

AUG. 14. 1917 ¹

4-683

Platted

MINERAL SURVEY No. 3413

LOT No.

Arizona Land District.

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

Phelps Dodge Corporation

KNOWN AS THE

Wedge, Raven, Tough Nut, Ute, La Esperanza, Owl lodes

Copper Mountain Mining District,

Greenlee County, Arizona

Sections 16 and 17 Uns., Township 4 South, Range 29 E., G. & S. R. B. & M,

Surveyed under instructions dated July 16, 1917.

by E.T. Morton
U. S. Mineral Surveyor.

Claim located see location notices, 19

Survey commenced July 22, 1917.

Survey completed August 1, 1917.

Address of claimant S.H. Morris, Atty., Box 879, Globe, Arizona.

DATES OF AMENDED LOCATIONS.

1.

Feet	
	SURVEY NO. 3413
	Wedge lode
	Beginning at Corner No. 1.
	A redwood post, in place, 4x6 ins., 3.5 ft. high, with a mound of stone scribed W 1-3413, whence U.S.L.M. No. 1654 bears S. 57°19' E. 1654.1 ft.
	Thence S. 18°23' W.
250.	Intersect gulch course northeast.
617.4	Intersect line 3-4 Ute lode of this survey at N. 76°55' E. 122.7 ft. from Cor. No. 3.
696.2	Intersect line 1-2 Sur. No. 1030 A. Cobre lode at S. 71°42' E. 98.9 ft. from Cor. No. 2.
954.5	To Cor. No. 2.
	Identical with Cor. No. 2 Ute lode of this survey.
	On line 3-4 La Esperanza lode of this survey. A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed U2-W2-3413.
	No bearings available.
	Thence S. 76°55' W.
348.35	South end center of the location and lode.
696.7	To Cor. No. 3.
	On line 3-4 and 1-2 La Esperanza and Tough Nut lodes of this survey respectively.
	A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed W. 3-3413.
	No bearings available.
	Thence N. 18°23' E.
471.6	Intersect gulch course Northeast.
621.6	Cors. Nos. 1 and 13 Tough Nut lode of this Survey and Sur. No. 1033 A. Lancaster lode respectively.
954.5	To Cor. No. 4.
	Identical with Cor. No. 2 Raven lode of this survey, and, on lines 13-16 Sur. No. 1033 A. Lancaster lode at N. 18°23' E. 332.9 ft. from Cor. No. 13.
	A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed R2-W4-3413.

617.4
327.1
954.5

Feet	No bearings available. Thence N.76°55'E.
348.35	North end center of the location and lode.
349.4	Cor. No.1 Raven lode of this survey, also intersect line 2-3 Sur.No.1033A.Cobre lode at N.2°35'W.551.5 ft from Cor.No.2.
696.7	To Cor.No. 1, The place of beginning. Raven lode. Beginning at Cor.No.1. On line 2-3 Sur.No.1033 A.Cobre lode at S.2°35'E.949.7 ft.from Cor.No.3. On line 4-1 Wedge lode of this survey. A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed R1-3413 whence U.S.L.M.No. 1654 bears S. 64°47' E. 1912.3 ft. Thence S.76°55'W.
174.7	South end center of the location and lode.
349.4	To Cor. No. 2. Identical with Cor. No. 4 Wedge lode of this survey heretofore described. On line 13-16 Sur. No. 1033 A. Lancaster lode at N. 18° 23' E. 332.9 ft. from Cor. No. 13. Thence N.2°35'W.
832.8	To Cor. No. 3. A redwood post 4x6 ins., 5 ft. long set 24 ins.in the ground with a mound of stone, scribed R3-3413, whence Cor. of the location bears N. 2°35' W. 116.9 ft. Thence N. 76°55'E.
174.7	North end center of the location and lode.
349.4	To Cor. No. 4. On line 13-16 and 2-3 Sur.No.1033 A. Lancaster and Cobre lodes at N. 18°23' E. 1292.9 ft. and S. 2°35' W. 116.9 ft. from Cors. Nos. 13 and 3 respectively. A redwood post, 4x6 ins., 5 ft, long set 24 ins. in the ground with a mound of stone scribed R4-3413, whence Cor. of the location bears N. 2°35' W. 116.9 ft. Thence S. 2°35' E.
832.8	To Cor. No. 1, the place of beginning.

Feet	Tough Nut lode
	Beginning at Cor. No. 1. Identical with Cor. No. 13 Sur. No. 1033 A. Lancaster lode and also on line ³⁻⁴ Wedge lode of this survey. A redwood post, in place, 4 ins. square 3.5 ft. high with a mound of stone scribed TN 1-3413 whence U.S.L.M. No. 1654 bears S. 79°05' E. 2215.6 ft. Thence S. 18°23' W.
150.	Intersect gulch course Northeast.
621.6	Cor.No.3 Wedge lode of this survey, also intersect line 3-4 La Esperanza lode of this survey at N. 76° 55' E. 154.2 ft. from Cor. No. 3.
951.9	Intersect line 2-3 and 4-1 La Esperanza and Owl lodes of this survey at S. 9°23' E. 282.32 ft. and S. 31°30' E. 57.96 ft. from Cors. Nos. 3 and 4 respectively.
1313.8	Intersect line 4-1 Sur. No. 2977 Eureka lode and line 1-2 Owl lode of this survey at S. 76°55' W. ^{531.30} 529.1 ft. and 291.63 ft. from Cors. Nos. 1 and 1 respectively.
1320.6	Intersect line 2-3 and 5-1 Sur. No. 2977 Eureka lode and Sur. No. 1654 A. Petaluma No. 2 lode at S. 77°08' W. 529.75 ft. and N. 77°08' E. 178.65 ft. from Cors. Nos. 2 and 5 respectively.
1470.	Intersect gulch course south.
1484.2	To Cor. No. 2. A redwood post, in place, 4x6 ins., 3.5 ft. high, with a mound of stone scribed TN 2-3413. No bearings available. Thence N. 71°40' W.
155.11	Intersect line 4-5 and 1-2 Sur. No. 1654 A. Petaluma No. 2 and Petaluma No. 3 lodes at S. 20°17' W. 71.09 ft. from Cors. Nos. 1 and 5 respectively.
270.	Intersect line 2-3 and 4-1 Sur. No. 2977 Eureka lode and Sur. No. 1654 A. Petaluma No. 3 lode at S. 77°08' W. 845.55 ft. and 137.15 ft. from Cprs. Nos. 2 and 1 respectively.

