# FIELD NOTES

BOOK 3187

### OF THE SURVEY OF THE

South	boundary of				
	TOWNSHI	P 14 SOUTH,	RANGE 12 E	MST,	
		the RESURV	TEY of the		,
Santa				nship 15 South,	
Part	of the west bdy	of Townshi	p 15 south,	RANGE 12 EAST, a	1d
	***			of	
west-	bdy and Subdivi	sion lines,	and		
Part	of the Subdivis	ion lines,		<del>-</del>	<del>-</del> -
·		of			
	TOWNSHIP	15 south.	RANGE 12 E	AST,	· ·
In the State	-		•	Meridian,	
	•	EXECU	TED BY		
		John F.	Hesse,		·
·	·	. ,	·		
In the capa	acity of U.S. Survey	or, under	$instructions$ $\dot{lpha}$	latedOctober 1,	, 191
issued by	the United States	s Surveyor (	General to g	govern surveys inc	cluded
Group No.		vere approved	by the Comm	vissioner of the Gen	eral Lar
Office, Nove	ember 30,	, 191.5.			
Retrace	Resurvey & ement commenc		*	•	
Survey, Retrac	Resurvey & completed	Z Nove	mber 14.	, 191_5	6151
	Executed under Assign			,	

Instructions dated Oct. 18,1915.

3/87 Book "A"

Group 57 - - - Arizona.

BOOK 3187

# INDEX DIAGRAM.

· · ·//	Towns	<i>Ship</i> 15 Soi	ith', 2	Range	12 East.	4.
g	. 6	<b>2</b> 9 5 2	5 4	22 <sub>3</sub> :		15 , 7
KEKE	28	28	24	2Ì	18	15
C. RESURVEYE	7	28 s 2	4 9	21 <sub>10</sub> 18	11 1	
<u> </u>	27	27	24	20	17	14
8	18	26 17 2	3 16	20 <sub>15</sub> l'	14 1	3 13 5
Ġ.	26	26	23	20	17	<u> </u>
N. N	19 10	25 <sub>20</sub> 2	2 21	19 22 :	.6 <sub>28</sub> 1	3 <sub>24</sub> 5
	SO SO	29	28	27	35 V A	RETRACED V
	31 PA	PAGO PABO PABO PABO PABO PABO PABO PABO PAB	NDARD	PARAL	85 EL 50	SANA
	///////	<b>V/////</b>				6 151

Jubdivisio	on lines šúrveyed unde	er this group.
Township 1	ines survéyed under t	his group.
Township l group.	ines retraced or resu	rveyed under this
Standard l	ines surveyed under to	his group.
Subdivisio group. Accepted s	n lines retraced or reurys.	esurveyed ander this

Areas surveyed as per accepted plats on file.

Chains. Surveys, resurveys & retracements of cuted by John E Hesse,
U.S. Surveyor, on dates shown on diagram on page 30 hereof using an A Lietz light mountain transit No. 6166, with
solar attachment. The horizontal limb is provided with
entwo double verniters, placed opposite to each other, reading to dingle minutes of arcewhich is also the least and ding to single minutes of aroundich is also the least no

count of the verniers of the lat.and decl.arcs.
The instrument was approved by the Assistant Supervisor
of Surveys for Arizona and California, October 18, 1915 conditional upon satisfactory field tests.

October 29, 1915.

To test the solar apparatus, by comparing its indications resulting from solar observations madeduring a.m. and  $\boldsymbol{n}$ p.m. hours, with a meridian determined by observations on Rolaris,, I proceed as follows:

At my camp, which is located near the cor. of secs. 9, 10, 15 and 16, T. 15 S. R. 12 E.; latitude 32° 07' 49" N., longitude 111° 070 12°0 W.; at 5h. 02m. a.m. by my watch, which has correct l.m.t., I observe Polaris at western elongation in accordance with Manual of Instructions, and mark a point in the line thus determined, on

a peg driven in the ground, 5 chs. N. of my station. At 7h. oom. a.m., 1.m.t., I lay off the azimuth of Polaris, 1° 21' to the east, and mark the meridian thus determined, by cutting a small groove in a stone firmly

set in the ground, 5 chs. N. of my station.

At 8h. 00m. a. m. 1.m.t., I set off 32° 08' N. on the lat. arc; 13° 12' S. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.1 ins. east of the meridian established by the

Polaris observation. I set off 13°  $16\frac{1}{8}$  S. on the decl. arc; and observe the sun on the meridian at noon; the resulting lat. is 32° 08' N.

At 4h. 00m. p.m., l.m.t., I set off  $32^{\circ}$  08' N. on the lat. arc;  $13^{\circ}$   $18\frac{1}{2}$ ' S. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.1 ins. west of the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations, defines positions for meridians, respectively about 0' 05" east and west of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 4h. 15m. p. m., is N. 13° 35' W.; the angle thus determined gives the mag. decl. 13° 35' E.

During the execution of the survey of T. 15 S. R. 12 E. the adjustments of the solar attachment were repeatedly tested and verified on this meridian.

The cor. of Tps. 14 and 15 S. Rgs. 12 and 13 E. is a granite stone, 10 x 4 x 3 ins. above ground, firmly set, marked with 6 notches on each edge; with a mound of stone, 2 ft. base,  $l\frac{1}{2}$  ft. high, S. of cor.

West on a random line along S. bdy. of T. 14 S. R. 12 E. setting temp. cors. at intervals of 40.00 and, at 6m. 6.15 chs., intersect the E. bdy. of T. 14 S. R. 11 E. 264 lks. N. of the cor. of Ts. 14 and 15 S. Rs. 11 and 12 E., which is a malpais stone 12 x 8 x 6 ins. above ground, firmly set, marked with 6 notches on each edge: with pits 24 x 24 x 12 inc. edge; with pits  $24 \times 24 \times 12$  ins. N., E., and W. of stone, 4 ft., and S. of stone, 8 ft. dist.; and a mound of earth 5 ft. base,  $2\frac{1}{2}$  ft. high, S. of cor. This fall: ing answers to a correction of 19' per mile.

South boundary of T. 14 S. R. 12 E. Chains. Thence N. 89° 41' E. on S. bdy. of sec. 31, marking and blazing true line. Over level land, through dense brush. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap S31 46.15 dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. 86.15 Set an iron post, 3 ft. long, 3 ins. ddam., 24 ins. in the ground, for cor. of secs. 31 and 32, marked on brass T14S S31 S32 R12E -S6 S5 **T15**S 1915 dig pits, 24 x 24 x 12 ins., NE and NW., 6 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. Land, level.
Soil, sandy loam, dry, medium texture; lst. rate. No timber. Undergrowth, greasewood, black brush, and mesquite. N. 89° 41' E. on S. bdy. of sec. 32. Over level land, through dense brush. 35.40 Wash, 7 lks. wide, course SW. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the 40.00 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap S32 1915 dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Wash,,5 lks. wide, course SW. 49.50 Wash, 6 lks. wide, course SW.
Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in 66.40 80.00 the ground, for cor. of secs, 32 and 33, marked on brass cap T14S R12E 532 533 S5 S4 **T15**S 1915 dig pits, 24 x 24 x 12 ins., NE and NW.  $5\frac{1}{2}$  ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber. Undergrowth, greasewood, blawk brush and mesquite. N. 89° 41' E. on S. bdy. of sec. 33 Over rolling land, through dense brush. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the 40.00 ground, for  $\frac{1}{4}$  sec. cor., marked on brass cap

1915  dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Road, bears NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap  T14S  R12E \[ \frac{533 \ 534}{54 \ 53} \\ \text{T15S} \\ \text{1945}  dig pits, 24 x 24 x 12 ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.  Land, level. Soil, sandy loam, dry, medium texture; lst. rate. No timber.  Undergrowth, greasewood, blackbrush and mesquite.
dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Road, bears NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap $ \begin{array}{c}                                     $
dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Road, bears NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap $ \begin{array}{c}                                     $
dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Road, bears NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap  T14S  R12E \[ \frac{S33 \sqrt{S34}}{S4 \sqrt{S3}} \]  T15S  1945  dig pits, 24 x 24 x 12 ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; lst. rate. No timber.
high, N. of core Road, bears NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap  T14S  R12E S33 S34  T15S  1945  dig pits, 24 x 24 x 12 ins., NE. and NW., 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; lst. rate. No timber.
Road, bears NW. and SE. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap $ \begin{array}{r}                                     $
Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 33 and 34, marked on brass cap $ \begin{array}{r}                                     $
the ground, for cor. of secs. 33 and 34, marked on brass cap $\begin{array}{c} \text{Tl4S} \\ \text{S33} \mid \text{S34} \\ \text{S4} \mid \text{S3} \\ \text{Tl5S} \\ \text{19a5} \\ \text{dig pits, 24 x 24 x 12 ins., NE. and NW,, 5\frac{1}{2} ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.$
T14S R12E $\frac{533 534}{54 53}$ T15S 1935 dig pits, 24 x 24 x 12 ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.
R12E $\frac{S33 S34}{S4 S3}$ T15S 19a5 dig pits, 24 x 24 x 12 ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.
Tiss 1945 dig pits, 24 x 24 x 12 ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.
dig pits, $24 \times 24 \times 12$ ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.
dig pits, $24 \times 24 \times 12$ ins., NE and NW, $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.
and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, level. Soil, sandy loam, dry, medium texture; 1st. rate. No timber.
of cor. Land, level. Soil, sandy loam, dry, medium texture; lst. rate. No timber.
Soil, sandy loam, dry, medium texture; 1st. rate.
No timber.
N. 89° 41' E. on S. bdy. of sec. 34
Over level land, through dense brush.
Wash, 8 lks. wide, course SW.
Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
\$34
· · · · · · · · · · · · · · · · · · ·
dig pits. 18 x 18 x 12 ins., E. and W. of post, 3 ft.
dist.; and raisea mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
high, N. of cor. Nash, 10 lks. wide, course SW.
Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in
the ground, for cor. of secs. 34 and 35, marked on brass
cap
T14S S34\S35
R12E S34 S35 S3 S2
T15S
1915  1915 NF cand NW $5\frac{1}{2}$ ft. dist
dig pits, 24 x 24 x 12 ins., NE. and NW., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N.
of cor.
Land, level.
Soil, sandy loam, dry, medium texture; lst. rate. No timber.
Undergrowth, greasewood, blackbrush and mesquite.
0111101 61 0 11 0 11 0 11 0 11 0 11 0 1
N. 89° 41' E. on S. bdy. of sec. 35
Over level land, through dense brush.
Road, bears NE. and SW.
Wash, 18 lks. wide, course SW. Set an iron post, 3 ft. long, l in. diam., 26 ins. in the
ground, for \(\frac{1}{4}\) sec. cor., marked on brass cap
\$35
$\frac{1}{4}$
1915
dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft.

