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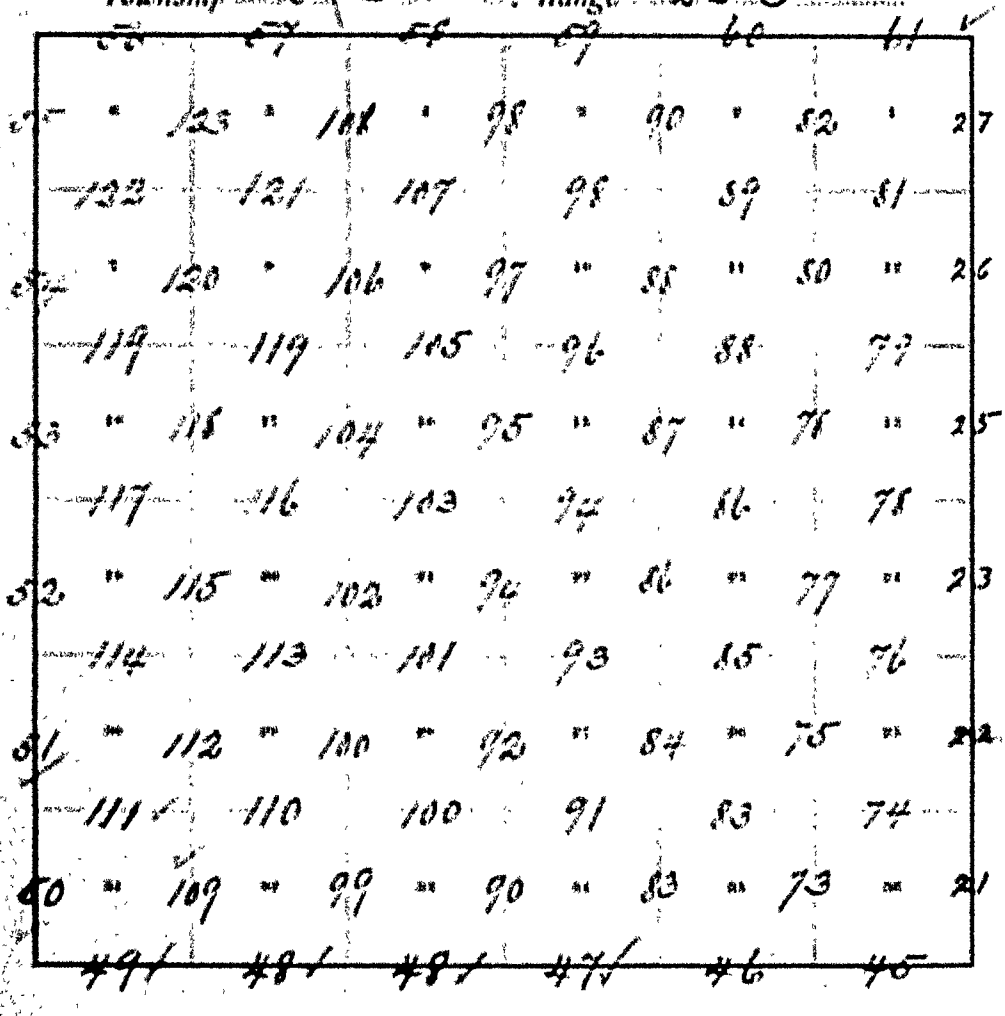

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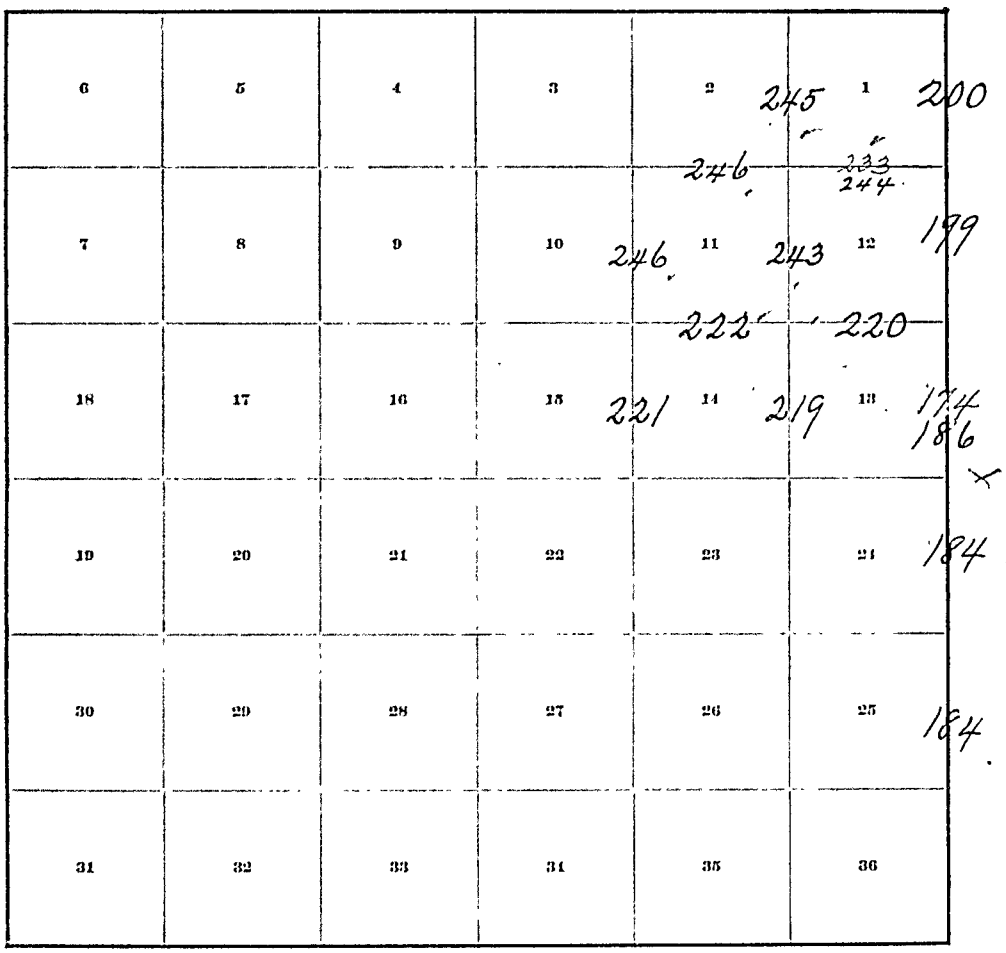

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FIELD NOTES

OF THE ~~SURVEY~~ Resurvey OF THE

Colorado Guide Meridian

through Townships 36-37-38 and 39 South

Between Ranges 22 and 23 East

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

his Contract No. 289, dated May 18, 1905

commenced April 6, 1907

completed April 12, 1907

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36 S. Lng L 5.40.00

37 " 6

38 " 6

39 " 6

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

R.F.Hurlburt,	Chainman.
J.E.Rogerson, Jr.	Chainman.
D.J.Rogers,	Chainman.
Indian Jerry,	Chainman.
R.F.Hurlburt,	Moundman.
J.E.Rogerson Jr.,	Moundman.
Indian Jerry,	Axman.
Indian Mannito,	Axman.
D.J.Rogers,	Flagman.

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BOOK A-348

PRELIMINARY OATHS OF ASSISTANTS.

J E Rogerson Jr. D J Rogers

We, R F Hurlburt and Indian Jerry

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the we will report the true distances to all notable objects, and the true lengths of all lines that we measuring, to the best of our skill and ability, and in accordance with instructions given us, in the

Colorado Guide Meridian through Tps. 36-37 S. bet. Rs. 22 and 23 E. Salt Lake Base and Meridian Utah

R. F. Hurlburt, Chainm

J E Rogerson Jr, Chainm

Subscribed and sworn to before me this 5th day of April, 1907

D J Rogers Chainm

Indian Jerry X Chainm

A P Hanson witness to mark

Peter Allan

Notary Public

SEAL

We, R F Hurlburt and J E Rogerson Jr.

do solemnly swear that we will well and truly perform the duties of moundmen in the estab of corners, according to the instructions given us, to the best of our skill and ability, in the su

Colorado Guide Meridian through Tps. 36-37-38 and 39 S. bet. Rs. 22 and 23 E Salt Lake Base and Meridian Utah

R. F. Hurlburt, Mou

J E Rogerson Jr, Moundm

Subscribed and sworn to before me this 5th day of April, 1907

Peter Allan

Notary Public

SEAL

We, Indian Jerry and Indian Mannith

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corn and other duties, according to instructions given us, to the best of our skill and ability, in the survey

Colorado Guide Meridian through Tps. 36-37-38 and S bet. Rs 22 and 23 E Salt Lake Base and Meridian Utah

A P Hanson witness to mark Indian Jerry X Axm

A P Hanson witness to mark Indian Mannith X Axm

Subscribed and sworn to before me this 5th day of April, 1907

Peter Allan

Notary Public

SEAL

I, D J Rogers, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of Colorado Guide Meridian through Tps. 36-37-38 and 39 S bet Rs 22 and 23 E. Salt Lake Base and Meridian Utah

D J Rogers

Subscribed and sworn to before me this 5th day of April, 1907

Peter Allan

Notary Public

SEAL

My Commission expires Mar 6th 1910

Resurvey of Colorado Guide Meridian through Tp. 39 S. between Rs. 22 and 23 E.

chains

Survey commenced April 6, 1907 and executed with a W & L.E. Gurley Light Mountain Transit with solar attachment. — The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the surveyor general for Utah March 27, 1907

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

At the cor. of Tps. 39 and 40 S Rs. 22 and 23 E. on the Colorado Guide Meridian, latitude 37° 22' 31" N. longitude 109° 30' 33.9" W. which is a sand stone 30 x 16 x 10 ins. set in a mound of stone 3 ft. base 2 ft. high on rock bottom, and marked and witnessed as described by the surveyor general; I set off 37° 23' N. on the lat. arc, 6° 19' N. on the decl. arc; and at 3h 39m p.m, l.m.t. determine a meridian with the solar, and mark a point thereof, on a stone set in the ground 5 chs N. of the cor.

At 9h 10m p.m, l.m.t. I observed Polaris in accordance with instructions in the manual and mark the direction thus determined by a nail driven in a wooden peg driven in the ground 5 chs. north of the corner. —

Astron. l.m.t. of obs. April 6 ..... 9h 10m

U.C. Polaris April 1 ..... 0h 29' 9.4s

Red. to April 6 ..... 19.7

U.C. Polaris April 6 ..... 0h 29' 29.1s 0.29.7

Hour angle of Polaris at obs. and time argument (Manual Tab. 7.) ..... 8h 40' 0.3s

Azimuth of Polaris at obs. ..... 1° 0.8'

April 6, 1907

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Resurvey of Colorado Guide Meridian through Tp. 39 S. between Rs. 22 and 23 E.

chains	
	April 7: at 7h a.m, L.M.T. I lay off the azimuth of Polaris 1°05' to the east and mark the meridian thus determined on the stone set April 6. 5 chs N. of the cor. on which the meridian agrees without material difference with the mark determined with the solar. At 9h 10m L.M.T. I set off 37°23' N. on the lat. arc. 6°34' N. on the decl. arc and mark a point in the meridian determined by the solar on the stone set April 6, on which the mark agrees with the meridian established by the Polaris observation without material difference; and therefor I conclude that the adjustments of the instrument are correct. — The magnetic bearing of the true meridian at 8h 10m is N. 16°20' W.: the angle thus determined gives the mag. decl. 16°20' E. —
	Preliminary to commencing this resurvey I make extensive retracements and learn that the cor. of Tps. 37 and 38 S Rs. 22 and 23 E. can nowhere be found and the entire line through Tps. 38 and 39 S. is greatly in error in alignment I therefre make the following resurvey. —
	From the Tp. cor. already described I run North bet. secs. 31 and 36
	Over mountainous land, in bottom of canyon
	Ascending over broken surface, rocky soil
19.00	Top of spur ridge sloping S.W., bears N.E. and S.W., 150 ft. above cor:
	Begin descent on broken slope
28.60	Bottom of slope bears S.W. and N.E., 120 ft. below ridge. — Enter loose sand
	Begin gradual ascent
39.30	Original 1/4 sec. cor bears east. 37 lks.; it consists of 3 small stones, of which one is faintly marked 1/4 on top surface. — I destroy said cor.
	Difference between measurements of 40.00 chs. by two rels of chainmen is 20 lks; position of middle point
	By 1st set. 40.10 chs.
	By 2nd set. 39.90 chs.; the mean of which is

Resurvey of Colorado Guide Meridian through Tp 39 S. between RS. 22 and 23 E.

chains	
40.00	Set a dark porphyry stone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
41.00	Top of ascent and low ridge bears E. and W. Begin gradual descent
47.30	Enter dry wash from north, turns West, 80 ft. below ridge
49.60	Leave dry wash, turns E.; begin ascent. broken slope
59.75	Dry wash drains N.E., 15 ft. deep.
64.00	Same wash drains S.W., 25 ft. deep
68.25	Dry wash drains W., 20 ft. deep.
70.60	Enter sandstone break 30 ft. high facing E
79.75	Original cor. bears E. 40 lks. being a sandstone 24 x 18 x 6 ins. set in a mound of stones, marking obliterated; to destroy said cor. Difference between measurements of 80.00 chs. by two sets of chainmen is 16 lks.; position of middle point. By 1st set 80.08 chs. By 2nd set 79.92 chs. the mean of which is
80.00	Set a light colored sand stone 18 x 8 x 5 ins. 12 ins. in the ground for cor. of secs. 25-30-31 and 36 marked with 1 notch on S. and 5 notches on N. edge; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable This cor. stands on top of sandstone break facing E. Land Mountainous, Soil, barren rock, gravely, and shifting sand 3rd and 4th rate No timber; thorny weeds scattering Mountainous land 80.00 chs. -
	North bet. secs. 25 and 30 Over mountainous land, in bottom of Recapture Canyon 300 ft. below plateau Gradual ascent along sandstone break
5.00	Begin descent on broken slope, break turns N.E. thence through loose sand and thorn W. slope
31.06	Dry wash drains W., 100 ft. below break Ascending gradually

Resurvey of Colorado Guide Meridian through Tp. 39 S. between Rs. 22 and 23 E.

Chains	
	Difference between measurements of 40.00 chs. by two sets of chainmen is 10 lks, position of middle point
	By 1st set. 40.05 chs
	By 2nd set. 39.95 chs.; the mean of which is
42.00	Set a sandstone 18 x 8 x 5 ins. 12 ins. in the ground for 1/4 sec cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. —
	A diligent search failed to disclose any trace of original corner
57.00	Top of rocky spur 100 ft. high running W. from break. —
	Descending gradually
73.24	Dry wash drains N. W. in rocky ravine 100 ft. deep, and beginning of ascent
77.00	Top of spur running W., 80 ft. high
	Descending
79.75	Original cor. bears E. 0.4 lks. being a stone set in a mound of stones, but all partly disintegrated and markings but faintly discernible. — Destroy said cor. —
	Difference between measurements of 80.00 chs by two sets of chainmen is 10 lks; position of middle point
	By 1st set. 79.95 chs.
	By 2nd set. 80.05 chs. the mean of which is
80.00	Set a sandstone 28 x 10 x 6 ins. in a mound of stones 3 ft. base 2 ft. high on even rock bottom, for cor. of secs 19-24-25 and 30 marked with 2 notches on S. and 4 notches on N. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. —
	Land mountainous
	Soil barren rock, gravely, and loose sand
	3rd and 4th rate
	No timber. — Thorny brush undergrowth.
	Mountainous land 80.00 chs
	Apr. 7: at this cor. I set off 6° 38' E for the declination and at 12h 02m p. m. L.M.T. observed the sun on the meridian; the resulting Lat. is 37° 23' N.

of Colorado Guide Meridian through Tp. 39 S. between Rs. 22 and 23 E.

Chains	
	North bet. secs. 19 and 24
	Over mountainous land, in bottom of Recapture Canyon 300 to 400 ft. below plateau
.00	Descending abruptly in sandstone cliff or break.
.50	Bottom of break course N 60° E and S 60° W. 30 ft. below cor.; descending gradually in bottom of canyon
1.15	Left bank of Recapture Creek course S.W. 14 ins deep swift current pure water
1.90	Right bank of same stream, and beginning of ascent in scattering cottonwood timber
5.00	Ascent becomes abrupt and rocky in scrubby cedar timber course S W and N.E.
27.00	Top of bench of Canyon 150 ft. above creek, course S.W. and N.E.
	Thence on gradual ascent
	Difference between measurements of 40.00 chs. by two sets of chainmen is 16 lks.; position of middle point
	By 1st set 39.92 chs.
	By 2nd set 40.08 chs. the mean of which is
40.00	Set a porphyry stone 18×8×5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.–
	A diligent search failed to disclose any trace of original cor.
44.00	Top of ascent, ridge bears E and W. 125 ft. high Descending
54.10	Dry wash drains E. in hollow 100 ft. deep. Ascending gradually on broken rocky E slope.
	Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks.; position of middle point
	By 1st set 80.06 chs.
	By 2nd set 79.94 chs. the mean of which is
80.00	Set a sandstone 18×8×5 ins. 12 ins. in the ground for cor. of secs. 13-18-19 and 24 marked with 3 notches on S. and N. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.–
	A careful search failed to disclose any trace

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Resurvey of Colorado Guide Meridian through Tp. 39 S.
between Rs. 22 and 23 E.

	Chains of the original corner
	Land Mountainous
	Soil barren rock, gravelly, and sandy 3rd and 4th rate
	Timber, a fringe of cottonwoods on R. bank of creek and scattering scrubby cedar along break.
	Mountainous land 80.00 chs.
	North bet. secs. 13 and 18
	Over mountainous land, in Recapture Canyon
	Ascending gradually on broken E. slope
57.00	Dry wash drains S.E in hollow 75 ft. deep.
9.00	Top of spur ridge running S.E 130 ft. high
	Descending to
13.00	Foot of slope 60 ft. below ridge bears S.E. and N.W.
	Enter bottom of Recapture Canyon
	Leave mountainous land and
	Enter dense undergrowth
37.58	Right bank of Recapture Creek course S.E. 16 lks. deep swift current pure water
38.08	Left bank of same stream
	Difference between measurements of 40.00 chs by two sets of chainmen in 8 lks. position of middle point
	By 1st set. 40.04 chs
	By 2nd set. 39.96 chs. The mean of which is
0.500	Set a sandstone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: from which
	A cottonwood tree 11 ins. diam. bears N. 35° 30' W. 10 lks dist. scribed 1/4 S. 13 T.
	A cottonwood tree 12 ins. diam. bears N. 22° 14' E. 26 lks. dist. scribed 1/4 S 18 T
	A diligent search failed to disclose any trace of original 1/4 sec. cor.
	Difference between measurements of 80.00 chs by two sets of chainmen in 14 lks. position of middle point
	By 1st set 79.93 chs.
	By 2nd set 80.07 chs. The mean of which is
0.500	Set a sandstone stone 18 x 9 x 8 ins. 12 ins. in the ground for cor. of secs. 7-12-13 and 18 marked with + notches on S. and 2 notches on N. edge

Resurvey of Colorado Guide Meridian through Tp 39 S. between Rs. 22 and 23 E

chains	raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
	A diligent search failed to disclose any trace of original corner.–
	Land mountainous and nearly level canyon bottom
	Soil rocky and gravely, and aluvial wash
	1st to 3rd rate
	Timber, a fringe of cottonwoods along bank of creek.–
	Dense undergrowth of thorn and grease wood
	Mountainous land and dense undergrowth 80.00 chs.
	April 7, 1907
	April 8: At 7h 16m a.m., l.m.t. I set off 37° 26' N. on the lat. arc 6° 57' N. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 7-12-13 and 18, thence I run North bet. secs. 7 and 12
	Through dense undergrowth
	In bottom of Recapture Canyon
12.15	Left bank of Recapture Creek 18 ins deep swift current, course S.W.
12.78	Right bank of same stream
21.20	Right bank of same stream course S.E.
22.30	Left bank of same stream
	Leave creek and ascend gradually
38.50	Begin abrupt ascent in huge sandstone bowlders bears N.W. and S.E.– Enter Mountainous land
	Difference between measurements of 40.00 chs. by two sets of chainmen is 20 lks.; position of middle point
	By 1st set 39.90 chs.
	By 2nd set 40.10 chs. the mean of which is
40.00	Set a porphyry stone 18×6×6 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
48.10	Rocky spur ridge runs west from plateau 200 ft. above creek
	Begin descent on N.W. slope
54.00	Foot of descent bears N.E. and S.W.
	Leave huge bowlders and enter level bottom land

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Resurvey of Colorado Guide Meridian through Tps 3 & 5 S. between Rs 22 and 23 E.

Chains	
	Leave mountainous land and enter dense undergrowth
61.00	Begin abrupt ascent in sandstone break, faces S.W.
	Leave dense undergrowth and enter Mountainous land
64.10	Top of break 100 ft. high
	Thence on gradual ascent to
68.00	Top of spur ridge running W. from plateau
	Over rolling bench
	Difference between measurements of 80.00 chs by two sets of chainmen in 14 decs. position of middle point
	By 1st set. 80.07 chs.
	By 2nd set. 79.93 chs. the mean of which is
80.00	Set a porphyry stone 24 x 10 x 8 ins. 18 ins in the ground for cor. of secs. 1-6-7 and 12 marked with 5 notches on S. and 1 notch on N. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
	Sec. cor. of prior survey which I destroy, bears N. 81° 40' E. 5.39 chs. being a sandstone set between two stones, somewhat disintegrated but markings plainly decernible.
	Land mountainous, and level canyon bottoms
	Soil barren rock, gravely and alluvial wash, 1st to 4th rate
	Timber, a fringe of cottonwoods along creek.
	Dense undergrowth of thorn and greasewood
	Mountainous land and dense undergrowth 80.00 chs

	North between secs. 1 and 6
	Over mountainous land
	Gradual descent to
3.95	Beginning of abrupt descent over cliffs, bears E and W.
8.52	Dry wash draining W. in bottom of box canyon 100 ft. deep.
	Ascending in cliffs to
10.60	Top of canyon, thence over rolling bench to
21.15	Wagon trail from Bluff City Utah to Cortez Colo bears S.E. and N.W.
	Difference between measurements of 40.00 chs. by two sets of chainmen in 6 decs.; position of middle

Resurvey of Colorado Guide Meridian through Tp. 39 S. between Rs. 22 and 23 E

Chains	
	point
	By 1st set. 39.97 chs.
	By 2nd set. 40.03 chs. the mean of which is
40.00	Set a porphyry stone 18 x 6 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. - Pits impracticable
	A carefull search failed to disclose any trace of the 1/4 sec. cor. of prior survey. —
66.50	Begin abrupt descent
71.00	Dry wash drains W. in ravine 100 ft. below bench
	Ascending broken slope
	Difference between measurments of 80.00 chs. by two sets of chainmen in 10 chs.; position of middle point
	By 1st set. 39.95 chs.
	By 2nd set. 40.05 chs. the mean of which is
80.00	Set a porphyry stone 18 x 8 x 6 ins 12 ins. in the ground for cor of townships 38 and 39 S. ranges 22 and 23 E. marked 38 S. on N. E, 23 E. on S. E, 39 S on S.W. and 22 E. on N.W. faces with 6 notches on each edge and raised a mound of stones 2 ft. base 1½ ft. high S. of cor. Pits impracticable. —
	A careful and persistent search failed to disclose any trace of the Tp cor of prior survey
	Land mountainous
	Soil, Barren rock, rocky and gravelly 2nd and 3rd rate
	No timber, some thorny undergrowth
	Mountainous land 80.00 chs. -
	April 8: At this cor. O set off 7°0' E on the decl. arc and at 12h 02m p.m, T.m.T. observed the sun on the meridian the resulting Lat. is 37°28' N.

Resurvey of Colorado Guide Meridian through Tp. 38 S. between Rs. 22 and 23 E. —

April 8: At 1h 40m p.m, T.m.T. from the cor. of Tps. 38 and 39 S, Rs. 22 and 23 E as above described I continue my survey through Tp 38 S. as follows. —

North bet. secs. 31 and 36

Over Mountainous land

Resurvey of Colorado Guide Meridian through Tp.
between Rs. 22 and 23 E

chains	Descending to
2.00	Wash drains W. 40 ft. deep.
	Ascending broken slope.
7.52	Wash drains W. 45 ft. deep.; thence along steep W. slope in large sandstone bowlders and scattering cedars.
	Difference between measurements of 40.00 chs. by 1st set of chainmen is 4 lks.; position of middle point.
	By 1st set 40.02 chs.
	By 2nd set 39.98 chs. the mean of which is
40.00	Set a porphyry stone 18 x 7 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. - Pits impracticable.
	A cedar tree 12 ins diam. bears S.0°.30'.E 29 lks. dist. marked 1/4 S.31.B.T.
	A carefull search failed to disclose any trace of original cor.
44.15	Dry wash drains N.W. 60 ft. deep. - Ascending to
47.60	Top of spur ridge running W. from plateau 140 ft. high
	Descending in big sandstone bowlders
68.00	Foot of slope bears N.E. and S.W. 120 ft. below spur
	Enter bottom of canyon
	Leave Mountainous land and enter Dense Undergrowth
	Difference between measurements of 80.00 chs. by two sets of chainmen is 22 lks. position of middle point
	By 1st set 80.11 chs.
	By 2nd set 79.89 chs. the mean of which is
80.00	Set a porphyry stone 18 x 8 x 8 ins. 12 ins. in the ground for cor. of secs. 25-30-31 and 36 marked with 1 notch on S and 5 notches on N. edges; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable.
	A careful search failed to disclose any trace of sec. cor. of prior survey.
	Land Mountainous and level canyon bottom
	Soil, barren rock, clay, gravel and aluvial wash 1st to 4th rate
	Timber, scrubby cedar, scattering along slope
	Dense undergrowth of thorn and greaswood
	Mountainous land and Dense undergrowth
	North bet. secs. 25 and 30

Resurvey of Colorado Guide Meridian through Tp. 38 S. between Rs. 22 and 23 E.

Chains	
	In bottom of Recapture Canyon nearly level land through dense undergrowth
2.75	Wash 10 ft. deep drains S.E.
6.75	wash 15 ft. deep drains S.E
8.80	Entire wash drains S.E. 12 ft. deep.
13.02	Leave wash, course N.E.
13.60	Wash drains SW 15 ft. deep:
34.40	Left. bank of Recapture Creek course S.W. 16 in. deep. swift current pure water, in channel 150 ft. wide 15 ft. deep.
35.15	Right bank of same stream
	Difference between measurements of 40.00 chs. by two sets of chainmen in 6 chs. position of middle point
	By 1st set 40.03 chs
	By 2nd set 39.97 chs. the mean of which is
40.00	set a porphyry stone 18x8x6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — No trace of original cor. could be found
70.00	Leave bottom of canyon bears N.E. and S.W. and begin abrupt ascent in huge sandstone boulders and bluff
	Leave dense undergrowth and enter broken mountainous land
76.50	Top of rocky spur running E. from plateau 170 ft. above creek.
	Descending N.E. slope in break and boulder
	Difference between measurements of 80.00 chs. by two sets of chainmen in 18 chs.; the middle point
	By 1st set 80.09 chs
	By 2nd set 79.91 chs. The mean of which is
80.00	set a porphyry stone 18x12x8 ins. 12 ins. in the ground for cor. of secs. 19-24-25 and 30 marked with 2 notches on S. and 4 notches on W edges: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
	Land level canyon bottom, and mountainous
	Soil alluvial wash 1st rate, barren rock and clay 4th rate
	Timber, a fringe of cottonwoods along creek
	Dense undergrowth of thorn and greasewood
	Dense undergrowth and mountainous land 80.00 chs.
	A careful search failed to disclose any trace of

Resurvey of Colorado Guide Meridian through between Rs. 22 and 23 E

Chains	
	the sec. cor. of prior survey. =
	April 8. 1907
	April 9: From the cor. of secs. 19-24-25 and 30 O
	run
	North bet. secs. 19 and 24
	Over mountainous land
	Descending on N.E. slope
1.50	Enter bottom of Recapture canyon, bears N.W. and
	S.E. thence over level land
	Leave mountainous land and enter dense undergrowth
19.50	Bottom of creek 20 ft. deep draining E.
	Enter mountainous land, leave dense undergrowth
	Thence along broken rocky slope facing E.
04.10	Dry creek 75 ft. deep drains E.
35.00	Enter bottom of Canyon and level land
	Leave Mountainous land, enter dense undergrowth
	Difference between measurements of 40.00 chs by
	two sets of chainmen in 10 lks. position of
	middle point
	By 1st set 40.05
	By 2nd set. 39.95 Chs. The mean of which is
40.00	Set a porphyry stone 18x10x8 ins. 12 ins. in the
	ground for 1/4 sec. cor. marked 1/4 on W. face; raised
	a mound of stones 2 ft. base 1½ ft. high W. of cor.
	Pits impracticable
	A diligent search failed to disclose any trace of the
	1/4 sec. cor. of prior survey. -
45.76	Right bank of Recapture creek course S.E. swift
	current 10 ins. deep, pure water, 70 lks wide
	Thence in creek to
49.60	Right bank of same creek from N.E. turns S.
55.20	Right bank of channel 20 ft. deep.
56.00	Right bank of creek, flows S.E.
57.00	Left bank of same creek
58.75	Leave channel 15 ft. high bears S.E. and N.W.
70.13	Enter old channel 20 ft. deep course E. and W.
72.00	Leave old channel
	Difference between measurements of 80.00 chs. by
	two sets of chainmen is 12 lks.; position of
	middle point
	By 1st set 79.94 chs.

Resurvey of Colorado Guide Meridian through Tp. 38 S. between Rs. 22 and 23 E

chains	
80.00	By 2nd ct. 80.00 chs. the mean of which is Set a porphyry stone 18 x 6 x 6 ins. 12 ins. in the ground for cor. of secs. 13-18-19 and 24 marked with 3 notches on N. and S. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable A diligent search failed to disclose any trace of the sec. cor. of prior survey Land broken slope and canyon bottom, level soil, bowlders and gravel 3rd rate and alluvial wash 1st. rate Timber, a few cottonwoods along bank of creek Dense undergrowth of thorn and greasewood Mountainous land and dense undergrowth 80.00 chs.
	North bet. secs. 13 and 18 In bottom of Recapture Canyon, level land Through dense undergrowth
11.00	Old road from Monticello to Bluff City bears N.W. and S.E. at foot of slope Begin abrupt ascent on side of canyon in huge sandstone bowlders and cliffs Enter scrubby cedar timber bears N.W. and S.E. Leave dense undergrowth, enter Mountainous land
25.50	Same road bears N.E. and S.W. Difference between measurements of 40.00 chs. by two sets of chainmen in 14 hrs.; position of middle point. By 1st set 40.07 chs. By 2nd Ct. 39.93 chs. the mean of which is
40.00	Set a porphyry stone 18 x 12 x 4 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; whence a cedar tree 8 ins. diam. bears S. 20° 0' E 10 lks dist. scribed ¼ S. 18 B.T. — no other trees within limit Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — A careful search failed to disclose any trace of the ¼ sec. cor. of prior survey. —
50.50	Top of spur runs S.E 320 ft. above bottom of canyon Begin descent on N.E. slope
57.17	Old road from Monticello to Bluff City bears N.W. and S.E.

Resurvey of Colorado Guide Meridian through Tp. 38 S. between Rs. 22 and 23 E.

chains	
	Difference between measurements of 80.00 chs. by two sets of chainmen in 18 hrs.; position of middle point
	By 1st set 80.09 chs.
	By 2nd set 79.91 chs. the mean of which is
80.00	set a porphyry stone 24×8×8 ins. 18 ins. in the ground for cor. of secs. 7-12-13 and 18 marked with + notches on S. and 2 notches on W. edges; from which
	A cedar tree 6 ins. diam. bears S. 61° 20' E 10 lks. dist. scribed T. 38 S. R 23 E S 18 B.T.
	A cedar tree 6 ins. diam. bears S 24° 30' W. 8 lks. dist. scribed T. 38 S R 22 E S 13 B.T.
	No other trees within limit.
	Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
	A careful search failed to disclose any trace of sec. cor. of prior survey
	Land level and mountainous
	Soil alluvial wash: 1st rate and rocky, gravely 4th rate
	Timber scrubby cedar scattering
	Thorny brush and greasewood undergrowth.
	Dense undergrowth and mountainous land 8.00 chs
	Apr 9: at this cor. O set off 7° 23' N. on the decl. arc and at 12h 02m P.M., T.M.T. observed the sun on the meridian; the resulting lat. is 37° 31' N.

	North bet. secs. 7 and 12
	Over mountainous land
	Descending gradually on broken E. slope in scrubby cedar timber
16.06	Dry wash drains S. 30° E. in gulch 130 ft. deep.
	Begin ascent on broken S.W. slope
	Difference between measurements of 40.00 chs by two sets of chainmen in 4 hrs.; position of middle point
	By 1st set 39.98 chs.
	By 2nd set 40.02 chs. the mean of which is
40.00	set a porphyry stone 18×12×6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised

Resurvey of Colorado Guide Meridian through Tp. 38 S. between Rs. 22 and 23 E.

chains

a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable

A diligent search failed to disclose any trace of the ¼ sec. cor. of prior survey.—

55.00 Enter dry wash in hollow 4 ft deep, from north turns S. W.

62.00 Leave dry wash course N. 30° E, and ascend E. slope

Difference between measurements of 80.00 chs. by two sets of chainmen in 12 lks.; position of middle point

By 1st set 79.94 chs.

By 2nd set. 80.06 chs. the mean of which is

80.00 Set a porphyry stone 18 x 12 x 6 ins. 12 ins. in the ground for cor. of secs. 1-6-7 and 12 marked with 5 notches on S. and 1 notch on N. edge from which

A cedar tree 5 ins. diam. bears N 7° 30' W. 22 lks. dist. marked T. 38 S. R. 22 E S 1 B T

A cedar tree 12 ins. diam. bears N. 82° 30' E. 50 lks. dist. marked T 38 S R 23 E S 6 B T.

No other trees within limit

Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable

A diligent search failed to disclose any trace of the sec. cor. of prior survey.—

Land mountainous

Soil rocky and gravely 3rd rate

Timber scrubby cedars, thin growth—

Mountainous land 80.00 chs.

North bd. secs. 1 and 6.

Over mountainous land

Through scrubby cedar timber

1.04 Dry wash in hollow; drains S. 30° E., 30 ft. deep

Ascending in dense cedar timber

Difference between measurements of 40.00 chs by two sets of chainmen in 10 lks.; position of middle point

By 1st set. 39.95 chs

By 2nd set. 40.05 chs the mean of which is

40.00 A cedar tree 16 ins. diam for ¼ sec. cor. I mark ¼ S 1 on W side and 6 on E side from which

A cedar tree 10 ins. diam. bears S. 80° 0' W. 14 lks. dist.

Resurvey of Colorado Guide Meridian through Tp. 38 S. between Rs 22 and 23 E.

Chains

marked 1/4 S 1 B.T. No other trees within limit
Raised a mound of stones 2 ft. base 1½ ft. high to cr.
of cor. Pits impracticable
A diligent search failed to disclose any trace of
the 1/4 sec. cor. of prior survey

5 8.00 Top of slope bears E. and N. 200 ft. above sec. cor.
Enter rolling Plateau and leave timber
Leave mountainous land and enter dense undergrowth
Difference between measurements of 80.00 chs by
two sets of chainmen in 14 chs.; position of
middle point
By 1st set. 79.93 chs.
By 2nd set. 80.07 chs. the mean of which is

80.00 set a white sandstone 18 x 10 x 7 ins. 12 ins. in the
ground for cor. of Tps. 37 and 38 S. Rs. 22 and 23 E
marked 37 S. on N E, 23 E on S E, 38 S on S W and 22 E
on N.W. faces with 6 notches on each edge and
raised a mound of stones 2 ft. base 1½ ft. high
S of cor. Pits impracticable
A diligent search failed to disclose any trace of
the Tp cor. of prior survey. —
Land Mountainous and level
Soil gravely and alluvial wash 1st and 2nd rate
Timber scrubby cedar of no commercial value
Dense undergrowth of thorn and rank sage
Mountainous land and dense undergrowth
80.00 chs.
April 9: At this cor I set off 37° 33' N. on the
lat arc 7° 28' N. on the decl. arc and at 4h 32m p.m.
T.m.t determine a meridian with the solar
and mark a point thereof on a wooden plug
driven in the ground 4.75 chs N. of my station.
At 8h 40m p.m, T.m.t. I observed Polaris in accordance
with instructions of the Manual and mark a
point in the line then determined on a peg
driven in the ground 4.75 chs N. of my station
Astron. T.m.t of obs. April 9 ..... 8h 40m
U.C. Polaris April 9 ..... 0h 17.9m
Hour angle of Pol. at obs. and time arc. (Manual Table) 8h 22.1m
Azimuth of Pol. at obs. ..... 1° 10' W.

April 9, 1907

Resurvey of Colorado Guide Meridian through Tp. 37 S. between Rs. 22 and 23 E

Chains

April 10: At 6h 45m a.m, I.m.t. I lay off the azimuth of Polaris 1°10' to the east and mark the meridian thus determined on the wooden plug set April 9 4.75 chs N. of my station and on which the meridian agrees without material difference with the mark determined by the solar.—

At 7h 32m a.m, I.m.t. I set off 37°33' N on the lat. arc 7°42' W on the decl. arc and determine with the solar a true meridian, which agrees with the meridian determined by Polaris observation and marked on the plug 4.75 chs. N. of the cor., without material difference.—

The solar apparatus therefor, both by ♄ and an observation point meridian which agree with the meridian obtained by Polaris observation and conclude the instrument is still in proper adjustment

The magnetic bearing of the true meridian at 7h 35m a.m, l.m.t. is N 16°20' W; the angle thus determined given mean mag. decl 16°20' E.—

I continue my line through Tp. 37 S. bet. Rs. 22 and 23 E as follows

From the cor. of Tps. 37 and 38 S. Rs. 22 and 23 E. as last described I run

North bet. secs. 31 and 36

Through dense undergrowth

Over rolling plateau

3,55 Old road from Monticello to Bluff City bears N.E. and S.W.

33,90 Edge of Recapture Canyon bears N.E. and S.W. Descending over perpendicular cliff 20 ft. deep thence over huge sandstone boulders on steep slope

Leave dense undergrowth and Enter Mountainous land and scattering cedar timber

Difference between measurements of 40.00 chs. by two sets of chainmen is 12 lks.; position of Middle Point

By 1st set. 4006 chs.

By 2nd set 39.94 chs. the mean of which is

40.00 set a porphyry stone 18 x 8 x 8 ins. 12 ins. in the ground

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Resurvey of Colorado Guide Meridian through Tp. 37 S. between Rs. 22 and 23 E.

Chains	for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
78.75	Enter bottom of Recapture Canyon bears N.E and S.W. 500 ft. below plateau
	Leave scattering cedars; enter fringe of cottonwoods
	Difference between measurements of 80.00 chs. by two sets of chainmen is 24 lks.; position of middle point
	By 1st set 79.88 chs
	By 2nd set 80.12 chs. the mean of which is
80.00	Set a porphyry stone 18 x 7 x 5 ins. 12 ins. in the ground for cor. of secs. 25-30-31 and 36 marked with 1 notch on S. and 5 notches on N. edges from which
	A cottonwood tree 12 ins. diam. bears N. 75°30' E. 1.34 chs. marked T. 37 S. R. 23 E. S 30 B T
	A cottonwood tree 16 ins. diam. bears N. 79°10' W. 76 lks. dist. marked T. 37 S R. 22 E. S 25 B.T.
	No other trees within limit
	Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
	From the description of the crossing of the creek and finding a monument on the bank of same I am confident the sec. cor. of the prior survey was located about 16 chs east of my line but a diligent search failed to find any trace of the cor. –
	Land rolling plateau and steep broken slope
	Soil gravely and rocky 2nd to 4th rate
	Timber scrubby cedar and a few Cottonwood
	Dense undergrowth of Thorn and sage
	Dense undergrowth and Mountainous land 80.00 chs
	North bet. secs. 25 and 30
	Over mountainous land
	In bottom of canyon, scattering timber
1.35	Recapture Creek 45 lks wide 2 ft. deep between banks 10 ft. high, swift current, pure water course S.W.
4.00	Leave timber bears S.W. and N.E.
	Ascending gradually
9.00	Begin abrupt ascent in large bowlders and breaks

Resurvey of Colorado Guide Meridian through Tp. 37 S. between Rs. 22 and 23 E

chains

Enter scattering cedar timber bears N.E. and S.W.
Difference between measurements of 40.00 chs. by two sets of chainmen in 18 hrs.; position of middle point
By 1st set. 40.09 chs.
By 2nd set. 39.91 chs. the mean of which is

40.00 Set a portuguese stone 18x10x4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.—
A diligent search failed to disclose any trace of the 1/4 sec cor of prior survey.

47.76 Top of Canyon bears N.E. and S.W. 550 ft. above creek; thence over rolling broken surface on gradual ascent

56.00 Top of slope and ridge, bears N.E. and S.W.; begin gradual descent on broken surface
Difference between measurements of 80.00 chs. by two sets of chainmen in 14 hrs.; position of middle point
By 1st set. 80.07 chs.
By 2nd set. 79.93 chs. the mean of which is

80.00 Set a sandstone 18x12x6 ins. 12 ins. in the ground for cor. of secs. 19-24-25 and 30 marked with 2 notches on S. and 4 notches on N. edges; from which
A cedar tree 12 ins. diam. bears S. 4° 10' E. 6 lks. dist. marked T. 37 S. R. 23 E S 30 13 T
No other trees within limit
Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
A diligent search failed to disclose any trace of the sec. cor. of prior survey
Land Mountainous
Soil gravely and rocky 3rd and 4th rate
Timber, cottonwood along creek and scrubby cedar.—
Mountainous land 80.00 chs.—
April 10: At this cor. I set off 7° 45' N. on the decl. arc. and at 12h 02m p.m., I took observe the sun on the meridian; the resulting lat. is 37° 35' N.

North bet. secs. 19 and 24

Resurvey of Colorado Guide Meridian
— 75 2

chains	
	Over mountainous and heavily
	Descending gradually over broken surface
	Difference between measurments of 40.00 chs by
	two sets of chainmen is 4 lks.; position of
	middle point
	By 1st set 39.98 chs.
	By 2nd set 40.02 chs. the mean of which is
40.00	Set a porphyry stone 20x7x4 ins. 15 ins in the
	ground for 1/4 sec. cor. marked 1/4 on W. face
	from which
	A cedar tree 6 ins. diam. bears East 5 lks. dist.
	1/4 S. 19 B.T.
	A cedar tree 6 ins. diam. bears S 78°5' W. 4
	marked 1/4 S 24 B.T.
	Raised a mound of stones 2 ft. base 1½ ft. high W. of
	A careful search failed to disclose cor. of prior survey
44.20	Hollow 20 ft. deep drains W.
58.20	Hollow 45 ft. deep drains W.
66.50	Hollow 50 ft. deep drains W.
69.40	Dry wash drains S.W. in hollow 60 ft. deep
	Difference between measurments of 80.00 chs. by
	two sets of chainmen is 12 lks.; position of
	Middle point
	By 1st set 80.06 chs.
	By 2nd set 79.94 chs. the mean of which is
80.00	Set a sandstone 18x8x4 ins. 12 ins. in ground and
	mound of stones on rocky bottom for cor. of secs.
	13-18-19 and 24 marked with 3 notches on N and
	S. edges from which
	A pinion tree 4 ins diam. bears N. 59°15' W. 26 lks. dist.
	marked T. 37 S. R. 22 E. S 13 B.T.
	A cedar tree 8 ins. diam. bears S. 60°30' W. 37 lks. dist.
	marked T 37 S R 22 E S 24 B.T.
	A cedar tree 12 ins. diam. bears S 42°45' E. 28 lks. dist.
	marked T. 37 S R 23 E S 19 B.T.
	A pinion tree 10 ins. diam. bears N. 22°45' E. 37 lks.
	dist. marked T 37 S R 23 E S 18 B.T.
	A careful search failed to disclose any trace of
	the sec. cor. of prior survey.
	Land mountainous, broken
	Soil gravely 3rd rate
	Timber scrubby cedar of dense growth

Resurvey of Colorado Guide Meridian through Tp. 37 S. between Rs. 22 and 23 E.

Chains	Commercial value Mountainous and heavily timbered land $80.00 chn.
	North bet. secs. 13 and 18
	Over mountainous and heavily timbered land
27.40	Hollow 70 ft. deep drains W.
	Difference between measurements of 40.00 chs. by two sets of chainmen in 10 lks.; position of middle point
	By 1st set. 39.95 chs.
	By 2nd set. 40.05 chs. the mean of which is
40.00	Set a sandstone 18 x 6 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which
	A cedar bee 12 ins. diam. bears S 62° 30' W. 16 lks. dist. marked 1/4 S 13 13. T.
	A cedar bee 14 ins. diam. bears S 66° 4' E. 25 lks. dist. marked 1/4 S 18 B.T.
	Raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor.
	A diligent search failed to disclose any trace of the 1/4 sec. cor. on original survey
43.40	Hollow 30 ft. deep drains W.
63.80	Dry wash in hollow 50 ft. deep drains S W.
	Difference between measurements of 80.00 chs by two sets of chainmen in 14 lks.; position of middle point
	By 1st set 79.93 chs.
	By 2nd set 80.07 chs. the mean of which is
80.00	Set a porphyry stone 18 x 12 x 8 ins. 12 ins. in the ground for cor. of secs. 7-12-13 and 18 marked with 4 notches on S. and 2 notches on N. edges from which
	A cedar bee 12 ins. diam. bears S 57° 30' W. 30 lks. dist. marked T 37 S R 22 E S 13 13 T
	A pinion bee 8 ins. diam. bears N 40° 27' W. 81 lks dist. marked T 37 S R 22 E S 12 B T
	A cedar bee 14 ins. diam bears S. 65° 40' E 35 lks dist. marked T 37 S R 23 E S 18 13 T
	A cedar bee 6 ins. diam. bears N. 52° 31' E 32 lks. dist. marked T 37 S R 23 E S 7 B T
	A careful search failed to disclose any trace of the sec. cor. of prior survey
	Land rolling, broken
	Soil gravelly and clay 2nd and 3rd rate

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Resurvey of Colorado Guide Meridian through Tp. 37 S between Rs 22 and 23 E

Chains	Timber scrubby cedar and pinion of dense growth but no commercial value Heavily timbered land 80.00 chs. April 10, 1907
	April 11: At 7h 21m a.m. I set off 37° 36' N on the lat. arc 8° 4' N on the decl. arc and determine with the solar a meridian at the cor. of secs. 7-12-13 and 18 Thence I run North bet. secs. 7 and 12 Over rolling broken surface and Heavily timbered land
7.25	Dry wash in hollow drains S.W. 75 ft. below cor Begin gradual ascent Difference between measurements of 40.00 chs. by two sets of chainmen is 8 lks.; position of middle point By 1st set 39.96 chs. By 2nd set 40.04 chs. the mean of which is
40.00	Set a porphyry stone 18 x 8 x 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: from which A cedar tree 14 ins. diam. bears N 10° 2' E 38 lks dist. marked 1/4 S 7 B T A cedar tree 6 ins. diam. bears S. 86° 28' W 38 lks. dist. marked 1/4 S 12 B T A diligent search failed to disclose any trace of the 1/4 sec. cor. of prior survey
40.06	Hollow 40 ft. deep drains S. 60° W.
69.00	Top of ridge 150 ft. high bears E. and W. Descending Difference between measurments of 80.00 chs. by two sets of chainmen is 12 lks.; position of middle point By 1st set 80.06 chs. By 2nd set 79.94 chs. the mean of which is
80.00	Set a porphyry stone 18 x 12 x 5 ins. 12 ins. in the ground for cor. of secs. 1-6-7 and 12 marked with 5 notches on S and 1 notch on N. edges from which A cedar tree 8 ins. diam. bears N. 86° 15' W. 29

Reservey of Colorado Guide Meridian through Tp. 37 S. between Rs 22 and 23 E.

Chains	
	Llks. dist. marked T. 37 S R 22 E S 1. 13 T
	A cedar tree 12 ins. diam. bears N 86° 10' E 30 llks. dist. marked T 37 S R 23 E S 6 13 T
	A cedar tree 14 ins. diam. bears S 27° 30' E 70 llks dist. marked T 37 S R 23 E S 7 13. T
	A cedar tree 16 ins. diam bears S 46° 33' W. 43 llks dist. marked T 37 S R 22 E S 12 B T
	A diligent search failed to disclose any trace of the sec. cor. of prior survey
	Land rolling, broken, mountainous
	Soil gravel and clay 2nd and 3rd rate
	Timber, scrubby cedar of dense growth - but no commercial value
	Heavily timbered land 80.00 chs.
	North bd. secs. 1 and 6
	Over broken, rolling mountainous land and dense cedar timber
	Heavily timbered land
8.00	Dry wash drains S W in hollow 30 ft. deep
27.05	Dry wash drains N.E.
37.50	Dry wash in hollow drains E., 25 ft deep
	Difference between measurements of 40.00 chs by two sets of chainmen in 12 llks.; position of middle point
	By 1st set. 39.9 + chs
	By 2nd set. 40.06 chs. the mean of which is
40.00	Set a porphyry stone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec cor. marked 1/4 on W. face; from which
	A cedar tree 4 ins. diam. bears S. 48° 30' W. 24 llks. dist. marked 1/4 S 1 B T
	A cedar tree 4 ins. diam. bears N. 48° 20' E. 28 llks dist. marked 1/4 S 6 B. T
	Difference between measurements of 80.00 chs. by two sets of chainmen in 10 llks.; position of middle point
	By 1st set. 80.05 chs
	By 2nd set. 79.95 chs. the mean of which is
80.00	Set a porphyry stone 18 x 8 x 7 ins. 12 ins. in the ground for cor. of Tps. 36 and 37 S Rs. 22 and 23 E. marked with 6 notches on each edge from which

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Resurvey of Colorado Guide Meridian through Tp. 37 S. between Rs 22 and 23 E

chains

A cedar tree 6 ins. diam bears N. 17° 45' E. 49 lks. dist. marked T 36 S R 23 E S 31 B T

A cedar tree 7 ins. diam. bears N 56° 22' W. 75 lks. dist. marked T 36 S R 22 E S 36 B T

A cedar tree 6 ins. diam. bears S. 86° 01' E 40 lks. dist. marked T 37 S R 23 E S 6 B T

No other trees within limit

Raised a mound of stones 2 ft. base 1½ ft. high S. of Cor. Pits impracticable

Land rolling

Soil gravely, and sandy loam 1st and 2nd rate

Timber. scrubby cedar of dense growth - but no commercial value

Sagebrush and thorn undergrowth on last 20 chs.

Heavily timbered land 80.00 chs.

April 11: at this township corner I set ~~off~~ 8° 7' N: on the decl are and at 12h 01m p.m. I mt observed the sun on the meridian: the resulting lat. is 37° 38' N.

Resurvey of Colorado guide Meridian through Tp 36 S between Rs 22 and 23 E

April 11 at 1h 15m p.m, I mt, from the cor. of Tps. 36 and 37 S. Rs. 22 and 23 E. as above described: I continue my survey through Tp. 36 S. as follows

North bet. secs. 31 and 36

Land rolling, broken, sagebrush and thorn

Over heavily timbered land

Difference between measurements of 40.00 chs by two sets of chainmen in 6 lks.; position of middle point By 1st. set. 40.03 chs.

By 2nd. set. 39.97 chs. the mean of which is

40.00 Set a sandstone 18 x 7 x 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: from which A cedar tree 7 ins. diam. bears N. 70° 3' W 35 lks. dist. marked 1/4 S. 36 B.T

A cedar tree 12 ins. diam. bears S 5° 30' W. 99 lks. dist. marked 1/4 S 36 B T

50.00 Wash drains S.E. 10 ft. deep. ascending gradually

54.60 Begin descent on N.E. slope

Difference between measurements of 80.00 chs. by two sets of chainmen in 14 lks.; position of middle point

Resurvey of Colorado Guide Meridian through Tp 36 S. between Rs. 22 and 23 E.

Chains	
	By 1st. set 80.07 chs.
	By 2nd. set 79.93 chs. the mean of which is
80.00	Set a quartzite stone 24 x 14 x 5 ins. in a mound of stones 3 ft. base 18 ins high on rock bottom for cor. of secs. 25-30-31 and 36 marked with 1 notch on S. and 5 notches on N. edges; from which
	A pinion tree 5 ins. diam. bears S. 50° 0' W. 15 lks. dist. marked T. 36 S R 22 E. S. 36 B T
	A cedar tree 7 ins. diam. bears S 3° 5' E. 16 lks. dist. marked T 36 S R 23 E S 31 B T
	A cedar tree 10 ins. diam. bears N. 36° 45' E. 74 lks dist. marked T 36 S R 23 E S 30 B T
	A cedar tree 6 ins. diam. bears N 69° 30' W. 47 lks. dist marked T 36 S R 22 E S 25 B T
	A diligent search failed to disclose any trace of the sec. cor. of prior survey. -
	This cor. stands on edge of wash in rocky ravine 160 ft. below ridge
	Land rolling, and broken
	Soil gravely loam and clay; last 20 chs rocky
	1st to 4th rate
	Timber, scrubby cedar and pinion of dense growth but no commercial value
	Heavily timbered land 80.00 chs.
	North bet. secs. 25 and 30
	Over rolling broken surface, and cedar timber
	Over heavily timbered land
0.35	Wash 40 lks. wide, water in hollows, drains S. 30° E. in bottom of rocky ravine
1.20	Leave ravine 20 ft. above wash thence on gradual ascent
27.00	Top of round knoll about 10 chs. diam. 110 ft. high. - Descending
	Difference between measurements of 40.00 chs by two sets of chainmen is 8 lks.; position of middle point
	By 1st set. 39.96 chs.
	By 2nd set. 40.04 chs. the mean of which is
40.00	Set a sandstone 17 x 7 x 5 ins. 11 ins. in the ground for 1/4 sec cor. marked 1/4 on W. face from which

BOOK A-548

Resurvey of Colorado Guide Meridian through Tp 36 S. between Rs. 22 and 23 E.

Chains	A cedar tree 10 ins. diam. bears N. 16° 0' W. 33 lks. dist. marked 1/4 S 25 BT
	A cedar tree 4 ins. diam bears S 36° 30' E. 30 lks. dist. marked 1/4 S 30 BT
	A careful search failed to disclose any trace of the 1/4 sec. cor. of prior survey. —
	Ascending gradually
	Difference between measurements of 80.00 chs. by two sets of chainmen is 12 lks.; position of middle point
	By 1st set 79.94 chs.
	By 2nd set 80.06 chs. the mean of which is
80.00	Set a sandstone 24 x 14 x 5 ins. in a mound of stones 3 ft. base 1½ ft. high on rock bottom for cor. of secs. 19-24-25 and 30 marked with 2 notches on S. and 4 notches on N. edges; from which
	A cedar tree 14 ins. diam. bears N. 44° 39' E. 29 lks. dist. marked T. 36 S R 23 E S 19 BT
	A cedar tree 6 ins. diam. bears S 51° 30' E 10 lks. dist. marked T 36 S R 23 E S 30 BT
	A pinion tree 8 ins. diam. bears S. 66° 19' W. 34 lks. dist. marked T 36 S R 22 E S 25 BT
	A cedar tree 10 ins. diam. bears N 22° 15' W. 17 lks. dist. marked T. 36 S R 22 E S 24 BT
	A diligent search failed to disclose any trace of the sec. cor. of prior survey
	Land rolling, broken
	Soil gravely and rocky 2nd and 3rd rate
	Timber, scrubby cedar and pinion of dense growth but no commercial value
	Heavily timbered land 80.00 chs.
	April 11, 1907
	April 12: At 7h 31m a.m. I m I-O set off 37° 40' N. on the lat. arc 8° 26' N. on the decl arc and determine a meridian with the solar at the cor. of secs. 19-24-25 and 30
	Thence I run
	North bet. secs. 19 and 24
	Land broken and mountainous, cedar timber
	Over heavily timbered land
	Descending among bowlders

Resurvey of Colorado Guide Meridian through Tp. 36 S. between Rs. 22 and 23 E.

