Volume

#

R0341

BOOK A-341

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6—151

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level th
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; th
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

.....

..... *Chainma*

..... *Chainma*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

.....

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establishme
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 ....., 189

SEAL

.....

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corne
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 ....., 189

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 .....

..... *Flagma*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

.....

.....

6—151

BOOK A-341

INDEX DIAGRAM.

Township 22 S., *Range* 15 E.

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6—151

PRELIMINARY OATHS OF ASSISTANTS.

We, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level th
chain over 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 o
.....

....., *Chainman*

....., *Chainman*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

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

....., *Moundman*

....., *Moundman*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

We, ... and .....
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
.....

....., *Axman*

....., *Axman*

Subscribed and sworn to before me this .....
day of ....., 189.

.....

SEAL

.....

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

....., *Flagman*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

BOOK A-341

INDEX DIAGRAM.

Township 21 S., *Range* 15 E.

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Meanders Page

6—152

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
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 su v

....., *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 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 c
and other duties, according to instructions given us, to the best of our skill and ability, in the sur

....., *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 .....

....., *Fl*

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

SEAL

BOOK A-341

INDEX DIAGRAM.

Township 20 S., *Range* 20 E.

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Meanders Page

6—151

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 assi- measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surve

.....

....., *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 establish of corners, according to the instructions given us, to the best of our skill and ability, in the surve

.....

....., *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 surve

.....

....., *Axm*

.....,

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

SEAL

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

....., *Flag.*

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

SEAL

BOOK A-341

INDEX DIAGRAM.

Township 20 S, *Range* 17 E.

6	5	4	3	2	1
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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 level th
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; th
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
.....

..... , *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 establishm
of corners, according to the instructions given us, to the best of our skill and ability, in the survey
.....

..... , *Moundm*

..... , *Moundm*

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 corn
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

.....

4—679.

M.M.L
K.J.B.

" K "

BOOK A-341

FILED
APR 14 1905 = 1906

J.B

FIELD NOTES

OF THE re SURVEY OF THE

N-O-R-T-H and S-O-U-T-H B-O-U-N-D-A-R-I-E-S

of

Township No. 23 South,

Range No. 15 East.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyors*

der ~~his~~ their Contract No. 291, *dated* June 3, *190*5

rvey commenced January 11, *190*6

rvey completed January 16, *190*6

6—151

high 5-00-22 ✓
S Bay Gow 1-06-00 ✓
N. high 6 04 32 ✓
Clay 10 [illegible] ✓

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Robert R. Raycraft,	Chainman.
Claude Gresham,	"
Daniel R. Adams,	Moundman
Willmer E. Tomlinson	Flagman

For preliminary affidavits see book "B" Tp. 23 S., R. 17 E.

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R0341

K

S Bdy T23S R15E

S. Bdy high	low	N Bdy high	
1 00 10	40-05	1-00.00	
1.00 10	45-95	1	
1.00 10		1	Clay
~~40 05~~		1	
~~45 95~~		1	
79-60		1 0452	10.00
1 00 32			
~~6.04.22~~	1-06-00 S Bdy	6-04-52	10.00
5-00-22			

BOOK A-341

INDEX DIAGRAM.

Township 23 South, , *Range* 15 East,

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BOOK A-341

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; t
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

.....

..... , *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 establishm
of corners, according to the instructions given us, to the best of our skill and ability, in the surve

.....

..... , *Moundm*

..... , *Moundm*

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 surve

.....

..... , *Axm*

..... , *Axm*

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

SEAL

I, ..., do solemnly swear that I will well and t
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

6—151

Resurvey of the South Boundary of T.23 S.,R.15 E.

CHAINS

Survey commenced, January 11, 1906, 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. 23 and 24 S., Rs. 15 and 16 E., on the Green River Guide Meridian, which is a sandstone, 24x8x6 ins., set in a mound of rock, marked and witnessed as descr-ed by the surveyor general, in approximate latitude 38° 46'N., longitude 110°14'W., I set off 38°46'N. on lat. arc, 21°45'S. on decl. arc, and at 4h. 08m., p.m., l.m.t., determine a meridian with the solar and mark a point thereof, on a stone, firmly set in the ground, 5 chs. N. of the cor.

January 11, 1906

January 12, : At 11h. 54m, 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.

At 7h. 30m., a.m., I lay off the azimuth of Polaris, 1°32' 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. 08m., a.m., l.m.t., I set off 38°46'N. on lat. arc, 21°39'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.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, about 0'26" W. and 0'26" E. of

Resurvey of the South Boundary of T.23 South, R.15 E.

CHAINS	
	reestablished 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.
	No trace can be found of the old sec. cor.
	Land, mountainous.
	Soil, sandy and rocky, 3rd. and 4th. rate.
	Mountainous land on 80.10 chs.
	N. 89°33' W., bet. secs. 2 and 35.
	Descend over solid sandstone.
4.50	Hollow, 100 ft. deep, course S.W.
	Ascend.
8.25	Spur, projects S.
	Descend.
20.00	Hollow, 100 ft. deep, course S.W.
	Ascend.
25.00	Sandstone spur, projects S.
	Descend.
29.50	Hollow, 100 ft. deep, course S.
	Abrupt ascent.
40.05	Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for reestablished 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.
	No trace can be found of the old ¼ sec. cor.
47.50	Sandstone ridge, bears N.E. and S.W.
	Descend.
76.50	Hollow, 100 ft. deep, course S.
	Ascend.
80.10	Point for cor. falls on a smooth sandstone floor; I cut a cross (x), at exact point for reestablished cor. of secs. 2-3-34 and 35, mark 2 grooves on E. and 4 grooves on W. sides of cross, and raise a mound of stone, 2 ft. base, 1½ ft high, W. of cor.

Resurvey of the South Boundary of T.23 S., R.15 E.

CHAINS

Pits impracticable.

No trace can be found of the old sec.cor.

Land, mountainous.

