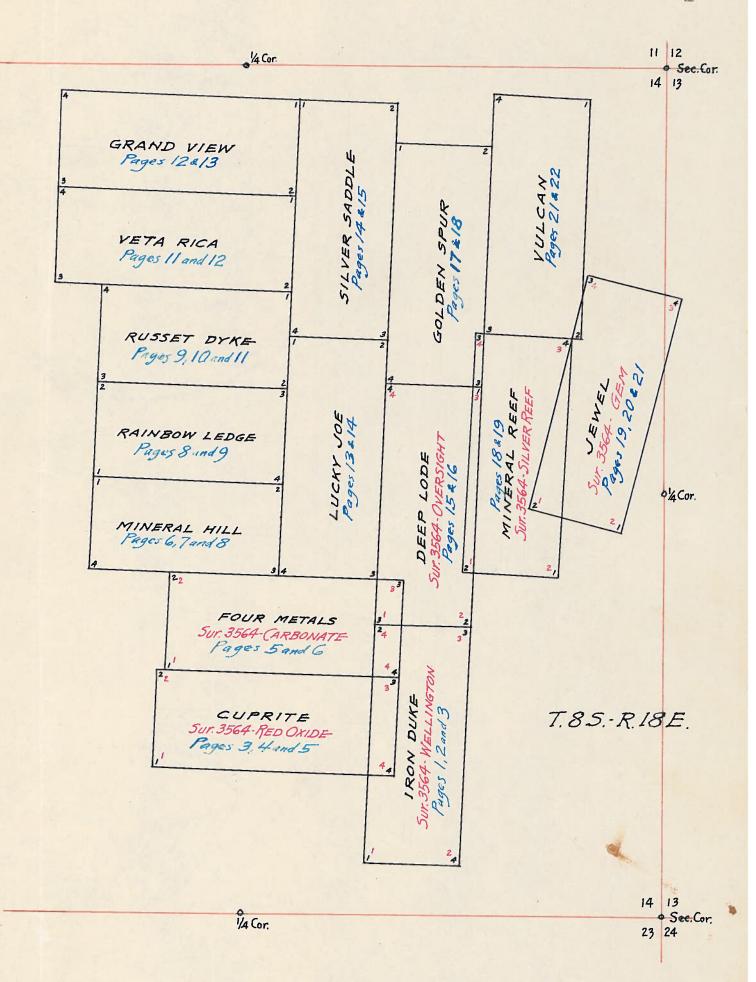
MINERAL SURVEY No. 4179

 RIZONA	Land	District

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

Copper State Metals Company		
Mineral Hill, Deep Lode, Silver Saddle, Golden Spur, Vulcan Jewel, Four Metals, Lucky Joe, Mineral Reef, Russet Dyke, Grand View, Rainbow Ledge, Cuprite, Veta Rica and Iron Duke Lodes		
Bunker Hill Mining District,		
Pinal County, Arizona		
Sections 13 and 14, Township 85., Range 18E, G&SRB&M		
Surveyed under instructions dated December 3, , 19 34		
By Ralph L. Motz, U. S. Mineral Surveyor.		
Claim located Jan. 15, 1926 & July 28, 19 28		
Survey commenced December 11, 19 34		
Survey completed January 18 , 19 35		
Address of claimant's attorney, Martin E. Tew, Copper Creek, Arizona.		
DATES OF AMENDED LOCATIONS		
6—823 U a. Government printing office: 1937		



· INDEX · DIAGRAM · MINERAL SUR. No.4179, ARIZ.

1

Feet

Mineral Survey No. 4179 was made with a Gurley & Sons Precise Transit, Light Mountain Model, with horizontal limb 6.25 inches in diameter, having two double opposite verniers, and full vertical circles 5 inches in diameter, having one double vernier; the verniers read to one minute of arc; the eye piece is equipped with a prismatic eye piece with colored glass slide for making direct observations upon the sum. The instrument was direct observations upon the sun. The instrument was in good condition at the time of the survey and all adjustments were in good order. An a.m. altitude observation of the sun for time and azimuth, and at noon on the meridian for latitude, were made at Cor. No. 2 of the Iron Duke lode, the details of which observations are shown in the calculation sheets herewith submitted for examination. All azimuths in this record are referred to the true meridian thus determined by the method of to the true meridian thus determined, by the method of deflection angles and calculated courses.

The lines were measured with a Lufkin steel tape, 150 feet in length, graduated to feet, tenths and hundredths for the entire length; a Kueffel & Esser steel tape, 300 feet in length, graduated to feet, tenths, and hundredths for the entire length; a Lufkin steel tape, 25 feet in length, graduated to feet; inches and fractions of inches for entire length. All tapes were compared with a Lufkin standard at the time of beginning the

survey, and found correct.

All lines and connections of this survey were run by direct methods.

The magnetic variation observed at each corner of the survey gave a uniform value of 14 10 E.

IRON DUKE

Beginning at point for Cor. No. 1 of the Iron Duke lode,

- Situated in the center of a creek bed, 20 ft. wide, course, westerly, where a permanent monument can not be established; from this point
 - A dacite ledge 82x98 ins., 43 ins. above the ground, bears N. 65°41'W., 50.35 ft. dist., mkd. BR x ID-1-4179.
 - A dacite ledge 24x54 ins., ll ins. above the ground, bears N. 19°03'W., 76.45 ft. dist., mkd. BR x ID-1-4179.
 - Cor. No. 3 Survey No. 3001 Lookout lode, an iron pipe, 1 in. diam., with round brass dap 2 ins. diam. mkd. 3501-L3, firmly set, bears N. 39°35'30" E., 401.59 ft. dist.
 - The 1/4 sec. cor. of secs. 14 and 23, T. 8 S., R. 18 E., G.& S.R.B.& M., bears S. 67 44 W., 814.46 ft. dist.; an iron post, 1 in. diam., 16 ins. above ground, firmly set in ground and mound of stone, marked and witnessed as described in the official record,

Thence N. 2°13'E.

40.00 Witness corner to Cor. No. 1

> Identical with witness corner to Cor. No. 1 Sur. No. 3564, Wellington lode

	The state of the s
Feet	An iron pipe, 1 1/4 ins. diam. with brass cap, firmly set in monument and mkd. WC-ID-1-4179
 379.17	Cor. No. 4 Sur. No. 3601 Mariposa lode, being an iron pipe with copper cap, firmly set and mkd. 3601-M4, established on line 2-3 Sur. No. 3601 Lookout lode at N. 73°57'W., 251.04 ft. from Cor. No. 3 thereof.
541.00	Cor. No. 3 Sur. No. 3001 Mariposa lode, an iron pipe with brass cap, firmly set and mkd. 3001-M 3, established on line 4-1 Sur. No. 3504 Red Oxide lode at N: 87°47'W., 105.0 ft. from Cor. No. 4 thereof, also intersect line 4-1 cf Cuprite kode of this survey at N. 87°47'W. 165.0 ft. from Cor. No. 4 thereof. Cor. No. 3 Sur. No. 3504 Red Oxide lode bears N. 2°13'E., 600.0 ft. from Cor. No. 4 thereof and Cor. No. 3 of Cuprite lode of this survey bears N. 2°13'E., 600.0 ft. from Cor. No. 4 thereof.
1500:0	Intersect line 2-3 Sur. No. 3564 Red Oxide lode at N. 87°47'W., 165.0 ft. from Cor. No. 3 thereof, line 2-3 of the Cuprite lode of this survey at N. 87°47'W., 165.0 ft. from Cor. No. 3 thereof; line 4-1 Sur. No. 3564 Carbonate lode at N. 87°47'W., 165.0 ft. from Cor. No. 4 thereof, and line 4-1 of Four Metals lode of this survey at N. 87°47'W., 165.0 ft.from Cor.No.4 thereof.
	Identical with Cors. Nos. 4, 1 and 3, Sur. No. 3564 Wellington lode, Sur. No. 3564 Oversight lode and Deep Lode lode of this survey, an iron pipe, 1 1/4 ins. diam. with brass cap 2 ins. square, firmly set and mkd. ID-2-4179; from which
Jun	A porphyry rock in place 13x13 ins., 8 ins. above the ground, bears N. 71°32'E., 31.0 ft. dist., mkd. BR-x ID-2-4179.
, balayo	A porphyry ledge 30x48 ins., 23 ins. above the ground, bears S. 30°37'E., 7.8 ft. dist., mkd. BR x ID-2-4179.
Винения	Thence S. 87°47'E.
165.0	Intersect line 3-4 Sur. No. 3564 Carbonate lode at N. 2°13'E., 359.0 ft. from Cor. No. 4 thereof, and line 3-4 of the Four Letals lode of this survey at N. 2°13'E., 359.0 ft. from Ccr. No. 4 thereof:
300.0	North end center, identical with the north end center of Sur. No. 3564 Wellington lode, south end center of Sur. No. 3564 Oversight lode, and the south end center of the Deep Lode lode of this survey, being a mound of stone 3 ft. base, 3 ft. high, agreeing with the north end center of the location.
600.0	Cor. No. 3.
	Identical with Cors. Nos. 2, 3 and 2 of Sur. No. 3564 Oversight lode, Sur. No. 3564 Wellington lode, and Deep Lode lode of this survey, an iron pipe, 1 1/4 ins. diam. with brass cap 2 ins. square, firmly set and mkd. ID-3-4179, DL-2-4179;
	No bearings available.

-	77		
	Feet	. Thence S. 2°13'W.	
	1500.00	Cor. No. 4	
		Identical with Cor. No. 2 Sur. No. 3564 Wellington lode an iron pipe with brass cap, firmly set, and mkd. ID-4-4179; from which	,
	02.0 78 S-0.69	A diorite ledge 41x48 ins., 28 ins. above the ground, bears N. 13.35'W., 65.83 ft. dist., mkd. BR x ID-4-4179.	
		A diorite ledge 24x28 ins., 44 ins. above the ground, bears N. 42 07 E., 62.38 ft. dist., mkd. BR x ID-4-4179.	
	ç	. Thence N. 87°47'W.	
	300.00	South end center, identical with south end center of Sur. No. 3564 Wellington lode, being a mound of stone 3 ft. base, 3 ft. high.	
	451.87	Intersect line 3-4 Sur. No. 3601 Lookout lode at S. 20° 32'W., 336.16 ft. from Cor. No. 3 thereof.	
	600.00	Point for Cor. No. 1 and place of beginning.	
Ì			
		Beginning at Cor. No. 1 of the Cuprite lode,	
	te - E	Identical with Cor. No. 1 Sur. No. 3564 Red Oxide lode, an iron pipe with brass cap, firmly set, and mkd. C-1-4179; from which	
	7	A granite ledge 28x38 ins., ll ins. above the ground, bears S. 22°12'E., 34.4 ft. dist., mkd. BR x C-1-4179.	
	6	A granite ledge 19x39 ins., 33 ins. above the ground, bears N. 00 39'W., 8.4 ft. dist., mkd. BR x C-1-4179.	
		The 1/4 sec. cor. of secs. 14 and 23, T. 8 S., R. 18 E., G.& S.R.B.& M., previously described, bears S. 31 50 E., 1050.1 ft. dist.	
		Thence N. 2°13'E.	
	167.27	Intersect line 2-3 Sur. No. 3601 Bagdad lode at N. 73° 57'W., 510.12 ft. from Cor. No. 3 thereof.	
		West end center, identical with the west end center. Sur. No. 3564 Red Oxide lode, being a mound of stone 3 ft. base, 3 ft. high.	
	600.00	Cor. No. 2.	
	dagen	Identical with Cor. No. 2 Sur. No. 3564 Red Oxide lode, an iron pipe with brass cap, firmly set, and mkd. C-2-4179; from which	
		A porphyry ledge 22x31 ins., 18 ins. above the ground, bears N. 4°57'E., 9.68 ft. dist., mkd. BR x C-2-4179.	

