

3639

GROUP NO. 121.

4-679

BOOK 3639

FIELD NOTES

OF THE SURVEY OF THE

Gila and Salt River Meridian, thru

Townships 35 and 36 North, and part of Township 34 North.

Survey of part of the boundary between

Townships 33 and 34 North, Ranges 2 and 3 East.

Survey of part of the Subdivision lines of

Township 34 North, Range 1 East,

Township 34 North, Range 2 East,

Township 33 North, Range 3 East, and

Township 33 North, Range 4 East.

Of the GILA and SALT RIVER BASE and Meridian,

In the State of ARIZONA.

EXECUTED BY

BENJAMIN J. KINSEY, U. S. Transitman

In the capacity of U. S. Surveyor, under Special Instructions dated Sept. 19, 1922, issued by the United States Surveyor General to govern surveys included in Group No. 121, which were approved by the Commissioner of the General Land Office, 191, and Assignment Instructions dated Sept. 15, 1922,

Survey commenced October 7, 1922.

Survey completed November 8, 1922.

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INDEX DIAGRAM.

Township -----, Range -----

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	29	28	27	26	25
31	32	33	34	35	36

The surveys hereinafter described, executed on dates shown on index diagram hereof, by Benjamin J. Kinsey, U.S. Transitman, using "Rocky Mountain Favorite" solar transit No. 10125, with U-shaped standards, $4\frac{1}{2}$ inch vertical circle, $4\frac{1}{2}$ inch horizontal circle and Smith solar attachment; unless otherwise specified all azimuth determinations are accomplished with the solar attachment.

October 7, 1922. In camp, in sec. 31, T. 37 N., R. 1 E., near cor. T. 37 N., Rs. 1 E. and 1 W., Lat. $36^{\circ} 34' 20''$ N., Long. $112^{\circ} 21' 23''$ W., I examine the adjustments of the transit and correct small errors in plate levels and collimation; then to test the solar apparatus by comparing its indications during the a.m. and p.m. hours, with a meridian established by Polaris observation proceed as follows:

At camp, Oct. 7, 1922, at same station as above, at 6h 34 m., p.m., l.m.t., observe Polaris at eastern elongation, making four observations, two each with the telescope in direct and reversed positions, and mark the mean point in the line thus determined by a tack in a peg driven firmly in the ground, about 6 chs. N.

Azimuth of Polaris at eastern elongation : $1^{\circ} 23' 00''$

October, 8. 1922. Lay off the azimuth of Polaris, $1^{\circ} 23' 00''$ to the west and mark the meridian thus determined by a tack in a peg driven firmly in the ground, about 6 chs. N. of station.

At 9h00m., a.m., l.m.t., set off $36^{\circ} 34' 20''$ on lat. arc, $5^{\circ} 44' S.$ on decl. arc, and determine a meridian with the solar which agrees with the true meridian.

At 12h00m., apt. noon, with the lat. arc, unchanged observe the sun on the meridian. The resultant reading of the decl. arc is $5^{\circ} 47' S.$, which agrees with the computed declination of the sun.

At 3h00m., p.m., with the lat. arc unchanged, set off $5^{\circ} 50'$ on the decl. arc and determine a meridian, which agrees with the true meridian.

As all of the observations during the usual hours of solar work come within $1' 30''$ of the true meridian conclude that the adjustments of the instrument are satisfactory.

August, 8. 1922., in approximate latitude $36^{\circ} 34' N.$, and longitude $112^{\circ} 20' 30''$, I make a meridian observation of the sun for time and latitude, observing simultaneously the altitude of the suns lower limb and the transit of the suns west limb, reversing the telescope and observing simultaneously the altitude of the suns upper limb and the transit of the suns east limb:

Mean observed altitude	: $47^{\circ} 38' 10''$
Reduced latitude	: $36^{\circ} 34' 20''$
Mean watch time of obsn.	: 12h23m35s.
Watch fast of local mean time:	6m50s.

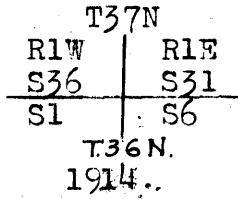
All distances unless otherwise specified are made with a 5-chain tape, Lufkin make, compared with a Chesterman Standard and found correct. The measurements are made on the slope, the vertical angle determined and reduced to a horizontal value. All measurements on the Principal Meridian are duplicated by the same set of chainmen, the mean of the two distances determined being used.

Survey of the Gila & Salt River Meridian thru T. 36 N.,
preliminary to

3039

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

Begin at the standard cor. of Ts. 36 and 37 N., Rs. 1 E.,
and 1 W., established by Jos. C. Thoma, U.S. Surveyor,
1914, which is an iron post 3 ins. in diam., projec-
ting 12 ins. above ground, with brass cap marked



from which

- a yellow pine, 30 ins. in diam., brs. N.61°W., 72 lks.
dist., marked T37N R1W S36 BT
- a jack pine, 16 ins. in diam., brs. N.59°E., 10 lks.
dist., marked T37N R1E S31 BT
- a jack pine, 10 ins. in diam., brs. S.17°E., 47 lks.
dist., marked T36N R1E S6 BT
- a jack pine, 18 ins. in diam., brs. S.71°W., 59 lks.
dist., marked T36N R1W S1 BT

South, on true line, on Gila and Salt River Meridian,
bet. secs. 1 and 6.

Over mountainous land, thru dense timber and scattering
undergrowth.

Descend gradually 48 ft. over SW slope.

29.70

Bottom of ravine, 40 lks. wide, course N.80°W.

Ascend 29 ft. over N.E. slope to cor.

32.12

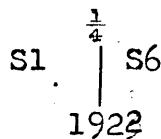
Barb wire fence, brs. N.W. and S.E.

36.20

Shallow wash, 10 lks. wide, course N.E.

40.00

Set an iron post 3 ft. long and 1 in. in diam. 26 ins.
in the ground, for the cor. sec. 1 and 6,
with brass cap marked



from which

- a yellow pine, 18 ins. in diam., brs. N.80½°E., 20 lks.
dist., marked $\frac{1}{4}$ S6 BT
- a yellow pine, 24 ins. in diam., brs. S.62°W., 66 lks.
dist., marked $\frac{1}{4}$ S1 BT

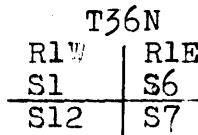
Ascend 34 ft. over general N. slope.

45.00

Over level land.

80.00

Set an iron post 3 ft. long and 2 ins. in diam. 26 ins.
in the ground, for the cor. secs. 1, 6, 7 and 12,
with brass cap marked



1922

from which

- a yellow pine, 10 ins. in diam., brs. N.53°W., 30 lks.
dist., marked T36N R1W S1 BT
- a yellow pine, 20 ins. in diam., brs. N.31½°E., 44 lks.
dist., marked T36N R1E S6 BT
- a yellow pine, 8 ins. in diam., brs. S.46°E., 59 lks.
dist., marked T36N R1E S7 BT
- a yellow pine, 18 ins. in diam., brs. S.70°W., 106 lks.
dist., marked T36N R1W S12 BT

Land, mountainous.

Soil, rocky 4th. rate.

Timber, yellow pine, jack pine and juniper,

Undergrowth, scattering buckbrush, manzanita and cacti.

Survey of the Gila & Salt River Meridian thru T. 36 N.,

preliminary to

Chains Survey of the Kaibab-Forest-Grand Canyon-Park Boundary.

	South, on true line, on G. and S.R. Meridian, bet. secs. 7 and 12. Over level land, thru dense timber and scattering undergrowth. Road, brs. E. and W. Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 7 and 12, with brass cap marked
28.50	
40.00	
	$\frac{1}{4}$ S12 S7 1922
	from which a yellow pine, 36 ins. in diam., brs. S.50°E., 12 lks. dist., marked $\frac{1}{4}$ S7 BT a yellow pine, 8 ins. in diam., brs. S.81 $\frac{1}{2}$ °W., 70 lks. dist., marked $\frac{1}{4}$ S12 BT
46.00	Desc. gradually over S. slope, 46 ft.
65.00	Wash, 60 lks. wide, course W. Ascend 34 ft. over N. slope
72.00	Over level top of ridge brs. S.W.
74.40	Yellow pine, 20 ins. diam., on line.
80.00	Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 7, 12, 13 and 18, with brass cap marked
	T36N R1W R1E S12 S7 S13 S18 1922
	from which a yellow pine, 16 ins. in diam., brs. N.70°W., 19 lks. dist., marked T36N R1W S12 BT a yellow pine, 12 ins. in diam., brs. N.63°E., 47 lks. dist., marked T36N R1E S7 BT a yellow pine, 10 ins. in diam., brs. S.25°E., 30 lks. dist., marked T36N R1E S18 BT a yellow pine, 12 ins. in diam., brs. S.2°W., 35 lks. dist., marked T36N R1W S13 BT
	Land, mountainous. Soil, rocky 4th. rate. Timber, yellow and jack pine, spruce, oak and juniper. Undergrowth, dense manzanita in scattering thickets, buckbrush and cacti.

	South, on true line, on G. and S.R. Meridian, bet. secs. 13 and 18. Over mountainous land, thru dense timber and scattering undergrowth. Descend 54 ft. over S. slope into Little Sowats Canyon. Wash, 30 lks. wide, course W. Ascend 100 ft. over N. slope.
3.10	
12.00	Spur, slopes W. Desc. 92 ft. over S. slope to wash.
19.00	Yellow pine, 14 ins. in diam., on line.
25.30	Little Sowats Wash, 1.00 ch. wide, course W. Ascend 75 ft. over N. slope
38.42	Yellow pine, 36 ins. in diam., on line.
40.00	Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 13 and 18, with brass cap marked
	$\frac{1}{4}$ S13 S18 1922

Survey of the Gila & Salt River Meridian thru T. 36 N., preliminary to

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

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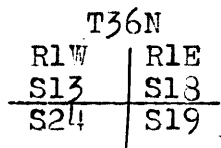
from which,
 a yellow pine, 26 ins. in diam., brs. S.70°E., 66 lks.
 dist., marked $\frac{1}{4}$ S18 BT
 a yellow pine, 28 ins. in diam., brs. N.33°W., 46 lks.
 dist., marked $\frac{1}{4}$ S13 BT

62.30 Desc. 44 ft. over W. slope
 Wash, 20 lks. wide, course W.
 Ascend gradually over N. slope

70.00 Low Spur, slopes NW.
 Desc. gradually over SW slope

72.10 Wash, 1.00 ch. wide, course NW.
 Asc. 52 ft. over NE slope to

80.00 Ridge, brs. E. and W.
 Set an iron post $\frac{3}{4}$ ft. long and 2 ins. in diam. 26 ins.
 in the ground, for the cor. secs. 13, 18, 19 and 24,
 with brass cap marked



1922

from which,
 a yellow pine, 24 ins. in diam., brs. N.40°W., 67 lks.
 dist., marked T36N R1W S13 BT
 a yellow pine, 6 ins. in diam., brs. N.74°E., 38 lks.
 dist., marked T36N R1E S18 BT
 a yellow pine, 14 ins. in diam., brs. S.22°E., 54 lks.
 dist., marked T36N R1E S 19 BT
 a yellow pine, 30 ins. in diam., brs. S.24 $\frac{1}{2}$ °W., 94 lks.
 dist., marked T36N R1W S24 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, oak, juniper and quaking
 asps.
 Undergrowth, buck, oak, manzanita brush.

South, on true line, bn G. and S.R. Meridian, bet. secs.
 19 and 24.
 Over mountainous land, thru dense timber and scattering
 undergrowth.

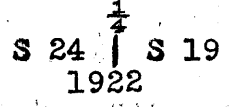
10.00 Desc. 29 ft. over S.W. slope
 Wash, 30 lks. wide, course W.
 Ascend 53 ft. over NE slope to spur.

15.10 A yellow pine, 24 ins. in diam., on line.

20.00 Spur, slopes N.W. Descend 98 ft. over S.W. slope

28.85 Wash, 40 lks. wide course N.W.
 Ascend 126 ft. over N.E. slope to cor.

40.00 Set an iron post $\frac{3}{4}$ ft. long and 1 in. in diam. 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 19 and 24,
 with brass cap marked



from which
 a yellow pine, 8 ins. in diam., brs. S. 34 $\frac{1}{2}$ ° E., 23 lks.
 dist., marked $\frac{1}{4}$ S 19 B T.
 a yellow pine, 8 ins. in diam., brs. N. 67° W., 12 lks.
 dist., marked $\frac{1}{4}$ S 24 B T.
 Continue over level land.

47.30 Wash, 15 lks. wide, course W.

53.80 Wash, 10 lks. wide, course W.

64.90 Game trail, brs. E. and W.

70.00 Descend South slope 80 ft.

74.85 Wash, 10 lks. wide, course W.
 Ascend 74 ft. over N. slope

Survey of the Gila & Salt River Meridian thru T. 36 N.,
preliminary to

Chains ~~Survey of the Kaibab Forest-Grand Canyon Boundary.~~

80.00

Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 19, 24, 25 and 30, with brass cap marked

T36N	
R1W	R1E
S24	S19
S25	S30

1922

from which,

a yellow pine, 18 ins. in diam., brs. N.8°W., 42 lks. dist., marked T36N R1W S24 BT

a yellow pine, 16 ins. in diam., brs. N.60°E., 67 lks. dist., marked T36N R1E S19 BT

a yellow pine, 20 ins. in diam., brs. S.49°E., 63 lks. dist., marked T36N R1E S30 BT

a yellow pine, 20 ins. in diam., brs. S.69°W., 68 lks. dist., marked T36N R1W S25 BT

Land, mountainous.