Feet	
278.8	Intersect line 4-1 Sur. No. 2977 Eureka lode at S. $76^{\circ}55'$ W. 858.2 ft. from Cor. No. 1, also intersect line 1-2 Owl lode of this survey, 618.53 ft. from Cor. No. 1.
300	South end center of the location and lode.
600	To Cor. No. 3. A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed TN 3-3413. No bearings available. Thence N. $18^{\circ}23'$ E.
230.4	Intersect line 3-4 Owl lode of this survey at N. $76^{\circ}55'$ E. 485.4 ft. from Cor. No. 3.
1384.2	Cor. No. 21 Sur. No. 1033 A. Arthur lode.
1484.2	To Cor. No. 4. Identical with Cor. No. 14 Sur. No. 1033 A. Lancaster lode, also on line 21-24 Sur. No. 1033A Arthur lode. A redwood post, in place, 4x6 ins. 3.5 ft. high with a mound of stone scribed TN 4-3413. No bearings available. Thence S. $71^{\circ}40'$ E.
300	North end center of the location and lode.
600	To Cor. 1, the place of beginning. Ute lode.
	Beginning at Cor. No. 1. Identical with Cor. No. 4 La Esperanza lode of this survey, also on line 3-4 Lot No. 42 Clay lode at N. $9^{\circ}23'$ W. 831.94 ft. from Cor. No. 3. A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed LE 4-U1-3413, whence U?S.L.M. No. 1654 bears S. $82^{\circ}50'$ E. 1071.5 ft. Thence S. $76^{\circ}55'$ W.
34.18	Intersect line 4-1 Sur. No. 1033 A. Cobre lode at N. $2^{\circ}41'$ W. 64.84 ft. from Cor. No. 1.
150.43	Intersect line 1-2 Sur. No. 1033 A. Cobre lode at N. $71^{\circ}42'$ W. 122.46 ft. from Cor. No. 1.

Feet	
646.5	<p>To Cor. No. 2. On line 3-4 La Esperanza lode of this survey, also identical with Cor. No. 2. Wedge lode of this survey heretofore described.</p>
	<p>Thence N. 2°35' W.</p>
146.21	<p>West end center of the location and lode.</p>
276.5	<p>Cor. No. 2 Sur. No. 1033 A Cobre lode. Cor. No. 1 said lode bears S. 71° 42' E. 644.6 ft.</p>
292.43	<p>To Cor. No. 3.</p>
	<p>On line 2-3 Sur. No. 1033 A. Cobre lode at N. 2° 35'</p>
	<p>W. 15.93 ft. from Cor. No. 2.</p>
	<p>A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed U3-3413.</p>
	<p>No bearings available.</p>
	<p>Thence N. 76°55' E.</p>
122.7	<p>Intersect line 1-2 Wedge lode of this survey at N. 18° 23' E. 337.1 ft. from Cor. No. 2.</p>
611.8	<p>Intersect line 4-1 Sur. No. 1033 A. Cobre lode at N. 2° 41' W. 357.16 ft. from Cor. No. 1, and line 3-4 Lot. 42 Clay lode at N. 9° 23' W. 1120.06 ft. from Cor. No. 3.</p>
646.5	<p>To Cor. No. 4.</p>
	<p>A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed U 4-3413.</p>
	<p>No bearings available.</p>
	<p>Thence S. 2°35' E.</p>
146.21	<p>East end center of the location and lode.</p>
292.43	<p>To Cor. No. 1, the place of beginning.</p>
	<p>La Esperanza lode.</p>
	<p>Beginning at Cor. No. 1.</p>
	<p>Identical with Cor. No. 1 Sur. No. 2978 Redondo lode.</p>
	<p>A pine post, in place 4 ins. square 3 ft. high with a mound of stone scribed L E 1-3413, whence U.S.L.M. No.</p>
	<p>1654 bears N. 65° 04' E. 1066.4 ft.</p>
	<p>Thence S. 76°55' W.</p>

Feet	
667.8	Intersect line 1-2 Sur. No. 1654 A. Am. Petaluma lode at S. $75^{\circ}36'$ E. 394.2 ft. from Cor. No. 1, also Cor. No. 4 Sur. No. 2978 Redondo lode.
1135.	Cor. No. 1 Sur. No. 2977 Eureka lode, also intersect line 1-5 Sur. No. 1654 A. Am. Petaluma lode at S. $19^{\circ}46'$ W. 216.55 ft. from Cor. No. 1.
1374.67	Cor. No. 1 Owl lode of this survey.
1497.4	To Cor. No. 2. On line 4-1 Sur. No. 2977 Eureka lode at S. $76^{\circ}55'$ W. 362.4 ^{ft} from Cor. No. 1, also on line 1-2 Owl lode of this survey. A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed L E 2-3413. No bearings available. Thence N. $9^{\circ}23'$ W.
295.8	West end center of the location and lode.
309.28	Intersect lines 4-1 and 1-2 Owl and Tough Nut lodes of this survey at N. $31^{\circ}30'$ W. 325.3 ft. and S. $18^{\circ}23'$ W. 951.9 ft. from Cors. Nos. 1 and 1 respectively.
591.6	To Cor. No. 3. A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stone scribed L E 3-3413. No bearings available. Thence N. $76^{\circ}55'$ E.
154.2	Cor. No. 3 Wedge lode of this survey, also intersect line 1-2 Tough Nut lode of this survey at S. $18^{\circ}23'$ W. 621.6 ft. from Cor. No. 1.
850.9	Cors. Nos. 2 and 2 Wedge and Ute lodes of this survey.
1346.97	Intersect line 1-2 Sur. No. 1033 A. Cobre lode at N. $71^{\circ}42'$ W. 122.46 ft. from Cor. No. 1.
1463.22	Intersect line 4-1 Sur. No. 1033 A. Cobre lode at N. $2^{\circ}41'$ W. 64.84 ft. from Cor. No. 1.
1497.4	To Cor. No. 4 Identical with Cor. No. 1 Ute lode of this survey heretofore described. Thence S. $9^{\circ}23'$ E.