Chains	
8.00	Wash draine S.E. 150 ft. below cor., water in hollow Ascending
11.10	Top of ridge bears S.E. and N.W. – Descending
	Difference between measurements of +0.00 chs. by two sets of chainmen in 14 lks.; position of middle point
	By 1st set +0.07 chs.
	By 2nd set 39.93 chs the mean of which is
+0.00	Set a porphyry stone 18 x 12 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; from which
	A cedar tree 12 ins. diam. bears S. 81° 30' W. 24 lks. dist. marked 1/4 S. 24 B T
	A pinion tree 12 ins. diam. bears S. 54° 30' E. 50 lks. dist. marked 1/4 S 19 B T
	A diligent search failed to disclose any trace of the 1/4 sec. cor. of prior survey
54.40	Dry wash drains E in hollow 30 ft. deep.
58.20	Wash drains S.E. in hollow 60 ft. deep, water in holes Ascending in large sandstone boulders
71.00	Top of spur ridge running E. 160 ft. high
	Thence along broken E slope
	Difference between measurements of 80.00 chs. by two sets of chainmen in 18 lks.; position of middle point
	By 1st set 80.09 chs.
	By 2nd set 79.91 chs. the mean of which is
80.00	Set a sandstone 18 x 12 x 4 ins. 12 ins. in the ground for cor. of secs. 13-18-19 and 24 marked with 3 notches on N. and S. edges from which
	A cedar tree 8 ins. diam. bears N. 14° 30' E. 22 lks. dist. marked T 36 S. R 23 E S 18 B T.
	A cedar tree 8 ins. diam. bears S 84° 30' E 32 lks. dist. marked T 36 S R 23 E S 19 B T
	A pinion tree 4 ins. diam. bears S. 63° 23' W. 46 lks. dist. marked T. 36 S R 22 E S 24 B T
	A cedar tree 10 ins. diam. bears N 32° 0' W 32 lks. dist. marked T 36 S R 22 E S 13 B T
	A careful search failed to disclose any trace of the sec cor. of prior survey
	Land broken, mountainous

Resurvey of Colorado Guide Meridian through between Rs. 22 and 23 E.

Chains	
	Soil rocky and gravelly 3rd and 4th rate
	Timber scrubby cedar and pinion valuable only for fencing and firewood
	Heavily timbered land 80.00 chs
	North bet. secs. 13 and 18
	Mountainous broken land and
	Heavily timbered land
	Run along broken E slope to
4.50	Descending abruptly in large bowlders
8.10	Wash drains S.E. in ravine 80 ft. deep
	Begin ascent
25.00	Top of spur ridge runs S.E. 150 ft. high
	Descending
26.00	Descent becomes abrupt, rocky slope
	Difference between measurements of 40.00 chs. by two sets of chainmen in 12 lks.; position of middle point
	By 1st set. 39.94 chs.
	By 2nd set. 40.06 chs. the mean of which is
40.00	Set a sandstone 18 x 14 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face
	from which
	A cedar tree 7 ins. diam. bears S 45° E 10 lks. dist.
	marked 1/4 S 18 13 T
	A cedar tree 6 ins. diam. bears N. 39° 55' W. 16 lks.
	dist. marked 1/4 S 13 13 T
	Difference between measurements of 80.00 chs. by two sets of chainmen in 14 lks.; position of middle point
	By 1st set. 79.93 chs.
	By 2nd set. 80.07 chs. the mean of which is
80.00	Set a sandstone 18 x 6 x 6 ins. 12 ins. in the ground for cor. of secs. 7-12-13 and 18 marked with 4 notches on S. and 2 notches on N. edge
	from which
	A cedar tree 4 ins. diam bears S. 36° 60' E. 29 lks.
	dist. marked T 36 S R 23 E S. 18 13 T
	A cedar tree 4 ins. diam. bears S. 50° 31' W 44 lks.
	dist. marked T 36 S R 22 E S. 13 13 T
	Two other trees within limit
	Raised a mound of stone 2 ft. base 1 ft. high on

Resurvey of Colorado Guide Meridian through Tp. 36 S. between Rs. 22 and 23 E.

chains

of cor. Pits impracticable
This cor. stands 275 ft. below spur
A diligent search failed to disclose any trace of the sec. cor. of prior survey
Land Mountainous, broken
Soil rocky and gravely 3rd and 4th rate
Timber scrubby cedar and pinion valuable only for fencing and firewood
Mountainous and heavily timbered land 80.00 chs.
April 12, at this cor. I set off 8° 29' W. on the decl. arc and at 12h 01m p.m., ? m.t. observed the sun on the meridian: the resulting lat. is 37° 42' N.

North bet. secs. 7 and 12
Over mountainous land
Descending broken slope

2.70 Enter level bottom of Recapture canyon, bears N.W. and S.E.
Leave mountainous land and enter dense undergrowth
10.00 Enter creek channel 10 ft. deep bears N.W. and S.E.
12.20 Right bank of Recapture Creek, 12 ins deep swift current pure water course S.E.
12.75 Left bank of creek
13.70 Leave channel of creek 10 ft. high
Thence over level bottom
23.40 Road from Monticello to Grayson bears E and W.
24.00 Leave bottom of canyon and begin abrupt ascent in sandstone bowlders and breaks, bears N.W. and S.E.
Leave dense undergrowth and enter Mountainous land
Difference between measurements of 40.00 chs. by two sets of chainmen in 4 lks.; position of middle point
By 1st set. 40.02 chs.
By 2nd set. 39.98 chs. the mean of which is
40.00 Set a sandstone 18 x 12 x 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which
A cedar bears 14 ins. diam. bears S 4° 30' W. 30 lks. dist. marked 14 S 12 BT
A cedar tree 12 ins. diam. bears N. 22° 30' E. 8 lks dist.

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Resurvey of Colorado Guide Meridian through Tp. 36 S. between Rs. 22 and 23 E.

Chains	marked 1/4 S. 7 B.T.
	A diligent search failed to disclose any trace of the 1/4 sec. cor. of prior survey
	Difference between measurements of 80.00 chs. by two sets of chainmen in 16 lks.; position of middle point
	By 1st set. 80.08 chs.
	By 2nd set. 79.92 chs. the mean of which is
80.00	Set a porphyry stone 18 x 8 x 6 ins. 12 ins. in the ground for cor. of secs. 1-6-7 and 12 marked with 5 notches on S. and 1 notch on N. edges. from which
	A cedar tree 14 ins. diam. bears N. 41° 30' E. 29 lks. dist. marked T. 36 S. R. 23 E. S 6 B T
	A cedar tree 10 ins. diam. bears S. 8° 30' E. 12 lks. dist. marked T 36 S R 23 E S 7 B T
	A cedar tree 8 ins. diam. bears S 89° 2' W. 22 lks. dist. marked T 36 S R 22 E. S 12 B. T
	A cedar tree 5 ins. diam. bears N 39° 30' W. 6 lks. dist. marked T 36 S R 22 E. S 1 B T
	This cor. stands 390 ft. above bottom of canyon
	A diligent search failed to disclose any trace of the sec. cor. of prior survey
	Land mountainous and level bottom
	soil alluvial wash 1/2 rate and rocky 1/2 rate
	Timber scrubby cedar and Pinion on slope
	Mountainous land and dense undergrowth 80.00 chs.
	North bd. secs. 1 and 6
	Over mountainous land
	Ascending in huge bowlders and cliffs, cedar timber
5.10	Top of Recapture Canyon bears N. W. and S E. 130 ft. above cor.
	Thence over broken plateau
	Over heavily timbered land
	Difference between measurements of 40.00 chs. by two sets of chainmen in 14 lks.; position of middle point
	By 1st. set 40.07 chs.
	By 2nd. set 39.93 chs. the mean of which is
40.00	Set a porphyry stone 18 x 10 x 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which

Resurvey of Colorado Guide Meridian through Tp 36 S. between Rs. 22 and 23 E.

Chains

A cedar tree 8 ins. diam. bears east 2 lks. dist. marked 1/4 S 6 B T

A pinion tree 10 ins. diam bears S 70° 0' W. 15 lks. dist. marked 1/4 sec. 1 B T

A diligent search failed to disclose any trace of the 1/4 sec cor. of prior survey

Land broken mountainous

Soil rocky, and sandy loam 1st to 4th rate

Timber scrubby cedar and pinion, dense growth

Heavily timbered land or mountainous 4.00 chs

The continuation of this line is impractical owing to enormous breaks and deep canyons and I therefor abandone my survey here.—

April 12, 1907

General Description

Township 39 S. Rs 22 and 23 E. is mainly composed of San Juan River Breaks and very rough, but Tps. 36-37 and 38 S. Rs. 22 and 23 E. are table-lands having a fertile soil and capable of successful cultivation with or without irrigation.— The table-lands are cut by enormous box canyons in which the streams are located and the water is therefo not available for use on the land without costly ditches.—

Nearly the entire area is covered with a dense growth of cedar and pinion timber and grass is not abundant.—

A P Hanson

U.S. Dep. Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P Hanson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Colorado Guide Meridian through Tps. 36-37-38 and 39 S. Bet. Rs. 22 and 23 E., Salt Lake Base and Meridian Utah giving the respective capacities in which they acted:

R F Hurlburt, Chainman.
D J Rogers, Chainman.
J E Rogerson Jr., Chainman.
Indian Jerry, Chainman.
R F Hurlburt, Moundman.
J E Rogerson Jr., Moundman.
Jordian Jerry, Axman.
Indian Manuito, Axman.
D J Rogers, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P Hanson, United States Deputy Surveyor, in surveying all those parts or portions of the Colorado Guide Meridian through Tps 36-37-38 and 39 S. between Rs. 22 and 23 E. of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

R F Hurlburt, Chainman.
J E Rogerson Jr., Chainman.
D J Rogers, Chainman.
R F Hurlburt, Indian Jerry X, Chainman. Moundman.
J E Rogerson Jr., Moundman.
A P Hanson witness to mark, Indian Jerry X, Axman.
A P Hanson witness to mark, Indian Manuito X, Axman.
D J Rogers, Flagman.

Subscribed and sworn to before me this 12 day of April, 1907

SEAL

A P Hanson
U.S. Dep. Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hannon, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward H. Anderson, United States Surveyor General for Utah, bearing date the 18th day of May, 1905, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Colorado Guide Meridian, through Townships 36, 37, 38, and 39 South, between Ranges 22 and 23 East of the Salt Lake Base and Meridian.

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

Andrew P. Hannon
United States Deputy Surveyor

Subscribed by said Andrew P. Hannon, and sworn to before me this 16th day of July, 1907.

SEAL

Thomas Kearns
U. S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, February 26, 1906

The foregoing field notes of the survey of the Colorado Guide Meridian, through Townships Nos. 36, 37, 38, and 39 S., between Ranges 22 and 23 East of the Salt Lake Base and Meridian, Utah

executed by Andrew P. Hannon, under his contract No. 289, dated May 18, 1905, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Kearns
United States 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.

United States Surveyor General

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FIELD NOTES

OF THE SURVEY OF THE

South, West and North Boundaries

of

Township No 37 South Range No 22 East

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

Andrew P Hanson, United States Deputy Surveyor,

Under his Contract No. 289, dated May 18, 1905

Survey commenced April 13, 1907

Survey completed April 18, 1907

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S Bdy high 5.78 33
W " " 6.00 00
N " " 5.77 00

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NAMES AND DUTIES OF ASSISTANTS.

R.F.Hurlburt,	Chainman.
J.E.Rogerson Jr.,	Chainman.
R.F.Hurlburt,	Roundman.
J.E.Rogerson Jr.	Roundman.
Indian Jerry	Axman.
Indian Mannito,	Axman.
D.J.Rogers,	Flagman.

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Volume
#
R0348

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, R F Hurlburt and J E Rogerson Jr.
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we assis
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey
the South, West and North Boundaries Tp. 3 S. R 22 E
Salt Lake Base and Meridian Utah

R. F. Hurlburt, Chainm
J E Rogerson Jr, Chainm

Subscribed and sworn to before me this 5th day of April, 1907

SEAL

Peter Allan
Notary Public

WE, R F Hurlburt and J E Rogerson Jr.
do solemnly swear that we will well and truly perform the duties of moundmen in the establishm
of corners, according to the instructions given us, to the best of our skill and ability, in the survey
the South, West and North Boundaries of Tp 3 S R 22 E
Salt Lake Base and Meridian Utah

R. F. Hurlburt, Moundm
J E Rogerson Jr, Moundm

Subscribed and sworn to before me this 5th day of April, 1907

SEAL

Peter Allan
Notary Public

WE, Indian Jerry and Indian Mannito
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corn
and other duties, according to instructions given us, to the best of our skill and ability, in the survey
the South, West and North Boundaries of Tp. 3 S. R 22 E.
Salt Lake Base and meridian Utah
A P Hanson witness to mark — Indian Jerry X Axm
A P Hanson witness to mark Indian Mannito X Axm

Subscribed and sworn to before me this 5th day of April, 1907

SEAL

Peter Allan
Notary Public

I, D J Rogers, do solemnly swear that I will well and tru
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in t
survey of the South, West and North Boundaries of Tp 3 S R 22 E.
Salt Lake Base and Meridian Utah

D J Rogers, Flagma

Subscribed and sworn to before me this 5th day of April, 1907

SEAL

Peter Allan
Notary Public

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My Commission expires May 6th 1910

South boundary of Tp. 37 S. R. 22 E.

Chain	Survey commenced April 13, 1907 and executed with a W & L E Gurley light mountain transit with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.- The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the surveyor general for Utah March 27. 1907 At the cor. of Tps. 37 and 38 S. Rs 22 and 23 E. on the Colorado Guide meridian; latitude 37°32'58" N. longitude 109°30'34" W. I examine the adjustments of the transit and find them correct and at 7h 36 m a m, I mt set off 37°33' N. on the lat. arc 8° 48' N on the decl. arc, determining a meridian with the solar which I compare with the meridian established by Polaris observation at this cor. on April 10, 1907 during the survey of the Colorado Guide Meridian and described in my notes of said survey (Book A) reference to which is hereby made.- The two meridians agree without material difference, and being confident the instrument is in proper adjustment I consider further tests at this time unnecessary.- The magnetic decl. I find to be the same as on April 10 viz. 16°20' E.-
	I begin at the Tp cor. above described; which I established April 9. 1907 Thence I run West. bet. secs. 1 and 36 Through dense undergrowth- Over rolling surface, through scattering timber
2.03	Old road from Monticello to Bluff City bears S.W. and N.E.
23.10	Edge of Recapture Canyon bears N. and S. Descend over perpendicular wall 20 ft. deep, thence descending abruptly over huge sandstone boulders Leave dense undergrowth, enter mountainous land

South boundary of Tp. 37 S. R. 22 E.

Chains	
	Scrubby cedar timber scattering
40.00	Set a porphyry stone 24 x 7 x 6 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft high N. of cor. Pits impracticable. —
60.50	Left bank of Recapture Creek bears N. and S. 10 ft. deep
61.00	Recapture Creek flows S. 40 lks. wide 16 ins. deep swift current good water, 360 ft. below plateau
61.60	Right bank of creek 10 ft. high; thence over bottom land
	Leave Mountainous land, enter dense undergrowth
69.10	Leave bottom land bears N. and S. and begin ascent on W. side of canyon
	Leave dense undergrowth, enter mountainous land
74.60	Dry wash drains S. in hollow 30 ft. deep
80.00	Set a white sandstone 30 x 14 x 5 ins. 22 ins. in the ground and mound of stones for cor. of secs. 1-2-35 and 36 marked with 1 notch on E. and 5 notches on W. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — This cor. stands 90 ft. above creek.
	Land rolling plateau and mountainous, canyon
	Soil alluvial wash on plateau 1st rate, canyon 1st to 4th rate
	Timber scrubby cedar scattering
	Dense undergrowth of sage and thorn
	Dense undergrowth and mountainous land 80.00 chs.

	West bet. secs. 2 and 36
	Over mountainous land
	Ascending broken slope, scattering timber, in breaks
40.00	Set a sandstone 18 x 10 x 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable.
44.90	Top of canyon bears N. and S. 300 ft. above sec. cor.
	Ascending gradually in cedar timber
54.00	Top of ascent bears N. and S. 60 ft. above breaks. Begin gradual descent
62.25	A brush fence runs N. E. and S. W.
74.05	Dry wash drains S. in hollow 30 ft. deep.
	Ascending gradually

South boundary of Tp 37 S R 22 E.

Chains	
80.00	Set a sandstone 18×8×8 ins. 12 ins. in the ground for cor. of secs. 2-3-34 and 35 marked with 2 notches on E and 4 notches on W. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable Land mountainous Soil rocky and gravely 2nd to 4th rate Timber scrubby cedar, good only for fencing and firewood Mountainous land 80.00 chs. April 13: at this cor. I set off 8°51' N on the decl. arc and at 12h.01m p.m., I mt observe the sun on the meridian the resulting lat. is 37°33' N.
	West. bet. secs. 3 and 34 Over mountainous land Ascending gradually, through cedar timber
0.75	Top of ridge bears N. and S. Begin descent on broken slope
9.90	Wash in hollow 40 ft. deep drains S. 50° W.
17.30	Begin abrupt descent, edge of canyon bears N. and S.
17.70	Perpendicular ledge 20 ft. deep bears N and S Thence in huge sandstone bowlders
24.52	Dry wash in bottom of Spring Canyon, drains S. 230 ft. below plateau Ascending abruptly
30.20	Top of Canyon bears N. and S. 200 ft. above wash Ascending gradually over broken slope
40.00	Set a porphyry stone 18×8×4 ins. 12 ins. in the ground for ¼ sec. cor. marked ¼ on N. face from which A cedar tree 10 ins. diam. bears S 71°30' E. 24 lks. dist. marked ¼ S. 3 B T No other trees within limit. Raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable
68.05	Wagon road from Grayson to Bluff City bears N.W. and S.E. — Leave cedar timber bears N. and S.
80.00	Set a sandstone 18×8×4 ins. 12 ins. in the ground for cor. of secs. 3-4-33 and 34 marked with 3 notches on E and W. edges; dig pits 18×18×12 ins

South boundary of Tp. 37 S. R 22 E.

chains	in each sec. 5½ ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
	This cor. stands 100 ft. above edge of canyon
	Land mountainous
	Soil gravelly loam, and rocky 1st and 4th rate
	Timber, scrubby cedar, thin growth W. of canyon
	Mountainous land 80.00 chs.
	West bet. secs. 4 and 33
	Over mountainous land
	Ascending
24.00	Top of ridge bears S. 25° W and N. 25° E 100 ft. above cor.
	Descending
37.50	Wash in hollow draines S.W. 60 ft. below ridge
	Ascending to
40.00	Set a sandstone 18 x 12 x 4 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. E. and W. of stone 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft. high N of cor.
42.00	Top of ridge bears S.W. and N.E. 50 ft. high
	Descending
73.00	Wash draines S.W. in hollow 60 ft. deep.
	Begin ascent
80.00	Set a sandstone 18 x 7 x 5 ins. 12 ins in the ground for cor. of secs. 4-5-32 and 33 marked with 4 notches on E. and 2 notches on W. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor. –
	Land mountainous.
	Soil sandy loam 1st rate
	No timber
	Mountainous land 80.00 chs.
	April 13, 1907
	April 14: From the cor. of secs. 4-5-32 and 33 run
	West. bet. secs. 5 and 32
	Over mountainous land
	Ascending gradually over broken, rolling slope
36.30	Top of ridge bears N. and S. 90 ft. above cor.
	Descending to
40.00	Set a sandstone 17 x 8 x 4 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits

South boundary of Tp. 37 S.R. 22 E.

Chains	18×18×12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
51.05	Wash drains S in hollow 60 ft. deep.
	Ascending to
80.00	Set a sandstone 18×7×5 ins. 12 ins. in the ground for cor. of secs. 5-6-31 and 32 marked with 5 notches on E. and 1 notch on W. edges; and raised a mound of stones 2 ft. base 1½ ft. high W. of cor. –
	Pits impracticable
	This cor. stands on top of swell running N. and S. along edge of canyon 70 ft. above hollow
	Land mountainous
	Soil sandy loam 1st rate
	No timber
	Mountainous land 80.00 chs.
	April 14: At 9h 31m a.m., T.m.T. – I set off 37°33' N. on the lat. arc. 9°11' N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 5-6-31 and 32. thence I run
	West. bet. secs. 6 and 31
	Over mountainous land
	Descending on rocky slope
2.60	Edge Cottonwood Canyon bears N. and S.; descending over perpendicular cliff 60 ft. deep, thence on abrupt descent in huge sandstone bowlders and breaks. – scattering timber
40.00	Set a porphyry stone 18×7×4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, from which
	A cedar tree 8 ins. diam. bears S. 12°5' W. 29 lks. dist. marked 1/4 S 6 B T
	A cedar tree 14 ins. diam. bears N. 58°30' E. 44 lks. dist. marked 1/4 S. 31 B.T
	Raised a mound of stones 2 ft. base 1½ ft. high N. of cor.
49.60	Spring branch 1 lk. wide flows S. 55° W.
57.50	Left bank of Cottonwood Creek flows S.E. in bottom of canyon 450 ft. deep; swift current good water
58.75	Right bank of creek 14 ins deep (at flood stage)
	Ascending.

South boundary of Tp. 37 S. R. 22 E.

Chains	Allowing for convergency of Meridian
78.33	Set a porphyry stone 20x8x6 ins. 15 ins. in the ground for cor. of Tps. 37 and 38 S Rs. 21 and 22 E. marked with 6 notches on each edge from which
	A cedar tree 12 ins. diam. bears S 58°15' E. 56 lks. dist. marked T 38 S R 22 E S 6 B T
	A cedar tree 10 ins. diam bears S 11°20' W. 23 lks. dist. marked T 38 S R 21 E S 1 B.T.
	A cedar tree 6 ins. diam. bears N 62°0' E. 69 lks dist. marked T 37 S R 22 E S 31 B T
	A cedar tree 12 ins. diam bears N 31°30' W. 1.04 chs dist. marked T 37 S R 21 E. S 36 B T
	Raised a mound of stones 2 ft. base 1½ ft. high S. of cor.
	This cor stands with the Cottonwood Canyon 100 ft. above creek
	Land mountainous
	Soil rocky and gravely, and clay 3rd and 4th rate
	Timber, scrubby cedar, scattering
	Mountainous land 78.33 chs.
	April 14: at this cor. I set off 9°13' N on the decl. arc and at 12h 01m p.m. 7 m 7 observe the sun on the meridian; the resulting lat. is 37°33' N.

West boundary of Tp. 37 S. R. 22 E.

	From the Tp. cor. above described I run
	North bet. secs. 31 and 36
	Over Mountainous land
	Descending, in scrubby cedar scattering
1.00	Wash drains N. 65° E.
	Ascending, sandstone break.
2.55	Top of spur runs E 40 ft. high
	Descending
5.50	Ravine with perpendicular sandstone walls 30 ft. deep, drains S.E.
7.30	North side of ravine. - Ascending gradually
19.00	Top of spur ridge runs S.E 60 ft. high
	Descending
23.80	Descent becomes abrupt over bluff bears N.W. and S.E
26.40	Cottonwood creek 50 lks wide flows S.E. swift current 2 ft. deep good water

West. boundary of T. 37 S. R. 22 E.

Chains	
33.30	Lane Creek flows S.W. 60 lks wide swift current Enter bottom land, sandy, no timber
40.00	Set a sandstone 18 x 10 x 6 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
43.10	Descend abruptly
45.55	Cottonwood Creek 70 lks wide flows S.E. swift current 16 ins. deep
	Ascending gradually in sand and bowlders &
57.50	Begin abrupt ascent in breaks and huge bowlders
	Enter scattering cedar timber, bears N.W. and S.E.
67.00	Spur ridge runs W. 100 ft. high Descending
75.00	Hollow draines S. 60° W., 90 ft. deep. - Ascending
80.00	Set a sandstone 18 x 8 x 4 ins. 12 ins. in the ground for cor. of secs. 25-30-31 and 36 marked with 1 notch on S. and 5 notches on N. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.
	This cor. stands 270 ft above the creek
	Land Mountainous
	Soil barren rock sand clay and gravel 3rd and 4th rate
	Timber scrubby cedar scattering
	Mountainous land 80.00 chs.

	North bet. secs. 25 and 30
	Over mountainous land
	Ascending in bowlders and breaks
40.00	Set a sandstone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
44.50	Ascent becomes abrupt
50.50	Perpendicular sandstone cliff 30 ft. high bears N. 30° W. and S. 30° E.
51.00	Top of Cottonwood canyon bears N. 30° W. and S. 30° E. 200 ft. above sec. cor.
	Thence over rolling plateau
	Leave mountainous land and enter heavily timbered land

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West boundary of T. 37 S. R. 22 E.

Chains	
80.00	Set a sandstone 18 x 10 x 4 ins. 12 ins. in the ground for cor. of secs. 19-24-25 and 30 marked with 2 notches on S. and 4 notches on N. edges from which A cedar tree 6 ins. diam. bears N. 39°0' W. 40 lks. dist. marked T 37 S. R 21 E. S 24 B.T. A cedar tree 6 ins. diam. bears S. 80°45' W. 87 lks. dist. marked T 37 S. R. 21 E S 25 BT A cedar tree 12 ins. diam. bears N. 65°58' E. 33 lks dist. marked T. 37 S. R. 22 E S. 19 BT A cedar tree 14 ins. diam. bears S 63°3' E. 37 lks dist. marked T. 37 S. R. 22 E S 30 BT Land Mountainous, and rolling Soil rocky, clay and sandy loam 4th and 2nd rate Timber, scrubby cedar of no commercial value Mountainous land and Heavily timbered land 80.00 chs. - April 14. 1907
	April 15: at 8h 0m a m, l m t I set off 37°35' N. on the lat. arc 9°31' N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 19-24-25 and 30 thence I run North bet. secs. 19 and 24 Over heavily timbered land Rolling broken plateau
39.00	Wash drains W. in hollow 30 ft. deep.
40.00	Set a sandstone 18 x 8 x 4 ins. 12 ins. in the ground for 1/4 sec. cor marked 1/4 on W. face from which A cedar tree 8 ins. diam. bears West. 27 lks. dist. marked 1/4 S 24 BT A cedar tree 8 ins. diam. bears N. 89°2' E 8 lks. dist. marked 1/4 S. 19 B.T.
43.00	Begin descent bears E. and W. Leave heavily timbered land and enter Mountainous land
50.10	Top of perpendicular cliff 35 ft. deep bears E. and W. Descending abruptly in huge bowlders
54.40	Dry wash draining S W. in bottom of canyon 240 ft. below plateau

West. boundary of T 37 S R 22 E

Chains	
	Begin abrupt ascent
5-6.60	Perpendicular cliff 40 ft. high bears N.E. and S.W. and top of canyon 260 ft. above wash
	Ascending gradually to
61.00	Top of low ridge bears N.E. and S.W. 35 ft. above top of cliff
	Thence over rolling plateau
	Leave mountainous land and enter heavily timbered land
80.00	Set a sandstone 18 x 8 x 4 ins. 12 ins. in the ground for cor. of secs. 13-18-19 and 24 marked with 3 notches on N. and S. edges from which
	A pinion tree 8 ins. diam. bears N. 81° 10' E. 54 lks. dist. marked T 37 S. R 22 E S 18 B T
	A pinion tree 10 ins. diam. bears S. 76° 50' W. 25 lks. marked T 37 S R 21 E. S 24 B.T.
	A cedar tree 6 ins. diam. bears S. 51° 20' E 23 lks. dist. marked T 37 S R 22 E S 19 B.T.
	A cedar tree 12 ins. diam. bears N 68° 13' W. 28 lks. dist. marked T 37 S R 21 E S 13 B T
	Land rolling plateau and mountainous slopes
	Soil rocky, and sandy loam 1st to 4th rate
	Timber scrubby cedar valuable only for fencing and firewood
	Mountainous land or heavily timbered land
	80.00 chs. —

	North bet. secs. 13 and 18
	Over heavily timbered land
	Run over rolling plateau
15.50	Wash drains S.W. in hollow 40 ft. deep.
40.00	Set a sandstone 17 x 6 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which
	A cedar tree 12 ins. diam. bears N. 69° 0' W. 54 lks. dist. marked 1/4 S 13 B T
	A cedar tree 14 ins. diam. bears S 14° 50' E 34 lks. dist. marked 1/4 S 18 B.T.
69.10	Wash drains W. in hollow 40 ft. deep.
80.00	Set a sandstone 18 x 8 x 5 ins. 12 ins. in the ground for cor. of secs. 7-12-13 and 18 marked with 4 notches on S and 2 notches on N. edges from which
	A cedar tree 8 ins. diam. bears S 1° 27' E 1.17 chs. dist. Marked T 37 S R 22 E S 18 B T

West boundary of T. 37 S. R. 22 E.

Chains	A cedar tree 6 ins. diam. bears N 29°25' W. 83 lks. dist. marked T. 37 S R 21 E S 12 B T.
	No other trees within limit
	Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
	Land rolling plateau
	Soil sandy loam 1st rate
	Timber scrubby cedar of dense growth but valuable only for fencing or firewood
	Heavily timbered land 80.00 chs.
	April 15: At this cor. I set off 9°34' N. on the decl. arc and at 12h m., I m t observe the sun on the meridian; the resulting lat. is 37°36' N.
	North bet. secs. 7 and 12
	Over heavily timbered land
	Run over rolling plateau through cedar timber
40.00	Set a sandstone 18 x 6 x 5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which
	A cedar tree 6 ins. diam. bears N 30°3' W. 24 lks. dist. marked 1/4 S 12 B.T.
	A cedar tree 7 ins. diam. bears S. 66°30' E 1.00 chs. dist. marked 1/4 S 7 B T
51.00	Wash drains W. in hollow 30 ft. deep.
77.00	Wash drains S. 20° W. in hollow 60 ft. deep.
	Ascending
80.00	Set a porphyry stone 18 x 8 x 7 ins. 12 ins. in the ground for cor. of secs 1-6-7 and 12 marked with 5 notches on S. and 1 notch on N. edges, from which
	A pinion tree 4 ins. diam. bears N 59°30' E 57 lks. dist. marked T 37 S R 22 E S. 6 B T
	A Cedar tree 34 ins diam bears S 61°50' E 21 lks. dist. marked T 37 S R 22 E S 7 B T
	A pinion tree 7 ins. diam. bears S. 38°35' W. 13 lks. dist. marked T 37 S R 21 E S 12 B T
	A cedar tree 10 ins. diam. bears N 61°25' W. 21 lks dist. marked T 37 S R 21 E S 1 B T
	Land rolling broken
	Soil sandy, gravely loam 1st and 2nd rate
	Timber scrubby cedar and pinion of dense growth but valuable only for fencing and

West. boundary of T. 37 S R 22 E.

Chains	
	Timber Heavily timbered land 8000 chs.
	North bet. secs. 1 and 6 Over heavily timbered land, and rolling plateau ascending gradually
20,00	Top of ridge runs S. 30° W. and N. 30° E. 80 ft. above cr
	Descending broken slope, gradually
40,00	Set a sandstone 18 x 10 x 5 ins. 12 ins. in the ground for 1/4 sec. cr. marked 1/4 on W. face from which A pinion tree 7 ins. diam bears S 35° 10' W. 42 lks dist. marked 1/4 S. 1 B T A pinion tree 7 ins. diam bears N 87° 30' E 37 lks. dist. marked 1/4 S 6 B T
42,40	Edge of canyon and perpendicular precipice 40 ft. deep. bears N 30° E and S 30° W.
	Thence descending abruptly in huge sandstone bowlders and breaks
57,20	Wash 40 lks wide water in hollow, drains S 30° W in bottom of box canyon 300 ft. deep.
	Begin ascent in huge bowlders and breaks
72,00	Perpendicular cliff 40 ft. high bears E and W. and top of canyon
	Thence over rolling plateau w
80,00	Set a sandstone 18 x 8 x 8 ins. 12 ins. in the ground for cor. of Tps. 36 and 37 S Rs. 21 and 22 E. marked with C notches on each edge. from which A cedar tree 14 ins. diam. bears S 42° 58' E 6 lks. dist marked T 37 S R 22 E S C B T A pinion tree 6 ins. diam. bears S 8° 35' W. 25 lks. dist. marked T 37 S R 21 E S 1 B T A cedar tree 15 ins. diam. bears N 6° 15' E 36 lks. dist. marked T 36 S R 22 E S 31 B T a cedar tree 10 ins diam bears N. 74° 25' W. 38 lks. dist. marked T 36 S R 21 E S 36 B T
	Land rolling plateau and abrupt canyon Soil gravelly and rocky 2nd to 4th rate Timber scrubby cedar of dense growth - but no commercial value

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West boundary of T 37 S R 22 E

Chains	Heavily timbered land 80.00 chs. April 15, 1907
	April 16: at 7h 35m a.m., l.m.t. I set off 37°38' N on the lat. arc 9°53'. N. on the decl. arc and determine a meridian with the solar at the cor. of Tps 36 and 37 S. Rs. 22 and 23 E. on the Colorado Guide Meridian
	Thence I run
	West on a random line along the N. bdy of Tp 37 S. R. 22 E. setting temp. 1/4 sec. and sec. cors. at intervals of 40.00 chs.; and at 477.30 chs. intersect the W. bdy of Tp. 30 lks. S of cor. of Tps 36 and 37 S Rs 21 and 22 E as set by me April 15. 1907. —
	The falling answers to a correction of 0°02' or 5 lks. N per mile counting from the N. E. cor of the Tp.; therefor I run
	S. 89°58' E. bet. secs. 6 and 31 marking and blazing true line. —
	Over heavily timbered land; and broken plateau
0.18	Perpendicular cliff 12 ft. high bears N. and S. —
	Ascending gradually
6.30	Edge of break to canyon bears N. and S. — Descending over perpendicular breaks and abrupt slopes in Canyon
15.05	Bottom of canyon 265 ft. deep; wash drains S 20° W
	Begin abrupt ascent in huge bowlders
19.80	Perpendicular cliff 40 ft. deep bears N. and S. and top of canyon. — Thence on gradual ascent
37.30	Set a porphyry stone 18×12×6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which
	A cedar tree 15 ins. diam. bears S 76°50' W. 15 lks. dist. marked 1/4 S 6 B.T
	A cedar tree 7 ins. diam. bears N. 15°30' E. 13 lks. dist. marked 1/4 S. 31 B.T.
52.00	Top of ascent and ridge bears N. and S. 80 ft. above canyon. — Thence on gradual descent to
77.30	Set a porphyry stone 16×8×6 ins. 11 ins. in the ground for cor. of secs. 5-6-31 and 32 marked with 1 notch on W. and 5 notches on E edges from which
	A cedar tree 10 ins. diam. bears S 38°5' E 22 lks.

North boundary of T. 37 S. R. 22 E.

Chains	dist. marked T 37 S R 22 E S 5 B.T A cedar tree 7 ins. diam. bears N 61° 10' E. 21 lks. dist. marked T 36 S R 22 E S 32 B T A cedar tree 12 ins. diam. bears S 61° 20' W. 25 lks. dist. marked T 37 S R 22 E 9.6 B T A cedar tree 6 ins. diam. bears N 81° 5' W. 37 lks. dist. marked T 36 S R 22 E S 31 B T Land rolling Soil sandy loam 1st. rate Timber scrubby cedar and pinion of dense growth.- Heavily timbered land 77.30 chs. April 16: The weather being cloudy during the noon hour I was unable to observe the sun on the meridian
	S. 89° 58' E. bet. secs. 5 and 32 Over heavily timbered land; and rolling plateau
23.10	Wash drains S in hollow.- Ascending
40.00	Set a conglomerate stone 24 x 10 x 5 ins. 18 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A cedar tree 7 ins. diam. bears N 68° 15' W. 52 lks. dist. marked 1/4 S. 32 B T A cedar tree 12 ins. diam. bears S. 31° 30' E 45 lks. dist. marked 1/4 S. 5 B T
43.30	Top of ridge bears N. and S. 130 ft. high Descending
63.50	Wash drains S in rocky ravine 120 ft. below ridge.- Thence over rocky land to
73.30	Abrupt break to canyon bears S. 25° E. and N. 25° W. - Descending in huge bowlders and ledges
80.00	Set a Sandstone 24 x 12 x 8 ins. 18 ins. in the ground and mound of stones on rock bottom for cor. of secs. 4-5-32 and 33 marked with 2 notches on W and 4 notches on E. edges from which A cedar tree 16 ins. diam. bears S 61° 3' E 21 lks. dist. marked T 37 S R 22 E S 4 B.T. A cedar tree 14 ins. diam. bears S. 84° 31' W. 56 lks dist. marked T 37 S R 22 E S 5 B T

North boundary of T. 37 S. R. 22 E.

Chains	No other trees within limit; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable.-
	This cor. stands 165 ft. below plateau on E. slope Land abrupt canyons and rolling plateau
	Soil sandy loam 1st rate, and rocky 4th rate
	Timber cedar and pinion, dense growth
	Heavily timbered land 80.00 chs.—
	April 16, 1907
	April 17: From the cor of secs 4-5-32 and 33 on N. bdy of T 9 S R 22 E
	S 89° 58' E bet. secs 4 and 33
	Over Heavily timbered land
	Descending in canyon
2,70	Bottom of canyon 95 ft. below cor. and wash, water in hollows, drains S. 20° E
	Begin abrupt ascent.
6,65	Perpendicular cliff bears N. 20° W. and S. 20° E. and top of canyon 225 ft. above wash
	Begin gradual ascent
20,00	Top of ridge bears N. and S. 100 ft. high.— Thence on gradual descent
30,85	Wash drains S. in hollow 60 ft. deep.
	Begin ascent
40,00	Set a quartzite stone 18 x 12 x 7 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which
	A cedar tree 8 ins. diam. bears North 15 lks. dist. marked 1/4 S. 33 B. T.
	A cedar tree 10 ins. diam. bears S. 60 15' W. 32 lks. dist. marked 1/4 S 4 B.T
48,00	Top of ridge bears N. and S. 150 ft. high, and on the ½ a pre-historic ruin consisting of a large mound with tops of walls visible.—
60,30	Edge of break to West Water Canyon bears N. and S descending abruptly in rocky slope
62,65	Wash drains S. in bottom of canyon 200 ft. below ridge;- water in hollows
	Ascending rocky slope
74,65	Perpendicular cliff 12 ft. high bears N. and S. and top of canyon.- Thence on gradual ascent to

North boundary of T 37 S R 22 E

Chains	
80.00	Set a porphyry stone 24 x 6 x 6 ins. 18 ins. in the ground for cor. of secs. 3-4-33 and 34 marked with 3 notches on east and west edges from which A pinion tree 6 ins. diam. bears S 21° 0' E 5 lks. dist. marked T 37 S R 22 E S 3 B T A cedar tree 8 ins. diam bears S 89° 15' W. 15 lks. dist. marked T. 37 S. R 22 E S 4 B.T A pinion tree 6 ins. diam. bears N. 55° 2' W. 20 lks dist. marked T 36 S. R. 22 E. S. 33 B T A cedar tree 9 ins. diam bears N. 87° 35' E. 49 lks. dist. marked T 36 S. R 22 E. S 34 B T Land rolling and broken Soil sandy loam. and rocky 1st. and 4th rate Timber cedar and pinion, dense growth Heavily timbered land 80.00 chs.
	S. 89° 58' E. bet. secs 3 and 34 Over heavily timbered land; and rolling plateau
23.60	Wash drains S in hollow 50 ft. deep Ascending gradually to
40.00	Set a sandstone 18 x 8 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face from which A cedar tree 10 ins. diam. bears East 15 lks. dist. marked 1/4 S 3 B T on S W and 1/4 S. 34 on N W faces. - no other trees within limit Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
42.00	Top of ridge bears N. and S 100 ft. above wash Descending gradually
55.00	Leave timber bears N. and S Leave heavily timbered land and enter dense undergrowth bears N and S
66.50	Road from Grayson to Bluff City bears N. and S.
67.05	Irrigation ditch 3 ft. wide drains S.
80.00	Set a sandstone 18 x 9 x 6 ins. 12 ins. in the ground for cor. of secs 2-3-34 and 35 marked with 4 notches on W. and 2 notches on E edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist.

North boundary of T. 37 S. R. 22 E.

	and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
	Land rolling
	Soil sandy loam 1st rate
	Timber cedar and pinion
	Thorn and sagebrush undergrowth
	Heavily timbered land or dense undergrowth 80.00 chs.
	April 17: at this cor. I set off 10° 17' W on the decl are and at 12 h m; I. m. t. observe the sun on the meridian; the resulting lat. is 37° 38' N.
	S. 89° 58' E bet. secs. 2 and 35
	Through dense undergrowth
	Over rolling land
9.60	Wash drains S. 20° W. in hollow 30 ft. deep
18.12	Wash drains S.W. in hollow 30 ft. deep. - ascend
26.20	Top of ridge 30 ft. high bears N. and S.
	Descending gradually
40.00	Set a hard conglomerate stone 18 x 12 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face dig pits 18 x 18 x 12 ins E. and W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
60.70	Wash drains S. in hollow 24 ft. deep
72.50	Wash drains S.
80.00	Set a portphyry stone 18 x 6 x 4 ins. 12 ins in the ground for cor. of secs. 1-2-35 and 36 marked with 1 notch on E and 5 notches on W. edges; from which
	A cedar tree 12 ins diam. bears N. 5° E 35 W. 21 lks. dist. marked T 36 S R 22 E S 35 B T
	A cedar tree 5 ins. diam. bears N 10° E 3' E 10 lks. dist. marked T 36 S R 22 E S 36 B T
	No other trees within limit; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. Pits impracticable. —
	Land rolling
	Soil sandy loam 1st. rate
	Timber a few cedars scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs.

North boundary of T 37 S R 22 E

Chains	
	S 89° 58' E bet. secs. 1 and 36
	Through dense undergrowth
	Over rolling land, ascending gradually
12.88	Top of ridge bears N and S 40 ft. high
	Descending gradually
24.30	Wash drains S in hollow. — Thence over rolling land
30.40	Wash drains S in hollow 20 ft. deep
40.00	Set a sandstone 18×12×6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face: dig pits 18×18×12 in. E. and W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor. —
80.00	The cor. of Tps 36 and 37 S Rs. 22 and 23 E. on the Colorado Guide Meridian
	Land rolling
	Soil sandy loam 1st. rate
	Timber, a few cedars scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs. —

April 17: At my camp which is located near the 1/4 sec. cor. bet. secs. 22 and 27 T 37 S R 22 E, I set off 37° 35' N. on the lat. arc 10° 23' N. on the decl. arc and at 4h 57m p.m., l.m.t. determine a meridian with the solar and mark a point thereof on a stone firmly set. 4.50 chs. N. of my station. —

At 8h 56m p.m., l.m.t. I observe Polaris in accordance with Manual of instructions and mark a point in the line thus determined on a peg driven in the ground 4.50 chs. N. of the instrument. —

Astron. l.m.t. of obs. Apr. 17. 8h 56m =
" " " " " " Apr 16. = - - - - - - 32h 56m
U.C. Polaris April 16 - - - - - - - - - - - 23 46.5
Hour ang. of Polaris at obs. and time argument (Manual Tab. 7) 9h 09.5m
Azimuth of Polaris at obs. - - - 1° 0' W.

April 17, 1907

Apr. 18: At 7h 10m a.m., l.m.t. I lay off the azimuth of Polaris 1° 0' to the east and mark the meridian thus determined on the

North boundary of T. 37 S R 22 E

stone set. April 17, 4.50 chs. N. of my station, and find it agrees without material difference, with the meridian previously determined by the solar and marked thereon. At 7h 30m a.m., l.m.t. I set off 37°35' N. on the lat. arc 10°35' N on the decl. arc and with the solar determine a meridian, a point in which I mark in the stone above refered to, which mark agrees without material difference with the meridian obtained by Polaris observation.—

The instrument by p.m. and a.m. solar observations points meridians which differ by less than 1' of arc from the meridian obtained by observation on Polaris and could not be improved by further adjusting.—

The magnetic bearing of the true meridian at 7h 50m a.m. is N. 15°10' W.; the angle thus determined gives mean mag. decl. 15°10' E.—

April 18, 1907

Boundaries of T 37 S R 22 E

Latitudes departures and closing errors

Line designated	True bearing	Distance	Latitudes N	Latitudes S	Departures E	Departures W
			chs.	chs.	chs.	chs.
Colorado Guide Mer.	South	480.00		480.00		
South bdy.	West	478.33				478.33
West bdy.	North	480.00	480.00			
North bdy.	S. 89°58' E	477.30		0.28	477.30	
Convergency					0.56	
Totals			480.00	480.28 480.00	477.86	478.33 477.86
Error in lat.				0.28	in dep.	0.47

General Description

This township is all rolling plateau, cut by enormous box canyons; and the greater part is covered with a dense growth of scrub cedar and pinion.— The soil on the plateau is much alike and consists of a redish, sandy loam very fertile; the canyons are mainly a mass of rock. The township should be subdivided; as it is being located upon for purposes of cultivation without

North boundary of T 39 S R 22 E.

irrigation. - There is no water running nor standing within the township except Recapture Creek cutting the S.E. cor. and Cottonwood Creek cutting the S.W. cor., both of which flow through canyons several hundred feet deep and not available. - Both of these streams become entirely dry before the summer is fairly begun. -

A P Hanson.
U.S. Dep. Surveyor.

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PAGE

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hanson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the South, West and North Boundaries of Tp. 3 S. R. 2 E. S. L. B. & M. Utah, showing the respective capacities in which they acted:

R. F. Hurlburt, Chainman.
J. E. Rogerson Jr., Chainman.
J. E. Rogerson Jr., Moundman.
R. F. Hurlburt, Moundman.
Indian Jerry, Axman.
Indian Mannito, Axman.
D. J. Rogers, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hanson, United States Deputy Surveyor, in surveying all the parts or portions of the South, West and North Boundaries of Tp. 3 S. R. 2 E. of the Salt Lake Base and meridian, State of Utah, which are represented on the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

R. F. Hurlburt, Chainman.
J. E. Rogerson Jr., Chainman.
J. E. Rogerson Jr., Moundman.
R. F. Hurlburt, Moundman.
A. P. Hanson witness to mark Indian Jerry X, Axman.
A. P. Hanson witness to mark Indian Mannito X, Axman.
D. J. Rogers, Flagman.

Subscribed and sworn to before me this 18th day of April, 1907.

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

9-151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from Edward H. Anderson
United States Surveyor General for Utah, bearing date
18th day of May, 190 5, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Sur
General for Utah, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of the South, West, and North
Boundaries of Township No. 37 South, RangeNNo. 22 East of
of the Salt Lake
Base and meridian, in the State of Utah, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further sol
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Sur
General for Utah and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey.

Andrew P. Hanson
United States Deputy Sur

Subscribed by said Andrew P. Hanson, and sworn to before me
this 29th day of July, 1907

Thomas Bell
U.S. Surveyor-General
for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26,

The foregoing field notes of the survey of the South, West, and North Bounda-
ries of Township No. 37 South, Range No. 22 East of the Salt Lak
Base and Meridian, Utah,

executed by Andrew P. Hanson
under his contract No. 289, dated May 18, 190 5, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
surveys they describe, are hereby approved.

Thomas Bell
United States Surveyor Ge

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 offi

United States Surveyor Ge

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BOOK A-348

FILED

29

FIELD NOTES

OF THE SURVEY OF THE

Subdivision Lines

of

Township No. 37 South Range No. 22 East

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

der his Contract No. 289, dated May 18, 1905

rvey commenced April 18, 1907

rvey completed May 3, 1907

6—151

high 59-27-78 ✓

low 40-50 ✓

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

R.F.Hurlburt,	Chainman.
J.E.Rogerson, Jr.,	Chainman.
R.F.Hurlburt,	Moundman.
J.E.Rogerson, Jr.	Moundman.
Indian Jerry,	Axman.
Indian Mannito,	Axman.
D.J.Rogers,	Flagman.

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Volume
#
R0348

BOOK A-348

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, R F Hurlburt and J E Rogerson Jr.
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same
we will report the true distances to all notable objects, and the true lengths of all lines that we as
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the sur
Subdivision Lines of Tps. 36 and 37 S. R. 22 E., Salt Lake Bas
and Meridian Utah

R. F. Hurlburt, Chai
J E Rogerson Jr., Chai
D. J. Rogers

Subscribed and sworn to before me this 5th
day of April, 1907

Peter Allan
Notary Public

SEAL

WE, R F Hurlburt and J E Rogerson Jr.
do solemnly swear that we will well and truly perform the duties of moundmen in the establis
of corners, according to the instructions given us, to the best of our skill and ability, in the sur
Subdivision Lines of Tps 36 & 37 S. R. 22 E., Salt Lake Base
and Meridian Utah

R. F. Hurlburt, Moun
J E Rogerson Jr., Moun

Subscribed and sworn to before me this 5th
day of April, 1907

Peter Allan
Notary Public

SEAL

WE, Indian Jerry and Indian Mannity
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of c
and other duties, according to instructions given us, to the best of our skill and ability, in the sur
Subdivision Lines of Tps. 36 & 37 S. R. 22 E., Salt Lake B
and Meridian Utah
A P Hanson Witness, 4 marks Indian Jerry X Aa
A P Hanson Witness to mark Indian Mannity X Aa

Subscribed and sworn to before me this 5th
day of April, 1907

Peter Allan
Notary Pub

SEAL

I, D J Rogers, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability, i
survey of Subdivision Lines of Tps 36 & 37 S. R. 22 E., Salt Lake
and Meridian Utah

D. J. Rogers, Flag

Subscribed and sworn to before me this 5th
day of April, 1907

Peter Allan
Notary Pub

SEAL

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[illegible] Commission Expires May 6 – 1910

Subdivision of T.37 S.,R.22 E.

Chains	
	Survey commenced April 18,1907 and executed with a W & L E Gurley light mountain transit with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc,which is also the least count of the verniers of the latitude and declination arcs.
	The instrument was examined,tested on the true meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,March 27,1907.
	Having this day completed a full test of the solar apparatus in connection with the survey of the boundaries of this Tp. as described in Book B,reference to which is hereby made;and found the same correct. I commence the subdivision as follows:
	I begin at the cor. of secs. 1-2-35 and 36 on S. bdy. T. 37 S.,R. 22 E.,latitude 37°32'58"N.,longitude 109°31'35"W.,established by me April 13, 1907, and heretofore described.
	Thence I run
	N.0°1'W.bet. secs.35 and 36
	Over mountainous land
	Ascending gradually on E.slope
3.50	Top of spur projects E.;descending
9.05	Wash drains S.E.in hollow 20 ft.deep
	Ascending
14.00	Top of spur runs S.E.,descending
22.15	Wash drains S.E.in hollow 30 ft.deep
	Ascending
40.00	A bowlder 12x10x5 ft.for ¼ sec.cor.I mark ¼ within a circle,on west face,at exact cor.point,3 ft.above ground;raised a mound of stones 2 ft.base 1½ ft.high W.of cor. Pits impracticable.
41.00	Begin abrupt ascent in huge bowlders and breaks;enter scattering cedars
53.60	Top of Recapture Canyon bears N.E.and S.W.,275 ft. above sec.cor.

Chains.	
	Thence over broken rocky surface to
80.00	Set a sandstone 18 x 8 x 8 ins.,12 ins.in the ground for cor.of secs.25-26-35 and 36,marked with 1 notch on S.and E.edges,from which
	A cedar tree 6 ins.diam.,bears N.53°25'W.,25 lks. dist.marked T.37 S.,R. 22 E.S 26 B T
	No other trees within limit.
	Raised a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
	Land mountainous
	Soil,barren rock,clay and gravel,3rd and 4th rate
	Timber,scrubby cedar scattering
	Mountainous land,80.00 chs.
	East on a random line bet.secs.25 and 36.
40.00	Set temp.¼ sec.cor.
80.00	Intersect Colorado Guide Meridian 21 lks.S.of cor. of secs.35,30,31, and 36, heretofore described.
	Thence I run
	S.89°51'W. on a true line bet.secs.25 and 36
	Through dense undergrowth
	In bottom of Recapture Canyon
1.61	Left bank of Recapture Creek between banks 10 ft. high,course S.60°W.,swift current 18 ins.deep,good water.
2.50	Right bank of same stream
	Enter timber bears S.W.and N.E.
10.50	Leave timber bears S.W.and N.E.
28.70	East Water Creek channel 80 lks.wide drains S.
29.00	Stream 2 lks.wide flows S.
29.50	Leave creek channel and begin ascent
32.00	Leave dense undergrowth and enter mountainous land bears N.and S.
40.00	Set a sandstone 20 X 8 X 4 ins.15 ins.in the ground for ¼ sec.cor.marked ¼ on N. face;raised a mound of stones 2 ft.base,1½ ft.high,N.of cor. Pits impracticable.

Subdivision of T.37 S.,R.22 E.

Chains.	
	Ascending in huge bowlders and breaks.
59.00	Perpendicular cliff 20 ft.high,bears N.and S.
62.00.	Top of canyon bears N.and S.,thence over rolling plateau
	Leave mountainous land and enter heavily timbered land
80.00	The cor.of secs.25-26-35 and 36
	Land,broken creek bottom,mountainous and rolling plateau
	Soil,sandy loam,barren rock and gravelly,1st to 4th rate
	Timber,cottonwood along creek and scrubby cedar, scattering on break and dense on plateau.
	Dense undergrowth,mountainous land or heavily timbered land 80.00 chs.
	April 18:At this cor.,I set off 10°38'N.on the decl. arc and at 12h.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°34'N.
	N.0°1'W.bet.secs.25 and 26
	Over heavily timbered land
	Along top of precipitous break,40 ft.deep,to canyon
20.00	Break to canyon,turns N.W.
	Thence over rolling plateau
40.00	Set a porphyry stone 18 X 8 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar tree 8 ins.diam.bears N.31°0'E.,25 lks.dist., marked ¼ S 25 B T
	A cedar tree 8 ins.diam.bears S.14°5'W.,14 lks.dist., marked ¼ S 26 B T
60.00	Leave heavily timbered land and enter dense undergrowth
80.00	Set a sandstone 18 X 7 X 4 ins.,12 ins.in the ground for cor.of secs.23-24-25 and 26,marked with 2 notches on S. and 1 notch on E.edges;raised a mound of stones 2 ft.base,1½ ft.high W.of cor.

Subdivision of T.37 S.,R.22 E.

