

**RECEIVED**  
U.S. LAND OFFICE  
Phoenix, Arizona

APR 16 1951

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



**MINERAL SURVEY NO.** 4351

Arizona Land District.

**FIELD NOTES**

Of The Survey Of The Mining Claim Of

M. C. Lake

Known As The

Minnesota No. 1, Minnesota No. 2, Minnesota No. 3 and Minnesota  
No. 4 lodes Owen Mining District,

Mohave County, Arizona

Section 29, Township 12 N., Range 13 W., G&SRM

Surveyed under order dated December 27, 1951

by Ralph L. Motz  
Mineral Surveyor.

Claim located April 23; Dec. 13, 1935; Aug. 16, 1936

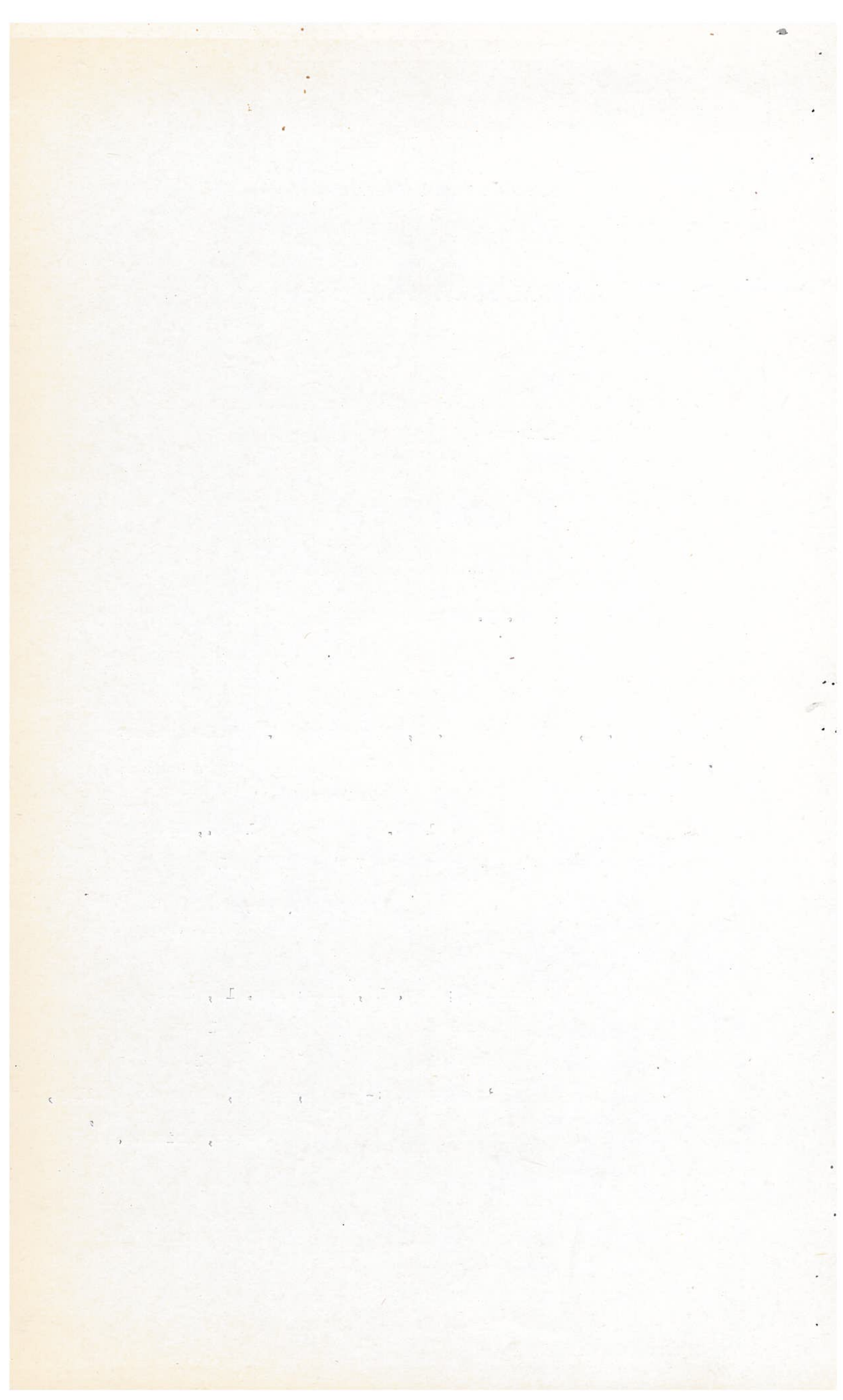
Survey commenced March 8, 1951

Survey completed March 13, 1951

Address of claimant's attorney:- Knapp, Boyle, Thompson & Bilby,  
Valley National Building,  
Tucson, Arizona.

