

Form 3400-11  
(September 1967)  
(formerly 4-683)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Mineral Survey number	4756
State	Arizona
Land District	Arizona

FIELD NOTES

Of the Survey of the Mining Claim of *(name and address of Claimant)*

Phelps Dodge Corp.  
c/o Evans, Kitchel & Jenckes  
363 N. 1st Ave.  
Phoenix, Arizona 85003

Known as the *(name of group, if any)*

CONSISTING OF LOCATIONS NAMED AND LOCATED AS FOLLOWS

NAME OF LOCATION	DATE	
	LOCATED	AMENDED
COPPER BROOM ONE	9/14/73	9/26/73

Mining district			County	
Copper Basin			Yavapai	
Section	Township	Range	Meridian	Survey under order dated
21	13 North	3 West	Gila & Salt River	October 5, 1973
Survey commenced		Survey completed		Name of Mineral Surveyor
Dec. 20, 1973		Dec. 22, 1973		Robert Lenon

STATE OF TEXAS  
COUNTY OF [illegible]

[illegible text]

[illegible text]

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[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

FEET	<p>This survey was made with a Lietz Precise Transit, No. 65718, with horizontal limb 5-1/2 ins. diam., having two double opposite verniers reading to 20 seconds of arc, and full vertical circle 4-1/2 ins. diam., having one double vernier reading to 1 minute of arc. The eyepiece has a removable colored glass for making direct observations upon the sun. The instrument was in good condition at the time of the survey and all adjustments were in good order.</p> <p>All azimuths in this record were referred to the meridian of the Phelps-Dodge Copper Basin Project triangulation-system, set out on a local plane grid, as checked by me and found to be correct by the observations set out below.</p> <p>October 21, 1973, at Triangulation Station "Copper Broom" in Latitude 34°29'30" N. and Longitude 112°35' W., I make a series of four altitude observations upon the sun for azimuth at approximately equal time intervals, two each with the telescope in direct and reversed positions, observing opposite limbs of the sun, and reading the horizontal angles from Triangulation Station "Clipper", SE'ly, to the sun.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;"></td> <td style="width: 25%; text-align: center;">(1)</td> <td style="width: 25%; text-align: center;">(2)</td> </tr> <tr> <td>Mean time of observation, 105th meridian standard time:</td> <td style="text-align: center;">9<sup>h</sup>07<sup>m</sup> a.m.</td> <td style="text-align: center;">9<sup>h</sup>11<sup>m</sup> a.m.</td> </tr> <tr> <td>Declination of sun at mean time of observation:</td> <td colspan="2" style="text-align: center;">10°48'30" S.</td> </tr> <tr> <td>Mean observed vertical an- gles to sun's center:</td> <td style="text-align: center;">27°24'</td> <td style="text-align: center;">28°14'</td> </tr> <tr> <td>Mean horizontal angles from reference point to sun's center:</td> <td style="text-align: center;">159°11'30"</td> <td style="text-align: center;">160°16'</td> </tr> <tr> <td>True bearing of the line "Copper Broom" to "Clipper"</td> <td colspan="2" style="text-align: center;">N. 31°27' W.</td> </tr> </table> <p>The lines were measured with a Hewlett-Packard distance meter, and a Chicago steel tape, 300 feet in length, graduated every foot, with the end feet graduated to tenths; which was compared with a Lufkin standard at the time of beginning the survey and found correct.</p> <p>All lines and connections of this survey were run by direct methods.</p> <p>The magnetic declination observed at each corner of the survey gave a uniform value of 14°00' E.</p>		(1)	(2)	Mean time of observation, 105th meridian standard time:	9 <sup>h</sup> 07 <sup>m</sup> a.m.	9 <sup>h</sup> 11 <sup>m</sup> a.m.	Declination of sun at mean time of observation:	10°48'30" S.		Mean observed vertical an- gles to sun's center:	27°24'	28°14'	Mean horizontal angles from reference point to sun's center:	159°11'30"	160°16'	True bearing of the line "Copper Broom" to "Clipper"	N. 31°27' W.	
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	Mineral Survey No. 4756																		
	COPPER BROOM ONE Lode																		
	At Cor. No. 1, COPPER BROOM ONE lode.																		
	Set an iron pin, 5/8 in. diam., 24 ins. long, 18 ins. in the ground, stone mound alongside, with aluminum cap mkd. X-CB0-1-4756, from which																		

