

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MINERAL SURVEY NO. 4420

Arizona Land District.

FIELD NOTES

Of The Survey Of The Mining Claim Of

PHELPS DODGE CORPORATION

Known As The

JESSIE L., DENVER AND AXTEL LODES

GREENLEE GOLD MOUNTAIN Mining District,

GREENLEE County, ARIZONA

Section 5, Township 4 South, Range 29 East, G. & S.R.M.

Surveyed under order dated September 27, 1956

by Robert Lenon
Mineral Surveyor.

Jessie L. lode	May 14, 1899
Denver lode	August 26, 1899
Claim located Axtel lode	April 2, 1901
Survey commenced	May 29, 1957
Survey completed	June 29, 1957

Address of claimant c/o Evans, Kitchel & Jenckes, Attorneys
807 Title & Trust Building
Phoenix, Arizona

DATES OF AMENDED LOCATIONS

Jessie L., Denver and Axtel lodes, July 27, 1956

Mineral Survey No. 4420

Chains
Feet

This survey was made with a Bausch & Lomb Precise Tranist No. 9259, with horizontal limb $5\frac{1}{2}$ ins. diam., having two single opposite verniers, and full vertical circle $4\frac{1}{2}$ ins. diam., having two double opposite verniers, all verniers reading 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 observations:

May 29, 1957, at the cor. of secs. 4, 5, 32 and 33, Ts. 3 and 4 S., R. 29 E., G. & S. R. M., Greenlee County, Arizona, in latitude $33^{\circ} 07' N.$, 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 inverted positions, observing opposite limbs of the sun, and reading the horizontal angle clockwise from a point on the line between secs. 32 and 33, T. 3 S., R. 29 E., 1500 ft. northerly to the sun.

Mean time of observation, 105th meridian standard time = 8h47m a.m.

Declination of sun at mean time of observation = $21^{\circ} 38' 36'' N.$

Mean observed vertical angle to sun's center = $43^{\circ} 06' 15''$

Mean horizontal angle from reference point to sun's center

= $90^{\circ} 33' 45''$

True bearing to reference point

= $N. 0^{\circ} 08' W.$

The lines were measured with a Lufkin steel tape 300 ft. 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 except for the ties to the older surveys, which were calculated.

The magnetic declination observed at each corner of the survey gave a uniform value of $12^{\circ} 45'$ East.

Feet

JESSIE L. LODGE

At cor. No. 1 of the Jessie L. lode, on the line between secs. 5 and 32, Ts. 3 and 4 S., R. 29 E., at its intersection with line 2-3, Sur. No. 3112, S. L. C. L. lode; from which cor. No. 3 bears $N. 0^{\circ} 06' W.$, 31.88 ft. dist.

Set a copper-coated steel rod, with a mound of stone alongside, 3 ft. long, $\frac{5}{8}$ ins. diam., 27 ins. in the ground, with bronze cap mkd. JL-1-4420; from which

The cor. of secs. 4, 5, 32 and 33, Ts. 3 and 4 S., R. 29 E., bears $N. 89^{\circ} 56' E.$, 542.66 ft. dist.

A pointed porphyry outcrop, 30x30 ins. and 18 ins. high bears $N. 72^{\circ} 20' W.$, 17.2 ft. dist., mkd. X-BR-1-4420.

Thence $S. 0^{\circ} 06' E.$

290.0

Gulch, 2 ft. wide, course E., turning NE.

300.0

Lode line, discovery point bears $S. 89^{\circ} 56' W.$, 940.0 ft. dist.

