

MINERAL SURVEY No. 3553

Arizona Land District

FIELD NOTES

OF THE SURVEY OF THE MINING CLAIM OF

Phelps Dodge Corporation

KNOWN AS THE

GREAT NORTHERN, GRIZZLEY, PERU Lodes

Conner Mountain Mining District,

Greenlee County, Arizona

Section 9, 15 & 16 Uns., Township 4 South, Range 29 E., G. & S. R. B. & M.

Surveyed under instructions dated February 26, 1919.

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

Claim located see location notices, 19

Survey commenced March 1, 1919.

Survey completed March 15, 1919.

Address of claimant: Morris & Malott, Attys., Box 879, Globe, Arizona.

DATES OF AMENDED LOCATIONS.

1.

Feet	Mineral SURVEY NO. 3553
	Great Northern Lode
	Beginning at Cor. No. 1.
	Identical with Cors. Nos. 7 and 4 Sur. No. 1171 Montana and Sur. No. 1512 Copper Cross lodes respectively.
	A porphyry stone 6 x 12 x 24 ins. set 12 ins. in the ground, with a mound of stone alongside, chiseled cross (X) G N 1-3553, whence a cross (X) and B R 1-3553 chiseled on porphyry 6 x 8 ft., facing East bears S 50° W. 8.3 ft. U. S. L. M. No. 1654 bears S. 75° 51' W. 2266.7 ft. Thence N. 49° 49' E.
368.44	Intersect lines 6-1 and 2-3 Sur. No. 1512 Copper Cross and Chambone lodes at N. 28° 44' W. 331.19 ft. and 309.29 ft. from Cors. Nos. 6 and 3 respectively.
390.	Intersect gulch, course S.E.
834.35	Intersect line 3-4 Sur. No. 1512 Trinket lode at N. 61° 02' W. 17.79 ft. from Cor. No. 3.
933.39	Intersect line 1-2 Sur. No. 1711 Indiana lode at S. 64° 08' E. 152.94 ft. from Cor. No. 1 and N. 64° 08' W. 24.96 ft., 41.64 ft. and 625.46 ft. from its intersections with line 2-3 Sur. No. 1512 Trinket lode, its intersection with line 3-4 Sur. No. 1512 Chambone lode and Cor. No. 2 respectively.
982.21	Intersect line 4-1 Peru lode of this survey at S. 38° 38' E. 29.04 ft. from Cor. No. 1 and N. 38° 38' W. 25.14 ft. and 571.06 ft. from its intersection with line 2-3 Sur. No. 1512 Trinket lode and from Cor. No. 4 respectively.
1042.51	Intersect line 3-4 Sur. No. 1512 Chambone lode at N. 27° 25' E. 65.96 ft., 99.78 ft. and 795.49 ft. from its intersection with line 2-3 Sur. No. 1512 Trinket lode and line 4-1 Peru lode of this survey, and its intersection with line 1-2 Sur. No. 1711 Indiana lode and Cor. No. 3 respectively.
1173.80	Intersect line 4-1 Sur. No. 1711 Indiana lode at N. 74° 37' E. 333.23 ft. from Cor. No. 1.
1500	To Cor. No. 2.