FEET	
	<p>The 1/4 sec. cor. of Secs. 16 and 21, T. 13 N., R. 3 W., G. &amp; S.R.M., Arizona, bears N. 12°43'10" E., 1427.32 ft. dist.</p> <p>Cor. No. 4, M.S. No. 4488 Copper Broom Extension lode, bears S. 58°35'05" W., 852.49 ft. dist.</p> <p>Cor. No. 3, Copper Broom Fraction lode, on line 3-4, Copper Broom Extension lode, both of M.S. No. 4488, bears S. 45°04'25" W., 684.42 ft. dist., an iron pipe, 1 in. diam., 6 ins. above ground, with galvanized cap mkd. X-CBF-3-4488, stone mound alongside.</p> <p>Cor. No. 2, M.S. No. 4488 Victoria No. 2 lode, bears N. 0°25' E., 34.65 ft. dist.</p> <p>Cor. No. 1, M.S. No. 514 Head Center lode, bears N. 28°32'50" E., 233.32 ft. dist.</p> <p>Cor. No. 6, M.S. No. 514 Head Center lode, bears S. 86°37' W., 118.36 ft. dist.</p> <p style="text-align: center;">Thence S. 36°06'20" E.</p>
30.	Gulch, 2 ft. wide; course West.
205.	Lode line; discovery point bears S. 53°53'40" W. 1425 ft. dist.
500.00	<p>Cor. No. 2, on line 1-2, M.S. No. 4488 Monopoly lode.</p> <p>Set an iron pin, 5/8 in. diam., 24 ins. long, 18 ins. in the ground, stone mound alongside, with aluminum cap mkd. X-CB0-2-4756, from which</p> <p>Cor. No. 2, M.S. No. 4488 Monopoly lode, bears N. 53°53'40" E., 4.74 ft. dist., 1 in. iron pipe, 6 ins. above ground, with galvanized cap mkd. X-M-2-4488, stone mound alongside.</p> <p style="text-align: center;">Thence S. 53°53'40" W.</p>
75.	Gulch, 5 ft. wide; course S. 75° W. to this point and West below this point.
284.32	Intersect line 3-4, M.S. No. 4488 Copper Broom Extension lode, at a point from which Cor. No. 4 bears N. 80°53' W., 802.59 ft. dist.
1053.32	Intersect line 3-4, M.S. No. 4488 Copper Broom Fraction lode, at a point from which Cor. No. 4 bears S. 7°33'10" W., 54.45 ft. dist., an iron pipe, 1 in. diam., 6 ins. above ground, with galvanized cap mkd. X-CBF-4-4488, stone mound alongside.
1130.00	Intersect line 4-1, M.S. No. 4488 Copper Broom Fraction lode, at a point from which Cor. No. 4 bears S. 80°53' E., 55.50 ft. dist.
1135.	Road, 12 ft. wide; bears N. 30° W. and S. 30° E.
1420.	Road, 12 ft. wide; bears N. 35° W. and S. 20° E.