Feet	
295.8	East end center of the location and lode.
591.6	To Cor. No. 1, the place of beginning.
	Owl lode.
	Beginning at Cor. No. 1.
	On line 4-1 Sur. No. 2977 Eureka lode at S. 76°55' W. also line 1-2 La Esperanza lode of this survey.
	239.67 ft. from Cor. No. 1.
	A redwood post, 4x6 ins. 5 ft. long set 24 ins. in the ground with a mound of stone scribed 01-3413 whence U.S. L.M. No. 1654 bears N. 71°44' E. 2429.9 ft. Cor. of the location bears N. 78°51' E. 234.6 ft.
	Thence S. 76°55' W.
122.73	Cor. No. 2 La Esperanza lode of this survey.
291.63	Intersect line 1-2 Tough Nut lode of this survey at N. 18°23' E. 170.4 ft. from Cor. No. 2.
360.	Intersect gulch course south.
618.53	Intersect line 2-3 Tough Nut lode of this survey at S. 71°40' E. 321.2 ft. from Cor. No. 3.
1136.53	To Cor. No. 2.
	On line 4-1 Sur. No. 2977 Eureka lode at N. 76°55' E.
	38.73' ft. from Cor. No. 4 and line 2-3 Sur. No. 3376
	Armada lode at N. 31°30' W. 216.74 ft. from Cor. No. 3.
	A redwood post, in place, 4x6 ins., 3.5 ft. high with a mound of stones scribed 0 2-3413.
	No bearings available.
	Thence N. 31°30' W.
191.63	West end center of the location and lode.
383.26	To Cor. No. 3.
	Identical with Cor. Nos. 2 & 3 Sur. No. 3376, Armada & Prescott lodes.
	A redwood post, in place, 4x6 ins. 3.5 ft. high, with a mound of stone scribed 0 3-3413.
	No bearings available.
	Thence N. 76°55' E.
485.4	Intersect line 3-4 Tough Nut lode of this survey at N. 18°23' E. 230.4 ft. from Cor. No. 3.
1136.53	To Cor. No. 4.

Feet

A redwood post, 4x6 ins., 5 ft. long set 24 ins. in the ground with a mound of stone scribed 04-3413, whence Cor. of the location bears N. 76° 55' E. 234 ft.

Thence S. 31° 30' E.

57.96 Intersect lines 1-2 and 2-3, Tough Nut and La Esperanza lodes of this survey at N. 18° 23' E. 532.3 ft. and N. 9° 23' W. 309.28 ft. from Cors. Nos. 2 and 2 respectively.

191.63 East end center of the location and lode.

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

Variation at all corners 13° 40' E.

The survey of each claim in this group is identical with or within the respective location. The corner point in each instance is indicated by a tack or small nail.

LODE LINES.

As near as can be determined from present developments the veins of the several locations embraced in this claim extend as follows from their respective discovery points:

Wedge lode, 274.5 ft. S. 18° 23' W. and 680 ft. N. 18° 23' E.

Raven lode, 41.8 ft. S. 2° 35' E. and 791 ft. N. 2° 35' W.

Tough Nut lode, 127 ft. N. 18° 23' E. and 1357.2 ft. S. 18° 23' W.

Ute lode, 68 ft. S. 76° 55' W. and 578.5 ft. N. 76° 55' E.

La Esperanza Lode, 413 ft. S. 76° 55' W. and 1456.1 ft. N. 76° 55' E.

Owl lode, 86.53 ft. N. 76° 55' E. and 1050 ft. S. 76° 55' W.

AREAS

Total area Wedge lode

Acres
13.021

Area in conflict with

Sur. No. 1033 A. Cobre lode 2.952

Ute lode of this survey 0.405

Sur. No. 1033 A. Cobre lode

(exclusive of its common conflict with Ute lode of this survey) 2.840

Total area Raven lode

6.568

	Acres
Area in conflict with	
Sur.No.1033 A. Lancaster lode	3.284 ✓
Total area Tough Nut lode	20.443 ✓
Area in conflict with	
Sur.No.1654 A. Petaluma No. 3 lode	0.094 ✓
Sur. No.1654 A. Petaluma No.2 lode	0.413 ✓
Sur. No. 2977 Eureka lode	0.038 *
Owl lodes of this survey	5.118 ✓
La Esperanza lode of this survey	0.499 ✓
Total area Ute lode	4.267 ✓
Area in conflict with	
Lot No. 42 Clay lode	0.115 ✓
Sur. No. 1033 A. Cobre lode	2.492 ✓
Total area La Esperanza lode	20.294 ✓
Area in conflict with	
Sur.No.1033 A. Cobre lode	0.085 ✓
Sur.No.1654 A.Am.Petaluma lode	0.976 ✓
Owl lode of this survey	0.435 ✓
Total area Owl lode	9.488 ✓

LOCATION

This survey is located in the Copper Mountain Mining District, Greenlee County, Arizona, approximately in Sections 9, 16 & 17 unsurveyed, Township 4, S.R.29E. G.&S.R.B.&M.

EXPENDITURE OF FIVE HUNDRED DOLLARS.

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

WEDGE LODE

shaft,

- No.1. The discovery, showing mineral in place is on the lode line 274.5 ft. from line 2-3, 6x6 ft. 50 ft. deep. Value \$500.00
- No.2. A tunnel with an open cut approach, the mouth of which bears from the North end center S. 22° 38' W.

501 ft. 5x10 ft. open cut and 4x6 ft. tunnel, running S. 7°E. 20 ft and 11 ft. respectively.

Value \$150.00

Note: The last 325 ft. of the No. 3 drift of the No. 2 working on the La Esperanza lode is on this lode.

Value 325 ft. \$6,300.00

RAVEN LODE

No. 1. The discovery shaft is on the lode line 41.8 ft. from line 1-2, 4x6 ft. 10 ft. deep.

Value \$ 100.00

Note: The last 125 ft. of the No. 2 drift of the No. 2 working on the La Esperanza lode is on this lode.

Value 125 ft. \$2,500.00

TOUGH NUT LODE.

No. 1. The discovery showing mineral in place is on the lode line 127 ft. from line 4-1.

No. 2. A tunnel with an open cut approach the mouth of which bears from the south end center N. 20°25' E. 378 ft., 5x10 ft., open cut and 5x6 ft. tunnel, running N. 2° W. 15 ft. and 66 ft. respectively.

Value \$ 700.00

Note: The last 290 ft. of the No. 1 drift of the No. 2 working on the La Esperanza lode is on this lode.

Value 290 ft. \$5,800.00

UTE LODE

No. 1. The discovery shaft is on the lode line 68 ft. from line 2-3, 4x6 ft., 10 ft. deep.

Value \$100.00

Note: 200 ft. of the No. 2 drift of the No. 2 working on the La Esperanza lode is on this lode.

Value 200 ft. \$4000.00

LA ESPERANZA LODE.

No. 1. The discovery showing mineral in place is on the lode line 41.3 ft. from line 2-3.

No. 2. A shaft the center of which bears from point on line 1-2, 632.2 ft. from Cor. No. 1, N.30°42'E. 306.6 ft.

6x10 ft. 569 ft. deep, from the bottom drift, known as No. 1 drift 6x6½ ft. running S. 30°20' E. 27 ft. thence S. 63°49' W. 20 ft., thence S. 79°55' W. 390 ft. thence S. 81°26' W. 990 ft. At a point in No. 1 drift 102 ft. from the shaft, a drift known as No. 2 drift, 6x6½ ft. running N. 9°23' W. 1840 ft. At a point in No. 1 drift 704 ft. from the shaft a drift known as No. 3 drift 6x6½ ft. running N. 8°34' W. 690.

