

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MINERAL SURVEY NO. 4434

Arizona Land District.

FIELD NOTES

Of The Survey Of The Mining Claim Of

C. Zay Clopton and Dorothy Clopton

Known As The

El Paso, El Paso No. 1, El Paso No. 2 and El Paso No. 3 lodes.

Patagonia Mining District,

Santa Cruz County, Arizona

Section 15 & 22 approx., Township 23 South, Range 16 East, G. & S.R.M.(unsur.)

Surveyed under order dated July 26, 1957

by Robert Leonon
Mineral Surveyor.

	El Paso, July 8	1930
	El Paso No. 1, April 17	1940
Claim located	El Paso Nos. 2 & 3, January 1,	1943
Survey commenced	April 11	1958
Survey completed	April 15	1958
Address of claimant	3018 East Seneca, Tucson, Arizona	

DATES OF AMENDED LOCATIONS

El Paso No. 1 & El Paso No. 2--June 27, 1957

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 350

LECTURE 10

STATISTICAL MECHANICS

THE CANONICAL ENSEMBLE

Consider a system in contact with a heat reservoir at temperature T .

The system can exchange energy with the reservoir.

The probability of the system being in a state i with energy E_i is given by

$$P_i = \frac{e^{-\beta E_i}}{Z}$$

$$Z = \sum_i e^{-\beta E_i}$$

$$\beta = \frac{1}{k_B T}$$

$$Z = \int e^{-\beta E} \Omega(E) dE$$

$$\ln Z = -\beta F$$

$$F = -k_B T \ln Z$$

$$F = U - TS$$

$$S = -k_B \sum_i P_i \ln P_i$$

Mineral Survey No. 4434

Chains

This survey was made with a Bausch and Lomb Precise Transit No. 9259, with horizontal limb $5\frac{1}{2}$ ins. diam., having two single opposite verniers and full vertical circle $4\frac{1}{2}$ ins. diam., having two double opposite verniers, all verniers reading to one minute of arc. The eyepiece is equipped with a colored glass set in the dust shutter for making direct observations upon the sun. The instrument was in good condition at the time of the survey and all adjustments were in good order.

All azimuths in this record were determined by the method of double horizontal angles referred to the meridian determined by the following observations:

April 11, 1958, at cor. No. 4, El Paso No. 1 lode, in latitude $31^{\circ} 25' N.$, and longitude $110^{\circ} 42' W.$, I make a series of four altitude observations upon the sun for azimuth at approximately equal time intervals, two each with the telescope in direct and inverted positions, observing opposite limbs of the sun, and reading the horizontal angles from cor. No. 4, El Paso lode, 600 ft. southwesterly clockwise to the sun.

Mean time of observation 105th

meridian standard time 8h53m00s a.m. 8h57m00s a.m.

Declination of sun at mean time of observation $8^{\circ} 17\frac{1}{2}' N.$

Mean observed vertical angles

to sun's center $36^{\circ} 00'$ $36^{\circ} 42'$

Mean horizontal angles, Clockwise from reference point to sun's center $228^{\circ} 00' 33''$ $228^{\circ} 37'$

True bearing to reference point $S. 55^{\circ} 31' W.$

The lines were measured with a Lufkin steel tape 300 ft. in length, graduated every foot, with the end feet graduated to tenths; and Lufkin steel tape 100 ft. in length, graduated to feet, tenths and hundredths; both 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 except for the ties to U. S. Mineral Monument No. 3, which were calculated.

The magnetic declination observed at each corner of the survey gave a uniform value of $13^{\circ} 15' E.$

Survey No. 4434

Feet

EL PASO LODE

At cor. No. 1 of the El Paso lode, identical with cor. Nos. 2 and 4 of the El Paso No. 1 and El Paso No. 2 lodes, respectively, of this survey, and cor. Nos. 1, 2, 3 and 4, Survey No. 3603, El Paso, El Paso No. 1, El Paso No. 8 and El Paso No. 2 lodes, respectively.

