

MINERAL SURVEY No. 3913

Arizona

Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

Phelps Dodge Corporation

KNOWN AS THE

SONORA and MAUD S. Lodes

Copper Mountain

Mining District,

Greenlee

County,

Arizona

Section 21

Township

4 S.

Range

29 E.

Surveyed under instructions dated September 5, 1923

by

J. N. Stevens

U. S. Mineral Surveyor.

Claim located See location notices, 19

Survey commenced September 14, 1923

Survey completed September 16, 1923

Address of claimant Jos. P. Hodgson, Agent and Atty. in fact for Claimant, Morenci, Arizona.

DATES OF AMENDED LOCATIONS.

Feet

## MINERAL SURVEY NO. 3913

## SONORA lode.

Beginning at Cor. No. 1, identical with Loc. Mon.

A pine post 4 ins. sq by 4 ft. high set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed 1-S- 3913, whence the S. 1/4 Cor. Sec. 21, T. 4 S., R. 29 E. brs. S. 65° 50' E., 1364.16 ft.

No other bearings are available.

Thence N. 48° 48' W.

Va. 13° 30' E.

300.0 To S. end center.

A pine post 4 ins. sq by 4 ft. high set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed S. Cr. S.

600.0 To Cor. No.2, identical with Loc. Mon.

A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed 2 S- 3913.

No bearings are available.

Thence N. 41°12' E.

Va. 13° 30' E.

333.0 To Cor. No. 3 Sur. No. 5316 Keystone lode, claimant herein.

750.0 To W. side center Mon.

1500.0 To Cor. No.3, identical with Loc. Mon. , on line 2-3 Sur. No.5316 Keystone lode.

A pine post 4 ins. sq by 4 ft. high set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed 3 S- 3913.

No bearings are available.

Thence S. 48° 48' E.

Va. 13° 30' E.

300.0 To N. end center.

A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed N. Cr. S.

425.93 Intersect line 2-3 Maud S lode of this Sur. at N.28°08'E., 769.94 ft. from Cor.No.2.

Feet.

## MINERAL SURVEY NO. 3913

## SONORA lode.

600.0 To Cor. No.4, identical with Loc. Mon.

A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed 4 S- 3913.

No bearings are available.

Thence S. 41°12' W.

Va. 13° 30' E.

750.0 To E. side center Mon. and Cor. No. 2 Maud S lode of this Sur. hereinafter described.

1500.00 To Cor. No.1, the place of beginning.

## MAUD S. Lode.

Beginning at Cor. No.1, identical with Loc. Mon.

A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed 1 MS-3913, whence the S. 1/4 Cor. Sec. 21 T. 4 S. R. 29 E. brs. S. 14° 46' E., 868.67 ft.

No other bearings are available.

Thence N. 61°52' W.

Va. 13° 30' E.

300.00 To S. end center.

A pine post 4 ins. sq by 4 ft. high set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed S. Cr. M S.

600.00 To Cor. No. 2, on line 4-1 Sonora lode of this Sur.

A pine post 4 ins. sq by 4 ft. high set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed 2 MS-3913.

No bearings are available.

Thence N. 28° 08' E.

Va. 13° 30' E.

750.0 To W. side center Mon.

769.94 Intersect line 3-4 Sonora lode of this Sur., at N.48°48'W., 174.07 ft. from Cor. No. 4.

900.00 Gulch brs. southeasterly.

feet

MINERAL SURVEY NO. 3913

MAUD S Lode.

1500.00 To Co. No.3, identical with Loc. Mon.

A pine post 4 ins. Sq by 4 ft. high set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high.

Scribed 3 MS- 3913.

No bearings are available.

Thence S. 61° 52' E.

Va. 13° 30' E.

300.0 To N. end center.

A pine post 4 ins. sq. by 4 ft. high, set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed N. Cr. MS.

600.00 To Cor. No. 4, identical with Loc. Mon.

A pine post 4 ins. sq. by 4 ft. high set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high scribed 4 MS- 3913.

No bearings are available.

Thence S. 28° 08' W.

Va. 13° 30' E.

750.00 To E. side center Mon.

960.00 Gulch brs southeasterly.

1500.00 To Cor. No.1, the place of beginning.

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LODE LINES.

As near as can be determined from the present developments, the veins of the several locations embraced in this claim, extend as follows from their respective discovery points:-

Sonora lode, 750. ft. S. 41°12'W., and 750 ft. N. 41°12' E.

