

4-683

MINERAL SURVEY No. 4087

Arizona

Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

Elizabeth L. Wood

KNOWN AS THE

SENATOR and ALTO lodes

Old Hat

Mining District,

Pinal

County, Arizona.

Sections 19 and 20<sup>Unsur.</sup>, Township 10 S., Range 16 E.

Surveyed under instructions dated December 26, 19 28

by *A. B. Stevens*

U. S. Mineral Surveyor.



Claim located See location notices, 19

Survey commenced January 8, 19 29

Survey completed January 10, 19 29

Address of claimant E. T. Cusick, Tucson Arizona  
Atty. for Claimant.

DATES OF AMENDED LOCATIONS.

See location notices.

Feet.

MINERAL SURVEY NO. 4087.  
SENATOR Lode.

Beginning at Cor. No.1, identical with Loc. Mon. and Cor. No.2  
Alto Lode of this Survey on line 2-3, Sur. No.2155 A. Cross Town lode  
claimant herein at S.74°37'W., 631.1 ft. from Cor. No.2.

An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground,  
set 18 ins. in the ground, stamped 1 S, 2 A -4087, with md of stone  
alongside, whence U.S. M. M. No.4 brs. N.46°46'20"E. 1078.38 ft.

No other bearings are available.

Thence S.74°37'W.  
Va. 13°45'E.

- 75.0 Gulch brs. southeasterly.
- 306.03 Intersect line 4-1 Sur. No.1837, Dolphin lode, claimant herein  
at S.32°25'E., 460.39 ft. from Cor. No.1 and N.32°25'W., 753.35 ft.  
from Cor. No.4.
- 315.55 To N. end center, identical with Loc. Mon.  
A mesquite post 4 ins. diam. 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.
- 631.1 To Cor. No.2, identical with Loc. Mon. and Cor. No.3 Sur. No.2155 A  
Cross Town lode.  
An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground,  
set 18 ins. in the ground stamped 2 S, 4087, 3, C T - 2155 A. with  
md of stone alongside.  
Cor. No.1 Sur. No.1837 Dolphin lode brs. N.7°59'10"E., 479.53 ft.  
Cor. No.4, Sur. No.1837 Dolphin lode brs. S.52°32'E., 903.7 ft.  
No other bearings are available.  
Thence S.51°14'E.  
Va. 13°45'E.
- 675.0 Gulch brs. northeasterly.
- 900.95 Intersect line 3-4, Sur. No.1837 Dolphin lode at S.45°46'W., 20.67  
ft. from Cor. No.4 and N.45°46'E., 577.71 ft. from Cor. No.3.
- 1498.0 To Cor. No.3, identical with Loc. Mon.  
An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground,  
set 18 ins. in the ground, stamped 3 S - 4087 with md of stone alongside.  
An oak tree 12 ins. diam. brs. S.85°22'W., 39.2 ft. blazed and scribed  
3-4087 B.T



MINERAL SURVEY NO. 4087.  
SENATOR Lode - Cont'd.

No other bearings are available.

Thence N.  $74^{\circ}37'E$ .  
Va.  $13^{\circ}45'E$ .

315.55 To S. end center, identical with Loc. Mon.

An oak post 4 ins. diam. by 4 ft. high, set firmly in the ground, and surrounded with md of stone  $3\frac{1}{2}$  ft. base by 3 ft. high, scribed S. Cr. S.

631.1 To Cor. No.4, identical with Loc. Mon. and Cor. No.3 Alto lode of this survey. An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground, set 18 ins. in the ground, stamped 4 S., 3 A. - 4087, with md of stone alongside.

An oak tree 7 ins. diam. brs. N.  $4^{\circ}33'W$ ., 4.7 ft. Blazed and scribed 4, 3 - 4087 B.T.

No other bearings are available.

Thence N.  $51^{\circ}14'W$ .  
Va.  $13^{\circ}45'E$ .

920.0 Gulch brs. northeasterly.

1250.0 Gulch brs. northeasterly.

1400.0 Gulch brs. easterly.

1498.0 To Cor. No.1, the place of beginning.

ALTO Lode.

Beginning at Cor. No.1, identical with Loc. Mon. and Cor. No. 2 Sur. No.2155 A., Cross Town Lode. On line 5-6, Sur. No.687 Southern Belle lode, claimant herein, at S. $51^{\circ}14'E$ ., 596.16 ft. from Cor. No.6 and N.  $51^{\circ}14'W$ ., 879.21 ft. from Cor. No.5.