Soil, sandy and rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 80.10 chs.

N.89°33'W., bet. secs. 3 and 34.

Ascend over solid sandstone ledges.

9.00 Sandstone ridge, bears N.E. and S.W.

Descend.

23.00 Hollow, 100 ft. deep, course S.W.

Ascend.

30.00 Sandstone ridge, bears N.E. and S.W.

Descend.

36.00 Leave sandstone ledges, enter sandy land.

40.05 Set a sandstone 18x8x6 ins., 12 ins. in the ground, for reestablished 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.

No trace can be found of the old ¼ sec.cor.

40.30 Hollow, 100 ft. deep, course S.

Ascend over solid sandstone ledges.

52.50 Sandstone spur, projects S.W.

Descend.

56.50 Leave sandstone ledges, enter sandy land.

80.10 Set a sandstone, 26x10x10 ins., 19 ins. in the ground, for reestablished 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.

No trace can be found of the old sec.cor.

Land, mountainous.

Soil, sandy and rocky, 3rd. and 4th. rate.

Resurvey of the South Boundary of T.23 S.,R.15 E.

CHAINS	
	No timber.
	Mountainous land on 80.10 chs.
	January 13: At this cor.I set off 21°30'S.on decl.arc,
	and at 12h.09m.,l.m.t.,observe the sun on the meridian,
	the resulting lat.is 38°46'N.
	N.89°33'W.,bet.secs.4 and 33.
	Descend over sandy land.
1.50	Hollow,100 ft.deep,course S.W.
	Ascend.
32.00	Ridge,bears N.and S.
	Descend,over solid sandstone ledges.
40.05	The ¼ sec.cor.of secs.4 and 33,heretofore described.
	Land,mountainous.
	Soil,sandy,and.rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 40.05 chs.
	Thence I run
	N.86°09'W.,bet.secs.4 and 33.
	Descend over sandstone ledges.
.25	Hollow,100 ft.deep,course S.W.
	Ascend over broken land.
40.00	Begin abrupt ascent,over broken sandstone ledges,
	bearing N.E.and.S.W.
45.95	The point of a high rocky spur,projecting S.
	The cor.of secs.4-5-32 and 33,heretofore described.
	Land,mountainous
	Soil,rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 45.95 chs.
	N.87°52'W.,bet.secs.5 and 32.
	Descend abruptly over sandstone ledges.
15.00	Hollow,200 ft.below sec.cor.,course S.
	Ascend.

Resurvey of the South Boundary of T.23 S.,R.15 E.

CHAINS

20.00 Leave sandstone ledges, enter sandy land.

24.00 Ridge, bears N. and S.

Descend.

39.80 Set a sandstone, 24x14x6 ins., 18 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x18 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.

No trace can be found of the old $\frac{1}{4}$ sec. cor.

49.80 Hollow, 100 ft. deep, course S W.

Ascend.

52.00 Ridge, bears N.E. and S.W.

Descend.

79.60 Intersect the cor. of secs. 5-6-31 and 32, heretofore described.

Land, mountainous.

Soil, sandy and rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 79.60 chs.

N.89°27'W., bet. secs. 6 and 31.

Descend over sandstone ledges.

9.75 Hollow, 150 ft. deep, course S.W.

Abrupt ascent.

20.00 Spur, projects S. Leave sandstone ledges, over sandy land.

Descend.

22.80 Hollow, 50 ft. deep, course S.

Ascend.

40.17 Intersect $\frac{1}{4}$ sec. cor. bet. secs. 6 and 31, heretofore described.

Ridge, bears N.E. and S.W.

Descend over solid sandstone.

80.32 Intersect the cor. of Tps. 23 and 24 S., Rs. 14 and 15 E. heretofore described.

Resurvey of the South Boundary of T.23 S.,R.15 E.

	CHAINS	
		Land,mountainous.
		Soil,sandy and rocky,3rd.and 4th.rate.
		No timber.
		Mountainous land on 80.32 chs.
		January 13,1906.

Resurvey of the North Boundary of T.23 S.,R.15 E:

January 15: At 8h.09m.,a.m.,l.m.t.,I set off 38°51'N.on lat.arc,21°08'S.on decl.arc,and determine a meridian with the solar,at the cor.of Tps.22 and 23 S.,Rs.15 and 16 E., which is a sandstone,12x5x4 ins.above ground,marked and witnessed as described by the surveyor general,on the Green River Guide Meridian.

Thence I run N.89°55'W.,retracing bet.secs.1 and 36;at 40.00 chs.,no trace can be found of the ¼ sec.cor.;and at 80.00 chs.,no trace can be found of the sec.cor.to secs. 1-2-35 and 36,I continue the line and can find no trace of any cor.until at 484.52 chs.,fall 0.30 chs.S.of the cor.of Tps.22 and 23 S.,Rs.14 and 15 E.,heretofore described.

January 15,1906.

January 16: At 8h.10m.,a.m.,l.m.t.,I set off 38°51'N.on lat.arc,20°57'S.on decl.arc.,and determine a meridian with the solar,at the cor.of Tps.22 and 23 S.,Rs.15 and 16 E.,heretofore described on the Green River Guide Meridian.

Thence I run

West,bet.secs.1 and 36.

	CHAINS	
		Descend over sandy land.
17.	10.00	Road to Green River,bears N.and S.
	23.00	Hollow,100 ft.deep,course S.E.
		Ascend.
	40.00	Sandy spur,projects N.
		Set a sandstone,18x10x4 ins.,12 ins.in the ground,for ¼

Resurvey of the North Boundary of T.23 S.,R.15 E.

CHAINS

sec.cor.,marked ¼ on N.face,and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

No trace can be found of the old sec.cor.

Descend.

48.00 Same hollow,100 ft.deep,course N.E.

Along hollow,course E.

64.00 Leave hollow,from S.W.to E.

Ascend.

70.00 Rocky spur,projects S.

Abrupt descent.

75.00 Hollow,100 ft.deep,course S.

Ascend.

