

SEP. 13 1911

(4-683.)

Mineral Survey No. 2945

Lot No. _____

ARIZONA Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

Hartford-Arizona Copper Mining Company.

KNOWN AS THE

HELENA

Hartford Mining District,

Cochise County, Arizona.

Section 21, Township 23 S, Range 20 E

Surveyed under instructions dated July 28, 1911.

by Ralph L. Metz,
U. S. ~~Deputy~~ Mineral Surveyor

Claim located See Location Notice, 1

Survey commenced Aug. 28, 1911

Survey completed Sept. 2, 1911

Address:

Claimant's Attorney:-

J. M. O'Connell,

Bisbee, Arizona.

SURVEY NO. 2945.

HELENA

Beginning at Cor. No. 1, the N. W. Cor., identical with location, with Cor. No. 6, Wisconsin Lode, Lot No. 37 and with the S.E. and S.W. Cors. respectively of the Lionel D. and Huachuck Chief Lodes, both unsurveyed, a pine post, 4 ft. long 4 ins. square, set 18 ins. in the ground in a mound of stones and scribed 1-2945 H.L. whence a pine tree 18 ins. in diameter and about 75 ft. high, blazed and scribed B. T. x 1-2945 bears N 52° 40' E 42.7 ft., a granite rock 8.4 x 13.2 x 3.0 ft. high chiseled B.F. x 1-2945 bears N 66° 33' E 58.3 ft., a second granite rock in place 4.1 x 4.3 x 1.0 ft. high with like chiseling bears S 49° 12' E 16.9 ft., U. S. M. M. No. 1, Hartford Mining District, Cochise County, bears S 2° 33' E 510.4 ft. and the Quarter Corner between Sections 20 and 21, T 23 S, R 20 E, G & S R B & M bears S 48° 45' W 911.5 ft.

Thence N 19° 47' E

- 191.7 To Cor. No. 4, Undine Lode, Lot No. 38, whence Cor. No. 6, said Undine lode brs. N. 58° 30' E., 400 ft.
- 371.4 Same bearing to location for North End Center, being a monument of rocks 3 ft. high with 3 ft. base
- 724.9 Same bearing to intersection with line 6 - 7 Undine Lode, Lot No. 38; at S 28° 45' E 1146.1 ft. from Cor. No. 7, Undine Lode and at N 28° 45' W 333.9 ft. from Cor. No. 6, Undine Lode.
- 742.8 Same bearing to Cor. No. 2, the N. E. Cor., identical with location, being a pine post, 4 ft. long, 4 ins. square set 18 ins. in the ground in a mound of stones and scribed 2-2945 H. L., whence a fir tree 45 ins. in diameter and about 100 ft. high, blazed and scribed B.T. x 2-2945, bears S 4° 36' E 34.7 ft., a granite rock in place 6.0 x 7.6 x 4.6 ft. high chiseled B. R. x 2-2945 bears S 32° 23' W 22.0 ft., and a slate rock in place

3.0 x 3.0 x 1.5 ft. high with like chiseling bears S 53° 22' E 33.7 ft.

Thence S 34° 05' E

- 385.8 To intersect line 5 -6 I. X. L. Lode, Lot No. 39, at S 9° 10' E 659.4 ft. from Cor. No. 5, I. X. L. Lode and at N 9° 10' W 826.6 ft. from Cor. No. 6, I. X. L. Lode, Lot No. 39.
- 1321.3 To Intersect line 6 - 2, I. X. L. Lode Lot. No. 39, at N 84° E 105.7 ft. from Cor. No. 1, I. X. L. Lode, at N 84° E 394.7 ft. from Cor. No. 6, I. X. L. Lode and at S 84° W 194.3 ft. from Cor. No. 2, I. X. L. Lode, Lot No. 39.
- 1500.0 Same bearing to Cor. No. 3, the S. E. Cor., identical with location, a pine post 4 ft. long, 4 ins. square set 18 ins. in the ground in a mound of stones and scribed 3-2945 H. L. whence a pine stump 30 ins. in diameter and 12 ft. high, blazed and scribed B. T. x 3-2945, bears N 89° 43' E 35.7 ft., a second pine stump 12 ins. in diameter and 5 ft. high, blazed and with like scribing, bears N 9° W 15.2 ft. and a diorite rock in place 2.0 x 4.0 x 2.0 ft. high bears chiseled B. R. x 3-2945 bears S 54° 42' W 23.7 ft.

