

Form 4-683
(January 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Mineral Survey number

4643

State

Arizona

Land District

Arizona

FIELD NOTES

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

Kennecott Copper Corporation

c/o Fennemore, Craig, Allen &
McClellan, Attorneys at Law,
First National Bank Building
Phoenix, Arizona

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

CONSISTING OF LOCATIONS NAMED AND LOCATED AS FOLLOWS

NAME OF LOCATION	DATE	
	LOCATED	AMENDED
T. Q. No. 1	10/1/65	

Mining district Mineral Creek		County Pinal	
Section 23 & 24	Township 3 South	Range 13 East	Meridian Gila and Salt River
Survey commenced March 14, 1966		Survey completed April 25, 1966	Survey under order dated February 18, 1966
			Name of Mineral Surveyor Travis L. Gant

SURVEY NO. 4643

1.

FEET

This survey was made with a W. & L. E. Gurley transit, No. 57289, with horizontal limb $6\frac{1}{2}$ ins. diam., having two double opposite verniers, and full vertical circle 5 ins. diam., having one double vernier; the horizontal verniers read to 30 secs. of arc, the vertical vernier reads 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 deflection angles referred to the meridian determined by the following observation:

March 29, 1966, at Cor. No. 2 of the T. Q. No. 1 lode in latitude $33^{\circ} 09' 29.2''$ N. and longitude $110^{\circ} 58' 52.8''$ W., I make 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 angles from a reference point approximately 650 feet northward clockwise to the sun.

Mean time of observation,
105th meridian, standard time = 10:26 a.m.

Declination of sun at mean
time of observation = $3^{\circ} 24' 00''$ N.

Mean observed vertical angle
to sun's center = $48^{\circ} 32' 00''$

Mean horizontal angle from
reference point to sun's center,
turned clockwise and to the
right to sun's center = $128^{\circ} 31' 15''$

True bearing to reference point = N. $0^{\circ} 42' 10''$ E.

The lines were measured with a Lufkin steel tape 500 feet in length, graduated every foot for 500 ft., with an added foot on the zero end graduated in tenths and hundredths; the tape was compared with a standard 100.00 ft. Invar tape at the time of beginning of 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 $13^{\circ} 30'$ E.

SURVEY NO. 4643

T. Q. No. 1 LODE

Beginning at Cor. No. 1 of the T. Q. No. 1 lode,

This corner falls on slide rock where a monument cannot be preserved, witnessed N. $89^{\circ} 57'$ W., 89.48 ft. dist.

Set a temporary point for Cor. No. 1; from which

The cor. of secs. 13, 14, 23, and 24, T. 3 S., R. 13 E., G.&S.R.M., bears N. $53^{\circ} 33'$ W., 255.37 ft. dist., an iron post 2 ins. diam., 15 ins. above ground, firmly set, with brass cap marked as described in the official record. Shortly after

