

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MINERAL SURVEY NO. 4344

ARIZONA Land District.

FIELD NOTES

Of The Survey Of The Mining Claim Of

CENTROID CONSOLIDATED MINES

Known As The

Jubilee No.2, Jubilee No.4, Jubilee No.5, Centroid No.Four, Centroid No.Fifteen, Black Hawk, Black Hawk No.1, Black Hawk No.3, Hancock No.1 Hancock No.Two, Hancock No.3, Hancock No.4 lodes.

ELLSWORTH Mining District,

YUMA County, STATE OF ARIZONA

7 and 18 unsurveyed 7 N. 12 W.  
Section 13 " " Township 7 N. Range 13 W.

Surveyed under order dated February, 17, 1950

by J. WILLIAM WAARA  
Mineral Surveyor.

Claim located See back of sheet 3, 19

Survey commenced February 17, 1950

Survey completed February 27, 1950

Address of claimant Yale McFate, its attorney,  
Luhrs Bldg, Phoenix Arizona.

DATES OF AMENDED LOCATIONS

February 2, 1950

February 3, 1950

Name	Located	Amended
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Jubilee No. 2	July 1, 1926	Feb. 2, 1950
Jubilee No. 4	July 1, 1926	Feb. 2, 1950
Jubilee No. 5	July 1, 1926	Feb. 2, 1950
Centroid No. Four	Feb. 1, 1934	Feb. 2, 1950
Centroid No. Fifteen-	Feb. 1, 1934	Feb. 3, 1950
Black Hawk	May 15, 1926	Feb. 3, 1950
Black Hawk No. 1	Aug. 1, 1926	Feb. 3, 1950
Black Hawk No. 3	July 12, 1929	Feb. 3, 1950
Hancock No. 1	July 20, 1929	Feb. 3, 1950
Hancock No. Two	May 8, 1929	Feb. 3, 1950
Hancock No. 3	July 24, 1929	Feb. 2, 1950
Hancock No. 4	July 23, 1929	Feb. 2, 1950

This survey was made with a Lietz Light Mountain transit No. 9503, Model No. 9, with a horizontal limb 5 ins. in diameter, having two double opposite verniers reading to thirty seconds of arc, and full vertical circle 5 ins. in diameter, having two double verniers reading to one minute of arc; the eye piece is fitted to receive a prismatic eye piece suitable for making direct observations upon the sun or Polaris. 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 observations.

February 19, 1950, at Cor. No. 3 Jubilee No. 5 lode of this survey, in latitude  $33^{\circ} 57' 00''$  N. and longitude  $113^{\circ} 33' 00''$  W., I make a series of six observations upon Polaris during the period of its western elongation, three each with the telescope in direct and reversed positions, and reading the horizontal angle from a reference point NW. of my station, E. to Polaris.

Mean time of observation, 105th  
 meridian Standard time 10h 20m p.m.  
 Declination of Polaris  $89^{\circ} 01' 66.11''$   
 Mean observed vertical angle  $33^{\circ} 38' 16''$   
 Mean horizontal angle from reference point to Polaris  $10^{\circ} 30' 00''$   
 True bearing to reference point N.  $11^{\circ} 39' 46''$  W.

A similar observation on Polaris was made at this station on February 16, 1950, the result of which gave the same bearing.

The lines were measured with a 1/8 inch steel tape, 500 feet in length, graduated every foot, which was compared with a steel standard tape at the time of beginning the survey and found correct.

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

The magnetic variation at each corner of the survey gave a uniform value of  $14^{\circ} 00'$  E.

Feet

## JUBILEE NO. 2 LODGE

At Cor. No. 1 of the Jubilee No. 2 lode, on line 4-1 Jubilee No. 5 lode of this survey.

Set an iron pipe,  $2\frac{1}{2}$  ft. long,  $\frac{3}{4}$  in. diam., 18 ins. in the ground with copper disc on pipe marked J 2-1-4344.

Raise a substantial mound of stone alongside.

The west  $\frac{1}{4}$  sec. cor. of Sec. 18, T. 7 N., R. 12 W., Gila and Salt River Meridian, bears N.  $34^{\circ} 43' 45''$  W.; 741.3 ft., an iron post, 1 in. diam., 18 ins. above ground, firmly set, marked as described in the official record.

No local bearing objects or bearing trees available.

Thence S.  $44^{\circ} 44'$  E.

829.8 Cor. No. 4 Jubilee No. 5 lode, on line 2-3 Jubilee No. 4 lode, both of this survey.

1002.61 Intersect line 1-2 Jubilee No. 4 lode, also intersect line 2-3 Centroid No. Four lode, both of this survey.

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Feet	
1500.0	<p>Cor. No. 2.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set alongside and copper disc on pipe mkd. J 2-2-4344.</p> <p>No bearings available.</p> <p>Thence S. 45° 15' W.</p>
206.1	<p>Intersect line 2-3 Centroid No. Four lode of this survey.</p>
300.0	<p>A substantial post set in the ground on the lode line; discovery point bears N. 44° 44' W., 1130 ft. dist.</p>
600.0	<p>Cor. No. 3.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe marked J 2-3-4344.</p> <p>No bearings available.</p> <p>Thence N. 44° 44' W.</p>
1500.0	<p>Cor. No. 4.</p> <p>Set an iron pipe, 2½ ft. long, 3/4 in. diam., 18 ins. in the ground with a copper disc on pipe mkd. J 2-4-4344 with its center for exact corner point.</p> <p>Raise a substantial mound of stone alongside.</p> <p>No bearings available.</p> <p>Thence N. 45° 15' E.</p>
300.0	<p>A substantial mound of stone on lode line; discovery point bears S. 44° 44' E., 370 ft. dist.</p>
600.0	<p>Cor. No. 1 and place of beginning.</p>
<p>JUBILEE NO. 4 LODE</p>	
<p>At Cor. No. 1 of the Jubilee No. 4 lode, identical with Cor. No. 5 Centroid No. Four lode of this survey.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. J 4-1-4344, C N F-5; from which</p> <p>The south 1/4 sec. cor., Sec. 18, T. 7 N., R. 12 W., bears S. 6° 31' 15" E., 1001.9 ft., an iron post, 1 in. diam., 15 ins. above ground, firmly set, and marked as described in the official record.</p> <p>No local bearing objects available.</p> <p>Thence N. 75° 36' W.</p>	