Chains.	
	Pits impracticable.
	Land rolling plateau,nearly level
	Soil,barren rock along break,and sandy loam,1st,to 4th.rate.
	Timber,scrubby cedar of dense growth
	Dense undergrowth of sagebrush and thorn
	Heavily timbered land or dense undergrowth 80.00 chs.
	N.89°51'E.on a random line bet.secs.24 and 25
40.00	Set temp.¼ sec.cor.
80.04	Intersect Colorado Guide Meridian at the cor.of secs. 19,24,25,and 30, heretofore described.Thence I run
	S.89°51'W.on a true line bet.secs.24 and 25
	Over mountainous land and rolling plateau
20.00	Top of canyon,bears N.and S.
	Begin abrupt descent in breaks and bowders
33.85	East Water Creek,4 lks.wide in channel 70 lks.wide, flows S.in bottom of canyon 300 ft.below cor.
	Ascending
40.02	Set a porphyry stone 18 X 10 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;raised a mound of stone 2 ft.base,1½ ft.high,N.of cor. Pits impracticable.
42.00	Ascent becomes abrupt in breaks
53.50	Top of canyon,bears N.and S.,320 ft.above stream
	Enter rolling plateau
	Leave mountainous land and enter heavily timbered land
76.60	Leave heavily timbered land and enter dense undergrowth,bears N.and S.
80.04	The cor.of secs.23-24-25 and 26
	Land mountainous and rolling plateau
	Soil,rocky,gravelly and sandy loam,1st.to 4ht.rate
	Timber,scrubby cedar of dense growth
	Dense undergrowth of sagebrush and thorn
	Mountainous land,heavily timbered land or

Chains.	
	dense undergrowth 80.04 chs.
	April 18,1907.
	April 19:at 7h. 3m.a.m.,l.m.t.,I set off 37°35' N.on the lat.arc,10°56'N.on the decl.arc and determine a true meridian with the solar at the cor.of secs.23-24-25 and 26;thence I run
	N.0°1'W.bet.secs.23 and 24
	Through dense undergrowth
	Over rolling plateau in scattering timber
40.00	Set a sandstone 18 X 12 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;dig pits 18 X 18 X 12 ins.,N.and S.of stone,3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high W.of cor.
57.00	Enter cedar timber, bears E.and W.
	Leave dense undergrowth and enter heavily timbered land
63.50	Wash,drains S.75°E.in hollow 50 ft.deep
79.25	Enter dry,rocky wash at head of canyon,drains S.65°E.
80.00	Set a sandstone 30 X 12 X 6 ins.in a mound of stones 3 ft.high on rock bottom for cor.of secs.13-14-23 and 24,marked with 3 notches on S.and 1 notch on E. edges:from which
	A cedar tree 6 ins.diam.,bears N.25°5'W.,55 lks. dist.,marked T 37 S R 22 E S 14 B T
	No other trees within limit
	Raised a mound of stones 2 ft.base,1½ ft.high W.of cor. Pits impracticable
	Land,rolling plateau
	Soil,sandy loam 1st.rate
	Timber,scrubby cedar of dense growth but no commercial value
	Thorn and sagebrush undergrowth
	Dense undergrowth or heavily timbered land 80.00 chs.

Chains.	
	N.89°51'E.on a random line bet.secs.13 and 24
40.00	Set temp.¼ sec.cor.
79.90	Intersect Colorado G.M,21 lks.N.of cor.of secs.13-18-19 and 24, heretofore described.
	Thence I run
	West on a true line bet.secs.13 and 24
	Over heavily timbered land
	Descending gradually on broken slope
28.00	Edge of canyon,bears N.and S.,150 ft. below cor.
	Begin abrupt descent in breaks and big bowlders
33.90	East Water Creek 3 lks.wide in channel 40 lks.wide, flows S.in bottom of canyon 200 ft.deep.
	Ascending in bowlders and breaks
39.95	Set a sandstone 18 X 8 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face,from which
	A cedar tree 12 ins.diam.,bears N.0°4'W.,18 lks.dist. marked ¼ S 13 B T
	A cedar tree 12 ins.diam.,bears S.39°55'W.,18 lks. dist.,marked ¼ S 24 B T
41.00	Top of canyon,bears N.and S.,220 ft.above creek
	Thence over rolling plateau
46.50	Wash in hollow 30 ft.deep,drains S.
73.00	Brush fence,bears N.W.and S.E.
79.90	The cor.of secs.13-14-23 and 24
	Land,broken plateau and rugged canyon
	Soil,sandy,gravely loam and rocky,1st.to 4th.rate.
	Timber,scrubby cedar and pinion,dense growth but no commercial value
	Heavily timbered land,79.90 chs.
	April 19:at this cor.I set off 10°59'N.on the decl. arc and at 12h.1m.p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37°36'N.
	N.0°1'W.bet.secs.13 and 14
	Over heavily timbered land
	From edge of wash,ascending

Subdivision of T.37 S.,R.22 E.

Chains	
13.05.	Brush fence,bears N.W.and S.E.
29.50	Top of ridge,bears E.and W.,140 ft.above cor.
	Descending
36.00	Leave timber,bears N.E.and S.W.
	Leave heavily timbered land and enter dense undergrowth
40.00	Set a porphyry stone 18 X 8 X 5 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W. face;raised a mound of stones 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor. Pits impracticable.
44.00	Foot of slope,bears N.E.and S.W.
	Thence over rolling surface
67.10	Wire fence,bears N.70°E.and S.70°W.
80.00	Set a porphyry stone 18 X 8 X 4 ins.,12 ins.in the ground for cor.of secs.11-12-13 and 14,marked with 4 notches on S.and 1 notch on E.edges;raised a mound of stones 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor. Pits impracticable.
	Land,rolling plateau
	Soil,sandy,gravelly loam,1st.rate
	Timber,scrubby cedar of no commercial value
	Dense thorn and sage undergrowth
	Heavily timbered land or dense undergrowth 80.00 chs.
	East on a random line bet.secs.12 and 13
40.00	Set temp.sec.cor.
79.92	Intersect Colorado C.M,12 lks.S.of cor.of secs.7-12-13 and 18, heretofore described.
	Thence I run
	S.89°55'W.on a true line bet.secs.12 and 13
	Over mountainous land
	Descending in cedar timber on broken slope
13.60	Wash,drains S.W.in hollow,90 ft. below cor.
22.80	Wash,drains S.in gulch,150 ft.below cor.
	Ascending
33.75	Top of spur ridge,runs S.,70 ft.high

Chains.	
	Descending to
37.85	Brush fence,bears N.and S.
39.96	Set a quartzite stone 18 X 11 X 8 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;raised a mound of stones 2 ft.base,1½ ft.high,N.of cor. Pits impracticable.
40.12	Dry wash,drains S.E.,80 ft.below spur
	Begin gradual ascent and leave timber
	Leave mountainous land and enter dense undergrowth, bears N.and S.
50.40	Wire fence,bears N.60°E.and S.60°W.
79.92	The cor.of secs.11-12-13 and 14
	This cor.stands 130 ft.above wash
	Land,mountainous and rolling
	Soil,gravelly and sandy loam,1st.and 2nd.rate
	Timber,scrubby cedar of dense growth
	Mountainous land or dense undergrowth 79.92 chs.
	April 19,1907.
	I
	April 20;at 7h.51m.a.m.,l.m.t.,I set off 37°36'50" N.on the lat.arc,11°17'N.on the decl.arc,and determine a meridian with the solar at the cor.of secs. 11-12-13 and 14;thence I run
	N.0°1'W.bet.secs.11 and 12
	Through dense undergrowth
	Over rolling plateau
40.00	Set a porphyry stone 17 X 10 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;raised a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
80.00	Set a sandstone 17 X 6 X 5 ins.,12 ins.in the ground for cor.of secs.1-2-11 and 12,marked with 5 notches on S.and 1 notch on E.edges,from which
	A cedar tree 5 ins.diam.bears S.6°55'E.,1.25 chs. dist.,marked T 37 S R 22 E S 12 B T
	A cedar tree 5 ins.diam.bears S.61°40'W.,2.40 chs.

Subdivision of T.37 S., R.22 E.

Chains.	
	dist.,marked T 37 S R 22 E S 11 B T
	No other trees within limit
	Raised a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
	Land,rolling broken plateau
	Soil,gravely sandy loam,1st.rate
	Timber,a few small cedars,scattering
	Dense thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs.
	N.89°55'E.on a random line bet.secs.1 and 12
40.00	Set temp.sec.cor.
79.96	Intersect Colorado G.M.W. 1 lks.N.of cor.of secs.1-6-7 and 12, heretofore described.
	Thence I run
	S.89° 58'W.on a true line bet.secs.1 and 12
	Over heavily timdered land
	Descending on broken slope
9.05	Wash,drains S.W.in hollow,30 ft. deep.
21.00	Spur ridge,60 ft.high,runs S.
29.70	Wash,drains S.20°E.,in hollow,120 ft.below cor.
	Begin gradual ascent
39.98	Set a sandstone 18 X 10 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face,from which
	A cedar tree 4 ins.diam.,bears N.39°50'E.,30 lks. dist.,marked ¼ S 1 B T
	A cedar tree 4 ins.diam.,bears S.81°57'W.,97 lks. dist.,marked ¼ S 12 B T
43.70	Leave cedar timber, bears N.and S.
	Leave heavily timbered land and enter dense undergrowth
79.96	The cor.of secs.1-2-11 and 12
	Land,rolling and broken
	Soil,gravely and sandy loam,1st.rate
	Timber,scrubby cedar of dense growth
	Thorn and sagebrush undergrowth

Subdivision of T.37 S.,R.22 E.

Chains.	
	Heavily timbered land or dense undergrowth 79.96 chs.
	April 20:the sky being overcast during the noon hour,I could obtain no observation for meridian.
	N.0°1'W.on a random line bet.secs.1 and 2
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.bdy.of Tp.,24 lks.E.of cor.of secs.1-2-35 and 36, heretofore described.
	Thence I run
	S.0°11'E.on a true line bet.secs.1 and 2
	Through dense undergrowth
	Over rolling broken plateau
18.00	Wash,drains S.E.,20 ft.deep
36.40	Wash,drains E.,20 ft.deep
40.00	Set a sandstone 18 X 6 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face,from which A cedar tree 6 ins.diam.,bears N.21°49'E.,2.61 chs. dist.,marked ¼S 1 B T A cedar tree 5 ins.diam.,bears S.51°29'W.,3.00 chs. dist.,marked ¼ S 2 B T
43.00	Top of ridge,bears E.and W.
62.90	Wash,drains E.in hollow,50 ft.below ridge
80.00	The cor.of secs.1-2-11 and 12
	Land,rolling
	Soil,sandy loam,1st.rate
	Timber,a few scrubby cedar scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs.
	April 20,1907.
	April 21:at 7h.31m.a.m.,l.m.t.,I set off 37°33'N. on the lat.arc,11°37'N.on the decl.arc and determine a meridian with the solar at the cor.of secs.2-3-34 and 35 on the S.bdy.of Tp. heretofore described.
	Thence I run

Subdivision of T.37 S.,R.22 E.

Chains.	
	N.0°1'W.bet.secs.34 and 35
	Over mountainous land
	Through cedar timber on rolling plateau
3.50	Spur ridge 15 ft. high, projects S.W.
12.00	Wash,drains S.W. in hollow 20 ft.deep.
25.50	Spur ridge 30 ft. high, projects S.W.
37.55	Wash,drains S.W.,in hollow 40 ft. deep, ascending
40.00	Set a sandstone 18 X 10 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar tree 4 ins.diam.,bears S.73°50'E.,40 lks. dist.,marked ¼ S 35 B T
	A cedar tree 4 ins.diam.,bears S.77°25'W.,52 lks. dist.,marked ¼ S 34 B T
50.00	Top of spur ridge,bears S.W.,90 ft.high,descending
65.50	Wash, drains S.W.,in hollow 60 ft.below ridge. Over broken slope to
74.50	Wash,drains S.W.,in hollow 20 ft.deep.
80.00	Set a sandstone 20 X 8 X 4 ins.,15 ins.in the ground for cor.of secs.26-27-34 and 35,marked with 1 notch on S.and 2 notches on E.edges,from which
	A cedar tree 14 ins.diam,bears N.78°40'W.,98 lks. dist.,marked T 37 S R 22 E S 27 B T
	No other trees within limit
	Raised a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
	Land,mountainous,broken and rolling
	Soil,gravely,sandy loam,1st.rate
	Timber,scrubby cedar of dense growth,mainly
	Sagebrush and thorn undergrowth
	Mountainous land 80.00 chs.
	East on a random line bet.secs.26 and 35
40.00	Set temp.¼ sec.cor.
80.06	Intersect N.and S.line at cor.secs.25-26-35 and36
	Thence I run
	West on a true line bet.secs.26 and 35
	Over mountainous land
	Through cedar timber,over broken plateau

Subdivision of T.37 S.,R.22 E.

Chains.	
1.50	Edge of break to canyon,bears N.and S.
	Descending over perpendicular ledge 30 ft.deep;
	thence over hugh bowlders
11.00	Wash,drains S.in bottom of canyon,160 ft.deep
	Ascend to
18.10	Top of canyon,bears N.and S.,thence over broken
	slope to
30.65	Begin abrupt descent on rocky slope
38.55	Dry wash,drains S.in bottom of canyon,180 ft.deep
	Ascend
40.03	Set a sandstone 18 X 11 X 5 ins.,12 ins.in the
	ground for ¼ sec.cor.,marked ¼ on N.face,from which
	A cedar tree 9 ins.diam.,bears S.17°4'E.,12 lks.
	dist.,marked ¼ S 35 B T
	A cedar tree 9 ins.diam.,bears N.30°57'W.,42 lks.
	dist.,marked ¼ S 26 B T
41.00	Begin abrupt ascent in hugh bowlders
46.05	Top of canyon,bears N.and S.
	Ascending gradually to
67.00	Top of slope and ridge running N.and S.,90 ft.high
	Descending to
80.06	The cor.of secs.26-27-34 and 35
	This cor.stands 120 ft.below ridge
	Land,broken and mountainous
	Soil,rocky and sandy loam,1st.to 4th.rate
	Timber,scrubby cedar of dense growth mainly
	Mountainous land 80.06 chs.
	April 21:at this cor.I set off 11°40'.0"N.on the decl.arc and at 12h.1m.p.m.,l.m.t.,observe the sun on meridian;the resulting lat.is 37°34'N.
	N.0°1'W.bet.secs.26 and 27
	Over heavily timbered land and rolling slope
17.00	Leave heavily timbered land and enter dense under-growth,bears E.and W.
40.00	Set a sandstone 18 X 6 X 5 ins.,12 ins.in the

Subdivision of T.37 S.,R.22 E.

Chains.	
	ground for ¼ sec.cor.,marked ¼ on W.face;dig pits 18 X 18 X 12 ins.N.and S.of stone,3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high,W. of cor.
80.00	Set a sandstone 17 X 8 X 4 ins.,12 ins.in the ground for cor.of secs.22-23-26 and 27,marked with 2 notches on S.and E.edges;dig pits 18 X 18 X 12 ins.in each sec.,5½ ft.dist.and raise a mound of earth 4 ft.base,2 ft.high,W.of cor.
	Land rolling plateau
	Soil,sandy loam,1st.rate
	Timber,scrubby cedar
	Thorn and sagebrush undergrowth
	Dense undergrowth or mountainous land 80.00 chs.
	East on a random line bet.secs.23 and 26
40.00	Set temp.sec.cor.
80.48	Intersect N.and S.line 42 lks.N.of cor.of secs.23-24 25 and 26
	Thence I run
	N.89°42' W.on a true line bet.secs.23 and 26
	Through dense undergrowth and rolling plateau
40.24	Set a porphyry stone 17 X 6 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;dig pits 18 X 18 X 12 ins.E.and W.of stone,3½ ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high, N.of cor.
	Ascending to
51.00	Top of ridge,runs N.and S.,90 ft.high
	Descending broken slope to
80.48	The cor.of secs.22-23-26 and 27
	Land,rolling
	Soil,sandy loam,1st.rate
	Timber,scrubby cedar,scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.48 chs.

April 21.1907.

Subdivision of T.37 S.,R.22 E.

Chains.	
	April 22:from the cor.of secs.22-23-26 and 27,I run
	N.0°11'W.bet.secs.22 and 23
	Through dense undergrowth;over rolling plateau
27.50	Wash,drains S.W.in hollow,30 ft.deep
40.00	Set a porphyry stone 18 X 6 X 5 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;dig pits 18 X 18 X 12 ins.N.and S.of stone,3 ft.dist.and raise a mound of earth $3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high, W.of cor.
80.00	Set a sandstone 18 X 10 X 4 ins.,12 ins.in the ground for cor.of secs.14-15-22 and 23,marked with 3 notches on S.and 2 notches on E.edges;dig pits 18 X 18 X 12 ins.in each cor.,$5\frac{1}{2}$ ft.dist.and raise a mound of earth 4 ft.base,2 ft.high,W.of cor.
	Land,rolling and broken
	Soil,sandy loam,1st.rate
	Timber,scrubby cedar scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs.
	S.89°42'E.on a random line bet.secs.14 and 23
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.20	Intersect N.and S.line,33 lks.S.of cor.of secs.13-14-23 and 24
	Thence I run
	N.89°56'W.on a true line bet.secs.14 and 23
	Through dense undergrowth;over rolling plateau
	Enter dry rocky wash,drains S.E.
0.65	Leave wash and begin gradual ascent
40.10	Set a porphyry stone 18 X 7 X 6 ins.,12 ins.in the ground and mound of stones on rocky bottom for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face;raised a mound of stones 2 ft.base,$1\frac{1}{2}$ ft.high,N.of cor. Pits impracticable.
60.00	Top of slope and ridge bearing N.and S.,150 ft. above sec.cor.
	Descending gradually

Subdivision of T.37 S.R.22 E.

Chains.	
80.20	The cor.of secs.14-15-22 and 23
	Land,rolling mesa
	Soil,sandy loam,1st.rate
	~~Timber,scrubby cedar,scattering~~
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.20 chs.
	April 22:at this cor.I set off 12°1'N.on the decl. arc and at 11h59m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°36'.."N.
	N.0°1'W.bet.secs.14 and 15
	Through dense undergrowth
	Ascending over rolling land
24.00	Top of ridge,bears N.60°W.and S.60°E.,100 ft. above cor.
	Begin gradual descent
40.00	Set a porphyry stone 17 X 6 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;dig pits 18 X 18 X 12 ins.N.and S.of stone,3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high W.of cor
48.00	Head of hollow,drains W.;ascending gradually
57.80	Top of ridge,bears N.W.and S.E.,60 ft.high
	Descending gradually
65.85	Wash in hollow 40 ft.deep,drains S.W.;ascending
73.50	Spur ridge,runs W.,40 ft.high;descend
80.00	Set a porphyry stone 24 X 14 X 4 ins.,18 ins.in the ground for cor.of secs.10-11-14 and 15,marked with 4 notches on S.and 2 notches on E.edges,from which A cedar tree 6 ins.diam.,bears S.31°23'W.,115 lks.
	~~dist.,marked T-37-S-R-22-E-S-15-B-T~~
	No other trees within limit
	Dig pits 18 X 18 X 12 ins.in each sec.,5½ ft.dist. and raise a mound of earth 4 ft.base,2 ft.high, W.of cor.
	Land,rolling and broken
	Soil,sandy loam,1st.rate

Chains.	
	Timber, scrubby cedar, scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs.

April 22: at 2h. 43m. p.m., l.m.t., I set off 37°36'30"N. on the lat. arc, 12°.64"N. on the deci. arc and determine a meridian with the solar at the cor. of secs. 10-11-14 and 15

Thence I run

~~S.89°56'E. on a random line bet. secs. 11 and 14~~

40.00	Set temp. ¼ sec. cor.
80.16	Intersect N. and S. line 10 lks. S. of cor. of secs. 11-12-13 and 14.

Thence I run

West on a true line bet. secs. 11 and 14

Through dense undergrowth,

Ascending gradually over rolling land.

40.08	Set a porphyry stone 18 X 6 X 6 ins., 12 ins. in the ground for ¼ sec. cor., marked ¼ on N. face; dig pits, 18 X 18 X 12 ins., E. and W. of stone, 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high, N. of cor.
69.00	Top of ridge, bears N. and S., 160 ft. above sec. cor.

Descending to

80.16	The cor. of secs. 10-11-14 and 15

Land, rolling, broken

Soil, sandy loam, 1st. rate

Timber, a few scrubby cedar, scattering

Thorn and sagebrush undergrowth

Dense undergrowth 80.16 chs.

~~N.0°1'W. bet. secs. 10 and 11~~

Through dense undergrowth,

Descending gradually over rolling land.

15.00	Wash 6 ft. deep, drains S.25°W. in bottom of draw
16.05	Leave wash and begin gradual ascent

Subdivision of T.37 S., R.22 E.

Chains.	
40.00	Set a porphyry stone 17 X 6 X 6 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;raised a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
80.00	Set a sandstone 17 X 7 X 6 ins.,12 ins.in the ground for cor.of secs.2-3-10 and 11,marked with 5 notches on S.and 2 notches on E.edges;dig pits 18 X 18 X 12 ins.in each sec.,5½ ft.dist.and raise a mound of earth 4 ft.base,2 ft.high,W.of cor. Land,rolling Soil,sandy loam,1st.rate Timber,a few scrubby cedars,scattering Thorn and sagebrush undergrowth Dense undergrowth 80.00 chs.

April 22,1907.

April 23: from the cor.of secs.2-3-10 and 11,I run East on a random line bet.secs.2 and 11

40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.06	Intersect N.and S.line at cor.of secs.1-2-11 and 12 Thence I run West on a true line bet.secs.2 and 11 Through dense undergrowth Ascending gradually over rolling land
40.03	Set a sandstone 18 X 8 X 5 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face,from which A cedar tree 4 ins.diam.,bears N.55°5' E.,65 lks. dist.,marked $\frac{1}{4}$ S 11 B T A cedar tree 4 ins.diam.,bears S.60°57' E.,90 lks. dist.,marked $\frac{1}{4}$ S 11 B T
55.00	Top of ridge bears N.and S.,100 ft.above sec.cor. Descending
67.05	Wash in hollow,drains S.;ascending gradually to
80.06	The cor.of secs.2-3-10 and 11

Subdivision of T.37 S., R.22 E.

Chains.	
	Land,rolling
	Soil,sandy loam,1st.rate
	Timber,a few scrubby cedars,scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.00 chs.
40.00	Set temp.¼ sec.cor.
79.90	Intersect N.bdy.of Tp.at 7 lks.W.of cor.of secs. 2-3-34 and 35 as heretofore described
	Thence I run
	S.0°2'W.on a true line bet.secs.2 and 3,
	Through dense undergrowth,
	Over rolling broken land,
39.90	Set a sandstone 20 X 12 X 4 ins.,15 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;dig pits 18 X 18 X 12 ins.N.and S.of stone,3 ft.dist.,and raise a mound of earth 3½ ft.base,1½ ft.high, W.of cor.
79.90	The cor.of secs.2-3-10 and 11
	Land,rolling
	Soil,sandy loam,1st.rate
	Timber,a few scrubby cedars,scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth 79.90 chs.
	April 23:at this cor.I set off 12°21'N.on the decl. arc and at 1h.58m.a.m.,l.m.t.,observe the sun on the meridian the resulting lat.is 37°37'N.
	April 23:at 2h.28m.p.m.,l.m.t.,I set off 37°33'N. on the lat.arc,12°23'N.on the decl.arc and determine a meridian at the cor.of secs.3-4-33 and 34 on S. bdy.of Tp.as heretofore described;thence I run
	N.0°2'W.bet.secs.33 and 34
	Through dense undergrowth,over rolling land

Subdivision of T.37 S., R.22 E.

Chains.	
10.35	Road from Grayson to Bluff City, bears N.W. and S.E.
40.00	Set a sandstone 18 X 8 X 4 ins., 12 ins. in the ground for ¼ sec. cor., marked ¼ on W. face; dig pits 18 X 18 X 12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
66.70	Wash, drains E.
73.30	Wash, drains E.
80.00	Set a sandstone 20 X 6 X 5 ins., 15 ins. in the ground for cor. of secs. 27-28-33 and 34, marked with 1 notch on S. and 3 notches on E. edges; from which A cedar tree 16 ins. diam., bears S. 46°30' E., 1.38 chs. dist., marked T 37 S R 22 E S 34 B T A cedar tree 6 ins. diam., bears N. 71°50' E., 1.37 chs. dist., marked T 37 S R 22 E S 27 B T No other trees within limit. Raised a mound of stones 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land, rolling
Soil, sandy loam, 1st. rate
Timber, scrubby cedar along canyon and scattering on plateau
Thorn and sagebrush undergrowth
Dense undergrowth 80.00 chs.

	East on a random line bet. secs. 27 and 34
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at cor. of secs. 26-27-34 and 35
	Thence I run
	West on a true line bet. secs. 27 and 34
	Over heavily timbered land
	Descending broken slope
19.00	Ravine, drains S.W.
40.00	Set a sandstone 18 X 9 X 6 ins. in a mound of stones 3 ft. base, 1 ft. high, on rock bottom for ¼ sec. cor., marked ¼ on N. face; from which A cedar tree 5 ins. diam., bears S. 75° E., 5 lks. dist.,

Subdivision of T.37 S.,R.22 E.

Chains.	
	marked $\frac{1}{4}$ S 34 B T
	A cedar tree 6 ins.diam.,bears N.70°E.,81ks.dist.,
	marked $\frac{1}{4}$ S 27 B T
42.20	Top of Spring Canyon,and perpendicular precipice 30 ft.deep,bears N.and S.;descending in big bowlders
48.10	Wash in bottom of canyon 120 ft.deep,drains S.
55.00	Begin ascent in bowlders and breaks
69.00	Top of canyon,bears N.and S.;enter rolling slope
71.05	Wash in ravine,drains S.E.
80.00	The cor.of secs.27-28-33 and 34
	This cor.stands 55 ft.above top of canyon
	Land,broken,mountainous
	Soil;rocky,gravely,and sandy,2nd.to 4th.rate
	Timber,scrubby cedar or dense growth mainly
	Heavily timbered land 80.00 chs.

April 23,1907.

April 24:at 7h.18m.a.m.,l.m.t.,I set off 37°34'N. on the lat.arc,12°38'N.on the decl.arc and determine a true meridian with the solar at the cor.of secs. 27-28-33 and 34

Thence I run

N.0°2'W.bet.secs.27 and 28

	Through dense undergrowth;over rolling land
3.98	Wash 10 ft.deep,drains E.
24.90	Wash 20 ft.deep,drains S.E.
27.75	Road from Grayson to Bluff City,bears N.E.and S.W.
37.30	Wire fence,bears S.75°W.and N.75°E.
38.70	Wire fence,bears N.20°E.and S.20°W.
40.00	Set a sandstone 17 X 12 X 4 ins.12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;dig pits 18 X 18 X 12 ins.N.and S.of the stone,3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high,W.of cor.
80.00	Set a porphyry stone 18 X 8 X 5 ins.;12 ins.in the ground for cor.of secs.21-22-27 and 28;marked with 2 notches on S.and 3 notches on E.edges;raise a

Subdivision of T.37 S., R.22 E.

Chains.	
	mound of stones 2 ft.base, 1½ ft.high, W.of cor. Pits impracticable.
	Land; broken, rolling
	Soil; sandy loam and gravely, 1st. and 2nd. rate
	Timber; a few scrubby cedar, scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth, 80.00 chs.
	East on a random line bet.secs.22 and 27
40.00	Set temp. ¼ sec.cor.
79.94	Intersect N.and S.line at cor.of secs.22-23-26 and 27
	Thence I run
	West on a true line bet.secs.22 and 27
	Through dense undergrowth
	Descending over broken slope to
39.97	Set a sandstone 24 X 14 X 8 ins.in a mound of stones 3 ft.base, 1½ ft.high, on top of sandstone ledge for ¼ sec.cor., marked ¼ on W.face; raised a mound of stones 2 ft.base, 1½ ft.high, N.of cor. Pits impracticable.
40.05	Perpendicular break 6 ft.to bottom of Spring Canyon and wash, water in hollows, drains S., 200 ft. below sec.cor.
40.45	Begin abrupt ascent in breaks
45.00	Ascent becomes gradual
60.03	Road from Grayson to Bluff City, bears N.E. and S.W.
64.96	Fence, bears N. and S.
79.94	The cor.of secs.21-22-27 and 28
	This cor.stands 170 ft.above bottom of canyon
	Land; broken, mountainous
	Soil; rocky and gravely, and sandy loam, 1st. to 4th.rate
	Timber; scrubby cedar on E., 60 chs., mostly scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth, 79.94 chs.
	April 24 at this cor., I set off 12-41 H.W. on the decl.arc and at 1h.58m.a.m., 1 m.t., observe the sun

Subdivision of T.37 S., R.22 E.

Chains.	
	on the meridian; the resulting lat. is 37°35'N.
	N.0°2'W. bet. secs. 21 and 22
	Through dense undergrowth and rolling land
40.00	Set a sandstone 17 X 10 X 4 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; dig pits 18 X 18 X 12 ins. N. and S. of stone 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set a sandstone 17 X 6 X 5 ins., 12 ins. in the ground for cor. of secs. 15-16-21 and 22, marked 37 S on N.E. and 22 E on S.E. faces with 3 notches on S. and E. edges; dig pits 18 X 18 X 12 ins. in each sec., $5\frac{1}{2}$ ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land; rolling
	Soil; sandy loam, 1st. rate
	No timber
	Thorn and sagebrush undergrowth
	Dense undergrowth, 80.00 chs.
	East on a random line bet. secs. 15 and 22
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.06	Intersect N. and S. line, 7 lks. S. of cor. of secs. 14-15-22 and 23
	Thence I run
	S.89°57'W. on a true line bet. secs. 15 and 22
	Through dense undergrowth
	Descending over rolling land
30.00	Road from Grayson to Bluff City, bears N.20°E. and S. 20°W.
34.40	Wire fence, bears N.E. and S.W.
40.03	Set a sandstone 17 X 8 X 6 ins. 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; dig pits 18 X 18 X 12 ins. E. and W. of stone, 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Subdivision of T.37 S., R.22 E.

Chains.	
42.05	Wash, drains S. in swale, 160 ft. below sec. cor.
	Ascending to
68.40	Wash, drains S.E.
80.06	The cor. of secs. 15-16-21 and 22
	This cor. stands 130 ft. above swale
	Land; rolling
	Soil; sandy loam, 1st. rate
	No timber
	Thorn and sagebrush undergrowth
	Dense undergrowth 80.06 chs.
	April 24, 1907.

April 25; at 7h. 25m. a.m. d.m.t., I set off 37°36' N. on the lat. arc, 12°58' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 15-16-21 and 22

Thence I run

N. 0°2' W. bet. secs. 15 and 16

Through dense undergrowth; over rolling land

14.10	Wash, drains S.E.
20.50	Enter cedar and pinion timber, bears N.E. and S.W.
	Leave dense undergrowth and enter heavily timbered land
40.00	Set a sandstone 18 X 12 X 6 ins., 12 ins. in the ground for ¼ sec. cor., marked ¼ on W. face; from which
	A cedar tree 14 ins. diam., bears N. 35° E., 1.59 chs. dist., marked ¼ S 15 B T. No other trees within limit
	Raised a mound of stones, 2 ft. base, 1½ ft. high, W. of cor.
69.50	Wash, drains W.
80.00	Set a sandstone 18 X 12 X 4 ins., 12 ins. in the ground for cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and 3 notches on E. edges; from which
	A cedar tree 6 ins. diam., bears N. 51°50' E., 65 lks. dist., marked T 37 S R 22 E S 10 B T
	A cedar tree 12 ins. diam., bears S. 31°30' E., 27 lks.

Subdivision of T.37 S.,R.22 E.

Chains.

dist.,marked T 37 S R 22 E S 15 B T

A cedar tree 14 ins.diam.,bears S.15°10'W.,30 lks.

dist.,marked T 37 S R 22 E S 16 B T

A cedar tree 6 ins.diam.,bears N.60°30'W.,19 lks.

dist.,marked T 37 S R 22 E S 9 B T

Land;rolling

Soil;sandy loam,1st.rate

Timber;scrubby cedars and pinion of dense growth

but no commercial value

Thorn and sagebrush undergrowth

Dense undergrowth or heavily timbered land 80.00 chs.

N.89°57'E.on a random line bet.secs.10 and 15

40.00 Set temp.¼ sec.cor.

79.70 Intersect N.and S.line 30 lks.S.of cor.of secs.10-11-14 and 15

Thence I run

S.89°44'W.on a true line bet.secs.10 and 15

Over rolling land

9.50 Wash in swale,drains S.25°W.

11.00 Road from Grayson to Bluff City,bears N.and S.

11.41 Wire fence,bears N.and S.

22.00 Enter cultivated field,bears N.and S.

39.50 Leave cultivated field,bears N.and S.

39.85 Set a sandstone 18 X 8 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;dig pits 18 X 18 X 12 ins.E.and W.of stone 3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high,N.of cor.

40.50 Enter dense undergrowth,bears N.and S.

74.50 Leave dense undergrowth and enter heavily timbered land,course N.and S.

79.70 The cor.of secs.9-10-15 and 16

Land;rolling

Soil;sandy loam,1st.rate

Timber;scrubby cedar and pinion

Thorn and sagebrush undergrowth

Subdivision of T.37 S.,R.22 E.

Chains.	
	Dense undergrowth or heavily timbered land 39.20 chs.
	April 25:at this cor.I set off 13°1'N.on the decl. arc,and at 11h58m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°36'N.
	N.0°2'W.bet.secs.9 and 10
	over heavily timbered land,rolling
31.75	Wash,drains S.W.,30 ft.deep
32.25	Wire fence,bears E.and W.
40.00	Set a porphyry stone 17 X 11 X 4 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;from which A cedar tree 6 ins.diam.,bears N.42°30'W.,20 lks. dist.,marked $\frac{1}{4}$ S 9 B T A cedar tree 6 ins.diam.,bears S.55°30'E.,25 lks. dist.,marked $\frac{1}{4}$ S 10 B T
42.50	Wash,drains S.65°W.in hollow 75 ft.deep
	Begin gradual ascent to
65.00	Top of swell,bears N.E.and S.
80.00	Set a porphyry stone 17 X 10 X 4 ins.,12 ins.in the ground for cor.of secs.3-4-9 and 10,marked with 5 notches on S.and 3 notches on E.edges;from which A cedar tree 14 ins.diam.,bears N.57°30'E.,64 lks. dist.,marked T 37 S R 22 E S 3 B T A cedar tree 4 ins.diam.,bears S.30°36'E.,55 lks. dist.,marked T 37 S R 22 E S 10 B T ~~A cedar tree 8 ins.diam.,bears S.11°24'W.,41 lks. dist.,marked T 37 S R 22 E S 9 B T~~ A cedar tree 6 ins.diam.,bears N.40°5'W.,45 lks. dist.,marked T 37 S R 22 E S 4 B T. Land;rolling Soil;sandy loam,1st.rate Timber;scrubby cedar and pinion of dense growth but no commercial value Heavily timbered land 80.00 chs.
	of slope to

Subdivision of T.37 S., R.22 E.

Chains.	
	N.89°44'E.on a random line bet.secs.3 and 10
40.00	Set temp.¼ sec.cor.
79.86	Intersect N.and S. line at cor.of secs.3-4-9 and 10
	Thence I run
	S.89°44'W.on a true line bet.secs.3 and 10
	Over rolling land
11.50	Road from Grayson to Bluff City,bears N.and S.
11.91	Wire fence,bears N.and S.
20.00	Enter cultivated field,bears N.and S.
32.00	Leave cultivated field,bears N.and S.
33.00	Enter dense undergrowth,bears N.and S.
39.93	Set a sandstone 18 X 10 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;raise a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
41.12	Wash,drains S.W.in hollow 20 ft.deep
61.40	Leave dense undergrowth and enter heavily timbered land,bears N.and S.
70.85	Wash,drains S.
79.86	The cor.of secs.3-4-9 and 10 Land;rolling Soil;sandy loam,1st.rate Timber;scrubby cedar Thorn and sagebrush undergrowth Dense undergrowth or heavily timbered land, 79.86.chs.
	N.0°2'W.on a random line bet.secs.3 and 4
40.00	Set temp.¼ sec.cor.
80.20	Intersect N.Bdy.of Tp.;19 lks.E.of cor.of secs.3-4-33 and 34,as heretofore described
	Thence I run
	S.0°10'E.on a true line bet.secs.3 and 4
	Over heavily timbered land,rolling
	Ascending to
4.00	Top of swell,bears N.W.and S.E.;descend on broken slope to

Subdivision of T.37 S.,R.22 E.

Chains.	
26.00	Dry wash,drains W.in hollow 90 ft.deep
	Ascending to
40.20	Set a sandstone 18 X 10 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;from which A cedar tree 13 ins.diam.,bears S.30°44' W.,24 lks. dist.,marked ¼ S 4 B T A cedar tree 12 ins.diam.,bears N.42°15' E.,52 lks. dist.,marked ¼ S 3 B T
45.70	Top of slope,bears N.E.and S.W.;thence over rolling plateau
80.20	The cor.of secs.3-4-9 and 10
	Land;rolling,broken
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar of dense growth
	Heavily timbered land,89.20 chs.
	April 25,1907.

April 26:from the cor.of secs.4-5-32 and 33 on S. bdy.of Tp.as heretofore described,I run N.0°3'W.bet.secs.32 and 33

Through dense undergrowth,over rolling land;ascending gradually

40.00	Set a porphyry stone 18 X 8 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;dig pits 18 X 18 X 12 ins.N.and S.of stone,3 ft.dist.,and raise a mound of earth 3½ ft.base,1½ ft.high,W.of cor.
60.00	Top of low ridge,bears E.and W.and beginning of gradual descent
80.00	Set a porphyry stone 18 X 6 X 5 ins.,12 ins.in the ground for cor.of secs.28-29-32 and 33,marked with 1 notch on S.and 4 notches on E.edges;dig pits 18 X 18 X 12 ins.in each sec.,5½ ft.dist.and raise a mound of earth 4 ft.base,2 ft.high,W.of cor.
	Land;rolling
	Soil;sandy loam,1st.rate

Subdivision of T.37 S., R.22 E.

Chains.	
	No timber
	Thorn and sagebrush undergrowth
	Dense undergrowth,80.00 chs.
	East on a random line bet.secs.28 and 33
40.00	Set temp.¼ sec.cor.
79.96	Intersect N.and S.line 5 lks.N.of cor.of secs.27-28-33 and 34
	Thence Drum
	N.89°58'W.on a true line bet.secs.28 and 33
	Through dense undergrowth,over rolling land,ascending gradually to
11.45	Road from Grayson to Bluff City,bears S.25°W.and N.25°E.
35.00	Top of ridge,bears N.and S.;100 ft.above cor.
	Begin gradual descent
39.98	Set a sandstone 18 X 8 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;dig pits 18 X 18 X 12 ins.E.and W.of stone 3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high,N.of cor.
79.96	The cor.of secs.28-29-32 and 33
	This cor. stands 120 ft.below ridge
	Land;rolling
	Soil;sandy loam,1st.rate
	No timber
	Thorn and sagebrush undergrowth
	Dense undergrowth,79.96 chs.
	April 26:at this cor.,I set off 13°20'N.on the decl. arc and at 11h 58m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°34'N.
80.00	Set a porphyry stone 18 X 6 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;dig pits 18 X 18 X 12 ins.W.and S.of stone,3 ft.dist.,and raise a mound of earth 3½ ft.base,1½ ft.high,W.of cor.
	Thence Drum
	N.0°31'W.bet.secs.28 and 29
	Through dense undergrowth,over rolling,broken land
	Descending gradually to
39.95	Wash,drains N.W.,130 ft.below cor.
40.00	On edge of wash.-Set a sandstone

Subdivision of T.37 S., R.22 E.

Chains.	
	21 X 7 X 6 ins., 16 ins. in the ground for ¼ sec.cor., marked ¼ on W.face; from which
	A cedar tree 12 ins.diam., bears S.21°30'E., 28 lks. dist., marked ¼ S 28 B T
	A cedar tree 12 ins.diam., bears S.69°27'W., 25 lks. dist., marked ¼ S 29 B T
60.00	Edge of perpendicular precipice 40 ft. deep, bears N.E. and S.W.
	Descending into canyon over rough bowlders
	Fence runs S.E. from top of canyon
64.90	Bottom of canyon, 120 ft. deep; wash, drains S.W.
	Ascending abruptly
68.05	Top of canyon, bears E. and W., thence over rolling land
75.95	Wash, drains S.20°W.
80.00	Set a sandstone 20 X 12 X 6 ins., 15 ins. in the ground for cor. of secs. 20-21-28 and 29, marked with 2 notches on S. and 4 notches on E. edges; from which
	A cedar tree 12 ins. diam., bears S.10°30'W., 90 lks. dist., marked T 37 S R 22 E S 29 B T
	No other trees within limit; raise a mound of stones 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

Land; broken and rolling
Soil; sandy loam, 1st. rate
Timber; scrubby cedar, mostly scattering
Thorn and sagebrush undergrowth
Dense undergrowth 80.00 chs.

April 26: at 2h 58m p.m., mean time, I set off 37° 35' N. on the lat. arc, 15° 23' N. on the decl. arc and determined a meridian with the solar at the cor. of secs. 20-21-28 and 29; thence I run S.89°58'E. on a random line bet. secs. 21 and 28

40.00	Set temp. ¼ sec. cor.
79.70	Intersect N. and S. line, 10 lks. N. of cor. of secs. 21-22-27 and 28
	Thence I run

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Chains.	
	N.89°54'W.on a true line bet.secs.21 and 28
	Through dense undergrowth
	Ascending gradually over rolling land
15.00	Top of ridge,bears N.and S.,40 ft.above cor.
	Descending gradually to
39.85	Set a sandstone 17 X 10 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face,dig pits 18 X 18 X 12 ins.E.and W.of stone,3 ft.dist.and raise a mound of earth 3½ ft.base,1½ ft.high,N. of cor.
53.55	Wash,drains S.25°W.in hollow 50 ft.deep
77.00	Wash,drains S.30°W.
79.70	The cor.of secs.20-21-28 and 29
	This cor.stands 140 ft.below ridge
	Land,rolling
	Soil,sandy loam,1st.rate
	Timber,a few scrubby cedar,scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth,79.70 chs.

April 26,1907.

April 27:at 7h58m.a.m.,l.m.t.,I set off 37°35' N. on the lat.arc,13°37'N.on the decl.arc and determine a meridian at the cor.of secs.20-21-28 and 29;thence I run

N.0°3'W.bet.secs.20 and 21

	Over mountainous land
	Ascending through scattering timber
10.00	Top of ridge,bears N.E.and S.W.,50 ft.high
	Descending gradually,broken slope
29.00	Top of break,bears S.60°W.and N.60°E.,75 ft.below ridge
	Descending abruptly into canyon
37.00	Bottom of canyon and wash,drains W.
	Ascending abruptly to
40.00	Set a sandstone 24 X 12 X 8 ins.in a mound of stones

Subdivision of T.37 S., R.22 E.

Chains.	
	3 ft.base, 1½ ft.high, on flat top of bowlder 6 X 6 X 6 ft., for ¼ sec.cor., marked ¼ on W.face; from which A pinion tree 6 ins.diam., bears S.89°10' W., 33 lks. dist., marked ¼ S 20 B T. A cedar tree 6 ins.diam., bears N.26°30' E., 44 lks. dist., marked ¼ S 21 B T. This cor.stands at foot of perpendicular cliff, 25 ft.high facing W. 125 ft.above wash; cliff bears S.E. and N.E.
43.06	Descend abruptly in high bowlders. Bottom of canyon and wash, drains W., 50. ft.below cor.
	4 chs.W.of head of canyon; ascending abruptly
49.00	Perpendicular cliff, 30 ft.high, bears E. and W. and
	Top of canyon. Thence over rolling broken slope; ascending abruptly
80.00	Set a porphyry stone 16 X 9 X 8 ins., in the ground for cor. of secs. 16-17-20 and 21, marked with 3 notches on S. and 4 notches on E. edges; from which A cedar tree 6 ins. diam., bears S. 60°23' E., 74 lks. dist., marked T 37 S R 22 E S 21 B T
	No other trees within limit; raised a mound of stones 2 ft.base, 1½ ft.high, W.of cor. Pits impracticable.
	This cor.stands 100 ft.above edge of canyon
	Land; mountainous, broken
	Soil; sandy loam, rocky and gravely, 1st. to 4th. rate
	Timber; scrubby cedar and pinion, mainly scattering
	Thorn and sagebrush undergrowth
	Mountainous land, 80.00 chs.
40.00	Set temp. ¼ sec.cor.
80.00	Intersect N. and S. line 7 lks. S. of cor. of secs. 15-16-21 and 22.
	Thence run N. 89°57' W. on a true line bet. secs. 16 and 21
	Through dense undergrowth

Subdivision of T.37 S., R.22 E.

Chains.	
	Ascending gradually on broken slope to
19.00	Top of ridge, bears N. and S., 60 ft. above cor.
	Begin gradual descent.
40.00	Set a white sandstone 17 X 10 X 6 ins., 12 ins. in the ground for ¼ sec. cor., marked ¼ on N. face; from which
	A cedar tree 8 ins. diam., bears S. 57°0'W., 29 lks. dist., marked ¼ S 21 B T
	A cedar tree 8 ins. diam., bears N. 14°30'W., 48 lks. dist., marked ¼ S 16 B T
59.40	Wash, drains S. 25°W. in hollow 25 ft. deep
80.00	The cor. of secs. 16-17-20 and 21
	Land; rolling
	Soil; sandy loam, 1st. rate
	Timber; scrubby cedar, mostly scattering
	Thorn and sagebrush undergrowth
	Dense undergrowth, 80.00 chs.
	April 27, at this cor., I set off 13° 40' N. on the decl. arcand at 11h 58m. a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 37°35' N.

	N. 0°3'W. bet. secs. 16 and 17
	Over mountainous land
	Ascending, on rolling land, through scattering timber
9.00	Top of ridge, bears E. and W., 50 ft. above cor.; descending gradually to
26.85	Wash, drains W. in hollow 70 ft. deep
	Ascending
29.00	Top of slope, bears N. 65°W.
30.00	Perpendicular precipice and break to West Water Canyon 30 ft. deep, bears N. E. and S. W. and beginning of abrupt descent in hugh bowlders.
38.50	Enter bottom of canyon, bears N. 65°E. and S. 65°W.
40.00	Set a porphyry stone 18 X 12 X 7 ins., 12 ins. in the ground for ¼ sec. cor., marked ¼ on W. face; from which
	A cedar tree 11 ins. diam., bears N. 74°25'W., 1.00 ch. dist., marked ¼ S 17 B T

Subdivision of T.37 S.,R.22 E.

Chains.	
	No other trees within limit
	Raised a mound of stones,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
40.10	Left bank of wash,10 ft.bank,water in hollow,drains S.
	65°W.,350 ft.below top of canyon
41.90	Right bank of wash,10 ft.bank
43.00	Begin gradual ascent in huge bowlders on E.slope
54.00	Run near bottom of precipitous cliff,40 ft.high,bears
	N.and S.
69.00	Cliff,turns N.W.;descending gradually to
79.20	Wash,drains S.65°E.
	Ascending to
80.00	Set a porphyry stone 18 X 10 X 5 ins.,12 ins.in the
	ground for cor.of secs.8-9-16 and 17,marked with 4
	notches on S.and E.edges;from which
	A cedar tree 12 ins.diam.,bears S.20°45'E.,77 lks.dist.,
	marked T 37 S R 22 E S 16 B T
	A cedar tree 13 ins.diam.,bears S.61°28'W.,38 lks.dist.,
	marked T 37 S R 22 E S 17 B T
	A cedar tree 6 ins.diam.,bears N.65°50'W.,34 lks.dist.,
	marked T 37 S R 22 E S 8 B T
	No other trees within limit
	Raise a mound of stones,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land;mountainous,broken
	Soil;sandy loam on mesa;canyon,bowlders and clay,1st.
	and 4th.rate
	Timber;scrubby cedar of thin growth mainly
	Mountainous land,80.00 chs.
	S.89°57'E.on a random line bet.secs.9 and 16
40.00	Set temp.¼ sec.cor.
80.24	Intersect N.and S.line 19 lks.N.of cor.of secs.9-10-15
	and 16
	Thence run

Subdivision of T.37 S.,R.22 E.

Chains.	
	N.89°49'W.on a true line bet.secs.9 and 16
	over heavily timbered land
	Descending gradually to
9.50	Wash,drains S.W.in hollow
12.10	Wash,drains S.W.in hollow
38.00	Break of West Water Canyon,bears N.25°E.and S.25°W.
	Descending over bowlders and ledges
40.12	Set a sandstone 18 X 10X 6 ins.,12 ins.in the ground for
	¼ sec.cor.,marked ¼ on N.face;from which
	A pinion tree 6 ins.diam.,bears N.7°30'W.,29 lks.dist.,
	marked ¼ S 9 B T
	A pinion tree 10 ins.diam.,bears S.28°25'E.,35 lks.dist.
	marked ¼ S 16 B T
56.30	Enter bottom of West Water Canyon,bears N.and S.,350 ft.
	deep
58.00	Dry wash 1.10 chs.,10 ft.banks,drains S.
65.00	Begin ascent
80.24	The cor.of secs.8-9-16 and 17
	Land;mountainous,broken
	Soil;gravely and rocky,2nd.and 3rd.rate
	Timber;dense growth of scrubby cedars and pinions.
	Heavily timbered land,80.24 chs.
	April 27,1907.

April 28:at 7h.48m.a.m.,l.m.t.,I set off 37°36'N.on the lat.arc,13°56'N.on the decl.arc and determine a meridian with the solar at the cor.of secs.8-9-16 and 17

Thence I run

N.0°3'W.bet.secs.8 and9

Over mountainous land

Ascending steep slope in huge bowlders and timber

7.00	Perpendicular cliff 20 ft.high,bears E.and W.and top of
	canyon,180 ft.above cor.
	Thence on gradual ascent over rolling land
	Leave mountainous,and enter heavily timbered land

Subdivision of T.37 S.,R.22 E.

Chains.	
40.00	Set a sandstone 18 X 10 X 6 ins.,12 ins.in the ground for 1/4 sec.cor.,marked 1/4 on W.face;from which
	A pinion tree 4 ins.diam.,bears N.80°30'W.,30 lks.dist., marked 1/4 S 8 B T
	A pinion tree 4 ins.diam.,bears N.60°2'E.,38 lks.dist., marked 1/4 S 9 B T
	This cor.stands at top of ascent and ridge running E.and W.,100 ft.above top of canyon
	Thence over rolling land
80.00	Set a sandstone 18 X 10 X 4 ins.,12 ins.in the ground for cor.of secs.4-5-8 and 9,marked with 5 notches on S. and 4 notches on E.edges;from which
	A pinion tree 4 ins.diam.,bears S.16°30'E.,40 lks.dist., marked T 37 S R 22 E S 9 B T
	A pinion tree 6 ins.diam.,bears N.74°28'E.,39 lks.dist., marked T 37 S R 22 E S 4 B T
	A pinion tree 6 ins.diam.,bears N.16°3'W.,45 lks.dist., marked T 37 S R 22 E S 5 B T
	A cedar tree 10 ins.diam.,bears S.35°59'W.,25 lks.dist., marked T 37 S R 22 E S 8 B T
	Land;mountainous and rolling
	Soil;rocky,and sandy loam,1st.and 4th.rate
	Timber;scrubby cedar and pinion of dense growth
	Mountainous land or dense undergrowth,80.00 chs.
	S.89°49'E.on a random line bet.secs.4 and 9
40.00	Set temp.1/4 sec.cor.
80.20	Intersect N.and S.line at cor.of secs.3-4-9 and 10
	Thence I run
	N.89°49'W.on a true line bet.secs.4 and 9
	Over heavily timbered land,rolling
11.50	Begin gradual descent,bears N.and S.
24.50	Top of West Water Canyon and perpendicular precipice,60 ft.deep,bears N.25°W.and S.25°E.
	Thence descending abruptly in huge bowlders

Subdivision of T.37 S.,R.22 E.

Chains.	
27.60	Bottom of canyon,200 ft.deep and wash,drains S.25°E.
	Begin abrupt ascent
30.50	Perpendicular cliff 50 ft.high,bears N.and S.and top of canyon;thence ascending gradually to
40.10	Set a sandstone 17 X 10 X 4 ins.,12 ins.in thr ground for ¼ sec.cor.,marked ¼ on N.face;from which
	A pinion tree 6 ins.diam.,bears S.74°30'E.,26 lks.dist., marked ¼ S 9 B T
	A pinion tree 5 ins.diam.,bears N.24°35'W.,35 lks.dist., marked ¼ S 4 B T
40.50	Top of ridge,bears N.and S.,
66.60	Top of ridge,bears N.and S.,40 ft.high;descend
80.20	The cor.of secs.4-5-8 and 9
	Land;rolling and broken
	Soil;sandy loam,and rocky,1st.and 4th.rate
	Timber;scrubby cedar and pinion of dense growth
	Heavily timbered land,80.20 chs.
	April 28:at this cor.,I set off 13°59'N.,on the decl.arc and at 11h5am.a.m.,l.m.t.,observe the sun on the meridian the resulting lat.is 37°37'N.
	N.0°3'W.on a random line bet.secs.4 and 5
40.00	Set temp.¼ sec.cor.
80.16	Intersect N.bdy.of Tp.,21 lks.E.of cor.of secs.4-5-32 and 33,as heretofore described
	Thence I run
	S.0°12'E.on a true line bet.secs.4 and 5
	Over heavily timbered land
	Ascending over huge bowlders and breaks in canyon
6.60	Top of canyon,bearsN.25°W.and S.25°E.,150 ft.above cor.;
	Thence over rolling land
32.60	Wash,drains S.E.in hollow,50 ft.deep
40.16	Set a sandstone 18 X 12 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¾ on W.face;from which

Subdivision of T.37 S.,R.22 E.

Chains.	
	A cedar tree 4 ins.diam.,bears N.58°55'E.,5 lks.dist., marked ¼ S 4 B T
	A pinion tree 4 ins.diam.,bears S.81°4'W.,10 lks.dist., marked ¼ S 5 B T
80.16	The cor.of secs.4-5-8 and 9
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar and pinion of dense growth
	Heavily timbered land,80.16 chs.

	From the cor.of secs.5-6-31 and 32 on S.bdy.of Tp.,as heretofore described I run
	N.0°3'W.bet.secs.31 and 32
	Over heavily timbered land
	Descending gradually over broken plateau
28.40	Wash,drains S.E.in hollow,75 ft.below cor.
	Ascending to
40.00	Set a sandstone 17 X 14 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar tree 10 ins.diam.,bears S.22°15'E.,35 lks.dist., marked ¼ S 32 B T
	A cedar tree 16 ins.diam.,bears S.89°27'W.,110 lks.dist., marked ¼ S 31 B T
54.00	Top of ridge,bears E.and W.,90 ft.high
	Descending gradually
70.50	Edge of West Water Canyon,bears E.and W.and beginning of abrupt descent in breaks and huge bowlders
80.00	Set a porphyry stone 17 X 9 X 8 ins.,12 ins.in the ground for cor.of secs.29-30-31 and 32,marked with 1 notch on S.and 5 notches on E.edges;from which
	A cedar tree 16 ins.diam.,bears N.70°33'W.,47 lks.dist., marked T 37 S R 22 E S 30 B T
	A cedar tree 9 ins.diam.,bears N.42°30'E.,19 lks.dist., marked T 37 S R 22 E S 29 B T
	A cedar tree 8 ins.diam.,bears S.17°44.W.,50 lks.dist.,

Subdivision of T.37 S.,R.22 E.

Chains.	
	marked T 37 S R 22 E S 61 B T
	A cedar tree 6 ins.diam.,bears S.40°33'E.,39 lks.dist.,
	marked T 37 S R 22 E S 32 B T
	This cor.stands 300 ft.below plateau
	Land;mountainous,broken
	Soil;sandy loam,1st.rate,and rocky,4th.rate
	Timber;a dense growth of scrubby cedar and pinion
	Heavily timbered land,80.00 chs.
	April 28,1907.
	April 29:at 7h57m.a.m.,l.m.t.,I set off 37°34'N.on the lat.arc,14°15'N.on the decl.arc and determine a true meridian with the solar at the cor.of secs.29-30-31 and 32
	Thence I run
	East on a random line bet.secs.29 and 32
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.10	Intersect N.and S.line,7 lks. S.of cor.of secs.28-29-32 and 33
	Thence I run
	S.89°57'W.on a true line bet.secs.29 and 32
	Through dense undergrowth
	Ascending gradually to
6.00	Top of ridge,bears N.and S.,35 ft.above cor.and beginning of gradual descent
28.90	Wash,drains S.65°W.in hollow 60 ft.below ridge
	Enter cedar timber,bears N.and S.and run over broken, rocky land on edge of canyon
	Leave dense undergrowth and enter heavily timbered land
40.05	Set a sandstone 22 X 16 X 12 ins.in a mound of stones 2 ft.base,1½ ft.high,on rock bottom for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face;from which
	A cedar tree 12 ins.diam.,bears S.12°2'E.,32 lks.dist., marked $\frac{1}{4}$ S 32 B T
	A cedar tree 5 ins.diam.,bears N.18°10'E.,

Subdivision of T.37 S.,R.22 E.

