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Book "D"

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BOOK 3421

Duplicate

(1)

# FIELD NOTES

OF ~~THE SURVEY~~ THE

RESURVEY OF

Subdivision Lines

in

TOWNSHIP 15 SOUTH RANGE 12 EAST

Within the Papago Indian Reservation

Of the Gila & Salt River Base and Meridian,

In the State of Arizona

EXECUTED BY

Charles M. Leedy

In the capacity of U. S. Surveyor, under instructions dated Oct. 6, 1914,

Commissioner of the General Land Office to A. F. Dunnington,  
~~issued by the United States Surveyor General to govern surveys included in~~  
Topographer in Charge of Indian Surveys

~~Group No. \_\_\_\_\_, which were approved by the Commissioner of the General Land~~

~~Office, \_\_\_\_\_, 191\_\_\_\_, pursuant to authority contained in the Act of~~

~~Congress dated \_\_\_\_\_, 191\_\_\_\_~~

Survey commenced July 9, 1915

Survey completed July 13, 1915

BOOK 3421

# INDEX DIAGRAM.

Township 15 South, Range 12 East

|    |    |    |    |    |    |    |   |    |   |    |
|----|----|----|----|----|----|----|---|----|---|----|
| 6  | 5  | 4  | 3  | 2  | 1  |    |   |    |   |    |
| 7  | 8  | 9  | 10 | 11 | 12 |    |   |    |   |    |
| 18 | 17 | 16 | 15 | 14 | 13 |    |   |    |   |    |
| 19 | 20 | 21 | 22 | 23 | 24 |    |   |    |   |    |
| 30 | 15 | 29 | 12 | 28 | 10 | 27 | 8 | 26 | 6 | 25 |
| 14 |    | 14 |    | 12 |    | 10 |   | 7  |   | 5  |
| 31 | 13 | 32 | 11 | 33 | 9  | 34 | 7 | 35 | 5 | 36 |

## Resurvey of Subdivision lines of T. 15 S., R. 12 E.

Chains

Survey commenced July 9, 1915, by Charles M. Leedy, U. S. Surveyor, and executed with a Young and Sons' light mountain transit No. 8501, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and decl. arcs.

The iron posts used in this survey are the regular General Land Office iron posts 3 ft. long, set 26 inches in the ground, filled with cement and fitted with brass caps. The posts at section corners are 2 inches in diameter and those at  $\frac{1}{4}$  sec. cors. 1 inch in diameter.

I examine the adjustments of the transit, and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observations on Polaris, I proceed as follows -

July 6, 1915. At camp which is near the cor. of secs. 19, 20, 29 and 30, T. 15 S., R. 13 E.

Lat.  $32^{\circ} 07' N.$   
Long.  $111^{\circ} 03' W.$

I set off  $32^{\circ} 7'$  on lat. arc, and  $22^{\circ} 45' N.$  on decl. arc, and at  $4^h 0^m$  p. m., l. m. t., determine a meridian with the solar, and mark a point thereof on a hub set firmly in the ground 5 chs. northerly from my station.

July 6, 1915.

July 7, 1915. At  $0^h 36.3^m$  a. m., by my watch which has been set to l. m. t., I observe polaris at Eastern Elongation, in accordance with the Manual of Instructions and mark a point in the line thus determined on a hub 5 chs. Northerly of my station.

At  $6^h 0^m$  a. m., l. m. t., I lay off the azimuth of Polaris  $1^{\circ} 21'$  to the west, and mark the meridian thus determined by a tack in the hub set July 6th; on which the meridian falls less than  $\frac{1}{2}'$  west of the mark determined by the solar.

At  $7^h 0^m$  a. m., l. m. t., I set off  $32^{\circ} 7'$  on lat. arc, and  $22^{\circ} 41\frac{1}{2}' N.$  on decl. arc, and determine a meridian with the solar and mark a point thereof on the hub already set 5 chs. northerly of my station; this mark falls less than  $\frac{1}{2}'$  west of the meridian established by Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

July 7, 1915.

Resurvey of Subdivision lines of T. 15 S., R. 12 E.

Chains

July 9, 1915. At 8<sup>h</sup> 0<sup>m</sup> a.m., l.m.t., I set off 32° 5' on lat. arc, and 22° 28' N. on decl. arc, and determine a meridian with the solar at the reestablished S. C. of secs. 35 and 36 on the S. bdy. of the tp.

Thence I run

N. 0° 27' E. on a random line retracing the line bet. secs. 35 and 36, and 25 and 26. Unable after diligent search to find any trace of the old cors. Set temp. cors. at intervals of 40 chs.

161.12 Fall 26 lks. W. of the reestablished cor. of secs. 23, 24, 25 and 26, on N. bdy. of Reservation.

Note: The temp. cors. are adjusted to their proportionate positions on meridional line.