3

Mineral Survey No. 4420

Chains-	Set an iron pin 5/8 ins. diam., with mound of stone alongside.
1535.00	Center of Lime Quarry Road, 30 ft. wide, bears E. and W.
600.00	Cor. No. 2, identical with cor. No. 1 of the Denver lode of this survey.
	Set a copper-coated steel rod, with a mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. D-1-JL-2-4420; from which
	A solid granitic boulder, 12x30 ins. and 12 ins. high, bears S. 36° 00' E., 9.55 ft. dist., mkd. X-BR-2-4420.
	Thence S. 89° 56' W.
1294.41	Point for witness cor. No. 3.
	Set a copper-coated steel rod, with mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. WC-3-4-4420; from which
	A large porphyry outcrop on top of the ridge bears S. 89° 56' W., 5.75 ft. dist. mkd. X-BR-WC-3-4-4420.
1300.16	Bearing Rock; previously described.
1497.25	Intersect line 2-3 Sur. No. 3852 Last Chance lode at a point from which cor. No. 2 bears N. 0° 01' W., 772.78 ft. dist.
1498.31	Cor. No. 3, identical with cor. No. 4 of the Denver lode of this survey.
	This cor. falls on the vertical face of a 200 ft. cliff where a monument cannot be established.
	Thence N. 0° 06' W.
300.00	Lode line, discovery point bears N. 89° 56' E., 558.31 ft. dist.
600.00	Cor. No. 4.
	This cor. falls on a point of rock at a vertical cliff where a permanent monument cannot be established.
	Cor. No. 2, Sur. No. 3852, Last Chance lode, bears N. 0° 37' E., 172.79 ft. dist.
	The witness 1/2 sec. cor. of secs. 5 and 32 bears S. 89° 56' W., 473.43 ft. dist., an iron post, 1 in. diam., set, mkd. and witnessed as described in the official record.
	Thence N. 89° 56' E.
1.93	Intersect line 2-3 Sur. No. 3852, Last Chance lode, at a point from which cor. No. 2 bears N. 0° 01' W., 172.78 ft. dist.
10.00	Set a railroad spike in W. side of ridge for witness cor. No. 4, with a mound of stone alongside; from which
	A bare porphyry outcrop at the east edge of ridge, on line, mkd. X-BR-4-4420; bears N. 89° 56' E., 20.40 ft. dist.
30.40	Bearing rock, previously described.

Mineral Survey No. 4420

Chains Feet	
1170.00	Center of Lime Quarry Road, 30 ft. wide, bears N. 15° E. and S. 15° W.
1498.31	Cor. No. 1 and place of beginning.
DENVER LODE	
	Beginning at cor. No. 1 of the Denver lode, identical with Cor. No. 2 of the Jessie L. lode this survey, from which
	The cor. of secs. 4, 5, 32 and 33 bears N. 42° 02½' E., 808.76 ft. dist.
	Thence S. 0° 06' E.
250.00	Lode line, discovery point bears S. 89° 56' W., 630 ft. dist. Set an iron pin, 5/8 ins. diam., with mound of stone alongside.
500.00	Cor. No 2, identical with cor. No. 1 of the Axtel lode of this survey. Set a hardened steel nail with brass washer in an agglomerate outcrop, with mound of stone alongside; from which A conglomerate outcrop 36x48 ins., 12 ins. high, bears N. 15° E., 13.40 ft. dist., mkd. X-BR-2-4420. Thence S. 89° 56' W.
290.00	Gulch, 3 ft. wide, course S.
1376.56	Bearing Rock to witness cor. No. 3.
1380.21	Set a copper-coated steel rod, with mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, for witness cor. No. 3. of the Denver and No. 4 of the Axtel lodes, with bronze cap mkd. WC-D3-A4-4420; from which A porphyry outcrop, 18x8 ins., mkd. X-BR-3-4-4420 bears N. 89° 56' E., 3.65 ft. dist.
1497.98	Intersect line 2-3 Sur. No. 3852, Last Chance lode, at a point from which cor. No. 2 bears N. 0° 01' W., 1272.78 ft. dist.
1498.31	Cor. No. 3, identical with cor. No. 4 of the Axtel lode of this survey. This cor. falls on the vertical face of a 200 ft. cliff where a monument cannot be established. Thence N. 0° 06' W.
250.00	Lode line, discovery point bears N. 89° 56' E., 868.31 ft. dist.
500.00	Cor. No. 4, identical with cor. No. 3 of the Jessie L. lode of this survey. Cor. No. 2, Sur. No. 3852, Last Chance lode, bears N. 0° 04' E., 772.78 ft. dist. Thence N. 89° 56' E.
1.06	Intersect line 2-3 Sur. No. 3852, Last Chance lode, at a point from which cor. No. 2 bears N. 0° 01' W., 772.78 ft. dist.

