

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MINERAL SURVEY NO. 4418

ARIZONA Land District.

FIELD NOTES

Of The Survey Of The Mining Claim Of

PHELPS DODGE CORPORATION

Known As The

BULLDOZER LODGE

Greenlee Gold Mountain Mining District,

Greenlee County, Arizona

Sections 20 and 21, Township 4 South, Range 29 East, G. & S. R. M.

Surveyed under order dated September 27, 1956

by Robert Lenon
Mineral Surveyor.

Claim located December 6, 1937

Survey commenced February 18, 1957

Survey completed February 21, 1957

Address of claimant's attorneys, Evans, Kitchel & Jenckes
807 Title & Trust Bldg.,
Phoenix, Arizona

DATES OF AMENDED LOCATIONS

February 24, 1956

SURVEY NO. 4418

1

Observations

This survey was made with a Berger Precise Transit No. 6072, with horizontal limb $5\frac{1}{2}$ ins. diam., having two double opposite verniers, and full vertical circle 5 ins. diam., having one double vernier; the verniers read to one minute of arc. The instrument was in good condition at the time of the survey and all adjustments were in good order.

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

February 18, 1957, at Cor. No. 1 of Survey No. 4418, Bulldozer lode, in latitude $33^{\circ}04' N.$, and longitude $109^{\circ}22\frac{1}{2}' W.$, 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 Cor. No. 4 Bulldozer lode, 1500 feet northeasterly, to the sun.

Mean time of observation, 105th meridian

standard time = $9^h 30^m 22^s$ a.m.

Declination of sun at mean time of observation = $11^{\circ}33.3' S.$

Mean observed vertical angle to sun's center = $28^{\circ}04'30''$

Mean horizontal angle clockwise from reference point to sun's center = $87^{\circ}21'00''$

True bearing to reference point = $N. 40^{\circ}48' E.$

The lines were measured with a Lufkin steel tape 300 feet in length, graduated every foot, with the end feet graduated to tenths, and a Lufkin steel tape 100 feet in length, graduated to feet, tenths, and hundredths, both tapes were compared with a Lufkin standard at the time of beginning the survey, and found correct.

All lines and connections of this survey were run by direct methods.

The magnetic declination observed at each corner of the survey gave a uniform value of $13^{\circ}00' E.$

Feet

BULLDOZER LODE

At Cor. No. 1 of the Bulldozer lode.

Set a copper-coated steel rod, 3 ft. long, $\frac{5}{8}$ ins. diam., 27 ins. in the ground, with bronze cap mkd. B-1-4418; from which

The quarter-section cor. of Secs. 20 and 21, T. 4 S., R. 29 E., G. & S.R.M., bears $N. 31^{\circ}42' E.$, 252.98 ft. dist., an iron post with brass cap, firmly set and properly marked.

Cor. No. 1 Sur. No. 4353 Tom Wal #8 lode, bears $N. 37^{\circ}55' E.$, 18.23 ft. dist.

A limestone outcrop, 30x30x36 ins. high, mkd. X-BR-B-1-4418, bears $N. 50^{\circ}50' W.$, 30.7 ft. dist.

Raise a mound of stone alongside the cor.

Thence $N. 46^{\circ}42' W.$

1.02

Intersect line 1-2, Sur. No. 4353 Tom Wal #8 lode at a point from which Cor. No. 1 bears $N. 41^{\circ}09' E.$, 18.16 ft. dist.

13.89

Intersect line 3-4, Sur. No. 760 Micawber lode, at a point from which Cor. No. 4 bears $N. 45^{\circ}33' E.$, 167.63 ft. dist.