Soil, rocky 4th. rate.

Timber, dense yellow and jack pine, oak, juniper, quaking asp and some spruce.

Undergrowth, buck, manzanita and other native brush.

South, on true line, on G. and S.R. Meridian, bet. secs. 25 and 30.

Over mountainous land, thru dense timber and scattering undergrowth.

Ascend 29 ft. over N. slope.

3.70 Yellow pine, 18 ins. in diam., on line.

5.00 Over level spur top, bearing SW.

8.90 Game trail, brs. E. and W.

10.00 Descend 161 ft. over S. slope

27.30 Sowats Canyon, wash in bottom, 40 lks. wide, course W.

Ascend 32 ft. over N. slope to spur.

30.50 Game trail, brs. E. and W.

33.00 Over level spur, top slopes W.

39.93 Yellow pine, 18 ins. in diam., on line.

40.00 Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 25 and 30, with brass cap marked

	$\frac{1}{4}$	
S25		S30

1922

from which,

a yellow pine, 18 ins. in diam., brs. S.64°E., 30 lks. dist., marked $\frac{1}{4}$ S30 BT

a yellow pine, 36 ins. in diam., brs. S.61°W., 39 lks. dist., marked $\frac{1}{4}$ S25 BT

Continue over level spur top.

50.00 Descend 129 ft. over S. slope

80.00 Wash, 30 lks. wide, course W.

Ascend 105 ft. over N. slope

60.60 Yellow pine, 18 ins. in diam., on line.

68.60 Spur, slopes W. Desc. 70 ft. over S. slope

80.00 Set an iron post 3 ft. long and 2 ins. in diam. 16 ins. in the ground to bedrock, supported by a mound of stone, deposit marked stone, for the cor. secs. 25, 30, 31 and 36, with brass cap marked

Survey of the Gila & Salt River Meridian thru T. 36 N.,
preliminary to

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

T36N
R1W R1E
S25 S30
S36 S31
1922

from which,
a yellow pine, 12 ins. in diam., brs. N.17°W., 70 lks.
dist., marked T36N R1W S25 BT
a yellow pine, 20 ins. in diam., brs. N.87°E., 126 lks.
dist., marked T36N R1E S30 BT
a yellow pine, 30 ins. in diam., brs. S.3°E., 81 lks.
dist., marked T36N R1E S31 BT
a yellow pine, 28 ins. in diam., brs. S.14°W., 105 lks.
dist., marked T36N R1W S36 BT

Land, mountainous.
Soil, rocky 4th. rate.
Timber, dense yellow and jack pine, spruce, quaking asp,
oak and juniper.
Undergrowth, oak, laurel and other native brush.

South, on true line, on G. & S.R. Meridian, bet. secs. 31
and 36.

Over mountainous land, thru dense timber and scattering
undergrowth.

- 15.00 Asc. 97 ft. over N. slope
- 20.00 Spur, slopes N.W. Thence over level top.
- 26.80 Desc. 69 ft. over S. slope
- 26.80 wash, 1.00 ch. wide, course W.
- 40.00 Ascend 157 ft. over N. slope
- 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
in the ground, for the 1/4 sec. cor. secs. 31 and 36,
with brass cap marked

1/4
S36 S31
1922

from which,
a yellow pine, 36 ins. in diam., brs. N.85°W., 10 lks.
dist., marked 1/4 S36 BT
a yellow pine, 12 ins. in diam., brs. S.22°E., 32 lks.
dist., marked 1/4 S31 BT

- 45.00 Continue across top of spur, sloping W.
- 45.00 Desc. 94 ft. over S. slope
- 52.00 Wash, 20 lks. wide, course W.
- 62.00 Asc. 96 ft. over N. slope
- 62.00 Spur, slopes W.
- 64.70 Desc. 100 ft. over S. slope to wash..
- 64.70 Trail brs., E. and W.
- 68.50 Wash, 15 lks. wide, course W.
- 75.00 Asc. 103 ft. over N. slope
- 75.00 Spur, slopes W. Thence over level top.
- 80.00 Set an iron post 3 ft. long 2 ins. in diam., 26 ins. in ground
for the cor. secs. 1, 6, 31 and 36, Ts. 35 and 36 N., Rs. 1 E.,
and 1 W., with brass cap marked

T36N
R1W R1E
S36 S31
S1 S6
T35N
1922

preliminary to

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

from which,
 a yellow pine, 24 ins. in diam., brs. N.88°W., 42 lks.
 dist., marked T36N R1W S36 BT
 a yellow pine, 18 ins. in diam., brs. N.54°E., 30 lks.
 dist., marked T36N R1E S31 BT
 a yellow pine, 24 ins. in diam., brs. S.43°E., 87 lks.
 dist., marked T35N R1E S6 BT
 a yellow pine, 24 ins. in diam., brs. S.46°W., 56 lks.
 dist., marked T35N R1W S1 BT

Land, mountainous.
 Soil; rocky 4th. rate.
 Timber, yellow and jack pine, spruce, asps and oak.
 Undergrowth, oak, manzanita and other native brush.

South, on true line, on G. & S.R. Meridian, bet. secs.
 1 and 6.

Over mountainous land, thru dense timber and scattering
 undergrowth.

00.35 Yellow pine, 18 ins. in diam., on line.
 2.00 Desc. 48 ft. over S. slope
 6.45 Wash, 10 lks. wide, course W.
 Ascend 27 ft. over N. slope
 10.00 Spur, slopes W.
 Desc. 136 ft. over S. slope
 12.70 Trail brs. E. and W.
 23.00 A yellow pine, 17 ins. in diam., on line.
 25.55 wash, 20 lks. wide, course W.
 Ascend 122 ft. over N. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 1 and 6,
 with brass cap marked

$\frac{1}{4}$
 |
 S1 | S6
 |
 1922

from which,
 a yellow pine, 24 ins. in diam., brs. N.27°W., 41 lks.
 dist., marked $\frac{1}{4}$ S1 BT
 a yellow pine, 24 ins. in diam., brs. N.33°E., 18 lks.
 dist., marked $\frac{1}{4}$ S6 BT

43.50 Desc. 211 ft. over S. slope
 59.50 Indian Valley Canyon, bottom, 1.00 ch. wide, course W.
 Old road in canyon, brs. E. and W.
 Asc. 58 ft. over N. slope
 63.50 Spur, slopes W.
 Desc. gradual S.W. slope
 66.00 Shallow wash, 10 lks. wide, course N.W.
 Asc. 168 ft. over N.E. slope
 77.00 Spur, slopes W. Desc. 21 ft. over S. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 1, 6, 7 and 12,
 with brass cap marked

T35N
 R1W R1E
 S1 | S6
 S12 | S7
 1922

from which,
 a yellow pine, 20 ins. in diam., brs. N.27°W., 58 lks.
 dist., marked T35N R1W S1 BT
 a yellow pine, 16 ins. in diam., brs. N.2°E., 111 lks.
 dist., marked T35N R1E S6 BT

preliminary to

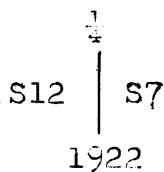
Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

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a yellow pine, 10 ins. in diam., brs. S.78°E., 46 lks. dist., marked T35N R1E S7 BT
a yellow pine, 16 ins. in diam., brs. S.79°W., 101 lks. dist., marked T35N R1W S12 BT

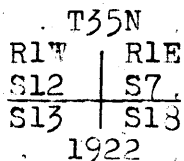
Land, mountainous.
Soil, rocky 4th. rate.
Timber, yellow and jack pine, spruce, asp, oak and juniper.
Undergrowth, oak, manzanita and other native brush.

- 8.55 South, on true line, on G. & S.R. Meridian, bet., secs. 7 and 12.
Over mountainous land, thru dense timber and scattering undergrowth.
Desc. 94 ft. over S. slope.
Bottom of E. branch of Indian Hollow Ravine. An old road brs. E. and W. Bee Spring Cabin and spring brs. E. about 1½ miles., in this canyon.
- 12.50 Asc. 76 ft. over N. slope
Spur, slopes W.
- 14.30 Desc. 21 ft. over S. slope
Wash, 10 lks. wide, course N.W.
- 21.50 Asc. 91 ft. over N.E. slope.
Spur, slopes W.
- 30.20 Desc. 149 ft. over S. slope
Wash, 50 lks. wide, course W.
- 40.00 Asc. 38 ft. over N. slope to
Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the ¼ sec. cor. secs. 7 and 12, with brass cap marked



from which,
a yellow pine, 24 ins. in diam., brs. N.83°E., 27 lks. dist., marked ¼ S7 BT
a yellow pine, 20 ins. in diam., brs. S.71°W., 49 lks. dist., marked ¼ S12 BT

- 57.45 Cor. set on spur, slopes W.
Desc. 131 ft. over S.W. slope
Wash, 30 lks. wide, course N.W.
- 62.00 Asc. 207 ft. over N.E. slope
Spur, slopes W.
- 64.30 Desc. 24 ft. over S. slope
Shallow draw, course N.W.
- 76.40 Asc. 46 ft. over N.E. slope
Dead snag, 30 ins. in diam., on line.
- 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins. in the ground, for the cor. secs. 7, 12, 13 and 18, with brass cap marked



from which,
a yellow pine, 16 ins. in diam., brs. N.2°W., 73 lks. dist., marked T35N R1W S12 BT
a yellow pine, 24 ins. in diam., brs. N.65°E., 123 lks. dist., marked T35N R1E S7 BT
a yellow pine, 16 ins. in diam., brs. S.30°E., 153 lks. dist., marked T35N R1E S18 BT

Survey of the Gila & Salt River Meridian thru T. 35 N.,

preliminary to

~~Chains Survey of the Kaibab Forest-Grand Canyon Boundary.~~

a yellow pine, 24 ins. in diam., brs. S.62°W., 142 lks. dist., marked T35N R1W S13 BT

Land, mountainous.
Soil, rocky 4th. rate.
Timber, yellow and jack pine, spruce, asp, oak and juniper.
Undergrowth, oak, manzanita and other native brush.

South, on true line, on G. & S.R. Meridian, bet. secs. 13 and 18.

Over mountainous land, thru dense timber and scattering undergrowth.

6.85

Desc. 85 ft. over S.W. slope. Ravine bottom, 25 lks. wide, course W.

13.50

Asc. 44 ft. over N. slope

Spur, slopes W. Across level land.

20.06

Blazed trail, brs. N.W. and S.E. Desc. 69 ft. over S. slope

24.02

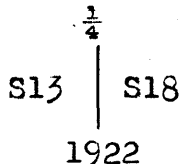
Yellow pine, 30 ins. in diam. on line.

29.60

Shallow draw, course N.W.

40.00

Asc. 49 ft. over N.E. slope to Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the 1/4 sec. cor. secs. 13 and 18, with brass cap marked



from which,
a yellow pine, 12 ins. in diam., brs. N.63°E., 25 lks. dist., marked 1/4 S18 BT
a yellow pine, 24 ins. in diam., brs. S.40°W., 18 lks. dist., marked 1/4 S13 BT

42.15

Continue over level land. Remains of log corral brs.E., about 50 lks. dist.

61.50

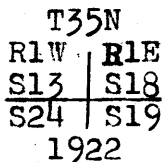
Descend 169 ft. over S. slope

71.90

Ravine bottom, 1 ch. wide, course W.

80.00

Asc. 139 ft. over N. slope Set an iron post 3 ft. long and 2 ins. in diam., 26 ins. in the ground, for the cor. secs. 13, 18, 19 and 24, with brass cap marked



from which,
anyellow pine, 36 ins. in diam., brs. N.80°W., 65 lks. dist., marked T35N R1W S13 BT
a yellow pine, 8 ins. in diam., brs. N.41°E., 19 lks. dist., marked T35N R1E S18 BT
a yellow pine, 3 ins. in diam., brs. S.56 1/2°E., 38 lks. dist., marked T35N R1E S19 BT
a yellow pine, 18 ins. in diam., brs. S.35°W., 15 lks. dist., marked T35N R1W S24 BT

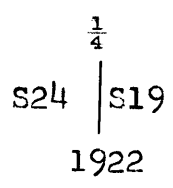
Land, mountainous.
Soil, rocky 4th. rate.
Timber, yellow and jack pines, asp, oak and spruce.
Undergrowth, oakbrush, laurel, manzanita and other native brush.

preliminary to

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary

South, on true line, on G. & S.R. Meridian, bet. secs. 19 and 24.
 Over mountainous land, thru dense timber and scattering undergrowth.
 Ascend 40 ft. over N. slope
 Ridge, brs. E. and W.
 Descend 118 ft. over S, slope
 Ravine bottom, 50 lks. wide, course W.
 Ascend 135 ft. over N. slope to cor.
 Yellow pine, 30 ins. in diam., on line.
 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 19 and 24, with brass cap marked

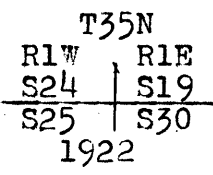
5.00
 15.00
 35.96
 40.00



from which,
 a yellow pine, 8 ins. in diam., brs. N.61°E., 57 lks. dist., marked $\frac{1}{4}$ S19 BT
 a yellow pine, 14 ins. in diam., brs. S.60°W., 69 lks. dist., marked $\frac{1}{4}$ S24 BT

Descend 36 ft. over S. slope
 Ravine bottom, 50 lks. wide, course S.W.
 Ascend 30 ft. over N.W. slope
 Spur, slopes W.
 Descend 148 ft. over N. slope
 Ravine bottom, 10 lks. wide, course W.
 Ascend 96 ft. over N.W. slope
 Spur, slopes W.
 Descend 61 ft. over S. slope
 Yellow pine, 14 ins. in diam., on line.
 Set an iron post 3 ft. long and 2 ins. in diam., 6 ins. in the ground, to bedrock, supported by a mound of stone, deposit marked stone at base of post, for the cor. secs. 19, 24, 25 and 30, with brass cap marked

47.90
 55.00
 71.10
 75.50
 77.36
 80.00



from which,
 a yellow pine, 16 ins. in diam., brs. N.67°W., 36 lks. dist., marked T35N R1W S24 BT
 a yellow pine, 16 ins. in diam., brs. N.40°E., 91 lks. dist., marked T35N R1E S19 BT
 a yellow pine, 16 ins. in diam., brs. S.86°E., 135 lks. dist., marked T35N R1E S30 BT
 a yellow pine, 24 ins. in diam., brs. S.40°W., 160 lks. dist., marked T35N R1W S25 BT

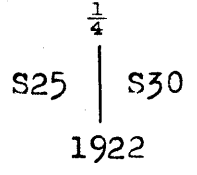
Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, asp, spruce, juniper and oak.
 Undergrowth, oak, laurel, buck, manzanita and other native brush.