80.00 Set a sandstone,36x12x4 ins.,27 ins.in the ground,for reestablished 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.

No trace can be found of the old sec.cor.

Land,mountainous.

Soil,sandy and rocky,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

West,bet.secs.2 and 35.

Ascend over rocky land.

2.20 Spur,projects S.

Abrupt descent.

12.00 Hollow,150 ft.deep,course S.

Ascend.

31.00 Rocky spur,projects S.

Descend.

34.00 Hollow,100 ft.deep,course S.

Ascend over sandstone ledges.

Resurvey of the North Boundary of T.23 S.,R.15 E.

CHAINS

40.00 Set a sandstone,30x20x4 ins.,22 ins.in the ground,for reestablished 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.

No trace can be found of the old ¼ sec.cor.

54.00 Begin abrupt ascent over gypsum,bearing N.E.and S.W.

71.75 Rocky ridge,200 ft.above ¼ sec.cor.,bears N.E.and S.W.

Abrupt descent.

78.00 Hollow,150 ft.deep,course N.

Abrupt ascent.

80.00 Set a sandstone,30x15x5 ins.,22 ins.in the ground,for reestablished 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.

Pits impracticable.

No trace can be found of the old sec.cor.

Land,mountainous.

Soil,sandy,rocky and gypsum,3rd.and 4th.rate.

No timber.

Mountainous land on 80.00 chs.

West,bet.secs.3 and 34.

Ascend abruptly over rocky land,

6.00 Rocky ridge,bears N.and S.

Abrupt descent.

27.00 Hollow,200 ft.deep,course S.

Abrupt ascent.

40.00 Set a sandstone,24x6x4 ins.,18 ins.in the ground,for reestablished 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.

No trace can be found of the old ¼ sec.cor.

47.00 Clay spur,projects S.

Abrupt descent over broken land.

Resurvey of the North Boundary of T.23 S.,R.15 E.

CHAINS

68.85 Hollow,200 ft.below spur,course S.

Ascend over sandy land.

80.00 Set a sandstone,24x12x4 ins.,18 ins.in the ground,for reestablished 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.

No trace can be found of the old sec.cor.

Land,mountainous.

Soil,sandy and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 80.00 chs.

January 16: At this cor.I set off 20°58'S.on decl.arc, and at 12h.10m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°51'N.

West,bet.secs.4 and 33.

Ascend over sandy clay land.

12.50 Clay spur,projects S.

Descend.

16.25 Hollow,100 ft.deep,course S.E.

Ascend.

40.00 Set a quartzite stone,30x12x5 ins.,23 ins.in the ground, for reestablished ¼ sec.cor.,marked ¼ on N.face,and rais a mound of stone,2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

No trace can be found of the old ¼ sec.cor.

64.75 Mail trail from Green River to Hanksville,bears N.E.and S.W.

68.50 Ridge,bears N.and S.

Descend.

78.00 Hollow,100 ft.deep,course S.

Ascend.

80.00 Set a quartzite stone,28x7x6 ins.,21 ins.in the ground,

Resurvey of the North Boundary of T.23 S.,R.15 E.

CHAINS	
	for reestablished 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.
	No trace can be found of the old sec.cor.
	Land,mountainous.
	Soil,sandy,clay and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	West,bet.secs.5 and 32.
	Ascend over rocky land,
12.10	Clay spur,projects S.E.
	Descend.
26.00	Hollow,100 ft.deep,course S.E.
	Ascend.
40.00	Set a sandstone,20x10x5 ins.,15 ins.in the ground,for reestablished 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.
	No trace can be found of the old ¼ sec.cor.
45.60	Begin abrupt ascent over broken sandstone ledges,bearing N.E.and S.W.
64.00	Ridge,bears N.E.and S.W.
	Descend.
71.00	Hollow,50 ft.deep,course N.
	Ascend.
80.00	Set a quartzite stone,26x10x8 ins.,19 ins.in the ground, for reestablished 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.
	No trace can be found of the old sec.cor.
	Land,mountainous.
	Soil,clay and rocky,3rd.and 4th.rate.

Resurvey of the North Boundary of T.23 S.,R.15 E.

CHAINS

No timber.

Mountainous land on 80.00 chs.

West, bet. secs. 6 and 31.

Ascend over rocky land.

1.00 Ridge, bears N.W. and S.E.

Abrupt descent.

12.15 Hollow, 200 ft. deep, course N.W.

Abrupt ascent.

15.00 Gypsum spur, projects N.W.

Descend.

19.00 Hollow, 150 ft. deep, course N.W.

Ascend.

23.00 Gypsum spur, projects N.W.

Descend.

31.50 Hollow, 150 ft. deep, course S.W.

Ascend.

40.00 Clay spur, projects S.W.

Set a sandstone, 16x8x7 ins., 11 ins. in the ground, for reestablished $\frac{1}{4}$ sec. cor., marked with $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Pits impracticable.

No trace can be found of the old $\frac{1}{4}$ sec. cor.

Descend over broken land.

69.00 Hollow, 100 ft. deep, course N.W.

Ascend.

77.00 Spur, projects N.

Descend.

84.52 Intersect W. bdy. of Tp., S. 0° 14' W., 10.00 chs. from the cor. of Tps. 22 and 23 S., Rs. 14 and 15 E., heretofore described.

Set a quartzite stone, 15x10x8 ins., 10 ins. in the ground, for closing cor. of Tps. 22 and 23 S., R. 15 E., marked

C C R. 15 E., on E.

22 S., on N., and

23 S., on S. face, with 6 grooves on N. S. and E. faces, and

Resurvey of the North Boundary of T.23 S.,R.15 E.

raise a mound of stone,2 ft.base,1½ ft.high,E.of cor.

Pits impracticable.

I destroy all marks on the cor.of Tps.22 and 23 S.,Rs. 14 and 15 E.,that pertain to R.15 E.

Land,mountainous.