FEET	
	<p>this survey tie was made, the sec. cor. post was removed during mine-stripping operations on Sur. No. 2615A Grenadier lode.</p> <p>The $\frac{1}{4}$-corner of secs. 13 and 24, T. 3 S., R. 13 E., G.&S.R.M., bears N. $86^{\circ} 22' 17''$ E., 2,442.53 ft. dist., an iron post 1 ins. diam., 20 ins. above ground, firmly set, with brass cap marked as described in the official record.</p> <p>Cor. No. 1 Sur. No. 2881A Copper King lode bears S. $16^{\circ} 08' 28''$ W., 200.79 ft. dist.</p> <p>Cor. No. 3 Sur. No. 2615A Grenadier lode identical with Cor. No. 4 Sur. No. 1244 Canton lode bears S. $3^{\circ} 04' 34''$ E., 180.21 ft. dist.</p> <p style="text-align: center;">Thence S. $0^{\circ} 42' 10''$ W.</p>
123.31	Intersect line 4-1 Sur. No. 1244 Canton lode, identical with line 2-3 Sur. No. 2615A Grenadier lode, at a point from which Cors. Nos. 4 and 3 respectively bear S. $11^{\circ} 10'$ E., 57.74 ft. dist.
182.31	Intersect common lines 4-1 Sur. No. 2881A Copper King lode, line 3-4 Sur. No. 2615A Grenadier lode, line 1-2 Sur. No. 2615A Tucson Queen lode, and the northerly line Sur. No. 2881A Tract A, at a point from which Cor. No. 1, Sur. No. 2881A Copper King lode, identical with the northwest point Sur. No. 2881A Tract A, bears S. $78^{\circ} 50'$ W., 54.62 ft. dist.
766.89	Intersect the southerly line, Sur. No. 2881A Tract A, identical with the northerly line Sur. No. 2881A Tract B, being the original south side line of Sur. No. 2881A Copper King lode location before amended, at a point from which the southwest point Sur. No. 2881A Tract A identical with the northwest point Sur. No. 2881A Tract B, bears S. $79^{\circ} 14'$ W., 67.92 ft. dist., and at a point from which the original S.W. corner of said location before amended bears S. $79^{\circ} 14'$ W., 69.48 ft. dist.
771.83	Intersect the southerly line Sur. No. 2881A Tract B, identical with the northerly line Sur. No. 2881A Tract C, being the original north side line of Sur. No. 2881A Alma lode location before amended, at a point from which the southwest point Sur. No. 2881A Tract B, identical with the northwest point Sur. No. 2881A Tract C bears S. $79^{\circ} 02'$ W., 68.09 ft. dist., and at a point from which the original N. W. corner of said location before amended bears S. $79^{\circ} 02'$ W., 147.00 ft. dist.
795.42	Intersect common lines 2-3 Sur. No. 2881A Copper King lode, line 3-4 Sur. No. 2615A Tucson Queen lode, line 4-1 Sur. No. 2881A Alma lode, and the southerly line Sur. No. 2881A Tract C, at a point from which Cor. No. 2 Sur. No. 2881A Copper King lode, identical with the Southwest point Sur. No. 2881A Tract C bears S. $78^{\circ} 50'$ W., 68.68 ft. dist.
1,078	Road; centerline bears S. 64° E. and N. 64° W.

FEET	
1,200.00	<p>Cor. No. 2.</p> <p>Set an iron post, 2 ft. long, 1 ins. diam., 14 ins. in the ground and in a concrete base, with brass cap mkd. TQ 1-2-4643; from which</p> <p>Cor. No. 1 Sur. No. 2881A Alma lode, identical with Cor. No. 1 Sur. No. 2615A Pope lode, bears N. 22° 10' W., 403.34 ft. dist.</p> <p style="text-align: center;">Thence N. 89° 57' W.</p>
78.35	<p>Intersect line 1-2 Sur. No. 2881A Alma lode, identical with line 1-2 Sur. No. 2615A Pope lode, at a point from which Cors. Nos. 1 bear N. 11° 11' W., 380.69 ft. dist.</p>
100.00	<p>Lode line; discovery point bears N. 0° 42' 10" E., 400 ft. dist.</p>
145.50	<p>Building line of Silicate Pilot Plant; exterior curb face bears S. 34° E. and N. 34° W.</p>
145.81	<p>Witness Corner for Cor. No. 3.</p> <p>Set a brass tablet, 2 ins. diam., 2½ ins. stem, flush with the surface of a concrete curb, 6 ins. wide, 12" above ground, with top mkd. WC-TQ 1-3-4643.</p>
200.00	<p>Cor. No. 3.</p> <p>This corner falls among the machinery in the Silicate Pilot Plant where a monument cannot be established.</p> <p style="text-align: center;">Thence N. 0° 42' 10" E.</p>
12.30	<p>Building line of Silicate Pilot Plant; wall bears N. 56° E. and S. 56° W.</p>
195	<p>Road; centerline bears S. 50° E. and N. 50° W.</p>
297	<p>Power line; bears S. 64° 30' W. and terminates N. 64° 30' E., 94 ft. dist.</p>
364.82	<p>Intersect line 4-1 Sur. No. 2615A Pope lode identical with line 3-4 Sur. No. 2615A Tucson Queen lode at a point from which Cor. No. 1 Sur. No. 2615A Pope lode, identical with Cor. No. 1 Sur. No. 2881A Alma lode, bears N. 78° 50' E., 44.18 ft. dist.</p>
381	<p>Road; centerline bears N. 37° E. and S. 37° W.</p>
670	<p>Road; centerline bears N. 52° E. and S. 52° W.</p>
955	<p>Road; centerline bears N. 37° W. and S. 37° E.</p>
977.93	<p>Intersect line 1-2 Sur. No. 2615A Tucson Queen lode identical with line 3-4 Sur. No. 2615A Grenadier lode at a point from which Cor. No. 3 Sur. No. 2615A Grenadier lode bears N. 78° 50' E., 216.50 ft. dist.</p>
1,200.00	<p>Cor. No. 4.</p> <p>Set an iron post, 2 ft. long, 1 in. diam., 18 ins. in the ground and in a concrete base, with a brass cap mkd. TQ 1-4-4643; from which</p> <p>Cor. No. 4, Sur. No. 2615A Grenadier lode bears S. 51° 59' 22" W., 481.24 ft. dist.</p>