Feet A porphyry ledge 18x20 ins., 7 ins. above the ground, bears S. 15°53'E., 16.2 ft. dist., mkd. BR x C-2-Thence S. 87 47'E. -50.00 Cors. Mos. 1 of Sur. No. 3564 Carbonate lode and Four Metals lode of this survey. 1335.00 Intersect line 4-1 Sur. No. 3564 Wellington lode at S.2° 13'W., 359.0 ft. from Cor. No. 4 thereof and line 1-2 of the Iron Duke lode of this survey at S. 2°13'W., 359.0 ft. from Gor. No. 2 thereof. 1500.00 Cor. No. 3. Identical with Cor. No. 4 Sur. No. 3564 Carbonate lode, Cor. No. 3 Sur. No. 3564 Red Oxide lode, and Cor. No. 4 of the Four Metals lode of this survey, an iron pipe with brass cap, firmly set and mkd. 6-3-4179; from A porphyry ledge 10x20 ins., 19 ins. above the . ground bears 1. 1'00'E., 20.8.ft. dist., mkd. BR-x C-3-4179.A porphyry ledge 8x61 ins., 16 ins. above the ground bears N. 37°35'E., 34.3 ft. dist., mkd. BR x C-3-Thence S. 2°13'W. 300.00 East end center, identical with the east end center of Sur. No. 3564 Red Oxide lode, being a mound of stone, 3 ft. base, 3 ft. high. 600.00 Cor. No. 4. Identical with Cor. No. 4 Sur. No. 3564 Red Oxide lode, an iron pipe with brass cap, firmly set, and mkd. : C-4-4179; from which A granite ledge 9x14 ins., 18 ins. above the ground; bears N. 58°28'E., 48.8 ft. dist., mkd. BR x C-4-A granite ledge 23x25 ins., 19 ins. above the ground, bears S. 2°01'W., 37.4 ft. dist., mkd. BR x C-4-4179. • Thence N. 87 47' W. 165.00 Cor. No. 3 Sur. No. 3601 Mariposa lode, also intersect line 4-1 Sur. No. 3564 Wellington lode at N. 2° 13' E., 541.0 ft. ftom Cor. No. 1 thereof, and line 1-2 of Iron Duke lode of this survey at N. 2° 13'E., 541.0 ft. from Cor. No. 1 thereof. 560.00 Wash, 10 ft. wide course southwesterly. 807.03 Cor. No. 2 Sur. No. 3601 Mariposa lode, also intersect line 3-4 Sur. No. 3272 Gulch Copper lode at S. 56° 59'E., 106.04 ft. from Cor. No. 4 thereof.

	Feet 820.78	Intersect line 2-3 Sur. No. 3601 Comet lode at S. 73.° 57'E., 189.50 ft. from Cor. No. 2 thereof. The intersection of line 2-3 Sur. No. 3501 Comet lode and line 4-1 Sur. No. 3272 Gulch Copper lode bears N. 73° 57'W., 99.39 ft. from this point.	
	932.02	Intersect line 4-1 Sur. No. 3272 Gulch Copper lode at S. 34° 12'W., 64.01 ft. from Cor. No. 4 thereof. The intersection of line 4-1 Sur. No. 3272 Gulch Copper lode and line 2-3 Sur. No. 3601 Comet lode, bears N. 34° 12'E., 28.02 ft. from this point.	
	1022.29	Intersect lines 1-2 and 3-4 of Sur. No. 3501 Comet and Bagdad lodes, respectively, at S. 23° 28' W., 48.61 ft. from Cors. 2 and 3 of Comet and Bagdad lodes.	
	1500.00	Cor. No. 1 and place of beginning.	
	,	FOUR METALS	
		Beginning at Cor. No. 1 of the Four Metals lode,	
		Identical with Cor. No. 1 Sur. No. 3564 Carbonate lode, an iron pipe, with brass cap, firmly set, mkd. FM-1-4179; from which	
	0.821	'A porphyry ledge llx31 ins., 6 ins. above the ground, bears N. 87° 47' W., 11.8 ft. dist., mkd. BR x FM 1-4179.	
		A porphyry ledge 8x27 ins., 8 ins. above the ground, bears N. 5° 53' E., 9.2 ft., dist., mkd. BR x FM-1-4179.	
	ecots :	The 1/4 sec. cor. of secs. 14 and 23, T. 8 S., R. 18 E., G.& S.R.B.& M., previously described, bears S. 17° 58' 30" E., 1575.4 ft. dist.	
		Thence N. 2° 13' E.	
	300.00	West end center, identical with west end center of Sur. No. 3564 Carbonate lode, being a mound of stone 3 ft. base, 3 ft. high.	
	590.00	Witness corner to Cor. No. 2.	
		Identical with witness corner to Cor. No. 2 Sur. No. 3504 Carbonate lode, an iron pipe with brass cap, firmly set, and mkd. WC - FM-2-4179.	
	600.00	Point for Cor. No. 2, an iron pipe driven in side of vertical bank of gulch, on line 3-4 of Mineral Hill lode of this survey, (permanent monument impractical), from which	
		A diorite ledge 21x62 ins., 25 ins. above the ground, bears S. 75° 16' E., 7.24 ft. dist., mkd. BR x FM-2-4179.	
		A porphyry ledge lox53 ins., 21 ins. above the ground, bears 5. 26° 24' W., 50.5 ft. dist., mkd. BR x FM-2-4179.	
	to best	Thence S. 87° 47' E.	
ш			

87.00 Gulch, 10 ft. wide, course northwesterly.

191.00 Same gulch, course southwesterly.

685.00 Cors. Nos. 3 and 4 of Mineral Hill and Lucky Joe lodes, respectively, both of this survey.

) .		MINERAL SURVEY NO. 4179, ARIZONA
	Feet 985.00	South end center of Lucky Joe lode of this survey
	1285.00	Cor. No. 3 of the Lucky Joe lode of this survey; also intersect line 4-1 Sur. No. 3564 Oversight lode at N. 2° 13' E., 241.0 ft. from Cor. No. 1 thereof, and line 3-4 of the Deep Lode lode of this survey at N. 2° 13' E., 241.0 ft. from Cor. No. 3 thereof.
	1450.00	Cor. No. 3
		Identical with Cor. No. 3 Sur. No. 3564 Carbonate lode, an iron pipe with brass cap, firmly set, mkd. FM-3-4179; from which
		A dacite ledge 29x24 ins., 44 ins. above the ground, bears S. 40° 57' W., 12.2 ft. dist., mkd. BR x FM-3-4179.
		A dacite ledge 21x36 ins., 14 ins. above the ground, bears N. 67° 00' W., 5.7 ft. dist., mkd. BR x FM-3-4179.
	,	Thence S. 2° 13' W.
	241.00	Intersect line 1-2 Sur. No. 3504 Oversight lode at S. 87° 47' E., 165.0 ft. from Cor. No. 1 thereof; line 3-4 Sur. No. 3564 Wellington lode at S. 87° 47' E., 165.0 ft. from Cor. No. 4 thereof; line 2-3 of the Deep Lode lode of this survey at S. 87° 47' E., 165.0 ft. from Cor. No. 3 thereof; and line 2-3 of the Iron Duke lode of this survey at S. 87° 47' E., 165.0 ft. from Cor. No. 2 thereof.
	300.00	East end center, identical with the east end center of Survey No. 3564 Carbonate lode, being a mound of stone, 3 ft. base, 3 ft. high.
	600.00	Cor. No. 4, which is identical with Cor. No. 3 of the Cuprite lode of this survey.
		Thence N. &7° 47' W.
	165.00	Intersect line 4-1 Sur. No. 3564 Wellington lode at S. 2° 13' W., 359.0 ft. from Cor. No. 4; and line 1-2 of the Iron Duke lode of this survey at S. 2° 13' W., 359.0 ft. from Cor. No. 2 thereof.
	1450.00	Cor. No. 1 and place of beginning.
		MINERAL HILL
	10.5	Beginning at Cor. No. 1.of the Mineral Hill lode,
	No.	Identical with Cor. No. 1 of the Rainbow Ledge lode of this survey, where I
		Set a porphyry rook 20x10x8 ins., 8 ins. in the ground to bedrock, surrounded by a mound of stone to top, for Cor. No. 1, mkd. MH-1-4179; RL-1-4179; from which
		The northwest location corner of the Mineral Hill lode and the southwest location corner of the Rainbow Ledge lode, both of this survey, bears N. 87° 47' W., 309.3 ft. dist., being a mound of stone, 3 ft. base, 3 ft. high.

9

Feet

The 1/4 sec. cor. of secs. 14 and 15, T. 8 S., R. 18 E. G.& S.R.B.& M., bears S. 84° 18' W., .1683.5 ft. .dist.; an iron post, 1 in. diam. 24 ins. above ground, firmly set in ground and mound of stone and marked as described in the official record.

Thence S. 87° 47' E.

1190.7

Cor. No. 2.

Identical with Cor. No. 4 of the Rainbow Ledge lode, and situated on line 4-1 of the Lucky Joe lode, both of this survey, where I

. Set a porphyry rock 25x7x6 ins., 14 ins. in the ground, for Cor. No. 2, -mkd. MH-2-4179; RL-4-4179; from which

- . A mound of stone 3.ft. base, 3 ft. high, bears westerly 4 ft. dist. -
 - A quartzite ledge 17x20 ins., 4 ins. above the ground, bears N. 57°,42' W., 51.0 ft. dist., mkd. BR x LH-2-4179.
 - A quartzite ledge 10x21 ins., 18 ins. above the ground, bears N. 6° 03' E., 44.4 ft., dist., mkd. BR x MH-2-4179

Thence S. . 2° 13! W. .