South, on true line, bet. secs. 25 and 30, on G. & S.R. Meridian.
 Over mountainous land, thru dense timber and scattering undergrowth.

preliminary to

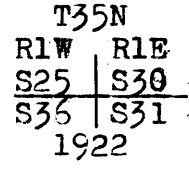
Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

3.35 Descend 71 ft. over S.W. slope into Parishwampitts Canyon.
 Bottom of canyon, wash, 1.00 ch. wide, course N.80°W.
 16.50 Ascend 236 ft. over N.E. slope to spur.
 Yellow pine, 36 ins. in diam., on line.
 19.50 Ridge, brs. E. and W.
 25.00 Desc. 160 ft. over S.W. slope
 37.90 Ravine bottom, 10 lks. wide, course S.W.
 Ascend 47 ft. over N.W. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 25 and 30, with brass cap marked



from which,
 a yellow pine, 30 ins. in diam., brs. N.39°E., 89 lks. dist., marked $\frac{1}{4}$ S30 BT
 a yellow pine, 36 ins. in diam., brs. S.43°W., 62 lks. dist., marked $\frac{1}{4}$ S25 BT

42.50 Ascend 14 ft. over N. slope
 Spur, slopes S.W.
 54.70 Desc. 142 ft. over S.W. slope
 Ravine bottom, 50 lks. wide, course N.80°W. Local name of this wash, is Locust Canyon.
 Ascend 142 ft. over N.E. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 18 ins. in the ground, to bedrock, supported by a mound of stone, deposit marked stone at base of post, for the cor. secs. 25, 30, 31 and 36, with brass cap marked



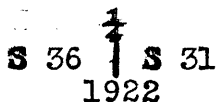
from which,
 a yellow pine, 18 ins. in diam., brs. N.48°W., 17 lks. dist., marked T35N R1W S25 BT
 a yellow pine, 8 ins. in diam., brs. N.64°E., 132 lks. dist., marked T35N R1E S30 BT
 a yellow pine, 16 ins. in diam., brs. S.52°E., 102 lks. dist., marked T35N R1E S31 BT
 a yellow pine, 20 ins. in diam., brs. S.29°W., 62 lks. dist., marked T35N R1W S36 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, asp, spruce, juniper and oak.
 Undergrowth, oakbrush, manzanita and other native brush.

South, on true line, on G. & S.R. Meridian, bet. secs. 31 and 36.
 Over mountainous land, thru dense timber and scattering undergrowth.
 Over level spur top, brs. W.
 3.00 Descend 266 ft. over S. slope into Topeats Canyon.
 11.50 Bottom of canyon, 1.50 chs. wide, course W.
 Ascend 124 ft. over N. slope
 20.00 Spur, slopes W.
 Descend 29 ft. over S. slope
 24.50 Ravine bottom, 10 lks. wide, course N.W.
 Ascend 75 ft. over N.E. slope

Survey of the Gila & Salt River Meridian thru T. 35 N., preliminary to
 Chains Survey of the Kaibab Forest - Grand Canyon Park Boundary.

40.00 Set an iron post 3 ft. long and 1 in. in diam., 8 ins. in the ground to bedrock, supported by a mound of stone, deposit marked stone, at base of post, for the 1/4 sec. cor. secs. 31 and 36, with brass cap marked

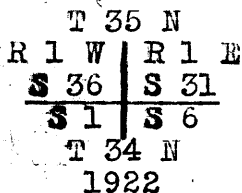


from which

- a yellow pine, 12 ins. in diam., brs. S. 79° E., 98 lks. dist., marked 1/4 S 31 B T.
- a yellow pine, 16 ins. in diam., brs. S. 50° W., 59 lks. dist., marked 1/4 S 36 B T.

Descend 161 ft. over S. slope.

- 50.65 Ravine bottom, 20 lks. wide, course NW. Ascend 144 ft. over NE. slope to cor.
- 59.68 A yellow pine, 36 ins. in diam., on line.
- 65.22 A yellow pine, 36 ins. in diam., on line.
- 75.90 Trail, brs. NW. and SE.
- 80.00 Set an iron post, 3 ft. long and 3 ins. in diam., 26 ins. in the ground, for the cor. Ts. 34 and 35 N., Rs. 1 E. and 1 W., secs. 1, 6, 31 and 36, with brass cap marked



from which,

- a yellow pine, 14 ins. in diam., brs. N. 69° W., 18 lks. dist., marked T 35 N R 1 W S 36 B T.
- a yellow pine, 16 ins. in diam., brs. N. 30° E., 18 lks. dist., marked T 35 N R 1 E S 31 B T.
- a yellow pine, 30 ins. in diam., brs. S. 22° E., 100 lks. dist., marked T 34 N R 1 E S 6 B T.
- a yellow pine, 14 ins. in diam., brs. S. 31 1/2° W., 12 lks. dist., marked T 34 N R 1 W S 1 B T.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, yellow and jack pine, spruce, oak, asp and juniper.

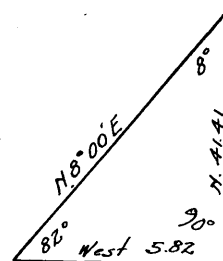
Undergrowth, oak, buck, manzanita and other native brush.

SURVEY OF THE GILA & SALT RIVER MERIDIAN, THRU T. 34 N.

South, on true line, on G. & S. R. Meridian, bet. secs. 1 and 6.

Over mountainous land, thru dense timber and undergrowth. Descend 45 ft. over S. slope to

- 8.94 Rim, brs. E. and W. Set flag for triangulation. Chain measurement beyond this point is impracticable, therefore triangulate as described as follows; and as shown on the diagram hereof. From a point ahead on line, measure a base 5.82 chs. West. From W. end of base the flag at 8.94 chs. brs. N. 8° E. Vertical angle from E. end of base to flag: +26°. Included angles of the triangle are 82°, 8° and 90°, the sum of which is 180° 00'. Triangulated measurement on the Meridian is obtained by Tang. 82° x 5.82:7.11537 x 5.82=41.41 chs., which added to 8.94 gives 50.35 chs., for dist. on meridian S. from Tp. cor.



40.00 True point for 1/4 sec. cor. falls on face of cliff and is inaccessible.

50.35 Triangulation point, 1501. ft. below Tp. cor.

(50.00) Measure 35 lks. N. from triangulation point and set an iron post, 3 ft. long and 1 in. in diam., 14 ins. in the ground to bedrock, supported by a mound of stone

Survey of the Gila & Salt River Meridian thru T. 34 N., preliminary to

Chains Survey of the Kaibab Forest - Grand Canyon Park Boundary.

deposit marked stone at base of post, for the witness $\frac{1}{4}$ sec. cor. secs. 1 and 6, with brass cap marked

W C
 $\frac{1}{4}$
S 1 | S 6
1922

from which

a pinon, 4 ins. in diam., brs. S. 68° W., 37 lks. dist. marked B T. only.

a cross cut in outcropping ledge (X) brs. N. 34 $\frac{1}{2}$ ° E., 28 lks. dist., mark also S 6 under cross.

Continue South, on true line, from $\frac{1}{4}$ sec. cor.

50.35 Triangulation point on spur, slopes W. Desc. 474 ft. over S. slope.

67.10 Spring or Stina Creek, 60 lks. wide, course W. On N. bank erect a md. of stones 4 ft. base, 2 ft. high. Asc. 347 ft. over N. slope.

Thence along

KAIBAB FOREST - GRAND CANYON PARK BOUNDARY.

80.00 Set an iron post 3 ft. long, 2 ins. in diam., 6 ins. in the ground, to bedrock, supported by a mound of stone, deposit marked stone at base of post, for the cor. secs. 1, 6, 7 and 12, with brass cap marked

T 34 N
R 1 W | R 1 E
S 1 | S 6
S 12 | S 7
1922

No bearing trees available. Raise a mound of stone 3 ft. base and 2 ft. high W. of cor.

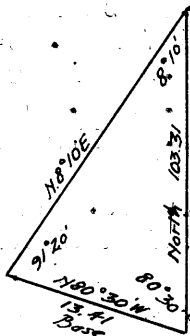
Land, rough.

Soil, rocky, 4th rate.

Timber, yellow and jack pine, spruce, oak and asp.

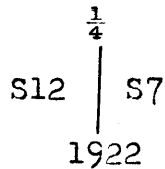
Undergrowth, dense oak, buck, manzanita and other native brush.

As chain measurements are impossible on the N. half of the line bet. secs. 7 and 12, on account of the roughness of the slopes, being broken by cliffs 400 ft. high, facing N., triangulate as follows: From a point ahead on line, measure a base 13.41 chs. N. 80° 30' W. It being impossible to sight flag at the cor. secs. 1, 6, 7 and 12, the flag at 8.94 chs. S. of the cor. secs. 1, 6, 31 and 36, brs. N. 8° 10' E. Vertical angle from E. end of base to flag : Zero. Included angles of the triangle are 91° 20', 80° 30', and 8° 10' the sum of which gives 180° 00'. Triangulated measurement on the Meridian is obtained by sine 91° 20' x 13.41 : 13.41 x .99973 : 13.40637 ÷ sine 8° 10' or .14205: 94.37 chs., which added to 8.94 gives 103.31 chs., or 23.31 chs. S. of the cor. secs. 1, 6, 7 and 12.



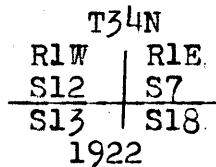
Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

- 20.00 Rim, brs. E. and W. This rim is a high cliff about 300 ft. high, and extends around Stina Canyon.
- 23.31 Triangulation point.
Continue on true line, on G. & S.R. Meridian, South, bet. secs. 7 and 12.
Over level mountain top, thru dense timber and scattering undergrowth.
- 29.20 A yellow pine, 30 ins. in diam., on line.
- 33.95 A yellow pine, 30 ins. in diam., on line.
- 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 7 and 12, with brass cap marked



from which,
 a yellow pine, 30 ins. in diam., brs. S. $67\frac{1}{2}^{\circ}$ E., 46 lks. dist., marked $\frac{1}{4}$ S7 BT
 a yellow pine, 30 ins. in diam., brs. S. 75° W., 32 lks. dist., marked $\frac{1}{4}$ S12 BT

- 52.70 Continue over level mountain top.
- 55.00 A yellow pine, 24 ins. in diam., on line.
Rim, brs. N.E. and S.W.
Descend 638 ft. over steep S.E. slope
- 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 18 ins. in the ground, to bedrock, supported by a mound of stone, deposit marked stone at base of post, for the cor. secs. 7, 12, 13 and 18, with brass cap marked



from which,
 a pinon, 6 ins. in diam., brs. N. 28° W., 105 lks. dist., marked T34N R1W S12 BT
 No other suitable bearing trees available. Raise a mound of stone 3 ft. base and 2 ft. high W. of cor.

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, dense yellow and jack pine, spruce, asp, oak and juniper.
 Undergrowth, oak, buck, manzanita and other native brush.

TOWNSHIP 34 NORTH, RANGE 1 EAST.

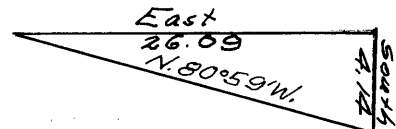
Chain measurement East, bet. secs. 7 and 18, being impracticable, from this point, triangulate as follows and as shown on the diagram hereof.

From a point ahead on line due East, of the cor. secs. 7, 12, 13 and 18, on the Rim of Kaibab Plateau, lay off a base South, 4.14 chs. From the S. end of base the flag brs. N. $80^{\circ}59'$ W.

Vertical angle from N. end of base to flag : -32°

Included angles of the triangle are $80^{\circ}59'$, $9^{\circ}01'$ and 90° the sum of which is $180^{\circ}00'$.

Triangulated measurement is obtained by Tang. $80^{\circ}59'$ or 6.30189×4.14 : 26.09 chs.



Chains Survey of the Kaibab Forest-Brand Canyon Park Boundary.