Found a porphyry boulder, mkd. X1-EP-2-EP1-3-EP8^a4-EP2-3603, lying near a mound of stone. I rebuilt the stone mound, reset the boulder, to which I added 4434; from which

Chains Feet	
	U. S. Mineral Monument No. 3 bears N. 0° 32' 15" E., 2787.73 ft. dist. An oak tree, 10 ins diam., bears N, 80° 45' E., 50.1 ft. dist., mkd. X-BT-1-4434. Thence S. 55° 31' W
37.00	Fence, bears N. and S.
165.00	Fence, bears N. and S.
210.00	Corral fence, bears N. 60° W. and S. 60° E.
230.00	Corral fence, bears N. 20° E. and S. 20° W.
300.00	Lode line, discovery point bears S. 34° 29' E., 600 ft. dist. Set an iron pin, 1/2 in. diam., in an old stone mound, which I rebuilt.
400.00	Gulch, 3 ft. wide, course S. 35° E.
600.00	Cor. No. 2, identical with cor. No. 3 of the El Paso No. 2 lode of this survey, and cor. Nos. 1, 2, 3, and 4, Survey No. 3603, El Paso No. 4, El Paso, El Paso No. 2 and El Paso No. 7 lodes, respectively. Found a weathered porphyry boulder with all markings obscured. I set a porphyry boulder, 4x6x20 ins., 18 ins. in the ground, in its place, mkd. X-3-EP2-2-EP-4434; from which An oak tree, 12 ins. diam., bears S. 80° 50' E., 22.9 ft. dist., mkd. X-BT-2-4434. Thence S. 34° 29' E.
460.00	Gulch, 3 ft. wide, course E.
900.00	Fence, bears N. 85° W. and S. 85° E.
1100.00	Gulch, 1 ft. wide, course N. 85° E.
1500.00	Cor. No. 3, identical with cor. Nos. 3 and 4 of the El Paso and El Paso No. 4 lodes of Survey No. 3603. Found a loose granite boulder lying near a stone mound, mkd. X-3-EP-4-EP4-3603; I rebuilt the stone mound, reset the boulder and added 3-4434 to the markings; from which Cor. No. 3, Survey No. 701, Paymaster Millsite, bears S. 3° 09' E., 443.80 ft. dist. A juniper, 10 ins. diam., bears N. 0° 15' W., 62.1 ft. dist., mkd. 3-4434-X-BT. Thence N. 55° 31' E.
80.00	Fence, bears S. 10° E. and N. 10° W.
117.24	Cor. No. 4, Survey No. 2193, Cedar lode.

Mineral Survey No. 4434

3

Chains Feet	
	Found a loose stone with proper markings nearby and reset it using the data from Survey No. 3603; raised a stone mound alongside.
125.00	Road, 15 ft. wide, bears N. 10° W. and S. 10° E.
150.00	Fence, bears S. 10° E. and N. 10° W.
300.00	Lode line, discovery point bears N. 34° 29' W., 900 ft. dist. Set an iron pin, ½ in. diam., in an old stone mound, which I rebuilt.
600.00	Cor. No. 4, identical with cor. No. 3 of the El Paso No. 1 lode of this survey, and cor. Nos. 3 and 4, Survey No. 3603, El Paso No. 1, and El Paso lodes respectively, on line 7414, Survey No. 2193, Cedar lode. Found a quartzite boulder, 6x10x2 ins. above ground, mkd. X-4EP-3-EP1-3603, to which I added 3-4434, raise a stone mound alongside; from which An oak stump, 24 ins. diam., bears S. 65° 05' W., 19.6 ft. dist. An oak tree, 18 ins. diam., bears N. 50° 10' E., 28.41 ft. dist., mkd. 3-4434-X-BT. Thence N. 34° 29' W.
30.00	Gulch, 10 ft. wide, course S. 45° E.
350.00	Fence, bears N. 80° E. and S. 80° W.
730.00	Fence, bears N. 10° E. and S. 10° W.
750.00	Road, 15 ft. wide, bears N. 10° E. and S. 10° W.
1500.00	Cor. No. 1 and place of beginning.
	EL PASO NO. 1 LODE
	At cor. No. 1 of the El Paso No. 1 lode, identical with cor. No. 2 of the El Paso No. 3 lode of this survey and cor. Nos. 1, 2 and 4, Survey No. 3603, El Paso No. 1, El Paso No. 3 and El Paso No. 8 lodes, respectively. Found a porphyry boulder lying loose near an old mound of stone, mkd. 1-EP1-2-EP3-4-EP8. I reset the boulder, 8x10x2 ins., above ground, and added 1-4434, and rebuilt the stone mound alongside; from which A juniper, 6 ins. diam., bears S. 71° 30' E., 28.8 ft. dist., mkd. X-BT-1-4434. U. S. M. M. No. 3, bears N. 10° 50' W., 2492.33 ft. dist. Thence S. 55° 31' W.
130.00	County road from Patagonia to Lochiel, 30 ft. wide, bears S. 30° E. and N. 30° W.
300.00	Lode line, discovery point, bears S. 34° 29' E., 70 ft. dist.