Chains.	
	30 lks.dist.,marked ¼ S 29 B T
52.00	Precipitous break to West Water Canyon,bears N.E.and S.W.
	Begin abrupt descent in huge bowlders and breaks
61.50	Wash,drains N.W.at bottom of slope,175 ft.below break; thence along steep N.slope.
80.10	The cor.of secs.29-30-31 and 32
	This cor.stands 320 ft.below plateau
	Land;mountainous,broken
	Soil;sandy loam on 1st.28 chs.,1st.rate,balance rocky, 4th.rate
	Timber;scrubby cedar of dense growth
	Dense undergrowth or heavily timbered land,80.10 chs.
	West on a random line bet.secs.30 and 31
40.00	Set temp.¼ sec.cor.
78.10	Intersect W.bdy.of Tp.at cor.of secs.25-30-31 and 36,as heretofore described
	Thence I run
	East on a true line bet.secs.30 and 31
	Over mountainous land
	Ascending abruptly in huge bowlders and breaks and scrub cedar
10.00	Top of Cottonwood Canyon and perpendicular cliff 35 ft. high,bears N.and S.,150 ft.above cor.
	Thence over rolling plateau to
29.75	Break to West Water Canyon,bears N.and S.;descend perpendicular cliff,40 ft.deep;thence on abrupt descent in huge bowlders and breaks to
36.00	Thence along steep S.slope to
38.10	Set a porphyry stone 18 X 6 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which A cedar tree 10 ins.diam.,bears S.29°28'E.,17 lks.dist., marked ¼ S 31 B T A cedar tree 16 ins.diam.,bears N.33°33'W.,95 lks.dist., marked ¼ S 30 B T
44.15	Wash,110 lks.,drains S.25°W.in bottom of West Water

Subdivision of T.37 S.,R.22 E.

Chains.	
	Canyon,350 ft.below plateau
	Ascending abruptly in big bowlders to
52.60	Top of ascent;thence along steep N.slope to
78.10	The cor.of secs.29-30-31 and 32
	Land;mountainous,very broken
	Soil;rocky,4th.rate
	Timber;scrubby cedar,dense growth
	Mountainous land,78.10 chs.
	April 29:at this cor.,I set off 14°18' N.E.on the decl. arc and at 11h.7m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat.is 37°34'N.
	N.0°3'W.bet.secs.29 and 30
	Over mountainous land
	Descending in huge bowlders and cedar timber to
5.75	Enter bottom of West Water Canyon,60 ft.below cor.;bears E.and W.
6.25	Left bank of wash,10 ft.deep,water in hollows,drains W.
7.75	Right bank of wash
10.50	Begin ascent on E.slope in breaks and bowlders
20.00	Spur,runs E.;thence along foot of broken E.slope
40.00	Set a quartzite stone 18 X 6 X 5 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;raise a mound of stones,2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
57.60	Dry wash,drains S.60°E.
58.80	Begin abrupt ascent
68.00	Top of spur ridge,runs W.;120 ft.high;descend to
75.05	Dry wash,drains S.W.in ravine 100 ft.below spur
	Ascend gradually to
80.00	Set a sandstone 17 X 8 X 6 ins.,12 ins.in the ground for cor.of secs.19-20-29 and 30,marked with 2 notches on S. and 5 notches on E.edges;from which
	A cedar tree 12 ins.diam.,bears N.43°50'W.,14 lks.dist., marked T 37 S R 22 E S 19 B T

Subdivision of T.37 S.,R.22 E.

Chains.	
	A cedar tree 6 ins.diam.,bears N.42°29'E.,8 lks.dist., marked T 37 S R 22 E S 20 B T
	A cedar tree 6 ins.diam.,bears S.29°32'E.,22 lks.dist., marked T 37 S R 22 E S 29 B T
	A cedar tree 6 ins.diam.,bears S.19°3'W.,70 lks.dist., marked T 37 S R 22 E S 30 B T
	Land;mountainous,broken
	Soil;rocky,4th.rate
	Timber;scrubby cedar
	Mountainous land,80.00 chs.
	N.89°57'E.on a random line bet.secs.20 and 29
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.04	Intersect N.and S.line,7 lks.N.of cor.of secs.20-21-28 and 29
	Thence I run
	West on a true line bet.secs.20 and 29
	Over mountainous land
	Ascending rolling slope in timber
15.00	Top of ridge,runs N.E.and S.W.,90 ft.high;descending gradually to
28.60	Edge of break to West Water Canyon,bears N.and S. Descending abruptly over perpendicular precipice,45 ft. deep;thence in huge bowlders and breaks to
37.50	Bottom of canyon,bears N.and S.,360 ft.below plateau
	Leave timber
38.85	Wash,drains S.20°W.
40.02	Set a sandstone 17 X 9 X 5 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face;raise a mound of stones,2 ft.base,1$\frac{1}{2}$ ft.high,N.of cor. Pits impracticable.
42.40	Enter timber and begin abrupt ascent,bears N.and S.
59.10	Perpendicular cliff,55 ft.high,bears N.and S.
	Thence on gradual ascent to
63.00	Top of ridge,bears N.and S.,250 ft.above wash

Chains.	
	Descending abruptly to
79.05	Wash,drains S.20°W.in gulch,130 ft.below ridge
	Ascending to
80.04	The cor.of secs.19-20-29 and 30
	Land;mountainous,very broken
	Soil;sandy loam on 1st.20 chs.,1st.rate,balance rocky, 4th.rate
	Timber;scrubby cedar and pinion
	Mountainous land,80.04 chs.
	April 29,1907.

April 30:from the cor.of secs.19-20-29 and 30,I run

West on a random line bet.secs.19 and 30

40.00	Set temp.¼ sec.cor.
77.78	Intersect W.bdy.of Tp.at cor.of secs.19-24-25 and 30,as heretofore described
	Thence I run
	East on a true line bet.secs.19 and 30
	Over heavily timbered land and rolling plateau
26.70	Wash,drains S.25°E.in hollow 40 ft.deep.
37.78	Set a porphyry stone 17 X 11 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar tree 6 ins.diam.,bearsS.38°41'W.,30 lks.dist., marked ¼ S 30 B T
	A cedar tree 6 ins.diam.,bears N.72°38'W.,104 lks.dist., marked ¼ S 19 B T
38.66	Wash,drains S.20°W.
43.60	Wash,drains S.25°W.,ascending gradually to
55.80	Top of ascent,bears N.and S.
70.70	Edge of break to canyon,bears N.and S.
	Begin abrupt descent in breaks and bowlders
77.78	The cor.of secs.19-20-29 and 30.
	This cor.stands 150 ft.below break
	Land;rolling and broken
	Soil;sandy loam on plateau,1st.rate

Subdivision of T.37 S., R.22 E.

Chains.	
	Timber;scrubby cedar,dense growth
	Heavily timbered land,77.78 chs.
	N.0°3'W.bet.secs.19 and 20
	Over mountainous land
	Ascending steep slope in bowlders and timber
11.05	Perpendicular cliff 30 ft.high,bears N.E.and S.W.and top of canyon,150 ft.above cor.;enter rolling plateau
22.80	Break to canyon,bears N.W.and S.E.;begin abrupt descent in bowlders.
30.90	Wash from N.turns S.E.at bottom of slope,140 ft.deep
37.00	Leave wash,turns N.W.;begin ascent
40.00	Set a sandstone 17 X 13 X 8 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;from which A cedar tree 6 ins.diam.,bears east,33 lks.dist.,marked $\frac{1}{4}$ S 20 B T A cedar tree 12 ins.diam.,bears S.89°57'W.,15 lks.dist., marked $\frac{1}{4}$ S 19 B T
40.75	Wash,drains S.W.
42.00	Ascending in breaks and big bowlders
48.15	Perpendicular cliff 30 ft.high,bears N.W.and S.E.,and top of canyon,150 ft.above wash Enter rolling plateau Leave mountainous land and enter heavily timbered land
57.85	Wash,drains W.
80.00	Set a sandstone 17 X 12 X 5 ins.,12 ins.in the ground for cor.of secs.17-18-19 and 20,marked with 3 notches on S.and 5 notches on E.edges;from which A cedar tree 6 ins.diam.,bears S.66°8'E.,67 lks.dist., marked T 37 S R 22 E S 20 B T A cedar tree 14 ins.diam.,bears N.50°50'E.,62 lks.dist., marked T 37 S R 22 E S 17 B T A cedar tree 12 ins.diam.,bears N.89°37'W.,11 lks.dist., marked T 37 S R 22 E S 18 B T A cedar tree 8 ins.diam.,bears S.36°31'W.,120 lks.dist.,

Subdivision of T.37 S.,R.22 E.

Chains.

marked T 37 S R 22 E S 19 B T

Land;broken canyon and rolling plateau

Soil;rocky,4th.rate,and sandy loam,1st.rate

Timber;scrubby cedar,dense growth

Mountainous or heavily timbered land,80.00 chs.

April 30:at this cor.,I set off 14°36'N.on the decl.arc and at 1h 8m p.m.,l.m.t.,observe the sun on the meridian; the resulting lat.is 37°35'N.

East on a random line bet.secs.17 and 20

40.00 Set temp.¼ sec.cor.

80.00 Intersect N.and S.line,14 lks.south of cor.of secs. 16-17-20 and 21

Thence I run

S.89°54'W.on a true line bet.secs.17 and 20

Over heavily timbered land

On gradual descent to

17.00 Edge of break to West Water Canyon,course N.and S. Descending abruptly over perpendicular precipice,35 ft. deep;thence over big bowlders

25.10 Wash in bottom of canyon,350 ft.below break,drains S., water in hollow

36.00 Ascending abruptly to

33.20 Perpendicular cliff 40 ft.high,bears N.and S.and top of canyon,350 ft.above wash

Thence over rolling plateau

Leave heavily timbered land and enter dense undergrowth, bears N.and S.

40.00 Set a sandstone 17 X 6 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;raise a mound of stones 3 ft.base,1½ ft.high,N.of cor. Pits impracticable.

49.10 Wash,drains S.W.in hollow 40 ft.deep

62.75 Wash,drains S.in hollow 50 ft.deep

Ascending to

63.70 Break 15 ft.high,bears N.and S.,and top of ravine

Subdivision of T.37 S.,R.22 E.

Chains.	
	Thence over rolling land.
	Leave dense undergrowth and enter heavily timbered land, bears N.and S.
80.00	The cor.of secs.17-18-19 and 20
	Land;rolling plateau and broken canyon
	Soil;sandy loam on plateau,1st.rate,canyon,rocky,4th.rate
	Timber;scrubby cedar of dense growth
	Thorn and sagebrush undergrowth
	Heavily timbered land or dense undergrowth,80.00 chs.

April 30:at 2h.32mp.m.,l.m.t.,I set off 37°36'N.on the lat.arc,14°39'N.E.on the decl.arc and and determine a meridian with the solar at the cor.of secs.17-18-19 and 20;thence I run

	West on a random line bet.secs.18 and 19
40.00	Set temp.¼ sec.cor.
77.36	Intersect W.bdy.of Tp.,10 lks.N.of cor.of secs.13-18-19 and 24,as heretofore described
	Thence I run
	N.89°56'E.on a true line bet.secs.18 and 19
	Over heavily timbered land,rolling plateau
25.90	Descend abruptly,bears N.E.and S.W.
29.00	Head of canyon 60 ft.deep and wash,drains S.25°W.
32.15	Top of canyon;thenceover rolling land
	Leave heavily timbered land and enter dense undergrowth, bears N.and S.
37.36	Set a sandstone 17 X 10 X 8 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;raise a mound of stones 2 ft.base,1½ ft.high,N.of cor. Pits impracticable.
41.90	Top of ridge,bears N.25°E.and S.25°W.,60 ft.high
	Descending gradually to
60.00	Wash,drains S.in hollow 20 ft.deep
65.00	Leave dense undergrowth and enter heavily timbered land, bears N.and S.
77.36	The cor.of secs.17-18-19 and 20

Subdivision of T.37 S.,R.22 E.

Chains.	
	Land;rolling plateau
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar and pinion of dense growth
	Heavily timbered land or dense undergrowth,77.36 chs.
	April 30,1907.
	May 1:at 7h.47m.a.m.,l.m.t.,I set off 37° 36' W. on the lat.arc,14°52'N.on the decl.arc and determine a meridian at the cor.of secs.17-18-19 and 20
	Thence I run
	N.0°3'W.bet.secs.17 and 18
	Over heavily timbered land
	Ascending gradually over rolling plateau
40.00	Set a sandstone 18 X 10 X 8 ins.,12 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face;from which
	A cedartree 6 ins.diam.,bears S.81°50'W.,12 lks.dist., marked $\frac{1}{4}$ S 18 B T
	A cedar tree 10 ins.diam.,bears S.59°32'E.,12 lks.dist., marked $\frac{1}{4}$ S 17 B T
58.00	Top of ridge,bears N.20°E.and S.20°W.,150 ft.above sec. cor.;descending gradually
78.00	Timber becomes scattering,bears N.E.and S.W.
80.00	Set a sandstone 17 X 7 X 6 ins.,12 ins.in the ground for cor.of secs.7-8-17 and 18,marked with 4 notches on S.and 5 notches on E.edges;from which
	A cedar tree 8 ins.diam.,bears S.60°27'W.,142 lks.dist., marked T 37 S R 22 E S 18 B T
	No other trees within limit;raise a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
	This cor.stands 100 ft.below top of ridge
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar and pinion of dense growth,
	Heavily timbered land,80.00 chs.

Subdivision of T.37 S.,R.22 E.

Chains.	
	N.89°54'E.on a random line bet.secs.8 and 17
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.04	Intersect N.and S.line 14 lks.north of cor.of secs. 8-9-16 and 17
	Thence I run
	West on a true line bet.secs.8 and 17
	Over heavily timbered land
	Descending in timber in bottom of canyon
2.25	Wash,drains S.60°E.
3.00	Begin abrupt ascent in breaks and bowlders
10.50	Perpendicular cliff 25 ft.high,bears N.W.and S.E.and top of canyon,230 ft.above cor.
	Ascending gradually to
24.00	Top of ridge,runs N.and S.;thence over rolling land to 50 ft.high
40.02	Set a sandstone 20 X 14 X 4 ins.,15 ins.in the ground for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face;from which
	A cedar tree 14 ins.diam.,bears S.50°10'W.,65 lks.dist., marked $\frac{1}{4}$ S 17 B T
	A cedar tree 12 ins.diam.,bears N.53°50'W.,70 lks.dist., marked $\frac{1}{4}$ S 8 B T
45.60	Wash,drains S.in swale
53.40	Wash,drains S.in swale;begin ascent
71.00	Top of ridge 80 ft.high,bears N.20°E.and S.20°W.
	Descending to
77.00	Timber,becomes scattering,bears N.W.and S.E.
80.04	The cor.of secs.7-8-17 and 18
	Land;rolling and broken
	Soil;sandy loam and rocky,1st.and 4th.rate
	Timber;cedar and pinion of dense growth
	Heavily timbered land,80.04 chs.
	May 1:at this cor.,I set off 14°55'0"N.on the decl.arc, and at 1h57m.a.m.,l.m.t.,observe the sun on the meridian; the resulting lat.is 37°36'N.
	S.89°56'W.on a random line bet.secs.7 and 18

Subdivision of T.37 S.,R.22 E.

Chains.	
40.00	Set temp.¼ sec.cor.
77.04	Intersect W.bdy.of Tp.,10 lks.N.of cor.of secs.7-12-13 and 18,as heretofore described
	Thence I run
	N.89°52'E.on a true line bet.secs.7 and 18
	Through dense undergrowth
	Descending gradually on rolling land in scattering timber
4.00	Wash,drains S.25°W.in hollow.
25.50	Wash,drains S.25°W.in hollow.
37.04	Set a porphyry stone 16 X 6 X 6 ins.,11 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar tree 10 ins.diam.,bears N.18°0'W.,126 lks.dist., marked ¼ S 7 B T
	A cedar tree 5 ins.diam.,bears S.71°2'E.,116 lks.dist., marked ¼ S 18 B T.
65.00	Descending gradually to
74.20	Dry wash,drains S.in hollow 50 ft.deep;ascending
77.04	The cor.of secs.7-8-17 and 18
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;scattering,scrubby cedar
	Thorn and sagebrush undergrowth
	Dense undergrowth,77.04 chs.
	N.0°3'W.bet.secs.7 and 8
	Through dense undergrowth;over rolling land;
17.00	Wash in hollow,drains S.15°W.
21.00	Enter timber,bears E.and W.
	Leave dense undergrowth and enter heavily timbered land
40.00	Set a sandstone 17 X 11 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;from which
	A cedar tree 14 ins.diam.;bears S.0°31'W.,56 lks.dist., marked ¼ S 7 B T
	A pinion tree 14 ins.diam.,bears N.82°52'E.,99 lks.dist.,

Subdivisions of T.37 S.,R.22 E.,M.D.M.

Chains.	
	marked ¼ S. 8 B. T.
80.00	Set a porphyry stone 17 X 9 X 8 ins.,12 ins.in the ground for cor.of secs.5-6-7 and 8,marked with 5 notches on S.and E.edges;from which
	A cedar tree 8 ins.diam.,bears N.62°10'E.,83 lks.dist., marked T 37 S R 22 E S 5 B T
	A cedar tree 6 ins.diam.,bears S.7°14'E.,56 lks.dist., marked T 37 S R 22 E S 8 B T
	A cedar tree 6 ins.diam.,bears S.22°55'W.,171 lks.dist., marked T 37 S R 22 E S 7 B T
	A cedar tree 6 ins.diam.,bears N.86°28'W.,55 lks.dist., marked T 37 S R 22 E S 6 B T
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;cedar and pinion,dense growth
	Thorn and sagebrush undergrowth
	Dense undergrowth or heavily timbered land,80.00 chs.

May 1,1907.

May 2:7h57m.a.m.,l.m.t.,I set off 37°37' N.on the lat.arc,15°10'N.on the decl.arc and determine a meridian with the solar at the cor.of secs.5-6-7 and 8

Thence I run

East on a random line bet.secs.5 and 8

40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,10 lks.north of cor.of secs.4-5-8 and 9

Thence I run

N.89°56'W.on a true line bet.secs.5 and 8

Over heavily timbered land

Descending gradually over rolling surface

24.10	Wash,drains S.in hollow 60 ft.deep

Ascending gradually

40.00	Set a sandstone 17 X 8 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which

Subdivision of T.37 S.,R.22 E.

Chains.	
	A cedar tree 8 ins.diam.,bears N.54°35'W.,20 lks.dist., marked ¼ S 5 B T
	A cedar tree 10 ins.diam.,bears S.35°27'E.,100 lks.dist., marked ¼ S 8 B T
46.00	Top of ridge,bears N. and S.,50 ft.high
	Descending to
67.00	Wash,drains S.in hollow 50 ft.deep
	Ascending to
70.00	Top of ridge,bears N.and S.;descending to
74.85	Wash,drains S.in hollow 30 ft.deep
80.00	The cor.of secs.5-6-7 and 8
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar,dense growth
	Heavily timbered land,80.00 chs.
	S.89°52'W.on a random line bet.secs.6 and 7
40.00	Set temp.¼ sec.cor.
77.12	Intersect W.bdy.of Tp.,14 lks.S.of cor.of secs.1-6-7 and 12,as heretofore described
	Thence I run
	N.89°58'E.on a true line bet.secs.6 and 7
	Over heavily timbered land and rolling mesa
0.80	Wash,drains S.20°W.;ascending gradually
10.00	Top of ridge,bears N.and S.;descending to
33.10	Wash,drains S.20°W.in hollow 40 ft.deep
37.12	Set a red sandstone 18 X 7 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar tree 12 ins.diam.,bears N.17°25'E.,64 lks.dist., marked ¼ S 6 B T
	A cedar tree 13 ins.diam.,bears S.50°44'E.,24 lks.dist., marked ¼ S 7,B T
64.10	Wash,drains S.in hollow 40 ft.deep;ascending gradually
77.12	The cor.of secs.5-6-7 and 8

Subdivision of T.37 S.,R.22 E.

Chains.	
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;cedar and pinion,dense growth
	Heavily timbered land,77.12 chs.
	May 2:at this cor.,I set off 15°13'N.on the decl.arc and at 11h.57m.a.m.,l.m.t.,observe the sun on the meridian; the resulting lat.is 37°37'N.
	N.0°3'W.on a random line bet.secs.5 and 6
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.bdy.of Tp.,32 lks.E.of cor.of secs.5-6-31 and 32,as heretofore described
	Thence I run
	S.0°17'E.on a true line bet.secs.5 and 6
	Over heavily timbered land and rolling mesa
40.00	Set a porphyry stone 17 X 18 X 8 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which A cedar tree 6 ins.diam.,bears N.35°10'E.,82 lks.dist., marked ¼ S 5 B T
	A cedar tree 8 ins.diam.,bears S.2°3'W.,79 lks.dist., marked ¼ S 6 B T
80.00	The cor.of secs.5-6-7 and 8
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;cedar and pinion,dense growth
	Heavily timbered land,80.00 chs.
	May 2:near my camp,which is located just 1 mile N.of the cor.of secs.2-3-34 and 35 on N.bdy.of T.37 S.,R.22 E.,at 4h.47m.p.m.,l.m.t.,I set off 37° 39'N.on the lat.arc, 15°18'W.on the decl.,determining a meridian with the solar and mark a point thereof on a wooden plug set firmly in the ground,5 chs.N.of my station. At 9h.32m.p.m.,l.m.t.,I observe Polaris in accordance with Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground,5 chs.N.

Subdivision of T.37 S.,R.22 E.

Chains.

of my station.

Astron.l.m.t.of obs.May 2,9h.32'=May 1- - - 33h.32.0m.

U.C.Polaris,May 1 - - - - - - - - - - - - - 22h.47.6m.

Hour ang.of Pol.at obs.and time argument- Manual Table 7 - 10h.44.4m.

Azimuth of Pol.at obs. - - - - - - - - - - - 0°28'W.

May 2,1907.

May 3:at 7h.2m.a.m.,l.m.t.,I lay off the azimuth of Polaris,0°28',to the east and mark the meridian thus determined by driving a tack in the wooden plug set May 2,and find the same agrees with the meridian established by the solar,without material difference.

At 7h.07m.a.m.,l.m.t.,I set off 37°38'N.on the lat.arc, 15°28'N.on the decl.arc,and mark a point on the meridian determined with the solar,on the wooden plug,5 chs.N.of my station,where it agrees with the meridian determined by Polaris observation,without material difference,and I therefore conclude the instrument still remains in proper adjustment.

The magnetic bearing of the true meridian at 7h.10m. a.m.,l.m.t.,is N.N.15°10'W.;the angle thus determined gives mean mag.decl.,15°10'E.

May 3,1907.

General Description.

This township contains only two kinds of land,viz: rolling plateau or mesa which has a very productive reddish sandy loam,covering in varying thickness the nearly horizontal strata of hard red sandstone,and,where these strata have been rent by vertical fissures or cracks forming enormous canyons having usually perpendicular walls for a depth of 30 to 75 ft.below which lying on a steep slope,a talus of clay,gravel,and bowlders,many of enormous size,fill the bottom of the fis-

Subdivision of T.37 S.,R.22 E.

sure to unknown depths.

These canyons have all a northerly and southerly trend, all draining southward,and in places have been to some extent filled by aluvial washings forming patches of rich bottom land,but usually they are a jumble of rocks from wall to wall.

Nearly the entire township is covered with a dense growth of cedar and pinion timber of the stunted,"High Plateau" variety;but running from north to south nearly through the centre of the township is a strip approximately two miles wide,nearly free from timber,and this open land together with parts of the township to the north is known as the "White Mesa",which has recently been settled and no doubt contains great possibilities for farming,the land being very fertile:but at present the land not covered with timber is covered with a rank growth of thorn and sage,mainly,to the exclusion of grasses or other useful plants.

There are no settlers in this township nor improvements excepting a couple of small patches of cultivated land in secs.3-10 and 15.This land has been recently brought under cultivation by settlers of the town of Grayson in T.36 S.,R.22 E.,who,I was told,will claim all the useful land in the township as soon as the same shall come into market. There is no mineral of any kind within the township

The plateau is everywhere strewn with ruins of prehistoric dwellings and fragments of pottery,and all the canyons contain cliff dwellings,so called,perched along the precipitous sides and under projecting rocks;numerous caves in the higher parts of the canyon sides show evidence of having been once occupied.

A O Jameson

U.S.Dep.Surveyor.

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SUBDIVISIONS OF T. 36 S., R. 32 E.

Note:

There being no notary public or other officer authorized to administer oaths within reasonable distance at the end of this survey; in order to save time and expense I administer the final oaths myself.

Andrew P Hanson
U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and

rking the lines and corners described in the foregoing field notes of the survey of _____

_____

wing the respective capacities in which they acted:

For final affidavits see book "D", Tp. 36 S., R. 22 E., *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

ose parts or portions of the _____

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented

the foregoing field notes as having been surveyed by him and under his direction; and that said survey

s been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the

rner monuments established, according to the instructions furnished by the United States Surveyor

neral for _____

or final affidavits see book "D" Tp.36 S., R. 22 E., *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

ubscribed and sworn to before me this _____

day of _____, 190 _____

SEAL

_____

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of t _____ day of _____, 190 , I have well, faithfully, and truly, in my ov proper person, and in strict conformity with the instructions furnished by the United States Survey General for _____, the Manual of Surveying Instructions, and the laws of t United States, surveyed all those parts or portions of _____

for final affidavit see book "D" Tp.36 S.. R. 22 E.

_____ of the _____ meridian, in the _____ of _____, which are represented in t foregoing field notes as having been surveyed by me, and under my direction; and I do further solemn swear that all the corners of said survey have been established and perpetuated in strict accordance wi the Manual of Surveying Instructions, and the special written instructions of the United States Survey General for _____ and in the specific manner described in the field notes, and th the foregoing are the original field notes of such survey.

_____

United States Deputy Surveyo

Subscribed by said _____, and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26, 190

The foregoing field notes of the survey of the Subdivisional lines of Township No. 27 South, Range No. 22 East of the Salt Lake Base and Meridian, Utah,

executed by Andrew P. Hanson under his contract No. 389, dated May 18, 190 5, having bee critically examined, and the necessary corrections and explanations made, the said field notes, and th surveys they describe, are hereby approved.

Thomas Hall

United States Surveyor Genera

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.

_____

United States Surveyor General

4—679.

D.

BOOK A-348

FIELD NOTES

OF THE SURVEY OF THE

Subdivisional Lines

of

Township No. 36 South Range No. 22 East

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

A P Hanson, United States Deputy Surveyor,

...er his Contract No. 289, dated May 16, 1906

...vey commenced May 3, 1907

...vey completed May 10, 1907

6—151

high 26-13-16 ✓
low 4-67-34 ✓

31-39-56

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

R. F. Hurlburt,	Chainman.
J.E.Rogerson Jr.	Chainman.
J.E.Rogerson Jr.,	Moundman.
R.F.Hurlburt	Moundman.
Indian Mannito,	Axman.
Indian Jerry,	Axman.
D.J.Rogers,	Flagman.

For preliminary affidavits see book "C" T.37 S., R. 22 E.

BOOK A-348

INDEX DIAGRAM.

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30	29	28	27	26	25
31	32	33	34	35	36

Meanders Page..... .....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will le
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the sam
we will report the true distances to all notable objects, and the true lengths of all lines that we a
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su

_____

_____, *Cha*

_____, *Cha*

Subscribed and sworn to before me this _____
day of _____, 190

SEAL

_____

_____

WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establi
of corners, according to the instructions given us, to the best of our skill and ability, in the su

_____

_____, *Moun*

_____, *Moun*

Subscribed and sworn to before me this _____
day of _____, 190

SEAL

_____

_____

WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the su

_____

_____, *A*

_____, *A*

Subscribed and sworn to before me this _____
day of _____, 190

SEAL

_____

_____

I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of _____

_____, *Fla*

Subscribed and sworn to before me this _____
day of _____, 190

SEAL

_____

_____

BOOK A-348

Subdivision of T.[illegible] S. [illegible] E.

Survey commenced May 2,[illegible],and executed with a [illegible] L.E.Gurley light mountain transit,with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc,which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined,tested on the true meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,March [illegible],[illegible].

For a full test of the solar apparatus completed this day see field notes of subdivision lines of [illegible] S.,[illegible] E.(Book O),reference to which is hereby made.

From the cor.of secs.[illegible] and [illegible] on S.bdy of Tp.[illegible] heretofore described,I run

N.0°1'W.bet.secs.[illegible] and [illegible]

Through dense undergrowth,over rolling land and scattering timber

40.00 Set a sandstone 17 X 7 X 5 ins.,[illegible] ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;from which

A cedar tree 8 ins.diam.,bears [illegible] lks.dist. marked ¼ S.30 B.T.

A cedar tree 4 ins.diam.bears [illegible] lks.dist. marked ¼ S.35 B.T.

80.00 Set a sandstone 17 X 7 X 5 ins.,[illegible] ins.in the ground for cor.of secs.[illegible] and [illegible],marked with [illegible] of [illegible] and [illegible]edges;from which

A cedar tree 8 ins.diam.,bears [illegible] lks.dist.. marked T 36 S R [illegible] E S [illegible] B T

A cedar tree 12 ins.diam.,bears [illegible] lks.dist.. marked T 36 S R [illegible] E S [illegible] B T

A cedar tree 4 ins.diam.,bears [illegible] lks.dist.. marked T 36 S R [illegible] E S 36 B T

A cedar tree 4 ins.diam.,bears [illegible] lks.dist.. marked T 36 S R [illegible] E S [illegible] B T

Land;rolling

Soil;sandy loam,1st.rate

Timber;scrubby cedar and pinion,scattering

Chains.	
	Thorn and sagebrush undergrowth
	Dense undergrowth,80.00 chs.
	S.89°58'E. on a random line bet.secs.25 and 36
40.00	Set temp.¼ sec.cor.
80.00	Intersect Colorado Guide Meridian and E.bdy.of Tp.at Cor. of Secs.25 30 31 and 36 as heretofore described
	Thence I run
	N.89°58'W.on a true line bet.secs.25 and 36
	Over heavily timbered land
	Ascending steep rocky side of wash to
0.60	Top of wash,course S.E.and beginning of gradual ascent
19.50	Top of ridge,bears N.and S.,175 ft.above cor.
	Descending gradually to
38.30	Wash,drains S.E.,150 ft.below ridge
	Thence over rolling land
40.00	Set a sandstone 17 X 8 X 6 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which
	A cedar tree 12 ins.diam.,bears N.69°15'W.,12 lks.dist., marked ¼ S 25 B T
	A pinion tree 4 ins.diam.,bears S.41°E.,32 lks.dist., marked ¼ S 36 B T
60.50	Wash,drains S.E.in hollow 40 ft.deep
74.48	Wash,drains S.E.in hollow 60 ft.deep;ascending gradually
80.00	The cor.of secs.25-26-35 and 36
	Land;rolling
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar and pinion
	Heavily timbered land,80.00 chs.
	May 3:at this cor.,I set off 15°31'N.on the decl.arc, and at 11h.57m a.m. l.m.t.,observe the sun on the meridian;the resulting lat.is 37°39'.
	N.0°1'W.bet.secs.25 and 26

Subdivision of T.36 S.,R.22 E.

Chains.	
	Over heavily timbered land and rolling mesa
36.00	Leave heavily timbered land and enter dense undergrowth, bears N.60°W. and S.60°E.;Wash drains S.E.
40.00	Set a sandstone 18 X 8 X 4 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;raise a mound of stones,2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
46.00	Leave dense undergrowth and enter heavily timbered land, bears S.W.and N.E.
72.50	Wash,drains S.W.
80.00	Set a sandstone 17 X 12 X 5 ins.,12 ins.in the ground for cor.of secs.23-24-25 and 26,marked with 2 notches on S.and 1 notch on E.edges;from which A cedar tree 8 ins.diam.,bears S.72°5'E.,19 lks.dist., marked T 36 S R 22 E S 25 B T A cedar tree 12 ins.diam.,bears S.72°30'W.,21 lks.dist., marked T 36 S R 22 E S 26 B T A cedar tree 6 ins.diam.,bears N.34°56'W.,20 lks.dist., marked T 36 S R 22 E S 23 B T A pinion tree 4 ins.diam.,bears N.36°10'E.,57 lks.dist., marked T 36 S R 22 E S 24 B T Land;rolling Soil;sandy loam,1st. Timber;cedar and pinion Thorn and sagebrush undergrowth Heavily timbered land or dense undergrowth,80.00 chs.
	S.89°58'E.on a random line bet.secs.24 and 25
40.00	Set temp.¼ sec.cbr.
80.06	Intersect Colorado Guide Meridian and E.bdy.of Tp.,7 lks. S.of cor.of secs.19-24-25 and 30,as heretofore described.
	Thence I run
	S.89°59'W.on a true line bet.secs.24 and 25
	Over heavily timbered land
	Ascending gradually on broken slope
30.00	Top of ridge,bears N.and S.,150 ft.above cor.

Chains.	
	Descending to
40.03	Set a sandstone 20 X 12 X 5 ins.,15 ins.in the ground for ¼ sec.cor.,marked ¼ on N.face;from which
	A pinion tree 5 ins.diam.,bears S.54°W.,25 lks.dist., marked ¼ S 25 B T
	A pinion tree 5 ins.diam.,bears N.15°5'E.,34 lks.dist., marked ¼ S 24 B T
52.10	Wash,drains S.in hollow,130 ft.below ridge
	Ascending
72.00	Top of ridge,bears N.and S.,120 ft.high
	Descending
80.06	The cor.of secs.23-24-25 and 26
	Land;rolling,mountainous
	Soil;sandy loam,1st.rate
	Timber;scrubby cedar and pinion
	Heavily timbered land,80.06 chs.
	May 3,1907.

May 4:at 7h.30m.a.m.,l.m.t.,I set off 37°40'N.on the lat.arc,15°46'00"N.on the decl.arc,and determine a meridian with the solar at the cor.of secs.23-24-25 and 26

Thence I run

N.0°1'W.bet.secs.23 and 24

Over heavily timbered land and gradual ascent

24.95	Wire fence,bears E.and W.
30.00	Enter open meadow,bears N.60°W.and S.60°E.
	Leave heavily timbered land
40.00	Set a sandstone 18 X 10 X 5 ins.,12 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face;raise a mound of stones 2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
46.00	Wash,drains S.W.;begin ascent
48.00	Enter heavily timbered land, bears N.W.and S.E.
78.00	Leave heavily timbered land, bears N.W.and S.E.
80.00	Set a sandstone 17 X 9 X 5 ins.,12 ins.in the ground for cor.of secs.13-14-23 and 24, marked with 3 notches on S.

.60
.vb

Subdivision of T.36 S.,R.22 E.

Chains.	
	and 1 notch on E. edges;raise a mound of stones 2 ft. base, ½ ft. high, W. of cor. Pits impracticable.
	Land;rolling
	Soil;sandy loam, 1st. rate
	Timber; cedar and pinion
	Heavily timbered land, 60.00 chs.
	N.89°59'E. on a random line bet. secs. 13 and 24
40.00	Set temp. ¼ sec. cor.
80.20	Intersect Colorado Guide Meridian and E. bdy. of Tp.,10 lks. S. of cor. of secs. 13-18-19 and 24
	Thence I run
	S.89°55'W. on a true line bet. secs. 13 and 24
	Over heavily timbered land
	Ascending gradually along broken S.E. slope
25.10	Dry wash in hollow, drains S.E.30 ft.deep
39.50	Top of spur, runs S.E. 90 ft.above wash
40.10	Set a sandstone 24 X 18 X 8 ins.,18 ins.in the ground for ¼ sec.,marked ¼ on N. face; from which
	A pinion tree 4 ins.diam., bears N.16°E.,6 lks.dist., marked ¼ S 13 B T
	A cedar tree 16 ins.diam., bears S.38°55'W.,54 lks.dist., marked ¼ S 24 B T
49.05	Dry wash, drains S.E.in hollow 40 ft.deep
66.55	Top of ridge, bears N.and S., 200 ft. above sec. cor.
	Descending
78.60	Leave heavily timbered land, bears N.E.and S.W.
80.20	The cor. of secs. 13-14-23 and 24
78.60 / 1.60	Land; rolling and broken
	Soil; sandy loam, 1st. rate
	Timber; scrubby cedar and pinion of dense growth
	Heavily timbered land, 78.60 chs.
	May 4:at this cor. I set off 15°48'N. on the decl. arc and at 11h.57m.a.m.,l.m.t.,observe the sun on the meridian; the resulting lat.is 37°41'[illegible]"N.

Subdivision of T.36 S.,R.22 E.

Chains.	
	N.0°1'W.bet.secs. 13 and 14
	Over rolling land
3.50	Enter heavily timbered land, bears N.W. and S.E.
36.03	Road from Grayson to Monticello, bears S.W.and N.E.
36.75	Fence, bears S.W.and N.E.
40.00	Set a sandstone 18 X 8 X 5 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on W. face; from which
	A cedar tree 12 ins. diam.,bears S.89°40'W.,35 lks.dist., marked ¼ S 14 B T
	A cedar tree 6 ins. diam.,bears S.57°30'E.,15 lks.dist., marked ¼ S 13 B T
68.20	Wash, drains S.W.
80.00 76.50 3-50	Set a porphyry stone 18 X 6 X 5 ins.,12 ins. in the ground for cor. of secs. 11-12-13 and 14, marked with 1 1 notch on E. and 4 notches on S. edges; from which
	A cedar tree 6 ins.diam.,bears N.71°30'E.,10 lks. dist., marked T 36 S R 22 E S 12 B T
	A pinion tree 6 ins. diam.,bears S.74°28'E.,11 lks. dist., marked T 36 S R 22 E S 13 B T
	A cedar tree 10 ins. diam.,bears N.65°57'W.,33 lks. dist., marked T 36 S R 22 E S 11 B T
	A cedar tree 6 ins. diam.,bears S.57°03'W.,19 lks. dist., marked T 36 S R 22 E S 14 B T
	Land; rolling
	Soil; sandy loam, 1st. rate
	Timber scrubby cedar and pinion of dense growth
	Heavily timbered land 76.50 Chs.
	N.89°55'E. on a random line bet. secs. 12 and 13
40.00	Set temp. ¼ sec. cor.
80.24	Intersect Colorado Guide Meridian and E. bdy. of Tp. 7 lks. North . of cor. of secs. 7-12-13 and 18, as heretofore described
	Thence I run

Subdivision of T.36 S.,R.22 E.

Chains.	
	S.89°58'W. on a true line bet. secs. 12 and 13
	Over heavily timbered land
	Ascending on broken, mountainous slope from bottom of Recapture Canyon
20.19	Road from Grayson to Monticello, bears N. and S.
38.00	Ascent becomes gradual, 320 ft. above sec. cor.
40.12	Set a sandstone 22 X 10 X 6 ins.,16 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on N. face; from which
	A pinion tree 4 ins. diam.,bears N.18°40'W.,27 lks. dist., marked $\frac{1}{4}$ S 12 B T
	A pinion tree 5 ins. diam., bears S.13°56'E.,25 lks.dist., marked $\frac{1}{4}$ S 13 B T
	Thence over gradually ascending ground
73.00	Top of ridge,bears N.and S.,300 ft.above Sec.Cor. Descending abruptly
80.24	The cor. of secs. 11-12-13 and 14
	Land; rolling, mountainous
	Soil; rocky on E. $\frac{1}{2}$ mile, balance sandy loam,1st. to 3rd. rate
	Timber; cedar and pinion, dense but of scrubby growth
	Heavily timbered land, 80.24 chs.
	May 4, 1907.

May 5:at 8h.0m.a.m.,l.m.t.,I set off 37°41'N. on the lat. arc, 16°3'N. on the decl. arc and determine a true meridian with the solar at the cor. of secs. 11-12-13 and 14

Thence I run

N.0°1'W. bet. secs. 11 and 12

Over heavily timbered land

Ascending gradually to

13.00	Top of slope and ridge, bears N.W. and S.E.125 ft.high
	Begin descent on broken rocky N.E. slope
40.00	Set a sandstone 21 X 8 X 5 ins.,15 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on W. face; from which
	A cedar tree 10 ins. diam.,bears S.35°55'W.,28 lks.dist.,

Chains.	
	marked ¼ S 11 B T
	A pinion tree 4 ins. diam.,bears S.58°30'E.,32 lks. dist.
	marked ¼ S 12 B T
44.00	Leave heavily timbered land and enter dense undergrowth, bears N.W. and S.E.
	Enter bottom of Recapture Canyon, bears N.W. and S.E., 300 ft. below ridge
54.25	Recapture Creek, 75 lks. wide, flows S.65°E. in channel 20 ft. deep; swift current, pure water
60.75	Leave dense undergrowth and enter cultivated field belonging to Jos. Lyman, bears N.W. and S.E.
70.00	Fence, bears N.W. and S.E.
	Leave field and enter mountainous land
70.50	Begin abrupt ascent in huge bowlders
80.00	Set a sandstone 24 X 9 X 5 ins.,18 ins. in the ground for cor. of secs. 1-2-11 and 12, marked with 1 notch on E. and 5 notches on S. edges; from which
	A pinion tree 4 ins. diam.,bears N.38°05'E.,19 lks.dist., marked T 36 S R 22 E S 1 B T
	Apinion tree 12 ins. diam.,bears N.49°52'W.,10 lks.dist., marked T 36 S R 22 E S 2 B T
	A cedar tree 12 ins. diam.,bears S.59°11'W.,32 lks.dist., marked T 36 S R 22 E S 11 B T
	A cedar tree 10 ins.diam.,bears S.17°15'E.,37 lks.dist., marked T 36 S R 22 E S 12 B T
	This cor. stands 160 ft. above creek
	Land; broken, mountainous
	Soil; sandy loam and rocky, 1st. to 4th..rate
	Timber; scrubby cedar and pinion of dense growth
	Dense sagebrush and thorn undergrowth
	Land, heavily timbered, dense undergrowth or mountainous, 70.75 chs.

N.89°58'E. on a random line bet.. secs. 1 and 12

Subdivision of T.36 S.,R.22 E.

Chains.	
40.00	Set temp. ¼ sec. cor.
80.12	Intersect Colorado Guide Meridian and E. bdy. of Tp., 5 lks. north of cor. of secs. 1-6-7 and 12, as heretofore described
	Thence I run
	West on a true line bet. secs. 1 and 12
	Over mountainous, broken,and heavily timbered land
	Descending to
4.50	Head of ravine, drains S.
	Ascending abruptly in break
10.20	Top of break, bears S.W. and N.E.,150 ft. above ravine
	Thence over broken plateau to
24.40	Descending abruptly in big bowlders to
29.85	Dry wash, drains S.20°W. in ravine, 175 ft. below plateau
	Ascending
37.00	Top of spur, runs S.,60 ft. high
	Descend to
40.06	Set a sandstone 18 X 8 X 6 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on N.face; from which
	A cedar tree 14 ins. diam.,bears S.80°27'E.,63 lks.dist., marked ¼ S 12 B T
	No other trees within limit; raise a mound of stones 2 ft. base, 1½ ft. high,N. of cor. Pits impracticable.
42.11	Fence, bears S.E. and N.W.
47.90	Creek, 25 lks. wide, shallow, slow current, good water, drains S.E. in gulch, 90 ft. below spur
	Ascending abruptly to
66.00	Top of spur, runs S.30°E.,175 ft. above creek
	Descending on broken S.W. slope to
80.12	The cor. of secs. 1-2-11 and 12
	Land; mountainous, broken
	Soil; rocky and gravely, and clay, 2nd. to 4th. rate
	Timber; scrubby cedar and pinion
	Mountainous land, 80.12 chs.
	May 5:at this cor. I set off 16°06'N. on the decl. arc,

Chains.	
	and at 11h.57m.a.m.,l.m.t.,observe the sun on the meridian; the resulting lat. is 37° 43'N.
	It being impracticable to extend this survey further north owing to breaks and cliff, I abandon it here
	From the cor. of secs. 2-3-34 and 35 on S. bdy. of Tp., as heretofore described, I run
	N.0°1'W. bet. secs. 34 and 35
	Over rolling mesa
2.24	Fence, bears E. and W.
13.40	Enter cultivated field, bears N.W. and S.E.
18.00	Leave cultivated field, bears N.W. and S.E.
24.60	Irrigating ditch, course S.W.
40.00	Set a sandstone 18 X 12 X 5 ins.,12 ins. in the ground for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ on W. face; dig pits 18 X 18 X 12 ins. N. and S. of stone, 3 ft. dist. and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
46.00	Enter cultivated land, bears E. and W.
64.72	Leave cultivated land, bears E. and W.
65.25	Irrigating ditch, drains E.(dry)
72.10	Fence, bears E. and W.;enter Town of Grayson survey
80.00	Set a sandstone 18 X 10 X 8 ins.,12 ins. in the ground for cor. of secs. 26-27-34 and 35, marked with 1 notch on S. and 2 notches on E. edges;from which
	A cedar tree 8 ins. diam.,bears N.70°52'E.,40 lks.dist., marked T 36 S R 22 E S 26 B T
	A cedar tree 12 ins. diam.,bears S.26°40'W.,50 lks.dist., marked T 36 S R 22 E S 34 B T
	A cedar tree 10 ins. diam.,bears S.8°15'E.,130 lks.dist., marked T 36 S R 22 E S 35 B T
	A cedar tree 4 ins. diam.,bears N.74°07'W.,85 lks.dist., marked T 36 S R 22 E S 27 B T
	Land;rolling mesa
	Soil;sandy loam, 1st. rate
	Timber;a few cedar, scattering

Subdivision of T.36 S.,R.22 E.

Chains.	
	Sagebrush and thorn undergrowth
	S.89°58'E. on a random line bet. secs. 26 and 35
40.00	Set temp. ¼ Sec.Cor.
79.96	Intersect N. and S. line, 5 lks. south of cor. of secs. 25-26-35 and 36
	Thence I run
	West on a true line bet. secs. 26 and 35
	Over heavily timbered land and rolling mesa
13.60	Wash,drains S.
39.98	Set a porphyry stone 17 X 9 X 6 ins.,12 ins.in the ground for ¼ sec. cor.,marked ¼ on N. face;from which
	A cedar tree 16 ins. diam.,bears S.29°06'W.,28 lks.dist., marked ¼ S 35 B T
	A cedar tree 8 ins. diam.,bears N.32°50'E.,44 lks. dist., marked ¼ S 26 B T
43.50	Leave heavily timbered land, bears N. and S.
43.95	Dry wash, drains S. in hollow 80 ft. deep
	Ascending gradually
75.50	Cuman Jones' house in the new town of Grayson, bears N. 4 chs.
79.96	The cor. of secs. 26-27-34 and 35
43-50 / 36-4°6	Land;rolling
	Soil;sandy loam,1st. rate
	Timber;cedar and pinion,dense on E. 43.50 chs.,balance scattering
	Heavily timbered land, 43.50 chs.
	May 5,1907.
	May 6:I run
	N.0°1'W. bet. secs. 26 and 27
1.75	Fence, bears E. and W.;enter Cuman Jones'town lot, 82 lks. E. of S.W. cor.
8.45	Fence, bears E. and W.;leave said lot and enter street
9.94	Fence,bears E. and W,;leave street and enter lot, same

Chains.	
	owner,at 79 lks.from S.W. cor.--Grayson Postoffice bears west about 13.00 chs.
16.30	Fence, bears E. and W.;enter street
17.78	Fence, bears E. and W.;enter lot of Nicholas Leves
24.20	Fence, bears E. and W.;enter street at 74 lks. from N.W. cor. of lot
25.80	Fence, bears E. and W.;leave street and town of Grayson
26.00	Wash, drains S.E. in hollow 60 ft. deep;ascend gradually
27.35	Irrigating ditch, drains S.75°E.(dry)
29.00	Enter heavily timbered land, bears E. and W.
	A small reservoir and a saw-mill bear W. about 5 chs.
40.00	Set a sandstone 20 X 10 X 6 ins.,15 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on W. face;from which
	A cedar tree 14 ins. diam., bears N.59°07'E.,46 lks.dist. marked $\frac{1}{4}$ S 26 B T
	A cedar tree 13 ins. diam.,bears S.64°50'W.,56 lks.dist., marked $\frac{1}{4}$ S 27 B T
40.50	Wash, drains S.E.
45.35	Road, bears S.W. and N.E.
80.00	Set a sandstone 18 X 10 X 6 ins.,12 ins. in the ground for cor. of secs. 22-23-26 and 27, marked with 2 notches on S. and E. edges;from which
	A cedar tree 10 ins. diam.,bears N.68°00'W.,14 lks.dist., marked T 36 S R 22 E S 22 B T
	A cedar tree 13 ins. diam.,bears S.57°15'E.,32 lks.dist., marked T 36 S R 22 E S 26 B T
	A cedar tree 6 ins. diam.,bears N.66°30'E.,44 lks.dist., marked T 36 S R 22 E S 23 B T
	A cedar tree 6 ins. diam.,bears S.26°57'W.,20 lks.dist., marked T 36 S R 22 E S 27 B T
	Land;rolling
	Soil;sandy loam,1st. rate
	Timber;scrubby cedar and pinion of dense growth
	Heavily timbered land, 51.00 chs.

Subdivision of T.36 S.,R.22 E.

Chains.	
	East on a random line bet. secs. 23 and 26
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at cor. of secs. 23-24-25 and 26
	Thence I run
	West on a true line bet. secs. 23 and 26
	Over heavily timbered land.
13.00	Leave heavily timbered land, bears N. and S.
	Fence, bears N. and S.
24.06	Dry wash, drains S.30°E. in hollow 40 ft. deep
27.00	Enter cultivated land, claimed by Albert Lyman,bears N.W. and.S.E.
33.90	Leave cultivated land, bears N. and S.
38.25	Fence, bears S.25°W. and N.25°E.;enter road from Grayson to Monticello
39.95	Fence, bears S.25°W. and N.25°E.;enter land claimed by Jens Nielsen
	Enter heavily timbered land, bears N. and S.
40.00	Set a sandstone 18 X 8 X 4 ins,,12 ins. in the ground for ¼ sec. cor.,marked ¼ on N. face;from which
	A cedar tree 6 ins. diam.,bears S.18°00'E.,23 lks.dist., marked ¼ S 26 B.T
	A cedar tree 14 ins. diam.,bears N.5°50'W.,42 lks.dist., marked ¼ S 23 B T
69.75	Road, bears N.E. and S.W.
73.00	Leave heavily timbered land, bears N. and S.
	Enter cultivated land, bears N. and S.
77.25	Leave cultivated land, bears N. and S.;ditch, drains S.(dry)
	Enter heavily timbered land
80.00	The cor. of secs. 22-23-26 and 27
54 80 / 25.20	Land;rolling
	Soil;sandy loam, 1st. rate
	Timber;scrubby cedar and pinion of dense growth
	Heavily timbered land,54.80 chs.
	May 6:at this cor. I set off 16°23'N. on the decl. arc,

Chains.	
	and at 11h.57m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat. is 37°40'N.
	N.0°1'W. bet. secs. 22 and 23
	Over heavily timbered land.
7.70	Ditch, drains S.30°E.;enter plowed field.
	Leave heavily timbered land, bears S.E. and N.W.
13.80	Leave plowed field and enter heavily timbered land,bears N.W. and S.E.
37.00	Leave heavily timbered land, bears E. and W.
	Enter plowed field.
40.00	Set a sandstone 18 X 12 X 4 ins.,12 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on W. face;from which A lone cedar tree 14 ins. diam.,bears N.2°31'W.,195 lks. dist.,marked $\frac{1}{4}$ S 22 B T : no other trees within limit; raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
42.75	Wash, drains E.
45.00	Leave plowed field, bears E. and W.
	Enter heavily timbered land.
45.75	Wash, drains S.E.
53.80	Fence, bears E. and W.
64.90	Enter plowed field, bears N.W. and S.E. and,
	Leave heavily timbered land, bears N.W. and S.E.
70.30	Leave plowed land, bears N.W. and S.E. and,
	Enter heavily timbered land, bears N.W. and S.E.
76.50	Leave heavily timbered land, bears E. and W.
80.00	Set a porphyry stone 18 X 11 X 6,ins.,12 ins, in the ground for cor. of secs. 14-15-22 and 23, marked with 3 notches on S. and 2 notches on E. edges;from which A cedar tree 14ins. diam.,bears N.6°29'E..165 lks. dist. marked T 36 S R 22 E S 14 B T:no other trees within limit Raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
	Land;rolling.

Subdivision of T.36 S.,R.22 E.

Chains.	
	Soil;sandy loam, 1st. rate.
	Timber;cedar and pinion.
	Heavily timbered land, 57.00 chs.
	May 6:at 3h.3m.p.m.,l.m.t.,I set off 37°41'N. on the lat. arc,16°25'N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 14-15-22 and 23
	Thence I run
	East on a random line bet. secs. 14 and 23
40.00	Set temp. ¼ sec.cor.
79.72	Intersect N. and S.,7 lks. north of cor. of secs. 15-14-23 and 24
	Thence I run
	N.89°57'W. on a true line bet. secs. 14 and 23
	Over rolling land
4.15	Wash,drains S.E.
9.50	Thence along N. edge of plowed field
12.20	Fence, bears N. and S.;enter road fromGrayson to Monticello
14.20	Fence,runs parallel to first;leave road and
	Enter plowed land, bears N. and S.
27.80	Leave plowed land, bears N. and S.
34.85	Enter plowed land, bears N.W. and S.E.
36.40	Leave plowed land, bears N. and S.
	Enter heavily timbered land, bears N. and S.
39.89	Set a porphyry stone 18 X 10 X 6 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on N. face;from which
	A cedar tree 10 ins. diam.,bears N. 18°30'E.,67 lks.dist., marked ¼ S 14 B T
	A cedar tree 10 ins. diam.,bears S.29°10'W.,30 lks.dist., marked ¼ S 23 B T
54.20	Top of ridg 60 ft. high,bears N. and S.
61.25	Road,bears N.25°W. and S.25°E.
70.00	Leave heavily timbered land,bears N. and S.
72.75	Wash,drains S.E.

Subdivision of T.36 S.,R.22 E.

Chains.	
73.00	Enter plowed land,bears N.W. and S.E.
77.70	Leave plowed land, bears N.W. and S.E.
79.78	The cor. of secs. 14-15-22 and 23
33-60	Land;rolling.
46-18	Soil;sandy loam,1st. rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land,33.60 chs.
	May 6,1907.

May 7:at 7h.55m.a.m.,l.m.t.,I set off 37°41'N. on the lat. arc,16°37'N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 14-15-22 and 23

Thence I run

N.0°1'W. bet. secs. 14 and 15

Over rolling land

2.00	Enter cultivated field, bears N.W. and S.E.
9.85	Leave cultivated field, bears N.W. and S.E.
	Wash, drains S.E.
	Enter heavily timbered land, bears N.W. and S.E.
40.00	Set a porphyry stone 18 X 8 X 4 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on W. face;from which
	A cedar tree 4 ins. diam.,bears S.37°30'W.,8 lks.dist., marked ¼ S.15 B T
	A cedar tree 6 ins. diam.,bears S.30°33'E.,32 lks. dist. marked ¼ S.14 B T
54.30	Wash, drains S.E.
70.00	Leave heavily timbered land, bears E. and W.
	Enter cultivated land, bears E. and W., claimed by J F Lyman
80.00	Set a porphyry stone 24 X 12 X 5 ins.,18 ins. in the
60.15	ground for cor. of secs. 10-11-14 and 15, marked with
19.85	4 notches on S. and 2 notches on E. edges;raise a mound of stones 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land;rolling.