Stations Feet	Description
263.47	Lode line; discovery point bears N. 40°48' E., 455 ft. dist. Set an iron pin, 1/2 in. diam., and raise a mound of stone alongside.
370.	Gulch, 15 ft. wide, course N. 50° E.
484.57	Intersect line 4-1, Sur. No. 3946 Iron Queen lode, at a point from which Cor. No. 4 bears N. 58°00' E., 1208.80 ft. dist., and intersect line 4-1, Sur. No. 4353 Tom Wal. #8 lode at a point from which Cor. No. 1 bears S. 48°51' E., 483.19 ft. dist.
563.47	Cor. No. 2 Set a copper-coated steel rod, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. B-2-4418; from which Cor. No. 4 Sur. No. 4353 Tom Wal #8 lode, bears N. 53°19' W., 38.08 ft. dist. A point on the face of the concrete pier (supporting the water-lines from Eagle Creek) 72x18x48 ins. high, bears N. 14°30' W., 16.5 ft. dist., mkd. X-BO-B-2-4418. Raise a mound of stone alongside the cor. Thence N. 40°48' E.
23.	Water-lines from Eagle Creek to Morence, course E.
530.	Road, 20 ft. wide, bears N. 60° W. and S. 60° E.
1496.46	Cor. No. 3, at intersection of line 3-4 Sur. No. 2857 Iron King lode with line 3-4 Sur. No. 3946 Iron Queen lode. Set a copper-coated steel rod, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. B-3-4418; from which A limestone boulder 12x12x9 ins. high, bears S. 18°40' E., 10.6 ft. dist., mkd. X-BR-B-3-4418. Cor. No. 3 Sur. No. 2857 Iron King lode, bears S. 11°30' E., 463.65 ft. dist. Cor. No. 4 Sur. No. 3946 Iron Queen lode, bears S. 10°51' E., 556.3 ft. dist. Raise a mound of stone alongside the cor. Thence S. 46°42' E.
300.0-	Lode line; discovery point bears S. 40°48' W., 1041.46 ft. dist. Set an iron pin, 1/2 in. diam., and raise a mound of stone alongside.
563.47	Cor. No. 4, at intersection of line 4-1 Sur. No. 2609 Tomb Stone lode, with line 2-3 Sur. No. 2857 Iron King lode. Set a copper-coated steel rod, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. B-4-4418; from which

SURVEY NO. 4418

Given Feet

A limestone outcrop, 18x24x12 ins. high, mkd. X-BR-B-4-4418, bears N. 41°50' W., 8.55 ft. dist.

Cor. No. 1 Sur. No. 2609 Tomb Stone lode, bears N. 40°48' E., 178.08 ft. dist.

Cor. No. 3 Sur. No. 2857 Iron King lode, bears S. 77°56' W., 324.82 ft. dist.

Cor. No. 4 Sur. No. 3946 Iron Queen lode, bears S. 62°21½' W., 344.70 ft. dist.

U.S. Coast & Geodetic Survey Triangulation Station "RENCI", a standard brass disc, set in bedrock, bears N. 71°06' W., 282.65 ft. dist.

Phelps Dodge Corp. triangulation station No. 119, an iron pin, 5/8 ins. diam., set in bedrock, bears N. 71°28' W., 290.47 ft. dist.

Raise a mound of stone alongside the cor. Thence S. 40°48' W. 50 ft. wide, 60 ft. long.

685. Road, 20 ft. wide, bears N. 80° W. and N. 60° E.

1160. Water-lines from Eagle Creek to Morence, course S. of E.

1328.80 Cor. No. 4 Sur. No. 760 Micawber lode, identical with Cor. No. 4 Sur. No. 2609 Tomb Stone lode; from which the quarter-section cor. of secs. 20 and 21, bears N. 14° 50' E., 91.36 ft. dist., heretofore described.

Cor. No. 3 Sur. No. 760 Micawber lode, bears S. 45°33' W., 594.44 ft. dist.

Cor. No. 1 Sur. No. 4353 Tom Wal #8 lode, bears S. 41°09' W., 149.46 ft. dist.