4	South boundary of T. 14 S. R. 12 E.
Chains	
80.00	high, N. of cor. Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, for cor. of secs. 35 and 36, marked on brass
	cap T14S
•	$R12E \frac{S35 \mid S36}{S2 \mid S1}$
	T15S 1915
	dig pits, 24 x 24 x 12 ins., NE and NW., $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, N.
	of cor. Land, level. Soil, sandy loam, dry, medium texture; lst. rate. No timber.
	Undergrowth, greasewood, blackbrush and mesquite.
• :	
	N. 89° 41' E. on S. bdy. of sec. 36
21.20	Over level land, through dense brush. Wash, 10 lks. wide, course SW.
37.00 40.00	
1.40.00	ground, for 4 sec. cor., marked on brass cap
	$\begin{array}{c} \text{S36} \\  \\  \end{array}$
	1915
	dig pits, 18 x 18 x 12 ins. E. and W. of post., 3 ft.
	dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
80.00	The cor. of Tps. 14 and 15 S., Rgs. 12 and 13 E., herein-
	hand, level. Soil, sandy loam, dry, medium texture, lst rate.
•	No timber. Undergrowth, greasewood, blackbrush and mesquite.
	ondergrowth, greasewood, brackbrush and mesquite.
·	

```
Resurvey of Santa Cruz Guide Meridian, thru. part of Tp. 15 South,
Chains.
           I commence at the cor. of secs. 19, 24, 25 and 30, on the E. bdy.
                of T.15 S., R.12 E. (Santa Cruz Guide Meridian) on the N. bdy. of the Papago Indian Reservation, which is an
                iron post, 3 ins.diam., 4 ins.above ground, marked on
                brass cap,
                                              R12E:R13E
                                                $24|$19
                                                $25 830
PIR
                1915 with pits 18x18x12 ins., in each sec. 5\frac{1}{2} ft. dist., and
                a mound of earth 4 ft.base, 2 ft.high, W.of cor.
            Thence
           N.0°28'E., on E.bdy. of sec. 24. Over level land, thru.dense brush.
  32.60 Road brs. NE. and SW.
  40.00 Set an iron post 3 ft.long, 1 in. indiam., 26 ins. in the ground, for reestablished 2 sec.cor.of sec.24, marked on
                brass cap,
                                                   -
3241
                                                     1915
  dig pits 18x18x12 ins., N.and S.of post, 3 ft.dist., and raise a mound of earth, 3 ft.base, 1 ft. high, W.of cor. Intersect the old 2 sec.cor.of secs.19 and 24, a limestone 8x4x3 ins. above ground, firmly set, marked 2 on W.face, with pits 18x18x12 ins., N.and S.of stone, 3 ft.dist., and a mound of earth 3 ft. base, 1 ft.high, W.of cor. Now refers to sec.19 only.
  69.09 Road brs.NV and SE. 72.20 Road brs.NV and SE.
                                        SE.
                                        3 ft.long, 3 ins. in diam.,
  80.00
            Set an iron post, 3 ft.long, 3 ins. in diam., 24 ins. the ground, for reestablished cor. of secs, 13 and 24,
                                                                                   24 ins. in
                marked on brass cap,
                                                   T15S
                                                     <u>| s18</u>
                                               R12E R13E
                                                  1915
                dig pits, 24x24x12 ins., NW. and Swee. 6 ft. dist., and raise
                a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
            Land, level
            Soil, sandy loam, dry, medium texture, 1st rate.
            No timber.
            Undergrowth, greasewood and mesquite.
            N.0^{\circ} 28'E., on E. bdy. of sec. 13.
    Over level land; thru.dense brush.

O.81 Intersect the old cor.of secs.13,18,19 and 24, a malpais stone 5x4x2 ins.above ground, firmly set, marked with 3
                notches on N. and S. edges, with traces of pits and a
                                          Change to cor. of secs. 18 and 19 only
                mound of earth.
                 by digging pits 24x24x12 ins. NE and SE.of post, 6 ft. dist., and by raising a mound of earth 4 ft. base, 2 ft.
                 high, E. of cor.
            Thence continuing measurement,
            N.0°29'E.
   28.10 Road brs.NE. and SW. 34.00 Road brs.NE and SW.
   40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the
                 ground, for reestablished & sec.cor.of sec.13, marked on
                 brass cap,
                                                       1915
```

dig pits 18x18x12 ins., N. & S, of post, 3 ft. dist., and raise a mound of earth 3 ft. base, 1 ft. high. W. of cor.

```
Resurvey of Santa Cruz Guide Meridian thru part of Tp. 15
Chains.
41.17
Intersect the old 2 sec.cor.of secs.13 and 18, a malpais stone,4x4x3 ins.above ground, firmly set, marked 1 on W. face, with pits 18x18x12 ins., N. and S. of stone, 3 ft. dist, and it a mound of earth 3 ft. base, 1 ft. high, W. of cor. Now refers to sec.18 only.
            Thence continuing measurement,
            N.0°23'E.
  56.50 Road brs.E. and W. 60.00 Begin gradual ascent, over rolling land.
  80.00 Set an iron post 3 ft.long, 3 ins. in diam., 24 ins.in the ground, for reestablished cor.of secs. 12 and 13, marked
                 on brass cap,
                                                 <u>513</u> s18
                                               R12E R13E
                                                  1915
                 and raise a mound of stone 2 ft.base, laft.high, w.of cor.
            Land, level and rolling.
            soil, 0 to 60.00 chs., sandy loam, dry, medium texture; 1st
                rate; 60.00 to 80.00 chs., rocky, 4th rate.
            No timber.
           Undergrowth, greasewood, mesquite and palo verde.
           N.0^{\circ}23'E., on E bdy. of sec. 12.
            Over rolling land, gradually ascending, thru. dense brush.
   1.52 Intersect the old cor.of secs.7,12,13 and 18,a granite stone, 6x6x6 ins.above ground, firmly set, marked with 4
                notches on S., and 2 notches on N. edges, with a mound of
                stone 2 ft. base, laft. high, w. of cor. Change to cor. of seds.
                7 and 18 only by moving mound of stone from W. to E. ofcor.
            Thence, continuing measurement,
           N.0°331E.
           Wash, 15 lks. wide, course SW. Ascend.
  29.30 Ridge, brs. Fand W.77 ft. above wash; descend. 36.00 Wash, 15 lks. wide, course NW.30 ft. below ridge, and over roll-
 ing land.

40.00 Set an iron post, 3 ft.long, lin. in diam., 26 ins. in the ground, for reestablished 2 sec.cor., of sec.12, marked on
                                                       1915
                and raise a mound of stone 2ft.base, 1\frac{1}{2}ft.high, W. of cor.
  41.70 Intersect the old 1 sec.cor.of secs.7 and 12, a malpais
                stone, loosely set in a mound of stone, 16x10x4 ins., marked 4 on W. face. I set stone, 11 ins. in the ground, and build a mound of stone, 2 ft. base, 12 ft. high, W. of cor. Now re-
                fers to sec. 7 only.
           Thence, continuing measurement.
           N.1°00'E.
 50.55 Wash 10 lks.wide, course NW. 55.12 Wash, 10 lks.wide, course NW. 65.05 Dim road brs.NE and SW. 65.84 Dim road brs.E and W.
 67.80 Wash, 10 lks.wide, course W. 69.80 Wash, 15 lks.wide, course SW.
           Trench from which pipe line has been removed, 3 lks.wide, 12
                ins.deep, brs.E. and W.
 71.90 Wash, 17 lks.wide, course W. Ascend..
80.00 Set an iron post, 3 ft.long, 3 ins.in diam., 24 ins.in the ground, for reestablished cor.of secs.l and 12, marked on
                brass cap,
                                                 . T15s
                                                SI2 87
                                              R12E R13E
```

```
Resurvey of Santa Cruz Guide Mer., thru.part of Tp.15 South
Chains.
                 and raise a mound of stone, 2 ft. base, 12 ft. high, 7. of
                 cor.
                  ft. above wash.
           Land, rolling and mountainous.
           Soil, rocky, 4th rate,
           Undergrowth, greasewood, palo verde, blackbrush and mesquite.
           N.1°00'E., on E.bdy.of sec.1.
  Ascend steep S.slope, thru.scattering brush.

1.71 Intersect the old cor.of secs.1,6,7 and 12, a granite stone firmly set in a mound of stone, marked with 5 notches on S. and 1 notch on N.edges, with a mound of stone, 2 ft. base, 1½ ft. high, W.of cor. Change to cor.of secs.6 and 7 only by moving mound of stone from W.to E.of cor.
           Thence, continuing measurement,
           N.Oº10'W.
  3.93 Ridge, brs.E. and W., 110 ft. above cor. of secs. 1 and 12, Peak about 10.00 chs. W. 150 ft. higher than ridge.
           Descend.
9.00 Wash, 5 lks.wide, course NE. 120 ft.below ridge.Ascend.
15/50 Spur, NE.85 ft. above wash. Descend.
16.50 Top of bluff, 30 ft.high.
24.45 Wash, 6 lks.wide, course NW.120 ft. below spur, and over rolling land, thru.dense brush.
29.00 Knoll about 50 ft.high.mbrs.W. about 5 chs.dist.
 32.40 Wash, 20 lks.wide, course NW.
40.00 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for reestablished 4 sec.cor. of sec.1, marked
                 on brass cap,
                                                         1 SI
                                                           1915
                 and raise a mound of stone, 2 ft. base, 1\frac{1}{2} ft. high, W. of cdr.
41.40 Intersect the old 2 sec.cor. of secs. 1 and 6, a granite
                stone 12x8x6 instabove ground, firmly set, marked on W. face, with a mound of stone, 2 ft. base, 12 ft. high, W. of cor. Now refers to sec. 6 only.
           Thence, continuing measurement, N.0°26'W.
Wash, 6 lks.wide; course NW.
74.20 Wash; 5 lks.wide, course SW.
75.25 Road brs.NE.and SW.
81.52 Intersect the old cor.of Ts.14 and 15 S., Rs.12 and 13 E.,
                hereinbefore described.
           Land, mountainous and rolling.
           Soil, rocky, 4th rate.
           No timber.
           Undergrowth, greasewood, palo verde and mesquite.
```

```
Retracement & resurvey of part of W bdy of T.15 S. R.12 E
                                               RETRACEMENT.
           I commence at the cor. of secs. 19,24,25 and 30 on the W bdy.
                of the Tp., and on the N.bdy. of the Papago Indian Res-
               ervation, which cor. has evidently been reestablished by the U. S. Indian Service, and is an iron post 3 ins diam., 6 ins. above ground, marked on brass cap,
                                                    $24 $19
$25 $30
                                                       PIR
                                                      1915
           Thence,
           N.0^{\circ}27, on a true line, bet. secs. 19 and 24 (south half).
           Over level land, thru.dense brush.
 40.01 Intersect the old a sec.cor., a malpais stone, 8x5x4 ins. above ground, firmly set, marked 2 on W.face, with traces of pits and mound of earth. I dig pits 18x18x12 ins.,
               N. and S. of stone, 3 ft. dist., and raise a mound of earth.
                3章 ft. base, lt ft. high, W. of cor.
           Thence,
           N.0°40'W., on a true line, bet. secs. 19 and 24 (north half).
 Intersect the cor. of secs. 13, 18, 19 and 24, a malpais stone, 8x8x8 ins. above ground, firmly set, marked with 3 notches on N. and S edges, with pits 18x18x12 ins., in each sec. 5½ ft. dist., and a mound of earth 4 ft. base, 2 ft. high, W. of cor.
           Land, level.
           Soil, sandy loam, dry, medium texture, 1st rate.
           No timber.
           Undergrowth, mesquite and cholla.
           N.0°26'W., on a true line, bet. secs. 13 and 18.
Over level land, thru.dense brush.

40.04 Intersect the old \( \frac{1}{4}\) sec.cor., a mal\( \frac{1}{2}\) ais stone, l0x6x4 ins. above ground, firmly set, marked \( \frac{1}{4}\) on W.face; pits and nound of earth obliterated; dig pits 18x18x12 ins., N.
               and S. of stone; 3 ft. dist., and raise a mound of earth 3½ ft. base. 1½ ft. high, W. of cor.
           Continue line and measurement.
 74.20 Wash, 20 lks.wide, course NW.
80.06 Intersect the old cor.of secs. 7,12,13 and 18, a malpais stone, 8x6x4 ins. above ground, firmly set; marked with
               4 notches on S. and 2 notches on N.edges; pits and mound of earth obliterated; dig pits 18x18x12 ins. in each sec. 5% ft. dist., and raise a mound of earth, 4 ft.base,
               2 ft. high, W. of cor.
           Land, level.
           Soil, sandy loam, dry, medium texture, 1st rate.
           No timber.
          Undergrowth, mesquite, blackbrush and cholla.
                                                 RESURVEY.
           From old cor.of secs. 7,12,13 and 18,
          N.0°31'W., on a true line, bet. secs. 7 and 12. Over level land, thru. dense brush.
1915
               dig pits 18 \times 18 \times 12 ins., N. and S. of post, 3ft. dist. and raise mound of earth 3\frac{1}{2}ft. base, 1\frac{1}{2}ft. high, W. of cor.
           Made careful search but was unable to find any trace of
          old 2 sec.cor. Continue line and measurement.
 80.02 Intersect the old cor. of secs. 1, 6, 7 and 12, a malpais stone
               10x6x5ins.above ground, firmly set, marked with 5 notches
               on S.& 1 notch on N.edges; pits and mound of earth nearly
               obliterated; dig pits 18x18x12 ins.in each sec. 52ft.dist.
```