Total value \$101900.00. 325 ft. value \$6500; 125 ft. value \$2500; 290 ft. value \$5800; 200 ft. value \$4000; and 25 ft. value \$500; are situated respectively on the Wedge, Raven, Tough Nut and Owl lodes of this survey. Value of 2451 ft. on this lode and thereto accredited.

\$60400.00

OWL LODE.

No. 1. The discovery showing mineral in place is on the lode 86.53 ft. from line 4-1.

No. 2. A tunnel with an open cut approach the mouth of which is on line 1-2, 203.3 ft. from Cor. No. 1, tunnel, 5x10 ft. open cut and 4x6 ft. running N. 23°30' E. 24 ft. and 13 ft. respectively.

Value \$250.00

Note: 25 ft. of the No. 1 drift of the No. 2 working on the La Esperanza lode, is on this lode.

Value 25 ft. \$500.00

ADJOINING LODES.

The lodes on the North are Sur. No. 1033 A. Lancaster and Cobre lodes, claimant herein; on the East Lot No. 42 Clay lode, The Arizona Copper Company claimant; on the south Sur. No. 2978 Redondo, Sur. No. 1654 A. Am. Petaluma, Sur. No. 2977 Eureka, Sur. No. 1654 A. Petaluma No. 2, and Petaluma No. 3 lodes, The Arizona Copper Company, claimant; on the west Sur. No. 3376 Armada lode, Organ, Unsurveyed, and Sur. No. 1033 A. Arthur lodes, claimant herein.

INSTRUMENT.

This survey was made with a Buff and Berger light mountain transit. The courses were deflected from the true meridian as determined by polaris observations.

The distances were measured with 5,50 and 500 ft. steel tapes.

Sur. No. 1033

R E P O R T

U.S.L.M.No. 1654 is a post 7 ins. square, properly set and scribed.

Sur. No. 1033 A. Arthur, Lancaster and Cobre lodes:

All corners are posts properly set and scribed

Lot No. 42 Clay lode:

Cors. Nos. 3 and 4 are posts properly set and scribed.

Sur. No. 2978 Redondo lode:

All corners are posts properly set and scribed.

Sur. No. 1654 A. Am. Petaluma lode:

All corners are posts properly set and scribed.

No. 3

Sur. No. 1654 A. Petaluma No. 2 and Petaluma lodes:

All corners are posts properly set and scribed:

Sur. No. 2977 Eureka lode:

All corners are posts properly set and scribed.

Sur. No. 3276 Armada lode:

All corners are posts properly set and scribed.

The differences between these field notes and the returns on previous survey are due to errors in the latter.

The differences between these field notes and the location certificates are due to errors in the latter.

All end center monuments are mounds of stone.

H. J. Mostow
U.S. Mineral Surveyor.

AUG 14 1917 14

FINAL OATHS FOR SURVEYS.

LIST OF NAMES.

A list of the names of the individuals employed by E.T.Morton
 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
Phelps Dodge Corporation
 known as the Wedge, Raven, Tough Nut, Ute, La Esperanza, Owl lodes
 and showing the respective capacities in which they acted.

W.R.Hutchins, Chainman.
J.L.Awalt, Chainman.
 _____, Axman.
 _____, Flagman.

FINAL OATHS OF ASSISTANTS.

We, W.R.Hutchins
 and J.L.Awalt, do solemnly swear that we assisted E.T.Morton
 _____, United States Mineral Surveyor, in marking the corners and surveying
 the boundaries of the mining claim of Phelps Dodge Corporation

 known as the Wedge, Raven, Tough Nut, Ute, La Esperanza, Owl lodes
 represented in the foregoing field notes as having been surveyed by said mineral surveyor and under his
 direction; and that said survey has been in all respects, to the best of our knowledge and belief, faithfully
 and correctly executed, and the corner and boundary monuments established according to law and the instruc-
 tions furnished by the United States Surveyor-General for Arizona

W.R. Hutchins, Chainman.
J.L. Awalt, Chainman.
 _____, Axman.
 _____, Flagman

Subscribed and sworn to by the above-named persons before me this 10th,

day of August, 19 17.

Wade Hampton
Notary Public

6-1048

My commission expires February 23rd, 1920.

AUG 14 1917 15

(4-686.)

FINAL OATH OF U. S. ~~DEPUTY~~ MINERAL SURVEYOR

I, E.T.Morton, U. S. ~~Deputy~~ Mineral Surveyor, do solemnly swear that, in pursuance of instructions received from the United States Surveyor General for Arizona, dated July 16, 1917, I have, in strict conformity to the laws of the United States, the official regulations and instructions thereunder, and the instructions of said Surveyor General, faithfully and correctly executed the survey of the Mining Claim of Phelps Dodge Corporation, known as the Wedge, Raven, Tough Nut, Ute, La Esperanza, Owl lodes, situate in Copper Mountain Mining District, Greenlee County, Arizona, in Sections 9, 16 & 17 Unsub. Township No. 4 S., Range No. 29 E., G. & S. R. B. & M. and designated as Survey No. 3413, as represented in the foregoing field notes, which accurately show the boundaries of said mining claim as distinctly marked by monuments on the ground, and described in the attached copy of the location certificate, which was received by me from the Surveyor General with said instructions, and that all the corners of said survey have been established and perpetuated in strict accordance with the law, official regulations and instructions thereunder; and I do further solemnly swear that the foregoing are the true and original field notes of said survey and my report therein, and that the labor expended and improvements made upon said mining claim by claimant or its grantors are as therein fully stated, and that the character, extent, location and itemized value thereof are specified therein with particularity and full detail, and that no portion of said labor or improvements so credited to this claim has been included in the estimate of expenditures upon any other claim.

E T Morton
U. S. ~~Deputy~~ Mineral Surveyor.

Subscribed and sworn to by the said E.T.Morton
U. S. ~~Deputy~~ Mineral Surveyor, before me a notary public
this 10th
day of August 1917.

Wade Hampton
Notary Public

JUL 14 1916

Amended Location Notice

NOTICE IS HEREBY GIVEN THAT THE UNDERSIGNED
THE DETROIT COPPER MINING CO. OF ARIZONA

a corporation, the assignee of GORDON McLEAN

who on the 27TH day of JANUARY, 1898, located the WEDGE

mining claim situated in the COPPER MOUNTAIN Mining District, GRAHAM County, Arizona, the location notice of which claim is of record in the office of the Recorder of said County in Book 9, Record of Mines, pages 458 & 459, has on this 29TH day of

DECEMBER, 1913, made an amended location of said claim, by virtue of which

and of said original location, it claims as a mining claim the following described lead, lode or vein of mineral bearing earth, rock or quartz and premises situated in the COPPER MOUNTAIN Mining District, in the County of GREENLEE, (FORMERLY GRAHAM.) Arizona, to-wit:

The name of said claim is the WEDGE Mining Claim. The name of the locator is THE DETROIT COPPER MINING CO. OF ARIZONA.

