

MINERAL SURVEY No. 4091

Arizona. Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

B.R. Hatcher

KNOWN AS THE

ST JOE and NEW COLORADO Lodes

Silver Hill Mining District,

Pima County, Arizona.

Section 22, Township 20 S., Range 10 E.

Surveyed under instructions dated Feb. 9, 1929

by [Signature] U. S. Mineral Surveyor.

Claim located See location notices, 19

Survey commenced February 27, 19 29

Survey completed February 29, 19 29

Address of claimant 933 N. 6 th Ave., Tucson, Arizona.

DATES OF AMENDED LOCATIONS.

See location notices.

Feet.

MINERAL SURVEY NO. 4091  
St Joe Lode.

Beginning at Cor. No.1, identical with Loc<sup>tion</sup> Monument.

An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground, set 18 ins. in the ground, stamped 1 S J - 4091, with md. of stone alongside, whence the ~~#~~ <sup>15 83</sup> 1/4 Cor. Secs. 22, T. 20S., R.10 E., brs. N.24°35'W., 1551.13 ft.

No other bearings are available.

Thence S. 6°20'E.  
Va. 13°45'E.

300.0 To E. end center, identical with Loc<sup>tion</sup> Monument.

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 E. Cr. S J.

600.0 To cor. No.2, identical with Loc<sup>tion</sup> Monument.

An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground, set 18 ins. in the ground, stamped 2 S J. -4091 with md. of stone alongside, whence

No bearings are available.

Thence S. 77°08'W.  
Va. 13°45'E.

1500.0 To Cor. No.3, identical with Loc. Mon. and Cor. No.4 New Colorado 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 3 S J, 4 N C - 4091 with md. of stone alongside, whence

No bearings are available.

Thence N. 6°20'W.  
Va. 13°45'E.

300.0 To W. end center, identical with Loc. Mon. and E. end center New Colorado lode of this Survey.

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. S.J, E. Cr. N.C.

600.0 to Cor. No.4, identical with Loc. Mon. and Cor. No.3 New Colorado lode of this Sur.

Feet.	MINERAL SURVEY NO. 4091.
	ST JOE Lode - Continued.
	An iron pipe 2 ins. diam. with cap on top, 24 ins. above ground, set 18 ins. in the ground, stamped 4 S.J., 3 N.C. - 4091, with md. of stone alongside.
	No bearings are available.
	Thence N. 77°08'E. Va. 13°45'E.
30.0	Gulch brs. northwesterly.
1500.0	To Cor. No.1, the place of beginning.
	NEW COLORADO Lode.
	Beginning at Cor. No.1, 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 1 N.C.- 4091 with md. of stone alongside, whence the 1/4 cor. bet. Secs. 21 and 22, T. 20 S., R.10 E. brs. S. 57°39'W., 525.56 ft.
	No other bearings are available.
	Thence N. 6°20'W., Va. 13°45'E.
235.0	Old road brs. northeasterly.
300.0	To W. end center, identical with Loc. <sup>tion</sup> Monument.
	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. N.C.
600.0	To Cor. No.2, 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 2 N.C. - 4091. with md. of stone alongside.
	No bearings are available.
	Thence N. 89°40'E. Va. 13°45'E.
1200.0	Gulch brs. northerly.
1500.0	To Cor. No.3, identical with Loc. Mon. and Cor. No.4 St Joe lode of this Survy <sup>y</sup> heretofore described.
	Thence S. 6°20'E. Va. 13°45'E.
300.0	To E. end center, identical with loc. Mon. and W. end center

Feet.

MINERAL SURVEY NO. 4091

NEW COLORADO Lode- Cont'd.

St. Joe lode of this Survey heretofore described.

600.0 To Cor. No.4, identical with Loc. Mon. and Cor. No.3 St Joe lode of this Survey heretofore described.

Thence S. 89°40'W.  
Va. 13°45'E.

1500.0 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.

ST JOE Lode.

417.0 ft. S. 77°08'W., and 1083.0 N. 77°08'E.

NEW COLORADO Lode.

157.0 ft. N. 89°40'E., and 1343.0 ft. S. 89°40'W.

AREA.

	Acres.
Total area, St Joe Lode -----	20.527
Total area, New Colorado lode. -----	20.548

LOCATION.

This survey is located in the N. 1/2 Sec. 22, T. 20 S., R. 10 E., in the Silver Hill Mining District, Pima 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 claim by the claimant or his grantors is not less than five hundred dollars ; and that said improvements consist of:

ST. JOE Lode.