Maud S. lode, 750 ft. S. 28°08' W., and 750 ft. N. 28° 08' E.

AREA.

	Acres
Total area Sonora lode-----	20.661
Total area Maud S. lode-----	20.661

Area in conflict with:

Sonora lode, of this Sur.----- 1.499

## MINERAL SURVEY NO. 3913

The survey of each lode of this location is identical with the respective locations as staked upon the ground.

## LOCATION.

This survey is located in the S. 1/2 Sec. 21, T 4 S. R. 29 E. G. & S. R. M., in Copper Mountain Mining District, Greenlee County, Arizona.

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## EXPENDITURE OF FIVE HUNDRED DOLLARS.

I certify that the value of the labor and improvements made upon or for the benefit of each of the locations embraced in said mining claim, by the claimant or its grantors, is not less than five hundred dollars, and that said improvements consist of:

## SONORA LODE.

No.1 The discovery shaft on the center line, 750 ft. from the center of line 1-2, 4 x 6 ft. 10 ft. deep.

Value \$100.00

No.2 A shaft, the center of which brs from Cor. No.2, N. 54° 45' E., 770 ft. 4 x 6 ft. 40 ft. deep.

Value \$400.00

No.3 A cut, the mouth of which brs. from Cor. No.2 N. 51°45' E., 710 ft. 4 1/2 ft. wide, 8 ft. face, running N. 50° E., 15 ft. to face.

Value \$100.00

No. 4 A cut, the mouth of which brs from Cor. No. 2 N. 50° E., 720. ft. 4 1/2 ft. wide, 8 ft. face, running N. 50° E. 15 ft. to face.

Value \$100.00

No.5 A tunnel, the mouth of which brs. from Cor. No. 4, S. 65° W., 300. ft. 4 x 6 ft. running S. 55° W., 20 ft. to Sta 1, from Sta.1 a tunnel 4 x 6 ft. running N. 18° W., 10 ft. to face, from Sta. 1 a tunnel 4 x 6 ft. running S. 18° E., 40 ft. to face, from Sta. 1 a tunnel 4 x 6 ft. running S. 55° W., 50 ft. to Sta. 2, thence S. 40° W. 100 ft. to face .

Value \$2200.00

## MAUD S Lode.

No.1, the discovery tunnel, the mouth of which is on the center line 750 ft. from the center of line 1-2, 4 x 6 ft running N.27° E.,

## MINERAL SURVEY NO. 3913

## EXPENDITURE OF FIVE HUNDRED DOLLARS.

## MAUD S Lode. Cont'd.

75 ft., thence N. 20° E., 150 ft. to face.

Value \$ 2250.00

No. 2, a tunnel, the mouth of which brs from Cor. No.1 , N. 8° E., 510 ft., 4 x 6 ft. running S. 10° W., 50 ft., thence S. 25° E., 100. ft., thence S. 30° W., 310 ft. to face.

Value \$ 4600.00

No.3, a tunnel, the mouth of which brs. from Cor. No. 3 , S. 23°45'W. 590 ft. 4 x 6 ft. running N. 62° E., 50 ft. to face.

Value \$500.0

No.4, a tunnel, the mouth of which brs. from Cor. No.3 S. 22° 15' W., 540 ft. 4x 6 ft. running N. 62° E., 30 ft. to face.

Value \$300.0

No. 5, a cut, the mouth of which brs/ from Cor. No. 3 , S. 26° 30' E. 400 ft. 4 1/2 ft. wide, 8 ft. face, running S. 28 ° W., 15 ft. to face.

Value \$ 100.0

## INSTRUMENT.

This survey was made with a Gurley mountain transit, the courses were deflected from the true meridian as determined by direct solar observations, the distances were measured with a 500 ft. steel tape.

## REPORT.

The lode line of each location of this claim was run directly upon the ground, and the corners were established by running around the claims.

The S. 1/4 Cor. Sec. 21 T. 4 S. R.29 E. consists of an iron pipe with brass cap on top stamped 1/4 S. 21-S 28.

Sur. No. 3316 Keystone lode. Cor. No.3 consists of a pine <sup>post</sup> 4 x 6 ins. 4 ft. above ground, properly set and scribed 3 K-3316. Cor. No. 2 consists of a md. of stone , the post has been destroyed.

MINERAL SURVEY NO. 3913

ADJOINING CLAIMS.

On the East by the Cragg No. 3 lode, unsurveyed, claimant unknown.

On the West by Sur. No. 3316 Keystone lode.