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Feet	Description
45	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W.
1353.08	Intersect line 2-3 Centroid No. Four lode, also intersect line 1-2 Jubilee No. 2 lode, both of this survey.
1475.15	Cor. No. 2 falls on a mine dump where it is impracticable to establish a monument. Thence N. 2° 05' W.
61.36	Witness Cor. No. 2 Set an iron pipe, 2½ ft. long, ¾ in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. W C J 4-2-4344. No bearings available.
92.46	Cor. No. 4 Jubilee No. 5 lode on line 1-2 Jubilee No. 2 lode, both of this survey.
312.1	A substantial post set in the ground on lode line; discovery point bears S. 75° 36' E., 180.0 ft. dist.
579.26	Cor. No. 3. Set an iron pipe, 3 ft. long, ¾ in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. J 4-3-4344; from which A corner of the location bears N. 2° 05' W., 45.64 ft. dist. No local bearing objects or bearing trees available. Thence S. 81° 07' E.
455.1	Cor. No. 4 identical with Cor. No. 3 Jubilee No. 5 lode, being on line 4-1 Hancock No. 3 lode, both of this survey. Set an iron pipe, 1 ft. long, ¾ in. diam., flush with the surface of the ground, with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. J 4-4-4344, J 5-3. No bearings available. Thence S. 74° 58' 30" E.
710	A natural gas pipe line, 36 ins. diam., bears N. 21° 54' W. and S. 21° 54' E.
860	Mine road, bears east and west.
1011.45	Cor. No. 5. Set an iron pipe, 3 ft. long, ¾ in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. J.4-5-4344; from which A corner of the location bears N. 2° 05' W., 18.0 ft. dist.

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Feet	
	No local bearing objects or bearing trees available.
	Thence S. 2° 05' E.
128.6	Intersect line 3-4 Hancock No. 3 lode of this survey.
300.5	A substantial post set in the ground on the lode line; discovery point bears N. 75° 36' W., 1295.15 ft. dist.
612.6	Cor. No. 1 and place of beginning.
<b>JUBILEE No. 5 LODE</b>	
	Cor. No. 1 of the Jubilee No. 5 lode, falls in water-course where it is impracticable to establish a monument. From this true point for corner;
	The west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears N. 20° 21' E., 142.0 ft. dist., hereinbefore described.
	No local bearing objects or bearing trees available.
	Thence N. 46° 02' E.
15.3	Witness cor. No. 1.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 24 ins. in the ground with a copper disc on pipe mkd. W C J 5-1-4344.
	Raise a substantial mound of stone alongside.
	No local bearing objects available.
300.0	A substantial mound of stone on lode line; discovery point bears S. 44° 44' E., 230.0 ft. dist.
599.8	Cor. No. 2.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with copper disc on pipe mkd. J 5-2-4344.
	Raise a substantial mound of stone alongside.
	No bearings available.
	Thence S. 44° 44' 30" E.
1035.27	Intersect line 1-2 Hancock No. 3 lode of this survey.
1500.0	Cor. No. 3, identical with Cor. No. 4 Jubilee No. 4 lode, being on line 4-1 Hancock No. 3 lode of this survey.
	Thence S. 46° 02' W.
300.0	A substantial post set in the ground on the lode line; discovery point bears N. 44° 44' W., 1270.0 ft. dist.
-600.0	Cor. No. 4, on line 1-2 Jubilee No. 2 lode and on line 2-3 Jubilee No. 4 lode, both of this survey.
	Set an iron pipe, 2 1/2 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the

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Feet	
	ground alongside and copper disc on pipe mkd. J 5-4-4344.
	No bearings available.
	Thence N. 44° 44' W.
829.8	Cor. No. 1 Jubilee No. 2 lode of this survey.
1500.0	Cor. No. 1 and place of beginning.
CENTROID NO. FOUR LODGE	
	At Cor. No. 1 of the Centroid No. Four lode.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. C N F-1-4344; from which
	The south 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears S. 38° 49' W., 309.9 ft. dist.
	No local bearing objects or bearing trees available.
	Thence N. 68° 41' W.
40.0	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W. and S. 21° 54' E.
1498.0	Cor. No. 2.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. C N F-2-4344.
	No bearings available.
	Thence N. 22° 13' W.
51.95	Intersect line 2-3 Jubilee No. 2 lode of this survey.
407.7	A substantial post set in the ground on the lode line; discovery point bears S. 68° 41' E., 350.0 ft. dist.
590.15	Intersect line 1-2 Jubilee No. 2 lode, of this survey, also intersect line 1-2 Jubilee No. 4 lode of this survey.
752.9	Cor. No. 3
	Set an iron pipe, 2 1/2 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. C.N.F-3-4344; from which
	A corner of the location bears N. 22° 13' W., 72.0 ft. dist.
	No local objects or bearing trees available.
	Thence N. 65° 05' E.
64.1	Cor. No. 4.

Feet	
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. C N F-4-4344.
	No bearings available.
	Thence S. 68° 37' 30" E.
1356.0	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W. and S. 21° 54' E.
1411.0	Cor. No. 5, identical with Cor. No. 1 Jubilee No. 4 lode of this survey.
	Thence S. 22° 13' E.
407.0	A substantial post set in the ground on the lode line; discovery point bears N. 68° 41' W., 1148.9 ft. dist.
814.9	Cor. No. 1, and place of beginning.
	<b>CENTROID NO. FIFTEEN LODE</b>
	At Cor. No. 1 of the Centroid No. Fifteen lode,
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with copper disc on pipe mkd. C N FI-1-4344.
	Raise a substantial mound of stone alongside.
	The west cor. to Secs. 7 and 18, T. 7 N., R. 12 W., bears N. 36° 31' W., 269.2 ft.; an iron post, 2 ins. diam., 12 ins. above ground, mkd. and witnessed as described in the official record.
	No local bearing objects available.
	Thence N. 68° 38' E.
.0.5	Cor. No. 1, Sur. No. 3631, Buck lode.
149.2	Natural gas pipe line, 36 ins. diam., bears N. 37° 18' W., and S. 37° 18' E.
300.0	A mound of stone, south end center Buck lode.
312.75	A substantial mound of stone on the lode line; discovery point bears S. 37° 48' E., 1081.5 ft. dist.
601.8	Cor. No. 2, Sur. No. 3631 Buck lode.
625.5	Cor. No. 2.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with copper disc on pipe mkd. C N FI-2-4344.
	Raise a substantial mound of stone alongside.
	No bearings available.
	Thence S. 37° 46' E.
1277.14	Intersect line 1-2 Black Hawk No. 3 lode of this survey.