26.09 Triangulation point 912 ft. above cor. secs. 7, 12, 13 and 18.

38.65 Continue over nearly level mountain top.

A yellow pine, 42 ins. in diam., on line.
As the convergency for this latitude is 38 lks., therefore at

39.12 Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 7 and 18, with brass cap marked

$$\frac{1}{4} \frac{S7}{S18}$$

1922

from which,

a yellow pine, 36 ins. in diam., brs. N.73°E., 96 lks. dist., marked $\frac{1}{4}$ S7 BT

a yellow pine, 30 ins. in diam., brs. S.14°E., 50 lks. dist., marked $\frac{1}{4}$ S18 BT

Continue on slight ascent of ridge.

75.57 A yellow pine, 30 ins. in diam., on line.

79.12 Set an iron post 3 ft. long and 2 ind. in diam. 26 ins. in the ground, for the cor. secs. 7, 8, 17 and 18, with brass cap marked

$$\begin{array}{c} T34N R1E \\ \frac{S7}{S18} \mid \frac{S8}{S17} \\ 1922 \end{array}$$

from which,

a yellow pine, 18 ins. in diam., brs. N.5 $\frac{1}{2}$ °W., 83 lks. dist., marked T34N R1E S7 BT

a yellow pine, 30 ins. in diam., brs. N.75°E., 158 lks. dist., marked T34N R1E S8 BT

a yellow pine, 18 ins. in diam., brs. S.59°E., 10 lks. dist., marked T34N R1E S17 BT

a yellow pine, 18 ins. in diam., brs. S.43°W., 25 lks. dist., marked T34N R1E S18 BT

Land, mountainous.

Soil, rocky 4th. rate.

Timber, dense yellow and jack pine, asp, oak and spruce.

Undergrowth, W. $\frac{1}{4}$ of mile dense thickets of oak, catclaw cacti, and other native brush. E. $\frac{1}{2}$ mile, scattering same.

East, on true line, bet. secs. 8 and 17.

Over mountainous land, thru dense timber and scattering undergrowth.

17.70 A yellow pine, 24 ins. in diam., on line.

28.95 A yellow pine, 48 ins. in diam., on line.

40.00 Set an iron post 3 ft. long and $\frac{1}{2}$ in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 8 and 17, with brass cap marked

$$\frac{1}{4} \frac{S8}{S17}$$

1922

from which,

a yellow pine, 6 ins. in diam., brs. N.47°E., 12 lks. dist., marked $\frac{1}{4}$ S8 BT

a yellow pine, 16 ins. in diam., brs. S.36°E., 33 lks. dist., marked $\frac{1}{4}$ S17 BT

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

Continue on gradual ascent over ridge.
 47.70 A dry sink, 1.00 ch. wide and 15 lks. deep, on line.
 53.00 Trail brs. N.E. and S.W.
 60.00 Descend 38 ft. over E. slope
 62.95 Head of draw, course S.
 Thence, over rolling land.
 75.00 Descend 11 ft. over S. slope
 75.90 Head of draw, course S.
 Ascend 51 ft. over W. slope
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins. in the ground, for the cor. secs. 8, 9, 16 and 17, with brass cap marked

T34N R1E	
S8	S9
S17	S16

1922

from which,
 a yellow pine, 24 ins. in diam., brs. N.27°W., 50 lks. dist., marked T34N R1E S8 BT
 a yellow pine, 30 ins. in diam., brs. N.71°E., 105 lks. dist., marked T34N R1E S9 BT
 a yellow pine, 6 ins. in diam., brs. S.48°E., 44 lks. dist., marked T34N R1E S16 BT
 a yellow pine, 12 ins. in diam., brs. S.74°W., 39 lks. dist., marked T34N R1E S17 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, dense yellow and jack pine, spruce, asp, and oak.
 Undergrowth, scattering oak, mahzanita and other native brush.

East, on true line, bet. secs. 9 and 16.
 Over mountainous land, thru dense timber and scattering undergrowth.
 Over rolling plateau.
 15.00 Descend 15 ft. over S.E. slope
 16.15 Head of draw, course S.W.
 Ascend 112 ft. over general S. slope
 36.10 Old road, brs. N.E. and S.W.
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 9 and 16, with brass cap marked

$\frac{1}{4}$	S 9
	S 16

1922

from which,
 a yellow pine, 30 ins. in diam., brs. N.40 $\frac{1}{2}$ °W., 82 lks. dist., marked $\frac{1}{4}$ S9 BT
 a yellow pine, 12 ins. in diam., brs. S.15°W., 18 lks. dist., marked $\frac{1}{4}$ S16 BT

47.05 A yellow pine, 24 ins. in diam., on line.
 52.10 A wash, 20 lks. wide, course S.W.
 80.00 Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 9, 10, 15 and 16, with brass cap marked

T34N R1E	
S9	S10
S16	S15

1922

Township 34 North, Range 1 East,

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

from which,
 a yellow pine, 30 ins. in diam., brs. N.73°W., 21 lks. dist., marked T34N R1E S9 BT
 a yellow pine, 30 ins. in diam., brs. N.50°E., 47 lks. dist., marked T34N R1E S10 BT
 an aspen, 8 ins. in diam., brs. S.38°E., 49 lks. dist., marked T34N R1E S15 BT
 an aspen, 10 ins. in diam., brs. S.31°W., 71 lks. dist., marked T34N R1E S16 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, dense yellow and jack pine, spruce, aspen, and oak.
 Undergrowth, dense oak, buck, manzanita and other native brush.

East, on true line, bet, secs. 10 and 15.
 Over mountainous land, thru dense timber and scattering undergrowth.

3.75 Descend 90 ft. over N.E. slope
 Shallow draw, course N.W.
 9.45 Ascend 122 ft. over S.W. slope
 10.00 A yellow pine, 16 ins. in diam., on line.
 24.40 Spur, slopes N.W. Desc. 100 ft. over N.E. slope
 Draw bottom 70 lks. wide, course N.80°W.
 Ascend 58 ft. over S.W. slope
 35.00 Spur, slopes S.W. Desc. 36 ft. over S.E. slope
 38.50 Draw bottom, 60 lks. wide, course S.80°W.,
 Ascend gradually over N.W. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 10 and 15, with brass cap marked

$\frac{1}{4}$ S10
 S15
 1922

from which,
 a fir, 18 ins. in diam., brs. N.55°E., 59 lks. dist. marked $\frac{1}{4}$ S10 BT
 a fir, 20 ins. in diam., brs. S.45°E., 25 lks. dist. marked $\frac{1}{4}$ S15 BT

Cor. set on ridge, brs. N.E. and S.W.
 42.00 Desc. 8 ft. over N.E. slope
 Head draw, course N.
 53.00 Ascend 176 ft. over S.W. slope
 Same ridge, brs. N.E. and S.W.
 58.40 Descend gradually over S.E. slope
 Head of ravine, course S.W.
 74.30 Ascend gradually over N.W. slope
 A yellow pine, 18 ins. in diam., on line.
 80.00 Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 10, 11, 14 and 15, with brass cap marked

T34N R1E
 S10 | S11
 S15 | S14
 1922

from which,
 a yellow pine, 12 ins. in diam., brs. N.28°W., 58 lks. dist., marked T34N R1E S10 BT
 a yellow pine, 18 ins. in diam., brs. N.15°E., 57 lks. dist., marked T34N R1E S11 BT

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

a yellow pine, 18 ins. in diam., brs. S.80°E., 94 lks. dist., marked T34N R1E S14 BT
 a yellow pine, 18 ins. in diam., brs. S.30°W., 126 lks. dist., marked T34N R1E S15 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, aspen, fir and oak.
 Undergrowth, dense oak, buck, manzanita and other native brush.

East, on true line, bet. secs. 11 and 14.
 Over mountainous land, thru dense timber and scattering undergrowth.

3.00
 10.00
 18.95
 40.00

Descend 10 ft. over S.E. slope
 Draw, 1.00 ch. wide, course S.
 Ascend gradually over W. slope.
 Spur, slopes S.W. Desc. 70 ft. over E. slope
 Draw bottom, 15 lks. wide, course S.
 Ascend 36 ft. over W. slope
 Set an iron post 3 ft. long and 1 in. in diam. 18 ins. in the ground, to bedrock, supported by a mound of stone, deposit marked stone at base of post, for the 1/4 sec. cor. secs. 11 and 14, with brass cap marked

1/4 S11
 S14
 1922

from which,
 a yellow pine, 20 ins. in diam., brs. N. 13°E., 72 lks. dist., marked 1/4 S11 BT
 a yellow pine, 16 ins. in diam., brs. S.8°W., 67 lks. dist., marked 1/4 S14 BT

40.67
 45.00
 50.00
 55.00
 64.85
 76.10
 80.00

Continue over rolling plateau.
 A yellow pine, 48 ins. in diam., on line.
 Low spur, slopes S.W.
 Sink, 2 chs. wide, 50 ft. deep, on line.
 Sink, 3 chs. wide, and 8 chs. long, S.W. end of same on line.
 Draw bottom 20 lks. wide, course S.70°W.
 A yellow pine, 18 ins. in diam., on line.
 Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 11, 12, 13 and 14, with brass cap marked

T34N R1E
 S11 | S12
 S14 | S13
 1922

from which,
 a yellow pine, 8 ins. in diam., brs. N.3°W., 38 lks. dist., marked T34N R1E S11 BT
 a yellow pine, 8 ins. in diam., brs. N.27°E., 40 lks. dist., marked T34N R1E S12 BT
 a yellow pine, 18 ins. in diam., brs. S.30°E., 20 lks. dist., marked T34N R1E S13 BT
 a yellow pine, 20 ins. in diam., brs. S.53°W., 23 lks. dist., marked T34N R1E S14 BT

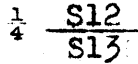
Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack, pine, spruce, aspen, fir and oak.
 Undergrowth, oak, laurel, buck, manzanita and other brush.

Township 34 North, Range 1 East,

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

East, on true line, bet. secs. 12 and 13.
 Over mountainous land, thru dense timber and scattering undergrowth.
 Over rolling plateau, on gradual ascent.

10.82 A yellow pine, 30 ins. in diam., on line.
 27.58 A fir, 30 ins. in diam., on line.
 27.60 A draw, near head, course S.
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 12 and 13, with brass cap marked



1922.

from which,
 a yellow pine, 24 ins. in diam., brs. N.46°E., 34 lks. dist., marked $\frac{1}{4}$ S12 BT
 a yellow pine, 24 ins. in diam., brs. S.16°E., 41 lks. dist., marked $\frac{1}{4}$ S13 BT

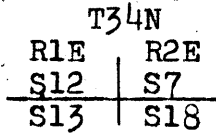
44.90 Descend 43 ft. over E. slope
 Head of draw, course S.
 Ascend 18 ft. over W. slope

47.00 Spur, slopes S.
 Descend 31 ft. over E. slope

54.85 Ravine bottom 50 lks. wide, course S.80°W.
 Ascend 52 ft. over N.W. slope to spur.

62.61 A yellow pine, 30 ins. in diam., on line.
 65.00 Spur, slopes N.
 Descend 14 ft. over E. slope

67.50 Ascend 51 ft. over W. slope to cor.
 73.25 Head of draw, drains N.W.
 80.00 Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for cor. secs. 7, 12, 13 and 18, T.34 N., Rs. 1 and 2 E., with brass cap marked



1922

from which,
 a yellow pine, 30 ins. in diam., brs. N.31°W., 140 lks. dist., marked T34N R1E S12 BT
 a yellow pine, 30 ins. in diam., brs. N.21°E., 120 lks. dist., marked T34N R2E S7 BT
 a yellow pine, 30 ins. in diam., brs. S.62°E., 24 lks. dist., marked T34N R2E S18 BT
 a yellow pine, 30 ins. in diam., brs. S.4°W., 59 lks. dist., marked T34N R1E S13 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, dense yellow and jack pine, spruce, aspen, oak and fir.
 Undergrowth, oak, buck, manzanita and other native brush.

TOWNSHIP 34 NORTH, RANGE 2 EAST.

East, on true line, bet. secs. 7 and 18.
 Over mountainous land, thru dense timber and scattering undergrowth.

6.00 Descend 36 ft. over S.E. slope
 Ravine bottom, 50 lks. wide, course S.75°W.
 Ascend 107 ft. over N.W. slope to cor.

9.90 Road, brs. N.30°W. and S.30°E.
 14.80 Wire fence, brs. N. and S.
 27.85 An aspen, 8 ins. in diam., on line.
 As the convergency for this latitude is 38 lks., therefore at

39.12 Set an iron post 3 ft. long and 1 in. in diam. 26 ins.

Township 34 North, Range 2 East,

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

in the ground, for the 1/4 sec. cor. secs. 7 and 18, with brass cap marked

1/4 S7 / S18 1922

from which, a yellow pine, 12 ins. in diam., brs. N.20°W., 16 lks. dist., marked 1/4 S7 BT a yellow pine, 12 ins. in diam., brs. S.15°E., 13 lks. dist., marked 1/4 S18 BT

- 49.30 Descend 137 ft. over S.E. slope to ravine bottom
51.75 A yellow pine, 13 ins. in diam., on line. Wash, 1.00 ch. wide, course S.W.
70.00 Ascend 293 ft. over N.W. slope Ridge, brs. N.E. and S.W.
76.75 Descend 168 ft. over S.E. slope Ravine bottom, 1.00 ch. wide, course S.W.
79.12 Ascend 32 ft. over N.W. slope to Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 7, 8, 17 and 18, with brass cap marked

T34N R2E S7 / S8 S18 / S17 1922

from which, a yellow pine, 8 ins. in diam., brs. N.32°W., 54 lks. dist., marked T34N R2E S7 BT a yellow pine, 36 ins. in diam., brs. N.33°E., 84 lks. dist., marked T34N R2E S8 BT a fir, 14 ins. in diam., brs. S.58°E., 43 lks. dist marked T34N R2E S17 BT a yellow pine, 6 ins. in diam., brs. S.2°W., 63 lks. dist., marked T34N R2E S18 BT

Land, mountainous. Soil, rocky 4th. rate. Timber, dense yellow and jack pine, spruce, aspen, fir and oak. Undergrowth, oak, laurel, manzanita and other native brush.