Resurvey of part of West bdy of Township 15 South Range 12 East. Chains, and raise a mound of earth 4 ft.base, 2 ft.high, w.of cor. Land, level. Soil, sandy loam, dry, medium texture, 1st rate. No timber. Undergrowth, mesquite and cholla. N.0° 28.W., on a true line, bet. secs. 1 and 6. Over level land, thru. dense brush. 16.70 Wash, 25 lks.wide, course W. 20.41 Road brs.E.and W. 39.99 Set an iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for reestablished 2 sec.cor., marked on brass cap, 2s1|s6 1915 dig pits, 18x18x12 ins., N.and S. of post, 3 ft.dist., and raise a mound of earth, 3 ft. base, 1 ft. high, W.of cor. Make careful search, but am unable to find any trace of old 3 sec.cor. Continue line and measurement. 45.69 Road brs.NW. and SE.
65.25 Wash, 25 lks.wide, course NW.
79.98 The cor.of Ts.14 and 15 S., Rs.11 and 12 E. hereinbefore described. Land, level. Soil, sandy loam, dry, medium texture, 1st rate. No timber.

Undergrowth, mesquite and black brush.

```
Chains.

From the cor. of secs. 23, 24, 25 and 26, which cor. has evidently been reestablished by the U.S. Indian Service, and is an iron post 3 ins. diam., 12 ins. above ground, marked on
                                                       T15S,R12E
S23 S24
S26 S25
                                                           1915
                 with pits 18x18x52ins.in each sec. 52 ft.dist., and a
           mound of earth, 4 ft, base, 1 ft. high, w.of cor. N.89°50'E. on a true line, bet. secs. 24 and 25 (N.bdy. of Pa-
                 pago Indian Reservation.)
            Over level land, thru.dense brush.
 20.07 Intersect the west 1/16 sec.cor.of sec.25, evidently estab-
                 lished by the U.S. Indian Service, an iron post 1 in in diam., 18 ins.above ground, marked on brass cap,
                                                     1915
           Continue line and measurement.
20.10 Wash, 15 lks. wide, course S.
40.15 Fall 1 lk.3. of 1 sec. cor., which cor. was evidently reestablished by the U.S. Indian Service, an iron post, 1 in. in diam., 14 ins. above ground, marked on brass cap,
                                                        S 2<u>4</u>
                                                       PIR
                                                       1915
           Continue line and measurement.
47.85 Road brs. NW. and SE.
48.85 Wash, 10 lks. wide, course SW.
49.75 Road brs. NE. and SW.
54.75 Road brs. NE. and SW.
 60.21 Intersect the east 1/16 sec.cor.of sec.25, evidently es-
                tablished by the U.S. Indian Service, an iron post, 1 in.
                in diam., 12 ins. above ground, marked on brass cap,
                                                     1915
           Continue line and measurement.
80.27 Intersect the cor. of secs/19,24,25 and 30 on E. bdy. of Tp., (Santa Cruz Guide Meridian), hereinbefore described, which
                cor. has evidently been reestablished by the U.S. Indian
                Service.
           Land, level.
           Soil, sandy loam, dry, medium texture, 1st rate.
           No timber.
           Undergrowth, greasewood and mesquite.
          From the reestablished cor. of secs. 19,24,25 and 30, on the
          W.bdy.of the Tp., hereinbefore described, N.89°47'E., on a true line, bet. secs. 19 and 30 (N.bdy.of
Papago Indian Reservation).

Over level land, thru dense brush.

Fall 3 lks.N. of the west 1/16 sec. cor. of sec. 30, evidently established by the U.S. Indian Service, an iron post, lin. in diam., 10 ins. above ground, marked on brass cap,
                                                      S19
                                                      330
                                                     1915
          Continue line and measurement.
21.50 Wash,15 lks.wide,course N.
40.72 Fall 2 lks.N. of 1 sec.cor., which cor. was evidently reestablished by the U.S. Indian Service, an iron post, 1 in in diam.,10 ans. above ground, marked on brass cap,
```