Feet	
1295.9	<p>Cor. No. 3.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. C N FI-3-4344.</p> <p>No bearings available.</p> <p>Thence S. 68° 38' W.</p>
312.05	A substantial post set in the ground on the lode line; discovery point bears N. 37° 48' W., 215.0 ft. dist.
460.0	Natural gas pipe line, 36 ins. diam., bears N. 37° 18' W. and S. 37° 18' E.
524	County road, bears southeast and northwest.
624.8	<p>Cor. No. 4, on line 4-1 Black Hawk No. 3 lode of this survey.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and the copper disc on pipe mkd. C N FI-4-4344.</p> <p>No bearings available.</p> <p>Thence N. 37° 48' W.</p>
660	County road, bears southeast and northwest.
1296.5	Cor. No. 1 and place of beginning.
<b>BLACK HAWK LODGE</b>	
	<p>At Cor. No. 1 of the Black Hawk lode, identical with Cor. No. 2 Black Hawk No. 1 lode, Cor. No. 3 Black Hawk No. 3 lode, and Cor. No. 3 Hancock No. 1 lode, all of this survey.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. B H-1-4344, B H 1-2, B H 3-3, H 1-3; from which</p> <p>The west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears S. 75° 56' W., 2249.4 ft. dist.</p> <p>No local bearing objects available.</p> <p>Thence N. 36° 56' E.</p>
291.5	Road bears southeast and northwest.
299.5	A substantial post set in the ground on the lode line; discovery point bears S. 59° 28' E., 205.0 ft. dist.
599.5	<p>Cor. No. 2, identical with Cor. No. 2 Black Hawk No. 3 lode of this survey.</p> <p>Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. B H-2-4344, B H 3-2.</p>

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	No bearings available.
	Thence S. 59° 28' E.
1500.0	Cor. No. 3. Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. B.H-3-4344.
	No bearings available.
	Thence S. 36° 56' W.
300.0	A substantial post set in the ground on the lode line; discovery point bears N. 59° 28' W., 1295.0 ft. dist.
600.0	Cor. No. 4, identical with Cor. No. 3 Black Hawk No. 1 lode of this survey. Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. B H-4-4344, B H 1-3.
	No bearings available.
	Thence N. 59° 26' W.
1015.	Road, bears south and north.
1500.0	Cor. No. 1 and place of beginning.
BLACK HAWK NO. 1 LODE	
	At Cor. No. 1 Black Hawk No. 1 lode, on line 3-4 Hancock No. Two lode of this survey. Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. B H 1-1-4344; from which The west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears S. 87° 36' W., 1830.2 ft. dist. No local bearing objects or bearing trees available.
	Thence N. 36° 56' E.
18.1	Cor. No. 3 Hancock No. Two lode, identical with Cor. No. 4 Hancock No. 1 lode, both of this survey.
114.5	Center line of Electric Power Lines, bears S. 55° 58' E. to Phoenix and N. 55° 58' W. to Parker Dam.
214.1	Center line parallel power line.
235	County road, bears southeast and northwest.
300.0	Lode line; discovery point bears S. 59° 26' E., 30.0 ft. dist. Impracticable to build a monument due to steep slope. Witness monument N. 36° 56' E., 10.7 ft. dist.
310.7	Witness monument; a substantial mound of stone.

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Feet	
588.1	Cor. No. 2, identical with Cor. No. 1 Black Hawk lode, Cor. No. 3 Black Hawk No. 3 lode, Cor. No. 3 Hancock No. 1 lode, all of this survey. Thence S. 59° 26' E.
485	Road, bears south and north.
1500.0	Cor. No. 3, identical with Cor. No. 4 Black Hawk lode of this survey. Thence S. 36° 56' W.
288.1	A substantial post set in the ground on the lode line; discovery point bears N. 59° 26' W., 1470.0 ft. dist.
463.8	Center line of electric power line, bears S. 55° 58' E.
564.5	Center line of parallel power line.
572.6	Witness cor. No. 4. Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. B H 1-4-4344 W C. No bearings available.
577.0	Cor. No. 4, falls in roadway. Thence N. 59° 50' 30" W.
465.0	Road, bears southeast and northwest.
486.3	Intersect line 3-4 Hancock No. 4 lode of this survey.
1500.7	Cor. No. 1 and place of beginning.
<b>BLACK HAWK NO. 3 LODE</b>	
At cor. No. 1 of the Black Hawk No. 3 lode.	
Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. B H 3-1-4344; from which	
The west cor. to Secs. 7 and 18, T. 7 N., R. 12 W., bears N. 56° 35' W., 1511.6 ft. dist.	
No other bearings available.	
Thence S. 57° 48' 30" E.	
311.48	Intersect line 2-3 Centroid No. Fifteen lode of this survey.
1493.3	Cor. No. 2, identical with Cor. No. 2 Black Hawk lode of this survey. Thence S. 36° 56' W.
300.0	A substantial post set in the ground on the lode line; the discovery point bears N. 57° 48' 30" W., 1253.3 ft. dist.

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Feet	
308	Road, bears southeast and northwest.
599.5	Cor. No. 3, identical with Cor. No. 1 Black Hawk lode, Cor. No. 2 Black Hawk No. 1 lode, and Cor. No. 3 Hancock No. 1 lode, all of this survey.  Thence N. 57° 48' 30" W.
888.3	Road, bears southeast to northwest.
1066.0	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W. and S. 21° 54' E.
1493.3	Cor. No. 4, identical with Cor. No. 2 Hancock No. 1 lode of this survey.  Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. BH 3-4-4344, H 1-2.  No bearings available. Thence N. 36° 56' E.
88.7	Cor. No. 4 Centroid No. Fifteen lode of this survey.
194	Road, bears southeast and northwest.
248.2	Natural gas pipe line, 36 ins. diam., bears N. 37° 18' W., and S. 37° 18' E.
299.5	A substantial post set in the ground on the lode line; discovery point bears S. 57° 48' 30" E., 240.0 ft. dist.
599.5	Cor. No. 1 and place of beginning.
<b>HANCOCK NO. 1 LODE</b>	
	At Cor. No. 1 of the Hancock No. 1 lode, identical with Cor. No. 2 Hancock No. Two lode of this survey.  Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H 1-1, H N T-2, 4344; from which  The west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears S. 32° 58' W., 1057.10 ft. dist.  No other bearings available.  Thence N. 36° 56' E.
97.6	Center line of electric power line, bears S. 55° 58' E.
197.2	Center line of parallel power line.
299.3	A substantial post set in a mound of stone on the lode line; discovery point bears S. 57° 51' 30" E., 120.0 ft. dist.
570.6	Cor. No. 2, identical with Cor. No. 4 Black Hawk No. 3 lode of this survey.

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Feet	
	Thence S. 57° 48' 30" E.
427.3	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W., and S. 21° 54' E.
605.0	Road, bears southeast and northwest.
1493.3	Cor. No. 3, identical with Cor. No. 1 Black Hawk lode, Cor. No. 2 Black Hawk No. 1 lode, Cor. No. 3 Black Hawk No. 3 lode, all of this survey.
	Thence S. 36° 56' W.
270.0	A substantial post set in the ground on the lode line; discovery point bears N. 57° 51' 30" W., 1373.3 ft. dist.
353.1	Road, bears southeast and northwest.
374.0	Center line of electric power line, bears S. 55° 58' E.
473.6	Center line of parallel power line.
570.0	Cor. No. 4, identical with Cor. No. 3 Hancock No. Two lode of this survey.
	Thence N. 57° 50' W.
221.0	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W., and S. 21° 54' E.
1493.3	Cor. No. 1 and place of beginning.