The length of the claim along said vein or lode is 954 feet; the width of said claim is 300 feet on each side of the middle of said lead, lode or vein. The general course of said lode and claim is NORTHEAST to SOUTHWEST. The distance from the Point of Discovery to the SOUTH end center monument of said claim is 470 feet. The distance from said Point of Discovery to the NORTH end center monument is 484 feet.

This Location Notice is posted in the monument of stones erected at said Point of Discovery upon said claim, which monument is hereinafter referred to as the Location Monument.

Said claim is bounded and described as follows, to-wit: Beginning at the monument of stones placed at the center of the SOUTH end of the claim, which monument is 470' feet 518°-24'W from said Location Monument; thence 577°-04'W 347.70 feet to a 4"X6"POST, being the SOUTHWEST corner of the claim, thence N18°-24'E 953.15 feet to a 4"X6"POST, being the NORTHWEST corner of the claim; thence N77°-04'E 347.70 feet, to a monument of stones, being the center of the NORTH end of the claim; thence again N77°-04'E 347.70 feet to a 4"X6"POST, being the NORTHEAST corner of the claim; thence 518°-24'W - 953.15 feet to a 4"X6"POST, being the SOUTHEAST corner of the claim; thence 577°-04'W 347.70 feet to the place of beginning.

To more fully identify the claim its general location is described as follows:

THE S.E. CORNER IS 276.74 FT S 2° 38' E OF S.W. COR No. 2 - SURVEY No 1033A COBRE PATENTED MINING CLAIM.

amended and posted on the ground this 29TH day of DECEMBER 1913

The Detroit Copper Mining Co. of Arizona
J. J. Housney
CORPORATE AGENT,
THE DETROIT COPPER MINING CO. OF ARIZONA

I, _____, County Recorder in and for the County and Territory aforesaid, do hereby certify that the within instrument was filed for record at _____ o'clock, _____ M., on this _____ day of _____ 19____, and duly recorded in Book No. _____ of _____ Records of _____ County, Arizona, at pages _____

WITNESS my hand and official seal the day and year first above written.

County Recorder

193

No. 3136

Amended Location
Notice

WEDGE
(Lawrence Group)

Dated DECEMBER 29 1913

Filed and recorded at request of
Schwart Copper Co.

January 31 A. D. 1914

at 9.00 o'clock A.M.

Book # 7 Section 11

Pages # 69

H. E. Kelly
County Recorder

By _____
Deputy Recorder

Notice of Mining Location

JUL 14 1917

18

LODE CLAIM

TO ALL WHOM IT MAY CONCERN:

This Mining Claim, the name of which is the RAVEN Mining Claim, situate on lands belonging to the United States of America, and in which there are valuable mineral deposits, was entered upon and located for the purpose of exploration and purchase

by THE DETROIT COPPER MINING CO. OF ARIZONA, (A CORPORATION)

(Locator must insert either "a citizen of the United States," or "who has declared his intention to become a citizen of the United States.")

the undersigned, on the 29TH day of DECEMBER 1913.

The length of this claim is 950 feet, and 17 claim 54 feet,

in a S 20° - 38' E direction and

896 feet in a N 20° - 38' W direction from

the center of the discovery ^{MOUND} shaft, at which this notice is posted, lengthwise of the claim, together

with 175' feet in width of the surface grounds, on each side

of the center of said claim. The general course of the lode deposit and premises is from the NORTH

to the SOUTH

The claim is situated and located in the COPPER MOUNTAIN Mining District, in

GREENLEE County, in the State of Arizona, about 1 MILE

in a NORTHWESTERLY direction from THE TOWN OF MORENCI.

To MORE FULLY DESCRIBE ITS LOCATION, THE N.E. CORNER IS IDENTICAL

WITH THE N.W. COR. #3-1033A, COBRE, PATENTED LODE MINING CLAIM.

.....

.....

The surface boundaries of the claim are marked upon the ground as follows: Beginning at

A MONUMENT OF STONES.

.....

at a point in a S 20° - 38' E direction 54 feet from

the discovery ^{MOUND} shaft (at which this notice is posted), being in the center of the SOUTH

end line of said claim; thence S 77° - 04' W - 173.85 feet to a 4" X 6" POST

, being the SOUTH WEST corner of said claim; thence

N 20° - 38' W - 949.26 feet to a 4" X 6" POST, being at the

NORTH WEST corner of said claim; thence N 77° - 04' E - 173.85 feet

to a MONUMENT OF STONES at the center of the NORTH end of said claim;

thence N 77° - 04' E - 173.85 feet to a 4" X 6" POST, being at the

NORTH EAST corner of said claim; thence S 20° - 38' E - 949.26

feet to a 4" X 6" POST at the SOUTH EAST corner of said claim;

thence S 77° - 04' W - 173.85 feet to the place of beginning.

.....

All done under the provisions of Chapter Six, of Title XXXII, of the Revised Statutes of the

United States, and of an Act of the General Assembly of Arizona, entitled "An Act to Revise and

Codify the Laws of the Territory of Arizona," approved March 16, 1901.

Dated and posted on the grounds this 29TH day of DECEMBER 1913.

The Detroit Copper Mining Co., of Arizona

W. J. Johnson
CORPORATE AGENT,

THE DETROIT COPPER MINING CO. OF ARIZONA

STATE OF ARIZONA,

County of _____

ss.

I, _____, County Recorder in and for the County and State aforesaid, do hereby certify that the within instrument was filed for record at _____ o'clock _____ M., on this _____ day of _____ 191____, and duly recorded in Book No. _____ of _____ Records of _____ County, Arizona, at pages _____

WITNESS my hand and official seal the day and year first above written.

County Recorder.

235

No. 3134

Notice of Location

LODE CLAIM

RAVEN

Dated DECEMBER 29, 1913.

Filed and Recorded at request of

Robert Cooper M.C.

January 31 A. D. 1914

at _____ M.,

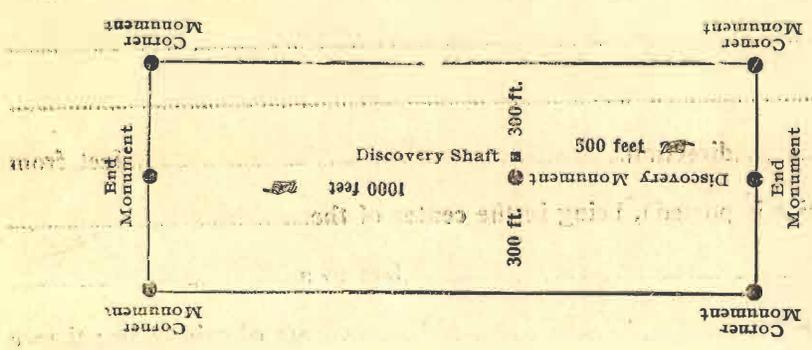
Book *11* *Spokane Mining*

Pages *7 & 8*

H. E. Kelly
County Recorder.

By *M. Thompson*
Deputy Recorder.