An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground, set 18 ins. in the ground, stamped 1 A - 4087, 2 C.T - 2155 A. with md of stone alongside, whence U.S. M. M. No.4 brs. N. $17^{\circ}14'30''E$ ., 598.04 ft. Cor.Secs.17,18,19,20,T.10 S.,R.16 E., brs. N.18  $41'W$ . 2031.4 ft.

An oak tree 8 ins. diam. Brs. S.  $36^{\circ}50'E$ ., 29.24 ft. Blazed and scribed 1- 4087, 2-2155 A. B.T.

No other bearings are available.

Thence S.  $74^{\circ}37'W$ .  
Va.  $13^{\circ}45'E$ .

315.55 To N. end center, identical with Loc. Mon.

A mesquite post 4 ins. diam. by 4 ft. high, set firmly in the ground and surrounded with md. of stone  $3\frac{1}{2}$  ft. base by 3 ft. high, scribed



Feet. MINERAL SURVEY NO. 4087 .  
ALTO Lode- Cont'd.

631.1 To Cor. No.2, identical with Loc. Mon. and Cor. No.1 Senator lode  
of this Sur<sup>v<sub>o</sub></sup>, heretofore described.

Thence S. 51°14'E.  
Va. 13°45'E .

98.0 Gulch brs. easterly.

248.0 Gulch brs. northeasterly.

578.0 Gulch brs. northeasterly.

1498.0 To Cor. No.3, identical with Loc. Mon. and Cor. No.4, Senator lode  
of this Sur<sup>v<sub>o</sub></sup>, heretofore described.

Thence N. 74°37'E.  
Va. 13°45'E.

315.55 To S. end center, identical with Loc. Mon.

An oak post 5 ins. diam. 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. A.

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

An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground,  
set 18 ins. in the ground, stamped 4 A.- 4087, with md of stone  
alongside.

An oak tree 6 ins. diam. brs. S. 50° W ., 14.7 ft.

No other bearings are available.

Thence N. 51°14'W.  
Va. 13°45'E.

618.79 To Cor. No.5, Sur. No.687, Southern Belle Lode. , hereinafter  
described.

1320.0 Gulch brs. easterly.

1498.0 To Cor. No.1, the place of beginning.

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 discoveries.

SENATOR LODE.

350.0 ft. N.51°14'W., and 1148.0 ft. S. 51°14'E.

ALTO LODE.

30 .0 ft. S. 51°14'E., and 1468.0 ft. N. 51°14'W.

## MINERAL SURVEY NO. 4087

## AREA.

	Acres.
Total area, Senator lode -----	17.592
Area in conflict with,-	
Sur. No.1837 Dolphin lode -----	2.900
 Total area, Alto lode. -----	 17.592

## LOCATION

This survey is located in the W. 1/2 Sec. 20 and the E. 1/2 Sec. 19, T. 10 S. R. 16 E. Unsurveyed, in the Coronado National Forest. Old Hat Mining District, Pinal County, Arizona.

## 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 claims by the claimant or her grantors is not less than five hundred dollars, and that said improvements consist of :

## SENATOR Lode.

No.1 The discovery cut, the face of which being the discovery point on the center line, 350.0 ft. from the center of line 1-2, 4 1/2 ft. wide, 8 ft. face, running N.45°E., 20 ft. to mouth.  
Value \$100.0

No.2 A cut, the mouth of which brs. from Cor. No.1, South 250.0 ft., 4 1/2 ft. wide, 8 ft. face, running S. 45° W., 22 ft. to face.  
Value \$100.0

No.3 A cut, the mouth of which brs. from Cor. No.1, S. 43°W., 170.0 ft. 4 1/2 ft. wide, 8 ft. face, running S. 30° E., 20 ft. to face.  
Value \$100.0

No.4 A cut, the mouth of which brs. from Cor. No.1, S.13°30'E., 665.0 ft. 4 1/2 ft. wide, 10 ft. face, running S.75°W., 22 ft. to face.  
Value \$100.0

No.5 A cut, the mouth of which brs. from Cor. No.1 S.23°30'E., 735.0 ft., 4 1/2 ft. wide, 8 ft. face, (caved) running S. 60°E. 15 ft. to face.  
Value \$100.0

No.6 A cut, the mouth of which brs. from Cor. No.1 S.26°E., 695.0 ft. 4 1/2 ft. wide 8 ft. face, running S. 60° E., 20 ft. to face.  
Value \$100.

No.7 A cut, the mouth of which is on the center line, 700 ft. from the center of line 3-4, 4 1/2 ft. wide, 10 ft. face running S. 60° E., 20 ft. to face. At face is a tunnel 4 x 6 ft. running S. 60° E., 5 ft. to face.  
Value, Cut and tunnel \$ 150.0

No.8 A cut, the mouth of which brs. from Cor. No.3, N. 51°15' W., 45 ft. 4 1/2 ft. wide, 8 ft. face, running N.20°E., 18 ft. to face.

