# MINERAL SURVEY No. 3945

	Arizona Land District.					
	FIELD NOTES  OF THE SURVEY OF THE MINING CLAIM OF					
	Phelps Dodge Corporation					
	KNOWN AS THE					
GRAHAM No.1, NEVADA and EUCLAIRE Lodes						
	Greenlee Gold Hountain Mining District,					
	Greenlee County, Arizona					
ections	2 and 3 , Township 4 S. , Range 29 E.					
Surveye	ed under instructions dated March 21 , 19 24					
	by					
(	Claim located See location notices , 19					
8	Survey commenced April, 30 , 19 24					
	Survey completed					
J	Address of claimant Phelps Dodge Corporation, Morenci, Ariz.					
	DATES OF AMENDED LOCATIONS.					
	See amended location notices.					

### MINERAL SURVEY NO. 3945

GRAHAM NO. 1 Lode.

Beginning at Cor. No.1, identical with Loc. Mon.

A granite rock 8 x 10 x 11 ins. above ground, set 12 ins. in the ground, chiseled with cross (x) 1 G No.1-3945, with md of stone 3 1/2 ft. base by 3 ft. high alongside, whence the 1/4 Cor. bet. Secs. 2-3 T. 4 S. R. 29 E., brs. N. 43° 49' E.,410.8 ft. Cor. No.2 Sur. No.2907 Raton lode, claimant herein, brs. S.35°27'E., 382.9 ft.

No other bearings are available.

Thence S.38°45'E. Va. 13° 30' E.

300.0

To W. end center, identical with Loc. Mon.

A pine post 4 ins. diam. by 4 ft. high set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed W. Cr. G. 1

374.95 Intersect line 1-2 Sur. No. 2907 Raton lode at N. 32°43' E., 23.02 ft. from Cor. No.2

600.00 To Cor. No.2, identical with Loc. Mon. and Cor. No.1 Euclaire lode of this Sur.

A granite rock 6 x 10 x 10 ins above ground, set 12 ins. in the ground, chiseled with cross (x) 2 G No.1, 1 E - 3945, with md of stone  $3 \frac{1}{2}$  ft. base by 3 ft. high alongside.

No bearings are available.

Thence N. 59°18' E. Va. 13° 30' E.

650.0

Gulch brs. southeasterly.

1500.0

To Cor. No.3, identical with Loc. Mon. and Cor. No.4 Euclaire lode of this Sur. also Cor. No.1 Sur. No.3915 Consolidate No.1 lode, claimant herein.

A granite rock 8 x 8 x 10 ins. above ground, set 12 ins in the ground, chiseled with cross (x) 3 G No.1, 4 E, 1 5945 and 1 C No.1-3915 with md of stone 3 1/2 ft. base by 3 ft. high alongside

No bearings are available.

Thence N.38°43' W. Va 13°30'E

MINERAL SURVEY NO. 3945 Feet. Graham No.1 lode - Cont'd. To E. end center, identical with Loc. Mon. 300.0 A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed E. Cr. G. No.1 To Cor. No.4 . 600.0 A granite rock 8 x 12 x 10 ins above ground, set 12 ins. in the ground, chiseled with cross (x) 4 G. No.1-3945 with md of stone 3 1/2 ft. base by 3 ft. high alongside. No bearings are available. Thence S. 59° 18' W. Va. 13° 30' E. Gulch brs. southwesterly. 215.0 Intersect line 1-2 Sur. No.2907 Raton lode at S.32° 43' W.,623.79 705.73 ft. from Cor. No.1 and N. 32° 43' E., 852.71 ft. from Cor. No.2. To Cor. No.1, the place of beginning. 1500.0 NEVADA Lode. Beginning at Cor. No.1, identical with Loc. Mon. A pine post 4 ins. so by 4 ft. high, set firmly in the ground and surrounded with md. of stone 3 1/2 ft. base by 3 ft. high, scribed 1 N - 3945, whence the Cor. to Secs. 2-3-10-11, T.4S., R.29E. brs. S. 63°33' E.,557.1 ft. No other bearings are available. Thence N. 38°21' W. Va. 13° 30' E. To W. end center, identical with Loc. Mon. 304.9 A pine post 4 ins. diam. by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high , scribed W. Cr. N. To Cor. No. 2, identical with Loc. Mon. 609.8 A pine post 4 ins.sq by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed 2 N - 3945.