From the reestablished S. C. of secs. 34 and 35 on S. bdy. of tp., I run

N. 0° 15' E. on a random line, retracing the line bet. secs. 34 and 35, and secs. 26 and 27. Unable after diligent search to find any trace of the old cor.

Set temp. cors. at intervals of 40.00 chs.

161.10 Falls 16<sup>lks.</sup> W. of the reestablished cor. of secs. 22, 23, 26 and 27 on the N. bdy. of the Reservation.

Note: The temp. cors. are adjusted to their proportionate positions on the meridional line.

From the reestablished S. C. of secs. 33 and 34, on the S. bdy. of the tp., I run -

N. on a random line retracing the line bet. secs. 33 and 34; and secs. 27 and 28. Unable after diligent search to find any trace of the old cors.

Set temp. cors. at intervals of 40.00 chs.

161.18 Fall 26<sup>lks.</sup> W. of the reestablished cor. of secs. 21, 22, 27 and 28, on N. bdy. of Reservation.

Note: The temp. cors. are adjusted to their proportionate positions on meridional lines.

July 9, 1915. At this cor. I set off 22° 26½' N. on decl. arc, and at apparent noon, observe the sun on the meridian, the resulting lat. is 32° 7' which is the proper lat.

From the reestablished S. C. of secs. 32 and 33, on the S. bdy. of tp., I run -

N. 0° 10' W. on a random line, retracing the line bet.

Resurvey of Subdivision lines of T. 15 S., R. 12 E.

|                             |   |
|-----------------------------|---|
| <p>Chains</p> <p>161.09</p> | <p>secs. 32 and 33, and secs. 28 and 29. Unable after diligent search to find any signs of the old. cors.</p> <p>Set temp. cors. at intervals of 40.00 chs.</p> <p>Fall 21 lks. W. of the reestablished cor. of secs. 20, 21, 28 and 29, on N. bdy. of Reservation.</p> <p>Note: The temp. cors. are adjusted to their proportionate positions on meridional line.</p>  |
| <p>161.18</p>               | <p>From the reestablished S. C. of secs. 31 and 32, on S. bdy. of tp., I run -</p> <p>N. 0° 15' W. on a random line retracing the line bet. secs. 31 and 32, and secs. 29 and 30. Unable after diligent search to find any sign of the old cors.</p> <p>Set temp. cors. at intervals of 40.00 chs.</p> <p>Fall 9 lks. W. of the reestablished cor. of secs. 19, 20, 29 and 30.</p> <p>Note: The temp. cors. are adjusted to their proportionate positions on meridional line.</p> <p style="text-align: right;">July 9, 1915.</p>   |
| <p>40.00</p> <p>80.56</p>   | <p>July 10, 1915. At 8<sup>h</sup> 0<sup>m</sup> a.m., l.m.t., I set off 32° 6' on lat. arc, and 22° 21' N. on decl. arc, and determine a meridian with the solar at the reestablished cor. of secs. 25, 30, 31 and 36, on E. bdy. of tp.</p> <p>Note: The tie to temp. cors. are taken to the adjusted position of temp. cors. on meridional lines.</p> <p>Thence I run</p> <p>W. on a random line retracing the line bet. secs. 25 and 36.</p> <p>Unable after diligent search to find any trace of old <math>\frac{1}{4}</math> sec. cor. Set temp. cor.</p> <p>Fall 19 lks. S. of the adjusted cor. of secs. 25, 26, 35 and 36.</p> |
| <p>40.00</p> <p>80.18</p>   | <p>I continue W. on a random line retracing the line bet. secs. 26 and 35.</p> <p>Unable after diligent search to find any trace of old <math>\frac{1}{4}</math> sec. cor. Set temp. cor.</p> <p>Fall 14 lks. N. of the adjusted cor. of secs. 26, 27, 34 and 35.</p>   |

Resurvey of Subdivision lines of T. 15 S., R. 12 E.