Thence S 19° 47' W

- 371.4 To South End Center Location, being a monument of rocks 3 ft. high with a 3 ft. base.
- 742.8 Same bearing to Cor. No. 4, the S. W. Cor., identical with location, a pine post 4 ft. long, 4 ins. square, set 18 ins. in the ground in a mound of stones and scribed 4-2945 H.L., whence a spruce tree 18 ins. in diameter and about 75 ft. high, blazed and scribed B. T. x 4-2945, bears N 81° 31' E 13.5 ft., a second spruce tree, 18 ins. in diameter and about 75 ft. high, blazed and with like scribing, bears S 17° 43' E 30.2 ft. and a fir tree, 24

ins. in diameter and about 80 ft. high, blazed and with like scribing, bears S 36° 54' W 39.1 ft.

Thence N 34° 05' W

291.0 To Cor, No. 5, Wisconsin Lode, Lot No. 37.

1500.0 Same bearing, to Cor. No. 1, the place of the beginning.

LEDGE

The presumed course of the vein on this claim is from the North End Center Location S 34° 05' E 1500.0 ft.

AREAS

Total Area Helena Lode, Survey No. 2945 - - - 20.658 A.

Conflict with I. X. L. Lode, Lot

No. 39 - - - - - 3.739 A

Conflict with Undine Lode, Lot No.

38 - - - - - 1.531 "

IMPROVEMENTS

I hereby certify that the value of the labor and improvements on this claim, placed thereon by the claimant or its grantors is not less than five hundred (\$500.00) dollars, and that said improvements are as follows:

No. 1, Discovery Cut, bears from N. E. C.

Location S 34° 05' E 300.0 ft. 14 x 12'

x 10 ft. face Value - - - - - \$ 50.00

No. 2, Tunnel, known as Tunnel No. 5, the

mouth of which bears from Cor. No. 1, S 67°

56' E 626.3 ft. From Sta. 1, at mouth the

tunnel runs S 9° 43' W 360.0 ft. to Sta. 2,

From Sta. 2 a drift runs S 9° 43' W 33.0 ft.

to face, another drift runs S 73° 44' E 68.0

ft. At 37 ft in this drift a crosscut runs

S 16° 16' W 14.5'. From Sta. 2 the tunnel runs

S 79° 55' W 49.2 ft. to Sta. 3, thence S 58°

11' W 37.0 ft., to Sta. 4, thence N 89° 16' W
26.0 ft. to Sta. 5, thence N 77° 02' W 63.5
ft. to face. At Sta. 2+32' a crosscut runs S 10°
05' E 23. ft., at Sta. 3+24.5' a crosscut runs
S 31° 39' E 20.5 ft., at Sta. 5+31.4' a cross-
cut runs N 12° 58' E 14.4 ft. This tunnel is
4 x 7 ft. high and a total of 709.1 ft. long.

Value - - - - - \$ 10636.50

No. 3, Tunnel, known as Tunnel No. 4, 4 x 6 x
30 ft. long, runs in a southerly direction
from mouth which bears S 48° 54' E 717.9

ft. from Cor. No. 1, Value - - - - - \$ 300.00

Total Value of Improvements - - - - - \$ 10986.50

ADJOINING CLAIMS

North:- Lionel D., Huachuak Chief, and Princeton Lodes,
unsurveyed, and Undine Lode, Lot No. 38 all
owned by the claimant herein.

East:- Princeton Lode, unsurveyed and I. X. L. Lode
Lot No. 39, owned by claimant herein.

South:- Triplets Lode, unsurveyed, S. A. Young, claimant.

West:- Harriet J. Lode, unsurveyed and Wisconsin Lode,
Lot No. 37, owned by the claimant herein.

LOCATION

This claim is located in the Hartford Mining District
Cochise County, Arizona, in Sec. 21, T 23 S, R 20 E,
G & S R B & M., within the Garces National Forest.

INSTRUMENT

This survey was made with a C. L. Berger & Sons No.
1 C Transit. The courses were deflected from the true
meridian as determined by a Solar observation. The dis-
tances were measured with a 300 ft. steel tape. Magnet-
ic variation 12° 30' E at all corners.

REPORT

Wisconsin Lode, Lot No. 37. Cors. V and VI are pine posts 4 ft. long, 4 ins. square set 18 ins in the ground in a mound of stones and were re-established by me according to the official courses and distances.