Feet	
	<p>A quartz porphyry stone 6 x 12 x 30 ins. set 12 ins. in the ground, with a mound of stone alongside, chiseled cross (X) G N 2-3553</p> <p>No bearings available.</p> <p>Thence S. 38°45' E.</p>
56.71	<p>Intersect line 2-3 Sur. No. 1512 Trinket lode at N. 53° 18' E. 233.46 ft., 518.06 ft., 556.21 ft. and 659.1 ft. from its intersection with line 4-1 Sur. No. 1711, Indiana lode (X)</p> <p>from its intersection with line 3-4 Sur. No. 1512 Cham-bone lode and line 4-1 Peru lode of this survey, its intersection with line 1-2 Sur. No. 1711 Indiana lode, and Cor. No. 3 respectively.</p>
149.16	<p>Intersect line 1-4 Sur. No. 1711 Indiana lode at N. 74° 37' E. 254.16 ft. and 688.3 ft. from its intersection with line 2-3 Sur. No. 1512 Trinket lode and Cor. No. 1 respectively.</p>
300	<p>N.E. end center of the location and lode.</p>
573	<p>Intersect line 3-4 Peru lode of this survey at N. 50° E. 518.6 ft. from Cor. No. 4.</p>
600	<p>To Cor. No. 3.</p> <p>A quartz porphyry stone 12 x 24 x 24 ins. set 12 ins. in the ground, with a mound of stone alongside, chiseled cross (X) GN 3-3553.</p> <p>No bearings available.</p> <p>Thence S. 49°49' W.</p>
236.89	<p>Intersect line 2-3 and 1-2 Surs. Nos. 1711 and 3057 Indiana and Talc lodes at N. 74°37' E. 66.85 ft. and 12.07 ft. from Cors. Nos. 2 and 1 respectively.</p>
239.85	<p>Intersect line 4-1 Sur. No. 1710 Famous lode at N. 82°09' E. 9.46 ft. from Cor. No. 1.</p>
245.58	<p>Intersect line 4-1 Sur. No. 3057 Talc lode at S. 64°19' E. 5.55 ft. from Cor. No. 1.</p>
249.20	<p>Cor. No. 2 Grizzley lode of this survey, also intersect line 1-2 Sur. No. 1710 Famous lode, at S. 25°11' E. 5.24 ft. from Cor. No. 1</p>
1049	<p>Intersect gulch course S.E.</p>
1500	<p>To Cor. No. 4.</p>

Feet	
	<p>Identical with Cor. No. 1 Grizzley lode of this survey and Cors. Nos. 8 and 10 Sur. No. 1171 Montana and Colorado lodes respectively.</p> <p>An iron rod in place 3 ft. high, with a pine post 4 ins. square 3 ft. high, with a mound of stone alongside. Post scribed G 1-G N 4-3553.</p> <p>No bearings available.</p> <p style="text-align: center;">Thence N. 38°45' W.</p>
300	S.W. end center of the location and lode.
338	Cor. No. 5 Sur. No. 1512 Copper Cross lode, Cor. No. 6 said Copper Cross lode bears N. 61°16' E. 315.5 ft.
600	To Cor. No. 1 the place of beginning.
	Grizzley lode.
	Beginning at Cor. No. 1.
	Identical with Cors. Nos. 8 and 10 Sur.No. 1171 Montana and Colorado lode, respectively, and Cor. No. 4, Great Northern Lode of this survey, heretofore described.
	U. S. L. M. No. 1654 bears S. 88°05' W. 2575 ft.
	Thence N. 49°49' E.
451	Intersect gulch course S.E.
1250.8	To Cor. No. 2.
	On line 3-4 Great Northern lode of this survey.
	On line 1-2 Sur. No. 1710 Famous lode, at S. 25°11' E. 5.24 ft. from Cor. No. 1.
	A quartz porphyry stone 12 x 12 x 24 ins. set 12 ins. in the ground, with a mound of stone alongside, chiseled cross (X) G 2-3553.
	No bearings available.
	Thence S. 38°45' E.
300	N.E. end center of the location and lode.
600	To Cor. No. 3.
	A cross (X) and G 3-3553 chiseled on quartz porphyry bed-rock 3 x 4 ft. 3 ft. high facing East, with a mound of stone alongside. <i>On line 1-2 Sur 11-1710 Famous lode S 25°11' E. 5.24 ft from Cor 11-1</i>
	No bearings available.

