

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MINERAL SURVEY NO. 4502

Arizona Land District.

FIELD NOTES

Of The Survey Of The Mining Claim Of

Magma Copper Company

Known As The

Magma, Magma No.1 and Lake Erie No.8 Lodes

Pioneer Mining District,

Pinal County, Arizona

Section 36, Township 1S, Range 12E,

Surveyed under order dated June 9, 1959

by Harvey W. Smith  
Mineral Surveyor.

Claim located See reverse side, 19

Survey commenced Aug. 10, 1959

Survey completed Aug. 30, 1959

Address of claimant Box 37, Superior, Arizona

DATES OF AMENDED LOCATIONS

See reverse side

	Located	Recorded	Amended	Amendment Recording
Magma	12/9/16	12/12/16	5/15/59	5/22/59
Magma No.1	12/9/16	12/12/16	5/15/59	5/22/59
Lake Erie No.8 Second Amendment	1/2/07	3/25/07	10/24/10 5/15/59	10/26/10 5/22/59

## SURVEY NO. 4502

(1)

Chains  
Feet

This survey was made with a C.L. Berger & Sons transit, No.15045 with a horizontal limb  $6\frac{1}{2}$  ins. diam., having two double opposite verniers and full vertical circle, 5 ins. diam.; 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 horizontal-angle-right referred to the meridian established by the following direct observation on the sun: At 8:10 A.M. on Aug. 27, 1959 at Cor. No.1 of the Magma lode, latitude  $33^{\circ}18'14.14''N.$ , longitude  $111^{\circ}04'59.59''W.$  turning from a reference point about one mile south-west clockwise to the sun in an east direction.

True bearing of reference point

$S.30^{\circ}44'W.$

The lines were measured with a Lufkin steel tape, 300 ft. in length, graduated every foot for 299 ft. and the remaining foot graduated to tenths and hundredths. The tape was compared to a standard at the beginning of the survey and found to be 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  $13^{\circ}15'E.$

## MAGMA LODGE

At Cor. No.1 of the Magma lode identical with Cor. No.4., Magma No.1. lode, on line 2-3 Lake Erie No.8 lode; both of this survey.

Set an iron post 13 ins. long,  $\frac{3}{4}$  ins. diam., in a 5 in. drill hole in east face of large boulder, cemented in, with a brass cap, 2 ins. diam., firmly fastened to the iron post; mkd. MS 4502 M 1 M1 4 X; from which

The  $\frac{1}{2}$  cor. between secs. 25 & 36, T.1S., R.12E., G.&S.R.B.&M. bears  $N.14^{\circ}43'30''W.$ , 1161.08 ft. dist., an ironpost,  $\frac{3}{4}$  in. diam. 12 ins. above ground, firmly set, marked and witnessed as described in the official record.

Set a post 4x4 ins., 4 ft. above ground adjacent to the iron post.

A power line bearing  $N.80^{\circ}W.$  and  $S.80^{\circ}E.$  passes immediately over this corner.