|            |   |            |    |         |       |         |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
|------------|---|------------|----|---------|-------|---------|-------|------|---|---|----|---|----|---|-------|---|---|----|---|----|---|-------|---|---|----|---|----|---|-------|---|---|----|---|----|---|-------|---|---|----|---|----|---|-------|
| Chains     | <p>I continue W. on a random line retracing the line bet. secs. 27 and 34.</p> <p>40.00 Unable after diligent search to find any trace of old <math>\frac{1}{4}</math> sec. cor. Set temp. cor.</p> <p>80.04 Fall 40 lks. N. of the adjusted cor. of secs. 27, 28, 33 and 34.</p> <p>July 10, 1915. At this temp cor. I set off 22° 19' N. on decl. arc, and at apparent noon observe the sun on the meridian. The resulting lat. is 32° 6' which is the proper lat.</p>  |            |    |         |       |         |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| 40.00      | <p>I continue W. on a random line retracing the line bet. secs. 28 and 33.</p> <p>40.00 Unable after diligent search to find any trace of the old <math>\frac{1}{4}</math> sec. cor. Set temp. cor.</p> <p>80.03 Fall 70 lks. N. of adjusted temp. cor. of secs. 28, 29, 32 and 33.</p>   |            |    |         |       |         |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| 40.00      | <p>I continue W. on a random line retracing the line bet. secs. 29 and 32.</p> <p>40.00 Unable after diligent search to find any trace of the old <math>\frac{1}{4}</math> sec. cor. Set temp. cor.</p> <p>80.21 Fall 110 lks. N. of the adjusted temp. cor. of secs. 29, 30, 31 and 32.</p>  |            |    |         |       |         |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| 40.00      | <p>I continue W. on a random line retracing the line bet. secs. 30 and 31.</p> <p>40.00 Unable after diligent search to find any trace of the old <math>\frac{1}{4}</math> sec. cor. Set temp. cor.</p> <p>80.21 Fall 140 lks. N. of the reestablished cor. of secs. 25, 30, 31 and 36, on W. bdy. of tp.</p> <p style="text-align: right;">July 10, 1915.</p> <p>Reported distance = 480.57 chs.<br/>New distance = 481.23 chs.</p> <p>Lengths of respective miles will be 11 lks. longer than reported in original survey, or -</p> <table style="margin-left: 20px;"> <tr> <td>Bet. secs.</td> <td>25</td> <td>and</td> <td>36</td> <td>will be</td> <td>80.18</td> <td>chs.</td> </tr> <tr> <td>"</td> <td>"</td> <td>26</td> <td>"</td> <td>35</td> <td>"</td> <td>80.13</td> </tr> <tr> <td>"</td> <td>"</td> <td>27</td> <td>"</td> <td>34</td> <td>"</td> <td>80.20</td> </tr> <tr> <td>"</td> <td>"</td> <td>28</td> <td>"</td> <td>33</td> <td>"</td> <td>80.15</td> </tr> <tr> <td>"</td> <td>"</td> <td>29</td> <td>"</td> <td>32</td> <td>"</td> <td>80.20</td> </tr> <tr> <td>"</td> <td>"</td> <td>30</td> <td>"</td> <td>31</td> <td>"</td> <td>80.37</td> </tr> </table> | Bet. secs. | 25 | and     | 36    | will be | 80.18 | chs. | " | " | 26 | " | 35 | " | 80.13 | " | " | 27 | " | 34 | " | 80.20 | " | " | 28 | " | 33 | " | 80.15 | " | " | 29 | " | 32 | " | 80.20 | " | " | 30 | " | 31 | " | 80.37 |
| Bet. secs. | 25  | and        | 36 | will be | 80.18 | chs.    |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| "          | "   | 26         | "  | 35      | "     | 80.13   |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| "          | "   | 27         | "  | 34      | "     | 80.20   |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| "          | "   | 28         | "  | 33      | "     | 80.15   |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| "          | "   | 29         | "  | 32      | "     | 80.20   |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |
| "          | "   | 30         | "  | 31      | "     | 80.37   |       |      |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |   |   |    |   |    |   |       |

Resurvey of Subdivision lines of T. 15 S., R. 12 E.

Chains

July 12, 1915. At 8<sup>h</sup> 0<sup>m</sup> a.m., l.m.t., I set off 32° 5' on lat. arc, and 22° 5' N. on decl. arc, and determine a meridian with the solar at the reestablished S. C. of secs. 35 and 36 on the S. bdy. of tp. previously described.

Thence I run

N. 0° 49' E. on a true line bet. secs. 35 and 36.

Gradually descending over gently rolling land, through mesquite, palo verde and cactus.

19.20 Road, brs. N. 30° E. and S. 30° W.

40.30 The proportionate point for the ¼ sec. cor. bet. secs. 35 and 36.

Set an iron post 1 in. dia., stamped on cap

¼ in N.  
S 35 in W.  
S 36 in E.  
1915 in S.

No B. T.s available.

Dig pits 18 x 18 x 12 ins. N. & S. of cor. 3 ft. dist.; and raise a mound of earth 3½ ft. base, 1½ ft. high, W. of cor.

80.60 The proportionate point for the cor. of secs. 25, 26, 35 and 36.

Set an iron post 2 ins. dia., stamped on cap

T 15 S S 26 in NW.  
R 12 E S 25 in NE.  
S 36 in SE.  
S 35 in SW.  
1915 in S.

