

4-683

MINERAL SURVEY No. 3972

Arizona Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

St. Anthony Mining and Development Co.

KNOWN AS THE

MAMMOTH EXTENSION and AVON TRIANGLE Lodes.

Old Hat Mining District,

Pinal County, Arizona.

Section 26, Township 8 S., Range 16 E.

Surveyed under instructions dated December 13, 1924

by T. N. Stevens  
U. S. Mineral Surveyor.

Claim located See location notices, 19

Survey commenced February 3, 1925

Survey completed February 4, 1925

Address of claimant R.W. Langworthy, Atty.in fact for claimant,  
P.O. Box 45, Tucson Arizona.

DATES OF AMENDED LOCATIONS.

Feet. MINERAL SURVEY NO. 3972  
MAMMOTH EXTENSION Lode.  
Beginning at Cor. No.1, identical with Loc. Mon.  
An iron pipe 1 in. diam. with cap on top, 18 ins. above ground,  
set 18 ins. in the ground, stamped 1 ME - 3972 with md. of stone  
alongside, whence the 1/4 Cor. bet. Secs. 26 and 27, T. 8 S., R. 16  
E. brs. N. 69° 30' W., 439.67 ft.  
No other bearings are available.  
Thence N. 46° 22' E.  
Va. 13° 30' E.  
300.0 To W. end Center, 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  
W. Cr. M E.  
415.47 To Cor. No.2 Sur. No.806 Mars lode and on line 5-6 Sur. No. 804  
Raven lode at N.60° W., 152.9<sup>18'30"</sup>ft. from Cor. No.6, both claimant herein.  
594.01 To Cor. No.2, identical with Loc. Mon., on line 5-6 Sur. No.807  
Remnant lode at N. 44°49' W., 422.84 ft. from Cor. No.6 and S.44°49' E.,  
1071.01 ft from Cor. No.5.  
An iron pipe 1 in. diam with cap on top, 18 ins. above ground ,  
set 18 ins. in the ground, stamped 2 M E -3972 with md. of stone  
alongside.  
Cor. No.6 Sur. No.804 Raven lode brs. S.1°02' 30" E., 199.0 ft.  
No other bearings are available.  
Thence S. 44° 49' E.  
Va. 13°30' E.  
106.31 Intersect line 6-2-Sur. No.804 Raven lode at N. 30° E., 142.64 ft.  
from Cor. No.6  
299.72 To Cor. No.3 Sur. No.802 Mammoth lode.  
315.07 To Cor. No.3, identical with Loc. Mon. and Cor. No.1 Sur. No.2999  
Rooster lode, Claimant unknown.  
An iron pipe 1 in. diam. with cap on top, 18 ins. above ground, set  
18 ins. in the ground, stamped 3 M E - 3972, 1 R - 2999 with md. of  
stone alongside.  
Cor. No.6 Sur. No.807 Remnant lode brs. S. 44°49' E., 107.77 ft.  
No other bearings are available.

Feet.

## MINERAL SURVEY NO. 3972

## MAMMOTH EXTENSION Lode - Cont'd.

Thence S. 46°22' W.

Va. 13° 30' E.

293.01 To E. end center, 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 E. Cr. ME.

580.0 Intersect line 4-1 Avon Triangle lode of this Sur. at N.48°51'30"W., 538.99 ft. from Cor. No.4 and S.48°51'30"E., 193.35 ft from Cor.No.1.

593.01 To Cor. No.4, identical with Loc. Mon. and Cor. No.5 Sur. No.802 Mammoth lode, Cor. No.3 said Mammoth lode brs.N.44°53'E., 592.9 ft.

An iron pipe 1 in. diam. with cap on top, 18 ins. above ground, set 18 ins. in the ground, stamped 4 M E - 3972, 5 M - 802 with md of stone alongside.

No bearings are available.

Thence N. 45° W.

Va. 13°30' E.