Undine Lode, Lot No. 38. Cors. IV, V, VI and VII are pine posts 4 ft. long, 4 ins. square set 18 ins. in the ground in a mound of stones and were re-established by me according to the official courses and distances of original surveys.

I. K. L. Lode, Lot No. 39. Cors. I, II, V and VI are pine posts 4 ft. long, 4 ins. square set 18 ins. in the ground in a mound of stones and were re-established by me according to the official courses and distances of the original survey.

U. S. M. M. No. 1, is a pine post 6 x 6 ins. x 10 feet high set in a mound of stones 5 ft. high with a 7 ft. base. It is scribed U. S. M. M. No. 1, H. D.

Quarter Corner, Secs. 20 and 21, T 23 S, R 20 E is a granite rock 6 x 8 x 18 ins. high set in the ground, a mound of stones near it and 1/4 chiseled on the west face.

Ralph L. Motz.

U. S. Mineral Surveyor

Dated at Bisbee, Arizona.

Sept. 11, 1911.

FINAL OATHS FOR SURVEYS.

LIST OF NAMES.

A list of the names of the individuals employed by Ralph L. Motz

United States Deputy 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

Hartford-Arizona Copper Mining Company,

known as the HELENA

and showing the respective capacities in which they acted.

Lionel H. Hamburg, Jr., Chainman.

....., Chainman.

Alex Daniels, Axman.

....., Flagman.

FINAL OATHS OF ASSISTANTS.

We, Lionel H. Hamburg, Jr.

and Alex Daniels, do solemnly swear that we assisted Ralph

L. Motz, United States Deputy Mineral Surveyor, in marking the corners and surveying the boundaries of the mining claim of

Hartford- Arizona Copper Mining Company,

known as the HELENA

represented in the foregoing field notes as having been surveyed by said ~~deputy~~ 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.

Lionel H. Hamburg, Jr. Chainman.

....., Chainman.

Alex Daniels, Axman.

....., Flagman.

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

day of September, 1911.

Arthur B. Young

Mary Pullie

my commission expires Feb. 16, 1915

(4-686.)

FINAL OATH OF U. S. ~~DEPUTY~~ MINERAL SURVEYOR

I, Ralph L. Motz, U. S. ~~Deputy~~ Mineral Surveyor, do solemnly swear that, in pursuance of instructions received from the United States Surveyor General for Arizona, dated July 28, 1911, 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 Hartford-Arizona Copper Mining Company, known as the HELENA, situate in Hartford Mining District, Cochise County, Arizona, in Section 21, Township No. 23 S., Range No. 20 E., G. & S. R. B. & M., and designated as Survey No. 2945, 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.

Ralph L. Motz
U. S. ~~Deputy~~ Mineral Surveyor.

Subscribed and sworn to by the said Ralph L. Motz
U. S. ~~Deputy~~ Mineral Surveyor, before me, Tom Grack, a
Notary Public this 14th
day of September, 1911.

My commission expires
Sept. 3, 1914,

Tom Grack, Notary Public
In and for Cochise Co.,
Arizona

Notice of Mining Location

JUL 28 1911

LODE CLAIM

To All Whom It May Concern:

This Mining Claim, the name of which is the Helena Mining Claim, situate on lands belonging to the United States of America, and in which there are valuable mineral deposits, was entered upon and located for the purposes of exploration and purchase by Princeton Copper Mining & Smelting Co.-a corporation organized under the laws of the State of South Dakota

(Locator must insert either "a citizen of the United States," or, "who has declared his intention to become a citizen of the United States.")

the undersigned, on the 22- day of April 1904.

The length of this claim is fifteen hundred (1500) feet, and we claim three hundred (300) feet, in a Northerly direction and 1200 twelve hundred feet in a Southerly direction from the center of the discovery shaft, at which this notice is posted, lengthwise of the claim, together with three hundred feet in width of the surface grounds, on each side of the center of said claim. The general course of the lode deposit and premises is from the north to the south

The claim is situated and located in the Hartford Mining District, in Cochise County, in the Territory of Arizona, about 2½ Miles in a Southerly direction from Berners Ranch and on the eastern slope of Ramsey Canon and bounded on the west by the Wisconsin Mine, on the North by the Undine, and on the east by the I X L Mine

The surface boundaries of the claim are marked upon the ground as follows: Beginning at a monument of stone

at a point in a northerly direction about 300 feet from the discovery shaft (at which this notice is posted), being in the center of the north end line of said claim; thence easterly 300 feet to a monument of stone, being the northeast corner of said claim; thence southerly 1500 feet to a monument of stone, being at the southeast corner of said claim; thence westerly 300 feet to a monument of stone at the center of the south end of said claim; thence westerly 300 feet to a monument of stone, being at the southwest corner of said claim; thence northerly 1500 feet to a monument of stone at the north west corner of said claim; thence easterly 300 feet to the place of beginning.