Subdivision of T.36 S.,R.22 E.

Chains.	
	Soil;sandy loam,1st.rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 60.15 chs.
	S.89°57'E. on a random line bet. secs. 11 and 14
40.00	Set temp. 1/4 sec. cor.
79.84	Intersect N. and S. line at cor. of secs. 11-12-13 and 14
	Thence I run
	N.89°57'W. on a true line bet. secs. 11 and 14
	Over heavily timbered land
	Descending over broken slope to
18.60	Wash, drains S.20°E. in hollow 130 ft. below cor.
	Thence over rolling surface to
39.92	Set a quartzite stone 18 X 8 X 5 ins.,12 ins. in the ground for 1/4 sec. cor.,marked 1/4 on N. face;from which
	A pinion tree 12 ins. diam.,bears N.30°16'E.,15 lks.dist. marked 1/4 S 11 B T.
	A cedar tree 6 ins, diam.,bearsS.2°11'W.,20 lks.dist., marked 1/4 S 14 B T.
40.57	East fence of corral, circular in form.
42,52	West fence of corral, circular in form.
48.95	Rocky break 10 ft. deep, bears N. and S.
	Leave heavily timbered land,bears N. and S.
51.00	Bottom of hollow and north end of a reservoir made by a dam across hollow and wash draining S.25°E.
	Dam 10 ft, high,bears S.25°E.,2.50 chs.
54.00	Enter heavily timbered land, bears N. and S.
73.20	Leave heavily timbered land, bears N. and S.
	Enter cultivated land, bears N. and S.
79.84	The cor. of secs. 10-11-14 and 15.
68.15 / 11.69	Land;rolling.
	Soil;sandy loam,1st.rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 68.15 chs.
	May 7:at this cor. I set off 16°40'N. on the decl. arc,

Chains.	
	and at 11h.56m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat. is 37°42'N.
	N.0°1'W. bet. secs. 10 and 11.
	Over cultivated land to
10.20	Fence, bears E. and W.
17.00	Leave cultivated land, bears E. and W.
	Enter heavily timbered land, bear E. and W.
39.60	Hollow drains S.E.
40.00	Set a sandstone 18 X 8 X 6 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on W. face;from which
	A cedar tree 10 ins. diam.,bears S.15°50'W.,85 lks.dist., marked ¼ S 10 B T.
	A pinion tree 12 ins. diam.,bears S.16°08'E.,135 lks. dist.,marked ¼ S 11 B T.
80.00	Set a sandstone 18 X 8 X 4 ins.,12 ins. in the ground
63	for cor. of secs. 2-3-10 and 11,marked with 5 notches on
17	S. and 2 notches on E. edges;from which
	A pinion tree 4 ins. diam.,bears N.44°57'W.,30 lks.dist., marked T 36 S R 22 E S 3 B T.
	A cedar tree 5 ins. diam.,bears S.46°04'W.,35 lks.dist., marked T 36 S R 22 E S 10 B T.
	A cedar tree 10 ins. diam.,bears N.46°41'E.,43 lks.dist., marked T 36 S R 22 E S 2 B T.
	A cedar tree 12 ins. diam.,bears S.82°30'E.,39 lks.dist., marked T 36 S R 22 E S 11 B T.
	Land;rolling.
	Soil;sandy loam, 1st. rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 63.00 chs.
	S.89°57'E. on a random line bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
79.94	Intersect N. and S. line 12 lks. N. of cor. of secs. 1-2-11 and 12
	Thence I run
	N.89°52'W. on a true line bet. secs. 2 and 11.

Subdivision of T.36 S.,R.22 E.

Chains.	
	Over mountainous land.
	Descending in breaks and huge bowlders to
12.00	Bottom of break, bears N.W. and S.E.,100 ft. below cor.
	Leave mountainous land.
12.40	Fence, bears N.W. and S.E.
	Thence through dense undergrowth and along gradual descent in bottom of Recapture Canyon.
26.60	Recapture Creek 65 lks. wide, flows S.E. in channel 10 ft.deep;pure water, swift current.
	Begin gradual ascent.
38.30	Leave bottom of canyon and begin ascent, bears N.W. and S.E.
39.97	Set a sandstone 18 X 10 X 6 ins.,12 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on N. face; raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Pits impracticable.
43.75	Leave dense undergrowth and enter mountainous land, bears N.W and S.E.
	Thence in breaks and bowlders, abrupt ascent.
	Enter timber, bears N.W. and S.E.
60.00	Top of ridge, bears N.W. and S.E.;300 ft. above bottom of canyon.
	Descending to
79.94	The cor. of secs. 2-3-10 and 11.
	This cor. stands 135 ft. below top of ridge.
	Land;broken, mountainous.
	Soil;sandy loam and rocky, 1st. to 4th. rate.
	Timber;scrubby cedar and pinion.
	Thorn and sagebrush undergrowth.
	Mountainous land and dense undergrowth, 79.94 chs.
	N.0°1'W. bet. secs. 2 and 3.
	Over heavily timbered land.
	Ascending to
18.00	Top of ridge, bears N.W. and S.E.,175 ft. above cor.
20.00	Begin descent.

Subdivision of T.36 S.,R.22 E.

Chains.	
25.00	Descent becomes abrupt in breaks and bowlders.
36.50	Leave heavily timbered land and enter dense undergrowth, bears N.W. and S.E.
38.00	Enter bottom of Recapture Canyon, 300 ft. below top of ridge, bears N.W. and S.E.
40.00	Set a sandstone 18 X 9 X 6 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. Pits impracticable.
	Land; mountainous and canyon bottom.
	Soil; sandy loam and rocky, 1st. to 4th. rate.
	Timber; scrubby cedar and pinion.
	Thorn and sagebrush undergrowth.
	Mountainous land and dense undergrowth, 40.00 chs.
	It being impracticable to extend this line another half mile I abandon it here.-
	May 7, 1907.
	May 8: from the cor. of secs. 3-4-33 and 34 on S. bdy. of Tp. as heretofore described, I run
	N.0°2'W. bet. secs. 33 and 34.
	Over heavily timbered and broken land.
13.00	Begin descent on broken rocky slope, bears S.W. and N.E.
30.95	Dry wash in bottom of West Water canyon, drains S.25°W., 150 ft. below cor.
	Begin gradual ascent along bottom of canyon
40.00	Set a sandstone 18 X 8 X 4 ins., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face; from which
	A cedar tree 12 ins. diam., bears S.77°30'W., 37 lks. dist., marked $\frac{1}{4}$ S 33 B T. No other trees within limit.
	Raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
52.00	West wall of canyon, bears S.25°W. and north; thence along rocky break.
80.00	Set a sandstone 20 X 14 X 5 ins., 15 ins. in the ground for cor. of secs. 27-28-33 and 34, marked with 1 notch

Subdivision of T.36 S.,R.22 E.

Chains.	
	on S. and 3 notches on E. edges;from which
	A cedar tree 8 ins. diam.,bears N.46°06'E.,4 lks.dist.,
	marked T 36 S R 22 E S 27 B T.
	A cedar tree 5 ins. diam.,bears S.64°15'E.,5 lks.dist.,
	marked T 36 S R 22 E S 34 B T.
	A pinion tree 10 ins. diam.,bears N.86°30'W.,63 lks.dist.,
	marked T 36 S R 22 E S 28 B T.
	A pinion tree 12 ins. diam.,bears S.9°30'W.,47 lks.dist.,
	marked T 36 S R 22 E S 33 B T.
	Land;broken.
	Soil;rocky and gravely, 3rd. and 4th. rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 80.00 chs.
	S.89°58'E. on a random line bet. secs. 27 and 34.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect N. and S. line at cor. of secs. 26-27-34 and 35.
	Thence I run
	N.89°58'W. on a true line bet. secs. 27 and 34.
	Over rolling land.
0.90	Ditch, drains S. enter street of Grayson village.
1.93	Fence, bears N. and S.;leave street and enter Hiram
	Stevens' lot and plowed field, 82 lks. S. of N.E. cor.
5.33	Fence, bears N. and S.;leave Stevens' lot.
8.50	Leave plowed land, enter sagebrush and cedar timber.
17.75	Ditch, drains S.(dry)
17.84	West side of street, bears N. and S.;enter plowed field.
24.50	Leave plowed field,and,
	Enter dense undergrowth, bears N. and S.
38.30	Wash, drains S.W.
40.00	Set a sandstone 18 X 11 X 9 ins.,12 ins. in the ground for
	$\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on N. face;from which
	A cedar tree 14 ins. diam.,bears N.1°30'E.,138 lks.dist.,
	marked $\frac{1}{4}$ S 27 B T. No other trees within limit.
	Raise a mound of stones 2 ft. base, $1\frac{1}{2}$ ft. high, N. of
	cor. Pits impracticable.

Subdivision of T.36 S.,R.22 E.

Chains.	
45.00	Enter heavily timbered land, bears N.E. and S.
65.00	Break of West Water Canyon, bears N. and S.
	Begin abrupt descent
72.60	Wash, drains S.,water in hollow, in bottom of canyon, 150 ft,deep.
	Ascending to
80.00	The cor. of secs. 27-28-33 and 34
55.50	Land;broken.
24.50	Soil;sandy loam, 1st. rate.
	Timber;scrubby cedar and pinion.
	Thorn and sagebrush undergrowth.
	Dense undergrowth and heavily timbered land, 55.50 chs.
	May 8: at this cor.,I set off 16°56'N. on the decl. arc, and at 11h.56m.a.m.,l.m.t.,observe the sun on the meridian; the resulting lat. is 37°39'N.
	N.0°2'W. bet. secs. 27 and 28.
	Over heavily timbered land.
	Along west edge of West Water Canyon in breaks and huge bowlders
40.00	Set a sandstone 18 X 12 X 5 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on W. face;from which
	A pinion tree 4 ins. diam.,bears S.19°30'W.,21 lks.dist. marked ¼ S 28 B T.
	A cedar tree 11 ins. diam.,bears S.50°50'E.,20 lks.dist. marked ¼ S 27 B T.
70.00	Leave edge of canyon and ascend.
80.00	Set a sandstone 18 X 6 X 6 ins.,12 ins. in the ground for cor. of secs. 21-22-27 and 28, marked with 2 notches on S. and 3 notches on E. edges;from which
	A pinion tree 5 ins. diam.,bears S.61°03'E.,23 lks.dist. marked T 36 S R 22 E S 27 B T.
	No other trees within limit; raise a mound of stones 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land;rough, broken.
	Soil;sandy loam on plateau; 1st. rate;canyon, rocky 4th.

Subdivision of T.36 S.,R.22 E.

Chains.	
	rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 80.00 chs.
	May 8:at 2h.45m.p.m.,l.m.t.,I set off 37°40'N.on the lat. arc, 16°59'00"N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 21-22-27 and 28.
	Thence I run
	S.89°58'E. on a random line bet. secs. 22 and 27.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.90	Intersect N. and S. line, 12 lks. S. of cor. of secs. 22-23-26 and 27.
	Thence I run
	S.89°57'W. on a true line bet. secs. 22 and 27.
	Over heavily timbered land.
16.34	Irrigating canal, 6 ft. wide, from Recapture Creek to Grayson, flows S.
	Enter cultivated field, bears N.30°W1 and S.30°E.
	Leave heavily timbered land.
17.70	Leave cultivated field, bears N. and S.
	Enter heavily timbered land.
25.80	Wash, drains.S.
30.16	Fence, bears N. and S.
39.95	Set a porphyry stone 18 X 10 4 ins.,12 ins. in the ground for $\frac{1}{4}$ sec. cor.,marked $\frac{1}{4}$ on N. face;from which
	A cedar tree 12 ins. diam.,bears S.2°40'W.,28 lks.dist., marked $\frac{1}{4}$ S 27 B T.
	A cedar tree 14 ins. diam.,bears N.29°30'E.,11 lks.dist., marked $\frac{1}{4}$ S 22 B T.
50.00	Low ridge, bears N. and S.,and beginning of descent.
67.50	Precipitous break to canyon, bears N. and S.
	Begin abrupt descent.
72.85	Dry wash in bottom of West Water Canyon, 150 ft. deep, drains S.
	Ascending broken slope.

Subdivision of T.36 S.,R.22 E.

Chains.	
78.00	Precipitous break, bears N. and S.,and beginning of gradual ascent to
79.90	The cor. of secs. 21-22-27 and 28.
	Land;rolling.
	Soil;sandy loam on plateau,1st. rate;canyon rocky.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 78.54 chs.
	May 8, 1907.
	May 9:at 8h.5m.a.m.,.l.m.t.,I set off 37°40'N. on the lat. arc, 17°10'N. on the decl. arc and determine a meridian with the solar at the cor. of secs. 21-22-27 and 28.
	Thence I run
	N.0°2'W. bet. secs. 21 and 22.
	Over heavily timbered land, ascending to
1.75	Top of spur, runs S.E. and beginning of gradual descent. along broken edge of canyon.
40.00	Set a porphyry stone 18 X 10 X 5 ins.,12 ins. in the ground for 1/4 sec. cor.,marked 1/4 on W. face;from which
	A cedar tree 16 ins. diam.,bears S.53°30'E.,9 lks.dist., marked 1/4 S 22 B T.
	A cedar tree 10 ins. diam.,bears S.46°04'W.,16 lks.dist., marked 1/4 S 21 B T.
46.00	West edge, turns N.W.;begin abrupt descent in breaks and huge bowlders.
50.05	Wash, drains S.25°E.,water in hollow, in bottom of West Water Canyon, 150 ft. deep.
	Along bottom of canyon to
63.35	Wash, drains S.20°E.
63.70	Begin abrupt ascent in breaks and cliffs.
65.00	Top of break, 100 ft. above wash, bears N.20°W. and S. 20°E.
	Ascending gradually to
80.00	Set a sandstone 17 X 12 X 4 ins.,16 ins. in the ground for cor. of secs. 15-16-21 and 22, marked with 3 notches on S. and E. edges;from which

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Subdivision of T.36 S.,R.22 E.

Chains.	
	A pinion tree 12 ins. diam.;bears N.65°00'W.,7 lks.dist., marked T 36 S R 22 E S 16 B T.
	A pinion tree 10 ins. diam.,bears N.60°57'E.,53 lks.dist., marked T 36 S R 22 E S 15 B T.
	A pinion tree 14 ins. diam.,bears S.65°30'E.,57 lks.dist., marked T 36 S R 22 E S 22 B T.
	A pinion tree 12 ins.diam.,bears S.62°08'W.,77 lks.dist., marked T 36 S R 22 E S 21 B T.
	This cor. stands 60 ft. above edge of canyon.
	Land;broken.
	Soil;rocky, 4th. rate, along canyon.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 80.00 chs.
	N.89°57'E. on a random line bet. secs. 15 and 22.
40.00	Set temp. ¼ sec. cor.
80.10	Intersect N. and S. line 7 lks. N. of cor. of secs. 14-15-22 and 23.
	Thence I run
	West on a true line bet. secs. 15 and 22.
	Over heavily timbered land.
6.50	Leave heavily timbered land and enter plowed field, bears N.W. and S.E.
10.50	Leave plowed field and enter heavily timbered land, bears N. and S.
24.80	Leave heavily timbered and
	Enter plowed field, bears N.W. and S.E.
30.00	Leave plowed field and
	Enter heavily timbered land, bears N.W. and S.E.
36.15	Fence, bears N.20°W. and S.20°E.
37.70	Canal from Recapture Creek to Grayson 6 ft. wide, flows S.25°E.
40.05	Set a sandstone 18 X 8 X 4 ins.,12 ins.in the ground for ¼ sec. cor.,marked ¼ on N. face;from which
	A cedar tree 6 ins. diam.,bears S.1°50'E.,20 lks.dist., marked ¼ S 22 B T.

Subdivision of T.36 S.,R.22 E.

Chains.	
	A pinion tree 10 ins.diam.,bears N.24°10'E.,36 lks.dist., marked ¼ S 15 B T.
60.00	Top of low ridge, bears N.20°W. and S.20°E.80 ft.high
	Begin gradual descent.
80.10	The cor. of secs. 15-16-21 and 22.
70.90	Land;rolling.
9.20	Soil;sandy loam, 1st. rate.
	Timber;scrubby cedar and pinion of dense growth.
	Heavily timbered land, 70.90 chs.
	May 9:at this cor. I set off 17°13'00"N. on the decl. arc and at 11h.56m.a.m.,l.m.t.,observe the sun on the meridian;the resulting lat. is 37°41'N.
	N.0°2'W. bet. secs. 15 and 16.
	Over heavily timbered land.
40.00	Set a sandstone 18 X 8 X 4 ins.,12 ins. in the ground for ¼ sec. cor.,marked ¼ on W. face;from which
	A pinion tree 6 ins.diam.,bears S.43°30'W.,21 lks.dist., marked ¼ S 16 B T.
	A pinion tree 8 ins.diam.,bears N.48°04'E.,18 lks.dist., marked ¼ S 15 B T.
49.30	Wash in hollow 40 ft. deep, drains S.W.
80.00	Set a porphyry stone 18 X 8 X 6 ins.,12 ins. in the ground for cor. of secs. 9-10-15 and 16,marked with 4 notches on S. and 3 notches on E. edges;from which
	A cedar tree 12 ins.diam.,bears N.10°30'W.,25 lks.dist., marked T 36 S R 22 E S 9 B T.
	A pinion tree 4 ins.diam.,bears S.88°55'W.,55 lks.dist., marked T 36 S R 22 E S 16 B T.
	No other trees within limit;raise a mound of stones, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	Land;rolling.
	Soil;sandy loam, 1st. rate.
	Timber;cedar and pinion of dense growth.
	Heavily timbered land, 80.00 chs.
	East on a random line bet.secs.10 and 15.

BOOK A-348

Subdivision of T.30 S.,R.22 E.

Chains.	
40.00	Set temp. ¼ sec. cor.
80.16	Intersect N. and S. line at cor. of secs. 10-11-14 and 15.
	Thence I run
	West on a true line bet. secs. 10 and 15.
	Over cultivated land.
2.15	Leave cultivated land and
	Enter heavily timbered land, bears N. and S.
10.75	Fence, bears N. and S.;enter plowed field.
	Leave heavily timbered land, bears N. and S.
35.50	Leave plowed field and
	Enter heavily timbered land, bears N. and S.
40.08	Set a sandstone 20 X 12 X 6 ins.,15 ins. in the ground
	for ¼ sec. cor.,marked ¼ on N. face;from which
	A cedar tree 5 ins. diam.,bears S.16°30'W.,51 lks.dist.,
	marked ¼ S 15 B T.
	A pinion tree 7 ins.diam.,bears N.61°40'W.,26 lks.dist.,
	marked ¼ S 10 B T.
42.00	Fence, bears N. and S.
43,85	Canal from Recapture Creek to Grayson, flows south.
80.16	The cor. of secs. 9-10-15 and 16.
53.26	
26.74	Land;rolling.
	Soil;sandy loam, 1st. rate.
	Timber.scrubby cedar and pinion of dense growth.
	Heavily timbered land, 53.26 chs.
	May 9, 1907.

	May 10:I run
	N.0°2'W. bet. secs. 9 and 10.
	Over heavily timbered land.
	Ascending to
15.00	Spur ridge 100 ft. high, runs S.W.
	Thence over rolling land.
40.00	Set a sandstone 18 X 8 X 5 ins.,12 ins. in the ground
	for ¼ sec. cor.,marked ¼ on W. face;from which
	A pinion tree 5 ins.diam.,bears S.85°30E.,12 lks.dist.,

Chains.	
	marked ¼ S 10 B T.
	A pinion tree 6 ins.diam.,bears S.16°30'W.,12 lks.dist.,
	marked ¼ S 9 B T.
80.00	Set a sandstone 17 X 8 X 5 ins.,12 ins. in the ground
	for cor. of secs. 3-4-9 and 10, marked with 5 notches
	on S. and 3 notches on E. edges;from which
	A pinion tree 4 ins.diam.,bears N.51°05'E.,25 lks.dist.,
	marked T 36 S R 22 E S 3 B.T.
	A pine tree 4 ins.diam.,bears N.20°30'W.,11 lks.dist.,
	marked T 36 S R 22 E S 4 B T.
	A pinion tree 5 ins.diam.,bears S.84°28'W.,34 lks.dist.,
	marked T 36 S R 22 E S 9 B T.
	A pinion tree 4 ins.diam.,bears S.50°45'E.,9 lks.dist.,
	marked T 36 S R 22 E S 10 B T.
	Land;rolling.
	Soil;sandy loam, 1st. rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 80.00 chs.
	East on a random bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.20	Intersect N. and S. line 14 lks.N. of cor. of secs.
	2-3-10 and 11.
	Thence I run
	N.89°54'W. on a true line bet. secs. 3 and 10.
	Over heavily timbered land.
11.35	Enter plowed field 50 lks. S. of N.E. cor.,bears N.and S.
	Leave heavily timbered land, bears N. and S.
14.00	Leave plowed field, bears N. and S.
	Enter heavily timbered land.
20.00	Top of low ridge, bears N. and S.90 ft.high
23.50	Wash,drains S. in hollow 40 ft. deep.
34.90	Canal 6 ft. wide from Recapture Creek to Grayson, drains
	S.20°E.(dry).
36.40	Fence, bears S.20°E.
40.10	Set a porphyry stone 18 X 8X5 ins.,12 ins.in the ground

Subdivision of T.36 S.,R.22 E.

Chains.	
	for ¼ sec. cor.,marked ¼ on N. face;from which
	A pinion tree 5 ins. diam.,bears S.25°55'W.,10 lks.dist.,
	marked ¼ S 10 B T.
	A pinion tree 4 ins.diam.,bears N.31°29'E.,26 lks.dist.,
	marked ¼ S 3 B T.
	Ascending to
53.00	Top of ridge,bearsN.15°E. and S.15°W.,150 ft. high.
	Descending to
80.20	The cor. of secs. 3-4-9 and 10.
77.55	
2.65	Land;rolling.
	Soil;sandy loam, 1st. rate.
	Timber;scrubby cedar and pinion.
	Heavily timbered land, 77.55 chs.
	May 10: at this cor. I set off 17°29'00"N. on the decl.
	arc and at 11h.56m.a.m.,l.m.t.,observe the sun on the
	meridian;the resulting lat. is 37°43'N
	N.0°2'W. bet. secs. 3 and 4.
	Over heavily timbered land.
	Ascending gradually.
40.00	Set a sandstone 17 X 9 X 5 ins.,12 ins.in the ground for
	¼ sec. cor.,marked ¼ on W. face,from which
	A pinion tree 5 ins.diam.,bears N.76°30'W.,14 lks.dist.,
	marked ¼ S 4 B T.
	A pinion tree 6 ins.diam.,bears S.11°50E.,23 lks.dist.,
	marked ¼ S 3 B T.
	Land;rolling.
	Soil;gravely and sandy, 2nd. rate.
	Timber;scrubby pinion and cedar of dense growth.
	Heavily timbered land, 40.00 chs.
	This line further north being impracticable owing to deep
	precipitous canyons, I abandon it here.-
	I return to the meridian established by me May 3 at my
	camp near the N.E. cor. of sec. 34,T.36 S R 22 E. and at
	4h.10m.p.m.,l.m.t.,set off 17°32'N. on the decl. arc and
	test the adjustment of my soalr finding;it gives the same

Chains.

meridian as before and adjustments correct.

May 10, 1907.

General Description.

The surveyed land in this township is rolling mesa, mountainous ridges, and abrupt rocky canyons. The soil which is a redish light loam is fertile and will raise adundant crops with or without irrigation.-

The township is cut by deep rocky canyons, having usually perpendicular walls and difficult to cross; and nearly the entire area is covered with a dense growth of timber of the scrub cedar and pinion variety.- The unsurveyed part of the township is cut up by several enormous box canyons and is covered with a dense growth of timber; it is fit for grazing only.- There is no water, standing or flowing, except Recapture Creek, traversing a rocky canyon about 300 ft. deep, but this stream dries up during the Mid-summer months.-

The township has been recently settled and the town of Grayson established, which at present contains from twenty to thirty families, who have commenced farming the open land both north and south of the town, but the greater part being covered with a dense growth of timber, the fields are as yet small and scattering.

Walter C. Lyman, Hans C. H. Bogh, Joseph A. Lyman, and J. A. Lyman, Jr., applicants for the survey of this township and also Tp.37 S.,R.22 E., who all have homes in the town of Grayson and who are interested in the adjoining farm lands, which, however, have not as yet been fully parcelled to each individual.

There is no mineral of any kind within the township.

Andrew P. Hansen

U.S.Dep.Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hanson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of subdivision lines of townships 36 & 37 S. R 22 E of the Salt Lake Base and meridian, showing the respective capacities in which they acted:

R. F. Hurlburt, Chainman.
J. C. Rogerson Jr, Chainman.
J. E. Rogerson Jr, Moundman.
R. F. Hurlburt, Moundman.
Indian Mannisto, Axman.
Indian Jerry, Axman.
D. J. Rogers, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hanson, United States Deputy Surveyor, in surveying all those parts or portions of the subdivision lines of townships 36 and 37 S. R 22 E of the Salt Lake Base and meridian, State of Utah, which are represented on the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

R. F. Hurlburt, Chainman.
J. E. Rogerson Jr., Chainman.
J. E. Rogerson Jr., Moundman.
R. F. Hurlburt, Moundman.
P. Hanson Witness to mark Indian Mannisto X, Axman.
P. Hanson Witness to mark Indian Jerry X, Axman.
D. J. Rogers, Flagman.

Subscribed and sworn to before me this 10 day of May, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

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BOOK A-348

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Surve
solemnly swear that, in pursuance of a contract received from Edward H. Anderson
United States Surveyor General for Utah, bearing date
18th day of May, 1905; I have well, faithfully, and truly, in m
proper person, and in strict conformity with the instructions furnished by the United States Su
General for Utah, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of the Subdivisional lines
of Townships 36 & 37 South Ranges 22 East
of the Salt Lake
Base meridian, in the State of Utah, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further so
swear that all the corners of said survey have been established and perpetuated in strict accordanc
the Manual of Surveying Instructions, and the special written instructions of the United States Su
General for Utah and in the specific manner described in the field notes, a
the foregoing are the original field notes of such survey.

Andrew P. Hanson
United States Deputy Su

Subscribed by said Andrew P. Hanson, and sworn to before me
this 13th day of September, 1907

SEAL

Thomas Hull
U. S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, February 26,

The foregoing field notes of the survey of the Subdivisional lines of Townsh
No. 36 South, Range No. 22 East of the Salt Lake Base and Meridian,
Utah,

executed by Andrew P. Hanson
under his contract No. 228, dated May 18, 1905, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor G

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 of

United States Surveyor G

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BOOK A-348

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1.

FIELD NOTES

OF THE SURVEY OF THE

Resurvey of the East Boundary

of

Township No. 10 South Range No. 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansons, United States Deputy Surveyor,

under his Contract No. 289, dated May 18, 1905

Survey commenced October 31, 1905

Survey completed October 31, 1905

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

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BOOK A-348

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Meanders Page .....

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will l
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the sa
we will report the true distances to all notable objects, and the true lengths of all lines that we
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the s

.....

....., *Ch*

....., *Ch*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the estab
of corners, according to the instructions given us, to the best of our skill and ability, in the s

.....

....., *Mou*

....., *Mou*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the s

.....

.....

.....

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

I, ..., do solemnly swear that I will well a
perform the duties of flagman according to instructions given me, to the best of my skill and abilit
survey of .....

....., *Fl*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

Correcting Survey of the Resurvey of E. Bdy T.10 S.R.6 E.

Chains Survey commenced October 31, 1908 and executed with a W & L E Gurley Light mountain transit with solar attachment For further description of instrument and test of solar see Fieldnotes of Resurvey of E. bdy. T.10 S.R6 E Book "E", reference to which is hereby made.—

October 31, 1908: at the cor. of secs. 13-18-19 and 24 T. 10 S.R.s 6 and 7 E. at 9h 12m a.m. l.m.t. I set off 39°56' 30" N. on the lat. arc, 14°6' S. on the decl. arc and test the solar on the meridian established October 10-11, 1907 by Polaris observation, and find the indication to agree, without material error and therefor conclude the instrument is in satisfactory adjustment.—

Note:- I find this cor. has been moved from its original position and loosely reset against the fence line, but am enabled to determine its former location; 1st by the intersection with fence line north and east as given in field notes of resurvey; 2d: by a small mound of stones about 30 lks. N. of cor. established by me at time of resurvey, as an alligament point, for the purpose of getting a clear view of bottom of gulch to the north; 3rd: by the cedar bearing tree S.18°15' W. 26 lks. dist. which I am confident is correct, while the course and distance of the other bearing tree was in error in the transcribed notes, seemingly due to the fact that, that part of the notes in the original tablets had become blurred and indistinct, from water or snow.—

I reset the stone as marked and described in original notes, in its exact former position for cor. of secs. 13-18-19 and 24, whence

A cedar tree 14 ins. diam. bears S18°15' W. 26 lks. dist. marked T.10 S R6 E S 24 B.T.

A pinion tree 15 ins. diam. bears N 57° 20' W 70 lks. dist. marked T.10 S R6 E S 13 B T

Corrective Survey of the Resurvey of E. Bdy. T 10 S R 6 E

Chains	No other trees within limit Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — Thence I run North bet. secs. 13 and 18
39.84	The 1/4 sec. cor. set by me on resurvey line bears west. 20 lks.
40.00	Remove, and reset the 1/4 sec. cor. as described in field notes of original Resurvey Book E: whence A pine tree 4 ins. diam. bears S. 51° 37' W. 38 lks. dist. marked 1/4 S. 13 B.T. A pine tree 4 ins. diam. bears N. 76° 10' E 15 lks. dist. marked 1/4 S. 18 B.T. I obliterate markings on bearing trees formerly established
79.92	The cor. of secs. 7-12-13 and 18 as established by me on resurvey line bears east 10 lks.
80.00	Remove and reset the cor. of secs. 7-12-13 and 18 as described in field notes of original resurvey Book "E" and raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — There is no change in topography on this line. —

Andrew P. Hanson
U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ....

.............................., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of ....

....

showing the respective capacities in which they acted:

.............................., *Chainman.*

.............................., *Chainman.*

.............................., *Moundman.*

.............................., *Moundman.*

.............................., *Axman.*

.............................., *Axman.*

.............................., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ....

.............................., United States Deputy Surveyor, in surveying all those parts or portions of the ....

.... of the

.... meridian, ... of .... which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the boundary monuments established, according to the instructions furnished by the United States Surveyor General for ....

.............................., *Chainman.*

.............................., *Chainman.*

.............................., *Moundman.*

.............................., *Moundman.*

.............................., *Axman.*

.............................., *Axman.*

.............................., *Flagman.*

Subscribed and sworn to before me this ....

day of ...., 190

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P.Hanson, United States Deputy Surv
solemnly swear that, in pursuance of a contract received from Edward H.Anderson
United States Surveyor General for U t a h, bearing dat
18th day of May, 190 5, I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States S
General for U t a h, the Manual of Surveying Instructions, and the law
United States, surveyed all those parts or portions of the corrective survey of the
resurvey of the East Boundary of Township No.10 South, Range No.
East

of the Salt Lake
and meridian, in the State of Utah, which are represente
foregoing field notes as having been surveyed by me, and under my direction; and I do further s
swear that all the corners of said corrective survey have been established and perpetuated in strict accorda
the Manual of Surveying Instructions, and the special written instructions of the United States S
General for Utah and in the specific manner described in the field notes,
the foregoing are the original field notes of such corrective survey.

Andrew P. Hans
United States Deputy S

Subscribed by said Andrew P.Hanson, and sworn to before me
this 4th day of December, 1908.

SEAL

Thos. Bell
U.S.Surveyor General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 29

The foregoing field notes of the corrective survey of the resurvey of the East Bounda
of Township No.10 South, Range No. 6 East of the Salt Lake Base
Meridian, Utah,

executed by Andrew P.Hanson
under his contract No. 289, dated May 18, 1905, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
corrective surveys they describe, are hereby approved.

Thos. Bell
United States Surveyor G

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 o

United States Surveyor G

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BOOK A-348

FIELD NOTES

OF THE RESURVEY OF THE

East Boundary

of

Township 10 South Range 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansen, United States Deputy Surveyor,

under his Contract No. 287, dated May 18, 1905

Survey commenced October 10, 1907

Survey completed October 11, 1907

6—151

Length 1-79-50
Ether 6.00

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Ray Glazier,	Chainman.
James S.Ballard,	Chainman.
Ray Glazier,	Moundman,
James S.Ballard.	Moundman.
Major Loveless,	Axman,
George M.P.Dougall,	Axman.
Major Loveless,	Flagman.

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Meanders Page ....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Ray Glazier and James S. Ballard do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will leve chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we ass measuring, to the best of our skill and ability, and in accordance with instructions given us, in the resurv east boundary of T. 10 S. R. 6 E. S. L. B. & M. Utah

Ray Glazier, Chain
James S. Ballard Chain

Subscribed and sworn to before me this 10 day of October, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

WE, Ray Glazier and James S. Ballard do solemnly swear that we will well and truly perform the duties of moundmen in the establish of corners, according to the instructions given us, to the best of our skill and ability, in the resurv east boundary of T. 10 S. R. 6 E. S. L. B. & M. Utah

Ray Glazier, Mound
James S. Ballard, Mound

Subscribed and sworn to before me this 10 day of October, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

WE, Mayor Loveless and George M. P. Dougall do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co and other duties, according to instructions given us, to the best of our skill and ability, in the resurv east boundary of T. 10 S. R. 6 E. S. L. B. & M. Utah

Mayor Loveless, Ax
George M. P. Dougall, Ax

Subscribed and sworn to before me this 10 day of October, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

I, Mayor Loveless, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, i resurvey of east boundary of T. 10 S. R. 6 E. S. L. B. & M. Utah

Mayor Loveless, Flag

Subscribed and sworn to before me this 10 day of October, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

6—151

Resurvey of East Boundary of Tp. 10 S. R. 6 E.

Chains

Survey commenced October 10, 1907 and executed with a W & L E Gurley light mountain transit with solar attachment. - The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. —

The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the Surveyor General for Utah March 27, 1907. —

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

At the witness corner to cor. of sec. 19-24-25 and 30 on east bdy. of Tp. 10 S. R. 6 E., latitude 39°55'34" N. longitude 111°13'08" W., I set off 39°55'34" N. on the lat. arc 6°27'00" S. on the decl. arc and at 2h47m p.m., l.m.t. determine a meridian with the solar and mark a point thereof on a plug firmly set in the ground 5 chs. S. of the cor. At 6h18m p.m. l.m.t. I observe Polaris at eastern elongation in accordance with Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground 5 chs. S. of my station. —

October 10, 1907

October 11: At 7h32m a.m. l.m.t. I lay off the azimuth of Polaris 1°33' to the east and mark the meridian thus determined by a small nail driven in the plug set October 10. on which the meridian falls 0.07 ft. West of the mark determined by the solar. -

At 7h47m a.m. l.m.t. I set off 39°55'34" N on the lat. arc 6°42'30" S. on the decl. arc, and mark a point in the meridian determined by the solar by a small nail driven in the plug already set 5 chs S. of the

Resurvey of East. Boundary of Tp. 10 S. R. 6 E.

Chains

instrument; this mark falls 0.05 ft. west of the meridian established by the Polaris observations. —
The solar apparatus both by p.m. and a.m. observations, defines positions for meridians which differ by less than 1' of arc from the meridian established by Polaris observations and I therefor consider the adjustments of the instrument satisfactory. —
The magnetic bearing of the true meridian at 8h a.m. is N. 16° 50' W., the angle thus determined gives the mag. decl. 16° 50' E. —

Note: Prior to commencing this survey I have by preliminary retracements, determined that I can not find a nearer corner from which to initiate the survey of Tps. 10 S. Rs 6 and 7 E, therefor From the witness Cor. already described which is a hard sandstone firmly set 10 x 9 x 6 ins. above ground marked with 2 notches on S. and 4 notches on N. edges and W. C. on N. E. face;
I run on resurvey line
North bet. secs. 25 and 30
Ascending, over mountainous land, in scattering timber
1.60 Ascent becomes abrupt in brakes and slide
5.00 Position of Cor. of secs 19-24-25 and 30 but a carefull search failed to disclose any trace of same, therefor:
I set a sandstone 18 x 10 x 5 ins. 12 ins. in the ground for cor. of secs. 19-24-25 and 30 marked with 2 notches on S and 4 notches on W. edges, from which
A cedar tree 18 ins. diam. bears S. 64° 21' E. 54 lks. dist. marked T. 10 S. R. 7 E S 30 B T
No other bearing trees within limits: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. — Pits impracticable
This cor. stands on lip of breaks 300 ft. above witness Cor.
Land, rock and rock talus; Soil 3rd and 4th rate
Timber, cedar and pine scattering
Mountainous land 5.00 chs. —

N. 0° 34' W. bet. secs. 19 and 24

Resurvey of East Boundary of Tp 10 S. R. 6 E.

Chains	
	Over mountainous land
	Ascending broken slope in timber
12.45	Top of ridge bears north easterly and south westerly
	130 ft. above cor.
	Leave timber and enter dense oak brush, bears
	parallel with ridge, and descend
33.05	Dry wash, in bottom of gulch 200 ft. below ridge
	drains S. W.
	Ascending broken slope
40.25	The 1/4 sec. cor. as found: a sandstone 28 x 16 x 16 ins.
	lying on top of ground and marked 1/4 on bottom face
	I reset stone 21 ins. in the ground, marked 1/4
	on W. face; raised a mound of stones 2 ft. base
	1½ ft. high, W. of cor. Pits impracticable
	Thence Bears N 0° 13' E
10.90	Top of ridge bears E. and W. 160 ft. above wash
	Descending
32.45	Bottom of gulch, drains westerly 210 ft. below
	ridge. — Ascending
38.00	Top of slope and open rimrock W. 100 ft. high
	Thence over rolling slope to
40.25	The cor. of secs. 13-18-19 and 24 as found; a sandstone
	24 x 14 x 4 ins. marked with 3 notches on opposite
	edges, lying on top of ground;
	I reset stone 18 ins. in the ground for cor of secs.
	13-18-19 and 24 marked with 3 notches on N.
	and S. edges from which
	Original bearing tree, a cedar 15 ins. diam. blazed
	and scribed but partly overgrown bears N. 46° 15' W.
	32 lks dist.
	Original bearing tree, a pine 12 ins. diam. blazed
	and scribed, but partly overgrown bears S. 18° 15' W. 26
	lks. dist. (both blazes facing corner)
	No other trees within limit: Raised a mound
	of stones 2 ft. base 1½ ft. high W. of cor. — Pits
	impracticable. —
	Land very broken
	Soil gravely and rocky 2nd to 4th rate
	Timber Cedar and pine. — dense oak brush
	undergrowth
	Mountainous land 80.50 chs. —

Resurvey of East Boundary T. 10 S. R. 6 E.

Chains	
	North bet. secs. 13 and 18
	Over mountainous land
0.10	Fence bears north-westerly and south easterly
0.40	Begin abrupt descent, bears E. and W.
11.18	Indian Creek 7 lks wide flows S.W. in bottom of gulch 140 ft. below cor. — Ascending
11.45	Enter cultivated field, of John N., and James S Ballard, parallel with creek
17.45	Fence bears south-westerly and north easterly; leave field of above parties
17.66	Road runs parallel with fence
	Begin abrupt ascent, and enter timber, bears S.W. and N.E.
19.00	Log House of John N and James S Ballard bears N. 47° 24' E. 7.50 chs.
40.00	Set a gray sandstone 14 x 8 x 7 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face
	from which
	A pine tree 8 ins. diam. bears N. 13° 55' E. 18 lks. dist. marked 1/4 S. 18 B.T.
	A pine tree 5 ins. diam. bears S. 57° 45' W. 13 lks. dist. marked 1/4 S 13 B T
	No trace of prior corner could be found
55.20	Top of ridge bears south westerly and north easterly 500 ft. above road
	Begin descent on N.W. slope: Leave timber and enter dense oak and thorn brush, parallel with ridge
73.25	Old road, in bottom of hollow draining S.W. 140 ft. below ridge. —
	Ascending gradually in bottom of hollow
80.00	Set a gray limestone 18 x 6 x 6 ins. 12 ins. in the ground for cor. of secs. 7-12-13 and 18 marked with + notches on S. and 2 notches on N. edges; raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
	No trees of prior cor. could be found though a careful search was made. —
	Land very broken
	Soil gravely and rocky 2nd to 4th rate
	Timber cedar and pine of dense growth
	Oak and thorn undergrowth-

Resurvey of East Boundary T. 10 S. R. 6 E.

Chains | Mountainous land 74.00 chs

October 11: The sky being overcast during the morn hours I could obtain no observation on the sun while on the meridian. —

October 11. 1907

General Description

For general description of Tps. 10 S Rs 6 and 7 E. see field notes of survey of E bdy T. 10 S R 6 E (Book F.) reference to which is hereby made. —

Andrew P Hanson

U.S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hanson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the resurvey of east boundary of T. 10 S. R. 6 E., S. L. B. & M. Utah, giving the respective capacities in which they acted:

Ray Glazier, Chainman.
James S. Ballard, Chainman.
Ray Glazier, Moundman.
James S. Ballard, Moundman.
Mayor Loveless, Axman.
George W. P. Dougall, Axman.
Mayor Loveless, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hanson, United States Deputy Surveyor, in resurveying all the parts or portions of the east boundary of T. 10 S. R. 6 E.

of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the posts or monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Ray Glazier, Chainman.
James S. Ballard, Chainman.
Ray Glazier, Moundman.
James S. Ballard, Moundman.
Mayor Loveless, Axman.
George W. P. Dougall, Axman.
~~Flagman.~~
Mayor Loveless Flagman

Subscribed and sworn to before me this 15 day of October, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

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BOOK A-348

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from Edward H. Anderson
United States Surveyor General for Utah, bearing date o
14th day of May, 1905, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Sur
General for Utah, the Manual of Surveying Instructions, and the laws o
United States, surveyed all those parts or portions of the resurvey of east boundary
Township No. 10 South, Range No. 6 East

of the Salt Lake
Base and meridian, in the State of Utah, which are represented i
foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said resurvey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Sur
General for Utah and in the specific manner described in the field notes, and
the foregoing are the original field notes of such resurvey.

Andrew P. Hanson
United States Deputy Sur

Subscribed by said Andrew P. Hanson, and sworn to before me
this 2d day of January, 1906

J. Thomas Kell
U.S. Surveyor-General
for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26 1

The foregoing field notes of the resurvey of the east boundary of Township No.
10 South, Range No. 6 East of the Salt Lake Base and Meridian, Utah,

executed by Andrew P. Hanson
under his contract No. 289, dated May 18, 1905, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
resurveys they describe, are hereby approved.

J. Thomas Kell
United States Surveyor Ge

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 offi

United States Surveyor Ge

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FIELD NOTES

OF THE SURVEY OF THE

East Boundary

of

Township No. 10 South Range No. 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansen, United States Deputy Surveyor,

er his Contract No. 289, dated May 18, 1905

ey commenced October 12, 1907

ey completed October 12, 1907

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Ray Glazier,	Chainman.
James S. Ballard,	Chainman.
Ray Glazier,	Moundman,
James S.Ballard,	Moundman.
Major Loveless,	Axman.
George M.P.Dougall,	Axman.
Major Loveless,	Flagman.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Ray Glazier and James S Ballard
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same
we will report the true distances to all notable objects, and the true lengths of all lines that we as
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the sur
the east boundary of T. 10 S. R. 6 E., S. L. B. & M. Utah

Ray Glazier, Chai
James S Ballard, Chai

Subscribed and sworn to before me this 10
day of October, 1907

Andrew P Hanson
U.S. Deputy Surveyor

SEAL

WE, Ray Glazier and James S Ballard
do solemnly swear that we will well and truly perform the duties of moundmen in the establis
of corners, according to the instructions given us, to the best of our skill and ability, in the sur
the east boundary of T. 10 S. R. 6 E., S. L. B. & M. Utah

Ray Glazier, Moun
James S Ballard, Moun

Subscribed and sworn to before me this 10
day of October, 1907

Andrew P Hanson
U.S. Deputy Surveyor

SEAL

WE, Mayor Loveless and George M Dougall
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the sur
the east boundary of T. 10 S. R. 6 E., S. L. B. & M. Utah

Mayor Loveless, A
George M Dougall, A

Subscribed and sworn to before me this 10
day of October, 1907

Andrew P Hanson
U.S. Deputy Surveyor

SEAL

I, Mayor Loveless, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability,
survey of the east boundary of T. 10 S. R. 6 E. S. L. B. & M. Utah

Mayor Loveless, Fla

Subscribed and sworn to before me this 10
day of October, 1907

Andrew P Hanson
U.S. Deputy Surveyor

SEAL

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East Boundary of T. 10 S. R. 6 E.

Chains	
	Survey commenced October 12, 1907 and executed with a W & L.E. Gurley light mountain transit with solar attachment.-
	Note: For a full description of instrument and complete test of adjustments see field notes of resurvey of east boundary of this Tp. (book "E") under date of October 10-11, 1907 referenced to which is hereby made, and being confident the instrument is still in satisfactory condition I omit the test at this time.-
	From the cor. of secs 7-12-18 and 18 as heretofore described I run
	North bet. secs. 7 and 12
	Over mountainous land
	Ascending in bottom of hollow draining S. in dense undergrowth-
19.00	Enter timber and begin abrupt ascent, bears E. and W.
31.50	Top of spur ridge runs S.W. 200 ft. above cor. Leave timber, bears N.E. and S.W. and descend on N.W. slope in dense undergrowth-
40.00	Set a limestone 16 x 9 x 8 ins. 11 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face, raised a mound of stones 2 ft. base 1½ ft. high W. of cor.- Pits impracticable
42.00	Head of hollow draining S.W. 85 ft. deep Ascending
46.00	Enter timber and begin abrupt ascent, bears E. and W.
50.50	Top of spur ridge runs W. 75 ft. high Descending
53.60	Leave timber and enter dense undergrowth; bears S.W. and N.E.
60.25	Bottom of gulch draining S.W. 100 ft. deep Ascending gradually
61.35	Old road bears S.W. and N.E.
63.50	Begin abrupt ascent. bears S.W. and N.E
64.60	Enter timber, bears S.W. and N.E.
73.00	Top of spur ridge runs S.W. 150 ft. high Enter mountain mahogany timber and begin descent on N.W. slope
80.00	Set a gray sandstone 18 x 10 x 6 ins. 12 ins. in

East. Boundary of T. 10 S. R. 6 E.

Chains	The ground for cor. of secs. 1-6-7 and 12 marked with 5 notches on S. and 1 notch on N. edge, from which W mahogany tree 4 ins. diam. bears N 45° 15' E 20 lks. dist. marked T 10 S R 7 E S 6 B T A mahogany tree 4 ins. diam. bears S. 23° 16' E 12 lks. dist. marked T 10 S R 7 E S 7 B T A mahogany tree 4 ins. diam. bears S 42° 30' W. 11 lks. dist. marked T 10 S. R 6 E S 12 B T A mahogany tree 4 ins. diam. bears N 70° 30' W 14 lks dist. marked T 10 S R 6 E S 1 B T This cor. stands 75 ft. below top of ridge Land broken Soil gravely and rocky 2d to 4th rate Timber, cedar, pine, pinion and mountain mahogany. — Dense oak and thorn undergrowth Mountainous land 80.00 chs.
	October 12: at 10h 0m a.m, I.m.t. O set off 39° 58' N. on the lat. arc 7° 8' S. on the dec. arc and determine a meridian with the solar at the cor. of secs. 1-6-7 and 12, thence O runs North bet. secs. 1 and 6 Over mountainous land Descending, through mountain Mahogany timber and buckthorn undergrowth
10.05	Bottom of gulch draining S.W. 150 ft. deep
	Begin ascent
12.00	Enter Cedar timber bears N.E. and S.W.
20.50	Top of spur ridge runs S.W. 110 ft. high
	Begin gradual descent on broken slope
26.00	Head of hollow draining S.W.
	Begin abrupt ascent
+0.00	Set a gray sandstone 16 x 6 x 6 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which A cedar tree 8 ins. diam. bears N. 33° 50' E 21 lks. dist. marked 1/4 S 6 B T A cedar tree 12 ins. diam. bears S. 52° 30' W. 48 lks. dist. marked 1/4 S 1 B T Land very broken Soil gravely and rocky 2nd to 4th rate

Timber, cedar, mountain mahogany, pine and pinion. —
Dense buckthorn and oak undergrowth
Mountainous land 40.00 chs —
It being impracticable to extend this line further owing to the roughness of the country I discontinue here. —

October 12, 1907

General Description

All the unsurveyed portions of township 10 S ranges 6 and 7 E. are mountainous lands very rough and broken and covered in most parts with a dense growth of rank undergrowth, aspen brake and timber of the cedar, pine and mountain mahogany variety, none of which is of commercial value. — The area furnishes indifferent summer pasture, and is subject to early and heavy snows in winter. —
There are a few small running streams. —

Andrew P Swenson
U S Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P Hanson, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of the east boundary of T. 10 S. R. 6 E., S. L. B. & M. Utah, showing the respective capacities in which they acted:

Ray Glazier, Chainman.
James S Ballard, Chainman.
Ray Glazier, Moundman.
James S Ballard, Moundman.
Mayor Loveless, Axman.
George M P Dougall, Axman.
Mayor Loveless, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P Hanson, United States Deputy Surveyor, in surveying all those parts or portions of the east boundary of T. 10 S. R. 6 E.

of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the proper monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Ray Glazier, Chainman.
James S Ballard, Chainman.
Ray Glazier, Moundman.
James S Ballard, Moundman.
Mayor Loveless, Axman.
George M P Dougall, Axman.
Mayor Loveless, Flagman.

Subscribed and sworn to before me this 18 day of October, 1907

SEAL

Andrew P Hanson
U.S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Su
solemnly swear that, in pursuance of a contract received from Edward H. Anderson
United States Surveyor General for Utah, bearing d
18th day of May, 1905, I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States
General for Utah, the Manual of Surveying Instructions, and the la
United States, surveyed all those parts or portions of the east boundary T. 10 S.
6 E.,

of the Salt Lake Ba
and meridian, in the State of Utah, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further sol
swear that all the corners of said survey have been established and perpetuated in strict accordan
the Manual of Surveying Instructions, and the special written instructions of the United States Su
General for Utah and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey.

Andrew P. Han
United States Deputy Su

Subscribed by said Andrew P. Hanson, and sworn to before me
this 2d day of January, 1908

SEAL

Thomas Hull
U.S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Feb. 26,

The foregoing field notes of the survey of the east boundary of Township No
South, Range No. 6 East of the Salt Lake Base and Meridian, Utah,

executed by Andrew P. Hanson
under his contract No. 289, dated May 18, 1905, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor G

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 o

United States Surveyor G

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BOOK A-348

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2.

FIELD NOTES

correcting
OF THE SURVEY OF THE

East Boundary

of

Township No. 10 South Range No. 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

der his Contract No. 289, dated May 18, 1905

rvey commenced October 31, 1908

rvey completed October 31, 1908

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same;
we will report the true distances to all notable objects, and the true lengths of all lines that we as
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the sur

.....

..... , *Chain*

..... , *Chain*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establish
of corners, according to the instructions given us, to the best of our skill and ability, in the surv

.....

..... , *Mound*

..... , *Mound*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co
and other duties, according to instructions given us, to the best of our skill and ability, in the surv

.....

..... , *Ax*

..... , *Ax*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

I, ..., do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability, i
survey of .....

..... , *Flag*

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

Correcting Survey of the East Boundary of T. 10 S. R 6 E

Chains	
	Survey commenced October 31, 1908 and executed with a W & L E Gurley light mountain transit with solar attachment. For further description of instrument and test of solar see field notes of Resurvey of E. Bdy. T 10 S. R 6 E. Book "E" under date of October 10-11, 1907 reference to which is hereby made.
	Having this day tested the solar on a meridian established by Polaris observation as described in field notes of correcting survey of the resurvey of E Bdy. T. 10 S. R. 6 E. Book and being confident the instrument is still in proper adjustment I omit further test at this time. —
	I begin at the cor. of Secs. 7-12-13 and 18 on E. Bdy. of T. 10 S. R. 6 E as reset by me this day and described in Book
	Thence I run
	North bet. secs. 7 and 12
40.00	The 1/4 sec. cor. as set and described by me Book "F"
79.52	The cor. of secs. 1-6-7 and 12 as set by me on original survey
80.00	Remove and reset cor. of secs 1-6-7 and 12 as described in field notes of original survey Book "F" thence
	A mountain mahogany tree 4 ins. diam. bears S. 58° 30' W. 7 lks. dist. marked T 10 S. R 6 E S 12 1/2 B.T.
	A mountain mahogany tree 4 ins. diam. bears S 20° 30' E. 14 lks. dist marked T. 10 S R 7 E S 7 1/2 B.T. — 3 distong markings on former bearing tree
	No other trees within limit
	Raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor. — Pits impracticable
	There is no change of topography on this line. —
	North bet. secs. 1 and 6
39.45	The 1/4 sec. cor. as set by me on original survey
40.00	Remove and reset the 1/4 sec. cor as described in Book F" thence

Correcting Survey of East Boundary of T. 10 S. R. 6 E.

Chains

A cedar tree 6 ins. diam. bears S. 4° 35' E. 40 lks dist. marked 1/4 S. 6 R T

A cedar tree 12 ins. diam. bears S 26° 25' W 67 lks. dist. marked 1/4 S 1 R T

I destroy markings on former bearing trees.—

There is no change in topography on this line.— October 31, 1908

Andrew P. Hanson

U.S. Deputy Surveyor

Volume

#

R0348

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by .....

....., United States Deputy Surveyor, to assist in running, measuring, and
cking the lines and corners described in the foregoing field notes of the survey of .....

.....

wing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in surveying all
e parts or portions of the .....

.....

.....

..... of the .....

..... meridian, ... of ....., which are represented
ie foregoing field notes as having been surveyed by him and under his direction; and that said survey
been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the
er monuments established, according to the instructions furnished by the United States Surveyor
eral for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

cribed and sworn to before me this .....
lay of ....., 190

SEAL

.....

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Surv
solemnly swear that, in pursuance of a contract received from Edward H. Anderson
United States Surveyor General for Utah, bearing da
18th day of May, 1905, I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States S
General for Utah, the Manual of Surveying Instructions, and the law
United States, surveyed all those parts or portions of the East Boundary of Townshi
10 South, Range 6 East

of the Salt Lake
Base and meridian, in the State of Utah, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further sol
swear that all the corners of said corrective survey have been established and perpetuated in strict accordanc
the Manual of Surveying Instructions, and the special written instructions of the United States Su
General for Utah and in the specific manner described in the field notes, an
the foregoing are the original field notes of such corrective survey.

Andrew P. Hanson
United States Deputy Surv

Subscribed by said Andrew P. Hanson, and sworn to before me
this 4th day of December, 1908

SEAL

U.S. Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, January 29,

The foregoing field notes of the corrective survey of the East Boundary of Township No.
10 South, Range No. 6 East of the Salt Lake Base and Meridian, Ut

executed by Andrew P. Hanson
under his contract No. 289, dated May 18, 1905, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
surveys they describe, are hereby approved.