## HANCOCK NO. TWO LODE

At Cor. No. 1 Hancock No. Two lode.

Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H N T-1-4344; from which

The west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears S. 30° 13' W., 626.1 ft. dist.

No local bearing objects available.

Thence N. 36° 56' E.

300.0	A substantial post set in the ground on the lode line; discovery point bears S. 57° 47' 30" E., 335.0 ft. dist.
432.7	Cor. No. 2, identical with Cor. No. 1 Hancock No. 1 lode of this survey.
	Thence S. 57° 50' E.
1272.3	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W., and S. 21° 54' E.
1493.3	Cor. No. 3, identical with Cor. No. 4 Hancock No. 1 lode of this survey.

Thence S. 36° 56' W.

Feet	
18.1	Cor. No. 1 Black Hawk No. 1 lode, on line 2-3 Hancock No. 4 lode, both of this survey.
133.9	Lode line; discovery point bears N. 57° 47' 30" W., 1158.3 ft. dist. Impracticable to set a post due to pipe line operation interference. Establish a witness cor., S. 36° 56' W., 40.0 ft. dist.
154.9	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W. and S. 21° 54' E.
173.9	Witness monument, a substantial wooden post.
354.31	Intersect line 2-3 Hancock No. 3 lode of this survey.
433.9	Cor. No. 4 Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H N T-4-4344. No bearings available. Thence N. 57° 47' 30" W.
259.46	Intersect line 1-2 Hancock No. 3 lode of this survey.
367.93	Intersect line 1-2 Hancock No. 4 lode of this survey.
1493.3	Cor. No. 1 and place of beginning.

## HANCOCK NO. 3 LODE

At Cor. No. 1 Hancock No. 3 lode

Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside, and copper disc on pipe mkd. H 3-1-4344; from which

The west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears N. 63° 05' 30" W., 1178.4 ft.

No local bearings available.

Thence N. 36° 33' E.

101.14	Intersect line 2-3 Jubilee No. 5 lode of this survey.
247.6	Intersect line 4-1 Hancock No. 4 lode of this survey.
300.0	A substantial post set in the ground on the lode line; discovery point bears S. 57° 17' E., 640.0 ft. dist.
517.79	Intersect line 4-1 Hancock No. Two lode of this survey.
600.1	Cor. No. 2. Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H 3-2-4344.

## Survey No. 4344

Feet	
	No bearings available.
	Thence S. 57° 11' E.
259.8	Intersect line 3-4 Hancock No. Two lode of this survey.
542.0	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W., and S. 21° 54' E.
1391.45	Intersect line 3-4 Hancock No. 4 lode of this survey.
1483.7	Cor. No. 3.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H 3-3-4344.
	No bearings available.
	Thence S. 36° 33' W.
236.	Road, bears east and west.
297.4	A substantial post set in the ground on the lode line; discovery point bears N. 57° 17' W., 844.0 ft. dist.
395.4	Intersect line 5-1 Jubilee No. 4 lode of this survey.
574.4	Witness cor. No. 4.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. W C H 3-4-4344.
	No bearings available.
597.4	Cor. No. 4. Impracticable to establish monument at this point.
	Thence N. 57° 17' W.
50.	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W., and S. 21° 54' E.
898.6	Road, bears east and west.
1023.6	Cor. No. 4 Jubilee No. 4 lode, identical with Cor. No. 3 Jubilee No. 5 lode, both of this survey.
1484.0	Cor. No. 1 and place of beginning.
HANCOCK NO. 4 LODE	
	Cor. No. 1, Hancock No. 4 lode falls in roadway. From this point, the west 1/4 sec. cor. of Sec. 18, T. 7 N., R. 12 W., bears N. 74° 29' 30" W., 1219.4 ft. dist.
	Thence N. 19° 02' E.
15.6	Witness cor. No. 1.
	Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post, set in the ground alongside and copper disc on pipe mkd. W C H 4-1-4344.

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## Survey No. 4344

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Feet	
	No local bearing objects available.
282.36	Intersect line 4-1 Hancock No. Two lode of this survey.
300.0	A substantial post set in the ground on the lode line; discovery point bears S. 70° 16' E., 230 ft. dist.
600.0	Cor. No. 2. Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H 4-2-4344.
	No bearings available. Thence S. 70° 16' E.
329.	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W., and S. 21° 54' E.
486.1	Cor. No. 1 Black Hawk No. 1 lode, on line 3-4 Hancock No. Two lode, both of this survey.
815.	Road, bears southeast and northwest.
961.	Center line of electric power line, bears S. 55° 58' E.
1366.	Center line of parallel power line.
1391.	Road, bears north and south.
1481.4	Cor. No. 3: Set an iron pipe, 3 ft. long, 3/4 in. diam., 18 ins. in the ground with a substantial wooden post set in the ground alongside and copper disc on pipe mkd. H 4-3-4344. No bearings available. Thence S. 19° 02' W.
22.5	Center line of electric power line, bears S. 55° 58' E.
126.	Center line of parallel power line.
170.	Road, bears southeast to northwest.
184.0	Intersect line 4-1 Black Hawk No. 1 lode of this survey.
300.0	A substantial post set in the ground on the lode line; discovery point bears N. 70° 16' W., 1251.1 ft. dist.
578.02	Intersect line 2-3 Hancock No. 3 lode of this survey.
600.0	Cor. No. 4. Set an iron pipe, 3 ft. long, 3/4 in. diam.; 18 ins. in the ground with a substantial wooden post, set in the ground alongside and copper disc on pipe mkd. H 4-4-4344. No bearings available.



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Feet	
	Thence N. 70° 16' W.
630.	Natural gas pipe line, 36 ins. diam., bears N. 21° 54' W. and S. 21° 54' E.
1456.33	Intersect line 1-2 Hancock No. 3 lode of this survey.
1481.1	Cor. No. 1, and place of beginning.