-2-

scribed, 2 - 3945. BT.

A pine tree 12 ins. diam. brs. N. 52° E., 12.5 ft. Blazed and

MINERAL SURVEY NO. 3945.

NEVADA Lode - Cont'd.

No other bearings are available.

Thence N. 61° 56' E. Va. 13° 30' E.

1499.79 Intersect line 1-2 Euclaire lode of this Sur. at N. 38° 43' W., 31.79 ft. from Cor. No.2

1500.00

To Cor. No.3, identical with Loc. Mon.

A porphyry rock 6 x 10 X 12 ins. above ground, set 12 ins. in the ground, chiseled with Cross (x) 3 N-3945, with md of stone 3 1/2 ft. base by 3 ft. high alongside.

No bearings are available.

Thence S. 38°21' E. Va. 13° 30' E.

31.75

To Cor. No. 2 Euclaire lode of this Sur. and Cor. No. 3 Sur. No. 3058 Olivette lode, claimant herein.

304.9

To E. end center, identical with Loc. Mon.

A pine post 4 ins. diam. by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed E. Cr. N.

334.4

To W. end center Sur. No.3058 Olivette lode. A md of stone.

609.8

To Cor. No.4, identical with Loc. Mon. On line 3-4 Sur. No. 3058 Maine lode at S. 61° 56' W., 579.18 ft. from Cor. Mo.4

A granite rock 8 x 8 x 10 ins. above ground, set 12 ins. in the ground, chiseled with cross (x) 4 N- 3945 with md of stone 3 1/2 ft. Wase by 3 ft. high alongside.

Cor. No.2 Sur. No.3058 Olivette lode brs. S. 38° 21' E., 26.85 ft. No other bearings are available.

> Thence S. 61° 56' W. Va. 13° 30' E.

816.32

To Cor. No.3 Sur. No. 3058 Maine lode.

1500.00

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

EUCLAIRE Lode.

Beginning at Cor. No.1, identical with Loc. Mon. and Cor. No.2 Graham lode of this Sur., heretofore described, whence the 1/4 Cor. bet. Secs. 2-3 T. 4 S., R. 29 E. brs. N. 6° 46' 40'W., 769.96 ft.

#### MINERAL SURVEY NO. 3945

EUCLAIRE Lode - Cont'd.

Thence S.38°43'E. Va. 13° 30' E

300.0

To W. end center, identical with Loc. Mon.

A pine post 4 ins. sq. by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed W. Cr E.

568.21 Intersect line 2-3 Nevada lode of this Sur. at S. 61° 56' W.,

0.21 ft. from Cor. No. 3.

To Cor. No. 2, identical with Loc. Mon. and Cor. No.3 Sur. No. 3058 Olivette lode.

A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md of stone  $3 \frac{1}{2}$  ft. base by 3 ft. high, Scribed 2 E -3945 and 3 0-3058.

No bearings are available.

Thence N. 59°18' E. Va. 13° 30' E.

825.0

Gulch brs. southeasterly.

1500.00

To Cor. No.3, identical with Loc. Mon. and Cor.4 Sur. No.3058 Olivette lode, also Cor. No.2 Sur. No.3915, Consolidate No.1 and Cor. No.3 Sur. No.1576 Copper Bullion lode, all belonging to claimant herein.

A pine post 4 ins sq by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed 3 E-3945, 4 0 - 3058, 2 C No.1-3915 and 3 C B - 1576 U.S.L.M. No.1576 brs. S. 81°35'30" E., 1287.8 ft.

No other bearings are available.

Thence N. 38°43' W. Va. 13° 30' E.