SOLAR OBSERVATION. *do not include in transcript*

Direct solar observation taken Sat. Sept. 15, 1923.

At 8:17 A M solar time- Sun bisected, -Lat 33°03', Lon. 109°21'

Difference in time 3h 45m

Apparent declination 3° 19' 43.5 " ✓  
3' 36" ✓

Dec'l----- 3° 16' ✓

P= 90°- Decl = 86° 44' ✓

L= 33°03'

H= 29°32'

P= 86°44'

2) 149°19'

S= 74°39'30" ✓

$$\sin \frac{1}{2} A = \frac{\sqrt{\sin(S-L) \sin(S-H)}}{\cos L \cos H}$$

S=L - 41°36'30" ✓

S=H - 45°07'30" ✓

9.8221910 ✓

9.8504304 ✓

0.0766550 ✓

0.0604463 ✓

2) 19.8097227 ✓

9.9048613- 53°26'30" - 1/2 A

106°53' - A.

180-106°53'-373°07'E.- Course of Sun.

11°15' Ang. to left from Sun.

S. 81°52'E. Course of line.

Set up at Cor. No. 2 Maud S. lode T.S to Cor. No. 1

# FINAL OATHS FOR SURVEYS.

## LIST OF NAMES.

A list of the names of the individuals employed by T. N. Stevens

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 \_\_\_\_\_

Phelps Dodge Corporation

known as the SONORA and MAUD S. Lodes

and showing the respective capacities in which they acted.

\_\_\_\_\_John H. Dexter\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Acman.*

\_\_\_\_\_, *Flagman.*

## FINAL OATHS OF ASSISTANTS.

We, I, John H. Dexter

and \_\_\_\_\_, do solemnly swear that we assisted \_\_\_\_\_

T. N. Stevens, United States Mineral Surveyor, in marking the corners and surveying the boundaries of the mining claim of Phelps Dodge Corporation

known as the SONORA and MAUD S. 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 <sup>my</sup> 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.

John H. Dexter, *Chainman.*

\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Acman.*

\_\_\_\_\_, *Flagman.*

Subscribed and sworn to by the above-named persons before me this 6<sup>th</sup>

day of December, 1923

My Commission Expires June 4, 1924

Nabel M. Leuder  
Notary Public



FINAL OATH OF U. S. MINERAL SURVEYOR.

I, T. N. Stevens, U. S. Mineral Surveyor, do solemnly swear that, in pursuance of instructions received from the United States Surveyor General for Arizona, dated September 5, 1923, 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 Phelps Dodge Corporation, known as the SONORA and NAUD S. Lodes, situate in Copper Mountain Mining District, Greenlee County, Arizona, in Section 21, Township No. 4 S., Range No. 29 E., G & S. R. M., and designated as Survey No. 3913, 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.

T. N. Stevens

U. S. Mineral Surveyor.

Subscribed and sworn to by the said

U. S. Mineral Surveyor, before me

Natany Public

this

day of December, 1923

My Commission Expires June 4, 1924

T. N. Stevens
Isabel M. Lander a
Natany Public

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

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

~~Phoenix, Arizona,~~

February 24, 1924.

I, U. S. Surveyor General for ~~District of Arizona~~,  
do hereby certify that the foregoing transcript of the Field Notes, return and approval  
of the Survey of the mining claim of

~~Phelps Dodge Corporation~~  
, known as the ~~SONORA and MAUD S. lodes~~  
, situate in ~~Copper Mountain~~  
Mining District, ~~Greenlee~~ County,  
~~Arizona~~, in Section ~~21~~, Township No. ~~4 S.~~,  
Range No. ~~29 E.~~, and designated as Survey

No. ~~3913~~, 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 <sup>each of</sup> said mining claims by claimant or ~~its~~ grantors, and  
that said improvements consist of ~~2 shafts, 3 cuts and 5 tunnels, total~~  
~~value \$10,650.~~

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.

~~Charles M. Donahoe,~~

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,

February 25, 1924

I, U. S. Surveyor General for District of Arizona

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

Phelps Dodge Corporation

, known as the

SONORA and MAUD S. lodes

situate in Copper Mountain mining district,

Greenlee County, Arizona

in Section 21, Township No. 4 S., Range No. 29 E.

, designated as Survey No. 3913

executed by T. N. Stevens, U. S. Mineral

Surveyor, September 14 - 16, 1923, under my instructions dated

September 5, 1923, have been critically examined and the necessary

corrections 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.

Charles M. Donohoe

U. S. Surveyor General for Arizona