- 5.00 S.0°03'E., on true line bet. secs. 17 and 18. Over mountainous land, thru dense timber and undergrowth. Ascend 23 ft. over N.W. slope Ridge, brs. N.30°E., and S.30°W.
12.40 Descend 211 ft. over S.E. slope Ravine bottom, 50 lks. wide, course S.W. Old trail in bottom, brs. N.E. and S.W.
19.00 Ascend 169 ft. over N.W. slope Spur, slopes S.W.
31.15 Descend 114 ft. over S.E. slope Ravine bottom, 10 lks. wide, course W.
40.00 Ascend 185 ft. over N. slope to Set an iron post 3 ft. long and 1 in. in diam. 28 ins., in the ground, for the 1/4 sec. cor. secs. 17 and 18, with brass cap marked

1/4 S18 | S17 1922

Township 34 North, Range 2 East,

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

from which,
 an aspen, 3 ins. in diam., brs. N.11 $\frac{1}{2}$ °W., 34 lks.
 dist., marked $\frac{1}{4}$ S18 BT
 an aspen, 6 ins. in diam., brs. N.73 $\frac{1}{2}$ °E., 13 lks.
 dist., marked $\frac{1}{4}$ S17 BT

Ascend 17 ft. over N.W. slope
 42.50 Spur, slopes S.W. Across level top.
 48.90 An aspen, 8 ins. in diam., on line.
 50.00 Begin descent of 156 ft. over S.E. slope
 62.20 Ravine bottom, 10 lks. wide, course E.
 Ascend 31 ft. over N. slope
 67.50 Low spur, slopes E.
 Descend 148 ft. over S. slope
 74.55 Shallow draw, course S.E.
 Ascend gradual N.E. slope
 76.00 Low spur, slopes E.
 Descend 73 ft. over S. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 17, 18, 19 and 20,
 with brass cap marked

T34N	R2E
S18	S17
S19	S20

1922

from which,
 an aspen, 4 ins. in diam., brs. N.47°W., 41 lks.
 dist., marked T34N R2E S18 BT
 a yellow pine, 42 ins. in diam., brs. N.1°E., 142 lks.
 dist., marked T34N R2E S17 BT
 an aspen, 6 ins. in diam., brs. S.23°E., 75 lks.
 dist., marked T34N R2E S20 BT
 a yellow pine, 42 ins. in diam., brs. S.74°W., 73 lks.
 dist., marked T34N R2E S19 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, fir, spruce, aspen and oak.
 Undergrowth, oak, manzanita, laurel and other native
 brush.

S.0°03'E., on true line, bet. secs. 19 and 20.
 Over mountainous land, thru dense timber and undergrowth.
 Descend 178 ft. over S.E. slope
 7.85 Bottom of Big Spring Canyon, 2.50 chs. wide, course
 S.60°W. A dim road in same, brs. N.60°E. and S.60°W.
 Ascend 66 ft. over N.W. slope
 10.00 Spur, slopes W.
 Descend 38 ft. over S.W. slope
 14.45 Ravine bottom, 20 lks. wide, course N.W.
 Ascend 232 ft. over N.E. slope
 27.00 Low spur, slopes N.W.
 Descend 20 ft. over S.W. slope
 31.30 Head of draw, course N.W.
 Ascend 123 ft. over N.E. slope
 40.00 Set an iron post 3 ft. long and 1 in. in diam. 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 19 and 20,
 with brass cap marked

	$\frac{1}{4}$	
S19		S20

1922

from which,
 a yellow pine, 6 ins. in diam., brs. N.56°W., 16 lks.
 dist., marked $\frac{1}{4}$ S19 BT
 a yellow pine, 8 ins. in diam., brs. N.86 $\frac{1}{2}$ °E., 31 lks.
 dist., marked $\frac{1}{4}$ S20 BT

Township 34 North, Range 2 East,

~~Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary~~

49.80 Descend 120 ft. over S. slope
 Ravine bottom, 30 lks. wide, course W.
 Ascend 117 ft. over N. slope
 57.20 Spur, slopes W.
 Descend 143 ft. over S.W. slope
 64.50 A fir, 18 ins. in diam., on line.
 72.40 A yellow pine, 30 ins. in diam., on line.
 73.80 Ravine bottom, 15 lks. wide, course S.W.
 Ascend 86 ft. over N.W. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 19, 20, 29 and 30,
 with brass cap marked

T34N	R2E
S19	S20
S30	S29

1922

from which,
 a fir, 10 ins. in diam., brs. N.10°W., 51 lks. dist.
 marked T34N R2E S19 BT
 a fir, 24 ins. in diam., brs. N.29°E., 40 lks. dist.
 marked T34N R2E S20 BT
 a yellow pine, 6 ins. in diam., brs. S.37°E., 16 lks.
 dist., marked T34N R2E S29 BT
 an aspen, 8 ins. in diam., brs. S.48°W., 37 lks.
 dist., marked T34N R2E S30 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir, oak and aspen.
 Undergrowth, oak, laurel, manzanita and other native
 brush.

10.00 S.0°03'E., on true line, bet. secs. 29 and 30.
 22.70 Over mountainous land, thru dense timber and undergrowth.
 40.00 Ascend 46 ft. over N.W. slope
 Spur, slopes W. Descend 160 ft. over S.W. slope
 A yellow pine, 14 ins. in diam., on line.
 Set an iron post 3 ft. long and 1 in. in diam., 18 ins.
 in the ground, to bedrock, supported by a mound of
 stone, deposit marked stone at base of post, for the
 1/4 sec. cor. secs. 29 and 30, with brass cap marked

1/4	
S30	S29

1922

from which,
 a yellow pine, 6 ins. in diam., brs. N.56°E., 56 lks.
 dist., marked 1/4 S29 BT
 a yellow pine, 30 ins. in diam., brs. S.6°W., 87 lks.
 dist., marked 1/4 S30 BT

50.00 Descend 88 ft. over S. slope
 Draw bottom, 1 ch. wide, course S.20°E. Junction of
 ravines from N.W. and N.E.
 Ascend gradual N.E. slope
 57.00 Foot of spur, slopes E.
 Descend 37 ft. over E. slope
 62.30 Ravine bottom, 2.50 chs. wide, course W.
 Ascend 204 ft. over N.W. slope
 80.00 Set an iron post 3 ft. long and 2 ins. in diam. 26 ins.
 in the ground, for the cor. secs. 29, 30, 31 and 32,
 with brass cap marked,

T34N	R2E
S30	S29
S31	S32

1922

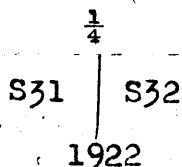
Township 34 North, Range 2 East,

~~Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.~~

from which,
 a white pine, 6 ins. in diam., brs. N.34°W., 16 lks. dist., marked T34N R2E S30 BT
 a yellow pine, 14 ins. in diam., brs. N.26°E., 73 lks. dist., marked T34N R2E S29 BT
 a fir, 10 ins. in diam., brs. S.61°E., 13 lks. dist., marked T34N R2E S32 BT
 a fir, 6 ins. in diam., brs. S.51°W., 37 lks. dist., marked T34N R2E S31 BT

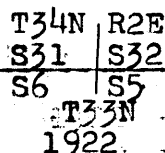
Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir, aspen and oaks.
 Undergrowth, oak, laurel, manzanita and other native brush.

S.0°03'E., on true line, bet. secs. 31 and 32.
 Over mountainous land, thru dense timber and undergrowth.
 On slight ase. N. slope
 1.00 Spur, slopes W.
 Descend 181 ft. over S.E. slope
 17.75 Ravine bottom, 15 lks. wide, course S.15°E.
 Ascend gradual N. slope
 20.00 Top of spur, slopes E.
 Descend 98 ft. over S. slope
 31.10 Ravine bottom, 60 lks. wide, course S.30°W.
 Ascend 156 ft. over N.W. slope
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground for the 1/4 sec. cor. secs. 31 and 32, with brass cap marked



from which,
 a pinon, 12 ins. in diam., brs. N.40°W., 25 lks. dist. marked 1/4 S31 BT
 a fir, 6 ins. in diam., brs. N.69°E., 16 lks. dist., marked 1/4 S32 BT

Ascend 48 ft. over N.W. slope
 43.90 A jack pine, 8 ins. in diam., on line.
 46.25 A yellow pine, 8 ins. in diam., on line.
 47.50 Spur, slopes S.W.
 Descend 241 ft. over S.E. slope
 63.00 Ravine, bottom, 40 lks. wide, course S.W.
 Ascend 238 ft. over N.W. slope
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 8 ins. in the ground, to bedrock, supported by a mound of stone, deposit marked stone at base of post, for the cor. secs. 5, 6, 31 and 32, with brass cap marked



from which,
 a yellow pine, 18 ins. in diam., brs. N.24°W., 28 lks. dist., marked T34N R2E S31 BT
 a yellow pine, 20 ins. in diam., brs. N.14°E., 82 lks. dist., marked T34N R2E S32 BT
 a yellow pine, 20 ins. in diam., brs. S.78°E., 26 lks. dist., marked T33N R2E S5 BT
 a yellow pine, 20 ins. in diam., brs. S.72°W., 96 lks. dist., marked T33N R2E S6 BT

Between Townships 33 & 34 North, Range 2 East,

1933

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

Land, mountainous.
Soil, rocky 4th. rate.
Timber, dense yellow and jack pine, spruce, aspen, fir,
and oak.
Undergrowth, laurel, oak, manzanita and other native
brush.

East, on true line, bet. secs. 5 and 32.
Over mountainous land, thru dense timber and undergrowth.
Descend 10 ft. over S.E. slope
2.20 A yellow pine, 12 ins. in diam., on line.
2.80 Ravine bottom, 10 lks. wide, course S.W.
Ascend 202 ft. over N.W. slope
15.00 Ridge, slopes S.W.
Descend 202 ft. over S.E. slope
19.05 Ravine bottom, 15 lks. wide, course S.
Ascend 40 ft. over W. slope
25.00 Spur, slopes S.
Descend 135 ft. over E. slope
33.75 Ravine bottom, 5 lks. wide, course S.E.
Ascend 15 ft. over S.E. slope
34.50 Spur, slopes S.
Descend 32 ft. over E. slope
38.20 Draw bottom, 20 lks. wide, course S.
Ascend gradual W. slope to
40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
in the ground, for the $\frac{1}{4}$ Sec. cor. secs. 5 and 32, with
brass cap marked

$$\frac{1}{4} \frac{S32}{S5}$$

1922

from which,
a pine, 10 ins. in diam., brs. N.55°W., 15 lks. dist.
marked $\frac{1}{4}$ S32 BT
a pine, 8 ins. in diam., brs. S.40°E., 39 lks. dist.
marked $\frac{1}{4}$ S5 BT

Ascend 46 ft. over W. slope
45.00 Spur, slopes S.
Descend 150 ft. over S.E. slope
51.50 Hanabowitz Canyon, bottom 50 lks. wide, course S.60°W.,
At this point a spring of excellent water on line.
An old road in bottom brs. N.60°E., and S.60°W.
Continue up bottom.
60.00 Leave canyon to N.E., at mouth of ravine from S.E.
Ascend 200 ft. over N.W. slope
68.65 A yellow pine, 14 ins. in diam., on line.
80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
in the ground, for the cor. secs. 4, 5, 32 and 33, with
brass cap marked

$$\begin{array}{c} T34N R2E \\ S32 | S33 \\ S5 | S4 \\ T33N \\ 1922 \end{array}$$

from which,
A yellow pine, 36 ins. in diam., brs. N.10°W., 59 lks.
dist., marked T34N R2E S32 BT
a yellow pine, 13 ins. in diam., brs. N.56°E., 97 lks.
dist., marked T34N R2E S33 BT
a yellow pine, 18 ins. in diam., brs. S.46°E., 50 lks.
dist., marked T33N R2E S4 BT
a yellow pine, 10 ins. in diam., brs. S.39°W., 91 lks.
dist., marked T33N R2E S5 BT