300.0 To E. end center, identical with Loc. Mon. and W. end Center Sur. No. 3915 Consolidate No. 1 lode.

A pine post 4 ins. sq by 4 ft. high, set firmly in the ground and surrounded with md of stone 3 1/2 ft. base by 3 ft. high, scribed E. Cr. E. and W. Cr. C. No. 1.

#### MINERAL SURVEY NO. 3945

#### EUCLAIRE Lode - Cont'd.

Mo.1 lode of this Sur. also Cor. No.1 Sur. No. 3915 Consolidate
No.1 lode, heretofore described.

Thence S.59° 18' W. Va. 13° 30' E.

850.0

Gulch brs. southeasterly.

1500.00

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

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#### LODE LINES.

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

Graham No. 1 lode, 550 ft.s. 59°18' W., and 950.0 ft.N. 59°18' E. Nevada lode, 34.0 ft. N. 61° 56' E., and 1466.0 s. 61° 56' W. Euclaire lode, 740.0 ft., S.59° 18' W., and 760.0 n. 59° 18' E.

#### AREA.

Total area Graham No.1 lode	Acres 20.459
Sur. No.2907 Raton lode 3.385	
Total area Nevada lode	20.661
Total area Euclaire lode	20.459

The survey of each lode of this location is identical with the respective locations as staked upon the ground.

#### LOCATION.

This survey is located in the S E 1/4 Sec. 3 and the W 1/2 Sec. 2 T. 4 S., R. 29 E.

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### 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 granters, is not less than five hundred dollars, and that said improvements consist of:

EXPENDITURE OF FIVE HUNDRED DOLLARS.

GRAHAM NO. 1 lode.

No.1 The discovery point on the center line 550.0 ft. from the center of line 1-2. A md of stone on cropping.

No.2 A shaft, the center of which brs. from Cor. No.3, S.74° W., 1020 ft. 5 x 20 ft., 10 ft. deep, caved. Value \$300.0

No.3 A tunnel, the mouth of which brs. from Cor. No. 3 S. 79°15' W., 880 ft. 4 x 6 ft. running N. 78° W., 10 ft. to face. Value \$100.0

No. 4 A tunnel, the mouth of which brs. from Cor. No. 3 S. 72° 30'W., 815 ft. 4 x 6 ft. running N. 40° 30' E., 100 ft. to face. Value \$1000.0

No.5 A shaft, the center of which brs. from Cor. No. 3 S.79°15' W., 730 ft. 4 x 6 ft. 10 ft. deep.

Value \$100.0

No. 6 A shaft, the center of which brs. from Cor. No. 3 S. 68° W., 960 ft. 4 x 6 ft. 10 ft. deep. Value \$100.

No. 7, A shaft, the center of which brs. from Cor. No. 3, S66°15'W., 950.0.4 x 6 ft. 100. ft. deep. Value \$1000.0

No. 8 A tunnel, the mouth of which brs. from. Cor. No.3, S.64°15'W. 965. ft. 4 x 6 ft. running west 30 ft. to point, thence S. 48° W., 70 ft. to face, from point a drift 4 x 6 ft. running N. 70 ° W., 20 ft. to face.

Total value \$1200.0

#### NEVADA Lode.

No.1, the discovery tunnel, the mouth of which being the discovery point is on the center line 34.0 ft. from the center of line 3-4 4 x 6 ft. Running S. 66° W., 128. ft. to face. Value \$1280.00

#### EUCLAIRE Lode.

No.1, the discovery cut, the face of which being the discovery point is on the center line 740. ft. from the center of line 1-2, 4 1/2 ft. wide 10 ft. face, running N. 59° E., 18 ft. to mouth., from its face is a tunnel 4 x 6 ft. running S. 43° W.,55 ft. to sta. 1 thence, S. 43° W., 35 ft. to face. From Sta. 1 A drift 4 x 6 ft.

#### MINERAL SURVEY NO. 3945

#### EXPENDITURE OF FIVE HUNDRED DOLLARS.

EUCLAIRE Lode -Cont'd.

running S. 45° E., 30 ft. to face. From Sta.l, another drift 4 x 6 ft., running N. 45° W.,8 ft. to face.