From which a

Mesquite 12 ins. dia., brs. N. 75½° W., 86 lks. dist., mkd. T 15 S R 12 E S 26 B T.

No other B. T.s available.

Dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist.; and raise a mound of earth 4 ft. base, 2 ft. high, W. of cor.

Land, gently rolling.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde 80.60 chs.

Mesquite brush and cactus, 80.60 chs.

Thence S. 89° 52' E. on a true line bet. secs. 25 and 36.

Over nearly level land sloping gently towards N., through mesquite, palo verde and cactus.

## Resurvey of Subdivision lines of T. 15 S., R. 12 E.

Chains

|       |  |
|-------|--|
| 23.30 | Road, brs. N. 15° E. and S. 15° W.   |
| 29.00 | Wash, 50 lks. wide, course N.  |
| 40.09 | Proportional point for the $\frac{1}{4}$ sec. cor. bet. secs. 25 and 36.<br><br>Set an iron post 1 in. dia., stamped on cap<br><br>$\frac{1}{4}$ in W.<br>S 25 in N.<br>S 36 1915 in S.<br><br>No B. T.s available.<br><br>Cor. set 6 ins. in ground on solid rock with mound of stone around.   |
| 54.00 | Begin ascent of rocky NW. slope of Black Mountain.   |
| 80.18 | The reestablished cor. of secs. 25, 30, 31 and 36, on E. bdy. of tp. previously described.<br><br>Land, nearly level, 54.00 chs.; mountainous 26.18 chs.<br>Soil, 2nd and 4th rate.<br>Timber, scattered mesquite and palo verde, 80.18 chs.<br>Mesquite and palo verde brush and cactus, 80.18 chs.   |
| 40.30 | Returning to the cor. of secs. 25, 26, 35 and 36, thence I run<br><br>N. 0° 16' E. on a true line bet. secs. 25 and 26.<br><br>Over nearly level land, sloping gently towards N. through scattered mesquite and palo verde and cactus.<br><br>The proportional point for the $\frac{1}{4}$ sec. cor. bet. secs. 25 and 26.<br><br>Set an iron post 1 in. dia., stamped on cap<br><br>$\frac{1}{4}$ in N.<br>S 26 in W.<br>S 25 in N.<br>1915 in S.<br><br>From which a<br><br>Mesquite 4 ins. dia., brs. S. 30° W., 116 lks. dist., mkd. $\frac{1}{4}$ S 26 B T.<br><br>Mesquite 5 ins. dia., brs. N. 27 $\frac{1}{2}$ ° W., 51 lks. dist.; mkd. $\frac{1}{4}$ S 26 B T. |
| 75.20 | Road, brs. E. & W.   |
| 80.52 | The reestablished cor. of secs. 23, 24, 25 and 26, on the N. bdy. of Papago Indian Reservation, previously described.<br><br>Land, nearly level.<br>Soil, 2nd rate.<br>Timber, scattered mesquite and palo verde, 80.52 chs.<br>Mesquite and palo verde brush and cactus.  |

## Resurvey of Subdivision lines of T. 15 S., R. 12 E.

## Chains

From the reestablished S. C. of secs. 34 and 35 on the S. bdy. of the tp., I run

N.  $0^{\circ} 37'$  E. on a true line bet. secs. 34 and 35.

Over nearly level land, sloping gently toward N., through scattered mesquite and palo verde and cactus.

21.50 Wash, 20 lks. wide, course NE.

40.30 The proportional point for the  $\frac{1}{4}$  sec. cor. bet. secs. 34 and 35.

Set an iron post 1 in. dia., stamped on cap

$\frac{1}{4}$  in N.  
S 34 in W.  
S 35 in E.  
1915 in S.

Dig pits 18 x 18 x 12 ins. N. & S. of cor. 3 ft. dist.; and raise a mound of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

No B. T.s available.

80.61 The proportional point for the cor. of secs. 26, 27, 34 and 35.

Set an iron post 2 ins. dia., for the cor. of secs. 26, 27, 34 and 35, stamped on cap

T 15 S S 27 in NW.  
R 12 E S 26 in NE.  
S 35 in SE.  
S 34 in SW.  
1915 in S.

No B. T.s available.

Dig pits 18 x 18 x 12 ins. in each sec.  $5\frac{1}{2}$  ft. dist.; and raise a mound of earth 4 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.61 chs.  
Mesquite and palo verde brush and cactus, 80.61 chs.

July 12, 1915. At this cor. I set off  $22^{\circ} 3\frac{1}{2}'$  N. on decl. arc, and at apparent noon, observe the sun on the meridian. The resulting lat. is  $32^{\circ} 6'$  which is the proper lat.

Thence N.  $89^{\circ} 46'$  E. on a true line bet. secs. 26 and 35.