205.0 Gulch, 10 ft. wide, course southwesterly.

300.0 East end center, being a mound of stone, 3 ft. base, 3 ft. high

500.0 Cor. No. 3

Identical with Cor. No. 4 of the Lucky Joe lode of this survey, and situated on lines 2-3 of Sur. No. 3504 Carbonate lode, and Four Metals lode of this survey, where I

Set a granite rock 24x5x7 ins., 16 ins. in the ground for Cor. No. 3, mkd. MH-3-4179; LJ-4-4179; from which

- A granite ledge 12x29 ins., 10 ins. above the ground, bears S. 20° 37' E., 30.6 ft. dist., mkd. BR x MH-3-4179.
- A granite ledge 14x24 ins., 12 ins. above the ground, bears S. 53° 51' E., 21.6 ft. dist., mkd. BR x 14H-3-4179.
- A mound of stone, 3 ft. base, 3 ft. high, bears. southerly 3 ft. dist.

Thence N. 87° 47' W.

- 494.0 Gulch, 10.ft. wide, course southwesterly.
- 598.0 Same gulch, course northwesterly.
- 685.0 Point for Cors. Nos. 2 of Sur. No. 3564 Carbonate lode, and Four Metals lode of this survey.

,		ALINERAL SURVEY NO. 4179, ARIZONA
	Feet	The state of the s
	1190.7	Cor. No. ,4.
	Bed.	Set a granite rock 25x7x7 ins., 15 ins. in the ground for Cor. No. 4, mkd. NH-4-4179; from which
		A mound of stone 3 ft. base, 3 ft. high, bears westerly 4 ft. dist.
		The scuthwest corner of the location, being a mound of stone, 3 ft. base, 3 ft. high, bears N. 87° 47' W., 309.3 ft. dist
	1934-3	A granite rock in place 10x29 ins., 3 ins. above the ground, bears 5. 25° 25' L., 37.6 ft., dist., mkdBR x MH-4-4179
		A granite rock in place 8x32 ins., 8 ins. above the ground, bears N. 71° 57' W., 16.2 ft. dist., mkd. BR x MH-4-4179.
	240.0	Gulch 10 ft. wide, course westerly.
	300.0	West end center. Raise a mound of stone 3 ft. base, 3 ft. high, from which
		The west end center of the location, being a mound of stone, 3 ft. base, 3 ft. high, bears N. 87° 47' W., 309.3.ft. dist
	600.0	Cor. No. 1 and place of beginning
	£ 198	RAINBOW LEDGE
		Beginning at Cor. No. 1 of the Rainbow Ledge lode, which is identical with Cor. No. 1 of Mineral Hill lode.of this survey.
		Thence N. 2° 13' E.
	170.0	Gulch, 20 ft. wide, course southwesterly.
	250.0	Same gulch, course.southeasterly.
	300.0	West end center. Raise a mound of stone, 3 ft. base, 3 ft. high; from which
	Danoug	The west end center of the location, being a mound of stone, 3 ft. base, 3 ft. high, bears N. 07° 47' W., 309.3 ft. dist.
	431.0	Gulch, 20 ft. wide, course southwesterly.
	600.0	Cor. No. 2
		Identical with Cor. No. 3 of the Russet Dyke lode of this survey, where I
		Set a granite rock 26x8x5 ins., 16 ins. in the ground for Cor. No. 2, mkd. RL-2-4179; RD-3-4179; from which
		The northwest location corner of the Rainbow Ledge lode and the southwest location corner of the Russet Dyke lode, both of this survey, being a mound of stone, 3 ft. base, 3 ft. high, bears N. 87 47 W., 309.3 ft. dist.

Feet

- A mound of stone, 3 ft. base, 3 ft. high, bears westerly 4 ft. dist.
- A granite rock in place 14x15 ins., 5 ins. above the ground bears N. 5° 32' W., 12.5 ft. dist., mkd. BR x RL-2-4179.
- A granite rock in place lox31 ins., 7 ins. above the ground bears S. 73° 13' E., 15.9 ft. dist., mkd. BR x RL-2-4179.

Thence S. 87° 47' E.

- 338.0 Gulch, 20 ft. wide, course southwesterly.
- 927.0 Gulch, 10 ft, wide, course northwesterly.
- 1190.7 Cor. No. 3.

Identical with Cor. No. 2 of the Russet Dyke lode and situated on line 4-1 of the Lucky Joe lode, both of this survey, where I

Set a diorite rock 24x8x7 ins., 16 ins. in the ground for Cor. No. 3, mkd. RL-3-4179; RD-2-4179; from which

- A mound of stone 3 ft. base, 3 ft. high, bears easterly 4 ft. dist.
- A quartzite rock in place 10x10 ins., 2 ins. above the ground bears S. 65° 36' E., 19.8 ft. dist., mkd. BR x.RL-3-4179.
- A porphyry ledge 12x53 ins., 23 ins. above the ground bears N. 75° 20' N., 79.5 ft. dist., mkd. BR x RL-3-4179.

Thence S. 2° 13' W.

- 149.0 Gulch, 10 ft. wide, course westerly.
- 300.0 East end center, being a mound of stone, 3 ft. base, 3 ft. high.
- 600.0 Cor. No. 4, which is identical with Cor. No. 2 of the Mineral Hill lode of this survey.

Thence N. 87° 47' W.

1190.7 Cor. No. 1 and place of beginning.

RUSSET DYKE

Beginning at Cor. No. 1 of the Russet Dyke lode

Identical with Cor. No. 2 of the Veta Rica lode and situated on line 4-1 of the Silver Saddle lode, both of this survey, where I

Set a diorite rock 25xl0x7 ins., 15 ins. in the ground, mkd. RD-1-4179; VR-2-4179; from which

A mound of stone 3 ft. base, 3 ft. high bears southerly 3 ft. dist.

	The state of the s
Feet	The 1/4 sec. cor. of secs. 11 and 14, T. 8 S., R. 18 E., G. & S.R.B.& M., bears N. 12° 18' W., 1423.0 ft. dist.; an iron post, l in. diam., 24 ins. above ground, firmly set in ground and mound of stone, and marked as described in the official record.
	Thence S. 2° 13' W.
300:0	East end center, identical with Cors. Nos. 4 and 1, respectively of the Silver Saddle and Lucky Joe lodes, both of this survey, where I
	Set a diabase rock, 24x9x8 ins., 17 ins. in the ground, mkd. EEC-RD-4179, SS-4-4179, LJ-1-4179; from which.
	A mound of stone, 3 ft. base, 3 ft. high, bears easter- ly 4 ft. dist.
	A diorite ledge 23x29 ins., 21 ins. above the ground, bears 5. 78° 41' E., 89.8 ft. dist., mkd. BR x LJ-1-4179.
	A diorite rock in place 20x27 ins., 25 ins. above the ground bears S. 41° 28' E., 46.5 ft. dist., mkd. BR x LJ-1-4179.
350.0	Gulch, 10 ft. wide, course westerly.
600.0	Cor. No. 2, which is identical with Cor. No. 3 of the Rainbow Ledge lode of this survey.
	Thence N. 87° 47' W.
263.7	Gulch, 10 ft. wide, course northwesterly.
852.7	Gulch, course southwesterly.
1190.7	Cor. No. 3, which is identical with Cor. No. 2 of the Rainbow Ledge lode of this survey.
	Thence M. 2° 13' E.
300.0	West end center. Raise a mound of stone, 3 ft. base, 3 ft. high; from which
	The west end center location corner, being a mound of stone, 3 ft. base, 3 ft. high, bears N. 87 47' W., 309:3 ft. dist:
600.0	cor. No. 4
	Situated on line 2-3 of the Veta Rica lode of this survey, where I
	Set a granite rock 24x9x6 ins., 14 ins. in the ground for Cor. No. 4, mkd. RD-4-4179; from which
ç	A mound of stone, 3 ft. hase, 3 ft. high, bears southerly 4 ft. dist.
-tento	A granite rock in place 25x30 ins., 5 ins. above the ground bears N. 70° 04' W., 25.7 ft. dist., mkd. BR x RD-4-4179

Feet

A granite rock in place 17x24 ins., 17 ins. above the ground, bears S. 85° 45' W., 52.8 ft. dist., mkd.

BR x RD-4-4179.

The northwest location corner identical with Cor. No. 3 of the Veta Rica lode of this survey, bears N. 8747' W., 309.3 ft. dist.

Thence S. 87° 47' I.

1190.7

Cor. No. 1 and place of beginning.

VETA RICA

Beginning at Cor. 'No. 1 of the Veta Rica lode,

Identical with Cor. No. 2 of the Grand View lode and situated on line 4-1 of the Silver Saddle lode, both of this survey, where I

Set a diorite rock 24x0x0 ins., 14 ins. in the ground for .Cor. No. 1, mkd. VR-1-4179, GV-2-4179; from which

- A mound of stone, 3 ft. base, 3 ft. high, bears southerly 3 ft. dist.
- A diorite rock in place llx14 ins., 10 ins. above the ground bears N. 3° 02' E., 15.6 ft. dist., mkd. BR x VR-1-4179.
 - A diorite rock in place 9x18 ins., 11 ins. above the ground, bears N. 16° 18' E., 40.5 ft. dist., mkd. BR x VR-1-4179.

The 1/4 sec. ccr. of secs. 11 and 14, T. 8 S., R. 18 E., G. & S.R.B. M., previously described, bears N. 22° 25' W-, -855.37 ft. dist.

THE I

Thence S. 2° 13' W.

- 300.0 East end center, being a mound of stone, 3 ft. base, 3 ft. high.
- 600.0 Cor. No. 2, which is identical with Cor. No. 1 of the Russet Dyke lode of this survey, and agrees with a corner of the location.

Thence N. 87° .47' W. -

1190.7 Cor. No. 4 of the Russet Dyke lode of this survey.

1500.0 Cor. No. 3

Set a porphyry rock, 25x9x7 ins., 15 ins. in the ground for Cor. No. 3, mkd. VR-3-4179; from which

- A mound of stone, 3 ft. base, 3 ft. high, bears southerly 4 ft. dist.
- A granite rock in place, 16x19 ins., 5 ins. above the ground bears N. 73° 04' W., 38.9 ft. dist., mkd. BR x VR-3-4179.
- A granite rock in place, 13x13 ins., 7 ins. above the ground bears S. 50° 25' W., 32.7 ft. dist., mkd. BR x VR-3-4179.