United States Surveyor Ge

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 o

United States Surveyor G

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BOOK A-348

FIELD NOTES

OF THE RESURVEY OF THE

Subdivision Lines

of

Township No. 10 South Range No. 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P Hansen, United States Deputy Surveyor,

er his Contract No. 289, dated May 18, 1905

ey commenced October 13, 1907

ey completed October 14, 1907

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Ray Glazier, Chainman and Moundman.

James S.Ballard, Chainman and Moundman.

Major Loveless, Axman and Flagman.

George M.P.Dougall, Axman.

Volume

#

R0348

BOOK A-348

INDEX DIAGRAM.

Township....., *Range*.....

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Meanders Page..... .....

PRELIMINARY OATHS OF ASSISTANTS.

We, Ray Glazier and James S Ballard do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will le chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the ... we will report the true distances to all notable objects, and the true lengths of all lines that we ... measuring, to the best of our skill and ability, and in accordance with instructions given us, in the re-su... the subdivision lines of T. 10 S. Rs. 6 & 7 E. S. L. B. & M. Utah.

Ray Glazier, Cha...
James S Ballard, Cha...

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P Hanson
U.S. Deputy Survey...

SEAL

We, Ray Glazier and James S Ballard do solemnly swear that we will well and truly perform the duties of moundmen in the establi... of corners, according to the instructions given us, to the best of our skill and ability, in the re-su... the subdivision lines of T. 10 S. Rs. 6 & 7 E. S. L. B. & M. Utah.

Ray Glazier, Mou...
James S Ballard, Mou...

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P Ha...
U.S. Deputy Surveyor

SEAL

We, Mayor Loveless and George M P Dougall do solemnly swear that we will well and truly perform the duties of axmen in the establishment of ... and other duties, according to instructions given us, to the best of our skill and ability, in the re-su... the subdivision lines of T. 10 S. Rs. 6 & 7 E. S. L. B. & M. Utah.

Mayor Loveless
George M P Dougall

Subscribed and sworn to before me this 10 day of October, 1907

George M P Dougall
Andrew P Hanson
U.S. Deputy Sur...

SEAL

I, Mayor Loveless, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability re-survey of the subdivision lines of T. 10 S. R. 6 & 7 E. S. L. B. & ...

Mayor Loveless, Fl...

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P Han...
U.S. Deputy Sur...

SEAL

C-11

Subdivision Resurvey of T. 10 S. R. 6 E.

Survey commenced October 13, 1907 and executed with a W. & L. E. Gurley light mountain transit with solar attachment.-

Note: For a full description of instrument and complete test of adjustments see field notes of resurvey of east boundary of this township (book "E") under date of October 10-11, 1907 reference to which is hereby made; and being confident the instrument is still in satisfactory condition I omit the test at this time.-

Note:- Prior to the commencement of this survey I have determined by preliminary retracements that the corners from which I am instructed to initiate the subdivision survey of this township does not exist, therefor:-

I begin at the cor. of secs. 13-14-23 and 24 which is a sandstone firmly set, 10 x 6 x 4 ins. above ground and marked with 3 notches on S. and 1 notch on E. edges; mound of stone alongside

Thence I run, on resurvey line

North bet. secs. 13 and 14

Over mountainous land

Descending

3.30 Fence, bears north westerly and south easterly

3.90 Track, D & R. G. R R bears north westerly and south easterly

4.00 Fence, runs parallel with track

7.80 Soldier Creek 30 lks. wide flows north westerly Enter bottom of gulch and dense willow and thorn

12.60 Fence bears north westerly and south easterly Leave willow and thorn, and ascend

12.67 County Road from Utah Valley to Soldier Summit bears north-westerly and south easterly

12.90 Irrigating ditch 18 ins. wide flows westerly Begin abrupt ascent bears easterly and westerly

16.60 Top of slope. 90 ft. high; thence on steep W. slope Enter timber

30.10 Begin abrupt descent bears N.E. and S.W.

30.95 Spring branch 1 lk. wide flows S.W. in narrow ravine 60 ft. deep.

Subdivision, Resurvey of T. 10 S. R. 6 E.

Chains	
	Begin abrupt ascent in slide and break
39.90	Top of slide and break bears E and W. 450 ft. above ravine
40.00	The 1/4 sec. cor. of prior survey could not be found. Set a sandstone 24 x 18 x 7 ins. 18 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which Stump of original bearing tree, cedar 8 ins. diam. with part of marking plainly decernible, bears S 80° W 16 lks. dist. A pine stump 16 ins. diam. bears S. 13° 45' E. 21 lks. dist. marked 1/4 S. 13 B.T. Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. —
40.25	Begin gradual descent on N. slope
57.30	Road bears nearly E and W. in hollow draining W. 160 ft. below 1/4 sec. cor. Thence over broken W. slope
77.25	Begin descent bears E and W.
79.75	Head of spring in hollow. drains S 65° W. Ascend
80.00	A carefull search failed to disclose any trace of prior corner Set a sandstone 18 x 9 x 8 ins. 12 ins. in the ground for cor. of secs. 11-12-13 and 14 marked with 1 notch on E and 4 notches on S. edges from which A cedar tree 4 ins. diam. bears S 1° 30' E 24 lks. dist. marked T 10 S R 6 E S 13 B.T No other bearing object within limit: Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — Land, rough and broken Soil gravely and rocky 3rd and 4th rate Timber, cedar and pinion, scattering, small growth Mountainous land 80.00 chs. —
	October 13: At 9 h 47 m a.m, I m.t. I set off 39° 57' 21" N. on the lat. arc 7° 30' 30" S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 11-12-13 and 14; Thence I run East on a random line bet. secs. 12 and 13
40.20	A carefull search failed to disclose any trace

Subdivision. Resurvey of T. 10 S. R. 6 E.

Chains	
	of the 1/4 sec. cor.
	Set temp. 1/4 sec cor
80.44	Intersect east
	bdy. of Tp. 15 lks. S. of cor. of secs. 7-12-13 and 18 as heretofore described
	Thence I run
	S. 89° 54' W. on a true line bet. secs. 12 and 13
	Over mountainous land
	Ascending in dense brush and scattering timber
17.00	Top of ridge bears N. and S. 150 ft. above cor.
	Begin abrupt. descent
40.22	Set a gray sandstone 18×12×5 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1 1/2 ft. high N. of cor. Pits impracticable
43.50	Enter bottom of gulch. drains S.W.
45.00	Dry wash drains S. 65° W. 320 ft. below ridge.
70.50	Same wash drains N. 85° W
79.30	Same wash and head of spring drains S 75° W.
80.44	The cor. of secs. 11-12-13 and 14
	Land broken, rough
	Soil gravely and rocky 3rd and 4th rate.
	Timber cedar and pinion, scrubby growth, scattering — and dense oak and thorn brush
	Mountainous land 80.44 chs. —
	October 13: At this cor. I set off 7° 32' 30" S. on the decl. arc and at 11h 47m am, I mt observe the sun on the meridian; the resulting lat. is 39° 57' 21" N. —
	From the cor. of secs. 14-15-22 and 23 which is a stone firmly set marked and witnessed as described by the Surveyor general I run North bet. secs. 14 and 15
	Over mountainous land in dense oak brush
	Descending over rolling slope.
34.55	Soldiers Creek 30 lks. wide flows westerly in bottom of narrow canyon 325 ft. below cor.
	Enter bottom of canyon, Leave oak brush
35.30	Old R.R. grade bears easterly and westerly. Ascend
39.57	Wire fence bears S. 70° E. and N. 70° W.
39.80	Telegraph line bears S. 70° E. and N. 70° W.

Subdivision Resurvey of T 10 S R 6 E

Chains	
39.95	Top of rail road cut bears easterly and westerly
40.00	A stationary sandstone bowlder projecting 12 x 10 x 8 ins. from face of cut for 1/4 sec. cor. I mark 1/4 on W. face and raised a mound of stones 2 ft. base 1½ ft. high on top of bank 11 lks. S. of cor. - No trace of prior corner could be found
40.45	Centre of track D. & R.G.R.R. bears S. 70° E. and N. 70° W. in bottom of cut 12 ft. deep
41.00	Top of cut bears easterly and westerly
41.20	Fence bears S. 70° E. and N. 70° W.
41.95	County Road from Utah Valley to Soldier Summit bears easterly and westerly
	Begin gradual ascent bears easterly and westerly
46.00	Ascent becomes abrupt. bears easterly and westerly
57.50	Top of spur runs west 150 ft. high
	Descending gradually on broken slope
70.00	Bottom of draw 120 ft. below spur, draining W.
	Ascending to
80.00	Set a hard sandstone 24 x 14 x 6 ins. 18 ins. in mound of stone 4 ft. base on rock bottom for cor. of secs. 10-11-14 and 15 marked with 4 notches on S. and 2 notches on E. edges from which
	A cedar tree 14 ins. diam bears S 58° 56' E. 37 lks. dist. marked T. 10 S. R 6 E. S 14 B.T.
	No other bearing objects within limits. Raised a mound of stones 2 ft base 1½ ft. high W. of cor. -
	Pits impracticable. -
	A carefull search failed to disclose any trace of prior corner
	Land rolling, broken
	Soil gravely and rocky 3rd and 4th rate
	Timber. scrubby cedar and pinion scattering on last 34.00 chs.: Dense oak brush on 1st 34.55 chs. Mountainous land 80.00 chs. -
	October 13, 1907

October 14: At 7 44 a.m, l.m.t. I set off 39° 57' N. on the last arc 7° 50' S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 10-11-14 and 15: thence I run

East on a random line bet. secs. 11 and 14

Subdivision Resurvey of T. 10 S. R. 6 E.

Chains	
40.00	Set temp. 1/4 sec. cor. no trace of old corner could be found.
80.12	Intersect N. and S. lines at cor. of secs. 11-12-13 and 14
	Thence I runs
	West on a true line bet. secs. 11 and 14
	Over mountainous land
	Ascending abruptly in brush and scattering timber
5.00	Top of spur ridge runs S.W. 75 ft. above cor.
	Descending
9.05	Bottom of slope 90 ft. below spur bears N.E. and S.W.
	Enter bottom of gulch
18.90	Dry wash drains S.W.
26.25	Fence bears N. and S.; enter meadow
27.55	Tie Fork Creek 10 lks wide flows S. in bottom of gulch
	Leave meadow and begin ascent
31.85	Fence bears N. and S.
32.08	Wagon Road bears N. and S.
36.00	Ravine drains S 65° E.; and beginning of abrupt ascent
	Enter cedar and pinion timber bears N. and S.
40.06	Set a sandstone 18 x 10 x 5 ins. 12 ins. in the ground
	for 1/4 sec. cor. marked 1/4 on N. face, from which
	A pine tree 8 ins. diam. bears N. 11° 49' W. 66 lks.
	dist. marked 1/4 S. 11 R 3 T
	A cedar tree 10 ins. diam. bears S. 58° 8' E 31 lks.
	dist. marked 1/4 S 14 B T
54.00	Top of spur ridge runs S. 400 ft. above creek
	Begin descent on broken slope
80.12	The cor of secs. 10-11-14 and 15
	This cor stands 260 ft. below ridge
	Land broken
	Soil gravely and rocky 3rd and 4th rate
	Timber Cedar and pinion, scrubby growth
	Mountainous land 80.12 chs. —

October 14, 1907

General Description

For general description see field notes of subdivision of this township (book "H") —

Andrew P. Hanson
U.S. Dep. Surveyor

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PAGE

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by .....

....., United States Deputy Surveyor, to assist in running, measuring, and

...cing the lines and corners described in the foregoing field notes of the survey of .....

.....

...wing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "I", *Chainman.*

T. 10 S., R. 7 E. ....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

....., United States Deputy Surveyor, in surveying all

...ose parts or portions of the .....

.....

.....

..... of the .....

..... meridian, ... of ....., which are represented

...the foregoing field notes as having been surveyed by him and under his direction; and that said survey ...s been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ...ner monuments established, according to the instructions furnished by the United States Surveyor ...neral for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

...bscribed and sworn to before me this .....

day of ....., 190

SEAL

.....

.....

0-151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I. _____, United States Deputy Surve
solemnly swear that, in pursuance of a contract received from _____
United States Surveyor General for _____, bearing date
_____ day of _____, 190 , I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Su
General for _____, the Manual of Surveying Instructions, and the laws o
United States, surveyed all those parts or portions of _____

For final affidavit see book "I" Tp.10 S., R. 7 E.

_____ of the
_____ meridian, in the _____ of _____, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said survey have been established and perpetuated in strict accordance
the Manual of Surveying Instructions, and the special written instructions of the United States Su
General for _____ and in the specific manner described in the field notes, an
the foregoing are the original field notes of such survey.

_____
United States Deputy Su

Subscribed by said _____, and sworn to before me
this _____ day of _____, 190

SEAL

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26, 1

re

The foregoing field notes of the survey of the subdivision lines of Township No.10 South, Range No.6 East of the Salt Lake Base and Meridian, Utah,

executed by Andrew P.Hanson,
under his contract No. 289, dated May 18, 1905, having critically examined, and the necessary corrections and explanations made, the said field notes, an surveys they describe, are hereby approved.

_____
United States Surveyor Ge

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 off

_____
United States Surveyor Ge

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BOOK A-348

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FIELD NOTES

Correcting

OF THE SURVEY OF THE

Subdivision Lines

of

Township No. 10 South Range No. 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hanson, United States Deputy Surveyor,

ler his Contract No. 259, dated May 18, 1905

vey commenced November 1, 1908

vey completed November 1, 1908

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

BOOK A-348

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BOOK A-348

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will le
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the saw
we will report the true distances to all notable objects, and the true lengths of all lines that we
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the s

..... Cha

..... Cha

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the estab
of corners, according to the instructions given us, to the best of our skill and ability, in the s

..... Mou

..... Mou

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment o
and other duties, according to instructions given us, to the best of our skill and ability, in the s

Subscribed and sworn to before me this .....
day of , 190

SEAL

I, ..., do solemnly swear that I will well a
perform the duties of flagman according to instructions given me, to the best of my skill and abili
survey of .....

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

Correcting Survey of Subdivision Lines, T 10 S R 6 E

Survey commenced November 1, 1908 and executed with a W. & L. E. Gurley light mountain transit with solar attachment. —
For further description of instrument and test of solar see field notes of Resurvey of E. Bdy T. 10 S. R. 6 E. Book "E", under date of October 10-11-1907 reference to which is hereby made. —
Having tested the solar October 31. 1908 on a meridian established by Polaris observation, and found it correct, as described in field notes of correcting survey of the Resurvey of E. bdy T. 10 S. R. 6 E. Book and being confident it is still in satisfactory adjustment I consider further test at this time unnecessary. —
November 1, 1908: At 9h 2m a m 8h 44m 7. m. 7. I set off 39° 58' N. on the lat. arc 14° 25' S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 1-2-11 and 12, as heretofore described
Thence I run
East on a random line bet. secs. 1 and 12
40.00 A diligent search failed to discover the 1/4 sec. cor.
80,36 Intersect E. bdy of Tp. at cor of secs. 1-6 7 and 12 as heretofore described. —
Thence I run
West on a true line bet. secs. 1 and 12
40,18 Set a limestone 18 x 10 x 4 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face whence
A pine tree 4 ins. diam. bears N. 44° 30' E. 32 lks. dist. marked 1/4 S 1 B T
A cedar tree 6 ins. diam. bears S 49° 55' W. 50 lks. dist. marked 1/4 S 18 B T
80,36 The cor. of secs 1-2-11 and 12
There is no change in topography on this line. —

November 1, 1908
Andrew P Hanson
U S Deputy Sur.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ..... United States Deputy Surveyor, to assist in running, measuring, and ing the lines and corners described in the foregoing field notes of the survey of .....

ing the respective capacities in which they acted:

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ..... United States Deputy Surveyor, in surveying all e parts or portions of the ..... of the ..... meridian, ... of ....., which are represented he foregoing field notes as having been surveyed by him and under his direction; and that said survey been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ier monuments established, according to the instructions furnished by the United States Surveyor eral for .....

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

scribed and sworn to before me this ..... day of ....., 190

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P.Hanson, United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from Edward H.Anderson
United States Surveyor General for Utah, bearing date
18th day of May, 1905, I have well, faithfully, and truly, in a
proper person, and in strict conformity with the instructions furnished by the United States Su
General for Utah, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of the corrective survey of the
subdivision of Township No.10 South, Range No. 6 East
of the Salt Lake
Base and meridian, in the State of Utah, which are represented
foregoing field notes as having been surveyed by me, and under my direction; and I do further sol
swear that all the corners of said corrective survey have been established and perpetuated in strict accordan
the Manual of Surveying Instructions, and the special written instructions of the United States Su
General for Utah and in the specific manner described in the field notes, an
the foregoing are the original field notes of such corrective survey.

Andrew P.Han
United States Deputy Su

Subscribed by said Andrew P.Hanson, and sworn to before me
this 4th day of December, 1908.

SEAL

U.S.Surveyor-General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City Utah, January 29,

The foregoing field notes of the corrective survey of the subdivisional lines of Townsl
No.10 South, Range No. 6 East of the Salt Lake Base and Meridian,
executed by Andrew P.Hanson
under his contract No. 289, dated May 18, 1905, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
surveys they describe, are hereby approved.

United State Surveyor G

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 o

United States Surveyor

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BOOK A-348

FIELD NOTES

OF THE SURVEY OF THE

Subdivision Lines

of

Township No 10 South Range No 6 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P Hanson, United States Deputy Surveyor,

der his Contract No. 289, dated May 18, 1905

vey commenced October 14, 1907

vey completed October 15, 1907

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high 4-40-32 ✓

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Ray Glazier. Chainman and Moundman.

James S.Ballard, Chainman and Moundman.

Major Loveless, Axman and Flagman.

George M.P.Dougall, Axman.

Volume

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R0348

BOOK A-348

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Meanders Page..... .....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Ray Glazier and James S Ballard do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will l chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the san we will report the true distances to all notable objects, and the true lengths of all lines that we measuring, to the best of our skill and ability, and in accordance with instructions given us, in the s subdivision lines in T. 10 S. Rs. 6¾ 7 E. S. L. B. & M. Utah.

Ray Glazier, Cha
James S Ballard

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P. Hans
U.S. Deputy Surv

SEAL

WE, Ray Glazier and James S Ballard do solemnly swear that we will well and truly perform the duties of moundmen in the estab of corners, according to the instructions given us, to the best of our skill and ability, in the s subdivision lines in T. 10 S. Rs. 6¾ 7 E. S. L. B. & M. Utah

Ray Glazier, Mo
James S Ballard

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P. Hans
U.S. Deputy Surv

SEAL

WE, Mayor Loveless and George W. Dougall do solemnly swear that we will well and truly perform the duties of axmen in the establishment o and other duties, according to instructions given us, to the best of our skill and ability, in the subdivision lines in T. 10 S. Rs. 6¾ 7 E. S. L. B. & M. Utah

Mayor Loveless
George W. Dougall

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P. Hans
U.S. Deputy Surv

SEAL

I, Mayor Loveless, do solemnly swear that I will well perform the duties of flagman according to instructions given me, to the best of my skill and abil survey of subdivision lines in T. 10 S. Rs. 6¾ 7 E. S. L. B. &

Mayor Loveless

Subscribed and sworn to before me this 10 day of October, 1907

Andrew P. Hans
U.S. Deputy Surv

SEAL

Subdivision of T. 10 S. R. 6 E.

Chains	
	Survey commenced October 14, 1907 and executed with a W & L E Gurley light mountain transit with solar attachment. —
	Note: For a full description of instrument and complete test of adjustments see field notes of resurvey of east boundary of this township (book "E") under date of October 10-11, 1907, reference to which is hereby made; and being confident the instrument is still in satisfactory condition I omit the test at this time. —
	October 14: At 9h 46m a.m. I set off 39° 5' W. on the bal. are 7° 53' S. on the decl. are and determine a meridian with the solar at the cor. of secs. 11-12-13 and 14 as heretofore described
	Thence Orun
	N. 0° 1' W. bet. secs. 11 and 12
	Over mountainous land
	Ascending abruptly, through scattering timber and brush
4.25	Top of spur ridge runs S.W. 80 ft. above cor.
	Descending
8.60	Dry wash in bottom of gulch. drains S.W. 60 ft. below spur. —
	Ascending to
24.00	Top of slope and spur running S.W. 250 ft. above gulch. — Thence along broken W. slope
38.50	Begin descent on N.W. slope
40.00	Set a sandstone 18 x 8 x 8 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which
	A cedar tree 4 ins. diam. bears S. 62° 35' W. 7 lks. dist. marked 1/4 S 11 B T
	No other trees within limit. -
	Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
44.00	Descent becomes abrupt
64.50	Bottom of gulch and dry wash draining S.W. 325 ft. below spur
	Begin abrupt ascent in breaks
76.30	Top of spur ridge bears N.E. and S.W. 350 ft. above gulch. -
	Thence on gradual descent to-

BOOK A-348

Subdivision of T.10 S.R.6 E.

Chains	
80.00	Set a sandstone 16 1-8 1-6 ins 11 ins. in the ground for cor. of secs. 1-2-11 and 12 marked with 5 notches on S. and 1 notch on E. edges from which A pinion tree 4 ins. diam bears S.46°30' E. 45 lks. dist. marked T10SR6E S12 B.T. A pinion tree 4 ins. diam. bears N. 24°5' E. 94 lks dist. marked T10SR6E S1 BT A pinion tree 4 ins. diam bears N.12°15' W. 18 lks. dist. marked T10SR6E.S2 BT A mountain mahogany tree 5 ins. diam bears S 29°0' W. 76 lks dist. marked T10SR6E S11 BT. Land very broken soil gravely and rocky 3rd and 4th rate Timber, cedar, pinion and mahogany of scrubby growth and mainly scattering Dense oak brush undergrowth Mountainous land 80.00 chs. — October 14: The weather being cloudy I could obtain no observation on the sun while on the meridian. —
	N. 89°54' E. on a random line bet. secs. 1 and 12
40.00	Set temp. 1/4 sec cor.
80.36	Intersect E. bdy. of Tp. at cor. of secs. 1-6-7 and 12 as heretofore described Thence I run S 89°54' W on a true line bet. secs. 1 and 12 Over mountainous land Descending in timber and brush
12.50	Bottom of gulch and dry wash drains S.W. 110. ft. below cor. Ascending
20.40	Top of spur runs S.W. 90. ft. high Thence descending
25.65	Bottom of gulch and dry wash. draining S.W. Ascending
39.50	Top of spur ridge runs S.W. 200 ft. high Begin descent
40.18	Set a limestone 16×9×6 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, from which

Subdivision of T. 10 S. R. 26 E.

Chains	A pine tree 6 ins. diam. bears N. 69° 45' W. 9 lks. dist. marked 1/4 S. 1. B T
	A cedar tree 16 ins. diam. bears S. 22° 40' E. 27 lks. dist. marked 1/4 S 1/2 B T
65.70	Bottom of gulch and dry wash draining S.W. 220 ft. below ridge
	Ascending
77.00	Top of slope bears N.E. and S.W. 160 ft. above gulch
80.36	The cor. of secs. 1-2-11 and 12
	Land very broken
	Soil gravely and rocky 3rd rate
	Timber cedar, pinion, mountain mahogany and pine of small size mainly and scattering
	Dense oak undergrowth
	Mountainous land 80.36 chs. —
	N. 0° 1' W. bet. secs. 1 and 2
	Over mountainous land, in dense oak brush
	Descending gradually in scattering timber on N.W. slope
19.96	Bottom of gulch and dry wash, drains S. 00° W. 150 ft. below cor.
	Begin abrupt ascent
38.00	Top of spur ridge runs W. 350 ft. above gulch
	Begin abrupt descent
40.00	Set a sandstone 18 x 7 x 6 ins. 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1 1/2 ft. high W. of cor.
	Pits impracticable. —
	Land very broken
	Soil gravely and rocky 3rd rate
	Timber, cedar, pinion, pine and mountain mahogany of small size, mainly and scattering
	Dense oak undergrowth —
	Mountainous land 40.00
	N. bdy of Tp. not being run it is impractical to extend this line further
	October 14, 1907
	October 15: at 7h 46m a m, I.m.T. I set off 39° 57' W. on the lat. arc, 8° 12' S on the decl. arc and determined a meridian with the solar at the cor. of secs. 10-11

Subdivision of T. 10 S. R. 6 E.

Chains	
	14 and 15 as heretofore described: thence O runs
	N 0°15' W bet. secs. 10 and 11
	Over mountainous land
	Ascending rocky slope in scattering timber.
12.50	Top of spur ridge runs W. 190 ft. above cor.
16.00	Descending to
26.20	Bottom of ravine and dry wash draining S 60° W.
	100 ft. deep. — Begin ascent
40.00	Set a sandstone 18×10×4 ins. 12 ins. in the ground
	for 1/4 sec. cor. marked 1/4 on W. face from which
	A cedar tree 5 ins. diam. bears N. 72°05' E. 33 lks.
	dist. marked 1/4 S 11 B.T.
	A cedar tree 6 ins. diam. bears N. 72°10' W. 29 lks.
	dist marked 1/4 S 10 B T
69.00	Top of ridge bears N.W. and S.E. 325 ft. above ravine
	Begin abrupt descent
79.60	Bottom of gulch draining N. E. - 350 ft. below top
	of ridge. —
80.00	Set a sandstone 16×8×8 ins. 11 ins. in the ground
	for cor. of secs. 2-3-10 and 11 marked with 5 notches
	on S and 2 notches on E. edges. from which
	A cedar tree 12 ins. diam. bears S 18°0' E. 49 lks. dist-
	marked T. 10 S R 6 E S 11 B T
	A cedar tree 8 ins. diam. bears S 71°10' W 108 lks.
	dist. marked T 10 S R 6 E S 10 B T
	No other trees within limit: Raised a mound of
	stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable
	Land very broken
	Soil gravelly and rocky 3rd rate
	Timber, cedar, pinion, pine and mountain
	mahogany, of small size mainly. —
	Mountainous land 80.00 chs. —
	East on a random line bet. secs. 2 and 11
40.00	Set temp. 1/4 sec. cor.
79.96	Intersect N. and S. line at cor. of secs. 1-2-11 and 12
	Thence O runs
	West on a true line bet. secs. 2 and 11
	Over mountainous land
	Descending in timber and brush
25.00	Spring branch 2 lks wide flows S. 60° W. in mouth
	of gulch 500 ft. below cor. -

Subdivision of T. 10 S. R. 6 E.

Chains	
	Ascending
26.50	Top of spur 20 ft. high runs S.W.
	Descending gradually
28.90	Fence bears N. and S.; enter Lucerne field
33.30	Pine Fork Creek 1.2 lks. wide swift current, flows S. in bottom of open gulch
	Begin gradual ascent. - Leave field bears N. and S.
34.37	Michael Barclay's House bears S. 55 lks.
35.35	Fence bears N. and S
35.50	Road bears N. and S.
36.85	Enter east end of Barclay's Barn
37.50	Leave north side of barn
39.98	Set a sandstone 16 x 11 x 10 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable
44.45	N. side of old deserted cabin
45.50	Wood road bears N. 60° W. and S. 60° E.
47.00	Bottom of gulch drains S. 60° E.
50.00	Begin abrupt ascent on N. E. slope
72.00	Top of spur ridge runs N. 500 ft. above gulch
	Descending on N. W. slope to
79.00	Enter bottom of gulch bears N 60° E and S. 60° W
79.96	The cor. of secs. 2-3-10 and 11
	Land very broken
	Soil gravelly and rocky 3rd rate
	Timber, cedar, pinion, pine and mahogany
	Dense oak brush undergrowth
	Mountainous land 79.96 chs. -
	It is impracticable to extend this survey further owing to high precipitous mountains hence I discontinue here. -
	October 15, 1907

General Description

The portion of this township covered by the present survey is all mountainous land, very rough and broken and covered in most parts with a dense growth of brush, and also timber of the cedar, pine and pinion varieties. Excepting narrow strips along the creeks, the soil is not fertile but composed mainly of

Subdivision of T 10 S R 6 E

borrow clays and gravels which furnish indifferent summer feature. — In the winter the whole region is covered with early and deep snows. —

There are one settler, Michael Barclay in secs. 2 and 11, he is applicant for survey of this Tp., and has a few acres under cultivation; value of improvements about 1000 dollars. — William T Williams the other applicant for survey is located beyond the boundaries of this Tp. and would be in T. 9 S. R. 6 E. of present surveys extended. There are a few small streams within the township. —

The land is probably all underlaid with valuable coal; asphalt deposits, as well as valuable ledges of lithographic stone are also found, both in the surveyed and unsurveyed part of the township. Finding no outcrops I return none as coal lands. —

Andrew O Lawson
U S Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and arking the lines and corners described in the foregoing field notes of the survey of _____

_____

owing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "J", *Chainman.*

T. 10 S., R. 7 E., *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all se parts or portions of the _____

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented he foregoing field notes as having been surveyed by him and under his direction; and that said survey been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ner monuments established, according to the instructions furnished by the United States Surveyor ieral for _____

_____ *Chainman.*

_____, *Chainman.*

_____ *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____ *Axman.*

_____, *Flagman.*

_____

scribed and sworn to before me this _____

day of _____, 190

SEAL

_____

_____

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BOOK A-348

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surve
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing dat
..... day of ....., 190 , I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States S
General for ....., the Manual of Surveying Instructions, and the law
United States, surveyed all those parts or portions of .....

For final affidavits see book "J" T. 10 S., R. 7 E.

..... of the .....
..... meridian, in the ..... of ....., which are represente
foregoing field notes as having been surveyed by me, and under my direction; and I do further s
swear that all the corners of said survey have been established and perpetuated in strict accordan
the Manual of Surveying Instructions, and the special written instructions of the United States S
General for ..... and in the specific manner described in the field notes, a
the foregoing are the original field notes of such survey.

United States Deputy S

Subscribed by said ..... and sworn to before me
this ..... day of ....., 190

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, Feb.26,

The foregoing field notes of the survey of the Subdivisional lines of Town
No.10 South, Range No.6 East of the Salt Lake Base and Meridian.

executed by Andrew P. Hanson
under his contract No. 289, dated May 18, 1905, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor G

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

United States Surveyor G

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BOOK A-348

FILED
JAN 2 1908

FIELD NOTES

RE
OF THE SURVEY OF THE

Subdivision Lines

of

Township No. 10 South Range No. 7 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansen, United States Deputy Surveyor,

der his Contract No. 259, dated May 18, 1905

rvey commenced October 16, 1907

rvey completed October 16, 1907

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high 2-04-31 ✓
low 1-35-42 ✓

3 39-73

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Roy Glazier, Chainman and Moundman.

James S.Ballard, Chainman and Moundman.

George M.P.Dougall, Axman,

Major Loveless, Axman and Flagman.

For preliminary affidavits see book "G" T.10 S., R. 6 E.

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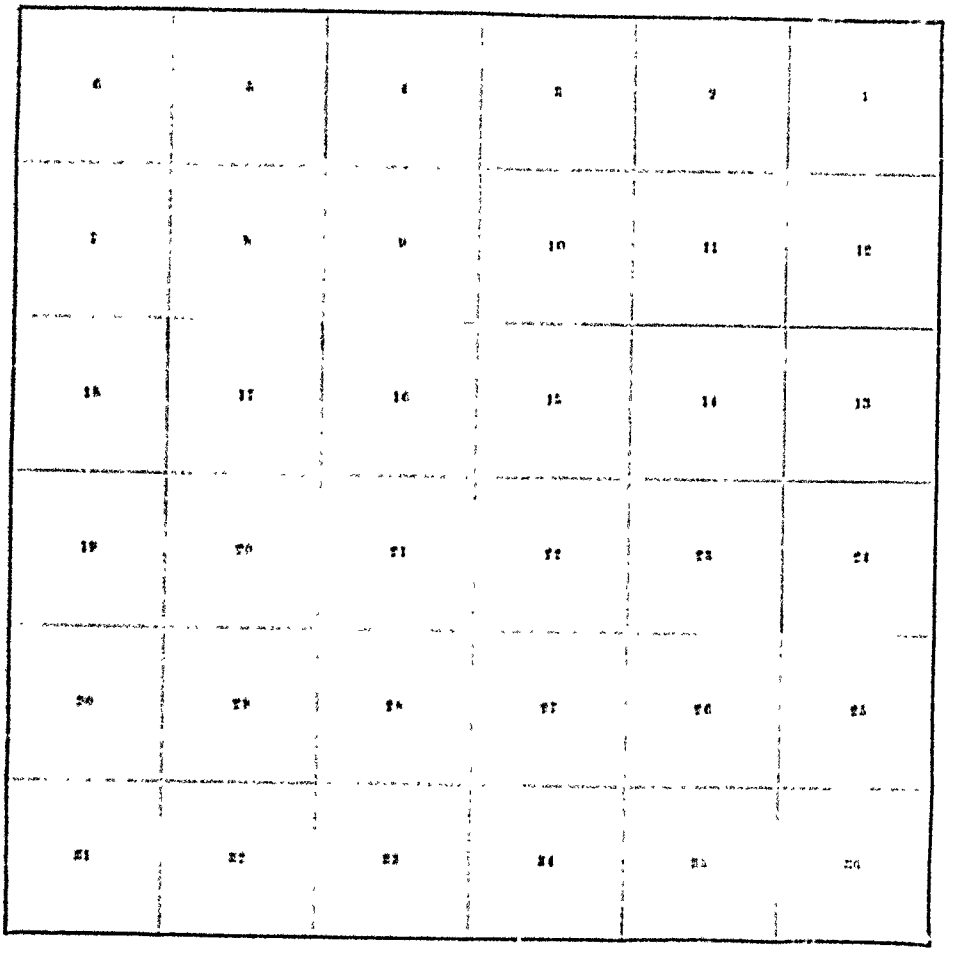
BOOK A-348

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

Meanders Page.....

6-[illegible]

Cook A-343

PRELIMINARY OATHS OF ASSISTANTS.

We, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will le
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the sam
we will report the true distances to all notable objects, and the true lengths of all lines that we
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su

.....

....., Ch

....., Ch

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

We, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establ
of corners, according to the instructions given us, to the best of our skill and ability, in the su

.....

....., Mou

....., Mou

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

We, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the su

.....

.....

.....

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

I, ..., do solemnly swear that I will well a
perform the duties of flagman according to instructions given me, to the best of my skill and ability
survey of .....

....., Fl

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

.....

.....

Subdivision Resurvey of T. 10 S. R. 7 E.

Chains	
	Survey commenced October 16, 1907 and executed with a W & L E Gurley light mountain transit with solar attachment. —
	Note:- For a full description of instrument and complete test of adjustments see field notes of resurvey of east boundary of T. 10 S. R. 6 E. (book "E") under date of October 10-11, 1907 reference to which is hereby made; and being confident, the instrument is still in satisfactory condition I omit the test at this time. —
	Note: Prior to the commencement of this survey I have by preliminary retracements determined that the corners from which I am instructed to initiate the subdivision survey of this township does not exist therefor: -
	I Begin at the cor. of secs. 19-24-25 and 30 on W. bdy. of Tp. 10 S. R. 7 E. as set by me October 15, 1907 thence I run East on a random retracement line bet. secs. 19 and 30
+0.19	The ¼ sec. cor bears N. 29 lks. answering to a true course of S. 89° 35' W.
80.11	The cor. of secs. 19-20-29 and 30 bears N. 29 lks. answering to a true course West for the last ½ mile
	The cor. of secs. 19-20-29 and 30 as found, being a sandstone 14 x 8 x 6 ins. lying flat with top face even with the surface of the ground, I examine it carefully and find the proper markings faintly discernible and identify it as the true and original corner, which I reset 10 ins in the ground marked with 2 notches on S and 6 notches on E. edges raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. -
	Thence I run
	West on a true line bet. secs. 19 and 30
	Over cultivated field in bottom of open gulch
25.94	Ditch 2 ft. wide flows S. 73° 20' W.
26.00	Fence bears S 73° 20' W and N 73° 20' E
	Leave cultivated field: course parallel with fence
27.10	County Road from Utah Valley to Soldier Summit runs parallel with fence
30.75	Track of D & R. G. R. R bears N 73° 20' E and S 73° 20' W
31.66	second track of same road runs parallel to first
33.30	Telegraph line bears parallel to tracks. -

Subdivision, Resurvey of T.10 S.R.7 E.

chains	
39.92	The 1/4 sec. cor. as found; a sandstone 14×12×10 ins. set 3 ins. in the ground with scattered mound, and marking faintly decernible.—
	I reset stone 10 ins. in the ground marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable: Thence I run S.89°35'W. bet. W.½ of secs 19 and 30
10.70	Foot of mountain bears N.E. and S.W., Ascend
12.19	Begin abrupt ascent in breaks; enter timber
25.00	Top of spur runs S. 225 ft. above gulch
	Descending
28.80	Bottom of ravine drains S. 150 ft. deep
	Ascending to
40.19	The cor. of secs. 19-24-25 and 30
	This cor stands 200 ft. above ravine
	Land sloping gulch and steep break
	Soil 1st and 4th rate
	Timber, cedar and pine on last 28 chs.
	Mountainous land 29.49 chs.

	From the cor. of secs. 19-20-29 and 30 I run S.89°43'E. on a retracement line bet. secs. 20 and 29
39.90	No trace of the 1/4 sec. cor. could be found
79.54	Intersect N and S. line 3.10 chs N. of cor. of secs. 20-21-28 and 29 which is a stone firmly set marked and witnessed as described by the surveyor general.—
	The falling answers to a return course of N 87°29'W. thence I run
	N 87°29'W on a true line bet. secs. 20 and 29
	Over mountainous land
	Descending steep broken slope in dense undergrowth
20.24	Stream 6 lks wide flows N. in bottom of gulch 400 ft below cor.
23.00	Begin abrupt ascent
26.50	Top of spur runs N. 100 ft. high
	Descending to
32.29	Fence bears N. and S
30.50	Enter bottom of hollow bears N. and S.
33.14	Stream 7 lks. wide flows N.
34.50	Begin abrupt ascent

Subdivision Resurvey of T. 10 S. R 7 E.

Chains	
38.70	Top of spur. runs N. 130 ft. high
	Descending
39.87	Set a sandstone 14 x 10 x 9 ins. 9 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable
	No trace of 1/4 cor. of prior survey could be found
60.56	Fence bears N. 70° E. and S. 70° W.
61.41	Soldier Creek 17 lks. wide flows S 70° W in bottom of open gulch. — Leave mountainous land
62.30	Enter nearly level and cultivated land parallel with creek
79.62	The cor. of secs. 19-20-29 and 30
61.41	Land broken, and nearly level
18.21	soil 1st to 3rd rate
	Timber Aspen and pine of small size, scattering
	Dense oak and thorn undergrowth
	Mountainous land 61.41 chs. —
	October 16: The weather being cloudy during the morn hours I could obtain no observation on the sun while on the meridian. —

Wishing to further demonstrate the accuracy of position of cor. of secs. 19-20-29 and 30 which in the past has been the subject of much dispute I run

South on a retracement line bet. secs. 29 and 30

40.00	Found a trace of the ¼ sec. cor. of prior survey which I reestablished as follows. —
	Set a limestone 14 x 8 x 4 ins. 9 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which a maple tree 4 ins. diam. bears West 18 lks. dist. marked 1/4 S. 30 B T. —
	No other trees within limit: Raised a mound of stones 2 ft. base 1½ ft. high W. of cor. —
	Pits impracticable.
	Thence E run
	North - bet. secs. 29 and 30
	Descending on Mountainous land in dense brush and brake, and scrubby timber

Subdivision Resurvey of T.10 S.R.7 E.

Chains	
2139	Fence bears E and W. Leave brush and timber
3522	Soldier Creek 10 lks wide flows S 70° W in bottom of open gulch at foot of slope 350 ft below Cor.
3900	Enter cultivated field, parallel with creek
4000	The cor. of secs. 19-20-29 and 30
	Land broken
	Soil gravelly 1st to 3rd rate
	Timber aspen and maple of small size and dense growth — Oak brush undergrowth —
	Monolithinous land 39.00 chs. —

October 16. At 2h 45m p.m. tmt. ☉ set off 39°55' on the lat. arc 8°41'30" S on the decl. arc and determine a meridian with the solar at the cor. of secs. 19-20-29 and 30 and having made a prior retracement

Drive

North bet. secs. 19 and 20

Over nearly level and cultivated land

[illegible] Ditch 2 ft wide drains S.W.

[illegible] Fence bears N 70° E and S 70° W

Leave cultivated field

[illegible] County Road from Utah Valley to Soldier Summit bears S 70° W and N 70 E.

[illegible] Track of D & R.G.R.R. bears N 70° E and S 70° W.

[illegible] Second track of same road, parallel to first

[illegible] Telegraph line parallel with tracks

Begin gradual ascent

[illegible] Spring Branch 1 lk wide flows S 20° W from mouth of ravine at foot of bocah bears N.E. and S.W.

Begin abrupt ascent along ravine. Enter timber

[illegible] Ravine drains S 20° E.

[illegible] Set a limestone 18 x 10 x 6 ins 12 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face, from which

A pine tree 14 ins. diam. bears S 79° 06' W the dist. marked [illegible] The trace of the cor. of prior survey could be found

A cedar tree 12 ins. diam. bears S 79° 29' W [illegible] the dist. marked [illegible]

[illegible] Top of cedar bears N.E. and S.W. 600 ft above gulch

Descending [illegible]

[illegible] Set a limestone [illegible] ins. 10 ins. in the ground for cor. of secs. 19-20-29 and 30 marked with

Subdivision. Resurvey of T.10 S.R.7 E.

Chains	3 notches on S. and 5 notches on E. edges: raised a mound of stones 2 ft. base 1½ ft. high W. of cor. Pits impracticable. — This cor. stands 200 ft. below top of ridge Land very broken Soil 1st to 4th rate Timber, cedar, pine and pinion on S. side of ridge dense growth and large. — Dense oak brush on N. side of ridge Mountainous land 63.90 chs No trace of cor of prior survey could be found. October 16. 1907

General Description

For general description see field notes of survey of subdivision line of T 10 S R 7 E (Book "J") reference to which is hereby made

Andrew P Hanson
U.S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P. Hanson, United States Deputy Surveyor, to assist in running, measuring, and king the lines and corners described in the foregoing field notes of the survey of Subdivision lines in T. 10 S. Rs. 6 & 7 E. S.L.B.&M. Utah ring the respective capacities in which they acted:

Ray Glazier, Chainman.
James S. Ballard, Chainman.
Ray Glazier, Moundman.
James S. Ballard, Moundman.
Mayor Loveless, Axman.
George M. McDougall, Axman.
Mayor Loveless, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P. Hanson, United States Deputy Surveyor, in surveying all parts or portions of the subdivision lines in T. 10 S. Rs. 6 and 7 E.

of the Salt Lake Base and meridian, State of Utah, which are represented foregoing field notes as having been surveyed by him and under his direction; and that said survey een in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the r monuments established, according to the instructions furnished by the United States Surveyor ral for Utah

Ray Glazier, Chainman.
James S. Ballard, Chainman.
Ray Glazier, Moundman.
James S. Ballard, Moundman.
Mayor Loveless, Axman.
George M. McDougall, Axman.
Mayor Loveless, Flagman.

ribed and sworn to before me this 16 ay of October, 1907

SEAL

Andrew P. Hanson
U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of 18th day of May, 1905, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of resurvey of subdivision lines in Township No. 10 S., Ranges 6 and 7 East of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said resurvey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such resurvey.

Andrew P. Hanson
United States Deputy Surveyor

Subscribed by said Andrew P. Hanson, and sworn to before me this 24th day of January, 1906

Thomas Kell
U.S. Surveyor-General for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26, 19

The foregoing field notes of the resurvey of subdivision lines in Township No. 10 South, Range No. 7 East of the Salt Lake Base and Meridian, Utah

executed by Andrew P. Hanson under Contract No. 285, dated May 18, 1905, having been carefully examined, and the necessary corrections and explanations made, the said field notes, and the survey they describe, are hereby approved.

Thomas Kell
United States Surveyor Gen

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.

United States Surveyor Gen

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4—679.

BOOK A-348

J.

FILED
JAN 2 1908

FIELD NOTES

OF THE SURVEY OF THE

Subdivision Lines

of

Township No. 10 South, Range No. 7 East

Of the Salt Lake Base and Meridian,

Utah

AS SURVEYED BY

Andrew P. Hansen, United States Deputy Surveyor,

er his Contract No. 289, dated May 18, 1906

ey commenced October 17, 1907

ey completed October 18, 1907

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Length 3.40.32

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Roy Glazier, Chainman and Roundman.

James S. Ballard Chainman and Roundman.

Major Loveless, Axman and Flagman.

George M.P. Dougall, Axman.

For preliminary affidavits see book "H" Tp. 16 S., R. 8 E.

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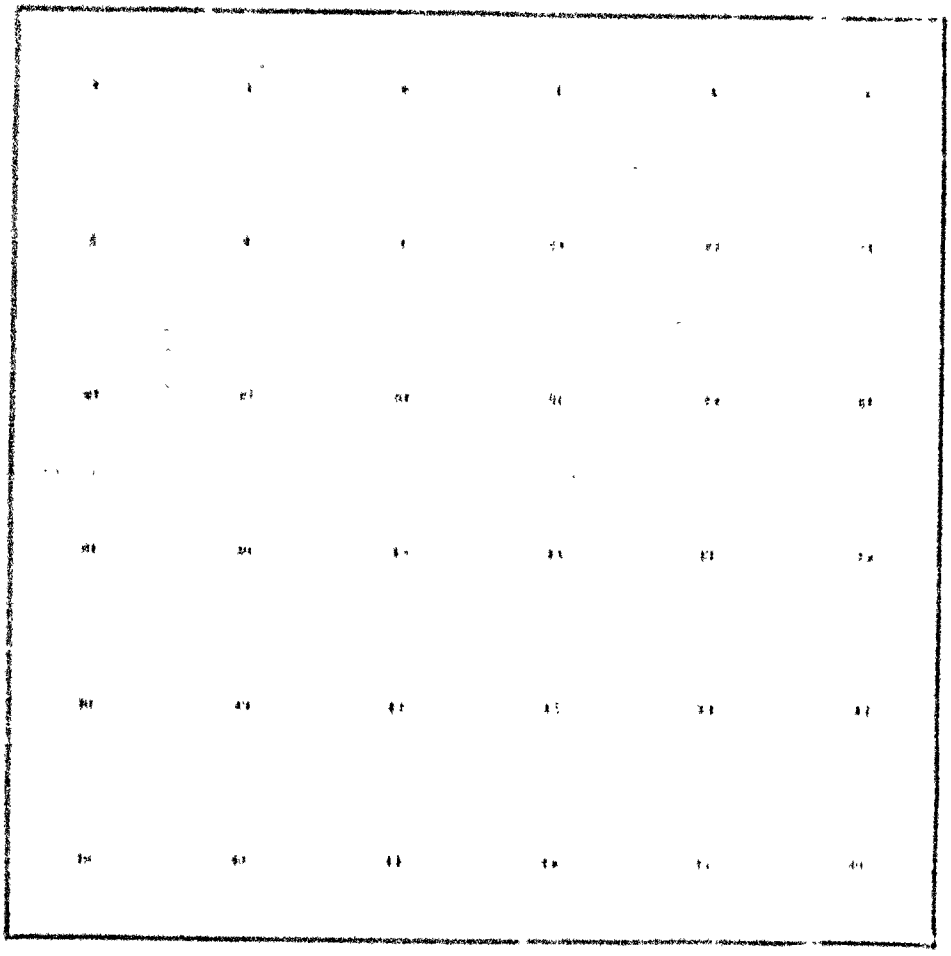
INDEX DIAGRAM.

Township . *Range*



Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

_____, *Chainman*

_____, *Chainman*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

We, _____ and _____
do solemnly swear that we will well and truly perform the duties of mounsdmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

_____, *Mounds*

_____, *Mounds*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

We, _____ and _____
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of cor and other duties, according to instructions given us, to the best of our skill and ability, in the survey

_____, *Axm*

_____, *Axm*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in
survey of _____

_____, *Flagm*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

Subdivision of T. 10 S. R. 7 E.

chains	
	Survey commenced October 17, 1907 and executed with a W & L.E. Gurley light mountain transit with solar attachment. —
	Note: For a full description of instrument and complete test of adjustments see field notes of resurvey of east boundary of T. 10 S. R. 6 E. (Book "E") under date of October 10-11, 1907 reference to which is hereby made; and being confident the instrument is still in satisfactory condition I omit the test at this time. —
	It being impractical to survey the eastern part of this township. I begin at the cor. of secs. 17-18 19 and 20 as heretofore described:
	Thence I run
	West on a random line bet. secs. 18 and 19
40.00	Set temp. 1/4 sec. cor.
80.22	Intersect
	W. bdy of Tp. 16 Mex. S. 0° 13' W of cor of secs. 13-18-19 and 24 as heretofore described
	Thence I run
	S. 89° 53' E on a true line bet. secs. 18 and 19
	Over mountainous land through dense brush
0.16	Fence bears N.W. and S.E. along top of ridge
	Begin gradual descent
4.30	Enter cultivated field of J. N. Ballard, bears N. and S
10.70	Leave cultivated field, bears N. and S. and begin ascent on N.W. slope, in dense oak brush
40.22	Set a Sandstone 12x12x5 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; raised a mound of stones 2 ft. base 1½ ft. high N. of cor. Pits impracticable. —
73.70	Top of spur runs W. 230 ft. above sec. cor.
	Descending N.E. slope
79.46	Bottom of hollow draining N. 100 ft. deep.
	Ascending
80.22	The cor. of secs. 17-18-19 and 20
	Land, broken, rolling
	Soil gravelly 2nd rate
	No timber. — Dense oak brush undergrowth
	Mountainous land 80.22 chs.

Subdivision of T.10 S.R.7 E.

chains	October 17: At this cor. I set off 9°01' S. on this decl. arc and at 11h 46m a.m., l.m.t. observed the sun on the meridian; the resulting lat. is 39°56'30" N. longitude at this point 111°13'08" W.
	N 0°03' W. bet. secs. 17 and 18
	Over mountainous land
	Descending in dense undergrowth
14.60	Bottom of hollow drains W. 140 ft. below cor.
	Ascending to
17.60	Top of spur ridge runs W. 50 ft. high
	Descending
29.03	East branch of Indian Creek 7 lks. wide flows W. in gulch 150 ft. below spur
30.85	Road bears E. and W.
31.00	Begin abrupt ascent
38.50	Top of spur runs S.E. 90 ft. above creek
	Descending
40.00	Set a sandstone 16×8×6 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; raised a mound of stones 2 ft. base 1½ ft. high W. of cor.
	Pits impracticable
41.90	Dry wash drains S.E. in hollow 40 ft. deep
	Enter timber and begin ascent, bears N.W. and S.E.
75.50	Top of ridge bears N. 20° W. and S. 20° E. 350 ft. above Wash.—
	Thence along steep N. slope to
80.00	Set a limestone 18×12×4 ins. 12 ins. in the ground for cor. of secs. 7-8-17 and 18 marked with 4 notches on S. and 5 notches on E. edges from which
	A cedar tree 6 ins. diam. bears N. 59°20' E. 58 lks. dist. marked T.10 S.R.7 E. S.8 B.T.
	A pinion tree 12 ins. diam. bears S. 36°41' E. 76 lks. dist. marked T.10 S.R.7 E. S.17 B.T.
	No other trees within limit: Raised a mound of stones 2 ft. base 1½ ft. high W. of cor.
	Land very broken
	Soil gravely and rocky 2nd to 4th rate
	Timber cedar and pinion on last 36.10 chs.
	Dense, oak and thorn undergrowth
	Mountainous land 80.00 chs.—

Subdivision of T. 10 S. R. 7 E.

Chains	
	N. 89° 53' W. on a random line bet. secs. 7 and 18
40.00	Set temp. 1/4 sec. cor.
80.10	Intersect west boundary
	of Tp. 17 lks. N. of cor. of secs. 7-12-13 and 18 as heretofore described.
	Thence I run
	East on a true line bet. secs. 7 and 18
	Over mountainous land
	In bottom of gulch, through dense brush
1.50	Old road runs N. and S. in gulch draining S
3.50	Begin ascent, and enter timber bears N. and S.
21.00	Top of ridge bears N. and S. 300 ft. above gulch
	Descending to
40.10	Set a limestone 16×10×5 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, from which
	A cedar tree 5 ins. diam. bears N. 9° 20' E. 19 lks. dist. marked 1/4 S 7 B T
	A cedar tree 6 ins. diam. bears S. 12° 30' E. 30 lks. dist. marked 1/4 S 18 B T
40.85	Wood road bears N. E. and S. W.
41.54	Indian Creek 8 lks wide flows S. 30° W. in bottom of narrow canyon 450 ft. below top of ridge
	Begin abrupt ascent
61.00	Top of slope bears N. E and S W. 325 ft. above creek
	Thence on steep N. slope
78.80	Top of spur runs N.: Descending to
80.10	The cor. of secs. 7-8-17 and 18
	Land very broken
	Soil gravely and rocky 3rd and 4th rate
	Timber, cedar and pinion: Dense oak brush undergrowth
	Mountainous land 80.10 chs. —
	October 17, 1907

October 18: At 7h 45m a.m. I.m.T. I set off 39° 57' 30" N. on the lat. arc 9° 18' 30" S. on the decl. arc and determine a meridian with the solar at the cor. of secs. 7-8-17 and 18, thence I run N. 0° 03' W. bet. secs. 7 and 8

Over mountainous land

Decending abruptly

8.85	Bottom of gulch drains N. W. 225 ft. below cor

Subdivision of T. 10 S R. 7 E.

Chains	
	Ascending
16.75	Top of spur runs N. 65° W. 40 ft. high
	Descending
21.70	Indian Creek 10 lks wide flows S. 65° W in bottom of narrow canyon 160 ft. below spur
22.00	Old road bears N. 65° E. and S. 65° W.
23.00	Begin abrupt ascent, and enter heavy timber bears N.E. and S.W.
40.00	Set a shale stone 16 x 7 x 6 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face from which A pine tree 14 ins. diam. bears S. 87° 37' E. 19 lks. dist. marked 1/4 S 8 B T A cedar tree 16 ins diam. bears N 86° 40' W. 20 lks. dist. marked 1/4 S 7 B T This cor. stands 250 ft. above road Land very broken Soil gravely and rocky 2d to 4th rate Timber cedar pine and pinion, dense growth. Mountainous land 40.00 chs. It being impracticable to extend this survey further owing to the roughness of the country I discontinue here. — I return to the meridian established October 10-11 by Polaris observation. - At 2h 15m p.m, l.m.t. I set off 9° 25' S. on the decl. arc and test the adjustments of my solar, finding it gives the same meridian as before and adjustments correct. — This is at the W.C. 16 cor. of secs. 19, 24, 25 and 30 on W. bdy. of this Tp. October 18, 1907

General Description

The area covered by this survey is all... mountainous land very rough and broken. - The soil is unproductive excepting narrow and isolated strips along the creeks. — Nearly the entire area is covered with timber of the cedar, pine and pinion varieties and also dense undergrowth of oak and thorn. The land furnishes indifferent summer pasture, but is covered with heavy snow during the winter months. —

There is a few small streams. — The whole area is probably underlaid with valuable coal deposits; asphalt beds and ledges of lithographic stone also is found, not only in the surveyed but also in the yet unsurveyed area, but having found no outcrops of coal I believe none as coal lands.
There are two settlers, James S Ballard and John N. Ballard, located in sec 1 & 8 and in common have a few acres under cultivation, value of improvements about 1600 dollars. — Both are applicants for survey

Andrew P Swanson
U S Deputy Surveyor

There being no notary public, or other officer authorized to administer oaths, within reasonable distance at the beginning or ending of these surveys: therefor in order to save time and expence, I administer the preliminary and final oaths myself. —

Andrew P Swanson
U S Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew P Hansen, United States Deputy Surveyor, to assist in running, measuring, and ing the lines and corners described in the foregoing field notes of the survey of subdivisions ion of T. 10 S. Rs. 6 and 7 E. S. L. B. & M. Utah ing the respective capacities in which they acted:

Ray Glazier, Chainman.
James S. Ballard, Chainman.
Ray Glazier, Moundman.
James S. Ballard, Moundman.
Mayor Loveless, Axman.
George W. Dougall, Axman.
Mayor Loveless, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew P Hansen, United States Deputy Surveyor, in surveying all parts or portions of the subdivisions given in T. 10 S. Rs. 6 and 7 E. of the Salt Lake ase and meridian, State of Utah, which are represented foregoing field notes as having been surveyed by him and under his direction; and that said survey een in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the monuments established, according to the instructions furnished by the United States Surveyor al for Utah

Roy Glazier, Chainman.
James S Ballard Chainman.
Roy Glazier, Moundman.
James S Ballard Moundman.
Mayor Loveless, Axman.
George W Dougall, Axman.
Mayor Loveless, Flagman.

ibed and sworn to before me this 16 y of October, 1907

SEAL

Andrew P Hansen
U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew P. Hanson, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of 18th day of May, 1905, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the subdivision lines of Township No. 10 South, Ranes 6 and 7 East

of the Salt Lake Base and meridian, in the State of Utah, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Andrew P. Hanson
United States Deputy Surveyor

Subscribed by said Andrew P. Hanson, and sworn to before me this 2d day of January, 1906

Thomas Bell
U.S. Surveyor-General
for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, Feb. 26, 19

The foregoing field notes of the survey of the subdivision lines of Township 10 South, Range No. 7 East of the Salt Lake Base and Meridian, Utah

executed by Andrew P. Hanson under his contract No. 289, dated May 18, 1905, having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas Bell
United States Surveyor Gen.