Feet	Thence S. 49°49' W.
145.71	Intersect line 1-2 Sur. No. 1710 Famous lode at S. 25°11' E. 626.21 ft. from Cor. No. 1.
146.15	Cor. No. 4 Sur. No. 2886 Ione lode, Cor. No. 3 said Ione lode bears S. 49°55' W. 600 ft.
426	Intersect gulch course East.
746.32	Intersect lines 2-3 and 4-1 Sur. No. 2886 Ione and Old Nick lodes at S. 30°53' E. 1.06 ft. from Cors. Nos. 3 and 4 respectively.
1250.8	To Cor. No. 4. Identical with Cor. No. 11 Sur. No. 1171 Colorado lode. An iron rod in place, 3 ft. high with a mound of stone alongside. At the bottom of said rod G 4-3553 chiseled on quartz porphyry bedrock 8 x 10 ft. facing North.
	Thence N. 38°45' W.
2	Intersect line 3-4 Old Nick lode, Sur. No. 2886, at S. 49°55' W. 504.56 ft. from Cor. No. 4.
255	Intersect gulch, course N.E.
300	S.W. End center of the location and lode.
600	To Cor. No. 1, the place of beginning.
	Peru lode.
	Beginning at Cor. No. 1.
	A cross (X) and P 1-3553 chiseled on quartz porphyry bedrock exposed 1 x 1.5 x 2 ft. facing East with a mound of stone alongside.
	U. S. L. M. No. 1654 bears S. 67°33' W. 3170.4 ft.
	Thence N. 50°00' E.
128.92	Intersect lines 4-1 Sur. No. 1711 Indiana lode and 3-4 Sur. No. 1512 Chambone lode at N. 74°37' E. 265.09 ft. and N. 27°25' E. 870.56 ft. from Cors. Nos. 1 and 3 respectively.
541.87	To Cor. No. 2. A pine post in place 4 ins. square 3 ft. high with a mound of stone scribed P 2-3553.
	No bearings available.
	Thence S. 38°38' E.

5.

- Feet
- 10.79 Intersect ^{N.E. corner} ~~N.W. side line~~ of Tract A.
- 85.4 Intersect S.E. ^{corner of} ~~side line~~ Tract A. and ^{intersect} line 2-3 Sur. No. 1512 Trinket lode at N. $53^{\circ}18'$ ^E W. 683.43 ft. from Cor. No. 3, also ^{intersect} line 1-2 Sur. No. 2975 White Glance No. 2 lode at N. $53^{\circ}18'$ E. 22.81 ft. from Cor. No. 1.
- 187.19 Intersect line 4-1 Sur. No. 1711 Indiana lode and line 4-1 Sur. No. 2975 White Glance No. 2 lode at N. $74^{\circ}37'$ E. 714.39 ft. and S. $51^{\circ}10'$ E. 105.06 ft. from Cors. Nos. 1 and 1 respectively.
- 300.05 N.E. end center of the location and lode.
- 600.1 To Cor. No. 3.
A pine post in place 4 ins. square 3 ft. high with a mound of stone scribed P 3-3553.
No bearings available.
Thence S. $50^{\circ}00'$ W.
- 23.27 Intersect line 2-3 Great Northern lode of this survey at S. $38^{\circ}45'$ E. 573 ft. from Cor. No. 2.
- 321.38 Cor. No. 2 Sur. No. 1711 Indiana lode.
- 541.87 To Cor. No. 4.
A quartz porphyry stone 6 x 12 x 24 ins. set 12 ins. in the ground with a mound of stone alongside chiseled cross (X) P 4-3553.
No bearings available.
Thence N. $38^{\circ}38'$ W.
- 300.05 S.W. end center of the location and lode.
- 467.4 Intersect line 1-2 Sur. No. 1711 Indiana lode at N. $64^{\circ}08'$ W. 512.02 ft. from Cor. No. 2.
- 545.92 Intersect lines 3-4 and 2-3 Sur. No. 1512 Chambone and Trinket lodes at N. $27^{\circ}25'$ E. 729.53 ft. and N. $53^{\circ}18'$ E. 141.04 ft. from Cors. Nos. 3 and 3 respectively.
- 571.06 Intersect line 1-2 Great Northern lode of this survey at S. $49^{\circ}49'$ W. 517.79 ft. from Cor. No. 2.
- 600.1 To Cor. No. 1, the place of beginning.
Variation at all corners $13^{\circ}50'$ E.

LODE LINES

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

Great Northern lode, 357 ft. S. 49°49' W. and ¹¹⁴³~~1153~~ ft.
 N. 49°49' E.
 Grizzley lode, 10 ft. S. 49°49' W. and 1240.8 ft. N. 49°
 49' E.