Thence  $N.88^{\circ}24'E.$

30.0 Power line bears  $N.51^{\circ}E.$  and  $S.51^{\circ}W.$

1310.0 Pipe line, 10 ins. diam. bears  $N.5^{\circ}E.$  and  $S.5^{\circ}W.$

1425.0 Power line, bears  $N.60^{\circ}E.$  and  $S.60^{\circ}W.$

CHAINS Feet	
1500.0	<p>Cor. No.2 identical with Cor. No.3 Magma No.1 lode.</p> <p>Set an iron post, 24 ins. long, 3/4 in. diam., in a 15 pound concrete and rock base, 12 ins. in the ground, with a brass cap, 2 ins. diam., firmly fastened within the iron post; mkd. MS 4502 M2 M1 3 X; from which</p> <p>Cor. No.3, Sur. No.4150, Spring lode, bears N. <math>68^{\circ}55'58''</math>W., 201.41 ft. dist.</p> <p>A mound of stones constructed around a post 4x4 ins., 4 ft. above ground, adjacent to the iron post.</p> <p>Thence S. <math>5^{\circ}31'30''</math>E.</p>
5.0	Right bank, Queen Creek, 60 ft. wide, course S. $15^{\circ}$ W.
300.70	Lode line; discovery point bears S. $88^{\circ}24'$ W., 1420.0 ft. dist.
400.0	Left bank, Queen Creek, 60 ft. wide, course S. $20^{\circ}$ W.
	Pipelines, 2-3 ins. diam., 1-4 ins. diam., bears N. $18^{\circ}$ E. and S. $23^{\circ}$ W.
601.40	<p>Cor. No.3</p> <p>Set a galvanized iron post, 18 ins. long, 3/4 in. diam. in a 15 pound concrete and rock base, 12 ins. in the ground, with a brass cap, 2 ins. diam. firmly fastened within the iron post; mkd. MS 4502 M 3 X; from which</p> <p>A mound of stones constructed adjacent to the iron post.</p> <p>Thence S. <math>88^{\circ}24'</math>W.</p>
650.0	Left bank Queen Creek, 60 ft. wide, course S. $75^{\circ}$ W.
760.0	Pipelines, 2-3 ins. diam.; 1-4 ins. diam., bears S. $77^{\circ}$ W. and N. $77^{\circ}$ E.
1500.0	<p>Cor. No.4 on line 2-3, Lake Erie No.8 lode of this survey.</p> <p>Set a galvanized iron post, 18 ins. long, 3/4 in. diam. in a 15-pound concrete and rock base, 12 ins. in the ground, with a brass cap, 2 ins. diam., firmly fastened within the iron post; mkd. MS 4502 M 4 X; from which</p> <p>A mound of stones constructed adjacent to the iron post.</p> <p>Thence N. <math>5^{\circ}31'30''</math>W.</p>
300.70	Lode line; discovery point bears N. $88^{\circ}24'$ E., 80.0 ft. dist.

## SURVEY NO. 4502

(3)

Chains Feet	Chains Feet
500.0	500.0
1601.40	1601.40
	601.40
	75.0
	1200.0
	300.70
	1298.62
	1459.45
	1500.0
	14.24
	26.62
	170.0

SURVEY NO. 4502

(4)

Chains Feet		Chains Feet
300.70	Lode line; discovery point bears S.88°24'W., 1431.0 ft. dist.	
448.14	Intersect line 2-3, Sur. No.4150, Spring lode at a point from which Cor. No.3 bears S.65°10'W., 190.84 ft. dist.	
560.0	Power line, bears S.60°W. and N.60°E.	
601.40	Cor. No.3, identical with Cor. No.2, Magma lode of this survey; previously described.	
75.0	Thence S.88°24'W.	
190.0	Power line bears N.60°E. and S.60°W.	
1470.0	Pipeline, 10 ins. diam., bears S.5°W. and N.5°E.	
1500.0	Power line, bears N.50°E. and S.50°W.	
1500.0	Cor. No.4 identical with Cor. No.1; Magma lode of this survey; previously described.	
55.66	Thence N.5°31'30"W.	
300.70	Center line, U.S. Highway 60-70, a paved highway bears N.68°30'E. and S.68°30'W.	
300.70	Lode line; discovery point bears N.88°24'E., 69.0 ft. dist.	
601.40	Cor. No.1 and place of beginning.	
<b>LAKE ERIE NO.8 LODE</b>		
At Cor. No.1 of the Lake Erie No.8 lode; identical with Cor. No.1, Sur. No.4235, Lake Erie No.4 lode; on line 5-1, Sur. No.2995, Horseshoe lode.		
Found an iron post, firmly set, 12 ins. above ground with a brass cap; mkd: MS 4235 LE4 1 to which I add marks MS 4502 LE8 1 X; from which		
The ¼ cor. between secs. 25 & 36, T.1S., R.12E., G.&S.R.B.&M. bears N.33°55'12"E., 652.18 ft. dist.; previously described.		
A wooden post, 4x4 ins., 4 ft. long set adjacent to the iron post.		
300.70	Intersect line 2-3, Sur. No.4231, Horseshoe No.4 lode at a point which bears N.88°24'E. Thence N.88°24'E. dist.	1457.0 ft.
300.70	Lode line; discovery point bears S.5°31'30"E., 1457.0 ft. dist.	
170.0	Center line, U.S. Highway 60-70, a paved highway bears N.68°30'E. and S.68°30'W.	
170.0	Pipe line, 10 ins. diam., bears S.40°W. and N.30°E.	