192.6 To Cor. No.1 Avon Triangle lode of this Sur., hereinafter described and on line 5-2 Sur. No.806 Mars lode at N 29°50' E., 162 ft. from Cor. No.5 and S. 29°50' W., 430.35 ft. from Cor. No.2

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

## AVON TRIANGLE Lode.

Beginning at Cor. No.1, identical with loc. Mon. On line 5-2 Sur. No. 806 Mars lode at N. 29°50' E., 162 ft. from Cor. No.5

An iron pipe 1 in. diam. with cap on top, 18 ins. above ground, set 18 ins. in the ground, stamped 1 A T - 3972 with md. of stone alongside whence the 1/4 Cor. bet. Secs. 26 - 27 T. 8 S. R. 16 E. brs. N.64° 14' W., 553.49 ft.

Cor. No.4 Mammoth Extension lode of this Sur. and Cor. No.5 Sur. No. 802 Mammoth lode brs. S. 45° E., 192.6 ft.

No other bearings are available.

Thence S. 29°50' W.

Va. 13°30' E.

112.0 To W. end center, 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 W. Cr. A T.

Feet.

MINERAL SURVEY NO. 3972

AVON TRIANGLE Lode -Cont'd.

162.0 To Cor. No.2, identical with Loc. Mon. and Cor. No.2 Sur. No.699 Aaven lode, Cor. No.6 Sur. No.698 Hackney lode, and Cor. No.5 Sur. No.806 Mars lode.

An iron pipe 1 in. diam. with cap on top, 18 ins. above ground, set 18 ins. in the ground, stamped 2 A T -3972, 2 A - 699, 6 H-698 and 5 M - 806 with md.of stone alongside.

No bearings are available.

Thence S.57°34' E.  
Va. 13°30' E.

718.86 To Cor. No.3, identical with Loc. Mon. On line 2-3 Sur. No.699 Aaven lode at N. 57°34' W., 323.3 ft. from Cor. No.3.

Also on line 5-6 Sur. No.802 Mammoth lode at S. 45° E. 551.4 ft. from Cor. No.5 .

A concrete monument 12 ins. sq. at base, 6 ins. sq on top, showing 12 ins. above ground with iron bolt at Cor. point, chiseled 3 A T - 3972. with md of stone alongside.

No bearings are available.

Thence N. 29°50' E..  
Va. 13°30' E.

50.0 To E. end center, identical with Loc. Mon.

An iron pipe 1 in. diam. by 4 ft. high, driven firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, stamped E. Cr. A T

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

An iron pipe 1 in. diam. with cap on top, 18 ins. above ground set 18 ins. in the ground, stamped 4 A T - 3972 with md of stone alongside.

No bearings are available.

Thence N. 48° 51' 30" W.  
Va. 13°30' E.

538.99 Intersect line 3-4 Mammoth Extension lode of this Sur. at N.46°22'E 13.01 ft. from Cor. No.4

539.33 Intersect line 3-5 Sur. No.802 Mammoth lode at N. 44°53' E., 12.99 ft. from Cor. No.5 and S. 44°53' W., 579.91 ft. from Cor. No.3.

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

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## MINERAL SURVEY No. 3972

## 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:

## MAMMOTH EXTENSION Lode.

115.1 ft. N.45° W., and 200 ft. S. 45° E.

## AVON TRIANGLE Lode.

75.0 ft. N. 57°34' W., and 643.86 ft. S. 57° 34' E.

## AREA.

	Acres.
Total area Mammoth Extension lode -----	4.292
Area in conflict with,	
Sur. No. 806 Mars lode -----	0.584
Sur. No. 804 Raven lode -----	0.468
Sur. No. 802 Mammoth lode -----	0.104
Avon Triangle lode of this Sur. -----	0.029
Exclusive of its conflict with-	
Sur. No. 802 Mammoth lode -----	0.029
Total area Avon Triangle lode -----	1.756
Area in conflict with,	
Sur. No. 802 Mammoth lode -----	0.392

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 W 1/2 Sec. 26, T. 8 S. R. 16 E.,  
G. & S. R. M.