DATES OF AMENDED LOCATIONS

4351 mo



Survey No. 4351

This survey was made with a C. L. Berger & Sons precise transit, with horizontal limb 6.25 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 eye piece is equipped with a colored glass slide in a detachable prismatic eyepiece 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.

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

March 10, 1951, at Cor. No. 2 of the Minnesota No. 2 lode in latitude 34° 21' N., and longitude 113° 38' W., I made a series of six altitude observations upon the sun for azimuth at approximately equal time intervals, three each with the telescope in direct and reversed positions, observing opposite limbs of the sun, and reading the horizontal angle from Cor. No. 1 of the Minnesota No. 2 lode to the sun.

Mean time of observation,  
 105th meridian standard time - - - 9h. 15 m., A. M.  
 Declination of sun at mean time  
 of observation - - - - - 4° 13' 50.2" S.  
 Mean observed vertical angle to  
 sun's center - - - - - 26° 33'  
 Mean horizontal angle from reference  
 point to sun's center - - - - - 26° 07' S-E  
 True bearing to reference point - S. 89° 57' E.

The lines were measured with a Keuffel & Esser steel tape, 300 feet in length, graduated to feet, tenths, and hundredths of feet for the entire length; a Keuffel & Esser steel tape, 100 feet in length, graduated to feet, tenths and hundredths of feet for the entire length; a Keuffel & Esser steel tape, 25 feet in length, graduated to feet, inches and fractions of inches for the entire length; all tapes were compared to a Lufkin standard tape at the time of beginning the survey, and found correct.

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

The magnetic declination observed at each corner of the survey gave a uniform value of 15° 20' E.

-----  
 Survey No. 4351  
 -----

MINNESOTA NO. 1 LODE

At Cor. No. 1 of the Minnesota No. 1 lode, identical with Cor. No. 1 of the Minnesota No. 3 lode of this survey

On the line between Secs. 29 and 32, T. 12 N., R. 13 W., G. & S. R. M.

Set an iron pipe, 1 inch diameter, 3 feet long, 14 inches in the ground in a mound of stones, mkd. M1-1-M3-1-4351; from which

The 1/4 corner Secs. 29 and 32, T. 12 N., R. 13 W., G. & S. R. M., bears N. 89° 57' W., 659.3 ft. dist.; an iron post, 1 inch diameter, with brass

Feet	
	cap, 18 ins. above ground, firmly set and marked as described in the official record.
	Thence N. 0° 03' W.,
600	Cor. No. 4 of the Minnesota No. 3 lode and Cor. No. 1 of the Minnesota No. 4 lode, both of this survey
1200	Cor. No. 4 of the Minnesota No. 4 lode of this survey
1500	Cor. No. 2
	Set an iron pipe, 1 inch diameter, 3 feet long, 15 inches in the ground in a mound of stones, mkd. M1-2-4351
	Thence S. 89° 57' E.,
300	Lode line; discovery cut bears S. 0° 03' E., 1260 ft. dist.
600	Cor. No. 3, identical with Cor. No. 3 of the Minnesota No. 2 lode of this survey
	Set an iron pipe, 1 inch diameter, 3 ft. long, 16 ins. in the ground in a mound of stones, with brass cap, 3 inches square, mkd. M1-3-M2-3-4351
	Thence S. 0° 03' E.,
1300	Center of road, bears N. 42° W., and S. 42° E.
1500	Cor. No. 4, identical with Cor. No. 2 of the Minnesota No. 2 lode of this survey
	On the line between Secs. 29 and 32, T. 12 N., R. 13 W., G. & S. R. M.
	Set an iron pipe, 1 inch diameter, 3 ft. long, 15 inches in the ground in a mound of stones, with brass cap, 3 inches diameter, mkd. M1-4-M2-2-4351, from which
	A sandstone rock in place, 9" x 24 ins., 8 ins., above ground bears N. 9° 55' E., 30.7 ft. dist., mkd. B0 X M1-4-4351
	A basalt rock in place, 14 x 36 ins., 18 inches above ground bears S. 45° 12' E., 11.2 ft. dist., mkd. B0 X M1-4-4351
	Thence N. 89° 57' W.
300	Lode line, discovery cut bears N. 0° 03' W., 240 ft. dist.
355	Center of road, bears N. 65° W., and, S. 65° E.
600	Cor. No. 1 and place of beginning.
-----	
MINNESOTA NO. 2 LODE	
	At Cor. No. 1 of the Minnesota No. 2 lode on the line between Secs. 29 and 32, T. 12 N., R. 13 W., G & S. R. M.
	Set an iron pipe, 1 inch diameter, 3 feet long, 18 ins.