## AREAS

	Acres
Total area Jubilee No. 2 lode	20.661
Area in conflict with- Jubilee No. 4 lode of this survey	0.124
Total area Jubilee No. 4 lode	19.910
Area in conflict with- Centroid No. Four lode of this survey Hancock No. 3 lode of this survey	2.780 3.796
Total area Jubilee No. 5 lode	20.656
Area in conflict with- Jubilee No. 4 lode of this survey	2.497
Total area Centroid No. Four lode	20.294
Area in conflict with- Jubilee No. 2 lode of this survey	1.177
Total area Centroid No. Fifteen lode	17.847
Total area Black Hawk lode	20.524
Total area Black Hawk No. 1 lode	19.930
Total area Black Hawk No. 3 lode	20.481
Area in conflict with- Centroid No. Fifteen lode of this survey	1.949
Total area Hancock No. 1 lode	19.483
Total area Hancock No. Two lode	14.803
Area in conflict with- Hancock No. 4 lode of this survey	3.522
Total area Hancock No. 3 lode	20.352
Area in conflict with- Hancock No. Two lode of this survey Jubilee No. 5 lode of this survey	0.481 0.533
Total area Hancock No. 4 lode	20.401
Area in conflict with- Black Hawk No. 1 lode of this survey Hancock No. 3 lode of this survey Hancock No. 3 lode of this survey, exclusive of its conflict with Hancock No. Two lode of this survey	2.085 5.976 5.495

## LOCATION

This survey is located in the SW $\frac{1}{4}$  Sec. 7, unsurveyed, NE $\frac{1}{4}$ , SE $\frac{1}{4}$ , SW $\frac{1}{4}$  and NW $\frac{1}{4}$  of Sec. 18, unsurveyed, T. 7 N., R. 12 W. and SE $\frac{1}{4}$  Sec. 13, unsurveyed, T. 7 N., R. 13 W., Gila and Salt River Meridian, Yuma County, Arizona.

The survey of the Jubilee No. 4 and Centroid No. Four lodes, is wholly within the respective amended location as marked on the ground. Certain corners differ with corners of the location to the extent previously shown. Witness corners were avoided by the method used.

The survey of all other lodes of the group is identical with the respective amended location as marked on the ground.

## EXPENDITURES

The improvements and the value of the labor and improvements made upon or for the benefit 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 Jubilee No. 2 lode, the center of which being the discovery point, is on the lode line N. 44° 44' W., 1130 ft. from the South Center End; 4 ft. wide, 10 ft. face, running westerly 33 ft. to face.  
Value, \$250.
- No. 2 A cut and tunnel, the mouth of tunnel bears S. 62° E., 275 ft. from Cor. No. 4; cut 4 ft. wide, 8 ft. face extending S. 30° E., 12 ft. from its face at mouth of tunnel; tunnel 4 x 6 ft. running N. 30° W., 27 ft.; thence N. 60° W., 20 ft.; thence N. 30° W., 25 ft.; thence N. 17° W., 18 ft.; thence N. 32° W., 25 ft.; thence N. 17° W., at 6 ft. cross cut runs N. 70° E., 52 ft., 24 ft. to a point; thence N. 2° E., 28 ft.; thence N. 37° W., 14 ft. to face of tunnel, having a total length of 233 ft.  
Value, cut \$100.  
tunnel \$2330.
- No. 3 A cut, the mouth of which bears S. 62° E., 597 ft. from Cor. No. 4, 6 ft. wide, 10 ft. face, running southerly 18 ft.  
Value, \$150.
- No. 4 A trench, the westerly end of which bears S. 53° E., 750 ft. from Cor. No. 4, 5 ft. wide, 5 ft. deep, running northeasterly 30 ft.  
Value, \$200.
- No. 5 A shaft, the center of which bears S. 65° E., 585 ft. from Cor. No. 4, 4 x 6 ft., 150 ft. deep, bears N. 73° E. on its dip. A drift 4 x 6 ft., 100 ft. in length running northerly from bottom of shaft.  
Value, shaft \$7500.  
drift \$1000.
- No. 6 A shaft, the center of which bears S. 84° 30' E., 767 ft. from Cor. No. 4, 4 x 6 ft., 8 ft. deep.  
Value, \$80.

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- No. 7 A shaft, the center of which bears N. 85° 45' E., 763 ft. from Cor. No. 4, 4 x 6 ft., 20 ft. deep.  
Value, \$200.
- No. 8 A shaft, the center of which bears N. 83° 30' E., 715 ft. from Cor. No. 4, 4 x 6 ft., 30 ft. deep.  
Value, \$300.
- No. 9 A shaft, the center of which bears N. 3° 30' W., 775 ft. from Cor. No. 3, 5 x 8 ft., 325 ft. deep, dips 52° to N. 7° E., with drifts 4 x 6 ft. extending northwesterly 150 ft. and southeasterly 50 ft. from bottom of shaft.  
Value, shaft \$15,000.  
drifts 2,000.
- No. 1 The discovery shaft of Jubilee No. 4 lode, the center of which being the discovery point is on the lode line 1295.15 ft. from its intersection with line 5-1; 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 2 A cut, the face of which bears S. 7° 30' W., 350 ft. from Cor. No. 4; 4 ft. wide, 10 ft. face, running northerly 10 ft.  
Value, \$50.
- No. 3 A cut, the face of which bears S. 44° 45' E., 265 ft. from Cor. No. 4, 4 ft. wide, 10 ft. face, running northerly 6 ft.  
Value, \$50.
- No. 1 The discovery cut of the Jubilee No. 5 lode, the center of face of cut being the discovery point is on the lode line N. 44° 44' W., 1270 ft. from the South Center End, 4 ft. wide, 10 ft. face, running northwesterly 16 ft.  
Value, \$100.
- No. 2 A cut, the mouth of which bears N. 87° E., 250 ft. from Cor. No. 1, 4 ft. wide, 8 ft. face, running northerly 12 ft.  
Value, \$80.
- No. 3 A cut, the mouth of which bears S. 11° W., 325 ft. from Cor. No. 2, 4 ft. wide, 7 ft. face, running northwesterly 22 ft.  
Value, \$100.
- No. 4 A cut and tunnel, the mouth of cut bears N. 89° 45' E., 350 ft. from Cor. No. 1, cut 3 ft. wide, 10 ft. face, running northwesterly 36 ft.; thence tunnel 4 x 6 ft., 30 ft. long, running northwesterly.  
Value, cut \$200.  
tunnel \$300.
- No. 5 A cut and two stoped areas, the mouth of cut bears S. 30° E., 348 ft. from Cor. No. 2, cut 3 ft. wide, 6 ft. face, 14 ft. long, running into a stoped area 3.5 x 5 ft. wide, 6 to 10 ft. high, extending into another stoped 3 x 11 ft. wide, 16 to 20 ft. high, all running northwesterly.  
Value, cut \$75.  
slope \$80.  
slope \$150.