## SURVEY NO. 4502

(5)

Chains Feet		Feet
402.70	Cor. No. 5, Sur. No. 2995, Horseshoe lode identical with Cor. No. 5, Sur. No. 4231, Horseshoe No. 1 lode.	
601.40	Cor. No. 2 identical with Cor. No. 1, Magma No. 1 lode of this survey; previously described.	
	Thence S. 5° 31' 30" E.	
545.74	Center line, U.S. Highway 60-70, a paved highway bears N. 68° 30' E. and S. 68° 30' W.	
601.40	Cor. No. 1 Magma lode identical with Cor. No. 4 Magma No. 1 lode, both of this survey.	
700.0	Pipe line, 10 ins. diam. and power line; pipeline bears N. 78° W. and S. 88° E., power line bears N. 43° E. and S. 43° W.	
1202.80	Cor. No. 4, Magma lode of this survey.	
1239.0	Power line bears N. 85° E. and S. 85° W.	
1397.0	Two - 3 ins. diam. pipe lines and one 4 ins. diam. pipeline bears N. 70° E. and S. 70° W.	
1420.0	Right bank, Queen Creek, 50 ft. wide, course, S. 70° W.	
1492.0	Cor. No. 3  Set an iron post 48 ins. long, 3/4 in. diam., in a mound of stones, 3 ft. diam. at base and 30 ins. high with a brass cap, 2 ins. diam., firmly fastened to the iron post, mkd. MS 4502 LE8 - 3 - X; from which  A wooden post 4x4 ins., 24 ft. long set adjacent to the iron post.  Thence S. 88° 24' W.	
100.0	Left bank, Queen Creek, 50 ft. wide, course S. 70° W.	
276.0	Two 3 ins. diam. pipelines and one 4 ins. diam. pipeline, bears N. 70° E. and S. 70° W.	
300.70	Lode line; discovery point bears N. 5° 31' 30" W., 35.0 ft. dist.	
601.40	Cor. No. 4 identical with Cor. No. 2, Sur. No. 4235, Lake Erie No. 4 lode.  Found an iron post, 2 ins. diam., 14 ins. above ground, firmly set, mkd. MS 4235 LE4 - 2 to which I added mark MS 4502 LE8 - 4 - X; from which  A mound of stones constructed adjacent to the iron post.	

SURVEY NO. 4502

(6)

Chains Feet		Chains Feet
	Thence N.5°31'30"W.	402.70
216.0	Power line, bears N.85°E. and S.85°W.	
515.0	Pipeline, 10 ins. diam., bears N.75°E. and S.75°W.	
810.0	Center line, U.S. Highway 60-70, a paved highway bears S.78°W. and N.78°E.	
1012.0	Power line; bears S.80°E. and N.80°W.	
1492.0	Cor. No.1 and place of beginning.	

Survey No. 4502

AREAS

	Acres
Total area Magma lode	20.661
" " Lake Erie No.8 lode	20.551
" " Magma No.1 lode	20.661
Area in conflict with	
Sur. No.4150, Spring lode	1.170
" " 4231, Horseshoe No.2 lode	0.033
" " " " " "	
exclusive of its conflict with	
Sur. No.4150, Spring lode	0.022

LOCATION

This survey is located in the N.E. 1/4 and N.W. 1/4 sec. 36, T.1S., R.12E., G.&S.R.B.&M.

The survey of the Magma No.1 and Lake Erie No.8 lodes is identical with the respective location or amended location as marked on the ground.

	Thence S.88°24'W.	
	Left bank, Green Creek, 50 ft. wide, course S.70°W.	100.0
	Two 3 ins. diam. pipelines and one 4 ins. diam. pipeline, bears N.70°E. and S.70°W.	276.0
	Lode line; discovery point bears N.5°31'30"W. 25.0 ft. dist.	300.70
	Cor. No.4 identical with Cor. No.2, Sur. No.4231, Lake Erie No.4 lode.	601.40
	Found an iron post, 2 ins. diam., 14 in. above ground, firmly set, mkd. MS 4231 L&E - 2 to which I added mark MS 4502 L&E - 4 - K; from which	
	A mound of stones constructed adjacent to the iron post.	



SURVEY NO. 4502

(7)

Chains  
FeetChains  
Feet

## 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 cut of the Magma lode is on the lode line 80 ft. from a point on line 4-1, 300.70 ft. from Cor. No.4; 4 ft. wide, 8 ft. long and 10 ft. deep.  
Value, \$75.

No.1 The discovery cut of the Magma No.1 lode is on the lode line, 69.0 ft. from a point on line 4-1, 300.70 ft. from Cor. No.4; 4 ft. wide, 6 ft. long and 8 ft. deep.  
Value, \$60.

No.1 The discovery shaft of the Lake Erie No.8 lode is on the lode line 35 ft. from a point on line 3-4, 300.70 ft. from corner No.3; 4 ft. wide, 6 ft. long and 8 ft. deep.  
Value, \$125.