Between Townships 33 and 34 North, Range 2 East,

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

	<p>Land, mountainous. Soil, rocky 4th. rate. Timber, yellow and jack pine, aspen, fir, spruce and oak. Undergrowth, oak, laurel, manzanita and other native brush.</p> <hr/> <p>East, on true line, bet. secs. 4 and 33. Over mountainous land, thru dense timber and scattering undergrowth. Ascend gradually over rolling south slope. A yellow pine, 16 ins. in diam., on line. Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 4 and 33, with brass cap marked</p> <p style="text-align: center;"> $\frac{1}{4}$ $\frac{S33}{S4}$ 1922 </p> <p>from which, a yellow pine, 14 ins. in diam., brs. N.54°E., 95 lks. dist., marked $\frac{1}{4}$ S33 BT a yellow pine, 6 ins. in diam., brs. S.36$\frac{1}{2}$°E., 32 lks. dist., marked $\frac{1}{4}$ S4 BT</p> <p>Descend 46 ft. over S.E. slope A yellow pine, 18 ins. in diam., on line. Draw bottom, 20 lks. wide, course S.W. Ascend 58 ft. over N.W. slope Spur, slopes S.W. Descend 63 ft. over S.E. slope A yellow pine, 16 ins. in diam., on line. Draw bottom, 1.00 ch. wide, course S.W. Ascend 63 ft. over N.W. slope A yellow pine, 14 ins. in diam., on line. Spur, slopes S.W. Descend 31 ft. over S.E. slope to Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 3, 4, 33 and 34, with brass cap marked</p> <p style="text-align: center;"> T34N R2E S33 S34 S4 S3 T33N 1922 </p> <p>from which, a yellow pine, 14 ins. in diam., brs. N.11°W., 57 lks. dist., marked T34N R2E S33 BT a yellow pine, 14 ins. in diam., brs. N.4°E., 67 lks. dist., marked T34N R2E S34 BT an aspen, 6 ins. in diam., brs. S.15°E., 49 lks. dist., marked T33N R2E S3 BT a yellow pine, 14 ins. in diam., brs. S.46$\frac{1}{2}$°W., 39 lks. dist., marked T33N R2E S4 BT</p> <p>Land, mountainous. Soil, rocky 4th. rate. Timber, yellow and jack pine, spruce, fir, aspen and oak. Undergrowth, oak, laurel, buck and other native brush.</p> <hr/>
14.97	
40.00	
40.63	
46.45	
60.00	
68.65	
70.00	
72.20	
77.40	
80.00	

Between Townships 33 and 34 North, Range 2 East,

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

East, on true line, bet. secs. 3 and 34.
 Over mountainous land, thru dense timber and scattering
 undergrowth.
 Descend 44 ft. over S.E. slope
 3.40 Ravine bottom, 10 lks. wide, course S.W.
 Ascend 40 ft. over N.W. slope
 6.25 A yellow pine, 10 ins. in diam., on line.
 10.00 Spur, slopes S.W.
 Descend gradual S.E. slope
 22.15 Head of shallow draw, course S.W.
 Ascend 23 ft. over N.W. slope
 26.75 A burned yellow pine, 24 ins. in diam., on line.
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 3 and 34,
 with brass cap marked

$\frac{1}{4}$ S34
 S3
 1922

from which,
 a yellow pine, 20 ins. in diam., brs. N.76°W., 29 lks.
 dist., marked $\frac{1}{4}$ S34 BT
 a yellow pine, 16 ins. in diam., brs. S.60°W., 20 lks.
 dist., marked $\frac{1}{4}$ S3 BT

Cor. set on spur, slopes S.W.
 Descend 123 ft. over S.E. slope
 47.80 A yellow pine, 18 ins. in diam., on line.
 48.20 Ravine bottom, 1 ch. wide, course S.W.
 Ascend 9 ft. over W. slope
 51.80 Ridge, brs. N.E and S.W.
 Descend 136 ft. over S.E. slope into Pond Canyon.
 57.40 Bottom, 1.00 ch. wide, course S.20°W.,
 Ascend 238 ft. over N.W. slope
 63.90 A jack pine, 48 ins. in diam. on line.
 66.55 Spur, slopes S.W.
 Descend 50 ft. over S.E. slope
 70.50 Bottom of ravine, 15 lks. wide, course S.W.
 Ascend 94 ft. over N.E. slope
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 2, 3, 34 and 35, with
 brass cap marked

T34N R2E
 S34 | S35
 S3 | S2
 T33N
 1922

from which,
 an aspen, 12 ins. in diam., brs. N.27°W., 20 lks.
 dist., marked T34N R2E S34 BT
 an aspen, 10 ins. in diam., brs. N.39°E., 27 lks.
 dist., marked T34N R2E S35 BT
 a fir, 10 ins. in diam., brs. S.67°E., 35 lks.
 dist., marked T33N R2E S2 BT
 a fir, 6 ins. in diam., brs. S.13°W., 49 lks.
 dist., marked T33N R2E S3 BT

Land, mbuntainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack, pine. Aspen, fir, spruce and oak.
 Undergrowth, oak, laurel, manzanita and other native
 brush.

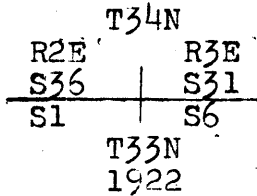
Between Townships 33 and 34 North, Range 2 East,

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

	<p>East, on true line, bet. secs. 2 and 35. Over mountainous land, thru dense timber and scattering undergrowth. On slight ascent over N.W. slope Spur, slopes S.W. Descend 220 ft. over S.E. slope into Milk Canyon. Bottom, 2.00 chs. wide, course S.60°W. Trail in same brs. N.E. and S.W. Continue over bottom. Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 2 and 35, with brass cap marked</p> $\frac{1}{4} \frac{S35}{S2}$ <p style="text-align: center;">1922</p> <p>from which, a spruce, 8 ins. in diam., brs. N.31°E., 95 lks. dist. marked $\frac{1}{4}$ S35 BT a fir, 10 ins. in diam., brs. S.28°W., 137 lks. dist. marked $\frac{1}{4}$ S2 BT</p>
13.50	
37.90	
40.00	
41.00	<p>Leave bottom, ascend 212 ft. over N.W. slope Ridge, brs. N.E and S.W. Continue on slight ascent of 23 ft. over same. Descend over gradual S.W. slope to Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 1, 2, 35 and 36, with brass cap marked</p> $\begin{array}{c} T34N R2E \\ S35 S36 \\ S2 S1 \\ T33N \\ 1922 \end{array}$ <p>from which, a fir, 16 ins. in diam., brs. N.13°W., 38 lks. dist. marked T34N R2E S35 BT a fir, 10 ins. in diam., brs. N.74°E., 24 lks. dist. marked T34N R2E S36 BT a yellow pine, 8 ins. in diam., brs. S.50°E., 54 lks. dist. marked T33N R2E S1 BT a pine, 8 ins. in diam., brs. S.9°W., 41 lks. dist. marked T33N R2E S2 BT</p> <p>Land, mountainous. Soil, rocky 4th. rate. Timber, yellow and jack pine, spruce, fir, aspen, and oak. Undergrowth, oak, laurel, manzanita and other native brush.</p>
60.00	
78.00	
80.00	
20.00	<p>East, on true line, bet. secs. 1 and 36. Over mountainous land, thru dense timber and scattering undergrowth. Ascend 75 ft. over N.W. slope Ridge, brs. N. and S. Descend 110 ft. over E. slope Ravine bottom, 1.50 chs. wide, course S.W. Set an iron post 3 ft. long and 1 in. in diam. 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 1 and 36, with brass cap marked</p> $\frac{1}{4} \frac{S36}{S1}$ <p style="text-align: center;">1922</p> <p>from which, a fir, 16 ins. in diam., brs. N.79°W., 208 lks. dist. marked $\frac{1}{4}$ S36 BT an aspen, 12 ins. in diam., brs. S.73°W., 204 lks. dist. marked $\frac{1}{4}$ S1 BT</p>
40.00	

~~Chains Survey of the Kaibab Forest Grand Canyon Park Boundary.~~

73.00 Ascend 314 ft. over N.W. slope
Ridge, slopes S.W.
80.00 Descend 52 ft. over S.E. slope
Set an iron post 3 ft. long and 3 ins. in diam., 26 ins.
in the ground, for the cor. ~~secs. 1, 6, 31 and 36~~, Ts.
33 and 34 N., Rs. 2 and 3 E., with brass cap marked

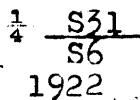


from which,
a yellow pine, 6 ins. in diam., brs. N.5 $\frac{1}{2}$ °W., 65 lks.
dist., marked T34N R2E S36 BT
a yellow pine, 20 ins. in diam., brs. N.80°E., 75 lks.
dist., marked T34N R3E S31 BT
an aspen, 7 ins. in diam., brs. S.28°E., 8 lks. dist.
dist., marked T33N R3E S6 BT
a fir, 20 ins. in diam., brs. S.68°W., 63 lks.
dist., marked T33N R2E S1 BT

Land, mountainous.
Soil, rocky 4th. rate.
Timber, yellow and jack pine, spruce, fir, aspen and oak.
Undergrowth, oak, laurel, manzanita and other native brush.

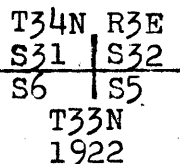
Between TOWNSHIPS 33 and 34 NORTH, RANGE 3 EAST.

East, on true line, bet. secs. 6 and 31.
Over mountainous land, thru dense timber and scattering
undergrowth,
20.00 Descend 84 ft. over S.E. slope
Ravine, bottom, 1.00 ch. wide, course S.W.
32.05 Ascend 366 ft. over N.W. slope
A fir, 10 ins. in diam., on line.
As convergency for this latitude is 53 lks., therefore at
39.47 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
in the ground, for the $\frac{1}{4}$ sec. cor. secs. 6 and 31,
with brass cap marked



from which,
a fir, 8 ins. in diam., brs. N.4°W., 11 lks. dist.,
marked $\frac{1}{4}$ S31 BT
a fir, 9 ins. in diam., brs. S.6°E., 46 lks. dist.,
marked $\frac{1}{4}$ S6 BT

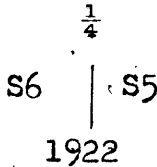
50.00 Continue on ascent of 80 ft. over N.W. slope
Ridge brs. N. and S.
At this point the road from Little Park to the Basin, brs.
N. and S.
65.85 Descend 251 ft. over E. slope
Ravine bottom, 50 lks. wide, course S.20°W.
79.47 Ascend 248 ft. over N.W. slope
Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
in the ground, for the cor. secs. 5, 6, 31 and 32, with
brass cap marked



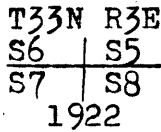
Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

from which,
 a fir, 30 ins. in diam., brs. N.68°W., 53 lks. dist.
 marked T34N R3E S31 BT
 a fir, 8 ins. in diam., brs. N.61°E., 78 lks. dist.
 marked T34N R3E S32 BT
 a pine, 10 ins. in diam., brs. S.63°E., 58 lks. dist.
 marked T33N R3E S5 BT
 a pine, 6 ins. in diam., brs. S.4°W., 32 lks. dist.,
 marked T33N R3E S6 BT
 Corner set on spur, slopes S.W.
 Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir, aspen and oak.
 Undergrowth, oak, laurel, manzanita and other native
 brush.

S.0°03'E., on true line, bet. secs. 5 and 6. T.33.N., R.
 3 E.
 Over mountainous land, thru dense timber and undergrowth.
 Descend 316 ft. over S.E. slope
 24.50 Ravine bottom, 50 lks. wide, course S.E.
 Ascend gradually 14 ft. over N.E. slope
 36.50 Low spur, slopes E.
 Continue on gradual descent over general S.E. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
 in the ground, for the 1/4 sec. cor. secs. 5 and 6, with
 brass cap marked,



from which,
 a yellow pine, 16 ins. in diam., brs. N.65°W., 12 lks.
 dist., marked 1/4 S6 BT
 a yellow pine, 16 ins. in diam., brs. N.86°E., 33 lks.
 dist., marked 1/4 S5 BT
 Continue on gradual descent of 46 ft. over general S.E.
 slope to cor.
 69.33 A fir, 12 ins. in diam., on line.
 73.60 Wash, 40 lks. wide and 10 ft. deep, course S.W.
 75.10 A fir, 8 ins. in diam., on line.
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 5, 6, 7 and 8, with
 brass cap marked



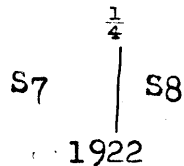
from which,
 a yellow pine, 20 ins. in diam., brs. N.36°W., 27 lks.
 dist., marked T33N R3E S6 BT
 a yellow pine, 18 ins. in diam., brs. N.65°E., 35 lks.
 dist., marked T33N R3E S5 BT
 a fir, 6 ins. in diam., brs. S. 12°E., 32 lks.
 dist., marked T33N R3E S8 BT
 a fir, 12 ins. in diam., brs. S.17°W., 69 lks.
 dist., marked T33N R3E S7 BT
 Land, mountainous, N.25 chs.; S.55 chs., rolling.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir, aspen and oak.
 Undergrowth, oak, laurel, manzanita and other native brush.

Township 33 North, Range 3 East,

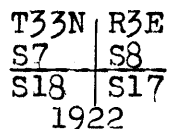
2039

~~Chains Survey of the Kaibab Forest Grand Canyon Park Boundary.~~

- S.0°03'E., on true line, bet. secs. 7 and 8.
Over rolling land, thru dense timber and scattering undergrowth.
Descend gradually over S.E. slope
3.30 Wash, 40 lks. wide, and 10 ft. deep, course S.E.
29.45 Same, wash, at junction with ravine from N.W., course S.30°W.
39.15 Same wash, course S.E.
Ascend 10 ft. over N. slope to
40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 7 and 8, with brass cap marked



- from which,
a yellow pine, 20 ins. in diam., brs. N.1°W., 120 lks. dist., marked $\frac{1}{4}$ S7 BT
a spruce, 30 ins. in diam., brs. N.63°E., 28 lks. dist., marked $\frac{1}{4}$ S8 BT
- Ascend 25 ft. over N. slope
42.00 Descend gradually over S.E. slope
50.00 Leave timber and undergrowth, brs. N.W and S.E.
Across open valley, locally known as the Basin.
70.00 Road to cabin in the Basin, brs. SE. and N.W. in draw, course SE.
Cabin, brs. S.E. about 10.00 chs. dist.
73.00 W. end of the Basin corrals, brs. E. about 1.00 ch. dist.
Ascend 29 ft. over N. slope to
80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins., in the ground, for the cor. secs. 7, 8, 17 and 18, with brass cap marked



- from which,
an aspen, 4 ins. in diam., brs. N.65°W., 10 lks. dist. marked T33N R3E S7 BT
an aspen, 4 ins. in diam., brs. N.48°E., 42 lks. dist. marked T33N R3E S8 BT
an aspen, 10 ins. in diam., brs. S.23°E., 35 lks. dist. marked T33N R3E S17 BT
a yellow pine, 36 ins. in diam., brs. S.52°W., 141 lks. dist. marked T33N R3E S18 BT
Cor. on edge of timber, brs. E. and W.
Land, rolling.
Soil, rocky 4th. rate, on slopes; in THE Basin, black sandy, loam, 3rd. rate.
Timber, yellow and jack pine, spruce, fir, aspen and oak.
Undergrowth, scattering buck, sage, laurel and other native brush.