FEET	
1495.00	<p>Cor. No. 1, M.S. No. 4488 Monopoly lode, on line 5-6, M.S. No. 515 Copper Bell lode, at a point from which Cor. No. 5 bears N. 36°11' W., 670.80 ft. dist.</p> <p>Found an iron pipe, 1 in. diam., 6 ins. above ground, stone mound alongside, with galvanized cap mkd. X-M-1-4488.</p>
1500.00	<p>Cor. No. 3.</p> <p>Set an iron pin, 5/8 in. diam., 24 ins. long, 18 ins. in the ground, stone mound alongside, with aluminum cap mkd. X-CB0-3-4756, from which</p> <p>Cor. No. 4, M.S. No. 4488 Copper Broom Fraction lode, bears N. 59°23'40" E., 410.98 ft. dist., an iron pipe, 1 in. diam., 6 ins. above ground, with galvanized cap mkd. X-CBF-4-4488, stone mound alongside.</p> <p>Thence N. 36°06'20" W.</p>
295.00	<p>Lode line; discovery point bears N. 53°53'40" E. 75 ft. dist.</p>
372.87	<p>Intersect line 4-1, M.S. No. 4488 Copper Broom Fraction lode, at a point from which Cor. No. 4 bears S. 80°53' E., 580.80 ft. dist.</p>
400.	<p>Road, 12 ft. wide; bears N. 60° E. and S. 75° W.</p>
515.	<p>Gulch, 7 ft. wide at junction. N'ly branch 5 ft. wide, course S. 50° W. to here; S'ly branch 3 ft. wide, course N. 45° W. to here; course of combined channels is S. 50° W. below this point.</p>
530.	<p>Road, 12 ft. wide; bears N. 80° W. and S. 80° E.</p>
595.00	<p>Cor. No. 4.</p> <p>Set an iron pin, 5/8 in. diam., 24 ins. long, 18 ins. in the ground, stone mound alongside, with aluminum cap mkd. X-CB0-4-4756, from which</p> <p>Phelps-Dodge triangulation-station "Copper Broom" bears N. 40°21'20" W., 191.16 ft. dist.</p> <p>U.S. M.M. #1 bears N. 83°19'15" W., 1729.18 ft. dist.</p> <p>Cor. No. 5, M.S. No. 515 Copper Bell lode, bears N. 33°46'15" W., 75.86 ft. dist., an old stone mound.</p> <p>Thence N. 57°31'05" E.</p>
3.20	<p>Intersect line 5-6, M.S. No. 515 Copper Bell lode, at a point from which Cor. No. 5 bears N. 36°11' W., 76.00 ft. dist., heretofore described.</p>
625.	<p>Gulch, 5 ft. wide; course S. 40° W.</p>

5

FEET  
668.53

Intersect line 2-3, Copper Broom Fraction lode, common with line 3-4, Copper Broom Extension lode, both of M.S. No. 4488, at a point from which Cor. No. 4 of Copper Broom Extension lode, identical with Cor. No. 3 of Bonnie Doon lode M.S. No. 512, bears N. 80°53' W., 23.90 ft. dist., an iron pipe, 1 in. diam., 6 ins. above ground, with galvanized cap mkd. X-BD-3-512-CBE-4-4488, stone mound alongside.

1430. Gulch, 2 ft. wide; course S. 80° W.

1503.00 Cor. No. 1, and place of beginning.

## AREAS

Acres

Total area, COPPER BROOM ONE lode-----18.854  
 Area in conflict with--  
 M.S. No. 4488 Copper Broom  
 Extension lode-----6.584  
 M.S. No. 4488 Copper Broom Fraction lode---7.199  
 M.S. No. 4488, Copper Broom Fraction  
 lode, exclusive of its conflict with  
 M.S. No. 515 Copper Bell lode-----7.182  
 M.S. No. 515 Copper Bell lode-----0.049  
 M.S. No. 515 Copper Bell lode, exclusive  
 of its conflict with M.S. No. 4488,  
 Copper Broom Fraction lode-----0.032

## LOCATION

This survey is located in Sec. 21, T. 13 N., R. 3 W., G. & S.R.M., Arizona, and is identical with ammended location as marked on the ground.

## EXPENDITURES

The improvements and the value of the labor and improvements made upon or for the benefit of the lode location embraced in said mining claim by the claimant or its grantors are as follows:

- No. 1 The discovery point of the COPPER BROOM ONE lode, being on the lode line, 75 ft. from a point on line 3-4, 295 ft. from Cor. No. 3.  
 No value.
- No. 2 The location hole, a percussion-drill hole, 3 ins. diam. at the collar, 15 ft. deep, the center of which bears N. 9°52' W., 188.4 ft. from Cor. No. 3.  
 Value, \$100.
- No. 3 A diamond drill hole, known as G-26, 3 ins. diam. at the collar, 1050 ft. deep, the center of which bears N. 18°24' W., 183.9 ft. from Cor. No. 3.  
 Value, \$10,000.
- No. 4 A diamond drill hole, known as G-23, 3 ins. diam. at the collar, 1099 ft. deep, the center of which bears S. 66°34' W., 519.1 ft. from Cor. No. 2.  
 Value, \$11,000.