The surface boundaries of the claim are marked upon the drawing as follows: Beginning at



This diagram is to give locator a general idea of plan of location under the new law. The Discovery Shaft can be in the center of claim or any distance from either end desired. In the diagram it is placed 500 feet from one end and 1000 feet from the other. Commence description of claim at a center end monument, giving its distance and direction from center of Discovery Shaft; thence bound the claim in either direction. In description be careful to state locality of claim with reference to some natural object, or permanent monument, as will identify the claim.

Excerpts from the Mining Laws of the State of Arizona.
Title XLVII of the Revised Statutes of 1901, and Amendments Thereto.

Sec. 2. Such location shall be made by erecting at or contiguous to the point of discovery a conspicuous monument of stones not less than three feet in height, or an upright post, securely fixed, projecting at least four feet above the ground, in which monument of stones or on which post there shall be posted a location notice which shall be signed by the name or names of the locator or locators.

Sec. 4. From the time of the location of a mining claim, as above specified, the locator shall be allowed ninety days within which to do or cause to be done the following things:
* * * * *

2. To sink a discovery shaft in the claim to a depth of at least eight feet from the lowest part of the rim of the shaft at the surface, and deeper, if necessary, until there is disclosed in said shaft mineral in place.

Sec. 6. Such surface boundaries shall be marked by six substantial posts projecting at least four feet above the surface of the ground, or by substantial stone monuments at least three feet high, to-wit: One at each corner of said claim and one at the center of each end-line thereof.

Sec. 8. Location notices may be amended at any time and the monuments changed to correspond with the amended location; Provided, That no change shall be made that will interfere with the rights of others.

JUL 14 1917

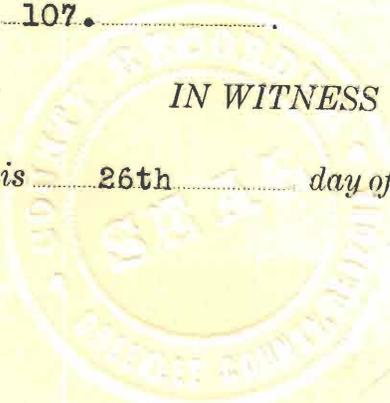
No. 8937

STATE OF ARIZONA,
COUNTY OF GREENLEE. } ss.

I, Rodney Ellis, County Recorder in and for the County of Greenlee,
State of Arizona, do hereby certify that the within and following is a full, true and complete
copy of the within mentioned NOTICE OF LOCATION BY JOHN HILL ET AL
ON THE TOUGH NUT MINING CLAIM,

as the same appears of record in my office, in Book No. 2, of Mining
Locations, Transcribed Records,
at page 107.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of
office, this 26th day of June, A. D. 1917



Rodney Ellis
County Recorder

NOTICE OF LOCATION.

Notice is hereby given that the undersigned in compliance with the requirements of the Mining Act of Congress approved May 10th 1872 have this day located and claim fifteen hundred linear feet along the course of this lead, lode or vein of mineral bearing quartz and 300 feet in width on each side of the middle of said lead, lode or vein situate in the Copper Mountain Mining Dist. County of Graham, Arizona and more particularly described as follows, to wit, Commencing at this monument of stones being the center of the West end of claim and upon which this notice is posted, thence Southerly 300 feet to a monument of stones, thence Easterly 1500 feet to a monument of stones, thence Northerly 300 feet to a monument of stones, being the center of the East end of claim, thence Northerly 300 feet to a monument of stones, thence Westerly 1500 feet to a monument of stones, thence Southerly 300 feet to the place of beginning.

This claim is bounded on the West by the Organ Mine and on the East by the Clay Mine and shall be known as the TOUGH NUT Mine.

Located January 3rd 1887.

John Hill
Horace D. Gast
Gordon McKean

Filed and recorded at 9:15 A. M. Jan 12th 1887 request of
H. D. Gast.

P. Michelena, Recorder.

JUL 14 1917

Notice of Mining Location.

LODE CLAIM.

To All Whom It May Concern:

This Mining Claim, the name of which is the "Ute" Mining Claim, situate on lands belonging to the United States of America, and in which there are valuable mineral deposits, was entered upon and located for the purpose of exploration and purchase by The Detroit Copper Mining Company of Arizona

(Locator must insert either "a citizen of the United States," or, "who has declared his intention to become a citizen of the United States.") the undersigned, on the 16th day of October 1900 1902

The length of this claim is 646.6 feet, and it claims 70 feet, in a South Westerly direction, and 576.6 feet in a North Easterly direction from the center of the discovery shaft, at which this notice is posted, lengthwise of the claim, together with 134 feet in width of the surface grounds, on each side of the center of said claim.

The general course of the lode deposit and premises is from the South West to the North East

The claim is situated and located in the Copper Mountain Mining District, in Graham County, in the Territory of Arizona, about The N. W. Corner in a of this direction from claim is identical with the South West Corner No. 2, of U. S. Mineral Survey No 1033 A, Cobre lode.

The surface boundaries of the claim are marked upon the ground as follows: Beginning at A Mound of Stones.

at a point in a S. W. direction 70 feet from the discovery shaft (at which this notice is posted), being in the center of the S. W. end line of said claim; thence N. 2° 42' W 136.3 feet to a Post and Mound of Stones, being the N. W. corner of said claim; thence N 78° 45' E 323.3 feet to a Mound of Stones at the center of the North side line of said claim; thence N. 76° 45' E 323.3 feet to a Post and Mound of Stones being at the N. E. corner of said claim; thence S 2° 42' E 136.3 feet to a Mound of Stones at the center of the N. E. end of said claim; thence S 2° 42' E 136.3 feet to a Post and Mound of Stones, being at the S. E. corner of said claim; thence S. 76° 45' W 323.3 feet to a Mound of Stones being at the center of the South side line of said claim; thence S. 76° 45' W 323.3 feet to a Post and Mound of Stones at the S. W. corner of said claim; thence N. 2° 42' W 136.3 feet to the place of beginning.

All done under the provisions of Chapter Six, of Title XXXII, of the Revised Statutes of the United States, and of an Act of the General Assembly of Arizona, entitled "An Act Concerning Mines," approved March 20th, 1895, and amended March 2d, 1899.