Value Cut and tunnel \$ 1380.0

No.2 A tunnel, the mouth of which brs. from Cor. No. 3 N. 89°30' W., 510 ft., 4 x 6 ft. running N. 40° 30' E., 60 ft. to face.

Value \$600.0

No.3 A cut, the mouth of which brs. from Cor. No. 3 S.87° 45'W.,

460. ft. 4 1/2 ft. wide, 10 ft. face, running East 20 ft., to face.

Value \$125.0

#### INSTRUMENT.

This survey was made with a Gurley mountain transit, the courses were deflected from the true meridian, as determined by direct solar observations. The distances were measured with a 500 ft. steel tape.

#### REPORT.

The lode line of each location of this claim was run directly upon the ground, and the corners were established by running around the claims.

The 1/4 Cor. bet Secs. 2-3, and the Cor. to Secs. 2-3-10-11 are iron posts with brass caps on top, set firmly in the ground and stamped with the number of the sections.

Sur. Nos. 1576 Copper Bullion, 2907 Raton, 3058 Olivette and Maine lodes. All corners consist of pine posts properly set and scribed with the number of the corner and the survey. I find all courses and distances to be correct as approved.

U.S.L.M. No.1576 is a pine timber 6 x 8 ins. set in md. of stone 6 ft. base by 4 1/2 ft. high, showing 8 ft. above ground, scribed U.S. L. M. 1576.

### MINERAL SURVEY NO. 3945

#### ADJOINING CLAIMS.

On the North by Sur? No.2907 Raton lode, Eclipse, Graham No.2 and Consolidate No.4 lodes, unsurveyed.

On the east by Consolidate No.4 UNS. Sur. NO.3915 Consolidate No.1 and Sur. No.3058 Olivette Lodes.

On the south by Sur. No.3058 Olivette and Maine lodes and New Jersey lode, UNS.

On the west by Eclipse UNS. and Sur. No.2907 Raton lode.

All belonging to claimant herein.

#### SOLAR OBSERVATION.

Direct solar observation taken Wednesday, April 30, 1924 at 8:12 AM Solar time - Sun bisected. - Lat. 33°06' Lon. 109:21'

Difference in time 3 h 30m. Apparent declination=14°46'17.9"

Dec'l= 14°48'59"

P = 90 - Dec'1 = 75° 11'

L = 33° 06' H = 38°26' P = 75° 11' 2)146° 43' S= 73° 21' 30"

Sin 1/2 A Sin (S-L) (S-H)
Cos L Cos H

S-L = 40°15'30" / S-H = 34°55'30" / 9.8103905 9.7577783 0.0769018 0:1060542 2) 19.7511248 -

9.8755624 = 48° 40° = 1/2 A 97° 20° = A.

180° - 97°20' = S 82°40' E.-Bearing of Sun.

38°02 Ang. to left from Sun.

120°42'

180°

N 59°18'B.- Course of line

Set up at Cor. No. 2 Euclaire lode - F.S. to Cor. No. 3

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# FINAL OATHS FOR SURVEYS.

## LIST OF NAMES.

A list of the names of the individuals emplo	yed by T.N. Stevens
United States Mineral Surveyor, to assist in ru	nning, measuring, and marking the lines, corners, and
boundaries described in the foregoing field notes	of the survey of the mining claim of
Phelps Dodge Corpo	
known as the GRAHAM NO.1, NEVADA, an	d EUCLAIRE Lodes
and showing the respective capacities in which th	
	I.P. Campbell , Chainman.
	, Chainman.
	, Axman.
	, Flagman.
FINAL OATHS	OF ASSISTANTS.
	o solemnly swear that we assisted
T.N. Stevens, United States M	ineral Surveyor, in marking the corners and surveying
	Phelps Dodge Corsoration
known as the <u>CRAHAM NO. 1 NEVADA</u> :	and EUCLAIRE Lodes
represented in the foregoing field notes as having	been surveyed by said mineral surveyor and under his
	ects, to the best of AF knowledge and belief, faithfully
	monuments established according to law and the instruc-
tions furnished by the United States Surveyor Conce	and for
	I P Cauckhell Chainman.
	, Chainman.
	, Awman.
	, Flagman
A STATE OF THE STA	above-named persons before me this
day of	
y Commission Expires Nevember 36, 1924	- 6 Elbul
1	Potar Vulle
	6—1048