Over nearly level land sloping gently towards N., through scattered mesquite and palo verde and cactus.

39.60 Wash, 10 lks. wide, course NE.

40.06 The proportional point for the  $\frac{1}{4}$  sec. cor. bet. secs. 26 and 35.

## Resurvey of Subdivision lines of T. 15 S., R. 12 E.

## Chains

Set an iron post 1 in. dia., stamped on cap

$\frac{1}{4}$  in W.  
S 26 in N.  
S 35 1915 in S.

From which a

Mesquite 8 ins. dia., brs. S.  $30\frac{1}{4}^{\circ}$  E., 115 lks. dist.,  
mkd.  $\frac{1}{4}$  S 35 B T.

Mesquite 5 ins. dia., brs. N.  $22\frac{1}{4}^{\circ}$  W., 52 lks. dist.,  
mkd.  $\frac{1}{4}$  S 26 B T.

80.13 The restored cor. of secs. 25, 26, 35 and 36, previously described.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.13 chs.

Mesquite and palo verde and cactus, 80.13 chs.

Returning to the restored cor. of secs. 26, 27, 34 and 35.

Thence I run

N. on a true line bet. secs. 26 and 27.

Over nearly level land, sloping gently towards N., through scattered mesquite, palo verde and cactus.

4.00 Begin ascent of small rocky hill.

10.50 Top of ascent, brs. N.  $60^{\circ}$  E., and S.  $60^{\circ}$  W.

Begin descent.

20.50 Foot of descent, brs. E. & W.

Thence over level land.

40.30 The proportional point for the  $\frac{1}{4}$  sec. cor. bet. secs. 26 and 27.

Set an iron post 1 in. dia., stamped on cap

$\frac{1}{4}$  in N.  
S 27 in W.  
S 26 in E.  
1915 in S.

From which a

Mesquite 5 ins. dia., brs. S.  $78^{\circ}$  E., 52 lks. dist.;  
mkd.  $\frac{1}{4}$  S 26 B T.

Mesquite 4 ins. dia., brs. S.  $27\frac{1}{4}^{\circ}$  W., 124 lks. dist.,  
mkd.  $\frac{1}{4}$  S 27 B T.

58.30 Road, brs. NE. & SW.

65.30 Road, brs. N.  $75^{\circ}$  E. and S.  $75^{\circ}$  W.

## Resurvey of Subdivision lines of T. 15 S., R. 12 E.

Chains

80.49

The reestablished cor. of secs. 22, 23, 26 and 27,  
on N. bdy. of Papago Indian Reservation, previously  
described.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.49 chs.

Mesquite and palo verde brush and cactus, 80.49 chs.

From the reestablished S. C. of secs. 33 and 34 on  
the S. bdy. of tp. previously described, I run

N.  $0^{\circ} 17'$  E. on a true line bet. secs. 33 and 34.

Over nearly level land sloping gently towards the  
N., through scattered mesquite and palo verde,  
and cactus.

40.31

The proportional point for the  $\frac{1}{4}$  sec. cor. bet. secs.  
33 and 34.

Set an iron post 1 in. dia., stamped on cap

$\frac{1}{4}$  in N.  
S 33 in W.  
S 34 in E.  
1915 in S.

From which a

Palo verde 6 ins. dia., brs. N.  $64\frac{1}{2}^{\circ}$  E., 51 lks. dist.,  
mkd.  $\frac{1}{4}$  S 34 B T.

Palo verde 5 ins. dia., brs. S.  $17\frac{1}{2}^{\circ}$  W., 32 lks. dist.,  
mkd.  $\frac{1}{4}$  S 33 B T.

44.80

Wash, 10 lks. wide, course N.  $15^{\circ}$  E.

76.10

Road, brs. NE. & SW.

80.63

The proportional point for the cor. of secs. 27, 28,  
33 and 34.

Set an iron post 2 ins. dia., stamped on cap

T 15 S S 28 in NW.  
R 12 E S 27 in NE.  
S 34 in SE.  
S 33 in SW.  
1915 in S.

From which a

Palo verde 8 ins. dia., brs. S.  $33\frac{3}{4}^{\circ}$  E., 233 lks. dist.,  
mkd. T 15 S R 12 E S 34 B T.

No other B. T.s available.

Dig pits 18 x 18 x 12 ins. in each sec.  $5\frac{1}{2}$  ft. dist.,  
and raise a mound of earth 4 ft. base, 2 ft. high,  
W. of cor.

## Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

Land, nearly level.  
Soil, 2nd rate.  
Timber, scattered mesquite and palo verde, 80.63 chs.  
Mesquite and palo verde brush and cactus, 80.63 chs.