Value \$100



## MINERAL SURVEY NO. 4087.

## EXPENDITURE OF FIVE HUNDRED DOLLARS - Cont'd.

## ALTO LODE.

No.1 The discovery shaft, the center of which being the discovery point, on the center line , 30 ft. from the center of line 3-4.

4 x 6 ft. 10 ft. deep.

Value \$100.0

No.2 A shaft., the center of which brs. from Cor. No.1 , S.25°E., 300 ft. 4 x 6 ft. 25 ft. deep.

Value \$250.0

No.3 A cut the mouth of which brs. from Cor. No. 1, S. 14°E., 250.0 ft. 4 ft. wide, 8 ft. face, running N. 60°W. 15 ft. to face.

Value \$100.0

No.4 A cut, the mouth of which brs. from Cor. No.1, S.10°30'E., 265. ft. 4 ft. wide, 8 ft. face, running N. 60° W., 15 ft. to face.

Value \$100.0

No.5 A tunmel, the mouth of which brs. from Cor. No.1, S.2°30'E., 275.0 ft. 4 x 6 ft. running West. 30.0 ft. to face.

Value \$300.0

No.6 A cut, the mouth of which brs. from Cor. No.1 S. 6°30'E., 305.0 ft. 4 ft. wide, 8 ft. face, running West. 15 ft. to face.

Value \$100.0

No.7 A cut, the mouth of which brs. from Cor. No.2 S. 62°45'E., 775.0 ft. 4 1/2 ft. wide 8 ft. face (caved) running S. 10°E., 15 ft. to face.

Value \$100.

No.8 A cut, the mouth of which brs. from Cor. No.2 S. 60°E., 350.0 ft. 4 ft. wide 8 ft. face, running S. 10°E., 15 ft. to face.

Value \$100.0

No.9 A cut, the mouth of which brs. from Cor. No.2, S. 57°30'E., 340.0 ft. 4 ft. wide, 8 ft. face, running S. 10°E., 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.

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MINERAL SURVEY NO. 4087

REPORT - Cont'd.

The Cor. to Secs. 17,18,19 and 20, T. 10 S, , R. 16 E. consists of a porphyry rock 10 x 12 ins. showing 12 ins. above ground, chiseled 5 notches on the E. and 3 notches on the S. face.

U.S. M.M. No.4 consists of a pine post 6 ins. sq. by 8 ft. high, set in md of stone 6 ft. base by 4 ft. high, scribed, "U.S.M.M.No.IV"

Cor. Nos. 5 and 6, Sur. No.687 Southern Belle lode consist of pine posts properly set and scribed with the number of the corners and the initials "S.B." Line 5-6 fails to furnish the course and distance as approved ( N.51°16'W.,1485 ft.) and same is properly given in these field notes.

Sur. No.2155 A. Cross Town lode. All corners consist of pine posts properly set and scribed with the number of the corner and the survey.

Line 2-3 fails to furnish the course as approved ,(S.75°06'W.,) and same is properly given in these field notes. Cor. Nos. 2 and 3 were found to be in very badly decayed condition and unsuitable for permanent corners. I set iron pipe 2 ins. diam. with caps on top in the exact position of the original corners, and stamped same with the number of the corners and the survey.

Sur. No.1837 Dolphin lode . All corners consist of redwood posts, properly set and scribed with the number of the corners and the survey.

Line 4-1 fails to furnish the distance as approved (1217.7 ft.) and line 3-4 fails to furnish the course and distance as approved, (S.45°45'W.,600 ft.) and same are properly given in these field notes.

ADJOINING CLAIMS.

On the North by Sur. No.2155 A., Cross Town lode, On the East by Sur. No.687, Southern Belle lode, On the West by Sur. No.1837, Dolphin lode. There are no other adjoining or conflicting claims known.

OATH OF ASSISTANT.

There being no Notary Public available within a long distance I proceeded to administer the necessary oath.