Peru lode, 18 ft. N. 50° E. and 523.87 ft. S. 50° W.

AREA

Total area Great Northern lode - - - - - Acres 20.655

Area in conflict with:

Sur. No. 1512 Copper Cross lode - - - - - 2.308 ✓

Sur. No. 1512 Chambone lode - - - - - 2.345 ✓

Sur. No. 1512 Trinket lode - - - - - 0.566 ✓

Sur. No. 1512 Trinket lode (exclusive of
 its common conflict with Sur. No. 1512
 Chambone lode) - - - - - 0.469 ✓

Sur. No. 1711 Indiana lode - - - - - 5.288 ✓

Sur. No. 1710 Famous lode - - - - - 0.001 ✓

Sur. No. 3057 Talc lode - - - - - 0.001 ✓

Sur. No. 3057 Talc lode (exclusive of its
 common conflict with Sur. No. 1710 Fam-
 ous lode) - - - - - 0.000 ✓

Tract A. - - - - - 0.322 ✓

Sur. No. 1512 Trinket lode (exclusive of
 its common conflict with Tract A) - - - - - 0.245 ✓

Sur. No. 1711 Indiana lode (exclusive of
 its common conflict with Sur. No. 1512
 Chambone lode) - - - - - 5.241 ✓

Sur. No. 1711 Indiana lode (exclusive of
 its common conflict with Sur. No. 1512
 Trinket lode) - - - - - 5.091 ✓

Sur. No. 1711 Indiana lode (exclusive of
 its common conflict with Sur. No. 1512
 Chambone and Trinket lodes) - - - - - 5.084 ✓

Total area Grizzley lode - - - - - 17.223 ✓

Area in conflict with:

Sur. No. 1710 Famous lode - - - - - 1.003 ✓

Sur. No. 2886 Ione lode - - - - - 0.007 ✓

Sur. No. 2886 Old Nick lode - - - - - 0.018 ✓

Total area Peru lode - - - - -	7.463 ✓
Area in conflict with:	
Great Northern lode of this survey - - - -	6.803 ✓
Great Northern lode of this survey (exclusive of its common conflict with Sur. No. 1512 Trinket lode) - - - - -	6.317 ✓
Sur. No. 1512 Trinket lode - - - - -	0.868 ✓
Sur. No. 1512 Chambone lode - - - - -	0.080 ✓
Sur. No. 1512 Trinket lode (exclusive of its common conflict with Sur. No. 1512 Chambone lode) - - - - -	0.788 ✓
Sur. No. 1711 Indiana lode - - - - -	5.393 ✓
Sur. No. 2975 White Glance No. 2 lode - -	0.027 ✓
Tract A. - - - - -	0.441 ✓
Tract A. (exclusive of its common conflict with Great Northern lode of this survey) - - - - -	0.119 ✓
Sur. No. 1512 Trinket lode (exclusive of its common conflict with Tract A) - - - - -	0.427 ✓
Sur. No. 1711 Indiana lode (exclusive of its common conflict with Sur. No. 1512 Trinket lode) - - - - -	5.113 ✓
Sur. No. 1711 Indiana lode (exclusive of its common conflict with Sur. No. 1512 Chambone lode) - - - - -	5.313 ✓
Sur. No. 1711 Indiana lode (exclusive of its common conflict with Sur. No. 1512 Chambone and Trinket lodes) - - - - -	5.113 ✓
Great Northern lode of this survey (exclusive of its common conflict with Tract A) - - - - -	6.481 ✓
Great Northern lode of this survey (exclusive of its common conflict with Sur. No. 1512 Chambone lode) - - - - -	6.785 ✓
Great Northern lode of this survey (exclusive of its common conflict with Sur. No. 1711 Indiana lode) - - - - -	1.741 ✓
Great Northern lode of this survey (exclusive of its common conflict with Sur. No. 1512 Trinket and Chambone lodes) - - - - -	6.317 ✓

.8.