- No. 6 A trench, the south end of which bears S. 32° E., 340 ft. from Cor. No. 2, 3 ft. wide, 36 ft. long; 2 to 6 ft. deep, bears northwesterly.  
Value, \$75.
- No. 7 A cut, the mouth of which bears S. 82° E., 400 ft. from Cor. No. 1, 4 ft. wide, 10 ft. face, running northwesterly 30 ft.  
Value, \$300.
- No. 8 A cut, the north end of which bears S. 46° 30' E., 256 ft. from Cor. No. 1, 3 ft. wide, 5 to 7 ft. face, extending southeasterly 35 ft.  
Value, \$200.
- No. 9 Described under Common Improvements.
- No. 10 A shaft, the center of which bears N. 43° 30' W., 320 ft. from Cor. No. 4, 4 x 6 ft., 30 ft. deep.  
Value, \$300.
- No. 1 The discovery shaft of the Centroid No. Four lode, the center of which being the discovery point, is on the lode line 1148 ft. from its intersection with line 5-1; 4 x 6 ft., 60 ft. deep.  
Value, \$600.
- No. 2 A trench, the west end of which bears S. 68° 41' E., 300 ft. from the West Center End, 4 x 6 ft., 39 ft. long, running easterly.  
Value, \$350.
- No. 1 The discovery shaft of the Centroid No. Fifteen lode, the center of which being the discovery point is on the lode line, 215 ft. from its intersection with line 3-4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 2 A cut; the face of which bears S. 17° E.; 817 ft. from Cor. No. 2, 5 ft. wide, 10 ft. face, running northerly 12 ft.  
Value, \$80.
- No. 3 A shaft, the center of which bears S. 26° 30' E., 528 ft. from Cor. No. 2; 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 1 The discovery shaft of the Black Hawk lode, the center of which being the discovery point, is on the lode line, 1295 ft. from the center of line 3-4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 2 Described under Common Improvements.
- No. 3 A cut and tunnel, the mouth of cut bears N. 67° 30' E., 355 ft. from Cor. No. 1, cut 4 ft. wide, 12 ft. face running northeast 20 ft. to tunnel 4 x 6 ft., 72 ft. long, bears northeasterly.  
Value, cut \$225.  
tunnel 720.
- No. 4 A shaft, the center of which bears N. 82° 30' E., 472 ft. from Cor. No. 1, 5 x 7 ft., 60 ft. deep.  
Value, \$1500.
- No. 5 A trench, the north end of which bears N. 87° E., 530

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- ft. from Cor. No. 1, 4 ft. wide, 3 ft. deep, 12 ft. long, running southerly.  
Value, \$50.
- No. 6 A trench, the north end of which bears S. 88° 30' E., 545 ft. from Cor. No. 1, 2 ft. wide, 3 ft. deep, 6 ft. long.  
Value, \$15.
- No. 7 A trench, the north end of which bears S. 88° 30' E., 565 ft. from Cor. No. 1, 2 ft. wide, 2 ft. deep, 6 ft. long.  
Value, \$10.
- No. 8 A trench, the north end of which bears S. 85° 30' E., 638 ft. from Cor. No. 1, 4 ft. wide, 2 ft. deep, 10 ft. long, running south.  
Value, \$30.
- No. 9 A shaft, the center of which bears S. 84° E., 678 ft. from Cor. No. 1, 6 x 8 ft., 20 ft. deep.  
Value, \$200.
- No. 10 A shaft, the center of which bears S. 82° E., 745 ft. from Cor. No. 1, 6 x 6 ft., 20 ft. deep.  
Value, \$250.
- No. 11 A shaft, the center of which bears S. 77° 30' E., 978 ft. from Cor. No. 1, 4 x 6 ft., 15 ft. deep.  
Value, \$150.
- No. 12 A trench, the north end of which bears S. 74° E., 1033 ft. from Cor. No. 1, 2 ft. wide, 2 ft. deep, 24 ft. long, bears south.  
Value, \$40.
- No. 1 The discovery shaft of the Black Hawk No. 1 lode, the center of which being the discovery point, is on the lode line, 1470 ft. from its intersection with line 3-4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 2 A cut, the face of which bears N. 49° E., 180 ft. from Cor. No. 1, 4 ft. wide, 8 ft. face, running easterly 10 ft.  
Value, \$75.
- No. 3 A shaft, the center of which bears N. 71° 30' E., 203 ft. from Cor. No. 1, 5 x 7 ft., 14 ft. deep timbered.  
Value, \$500.
- No. 4 A trench, the southwest end of which bears N. 81° E., 210 ft. from Cor. No. 1, 2 ft. wide, 2 ft. deep, 6 ft. long, bears easterly.  
Value, \$10.
- No. 5 A trench, the northwest end of which bears S. 19° 30' E., 480 ft. from Cor. No. 2, 6 ft. wide, 5 to 8 ft. deep, 8 ft. long, bears southeasterly.  
Value, \$50.
- No. 6 Described under Common Improvements.
- No. 1 The discovery shaft of the Black Hawk No. 3 lode, the center of which being the discovery point, is on the lode line 1253.3 ft. from its intersection with line 2-3; 4 x 6 ft., 8 ft. deep.  
Value, \$80.

- No. 2 A shaft, the center of which bears N. 69° 30' E., 395 ft. from Cor. No. 4, 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 3 A shaft, the center of which bears N. 75° 30' E., 400 ft. from Cor. No. 4, 4 x 6 ft., 4 ft. deep.  
Value, \$40.
- No. 4 A shaft, the center of which bears S. 77° 30' W., 760 ft. from Cor. No. 2, 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 5 A shaft, the center of which bears S. 83° W., 520 ft. from Cor. No. 2, 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 6 A shaft, the center of which bears S. 85° W., 485 ft. from Cor. No. 2, 6 x 7 ft.; 5 ft. deep.  
Value, \$80.
- No. 7 A shaft, the center of which bears S. 31° 30' E., 320 ft. from Cor. No. 1, 4 x 6 ft., 5 ft. deep.  
Value, \$50.
- No. 1 The discovery shaft of the Hancock No. 1 lode, the center of which being the discovery point, is on the lode line, 1373.3 ft. from its intersection with line 3-4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 2 A shaft, the center of which bears S. 75° 45' W., 475 ft. from Cor. No. 3, 4 x 6 ft., 8 ft. deep.  
Value, \$80.
- No. 3 A cut, the face of which bears S. 62° 30' W., 478 ft. from Cor. No. 3, 4 ft. wide, 10 ft. face, extending westerly 16 ft.  
Value, \$150.
- No. 1 The discovery shaft of the Hancock No. Two lode, the center of which being the discovery point, is on the lode line 1158.3 ft. from its intersection with line 3-4; 5 x 6 ft., 8 ft. deep.  
Value, \$100.
- No. 2 A shaft, the center of which bears S. 33° 30' E., 335 ft. from Cor. No. 2, 5 x 6 ft., 8 ft. deep.  
Value, \$100.
- No. 3 A shaft, the center of which bears S. 82° E., 625 ft. from Cor. No. 1, 4 x 6 ft., 100 ft. deep.  
Value, \$4500.
- No. 4 A trench, the north end of which bears N. 59° E., 220 ft. from Cor. No. 1, 3 ft. wide, 4 to 8 ft. deep, 25 ft. long, running southeasterly, and containing a shaft 4 x 6 ft., 8 ft. deep and slope 4 x 8 x 6 ft. in size.  
Value, trench \$150.  
shaft 80.  
slope 80.
- No. 5 A trench, the north end of which bears S. 18° 30' W., 170 ft. from Cor. No. 2, 4 ft. wide, 6 ft. deep, 25 ft. long, extending southeasterly, containing a shaft 4 x 6 ft., 10 ft. deep.