# FINAL OATH OF U.S. MINERAL SURVEYOR.

I, U. S. Mineral Surveyor,
do solemnly swear that, in pursuance of instructions received from the United States
Surveyor General for Arizona , dated
March 21, 1924, , 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
GRAHAM NO.1. NEVADA and EUCLAIRE lodes
situate in Greenlee Gold Mountain Mining District,
Greenlee County, Arizona , in Sections
2-3 , Township No. 4 S. , Range No. 29 E. G. S. R. M.
and designated as Survey No. 3945 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 per-
petuated in strict accordance with the law, official regulations and instructions there-
under; 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 oritsgrantors
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.
11,22
U/.N. Exerns
U. S. Mineral Surveyor.
Subscribed and sworn to by the said Notes
U. S. Mineral Surveyor, before me RW daugwatter a Way Public
mand for Finna Prunty, Clique this 20
day of time, 1924
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y commune whome of political to
my 191041 924 Mary works I ma so, they me

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

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

	Phoenix, Arizona,			
	July 25 , 1924 .			
I, U. S. Surveyor G	eneral for <u>District of Arizona</u>			
	he foregoing transcript of the Field Notes, return and approval			
	ining claim of			
	Phelps Dodge Corporation			
	s the GRAHAM NO. 1. NEVADA, and EUCLAIR lodes			
	, situate in Greenlee Gold Mountain			
	ng District, Greenlee County,			
	, in Sections 2 and 3 , Township No. 4 S.,			
	29 E. , and designated as Survey			
	, has been correctly copied from the originals on			
file in this office; that s	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 i	is made therein to natural objects or permanent monuments as			
will perpetuate and fix the				
	fy that five hundred dollars' worth of labor has been expended			
	upon said mining claims by claimant or its grantors, and			
drifts, total va	consist of 4 shefts, 2 cuts, 6 tunnels and 3			
- Maria da de la compansa de la contra del contra de la contra del la contra de la contra del la contra del la contra del la contra del la contra de la contra del la contra dela contra del la contra del la contra del la contra del la contra	LLSI_sqr(JS2) &			
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	id labor or improvements has been included in the estimate of			
expenditures upon any o				
	the plat thereof, filed in the U.S. Land Office at Phoenix.			
Arizona, is	s correct and in conformity with the foregoing Field Notes.			
	Charles M. Donohoe			
o 6—168	United States Surveyor General for Arizons.			

o 6—168

# 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,			
		July 25	, 1924		
I, U. S. Surveyor General for	District	of Arizona,			
do hereby certify that the foregoing an	d hereto attached F	Field Notes and Return of	the Survey of the		
Mining Claim of					
Pb	elps Dodge C	orporation			
			, known as the		
GRAHAN NO.	1, NEVADA, a	nd EUCLAIRE lodes			
situate in	Greenlee	Gold Mountain	mining district,		
Greenlee	County,	Ari zona			
in Sections 2 and 3 , To	wnship No	4.S., Range No	o. 29 E.		
, designated as Sur	vey No	3945			
executed byT. N.	Stevens		, U. S. Mineral		
Surveyor, April 30 - N	ay 2	, 1924, under my	instructions dated		
March 21	, 1924, have	been critically examined	and the necessary		
corrections and explanations made, and	the said Field Note	es and Return, and the sur	vey they describe,		
are hereby approved. The certified cop	by of the location co	ertificate filed by the appli	cant 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.					
	Gearle	o M. Dono	hoe.		

U. S. Surveyor General for \_\_\_Arizona.