No.1, the discovery shaft, the center of which being the discovery point, on the center line, 417.0 ft. from the center of line 3-4 4 x 6 ft. 50 ft. deep.  
Value \$500.0

No. 2 A shaft, the center of which brs. from Cor. No.3 N.38°45'E., 440.0<sup>ft</sup>, 4 x 6 ft. 50 ft. deep.  
Value \$500.0

No.3 A shaft, the center of which brs. from Cor. No.3 N.32°30'E., 390.0<sup>ft</sup>, 4 x 6 ft. 10 ft. deep.  
Value \$100.0

## MINERAL SURVEY NO. 4091

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

## ST JOE Lode.

No.4 A tunnel, the mouth of which brs. from Cor. No.3, N.20°E.,  
285.0 ft. 4 x 6 ft. running N. 73°E., 75.0 ft. to face.  
Value \$750.0

No.5 A shaft, the center of which brs. from Cor. No.3, N. 2°45'E.,  
255.0 ft. 4 x 6 ft. 50 ft. deep.  
Value \$500.0

No.6 A shaft, the center of which brs. from Cor. No.3, N. 55°E.,  
690.0 ft. 4 x 6 ft. 50 ft. deep.  
Value \$500.0

No.7 A shaft, the center of which brs. from Cor. No.3, N. 48°30'E.,  
745.0 ft. 4 x 6 ft. 50 ft. deep.  
Value \$500.0

No.8 A shaft, the center of which brs. from Cor. No.3, N.58°45'E.,  
940.0 ft. 4 x 6 ft. 40 ft. deep.  
Value \$400.0

No.9 A shaft, the N.W. Cor. of which is on the center line  
950.0 ft. from the center of line 3-4, 4 x 6 ft. 20 ft. deep.  
Value \$200.0

No.10 A shaft, the center of which brs. from Cor. No.2, N.66°W.,  
460.0 ft. 4 x 6 ft. 10 ft. deep.  
Value \$100.0

No.11 A shaft, the center of which brs. from Cor. No.2, N.64°W.,  
200.0 ft. 4 x 6 ft. 50 ft. deep.  
Value \$500.0

No.12 A cut, the mouth of which brs. from Cor. No.4 S. 50°E.,  
100.0 ft. 4 1/2 ft. wide, 10 ft. face, running North 12 ft. to face.  
Value \$100.0

## NEW COLORADO Lode.

No.1 The discovery shaft, the center of which being the discovery  
point, on the center line 157.0 ft. from the center of line 3-4,  
6 x 8 ft. 200 ft. deep. (timbered)  
Value \$3000.0

No.2 A shaft, the center of which brs. from Cor. No.4 N. 11°W.,  
280.0 ft. 4 x 6 ft. 10 ft. deep.  
Value \$100.0

a shaft,  
No.3 The S.E. cor. of which is on the center line, 200 ft. from the  
center of line 3-4, 4 x 6 ft. 25 ft. deep.  
Value \$250.0

## MINERAL SURVEY NO. 4091

EXPENDITURE OF FIVE HUNDRED DOLLARS † Cont'd.

## NEW COLORADO Lode.

- No.4 A shaft, the center of which brs. from Cor. No.3, S.43°30'W.,  
375.0 ft. 4 x 6 ft. 15 ft. deep.  
Value \$150.0
- No.5 A shaft, on the center line, 290.0 ft. from the center of  
line 3-4, 4 x 6 ft. 10 ft. deep.  
Value \$100.0
- No.6 A shaft, the center of which brs. from Cor. No.3, S.45°30'W.,  
405.0 ft. 4 X 6 ft. 10 ft. deep.  
Value \$100.0
- No.7 A shaft, the center of which brs. from Cor. No.3, S.53°30'W.,  
335.0 ft. 4 x 6 ft. 10 ft. deep.  
Value \$100.0
- No.8 A shaft, the center of which brs from Cor. No.3, S.55°30'W.,  
360.0 ft. 4 x 6 ft. 25 ft. deep.  
Value \$250.0
- No.9 A shaft, the center of which brs. from Cor. No.3, S. 61° W.,  
400.0 ft. 4 x 6 ft. 25 ft. deep.  
Value \$250.0
- No.10 A shaft, the center of which brs. from Cor. No.3, S.43°30'W.,  
475.0 ft. 4 x 6 ft. 50 ft. deep.  
Value \$500.0
- No.11 A shaft, the center of which brs. from Cor. No.3, S.41°W.,  
500.0 ft. 4 x 6 ft. 10 ft. deep.  
Value \$100.0
- No.12 A cut, the face of which is on the center line, 620.0 ft. from  
the center of line 3-4, 4 1/2 ft. wide, 8 ft. face, running N.45°E.,  
15 ft. to mouth.  
Value \$100.0
- No.13 A shaft, the center of which is on the center line, 640.0  
ft. from the center of line 3-4, 4 x 6 ft. 10 ft. deep.  
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.

MINERAL SURVEY NO. 4091.  
REPORT- Cont'd.

The 1/4 Cor. to Secs. 21 and 22, T. 20 S. R. 10 E. consists of a quartzite rock, 10 x 12 ins. showing 12 ins. above ground, chiseled 1/4 on the W. face.