1430. Gulch, 25 ft. wide, course SE.

1496.46 Cor. No. 1 and place of beginning.

AREAS

Acres

Total area, Bulldozer lode	19.339
Area in conflict with:	
Sur. No. 760 Micawber lode	0.027
Sur. No. 760 Micawber lode, exclusive of its conflict with Sur. No. 4353 Tom Wal #8 lode	0.022
Sur. No. 2857 Iron King lode	1.729
Sur. No. 3946 Iron Queen lode	8.553
Sur. No. 4353 Tom Wal #8 lode	0.101
Sur. No. 4353 Tom Wal #8 lode, exclusive of its conflict with Sur. No. 760 Micawber lode	0.096

LOCATION

This survey is located in the E½ of Sec. 20 and W½ of Sec. 21, T. 4 S., R. 29 E., G. S.R.M., Greenlee County, Arizona

The survey is identical with the location as marked on the ground.

Chains

EXPENDITURES

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

- No. 1 The discovery cut of the Bulldozer lode, the face of which being the discovery point, is on the lode line 455 ft. from a point on line 1-2, 263.47 ft. from Cor. No. 1, 12 ft. wide, 15 ft. face, running N. 40°48' E., 32 ft. to face.
Value, \$750.00

OTHER IMPROVEMENTS

An access road from the Eagle Creek road to the discovery cut of the Bulldozer lode, 12 ft. wide, 400 ft. long.

Claimant herein.

A triple water-line, each line being 12 ins. diam. steel pipe, set on concrete footings.

Claimant herein.

A graded road from Eagle Creek to Morenci across this claim, 20 ft. wide, 630 ft. long.

Claimant unknown.

A cut, 5 ft. wide, the face of which bears S. 75°50' W., 675 ft. from Cor. No. 4, runs N. 10° W., 10 ft. to 4 ft. face.

Claimant unknown.

A cut, 14 ft. wide, the face of which bears S. 75°10' W., 403 ft. from Cor. No. 4, runs North, 17 ft. to 5 ft. face.

Claimant unknown.

A shaft, the center of which bears N. 74° W., 402 ft. from Cor. No. 4, 6x8 ft., 10 ft. deep.

Claimant herein.

A cut, 10 ft. wide, the face of which bears N. 70° W., 305 ft. from Cor. No. 4, runs S. 65° W., 15 ft. to 8 ft. face.

Claimant unknown.

OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA.

Sur. No. 760 Micawber lode:

Cors. No. 3 and 4 are sandstones, firmly set and properly marked. Line 3-4 was found to be N. 45°33' E., 594.44 ft. instead of N. 45°50' E., 595.65 ft. as approved. The bearing of line 2-3 is shown as approved.

Sur. No. 2609 Tomb Stone lode:

Cor. No. 1, a badly scattered mound of stone; set a stake at true point, reestablished from old Phelps Dodge coordinate data.

Cor. No. 4, identical with Cor. No. 4 Sur. No. 760 Micawber lode, described above.

Line 4-1 was found to be N. 40°48' E., 1506.88 ft. instead of N. 41°13' E., 1500.0 ft. as approved.

Sur. No. 2857 Iron King lode:

Cor. No. 3, reset from old Phelps Dodge coordinate data, fell within an old scattered mound of stone. Set a copper-coated steel rod, mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap marked IK-3-2857.

CHANGES

Cor. No. 4: identified by original bearing object. Set a copper-coated steel rod, mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. IK-4-2857. Line 3-4 was found to be N. 11°30' W., 594.78 ft., instead of N. 11°39' W., 600.0 ft. as approved.

Sur. No. 3946 Iron Queen lode:

Cor. No. 3, found a badly scattered mound.

Cor. No. 4, found a loose stone, properly marked. Reset same firmly in ground alongside existing stone mound, using old Phelps Dodge coordinate data.

Cor. No. 1, found a loose stone, properly marked. Reset same on line 1-2 and at record distance from Cor. No. 1 Sur. No. 3946 Stamboul lode.

Line 3-4: bearing found to be S. 10°51' E., instead of S. 11°02' E., as approved.

Line 4-1 was found to be S. 58°00' W., 1497.54 ft., instead of S. 57°57' W., 1500.0 ft. as approved.