- S.0°03'E., on true line, bet. secs. 17 and 18.
Over mountainous land, thru scattering timber and undergrowth.
Descend 29 ft. over S. slope
7.00 Shallow draw, course E.
Ascend 14 ft. over N. slope
11.30 A yellow pine, 30 ins. in diam. on line.
11.50 Spur, slopes E.
Descend 44 ft. over S. slope

~~Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.~~

- 21.00 Wash, 20 lks. wide, course S.E.
Ascend 34 ft. over N. slope
- 25.00 Spur, slopes S.E.
Descend gradually over S.W. slope
- 37.50 Shallow draw, course E.
Ascend gradually over N. slope to
- 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
in the ground, for the $\frac{1}{4}$ sec. cor. secs. 17 and 18,
with brass cap marked

$$\frac{1}{4}$$

S18	S17
-----	-----

1922

from which,
a fir, 24 ins. in diam., brs. N.74°E., 29 lks. dist.
marked $\frac{1}{4}$ S17 BT
a pine, 8 ins. in diam., brs. S.18°W., 25 lks. dist.
marked $\frac{1}{4}$ S18 BT

- 44.05 Continue over rolling W. slope
Head of shallow draw, course E.
Ascend 14 ft. over N. slope
- 52.90 Low spur, slopes E.
Descend gradually over S. slope
- 57.50 A trail, in draw, course N.E., brs. N.E and S.W.
Ascend 68 ft. over N.W. slope
- 60.40 An aspen, 10 ins. in diam., on line.
- 65.00 A blazed trail, brs. N.E and S.W.
Ridge, brs. N.W and S.E.
- 80.00 Descend gradually over S.W. slope to
Set an iron post 3 ft. long and 2 ins. in diam. 26 ins.
in the ground, for the cor. secs. 17, 18, 19 and 20,
with brass cap marked

T33N	R3E
S18	S17
S19	S20

1922

from which,
a yellow pine, 12 ins. in diam., brs. N.34 $\frac{1}{2}$ °W., 30 lks.
dist., marked T33N R3E S18 BT
a yellow pine, 12 ins. in diam., brs. N.58 $\frac{1}{2}$ °E., 52 lks.
dist., marked T33N R3E S17 BT
a yellow pine, 18 ins. in diam., brs. S.78°E., 46 lks.
dist., marked T33N R3E S20 BT
a yellow pine, 18 ins. in diam., brs. S.60°W., 22 lks.
dist., marked T33N R3E S19 BT

Land, mountainous.
Soil, rocky 4th. rate.
Timber, yellow and jack pine, spruce, fir, aspen.
Undergrowth, oak, manzanita, laurel and other native
brush.

- East, on true line, bet. secs. 17 and 20.
Over mountainous land, thru dense timber and undergrowth.
Ascend 34 ft. over S.W slope
- 7.00 Ridge, brs. N.W and S.E.
Descend 238 ft. over N.E. slope
- 37.90 Wash, in bottom of Outlet Canyon, 2 chs. wide, course S.
Ascend 20 ft. over W. slope to
- 40.00 Set an iron post 3 ft. long and 1 in. in diam. 26 ins.
in the ground, for the $\frac{1}{4}$ sec. cor. secs. 17 and 20,
with brass cap marked

$$\frac{1}{4}$$

S17	S20
-----	-----

1922

Township 33 North, Range 3 East,

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

from which,
 a fir, 12 ins. in diam., brs. N.89°W., 128 lks. dist.
 marked $\frac{1}{4}$ S17 BT
 a fir, 8 ins. in diam., brs. S.87°W., 135 lks. dist.
 marked $\frac{1}{4}$ S20 BT

58.00 Ascend 226 ft. over W. slope
 Spur, slopes S.
 69.30 Descend 228 ft. over E. slope
 Draw bottom, 1.50 ch. wide, course S. Junction of draws
 from N.E and N.W.
 69.40 Trail, brs. N. and S.
 Ascend 165 ft. over W. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 16, 17, 20 and 21,
 with brass cap marked

T33N	R3E
S17	S16
S20	S21

1922

from which,
 a yellow pine, 12 ins. in diam., brs. N.60°W., 70 lks.
 dist., marked T33N R3E S17 BT
 a yellow pine, 14 ins. in diam., brs. N.76°E., 76 lks.
 dist., marked T33N R3E S16 BT
 an aspen, 8 ins. in diam., brs. S.35°E., 9 lks.
 dist., marked T33N R3E S21 BT
 a yellow pine, 30 ins. in diam., brs. S.23°W., 96 lks.
 dist., marked T33N R3E S20 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir, and aspen.
 Undergrowth, oak, laurel, manzanita and other native
 brush.

East, on true line, bet. secs. 16 and 21.
 Ascend 75 ft. over N.W. slope
 10.00 Spur, slopes S.W.
 Descend 24 ft. over S.E. slope
 23.40 Draw bottom, 20 lks. wide, course S.E.
 Ascend gradually over N.W. slope
 25.00 Ridge, brs. N. and S.
 Descend 52 ft. over E. slope
 36.85 Ravine bottom, 15 lks. wide, course S.
 Ascend gradually over W. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam. 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 16 and 21,
 with brass cap marked

$\frac{1}{4}$	S16
	S21

1922

from which,
 a yellow pine, 20 ins. in diam., brs. N.46°E., 78 lks.
 dist., marked $\frac{1}{4}$ S16 BT
 a yellow pine, 20 ins. in diam., brs. S.1°W., 52 lks.
 dist., marked $\frac{1}{4}$ S21 BT

43.10 Ascend 21 ft. over W. slope
 A yellow pine, 12 ins. in diam., on line.
 50.00 Spur, slopes S.
 Descend 102 ft. over S.E. slope
 56.90 Ravine bottom, 50 lks. wide, course S.

Township 33 North, Range 3 East,

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

61.00 Ascend 49 ft. over W. slope
 Spur, slopes S.
 64.00 Descend 102 ft. over S.E. slope
 Head of draw, drains N.W.
 Ascend 114 ft. over N.W. slope
 69.00 Ridge, brs. N. and S.
 69.70 Highway, Fredonia-Bright Angel Point, Brs. N. and S.
 69.85 Telephone line, brs. N. and S.
 77.35 Fir, 18 ins. in diam., on line.
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 15, 16, 21 and 22,
 with brass cap marked

T33N R3E
 S16 | S15
 S21 | S22
 1922

from which,
 an aspen, 6 ins. in diam., brs. N.48°W., 9 lks.
 dist., marked T33N R3E S16 BT
 a yellow pine, 14 ins. in diam., brs. N.39°E., 55 lks.
 dist., marked T33N R3E S15 BT
 a fir, 12 ins. in diam., brs. S.63°E., 70 lks.
 dist., marked T33N R3E S22 BT
 a fir, 8 ins. in diam., brs. S.2°W., 60 lks.
 dist., marked T33N R3E S21 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack, pine, spruce, fir and aspen.
 Undergrowth, oak, laurel, manzanita and other native
 brush.

East, on true line, bet. secs. 15 and 22.
 Over mountainous land, thru dense timber and undergrowth.
 Descend 40 ft. over E. slope.
 10.00 Ravine bottom, 75 lks. wide, course S.70°E. Junction of
 ravines from N.W. and S.W.
 Ascend 23 ft. over S.W. slope
 17.50 Low spur, slopes S.
 Descend 14 ft. over S.E. slope
 18.25 Wash, 10 lks. wide, course S.E.
 Ascend 51 ft. over W. slope
 23.00 Spur, slopes S.
 Descend 27 ft. over S.E. slope
 Ascend 194 ft. over S.W. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 15 and 22,
 with brass cap marked

$\frac{1}{4}$ S15
 $\frac{1}{4}$ S22
 1922

from which,
 a yellow pine, 10 ins. in diam., brs. N.4°W., 12 lks.
 dist., marked $\frac{1}{4}$ S15 BT
 a fir, 6 ins. in diam., brs. S33 $\frac{1}{2}$ °W., 38 lks.
 dist., marked $\frac{1}{4}$ S22 BT

47.00 Descend 187 ft. over S.E. slope
 Head of draw, 50 lks. N., course E.
 55.80 Ravine bottom, 15 lks. wide, course S.E.
 Ascend 110 ft. over W. slope
 63.00 Spur, slopes S.
 Descend 172 ft. over E. slope
 73.70 A yellow pine, 36 ins. in diam., on line.

Township 33 North, Range 3 East,

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins. in the ground, for the cor. secs. 14, 15, 22 and 23, with brass cap marked

T33N R3E	
S15	S14
S22	S23
1922	

from which,
 an aspen, 10 ins. in diam., brs. N.85°W., 195 lks. dist., marked T33N R3E S15 BT
 an aspen, 6 ins. in diam., brs. N.53°E., 112 lks. dist., marked T33N R3E S14 BT
 an aspen, 10 ins. in diam., brs. S.67°E., 166 lks. dist., marked T33N R3E S23 BT
 an aspen, 6 ins. in diam., brs. S.81°W., 195 lks. dist., marked T33N R3E S22 BT
 This cor. set in Road Canyon, course S.W. 3.00 chs. wide. Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir, and aspen.
 Undergrowth, oak, laurel, manzanita and other native brush.

East, on true line, bet. secs. 14 and 23.
 Over mountainous land, thru dense timber and scattering undergrowth.

11.40 Ascend 261 ft. over N.W. slope
 Spur, slopes S.W.
 21.62 Descend 122 ft. over S.E. slope
 Ravine bottom, 1.00 ch. wide, course S.
 25.00 Ascend 48 ft. over N.W. slope
 Low spur, slopes S.W.
 29.00 Descend 23 ft. over S.E. slope
 Draw bottom, 1.00 ch. wide, course S.80°W.
 40.00 Ascend 142 ft. over N.W. slope to
 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground for the $\frac{1}{4}$ sec. cor. secs. 14 and 23, with brass cap marked

$\frac{1}{4}$ S14	
$\frac{1}{4}$ S23	
1922	

from which,
 a pine, 24 ins. in diam., brs. N.7°E., 56 lks. dist., marked $\frac{1}{4}$ S14 BT
 a pine, 12 ins. in diam., brs. S.6°W., 51 lks. dist., marked $\frac{1}{4}$ S23 BT

45.03 Ascend 23 ft. over N.W. slope
 A fir, 36 ins. in diam., on line.
 50.00 Spur, slopes S.W.
 Descend 262 ft. over S.E. slope
 67.05 Bottom of ravine, 1.00 ch. wide, course S.
 Ascend 210 ft. over N.W. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam. 26 ins. in the ground, for the cor. secs. 13, 14, 23 and 24, with brass cap marked

T33N R3E	
S14	S13
S23	S24
1922	

from which,
 a spruce, 12 ins. in diam., brs. N.42°W., 2 lks. dist., marked T33N R3E S14 BT
 a spruce, 6 ins. in diam., brs. N.23°E., 7 lks. dist., marked T33N R3E S13 BT
 a pine, 4 ins. in diam., brs. S.44 $\frac{1}{2}$ °E., 15 lks. dist., marked BT only.
 a spruce, 8 ins. in diam., brs. S.71°W., 46 lks.

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

dist., marked T33N R3E S23 BT

Land, mountainous.

Soil, rocky 4th. rate.

Timber, dense yellow and jack pine, spruce, fir, and aspen.

Undergrowth, oak, laurel, manzanita and other native brush.

N.0°01'W., on true line, bet. secs. 13 and 14.

Over mountainous land, thru dense timber and undergrowth.

Descend 172 ft. over N.W. slope

1.65 A yellow pine; 10 ins. in diam., on line.

11.50 Ravine bottom, 20 lks. wide, course W.

Asc. 61 ft. over S. slope

15.00 Spur, slopes S.W.

Descend 130 ft. over N.W. slope

22.70 Ravine bottom, 50 lks. wide, course W.

Asc. 94 ft. over S. slope

27.50 Spur, slopes W.

Descend 107 ft. over N.W. slope to

40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins. in the ground, for the $\frac{1}{4}$ sec. cor. secs. 13 and 14, with brass cap, marked

$\frac{1}{4}$

S14 | S13

1922

from which,

an aspen, 6 ins. in diam., brs. S.85°N., 100 lks.

dist., marked $\frac{1}{4}$ S13 BT

an aspen, 6 ins. in diam., brs. S.60 $\frac{1}{2}$ °W., 151 lks.

dist., marked $\frac{1}{4}$ S14 BT

This cor. set in Road Canyon, course S.15°W.