Mineral Survey No. 4420

Chains Feet		Meters 1964
198.15	Bearing Rock to witness cor. No. 4, previously described.	60.041
203.9	Witness cor. No. 4, identical with witness cor. No. 3 of the Jessie L. lode of this survey, previously described.	
1498.31	Cor. No. 1 and place of beginning.	
DENVER LODGE		
AXTEL LODGE		
260.85	Beginning at cor. No. 1 of the Axtel lode, identical with cor. No. 2 of the Denver lode of this survey, from which The cor. of secs. 4, 5, 32 and 33 bears N. 26° 10' E., 1226.29 ft. dist. Thence S. 0° 06' E.	
369.50	Lode line, discovery point bears S. 89° 56' W., 550 ft. dist. Set an iron pin, 5/8 ins. diam., with mound of stone alongside.	
521.70	Cor. No. 2 of Sur. No. 3112 S. L. C. L. lode, and intersect line 3-4 Sur. No. 2962, Bear lode, at a point from which cor. No. 3 bears S. 76° 06' W., 103.2 ft. dist. Cor. No. 2 Set a copper-coated steel rod, with a mound of stone alongside, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. A-2-4420, from which A porphyry outcrop 12x15 ft., 10 ft. high, bears S. 35° 40' E., 30.0 ft. dist., mkd. X-BR-2-4420. Cor. No. 3, Sur. No. 2962, Bear lode, bears N. 38° 15' W., 162.28 ft. dist. Cor. No. 4, Sur. No. 2962, Sultana lode, bears N. 33° 33' W., 199.01 ft. dist. Thence S. 89° 56' W.	
68.77	Intersect line 2-3, Bear lode, and line 4-1, Sultana lode, both of Sur. No. 2962, at a point from which cor. No. 3, Bear lode, bears N. 13° 57' W., 131.36 ft. dist.; and cor. No. 4, Sultana lode bears N. 13° 57' W., 170.97 ft. dist.	
370.00	Gulch, 4 ft. wide, course S. 20° W.	
686.90	Intersect line 2-3 Sur. No. 2962, Sultana lode, at a point from which cor. No. 3 bears N. 13° 57' W., 22.44 ft. dist.	
1498.31	Cor. No. 3, on line 3-4 Sur. No. 3852, San Pedro lode, at a point from which cor. No. 3 bears N. 0° 05' W., 368.89 ft. dist.	
This cor. falls in a dump area where a permanent marker cannot be maintained.		
Thence N. 0° 06' W.		
49.1	A point on a shelf below a cliff, 200 ft. high, for witness cor. No. 3, mkd. X-WC-3-4420.	

Mineral Survey No. 4420

Chains Feet	
260.85	Lode line, discovery point bears N. 89° 56' E., 948.31 ft. dist.
294.48	Position of cor. No. 3 Sur. No. 3852, Last Chance lode; from which witness cor, No. 3 bears S. 89° 00' W., 45.1 ft. dist.
368.86	Intersect line 2-3 Sur. No. 3852 San Pedro lode at a point from which the position for cor. No. 3 bears N. 74° 55' E., 0.11 ft. dist. and witness cor. No. 3 bears S. 74° 55' W., 58.69 ft. dist.
521.70	Cor. No. 4, identical with cor. No. 3 of the Denver lode of this survey. Thence N. 89° 56' E.
0.33	Intersect line 2-3 Sur. No. 3852, Last Chance lode, at a point from which cor. No. 3 bears S. 0° 01' E., 227.22 ft. dist.
118.1	Witness cor. No. 4, identical with witness cor. No. 3 of the Denver lode of this survey.
121.75	Bearing rock; previously described.
1208.31	Gulch, 4 ft. wide, course S. 20° W.
1498.31	Cor. No. 1 and place of beginning.