Gibbins Feet	
	Set an iron pin, 1/2 in. diam., in an old stone mound, which I rebuilt.
	Cor. No. 2, identical with cor. Nos. 1 and 4 of the El Paso and El Paso No. 2 lodes, respectively, of this survey, and cor. Nos. 1, 2, 3 and 4, Survey No. 3603, El Paso, El Paso No. 1, El Paso No. 8 and El Paso No. 2 lodes, respectively.
	Thence S. 34° 29' E.
750.00	Road, 15 ft. wide, bears N. 10° E. and S. 10° W.
770.00	Fence, bears N. 10° E. and S. 10° W.
1150.00	Fence, bears N. 80° E. and S. 80° W.
1470.00	Gulch, 10 ft. wide, course S. 45° E.
1500.00	Cor. No. 3, identical with cor. No. 4 of the El Paso lode of this survey, and cor. Nos. 3 and 4, Survey No. 3603, El Paso No. 1 and El Paso lodes, respectively, on line 4-1, Survey No. 2193, Cedar lode.
	Thence N. 55° 31' E.
10.00	Gulch, 10 ft. wide, course S. 45° E.
30.00	Fence, bears S. 40° E. and N. 40° W.
300.00	Lode line, discovery point bears N. 34° 29' W., 1430 ft. dist.
	Set an iron pin, 3/4 ins. diam., in an old stone mound, which I rebuilt.
470.00	Fence, bears S. 50° E. and N. 50° W.
490.00	Gulch, 4 ft. wide, course S. 50° E.
550.00	County road from Patagonia to Lochiel, 30 ft. wide, bears E. and W.
600.00	Cor. No. 4, identical with cor. No. 3 of the El Paso No. 3 lode of this survey, and cor. Nos. 1 and 4, Survey No. 2193, Cedar and Ash lodes, respectively, and cor. Nos. 3 and 4, Survey No. 3603, El Paso No. 3 and El Paso No. 1 lodes, respectively.
	Found a quartzite boulder, 7x12x5 ins. above ground, mkd. X-4-EP1-3-EP3-3603 and 1-C-4-A-2193; to which I added 4434 and rebuilt the stone mound alongside; from which
	An oak tree, 30 ins. diam., bears N. 41° 42' W., 50.5 ft. dist., with a blaze that has grown over.
	Thence N. 34° 29' W.
1500.00	Cor. No. 1 and place of beginning.
	EL PASO NO. 2 LODE
	At cor. No. 1 of the El Paso No. 2 lode, identical with cor. No. 1, Survey No. 3603, El Paso No. 2 lode and falling on line 3-4, Survey No. 2190 Park lode, at a point from which cor. No. 4 bears N. 45° 24' 30" E., 605.43 ft. dist., and on line 2-3, Survey No. 3603, El Paso No. 8 lode.

