</p> <p>No bearings are available.</p>
18.00	<p style="text-align: center;">Thence N.88°25'W.</p> <p>South End Center Strip lode.</p>
158.00	<p>Cor.No.4 Strip lode and Cor.No.1 Oregon No.1 lode.</p>
300.00	<p>North End Center. Copper Schist No.2</p> <p>A monument of rock.</p>
458.00	<p>South End Center Oregon No.1 lode.</p>
523.00	<p>To Cor.No.3</p>
	<p>Identical with Cor.No.2 Copper Schist No.2 lode, previous ly described.</p>
	<p style="text-align: center;">Thence S.1°35'W.</p>
240.00	<p>Middle of Turkey Creek, 50 ft.wide, course Southeasterly.</p>
1500.00	<p>To Cor.No.4</p> <p>Identical with Cor.No.2 Copper Schist No.5, Cor.No.3 Copper Schist No.6 and Cor.No.1 Copper Schist No.2 lodes previously described.</p>

Feet	Thence S.88°25'E.
223.00	South End Center Identical with North End Center Copper Schist No.6 lode previously described.
523.00	To Cor.No.1, The place of beginning. Millsite lode. Beginning at Cor.No.1 Identical with Cor.No.4 Oregon No.1 lode of this survey. On line 2-3 Copper Schist No.2 lode. A diorite schist rock 3 x 13 x 26 ins.set 15 ins.in the ground, chiseled + at exact corner point and O,1-4, M-1-3645 with mound of rock alongside. Whence The S.¼ Cor.Sec.31 T.10 N.,R.2 E.unsurveyed G.& S.R.B.& M. bears S.11°0'E. 5966.63 ft. A cottonwood tree 12i s.in dia.blazed and scribed B.T.+ M.1,O,1-4-3645 bears S.74°02'W.-36 ft. Thence N.3°35'E.
1080.00	Middle of Turkey Creek 80ft.wide along line, Course South westerly.
1350.00	Middle of Turkey Creek, 60ft.wide along line, Course South easterly.
1500.00	To Cor.No.2 Identical with Cor.No.3 Oregon No.1 lode and with the S.W. Cor.Oregon No.2 lode unsurveyed, claimant herein. A schist rock 3 x 14 x 20 ins. set 12 ins.in the ground chiseled + at exact corner point and M,2,0,1-3-3645 with mound of rock alongside. Whence A boulder 3 x 5 x 8ft.chiseled B.+R., M-2,O,1-3-3645 bears S.25°W. 22.40ft. Thence N.88°25'W.
300.00	North End Center A monument of rock.
600.00	To Cor.No.3 Identical with the N.E.Cor. Midwest lode, unsurveyed, claimant herein. A schist rock 2 x 12 x 24 ins. set 14 ins.in the ground, chiseled + at exact corner point and M,3-3645 with mound of rock alongside. Whence

Mineral Survey No.3645

Feet	No bearings are available.
	Thence S.3°35'W.
330.00	Middle of Turkey Creek, 60ft. wide, Course Northeasterly
1500.00	To Cor.No.4
	On North end line Copper Schist No.3 lode unsurveyed.
	A schist rock 3 x 13 x 31 ins.set 20 ins.in the ground, chiseled + at exact corner point and M,4-3645 with mound of rock alongside. Whence
	Ledge of schist rock showing 1 x 5 ft.above surface, chiseled B.+ R., M,4-3645 bears S.80°W.-3.60 ft.
	Thence S.88°25'E.
235.00	Cor.No.3 Copper Schist No.2 lode and N.E.Cor.Copper Schist No.3 lode unsurveyed
300.00	South End Center, Arrangement of rock.
505.00	Middle of Turkey Creek, 50 ft. wide course Southeasterly.
535.00	North end center Copper Schist No.2 lode.
600.00	To Cor.No.1, The place of beginning.
	Oregon No.1 lode.
	Beginning at Cor.No.1
	Identical with Cor.No.4 Strip lode of this survey.
	On line 2-3 Copper Schist No.1 lode of this survey.
	A schist rock 3 x 12 x 31 ins.set 20 ins.in the ground, chiseled + at exact corner point and O,1-1,S,4-3645 with mound of rock alongside. Whence
	The S $\frac{1}{4}$ Cor.Sec.31 T.10 N.R.2 E.unsurveyed, G.& S.R.B.& M. bears S.5°16'14"E.-5865.16 ft.
	No other bearings available.
	Thence N.3°35'E.
1500.00	To Cor.No.2
	Identical with Cor.No.3 Strip lode of this survey and with the S.E.Cor.Oregon No.2 and the S.W.Cor.Oregon No.4 lodes unsurveyed, claimant herein
	A schist rock 3 x 14 x 30 ins.set 18 ins.in the ground chiseled + at exact corner point and O,1-2,S,3-3645 with mound of rock alongside. Whence
	WA ledge of rock 10 x 20ft. chiseled B.+R. O 1,2,S,3-3645 bears S.30°E.-61 ft.