Thence N. 89° 49' E. on a true line bet. secs. 27  
and 34.

Over nearly level land, sloping gently towards N.,  
through scattered mesquite, palo verde and cactus.

3.50 Road, brs. NE. & SW.

4.20 Wash, 10 lks. wide, course N. 10° E.

22.00 Wash, 10 lks. wide, course N.

40.10 The proportional point for the  $\frac{1}{4}$  sec. cor. bet.  
secs. 27 and 34.

Set an iron post 1 in. dia., stamped on cap

$\frac{1}{4}$  in W.  
S 27 in N.  
S 34 1915 in S.

From which a

Palo verde 8 ins. dia., brs. N. 75 $\frac{1}{2}$ ° E., 156 lks. dist.,  
mkd.  $\frac{1}{4}$  S 27 B T.

Palo verde 12 ins. dia., brs. S. 79 $\frac{1}{2}$ ° E., 188 lks. dist.,  
mkd.  $\frac{1}{4}$  S 34 B T.

40.30 Wash, 10 lks. wide, course NE.

80.20 The restored cor. of secs. 26, 27, 34 and 35, previously  
described.

Land, nearly level.  
Soil, 2nd rate.  
Timber, scattered mesquite and palo verde, 80.20 chs.  
Mesquite and palo verde brush and cactus, 80.20 chs.

July 12, 1915.

July 13, 1915. At 8<sup>h</sup> 0<sup>m</sup> a.m., l.m.t., I set off 32°  
6' on lat. arc, and 21° 57' N. on decl. arc, and  
determine a meridian with the solar at the restored  
cor. of secs. 27, 28, 33 and 34, previously described.

Thence I run

N. 0° 6' W. on a true line bet. secs. 27 and 28.

Over nearly level land, gently sloping towards N.,  
through scattered mesquite and palo verde and cactus.

40.31 The proportional point for the  $\frac{1}{4}$  sec. cor. bet. secs.  
27 and 28.

Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

Set an iron post 1 in. dia., stamped on cap

1/4 in N.  
S 28 in W.  
S 27 in E.  
1915 in S.

From which a

Palo verde 6 ins. dia., brs. S. 27 1/4° W., 85 lks. dist.,  
mkd. 1/4 S 28 B T.

Palo verde 12 ins. dia., brs. N. 14 1/4° W., 319 lks. dist.,  
mkd. 1/4 S 28 B T.

52.00 Road, brs. N. 75° E. and S. 75° W.

80.55 The reestablished cor. of secs. 21, 22, 27 and 28, on  
N. bdy. of Papago Indian Reservation, previously  
described.

Land, nearly level.  
Soil, 2nd rate.  
Timber, mesquite and palo verde, 80.55 chs.  
Mesquite and palo verde brush and cactus, 80.55 chs.

From the reestablished S. C. of secs. 32 and 33 on  
the S. bdy. of tp. previously described, I run -

N. 0° 1' E. on a true line bet. secs. 32 and 33.

Over nearly level land, gently sloping towards N.,  
through scattered mesquite and palo verde and  
cactus.

5.60 Road, brs. NE. & SW.

12.20 Wash, 5 lks. wide, course N. 30° E.

40.28 The proportional point for the 1/4 sec. cor. bet.  
secs. 32 and 33.

Set an iron post 1 in. dia., stamped on cap

1/4 in N.  
S 32 in W.  
S 33 in E.  
1915 in S.

From which a

Palo verde 5 ins. dia., brs. S. 3 1/4° E., 178 lks. dist.,  
mkd. 1/4 S 33 B T.

Mesquite 6 ins. dia., brs. N. 72° W., 110 lks. dist.,  
mkd. 1/4 S 32 B T.

80.57 The proportional point for the cor. of secs. 28, 29,  
32 and 33.

Set an iron post 2 ins. dia., stamped on cap

T 15 S S 29 in NW.  
R 12 E S 28 in NE.  
S 33 in SE.  
S 32 in SW.  
1915 in S.

Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

From which a

Palo verde 6 ins. dia., brs. N. 46 3/4° E., 213 lks. dist.,  
mkd. T 15 S R 12 E S 28 B T.

Palo verde 6 ins. dia., brs. N. 2 1/4° W., 194 lks. dist.,  
mkd. T 15 S R 12 E S 29 B T.

No other B. T.s available.

Dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist.,  
and raise a mound of earth 4 ft. base, 2 ft. high,  
W. of cor.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.57 chs.

Mesquite and palo verde brush and cactus, 80.57 chs.

Thence -

N. 89° 47' E., on a true line bet. secs. 28 and 33.

Over nearly level land, gently sloping towards N.,  
through scattered mesquite, palo verde and cactus.

40.08

The proportional point for the 1/4 sec. cor. bet.  
secs. 28 and 33.