Mineral Survey No. 4434

5

Chains	
	Found a sandstone boulder, 8x5x3 ins. above ground, firmly set and mkd. X-1-EP2-3603; to which I added 1-4434; from which U. S. M. M. No. 3 bears N. 21° 12½' E., 1993.16 ft. dist. A juniper, 6 ins. diam., bears S. 10° 45' W., 10 ft. dist., mkd. 1-4434-X-BT. Cor. No. 2, El Paso No. 8 lode, Survey No. 3603, a boulder firmly set and properly mkd., bears N. 36° 47' W., 106.70 ft. dist., on the southerly bank of a gulch running N. 55° E. Thence S. 55° 31' W.
250.00	Gulch, 3 ft. wide, course N. 10° W.
280.00	Same gulch, 3 ft. wide, course S. 70° E.
300.00	Lode line, discovery point bears S. 36° 47' E., 958.5 ft. dist.
	Set an iron pin, ½ in. diam., in an old stone mound, which I rebuilt.
370.00	Same gulch, 3 ft. wide, course N. 25° E.
576.00	Gulch, 3 ft. wide, course S. 40° E.
600.00	Cor. No. 2, identical with cor. No. 2, Survey No. 3603, El Paso No. 2 lode and falling on line 4-1, Survey No. 3603 El Paso No. 7 lode. Found a porphyry boulder, 6x10x10 ins. above ground, firmly set, mkd. X-2-EP2-3603; to which I added 2-4434 and rebuilt the stone mound alongside; from which The 10 ins. main trunk of a second-growth juniper clump bears S. 72° 35' W., 22.8 ft. dist., mkd. X-BT-2-4434. Cor. No. 3, Survey No. 2190, Park lode, bears S. 26° 13' W., 320.3 ft. dist., a stone, firmly set and properly mkd., stone mound alongside. Thence S. 36° 47' E.
50.00	Gulch, 2 ft. wide, course N. 25° E.
106.29	Intersect line 3-4, Survey No. 2190, Park lode, at a point from which cor. No. 3 bears S. 45° 24' 30" W., 288.05 ft. dist.
690.00	Gulch, 1 ft. wide, course N. 50° E.
1030.00	Gulch, 2 ft. wide, course N. 35° E.
1160.50	Cor. No. 3, identical with cor. No. 2 of the El Paso lode of this survey, and cor. Nos. 1, 2, 3 and 4, Survey No. 3603, El Paso No. 4, El Paso, El Paso No. 2 and El Paso No. 7 lodes, respectively. Thence N. 55° 31' E.
200.00	Gulch, 3 ft. wide, course S. 35° E.
300.00	Lode line, discovery point bears N. 36° 47' W., 202 ft. dist.
370.00	Corral fence, bears N. 20° E. and S. 20° W.
390.00	Corral fence, bears N. 60° W. and S. 60° E.
435.00	Fence, bears N. and S.
563	Fence, bears N. 90° E. and S. 9° W.

Mineral Survey No. 4434

6

Obstructions Feet	
600.00	Cor. No. 4, identical with cor. Nos. 1 and 2 of the El Paso and El Paso No. 1 lodes of this survey, and cor. Nos. 1, 2, 3 and 4, Survey No. 3603; El Paso, El Paso No. 1, El Paso No. 8 and El Paso No. 2 lodes, respectively. Thence N. 36° 47' W.
35.00	Fence, bears N. 9° E. and S. 9° W.
220.00	Fence, bears N. and S.
445.00	Gulch, 1 ft. wide, course N. 15° E.
1030.00	Gulch, 4 ft. wide, course N. 55° E.
1160.50	Cor. No. 1 and place of beginning.
EL PASO NO. 3 LODE	
	At cor. No. 1 of the El Paso No. 3 lode, identical with cor. No. 1, Survey No. 3603, El Paso No. 3 lode. Found a porphyry boulder, 10x5x4 ins. above ground, firmly set, mkd. X-1 EP3-3603, to which I add 1-4434 and rebuilt the stone mound alongside; from which, U. S. M. M. No. 3 bears N. 24° 33' W., 2317.74 ft. dist. An oak tree, 10 ins. diam., bears N. 50° E., 12.9 ft. dist., mkd. X-BT-1-4434. Thence S. 55° 31' W.
160.00	Gulch, 3 ft. wide, course N. 35° W.
300.00	Lode line, discovery point bears S. 34° 29' E., 300 ft. dist. Set an iron pin, ½ in. diam., in an old stone mound, which I rebuilt.
350.00	Gulch, 2 ft. wide, course N. 25° E.
600.00	Cor. No. 2, identical with cor. No. 1 of the El Paso No. 1 lode of this survey, and cor. Nos. 1, 2, and 4, Survey No. 3603, El Paso No. 1, El Paso No. 3 and El Paso No. 8 lodes, respectively. Thence S. 34° 29' E.
1500.00	Cor. No. 3, identical with cor. No. 4 of the El Paso No. 1 lode of this survey, and cor. Nos. 1 and 4, Survey No. 2193, Cedar and Ash lodes, respectively, and cor. Nos. 3 and 4, Survey No. 3603, El Paso No. 3 and El Paso No. 1 lodes, respectively. Thence N. 55° 31' E.
300.00	Lode line, discovery point bears N. 34° 29' W., 1200 ft. dist. Set an iron pin, ½ in. diam., in an old stone mound, which I rebuilt.