Signature   Sign	Retrac							
Continue line and measurement.  Fall 1 lk.Nof the cast 1/16 sec.cor.of sec.30.evidently established by the U.S. Indian Service, an iron post, 1 in.in diam., 10 ins.above ground.marked on brass cap, 2 1 819  FIR 1915  63.70 Wash,15 lks.wide, course NW.  100.80 Intersect cor.of secs.19, 20, 29 & 30.which cor.was evident 1y. reestablished by the U.S. Indian Service, an iron post, 3 ins.in diam., 6 ins. above ground, marked on brass cap,  FIS   RIE   S19   320   330   329   PIR   1915  witnessed by four bearing trees. Land, level. Soil, sandy loam, dry, medium texture, 1st rate. No timber. Undergrowth, mesquite, cholla and palo verde.  Boundaries of that portion of T.15 S., R.12 E., subdivide under this Group.  Latitudes, departures, and closing errors. Inde designated. True bearing.Dist. Latitudes. Departures. Subdivisional S.39°50°W. 80.27   25 80.27   boundary, S.89°57°W. 320.00   28 320.00   (N.bdy.of Papagos.89°47°W. 80.86   30 80.86   Indiah Res.)  N.0°27°W. 80.06 80.06   30 80.86   Indiah Res.)  N.0°27°W. 80.06 80.06   30 80.86   N.0°31°W. 80.06 80.06   30 80.86   N.0°31°W. 80.02 80.02   72   N.0°26°W. 80.06 80.06   30.06   N.0°31°W. 80.02 80.02   72   N.0°26°W. 80.06 80.06   30.06   N.0°31°W. 99.98   79.98   North boundary, N.89°41°E. 406.15   2.69   North boundary, N.89°41°E. 406.15   2.69   North boundary, N.89°41°E. 406.15   2.69   N.0°26°W. 40.18   40.12   40.12   30   N.0°26°W. 40.18   40.18   39.69   39.69   11   Sast boundary, S.1°00°W. 40.01   40.00   70   N.0°28°W. 40.18   40.18   39.69   39.69   11   Sast boundary, S.1°00°W. 40.01   40.00   70   N.0°28°W. 40.18   40.18   39.69   39.69   11   Sast boundary, S.1°00°W. 40.01   40.00   70   N.0°28°W. 40.36   40.36	Chains.			4	PIR ·		•	
80.86 Intersect cor. of secs. 19, 20, 29 & 30, which cor. was evident ly reestablished by the U.S. Indian Service, an iron post, 3 ins. in diam. 6 ins. above ground, marked on brass cap,  T158 R12E S19 S20 S30 S29 PIR 1915  witnessed by four bearing trees.  Land, level. Soil, sandy loam, dry, medium texture, lst rate. No timber. Undergrowth, mesquite, cholla and palo verde.  Boundaries of that portion of T.15 S., R.12 E., subdivide under this Group.  Latitudes, departures, and closing errors.  Aine designated. True bearing. Dist. Latitudes. Departures.  N. S. E. W. Subdivisional S.89 50 W. 80, 27 boundary, S.89 57 W. 320.00 .28 320.00 (N.bdy.of Papagos.89 47 W. 80.86 .30 80.86 Indiah Res.)  N. O 26 W. 80.86 .30 80.86 Indiah Res.)  N. O 26 W. 80.86 80.06 .30 N. O 27 W. 40.01 40.01 H. O 40 W. 39.99 39.99 .46 N. O 28 W. 79.98 79.98 North boundary, N.89 41 E. 486.15 2.69 486.15 S. O 20 E. 40.12 40.12 30 S. O 20 E. 40.12 30 S. O 20 E. 40.12 30 S. O 20 W. 40.01 40.00 .70 S. O 23 W. 40.35 40.35 .27 S. O 29 W. 40.36 40.36 .34 S. O 22 W. 80.81 80.81 60.81 Sonvergency, .30 Totals, S22.75 522.32 486.56 486.23 Error in latitude, 0.43	60.76	Continu Fall 1	e line and lk.N.of thablished by	ne east I the U.S ins.abo	L/16 sec.co E.Indian Sove ground S19 S30 PIR	ervice, a	n iron p	post, 1
S19   S20   S30   S29   PIR   1915   Witnessed by four bearing trees.   Land, level.   Soil, sandy loam, dry, medium texture, lst rate.   No timber.   Undergrowth, mesquite, cholla and palo verde.   Boundaries of that portion of T.15 S., R.12 E., subdivide under this Group.   Latitudes, departures, and closing errors.   Latitudes, departures, and closing errors.   Latitudes, Departures.   N. S. E. W.   Subdivisional   S.89   50   W. 80, 27   .25   80, 27   boundary, s.89   57   W. 320.00   .28   320.00   (N.bdy. of Papagos.89   47   W. 80.86   .30   80.86   .30   Soil	63.70 80.86	Interse	ect cor.of reestable , 3 ins.in	secs.19 ished by n diam.,	,20,29 & 30 the U.S.I: 5 ins. abo	ndian S <b>er</b>	vice, ar	n iron
witnessed by four bearing trees. Land, level. Soil, sandy loam, dry, medium texture, lst rate. No timber. Undergrowth, mesquite, cholla and palo verde.  Boundaries of that portion of T.15 S., R.12 E., subdivide under this Group.  Latitudes, departures, and closing errors. Anne designated. True bearing. Dist. Latitudes. Departures.  N. S. E. W. Subdivisional S.39°50'W. 80.27 .23 80.27 boundary, 8.89°57'W. 320.00 .28 320.00 .80.86 Indiah Res.)  N.0°27'W. 40.01 40.01 .30 80.86 Indiah Res.)  N.0°27'W. 40.01 40.01 .30 80.86 .60 .80.86 .60 .80.92 .72 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .80.92 .72 .80.92 .8				হ	30 329 PIR			
Latitudes, departures, and closing errors.  ine designated. True bearing.Dist. Latitudes. Departures.  N. S. E. W. Subdivisional S.89°50'W. 80,27 .23 80.27 boundary, S.89°57'W. 320.00 .28 320.00 (N.bdy.of Papagos.89°47'W. 80.86 .30 80.86 Indian Res.)  N. O°27' W. 40.01 40.01 .31 N.0°40'W. 39.99 39.99 .46 .60 N.0°31'W. 80.06 80.06 .60 N.0°31'W. 80.02 80.02 .72 N.0°28'W. 79.98 79.98 .65 North boundary, N.89°41'E. 486.15 2.69 486.15 S.0°26'E. 40.12 .30 S.0°10'E. 39.69 39.69 .11 Sast boundary, S.1°00'W. 40.01 40.00 .70 S.0°33'W. 40.01 40.00 .70 S.0°33'W. 40.18 40.18 .39 S.0°25'W. 40.35 40.35 .27 S.0°29'W. 40.36 40.36 .34 S.0°29'W. 80.81 80.81 .66 Sonvergency,  Totals, 322.75 322.32 486.56 486.23 Error in latitude, 0.45		Land, le Soil, se No timb	evel. andy loam, oer.	four bear dry,medi	ring trees	, 1st rat		
Latitudes, departures, and closing errors.		DILLOT DE						
ine designated. True bearing.Dist. Latitudes. Departures.  Subdivisional \$.89°50'W. 80,27								
N. S. E. 7 Subdivisional S.89°50'W. 80,27 .23 80.27 boundary, S.89°57'W. 320.00 .28 320.00 (N.bdy.of Papagos.89°47'W. 80.86 .30 80.80  Indian Res.)  N.0°27'W. 40.01 40.01 .31 N.0°40'W. 39.99 39.99 .46 N.0°31'W. 80.06 80.06 .60 N.0°31'W. 80.06 80.02 .72 N.0°28'W. 79.98 79.98 .65 North boundary, N.89°41'E. 486.15 2.69 486.15 S.0°26'E. 40.12 40.12 40.12 .30 S.0°10'E. 39.69 39.69 .11 Bast boundary, S.1°00'W. 40.01 40.00 .70 S.0°33'W. 40.18 40.18 .30 S.0°23'W. 40.18 40.18 .30 S.0°23'W. 40.35 40.35 .27 S.0°29'W. 40.36 40.36 .34 S.0°29'W. 40.36 40.36 .34 S.0°28'W. 80.81 80.81 .66 Sonvergency,  Totals,  Totals,  Error in latitude,  23 80.27 S22.32 486.56 486.23	•		ries of th	nat port:	ion of T.1	5 S.,R.12	E., sub	divide
Subdivisional S.89°50'W. 80,27		Bounda	atitudes,	unde departur	er this Gro	oup. losing er	rors.	
N.0°40'W. 39.99 39.99 46.16  N.0°31'W. 80.02 80.02 72  N.0°28'W. 79.98 79.98 79.98  North boundary, N.89°41'E. 486.15 2.69 486.15  S.0°26'E. 40.12 40.12 30  S.0°10'E. 39.69 39.69 .11  Cast boundary, S.1°00'W. 40.01 40.00 .70  S.0°33'W. 40.18 40.18 .39  S.0°23'W. 40.35 40.35 .27  S.0°29'W. 40.36 40.36 .34  S.0°28'W. 80.81 80.81 .66  Sonvergency, 30  Totals, 322.32 486.56 486.23  Error in latitude, 0.43	ine des	Bounda	atitudes,	unde departur	er this Groces, and contact.  Latitude	oup. losing er udes.	rors. Departu	ıres.
S.0°26'E. 40.12 40.12 .30 S.0°10'E. 39.69 39.69 .11  Bast boundary, S.1°00'W. 40.01 40.00 .70 S.0°33'W. 40.18 40.18 .39 S.0°23'W. 40.35 40.35 .27 S.0°29'W. 40.36 40.36 .34 S.0°28'W. 80.81 80.81 .66 Sonvergency,  Totals,  Totals,  Error in latitude,  322.75 322.32 486.23	Subdivi bound (N.bdy.	Bounda  Lignated  sional  ary,  of Papag	s.89°50° s.89°57° s.89°57° s.89°47°	unded departured in the second	res, and control of the control of t	losing er udes. S23	rors. Departu	80.2°
Convergency, .30  Totals, .322.75 322.32 486.56 486.23  Error in latitude, .322.32 486.23	Subdivibound bound (N.bdy. India	Bounda Lignated sional ary, of Papag n Res.)	s.89°50° s.89°50° s.89°57° sos.89°47° N.0°27° N.0°40°W N.0°26°W N.0°31°W N.0°28°W	unde departur aring.Dis W. 80, W. 320. W. 40. 80. 80.	res, and control of the control of t	losing er udes. S23 .28 .30	rors. Departu	80.27 320.00 80.80 .46 .60
Error in latitude, 0.43	Subdivibound (N.bdy. India Vest bo	Bounda Lignated sional ary, of Papas n Res.)	S.89°50' S.89°57' S.89°57' N.0°27' N.0°26'W N.0°26'W N.0°28'W N.0°28'W S.0°26'E S.0°10'E S.0°10'E S.0°33'W S.0°23'W S.0°29'W	unde departur aring.Dis W. 80. W. 320. W. 80. W. 40. 40. 40. 40. 40.	res, and control of the control of t	losing er udes. S. .23 .28 .30 40.12 39.69 40.00 40.18 40.35	rors. Departu	80.27 320.00 80.86 .60 .72 .65
Error in departure.	Subdivibound (N.bdy. India Vest bo	Bounda  Lignated sional ary, of Papag n Res.) undary, undary, undary,	S.89°50' S.89°50' S.89°57' N.0°27' N.0°26'W N.0°26'W N.0°26'W N.0°28'W N.0°28'W S.0°28'W S.0°23'W S.0°23'W S.0°29'W S.0°28'W	unde departur aring.Dis W. 80. W. 320. W. 80. W. 40. 40. 40. 40. 40.	r this Groves, and city.  N.  27  00  86  01  40.01  99  39.99  06  80.06  02  80.02  98  79.98  15  2.69  18  35  36  81	losing er udes.  S.  23 28 30  40.12 39.69 40.00 40.18 40.35 40.36 80.81	rors. Departu E.  486.15 .30 .11	80.27 320.00 80.80 .60 .72 .65
	Subdivibound (N.bdy. India Vest bo	Bounda  Lignated sional ary, of Papag n Res.) undary, undary, ency, Totals Error	s.89°50° s.89°57° s.89°57° s.89°57° N.0°27° N.0°26° N.0°26° N.0°28° N.89°41° s.0°26° s.0°10° s.0°33° s.0°23° s.0°28°	unde departur aring.Dis W. 80, W. 320, W. 80, W. 40, 40, 40, 40, 40, 40, 80,	r this Groves, and city.  It. Latity N.  27  00  86  01 40.01  99 39.99  06 80.06  02 80.02  98 79.98  15 2.69  18  35  36  81	losing er udes.  S.  23 28 30  40.12 39.69 40.00 40.18 40.35 40.36 80.81	rors. Departu E.  486.15 .30 .11	80.27 320.00 80.86 .60 .72 .65
	Subdivibound (N.bdy. India Vest bo	Bounda  Lignated sional ary, of Papag n Res.) undary, undary, ency, Totals Error	s.89°50° s.89°57° s.89°57° s.89°57° N.0°27° N.0°26° N.0°26° N.0°28° N.89°41° s.0°26° s.0°10° s.0°33° s.0°23° s.0°28°	unde departur aring.Dis W. 80, W. 320, W. 80, W. 40, 40, 40, 40, 40, 40, 80,	r this Groves, and city.  It. Latity N.  27  00  86  01 40.01  99 39.99  06 80.06  02 80.02  98 79.98  15 2.69  18  35  36  81	losing er udes.  S.  23 28 30  40.12 39.69 40.00 40.18 40.35 40.36 80.81	rors. Departu E.  486.15 .30 .11	80.27 320.00 80.86 .60 .72 .65

```
Survey of part of Subdivision of Township 15 S. 13.12 E.
Chains.
           From the reestablished cor. of secs. 23,24, 25 and 26, on
                the N.bdy of the Papago Indian Reservation, here inbefore
                described.
 North, bet. secs.23 and 24.

Over level land, thru. dense brush.

40.00 Set and iron post 3 ft.long, 1 in. in diam., 26 ins. in the ground, for 4 sec.cor., marked on brass cap,
                                                  1523 | S24
                                                     1915
                dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth 3\frac{1}{2} ft. base, 1\frac{1}{2} ft. high, W.
                 of cor.
  42.18 Road brs.NE. and SW.
80.00 Set an iron post 3 ft.long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 13,14, 23 and 24, marked on
                 brass cap,
                                                  T15SIR12E
                                                    sí4 s13
s23 s24
                dig pits 18x18x12 ins., in each sec. 51 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
            Land, level.
            Soil, sandy loam, dry, medium texture, 1st rate.
            No timber.
            Undergrowth, greasewood and mesquite.
              East, on a random line, bet. secs. 13 and 24.
40.00 Set temp. 2 sec. cor.
80.90 Intersect E bdy. of Tp. (Santa Cruz Guide Meridian) 28 lks.
S. of the reestablished cor. of secs. 13 and 24, hereinbe-
                 fore described.
  Thence,

$.89 48'W., on a true line, bet. secs.13 and 24.

Over level land, thru.dense brush.

15.40 Road brs.NW. and SE.
 29.20 Wash, 20 lks.wide, course NE.
31.30 Road brs.NW. and SE.
40.90 Set an iron post 3 ft.long, 1 in. indiam., 26 ins. in the ground, for 4 sec.cor., marked on brass cap,
                                                    1915
              . dig pits 18x18x12 ins., E. and W. of post, 3 ft. dist., and
                 raise a mound of earth, 3\frac{1}{2} ft.base, 1\frac{1}{2} ft.high, N.of cor.
  69.80 Wash, 10 lks.wide, course NW.
  80.90 The cor.of secs.13,14,23 and 24.
            Land, level.
            Soil, sandy loam, dry, medium texture, 1st rate.
            No timber.
            Undergrowth, greasewood and mesquite.
 North, bet. secs. 13 and 14.

Over level land, thru.dense brush.

25.06 Road brs.E.and W.

33.20 Road brs.E.and W.

33.60 Wire fence brs. NW.and SE.

35.18 Wash, 15 lks.wide, course W.
  39.40 Wire fence brs.N. 20°E. and S.20°W.
```

```
Survey of part of Subdivision of Township 15 S. R.12 E.
Chains.
 40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for 2 sec.cor., marked on brass cap,
                                            ½$14;$13
                                              1915
               dig pits 18x18x12 ins., N.and S. of post, 3 ft.dist., and raise a mound of earth, 3\frac{1}{2} ft.base, 1\frac{1}{2} ft.high, W.
 of cor.
41.70 Wash, 20 lks.wide, course W.
51.30 Road brs.E. and W.
53.60 Road brs. E. and W.
 80.00 Set an iron post 3 ft.long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, marked on
               brass cap.
                                            T15s|R12E
                                             $11 | $12
$14 | $13
1915
              dig pits, 18x18x12 ins. in each secs. 5\frac{1}{2} ft.dist., and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.
           Land, level.
        Soil, sandy loam, dry, medium texture, 1st rate.
          No timber.
          Undergrowth, greasewood and mesquite.
          N.89 48 E., on a random line, bet. secs. 12 and 13.
  40.00 Set temp. sec.cor.
81.39 Intersect E bdy.of Tp., (Santa Cruz Guide Meridian), 1 lk.
               N. of the reestablished cor. of secs. 12 and 13, herein-
               before described.
           Thence, S.89'48'W., on a true line, bet. secs.12 and 13.
           Over rolling land, gradually descending thru. dense
               brush.
 41.39 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for 2 sec.cor., marked on brass cap,
                                               S12
                                               S13
               from which,
                         A palo verde, 4 ins.in diam., brs. N. 24 6 E., 70 lks.
                              dist., marked & S 12 B T.
                         A palo verde, 8 ins.diam., brs. S. 732°E., 94 lks.
                         dist., marked 5 S 13 B T. House, empty, brs. S. 28 5 °W.
  55.00 Over level land.
  56.70 House, empty, brs. S. 7°45'W.
  81.39 The cor. of secs. 11, 12, 13 and 14.
           Land, level and rolling.
          Soil, rocky; outcropping rock ledges, 4th rate. No timber.
           Undergrowth, greasewood, mesquite, cholla and palo verde.
           North, bet. secs. 11 and 12. Over level land, thru.dense brush.
 3.50 Wash,40 lks.wide, course W. 17.80 Wash,7 lks.wide, course W. 20.00 Ascend SW.slope.
 40.00 Set an iron post, 3 ft.long, 1 in. in diam., 26 ins. in the ground, for 4 sec.cor., marked on brass cap,
                                            를S11 S12
                                               1915
```