Feet	Thence N.88°25'W.	Feet
300.00	North End Center	100.00
	A monument of rock.	240.00
600.00	To Cor.No.3	
	Identical with Cor.No.2 Millsite lode of this survey and the S.W.Cor.Oregon No.2 lode unsurveyed.	1500.00
	Thence S.3°35'W.	
150.00	Middle of Turkey Creek, 60 ft. wide, course Southeasterly.	
420.00	Middle of Turkey Creek, 80 ft. wide, course Southwesterly.	
1500.00	To Cor.No.4	
	Identical with Cor.No.1 Millsite lode of this survey	150.00
	Previously described.	
	Thence S.88°25'E.	340.00
235.00	Cor.No.2 Copper Schist No.2 lode and Cor.No.3 Copper Schist No.1 lode, previously described.	
300.00	South End Center, a monument of rock.	
458.00	North End Center Copper Schist No.1 lode.	
600.00	To Cor.No.1, The place of beginning.	
	Strip lode.	
	Beginning at Cor.No.1.	
	Identical with Cor.No.4 Oregon No.3 lode of this survey	
	A 5 x 5 in. Post, 4 ft. long set 2 ft. in ground with mound of earth and rock, nail at exact corner point, scribed S, 1, 0-3, 4-3645	
	Whence	
	The S. 1/4 Cor. Sec. 31 T. 10 N., R. 2 E. unsurveyed, G. & S. R. B. & M bears S. 2°55'57"E. - 5841.40 ft.	
	No other bearings available.	
	Thence N. 3°35'E.	
1500.00	To Cor.No.2	220.00
	Identical with Cor.No.3 Oregon No.3 lode of this survey.	300.00
	On south end line Oregon No.4 lode, unsurveyed.	
	A schist rock 2 x 16 x 26 ins. set 16 ins. in the ground, chiseled + at exact corner point and S-2, 0-33-3645 Mo and of rock alongside.	800
	Whence	
	No bearings are available.	
	Thence N. 88°25'W.	1500.00

Feet	
100.00	North End Center, A monument of rock.
240.00	To Cor.No.3
	Identical with Cor.No.2 Oregon No.1 lode, <i>previously described.</i>
	Thence S.3°35'W
1500.00	To Cor.No.4
	Identical with Cor.No.1 Oregon No.1 lode, <i>previously described.</i>
	Thence S.88°25'E.
140.00	South End Center
	A monument of rock.
158.00	Cor.No.2 Copper Schist No.1 lode and N.W. Cor. Copper Schist No.8 lode, unsurveyed.
240.00	To Cor.No.1, The place of beginning.
	Oregon No.3 lode
	Beginning at Cor.No.1
	A diorite rock 7 x 10 x 31 ins. set 18 ins. in the ground, chiseled + at exact corner point and O,3-1-3645 Whence The S.¼ Sec.31 T.10 N.,R.2 E. unsurveyed G.& S.R.B.& M. bears S.2°57'40"W. + 5824.94 ft.
	A boulder 2 x 4 x 3 ft. chiseled B.+ R., O,3-1-3645 bears N.55°08'E. + 22.40 ft.
	Thence N.3°35'E.
1500.00	To Cor.No.2
	A schist rock 3 x 14 x 24 ins. set 12 ins. in the ground chiseled + at exact corner point and O,3-2-3645 with mound of rock alongside. Whence No bearings are available.
	Thence N.88°25'W.
220.00	S.E. Cor. Oregon No.4 lode unsurveyed.
300.00	North End Center
	A monument of rock.
600.00	To Cor.No.3
	Identical with Cor.No.2 Strip lode of this survey
	Previously described.
	Thence S.3°35'W
1500.00	To Cor.No.4

Feet Identical with Cor.No.1 Strip lode of this survey.
Previously described.