Great Northern lode of this survey (exclu-
of its common conflict with Sur. No.
1711 Indiana lode and Sur.No.1512
Chambone lode) - - - - - 1.741 ✓

Great Northern lode of this survey (exclu-
sive of its common conflict with Sur.
No.-1711 Indiana lode and Sur.No.1512
Trinket lode) - - - - - 1.431 ✓

Great Northern lode of this survey (ex-
clusive of its common conflict with
Sur. No. 1711 Indiana lode and Sur.
No. 1512 Trinket and Chambone lodes
and Tract A) - - - - - 1.431 ✓

TRACT A.

Beginning at the intersection of lines 2-3 Sur. No.1512
Trinket lode, and 2-3 Peru lode of this survey; thence
S. 53°18' W. 257.79 feet to the intersection of lines 2-3
and 4-1 Sur. No. 1512 Trinket lode and Sur. No. 1711 In-
diana lode respectively; thence S. 74°37' W. 118.76 ft.
to a point; thence N. 48°25' E.367.09 ft. to the inter-
section of line 2-3 Peru lode of this survey and the
~~original~~ north side line of ^{the original lode of the} White Glance No. 2 lode;
thence S. 38°38' E. 74.61 ft. to the place of beginning,
containing 0.441 acres.

Note: Tract A. is identical with the conflict of the
~~original White Glance No. 2 lode and Sur. No. 1512 Trin-~~
~~ket lode~~ ^{exclusive of its common conflict with Sur. No.}
1711 Indiana lode and Sur. No. 1512 Chambone lode, that
is in conflict with this survey.

LOCATION.

This survey is located in the Copper Mountain Mining
District, Greenlee County, Arizona approximately in
Sections 9, 15 and 16 Uns. T. 4 S. R. 29 E., G. & S.
R. B. & M.

EXPENDITURE: OF FIVE HUNDRED DOLLARS.

I certify that the value of labor and improvements made
upon, or for the benefit of, each of the locations em-
braced in said mining claim by the claimant or its
grantors is not less than Five Hundred Dollars, and that

said improvements consist of:

Great Northern Lode.

No. 1. The discovery showing mineral in place is on the lode line 357 ft. from line 4-1.

No. 2. A shaft the center of which bears from a point on line 1-2 923 ft. from Cor. No. 1 S. 60° E. 102 ft. 5 x 6 ft. 10 ft. deep.

Value - - - - - \$100.00

Note: An undivided 1/17 interest in the No. 2 working on Sur. No. 3331 Idaho lode is accredited to this lode.

Value 1/17 interest - - - - - \$1500.00

Note: An undivided 1/17 interest in the No. 2 working on Sur. No. 3331 Idaho lode is accredited to each lode of this survey as hereinafter explained.

Grizzley Lode.

No. 1. The discovery showing mineral in place is on the lode line 10 ft. from line 4-1.

Note: An undivided 1/17 interest in the No. 2 working on Sur. No. 3331 Idaho lode is accredited to this lode.

Value 1/17 interest - - - - - \$1500.00

Peru Lode.

No. 1. The discovery cut the fact of which is on the lode line 18 ft. from line 2-3, 5 x 12 ft. running N. 35° E. 13 ft.

Value - - - - - \$100.00

Note: An undivided 1/17 interest in the No. 2 working on Sur. No. 3331 Idaho lode is accredited to this lode.

Value 1/17 interest - - - - - \$1500.00

This claim is a part of the Yankee Group, claimant herein, which comprises 17 lodes, viz: Sur. No. 3331 Bunker Hill, California, Idaho; Sur. No. 1171 Wellington, Montana, Colorado; Sur. No. 1710 Famous, Meddler; Sur. No. 1711 Indiana; Sur. No. 3057 Talc; Sur. No. 1029 A. Annie Ryerson, Morenci; ~~Sur.~~ No. 40 Yankee; ~~Sur.~~ No. 39 Montezuma, Great Northern, Grizzley and Peru lodes of this survey.

Upon inspection of the contour map filed with Sur. No. 3331 in which part of this same improvement was used it

can readily be seen that the No. 2 working on said Idaho lode is conveniently located to develop the different lodes of this group at depth by drifts driven from different levels.