Spil,clay and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 84.52 chs.

January 16,1906

BOUNDARIES OF T.23 S.,R.15 E.

Latitudes,departues and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
E.Bdy.of T.23 S.R.14 E.	N.0°14'E.	471.83	471.82		1.92	
N.Bdy.of T.23 S.R.15 E.	East	484.52			484.52	
E.Bdy.of T.23 S.R.15 E.	S.0°11'W.	481.08		481.07		1.54
N.Bdy.of T.24 S.R.15 E.	N.89°33'W.	280.35	2.20			280.34
	N.86°09'W.	45.95	3.08			45.86
	N.87°52'W.	79.60	2.96			79.55
	N.89°27'W.	80.32	.77			80.32
Convergency					.59	
Totals			480.83	481.07	487.03	487.61
				480.83		487.03
Error in lat.and dep.				0.24		0.58

For general description see,subdivisions of T.23 S.,R.15 E.

Harvey A. Hirst

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:

....., *Chainman.*

....., *Chainman.*

inal affidavits see book "P", Tp. 23 S., R. 15 E. ....., *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 e 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 .....

inal affidavits see book "P", Tp. 23 S., R. 15 E. ....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

cribed and sworn to before me this ..... day 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 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 affidavits see book "P". Tp. 23 S., R. 15 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, March 18, 190

The foregoing field notes of the re survey of the North and South Boundaries of Township No.23 South, Range No.15 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey T.Heist, and Earl V.Woolley, under their contract No. 291, dated June 3, 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 Hill
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—679.

BOOK A-341
"L"

MML
H.J.B.

FILED
APR 14 1906

FIELD NOTES

OF THE ~~SURVEY~~ retracement OF THE

W-E-S-T B-O-U-N-D-A-R-Y

of

Township No. 23 South,

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyors*

er his Contract No. 291, *dated* June 3, *1905.*

acement *commenced* January 14, *1906*

acement *completed* January 14, *1906*

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6-01-83

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Robert R. Raycraft,	Chainman.
Claude Gresham,	"
Daniel R. Adams	Moundman
Willmer E. Tomlinson	Flagman

For preliminary affidavits see book "A" Tp. 23 S., R. 17 E.

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Volume
#
R0341

BOOK A-341

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2	30	29	28	27	26	25
1	31	32	33	34	35	36

Meanders Page

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PRELIMINARY OATHS OF ASSISTANTS.

We, ... and ...

... swear that we will well and faithfully execute the duties of chainmen; that we will level t... upon ... and ... ground, and plumb the tally pins, either by sticking or dropping the same; th... ... distances to all notable objects, and the true lengths of all lines that we assist ... of our skill and ability, and in accordance with instructions given us, in the survey

... , *Chainm*

... , *Chainm*

... sworn to before me this ...

... , 190

SEAL

We, ... and ...

... swear that we will well and truly perform the duties of moundmen in the establishme... ... according to the instructions given us, to the best of our skill and ability, in the survey

... , *Moundm*

... , *Moundm*

... sworn to before me this ...

day of ... , 190

SEAL

We, ... and ...

... 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

... , *Axma*

... , *Axma*

... sworn to before me this ...

... , 190

SEAL

... do solemnly swear that I will well and tru... ... to instructions given me, to the best of my skill and ability, in t...

... , *Flagma*

... this ...

... , 190

SEAL

A-341

34A

L

Ret. W.B.G. 23.5.15 E

high Cum

100 56
100 60
100 54
79 88
100 45
79 80

6.01.83

Retracement of the West Boundary of T.[illegible] S., R.[illegible] E.

GRAINS

Survey commenced, January 14, 19[illegible], and executed with the instrument described in book " [illegible] ", of this survey.

I know the instrument to be in adjustment, from recent observations made January 11 and 12, and described in book " K ", of this survey.

At the cor. of Tps. [illegible] and 24 S., Rs. 14 and 1[illegible] E., [illegible] described, at [illegible] m., [illegible] m., l.m.t., I set off [illegible] on lat. arc, 21°19'S. on decl. arc, and determine a meridian with the solar.

Thence I run North, on retracement line,
Ret. secs. 31 and 36.

Descend over solid sandstone ledges.

9.00 Hollow, 50 ft. deep, course W.

Ascend.

14.00 Sandstone spur, projects W.

Descend.

27.00 Hollow, 50 ft. deep, course W.

Ascend.

40.32 Fall 16 lks. W. of the ¼ sec. cor. of secs. 31 and 36, which is a sandstone, 10x8x4 ins. above ground, marked and witnessed as described by the surveyor general.

44.50 Spur, projects W.

Descend.

48.00 Hollow, 75 ft. deep, course W.

Ascend.

80.56 Sandstone spur, projects W.

Fall 32 lks. W. of the cor. of secs. 25-30-31 and 36, which is a cross (X), marked in the solid sandstone, marked and witnessed as described by the surveyor general.

The course of this line is therefore N. 0°14'E.

Land, mountainous.

Soil, sandy and rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on [illegible] chs.

Retracement of the West Boundary of T.23 S.,R.15 E.

CHAINS	
	North, on retracement line,
	Bet.secs.25 and 30.
	Descend over solid sandstone ledges.
12.00	Hollow, 100 ft.deep, course S.W.
	Ascend over sandy land.
36.00	Spur, projects W.
	Descend.
40.00	Hollow, 100 ft.deep, course W.
	Ascend.
40.24	Fall 16 lks.W.of the ¼ sec.cor., bet.secs.25 and 30, which is a sandstone, 30x15x2 ins., set in a mound of stone, marked and witnessed as described by the surveyor general.
45.00	Begin abrupt ascent over solid sandstone ledges, bearing E.and W.
54.65	Sandstone ridge, bears E.and W.
	Descend.
65.00	Hollow, 100 ft.deep, course W.
	Abrupt ascent.
75.75	Spur, projects W.
	Descend.
80.60	Fall 32 lks.W.of the cor.of secs.19-24-25 and 30, which is a sandstone, 12x10x3 ins.above ground, marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.0°14'E.
	Land, mountainous.
	Soil, sandy and rocky, 3rd.and 4th.rate.
	No timber.
	Mountainous land on 80.60 chs.
	North, on retracement line,
	Bet.secs.19 and 24.
	Descend over broken sandstone ledges.
4.50	Hollow, 100 ft.deep, course W.
	Ascend.
5.50	Spur, projects W.