300.00 South End Center Thence S.88°25'E.

A monument of rock.

510.00 Northeast corner Copper Schist No.8 lode,unsurveyed.

600.00 To Cor.No.1, The place of beginning.

Variation at all corners 14°30'E.

Lode Lines.

As near as may be determined from present developments the lode lines of this claim run as follows from their respective discovery points.-

Copper Schist No.5 lode N.1°35'E.-100ft., S.1°35'W.1400ft

Copper Schist No.6 lode,N.1°35'E.-580 ft.,S.1°35'W.920 ft.

Copper Schist No.2 lode,N.1°35'E.620ft.,S.1°35'W.880 ft.

Copper Schist No.1 lode.N.1°35'E.700ft.,S.1°35'W.-800 ft.

Millsite lode, N.3°35'E.980 ft.,S.3°35'W.520 ft.

Oregon No.1 lode N.3°35'E.210 ft.,S.3°35'W.-1290ft

Strip lode. N.3°35'E.1320ft.,S.3°35'W.180 ft.

Oregon No.3 lode N.3°35'E.775 ft.,S.3°35'W.725 ft.

Area

Total Area Copper Schist No.5 lode 20.661 Acres

Total Area Copper Schist No.6 lode..... 18.010 "

Total Area Copper Schist No.2 lode 20.661 "

Total Area Copper Schist No.1 lode..... 18.010 "

Total Area Millsite lode 20.649 "

Total Area Oregon No.1 lode 20.649 "

Total Area Strip lode 8.259 "

Total Area Oregon No.3 lode 20.649 "

Total 147.548 "

The survey of this claim is identical with the respective locations.

Location.

This claim is situated in Secs.30 and 31 unsurveyed T.10 N.,R.2 E. Gila and Salt River Base and Meridian.

Adjoining Claims.

On the East

Copper Schist No.7 and Copper Schist No.8 lodes

On the South: No known lodes.

On the West:

Copper Schist No.3 and Copper Schist No.4, Midwest lodes

On the North:

Oregon No.2 and Oregon No.4 lodes.

Expenditure of Five Hundred Dollars.

I certify that the value of the labor and improvements made upon or for the benefit of the locations embraced in this claim by the claimant or its grantors is less than five hundred dollars and that said improvements consist of:

On Copper Schist No.5 lode.

No.1 The Discovery cut, on the lode line at S.1°35'W.100ft. from the North end center, 14ft. long Easterly and Westerly, 4 ft. wide, 9 ft. face. In diorite schist.

Value \$75.00

On Copper Schist No.6 lode.

No.1 The discovery cut, the face of which is on the lode line at 580ft. from the North end center, Running thence N.60°W.10ft. 4 ft. wide, 8ft. face.

Value \$60.00

No.2 An open cut, the mouth of which bears N.74°45'E.205ft. from Cor.No.4 Running thence South 12 ft. to 8 ft. face, 4 ft. wide.

Value \$60.00

On Copper Schist No.2 lode.

No.1 The Discovery cut, the face of which is on the lode line at 620ft. from the North end center, running thence East 12 ft. 4 ft. wide, 9 ft. face, in copper bearing vein matter.

Value \$75.00

No.2 An open cut, the mouth of which bears from Cor.No.3 S.59°40'E. 275 ft. Running thence South 24 ft. to 12 ft. face, 4 ft. wide.

Value \$125.00

On Copper Schist No.1 lode.

No.1 The discovery cut, on the lode line at 700ft. from the North end center. Running thence southerly 12 ft. to mouth, 4 ft.