L	2	MINERAL SURVEY NO. 4179, ARIZONA
	Feet	The state of the s
	verit of	Thence N. 2° 13' E.
	300.0	West end center, being a mound of stone, 3 ft. base, 3 ft. high.
	600.0	Cor. No. 4
		Identical with Cor. No. 3 of the Grand View lode of this survey, where I.
		Set a granite rock, 25x8x4 ins., 16 ins. in the ground for Cor. No. 4, mkd. VR-4-4179, GV-3-4179; from which
		A mound of stone, 3 ft. base, 3 ft. high, bears southwesterly 4 ft. dist.
	āre to alo	A granite rock in place, 15x32 ins., 9 ins. above the ground bears N. 42° 51'-W., 48.1 ft. dist., mkd. BR x VR-4-4179.
		A granite rock in place, 15x71 ins., 22 ins. above the ground, bears S. 51°-04' E., 47.3 ft. dist., mkd. BR x VR-4-4179.
	O.J. Lieve	Thence S. 87° 47' E.
	1500.0	Cor. No. 1 and place of beginning.
		GRAND VIEW
		Beginning at Cor. No. 1 of the Grand View lode
		Identical with Cor. No. 1 of the Silver Saddle lode of this survey, where I
	-0 9/5 · 1 - 188 · 1	Set a granite rock, 24x7x6 ins., 15 ins. in the ground for Cor. No. 1, mkd. GV-1-4179, SS-1-4179; from which
		A mound of ston'e, 3 ft. base, 3 ft. high, bears easterly 3 ft. dist.
	100	A granite rock in place, 23x29 ins., 15 ins. above the ground, bears N. 35° 42' W., 63.4 ft. dist., mkd. BR x GV-1-4179.
		A granite rock in place, 19x22 ins., 7 ins. above the ground, bears N. 51° 41' E., 36.9 ft. dist., mkd. BR x GV-1-4179.
		The 1/4 sec. cor. of secs. 11 and 14, T. 8 S., R. 18 E., G.& S.R.B.& M., previously described, bears N. 61° 19' W., 398.3 ft. dist.
	ibinang.	Thence S. 2° ,13' W.
	300.0	East end center, being a mound of stone, 3 ft. base, 3 ft. high.
	500.0	Cor. No. 2, which is identical with Cor. No. 1 of the Veta Rica lode of this survey.
	•	Thence N. 87° 47° W.
	1500.0	Cor. No. 3, which is identical with Cor. No. 4 of the Veta Rica lode of this survey.

Thence N. 2° 13' E.

300.0

West end center, being a mound of stone, 3 ft. base, 3 ft. high.

Feet 500.0

Cor. No. 4

Set a granite rock, 26x7x4 ins., 10 ins. in the ground to bedrock and surrounded by a mound of stone to top for Cor. No. 4, mkd. GV-4-4179; from which

- A mound of stone, 3 ft. base, 3 ft. high, bears westerly 5 ft. dist.
- A granite ledge, 15x28 ins., 18 ins. above the ground, bears S. 16° 54' W., 8.3 ft. dist., mkd. BR x GV-4-4179.
- A granite rock in place, 7x30 ins., 12 ins. above the ground, bears 5. 32° 19' W., 32.1 ft. dist., mkd. BR x GV-4-4179.

Thence S. 87° 47' E.

310.0 Gulch, 5 ft. wide, course northerly.

1500.0 Cor. No. 1 and place of beginning.

LUCKY JOE ,

Beginning at Cor. No. 1 of the Lucky Joe lode, which is identical with the east end center of the Russet. Dyke lode and with Cor. No. 4 of the Silver Saddle lode, both of this survey; from which

The 1/4 sec. cor. of secs. 11 and 14, T. 8 S., R. 18 E., G.& S.R.B.& M., previously described, bears N. 9° 45' 30" W., 1718.8 ft. dist.

Thence S. 87° 47' E.

- 245.0 Gulch, 10 ft. wide, course southwesterly.
- 300.0 North end center, being a mound of stone, 3 ft. base, 3 ft. high.

Identical with south end center of Silver Saddle lode of this survey.

600.0 Cor. No. 2.

Identical with Cor. No. 3 of Silver Saddle lode and situated on line 4-1 of the Golden Spur lode, both of this survey, where I

Set a dacite rock, 25x10x4 ins., 15 ins. in the ground for Cor. No. 2, mkd. LJ-2-4179, SS-3-4179; from which

A mound of stone, 3 ft. base, 3 ft. high, bears easterly 3 ft. dist.

Thence S. 2° 13' W.

- 200.0 Gulch, 10 ft. wide, course westerly.
- 241.0 Cor. No. 4 of the Golden Spur lode of this survey, Cor. No. 4 of Sur. No. 3504 Cversight lode and Cor. No. 4 of the Deep Lode lode of this survey.
- 769.0 Gulch, 5 ft. wide, course northwesterly.

1	4	MINERAL SURVEY No. 4179, ARIZONA
	Feet 1500.0	Cor. No. 3
	200	Situated on lines 2-3 Sur. No. 3564 Carbonate lode and Four Metals lode of this survey; line 3-4 of the Deep Lode lode of this survey; and line 4-1 of Sur. No. 3564 Oversight lode, where I
		Set a quartzite rock, 26x6x5 ins., 15 ins. in the ground for Cor. No. 3, mkd. LJ-3-4179; from which
		. A mound of stone, 3 ft. base, 3 ft. high, bears westerly 6 ft.
	e della	. A granite ledge lox30 ins., 20 ins. above the ground bears N. 26 24 E., 80.8 ft. dist., mkd. BR x LJ-3-4179.
The state of the state of		A granite rock in place, 12x29 ins., 9 ins. above the ground, bears N. 70° 18' E., 10.5 ft. dist., mkd. BR x LJ-3-4179.
		. Thence N, 87° 47' W.
	300.0	South end center, being a mound of stone, 3 ft. base, 3 ft. high.
	600.0	Cor. No. 4, which is identical with Cor. No. 3 of the Mineral Hill lode of this survey.
		Thence N. 2° 13' E.
	300.0	East end center of the Mineral Hill Lode of this survey.
	394.0	Gulch, 10 ft . wide, course southwesterly.
	600.0	Cor. No. 2 of the Mineral Hill lode and Cor. No. 4 of the Rainbow Ledge lode, both of this survey.
	900.0	East end center of the Rainbow Ledge lode of this survey.
	1051.0	Gulch, 10 ft. wide, course westerly.
	1200.0	Cor. No. 3 of the Rainbow Ledge lode and Cor. No. 2 of the Russet Dyke lode, both of this survey.
	1450.0	Gulch, 10 ft. wide, course westerly.
	1500.0	Cor. No. 1 and place of beginning.
		SILVER SADDLE
	Louis	Beginning at Cor. No. 1 of the Silver Saddle lode, which is identical with Cor. No. 1 of the Grand View lode of this survey.
		Thence S. 87° 47° E.
	300.0	North end center, being a mound of stone, 3 ft. base, 3 ft. high.
	.600.0	Cor. No. 2.
		Set a granite rock 24x10x7 ins., 14 ins. in the ground, for Cor. No. 2, mkd. SS-2-4179; from which
		A mound of stone, 3 ft. base, 3 ft. high, bears easterly 3 ft. dist.

Feet A granite rock in place, oxlo ins., 19 ins. above the ground, bears N. 18° 01' W., 19.9 ft. dist., mkd. BR x SS-2-4179. A granite rock in place, 18x19 ins., 8 ins. above the ground, bears N. 75° 13' E., 27.85 ft. dist., mkd. BR'x SS-2-4179. Cor. No. 1 of the Golden Spur lode of this survey. 241.0 Gulch, 10 ft. wide, course southwesterly. 972.0 Cor. No. 3, which is identical with Cor. No. 2 of the Lucky Joe lode of this survey. 1500.0 . . Thence N. 87° 47' W. South end center, which is identical with morth end center of the Lucky Joe lode of this survey. 300.0 Gulch, 10 ft. wide, course southwesterly. 355.0 Cor. No. 4, which is identical with the east end center of the Russet Dyke lode and with Cor. No. 1 of the Lucky Joe lode, both of this survey. 500.0 Thence N. 2° 13' E. Cor. No. 1 of the Russet Dyke 1cde and Cor. No. 2 of 300.0 the Veta Rica lode, both of this survey. East end center of the Veta Rica lode of this survey. 600.0 Cor. No. 1 of the Veta Rica lode and Cor. No. 2 of the Grand View lode, both of this survey. 900.0 1200.0 East end center of the Grand View lode of this survey. 1500.0 Cor. No. 1 and place of beginning. . DEEP LODE Beginning at Cor. No. 1 of the Deep Lode lode Identical with Cor. No. 3 Sur. No. 3504 Oversight lode and Cor. No. 3 of the Golden Spur lode of this survey, being an iron post with brass cap, firmly set, mkd. DL-1-4179, GS-3-4179; from which A quartzite rock in place lox10 ins., 5 ins. above the ground, bears S. 54° 10' W., 15.3 ft. dist., mkd. BR x DL-1-4179. A porphyry Tedge 30x37 ins., 14 ins. above the ground, bears N. 53 22' W., 54.1 ft. dist., mkd. BR x DL-1-4179. The 1/4 sec. cor. of secs. 13 and 14, T. 8 S., R. 18 E., G. & S.R.B.& M., bears S. 00° 41° E:, 1321.5 ft. dist.; and iron post, 1 in. diam., 9 ins. above ground, firmly set, marked and witnessed as described in the official record.

Thence S. 2' 13' W.

Feet	
621.0	Gulch, 5 ft. wide, course westerly.
1162.04	Intersect line 1-2 Sur. No. 3504 Silver Reef lode at S. 86° 17° E., 81.25 ft. from Cor. No. 1 thereof; and line 1-2 of the Mineral Reef lode of this survey at S. 86° 17° E., 81.25 ft. from Cor. No. 2 thereof.
1500.0	Cor. No. 2, which is identical with Cor. No. 3 of the Iron Duke lode of this survey.
	Thence N. 87° 47° W.
300.0	South end center, which is identical with the nor th end center of the Iron Duke lode of this survey.
435.0	Intersect line 3-4 of Sur. No. 3564 Carbonate lode at S. 2° 13' W., 241.0 ft. from Cor. No. 3 thereof; and line 3-4 of the Four Metals lode of this survey at S. 2° 13' W., 241.0 ft. from Cor. No. 3 thereof.
500.0	Cor. No. 3, which is identical with Cor. No. 2 of the Iron Duke lode of this survey.
Ternes	Thence N. 2° 13' E.
241.0	Cor. No. 3 of the Lucky Joe lode of this survey, also intersect line 2-3 Sur. No. 3564 Carbonate lode at N. 87° 47' W., 165.0 ft. from Cor. No. 3 thereof, and line 2-3 of the Four Metals lode of this survey at N. 87° 47' W., 165.0 ft. from Cor. No. 3 thereof.
972.0	Gulch, 5 ft. wide, course northwesterly.
1500.0	Cor. No. 4 901 9014 http://doi.org/10.000
.voe.	Identical with Cor. No. 4 of the Golden Spur lode of this survey and Cor. No. 4 of Sur. No. 3504 Oversight lode, situated on line 2-3 of the Lucky Joe lode of this survey, being an iron pipe with brass cap, firmly set, mkd. DL-4-4179, GS-4-4179; from which
	A dacite ledge 14x41 ins., 38 ins. above the ground, bears N. 33° 39' W., 69.1 ft. dist., mkd. BR x DL-4-4179.
wayerly in	A dacite rock in place 12x30 ins., 17 ins. above the ground, bears N. 41° 29' E., 41.3 ft. dist., mkd. BR x DL-4-4179.
	Thence S. 87° 47' E.
300.0	North end center, being a mound of stone, 3 ft. base, 3 ft. high, identical with the south end center of the Golden Spur lode of this survey, and north end center of Sur. No. 3504 Oversight lode.
549.16	Intersect line 4-1 Sur. No. 3564 Silver Reef lode at S. 3° 43' W., 339.09 ft. from Cor. No. 4 thereof, and line 2-3 of the Mineral Reef lode of this survey at S. 3° 43' W., 339.09 ft. from Cor. No. 3 thereof.
600.0	Cor. No. 1 and place of beginning.