Retracement of the West Boundary of T.23 S.,R.15 E.

CHAINS

Descend.

7.25 ollow,75 ft.deep,course S.W.

Abrupt ascent.

15.00 Ridge,bears E.and W.

Descend over sandy land.

32.75 Hanksville and Green River mail trail,bears N.E.and S.W.

40.19 Fall 16 lks.W.of the ¼ sec.cor.,bet.secs.19 and 24,which is a sandstone,12x4x3 ins.,above ground,marked and witnessed as described by the surveyor general.

40.75 Hollow,100 ft.deep,course W.

Abrupt ascent.

47.00 Spur,projects W.

Descend over broken land.

65.80 Hollow,150 ft.deep,course S.W.

Abrupt ascent.

80.54 Fall 32 lks.W.of the cor.of secs.13-18-19 and 24,which is a sandstone,10x4x4 ins.above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°14'E.

Land,mountainous.

Soil,sandy and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 80.54 chs.

January 14: At this cor.I set off 21°20'S.on decl.arc, and at 12h.09m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°49'N.

North,on retracement line,

Bet.secs.13 and 18.

Ascend over sandy land.

5.25 Begin abrupt ascent over gypsum,bearing E.and W.

14.20 Ridge,200 ft.high,bears E.and W.

Abrupt descent.

22.00 Hollow,200 ft.below ridge,course W. Ascend.

26.30 Spur,projects W. Descend.

Retracement of the West Boundary of T.23 S.,R.15 E.

CHAINS	
40.14	Fall,16 lks.W,of the ¼ sec.cor.,bet.secs.13 and 18,which is a sandstone,10x8x2 ins.above ground,marked and witnessed as described by the surveyor general.
45.75	Hollow,100 ft.deep,course S.W.
	Abrupt ascent.
56.20	Rocky ridge,bears N.W.and S.E.
	Abrupt descent.
68.50	Hollow,150 ft.deep,course W.
	Ascend.
70.00	Spur,projects W.
	Descend.
71.50	Hollow,100 ft.deep,course W.
	Ascend.
73.50	Spur,projects W.
	Abrupt descent.
78.00	Hollow,150 ft.deep,course W.
	Abrupt ascent.
79.88	Spur,projects W.
	Fall 32 lks.W.of the cor.of secs.7-12-13 and 18,which is a sandstone,10x8x7 ins.above ground,marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.0°14'E.
	Land,mountainous.
	Soil,sandy and rocky,3rd.and 4th,rate.
	No timber.
	Mountainous land on 79.88 chs.
	North,on retracement line,
	Bet.secs.7 and 12.
	Descend over sandy land.
6.00	Hollow,150 ft.deep,course S.W.
	Abrupt ascent.
12.90	Rocky ridge,bears N.E.and S.W.
	Abrupt descent.
20.50	Hollow,150 ft.deep,course S.W.

Retracement of the West Boundary of T.23 E.,R.15 E.

CHAINS

Abrupt ascent.

23.00 Rocky spur,projects S.W.

Descend.

30.00 Hollow,150 ft.deep,course S.W.

Ascend.

35.25 Rocky spur,projects S.W.

Abrupt descent.

38.75 Hollow,100 ft.deep,course S.W.

Ascend.

40.21 Fall 16 lks.W.of the $\frac{1}{4}$ sec.cor.,bet.secs.7 and 12,which is a cross,(X),on a sandstone ledge,marked and witnessed as described by the surveyor general.

68.00 Spur,projects E.

Descend.

74.00 Hollow,50 ft.deep,course E.

Leave sandstone ledges,over sandy land.

Ascend.

80.45 Ridge,bears N.E.and S.W.

Fall 32 lks.W.of the cor.of secs.1-6-7 and 12,which is a conglomerate stone,10x7x6 ins.above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°14'E.

Land,mountainous.

Soil,sandy and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 80.45 chs.

North,on retracement line,

Bet.secs.1 and 6.

Descend over sandy land.

27.25 Hollow,75 ft.deep,course W.

Ascend.

36.50 Ridge,bears E.and W.

Descend over broken sandstone ledges.

40.10 Fall 16 lks.W.of the $\frac{1}{4}$ sec.cor.,bet.secs.1 and 6,which i

Retracement of the West Boundary of T.23 S.,R.15 E.

CHAINS	
	a sandstone,10x8x3 ins.above ground,marked and witnessed as described by the surveyor general.
71.00	Hollow,100 ft.deep,course W.
	Ascend over clay land.
72.50	Spur,projects W.
	Descend.
75.00	Hollow,75 ft.deep,course N.W.
	Ascend.
79.80	Fall 32 lks.W.of the cor.of Tps.,22 and 23 S.,Rs.14 and 15 E.,which is a sandstone,15x12x6 ins.above the ground, marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.0°14'E.
	Land,mountainous.
	Soil,rocky,sand and clay,3rd.and 4th.rate.
	No timber.
	Mountainous land on 79.80 chs.

January 14,1906.

For general description,see subdivisions of T.23 S.,R. 15 E.

For table of latitude and departures see,North and South bdys.,of T.23 S.,R.15 E.