\$40.00

No.2 An open cut, the mouth of which bears from Cor. No. 4 N. 84° E. 180 ft. Running thence West 12 ft. to 8 ft. face, 4 ft. wide.

Value \$60.00

On Millsite lode.

No.1 The discovery cut, The face of which is on the lode line at 520 ft. from the South end center, running thence southwesterly 8 ft. to mouth, 4 ft. wide, 8 ft. face.

Value \$60.00

On Oregon No. 1 lode.

No.1 The discovery cut, the face of which is on the lode line at 210 ft. from the North end center, running thence south 8 ft. 4 ft. wide 9 ft. face.

Value \$60.00

On Strip lode.

No.1 The discovery cut, the mouth of which is on the lode line at 164 ft. from the South end center, running thence North 16 ft. to 8½ ft. face, 4 ft. wide.

Value \$75.00

On Oregon No. 3 lode.

No.1 The discovery cut, the face of which is on the lode line at 725 ft. from the South end center, running thence East 12 ft. to mouth of cut, 4 ft. wide, 9 ft. face.

Value \$75.00

Other Improvements.

A shaft which bears from Cor. No. 3 Copper Schist No. 2 lode, S. 24° 20' E. 670 ft. 4 x 6 ft. 16 ft. deep to water.

Claimant unknown

An open cut, the mouth of which bears from Cor. No. 2 Copper Schist No. 2 lode, S. 19° 40' W. 580 ft. running 20 ft. South, 7 ft. wide, 7 ft. face., Claimant unknown.

An open Cut the mouth of which bears from Cor. No. 2 Copper Schist No. 2 lode, S. 17° 45' W. 450 ft. Running South 16 ft. 4 ft. wide, 10 ft. face. Claimant unknown

An open cut, the mouth of which bears from Cor. No. 2 Copper Schist No. 2 lode, S. 14° 45' W. 580 ft. Running East 16 ft. 4 ft. wide 8 ft. face. Claimant unknown.

Instrument.

This survey was made with a C.L.Berger & Sons transit. The courses were deflected from the true meridian as determined by direct solar observations, The distances were measured with steel tapes.

Report.

The lines of this survey were run direct upon the ground as was also the tie from Cor.No.1 Copper Schist No.5 lode to S.1/4 Cor.Sec.31 unsurveyed T.10 N.R.2 E, G.& S.R.

The remaining Sec.Cor.ties were calculated by travers enclosed herewith.

The S.1/4 Cor.Sec.31 T.and R. aforesaid is a 1 in.Iron pipe with bronze cap,properly set and marked.

The corners of adjacent unsurveyed claims shown on plat are monuments of rock.

Note.

The discrepancies between these field notes and the amended location certificates are due to errors in the latter.

FINAL OATHS FOR SURVEYS.

LIST OF NAMES.

A list of the names of the individuals employed by Alfred B. Colwell

United States Mineral Surveyor, to assist in running, measuring, and marking the lines, corners, and boundaries described in the foregoing field notes of the survey of the mining claim of

Howard Copper Company

known as the Millsite, Copper Schist No. 6, Strip, Oregon No. 1, Oregon No. 3
Copper Schist No. 1, Copper Schist No. 2, Copper Schist No. 5
lodes.

and showing the respective capacities in which they acted.

A. R. Miller, Jr., Chainman.

Chainman.

Asman.

Flagman.

FINAL OATHS OF ASSISTANTS.

~~We~~, I, A. R. Miller Jr.,

and _____, do solemnly swear that ~~we~~ assisted Alfred B.

Colwell, United States Mineral Surveyor, in marking the corners and surveying

the boundaries of the mining claim of Howard Copper Company

known as the Copper Schist No. 1, Copper Schist No. 2, Copper Schist No. 5
Copper Schist No. 6, Millsite, Strip, Oregon No. 1, Oregon No. 3
lodes

represented in the foregoing field notes as having been surveyed by said mineral surveyor and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, faithfully and correctly executed, and the corner and boundary monuments established according to law and the instructions furnished by the United States Surveyor-General for Arizona

A. R. Miller Jr., Chainman.

Chainman.