Value, trench \$250.00  
shaft 100.00

No. 1 The discovery shaft of the Hancock No. 3 lode, the center of which being the discovery point, is on the lode line 844.0 ft. from its intersection with line 3-4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.00

No. 2 A shaft, the center of which bears N. 44° 15' W., 480 ft. from Cor. No. 4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.00

No. 1 The discovery shaft of the Hancock No. 4 lode, the center of which being the discovery point, is on the lode line 1251.1 ft. from the center of line 3-4; 4 x 6 ft., 8 ft. deep.  
Value, \$80.00

An interest in common improvement described as follows:

No. 1 Improvement No. 9 on Jubilee No. 5 lode.

The main working shaft, the center of which bears N. 79° W., 505 ft. from Cor. No. 3, Jubilee No. 5 lode, 5 x 10 ft., 300 ft. deep, vertical, well timbered, two compartments, with cross cut 4 x 6 ft. running south 300 ft. to a drift, and 620 ft. to face. Drifts running west 50 ft. thence southwest 60 ft. to face.

Value of shafts	\$61,000.
drifts	11,000.
Total	\$72,000.

Value of one-thirty-seventh interest \$1945.95.

This improvement is in course of construction for the development of the twelve lodes of this survey, and in addition the twenty-five unsurveyed lodes as follows: Jubilee No. 1, Jubilee No. 3, Jubilee No. 6, Centroid No. 1, Centroid No. 2, Centroid No. 3, Centroid No. 5, Centroid No. 6, Centroid No. 7, Centroid No. 8, Centroid No. 9, Centroid No. 10, Centroid No. 11, Centroid No. 12, Centroid No. 13, Centroid No. 14, Centroid No. 16, Centroid No. 17, Centroid No. 18, Centroid No. 19, Centroid No. 20, Centroid No. 21, Hancock No. 5, Hancock No. 6, and Oversight lodes.

These are all the contiguous lode claims owned in common within the range of benefit from said shaft.

The surface is slightly rolling with slight down grade southerly and easterly from the shaft, and rising rather abruptly northwesterly, northerly and westerly from said shaft. Cross-cuts now intercept lodes in its present state, and with necessary laterals at present and future depths of the shaft this improvement affords practical and economical means of developing each of the lode system and lodes at depth.

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 un-

divided one-thirty-seventh interest in its value is hereby credited to each of said lodes and a like interest apportioned to each of the other stated lodes of the common group, except as above stated, no portion of, or interest in this improvement, has been credited heretofore as patent expenditure to any lode claim.

**No. 2 Improvement No. 2 Black Hawk lode.**

A shaft, the center of which bears N. 61° E., 350 ft. from Cor. No. 1 Black Hawk lode, 4 x 8 ft., 50 ft. deep, well timbered two compartments, inclined along the lode dipping to the northeast.

Value, \$2100.

Value of one-third interest \$700.

This improvement is in the course of construction for the development of the Black Hawk, Black Hawk No. 3 and Centroid No. Fifteen lodes of this survey, situated on the lode and its continuation northwesterly. They are contiguous lode claims owned in common on the same vein or lode and within the range of benefit from developing said vein in said shaft.

The surface is slightly rolling northwesterly increasing in elevation to the end line of the Black Hawk No. 3 lode, then descending gradually. With increased depth and drifts this improvement affords practical and economical means of developing the common veins of the three lodes.

Five hundred dollars or over has been expended in this improvement in such a manner as tends to the development of the Black Hawk, Black Hawk No. 3 and Centroid No. Fifteen lodes of this survey, subsequent to their 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 mentioned lodes.

**No. 3 Improvement No. 6 on the Black Hawk No. 1 lode.**

A shaft, the center of which bears S. 19° 30' E., 520 ft. from Cor. No. 2 Black Hawk No. 1 lode, 4 x 6 ft., 60 ft. deep, one compartment, timbered, vertical.

Value, \$900.

Value of one-half interest \$450.

This improvement was made for the development of the Black Hawk No. 1 and Hancock No. 1 lodes of this survey, situated on the strike of the same lode or vein system. They are contiguous lode claims owned in common on the same vein or lode within the range of benefit from developing said veins in said shaft.

The surface is slightly rolling northwesterly increasing in elevation to the northwest. With increased depth and drifts this improvement affords practical and economical means of developing the common veins of these lodes.

Five hundred dollars or over has been expended in this improvement in such a manner as tends to the development



of the aforesaid lodes of this survey subsequent to their location and to the time since which common ownership and contiguity have prevailed; therefore an undivided one-half interest in its value is hereby credited to each of said mentioned lodes.

#### OTHER IMPROVEMENTS

A frame warehouse, the SE. cor. of which bears N. 86° 30' W., 342 ft. from Cor. No. 3 Jubilee No. 5 lode, 18 x 24.3 ft. in size; the long sides bear N, 80° W.

A frame house, the SE. cor. of which bears N. 22° 43' W., 243 ft. from Cor. No. 3 Jubilee No. 5 lode, 12.3 x 52.3 ft. in size; the long sides bear N. 20° E.

A frame house, the SE. cor. of which bears N. 7° 52' E., 20 ft. from Cor. No. 3 Jubilee No. 5 lode, 10.2 x 36.2 ft. in size; the long sides bear N. 16° E.

A frame house, the SE. cor. of which bears N. 13° 22' E., 128 ft. from Cor. No. 3 Jubilee No. 5 lode, 10.2 x 36.2 ft. in size; the long sides bear N. 16° E.

A frame garage, the NW. cor. of which bears S. 11° 22' W., 85 ft. from Cor. No. 3 Jubilee No. 5 lode, 20 x 60.5 ft. in size; the long side bears S. 68° E.

A frame office building, the SE. cor. of which bears S. 88° 52' W., 80 ft. from Cor. No. 3 Jubilee No. 5 lode, 16 x 22.2 ft., bears N. 16° E.