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.

United States Surveyor Ge

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4—679.

BOOK A-348
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FILED
AUG 22 1908

FIELD NOTES

OF THE SURVEY OF THE

SOUTH, EAST and NORTH BOUNDARIES

of

Township No. 23 South, Range No. 18 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

vey D. Heist and Job H. Winwood, *United States Deputy Surveyor,* s their
er ~~his~~ *Contract No.* 298, *dated* March 21, 1907

ey *commenced* March 1, 1908

ey *completed* March 4, 1908

6—161

South Bdy. East 5-78-54
East Bdy. East 3-18-75
West 2-64-30
North Bdy. East 5-11-77
West 66-50

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton	Chainman
Walter A. Stumm,	"
Earl Woolley	Moundman
Homer Petty,	"
Claude L. Heist,	Axman
Charlie Stumm,	Flagman

BOOK A-348

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Manderson W. Houghton and Walter A. Stumm,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of S & E.bdys.of Ts.22 S.,Rs.18 and 19 E.,T.23 S.,Rs.18,19 and 20 E., N.bdys.of Ts.22 S.,Rs.18 and 19 E., T.23 S.,R.20 E.and the E.bdy.of T.22 S.,R.20 E.,S.L.B.& M.,in the state of Utah

Manderson W. Houghton, Chainman

Walter A. Stumm, Chainman

Subscribed and sworn to before me this 1st. day of March, 1908

SEAL

Harvey H. Hurst
U.S. Deputy Surveyor.

WE, Earl Woolley, and Homer Petty,

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of S & E.bdys.of Ts.22 S.,Rs.18 and 19 E.; T.23 S.,Rs.18,19 and 20 E., N.bdys.of T.22 S.,Rs.18 and 19 E. ; T.23 S.,R.20 E.,and the E.bdy.of T.22 S.,R.20 E.,S.L.B.& M.,in the state of Utah.

Earl Woolley, Mound

Homer Petty, Mound

Subscribed and sworn to before me this 1st. day of March, 1908

SEAL

Harvey H. Hurst
U.S. Deputy Surveyor

WE, I, Claude L. Heist, and

do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of S.& E.bdys.of T.22 S.,Rs.18 and 19 E.; T.23 S.,Rs.18,19 and 20 E., N.bdys.of T.22 S.,Rs.18 and 19 E.;T.23 S.,R.20 E.,and the E.bdy.of T.22 S.,R.20 E.,S.L.B.& M.,in the state of Utah.

Claude L. Heist, Ax.

Ax.

Subscribed and sworn to before me this 1st. day of March, 1908

SEAL

Harvey H. Hurst
U.S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, in survey of S.& E.bdys.of T.22 S.,Rs.18 & 19 E.;T.23 S.,Rs.18,19 & 20 N.bdys.of T.22 S.,Rs.18 and 19 E.;T.23 S.,R.20 E.,and the E.bdy.of T.2 R.20 E.,S.L.B.& M.,in the state of Utah.

Charlie Stumm, Flag

Subscribed and sworn to before me this 1st. day of March, 1908

SEAL

Harvey H. Hurst
U.S. Deputy Surveyor

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SOUTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS

Survey commenced, March 1,1908 and executed with a W & L.E.Gurley,light mountain transit,with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc,which is also the least count of the verniers of the latitude and declination arcs.
The instrument was examined,tested on the true meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,February 28,1908.

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

At the corner of Tps.23 and 24 S.,Rs.17 and 18 E., which is a sandstone,8x6x6 ins.above ground,marked and witnessed as described by the surveyor general,in approximate latitude 38°46'N.,longitude 110°01'W.,I set off 38°46'N.on lat.arc,7°25'S.,on decl.arc,and at 4h.13m., p.m.,l.m.t.,determine with the solar a meridian and mark a point thereof,on a stone firmly set in the ground,5 chs. N.of the cor.

At 8h.43m.,p.m.,l.m.t.,I observe Polaris at western elongation,in accordance with Manual of Instructions,and mark a point in the line thus determined on a peg driven in the ground,5 chs.N.of my station.

March 1,1908.

March 2 : At 7 a.m.,I lay off the azimuth of Polaris, 1°33'to the east,and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins.east of the mark determined by the solar.

At 8h.12m.,a.m.,l.m.t.,I set off 38°46'N.,on lat.arc,

SOUTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	7°10'S.,on decl.arc,and mark a point in the meridian determined with the solar,by a cross on the stone already set 5 chs.N.of my station;this mark falls 0.3 ins.east of the meridian established by the Polaris observation.
	The solar apparatus,by p.m.and a.m.observations,defines positions for meridians,respectively about,0'21" west and 0'16" east of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h.30m., a.m.is N.15°40'W.,the angle thus determined gives the mag.decl. 15°40'E.
	From the Tp.cor.already described, I run
	East,bet.secs.6 and 31,marking and blazing true line. Gradual descent over sandy land,through dense greasewood brush.
38.84	Allowing for convergency,set a pine post,3 ft.long,4 ins. sq.,with marked stone,24 ins.in the ground,for ¼ sec. cor.,marked ¼ S 31 on N.face and 6 on S.face,dig pits, 18x18x12 ins.,E.and W.of post,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,N.of cor.
56.00	Wash,1.00 ch.wide,5 ft.deep,course S.
	Gradual ascent.
78.84	Set a sandstone,15x10x4 ins.,10 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 5 notches on E. and 1 notch on W.edges,dig pits,18x18x12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Land,rolling.
	Soil,shifting sand, 3rd.rate.
	No timber.
	Undergrowth, greasewood.
	Land covered with dense undergrowth, 78.84 chs.

SOUTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	East, bet.secs.5 and 32.
	Ascend over sandy land, through dense greasewood brush.
12.00	Begin abrupt ascent over sandstone ledges, bearing NE. and SW.
37.00	Sandstone spur, 400 ft. above sec.cor., projects SW.
	Descend along steep south slope.
40.00	Falls on a sandstone boulder, 8x8x3 ft. above ground, I mark a cross (x(, at exact point for $\frac{1}{4}$ sec.cor.; mark $\frac{1}{4}$ on N. side of cross, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
43.00	Hollow, 100 ft. deep, course S.
	Ascend.
65.00	Sandstone ridge, bears NE. and SW.
	Descend abruptly over solid sandstone.
70.50	Foot of ledges, 500 ft. below ridge, bears NE. and SW.
	Gradual descent over sandy land, through dense greasewood brush.
80.00	Set a sandstone, 15x14x5 ins., 10 ins. in the ground, for cor. of secs.4-5-32 and 33, marked with 4 notches on E. and 2 notches on W. edges, dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, mountainous and rolling.
	Soil, sandy 3rd. rate ; sandstone ledges, 4th. rate.
	No timber.
	Undergrowth, greasewood.
	Mountainous land or land covered with dense undergrowth
	80.00 chs.

	East, bet.secs.4 and 33.
	Descend over sandy land, through dense undergrowth.
8.50	Wash, 1.25 chs. wide, 40 ft. deep, course S.
	Gradual ascent.

SOUTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
23.75	Road,bears NE.and SW.
40.00	Set a pine post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 33 on N. face,4 on S.face,dig pits,18x18x12 ins.,E.and W.of post, 3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft. high,N.of cor.
80.00	Set a sandstone,12x9x9 ins.,8 ins.in the ground,for cor. of secs.3-4-33 and 34,marked with 3 notches on E.and W. edges,and raise a mound of stone,2 ft.base,1½ ft.high, W.of cor.
	Pits impracticable.
	Land,rolling.
	Soil,sandy,3rd.rate.
	No timber.
	Undergrowth,greasewood.
	Dense undergrowth on 80.00 chs.
	March 2: At this cor.I set off 7°08'N.,on decl.arc,and at 0h.12m.,p.m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°46'N.

East,bet.secs.3 and 34.

Ascend over rolling ,sandy land,through dense undergrowth.

40.00	Set a sandstone,18x12x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins., E.and W.of stone,3 ft.dist.,and raise a mound of earth, 3½ ft.base,1½ ft.high,N.of cor.
80.00	Set a sandstone,18x6x5 ins.,12 ins.in the ground,for cor.of secs.2-3-34 and 35,marked with 2 notches on E. and 4 notches on W.edges,dig pits,18x18x12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Land,rolling.
	Soil,sandy,3rd.rate.
	No timber.

SOUTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	Undergrowth, greasewood.
	Dense undergrowth on 80.00 chs.
	East, bet.secs.2 and 35.
	Ascend over rolling, sandy land, through scattering cedar and pinon timber and dense undergrowth.
40.00	Set a sandstone, 20x6x5 ins., 15 ins. in the ground, for ¼ sec.cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
41.00	Spur, projects NW.
	Descend.
48.00	Hollow, 75 ft. deep, course NW.
	Ascend abruptly over sandstone boulders and ledges.
62.80	Rocky spur, 400 ft. above ¼ sec. cor., projects S.
	Abrupt descent.
69.00	Hollow, 100 ft. deep, course SW.
	Ascend over sandy land.
	Leave timber.
80.00	Set a sandstone, 15x14x7 ins., 10 ins. in the ground, for cor. of secs. 1-2-35 and 36, marked with 1 notch on E. and 5 notches on W. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous and rolling.
	Soil, sandy, 3rd. rate; rocky, 4th. rate.
	Timber, cedar and pinon.
	Undergrowth, greasewood.
	Mountainous land or land covered with dense undergrowth, 80.00 chs.
	East, bet.secs.1 and 36.
	Ascend over sandy and mountainous land, through dense undergrowth.

SOUTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS

18.00 Ridge,bears N.and S.

Descend.

31.00 Hollow,50 ft.deep,course N.

Ascend.

38.00 Ridge,bears NE.and SW.

Descend.

40.00 Set a sandstone,12x9x6 ins.,8 ins.in the ground,for 1/4 sec.cor.,marked 1/4 on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

74.00 Enter scattering cedar and pinon timber.

80.00 Set a sandstone,18x10x10 ins., in mound of stone,for cor.of Tps.23 and 24 S.,Rs.18 and 19 E.,marked

23 S on NE.,

19 E on SE.,

24 S on SW.,and

18 E on NW.face,with 6 notches on each edge,

from which

A cedar,6 ins.diam.,bears N.9°E.,1.85 chs.dist., marked T 23 S R 19 E S 31 BT.

A cedar,6 ins.diam.,bears S.82½°E.,67 lks.dist., marked T 24 S R 19 E S 6 BT.

A cedar,5 ins.diam.,bears S.16°W.,63 lks.dist., marked T 24 S R 18 E S 1 BT.

A cedar,4 ins.diam.,bears N.22°W.,55 lks.dist., marked T 23 S R 18 E S 36 BT.

On account of natural obstacles,this cor.cannot be set in the ground.

Land,mountainous.

Soil,sandy, 3rd.rate.

Timber,cedar and pinon.

Undergrowth, greasewood.

Mountainous land or dense undergrowth on 80.00 chs.

March 2,1908.

EAST BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	March 3: At 8h.12m.,a.m.,l.m.t.,I set off 38°46'N.,on lat. arc,6°47'S.,on decl.arc,and determine a meridian with the solar,at the cor.of Tps.23 and 24 S.,Rs.18 and 19 E.
	Thence I run
	North,bet.secs.31 and 36.
	Descend over mountainous land,through scattering cedar and pinon timber.
28.65	Hollow,50 ft.deep,course NE.
	Ascend.
30.00	Ridge,bears NE.and SW.
	Leave timber.
	Descend abruptly over rocky land.
40.00	Set a sandstone,15x12x4 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
80.00	Set a sandstone,15x12x4 ins.,in a mound of stone,for cor. of secs.25-30-31 and 36,marked with 1 notch on S.and 5 notches on N.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Pits impracticable.
	On account of natural obstacles,this cor.cannot be set in the ground.
	Land,mountainous.
	Soil,sandy and rocky,3rd.rate.
	Timber, cedar and pinon.
	Mountainous land on 80.00 chs.
	North,bet.secs.25 and 30.
	Descend abruptly over rocky and mountainous land.
5.00	Hollow,100 ft.deep,course NE.
	Ascend.
13.00	Rocky spur,projects NE.
	Abrupt descent.

EAST BOUNDARY OF T.23 S.,R.18 E.

CHAINS

21.00 Foot of abrupt descent,bears E.and W.

Over level sandy land,through dense undergrowth.

35.00 Begin abrupt ascent over rocky land,bears E.and W.

36.65 Rocky spur,projects W.

Abrupt descent.

38.00 Foot of abrupt descent bears NE.and SW.

Gradual descent over sandy land,through dense undergrowth.

40.00 Set a sandstone,18x10x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,and raise a mound of stone, 3 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

63.00 Begin abrupt ascent,bears E.and W.

64.70 Rocky spur,projects W.

Abrupt descent.

69.50 Foot of abrupt descent,bears NE.and SW.

Gradual descent over sandy land,through dense undergrowth.

77.10 Road,bears NE.and SW.

79.25 Wash,50 lks.wide,5 ft.deep,course SW.

Gradual ascent.

80.00 Set a sandstone,15x12x7 ins.,10 ins.in the ground,for cor.of secs.19-24-25 and 30,marked with 2 notches on S. and 4 notches on E.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous and rolling.

Soil,rocky, 4th.rate,:sandy,3rd.rate.

No timber.

Undergrowth,greasewood.

Mountainous land,or land covered with dense undergrowth,

80.00 chs.

March 3: At this cor.I set off 6°44'E., on decl.arc,and at 9h.11m.,p.m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°48'N.

EAST BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	North,bet.secs.19 and 24.
	Gradual ascent over sandy land,through dense undergrowth.
23.00	Begin abrupt ascent over rocky land,bears NE.and SW.
26.35	Ridge,bears NE.and SW.
	Abrupt descent.
40.00	Set a sandstone,14x8x4 ins.,10 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,and raise a mound of stone, 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
40.75	Foot of abrupt descent,bears NE.and SW.
	Gradual descent over sandy land,through dense undergrowth.
78.90	Wash,20 lks.wide,10 ft.deep,course SW.
80.00	Set a sandstone,15x11x6 ins.,10 ins.in the ground,for cor.of secs.13-18-19 and 24,marked with 3 notches on N.and S.edges,dig pits,18x18x12 ins.,in each sec.,$5\frac{1}{2}$ ft.dist., and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,mountainous and rolling.
	Soil,rocky, 3rd.rate,;sandy loam, 2nd.rate.
	No timber.
	Undergrowth,greasewood.
	Mountainous land or land covered with dense undergrowth
	80.00 chs.

	North,bet.secs.13 and 18.
	Gradual ascent,through scant brush.
40.00	Set a pine post,3 ft.long,4 ins.square,with marked stone, 24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 13 on W., 18 on E.faces,dig pits,18x18x12 ins.,N.and S.of post., 3 ft.dist.,and raise a mound of earth,$3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft. high,W.of cor.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.7-12-13 and 18, marked T 23 S.S.7 on NE., R 19 E.S.18 on SE., S 13 on SW.,and

EAST BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	R 18 E S 12 on NW face,with 4 notches on S.and 2 notches on N.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	Land,nearly level.
	Soil,sandy loam, 1st.rate.
	No timber.
	North,bet.secs.7 and 12.
	Gradual ascent through scant brush.
15.50	Wash,25 lks.wide,8 ft.deep,course SW.
	Ascend.
16.50	Spur,projects E.
	Descend.
17.50	Same wash,25 lks.wide,8 ft.deep,course SE.
	Gradual ascent.
40.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼,S 12 on W., 7 on E.face,dig pits,18x18x12 ins.,N.and S.of post.,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft. high,W.of cor.
66.50	Same wash,25 lks.wide,8 ft.deep,course SW.
	Enter dense undergrowth.
80.00	Set a sandstone,15x10x5 ins.,10 ins.in the ground,for cor.of secs.1-6-7 and 12,marked with 5 notches on S.and 1 notch on N.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	Land,rolling.
	Soil,sandy loam,1st.rate.
	No timber.
	Undergrowth,greasewood.
	Land covered with dense undergrowth on 13.50 chs.

EAST BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	North,bet.secs.1 and 6.
	Gradual ascent through scant brush.
34.50	Begin abrupt ascent,bears NW.and SE.
37.25	Gravel knoll,bears NW.5.00 chs.,SE.3.00 chs.
	Abrupt descent.
39.75	Foot of knoll,bears NW.and SE.
	Gradual ascent.
40.00	Set a sandstone,18x8x5 ins.,12 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,and raise a mound of stone, 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
83.05	A distance equal to the length of the west bdy.of the Tp.
525 / 77.8 ch	Set a sandstone,20x6x6 ins.,15 ins.in the ground,for cor.of Tps.22 and 23 S.,Rs.18 and 19 E.,marked 22 S on NE., 19 E on SE., 23 S on SW.,and 18 E on NW.face;and with 6 notches on each edge, dig pits,24x24x12 ins.,on each line,N.E.and W.,4 ft.and S.of stone,8 ft.dist.,and raise a mound of earth,5 ft.base, $2\frac{1}{2}$ ft.high,S.of cor.
	Land,mountainous and rolling.
	Soil,gravel,3rd.rate.;sandy loam,1st.rate.
	No timber.
	Mountainous land on 5.25 chs.
	March 3,1908.

NORTH BOUNDARY OF T.23 S.,R.18 E.

March 4 : At 8h.12m.,a.m.,l.m.t.,I set off 38°51'N.,on lat.arc,6°23'S.on decl.arc,and determine a meridian with the solar,at the cor.of Tps.22 and 23 S.,Rs.18 and 19 E.

Thence I run

West,on a random line,along the N.bdy.of T.23 S.,R.18 E., setting temp.$\frac{1}{4}$ sec.and sec.cors.at intervals of 40.00 chs.

NORTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	and at 478.27 chs.intersect the west bdy.of the Tp.,30 lks.S.of the cor.of Tps.22 and 23 S.,Rs.17 and 18 E., which is a sandstone,9x8x7 ins.above ground,marked and witnessed as described by the surveyor general.
	The falling answers to a correction of 0°02',or 5 lks. N.per mile,counting from the NE.cor.of the Tp.,
	therefore I run
	S.89°58'E.,bet.secs.6 and 31,marking and blazing true line.
	Gradual descent,through dense undergrowth.
32.50	Road,bears NE.and SW.
38.27	Set a sandstone,15x8x5 ins.,10 ins.in the ground,for ¼ Sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound of earth,3½ ft. base,1½ ft.high,N.of cor.
46.75	Hollow,100 ft.deep,course SW.
	Begin abrupt ascent over rocky land.
58.30	Rocky spur,projects NE.
	Abrupt descent.
78.27	Set a sandstone,15x8x6 ins.,10 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 5 notchew on E.and 1 notch on W.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Pits impracticable.
	Land,rolling and mountainous.
	Soil,sandy and rocky,3rd.rate.
	No timber.
	Undergrowth,greasewood.
	Mountainous land or land covered with dense undergrowth, 78.27 chs.
	March 4: At this cor.I set off 6°20'S.,on decl.arc,and at 0h.12m.,p.m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°51'N.

NORTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	S.89°58'E.,bet.secs.5 and 32.
	Descend over rocky and mountainous land.
1.00	Hollow,150 ft.deep course NW.
	Ascend.
11.00	Begin abrupt ascent,bears NW.and SE.
16.00	Rocky spur,projects NW.
	Abrupt descent.
20.00	Hollow,100 ft.deep,course N.
	Ascend.
22.00	Spur,projects NW.
	Descend.
23.50	Hollow,75 ft.deep,course NW.
	Ascend.
34.00	Spur,projects N.
	Descend.
40.00	Set a sandstone,15x10x4 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
41.00	Hollow,75 ft.deep,course N.
	Ascend.
80.00	Set a sandstone,15x6x5 ins.,10 ins.in the ground,for cor.of secs.4-5-32 and 33,marked with 4 notches on E. and 2 notches on W.edges,dig pits,18x18x12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,mountainous.
	Soil,rocky and sandy, 3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.

	S.89°58'E.,bet.secs.4 and 33.
	Ascend over rolling land,through dense undergrowth.
40.00	Set a sandstone,15x6x6 ins.,10 ins.in the ground,for ¼

NORTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound of earth,3½ ft. base,1½ ft.high,N.of cor.
71.50	Begin abrupt ascent,bears NW.and SE.
74.50	Ridge,bears NW.and SE.
	Descend.
80.00	Set a sandstone,15x14x4 ins.,10 ins.in the ground,for cor.of secs.3-4-33 and 34,marked with 3 notches on E.and W.edges,dig pits,18x18x12 ins.,in each sec.,5½ ft.dist., and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,mountainous and rolling.
	Soil, sandy loam,1st.rate, clay,2nd.rate.
	No timber.
	Undergrowth,sage and greasewood.
	Dense undergrowth or mountainous land on 80.00 chs.

S.89°58'E.,bet.secs.3 and 34.

	Descend over rolling land,through dense undergrowth.
40.00	Set a sandstone,24x8x4 ins.,18 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound of earth,3½ ft. base,1½ ft.high,N.of cor.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.2-3-34 and 35,marked T.22 S S 35 on NE., R 18 E S 2 on SE., T 23 S S 3 on SW.,and S 34 on NW.face,with 2 notches on E.and 4 notches on W.edges,dig pits,18x18x12 ins.,in each sec.,5½ ft. dist.,and raise a mound of earth,4 ft.base,2 ft.high,W. of cor.
	Land,rolling.
	Soil,sandy loam,1st.rate.
	No timber.
	Land,covered with dense undergrowth on 80.00 chs.

NORTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
	S.89°58'E.,bet.secs.2 and 35.
	Descend over rolling land,through dense undergrowth.
40.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 35 on N. face,2 on S.face,dig pits,18x18x12 ins.,E.and W.of post., 3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high, N.of cor.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.1-2-35 and 36,marked T 22 S.S.36 on NE., R 18 E S 1 on SE., T 22 S S 2 on SW.,and S 35 on NW.face,with 1 notch on E.and 5 notches on W. edges,dig pits,18x18x12 ins.,in each sec.,5½ ft.dist., and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,rolling.
	Soil,sandy loam,1st.rate.
	No timber.
	Undergrowth, greasewood and sage.
	Land,covered with dense undergrowth,80.00 chs.
	S.89°58'E.,bet.secs.1 and 36.
	Descend over rolling land,through scant brush.
33.00	Wash,75 lks.wide,5 ft.deep,course SE.
	Ascend.
40.00	Set a sandstone,18x6x4 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound of earth,3½ ft.base, 1½ ft.high,N.of cor.
43.50	Begin abrupt ascent,bears NW.and SE.
48.50	Top of abrupt ascent,bears NW.and SE.
	Ascend.
51.50	Spur,projects SE.
	Descend.

NORTH BOUNDARY OF T.23 S.,R.18 E.

CHAINS	
53.00	Begin abrupt descent,bears NW.and SE.
57.00	Foot of abrupt descent,bears NW.and SE.
	Gradual descent.
72.00	Wash,1.00 ch.wide,5 ft.deep,course S.
	Gradual ascent.
80.00	The cor.of Tps.22 and 23 S.,Rs.18 and 19 E.
	Land,rolling and mountainous.
	Soil,sandy loam,1st.rate, clay,3rd.rate.
	No timber.
	Undergrowth,sage.
	Mountainous land on 13.50 chs.
	March 4, 1908

BOUNDARIES OF T.23 S., R.18 E.

Latitudes,departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
N.Bdy.	S.89°58'E.	478.27		0.28	478.27	
E.Bdy.	South	483.05		483.05		
S.Bdy.	West	478.84				478.84
E.Bdy. of T.23 S.R.17 E.	North	485.05	483.05			
Convergency					0.58	
Totals,			483.05	483.33	478.85	478.84
Error in lat.and dep.				483.05	478.84	
				0.28	0.01	

No trace could be found of any cors.of the old surveys on the N.& S.bdys. For general description,see Subdivisions of T.23 S., R.18 E.

Harvey M. Hurst
U.S.Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and

ing the lines and corners described in the foregoing field notes of the survey of _____

_____

ing the respective capacities in which they acted:

_____, *Chainman.*

r list of names and final oaths of assistants see book "F" *Chainman.*

Tp.23 S., R. 20 E.

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

parts or portions of the _____

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented

foregoing field notes as having been surveyed by him and under his direction; and that said survey

een in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the

monuments established, according to the instructions furnished by the United States Surveyor

al for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

ibed and sworn to before me this _____

y of _____, 190

SEAL

_____

_____

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of _____ day of _____, 190 , I have well, faithfully, and truly, in my c proper person, and in strict conformity with the instructions furnished by the United States Surve General for _____, the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of _____ For final affidavit see book "F" T.23 S., R. 20 E. _____ of the _____ meridian, in the _____ of _____, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further sol swear that all the corners of said survey have been established and perpetuated in strict accordance the Manual of Surveying Instructions, and the special written instructions of the United States Surv General for _____ and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

_____

United States Deputy Surve

Subscribed by said _____, and sworn to before me this _____ day of _____, 190

SEAL

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1

The foregoing field notes of the survey of the south, east, and north bound ries of Township No.23 South, Range No.18 East of the Salt Lake Ba se Meridian, Utah,

executed by Harvey D.Heist and Job H.Winwood under ~~their~~ Contract No. 228, dated March 21, 190 7, havin critically examined, and the necessary corrections and explanations made, the said field notes, a surveys they describe, are hereby approved.

Thomas Hall

United States Surveyor Ge

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 o

_____

United States Surveyor Ge

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4—679.

"B"

BOOK A-348

FIELD NOTES

OF THE SURVEY OF THE

EAST and NORTH BOUNDARIES

of

Township No. 22 South,

Range No. 18 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

vey D. Heist and Job H. Winwood, *United States Deputy Surveyor,*

er ~~his~~ their *Contract No.* 298, *dated* March 21, *190* 7

ey *commenced* March 5, *190* 8

ey *completed* March 7, *190* 8

6—151

East Bdy high 3-22-70
low 2-64-00

North Bdy high 5-77-57

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chainman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

For preliminary affidavits see book "A" T. 23 S., R. 18 E.

BOOK A-348

INDEX DIAGRAM.

Township 22 South, *Range* 18 East

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31	32	33	34	35	36 1

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, _____ and _____
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level t
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; t
we will report the true distances to all notable objects, and the true lengths of all lines that we assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey
_____

_____, *Chainm*

_____, *Chainm*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

We, _____ and _____
do solemnly swear that we will well and truly perform the duties of moundmen in the establ
of corners, according to the instructions given us, to the best of our skill and ability, in the surve
_____

_____, *Moundm*

_____, *Mound*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

We, _____ and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of
and other duties, according to instructions given us, to the best of our skill and ability, in the surve
_____

_____, *Axm*

_____, *Axm*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

I, _____, do solemnly swear that I will well and
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in
survey of _____

_____, *Fl*

Subscribed and sworn to before me this _____
day of _____, 190

_____

SEAL

_____

EAST BOUNDARY OF T.22 S.,R.18 E.

CHAINS

Survey commenced, March 5,1908, and executed with the instrument described in book "A",of this survey.

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

At the cor.of Tps.22 and 23 S.,Rs.18 and 19 E., heretofore described in approximate latitude,38°51'N., longitude 109°54'W.,I set off 5°53'S.,on decl.arc, and at 4h.12m.,p.m.,l.m.t.,determine with the solar a meridian and mark a point thereof on a stone firmly set in the ground,5 chs.N.of the cor.

At 8h.28m.,p.m.,l.m.t.,I observe Polaris at Western elongation,in accordance with Manual of Instructions, and mark a point in the line thus determined,on a wooden peg driven in the ground,5 chs.N.of my station.

March 5,1908

March 6: At 7 a.m.,I lay off the azimuth of Polaris, 1°31'to the east,and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins.east of the mark determined by the solar.

At 8h.11m.,a.m.,l.m.t.,I set off 38°51'N.,on lat. arc, 5° 37' S.,on decl.arc, and mark a point in the meridian determined with the solar, by a cross on the stone, already set 5 chs.N. of my station ; this mark falls 0.3 ins. east,of the meridian established by the Polaris observation.

The solar apparatus,by p.m.and a.m.observations, defines positions for meridians,respectively about 0'21" west and 0'16" east,of the meridian established

EAST BOUNDARY OF T. 22 S., R. 18 E.

CHAINS

by the Polaris observations , therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 30m., a.m. is N.15°40'W., the angle thus determined gives the mag.decl.15°40'E.

From the township cor.,heretofore described, I run

North,bet.secs.31 and 36.

Ascend over rolling land,through scant undergrowth.

20.00 Wash,75 lks.wide, 5 ft.deep,course SW.

40.00 Set a sandstone,15 x 6 x 6 ins., 10 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face, dig pits, 18 x 18 x 12 ins., N and S. of stone, 3 ft.dist., and raise a mound of earth, 3½ ft. base, 1½ ft.high, W.of cor.

80.00 Set a sandstone, 18 x 8 x 4 ins., 12 ins.in the ground,for cor.of secs. 25-30-31 and 36, marked with 1 notch on S., and 5 notches on N.edges, dig pits, 18 x 18 x 12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.

Land,rolling.

Soil,sandy loam, 1st.rate.

No timber.

Undergrowth,sparse sage and greasewood.

North,bet.secs.25 and 30.

Ascend over rolling land,through scant undergrowth.

40.00 Set a sandstone, 18 x 8 x 4 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,dig pits, 18 x 18 x 12 ins.,N.and S.of stone, 3 ft.dist., and raise a mound of earth, 3½ ft.base, 1½ ft.high, W.of cor.

72.00 Spur,projects W.

Descend.

EAST BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
80.00	Set a sandstone, 18 x 12 x 4 ins.,12 ins.in the ground,for cor.of secs.19-24-25 and 30.,marked with 2 notches on S.,and 4 notches on N.edges, dig pits, 18 x 18 x 12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,W.of cor. Land, rolling. Soil, sandy loam, 1st.rate. No timber. Undergrowth, sage and greasewood.

North, bet.secs.19 and 24.

	Descend over rolling land,through scant undergrowth.
8.00	Hollow,50 ft.deep,course SW.
	Ascend.
13.00	Spur,projects SW.
	Descend.
18.00	Hollow,75 ft.deep,course SW.
	Ascend.
24.00	Ridge,bears NE.and SW.
	Descend over rolling land.
39.25	Road , from Valley City, to Little Grande, bears NW. and SE.
40.00	Set a sandstone, 18 x 8 x 6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face, dig pits, 18 x 18 x 12 ins.,N.and S.of stone, 3 ft.dist., and raise a mound of earth, 3½ ft.base, 1½ ft.high,W.of cor.
69.00	Hollow,50 ft.deep,course SW.
	Ascend.
80.00	Set a sandstone,18x12x5 ins.,12 ins.in the ground, for cor.of secs.13-18-19 and 24,marked with 3 notches on N.and S.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.

16.00

4 00

East Boundary of T.22 S.,R.18 E.

CHAINS	
	high,W.of cor.
	Land,mountainous and rolling.
	Soil,sandy loam,1st.rate.
	clay,3rd.rate.
	No timber.
	Undergrowth,greasewood and sage.
	Mountainous land on 16.00 chs.

North, bet.secs.13 and 18.

	Ascend over rolling land,through dense undergrowth.
20.00	Ridge,bears NE.and SW.
	Descend.
35.00	Hollow,75 ft.deep,course SW.
	Ascend.
36.50	Over level land.
40.00	Set a sandstone, 18 x 12 x 4 ins., 12 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face, dig pits, 18 x 18 x 12 ins.,N.and S.of stone,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
80.00	Set a sandstone, 18 x 10 x 4 ins.,12 ins.in the ground,for cor.of secs.7-12-13 and 18,marked with 4 notches on S.and 2 notches on N.edges, dig pits, 18 x 18 x 12 ins.,in each sec., $5\frac{1}{2}$ ft.dist., and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.
	Land,rolling and level.
	Soil,sandy loam, 1st.rate.
	No timber.
	Undergrowth,sage.
	Land,covered with dense undergrowth, 80.00 chs.
	March 6 : At this cor.I set off 5° 34' S.,on decl.arc, and at 0h. 11m., p.m., l.m.t., observe the sun on the

EAST BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
	meridian, the resulting lat. is 38°55'N.
	North, bet. secs. 7 and 12.
	Over level land, through dense undergrowth.
36.00	Leave level land, bears NW. and SE.
	Begin abrupt descent over rocky land.
38.75	Hollow, 75 ft. deep, course NW.
	Abrupt ascent.
40.00	Set a sandstone, 18 x 10 x 4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
40.25	Spur, projects W.
	Descend.
42.50	Hollow, 50 ft. deep, course W.
	Ascend.
47.65	Spur, projects W.
	Abrupt descent.
50.00	Foot of abrupt descent, bears NE. and SW.
	Leave rocky land,
	Descend over broken clay land, cut by washes draining NW.
66.00	Wash, 1.00 ch. wide, 10 ft. deep, course W.
73.50	Wash, 1.00 ch. wide, 15 ft. deep, course W.
78.75	Wash, 1.00 ch. wide, 10 ft. deep, course SW.
	Begin ascend over badly broken clay hills, land supporting no vegetation.
80.00	Set a limestone, 15 x 6 x 6 ins., 10 ins. in the ground, for cor. of secs. 1-6-7 and 12, marked with 5

EAST BOUNDARY OF T.22 S.,R.18 E.

CHAINS

notches on S. and 1 notch on N.edges, dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft.base, 2 ft.high, W. of cor.

Land, level and mountainous.

Soil, sandy loam,1st.rate.

clay, 3rd.rate.

No timber.

Undergrowth, sage.

Mountainous land or

land covered with dense undergrowth on 80.00 chs.

North, bet.secs.1 and 6.

Ascend abruptly over broken clay hills, land mountainous and supporting no vegetation.

40.00 Set a pine post, 3 ft.long, 4 ins.sq., with marked stone, 24 ins.in the ground, for ¼ sec.cor., marked ¼ S 1 on W., and 6 on E.face, dig pits, 18 x 18 x 12 ins., N.and S.of post., 3 ft.dist., and raise a mound of earth, 3½ ft.base, 1½ ft. high, W.of cor.

56.75 Wagon road, from Thompson's to Little Grande, bears NE.and SW.

70.05 Old railroad grade, bears NW.and SE.

Enter scant growth of sage brush.

84.00 Ridge, bears NE.and SW.

Abrupt descent.

EAST BOUNDARY OF T.22 S.,R.18 E.

CHAINS

86.70 A distance equal to the west bdy.of the Tp.

Set a limestone,15x10x10 ins.,10 ins.in the ground,for cor.of Tps.21 and 22 S.,Rs.18 and 19 E.,marked

21 S on NE.,

19 E on SE.,

22 S.on SW.,and

18 E on NW.face and with 6 notches on each edge,dig pits,24x24x12 ins.,on each line,N.E.and W.,4 ft.and S.of stone,8 ft.dist.,and raise a mound of earth,5 ft.base, 2½ ft.high,S.of cor.

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 86.70 chs.

NORTH BOUNDARY OF T.22 S.,R.18 E.

From the cor.of Tps.21 and 22 S.,Rs.18 and 19 E.,I run,

West,on a random line,along the N.bdy.of T.22 S., R.18 E.,setting temp.¼ sec.and sec.cors.at intervals of 40.00 chs.,and at 477.57 chs.,Intersect the west bdy.of the Tp.,15 lks.S.of the cor.of Tps.21 and 22 S.,Rs.17 and 18 E.,which is a sandstone,10x10x6 ins.above ground,marked and witnessed as described by the surveyor general.

The falling answers to a correction of 0°01', or 2½ lks. N.per mile,counting from the NE.cor.of the Tp.

March 6,1908

NORTH BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
	March 7 : At 8h.11m.,a.m.,l.m.t.,I set off 38°56'N.,on lat.arc,5°34'S.,on decl.arc,and determine a meridian with the solar at the cor.of Tps.21 and 22 S.,Rs.17 and 18 E.,thence I run
	S.89°59'E.,bet.secs.6 and 31,marking and blazing true line
	Ascend over broken clay land.
9.00	Spur,projects N.
	Descend along steep N.slope.
31.00	Hollow,75 ft.deep,course N.
	Ascend along steep north slope.
36.00	Leave broken clay land,bears NE.and SW.
	Begin gradual ascent through dense undergrowth.
37.57	Set a sandstone,15x12x5 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
77.57	Set a limestone,15x10x7 ins.,10 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 5 notches on E.and 1 notch on W.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous and rolling.
	Soil,clay,3rd.rate; sandy loam,1st.rate.
	No timber.
	Undergrowth,sage.
	Mountainous land or land covered with dense undergrowth,
	77.57 chs.

S.89°59'E.,bet.secs.5 and 32.

	Gradual ascent,through dense undergrowth.
18.22	Middle of track of Denver and Rio Grande Railroad,bears N.32°10'W. and S.32°10'E.
19.06	Telegraph line,bears N.32°10'W.and S.32°10'E.
	Ascend abruptly over broken clay hills cut by many washes draining SW.

NORTH BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
40.00	Set a sandstone,15x10x8 ins.,10 ins.in the ground,for ¼ sec. cor.,marked ¼ on N.face,and raise a mound of stone,2 ft. base,1½ ft.high,N.of cor.
	Pits impracticable.
69.70	Leave clay land,enter rocky land.
80.00	Set a sandstone,12x12x8 ins.,8 ins.in the ground,for cor. of secs.4-5-32 and 33,marked with 4 notches on E.and 2 notches on W.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Pits impracticable.
	Land,rolling and mountainous.
	Soil,clay and rocky,3rd.rate.,sandy loam,1st.rate.
	No timber.
	Undergrowth,sage.
	Mountainous land or land covered with dense undergrowth,
	80.00 chs.

S.89°59'E.,bet.secs.4 and 33.

	Ascend over rocky and mountainous land.
5.00	Begin abrupt ascent,bears NW.and SE.
7.70	Ridge,bears N.and S.
	Descend.
17.30	Begin abrupt descent,bears NE.and SW.
26.00	Hollow,150 ft.deep,course SW.
	Abrupt ascent.
29.50	Ridge,bears N.and S.
	Abrupt descent.
40.00	Set a sandstone,20x8x5 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
45.75	Hollow,100 ft.deep,course S.
	Abrupt ascent.
48.12	Spur,projects S.

NORTH BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
	Abrupt descent.
80.00	Set a flint stone,15x10x8 ins.,10 ins.in the ground,for cor.of secs.3-4-33 and 34,marked with 3 notches on E.and W.edges,and raise a mound of stone,2 ft.base,1½ ft.high, W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	March 7: At this cor.I set off 5°41'S.,on decl.arc,and at 0h.11m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 38°56'N.

S.89°59'E.,bet.secs.3 and 34.

	Descend over rocky and mountainous land.
13.00	Enter bottom of wide hollow,course SW.
	Over sandy land,through dense undergrowth.
29.50	Wash,75 lks.wide,10 ft.deep,course SW.
33.20	Leave hollow,course SW.
	Abrupt ascent.
40.00	Set a flint stone,15x12x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
41.00	Spur,projects NW.
	Descend.
55.00	Hollow,50 ft.deep,course NW.
	Ascend.
76.00	Ridge,bears NW.and SE.
80.00	Hollow,40 ft.deep,course NW.
	Set a sandstone,20x10x3 ins.,15 ins.in the ground,for cor. of secs.2-3-34 and 35,marked with 2 notches on E.and 4 notches on W.edges,dig pits,18x18x12 ins.,in each sec.,

NORTH BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
	5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high, W.of cor.
	Land,mountainous.
	Soil,rocky and clay,3rd.rate.
	No timber.
	Undergrowth,greasewood.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	S.89°59'E.,bet.secs.2 and 35.
	Ascend over mountainous land.
9.50	Ridge,bears NE.and SW.
	Abrupt descent.
12.00	Hollow,75 ft.deep,course S.
	Ascend.
14.00	Spur,projects S.
	Descend along steep south slope.
40.00	Set a sandstone,18x10x4 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
67.70	Hollow,75 ft.deep,course S.
	Ascend.
68.80	Telegraph line,bears S.72°10'W.,and N.72°10'E.
71.02	Middle of track of Denver and Rio Grande Railroad,bears S.72°10'W.and N.72°10'E.
80.00	Set a sandstone,15x12x7 ins.,10 ins.in the ground,for cor.of secs.1-2-35 and 36,marked with 1 notch on E.and 5 notches on W.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.

NORTH BOUNDARY OF T.22 S.,R.18 E.

CHAINS	
	Mountainous land on 80.00 chs.
	S.89°59'E.,bet.secs.1 and 36.
	Ascend over mountainous land.
3.50	Spur,projects S.
	Descend.
15.15	Old railroad grade,bears NE.and SW.
19.50	Hollow,100 ft.deep,course SW.
	Abrupt ascent.
20.25	Spur,projects SW.
	Descend.
21.20	Hollow,75 ft.deep,course SW.
	Ascend.
37.00	Old railroad grade,bears NW.and SE.
40.00	Set a sandstone,15x12x8 ins.,10 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face,and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high,N.of cor.
	Pits impracticable.
49.00	Spur,projects SW.
	Descend.
54.00	Hollow,75 ft.deep,course SW.
	Ascend.
57.35	Old railroad grade,bears NE.and SW.
72.00	Old railroad grade,bears NW.and SE.
	Abrupt ascent.
80.00	The cor.of Tps.21 and 22 S.,Rs.18 and 19 E. Land,mountainous. Soil,clay and rocky,3rd.rate. No timber. Mountainous land on 80.00 chs.

March 7,1908

BOUNDARIES OF T.22 S.,R.18 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
			Chs.	Chs.	Chs.	
N. Bdy.	S.89°59'E.	477.57		0.14	477.57	
E.Bdy.	South	486.70		486.70		
S.Bdy.	N.89°58'W.	478.27	0.28			478.27
E.Bdy.of T.22 S.,R.17 E.	North	486.70	486.70			
Convergency					0.58	
Totals			486.98	486.84	478.15	478.27
			486.84			478.15
Error in lat.and dep.			0.14			0.12

For general description, see Subdivisions of T.22 S., R.18 E.

No trace could be found of the cors.on the old survey of the E.and N.bdys.of this township.

Harvey M. Hurst
U.S.Deputy Surveyor

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PAGE

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and king the lines and corners described in the foregoing field notes of the survey of _____

_____

wing the respective capacities in which they acted:

r list of names and final oaths of assistants see book "F", *Chainman.*

T. 23 S., R. 20 E.

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all e parts or portions of the _____

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented he foregoing field notes as having been surveyed by him and under his direction; and that said survey been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the er monuments established, according to the instructions furnished by the United States Surveyor eral for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

scribed and sworn to before me this _____

day of _____, 190

_____

SEAL

_____

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BOOK A-348

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from United States Surveyor General for _____, bearing date of _____ day of _____, 190 , I have well, faithfully, and truly, in my c proper person, and in strict conformity with the instructions furnished by the United States Surv General for _____, the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of _____

For final affidavit see book "F" T. 23 S., R. 20 E.

_____ of the _____ meridian, in the _____ of _____, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solc swear that all the corners of said survey have been established and perpetuated in strict accordance the Manual of Surveying Instructions, and the special written instructions of the United States Su General for _____ and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

_____
United States Deputy Surv

Subscribed by said _____, and sworn to before me this _____ day of _____, 190

_____

SEAL

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1

The foregoing field notes of the survey of the east and north boundaries of Township No.22 South, Range No.18 East, of the Salt Lake Base an Meridian, Utah,

executed by Harvey D.Heist and Job H.Winwood their under ~~his~~ contract No. 298, dated March 21, 1907, having critically examined, and the necessary corrections and explanations made, the said field notes, an surveys they describe, are hereby approved.

Thomas Hall
United States Surveyor Ge

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 off

_____
United States Surveyor G

6—151

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PAGE

327 M.S.B. 327
H.J.B.

4—679.

"C"

BOOK A-348

FIELD NOTES

FILED
AUG 31 1908

H.J.B.

OF THE SURVEY OF THE

EAST SOUTH and NORTH BOUNDARIES

of

Township N.22 South,

Range No.19 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

Harvey D.Heist and Job H.Winwood, *United States Deputy Surveyor,* s

nder ~~*his*~~ their *Contract No.* 298., *dated* March 21, *190*7

urvey commenced March 8, *190*8

urvey completed March 14, *190*8

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South Bdy high 2-38-75
low 3-56-80
East Bdy high 4-22-33
low 1-59-00
North Bdy high 6-15-03 Cl 05-63

15 Jl 91

BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chainman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

For preliminary affidavits see book "A" Tp. 23 S., R. 18 E.

BOOK A-348

INDEX DIAGRAM.

Township 22 South, *Range* 12 East.

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

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level t... chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; tha... we will report the true distances to all notable objects, and the true lengths of all lines that we assist i... measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey c...

_____

_____, *Chainma...*

_____, *Chainma...*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of moundmen in the establ... of corners, according to the instructions given us, to the best of our skill and ability, in the survey ...

_____

_____, *Moundma...*

_____, *Moundma...*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

WE, _____ and _____

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co... and other duties, according to instructions given us, to the best of our skill and ability, in the survey ...

_____

_____, *Axma...*

_____, *Axma...*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

I, _____, do solemnly swear that I will well and tru... perform the duties of flagman according to instructions given me, to the best of my skill and ability, in t... survey of _____.

_____, *Flagma...*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

RANDOM EAST BOUNDARY OF T.22 S.,R.19 E.

Survey commenced, March 8,1908,and executed with the instrument described in book "A",of this survey.

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

At the cor.of Tps.21 and 22 S.,Rs.19 and 20 E.,which is a sandstone,10x10x 6 ins.above ground, marked and witnessed as described by the surveyor general, in approximate latitude 38°56'N.,long.109°47'W., I set off 38°56'N.,on lat.arc,4°42'S.on decl.arc,and at 4h.11m.,p.m.,l.m.t.,determine with the solar a meridian and mark a point thereof on a stone,firmly set in the ground,5 chs.N.of the cor.

At 8h.15m.,p.m.,l.m.t.,I observe Polaris at western elongation,in accordance with Manual of Instructions, and mark a point in the line thus determined,on a peg driven in the ground, 5 chs.N.of my station.

March 8, 1908

March 9 : At 7 a.m.,I lay off the azimuth of Polaris, 1°31'to the east and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins.east of the mark determined by the solar.

At 8h.11m.,a.m.,l.m.t.,I set off 38°56'N.,on lat. arc,4°27'S.,on decl.arc,and mark a point in the meridian determined with the solar,by a cross on the stone,already set 5 chs.N.of my station; this mark falls 0.4 ins.east of the meridian established by the Polaris observation.

RANDOM EAST BOUNDARY OF T.22 S.,R.19 E.

CHAINS

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'21" west and east of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.30m., a.m., is N.15°55'W., the angle thus determined gives the mag.decl.15°55'E.

From the township cor., already described, I run South, on a random line, along the E.bdy. of T.22 S.,R.19 E. setting temp.$\frac{1}{4}$ sec.cors. and sec.cors. at intervals of 40.00 chs., and at 486.70 chs., a distance equal to the the length of the west boundary of the Tp., set a temp. cor. for Tps.22 and 23 S.,Rs.19 and 20 E.

March 9,1908

SOUTH BOUNDARY OF T.22 S.,R.19 E.

March 10 : At 8h.10m., a.m., l.m.t., I set off 38°51'N., on lat.arc, 4°03'S., on decl.arc, and determine a meridian with the solar at the temp.cor. of Tps.22 and 23 S.,Rs.19 and 20 E.,

Thence I run, west, on a random line along the south boundary of T.22 S.,R.19 E., setting temp.$\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs. and at 495.55 chs. intersect the E.bdy. of T.23 S.,R.18 E.,5.37 chs.S. of the cor. of Tps.22 and 23 S.,Rs.18 and 19 E., heretofore described.

I abandon the random line and run [illegible] east, from the cor. of Tps.22 and 23 S.,Rs.18 and 19 E.

March 10,1908.

SOUTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	March 11 : At 8h.10m.,a.m.,l.m.t.,I set off 38°51'N., on lat.arc,3°40'S.,on decl.arc,and determine a meridian with the solar,at the cor.of Tps.22 and 23 S.,Rs.18 and 19 E.,heretofore described.
	Thence I run,
	East,bet.secs.6 and 31, marking and blazing true line.
	Over rolling land,through scant undergrowth.
55.55	Set a limestone,15x12x3 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins., E.and W.of stone,and raise a mound of earth,3½ ft.base, 1½ ft.high,N.of cor.
95.55	Set a sandstone,15x7x5 ins.,10 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 5 notches on E.and 1 notch on W.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	Land,rolling.
	Soil,clay loam,2nd.rate.
	No timber.
	Undergrowth, sparse,sage and greasewood.

	East,bet.secs.5 and 32.
	Gradual descent,through scant undergrowth.
40.00	Set a pine post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 32 on N. face,and 5 on S.face,dig pits,18x18x12 ins.,E.and W.of post,3 ft.dist.,and raise a mound of earth,3½ ft.base, 1½ ft.high,N.of cor.
53.00	Wash,10 lks.wide,8 ft.deep,course S.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.4-5-32 and 33, marked,T 22 S S 33 on NE.,
	R 19 E S 4 on SE.,
	T 23 S S 5 on SW.and

SOUTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	S 32 on NW.face,and with 4 notches on E.and 2 notches on W.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	Land,sloping east.
	Soil,sandy loam,1st.rate.
	No timber.
	Undergrowth,sparse,sage.
	East,bet.secs.4 and 33.
	Gradual descent,through scant undergrowth.
40.00	Set a pine post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 33 on N.face, 4 on S.face,dig pits,18x18x12 ins.,E.and W.of post,3 ft. dist.,and raise a mound of earth,3½ ft.base,1½ ft.high, N.of cor.
50.25	Wash,10 lks.wide,10 ft.deep,course S.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.3-4-33 and 34,marked T.22 S S 34 on NE., R.19 E S 3 on SE., T 23 S S 4 on SW.,and S 33 on NW.face,with 3 notches on E.and W.edges,and dig pits,18x18x12 ins.,in each sec.,5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,sloping east.
	Soil,sandy loam,1st.rate.
	No timber.
	Undergrowth,sparse sage.
	East,bet.secs.3 and 34.
	Over level land,through scant undergrowth.
25.00	Begin ascent over rolling clay land.
33.00	Ridge,bears N.and S.

SOUTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	Descend.
35.00	Hollow,50 ft.deep,course SE.
	Ascend.
37.50	Ridge,bears N.and S.
	Descend.
40.00	Set a limestone, 18 x 14 x 3 ins., 12 ins.in the ground, for ¼ sec.cor., marked ¼ on N.face, dig pits, 18 x 18 x 12 ins., E. and W.of stone, 3 ft.dist., and raise a mound of earth, 3½ ft.base, 1½ ft.high, N. of cor. ✓
41.25	Foot of descent, bears N.and S.
	Over level land,through dense greasewood brush.
71.90	Wagon road, to Moab, bears NW.and SE.
75.05	Telephone line, between Moab and Thompsons, bears NW. and SE.
80.00	Set a sandstone , 20 x 11 x 6 ins.,15 ins.in the ground, for cor.of secs. 2-3-34 and 35, marked with 2 notches on E.and 4 notches on W.edges, and raise a mound of stone, 2 ft.base, 1½ ft.high,W.of cor.
38.75	Pits impracticable. ✓
41.25	Land,level and rolling.
	Soil,sandy loam 1st.rate;
	clay,3rd.rate.
	No timber.
	Undergrowth, sage and greasewood.
	Land,covered with dense undergrowth,38.75 chs. ✓
	March 11 : At this cor.I set off 3° 37' S.,on decl.

[illegible]

are, and at [illegible], [illegible], [illegible], [illegible], observe the sun on the meridian, the resulting lat. is 38° 51' N.

East, bet. secs. [illegible] and 35.

Ascend over sandy land, through dense sage and greasewood brush.

[illegible] Begin abrupt ascent, bearing NW. and SE.

Enter rocky land.

[illegible] Rocky ridge, bearing N. and S.

Abrupt descent.

[illegible] Enter bottom of hollow, 100 ft. deep, course SW.

[illegible] Leave hollow, course SW.

Begin abrupt ascent over rocky land.

[illegible] Foot of sandstone ledge, 30 ft. high, bearing NE. and SW.

[illegible] Top of ledge, bearing NE. and SW.

Ascend abruptly over broken sandstone ledges, and large boulders.

[illegible] Rocky spur, projects SW.

Descend.

[illegible] Hollow, [illegible] ft. deep, course SW.

Abrupt ascent.

[illegible] Foot of sandstone ledge, [illegible] ft. high, bearing NE. and SW.

[illegible] Top of ledge, bearing NE. and SW.

Abrupt ascent.

SOUTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS

37.83 Rocky spur,projects SW.

Descend.

38.25 Hollow,75 ft.deep,course SW.

Abrupt ascent.

40.00 Set a sandstone,18x6x5 ins.,12 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face,and raise a mound of stone, 2 ft.base,$1\frac{1}{2}$ ft.high,N.of cor. ✓

Pits impracticable.

68.70 Ridge,bears NW.and SE.,700 ft.above sec.cor.

Abrupt descent.

73.00 Hollow,150 ft.deep,course SE.

Abrupt ascent.

75.87 Rocky spur,projects S.

Abrupt descent.

80.00 Set a sandstone,15x12x12 ins.,10 ins.in the ground,for cor.of secs.1-2-35 and 36,marked with 1 notch on E.and 5 notches on W.edges,and raise a mound of stone,2 ft. base,$1\frac{1}{2}$ ft.high,W.of cor. ✓

Pits impracticable.

Land,rolling and mountainous.

Soil,sandy and rocky,3rd.rate.

No timber.

Undergrowth,greasewood.

Mountainous land or

land covered with dense undergrowth,80.00 chs. ✓

East,bet.secs.1 and 36.

Descend over rocky and mountainous land.

0.30 Hollow,75 ft.deep,course S.

Abrupt ascent.

8.00 Rocky spur,projects S.

Abrupt descent.

22.00 Hollow,150 ft.deep,course SW.

Abrupt ascent.

SOUTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS

32.50 Ridge, bears NE. and SW.

Abrupt descent.