## MINERAL SURVEY NO. 4087

## SOLAR OBSERVATION.

*do not include in copy -*

Direct solat observation taken Thursday, Jan. 10, 1929 at 9:37  
 A.M. <sup>app. or</sup> Solar time. Sun bisected, - Lat. 32°32'45" - Lon. 110°44'

Difference in time 5 hrs.

$$\text{App't Dec'l} = 21^{\circ}59'24.1''$$

$$\text{Dec'l} = \frac{21^{\circ}57'33''}{90^{\circ}}$$

$$P = \frac{111^{\circ}57'33''}{90^{\circ}}$$

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

$$L = 32^{\circ}32'45''$$

$$h = 24^{\circ}55'57'' \text{ (Appt } h - 24^{\circ}58' \text{ Ref. } - 2' 03' \text{ )}$$

$$P = 111^{\circ}57'33''$$

$$2) \underline{169^{\circ}26'15''}$$

$$S = 84^{\circ}43'08''$$

$$S-L = 52^{\circ}10'23'' \quad 0.8975538$$

$$S-h = 59^{\circ}47'11'' \quad 9.9365918$$

$$0.0741923$$

$$0.0424860$$

$$2) \underline{19.9508239}$$

$$9.9754119 = 70^{\circ}54'05'' - 1/2 A.$$

$$141^{\circ}48'10'' - A.$$

$$180^{\circ} - 141^{\circ}48'10'' = S.38^{\circ}11'50''E - \text{Bearing of Sun.}$$

$$\frac{67^{\circ}11' +}{105^{\circ}23'} - \text{Ang. to left from Sun.}$$

$$105^{\circ}23'$$

$$180^{\circ} - 105^{\circ}23' = N.74^{\circ}37'E. - \text{Bearing of line.}$$

Set up at E. end center Senator lode, F.S. to Cor. No.4.



# 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

Elizabeth L. Wood

known as the SENATOR and ALTO lodes

and showing the respective capacities in which they acted.

Ramon Ronquillo, Chainman.

Chainman.

Arman.

Flagman.

## FINAL OATHS OF ASSISTANTS.

We, I. Ramon Ronquillo

and I, 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 Elizabeth L. Wood

known as the SENATOR and ALTO 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 Office Cadastral Engineer, at Phoenix, Arizona.

Ramon Ronquillo, Chainman.

Chainman.

Arman.

Flagman.

Subscribed and sworn to by the above-named persons before me this 14th

day of February, 1929

T.N. Stevens  
U.S. Mineral Surveyor

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 Office Cadastral Engineer, at Phoenix, Arizona, dated December, 26, 1928, I have, in strict conformity to the laws of the United States, the official regulations and instructions thereunder, and the instructions of said Office Cadastral Engineer, faithfully and correctly executed the survey of the Mining Claim of Elizabeth L. Wood, known as the Senator and Alto lodes, situate in Old Hat Mining District, Pinal County, Arizona, in Section 19 and 20, Unsur., Township No. 10 S., Range No. 16 E., and designated as Survey No. 4087, 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 Office Cadastral Engineer with said instructions, and that all 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 her 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 T.N. Stevens

U. S. Mineral Surveyor, before me Maebelle Hess, a notary

Public in and for Pima County this 5th

day of March, 1929

my commission expires Feb. 7, 1932

Maebelle Hess

Notary Public



OFFICE CADASTRAL ENGINEER'S FINAL CERTIFICATE ON FIELD NOTES

Department of the Interior

PUBLIC SURVEY OFFICE

Phoenix, Arizona,

March 23, 19 29

I, Office Cadastral Engineer, at Phoenix, Arizona,

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

Elizabeth L. Wood

known as the SENATOR and ALTO lodes

situate in Old Hat

Mining District Pinal County Arizona

in Section 19 and 20, Unsur., Township No. 10 S., Range No. 16 E., and

designated as Survey No. 4087, 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.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon, or for the benefit of, each location embraced in said mining claim by claimant

or her grantors,

and that said improvements consist of 2 shafts, 14 cuts and 2 tunnels,

total value \$2100.

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.

John D. Adams

Office Cadastral Engineer.

CERTIFICATE OF APPROVAL OF FIELD NOTES AND SURVEY OF  
MINING CLAIM

DEPARTMENT OF THE INTERIOR  
PUBLIC SURVEY OFFICE

At Phoenix, Arizona,

\_\_\_\_\_ March 23 \_\_\_\_\_, 1929

I, Office Cadastral Engineer at Phoenix, Arizona,

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

Elizabeth L. Wood

\_\_\_\_\_, known as the

SENATOR and ALTO lodes

situate in \_\_\_\_\_ Old Hat \_\_\_\_\_ mining district,

Pinal County, Arizona,

in Sections 19 & 20 Unsur., Township No. \_\_\_\_\_ 10 S. \_\_\_\_\_, Range No. \_\_\_\_\_ 16 E.

\_\_\_\_\_, designated as Survey No. \_\_\_\_\_ 4087

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

Surveyor, \_\_\_\_\_ January 8 - 10 \_\_\_\_\_, 1929, under my instructions dated


\_\_\_\_\_ December 26 \_\_\_\_\_, 1928, 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.

  
\_\_\_\_\_  
Office Cadastral Engineer.