All done under the provisions of Chapter Six, of Title XXXII, of the Revised Statutes of the United States, and of an Act of the General Assembly of Arizona, entitled "An Act to Revise and Codify the Laws of the Territory of Arizona," approved March 16, 1901.

Dated and posted on the ground this 22^d day of April 1904.

Witness: Princeton Copper Mining & Smelting Co.

A. E. Slessman By Henry Hamburg, President.

Clarence Woodcock

Filed and recorded at request of Henry Hamburg Apr.30 1904
at 9 A. M. in Book 31 Record of Mines at Page 24.

TERRITORY OF ARIZONA, |
 | SS.
County of Cochise. |

I, C. A. McDonald, County Recorder in and
for the County of Cochise, Territory of Arizona, D O H E R E B Y
C E R T I F Y, that I have compared the annexed and foregoing copy
with the original location notice of the "H E L E N A" Mining Claim
filed for record on the 30th day of April 1904, and recorded in Book
31 Record of Mines at page 24; and that the same is a full, true
and correct copy of said original and of the whole thereof.

Given under my hand and official seal this the 22nd day of July
A. D. 1911.

C. A. McDonald

County Recorder.

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

Department of the Interior,

OFFICE OF U. S. SURVEYOR-GENERAL,

Phoenix, Arizona,

October 27, 19 11.

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

Hartford-Arizona Copper Mining Company,

known as the HELENA,

situate in Hartford

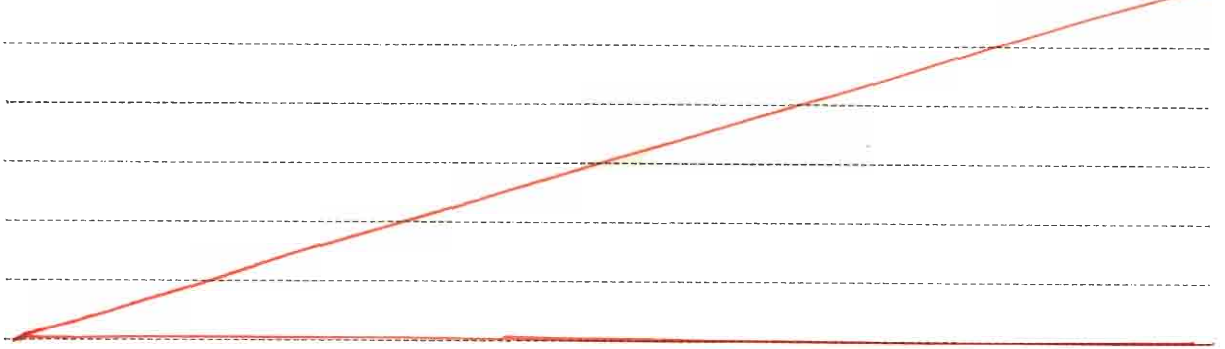
Mining District, Cochise County, Arizona,

in Section 21, Township No. 23 S., Range No. 20 E., and

designated as Survey No. 2945, 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 1 cut, 2 tunnels, 2 drifts and 4 crosscuts, total value \$10986.50.



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 S. Ingalls,

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,

October 27, 1911.

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

Hartford-Arizona Copper Mining Company,

, known as the

HELENA,

situate in Hartford mining district,

Cochise County, Arizona,

in Section 21, Township No. 23 S., Range No. 20 E.

, designated as Survey No. 2945,

executed by Ralph L. Motz, U. S. Deputy Mineral

Surveyor, August 28 - September 2, 1911, under my instructions dated

July 28, 1911, 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. A true copy of the copy of the location certificate filed by the applicant for

survey is included in the field notes.

Frank S. Lygall

U. S. Surveyor-General for Arizona,