A frame shed, the SE. cor. of which bears S. 85° 47' W., 231 ft. from Cor. No. 3, Jubilee No. 5 lode, 14.2 x 39 ft., bears N. 40° W.

A galvanized water tank, 12 ft. diameter, the center of which bears N. 61° 35' W., 445 ft. from Cor. No. 3 Jubilee No. 5 lode.

A frame residence, the NE. cor. of which bears S. 65° 45' W., 105 ft. from Cor. No. 3 Jubilee No. 5 lode, main building 20.2 x 68.5 ft. in size, bears S. 60° W., porch on south side 8.5 x 60 ft., shed on west end 7.7 x 16.2 ft.

#### OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA

Cors. Nos. 1 and 2, Sur. No. 3631, Buck lode are stones properly set and marked as described in the official record.

The iron pipe used for corner monuments is fitted with a floor flange  $3\frac{1}{2}$  ins. diam., at top of pipe. The copper disc also  $3\frac{1}{2}$  ins. diam. is securely bolted to the floor flange, with its center for exact corner point.

#### FIELD ASSISTANTS

Jake Stark Chainman

Ned Buchanan Chainman

J. William Waara

Mineral Surveyor

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of the aforesaid lobes of this survey subsequent to their location and to the time since which common ownership and continuity have prevailed; therefore an undivided one-half interest in its value is hereby credited to each of said mentioned lobes.

OTHER IMPROVEMENTS

A frame warehouse, the SE. cor. of which bears N. 88° 30' W., 312 ft. from Cor. No. 3 Tangle No. 2 lobe, 18 x 24.5 ft. in size; the long sides bear N. 80° W.

A frame house, the SE. cor. of which bears N. 22° 43' W., 243 ft. from Cor. No. 3 Tangle No. 2 lobe, 12.5 x 22.5 ft. in size; the long sides bear N. 20° E.

A frame house, the SE. cor. of which bears N. 7° 52' E., 20 ft. from Cor. No. 3 Tangle No. 2 lobe, 10.2 x 36.2 ft. in size; the long sides bear N. 16° E.

A frame house, the SE. cor. of which bears N. 17° 22' E., 128 ft. from Cor. No. 3 Tangle No. 2 lobe, 10.2 x 36.2 ft. in size; the long sides bear N. 16° E.

A frame garage, the NW. cor. of which bears S. 11° 22' W., 85 ft. from Cor. No. 3 Tangle No. 2 lobe, 20 x 60.5 ft. in size; the long sides bear S. 60° E.

A frame office building, the SE. cor. of which bears S. 80° 22' W., 60 ft. from Cor. No. 3 Tangle No. 2 lobe, 16 x 22.5 ft. in size; bears N. 16° E.

A frame shed, the SE. cor. of which bears S. 6° 47' W., 21 ft. from Cor. No. 3 Tangle No. 2 lobe, 14.2 x 39 ft. in size; bears N. 40° W.

A galvanized water tank, 18 ft. diameter, the center of which bears N. 61° 52' W., 445 ft. from Cor. No. 3 Tangle No. 2 lobe.

A frame residence, the NE. cor. of which bears S. 45° W., 105 ft. from Cor. No. 3 Tangle No. 2 lobe, main building 20.2 x 28.5 ft. in size, bears N. 60° W., porch on south side 8.5 x 20 ft., shed on west end 7.7 x 16.2 ft.

OTHER CORNER DESCRIPTIONS AND SUPPLEMENTAL DATA

Corners Nos. 1 and 2, S. 200 ft. No. 3551, Back lobe are stones properly set and marked as described in the official record.

The iron pipe used for corner monuments is fitted with a floor flange 3 1/2 in. diam., at top of pipe. The copper disc also 3 1/2 in. diam. is securely bolted to the floor flange, with its center for exact corner point.

FIELD ASSISTANTS

Large Stark  
Chairman  
Hub Buchanan  
Chairman

J. William West  
Mineral Surveyor

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GENERAL LAND OFFICE

FINAL OATH OF MINERAL SURVEYOR

I, J. William Waara....., Mineral Surveyor,  
do solemnly swear that, in pursuance of instructions received from the Office Cadastral  
Engineer, at Phoenix Arizona....., dated February 17, 1950.....,  
I have, in strict conformity to the laws of the United States, the official regulations  
and instructions thereunder, and the instructions of said Office Cadastral Engineer,  
faithfully and correctly executed the survey of the mining claim of .....

Centroid Consolidated Mines....., known as the  
Jubille No.2, Jubilee No.4, Jubilee No.5, Centroid No.Four, Centroid  
No.Fifteen, Black Hawk, Black Hawk No.1, Black Hawk No.3, Hancock No.1  
Hancock No.two, Hancock No.3, Hancock No.4  
situate in Ellsworth..... Mining District,  
Yuma..... County, State of Arizona....., in Section  
Sec. 18 unsur& 7 unsur. T.7 N. R. 12 W.  
" 13 " " Township No. 7 N. Range No. 13 W.  
and designated as Survey No. 4344....., as represented  
in the foregoing field notes, which accurately show the boundaries of said mining claim  
as distinctly marked by monuments on the ground, and described in the attached copy of  
the location certificate, which was received by me from the Office Cadastral Engineer  
with said instructions, and that all corners of said survey have been established and  
perpetuated in strict accordance with the law, official regulations and instructions  
thereunder; and I do further solemnly swear that the foregoing are the true and original  
field notes of said survey and my report therein, and that the labor expended and im-  
provements made upon said mining claim by claimant or its.....  
grantors are as therein fully stated, and that the character, extent, location, and  
itemized value thereof are specified therein with particularity and full detail, and  
that no portion of said labor or improvements so credited to this claim has been included  
in the estimate of expenditures upon any other claim. ....

J. William Waara  
(Mineral Surveyor)

Subscribed and sworn to by the said J. William Waara

Mineral Surveyor, before me J. C. Bauer

..... this 17

day of May, 1950

J. C. Bauer  
Notary Public

My Commission expires  
Jan. 10, 1953



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.....

October 3, 19 50

I, ..... 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 Centroid Consolidated Mines

....., known as the  
Jubilee No. 2, Jubilee, No.4, Jubilee No.5, Centroid No.Four, Centroid No.Fifteen,  
Black Haw, Black Hawk No.1, Black Hawk No.3, Hancock No.Two, Hancock No.3,  
Hancock No. 4, lodes  
situate in Ellsworth mining district,  
Yuma County, Arizona

in Sections 7 and 18, Township No. 7 N., Range No. 12 W.  
" 13 " " 7 N. " " 13 W.  
G&SRM, designated as Survey No. 4344

executed by J. William Waara, Mineral

Surveyor, February 17 to 27, 1950, 19 , under my instructions dated

February 17, 1950, 19 , 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.

Office Cadastral Engineer.