Mineral Survey No. 4434

<p>550.00 600.00 1190.00 1500.00</p>	<p>Chains Feet</p> <p>Gulch, 2 ft. wide, course S. 40° E.</p> <p>Cor. No. 4, identical with cor. No. 4, Survey No. 3603, El Paso No. 3 lode.</p> <p>Found a granite boulder, 10x12x5 ins. above ground, mkd. X-4-EP3-3603, to which I added 4-4434 and rebuilt the stone mound alongside; from which</p> <p>An oak tree, 12 ins. diam., with an old blaze bears S. 6° 15' W., 11.0 ft. dist.; there were no legible markings; I reblazed the tree and mkd. X-BT-4-4434.</p> <p>Thence N. 34° 29' W.</p> <p>Gulch, 2 ft. wide, course N. 35° E.</p> <p>Cor. No. 1 and place of beginning.</p>
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AREAS

	Acres
Total area, El Paso lode	20.661
Area in conflict with: Survey No. 3603, El Paso lode	20.661
Total area, El Paso No. 1 lode	20.661
Area in conflict with: Survey No. 3603, El Paso No. 1 lode	20.661
Total area, El Paso No. 2 lode	15.972
Area in conflict with: Survey No. 2190, Park lode	0.731
Survey No. 3603, El Paso No. 2 lode	15.972
Survey No. 3603, El Paso No. 2 lode, exclusive of it's conflict with Survey No. 2190, Park lode	15.241
Total area, El Paso No. 3 lode	20.661
Area in conflict with: Survey No. 3603, El Paso No. 3 lode	20.661

LOCATION

This survey is located in the Coronado National Forest in approximately Sections 15 and 22, T. 23 S., R. 16 E., G. & S. R. M., Santa Cruz County, Arizona.

This entire survey conforms to the claims of the same name, part of Survey No. 3603, and to the respective locations as marked on the ground.

EXPENDITURES

The improvements and 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 are as follows:

No. 1 The discovery point of El Paso lode, being on the lode line, 600 ft. from a point on line 1-2, 300 ft. from cor. No. 1.
No value.

8
9

Mineral Survey No. 4434

8

Foot	
No. 2	A trench, 6 ft. wide, 5 ft. deep, 30 ft. long, the center of which bears S. 57° E., 475 ft. from cor. No. 2, El Paso lode, bears N. 55° E., and S. 55° W. Value, \$135.
No. 3	A trench, 4 ft. wide, 5 ft. deep, 65 ft. long, the center of which bears S. 63° E., 485 ft. from cor. No. 2, El Paso lode, bears N. 35° W. and S. 35° E. Value, \$135.
No. 4	A cut, 5 ft. wide, the face of which bears N. 9° W., 480 ft. from cor. No. 3, runs N. 75° W.; 12 ft. to 6 ft. face. Value, \$85.
No. 5	A cut, 5 ft. wide, the face of which bears N. 10° W., 540 ft. from cor. No. 3, runs S. 80° W.; 12 ft. to 10 ft. face. Value, \$120.
No. 6	A shaft, 8x10 ft. in size, 8 ft. deep, the center of which bears N. 45° E., 205 ft. from cor. No. 3. Value, \$300.
No. 7	A shaft, 5x6 ft. in size, 4 ft. deep, the center of which bears N. 35° W., 150 ft. from cor. No. 4. Value, \$60.
No. 1	The discovery shaft of El Paso No. 1 lode, the center of which being the discovery point is on the lode line, 70 ft. from a point on line 1-2, 300 ft. from cor. No. 1, 6x10 ft. in size, 8 ft. deep. Value, \$180.
No. 2	A shaft, 6x6 ft. in size, 8 ft. deep, the center of which bears N. 33° 30' W., 55 ft. from cor. No. 3. Value, \$145.
No. 3	A shaft, 6x8 ft. in size, 10 ft. deep, the center of which bears N. 27° W., 145 ft. dist. from cor. No. 3. Value, \$240.
No. 1	The discovery shaft of El Paso No. 2 lode, the center of which being the discovery point is on the lode line, 202 ft. from a point on line 3-4, 300 ft. from cor. No. 4, 6x10 ft. in size, 8 ft. deep. Value, \$240.
No. 2	A shaft, 4x8 ft. in size, 8 ft. deep, the center of which bears N. 22° W., 540 ft. from cor. No. 3, El Paso No. 2 lode. Value, \$130.
No. 3	A shaft, 4x10 ft. in size, 5 ft. deep, the center of which bears S. 34° 45' E., 230 ft. from cor. No. 1, El Paso No. 2 lode. Value, \$130.
No. 1	The discovery point of El Paso No. 3 lode, being on the lode line, 300 ft. from a point on line 1-2, 300 ft. from cor. No. 1. No value.
No. 2	A shaft, 4x6 ft. in size, 8 ft. deep, the center of which bears S. 50° E., 680 ft. from cor. No. 2, El Paso No. 3 lode. Value, \$90.