Feet	
	in the ground in a mound of stones, with brass cap 3 inches square, mkd. M2-1-4351; from which
	The point for the Cor. of Secs. 28, 29, 32 and 33, T. 12 N., R. 13 W., G. & S. R. M., bears S. 89° 57' E., 781.4 ft. dist.; an iron pin driven in a sloping ledge, from which the witness corner bears S. 0° 03' E., 66.0 ft. dist., an iron pipe with brass cap, firmly set and marked as described in the official record.
	A schist rock in place, 12 x 14 ins., 12 ins. above ground, bears N. 79° 02' E., 13.8 ft. dist., mkd. B0 X M2-1-4351
	Thence N. 89° 57' W.,
300	Lode line, discovery shaft bears N. 0° 03' W., 108 ft. dist.
416	Road, bears SE. and NW.
600	Cor. No. 2, identical with Cor. No. 4 of the Minnesota No. 1 lode of this survey
	Thence N. 0° 03' W.,
1500	Cor. No. 3, identical with Cor. No. 3 of the Minnesota No. 1 lode of this survey
	Thence S. 89° 57' E.,
300	Lode line, discovery shaft bears S. 0° 03' E., 1392 ft. dist.
600	Cor. No. 4
	Set an iron pipe, 1 inch diameter, 3 feet long, 18 ins. in the ground in a mound of stones, with brass cap 3 inches square, mkd. M2-4-4351
	Thence S. 0° 03' E.,
1500	Cor. No. 1 and place of beginning.
-----	
MINNESOTA NO. 3 LODE	
	Beginning at Cor. No. 1 of the Minnesota No. 3 lode, identical with Cor. No. 1 of the Minnesota No. 1 lode of this survey
	Thence N. 89° 57' W.,
659.3	The 1/4 Cor. Secs. 29 and 32, T. 12 N., R. 13 W., G. & S. R. M.
1500	Cor. No. 2
	Identical with Cor. No. 1 of the Maggie No. 25 lode, Survey No. 4211
	A basalt rock, 7 x 7 ins., 8 inches above ground, mkd. M25-1-4211; M3-2-4351
	Thence N. 0° 03' W.,
300	Lode line, discovery cut bears S. 89° 57' E., 1150 ft. dist.
600	Cor. No. 3, identical with Cor. No. 2 of the Minnesota No. 4 lode of this survey

Feet	
	On line 4-1 of Survey No. 4211 Maggie No. 25 lode
	Set an iron pipe, 1 inch diameter, 3 feet long, 12 ins. in the ground in a mound of stones, with brass cap 3 inches square, mkd. M3-3-M4-2-4351
	Thence S. 89° 57' E.,
1500	Cor. No. 4, identical with Cor. No. 1 of the Minnesota No. 4 lode of this survey
	On line 1-2 of the Minnesota No. 1 lode of this survey
	Set an iron pipe, 1 inch diameter, 3 ft. long., 18 ins. in the ground in a mound of stones, with brass cap 3 inches square, mkd. M3-4-M4-1-4351; from which
	A basalt rock in place, 17 x 61 inches, 25 inches above ground bears N. 80° 55' E., 14.2 ft. dist., mkd. B0 X M3-4-4351
	Thence S. 0° 03' E.,
300	Lode line, discovery cut bears N. 89° 57' W., 350 ft. dist.
600	Cor. No. 1 and place of beginning.