Harry H. Hirst

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

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

.....

ing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

For final affidavits see book "T" Tp. 21 S., R. 14 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

been 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

al for .....

or final affidavits see book "T" Tp. 21 S., R. 14 E. ....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

ribed and sworn to before me this .....

ay 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 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 affidavits see book "I" Tn.21 S., R. 14 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 Surve 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, March 18, 19

The foregoing field notes of the ~~survey of~~ Retracement of the West Boundary Township No.23 South, Range No.15 East of the Salt Lake Base and Meridian, Utah,

executed by their Harvey I.Heist and Earl V.Woolley under his contract No. 291, dated June 3, 1905, having critically examined, and the necessary corrections and explanations made, the said field notes, and ~~surveys~~ retracements 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 offic

.....
United States Surveyor Gene

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BOOK A-341

FIELD NOTES

OF THE SURVEY OF THE

S-U-B-D-I-V-I-S-I-O-N-S

of

Township No. 23 South,

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyors*

er ~~his~~ their *Contract No.* 291, *dated* June 3, *190* 5

vey commenced January 17, *190* 6

vey completed January 24, *190* 6

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APR 14 1906 - 1906

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NAMES AND DUTIES OF ASSISTANTS.

Robert R.Raycraft,	Chainman.
Claude Gresham,	"
Daniel R.Adams,	Moundman
Willmer E.Tomlinson	Flagman

For preliminary affidavits see book "A" Tp.23 S., R. 17 E.

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BOOK A-341

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47		46		34		26		19		12
7	45	8	33	9	26	10	18	11	11	12
44		43		32		25		17		11
18	42	17	32	16	24	15	17	14	10	13
41		40		31		23		16		9
19	40	20	30	21	23	22	16	23	8	24
39		38		30		22		15		7
30	37	29	29	28	21	27	14	26	7	25
5		4		3		2		2		1
31	36	32	28	33	20	34	14	35	6	36

Meanders Page

6—151

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; 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 .....

..... *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 .....

..... *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 .....

..... *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 survey of .....

..... *Flagman*

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

SEAL

6—151

Subdivisions of T.23 S.,R.15 E.

CHAINS

Survey commenced, January 17, 1906, and executed with the instrument described in book " A ", of this survey.

I know the instrument to be in adjustment, from recent observations made, January 11 and 12, 1906, and recorded in book " K ", of this survey.

The south boundary of the township is out of limits for both course and distance, therefore I run a sectional correction line, as follows:

At 8h.10m., a.m., l.m.t., I set off 38°47'N., on lat.arc, 20°45'S., on decl.arc, and determine a meridian with the solar, at the cor. of secs.25-30-31 and 36, on the Green River Guide Meridian, the E.bdy. of the Tp., which is a flint stone, 8x6x4 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

West, on a sectional correction line,

Bet.secs.25 and 36.

Over rolling sandy land, through dense artemisia.

40.00 Set a charred cottonwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec.cor., marked ¼ S 25 on N.face and 36 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 charred cottonwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs.25-26-35 and 36, marked T.23 S., S.25 on N.E.,

R.15 E., S.36 on S.E.,

S.35 on S.W., and

S.26 on N.W.face, with 1 notch on S. and E. 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. Undergrowth, artemisia.

Dense undergrowth on 80.00 chs.

Subdivisions of T.23 S., R.15 E.

CHAINS	
	West, on a sectional correction line,
	Bet. secs. 26 and 35.
	Ascend gradually, over rolling sandy land, through dense artemisia.
40.00	Set a charred cottonwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 26 on N. face, 35 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.
72.00	Ridge, bears N. and S.
	Descend.
80.00	Set a sandstone, 18x10x6 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, 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, artemisia.
	Dense undergrowth on 80.00 chs.
	West, on a sectional correction line,
	Bet. secs. 27 and 34.
	Descend over sandy land.
5.00	Head of hollow, course N.
	Ascend.
11.00	Ridge, bears N. and S.
	Descend abruptly over clay land.
40.00	Set a sandstone, 18x10x8 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.
46.00	Hollow, 200 ft. below, ridge, course S.
	Ascend over broken land, sandstone and clay spurs.
80.00	Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for

Subdivisions of T.23 S.,R.15 E.

CHAINS

cor.of secs.27-28-33 and 34,marked with 1 notch on S. and 3 notches on E.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,sandy,clay and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 80.00 chs.

West,on a sectional correction line,

Bet.secs.28 and 33.

Ascend abruptly over broken sandstone ledges.

25.00 Ridge,200 ft.above sec.cor.,bears N.E.and S.W.

Descend.

34.50 Hollow,100 ft.deep,course N.

Ascend,over sandy land.

40.00 Set a sandstone,20x14x3 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,3½ft. base,1½ ft.high,N.of cor.

42.50 Ridge,bears N.and S.

Descend.

69.50 Hollow,150 ft.deep,course N.W.

Ascend.

75.00 Ridge,bears N.W.and S.E.

Abrupt descent.

78.00 Hollow,100 ft.deep,course N.

Abrupt ascent.

78.75 Rocky ridge,bears N.W.and S.E.

Abrupt descent.

79.80 Hollow,150 ft.deep,course N.W.

Abrupt ascent.

80.00 Set a sandstone,16x10x4 ins.,11 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,and raise a mound of stone,2 ft.base,

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,sandy,clay and rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 80.00 chs.
	January 17: At this cor.I set off 20°46'S.on decl.arc, and at 12h.10m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°47'N.
	West,on a sectional correction line, Bet.secs.29 and 32.
	Ascend abruptly over broken sandstone ledges.
1.00	Rocky spur,projects N.
	Abrupt descent over broken and rocky land.
15.50	Hollow,150 ft.deep,course N.
	Abrupt ascent.
20.00	Sandstone spur,projects N.
	Abrupt descent.
26.00	Hollow,100 ft.deep,course N.W.
	Abrupt ascent over solid sandstone.
30.80	Sandstone spur,projects N.W.
	Abrupt descent.
35.00	Hollow,150 ft.deep,course N.W.
	Abrupt ascent.
39.30	Sandstone spur,projects N.W.
	Abrupt descent.
40.00	Set a sandstone,28x5x4 ins.,21 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.
47.50	Hollow,100 ft.deep,course N.W.
	Ascend.
50.75	Spur,projects N.W.
	Abrupt descent.