~~CORNER~~
Feet

~~Feet~~
Feet

- No. 3 A shaft, 20x20 ft. in size, 6 ft. deep, the center of which bears N. 20° E., 235 ft. from cor. No. 3, El Paso No. 3 lode.
Value, \$250.
- No. 4 A cut, the face of which bears N. 40° W., 175 ft. from cor. No. 4, El Paso No. 3 lode, 4 ft. wide, runs N. 50° W., 10 ft. to 3 ft. face.
Value, \$30.
- No. 5 A shaft, 4x6 ft. in size, 3 ft. deep, bears S. 75° E., 160 ft. from cor. No. 2, El Paso No. 3 lode.
Value, \$30.
- No. 6 A shaft, 4x6 ft. in size, 3 ft. deep, bears S. 63° E., 350 ft. from cor. No. 2, El Paso No. 3 lode.
Value, \$30.
- No. 7 A shaft, 3x4 ft. in size, 5 ft. deep, bears S. 79° E., 145 ft. from cor. No. 2, El Paso No. 3 lode.
Value, \$25.
- No. 8 A shaft, 10x10 ft. in size, 5 ft. deep, which bears S. 50° E., 530 ft. from cor. No. 2, El Paso No. 3 lode.
Value, \$75.
- No. 9 A shaft, 4x6 ft. in size, 5 ft. deep, the center of which bears S. 81° E., 170 ft. from cor. No. 2, El Paso No. 3 lode.
Value, \$50.

OTHER IMPROVEMENTS

A shaft, 6x12 ft. in size, 50 ft. deep, the center of which bears N. 78° W., 195 ft. from cor. No. 4, El Paso No. 2 lode.
Claimant unknown.

The El Paso shaft, 6x10 ft. in size, unknown depth, the center of which bears S. 19° W., 250 ft. from cor. No. 1, El Paso lode.
Claimant unknown.

A house, 15x30 ft. in size, which bears N. 52° W., 685 ft. from cor. No. 4, El Paso lode.
Claimant unknown.

A barn, bears N. 67° W., 325 ft. from cor. No. 4, El Paso lode.
Claimant unknown.

A bunkhouse, bears N. 48° W., 415 ft. from cor. No. 4, El Paso lode.
Claimant unknown.

A well, bears N. 48° W., 325 ft. from cor. No. 4, El Paso lode.
Claimant unknown.

A house, bears N. 29° W., 240 ft. from cor. No. 4, El Paso lode.
Claimant unknown.

A shaft, 10x10 ft. in size, 4 ft. deep, bears S. 53° E., 540 Ft. from cor. No. 2, El Paso No. 3 lode.
Claimant unknown.

OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA

Survey No. 701, Paymaster Millsite: All corners were seen, all are old stone mounds; the tie was made to a stake set flush with the ground; for cor. No. 3.

Chainman
Feet

Survey No. 122, First Western Extension of the Enterprise Mine. Millsite claim: Remnants of the old buildings were seen and the topography of the ground fits the patent plat, but none of the corners nor bearing objects were seen.

Survey No. 2190, Park lode: Cor. No. 3 is a boulder, firmly set and properly marked as described in the official record. Cor. No. 4 is a boulder firmly set, most of the markings are illegible; stone mound alongside. Line 3-4 was found to be N. 45° 24½' E., 1498.61 ft. instead of N. 45° 49' E., 1500 ft. as approved.