SURVEY NO. 4643

FEET	
	Thence S. 89° 57' E.
100.00	Lode line; discovery point bears S. 0° 42' 10" W., 800 ft. dist.
110.52	Witness Corner for Cor. No. 1. Set an iron post, 2 ft. long, 1 in. diam., 16 ins. in the ground and in a concrete base, with brass cap mkd. WC-TQ 1-1-4643.
174.15	Intersect line 2-3 Sur. No. 2615A Grenadier lode identical with line 4-1 Sur. No. 1244 Canton lode at a point from which Cors. Nos. 3 and 4 respectively bear S. 11° 10' E., 183.45 ft. dist.
200.00	Cor. No. 1 and place of beginning.

SURVEY NO. 4643

AREAS

	<u>Acres</u>
Total area, T.Q. No. 1 lode	5.509
Area in conflict with - -	
Tract D, hereinafter described	0.071
Tract E, hereinafter described	0.042
Sur. No. 1244 Canton lode	0.037
Sur. No. 2615A Grenadier lode	0.892
Sur. No. 2615A Pope lode	0.702
Sur. No. 2615A Tucson Queen lode	2.815
Sur. No. 2615A Tucson Queen lode, exclusive of its conflict with:	
(1) Sur. No. 2881A Copper King lode	1.966
(2) Sur. No. 2881A Copper King lode and Tract D	1.895
(3) Sur. No. 2881A Copper King lode and Tract E.	1.924
(4) Sur. No. 2881A Copper King lode and Tracts D & E.	1.853
Sur. No. 2881A Alma lode	1.064
Sur. No. 2881A Copper King lode	0.849
Sur. No. 2881A Copper King lode, exclusive of its conflict with Sur. No. 2615A Tucson Queen lode	0.000
Sur. No. 2881A Tract A	0.805
Sur. No. 2881A Tract B	0.008
Sur. No. 2881A Tract C	0.036

TRACT D

That portion of Sur. No. 2615A Tucson Queen lode in conflict with T. Q. No. 1 lode of this survey, excluded by said Tucson Queen lode in favor of Copper King lode location abandoned by Sur. No. 2881A Copper King lode, and is bounded and described as follows:

Beginning at Cor. No. 1 Sur. No. 2881A Copper King lode ---
Thence S. 1° 59' W., 587.00 ft., to south line of said abandoned location of Copper King lode;

SURVEY NO. 4643

5.

F E E T

Thence S. $79^{\circ} 14'$ W., 1.56 ft. to S.W. Cor. of said abandoned location of Copper King lode;
Thence N. $0^{\circ} 38' 30''$ E., 348.12 ft. to west end center of said abandoned location of Copper King lode;
Thence N. $4^{\circ} 18' 30''$ E., 239.52 ft. to place of beginning.