Feet

GOLDEN SPUR

Beginning at Cor. No. 1 of the Golden Spur lode

Situated on line 2-3 of the Silver Saddle lode of this survey, where I

Set a granite rock 29x7x5 ins., 16 ins. in the ground for Cor. No. 1, mkd. GS-1-4179; from which

- A mound of stone, 3 ft. base, 3 ft. high, bears easterly 3 ft. dist.
- A granite rock in place 15x28 ins., 18 ins. above the ground, bears N. 14° 35' E., 15.5 ft. dist., mkd. BR x GS-1-4179.
- A granite rock in place 7x30 ins., ll ins. above the ground, bears N. 72° 04' W., 43.0 ft. dist., mkd. BR x GS-1-4179.

The 1/4 sec. cor. of secs. 11 and 14, T. 8 S., R. 18 E., G. & S.R.B.& M., previously described, bears N. 04° 09' W., 1944.1 ft. dist.

Thence S. §7° 47' E.

300.0 North end center, being a mound of stone, 3 ft. base, 3 ft. high.

600.0 Cor. No. 2.

Situated on line 3-4 of the Vulcan lode of this survey.

- Set a porphyry rock 24x8xo ins., 15 ins. in the ground for Cor. No. 2, mkd. GS-2-4179; from which
 - A mound of stone, 3 ft. base, 3 ft. high, bears westerly o ft. dist.
 - A porphyry ledge 12x40 ins., 23 ins. above the ground, bears S. 40° 13' E., 52.1 ft. dist., mkd. BR x GS-2-4179.
 - A porphyry ledge 16x26 ins., 12 ins. above the ground, bears N. 5° 01' W., 46.3 ft. dist., mkd. BR x GS-2-4179.

Thence S. 2° 13' W.

- 352.0 Gulch, 5 ft. wide, course westerly.
- 1161.53 Cor. No. 3 of the Vulcan lode of this survey, also intersect line 3-4 Sur. No. 3564 Silver Reef lode at S. 80° 17. E., 41.90 ft. from Cor. No. 4 thereof and line 3-4 of the Mineral Reef lode of this survey at S. 80° 17. E., 41.90 ft. from Cor. No. 3 thereof.
- 1475.0 Gulch, 5 ft. wide, course westerly.
- 1500.0 Cor. No. 3, which is identical with Cor. No. 1 of the Deep Lode lode of this survey.

Thence N. 87° 47' W.

50.84 Intersect line 4-1 Sur. No. 3564 Silver Reef lode at S. 3° 43' W., 339.69 ft. from Cor. No. 4 thereof and line 2-3 of the Mineral Reef lode of this survey at S. 3° 43' W., 339.69 ft. from Cor. No. 3 thereof.

L 8	MINERAL SURVEY NO. 4179, ARIZONA
Feet 300.0	South end center, which is identical with the north end center of the Deep Lode lode of this survey.
600.0	Cor. No. 4, which is identical with Cor. No. 4 of the Deep Lode lode of this survey.
pot hiter	Thence N. 2° 13' E.
41.0	Gulch, 10 ft. wide, course westerly.
241.0	Cor. No. 2 of the Lucky Joe lode and Cor. No. 3 of the Silver Saddle lode, both of this survey.
769.0	Gulch, 10 ft. wide, course southwesterly.
1500.0	Cor. No. 1 and place of beginning.
	MINERAL REEF
anned i	Beginning at Cor. No. 1 of the Mineral Reef lode, which is identical with Cor. No. 2 of Sur. No. 3504 Silver Reef lode, being an iron pipe with brass cap, firmly set, for Cor. No. 1, mkd. MR-1-4179; from which
, sag	A dacite rock in place, 13x23 ins., 23 ins. above the ground, bears N. 29° 00' W., 58.1 ft. dist., mkd. BR x MR-1-4179.
	A dacite rock in place, 13x28 ins., 15 ins. above the ground, bears S. 78° 18' W., 62.4 ft. dist., mkd. BR x MR-1-4179.
- Sunor	The 1/4 sec. cor. of secs. 13 and 14, T. 8 S., R. 18 E., G. & S.R.B.& M., previously described, bears N. 51° 07' 30" E., 872.8 ft. dist.
2	Thence N. 86° 17' W.
300.0	South end center, being a mound of stone, 3 ft. base, 3 ft. high, identical with the south end center of Sur. No. 3504 Silver Reef lode.
0	Intersect line 2-3 Sur. No. 3564 Oversight lode at S. 2° 13' W., 1162.04 ft. from Cor. No. 3 thereof and line .1-2 of the Deep Lode lode of this survey at S. 2° 13' W., 1162.04 ft. from Cor. No. 1-thereof.
600.0	Cor. No. 2
	Identical with Cor. No. 1 Sur. No. 3504 Silver Reef lode, being an iron pipe with brass cap, firmly set, mkd. MR-2-4179; from which
312 1 18 1	A dacite rock in place, 14x26 ins., 13 ins. above the ground, bears S. 60° 32' E., 25.7 ft. dist., mkd. BR. x MR-2-4179.
6.03	A dacite rock in place, 12x25 ins., 6 ins. above the ground, bears N. 17° 22' E., 39.8 ft. dist., mkd. BR x MR-2-4179.
	Thence N. 3° 43' E.
517.0	Gulch, 5 ft. wide, course westerly.
1160.31	Intersect line 3-4 Sur. No. 3564 Oversight lode at N. 87° 47' W., 50.84 ft. from Cor. No. 3 thereof; line 4-1

	MINERAL SURVEY NO. 4179, ARIZONA
Feet	of the Deep Lode lode of this survey at N. 87° 47' W., 50.84 ft. from Gor. No. 1 thereof and line 3-4 of the Golden Spur lode of this survey at N. 87° 47' W., 50.84 ft. from Gor. No. 3 thereof.
1185.0	Gulch, 5 ft. wide, course westerly.
1500.0	Cor. No. 3.
. 988 - 1116	Identical with Cor. No. 4 Sur. No. 3564 Silver Reef lode being an iron pipe with brass cap, firmly set in the ground and in a mound of stone, mkd. MR-3-4179.
	No bearings available.
	Thence S. 86° 17' E.
41.96	Cor. No. 3 of the Vulcan lode of this survey, also intersect line 2-3 of the Golden Spur lode of this Survey at N. 2° 13' E., 338.47 ft. from Cor. No. 3 thereof.
300.00	North end center, being a mound of stone, 3 ft. base, 3 ft. high, identical with location and with the North end center of Sur. No. 3504 Silver Reef lode.
341.96	South end center of the Vulcan lode of this survey.
600.0	Cor. No. 4
. Did	Identical with Gor. No. 3 Sur. No. 3564 Silver Reef lode and situated on line 4-1 Sur. No. 3564 Gem lode and line 2-3 of the Jewel lode of this survey, being an iron pipe with brass cap, firmly set, mkd. MR-4-4179; from which
100	A quartzite ledge, 22x24 ins., 21 ins. above the ground, bears N. 0° 39' E., 12.2 ft. dist., mkd. BR x MR-4-4179.
J-p-yev	A quartzite ledge, 19x21 ins., 12 ins. above the ground, bears N. 60° 41' E., 29.2 ft. dist., mkd. BR x MR-4-4179.
	Thence S. 3° 43' W.
205.0	Gulch, 5 ft. wide, course westerly.
1113.08	Intersect line 1-2 Sur. No. 3504 Gem lode at S. 75° 23' E., 210.48 ft. from Cor. No. 1 thereof, and line 1-2 of the Jewel lode of this survey at S. 75° 23' E., 210.48 ft. from Cor. No. 2 thereof.
1500.0	Cor. No. 1 and place of beginning.
PQ.	JEWEL OF THE SECOND SERVICE OF THE SECOND SERVICE OF THE SECOND SERVICE OF THE SECOND SERVICE OF THE SECOND SECOND SERVICE OF THE SECOND SECON
	Beginning at Cor. No. 1 of the Jewel lode,
. 1886	Identical with Cor. No. 2 Sur. No. 3504 Gem lode, being an iron pipe with copper cap, firmly set, mkd. J-1-4179; from which
	A shale ledge 28x80 ins., 52 ins. above the ground, bears N. 66° 54' E., 73.3 ft. dist., mkd. BR x J-1-4179.
au ide	Commence of the Commence of th

MINERAL SURVEY NO. 4179, ARIZONA. Feet A shale ledge 19x22 ins., 7 ins. above the ground, bears S. 21° 40' E., 34.9 ft. dist., mkd. BR x J-1-4179. The 1/4 sec. cor. of secs. 13 and 14, T. 8 S., R. 18 E., G. & S.R.B.& M., previously described, bears N. 46° 52' E., 380.3 ft. dist. Thence N. 75° 23' W. 300.0 South end center, being a mound of stone, 3 ft. base, 3 ft. high, identical with south end center of Sur. No. 3564 Gem lode. 389.52 Intersect line 2-3 Sur. No. 3564 Silver Reef lode at S. 3° 43' W., 1113.08 ft. from Cor. No. 3 thereof and line 4-1 of the Mineral Reef lode of this survey at S. 3° 43' W., 1113.08 ft. from Cor. No. 4 thereof. 600.0 · Cor. No. 2 Identical with Cor. No. 1 Sur. No. 3564 Gem lode, being an iron pipe with brass cap, firmly set, mkd. J-2-4179; from which A porphyry ledge 15x23 ins., 7 ins. above the ground, bears N. 72° 40' W., 31.0 ft. dist., mkd. BR x J-A quartzite ledge 76x86 ins., 47 ins. above the ground, bears N. 14° 09° E., 96.0 ft. dist., mkd. BR x J-2-4179. Thence N. 14° 37' E. Gulch, 5 ft. wide, course westerly. 860.0 Cor. No. 3 Sur. No. 3564 Silver Reef lode, Cor. No. 4 of the Mineral Reef lode of this survey, also intersect line 2-3 of the Vulcan lode of this survey at N. 85° 17' W., 41.90 ft. from Cor. No. 2 thereof. 1093.0 1288.34 Intersect line 1-2 of the Vulcan lode of this survey at N. 2° 13' E., 191.88 ft. from Cor. No. 2 thereof. 1500.0 Cor. No. 3 Identical with Cor. No. 4 Sur. No. 3504 Gem lode, being an iron pipe with brass cap, firmly set, mkd. J-3-4179; from which A point on the vertical face of a quartzite cliff 15x60 ft. bears S. 2° 12' E., 46.9 ft. dist. mkd. BR x J-3-4179. Another point on same quartzite cliff bears S. 39° 55' E., 25.9 ft. dist., mkd. BR x J-3-4179. Thence S. 75° 23' E. 300.0 North end center, being a mound of stone, 3 ft. base, 3 ft. high, identical with the north end center of Sur. No. 3564 Gem lode. Cor. No. 4. 600.0

Identical with Cor. No. 3 Sur. No. 3504 Gem lode, being

Feet

an iron pipe with brass cap, firmly set, mkd. J-4-4179; from which

- A porphyry rock in place, 14x15 ins., 18 ins. above the ground, bears S. 9° 45' E., 19.4 ft. dist., mkd. BR x J-4-4179.
- A porphyry rock in place, llx23 ins., l4 ins. above the ground, bears N. 2° 30' W., l4.0 ft. dist., mkd. BR x J-4-4179.