FEET

OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA

M.S. No. 514, Head Center lode: All corners except No. 5 were found; No. 2 is a large mound, with a very old squared cedar post in it, scribed: HCN-1; Nos. 1 and 4 are very old mounds of similar appearance; No. 3 is only the base of a very old monument. The position for Cor. No. 5 was calculated from Cor. No. 4, on record distance and bearing. Cor. No. 6 is a scattered old mound of large stones 8 ft. in diam. Record lengths of the sidelines are within 5 to 11 ft.; all bearings are reasonably close to record.

M.S. No. 515, Copper Bell lode: Cor. No. 5 is a large monument; the record bearing was used for line 5-6.

M.S. No. 4488: All corners found were iron pipes, 1 in. diam., 6 ins. above ground, stone mound alongside, with galvanized pipe-caps properly mkd. All pertinent data checked out very well; the scribed markings on the squared cedar posts are remarkably legible, and appear to be the original scribing. Cor. No. 4 Copper Broom Extension, had been set as identical with Cor. No. 3, M.S. No. 512 Bonnie Doon lode, and a large old monument is alongside this corner.

FIELD ASSISTANTS

Hoyd J. Patty  
Thomas S. Woods  
Stephen W. Dale  
Bruce A. Schreiber

Transitman  
Head Chainman  
Rear Chainman  
Axeman

FEET



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

Name of Mineral Surveyor	Date
Robert Lenon	April 4, 1977

I HEREBY CERTIFY That in pursuance of an order received from the Bureau of Land Management & Amended , at Phoenix, Arizona , dated Sept. 10, 1973/ October 5 , 19 73 , I have carefully executed the survey of the claim of Phelps Dodge Corp. , known as the (lode, placer, or mill site) COPPER BROOM ONE , situated in Section 21 , Township 13 N. , Range 3 W. , Gila & Salt River Meridian, in the State of Arizona .

This survey, designated as number 4756 , has been executed by me and under my direction and has been made in strict conformity with said order, the Manual of Instructions for the Survey of Public Lands of the United States, and in specific manner described in the foregoing field notes.

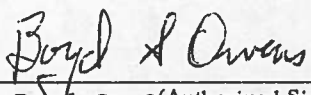
I FURTHER CERTIFY That the labor expended and improvements made upon and for the benefit of the (lode ~~XXXXX~~) location(s) embraced in the said mining claim by claimant(s) or its grantors are fully stated in my report. The character, extent, location, and itemized value are specified in full detail. No portion of, or interest in, said labor and improvements so credited to this claim has been included in the estimate of expenditures upon any other claim.

Patagonia, Arizona  
(Location)   
(Signature of Mineral Surveyor)

CERTIFICATE OF APPROVAL

Office
Arizona State Office
Location
Phoenix, Arizona
Date
August 29, 1978

The foregoing field notes of mineral survey number 4756 , in Section 21 , Range 3 W. , Gila and Salt River Meridian, in the State of Arizona ,  surveyed  unsurveyed Township 13 N. , executed by Robert Lenon Amended , Mineral Surveyor, under order dated Sept. 10, 1973 & Oct 5<sup>19</sup> 73, having been critically examined and the necessary corrections made prior to their certification by the surveyor, the field notes and the survey therein described are hereby approved.

  
Boyd S. Owens (Authorized Signature) Chief, Branch of Cadastral Survey (Title)

CERTIFICATE OF TRANSCRIPT

I HEREBY CERTIFY That the foregoing transcript of field notes of the above-described mineral survey number is a true copy of the original field notes.

(Authorized Signature) (Title)

Title 18, U.S.C. section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
530 SOUTH EAST ASIAN AVENUE

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