Asman.

Flagman.

Subscribed and sworn to by the above-named persons before me this 31st

day of January, 1920

J. M. R. Moore

My commission expires Feb 23rd 1920

Notary Public

FINAL OATH OF U. S. MINERAL SURVEYOR.

I, Alfred B. Colwell, U. S. Mineral Surveyor, do solemnly swear that, in pursuance of instructions received from the United States Surveyor General for Arizona, dated Dec. 11-1919, I have, in strict conformity to the laws of the United States, the official regulations and instructions thereunder, and the instructions of said Surveyor General, faithfully and correctly executed the survey of the Mining Claim of Howard Copper Company. Copper Schist No. 5, Copper Schist No. 6, Copper Schist No. 2, Copper Schist No. 1, Millsite, Oregon No. 1, Strip, Oregon No. 3 lodes, situate in Black Canyon Mining District, Yavapai County, Arizona, in Section 30 and 31, Township No. 10 N., Range No. 2 E. G. & S. R. B. & M., and designated as Survey No. 3645, as represented in the foregoing field notes, which accurately show the boundaries of said mining claim as distinctly marked by monuments on the ground, and described in the attached copy of the location certificate, which was received by me from the Surveyor General with said instructions, and that all the corners of said survey have been established and perpetuated in strict accordance with the law, official regulations and instructions thereunder; and I do further solemnly swear that the foregoing are the true and original field notes of said survey and my report therein, and that the labor expended and improvements made upon said mining claim by claimant or its grantors are as therein fully stated, and that the character, extent, location, and itemized value thereof are specified therein with particularity and full detail, and that no portion of said labor or improvements so credited to this claim has been included in the estimate of expenditures upon any other claim.

Alfred B. Colwell
U. S. Mineral Surveyor.

Subscribed and sworn to by the said Alfred B. Colwell
U. S. Mineral Surveyor, before me N. F. Nykoff, Notary Public
in and for Yavapai County, Arizona this 25th
day of February, 1920

N. F. Nykoff
Notary Public

U. S. SURVEYOR-GENERAL'S FINAL CERTIFICATE ON FIELD NOTES.

Department of the Interior,

OFFICE OF U. S. SURVEYOR-GENERAL,

Phoenix, Arizona,

April 15, 1920, 191-

I, U. S. Surveyor-General for Arizona

do hereby certify that the foregoing transcript of the Field Notes, return and approval of the survey of the mining claim of Howard Copper Company

known as the COPPER SCHIST NO.5, COPPER SCHIST NO.6, COPPER SCHIST NO.2 NO.3 Lodes. MILLSITE, OREGON NO.1, STRIP, OREGON situate in Black Canyon

Mining District, Yavapai County, Arizona

in Section 30 and 31 unsurveyed Township No. 10 N., Range No.2 E.G.& S.R.B.& M and designated as Survey No. 3645, has been correctly copied from the originals on file in

this office; that said Field Notes furnish such an accurate description of said mining claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

~~And I further certify that five hundred dollars' worth of labor has been expended or improvements made upon said mining claim by claimant or its grantors, and that said improvements consist of~~

~~and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim~~

I further certify that the plat thereof, filed in the U. S. Land Office at Phoenix,

Arizona, is correct and in conformity with the foregoing Field Notes.

Frank P. Trott,

United States Surveyor-General for Arizona.

4-687

SURVEYOR GENERAL'S CERTIFICATE OF APPROVAL OF FIELD NOTES
AND SURVEY OF MINING CLAIM

DEPARTMENT OF THE INTERIOR
OFFICE OF U. S. SURVEYOR GENERAL

Phoenix, Arizona,

April 15, 1920, 191

I, U. S. Surveyor General for Arizona

do hereby certify that the foregoing and hereto attached Field Notes and Return of the Survey of the
Mining Claim of Howard Copper Company

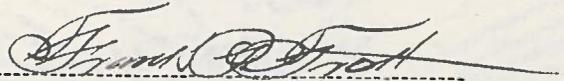
known as the
MILLSITE, COPPER SCHIST NO.6, STRIP, OREGON NO.1, OREGON NO.3,
COPPER SCHIST NO.1, COPPER SCHIST NO.2, COPPER SCHIST NO.5 lodes.