BOOK 3187

```
Survey of part of the. Subdivision of T. 15 S. R. 12 E.
 Chains.
            and raise a mound of stone, 2 ft. base, l^{\frac{1}{2}} ft. high, W.
            of cor.
           Descend gradual NW. slope.
  42.00
           Wash, 12 lks. wide, course SW. Ascend gradual S. slope. Road, bears NE. and SW.
  45.07
  50.00
           Old boiler in smelter ruins, bears W. 83 lks. dist.
  63.30
           Ridge, bears E. and W. 45 ft. above wash. Descend. Wash, 6 lks. wide, course NE. 30 ft. below ridge. Ascend.
  67.00
  71.10
           Spur NE. 20 ft. above wash, Descend.
  75.00
           Set an iron post, 3 ft. long, 2 ins. diam., 12 ins. in
  80.00
            the ground, in a mound of stone, for cor. of secs. 1, 2,
            11 and 12, marked on brass cap
                                           T15S R12E
                                            S2 | S1
                                            S11 S12
                                             1915
            and raise a mound of stone, 2 ft. base, l^{\frac{1}{2}} ft. high, W.
            of cor.
           15 ft. below spur.
           Land, rolling hills.
           Soil, rocky; 4th. rate.
           No timber.
           Undergrowth, greasewood, blackbrush, cholla and paloverde
           N. 89° 48' E. on a random line, bet. secs. 1 and 12. Set temp. \( \frac{1}{4} \) sec. cor. Intersect E. bdy. of To. (Sahta. Cruz Guide Mer.) 5° 1ks. N. of
  40.00
  82:37
            theoreestablished cor. of secs. 1&12, here inbefore described.
           S. 89° 50' W. on a true line bet. secs. 1 and 12.
           Ascend along SE. slope through dense brush.
           Spur S. 127 ft. above cor. Descend SW. slope.
   8.05
  17.00
           Over rolling land. 205 ft. below spur.
           Wash, 15 lks. wide, course NW. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
  38.07
  42.37
            ground, for \frac{1}{4} sec. cor., marked on brass cap
                                           S12
                                          1915
            and raise a mound of stone, 2 ft. base, l^{\frac{1}{2}} ft. high, N.
           Cross roads at their intersection, one bears NE. and SW.
  52.57
            and the other NW. and SE.
           Wash, 5 lks. wide, course NW.
Wash, 5 lks. wide, course NW.
Wash, 5 lks. wide, course N. and ascend gradual NE. slope.
The cor. of secs. 1, 2, 11 and 12.
  67.30
  70.00
  77.90
  82.37
           Land, rolling and mountainous.
           Soil, rocky; 4th. rate., except from 17.00 to 77.90 chs.
            which is sandy loam, dry, medium texture; lst. rate.
           No timber.
           Undergrowth, greasewood, paloverde, cholla and mesquite.
           North, bn a true line bet secs. 1 and 2.
           Descend gradual N. slope, through dense brush.
           Road, bears \mathbb{E}_{\bullet} and \mathbb{W}_{\bullet}
   5.20
           Wash, 7 lks. wide, course NW. and over rolling land.
  8.60
           Wash, 8 lks. wide, course W. Wash, 8 lks. wide, course W. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
   9.50
  12.80
  40.00
            ground, for \frac{1}{4} sec. cor., marked on brass cap \frac{1}{4}S2 | S1
```

```
16
        urvey of part of the Subdivision of T. 15 S.
       Chains.
                    dig pits, 18 \times 18 \times 12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                    high, W. of cor.
         76.90
                   Wash, 10 lks. wide, course W.
         81.23
                   Intersect N. bdy. of Tp. 209 lks. S. 89° 41' W. of the
                   cor. of secs. 35 and 36, T. 14 S. R. 12 E. hereinbefore described. At point of intersection,
Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
                    the ground, for closing cor. of secs. 1 and 2, marked on
                    brass, cap
                                                       T14S
                                             R12E S35 S36
                                                    CIC
S2 S1
                                                    T15S
                                                    1915
                    dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W., 3 ft., and S. of post, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
                  Land, level and rolling.
                  Soil, sandy loam, dry, medium texture; 1st. rate; except
                    S. 5.00 chs. which is rocky; 4th. rate.
                  No timber.
                  Undergrowth, greasewood, mesquite and blackbrush.
                   From the cor. of secs. 22, 23, 26&27, on the N.bdy. of the Pap-
                      ago Indian Reservation, which cor. has evidently, been re-
                      established by the U.S. Indian Service, an iron post 3 ins.
                    indiam 12 instabove ground, marked on brass cap,
                                                       T15S R12E
S22 S23
S27 S26
                                                           PIR
                                                          1915
                   Witnessed by 4 bearing trees.
                  N. 0° 01' W. bet. secs. 22 and 23. Over level land, through dense brush.
        40.00
                  Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
                    ground, for \frac{1}{4} sec. cor., marked on brass cap \frac{1}{4}S22 S23
                                                          1915
                  dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft. high, W. of cor. Wash, 10 lks. wide, course NE. Wire fence, bears E. and W. brush becomes very scattering.
        40.60
        64.63
        74.00
                  Across pond.
        75.24
                  Embankment 4 ft. high, bears E. and W. S. bank of pond.
                  Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
        80.00
                   the ground, for cor. of secs. 14, 15, 22 and 23, marked
                   on brass cap
                                                       T15S R12E
                                                        S15|S14
                                                        S221523
                                                          1915
                   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.
```

From this cor. Domingo Valencia house bears S. 37° 39' E.