Dated and posted on the ground this 16th day of October 1900 1902

Witness
Geo. M. Robison

The Detroit Copper Mining Company
of Arizona
per C. B. Niles its Agent

TERRITORY OF ARIZONA, } ss.
County of.....

I,..... County Recorder in and for the County and Territory aforesaid, do hereby certify that the within instrument was filed for record at.....o'clock,.....M. on this.....day of.....1....., and duly recorded in Book No..... of.....Records of.....County, Arizona, at pages.....

WITNESS my hand and official seal the day and year first above written.

County Recorder

Notice of Location.

LODE CLAIM.

136

Utter
The Detroit-Copper
Mining Company
of Arizona

Dated Oct 16th 1902

Filed and recorded at request of

C. E. Mills

Oct 21 A. D. 1902

at 9 o'clock a. M.

Book 105 Record of Mines

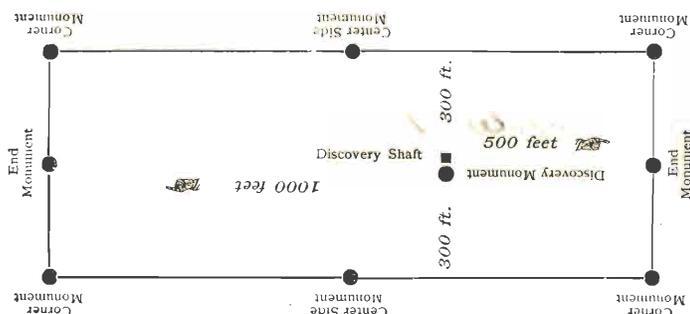
Pages 202

James Smith
County Recorder.

By Deputy Recorder.

THE H. H. MCNEIL CO., PRINTERS, PHOENIX, ARIZONA.

407 3884



This diagram is to give locator a general idea of plan of location under the new law. The Discovery Shaft can be in the center of claim or any distance from either end desired. In the diagram it is placed 500 feet from one end and 1000 feet from the other. Commence description of claim at a center end monument, giving its distance and direction from center of Discovery Shaft; thence bound the claim in either direction. In description be careful to state locality of claim with reference to some natural object, or permanent monument, as will identify the claim

JUL 14 1917

24

Notice of Mining Location.

LODE CLAIM.

To All Whom It May Concern:

This Mining Claim, the name of which is the La Esperanza Mining Claim, situate on lands belonging to the United States of America, and in which there are valuable mineral deposits, was entered upon and located for the purpose of exploration and purchase by Ignacio Campbell and Claro Dominguez Citizens of the U.S. on Jan 1st 1896 and subsequently deeded it to The Detroit Copper Mining Co which has (Locator must insert either "a citizen of the United States," or, "who has declared his intention to become a citizen of the United States.") ~~the undersigned~~, on the 27th day of May 1903 Amended same as follows 1900.

The length of this claim is Fifteen Hundred feet, and it claim S. 250 feet, in an Easterly direction, and 1250 feet in a Westerly direction from the center of the discovery shaft, at which this notice is posted, lengthwise of the claim, together with three hundred feet in width of the surface grounds, on each side of the center of said claim. The general course of the lode deposit and premises is from the Easterly to the Westerly.

The claim is situated and located in the Copper Mountain Mining District, in Graham County, in the Territory of Arizona, about Adjoining the in a Argyle Lode direction from on the North, said Argyle lode being patented and known as U. S. Mineral Survey No. 1654

The surface boundaries of the claim are marked upon the ground as follows: Beginning at A Monument of Stones

at a point in an Easterly direction 250 feet from the discovery shaft (at which this notice is posted), being in the center of the East end line of said claim; thence S 9° 30' E 300.7 feet to a post and Mound of Stone, being the S. E. corner of said claim; thence Also Cor. No 6 Survey feet to a No 1654 Argyle lode at the center of the side line of said claim; thence S 76° 30' W 15.00 feet to a post and Mound of Stones being at the S. W. corner of said claim; thence N. 9° 30' W 300.7 feet to a Mound of Stones at the center of the West end of said claim; thence N 9° 30' W 300.7 feet to a Post and Mound of Stones, being at the N. W. corner of said claim; thence N 76° 30' E 15.00 feet to a Post and Mound of Stones being at the center of the side line of said claim; thence feet to a at the N. E corner of said claim; thence S 9° 30' E 300.7 feet to the place of beginning.

All done under the provisions of Chapter Six, of Title XXXII, of the Revised Statutes of the United States, and of an Act of the General Assembly of Arizona, entitled "An Act Concerning Mines," approved March 20th, 1895, and amended March 2d, 1899. And subsequent Amendments

Dated and posted on the ground this 27th day of May 1903

All rights acquired by the original location are hereby preserved.
Witness to Amended location
Geo. M. Robison

The Detroit Copper Mining Co of Arizona
per E. M. ...

TERRITORY OF ARIZONA }
County of..... } ss.

I,..... County Recorder in and for the County and Territory aforesaid, do hereby certify that the within instrument was filed for record at.....o'clock,.....M. on this.....day of.....1, and duly recorded in Book No..... of.....Records of.....County, Arizona, at pages.....

WITNESS my hand and official seal the day and year first above written.

County Recorder

321 56.95

Amended

Notice of Location.

LODE CLAIM.

"La Esperanza"

The Detroit Hooper Mining Co. of Arizona

Dated May 27th 1903

Filed and recorded at request of

B. E. Miller Agent.

June 26th A. D. 1903

at P. O. Clark a. M.

Book 15 Record of Mines

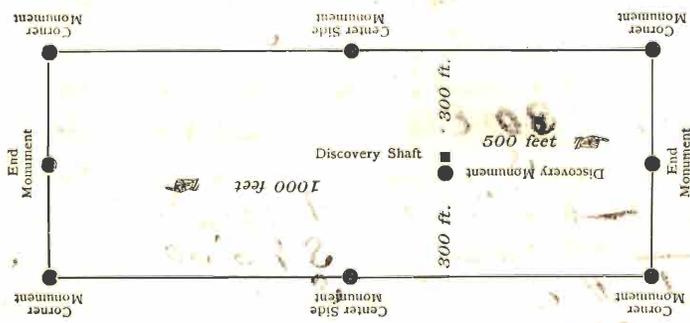
Pages 572-

M. J. Simms

County Recorder.

By Deputy Recorder.

THE H. H. MCNEIL CO., PRINTERS PHOENIX, ARIZONA.



This diagram is to give locator a general idea of plan of location under the new law. The Discovery Shaft can be in the center of claim or any distance from either end desired. In the diagram it is placed 500 feet from one end and 1000 feet from the other. Commence description of claim at a center end monument, giving its distance and direction from center of Discovery Shaft; thence bound the claim in either direction. In description be careful to state locality of claim with reference to some natural object, or permanent monument, as will identify the claim

JUL 14 1917

Notice of Mining Location.