AREAS

	Acres
Total area, Jessie L. lode	20.638 ✓
Area in conflict with:	
Sur. No. 3852, Last Chance lode	0.021 ✓
Total area, Denver lode	17.198 ✓
Area in conflict with:	
Sur. No. 3852, Last Chance lode	0.008 ✓
Total area, Axtel lode	17.945 ✓
Area in conflict with:	
Sur. No. 2962, Bear lode	0.276 ✓
Sur. No. 2962, Sultana lode	1.332 ✓
Sur. No. 3852, Last Chance lode	0.001 ✓
Sur. No. 3852, San Pedro lode	0.000 ✓
Sur. No. 3852, San Pedro lode, exclusive of its conflict with Sur. No. 3852, Last Chance lode	0.000 ✓

LOCATION

This survey is located in the NE 1/4 Sec. 5, T. 4 S., R. 29 E., of the G. & S. R. M., Arizona.

The survey is identical with the amended locations as marked on the ground.

Mineral Survey No. 7420

Chains

EXPENDITURES

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

- No. 1 The discovery point of the Jessie L. lode, being on the lode line 940 ft. from a point on line 1-2, 300 ft. from cor. No. 1.
No value.
- No. 2 A cut, the face of which bears N. 76° 50' W., 967 ft. from cor. No. 2; 20 ft. face; running N. 84° W., 20 ft. to face.
Value \$500.
- No. 3 A cut, 4 ft. wide, the face of which bears N. 73° 15' W., 1049 ft. from cor. No. 2; 12 ft. face; running N. 40° W., 16 ft. to face.
Value \$150.
- No. 4 A cut, 6 ft. wide, the face of which bears N. 27° 35' W., 419 ft. from cor. No. 2; 8 ft. face; runs N. 17° W., 10 ft. to face and portal of adit 5x5 ft. in size, running N. 17° W., 8 ft. to breast.
Value \$200.
- No. 5 A cut, 6 ft. wide, the face of which bears N. 88° W., 606 ft. from Cor. No. 2; 12 ft. face; runs S. 60° W., 16 ft. to face and portal of adit 5x6 ft. in size, running S. 60° W., 36 ft. to breast.
Value \$500.
- No. 1 The discovery point of the Denver lode, being on the lode line 630 ft. from a point on line 1-2, 250 ft. from cor. No. 1.
No value.
- No. 2 A cut, 5 ft. wide, the face of which bears N. 62° 15' W., 719 ft. from cor. No. 2; 12 ft. face; runs N. 54° W., 16 ft. to face and portal of adit 4x6 ft. in size, running N. 60° W., 24 ft. to breast.
Value \$500.
- No. 3 A cut, 8 ft. wide, the face of which bears N. 55° 45' W., 567 ft. from cor. No. 2; 8 ft. face, runs N. 45° W., 12 ft. to face and portal of adit 5x6 ft. in size, running N. 45° W., 12 ft. to breast.
Value \$400.
- No. 4 A cut, 5 ft. wide, the face of which bears N. 36° 10' W., 325 ft. from cor. No. 2; 8 ft. face; runs N. 32° E., 12 ft. to face and portal of adit 4x7 ft. in size, running N. 32° E., 24 ft. to breast.
Value \$500.
- No. 1 The discovery point of the Axtel lode, being on the lode line 550 ft. from a point on line 1-2, 260.85 ft. from cor. No. 1.
No value.
- No. 2 A cut, 8 ft. wide, the face of which bears S. 67° 50' W., 599 ft. from cor. No. 1; 10 ft. face; runs N. 82° E., 15 ft. to face.
Value \$200.
- No. 3 A cut, 5 ft. wide, the face of which bears S. 72° 55' W., 375 ft. from cor. No. 1, 6 ft. face, runs N. 55° W., 18 ft. to face; partly filled.
Value \$100.
- No. 4 A cut, 5 ft. wide, the face of which bears S. 13° 15' W., 150 ft. from cor. No. 1; 14 ft. face; runs N. 76° E., 30 ft. to face; partly filled.
Value \$400.
- No. 5 An adit, 10x10 ft. in size, the portal of which bears N. 1° E., 65 ft. from cor. No. 3; running N. 78° E., 26 ft. to breast.
Value \$500.

Mineral Survey No. 4420

Chains

No portion of or interest in these improvements has been credited heretofore as patent expenditure to any lode claim.

OTHER IMPROVEMENTS

A graded road from the pit to the Lime Quarry across the Jessie L. lode; 30 ft. wide, 850 ft. long. Value \$1500.
Claimant herein.

OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA

Sur. No. 2962, Bear lode: Cor. No. 3 is a scattered mound of stone; set a stake in the apparent center. Cor. No. 4 is a 4x4 in. post, badly rotted, but properly mkd. Line 3-4 was found to be N. 76° 06' E., 260.0 ft. instead of N. 76° 06' E., 262.61 ft. as approved.

Sur. No. 2962, Sultana lode: Cors No. 3 and 4 are both mounds of stone. Line 3-4 was found to be N. 76° 02' E., 600.06 ft. instead of N. 76° 06' E., 599.4 ft. as approved.

Sur. No. 3112 S. L. C. L. lode: Cors. Nos. 2 and 3 are both 4x6 in. posts, properly mkd. Line 2-3 was found to be N. 0° 06' W., 1501.38 ft. instead of N. 0° 06' W., 1500 ft. as approved.

Sur. No. 3852, San Pedro lode: Witness cor. No. 3 is an "X" on a rock bench below a 200 ft. cliff. Cor. No. 4 has been covered by the waste dump. Line 3-4 is shown as approved.

Sur. No. 3852, Last Chance lode: Cor. No. 2 is a 4x6 in. post, firmly set and properly mkd. Witness cor. No. 3 is an "X" on a rock bench beneath a 200 ft. cliff. Line 2-3 is shown approximately as approved.

The cor. of secs. 4, 5, 32 and 33, Ts. 3 and 4 S., R. 29 E. has been destroyed and reset from Phelps Dodge coordinate data. It is now monumented with a copper-coated steel rod, in a mound of stone, 3 ft. long, 5/8 ins. diam., 27 ins. in the ground, with bronze cap mkd. 5-4-32-33.

The ¼ sec. cor. of secs. 32 and 33, monumented with an iron post, 1 in. diam., firmly set in a mound of stone, with brass cap properly mkd., bears N. 0° 08' W., 2638.5 ft. dist. from the cor. of secs. 4, 5, 32 and 33.

FIELD ASSISTANTS

Name	Capacity
Frank Eastman	Instrumentman
Joe D. Alvarez	Chainman
Marlin E. Widger	Chainman

8

UNITED STATES GOVERNMENT

Chains

Chains

The chains are used in the investigation of the case.

OTHER INFORMATION

It is noted that the chain is made of steel and is used for the purpose of...

CHAIN DESCRIPTIONS AND MEASUREMENTS

Chain No. 1: Length 100 ft. Made of steel. Used for...

Chain No. 2: Length 100 ft. Made of steel. Used for...

Chain No. 3: Length 100 ft. Made of steel. Used for...

Chain No. 4: Length 100 ft. Made of steel. Used for...

Chain No. 5: Length 100 ft. Made of steel. Used for...

Chain No. 6: Length 100 ft. Made of steel. Used for...

Chain No. 7: Length 100 ft. Made of steel. Used for...

Chain No. 8: Length 100 ft. Made of steel. Used for...

FIELD OFFICERS

Name

Special Agent in Charge
U.S. Department of Justice

Name

Special Agent in Charge
U.S. Department of Justice

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

July 19, 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 claims of PHELPS DODGE CORPORATION,
 known as the DENVER, JESSIE L. AND AXTEL LODES
(Lode, placer, or mill site)
 situate in GREENLEE GOLD MOUNTAIN MINING DISTRICT Sec. 5
 T. 4 S., R. 29 E., G. & S. R. Meridian, ARIZONA, and
(State)
 designated as Survey No. 4420, 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)

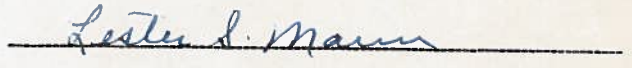


(Mineral Surveyor)

CERTIFICATE OF APPROVAL

Bureau of Land Management Survey Office
(Office)
Phoenix, Arizona September 9, 1958
(Place) (Date)

The foregoing field notes of mineral survey No. 4420, in Sec. 5
Arizona, T. 4 S., R. 29 E., G. & S. R. Meridian,
(State) executed by Robert Lenon, Mineral Surveyor,
 under order dated Sept. 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.



Lester S. Mann
 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.

(Title)