An interest in a common improvement described as follows:

The development work from the 2250 level to the 3000 level consists of numerous drifts and crosscuts, 6x8 ft. in size, with inter connecting raises, 4x6 ft. in size, for orderly mining by various stoping methods, usually variations of square-set or cut and fill. The workings are so numerous and complicated that a verbal description is inadequate. See included plat for general mining layout.

Value of drifts, crosscuts, raises and stops;  
\$150,000.

Value of one-third interest, \$50,000

These improvements are constantly progressing for orderly mining of the three lodes, Magma, Magma No.1 and Lake Erie No.8 which are all contiguous lode claims owned by Magma Copper Co.

Five hundred dollars or over has been expended in this improvement in such a manner as tends to the development of each lode of this survey subsequent to its location and to the time since which common ownership and contiguity have prevailed; therefore an undivided one-third interest in its value is hereby credited to each of said lodes, Magma, Magma No.1 and Lake Erie No.8.

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

## OTHER IMPROVEMENTS

None

OTHER CORNER DESCRIPTIONS &  
SUPPLEMENTAL DATA

Sur. No.4150, Spring lode, Cor. No.3, an iron post flush

SURVEY NO. 4502

(8)

Chains  
Feet

Feet

with the pavement of the old highway. Identified from a witness post at edge of road and a bearing rock. Lines 2-3 and 3-4 are shown as approved.

Sur. No. 4231, Horseshoe No. 1 lode. Cor. No. 4 identical with Cor. No. 3, Horseshoe No. 2 lode; Cor. No. 5, a witness corner, Horseshoe No. 1 lode identical with Cor. No. 5, Sur. No. 2995, Horseshoe lode. The corners are iron posts 2 ins. diam., 18 ins. above ground, firmly set, properly marked and witnessed as described in the official record. Line 4-5 Horseshoe No. 1 lode is N. 88 24' E., 1497.32 ft. instead of 1494.48 ft. as approved. Line 2-3, Sur. No. 4231, Horseshoe No. 2 lode is shown as approved.

Sur. No. 4235, Lake Erie No. 4 lode, line 1-2 is correct as approved.

Sur. No. 2995, Horseshoe lode, line 5-6 is shown as approved.

FIELD ASSISTANTS

An interest in a common improvement described as follows:

Name

Capacity

Russell Hart Chainman

Richard Cleveland Axeman

Value of one-third interest, \$20,000

These improvements are constantly progressing for the better mining of the three lodes, Magna No. 1 and Lake Erie No. 3, which are all contiguous lode claims owned by Magna Copper Co. Five hundred dollars or over has been expended in the improvement in such a manner as tends to the development of each lode of this survey subsequent to its location and to the time since which common ownership and control have prevailed; therefore an undivided one-third interest in the value is hereby credited to each of said lodes, Magna No. 1 and Lake Erie No. 3. No portion of an interest in these improvements has been credited heretofore as patent expenditures to any lode claim.

OTHER IMPROVEMENTS

None

OTHER CORNER DESCRIPTIONS & SUPPLEMENTAL DATA

Sur. No. 4150, Sprinkling lode, Cor. No. 3, an iron post 18 in.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

13

CERTIFICATE OF SURVEYOR

Nov. 15, 1959

I, Harvey W. Smith,  
Mineral Surveyor, hereby certify upon honor that in pursuance of an order received from the Cadastral  
Engineer, BLM., at Phoenix, Arizona  
dated June 9, 1959, I have faithfully and correctly executed the survey of  
the mining claim of Magma Copper Company,  
known as the Magma, Magma No. 1 and Lake Erie No. 8 Lodes  
(Lode, placer, or mill site)  
situate in Pioneer Mining District, Pinal County, Sec. 36,  
T. 1S., R. 12E., G. & S. R. Meridian, Arizona, and  
(State)  
designated as Survey No. 4502, 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.

Scottsdale, Arizona  
(Place)

Harvey W. Smith  
Harvey W. Smith  
(Mineral Surveyor)

CERTIFICATE OF APPROVAL

Bureau of Land Management--Survey Office  
(Office)  
Phoenix, Arizona February 29, 19 60  
(Place) (Date)

The foregoing field notes of mineral survey No. 4502, in Pioneer Mining District  
Section 36, T. 1 South, R. 12 East, Gila & Salt River Meridian,  
Arizona, executed by Harvey W. Smith, Mineral Surveyor,  
(State)  
under order dated June 9, 1959, 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  
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)