-----

MINNESOTA NO. 4 LODE

	Beginning at Cor. No. 1 of the Minnesota No. 4 lode, identical with Cor. No. 4 of the Minnesota No. 3 lode of this survey; from which
	The 1/4 Cor. Secs. 29 and 32, T. 12 N., R. 13 W., G. & S. R. M. bears S. 47° 42' W., 890.7 ft. dist.
	Thence N. 89° 57' W.,
1500	Cor. No. 2, identical with Cor. No. 3 of the Minnesota No. 3 lode of this survey
	Thence N. 0° 03' W.,
300	Lode line, discovery cut bears S. 89° 57' E., 1270 ft. dist.
600	Cor. No. 3
	on line 4-1 of Survey No. 4211 Maggie No. 25 lode, Cor. No. 4 of the Maggie No. 25 lode bears N. 0° 03' W., 300 ft. being a basalt rock, 7 x 8 ins., 9 ins. above ground.
	Set an iron pipe, 1 inch diameter, 3 feet long, 18 ins. in the ground in a mound of stones, with brass cap 3 inches square, mkd. M4-3-4351
	Thence S. 89° 57' E.,
1500	Cor. No. 4
	On line 1-2 of the Minnesota No. 1 lode of this survey
	Set an iron pipe, 1 inch diameter, 3 feet long, 18 ins. in the ground in a mound of stones, with brass cap 3 inches square, mkd. M4-4-4351

Feet  
 Thence S.  $0^{\circ} 03' E.$ ,  
 300 Lode line, discovery cut bears N.  $89^{\circ} 57' W.$ , 230 ft.  
 dist.:  
 600 Cor. No. 1 and place of beginning.

## AREAS

Acres

Total area, Minnesota No. 1 lode - - - - - 20.661  
 Total area, Minnesota No. 2 lode - - - - - 20.661  
 Total area, Minnesota No. 3 lode - - - - - 20.661  
 Total area, Minnesota No. 4 lode - - - - - 20.661

## LOCATION

This survey is located in the SE 1/4 and SW 1/4 Sec. 29, T. 12 N., R. 13 W., of the Gila and Salt River Meridian.

The survey of all of the claims is identical with the respective location as marked on the ground.

## 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 his grantors are as follows:-

No. 1 The discovery cut of the Minnesota No. 1 lode, the face of which being the discovery point, is on the lode line 240 ft. from the center of line 4-1; 5 ft. wide, 10 ft. face, runs South 18 ft. to face  
 Value \$150

No. 2 A trench, the west end of which bears N.  $23^{\circ} 30' E.$ , 358 ft. from Cor. No. 1 of the Minnesota No. 1 lode; 2 x 3 ft. in size, running N.  $70^{\circ} E.$ , 40 ft. to east end  
 Value \$80

No. 3 A trench, the west end of which is on line 1-2, 310 ft. from Cor. No. 1 of the Minnesota No. 1 lode; 2 x 3 ft. in size, runs S.  $85^{\circ} E.$ , 160 ft. to east end  
 Value \$320

No. 1 The discovery shaft of the Minnesota No. 2 lode, the center of which being the discovery point is on the lode line; 108 ft. from the center of line 1-2; 4 x 6 ft. in size, 10 feet deep  
 Value \$75

No. 1 The discovery cut of the Minnesota No. 3 lode, the face of which being the discovery point is on the lode line 350 ft. from the center of line 4-1; 5 ft. wide, 10 ft. face, runs S.  $60^{\circ} W.$ , 20 ft. to face  
 Value \$160

No. 2 A trench, the south end of which is on line 4-1, 310 ft. from Cor. No. 1 of the Minnesota No. 3 lode; 2 x 3 ft. in size, runs N.  $43^{\circ} W.$ , 25 ft. to north end  
 Value \$50