Across Canyon bottom:

44.00 Begin ascent of 121 ft. over S.E. slope

51.70 Low spur, slopes E.

Descend gradual N. slope

54.35 Head of draw, 3.00 chs. wide, course E.

Asc. 130 ft. over S.W. slope

60.40 Spur, slopes E.

Descend 72 ft. over N. slope

67.70 Ravine bottom, 10 lks. wide, course E.

Asc. 127 ft. over S.E. slope

69.64 A fir, 24 ins. in diam., on line.

80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins. in the ground, for the cor. secs. 11, 12, 13 and 14, with brass cap marked

T33N R3E

S11 | S12

S14 | S13

1922

from which,

a yellow pine, 18 ins. in diam., brs. N.38°W., 58 lks.

dist., marked T33N R3E S11 BT

a yellow pine, 18 ins. in diam., brs. N.31°E., 50 lks.

dist., marked T33N R3E S12 BT

an aspen, 6 ins. in diam., brs. S.33°E., 34 lks.

dist., marked T33N R3E S13 BT

a spruce, 6 ins. in diam., brs. S.6°W., 45 lks.

dist., marked T33N R3E S14 BT

Land, mountainous.

Soil, rocky 4th. rate.

Timber, yellow and jack pine, spruce, fir and aspen.

Undergrowth, oak, laurel, manzanita and other native brush.

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

N.0°01'W., on true line, bet. secs. 11 and 12.
 Over mountainous land, thru dense timber and undergrowth.
 Ascend 23 ft. over S.E. slope
 5.00 Spur, slopes E.
 Descend 196 ft. over N. slope
 23.00 Ravine bottom 15 lks. wide, course N.W.
 Asc. 14 ft. over N.W. slope
 27.30 Spur, slopes W.
 Descend 85 ft. over N. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam. 26 ins.
 in the ground, for the $\frac{1}{4}$ sec. cor. secs. 11 and 12,
 with brass cap marked

$\frac{1}{4}$
 S11 | S12
 1922

from which,
 an aspen, 10 ins. in diam., brs. N.55°W., 44 lks.
 dist., marked $\frac{1}{4}$ S11 BT
 an aspen, 8 ins. in diam., brs. S.63°E., 41 lks.
 dist., marked $\frac{1}{4}$ S12 BT

This cor, set in canyon bottom, course S.15°W.
 A ravine enters same from N.E.
 45.00 Leave bottom to N.30°E. Ascend 213 ft. over S.E slope
 49.00 Shallow draw, course E.
 60.50 Spur, slopes E.
 Desc. 34 ft. over N. slope
 63.80 Draw bottom, 10 lks. wide, course S.E.
 Ascend 122 ft. over S.W. slope
 66.70 Spur, slopes E.
 Desc. 75 ft. over N. slope
 73.60 Ravine bottom, 15 lks. wide, course E.
 Ascend 74 ft. over S.W. slope to
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 1, 2, 11 and 12,
 with brass cap marked

T33N R3E
 S2 | S1
 S11 | S12
 1922

from which,
 a spruce, 12 ins. in diam., brs. N.26°W., 42 lks.
 dist., marked T33N R3E S2 BT
 an aspen, 8 ins. in diam., brs. N.13°E., 24 lks.
 dist., marked T33N R3E S1 BT
 a spruce, 8 ins. in diam., brs. S.43°E., 6 lks.
 dist., marked T33N R3E S12 BT
 a fir, 14 ins. in diam., brs. S.63°W., 23 lks.
 dist., marked T33N R3E S11 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir and aspen.
 Undergrowth, oak, manzanita, laurel and other native
 brush.

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

East, on true line, bet. secs. 1 and 12.
 Over mountainous land, thru dense timber and undergrowth.
 Descend 208 ft. over S.E. slope
 11.50 Canyon, 1.00 ch. wide, course S.
 Ascend 74 ft. over S.W. slope
 17.50 Spur, slopes S.W.
 Descend 23 ft. over S.E. slope
 24.25 Fir, 40 ins. in diam., on line.
 26.00 Ravine, bottom, 10 lks. wide, course S.75°W.
 Ascend 70 ft. over S.W. slope to
 40.00 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
 in the ground, for the 1/4 sec. cor. secs. 1 and 12,
 with brass cap marked

1/4 S1
 S12
 1922

from which,
 a spruce, 6 ins. in diam., brs. N.61°E., 56 lks.
 dist., marked 1/4 S1 BT
 a spruce, 10 ins. in diam., brs. S.50°W., 48 lks.
 dist., marked 1/4 S12 BT

Cor. set on ridge, brs. N. and S.
 Descend 82 ft. over S.E. slope
 44.00 Head of draw, course S.75°E.,
 Ascend 69 ft. over S.W. slope
 55.00 Spur, slopes S.
 Descend 59 ft. over SE slope
 62.50 Road Canyon, 50 lks. wide, course S.
 Ascend 93 ft. over S.W. slope
 80.00 Set an iron post 3 ft. long and 2 ins. in diam., 26 ins.
 in the ground, for the cor. secs. 1, 6, 7 and 12,
 with brass cap marked

T33N
 R3E R4E
 S1 S6
 S12 S7
 1922

from which,
 a spruce, 6 ins. in diam., brs. N.80°W., 10 lks.
 dist., marked T33N R3E S1 BT
 a spruce, 6 ins. in diam., brs. N.69°E., 24 lks.
 dist., marked T33N R4E S6 BT
 a spruce, 8 ins. in diam., brs. S.40°E., 6 lks.
 dist., marked T33N R4E S7 BT
 a spruce, 10 ins. in diam., brs. S.48°W., 22 lks.
 dist., marked T33N R3E S12 BT

Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, aspen, fir, spruce.
 Undergrowth, second growth timber, manzanita, laurel
 and other native brush.

TOWNSHIP 33 NORTH, RANGE 4 EAST.

East, on true line, bet. secs. 6 and 7.
 Over mountainous land, thru dense timber and undergrowth.
 Descend 172 ft. over S.E. slope
 15.00 Ravine bottom, 1.00 ch. wide, course E., from N.W.
 18.00 A yellow pine, 24 ins. in diam., on line.
 Leave bottom, to S.75°E., asc. 29 ft. over S.W. slope
 39.56 Set an iron post 3 ft. long and 1 in. in diam., 26 ins.
 in the ground for the 1/4 sec. cor. secs. 6 and 7,
 with brass cap marked

1/4 S6
 S7
 1922

Chains Survey of the Kaibab Forest-Grand Canyon Park Boundary.

- from which,
 a yellow pine, 36 ins. in diam., brs. N.56°W., 26 lks.
 dist., marked $\frac{1}{4}$ S6 BT
 a fir, 6 ins. in diam., brs. S.13°W., 13 lks.
 dist., marked $\frac{1}{4}$ S7 BT
- Cor. set on spur, slopes S.
 Descend 196 ft. over S.W. slope
 Ravine bottom, course S.
 Ascend, 181 ft. over S.W. slope
- 50.55 Spur, slopes S.
 64.50 Descend 121 ft. over S.E. slope
 71.40 Ravine bottom, 1 ch. wide, course S.
 Ascend 130 ft. over S.W. slope to
 79.56 Set a malapai stone, 12 x 14 x 26 ins., 18 ins. in the
 ground, for the cor. secs. 5, 6, 7 and 8, marked
 5 grooves on the S. and 5 grooves on E. faces.
 from which,
 a fir, 36 ins. in diam., brs. N.66°W., 38 lks. dist.
 marked T33N R4E S6 BT
 a pine, 10 ins. in diam., brs. N.4°E., 46 lks. dist.
 marked T33N R4E S5 BT
 an aspen, 8 ins. in diam., brs. S.32°E., 26 lks. dist.
 marked T33N R4E S8 BT
 a fir, 8 ins. in diam., brs. S.59 $\frac{1}{2}$ °W., 13 lks. dist.
 marked T33N R4E S7 BT
- Land, mountainous.
 Soil, rocky 4th. rate.
 Timber, yellow and jack pine, spruce, fir and aspen.
 Undergrowth, oak, laurel, manzanita and other native
 brush.
-
- East, on true line, bet. secs. 5 and 8.
 Over mountainous land, thru dense timber and scattering
 undergrowth,
 Descend 109 ft. over S.E. slope
 8.80 Ravine bottom, 1.00 ch. wide, course S.
 Asc. 46 ft. over S.W. slope
 15.00 Spur, slopes S.W.
 Desc. gradually over S.E. slope
 25.75 Ravine bottom, 20 lks. wide, course S.70°W.
 Head of same. about 4.00 chs. N.
 Ascend 73 ft. over N.W. slope
 40.00 Set amahapai stone, 14 x 16 x 20 ins., 18 ins. in the
 ground, for the $\frac{1}{4}$ sec. cor. secs. 5 and 8, with $\frac{1}{4}$ cut
 in N. face
 from which,
 a yellow pine, 30 ins. in diam., brs. N.24°W., 55 lks.
 dist., marked $\frac{1}{4}$ S5 BT
 a yellow pine, 30 ins. in diam., brs. S.50°E., 29 lks.
 dist., marked $\frac{1}{4}$ S8 BT
- Cor. set on ridge, brs. N. and S.
 Descend 101 ft. over S.E. slope
 47.85 Ravine bottom, 25 lks. wide, course S.W.
 Ascend 138 ft. over N.W. slope
 60.00 Ridge, brs. N. and S.
 Desc. 73 ft. over E. slope
 73.50 Ravine bottom, 25 lks. wide, course S.W.
 Ascend 81 ft. over N.W. slope
 80.00 Set a malapai stone, 8 x 12 x 26 ins., 18 ins. in the
 ground, for the cor. secs. 4, 5, 8 and 9, with
 4 grooves on E. and 5 grooves on S. faces
 from which,

Chains Survey of the Kaibab Forest- Grand Canyon Park Boundary.

a yellow pine, 10 ins. in diam., brs. N.40°W., 69 lks.
dist., marked T33N R4E S5 BT
a yellow pine, 8 ins. in diam., brs. N.65°E., 55 lks.
dist., marked T33N R4E S4 BT
a yellow pine, 36 ins. in diam., brs. S.28°E., 52 lks.
dist., marked T33N R4E S9 BT
a yellow pine, 36 ins. in diam., brs. S.86°W., 103 lks.
dist., marked T33N R4E S8 BT

Land, mountainous.

Soil, rocky 4th. rate.

Timber, yellow and jack pine, aspen, spruce and fir.

Undergrowth, manzanita, laurel and other native brush.

As the East Rim of the Buckskin Mountain brs. E. about 10 chains, discontinue the projection of the Kaibab Forest- Grand Canyon National Monument Boundary at the cor. secs. 4, 5, 8 and 9.

November, 10, 1922, at Riggs Springs, near the corner of Ts. 36 and 37 N., Rs. 1 E. and 1 W., on the meridian hereinbefore referred to on page 2 of this book, I test the adjustments of the instrument as follows:
Examine the adjustments of the transit and find no errors, then to test the workings of the solar attachment, proceed as follows:

At 9h.00m., a.m., app.t., set off 36°34'20" N., on the lat. arc, 17°01½' S., on decl. arc and determine a meridian which agrees with the true meridian.

At 12h.00m., app.noon, with the lat. arc unchanged, observe the sun on the meridian, the resultant reading of the decl. arc being 17°04' S., which agrees with the calculated decl. of the sun.

At 3h.00m., p.m., app.t., with the lat. arc unchanged set off 17°05½' S., on the decl. arc and determine a meridian, with the solar which agrees with the true meridian.

As all of the observations made, during the usual hours of solar work agree within 1'30" of the true meridian, conclude that the adjustments of the instrument, have been maintained during the survey.

GENERAL DESCRIPTION

That portion of the Kaibab Forest- Grand Canyon National Monument, boundary, surveyed under this group, traverses mountainous land ranging from an elevation of 7,500 ft. to 9,000 ft. above sea level, except those parts of lines lying under the plateau Rim, where the point of lowest descent is about 5500 ft.

This region, known as Buckskin Mountain, is covered with a heavy growth of virgin timber as yet practically untouched. There are a few sawmills on the W. slope of the mountain. Timber is chiefly yellow and jack pine, spruce, fir, oak and aspen.
Fine springs abound on the mountain.

There is an excellent highway built from Fredonia, Ariz. to Bright Angel Point, on the southern end of the Buckskin Mtn., which is only passable during the summer as heavy snows cover the plateau from about Nov. 1st. to May.

The grazing value of the land is fair.

BOOK 3639

CERTIFICATE OF UNITED STATES TRANSITMAN.

I, Benjamin J. Kinsey, U. S. Transitman hereby certify upon honor that, in pursuance of special instructions received from the U. S. Surveyor General for Arizona, bearing date of the 19th day of September, 1922, 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 the Gila and Salt River Meridian, thru Townships 35 and 36 North, and part of Township 34 North, part of the boundary between Townships 33 and 34 North, Ranges 2 and 3 East, and part of the Subdivision Lines of Township 34 North, Ranges 1 and 2 East, and Township 33 North, Ranges 3 and 4 East of the Gila & Salt River Base and Meridian, in the State of Arizona, which are represented in the foregoing field notes as having been executed by me, and under my direction; and 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 Arizona and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Place: Washington D.C.

Benjamin J. Kinsey
U. S. Transitman

Date: March 5, 1925

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Phoenix, Arizona, March 10, 1925

The foregoing field notes of the survey of Gila and Salt River Meridian, thru Townships 35 and 36 North, and part of Township 34 North, part of the boundary between Townships 33 and 34 North, Ranges 2 and 3 East, and part of the Subdivision Lines of Township 34 North, Ranges 1 and 2 East, and Township 33 North, Ranges 3 and 4 East,

executed by Benjamin J. Kinsey, U. S. Transitman,

under his special instructions dated September 19, 1922, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Charles M. Doulos
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.