LODE CLAIM.

To All Whom It May Concern:

This Mining Claim, the name of which is the Owl, Mining Claim, situate on lands belonging to the United States of America, and in which there are valuable mineral deposits, was entered upon and located for the purpose of exploration and purchase by The Detroit Copper Mining Company of Arizona by C. E. Mills its authorized agent (locator must insert either "a citizen of the United States," or, "who has declared his intention to become a citizen of the United States.") the undersigned, on the 1st day of February, 1904.

The length of this claim is 1430 feet, and it claims 330 feet, in a North Easterly direction, and 1100 feet in a South Westerly direction from the center of the discovery shaft, at which this notice is posted, lengthwise of the claim, together with 188 feet in width of the surface grounds, on each side of the center of said claim. The general course of the lode deposit and premises is from the North East to the South West.

The claim is situated and located in the Copper Mountain Mining District, in Graham County, in the Territory of Arizona, ~~about~~ The South East in a Corner being ~~direction from~~ identical with Cor No 1, Petaluma No. 2 claim U. S. Mineral Survey No. 1654 A.

The surface boundaries of the claim are marked upon the ground as follows: Beginning at a mound of stones

at a point in a North Easterly direction 330 feet from the discovery shaft (at which this notice is posted), being in the center of the Easterly end line of said claim; thence S. 31° 35' E 188 feet to a post & mound of stones = Cor 1-1654 A., being the South East corner of said claim; thence S. 76° 30' W. 1430 feet to a post & mound of stones at the center of the ~~side line of said claim~~; thence ~~feet to a~~, being at the South West corner of said claim; thence N. 31° 35' W 188 feet to a post & mound of stones at the center of the Westerly end of said claim; thence N 31° 35' W 188 feet to a Post & Mound of stones being at the North West corner of said claim; thence N. 76° 30' E 1430 feet to a post & mound of stones being at the center of the ~~side line of said claim~~; thence ~~feet to a~~ at the North East corner of said claim; thence S. 31° 35' E 188 feet to the place of beginning.

All done under the provisions of Chapter Six, of Title XXXII, of the Revised Statutes of the United States, and of an Act of the General Assembly of Arizona, entitled "An Act Concerning Mines," approved March 20th, 1895, and amended March 2d, 1899.

Dated and posted on the ground this 1st day of February, 1904.

The Detroit Copper Mining Co of Ariz
C. E. Mills its agt.
GMR

TERRITORY OF ARIZONA }
County of..... } ss.

I,..... County Recorder in and for the County and Territory aforesaid, do hereby certify that the within instrument was filed for record at.....o'clock,.....M. on this.....day of.....1, and duly recorded in Book No..... of.....Records of.....County, Arizona, at pages.....

WITNESS my hand and official seal the day and year first above written

County Recorder

358 Owl
139 9086

Notice of Location.

LODE CLAIM.

Detroit Copper Mining Company of Arizona

Dated Feb 1st 1904

Filed and recorded at request of

Geo. M. Robinson Mch. 30th A. D. 1904

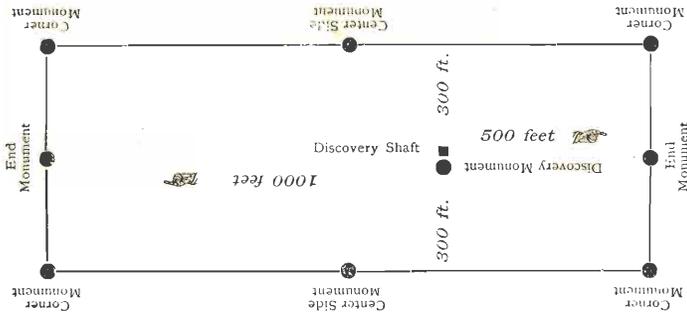
at 3 o'clock P. M.

Book 17 Records of Mines Pages 308.

W. J. Jimmo County Recorder.

By Deputy Recorder.

THE H. H. McNEIL CO., PRINTERS, PHOENIX, ARIZONA.



This diagram is to give locator a general idea of plan of location under the new law. The Discovery Shaft can be in the center of claim or any distance from either end desired. In the diagram it is placed 500 feet from one end and 1000 feet from the other. Commence description of claim at a center end monument, giving its distance and direction from center of Discovery Shaft; thence bound the claim in either direction. In description be careful to state locality of claim with reference to some natural object, or permanent monument, as will identify the claim

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

Department of the Interior,

OFFICE OF U. S. SURVEYOR-GENERAL,

Phoenix, Arizona,

February 5, 1918.

I, U. S. Surveyor-General for District of Arizona,

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

Phelps Dodge Corporation

known as the WEDGE, RAVEN, TOUGH NUT, UTE, LA ESPERANZA, OWL Lodes situate in

Copper Mountain

Mining District, Greenlee County, Arizona

Unsur.

in Sections 9, 16 & 17, Township No. 4 S, Range No. 29 E, and

designated as Survey No. 3413, has been correctly copied from the originals on file in

this office; that said Field Notes furnish such an accurate description of said mining claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

And I further certify that five hundred dollars' worth of labor has been expended or improvements made upon each of said mining claims by claimant or its grantors, and that said improvements consist of 4 shafts, 3 cuts, 3 tunnels, and 3416 ft. of drifting, total value \$81,300.

and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

I further certify that the plat thereof, filed in the U. S. Land Office at Phoenix,

Arizona, is correct and in conformity with the foregoing Field Notes.

Frank P. Trott,

United States Surveyor-General for Arizona.

SURVEYOR-GENERAL'S CERTIFICATE OF APPROVAL OF FIELD NOTES AND SURVEY OF MINING CLAIM.

Department of the Interior,

OFFICE OF U. S. SURVEYOR-GENERAL,

Phoenix, Arizona,

February 5, 1918.

I, U. S. Surveyor-General for District of Arizona

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

Phelps Dodge Corporation

, known as the

WEDGE, RAVEN, TOUGH NUT, UTE, LA ESPERANZA, OWL Lodes

situate in Copper Mountain mining district,

Greenlee County, Arizona

in Section 9, 16 & 17 Unsur., Township No. 4 S, Range No. 29 E.

, designated as Survey No. 3413

executed by E. T. Morton, United States Mineral

Surveyor, July 22 - August 1, 1917, under my instructions dated

July 16, 1917, have been critically examined and the necessary cor-

rections and explanations made, and the said Field Notes and Return, and the Survey they describe,

are hereby approved. A true copy of the copy of the location certificate filed by the applicant for

survey is included in the field notes.

[Handwritten signature]

U. S. Surveyor-General for Arizona.