Thence S. 14° 37' W.

181.0 Gulch, 5 ft. wide, course westerly.

1500.0 Cor. No. 1 and place of beginning.

VULCAN

Beginning at Cor. No. 1 of the Vulcan lode, where I

Set a dacite rock 28x8x6 ins., 16 ins. in the ground for Cor. No. 1, mkd. V-1-4179; from which

- A porphyry ledge 15x53 ins., 30 ins. above the ground, bears N. 3° 25' E., 32.0 ft. dist., mkd. BR x V-1-4179.
- A prophyry rock in place, 31x31 ins.,16 ins. above the ground, bears S. 84° 08' E., 22.2 ft. dist., mkd. BR x V-1-4179.

The cor. of secs. 11,12,13 and 14, T. 8 S., R. 18 E., G.& S.R.B.& M., bears N. 70° 05' E., 514.2 ft. dist.; an iron post, 2 ins. diam., 24 ins. above ground, firmly set in ground and mound of stone, and marked as described in the official record.

Thence S. 2° 13' W.

- 58.0 Gulch, 10 ft. wide course southwesterly.
- 1308.12Intersect line 4-1 Sur. No. 3504 Gem lode at S. 14° 37' W. 211.60 ft. from Cor. No. 4 and line 2-3 of the Jewel lode of this survey at S. 14° 37' W., 211.60 ft. from Cor. No. 3 thereof.

1500.0 Cor. No. 2

- Set a porphyry rock, 24x7xo ins., 15 ins. in the ground for Cor. No. 2, mkd. V-2-4179; from which
- .A mound of stone, 3 ft. base, 3 ft. high, bears southerly 3 ft. dist.
 - A quartzite rock in place, llx26 ins., 10 ins. above the ground, bears 5. 86° 17' E., 9.8 ft. dist., mkd. BR x V-2-4179.

Thence N. 86° 17' W.

41,96Cor. No. 3 Sur. No. 3504 Silver Reef lode and Cor. No. 4 of the Mineral Reef lode of this survey, also intersect line 4-1 Sur. No. 3504 Gem lode at S. 14° 37' W., 407.0 ft. from Cor. No. 4 thereof and line 2-3 of the Jewel lode of this survey at S. 14° 37' W. 407.0 ft. from Cor. No. 3 thereof.

MINERAL SURVEY NO. 4179, ARIZON	MINERAL	SURVEY	NO.	4179.	ARIZON
---------------------------------	---------	--------	-----	-------	--------

22	MINERAL SURVEY NO. 4179, ARIZONA
Feet 300.0	South end center, being a mound of stone, 3 ft. base, 3 ft. high.
341.96	North end center of Sur. No. 3504 Silver Reef lode, and north end center of the Mineral Reef lode of this survey.
600.0	Cor. No. 3
	Situated on line 3-4 Sur. No. 3564 Silver Reef lode, line 3-4 of the Mineral Reef lode of this survey and line 2-3 of the Golden Spur lode of this survey, where I
	Set a quartzite rock 26x8x8 ins., 15 ins. in the ground for Cor. No. 3, mkd. V-3-4179.
	No bearings available.
	Thence N. 2° 13° E.
809.53	Gulch, 5 ft. wide, course westerly.
1161.53	Cor. No. 2 of the Golden Spur lode of this survey.
1500.0	Cor. No. 4
870	Set a per phyry rock 24x7x6 ins., 15 ins. in the ground for Cor. No. 4, mkd. V-4-4179; from which
one of	A porphyry ledge 13x29 ins., 14 ins. above the ground bears S. 35° 57' W., 21.9 ft. dist., mkd. BR x V-4-4179.
Sorten	A porphyry ledge 8x33 ins., 28 ins. above the ground bears N. 23° 00' W., 40.4 ft. dist., mkd. BR x V-4-4179 Thence S. 80° 17' E.
300.0	North end center, being a mound of stone, 3 ft. base, 3 ft. high.
600.0	Cor. No. 1 and place of beginning.

LODE LINES

The presumed course of the vein of each of the several lode locations embraced in this survey, counted from the respective points of discovery, is as follows:-

Iron Duke lode, N. 2° 13' E., 345 ft.; and, S. 2° 13' W., 1155 ft.

Cuprite lode, N. 87° 47' W., 650 ft.; and, S. 87° 47' E., 850 ft.

Four Metals lode, N. 87° 47' W., 155 ft.; and, S. 87° 47' E., 1295 ft.

Mineral Hill lode, N. 87° 47' W., 540.7 ft.; and, S. 87° 47' E., 650 ft.

	intivities boiling income and positioning	
	Rainbow Ledge lode, N. 87° 47' W., 580.7 ft.; and 47' E., 610 ft.	., s. 87°
	Russet Dyke lode, N. 87° 47' W., 890.7 ft.; and, 47' E., 300 ft.	s. 87°
	Veta Rica lode, N. 87° 47' W., 1470 ft.; and, S. E., 30 ft.	87° 47'
	Grand View lode, N. 87° 47' W., 1480 ft.; and, S. E., 20 ft.	٥7° 47'
	Lucky Joe lode, N. 2° 13' E., 005 ft.; and, S. 2° 835 ft.	13' W.,
	Silver Saddle lode, N. 2° 13' E., 800 ft.; and, S. W., 700 ft.	2° 13'
	Deep Lode lode, N. 2° 13' E., 150 ft.; and, S. 2° 1344 ft.	13' W.,
	Golden Spur lode, N. 2° 13' E., 740 ft.; and, S. 700 ft.	2° 13' W
	Mineral Reef lode, N. 3° 43' E., 490 ft.; and, S. W., 1010 ft.	3° 43'
	Jewel lode, N. 14° 37' E., 800 ft.; and, S. 14° 3700 ft.	37° W.,
N. P.	Vulcan lode, N. 2° 13' E., 1200 ft.; and, S. 2° 1 300 ft.	.3' W.,
	AREAS. Total area, Iron Duke lode	Acres. 20.061
	Area in conflict with -	
	Sur. No. 3504 Carbonate lode Four Metals lode of this survey Sur. No. 3504 Red Oxide lode Guprite lode of this survey Sur. No. 3504 Wellington lode Sur. No. 3601 Lookout lode	1.300 2.273 2.273
	Total area, Cuprite lode	20.661
	Area in conflict with -	
CAND OF THE PERSON NAMED IN	Sur. No. 3564 Red Oxide lode Sur. No. 3272 Gulch Copper lode Sur. No. 3601 Comet lode Sur. No. 3601 Comet lode, exclusive of its conflict with Sur. No. 3272 Gulch Copper lode Sur. No. 3601 Bagdad lode	0.075
	Total area, Four Metals lode	
	Area in conflict with -	
	Sur. No. 3564 Carbonate lode	19.972
	Total area, Mineral Hill lode	16.401
	Total area, Rainbow Ledge lode	16.401

1		
-	Total area, Russet Dyke lode	Acres 16.401
	Total area, Veta Rica lode	20.661
	Total area, Grand View lode	20.661
١	Total area, Lucky Joe lode	20.561
	. Total area, Silver Saddle lode	20.661
	Total area, Deep Lode lode	20.661
	Area in conflict with-	
	Sur. No. 3564 Oversight lode Sur. No. 3564 Carbonate lode	20.661 0.913 0.913 1.760 1.760
	Total area, Golden Spur lode	20.661
	Area in conflict with -	
	Sur. No. 3564 Silver Reef Mineral Reef lode of this survey	0.361
	Total area, Mineral Reef lode	20.661
	Area in conflict with -	
	Sur. No. 3564 Silver Reef lode	20.651
	Total area, Jewel lode	20.661
	Area in conflict with -	
	Sur. No. 3504 Gem lode Sur. No. 3504 Silver Reef lode Mineral Reef lode of this survey	20.601 2.641 2.641
	Total area, Vulcan lode	20.654
	Area in conflict with -	
	Sur. No. 3504 Gem lode Jewel lode of this survey	0.092

LOCATION

This survey is located in Sec. 14 and the NW 1/4 of Sec. 13, T. 8 S., R. 18 E., G. & S.R.B.& M., Arizona.

The survey of each of the lode locations of this survey is identical with the original location as marked on the ground, with the following exceptions, which are duly recorded in the notes:- Mineral Hill lode, Rainbow Ledge lode and Russet Dyke lode.

EXPENDITURE OF \$500.

I certify that the value of the labor and improvements made upon or for the benefit of each of the lode locations embraced in said mining claim by the claimant or its grantors is not less than \$500, and that said improvements consist of:-

- The discovery cut of the Iron Duke lode, the face of which being the discovery point, is on the center line 345 ft. from the north end center; 8 ft. wide, 12 ft. face, running N. 30° W., 15 ft. to face. Part of this was reported in the improvements on Sur. No. 3564. Value of additional work, \$100.
- The discovery shaft of the Cuprite lode, the center of which being the discovery point, is on the center line 650 ft. from the west end center, 4xo ft., 10 ft. deep. No. 1 Value, \$50.
- The discovery cut of the Four Metals lode, the face of which being the discovery point, is on the center line 155 ft. from the west end center, 4 ft. wide, 10 ft. face, running S. 88° E., 18 ft. to face.

 Value, 475. No. 1
- An open cut, the mouth of which bears N. 88° 14' E., 110.0 ft. from the west end center of the Four Metals lode; 5 ft. wide, 10 ft. face running easterly 35 ft. to face. At face of open cut is a tunnel 4x7 ft., No. 2 running easterly 204 ft. to breast. At a point in this tunnel 29 ft. from portal is a crosscut 4x7 ft. running north 3 ft. to breast.
 At same point is a crosscut 4x7 ft., running south 7
 - ft. to breast. At a point in same tunnel 40 ft. from portal, is a raise 5x7 ft., 24 ft. high to surface, (reported as 4x0x23 ft. in Sur. No. 3504).