The 1/4 Cor. to Secs. 15 and 22, T. 20 S. R. 10 E., consists of a porphyry rock, 10 x 12 ins. showing 4 ins. above ground, chiseled 1/4 on the N. face.

ADJOINING CLAIMS.

On the South the Winnie Belle and Daisy lodes, Robt. Randell claimant. There are no other adjoining or conflicting claims known.

SOLAR OBSERVATION. *do not include in copy*

Direct solar observation taken Thurs. Feb. 28, at 3:55 P.M. Solar time.  
Sun bisected. Lat. 31°40'30" - Lon. 111°18'  
Difference in time 1h 20m.

$$\begin{array}{r} \text{Appt Dec'l} = 8^\circ 02' 12.5'' \\ \quad \quad \quad \underline{10' 41.6''} \\ \text{Dec'l} = 7^\circ 51' 30.9'' \\ \quad \quad \quad \underline{90^\circ} \\ \quad \quad \quad 97^\circ 51' 30.9'' \end{array} \quad \text{Sin } 1/2 A = \sqrt{\frac{\text{Sin } (S-L) (S-H)}{\text{Cos } L \text{ Cos } H}}$$

$$\begin{array}{l} L = 31^\circ 40' 30'' \\ h = 23^\circ 43' 50'' \text{ (App't h} - 23^\circ 46', \text{ Ref.} - 2' 10'') \\ p = 97^\circ 51' 30.9'' \\ 2) \underline{153^\circ 15' 50.9''} \\ S = 76^\circ 37' 55. \end{array}$$

$$\begin{array}{r} S-L = 44^\circ 57' 25' \quad 9.8491584 \\ S-H = 52^\circ 54' 05'' \quad 9.9017843 \\ \quad \quad \quad 0.0700499 \\ \quad \quad \quad \underline{0.0383663} \\ 2) \underline{19.8593589} \\ \quad \quad \quad 9.9296794 - 58^\circ 16' = 1/2 A \\ \quad \quad \quad \quad \quad \quad \quad 116^\circ 32' = A. \end{array}$$

$$\begin{array}{l} 180^\circ - 116^\circ 32' = S. 63^\circ 28' W. = \text{Bearing of sun.} \\ \quad \quad \quad \underline{69^\circ 48'} = \text{Ang. to left from sun.} \\ \quad \quad \quad S 6^\circ 20' E. = \text{bearing of line.} \end{array}$$

Set up at Cor. No. 3, New Colorado 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 \_\_\_\_\_

B.R. Hatcher

known as the ST JOE and NEW COLORADO Lodes.

and showing the respective capacities in which they acted.

Dan B. Gemung, Chainman.

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

\_\_\_\_\_, Axman.

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

## FINAL OATHS OF ASSISTANTS.

We, I, Dan B. Gemung

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 B.R. Hatcher

known as the ST JOE and NEW COLORADO 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

Dan B. Gemung, Chainman.

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

\_\_\_\_\_, Axman.

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

Subscribed and sworn to by the above-named persons before me this 19

day of March, 19 29

[Signature]  
Notary Public



GOVERNMENT PRINTING OFFICE

6-1013

Commissioner expires  
2-27-30.

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, Ariz., dated February 9, 1929, 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 B.R. Hatcher, known as the ST. JOE and NEW COLORADO Lodes, situate in Silver Hill Mining District, Pima County, Arizona, in Section 22, Township No. 20 S., Range No. 10 E. and designated as Survey No. 4091, 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 his 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.

[Signature of T.N. Stevens]
U. S. Mineral Surveyor.

Subscribed and sworn to by the said T.N. Stevens
U. S. Mineral Surveyor, before me Mabelle Hess, a notary
Public this 25th
day of March, 1929

my commission
expires Feb. 7, 1932.

Mabelle Hess
notary Public

OFFICE CADASTRAL ENGINEER'S FINAL CERTIFICATE ON FIELD NOTES

Department of the Interior

PUBLIC SURVEY OFFICE

Phoenix, Arizona,

April 12, 1929

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

B. R. Hatcher

known as the ST. JOE and NEW COLORADO lodes

situate in Silver Hill

Mining District Pima County Arizona

in Section 22, Township No. 20 S., Range No. 10 E., and

designated as Survey No. 4091, 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 his grantors,

and that said improvements consist of 22 shafts, 2 cuts and 1 tunnel,

total value \$9750.

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

April 12, 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

B. R. Hatcher

, known as the

ST. JOE and NEW COLORADO lodes

situate in Silver Hill mining district,

Pima County, Arizona,

in Section 22, Township No. 20 S., Range No. 10 E.

, designated as Survey No. 4091

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

Surveyor, February 27 - 29, 1929, under my instructions dated

February 9, 1929, 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.

Handwritten signature of John D. Clavin, Office Cadastral Engineer.