38.50 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

40.00 Falls on a sandstone boulder, 25x15x10 ft. above ground, I cut a cross, (X), at exact point for $\frac{1}{4}$ sec. cor., mark $\frac{1}{4}$ on N. side of cross, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

52.80 Rocky ridge, bears N. and S.

Abrupt descent.

Enter scattering cedar and pinon timber.

60.50 Hollow, 150 ft. deep, course S.

Ascend over solid sandstone.

80.00 Intersect the random E. bdy. of T.22 S., R.19 E.

Set a sandstone, 20x10x9 ins., in a mound of stone, for cor. of Tps. 22 and 23 S., Rs. 19 and 20 E., marked

22 S on NE.,

20 E on SE.,

23 S on SW., and

19 E on NW. face, and with 6 notches on each edge, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.

Pits impracticable.

Note:

On account of natural obstacles, this cor. cannot be set in the ground.

Land, mountainous.

Soil, rocky, 3rd. rate.

Timber, scattering cedar and pinon.

Mountainous land on 80.00 chs.

March 11, 1908

EAST BOUNDARY OF T.22 S.,R.19 E.

CHAINS

March 12: At 8h.10m.,a.m.,l.m.t.,I set off 38°51'N.,on lat.arc,3°16'S.,on decl.arc,and determine a meridian with the solar,at the cor.of Tps.22 and 23 S.,Rs.19 and 20 E., heretofore described.

Thence I run

North,bet.secs.31 and 36.

Ascend over solid sandstone and mountainous land.

22.00 Begin abrupt ascent,over sandstone boulders and scattering cedar and pinon timber.

26.60 Ridge,bears NW.and SE.

Abrupt descent.

31.00 Hollow,100 ft.deep,course SE.

Ascend.

38.20 Ridge,bears NW.and SE.

Leave timber.

Abrupt descent.

40.00 Set a sandstone,18x12x10 ins.,12 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,and raise a mound of stone, 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.

Pits impracticable.

42.75 Top of sandstone ledges, 400 ft.high, bearing NW.and SE.

54.00 Foot of ledges, bearing NW.and SE.

Over rolling sandy land,descend through dense undergrowth.

61.00 Road,bears NW.and SE.

80.00 Set a sandstone,15x10x5 ins.,10 ins.in the ground,for cor.of secs.25-30-31 and 36,marked with 1 notch on S.and 5 notches on N.edges,dig pits,18x18x12 ins.,in each sec., $5\frac{1}{2}$ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high, W.of cor.

Land,mountainous and rolling.

Soil,rocky,3rd.rate; sandy,2nd.rate.

Timber, scattering cedar and pinon.

Undergrowth, sage and greasewood.

EAST BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	Mountainous land or
	land covered with dense undergrowth, 80.00 chs.
	North, bet.secs.25 and 30.
	Gradual ascent, over sandy land, through dense undergrowth.
20.00	Wash, 25 lks.wide, 10 ft.deep, course W.
40.00	Set a sandstone, 15x8x8 ins., 10 ins.in the ground, for ¼ sec.cor., marked ¼ on W.face, dig pits, 18x18x12 ins., N.and S.of stone, 3 ft.dist., and raise a mound of earth, 3½ ft. base, 1½ ft.high, W.of cor.
52.00	Wash, 25 lks.wide, 10 ft.deep, course W.
80.00	Set a sandstone, 15x9x5 ins., 10 ins.in the ground, for cor.of secs.19-24-25 and 30, marked with 2 notches on S. and 4 notches on N.edges, dig pits, 18x18x12 ins., in each sec., 5½ ft.dist., and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.
	Land, sloping south.
	Soil, sandy, 3rd.rate.
	No timber.
	Undergrowth, sage and greasewood.
	Land, covered with dense undergrowth, 80.00 chs.
	March 12 : At this cor.I set off 3°13'S., on decl.arc, and at 0h.10', p.m., l.m.t., observe the sun on the meridian, the resulting lat.38°53'N.
	North, bet.secs.19 and 24.
	Gradual ascent, over sandy land, through dense undergrowth.
12.00	Begin abrupt ascent over rocky land, bears NW.and SE.
14.75	Rocky spur, projects NW.
	Abrupt descent.
18.00	Foot of abrupt descent, bears NW.and SE.
	Gradual descent.

EAST BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
40.00	Set a sandstone,20x8x4 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,dig pits,18x18x12 ins.,N. and S.of stone,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,W.of cor.
43.00	Wash,30 lks.wide,10 ft.deep,course SW.
	Gradual ascent.
68.00	Begin abrupt ascent,bears NE.and SW.
70.25	Spur,projects SW.
	Abrupt descent.
78.90	Hollow,100 ft.deep,course SW.
	Abrupt ascent.
80.00	Set a sandstone,15x12x4 ins.,10 ins.in the ground,for cor.of secs.13-18-19 and 24,marked with 3 notches on N. and S.edges, dig pits,18x18x12 ins.,in each sec.,5½ ft. dist.,and raise a mound of earth,4 ft.base,2 ft.high, W.of cor.
	Land,mountainous and rolling.
	Soil,rocky,3rd.rate; clay,2nd rate.
	No timber.
	Undergrowth,sage and greasewood.
	Mountainous land or
	land covered with dense undergrowth,80.00 chs.

North,bet.secs.13 and 18.

	Ascend abruptly over mountainous land.
18.50	Ridge,bears NE.and SW.
	Abrupt descent.
21.00	Foot of abrupt descent,bears NE.and SW.
	Descend over rolling land,through scant brush.
40.00	Set a pine post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 13 on W. face,18 on E.face,dig pits,18x18x12 ins.,N.and S.of post., 3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft. high,W.of cor.

[illegible] OF T.[illegible] S., R.19 E.

[illegible]

[illegible] Wash, [illegible] chs. wide, 10 ft. deep, course W.

Gradual ascent.

[illegible] Set a sandstone, 12x10x5 ins., 8 ins. in the ground, for cor. of secs. 7-12-13 and 18, marked with 4 notches on S. and 2 notches on N. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, clay, 3rd. rate, loam, 1st. rate.

No timber.

Undergrowth, sage.

Mountainous land on $1.00 chs.

North, bet. secs. 7 and 12.

Ascend over rolling land.

[illegible] Wash, 1.00 wide, 10 ft. deep, course SW.

[illegible] Set a limestone, 16x10x5 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

[illegible] Road, bears NE. and SW.

[illegible] Set a limestone, 16x9x5 ins., 10 ins. in the ground, for cor. of secs. 1-6-7 and 12, marked with 5 notches on S. and 1 notch on N. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay loam, 2nd. rate.

No timber.

North, bet. secs. 1 and 6.

Ascend over rolling land, through dense undergrowth.

EAST BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
15.20	Ridge, bears NE. and SW.
	Descend.
19.60	Telephone line, between Moab and Thompsons, bears NE. and SW.
23.75	Hollow, 50 ft. deep, course SW.
	Ascend.
28.60	Spur, projects NW.
	Descend.
37.80	Hollow, 75 ft. deep, course W.
	Ascend.
40.00	Set a limestone, 15x10x4 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
46.80	Spur, projects SW.
	Descend.
53.00	Hollow, 50 ft. deep, course W.
	Ascend.
58.30	Spur, projects SW.
	Descend.
67.50	Hollow, 75 ft. deep, course SW.
	Ascend.
81.33	Intersect the cor. of Tps. 21 and 22 S., Rs. 19 and 20 E.
	Land, rolling and mountainous.
	Soil, clay 3rd. rate; loam, 2nd. rate.
	No timber.
	Undergrowth, greasewood and sage.
	Mountainous land or
	land covered with dense undergrowth, 81.33 chs.
	March 12, 1908

NORTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS

March 13 : At 8h.10m.,a.m.,l.m.t.,I set off 38°56'N.,
on lat.arc, 2°53'S.,on decl.arc,and determine a meridian
with the solar at the cor.of Tps.21 and 22 S.,Rs.19 and
20 E.,heretofore described.

Thence I run

West,on a random line,along the N.bdy.of T.22 S.,R.19 E.,
setting temp.¼ sec.and sec.cors.at intervals of 40.00
chs.and at 495.03 chs.,intersect the E.bdy.of T.22 S.,
R.18 E.,5.63 chs.S.of the cor.of Tps.21 and 22 S.,Rs.
18 and 19 E.,heretofore described.

The falling is not within the limits of 21' of arc,I
therefore abandon the random line and begin at the cor.of
Tps.21 and 22 S.,Rs.18 and 19 E.,and run

East, bet.secs.6 and 31,

marking and blazing true line.

Ascend abruptly over mountainous land.

2.00 Ridge,bears NE.and SW.

Abrupt descent.

9.00 Hollow,75 ft.deep,course SW.

Ascend.

22.80 Ridge,bears N.and S.

Descend.

30.25 Old railroad grade,bears N.and S.

38.00 Hollow,100 ft.deep,course S.

Ascend.

55.03 Set a limestone,20x10x3 ins.,15 ins.in the ground,for
¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins.,
E.and W.of stone,3 ft.dist.,and raise a mound of earth,
3½ ft.base,1½ ft.high,N.of cor.

65.50 Ridge,bears N.and S.

Descend.

67.50 Hollow,75 ft.deep,course S.

Ascend.

79.50 Ridge,bears N.and S.

NORTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	Descend.
80.75	Hollow,75 ft.deep,course S.
	Ascend.
94.60	Ridge,bears N.and S.
	Descend.
95.03	Set a limestone,18x10x4 ins.,12 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 5 notches on E.and 1 notch on W.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 95.03 chs.

March 13,1908.

March 14 : At 8h.09m.,a.m.,l.m.t.,I set off 38°56'N.,on lat.arc,2°29'S.,on decl.arc,and determine a meridian with the solar,at the cor.of secs.5-6-31 and 32.

Thence I run

East,bet.secs.5 and 32.

	Descend over mountainous land.
7.50	Hollow,75 ft.deep,course S.
	Ascend.
12.00	Ridge,bears N.and S.
	Descend.
14.50	Road,bears NE.and SW.
18.00	Hollow,100 ft.deep,course S.
	Abrupt ascent.
23.00	Rocky ridge,bears N.and S.
	Abrupt descent.
25.00	Hollow,50 ft.deep,course SW.
	Ascend.
29.00	Ridge,bears NE.and SW.

NORTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	Descend.
34.50	Hollow,100 ft.deep,course S.
	Abrupt ascent.
37.30	Ridge,bears N.and S.
	Abrupt descent.
40.00	Set a limestone,15x8x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
43.00	Hollow,100 ft.deep,course S.
	Abrupt ascent.
58.00	Spur,projects SW.
	Abrupt descent.
62.00	Hollow,100 ft.deep,course SW.
	Abrupt ascent.
70.60	Spur,projects SW.
	Abrupt descent.
73.00	Hollow,100 ft.deep,course SW.
	Abrupt ascent.
80.00	Set a sandstone,28x10x6 ins.,21 ins.in the ground,for cor.of secs.4-5-32 and 33,marked with 4 notches on E.and 2 notches on W.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky and clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.

East,bet.secs.4 and 33.

	Ascend abruptly over rocky and mountainous land.
3.00	Ridge,bears NE.and SW.
	Descend.

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NORTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
4.80	Hollow,50 ft.deep,course SE.
	Ascend.
6.90	Spur,projects SE.
	Descend.
11.10	Hollow,100 ft.deep,course SW.
	Abrupt ascent.
20.00	Top of abrupt ascent,bears NE.and SW.
	Gradual ascent.
24.50	Ridge,bears NE.and SW.
	Abrupt descent.
29.00	Foot of abrupt descent,bears NE.and SW.
	Gradual descent,through dense undergrowth.
40.00	Set a limestone,24x6x4 ins.,18 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on N.face,dig pits,18x18x12 ins.,E. and W.of stone,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high,N.of cor.
48.50	Wash,1.50 chs.wide,25 ft.deep,course S.
	Gradual ascent.
80.00	Set a sandstone,15x9x4 ins.,10 ins.in the ground,for cor.of secs.3-4-33 and 34,marked with 3 notches on E.and W.edges,dig pits,18x18x12 ins.,in each sec.,$5\frac{1}{2}$ ft.dist., and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,mountainous and rolling.
	Soil,rocky and clay,3rd.rate ; loam,2nd.rate.
	No timber.
	Undergrowth,sage.
	Mountainous land or
	land covered with dense undergrowth,80.00 chs.

East,bet.secs.3 and 34.

	Gradual ascent,through dense undergrowth.
22.00	Begin abrupt ascent,bears NE.and SW.
26.75	Ridge,bears NE.and SW.
	Abrupt descent.

NORTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
32.00	Foot of abrupt descent,bears NE.and SW.
	Gradual descent.
40.00	Set a sandstone,18x6x5 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins., E.and W.of stone,3 ft.dist.,and raise a mound of earth, 3½ ft.base,1½ ft.high,N.of cor.
80.00	Set a sandstone,15x10x4 ins.,10 ins.in the ground,for cor.of secs.2-3-34 and 35,marked with 2 notches on E.and 4 notches on W.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	Land,mountainous and rolling.
	Soil,sandy loam,1st.rate ; clay,3rd.rate.
	No timber.
	Mountainous land or
	land covered with dense undergrowth,80.00 chs.
	March 14: At this cor.I set off 2°26'S.,on decl.arc, and at 0h.09m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 38°56'N.

East,bet.secs.2 and 35.

	Gradual descent through dense undergrowth.
23.25	Wash,15 lks.wide,8 ft.deep,course S.
	Gradual ascent.
40.00	Set a sandstone,15x8x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins.,E. and W.of stone,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,N.of cor.
54.50	Wash,35 lks.wide,15 ft.deep,course SW.
80.00	Set a sandstone,12x12x4 ins.,8 ins.in the ground,for cor.of secs.1-2-35 and 36,marked with 1 notch on E.and 5 notches on W.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.

NORTH BOUNDARY OF T.22 S.,R.19 E.

CHAINS	
	Land, rolling.
	Soil, sandy loam, 1st. rate.
	No timber.
	Undergrowth, sage.
	Land, covered with dense undergrowth, on 80.00 chs.

East, bet. secs. 1 and 36.

Gradual ascent, through dense undergrowth.

13.00 Wash, 50 lks. wide, 15 ft. deep, course SW.

40.00 Set a limestone, 15x9x4 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

76.50 Road, from Moab to Thompsons, bears N. and S.

80.00 Intersect W. bdy. of T.21 S., R.20 E., 5.63 chs. N. of the cor. of Tps. 21 and 22 S., Rs. 19 and 20 E., heretofore described.

Set a sandstone, 15x12x8 ins., 10 ins. in the ground, for closing cor. of Tps. 21 and 22 S., R.19 E., marked

C C 19 E on W.,

21 S on N., and

22 S on S. face, and with 6 grooves on N.S. and W. faces, dig pits, 30x24x12 ins., crosswise on each line, N. and S. 4 ft., and W. of cor. 8 ft. dist., and raise a mound of earth, 5 ft. base, $2\frac{1}{2}$ ft. high, W. of cor.

I destroy all marks on the cor. of Tps. 21 and 22 S., Rs. 19 and 20 E., that pertain to R.19 E.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth, 80.00 chs.

March 14, 1908

BOUNDARIES OF T. 22 S., R. 19 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
S. Bdy.	West	495.55				495.55
W.Bdy.	North	486.70	486.70			
N.Bdy.	East,	495.03			495.03	
E.Bdy.	South	486.96		486.96		
Convergency					0.60	
Totals			486.70	486.96	495.63	495.55
Error in lat. and dep.				486.70	495.55	
				0.26	0.08	

For general description, see, Subdivisions of T.22 S., R.19 E.

No trace could be found of the old surveys on the E.N. and S.bdys. of this township.

Harvey L. Hunt
U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and

rking the lines and corners described in the foregoing field notes of the survey of _____

_____

wing the respective capacities in which they acted:

list of names and final affidavits of assistants see book "F" T.23 S., R. 20 E.

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

se parts or portions of the _____

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented

he foregoing field notes as having been surveyed by him and under his direction; and that said survey been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the ner monuments established, according to the instructions furnished by the United States Surveyor

neral for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

bscribed and sworn to before me this _____

day of _____, 190

_____

SEAL

_____

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Sur...
solemnly swear that, in pursuance of a contract received from _____
United States Surveyor General for _____, bearing date ...
_____ day of _____, 190 , I have well, faithfully, and truly, in ...
proper person, and in strict conformity with the instructions furnished by the United States Sur...
General for _____, the Manual of Surveying Instructions, and the laws ...
United States, surveyed all those parts or portions of _____
For final affidavit see book ref. Tp. 23 S., R. 20 E.
_____
_____
_____ of the _____
_____ meridian, in the _____ of _____, which are represented in ...
foregoing field notes as having been surveyed by me, and under my direction; and I do further solem...
swear that all the corners of said survey have been established and perpetuated in strict accordance w...
the Manual of Surveying Instructions, and the special written instructions of the United States Surve...
General for _____ and in the specific manner described in the field notes, and th...
the foregoing are the original field notes of such survey.

_____
United States Deputy Surveyo...

Subscribed by said _____, and sworn to before me this _____ day of _____, 190 }

_____

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, ... 190...

The foregoing field notes of the survey of the east, south, and north boundaries of Township No. 22 South, Range No. 19 East of the Salt Lake Base and Meridian, Utah,
_____
_____
_____
executed by Harvey D. Heist and Job H. Winwood
under his contract No. 208, dated March 21, 190 7, having be...
critically examined, and the necessary corrections and explanations made, the said field notes, and th...
surveys they describe, are hereby approved.

_____
United States Surveyor Genera...

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.

_____
United States Surveyor Genera...

4—306

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4—679.

"D"
BOOK A-348

FILED
SEP 8 1908

FIELD NOTES

7.7

OF THE SURVEY OF THE

EAST and SOUTH BOUNDARIES

of

Township No. 23 South,

Range No. 19 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, *United States Deputy Surveyors,*

Under ~~his~~ their *Contract No.* 298, *dated* March 21, 1907

Survey commenced March 15, 1908

Survey completed March 18, 1908

6—151

East 13 chs High 3-01-80
Low 3-01-25

South 8 chs High 3-72-68
Low 2-23-50

Book A 348

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton,	Chainman
Walter A. Stumm,	"
Earl Woolley,	Moundman
Homer Petty	"
Claude L. Heist,	Axman
Charlie Stumm,	Flagman

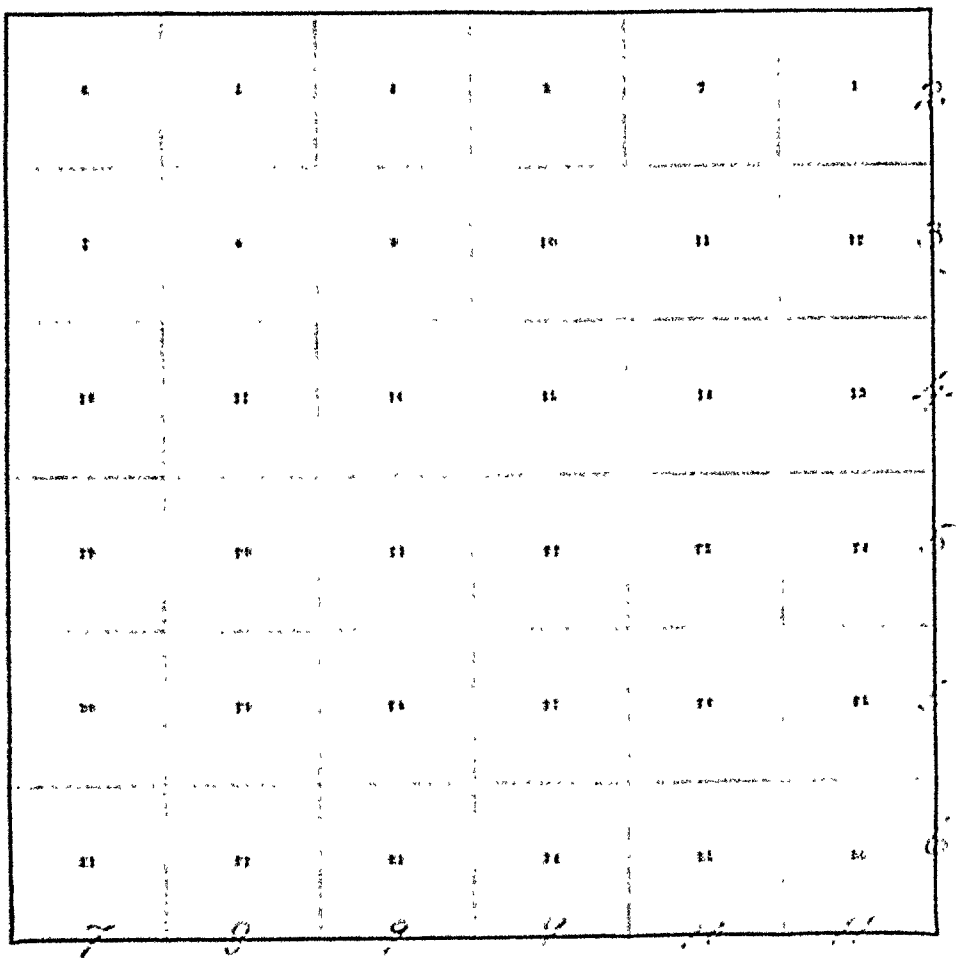
For preliminary affidavits see book "A" T. 23 S., R. 18 E.

BOOK A-348

INDEX DIAGRAM.

Township 3[illegible] South, *Range* 19 East

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



Meanders Page .....

6—131

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman.*

_____, *Chainman.*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman.*

_____, *Moundman.*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman.*

_____, *Axman.*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

EAST BOUNDARY OF T.23 S.,R.19 E.

Survey commenced, March 15, 1908, and executed with the instrument described in book "A", of this survey.
I examine the adjustments of the transit, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of Tps. 22 and 23 S., Rs. 19 and 20 E., heretofore described, in approximate latitude 38°51'N., longitude 109°47'W., I set off 38°51'N., on lat. arc, 1°58'S., on decl. arc, and at 4h.09m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 7h.48'p.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg, driven in the ground, 5 chs. N. of my station.

March 15, 1908.

March 16: At 7 a.m., I lay off the azimuth of Polaris, 1°31'to the east and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. east of the mark determined by the solar.

At 8h.09' a.m., l.m.t., I set off 38°51'N., on lat. arc, 1°42'S., on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone, already set 5 chs. N. of my station; this mark falls 0.5 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about, 0'26" west and east of the meridian established by the Polaris

EAST BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
	observations, therefore, I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h.30m., a.m. is N.15°39'W., the angle thus determined gives the mag.decl. 15°39'E.
	From the Tp.cor. already described, I run
	South, bet.secs.1 and 6.
	Descend abruptly over solid sandstone, through scattering cedar and pinon timber.
22.00	Hollow, 150 ft.deep, course SE.
	Abrupt ascent.
23.75	Spur, projects E.
	Abrupt descent.
27.25	Same hollow, 150 ft.deep, course SW.
	Abrupt ascent.
40.05	Spur, projects SW.
	Abrupt descent.
43.05	A distance corresponding to the N.½ of the west bdy. of sec. 6 .
	Set a sandstone, 18x9x4 ins., 12 ins. in the ground, for ¼ sec.cor., marked ¼ on W.face, and raise a mound of stone, 2 ft.base, 1½ ft.high, W. of cor. √
	Pits impracticable.
43.15	Hollow, 100 ft.deep, course SW.
	Abrupt ascent.
55.00	Rocky spur, projects SW.
	Abrupt descent.
59.50	Hollow, 100 ft.deep, course SW.
	Abrupt ascent.
63.75	Rocky spur, projects SW.
	Abrupt descent.
66.70	Hollow, 150 ft.deep, course SW.
	Abrupt ascent.

EAST BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
69.25	Rocky spur, projects SW.
	Abrupt descent.
77.90	Hollow, 100 ft. deep, course SW.
	Abrupt ascent.
83.05	Rocky spur, projects W.
	Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 1-6-7 and 12, marked with 5 notches on S. and 1 notch on N. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	Timber, scattering cedar and pinon.
	Mountainous land on 83.05 chs.
	South, bet. secs. 7 and 12.
	Descend abruptly over rocky and mountainous land.
9.00	Hollow, 100 ft. deep, course SW.
	Ascend.
10.75	Rocky spur, projects SW.
	Descend.
24.00	Hollow, 100 ft. deep, course SW.
	Ascend.
27.00	Rocky spur, projects SW.
	Descend.
34.00	Leave rocky land, descend through dense undergrowth.
40.00	Set a sandstone, 15x11x4 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
52.00	Hollow, 75 ft. deep, course NW.
	Ascend.
80.00	Set a sandstone, 15x10x8 ins., 10 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked with 4 notches on S.

EAST BOUNDARY OF T.23 S.,R.19 E.

CHAINS

and 2 notches on N.edges, and raise a mound of stone, 2 ft. base, 1½ ft.high, W. of cor.

Pits impracticable.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate; sandy, 2nd. rate.

Timber, scattering cedar and pinon.

Mountainous land or

land covered with dense undergrowth, 80.00 chs.

South, bet. secs. 13 and 18.

Ascend abruptly over rocky and mountainous land.

12.75 Spur, projects E.

Abrupt descent.

15.00 Hollow, 75 ft. deep, course NE.

Abrupt ascent.

20.00 Ridge, bears NW. and SE.

Abrupt descent.

40.00 Set a conglomerate stone, 15x12x4 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

53.00 Foot of abrupt descent, bears NW. and SE.

Descend over sandy land.

80.00 Set a sandstone, 24x10x3 ins., 18 ins. in the ground, for cor. of secs. 13-18-19 and 24, marked with 3 notches on N. and S. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. rate; sandy, 2nd. rate.

No timber.

Mountainous land on 53.00 chs.

March 16: At this cor. I set off 1°39' S., on decl. arc, and at 9h. 00m., p.m., l.m.t., observe the sun on the

EAST BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
	meridian, the resulting lat. is 38°49'N.
	South, bet. secs. 19 and 24.
	Gradual descent, through scant brush.
39.65	Road to Moab, bears NW. and SE.
40.00	Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
61.90	Telephone line, between Moab and Thompsons, bears NW. and SE.
80.00	Set a limestone, 18x6x6 ins., 12 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked with 2 notches on S. and 4 notches on N. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, sloping south.
	Soil, sandy loam, 1st. rate.
	No timber.
	Undergrowth, sparse sage and greasewood.
	South, bet. secs. 25 and 30.
	Gradual ascent, through scant brush.
3.25	Begin abrupt ascent, bears NW. and SE.
8.00	Ridge, bears NW. and SE.
	Descend along rolling west slope.
40.00	Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
80.00 4.75 75-25	Set a sandstone, 24x15x3 ins., 18 ins. in the ground, for cor. of secs. 25-30-31 and 36, marked with 1 notch on S. and 5 notches on N. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft.

EAST BOUNDARY OF T.23 S.,R.19 E.

CHAINS

High,W.of cor.

Land,rolling and mountainous.

Soil,sandy loam,1st.rate; clay,3rd.rate.

No timber.

Undergrowth,sage and greasewood.

Mountainous land on 4.75 chs.

South,bet.secs.31 and 36.

Descend along rolling west slope.

16.00 Hollow,75 ft.deep,course SW.

Ascend.

21.00 Ridge,bears NE.and SW.

Descend.

40.00 Set a sandstone,24x12x3 ins.,18 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,dig pits,18x18x12 ins., N.and S.of stone,3 ft.dist.,and raise a mound of earth, 3½ ft.base,1½ ft.high,W.of cor.

64.00 Wash,1.00 ch.wide,10 ft.deep,course SE.

Ascend over rolling land.

80.00 Set a limestone,16x8x6 ins.,11 ins.in the ground,for cor.of Tps.23 and 24 S.,Rs.19 and 20 E.,marked

23 S on NE.,

20 E on SE.,

24 S.,onSW.,and

19 E on NW.face,and with 6 notches on each edge, dig pits,24x24x12 ins.,on each line,N.,E.and W.,4 ft. and 8.of cor.8 ft.dist.,and raise a mound of earth,4 ft. base,2 ft.high,S.of cor.

Land,rolling,and mountainous.

Soil,clay,2nd.rate.

No timber.

Mountainous land on 21.00 chs.

March 16,1908.

SOUTH BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
	March 17 : At 8h.09m.,a.m.,l.m.t.,I set off 38°46'N.on lat.arc, 1°18'S.,on decl.arc,and determine a meridian with the solar,at the cor.of Tps.23 and 24 S.,Rs.19 and 20 E., heretofore described,thence I run
	West,on a random line,along the south bdy.of the Tp., setting temp.¼ sec.and sec.cors.at intervals of 40.00 chs.and at 496.18 chs.,fall 44 lks.S.of the cor.of Tps. 23 and 24 S.,Rs.18 and 19 E.,heretofore described.
	The falling answers to a correction of 0°03',or 7 lks. N.per mile,counting from the SE.cor.of the Tp.,
	therefore I run
	S.89°57'E.,bet.secs.31 and 6,
	marking and blazing true line.
	Descend over rocky and mountainous land,through scattering cedar and pinon timber.
46.00	Leave timber.
49.20	Hollow,100 ft.deep,course NE.
	Abrupt ascent.
52.00	Rocky spur,projects N.
	Abrupt descent.
56.18	Hollow,150 ft.deep,course N.
	Set a sandstone,15x12x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
	Abrupt ascent.
60.00	Enter scattering cedar and pinon timber.
75.00	Leave timber.
82.00	Rocky spur,projects N.
	Abrupt descent.
92.00	Hollow,75 ft.deep,course N.
	Abrupt ascent.
96.18	Ridge,bears NE.and SW.

SOUTH BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
	Set a sandstone,15x10x6 ins.,10 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 5 notches on E.and 1 notch on W.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	Timber,cedar and pinon.
	Mountainous land on 96.18 chs.
	March 17,1908.
	March 18 : At 8h.08m.,a.m.,l.m.t.,I set off 38°46'N.,on lat.arc,0°55'S.,on decl.arc,and determine a meridian with the solar,at the cor.of secs.5-6-31 and 32.
	Thence I run
	S.89°57'E.,bet.secs.5 and 32.
	Descend over rocky and mountainous land.
9.00	Begin abrupt descent,bears NE.and SW.
34.00	Over solid sandstone.
40.00	Point for cor.falls on solid sandstone, I mark a cross,(X) at exact point for ¼ sec.cor.,mark ¼ on N.side of cross, and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
44.00	Enter scattering cedar and pinon timber.
49.00	Hollow,100 ft.deep,course NE.
	Leave timber.
	Abrupt ascent.
75.75	Rocky spur,projects N.
	Descend.
78.00	Hollow,50 ft.deep,course N.
	Ascend.
79.75	Rocky spur,projects N.
	Abrupt descent.
80.00	Set a lava stone,18x10x5 ins.,12 ins.in the ground,for cor.of secs.4-5-32 and 33,marked with 4 notches on E.

SOUTH BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
	and 2 notches on W.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
	Pits impracticable. ✓
	Land,mountainous.
	Soil,rocky,3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	S.89°57'E.,bet.secs.4 and 33.
	Descend abruptly over rocky and mountainous land.
21.00	Foot of abrupt,descent,bears NW.and SE.
	Over level land,through dense undergrowth.
40.00	Set a limestone,20x12x3 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,dig pits,18x18x12 ins., E.and W.of stone,3 ft.dist.,and raise a mound of earth, 3½ ft.base,1½ ft.high,N.of cor. ✓
80.00	Set a sandstone,18x10x3 ins.,12 ins.in the ground,for cor.of secs.3-4-33 and 34,marked with 3 notches on E.and W.edges,dig pits,18x18x12 ins.,in each.sec.;5½ ft.dist., and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,mountainous,and level. ✓
	Soil,rocky,3rd.rate ; sandy loam,1st.rate.
	No timber.
	Mountainous land or land covered with dense undergrowth on 80.00 chs.
	S.89°57'E.,bet.secs.3 and 34.
	Gradual ascent through dense undergrowth.
13.50	Begin abrupt ascent,bears NW.and SE.
19.75	Ridge,bears NW.and SE.
	Descend over rolling land
40.00	Set a limestone,24x7x3 ins., 18 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.

SOUTH BOUNDARY OF T.23 S.,R.19 E.

CHAINS

Pits impracticable.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.2-3-34 and 35, marked T 23 S S 35 on NE.,
R 19 E S 2 on SE.,
T 24 S S 3 on SW.,and
S 34 on NW face,and with 2 notches on E.and 4 notches on W.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high, W.of cor.

Land,rolling and mountainous.

Soil,clay,2nd.rate.

No timber.

Undergrowth,greasewood.

Mountain ous land or land covered with dense undergrowth on 19.75 chs.

S.89°57'E.,bet.secs.2 and 35.

Descend over rolling land.

40.00 Set a pine post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 35 on N., 2 on S.face,dig pits,18x18x12 ins.,E.and W.of post., 3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft. high,N.of cor.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.1-2-35 and 36, marked T 23 S S 36 on NE.,
R.19 E S 1 on SE.,
T 24 S S 2 on SW.,and
S 35 on NW.face,and with 1 notch on E.and 5 notches on W.edges,dig pits,18x18x12 ins.,in each sec., 5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.

SOUTH BOUNDARY OF T.23 S.,R.19 E.

CHAINS	
	Land, rolling.
	Soil, clay, 2nd. rate.
	No timber.
	March 18: At this cor. I set off 0°52'S., on decl. arc, and at 0h.08m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°46'N.
	S.89°57'E., bet. secs. 1 and 36.
	Descend over rolling land.
40.00	Set a limestone, 18x10x7 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
43.25	Hollow, 50 ft. deep, course NE.
	Ascend.
47.25	Spur, projects N.
	Descend.
51.90	Hollow, 75 ft. deep, course NE.
	Ascend.
55.25	Spur, projects N.
	Abrupt descent.
66.50	Hollow, 75 ft. deep, course NE.
	Abrupt ascent.
71.00	Spur, projects N.
	Abrupt descent.
75.00	Hollow, 75 ft. deep, course NE.
	Abrupt ascent.
78.00	Spur, projects NE.
	Abrupt descent.
80.00	The cor. of Tps. 23 and 24 S., Rs. 19 and 20 E.
36.75	Land, rolling and mountainous.
43 25	Soil, clay, 2nd. rate.
	No timber.
	Mountainous land on 36.75 chs.
	March 18, 1908.

BOUNDARIES OF T. 23 S., R. 19 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
South Bdy.	N.89°57'W.	496.18	0.42			496.18
West Bdy.	North	483.05	483.05			
North Bdy.	East	495.55			495.55	
East Bdy.	South	483.05		483.05		
Convergency					0.58	
Totals			483.47 483.05	483.05	496.13	496.18 496.13
Error in lat.			0.42	Error in dep.		0.05

For general description, see Subdivisions of T.23 S., R.19 E.

No trace could be found of any old cors. of the old survey on the S.Bdy. of this Tp.

Henry A. Finch

U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "F", *Chainman.*

Tp.23 S. R. 20 E., *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____ meridian, _____ of _____, which are represented on the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 190

_____

SEAL

_____

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 190 , I have well, faithfully, and truly, in my o proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final affidavit see book "F" T. 23 S., R. 20 E.

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

_____
United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 190 }

_____

SEAL

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 190 7

The foregoing field notes of the survey of the East and South boundaries of Township No. 23 South, Range No. 19 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey E. Heist and Job H. Winwood under his contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Kell
United States 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.

_____
United States Surveyor General.

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4—070.

BOOK A-348

"E"

FILED

SEP 17 1908

T. N.

FIELD NOTES

OF THE SURVEY OF THE

SOUTH and EAST BOUNDARIES

of

Township No. 22 South,

Range No. 20 East,

Of the Salt Lake Base and ... *Meridian,*

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, ... *United States Deputy Surveyor,*

Under ~~his~~ their *Contract No.* 238, ... *dated* March 21, ... *1907*

Survey commenced March 19, ... *1908*

Survey completed March 22, ... *1908*

East Bdy Right 6-01-19

South Bdy Right 6-00-36

12 01 19

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BOOK A-348

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton — Chainman

Walter A. Stumm, — "

Earl Woolley, — Moundman

Homer Petty, — "

Claude L. Heist, — Axman

Charlie Stumm, — Flagman

For preliminary affidavits see book "A" T. 23 S., R. 18 E.

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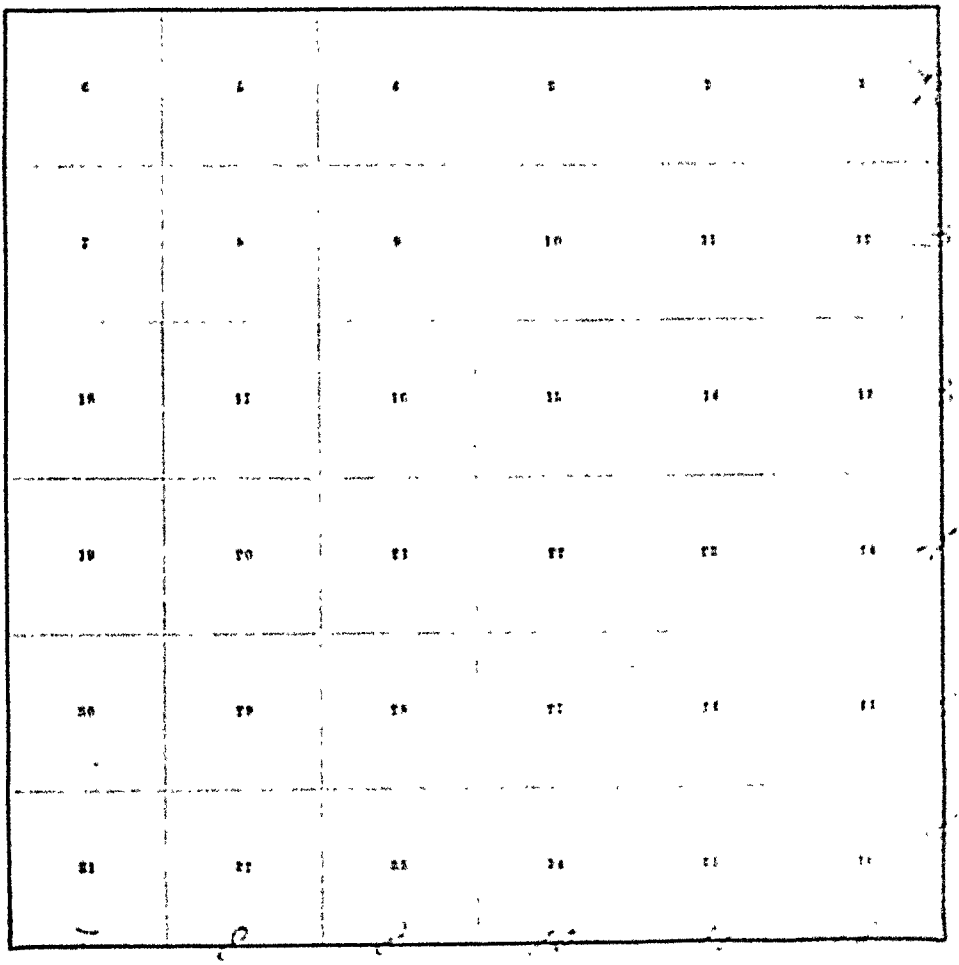
#
R0348

BOOK A-348

INDEX DIAGRAM.

Township 22 South, Range 1 East



Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, _____ and _____ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of _____

_____, *Chainman*

_____, *Chainman*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Moundman*

_____, *Moundman*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

WE, _____ and _____ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of _____

_____, *Axman*

_____, *Axman*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

I, _____, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of _____

_____, *Flagman*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

EAST BOUNDARY OF T.22 S.,R.20 E.

CHAINS

Survey commenced, March 19,1908, and executed with the instrument described in book "A", of this survey.

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

At the cor. of Tps.21 and 22 S.,Rs.20 and 21 E., which is a sandstone, 6x6x6 ins. above ground, marked and witnessed as described by the surveyor general, in approximate latitude 38°56'N., longitude 109°41'W., I set off 38°56'N., on lat. arc, 0°23'S., on decl. arc, and at 4h. 08m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 7h.33m., p.m., l.m.t., I observe Polaris, at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg, driven in the ground, 5 chs. N. of my station.

March 19,1908.

March 20 : At 7 a.m., I lay off the azimuth of Polaris, 1°31', to the east and ma rk the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. east of the mark determined by the solar.

At 8h.08m., a.m., l.m.t., I set off 38°56'N. on lat. arc, 0°07'S., on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone, already set 5 chs. N. of my station; this mark falls 0.5 ins. east of the meridian established by the Polaris observation.

EAST BOUNDARY OF T.22 S.,R.20 E.

CHAINS

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'26" west and east of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.30m., a.m., is N.16°10'W., the angle thus determined gives the mag.decl.16°10'E.

From the Tp.cor., already described, I run

South, bet.secs.1 and 6.

Ascend through dense undergrowth.

1.00 Ridge, bears E. and W.

Descend.

10.50 Wash, 20 lks.wide, 10 ft.deep, course SE.

Ascend.

41.19 A distance equal to corresponding line on the W.bdy. of sec. 6 of this township, minus the southing of the N.bdy. Set a flint stone, 18x10x6 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec cor., marked $\frac{1}{4}$ on W.face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

81.19 Set a flint stone, 20x8x4 ins., 15 ins. in the ground, for cor. of secs.1-6-7 and 12, marked with 5 notches on S. and 1 notch on N. edges, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, sage.

Land, covered with dense undergrowth, 81.19 chs.

EAST BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
	SOUTH,bet.secs.7 and 12.
	Ascend over rolling land,through dense undergrowth.
11.00	Ridge,bears NW.and SE.
	Descend over rolling land.
40.00	Set a sandstone,15x10x5 ins.,10 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,dig pits,18x18x12 ins., N.and S.of stone,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
54.00	Foot of rolling descent,bears NW.and SE.
	Gradual descent.
80.00	Set a sandstone,15x10x10 ins.,10 ins.in the ground,for cor.of secs.7-12-13 and 18,marked with 4 notches on S.and 2 notches on N.edges,dig pits,18x18x12 ins.,in each sec., $5\frac{1}{2}$ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	Land;rolling.
	Soil,clay,2nd.rate; sandy loam,1st.rate.
	No timber.
	Undergrowth,sage.
	Land,covered with dense undergrowth on 80.00 chs.
	South,bet.secs.13 and 18.
	Gradual descent,through dense undergrowth.
40.00	Set a sandstone,18x8x4 ins.,12 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,dig pits,18x18x12 ins.,N. and S.of stone,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
80.00	Set a sandstone,12x8x6 ins.,8 ins.in the ground,for cor. of secs.13-18-19 and 24,marked with 3 notches on N.and S.edges,dig pits,18x18x12 ins.,in each sec.,$5\frac{1}{2}$ ft.dist., and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,sloping south.
	Soil,sandy loam,1st.rate.
	No timber.

EAST BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
	Undergrowth, sage.
	Land, covered with dense undergrowth on 80.00 chs.
	March 20 : At this cor. I set off 0°04'S., on decl. arc, and at 0h.08m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°54'N.
	South, bet. secs. 19 and 24.
	Over level land, through dense undergrowth.
14.10	Wash, 20 lks. wide, 5 ft. deep, course SE.
	Ascend.
20.00	Ridge, bears E. and W.
	Descend.
27.00	Foot of descent, bears E. and W.
	Over level land.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 24 on W. and 19 on E. faces, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
56.00	Leave level land, bears E. and W.
	Ascend over rolling land.
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked with 2 notches on S. and 4 notches on N. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, level and rolling.
	Soil, Clay, 2nd. rate. sandy loam, 1st. rate.
	No timber.
	Undergrowth, sage.
	Land covered with dense undergrowth on 80.00 chs.

EAST BOUNDARY OF T.22 S.,R.20 E.

CHAINS

South,bet.secs.25 and 30.

Ascend abruptly over clay land.

28.15 Ridge,bears E.and W.

Abrupt descent.

31.00 Foot of abrupt descent,bears E.and W.

Over level land,through dense undergrowth.

40.00 Set a limestone,24x12x3 ins.,18 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,dig pits,18x18x12 ins.,N. and S.of stone,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,W.of cor.

61.25 Wash,15 lks.wide,5 ft.deep,course E.

76.00 Leave level land,bears E.and W.

Ascend over mountainous land.

80.00 Set a sandstone,15x12x6 ins.,10 ins.in the ground,for cor.of secs.25-30-31 and 36,marked with 1 notch on S.and 5 notches on N.edges,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous and level.

Soil,clay and rocky,3rd.rate ; sandy loam,1st.rate.

No timber.

Undergrowth,sage.

Mountainous land or land covered with dense undergrowth,80.00 chs.

South,bet.secs.31 and 36.

Ascend over rocky and mountainous land.

3.75 Spur,projects NE.

Descend.

7.50 Hollow,50 ft.deep,course NE.

Abrupt ascent.

13.50 Rocky spur,projects NE.

Abrupt descent.

18.60 Hollow,75 ft.deep,course NE.

EAST BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
	Abrupt ascent.
40.00	Set a sandstone,20x8x5 ins.,15 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,and raise a mound of stone, 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
47.30	Rocky ridge,bears NE.and SW.
	Abrupt descent.
50.00	Hollow,75 ft.deep,course SE.
	Ascend.
52.60	Spur,projects SE.
	Abrupt descent.
59.00	Hollow,100 ft.deep,course SE.
	Ascend.
70.00	Rocky spur,projects SE.
	Descend.
80.00	Set a lava stone,18x12x8 ins.,12 ins.in the ground,for cor.of Tps.22 and 23 S.,Rs.20 and 21 E.,marked 22 S on NE., 21 E on SE., 23 S on SW.,and 20 E on NW.face,and with 6 notches on each edge, and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high,S.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	Timber,a few scattering cedars.
	Mountainous land on 80.00 chs.
	March 20, 1908

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SOUTH BOUNDARY OF T.22 S.,R.20 E.

CHAINS

March 21 : At 8h.07m.,a.m.,l.m.t.,I set off 38°51'N.,on lat.arc,0°16' N.on decl.arc,and determine a meridian with the solar,at the cor.of Tps.22 and 23 S.,Rs.20 and 21 E.

Thence I run

West,on a random line,along the south bdy.of T.22 S.,R. 20 E.,setting temp.¼ sec.and sec.cors.at intervals of 40.00 chs.,and at 480.36 chs.,intersect the east bdy.of T.23 S.,R.19 E.,96 lks.S.of the cor.of Tps.22 and 23 S., Rs.19 and 20 E.,heretofore described.

The falling answers to a correction of 0°07', or 16 lks. N.per mile,counting from the SE.cor.of the Tp.,

March 21,1908.

March 22 : At 8h.07m.,a.m.,l.m.t.,I set off 38°51'N.,on lat.arc,0°40'N.,on decl.arc,and determine a meridian with the solar at the cor.of Tps.22 and 23 S.,Rs.19 and 20 E.

Thence I run

S.89°53'E.,bet.secs.6 and 31,

marking and blazing true line.

Ascend over solid sandstone and mountainous land.

19.30 Rocky ridge,bears NW.and SE.

Abrupt descent.

Enter scattering cedar and pinon timber.

28.00 Hollow,75 ft.deep,course NE.

Abrupt ascent.

29.75 Rocky spur,projects N.

Abrupt descent.

40.36 Set a sandstone,18x8x4 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,from which

a pinon,8 ins.diam.,bears N.32°E.,16 lks.dist., marked ¼ S 31 BT.

No other trees within limits,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.

SOUTH BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
59.75	Foot of abrupt descent, bears NW. and SE.
	Leave timber.
	Over level sandy land, through dense undergrowth.
80.36	Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for cor. of secs. 5-6-31 and 32, marked with 5 notches on E. and 1 notch on W. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, mountainous and level.
	Soil, rocky, 3rd. and 4th. rate ; sandy loam, 1st. rate.
	Timber, cedar and pinon.
	Undergrowth, sage.
	Mountainous land or land covered with dense undergrowth, 80.36 chs.

S.89°53'E., bet. secs. 5 and 32.

	Ascend over rolling land.
7.50	Road, bears NW. and SE.
14.50	Spur, projects SE.
	Descend.
33.00	Hollow, 50 ft. deep, course SE.
	Ascend over mountainous land.
40.00	Falls on a sandstone boulder, 4x2½x1 ft. above ground, I mark a cross (X), at exact point for ¼ sec. cor., mark ¼ on N. side of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Ascend abruptly over sandstone ledges.
47.00	Top of sandstone ledges, 200 ft. high, bear NW. and SE.
	Ascend over sandstone ledges.
56.00	Foot of nearly perpendicular sandstone ledges, bearing NW. and SE.
56.50	Sandstone spur, projects SE., 500 ft. above sec. cor.
	Descend abruptly over solid sandstone.
58.25	Hollow, 100 ft. deep, course S.

SOUTH BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
	Ascend.
60.25	Rodky ridge,bears NW.and SE.
	Descend through scattering cedar and pinon timber.
80.00	Set a sandstone,18x12x8 ins.,12 ins.in the ground,for cor.of secs.4-5-32 and 33,marked with 4 notches on E.and 2 notches on W.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
	Pits impracticable.
	Note: No suitable bearing trees are within limits.
	Land,mountainous.
	Soil,rocky,3rd.and 4th.rate.
	Timber, dwarfed,cedar and pinon.
	Mountainous land on 80.00 chs.
	S.89°53'E.,bet.secs.4 and 33.
	Descend over mountainous land,through scattering cedar and pinon timber.
31.50	Hollow,200 ft.deep,course NE.
	Abrupt ascent.
40.00	Set a sandstone,15x8x8 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,from which A cedar,5 ins.diam.,bears S.75°E.,29 lks.dist., marked ¼ S 4 B T. A cedar,10 ins.diam.,bears N.31°W.,45 lks.dist., marked ¼ S 33 B T.
65.30	Sandstone ridge,bears NW.and SE.
	Descend along steep N.slope.
80.00	Set a sandstone,15x8x5 ins.,10 ins.in the ground,for cor.of secs.3-4-33 and 34,marked with 3 notches on E. and W.edges,from which A pinon,7 ins.diam.,bears N.23°E.,1.22 chs.dist., marked T 22 S R 20 E S 34 B T. A pinon,12 ins.diam.,bears S.23°E.,1.17 chs.dist.,

SOUTH BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
	marked T 23 S R 20 E S 3 B T.
	A pinon,8 ins.diam.,bears S.47°W.,93 lks.dist.,
	marked T 23 S R 20 E S 4 B T.
	A pinon,15 ins.diam.,bears N.11°W.,79 lks.dist.,
	marked T 22 S R 20 E S 33 B T.
	Land,mountainous.
	Soil,rocky,3rd.and 4th.rate.
	Timber, cedar and pinon.
	Mountainous land on 80.00 chs.
	March 22 : At this cor.I set off 0°43'N.,on decl.arc,
	and at 0h.07m.,p.m.,l.m.t.,observe the sun on the
	meridian,the resulting lat.is 38°51'N.
	S.89°53'E.,bet.secs.3 and 34.
	Over solid sandstone,along steep N.slope,through
	scattering cedar and pinon timber.
40.00	Set a sandstone,15x8x5 ins.,10 ins.in the ground,for ¼
	sec.cor.,marked ¼ on N.face,from which
	A cedar,10 ins.diam.,bears N.67°E.,37 lks.dist.,
	marked ¼ S 34 BT.
	A cedar,12 ins.diam.,bears S.68°W.,57 lks.dist.,
	marked ¼ S 3 B T.
60.50	Hollow,100 ft.deep,course NW.
	Abrupt ascent.
65.50	Rocky ridge,bears NW.and SE.
	Abrupt descent.
80.00	Set a sandstone,18x12x4 ins.,12 ins.in the ground,for
	cor.of secs.2-3-34 and 35,marked with 2 notches on E.and
	4 notches on W.edges,from which
	A pinon,7 ins.diam.,bears S.39°E.,35 lks.dist.,
	marked T 23 S R 20 E S 2 B T.
	A pinon,8 ins.diam.,bears N.75°W.,9 lks.dist.,
	marked T 22 S R 20 E S 34 BT.
	No other trees within limits,and raise a mound of stone,

SOUTH BOUNDARY OF T. 22 S., R. 20 E.

CHAINS	
	2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, rocky, 4th. rate.
	Timber, cedar and pinon.
	Mountainous land on 80.00 chs.
	S. 89° 53' E., bet. secs. 2 and 35.
	Descend over solid sandstone, through scattering cedar and pinon timber.
12.00	Hollow, 75 ft. deep, course NW.
	Ascend.
15.90	Spur, projects NW.
	Descend.
25.50	Hollow, 100 ft. deep, course NW.
	Ascend.
40.00	Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for ¼ sec. cor., marked 1/4 on N. face, and raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor.
	Pits impracticable.
44.00	Rocky spur, projects NE.
	Abrupt descent.
58.00	Hollow, 150 ft. deep, course NE.
	Abrupt ascent.
68.00	Spur, projects N.
	Descend.
72.00	Hollow, 50 ft. deep, course N.
	Ascend.
80.00	Set a sandstone, 18x9x9 ins., 12 ins. in the ground, for cor. of secs. 1-2-35 and 36, marked with 1 notch on E. and 5 notches on W. edges, from which
	A pinon, 6 ins. diam., bears S. 25° E., 74 lks. dist., marked T 23 S R 20 E S 1 B T.
	No other trees within limits, and raise a mound of stone,

SOUTH BOUNDARY OF T.22 S.,R.20 E.

CHAINS	
	2 ft.base, 1½ ft.high, W.of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	Timber, cedar and pinon.
	Mountainous land on 80.00 chs.
	S.89°53'E., bet.secs.1 and 36.
	Ascend over rocky and mountainous land.
10.00	Ridge, bears NE. and SW.
	Abrupt descent.
17.00	Hollow, 100 ft.deep, course SE.
	Abrupt ascent.
40.00	Set a sandstone, 18x11x5 ins., 12 ins.in the ground, for ¼ sec.cor., marked ¼ on N.face, and raise a mound of stone, 2 ft.base, 1½ ft.high, N.of cor.
	Pits impracticable.
40.40	Rocky spur, projects S.
	Descend.
46.00	Hollow, 50 ft.deep, course SE.
	Ascend.
49.15	Rocky spur, projects SE.
	Abrupt descent.
61.50	Hollow, 110 ft.deep, course SE.
	Abrupt ascent.
62.70	Rocky spur, projects S.
	Abrupt descent.
79.90	Hollow, 150 ft.deep, course SE.
	Ascend.
80.00	The cor.of Tps.22 and 23 S., Rs.20 and 21 E.
	Land, mountainous.
	Soil, rocky, 3rd. and 4th. rate.

SOUTH BOUNDARY OF T.22 S.,R.20 E.

CHAINS

No timber.

Mountainous land on 80.00 chs.

March 22,1908

BOUNDARIES OF T. 22 S. R. 20 E.

Latitudes,departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	
E. Bdy.	South	481.19		481.19		
S.Bdy.	N.89°53'W.	480.36	0.98			480.36
W. Bdy.	North	481.33	481.33			
S.Bdy. of T 21 S.R.20 E,	S.89°59E.	479.84		0.14	479.84	
Convergency					0.58	
Totals			482.31	481.33	480.42	480.36
			481.33		480.36	
Error in lat.and dep.			0.98		0.06	

For general description,see Subdivisions of T.22 S.,R.20 E.

Harvey W. Hurst
U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

or list of names and final affidavits of assistants see book "F" T. 23 S., R. 20 E.

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____, United States Deputy Surveyor, in surveying all those parts or portions of the _____ of the _____ meridian, _____ of _____, which are represented on the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____, United States Surveyor General for _____, bearing date of the _____ day of _____, 190 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final affidavit see book "F" T. 23 S., R. 20 E.

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

_____

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 190

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 190

The foregoing field notes of the survey of the south and east boundaries of Township No. 23 South, Range No. 20 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood their under his contract No. 298, dated March 21, 190 7, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Thomas Hull

_____

United States 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.

_____

United States Surveyor General.