 At same point is a shaft 5x7 ft., 70 ft. deep to 100 ft. level and 5x7 ft.
 - ft. level, and 5x7 ft., 8 ft. deep below 100 ft. level.
 - At point in same tunnel 87 ft. from portal is a crosscut 4x6 ft., running S. 45° W., 25 ft. to breast. At a point in same tunnel 112 ft. from portal is a

raise 4x0 ft., o ft. high.

From shaft, at 100 ft. level, a crosscut 4x0 ft., runs south 140 ft. to breast.

At a point in this crosscut 15 ft. from shaft, a drift 4x6 ft. runs east 50 ft. to breast.

From same point in crosscut, a drift 4xô ft., runs west

30 ft. to breast. From shaft at 100 ft. level, a crosscut 4xo ft. runs

north 100 ft. to breast.
At point in this crosscut 30 ft. from shaft, a drift 4xb ft. runs east 15 ft. to breast.

(Note: - Data for depth of shaft and footage of drifts and crosscuts on 100 ft. level are taken from the Company records as water stands in the shaft to the main tunnel level).

Total value of this improvement is \$10,515.00, of which \$2940. was reported in Sur. No. 3564.

Value of additional work on open cut, tunnel, crosscuts, raises, shaft and drifts, 47575.00.

This tunnel is situated well towards the southern end of the property. The ground rises from this point to the north, east and south. Any work done here would tend

to develop the whole property and from this tunnel, shaft and 100 ft. level, drifts and crosscuts can be run to develop the ore bodies of the property. Therefore this is a common improvement and a 1/15 of the value of the additional work has been allotted to each claim of this survey.

Value of 1/15 interest, \$505.

- No. 3 An open cut, the mouth of which bears N. 85° 40' E., 180 ft. from the west end center of the Four Metals lode; 5 ft. wide, 20 ft. face, running east 30 ft. to face; at face is a tunnel 5x9 ft. running 8 ft. to a point from which a tunnel 4x6 ft. runs east 7 ft. to breast.

 Value of open cut and tunnels, \$530.
- No. 1 The discovery cut of the Mineral Hill lode, the face of which being the discovery point, is on the center line 550 ft. from the east end center; 4 ft. wide, 10 ft. face running north 12 ft. to face; at face of cut is a tunnel 4x5 ft. running north 40 ft. to breast.

 Value of cut and tunnel, \$530.
- No. 2 In open cut, the mouth of which is on the center line 678 ft. from the east end center of the Mineral Hill lode; 4 ft. wide, 8 ft. face, running north 10 ft. to face; in bottom of this cut is a shaft, 4x6 ft. 8 ft. deep. Value of open cut and shaft, 775.
- No. 1 The discovery cut of the Rainbow Ledge lode, the face of which being the discovery point, is on the center line old ft. from the east end center; 4 ft. wide, 10 ft. face, running south 12 ft. to face; at face is a tunnel 4x6 ft., running south 16 ft. to breast.

 Value of open cut and tunnel, 200.
- Mo. 2 An open cut, the mouth of which bears N. 64° 30' E., 604 ft. from Cor. No. 1 of the Rainbow Ledge lode, 4 ft. wide, 10 ft. face, running S. 30° W., 10 ft. to face; at face is a tunnel 4xb ft., running S. 30° W., 41 ft. to breast.

 Value of open cut and tunnel, 4475.
- No. 3 An open cut, the mouth of which bears S. 74° 05' E., 517 ft. from Cor. No. 2 of the Rainbow Ledge lode, 4 ft. wide, 12 ft. face, running S. 60° E., 12 ft. to face. Value, \$60.
- No. 1 The discovery cut of the Russet Dyke lode, the face of which being the discovery point, is on the center line 300 ft. from the east end center; 4 ft. wide, 10 ft. face, running N. 45° W., 12 ft. to face.

 Value, 450.
- No. 2 An open cut, the mouth of which bears N. 81° 52' W., 592 ft. from Cor. No. 2 of the Russet Dyke lode, 4 ft. wide, 10 ft. face, running south 12 ft. to face; at face is a tunnel 4xb ft., running south 21 ft. to breast.

 Value of open cut and tunnel, 260.
- No. 3 An open cut, the mouth of which bears S. 64° 15' E., 332 ft. from Cor. No. 4 of the Russet Dyke lode, 4 ft. wide, 16 ft. face, running west 10 ft. to face; at face is a tunnel 4x6 ft., running west 50 ft. to breast.

 Value of open cut and tunnel, 4600.

No. 1	The discovery cut of the Veta Rica lode, the face of which being the discovery point, is on the center line 30 ft. from the east end center; 5 ft. wide, 10 ft. face, running west 12 ft. to face. Value, \$60.
to nede	A shaft, the center of which is on the center line 107 ft. from the east end center of the Veta Rica lode; 5x6 ft. 8 ft. deep. Value, \$\psi_50\$.

- No. 3 An open cut, the mouth of which bears N. 33° 55' W., 277 ft. from Cor. No. 2 of the Veta Rica lode; b ft. wide, 10 ft. face, running S. 40° E., 16 ft. to face. Value, \$100.
- No. 4 An open cut, the mouth of which bears N. 24° 40' W., 211 ft. from Cor. No. 2 of the Veta Rica lode; oft. wide, 12 ft. face, running S. 40° E., 24 ft. to face. Value, \$180.
- No. 5 An open cut, the mouth of which bears S. 76° 55' W., 720 ft. from Cor. No. 1 of the Veta Rica lode; 4 ft. wide, 10 ft. face, running N. 30° E., 10 ft. to face.

 Value, \$65.
- An open cut, the mouth of which bears S. 85° 35' W., 198 ft. from Gor. No. 1 of the Veta Rica lode; 5 ft. wide, 8 ft. face, running N. 50° W., 15 ft. to face; in bottom of this cut is a shaft 4x6 ft. 5 ft. deep.

 Value of open cut and shaft, \$125.
- No. 7. An open cut, the mouth of which bears N. 89° 30' W., 172 ft. from Cor. No. 1 of the Veta Rica lode; 4 ft. wide, 10 ft. face, running N. 60° W., 18 ft. to face; at face is a tunnel 4x6 ft., running N. 60° W., 26 ft. to breast. This open cut and tunnel starts on the Veta Rica lode and runs into the Grand View lode, so a 1/2 interest has been allotted to each of these claims.

Total value of open cut and tunnel, \$330. Value of 1/2 interest, \$165.

- No. 1 The discovery cut of the Grand View lode, the face of which being the discovery point, is on the center line 20 ft. from the east end center; 4 ft. wide, 10 ft. face, running east 12 ft. to face.

 Value, \$50.
- No. 2 A shaft, the center of which bears N. 82° 10' W., 393 ft. from Cor. No. 2 of the Grand View lode; 4x6 ft., 8 ft. deep.
 Value, \$40.
- No. 3. A shaft, the center of which bears N. 84° 05' W., 476 ft. from Cor. No. 2 of the Grand View lode; 4xô ft., 8 ft. deep.

 Value, 440.
- No. 4. A shaft, the center of which bears N. 85° W., 515 ft. from Cor. No. 2 of the Grand View lode; 4x5 ft., 10 .ft. deep.

 Value, 450.

- No. 5 An open cut, the mouth of which bears S. 86° 30' E., 204 ft. from Cor. No. 4 of the Grand View lode, 5 ft. wide, 12 ft. face, running S. 78° W., 20 ft. to face; at face is a tunnel 4x6 ft., running S. 78° W., 60 ft. to breast.

 Value of open cut and tunnel, \$\pi725\$.
- No. 1 The discovery shaft of the Lucky Joe lode, the center of which being the discovery point, is on the center line 605 ft. from the north end center; 8x8 ft., 10 ft. deep.

 Value, \$200.
- No. 2 An open cut, the mouth of which bears S. 22° 30' W., 675 ft. from Cor. No. 2 of the Lucky Joe lode, 4 ft. wide, 10 ft. face, running N. 45° E., 18 ft. to face. Value, 975.
- No. 3 An open cut, the mouth of which bears S. 17° 30' W., 658 ft. from Cor. No. 2 of the Lucky Joe lode, 6 ft. wide, 10 ft. face, running N. 45° W., to face. Value, \$65.
- No. 4 A shaft, the center of which bears S. 15° W., 637 ft. from Cor. No. 2 of the Lucky Joe lode, 4x0 ft., 10 ft. deep.

 Value, \$50.
- No. 5 An open cut, the mouth of which bears S. 3° W., 780 ft. from Cor. No. 2 of the Lucky Joe lode, 4 ft. wide, 10 ft. face, running south 18 ft. to face. Value, 475.
- No. 6 An open cut, the mouth of which bears S. 49° 15' E., 371 ft. from Cor. No. 1 of the Lucky Joe lode, 4 ft. wide, 8 ft. face, running N. 15° W., 18 ft. to face.

 Value, 460.
- No. 7 An open cut, the mouth of which bears N. 12° W., 310 ft. from Cor. No. 3 of the Lucky Joe lode, 5 ft. wide, 12 ft. face, running 21 ft. to face; at face is tunnel 4x6 ft., running S. 70° E., 31 ft. to breast. Value of open cut and tunnel, 4440.
- No. 1 The discovery shaft of the Silver Saddle lode, the center of which being the discovery point, is on the center line 800 ft. from the north end center; 4x0 ft.

 10 ft. deep.

 Value, \$50.
- No. 2 A shaft, the center of which bears S. 32° 45' W., 483.
 ft. from Cor. No. 2 of the Silver Saddle lode, 4x6 ft.
 10 ft. deep.
 Value, \$50.
- No. 3 An open cut; the mouth of which bears S. 36° 40' W., 410 ft. from Cor. No. 2 of the Silver Saddle lode, 4 ft. wide, 10 ft. face, running south 16 ft. to face. Value, 475.
- No: 4 An open cut; the mouth of which bears S. 32° 45' W., ... 357 ft. from Cor. No. 2 of the Silver Saddle lode, 5 ft. wide, 10 ft. face, running north 18 ft. to face; at face is a tunnel 4x0 ft., running north 45 ft. to breast.

 Value of open cut and tunnel, \$550.

- No. 5 'A shaft, the center of which bears S. 41° 25' E., 240 ft. from Cor. No. 1 of the Silver Saddle lede, 4x0 ft. 8 ft. deep. Value, \$40.
- A shaft, the center of which bears S. 41° E., 185 ft. No. o from Cor. No. 1 of the Silver Saddle lode, 4xo ft., 40 ft. deep. Value, \$400.
- The discovery shaft of the Deep Lode lode, the center of which being the discovery point, is on the center line 156 ft. from the north end center, 4x6 ft., 10 ft. deep. Value, 450.
- Open cut, the mouth of which bears S. 11° 20' E., 495 ft. from Cor. No. 4 of the Deep Lode lode, 4 ft. wide, 10 ft. face, running east 12 ft. to face.