Set an iron post 1 in. dia., stamped on cap

1/4 in W.  
S 28 in N.  
S 33 1915 in S.

From which a

Palo verde 8 ins. dia., brs. S. 8 1/4° W., 189 lks. dist.,  
mkd. 1/4 S 33 B T.

Mesquite 3 ins. dia., brs. N. 3 1/4° W., 228 lks. dist.,  
mkd. 1/4 S 28 B T.

72.60

Wash, 10 lks. wide, course N.

80.15

The restored cor. of secs. 27, 28, 33 and 34,  
previously described.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.15 chs.

Mesquite and palo verde brush and cactus, 80.15 chs.

Returning to the restored cor. of secs. 28, 29, 32 and  
33, I run -

N. 0° 12' W. on a true line bet. secs. 28 and 29.

Over nearly level land sloping gently towards N.,  
through scattered mesquite, palo verde and cactus.

40.28

The proportional point for the 1/4 sec. cor. bet.  
secs. 28 and 29.

Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

Set an iron post 1 in. dia., stamped on cap

1/4 in N.  
S 29 in W.  
S 28 in E.  
1915 in S.

From which a

Mesquite 6 ins. dia., brs. N. 57° E., 222 lks. dist.,  
mkd. 1/4 S 28 B T.

Palo verde 6 ins. dia., brs. S. 88° W., 210 lks. dist.,  
mkd. 1/4 S29 B T.

44.70 Road, brs. E. & W.

80.52 The reestablished cor. of secs. 20, 21, 28 and 29,  
on N. bdy of Papago Indian Reservation, previously  
described.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.52 chs.

Mesquite and palo verde brush and cactus, 80.52 chs.

July 13, 1915. At this cor. I set off 21° 55 1/2' N.  
on decl. arc, and at apparent noon observe the sun  
on the meridian. The resulting lat. is 32° 7' which  
is the proper lat.

From the reestablished S. C. of secs. 31 and 32,  
on the S. bdy. of tp., previously described, I run

N. 0° 6' W. on a true line bet. secs. 31 and 32.

Over nearly level land, sloping towards N., through  
scattered mesquite, palo verde and cactus.

40.28 The proportional point for the 1/4 sec. cor. bet.  
secs. 31 and 32,

Set an iron post 1 in. dia., stamped on cap

1/4 in N.  
S 31 in W.  
S 32 in E.  
1915 in S.

From which a

Mesquite 5 ins. dia., brs. N. 12° E., 135 lks. dist.,  
mkd. 1/4 S 32 B T.

Palo Verde 8 ins. dia., brs. S. 48 1/2° W., 46 lks. dist.,  
mkd. 1/4 S 31 B T.

80.57 The proportional point for the cor. of secs. 29, 30,  
31 and 32.

Set an iron post 2 ins. dia., stamped on cap

T 15 S S 30 in NW.  
R 12 E S 29 in NE.  
S 32 in SE.  
S 31 in SW.  
1915 in S.

Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

From which a

Palo verde 6 ins. dia., brs. N. 88 $\frac{1}{2}$ ° E., 127 lks. dist.,  
mkd. T 15 S R 12 E S 29 B T.

Palo verde 6 ins. dia., brs. S. 83 $\frac{1}{2}$ ° E., 296 lks. dist.,  
mkd. T 15 S R 12 E S 32 B T.

Palo verde 8 ins. dia., brs. N. 13° W., 217 lks. dist.,  
mkd. T 15 S R 12 E S 30 B T.

No other B. T. available.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.57 chs.

Mesquite and palo verde brush and cactus, 80.57 chs.

Thence N. 89° 43' E. on a true line bet. secs. 29  
and 32.

Over nearly level land, sloping gently towards N.,  
through scattered mesquite, palo verde and cactus.

16.50 Wash, 30 lks. wide, course N.

40.10 The proportional point for the  $\frac{1}{4}$  sec. cor. bet.  
secs. 29 and 32.

Set an iron post 1 ins. dia., stamped on cap

$\frac{1}{4}$  in W.  
S 29 in N.  
S 32 1915 in S.

No B. T.s available.

Dig pits 18 x 18 x 12 ins. E. & W. of cor. 3 ft. dist.;  
and raise a mound of earth 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high,  
N. of cor.

80.20 The restored cor. of secs. 28, 29, 32 and 33, previous-  
ly described.

Land, nearly level.

Soil, 2nd rate.

Timber scattered mesquite and palo verde, 80.20 chs.

Mesquite and palo verde brush and cactus, 80.20 chs.

Returning to the restored cor. of secs. 29, 30, 31  
and 32, I run -

S. 89° 47' W. on a true line bet. secs. 30 and 31.

Over nearly level land, sloping gently towards N.,  
through scattered mesquite, palo verde and  
cactus.