Subdivisions of T.23 S.,R.15 E.

CHAINS

71.50 Hollow,150 ft.deep,course S.W.

Abrupt ascent over solid sandstone.

80.00 Point for cor.falls on a smooth sandstone floor; I cut a cross (X),at exact point for cor.of secs.29-30-31 and 32 mark 1 groove on S.and 5 grooves on E.sides of cross, and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor

Pits impracticable.

Land,mountainous.

Soil,rocky,4th.rate.

No timber.

Mountainous land on 80.00 chs.

Knowing the line bet.secs.30 and 31 will not fall within limits on the W.bdy.of the Tp.,I run

West,on a sectional correction line,

Bet.secs.30 and 31.

Ascend over solid sandstone ledges.

24.75 Ridge,bears N.E.and S.W.

Leave sandstone ledges.

Descend over sandy land,through dense artemisia.

40.00 Set a sandstone,18x10x5 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.

85.71 Intersect W.bdy.of Tp.,9.80 chs.,S.0°14'W.,of the cor. of secs.25-30-31 and 36,heretofore described.

Set a sandstone,28x15x4 ins.,21 ins.in the ground,for closing cor.of secs.30 and 31,marked C C on E.,with 1 groove on S.and 5 grooves on N.faces,and raise a mound of stone,2 ft.base,1½ ft.high,E.of cor.

Pits impracticable.

I destroy all marks on the cor.of secs.25-30-31 and 36, that pertain to R.15 E.

Land,mountainous.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Soil,rocky and sandy,3rd.and 4th.rate.
	No timber. Undergrowth, artemisia.
	Mountainous land or dense undergrowth on 85.71 chs.
	January 17,1906
	January 18: At 8h.10m.,a.m.,l.m.t.,I set off 38°47'N.on lat.arc,20°34'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.25-26-35 and 36,heretofore described.
	Thence I run
	S.0°10'W.,on a random line,bet.secs.35 and 36.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.52	Intersect S.bdy.of Tp.,7 lks.E.of the reestablished cor. of secs.1-2-35 and 36,heretofore described.
	Thence I run
	N.0°13'E.,on a true line,
	Bet.secs.35 and 36.
	Ascend over solid sandstone.
4.00	Sandstone spur,projects W.
	Descend.
7.35	Hollow,75 ft.deep,course S.W.
	Ascend over solid sandstone.
35.00	Top of ascent,bears N.W.and S.E.
	Leave sandstone ledges,over rolling sandy land.
39.52	Set a sandstone,15x12x7 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.
	Through dense artemisia.
79.52	The cor.of secs.25-26-35 and 36.
	Land,mountainous and level.
	Soil,rocky and sandy,3rd.and 4th.rate.
	No timber. Undergrowth, artemisia.
	Mountainous land or dense undergrowth on 79.52 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS

N.0°10'E.,bet.secs.25 and 26.

Over rolling sandy land,through dense artemisia.

40.00 Set a quartzite stone,12x7x6 ins.,8 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 Set a sandstone,18x10x4 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,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. Undergrowth artemisia.

Dense undergrowth on 80.00 chs.

East,on a random line,bet.secs.24 and 25.

40.00 Set temp.¼ sec.cor.

80.02 Intersect Green River Guide Meridian,19 lks.S.of the cor.of secs.19-24-25 and 30,which is a granite stone,6x5x5 ins.above ground,marked and witnessed as described by the surveyor general.

Thence I run

S.89°52'W.,on a true line,

Bet.secs.24 and 25.

Over rolling sandy land,through dense artemisia.

40.01 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.

80.02 The cor.of secs.23-24-25 and 26.

Land,rolling.

Soil,sandy,2nd.rate.

No timber. Undergrowth artemisia.

Dense undergrowth on 80.02 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	N.0°10'E.,bet.secs.23 and 24.
	Over rolling sandy land,ascend gradually through dense artemisia.
36.00	Ridge,bears N.E.and S.W.
	Descend.
40.00	Set a sandstone,20x7x4 ins.,15 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.
40.35	Hollow,75 ft.deep,course N.E.
	Ascend.
42.70	Spur,projects E.
	Descend.
44.25	Hollow,75 ft.deep,course E.
	Ascend.
46.50	Spur,projects E.
	Descend.
48.50	Hollow,75 ft.deep,course E.
	Ascend.
50.25	Spur,projects N.E.
	Descend.
52.00	Hollow,50 ft.deep,course N.E.
	Ascend.
53.50	Spur,projects N.E.
	Descend.
63.50	Hollow,150 ft.deep,course N.E.
	Abrupt ascent.
67.25	Sandstone ridge,bears N.E.and S.W.
	Descend.
80.00	Set a sandstone,24x12x4 ins.,18 ins.in the ground,for cor.of secs.13-14-23 and 24,marked with 3 notches on S. and 1 notch on E.edges,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,rolling and mountainous.

Subdivisions of T.23 S.,R.15 E.

CHAINS

Soil,sandy and rocky,3rd.and 4th.rate.

No timber. Undergrowth, artemisia.

Mountainous land or dense undergrowth on 80.00 chs.

January 18: At this cor.I set off 20°35'S.on decl.arc, and at 12h.10m.,l.m.t.,ob serve the sun on the meridian the resulting lat.is 38°49'N.

N.89°52'E.,on a random line,bet.secs.13 and 24.

40.00 Set temp.¼ sec.cor.

80.10 Intersect Green River Guide Meridian,24 lks.S.of the cor of secs.13-18-19 and 24,which is a sandstone,14x6x6 ins. above ground,marked and witnessed as described by the surveyor general.

Thence I run

S.89°42'W.,on a true line,

Bet.secs.13 and 24.

Ascend over rocky land.

.50 Rocky spur,projects N.

Descend.

4.00 Rocky spur,projects N.

Abrupt descent.

7.50 Hollow,150 ft.deep,course N.

Abrupt ascent.