 Value, \$50. No. 2
- shaft, the center of which bears N. 10° E., 570 ft. from Cor. No. 3 of the Deep Lode lode, 4x0 ft., 10 ft. A shaft, No. 3 deep. Value, 50.
- The discovery cut of the Golden Spur lode, the face of which being the discovery point, is on the center line 740 ft. from the north end center; 4 ft. wide, 10 ft. face, running S. 60° E., 12 ft. to face. No. 1 Value, 450.
- An open cut, the mouth of which is on the center line 478 ft. from the north end center, of the Golden Spur lode, 4 ft. wide, 6 ft. face, running S. 60° E., 12 ft. to face.

 Value, 440.
- An open cut, the mouth of which bears N. 19° E., 620 ft. from Cor. No. 4 of the Golden Spur lode, 4 ft. wide, No. 3 8 ft. face, running North 10 ft. to face. Value, \$35.
- A shaft, the center of which bears N. 25° 30' W., 566 ft. from Cor. No. 3 of the Golden Spur lode, 4x6 ft., 20 No. 4 ft. deep. Value, \$150.
- An open cut, the mouth of which bears N. 32° 35' W., 500 ft. from Cor. No. 3 of the Golden Spur lode, oft. wide, 8 ft. face, running east 10 ft. to face. Value, \$50. No. 5
- The discovery open cut of the Vulcan lode, the face of which being the discovery point, is on the center line 300 ft. from the south end center; 4 ft. wide, 10 ft. No. 1 face, running north 12 ft. to face. Value, \$50.
- An open cut, the mouth of which is on the center line 60 ft. from the south end center of the Vulcan lode; 5 ft. wide, 10 ft. face, running east 12 ft. to face; at face is a tunnel 4x6 ft. running east 11 ft. to No. 2 Value of open cut and tunnel, 4170.

No. 3 A shaft, the center of which bears N. 30° 30' E., 62 ft. from the south end center of the Vulcan lode, ox0 ft., 15 ft. deep. Value, 250. The discovery cut of the Jewel lode, the face of which No. 1 being the discovery point, is on the center line 800 ft. from the north end center; 8 ft. wide, 12 ft. face, running S. 45° E., 10 ft. to face. Total value, \$150. Part of this cut was reported in Sur. No. 3564 Gem lode at a value of \$50.

Value of additional work, \$100. No. 2 An open cut, the mouth of which bears N. 27° 30' E., 505 ft. from Cor. No. 2 of the Jewel lode, 4 ft. wide, 10 ft. face, running N. 45° W., 12 ft. to face. Value, \$50. No. 1 The discovery cut of the Mineral Reef lode, the face of which being the discovery point, is on the center line 490 ft. from the north end center; 4 ft. wide, 10 ft. face, running south 12 ft. to face.

Value, \$50. An open cut, the mouth of which bears N. 10° 45' E., 605 ft. from Cor. No. 2 of the Mineral Reef lode, 4 ft. wide, 10 ft. face; running east 12 ft. to face. No. 2 Value, 450. An open cut, the mouth of which bears N. 23° 30° E., 521 ft. from Cor. No. 2 of the Mineral Reef lode, 4 ft. wide, 10 ft. face, running south 12 ft. to face. No. 3 Value, \$50. An open cut, the mouth of which bears N. 6° 47' W., 813 ft. from Cor. No. 1 of the Mineral Reef lode, 5 ft. wide, 15 ft. face, runs S. 55° W., 33 ft. to face; at face is a tunnel 4xo ft., running S. 55° W., 143 ft. to breast. At a point in this tunnel 126 ft. from portal is a raise 4x6 ft., 50 ft. high to surface. At same point in tunnel is a drift 4x6 ft., running south 22 ft. to breast. No. 4 south 22 ft. to breast. At a point in same tunnel 107 ft. from portal is a drift 4x6 ft., running south 131 ft. to breast.

At a point in this drift 33 ft. from tunnel, is a raise 4x6 ft., 60 ft. to the surface. At a point in same drift, 89 ft. from tunnel, is a crosscut 4x6 ft., running west 28 ft. to breast.

At a point in same drift, 96 ft. from tunnel, is a raise 6x8 ft., 12 ft. high, and

At same point old winze has been changed to shaft

ox6 ft. partly timbered. oxo ft. partly timbered, 90 ft. deep.

At 30 ft. below top of this shaft is a drift 4xo ft.

running north 10 ft. to breast.

At 40 ft. below top of same shaft, is a drift 4x6 ft. running east 50 ft. to breast. At same point in shaft, is a drift 4x6 ft., running west 50 ft. to breast.

(Note: Data for depth of shaft and the length of drifts is taken from the Company records as the shaft is filled with water.) This work is centrally located with respect to this group of 15 claims and any work done tends to develop the ore deposits of all of the claims, for that reason a 1/15 interest in this improvement has been allotted

to each claim of this survey. Total value of this improvement \$8215. of which \$4120. was reported in Sur. No. 3504. Value of additional work on open cut, tunnel, raises, drifts and shaft, \$4095. Value of 1/15 interest, 4273.

FINAL OATHS FOR SURVEYS

LIST OF NAMES

A list of the names of the individuals employed by Ralph L. Motz
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
State Metals Company known as the Mineral Hill, Deep Lode, Silver Saddle, Golden Spur, Vulcan, Jewel, Four Metals, Lucky Joe, Mineral Reef, Russet Dyke, Grand View, Rainbow Ledge, Cuprite, Veta Rica
and showing the respective capacities in which they acted.
Martin Anderson , Chainman.
Walter Anderson , Chainman.
, Axman.
, Flagman.
FINAL OATHS OF ASSISTANTS
We, Martin Anderson
and Walter anderson, do solemnly swear that we assisted Ralph L. Motz
, United States Mineral Surveyor, in marking the corners and surveying
the boundaries of the mining claim of the Copper State Metals Company, Known as the Mineral Hill, Deep Lode, Silver Saddle, Golden Spur, Vulcan, Jewel, Four Metals, Lucky Joe, Mineral Reef, Russet Dyke, Grand View, Rainbow Ledge, Cuprite, Veta Rica and Iron Duke lodes. known as the
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 Office Cadastral Engineer, at Phoenix, Arizona.
Martin anderson, Chainman.
Walter Anderson
, Axman.
, Flagman
Subscribed and sworn to by the above-named persons before me this 18th
day of, 19 35.
Margaret Swing. Notary Public, in and for the
Notary Public, in and for the

My commission expires
Heliniany 15, 1937

FINAL OATH OF U. S. MINERAL SURVEYOR.

I, 100 02	, U. S. Mineral Surveyor,	
do solemnly swear that, in pursuance	e of instructions received from the Office Cadastral Engineer,	
at Phoenix, Arizona	, dated December 3, 1935,	
I have, in strict conformity to the la	aws of the United States, the official regulations and instruc-	
tions thereunder, and the instruction	ns of said Office Cadastral Engineer, faithfully and correctly	
Mineral Hill, Deep Lode	Claim of Copper States Metals Co. known as Silver Saddle, Golden Spur, Vulcan Jewe Mineral Reef, Russet Dyke, Jewey & the ge, Cuprite, Veta Rica and Iron Duke lode	el,
	Bunker Hill Mining District,	
	County, Arizona , in Section	
13 & 14 , Township No. 8 &	S, Range No. 18 E, G & S R B & M	
and designated as Survey No	4179 , as represented	
	curately show the boundaries of said mining claim as distinctly	
marked by monuments on the groun	ad, and described in the attached copy of the location certifi-	
cate, which was received by me from	n 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 instr	uctions thereunder; and I do further solemnly swear that the	
foregoing are the true and original fi	eld notes of said survey and my report therein, and that the	
labor expended and improvements m	ade upon said mining claim by claimant orits	
grantors are as therein fully stated,	and that the character, extent, location, and itemized value	
thereof are specified therein with pa	articularity 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.		
	Raffle R. Mox. U. S. Mineral Surveyor.	
Subscribed and sworn to by the	said Ralph L. Motz	
	me D. M. Simpson, Notary Public	
	this loth	
day ofMay	, 19235 AM Simpson	
	Natany Dublie in ord for the	
	Netery Public, in and for the County of Cochise, State of Arizona.	

My Commission Expires August 9, 1937.

CERTIFICATE OF APPROVAL OF FIELD NOTES AND SURVEY OF MINING CLAIM

UNITED STATES DEPARTMENT OF THE INTERIOR GENERAL LAND OFFICE PUBLIC SURVEY OFFICE

At Phoenix, Arizona
June 21 , 1935
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 COPPER STATE METALS COMPANY
known as the Mineral Hill, Deep Lode, Silver Saddle, Golden Spur,
Vulcan, Jewel, Four Metals, Lucky Joe, Mineral Reef, Russet Dyke,
Grand View, Rainbow Ledge, Cuprite, Veta Rica and Iron Duke lodes,
situate in Bunker Hill mining district,
Pinal County, Arizona
in Sections 13 and 14 , Township No. 8 South , Range No. 18 East
, designated as Survey No. 4179
executed by
Surveyor, December 11, 1934 to January 18, 1935, under my instructions dated
December 3 , 1934, 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. Shernan C. Fiske, Acting Office Cadastral Engineer.

6-7181 U. S. GOVERNMENT PRINTING UPPICE: 1806

Four Mesals lode - Cor. No. 4 identical with Cor. No. 3 of the Cuprite lode of this survey, is an iron pipe with brass cap, firmly set and mkd. FM-4-4179

Deep lode - Cor. No. 3 identical with Cor. No. 2 of the Iron Duke lode of this survey, is an iron pipe, 1 1/4 ins. diam. with brass cap 2 ins. square, firmly set and marked D-3-4179

I, Ralph L. Motz, Mineral Surveyor, G.L.O., do hereby certify that the above supplemental report for Mineral Survey No. 4179 is true and correct.

Mineral Surveyor, G. L.O.

State of Arizona, O County of Cochise) ss.

Subscribed and sworn to by the said

Ralph L. Motz, Mineral Surveyor, G.L.O., Before me
W. H. Meischer, Notary Public, this 3rd day of March,
1938.

Notary Public, in and for the County of Cochise, State of Arizona.

MHMieschen

My commission expires Feb. 3,1941

UNITED STATES
DEPARTMENT OF THE INTERIOR
General Land Office
Public Survey Office

Phoenix, Arizona, March 4. 1938.

I, Sherman C. Fiske, Office Cadastral Engineer at Phoenix, Arizona, do hereby certify that the markings on Cor. No. 4 of the Four Metals lode, Sur. No. 4179, are FM-4-4179, and that the markings on Cor. No. 3 of the Deep lode, of the same survey, are D-3-4179, as appears from the supplemental report of Ralph L. Motz, Mineral Surveyor, G.L.O., dated March 3, 1938, a copy of which is hereto attached.

Sherman C. Fiske Office Cadastral Engineer.