situate in Black Canyon mining district,
Yavapai County, Arizona

in Section 30,31 Unsur., Township No. 10 N., Range No. 2 E.G.& S.R.
B.& M., designated as Survey No. 3645

executed by Alfred B. Colwell, U. S. Mineral
Surveyor, Dec. 14, '19- Jan. 28, 191²⁰, under my instructions dated

Dec. 11, 191⁹, have been critically examined and the necessary cor-
rections and explanations made, and the said Field Notes and Return, and the Survey they describe,
are hereby approved. The certified copy of the location certificate filed by the applicant for survey is
on file in this office and a true copy of said certified copy of said location certificate is included and made
a part of the transcript of the field notes.



U. S. Surveyor General for Arizona.

(4-691.)

Certificate of U. S. Surveyor General

AS TO

EXPENDITURES REPORTED AFTER RETURN OF SURVEY OF MINING CLAIM.

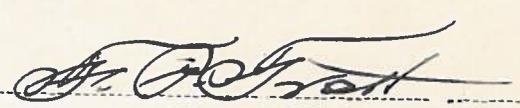
I, U. S. Surveyor General for District of Arizona,
do hereby certify that Five Hundred Dollars' worth of labor has been expended or
improvements made by claimant or its grantors, ^{or for each of} upon the mining claim of
Howard Copper Company

known as the Copper Schist No. 1, Copper Schist No. 2, Copper Schist No. 5
Copper Schist No. 6, Millsite, Strip, Oregon No. 1, and
Oregon No. 3 lodes,
situate in Black Canyon mining district,

Yavapai County, Arizona
in Sections 30 & 31, Township No. 10 N., Range No. 2 E.;

that said improvements consist of 11 cuts and 1 tunnel with drifts and
crosscuts, total value \$10,670, of which \$6177.38 is re-
served for certain other claims not included in Survey No.
3645.

, and that no portion of said labor or improvements has been
included in the estimate of expenditures upon any other claim. A copy of the report of
Alfred B. Colwell, U. S. ~~Deputy~~ Mineral Surveyor, dated
August 31, 1920, ~~is~~, is hereto attached.


U. S. Surveyor General for Arizona.

Office of U. S. Surveyor General,

Phoenix, Arizona,

September 3, 1920

SEP 30 1920

(4-690.)

Report of Expenditures upon Mining Claim, filed by U. S. Deputy Mineral Surveyor after return of Survey.

I, Alfred B. Colwell, U. S. ~~Deputy~~ Mineral Surveyor, do solemnly swear that in pursuance of instructions received from the United States Surveyor General for Arizona, dated December 11, 1919,

I have made a personal and thorough examination upon the premises, to ascertain the value of the labor expended and improvements made by claimant or its grantors upon the mining claim of _____

Howard Copper Company

_____, known as the Copper Schist No. 1, Copper Millsite, Oregon No. 1, Strip Oregon No. 3
Copper Schist No. 6
Schist No. 2, Copper Schist No. 5, situate in Black Canyon

_____ mining district, Yavapai

County, Arizona, in Sections 30, 31 Unsur, Township No.

10 N., Range No. 2 E.G. & S.R.B. & M., surveyed by me Dec. 14-1919 to
Jany. 28-1920, 18, and designated as Survey No. 3645;

that the value of the labor so expended and improvements so made are as fully stated in my report of said examination, hereto attached; that the character, extent, location and itemized value of said improvements are specified therein with particularity and full detail, and that no portion of said labor or improvements, so credited to this claim has been included in the estimate of expenditures upon any other claim.

Alfred B. Colwell

U. S. ~~Deputy~~ Mineral Surveyor.

Subscribed and sworn to by the said Alfred B. Colwell

_____, U. S. ~~Deputy~~ Mineral Surveyor, before me

this 31st. day of August 1920, 1

Walter H. Davis
Notary Public
Yavapai County
Arizona.