40.05 The proportional point for the  $\frac{1}{4}$  sec. cor. bet.  
secs. 30 and 31.

Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

Set an iron post 1 in. dia., stamped on cap

- 1/4 in W.
- S 30 in N.
- S 31 1915 in S.

From which a

Palo verde 8 ins. dia., brs. S. 35 1/2° W., 72 lks. dist., mkd. 1/4 S 31 B T.

Palo verde 8 ins. dia., brs. N. 13° W., 83 lks. dist., mkd. 1/4 S 30 B T.

55.40 Wash, 20 lks. wide, course N.

69.40 Wash, 30 lks. wide, course N. 15° W.

80.37 The reestablished cor. of secs. 25, 30, 31 and 36, on W. bdy of tp., previously described.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.37 chs.

Mesquite and palo verde brush and cactus, 80.37 chs.

Returning to the restored cor. of secs. 29, 30, 31 and 32, I run

N. 0° 20' W. on a true line bet. secs. 29 and 30.

Over nearly level land, sloping gently towards N., through scattered mesquite, palo verde and cactus.

35.00 Road, brs. E. & W.

40.28 The proportional point for the 1/4 sec. cor. bet. secs. 29 and 30.

Set an iron post 1 in. dia., stamped on cap

- 1/4 in N.
- S 30 in W.
- S 29 in E
- 1915 in S.

From which a

Mesquite 8 ins. dia., brs. S. 48° E., 31 lks. dist., mkd. 1/4 S 29 B T.

Mesquite 6 ins. dia., brs. S. 20° W., 41 lks. dist., mkd. 1/4 S 30 B T.

40.70 Wash, 20 lks. wide, course N. 15 ° W.

80.61 The reestablished cor. of secs. 19, 20, 29 and 30, on N. bdy. of Papago Indian Reservation, previously described.

Land, nearly level.

Soil, 2nd rate.

Timber, scattered mesquite and palo verde, 80.61 chs.

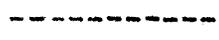
Mesquite and palo verde brush and cactus, 80.67 chs.

July 13, 1915.

Resurvey of Subdivision lines in T. 15 S., R. 12 E.

Chains

GENERAL DESCRIPTION.



The land in this frac. township is mostly level, sloping gently towards the north, with the exception of a portion of Black Mountain which occupies the major part of the E. 1/4 of sec. 36 and is rough rocky land of 4th rate; the remainder of the township is of a good sandy soil 2nd rate, and if irrigated would be suitable for agriculture.

This frac. township is covered with scattered mesquite and palo verde timber; mesquite and palo verde brush and numerous species of cacti.

There is very little grass, and no water of any kind.

The washes mentioned are merely deposits of sand washed down from the higher country and are almost level with the ground.

There are no improvements nor settlers within the frac. township.

Charles M. Leedy,  
U. S. Surveyor.

Denver, Colo., *June 27-1916*

I hereby certify that the resurvey of subdivision lines in T. 15 S., R. 12 E., within the Papago Indian Reservation, Arizona, was made under my supervision and direction, and to the best of my knowledge and belief the field work was executed in strict accordance with instructions given me dated Oct. 6, 1914, and the Manual of Surveying Instructions, and that these field notes are a correct representation thereof.

*A. F. Cunningham*

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Topographer in Charge of  
Indian Surveys.



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BOOK 3421

FINAL OATH OF UNITED STATES SURVEYOR.

I, \_\_\_\_\_, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for \_\_\_\_\_ bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 191 \_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final oath of U. S. Surveyor, see Book "A" (3rd Standard Parallel N., through Rgn. 11, 12 and 13 E.)

\_\_\_\_\_ of the \_\_\_\_\_ Meridian, in the State of \_\_\_\_\_, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 191 \_\_\_\_\_ }



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APPROVAL.

OFFICE OF THE COMMISSIONER OF THE GENERAL LAND OFFICE  
~~OFFICE OF THE UNITED STATES SURVEYOR GENERAL,~~

Washington, D.C., May 5, 1921

The foregoing field notes of the <sup>FS</sup> survey of \_\_\_\_\_ subdivision lines in T. 15 S., R. 12 E., within the Purogo Indian Reservation, Arizona,

executed by Charles H. Leedy, U. S. Surveyor, under direction of A. F. Dunnington, Topographer in Charge of Indian Surveys under his special instructions dated Oct. 6, 1914, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

(Signed) William Spry  
U. S. Surveyor General  
Commissioner of the General Land Office

I certify that the foregoing transcript of the field notes of the above-described surveys in T. 15 S., R. 12 E., Arizona, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General  
Commissioner of the General Land Office