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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:

## MAMMOTH EXTENSION Lode.

No. 1 The discovery shaft, on the lode line 115.1 ft. from a point on line 1-2, 300 ft. from Cor. No. 1, 4 x 6 ft., 10 ft. deep.  
Value \$100.0

No. 2 A shaft, the center of which hrs. from Cor. No. 3 S. 68°30' W., 310 ft. 4 x 6 ft. 15 ft. deep.  
Value \$150.0

No. 3 A tunnel, the mouth of which hrs. from Cor. No. 3 S. 86° W., 210 ft., 4x6 ft. running S. 86° W., 40 ft. to face. Value \$400.0

## MINERAL SURVEY NO. 3972

EXPENDITURE OF FIVE HUNDRED DOLLARS - Cont'd.

## MAMMOTH EXTENSION Lode.

No.4 A shaft, on the lode line 10 ft. from a point on line 3-4  
300 ft. from Cor. No.4 4 x 6 ft. 80 ft. deep.  
Value \$800.0

No.5 A tunnel, the mouth of which brs. from Cor. No.4 N.14° E.  
60 ft., 4 x 6 ft. running S. 36° W., 170.0 ft.  
Value \$1700.0

## AVON TRIANGLE Lode.

No.1 The discovery shaft on the lode line, 75 ft. from a point  
on line 1-2 at N. 29°50' E. 50 ft. from Cor. No.2, 4 x 6 ft. 40 ft  
deep.

Value \$400.0

No 2 A tunnel, the mouth of which brs. from Cor. No.3 N. 49° 30' W  
430 ft., 4 x 6 ft. running N. 85° W., 50 ft. to face.  
Value \$500.0

## 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.

All tie lines were run directly upon the ground.

The 1/4 Cor. bet. Secs. 26 and 27 T 8 S. R. 16 E. consists of an  
oak post 4 ins. sq by 4 ft. high, surrounded with md. of stone,  
scribed 1/4 S. 26, S 27, T. 8 S. R. 16 E.

Sur. Nos 698, 699, 802, 804, 806, 807, 2999, Hackney, Aaven, Mammoth,  
Raven, Mars Remnant, and Rooster lodes respectively. All corners  
consist of pine posts set in mds. of stone, all of which are in  
badly decayed condition but can be identified as the original  
corners.

Cor. Nos 6, 2 and 5, Sur. Nos 698, 699 and 806, Hackney, Aaven  
and Mars lodes respectively also Cor. No.5 Sur. No.802 Mammoth lode

and Cor.

No.

## MINERAL SURVEY NO. 3972

## Report - Cont'd.

and Cor. No.3 Sur. No. 2999 Rooster lode were badly decayed and unsuitable for permanent corners, I set iron pipe 1 in. diam, capped in the exact position of the original corners and stamped same with the number of the corners and the surveys.

Line 5-2, Sur. No.806 Mars lode fails to furnish the course and distance as approved (N 30° E 600 ft), line 2-3 Sur. No.699 Aaven lode fails to furnish the course and distance as approved (S57°30' E. 1040 ft), Line 3-5 Sur. No. 802 Mammoth lode fails to furnish the course and distance as approved (S45° W.,600.0 ft), Line 5-6 Sur. No. 807 Remnant lode fails to furnish the course and distance as approved (N.45°W 1500 ft.), Line 5-6 Sur. No.804 Raven lode fails to furnish the course and distance as approved (N.60° W., 1500 ft.), line 6-2 fails to furnish the distance as approved (600 ft.) and the above are properly given in these field notes.

The location notice of the Avon Triangle describes a full claim. AS my survey is identical with the monuments on the ground, apparently the location notice is in error.

## ADJOINING CLAIMS.

On the North - Sur. No.s 804, and 807 Raven and Remnant and Rooster lodes respectively.

On the East - Sur. Nos. 802 and 807 , Mammoth and Remnant lodes respectively.

On the South - Sur. No.699 Aaven lode .

On the West - Sur. Nos. 698, 806, and 804, Rooster, Mars and Raven lodes respectively.