Sur. No. 3946 Stamboul lode:

Line 1-2 bearing correct as approved.

Cor. No. 1: a sandstone, firmly set and properly marked, mound of stone alongside.

Cor. No. 2: a porphyry stone, firmly set, faint markings visible, scattered mound of stone alongside.

Sur. No. 4353, Tom Wal No. 1 lode:

Cor. No. 1: an iron pipe, 3/4 ins. diam., with a square brass cap, properly marked, set loosely in a mound of stone.

Sur. No. 4353 Tom Wal #8 lode:

Cor. No. 1: identified by two original bearing objects. Set a copper-coated steel rod with mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with brass cap mkd. TW 8-1-4353.

Line 1-2 was found to be S. 41°09' W., instead of S. 41°12' W., as approved and the distance between Cor. No. 1 Tom Wal #8 and Cor. No. 1 Tom Wal No. 1 lodes, was found to be 446.91 ft. instead of 447.2 ft. as approved.

Cor. No. 4: Reestablished at record distance (600.0 ft.) at right-angles to line 1-2. Set a copper-coated steel rod, mound of stone alongside, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. TW 1-4-4353.

FIELD ASSISTANTS

Name	Capacity
Frank Eastman	Instrumentman
Joe D. Alvarez	Chairman
Sidney G. Walters	Chairman

STAIRWAY NO. 4118

Chains

Cor. No. 1: Identified by original bearing object. Set a copper-coated steel rod, round of stone alongside, 3 ft. long, 2 1/2 ins. dia., in the ground, with bronze cap and. 27 ins. dia., instead of 28 ins. dia., as approved.

Cor. No. 2: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 3: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 4: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 5: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 6: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 7: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 8: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 9: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 10: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 11: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 12: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 13: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 14: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 15: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 16: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 17: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 18: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 19: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

Cor. No. 20: Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same. Found a loose stone, properly marked. Reset same.

FIELD ASSISTANTS

Name	Capacity
Frank Eastman	Instrumentman
Joe D. Alvarez	Operator
Shirley G. Wilfers	Operator

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

April 22, 1957

I, ROBERT LENON,
 Mineral Surveyor, hereby certify upon honor that in pursuance of an order received from the _____
Office Cadastral Engineer, at PHOENIX, Arizona
 dated Sept. 27, 1956, I have faithfully and correctly executed the survey of
 the mining claim of Phelps Dodge Corporation,
 known as the BULLDOZER lode (Lode, placer, or mill site)
 situate in Secs. 20 & 21,
 T. 4 S., R. 29 E., Gila & Salt River Meridian, ARIZONA, and
 (State)
 designated as Survey No. 4418, which is represented in the foregoing field notes as having been
 executed by me and under my direction, and that said survey has been made in strict conformity with said order,
 the Manual of Instructions for the Survey of the Public Lands of the United States, and in the specific manner
 described in the foregoing field notes, and I do further certify that the labor expended and improvements made
 upon or for the benefit of the lode location (S) embraced in the said mining claim by
 (Lode or placer)
 claimant(S) or its grantors are fully stated in my report therein, and that the character,
 extent, location, and itemized value thereof are specified therein with particularity and full detail, and that no
 portion of, or interest in, said labor and improvements so credited to this claim has been included in the estimate
 of expenditures upon any other claim.

Patagonia, Arizona
 (Place)

Robert Lenon
 (Mineral Surveyor)

CERTIFICATE OF APPROVAL

Survey Office
 (Office)
Phoenix, Arizona March 17, 1958
 (Place) (Date)

The foregoing field notes of mineral survey No. 4418, in Secs. 20 and 21
4 S., R. 29 E., G. & S.R. Meridian,
Arizona, executed by Robert Lenon, Mineral Surveyor,
 (State)
 under order dated September 27, 1956, 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.

Everett H. Kimmell
 (Title)
Everett H. Kimmell
 Office Cadastral Engineer
 (Title)

CERTIFICATE OF TRANSCRIPT

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