Soil, sandy loam, dry, medium texture; 1st. rate.

Undergrowth, greasewood, mesquite and cholla.

9.70 chs. dist.

Land, level.

No timber.

Set temp.  $\frac{1}{4}$  sec. cor.

40.00

18.

```
Survey of part of the Subdivision of T. 15 S. R. 12 E.
 80.17
           Intersect N. and S. line, 3 lks. S. of the cor. of secs.
            11, 12, 13 and 14.
           Thence
           S. 89° 52' W. on a true line, bet. secs. 11 and 14.
           Over level land, through dense brush.
          Wash, 15 lks. wide, course SW. Road, bears NE. and SW.
 14.78
 17.00
 40.08\frac{1}{2} Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
           ground, for 4 sec. cor., marked on brass cap
                                               Sll
                                              1915
            dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
            high, N. of cor.
           The cor. of secs. 210,11,14 and 15%
 80.17
           Land, level.
           Soil, sandy loam, dry, medium texture; 1st. zzte.
           No timber.
           Undergrowth, greasewood and mesquite.
           N. 0° Ol' W. bet. secs. 10 and 11. Over level land, through dense brush.
          Wash, 15 lks. wide, course NW.

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for \(\frac{1}{4}\) sec. cor., marked on brass cap
\(\frac{1}{4}\)S10 |S11
  7.60
 40.00
                                                 1915
            dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
            high, W. of cor.
          Road, bears NW. and SE. Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, marked on
 54.60
80.00
            brass cap
                                               T15S R12E
                                                S3 | S2
                                                S10 S11
                                                 1915
           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. o
            of cor.
           Land, level.
          Soil, sandy loam, dry, medium texture; 1st. rate.
          No timber.
           Undergrowth, greasewood and mesquite.
          N. 89° 52' E. on a random line, bet. secs. 2 and 11
          Set temp. \frac{1}{4} sec. cor. Intersect N. and S. line, 2 lks. N. of the cor. of secs.
40.00
80.18
           1, 2, 11 and 12.
          Thence
          S. 89° 53' W. on a true line, bet. secs. 2 and 11.
          Descend along gradual NW. slope, through dense brush. Road, bears NE. and SW. and over level land.
14.30
40.09
          Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
           ground, for \( \frac{1}{4} \) sec. cor., marked on brass cap
                                               SII
                                             1915
           dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
```

```
Survey of part of the Subdivision of T. 15 S. R. 12 E.
                                                                                            19
Chains.
           high, N. of cor.
          The cor. of secs. 2, 3, 10 and 11.
 80.18
          Land, level and hilly.
Soil, 0 to 14.30 chs., rocky; 4th. rate, 14.30 to 80.18
           chs., sandy loam, dry, medium texture; 1st. rate.
          No timber.
          Undergrowth, greasewood, mesquite and blackbrush.
          N. 0° 01' W. on a true line, bet sees. 2 and 3.
          Over level land, through dense brush.
          Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 40.00
           ground, for ½ sec. cor., marked on brass cap ½S3 S2
                                             1915
         dig pits, 18 \times 18 \times 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft. high, W. of cor. Road, bears E. and W.
 77.00
          Intersect N. bdy. of Tp. 228 lks. S. 89° 41' W. of the
 80.83
           cor. of secs. 34 and 35, T. 14 S. R. 12 E., hereinbefored described. At point of intersection,
          Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
           the ground, for closing cor. of secs. 2 and 3, marked
           on brass cap
                                           T14S
                                  R12E S34 S35
                                         S3 S2
                                         T15S
                                         1915
           dig pits, 24 x 18 x 12 ins. crosswise on each line, E. and W. 3 ft., and S. of post, 7 ft. dist.; and raise a
           mound of earth, 4 ft. base, 2 ft. high, S. of cor.
          Land, level.
          Soil, sandy loam, dry, medium texture; lst. rate.
          No timber.
          Undergrowth, greasewood, mesquite and blackbrush.
          From the cor. of secs. 21, 22, 27 and 28, on N. bdy. of the Pap-I cago Indian Reservation, which cor. has evidently, been co-
           is established by the U.S. Indian Service, anvironopost 3 ins.
           mindiam. physins. above ground, marked on brass cap,
                                           T15S R12E
                                             S21 S22
                                             S28 S27
                                               PIR
                                              1915
           witnessed by 4 bearing trees.
          N. 0° 01' W. bet. secs. 21 and 22.
Over level land, through dense brush.
Dim road, bears NE. and SW.
  1.39
23.49
          Road, bears NE. and SW.
 40.00
          Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
           ground, for \( \frac{1}{4} \) sec. cor., marked on brass cap
                                            ½S21|S22
                                              1915
           dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
           high, W. of cor.
          Brush becomes scattering.
50.00
          Set an iron postm 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, marked
80.00
           on barss cap
                                           T15S R12E
                                             S16 S15
                                             S21 S22
```

#### 20 Survey of part of the . Subdivision of T. 15 S. R. 12 E.

urvey of	part of the Subdivision of T. 15 S. R. 12 E.
Chains.	dig pits, $18 \times 18 \times 12$ 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. Land, level. Soil, sandy loam, dry, medium texture; lst. rate.
	No timber. Undergrowth, mesquite, cholla and paloverde.
40.00	East on a random line, bet. secs. 15 and 22.
40.00	Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 26 lks. S. of the cor. of secs. 14, 15, 22 and 23. Thence
3.77 4.86	S. 89° 49' W. on a true line, bet. secs. 15 and 22.  Over level land, through very scattering brush.  Ditch, 8 lks. wide, course N.  Wire fence, bears N. and S.
18.40 40.10	Road, bears NE. and SW. Set am iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for 4 sec. cor., marked on brass cap  S15
	$\frac{2}{522}$ 1915 dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
80.20	high, N. of cor.  The cor. of secs. 15, 16, 21 and 22.  Land, level.  Soil, sandy loam, dry, medium texture; lst. rate.
	No timber. Undergrowth, mesquite and cholla.
11.40	N. 0° 01' W. bet. secs. 15 and 16. Over level land, through scattering brush. Wash, 15 lks. wide, course NW. Leave brush.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for \( \frac{1}{4} \) sec. cor., marked on brass cap \( \frac{1}{4} \) S16 S15 \( \frac{1}{2} \) S15
80.00	dig pits, $18 \times 18 \times 12$ ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
00.00	the ground, for cor. of secs. 9, 10, 15, and 16, marked on brass cap
	\$9   \$10 \$16   \$15 1915
	dig pits, $18 \times 18 \times 12$ 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.
	Land, level. Soil, sandy loam, dry, medium texture; lst. rate. No timber.
	Undergrowth, mesquite and cholla.
, ,	• • • •
40.00 80.10	N. 89° 49' E. on a random line, bet. secs. 10 and 15. Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 2 lks. N. of the cor. of secs.
00.10	Linear Death of Lines of the or one of Books

```
Survey of part of the Subdivision of T. 15 S. R. 12 E.
22
       Chains.
                   dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                   high, N. of cor.
        80.08
                   The cor. of secs. 3, 4, 9 and 10.
                  Land, level.
                  Soil, sandy loam, dry, medium texture; 1st. rate.
                  No timber.
                  Undergrowth, mesquite, blackbrush and cholla.
                  N. 0° 01'W., on a true line, bet. secs. 3 and 4. Over level land, through dense brush. Road, bears NE. and SW. Road, bears E. and W.
        34.90
        39.00
        40.00
                  Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
                    ground, for 4 sec. cor., marked on brass cap
                                                       4S4 S3
                                                        1915
                    dig pits, 18 \times 18 \times 12 ins., N. and S. of post, 3 ft.
                    dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                    high, W. of cor.
                  Ascend along SW. slope of rocky hill.
        44.00
                  Spur W. 80 ft. above 44.00 chn. point. Descend.
        56.00
                   Over level land, 70 ft. below spur.
        64.00
                  SW. cor. of brush shed.
        67.90
                  SW. cor. of Francisco Canes House bears E. 74 lks. dist.
        69.00
                  Lime kiln bears E. 5 lks. dist.
        69.30
                  Wire fence, bears NW. and SE.
        70.18
                  Wash, 8 lks. wide, course SW.
Wire fence, bears E. and W.
Intersect N. bdy. of Tp. 245 lks. S. 89° 41' W. of the cor. of secs. 33 and 34, T. 14 S. R. 12 E. horeinbefore described, At point of intersection,
        73.60
        79.40
        80.70
                  Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
                    the ground, for closing cor. of secs. 3 and 4, marked
                    on brass cap
                                                       T14S
                                              R12E\frac{S33|S34}{C|C}
                                                    S4 S3
                                                    T15S
                                                    1915
                    dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W., 3 ft., and S. of post., 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
                   Land, level and hilly.
                   Soil, sandy loam, dry, medium texture; 1st. rate; except
                    over hill, which is rocky; 4th. rate.
                   No timber.
                   Undergrowth, mesquite, greasewood and blackbrush.
                   From the cor. of secs. 20, 21, 28 & 29, on the N. bdy. of the Papago Indian Reservation, which cor. has evidently been I reestablished by the U.S. Indian Service, an iron post 3 ins. in diam., 12 ins. above, ground, marked on brass, cap,
                    marked on brace cap
                                                       T15S R12E
                                                        S20 | S21
S29 | S28
                                                           PIR
                                                          1915
                    with pits, 18 x 18 x 12 ins., in each sec. 5\frac{1}{2} ft. dist.;
                    and a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
                   N. 0° 02' W. bet. secs. 20 and 21.
```

Over level land, through dense brush.