TRACT E

That portion of Sur. No. 2615A Tucson Queen lode in conflict with T. Q. No. 1 lode of this survey, excluded by said Tucson Queen lode in favor of Alma lode location abandoned by Sur. No. 2881A Alma lode, and is bounded and described as follows:

Beginning at Cor. No. 2 Sur. No. 2881A Copper King lode ---
Thence S. $78^{\circ} 50'$ W., along line 4-1 Sur. No. 2881A Alma lode, 75.36 ft. to west line of said abandoned location of Alma lode;
Thence N. $6^{\circ} 33'$ W., 23.67 ft. to N. W. Cor. of said abandoned location of Alma lode;
Thence N. $79^{\circ} 02'$ E., 78.91 ft., to line 1-2 Sur. No. 2881A Copper King lode;
Thence S. $1^{\circ} 59'$ W., 23.95 ft. to place of beginning.

LOCATION

This survey is located in NE $\frac{1}{4}$ sec. 23 and in NW $\frac{1}{4}$ Sec. 24, T. 3 S., R. 13 E., G. & S. R. M. Pinal County, Arizona.

The survey of the T. Q. No. 1 lode is identical with the location as marked on the ground.

EXPENDITURES

No. 1 A diamond drill hole, the center of which is the discovery point, is on the lode line, 400 ft. from a point on line 2-3, 100 ft. from Cor. No. 2; 2 ins. diam., 120 ft. depth.
Value, \$ 780

OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA

Sur. No. 1244, Canton lode: Cor. No. 4 is a Quartzite stone, firmly set and properly marked; no other corners were found. All lines shown as approved.

Sur. No. 2615A Grenadier lode: Cors. Nos. 3 and 4 are quartzite stones, firmly set and properly marked, Cor. No. 3 being identical with Cor. No. 4, Sur. No. 1244 Canton lode. No other corners were found. Line 2-3 shown as approved. Line 3-4 was found to be S. $78^{\circ} 50'$ W., 600.20 ft. instead of S. $78^{\circ} 50'$ W., 600 ft. as approved. Cors. Nos. 3 and 4 of the Grenadier lode were the only corner monuments found in the vicinity of this survey and it is upon these two monuments that the entire survey is based.

Sur. No. 2615A Tucson Queen lode: No corners could be found. All lines shown as approved.

Sur. No. 2615A Pope lode: No corners could be found. All lines shown as approved.

Sur. No. 2881A Copper King lode: No corners could be found. All lines shown as approved.

Sur. No. 2881A Alma lode: No corners could be found. All lines shown as approved.

FEET

Sur. No. 2615A Tucson Queen lode, conflict between the Copper King and Alma lode, unsurveyed at that time: the south line of that parcel of land described in paragraph two was found to be S. 78° 50' W., 582.3 ft. instead of S. 79° W., 582.3 ft., as approved; also the west line of the parcel was found to be N. 6° 33' W., 23.67 ft. instead of N. 6° 11' W., 22 ft., as approved.

FIELD ASSISTANTS

Name

Capacity

Wilburn H. Martin

Chainman

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CERTIFICATE OF SURVEYOR

Name of Mineral Surveyor Travis L. Gant	Date May 6, 1966
---	----------------------------

I HEREBY CERTIFY That in pursuance of an order received from the Dept. of Interior Bureau of Land Mangement at Phoenix, Arizona dated February 18, 19 66, I have carefully executed the survey of the claim of Kennecott Copper Corporation known as the (lode, placer, or mill site) T. Q. No. 1 lode situated in Mineral Creek Mining District, Pinal County, Arizona, Secs. 23 & 24, Township 3 S., Range 13 E., Gila and Salt River Meridian, in the State of Arizona

This survey, designated as number 4643, 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 the 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 or placer) T. Q. No. 1 lode location(s) embraced in the said mining claim by claimant(s) or his 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.

Globe, Arizona (Location)	<i>Travis L. Gant</i> (Signature of Mineral Surveyor)
-------------------------------------	--

CERTIFICATE OF APPROVAL

Office Arizona State Office Bureau of Land Management Location Phoenix, Arizona Date June 16, 1966

The foregoing field notes of mineral survey number 4643, in Sections 23 and 24, Township 3 S., Range 13 E., Gila and Salt River Meridian, in the State of Arizona, executed by Travis L. Gant, Mineral Surveyor, under order dated February 18, 1966, 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.

<i>Fred J. Weiler</i> (Authorized Signature) Fred J. Weiler	State Director (Title)
---	---------------------------

CERTIFICATE OF TRANSCRIPT

I 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.