WALTER H. DAVIS
NOTARY PUBLIC
YAVAPAI COUNTY, ARIZONA
My commission expires 11-14-23 2-202

Expenditure of Five Hundred Dollars

I certify that the value of labor and improvements made upon or for the benefit of the locations embraced in this claim, by the claimant or its grantors, is not less than Five Hundred Dollars, and that said improvements consist of:-

On Copper Schist No. 5 lode.

- No. 1 The discovery cut, on the lode line at S.1°35'W.-100 ft. from the North end center, 14 ft. long Easterly and Westerly, 4 ft. wide, 9 ft. face.

Value \$75.00

An undivided 1/19 interest in Improvement No. 2 on the Copper Schist No. 2 lode.

Value \$561.58

On Copper Schist No. 6 lode.

- No. 1 The discovery cut, the face of which is on the lode line at ~~589~~⁵⁸⁰ ft. from the North end center. Running thence N. 60°W 10 ft. to face 4 ft. wide, 8 ft. high.

Value \$60.00

- No. 2 An open cut, the mouth of which bears from Cor. No. 4 N.74°45'E.-205 ft. Running thence South 12 ft. to 8 ft. face 4 ft. wide.

Value \$60.00

An undivided 1/19 interest in Improvement No. 2 on the Copper Schist No. 2 lode.

Value \$561.58

On Copper Schist No. 2 lode.

- No. 1 The discovery cut, the face of which is on the lode line at 620 ft. from the North end center. Running thence East 12 ft. 4 ft. wide, 9 ft. face in copper bearing vein rock.

Value \$75.00

- No. 2 An open cut and tunnel. The mouth of cut bears from Cor. No. 3 S.59°40'E.-275 ft. Running thence South 24 ft. to 12 ft. face, 4 ft. wide. At face of cut a tunnel runs S.0°18'E.-36.6 ft. to Point 2. Thence S.5°25'E.-37.5 ft. to point 3, Thence S.2°18'W.-194.2 ft. to Point 4, Thence

S.1°11'W.-50.5 ft. to A. Thence S.1°11'W.-109.6 ft. to B.
Thence S.54°06'W.-19 ft to Point 6. Thence S.82°29'W.
48 ft. to Face.

From A a crosscut runs S.85°W.-109 ft. to face.

From B a crosscut runs N.85°E.-23 ft. to face.

From B a drift runs S.2°W.-50 ft. Thence West 25 ft. to
face. All drifts and crosscuts are not less than 4 ft.
wide and 6.5 ft. high. The first 36.6 ft. at mouth of
tunnel is timbered with drift sets.

Total length of ^{tunnel,} drifts and crosscuts is ~~703.4~~^{702.4} ft.

Value of Open Cut \$ 125.00

Value of Tunnel Drifts and Crosscuts 10545.00

interest Total Value \$ 10670.00

An undivided 1/19/credited to this lode \$ 561.58

On Copper Schist No. 1 lode.

No. 1 The Discovery cut, on the lode line at 700 ft. from the
North end center. Running thence Southerly 12 ft. to
mouth 4 ft. wide, 8 ft. face.

Value \$ 60.00

No. 2 An open cut the mouth of which bears from Cor. No. 4
N.84°E. 180 ft. Running thence West 12 ft. to 8 ft.
face, 4 ft. wide.

Value \$ 60.00

An undivided 1/19 interest in Improvement No. 2 on the
Copper Schist No. 2 lode.

Value \$561.58

On Millsite lode.

No. 1 The discovery cut, the face of which is on the lode line
at 520 ft. from the South end center, running thence
Southwesterly 8 ft. to mouth, 4 ft. wide, 8 ft. face.

Value \$ 60.00

An undivided 1/19 interest in Improvement No. 2 on the
Copper Schist No. 2 lode.

Value \$561.58

On Oregon No. 1 lode.

No. 1 The discovery cut, the face of which is on the lode line

at 310 ft. from the North end center, running thence South 8 ft. 4 ft. wide, 9 ft. face.

Value \$ 60.00

An undivided 1/19 interest in Improvement No. 2 on the Copper Schist No. 2 lode.