From Cor. No. 1 Great Northern lode of this survey the center of the No. 2 shaft on Sur. No. 3331 Idaho lode bears S. $83^{\circ}30'$ W. 978 ft., 6 x 8-ft. 270 deep. From the bottom of this shaft a drift 6 x 7 ft. running S. $30^{\circ}30'$ W. 30 feet, thence S. $26^{\circ}25'$ E., 181 ft., thence S. $85^{\circ}10'$ E. 468 ft., thence S. 48° E. 70 ft., thence S. 67° E. 20 ft., thence S. 31° E. 128 ft., thence N. 48° E. 48 ft., thence N. 64° E. 320 ft.

Value - - - - - \$25,500.00

Note: Over Five Hundred Dollars worth of work has been done in the breast of the last drift since the Peru lode was located.

Note: I have been reliably informed that the discovery shaft on the Grizzley lode of this survey has been obliterated by tailings dump which is near the junction of the two gulches shown on map of this survey. See affidavits attached.

ADJOINING LODES.

This survey is bounded on the North by Sur. No. 1512 Copper Cross, Chambone and Trinket lodes; on the East by Sur. No. 2975 White Glance No. 2 lode, J. Leszynsky claimant, Sur. No. 1711 Indiana lode, Sur. No. 3057 Talc lode, Sur. No. 1710 Famous lode, claimant herein; On the South by Sur. No. 2886 Ione and Old Nick lodes, The Arizona Copper Company claimant; and the West by Sur. No. 1171 Colorado and Montana 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.

REPORT.

U. S. L. M. No. 1654 is a post 7 ins. square properly

11.

set and scribed.

Sur. No. 1171 Colorado and Montana lodes;

Cors. 8, 10 and 11 are iron pins set in bedrock with the proper markings alongside. No. 7 has been obliterated. Its position was established by using bearing rock for Cor. No. 4 Sur. No. 1512 Copper Cross lode, which was identical with said Cor. No. 7.

Sur. No. 1512 Copper Cross, Chambone and Trinket lodes:

All corners are posts properly set and scribed except Cor. No. 4 of the Copper Cross lode, which has been obliterated. Position determined by its bearing rock.

Sur. No. 2975 White Glance No. 2 lode:

All corners are posts properly set and scribed.

Sur. No. 1711 Indiana lode:

All corners are posts properly set and scribed.

Sur. No. 3057 Talc lode:

Cors. Nos. 2 and 4 are posts properly set and scribed.

Cor. No. 1 is a cross (X) on bedrock.

Sur. No. 1710 Famous lode:

Cor. No. 1 is a cross (X) on bedrock. Cor. No. 4 is a post properly set and scribed. The witness corner for Cor. No. 2 is a cross (X) on rock with post alongside properly scribed.

Sur. No. 2886 Ione and Old Nick lodes: *12 to 13*

Ione lode: Cor. No. 2 is a post properly set and scribed; Cor. No. 3 is a cross (X) on a rock properly chiseled, and the witness corner for Cor. No. 4 is a cross (X) on rock properly chiseled.

Old Nick lode: Cors. Nos. 1, 3 and 4 are stones properly chiseled.

The survey of each lode of this location is identical with the respective locations as staked upon the ground. The differences between these field notes and returns on previous surveys are due to errors in the latter. All end center monuments are mounds of stone. All corner points on posts are marked with tacks; on stones or rods with crosses (X).

Cors. Nos. 2 and 3 of Peru lode of this survey are identical with the original N. E. and S. E. corners of the Great Northern lode as excluded from Sur.No. 1711 Indiana lode, and the side lines are parallel to the original side lines of the Great Northern lode.