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the

Road, bears E. and W.

13.81

**40.00**○

```
Survey of part of Assubdivision of T. 15 S. R. 12 E.
Chains.
                      ground, for \frac{1}{4} sec. cor., marked on brass cap \frac{1}{4}S20 | S21
                                                                                        1915
                      dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.
                      dist., and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                      high, W. of cor.
                   Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
  80.00
                      the ground, for cor. of secs. 16, 17, 20 and 21, marked
                      on brass cap
                                                                                   T15S R12E
                                                                                      S17 S16
                                                                                      S20 S21
                                                                                        1915
                     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.
                   Land, level.
Soil, sandy loam, dry, medium texture; lst. rate.
                   No timber.
                   Undergrowth, mesquite and cholla.
                   East on a random line, bet. secs. 16 and 21.
 40.00
                   Set temp. \frac{1}{4} sec. cor.
 80.16
                   Intersect N. and S. line, 21 lks. S. of the cor. of secs.
                     15, 16, 21 and 22.
                   Thence
                   S. 89° 51' W. on a true line, bet. secs. 16 and 21.
                   Over level land, through dense brush.
                   Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
 40.08
                     ground, for \frac{1}{4} sec. cor., marked on brass cap
                                                                                   S16
                                                                                1915
                     dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                     high, N. of cor.
                   The cor. of secs. 16, 17, 20 and 21.
 80.16
                   Land, level.
                   Soil, sandy loam, dry, medium texture; 1st. rate.
                   No timber.
                   Undergrowth, mesquite and cholla.
                 N. 0° 02' W. bet. secs. 16 and 17.

Over level land, through dense brush.

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for \( \frac{1}{4} \) sec. cor., marked on brass cap

\[ \frac{1}{4} \) \( \frac{1}{4} 
 40.00
                                                                                       1915
                    dig pits, 18 \times 18 \times 12 ins., N. and S. of post., 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                    high, W. of cor.
 80.00
                  Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
                    the ground, for cor. of secs. 8, 9, 16 and 17, marked
                     on barss cap
                                                                                  T15S R12E
                                                                                     S8 | S9
                                                                                     S17 S16
                                                                                       1915
                    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.
                  Land, level.
                  Soil, sandy loam, dry, medium texture; 1st. rate.
                  No timber.
```

```
24 Survey of part of the Subdivision of T. 15 S. R. 12 E.
       Chains. Undergrowth, mesquite and cholla.
                   N. 89° 51' E. on a random line, bet. secs. 9 and 16. Set temp. \frac{1}{4} sec. cor.
         40.00
                   Intersect N. and S. line, 2 lks. S. of the cor. of secs.
        80.16
                     9, 10, 15 and 16.
                   Thence
                   S. 89° 50' W. on a true line, bet. secs. 9 and 16. Over level land.
                   Wash, 15 lks. wide, course NW. and enter dense brush. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for 4 sec. cor., marked on brass cap
        23.76
        40.08
                                                          S16
                                                         1915
                     dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                   high, N. of cor. Wash, 10 lks. wide, course NW.
         58.36
                   The cor. of secs. 8, 9, 16 and 17.
        80.16
                   Land, level.
                   Soil, sandy loam, dry, medium texture; 1st. rate.
                   No timber.
                   Undergrowth, mesquite and cholla.
                   N. 0° 02' W. bet. secs. 8 and 9. Over level land, through dense brush.
                   Road, bears E. and W.
         13.00
                   Wash, 8 lks. wide, course W.
         13.70
                  Wash, 8 1ks. wide, course W. Wash, 12 1ks. wide, course W. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for \( \frac{1}{4} \) sec. cor., marked on brass cap \( \frac{1}{4} \)S8 \( \sigma \)9
         31.40
         40.00
                                                            1915
                     dig pits, 18 x 18 x 12 ins., N. and S. of post.,3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                   high, W. of cor.
Road, bears E. and W.
Wash, 15 lks. wide, course W.
         51.60
         52.20
         65.51
                   Wash, 15 lks. wide, course W.
                   Road, bears NE. and SW.
         71.10
                   Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, marked on
         80.00
                     brass cap
                                                          T15S R12E
                                                             S5 | S4
S8 | S9
                                                             1915
                     dig pits, 18 \times 18 \times 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.
                    Land, level.
                    Soil, sandy loam, dry, medium texture; 1st. rate.
                   No timber.
                    Undergrowth, mesquite and blaukbrush.
                   N. 89° 50' E. on a random line, bet. secs. 4 and 9. Set temp. \frac{1}{4} sec. cor.
         40.00
                   Intersect N. and S. line, 6 lks. N. of the cor. of secs.
         80.12
                     3, 4, 9 and 10.
                    Thence
```

```
Survey of part of . Subdivision of T. 15 S. R. 12 E.
                                                                                   21
Chians.
          S. 89° 53' W. on a true line, bet. secs. 4 and 9.
          Over level land, through dense brush.
          Set an iron post, 3 ft. long; 1 in. diam., 26 ins. in the
 40.06
           ground, for \frac{1}{4} sec. cor., marked on brass cap
                                          1915
           dig pits, 18 x 18 x 12, ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
           high, N. of cor.
 44.40
          Road, bears NE. and SW.
          The cor. of secs. 4, 5, 8 and 9.
80.12
          Land, level.
          Soil, sandy loam, dry. medium texture; 1st. rate.
          No timber.
          Undergrowth, mesquite and blackbrush.
         N. 0° 02' W. on a true line, bet secs. 4 and 5.
          Over level land, through dense brush.
         Wash, 20 lks. wide, course SW. Wash, 10 lks. wide, course W. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
  3.60
33.50
40.00
           ground, for \(\frac{1}{4}\) sec. cor. marked on brass cap
                                          <del>1</del>S5|S4-
                                           1915
           dig pits, 18,x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
         high, W. of cor.
Wash, 10 lks. wide, course W.
54.20
         Wash, 8 lks. wide, course W.
Intersect N. bdy. of Tp. 259 lks. S. 89° 41' W. of the cor. of secs. 32 and 33, T. 14 S. R. 12 E. hereinbefore
79.20
80.32
           described. At point of intersection,
         Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
         the ground, for closing cor. of secs. 4 and 5, marked
           on brass cap
                                           T14S
                                 R12E \frac{S32 \mid S33}{C \mid C}
                                       S5 S4
                                        T15S
                                        1915
          dig pits, 24 x 18 x 12 ins., crosswise on each line, E.
          and W. 3 ft., and S. of post, 7 ft. dist.; and raise a mound of earth, 4 ft/ base, 2 ft. high, S. of cor.
         Land, level.
         Soil, sandy loam, dry, medium texture; 1st. rate.
         No timber.
         Undergrowth, mesquite and blackbrush.
         From the reestablished corner of secs., 19, 20, 29, and 30,
           inh here in before described,
         N. 0° 02' W. bet. secs. 19 and 20. Over level land, through dense brush.
14.32
         Road, bears E. and W.
40.00
         Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
          ground, for \frac{1}{4} sec. cor., marked on brass cap \frac{1}{4}S19 S20
                                            1915
          dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.
          dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
          high, W. of cor.
43.00
         Road, bears E. and W.
```

۱ ۷		
	80.00	Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, marked
İ		on brass cap T15S R12E
		S18 S17
		\$1 <mark>9 \$</mark> 20 1915
	ć .	dig pits, $18 \times 18 \times 12$ 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.
		Land, level. Soil, sandy loam, dry, medium texture; lst. rate.
		No timber. Undergrowth, mesquite, blackbrush and cholla.
	40.00	East on a random line, bet. secs. 17 and 20.
	40.00 80.22	Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 22 lks, S. of the cor. of secs. 16, 17, 20 and 21,
		Thence S. 89° 51' W. on a true line, bet. secs. 17 and 20.
	40.11	Over level land, through dense brush. Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap S17
	•	\$20
	2	dig pits, $18 \times 18 \times 12$ ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	80.22	The cor. of secs. 17, 18, 19 and 20. Land, level.
	•	Soil, sandy loam, dry, medium texture; lst. rate. No timber. Undergrowth, mesquite and cholla.
	40.00	West on a random line, bet. secs. 18 and 19. Set temp. $\frac{1}{4}$ sec. cor.
	81.56	Intersect W. bdy. of Tp. 26 lks. N. of old cor. of secs. 13, 18, 19 and 24, hereinbefore described.
		Thence N. 89° 49' E. on a true line, bet. secs. 18 and 19. Over level land, through dense brush.
	41.56	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap
		$\frac{1}{4}$
	n - 16 - 1	S19 1915
		dig pits, $18 \times 18 \times 12$ ins., E. and W. of post., 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
	81.56	high, N. of cor. The cor. of secs. 17, 18, 19 and 20.
		Land, level. Soil, sandy loam, dry, medium texture; lst. rate.
		No timber. Undergrowth, mesquite, blackbrush and cholla.
1	^	
		N. 0° 02' W. bet. secs. 17 and 18. Over level land, through dense brush.