Value \$561.58

No. 1 On Strip lode. The discovery cut, the mouth of which is on the lode line at ¹⁸⁰ 164 ft. from the South end center, running thence North 16 ft. to 8 1/2 ft. face, 4 ft. wide.

Value \$ 75.00

An undivided 1/19 interest in Improvement No. 2 on the Copper Schist No. 2 lode.

Value \$561.58

No. 1 On Oregon No. 3 lode. The discovery cut, the face of which is on the lode line at 725 ft. from the South end center, running thence East 12 ft. to mouth of cut, 4 ft. wide, 9 ft. face.

Value \$ 75.00

An undivided 1/19 interest in Improvement No. 2 on the Copper Schist No. 2 lode.

Value \$561.58

The tunnels described under Improvement no.2 on the Copper schist No.2 lode, with its connected drifts and cross cuts has been designed and constructed for the purpose- First, of developing and mining any and all portions of the ore body which lie above it or at such moderate depths below it that they may be properly worked in a practical manner. Second, For the purpose of reaching that part of the ore body where it is practical to sink a working shaft or winze, in order to follow the ore downward, exploring and developing it at depth and initiating lateral development by means of drifts and cross cuts at various levels below the tunnel.

It is not practical to sink a shaft from the surface

MINERAL SURVEY NO.3645

as the ground rises steeply from the bed of Turkey Creek to an elevation of 300ft. over the tunnel, making the construction of a road for the hauling of machinery and supplies difficult and impractical.

The tunnel therefore serves two purposes-First, For the development and extraction of ore from above the tunnel level. Second- As a means of communication between the surface at a point which is accessible, to a shaft which is to be sunk in the ore body.

A plat is submitted herewith showing-

1st. The locations embraced in Sur.No.3645

2nd. The contiguous unsurveyed locations owned by the

claimant herein, and which are credited with an interest in the tunnel, viz., Oregon No. 2, Oregon No. 4, Midwest, Sulphuric No. 1, Sulphuric No. 2, Copper Schist No. 3, Copper Schist No. 4, Copper Schist No. 7, Copper Schist No. 8, Never Sweat and Gold Bug No. 6

3rd. The position of Turkey creek (or Black Canyon) which

divides the ground topographically into two groups.

The surface is very mountainous, rising on each side of Turkey creek to an elevation of 500ft. or more at the North and South ends of the group respectively.

The formation is identical on both sides of the Creek, consisting of pre-Cambrian schists, standing vertical and having a Northerly and Southerly strike parallel to the lode lines.

The locations surrounded by a yellow border to wit- Sulphuric No. 2, Copper Schist No. 3, Copper Schist No. 2, Copper Schist No. 1, Copper Schist No. 8, Copper Schist No. 4, Copper Schist No. 5, Copper Schist No. 6, Copper Schist No. 7, Never Sweat and Gold Bug No. 6 are susceptible of development and directly benefited by the tunnel herein described.

The remaining claims to wit- Sulphuric No. 1, Midwest, Millsite, Oregon No. 1, Strip, Oregon No. 3, Oregon No. 2 and Oregon No. 4 are indirectly benefited by said tunnel as it is a necessary preliminary and means of communication with a shaft to be sunk below the tunnel level, from which drifts will be run at a depth below the bed of the Creek and into the claims of the Northerly group. The bed of Turkey creek is a superficial topographic feature and has no effect on the continuity of the veins or the ore bearing formation.

The herein described tunnel and connected existing and projected workings, therefore constitute a practical method of developing this claim as a whole, whence future workings may be projected from a point which is accessible permitting the use of a single centralized power plant and the accompanying buildings.

It is therefore proper to assign to each of the 19 locations constituting this claim, a proportionate part of the value of the tunnel described as Improvement no. 2 upon the Copper Schist No.2 lode.

I Alfred B. Colwell, U.S. Mineral Surveyor for the District of Arizona, first being duly sworn, depose and say that the above supplemental report is true and correct, and that the improvements mentioned therein were made and completed prior to the date of expiration of the publication of the notice of application for patent to the lands embraced within Mineral Survey no. 3645

Alfred B. Colwell
U.S. Mineral Surveyor.