E. J. Moore
U. S. Mineral Surveyor.

All corners are posts properly set and scribbled except
 Cor. No. 4 of the Copper Cross lode, which has been off-
 terated. Position determined by its bearing rock.
 Sur. No. 2385 White Glance No. 3 lode:
 All corners are posts properly set and scribbled.
 Sur. No. 1711 Indiana lode:
 All corners are posts properly set and scribbled.
 Sur. No. 2037 Lyle lode:
 Cors. Nos. 2 and 4 are posts properly set and scribbled.
 Cor. No. 1 is a cross (X) on bedrock.
 Sur. No. 1710 Tamona lode:
 Cor. No. 1 is a cross (X) on bedrock. Cor. No. 4 is a
 post properly set and scribbled. The witness corner for
 Cor. No. 2 is a cross (X) on rock with post alongside
 properly scribbled.
 Sur. No. 2385 Iowa and Old Hill lodes:
 lone lode: Cor. No. 2 is a post properly set and scribbled.
 Cor. No. 3 is a cross (X) on a rock properly chiseled.
 and the witness corner for Cor. No. 4 is a cross (X) on
 rock properly chiseled.
 Old Hill lode: Cors. Nos. 1, 3 and 4 are stones properly
 chiseled.
 The survey of each lode of this location is identical
 with the respective locations as staked upon the ground.
 The differences between these field notes and returns on
 previous surveys are due to errors in the latter. All
 end center monuments are made of stone. All corner
 points on posts are marked with letters; on stones or rods
 with crosses (X).

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 Great Northern, Grizzley, Peru lodes _____
 and showing the respective capacities in which they acted.

Pablo Gonzales _____, *Chainman.*
 _____, *Chainman.*
 _____, *Asman.*
 _____, *Flagman.*

FINAL OATHS OF ASSISTANTS.

~~We, I,~~ Pablo Gonzales _____
~~and~~ _____, do solemnly swear that ^I ~~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 Great Northern, Grizzley, Peru 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 _____

Pablo Gonzales _____, *Chainman.*
 _____, *Chainman.*
 _____, *Asman.*
 _____, *Flagman.*

Subscribed and sworn to by the above-named persons before me this 6 th _____
 day of May _____, 1918

Louis T. Payne
Notary Public

6-1048

My Commission expires Feb. 20-1923

FINAL OATH OF U. S. MINERAL SURVEYOR.

I, E.T. Morton, U. S. Mineral Surveyor, do solemnly swear that, in pursuance of instructions received from the United States Surveyor General for Arizona, dated February 26, 1919, 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 Great Northern Grizzley, Peru lodes, situate in Copper Mountain Mining District, Greenlee County, Arizona, in Section 9, 15 & 16 Uns, Township No. 4 S., Range No. 29 E. G. & S. R. B. & M., and designated as Survey No. 3553, 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. Mineral Surveyor.

Subscribed and sworn to by the said E.T. Morton
U. S. Mineral Surveyor, before me L.T. Payne, Notary Public
this 6th day of May, 1919.

Louis T. Payne
Notary Public

8-1044

My Commission Expires Feb. 20, 1923

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

Department of the Interior,

OFFICE OF U. S. SURVEYOR-GENERAL,

Phoenix, Arizona,

May 3, 1920.

I, U. S. Surveyor-General for Arizona

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

known as the GREAT NORTHERN, GRIZZLEY, PERU lodes situate in Copper Mountain

Mining District, Greenlee County, Arizona.

in Section 9, 15, & 16, Township No. 4 South, Range No. 29 E., G&SRB&M, and designated as Survey No. 3553

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 said mining claim by claimant or its grantors, and that said improvements consist of a cut, 2 shafts and 3/17 interest in shaft No. 2 Idaho lode, Sur. No. 3331, Value \$4700.00

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.

4-687

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

DEPARTMENT OF THE INTERIOR
OFFICE OF U. S. SURVEYOR GENERAL

Phoenix, Arizona,

May 3, 1920

I, U. S. Surveyor General for Arizona

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

known as the

GREAT NORTHERN, GRIZZLEY, PERU Lodes

situate in Copper Mountain mining district,

Greenlee

County, Arizona

in Section 9, 15 & 16 Uns., Township No. 4 South, Range No. 29 E., G. &

S. R B & M

, designated as Survey No. 3553

executed by E. T. Morton, U. S. Mineral

Surveyor, March 1-15, 1919, under my instructions dated

February 26, 1919, 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. 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.



U. S. Surveyor General for Arizona