## SOLAR OBSERVATION.

MINERAL SURVEY NO. 3972

*do not include in Transcript*

SOLAR OBSERVATION.

Direct Solar observation taken Tuesday Feb. 3, 1925.

1:52 P.M. solar time- Sun bisected/- Lat 32°43' 30" - Lon. 110° 41'

Difference in time 9 h 15 m

Apparent declination 16° 34' 48.5 "  
6' 47" ✓  
declination = 16° 28' 02" ✓

P = 90° + Dec'l = 106° 28' 02"

L = 32°43'30"                      Sin 1/2 A =  $\sqrt{\frac{\sin(S-L)(S-H)}{\cos L \cos H}}$   
H = 34°38'37" - App't H - 34°40'  
P = 106°28'02"                      1'23" ✓  
2)  $\frac{173°50'09"}{86°55'04"} - S$                        $\frac{34°38'37"}{34°38'37"}$

S-L = 54°11'34"                      9.9090155 ✓  
S-H = 52°16'27"                      9.8981479 ✓  
0.0750620  
0.0847564 ✓  
2)  $\frac{19.9669818}{0} = 9.9834909 = 74°18'05" = 1/2 A.$   
148°36' 10" = A.

180° - 148°36' 10" = 31° 23' 50"W = bearing of sun.  
76°23' 50" Ang. to left from sun.  
S 45° 00' 00" E. = Course of line.

Set up at Cor. No.1 Avon Triangle lode, PS to to Cor. No.4 Mammoth Extension lode.



# 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  
St. Anthony Mining and Development Co.  
 known as the MAMMOTH EXTENSION and AVON TRIANGLE Lodes.  
 and showing the respective capacities in which they acted.

S. C. Wood ..... , Chainman.  
 ..... , Chainman.  
 ..... , Axman.  
 ..... , Flagman.

## FINAL OATHS OF ASSISTANTS.

~~We~~, I, S. C. Wood ,  
 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 St. Anthony Mining and Development Co.  
 known as the MAMMOTH EXTENSION and AVON TRIANGLE 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 instruc-  
 tions furnished by the United States Surveyor-General for Arizona.

S C Wood ..... , Chainman.  
 ..... , Chainman.  
 ..... , Axman.  
 ..... , Flagman

Subscribed and sworn to by the above-named persons before me this 30<sup>th</sup>  
 day of March , 1925

*My Commission  
 expires Feb. 6, 1928*

Mabelle Hess  
 .....  
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 December 13, 1924, 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 St Anthony Mining and Development Co., known as the MAMMOTH EXTENSION and AVON TRIANGLE Lode, situate in Old Hat Mining District, Pinal County, Arizona, in Section 26, Township No. 8 S., Range No. 16 E., G. & S. R. M., and designated as Survey No. 3972, 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 T.N. Stevens  
U. S. Mineral Surveyor, before me Maubelle Hess, a Notary Public  
in and for the County of Pima this 30<sup>th</sup>  
day of March, 1925

My Commission expires Feb. 6, 1928  
3-1044

Maubelle Hess  
Notary Public

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

Department of the Interior,

OFFICE OF U. S. SURVEYOR-GENERAL,

Phoenix, Arizona

May 5, 1925

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

St. Anthony Mining and Development Co.

known as the MAMMOTH EXTENSION and AVON TRIANGLE lodes

situate in Old Hat

Mining District, Pinal County, Arizona

in Section 26, Township No. 8 S., Range No. 16 E., and

designated as Survey No. 3972, 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 each of said mining claims by claimant or its grantors, and that said improvements consist of 3 tunnels, total value \$4050.

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. Donohoe

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.

May 5, 1925

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

St. Anthony Mining and Development Co.

, known as the

MAMMOTH EXTENSION and AVON TRIANGLE lodes

situate in Old Hat mining district,

Pinal County, Arizona

in Section 26, Township No. 8 S., Range No. 16 E.

, designated as Survey No. 3972

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

Surveyor, February 3 - 4, 1925, under my instructions dated

December 13, 1924, 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.