BOOK 3187

	Surv	ey of part of Subdivision of T. 15 S. R. 12 E. 28
	Chains.	ground, for $\frac{1}{4}$ sec. cor., marked on brass cap $\frac{1}{4}$ S18 S17
		dig pits, $18 \times 18 \times 12$ ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	80.00	Set an iron post, 3 ft. long, 2 in. diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, marked on brass cap
		T15S R12E S7   S8 S18 S17
		1915 dig pits, $18 \times 18 \times 12$ 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. Land, level.
	,	Soil, sandy loam, dry, medium texture; lst. rate.  No timber.  Undergrowth, mesquite, blackbrush and cholla.
		N. 89° 51' E. on a random line, bet. secs. 8 and 17.
	40.00 80.18	Set temp. $\frac{1}{4}$ sec. cor. Intersect N. and S. line, 3 lks. N. of the cor. of secs. 8, 9, 16 and 17.
		Thence S. 89° 52' W. on a true line, bet. secs. 8 and 17. Over level land, through dense brush.
	40.09	Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked on brass cap  S8
		$\frac{\frac{1}{4}}{517}$ 1915
		dig pits, $18 \times 18 \times 12$ ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
-	80.18	The cor. of secs. 7, 8, 17 and 18. Land, level.
The same of the sa		Soil, sandy loam, dry, medium texture; lst. rate.  No timber.  Undergrowth, mesquite, blackbrush and cholla.
	40.00	S. 89° 49' W. on a random line, bet. secs. 7 and 18. Set temp. $\frac{1}{4}$ sec. cor.
	82.00	Intersect W. bdy. of Tp. 2 lks. S. of old cor. of secs. 7, 12, 13 and 18, hereinbefore described. Thence
	42.00	N. 89° 50' E. on a true line, bet. secs. 7 and 18.  Over level land, through dense brush.  Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
	4€,00	ground, for \(\frac{1}{4}\) sec. cor., marked on brass cap
		\$\frac{1}{518}\$ 1915
		dig pits, $18 \times 18 \times 12$ ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	82.00	The cor. of secs. 7, 8, 17 and 18. Land, level. Soil, sandy loam, dry, medium texture; lst. rate.
Company of the Compan		No timber. Undergrowth, mesquite, blackbrush and cholla.
AND THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN THE PERSON N	• .	

```
28
          Sasurvey of parts of Bubdivision of T. 15 S. R. 12 E.
          Chains.
                      N. 0° 02' W. bet. secs. 7 and 8.
                      Over level land, through dense brush.
             5.00
                      Leave brush.
                      Road, bears E. and W.
           15.20
                     Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for \frac{1}{4} sec. cor., marked on brass cap \frac{1}{4}S7 | S8
           40.00
                                                             1915
                       dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                       high, W. of cor.
                      Road, bears NE. and SW. Road, bears NE. and SW
            40.58
            42.00
                      Wash, 25 lks. wide, course W. Road, bears E. and W.
            67.40
           72.30
                      Wash, 12 lks. wide, course W. Wash, 25 lks. wide, course NW. and through dense brush. Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, marked on
           73.30
            79.40
           80.00
                       brass cap
                                                           T15S R12E
                                                              S6|S5
                                                              S7 S8
                                                              1915
                       from which
                                A mesquite, 4 ins. diam., bears S. 12\frac{1}{2}^{\circ} E. 100 lks. dist., marked T15SR12ES8BT
                                A mesquite, 6 ins. diam., bears S. 59\frac{3}{4}^{\circ} W. 102 lks. dist., marked T15SR12ES7BT
                       No other bearings 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.
                      Land, level.
                      Soil, sandy loam, dry, medium texture; 1st. rate.
                      No timber.
                      Undergrowth, mesquite.
                      N. 89° 52' E. on a random line, bet. secs. 5 and 8.
                      Set temp. \frac{1}{4} sec. cor.
            40.00
                      Intersect the corner of secs. 4, 5, 8 and 9, 1, 4, 5, 6,
            80.20
                      Thence
                      S. 89° 52' W. on a true line, bet. secs. 5 and 8.
                      Over level land, through dense brush.
                      Wash, 15 lks. wide, course NW. Set an iron post, 3 ft. lomg, 1 in. diam., 26 ins. in the
            21.53
            40.10
                        ground, for \frac{1}{4} sec. cor., marked on brass cap
                                                          1915
                        dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                        high, N. of cor.
                      Road, bears NW. and SE.
            59.83
                      The cor. of secs. 5, 6, 7 and 8.
            80.20
                      Land, level.
                      Soil, sandy loam, dry, medium texture; 1st. rate.
                      Undergrowth, mesquite and blackbrush.
                      S. 89° 50' W. on a random line, bet. secs. 6 and 7. Set temp. \frac{1}{4} sec. cor. Intersect W. bdy. of Tp. 7 lks. S. of the reestablished
            40.00
            82.54
```

```
Survey of part of The . Subdivision of T. 15 S. R. 12 E.
     Chains.
                 loor of secs. 1,6,7 and 12, here inbefore described.
                  Thence
                 N. 89° 53' E. on a true line, bet. secs. 6 and 7.
                 Over level land, through dense brush.
                 Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the ground, for \( \frac{1}{4} \) sec. cor., marked on brass cap \( \frac{1}{4} \)
      42.54
                                                      1915
                   dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                 high, N. of cor.
Wash, 15 lks. wide, course NW.
Road, bears NW. and SE.
      52.90
      59.80
                 Wash, 25 lks, wide, course NW.
      80.65
      82.54
                 The cor. of secs. 5, 6, 7 and 8.
                 Land, level. Soil, sandy loam, dry, medium texture; 1st. rate.
                 No timber.
                 Undergrowth, mesquite.
                 N. 0° 02' W. on a true line, bet secs. 5 and 6. Over level land, through dense brush.
                 Wash, 15 lks, wide, course W.
Road, bears NW. and SE.
Wash, 15 lks. wide, course W.
Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
        0.76
        8.70
      25.66
      40.00
                  ground, for \frac{1}{4} sec. cor., marked on brass cap \frac{1}{4}S6 \mid S5
                                                          1915
                  dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3\frac{1}{2} ft. base, 1\frac{1}{2} ft.
                  high, W. of cor.
                 Intersect N. bdy. of Tp. 290 lks. S. 89° 41' W. of the cor. of secs. 31 and 32, T. 14 S. R. 12 E.hereinbefored described. At point of intersection,
      80.15
                 Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in
                   the ground, for closing cor. of secs. 5 and 6, marked on
                   brass cap
                                                         T14S
                                             R12E S31 S32
                                                     S6 S5
                                                     T15S
                                                     1915
                  dig pits, 18 \times 18 \times 12 ins., crosswise on each line, E. and W., 3 ft., and S. of post, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
                 Land, level.
                 Soil, sandy loam, dry, medium texture; 1st. rate.
                 No timber.
                 Undergrowth, mesquite and blackbrush.
                                             GENERAL DESCRIPTION.
                 The extreme NE. cor. of this township is hilly and the
                   soil rocky, the rest of the township is level, and the
                  soil a sandy loam, which, with water, would be very fertile. Extensive copper mining has been carried on in secs. 11 and 12, but the claims are now idle. Lime
                   stone is quarried in sec 3. and burned for lime on the ground. There is no water or timber in the township,
                   which is covered by a dense growth of greasewood and mes
```

quite undergrowth. There is one settler each in secs. 3,

13 and 14.

30							,	
à ·		,			uA" Arizo	ona,		
		` '	Towns	hip 15 Sou	ith, Range	12 East,	• •	
				e de la companya de La companya de la co				•
•			,	DATE I	DIAGRAM.			
	^ , <b>,</b>	17 7-15	11-7-15	11-7-15	l 11-7-15	( 1I-7 <b>-</b> 15	11 <b>-</b> 7-15	
	14	11-7-15	77-/-73	L. 77.	- r	; r		5
	<i>[ED:</i>	9 11 <b>-14</b>	2 1.11.	4 [1]	3 6-11	2 & - 11	l.	11-1-
	RESURVEYEL	11-14-15	11-14-15	11-12-15	11-11-15 ~	11 <b>-</b> 9-15	11-9-15	idian
	7-E1-1	7 1911	8	9 11	10 11-6-11	11 8	12	II-I-I
		11-13-15 Vi	11-13-15	بر بر		11-9-15 v	11-8-15	[-]5   II-] ruz Guide . RESURVEYED
,	11-13-1	18 11-4-15	17 II 11-4-15	7./55. F	15 R12E.11 11-2-15	14 & II 11-2-15	e.	FO
	<i>RETRACED</i> 13-15   11	19 4-1	50 4	21 2	22 -12	23 -08-	24	5anta
	11	1-4-15	` [7]	11-	급	0.1	10-39-15	F_
		RETRACED 30	<sup>,</sup> 29	28	27	26	RETRACED 25	
	. 4	,	PAPAGO	•	RESERV.	•		
		31	<b>3</b> :2	33	34	35	36	
	L							4
	•	***	3 rd	5+d.	Parallel	Jouth	-	
		1			es as show 3. Surveyo		diagram,	
								_

Bdy.of Papago Indian Reservation.

ECCK CO

4--680

#### FIELD ASSISTANTS.

NAMES.	CAPACITY.
G. S.Strong,	Cornerman,
H. C. Bennett,	Cornerman,
D. B. Alleman,	Chainman,
W. E. Stutzman,	Flagman,
E. A. Starr,	Cornerman,
R. H. Brown,	Axman,
R. G. Butler,	Cornerman & Flagman,
H. R. Bedient,	Chainman & Cornerman
F. G. Ayers,	Chainman,
······	
-	

## CERTIFICATE OF UNITED STATES SURVEYOR.

8001. John F. Hesse, U.S. Surveyor, hereby certify upon honor that, in pursuance
COT, John F. Hesse, U.S. Surveyor, hereby certify upon honor that, in pursuance
of special instructions received from the U.S. Surveyor General, for Group 57, Arizona,
bearing date of the _lst day ofOctober,, 1915 , I have well, faithfully, and truly
in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instruc-
tions, and the laws of the United States, surveyed all those parts or portions of the .South boundary
of Township 14 South, Range 12 East, and the Subdivision lines of Townsh
15 South, Range 12 East; retraced all those parts or portions of the West bdy and
Subdivision lines of Township 15 South, Range 12 East, and Resurveyed
all those parts or portions of the mast and West boundaries of Town-
ship 15 South, Range 12 East, of the Gila and Salt
River Base and Meridian, in the State of Arizona, which are represented by
the diagram on page 30 hereof and in the foregoing field notes as having been executed by me, and under my direction; and that all the corners of
retracements and resurveys said surveys have been established and perpetuated in strict accordance with the Manual of Surveying Instruc-
tions, and the special written instructions of the U. S. Surveyor General, for Group 57, Arizona.
and in the specific manner described in the field notes, and that the foregoing are the original field notes of
such surveys retracements and resurveys
John J. Heise U. S. Surveyor.
U. S. Surveyor.
APPROVAL.
Office of the United States Surveyor General,
Phoenix, Arizona, October 14, 1918
The foregoing field notes of the survey of the South bdy of Township 14 South,
Range 12 East, the Resurvey of parts of the East and West bdrs., the
Retracement of part of the West bdy and Subdivision lines, and completion of the
survey of the Subdivision lines of Township 15 South, Range 12 East,
of the Gila and Salt River Base and Meridian, in the State of Arizona,
executed by John F. Hesse, U. S. Surveyor,
under his special instructions dated October 1,1915, for Group 57, Arizoma, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.
aney describe, are hereby approved.
U. S. Surveyor General.
I certify that the foregoing transcript of the field notes of the above described surveys in
, has been correctly copied from the original notes on file in this office.