Survey No. 2193, Cedar lode: Cor. No. 1, identical with cor. No. 4, Ash lode, same survey, and cor. Nos. 3 and 4, El Raso No. 3 and El Paso No. 1 lodes, both of this survey. Cor. No. 4 was reset from data on the plat of Survey No. 3603, using the Boulder found lying loose nearby. Line 4-1 was set to bear N. 55° 31' E., 1082.76 ft. instead of N. 55° 53' E., 1086 ft. as approved.

U. S. M. M. No. 3 is a well built monument, 5 ft. high, with a wooden post, 10 ins. diam., 10 ft. high, set in the center.

Survey No. 3603, El Paso No. 8 lode, unpatented, cors. Nos. 1 and 2 were both as described in the transcribed notes. Line 1-2 was found to be approximately as recorded. El Paso and El Paso Nos. 1, 2 and 3 lodes are identical with the El Paso and El Paso Nos. 1, 2 and 3 of this survey. Corner monuments are described in the foregoing field notes. The lengths of all lines were found as returned. The bearings of all lines differ to the extent returned in the foregoing field notes.

MEMO

El Paso No. 2 lode was shortened from 1500 ft. as the location certificate states to 1160.5, to conform with the corners set for Survey No. 3603, and to lessen the conflict with Survey No. 2190, Park lode.

FIELD ASSISTANTS

- Marlin E. Widger
- Joe D. Alvarez
- Michael Pine
- J. W. Stephens

- Instrument
- Chainman
- Chainman
- Axeman

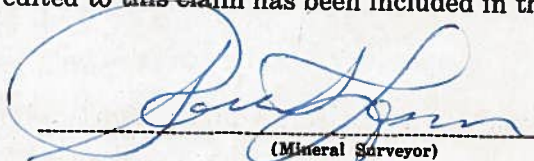
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

April 21, 1958

I, Robert Lenon,
 Mineral Surveyor, hereby certify upon honor that in pursuance of an order received from the
Office Cadastral Engineer, at Phoenix, Arizona
 dated July 26, 1957, I have faithfully and correctly executed the survey of
 the mining claim of G. Zay and Dorothy Clopton,
 known as the El Paso, El Paso No. 1, El Paso No. 2 and El Paso No. 3 lodes,
(Lode, placer, or mill site)
 situate in Patagonia Mining District, Santa Cruz County, Sec's 15 & 22, approximate
T. 23 S., R. 16 E., G & S R (unsurveyed) Meridian, ARIZONA, and
(State)
 designated as Survey No. 4434, which is represented in the foregoing field notes as having been
 executed by me and under my direction, and that said survey has been made in strict conformity with said order,
 the Manual of Instructions for the Survey of the Public Lands of the United States, and in the specific manner
 described in the foregoing field notes, and I do further certify that the labor expended and improvements made
 upon or for the benefit of the lode location(s) embraced in the said mining claim by
(Lode or placer)
 claimant(s) or its grantors are fully stated in my report therein, and that the character,
 extent, location, and itemized value thereof are specified therein with particularity and full detail, and that no
 portion of, or interest in, said labor and improvements so credited to this claim has been included in the estimate
 of expenditures upon any other claim.

Patagonia, Arizona
(Place)


 (Mineral Surveyor)

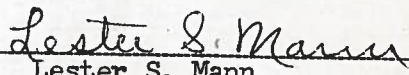
CERTIFICATE OF APPROVAL

Bureau of Land Management Survey Office
(Office)

Phoenix, Arizona May 11, 1959
(Place) (Date)

The foregoing field notes of mineral survey No. 4434, in Approximately Secs. 15 & 22
Arizona, T. 23 S., R. 16 E (Unsur.) Gila & Salt River Meridian,
(State), executed by Robert Lenon, Mineral Surveyor,

under order dated July 26, 1957, having been critically examined and the necessary
 corrections made prior to their certification by the surveyor, the field notes and the survey therein described
 are hereby approved.


 Lester S. Mann

Office Cadastral Engineer
(Title)

CERTIFICATE OF TRANSCRIPT

I CERTIFY that the foregoing transcript of field notes of the above described mineral survey No. _____
 is a true copy of the original field notes.

(Title)