- No. 3 A trench, the south end of which bears N. 60° 15' W., 553 ft. from Cor. No. 1 of the Minnesota No. 3 lode; 2 x 3 ft. in size, runs N. 61° E., 120 ft. to bend, thence N. 12° E., 85 ft. to another bend, thence N. 19° E., 120 ft. to the north end; total length 325 ft.  
Value \$650
- No. 4 A trench, the east end of which bears S. 17° 30' W., 170 ft. from Cor. No. 4 of the Minnesota No. 3 lode; 2 x 3 ft. in size, runs west 24 ft. to west end  
Value \$50
- No. 5 A trench, the east end of which bears S. 31° W., 128 ft. from Cor. No. 4 of the Minnesota No. 3 lode; 2 x 3 ft. in size, runs S. 60° W., 115 ft. to west end  
Value \$230
- No. 6 An open cut, the mouth of which bears S. 44° 40' W., 100 ft. from Cor. No. 4 of the Minnesota No. 3 lode; 6 ft. wide, 15 ft. face, runs west 20 ft. to face and portal of tunnel, 4 x 7 ft. in size running west 76 ft. to point 1; thence S. 45° W., 26 ft. to breast. At point 1 is a shaft 4 x 4 ft. in size, 26 ft. high to surface. Value \$2220. A 1/4 interest in this improvement has been allotted to each of the 4 claims in this survey. This is a common improvement and has been made for the benefit of all the claims of this group. The surface of the claims rise from this point to the west, north and east, and from the tunnel drifts and cross cuts can be run to the other claims to develop the ore bodies of manganese ore.  
Value of a 1/4 interest \$555
- No. 1 The discovery cut of the Minnesota No. 4 lode, the face of which being the discovery point is on the lode line 230 ft. from the center of line 4-1; 4 ft. wide, 10 ft. face, runs west 15 ft. to face and east end of trench, 2 x 3 ft. in size, running S. 72° W., 80 ft. to west end. At mouth of cut is the west end of a trench, 2 x 3 ft. in size, running S. 76° E., 110 ft. to bend, thence S. 31° E., 35 ft. to east end.  
Value \$550
- No. 2 An open cut, the mouth of which bears S. 56° W., 415 ft. from Cor. No. 4 of the Minnesota No. 4 lode; 4 ft. wide, 10 ft. face, runs S. 78° W., 24 ft. to face and portal of tunnel, 4 x 7 ft. in size, running S. 78° W., 3 ft. to face  
Value \$180
- No. 3 An open cut, the mouth of which bears S. 62° 30' W., 442 ft. from Cor. No. 4 of the Minnesota No. 4 lode; 6 ft. wide, 12 ft. face, runs S. 80° W., 24 ft. to face  
Value \$175

To facilitate the development of this group of claims a road has been built from the west end line of Sur. No. 4209 Chapin No. 20 lode to this group and into the group of claims. This has been built as a common improvement for the four claims and a 1/4 th interest in its value has been allotted to each of the claims.

Value of 5200 ft. of road \$2300

Value of 1/4th interest \$575

FIELD ASSISTANT

Jackson L. Clark

Chainman



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

I, Ralph L. Motz, Mineral Surveyor,  
 hereby certify upon honor that in pursuance of an order received from the  
Division of Engineering, at Albuquerque, New Mexico,  
 dated December 27, 1950, I have faithfully and correctly executed the survey  
 of the mining claim of Mack C. Lake  
 known as the Minnesota No. 1, Minnesota No. 2,  
Minnesota No. 3 and Minnesota No. 4 (lode, placer, or millsite) situate in Owen Mining District,  
Mohave County, in Section 29 T. 12 N., R. 13 W.,  
Gila & Salt River Meridian, Arizona, and designated  
 as Survey No. 4351 (State), which is represented in the fore-  
 going 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 ex-  
 pended and improvements made upon or for the benefit of the lode  
 location-s embraced in the said mining claim by claimant- or his (lode or placer) 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.

Bisbee, Arizona.

(Place)

March 16, 1951.

(Date)

*Ralph L. Motz*  
 (Mineral Surveyor)



**CERTIFICATE OF APPROVAL OF FIELD NOTES AND SURVEY OF  
MINING CLAIM**

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
~~GENERAL LAND OFFICE~~  
~~PUBLIC SURVEY OFFICE~~**

**Bureau of Land Management  
Division of Engineering  
1009 W. Tijeras Ave.,  
Albuquerque, N. M.**

At Albuquerque, New Mexico

April 9, 19 51

I, Acting Office Cadastral Engineer at Albuquerque, New Mexico

do hereby certify that the foregoing and hereto attached Field Notes and Return of the Survey of the  
Mining Claim of M. C. Lake

....., known as the  
Minnesota No. 1, Minnesota No. 2, Minnesota No. 3, and Minnesota No. 4 lodes

situate in Owen mining district,

Mohave County, Arizona

in Section 29, Township No. 12 North, Range No. 13 West

G&SRM, designated as Survey No. 4351

executed by Ralph L. Motz, Mineral

Surveyor, March 8, 1951 to March 13, 1951, 19 51, under my instructions dated

December 27, 1951, 19 51, have been critically examined and the necessary

corrections and explanations made, and the said Field Notes and Return, and the Survey they describe,

are hereby approved. The certified copy of the location certificate filed by the applicant for survey is

included and made a part of these field notes.

*E. H. Kimmell*

Acting Office Cadastral Engineer.