12.00 Rocky spur,projects N.E.

Abrupt descent.

14.50 Hollow,150 ft.deep,course N.E.

Abrupt ascent.

19.00 Rocky spur,projects N.E.

Abrupt descent.

29.75 Hollow,200 ft.deep,course N.E.

Abrupt ascent.

40.05 Set a sandstone,24x12x4 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.

Pits impracticable.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
42.85	Sandstone spur, projects S.E.
	Abrupt descent over sandstone spurs.
51.00	Hollow, 150 ft. deep, course S.E.
	Abrupt ascent.
67.00	Sandstone ridge, bears N.E. and S.W.
	Descend.
80.10	The cor. of secs. 13-14-23 and 24.
	Land mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	No timber.
	Mountainous land on 80.10 chs.

N.0°10'E., bet. secs. 13 and 14.

	Descend over sandy land, through dense artemisia.
19.00	Over solid sandstone ledges.
39.00	Leave solid sandstone.
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, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
66.00	Hollow, 100 ft. deep, course S.W.
	Ascend.
80.00	Set a sandstone, 24x12x4 ins., 18 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, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
	Land, rolling.
	Soil, sandy and rocky, 3rd. and 4th. rate.
	No timber. Undergrowth, artemisia.
	Dense undergrowth or mountainous land on 80.00 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS

N.89°42'E.,on a random line,bet.secs.12 and 13.

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

79.86 Intersect Green River Guide Meridian,5 lks.N.of the cor. of secs.7-12-13 and 18,which is a sandstone,12x10x10 ins. above ground,marked and witnessed as described by the surveyor general.

Thence I run

S.89°44'W.,on a true line,

Bet.secs.12 and 13.

Descend over rocky land.

14.00 Hollow,150 ft.deep,course N.E.

Abrupt ascent.

27.75 Rocky spur,projects N.E.

Descend.

36.00 Hollow,100 ft.deep,course N.E.

Ascend.

39.93 Set a sandstone,18x8x5 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,1½ ft.high,N.of cor.

Pits impracticable.

66.50 Ridge,bears N.and S.

Descend.

79.86 The cor.of secs.11-12-13 and 14.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 79.86 chs.

N.0°10'E.,bet.secs.11 and 12.

Ascend over rocky land,through dense artemisia.

22.75 Ridge,bears N.W.and S.E.

Abrupt descent.

40.00 Set a sandstone,18x10x5 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,1½ ft.high,W.of cor.

Subdivisions of T.23 S.,R.15 E.

CHAINS

Pits impracticable.

48.50 Hollow,150 ft.deep,course N.E.

Abrupt ascent.

69.00 Ridge,bears E.and W.

Descend.

80.00 Set a sandstone,15x10x4 ins.,10 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,and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,sandy and rocky,3rd.rate.

No timber. Undergrowth, artemisia.

Mountainous land on 80.00 chs.

January 18,1906.

January 19: At 8h.11m.,a.m.,l.m.t.,I set off 38°50'N. on lat.arc,20°21'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.1-2-11 and 12.

Thence I run

N.89°44'E.,on a random line,bet.secs.1 and 12.

40.00 Set temp.¼ sec.cor.

79.84 Intersect Green River Guide Meridian,10 lks.S.of the cor.of secs.1-6-7 and 12,which is a sandstone,12x8x4 ins. above ground,marked and witnessed as described by the surveyor general.

Thence I run

S.89°40'W.,on a true line,

Bet.secs.1 and 12.

Ascend abruptly over solid sandstone ledges.

12.50 Ridge,bears N.and S.

Abrupt descent.

Leave solid sandstone,over rocky land.

39.92 Set a sandstone,18x6x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone,

Subdivisions of T.23 S., R.15 E.

CHAINS

2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

58.50 Hollow, 150 ft. deep, course N.E.

Ascend over sandy land.

79.84 The cor. of secs. 1-2-11 and 12.

Land, mountainous.

Soil, rocky and sandy, 3rd. and 4th. rate.

No timber.

Mountainous land on 79.84 chs.

N. 0° 10' E., on a random line, bet. secs. 1 and 2.

40.00 Set temp. ¼ sec. cor.

81.56 Intersect N. bdy. of Tp., 14 lks. E. of the reestablished cor. of secs. 1-2-35 and 36, heretofore described.

Thence I run

S. 0° 04' W., on a true line,

Bet. secs. 1 and 2.

Descend abruptly over rocky land.

2.25 Enter bottom of wide, hollow, 150 ft. deep, course N.E.

9.50 Leave hollow, course N.E.

Abrupt ascent.

14.50 Top of abrupt ascent, bears N.E. and S.W.

Leave rocky land, ascend over sandy land, through dense artemisia.

41.56 Set a sandstone, 24x7x6 ins., 18 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.

81.56 The cor. of secs. 1-2-11 and 12.

Land, mountainous.

Soil, rocky and sandy, 3rd. rate.

No timber. Undergrowth, artemisia.

Mountainous land or dense undergrowth on 81.56.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	From the cor.of secs.26-27-34 and 35,heretofore described I run
	S.0°10'W.,on a random line,bet.secs.34 and 35.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
78.86	Intersect S.bdy.of Tp.,19 lks.E.of the reestablished cor. of secs.2-3-34 and 35,heretofore described.
	Thence I run
	N.0°18'E.,on a true line,
	Bet.secs.34 and 35.
	Ascend over solid sandstone,
9.50	Sandstone ridge,bears E.and W.
	Leave sandstone ledges,descend over rocky land.
38.00	Hollow,100 ft.deep,course S.W.
	Ascend.
38.86	Set a granite stone,20x8x4 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.
70.50	Begin abrupt ascent over broken sandstone ledges,bearing E.and W.
78.50	Ridge,bears E.and W.
	Descend.
78.86	The cor.of secs.26-27-34 and 35.
	Land,mountainous.
	Soil,rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 78.86 chs.
	N.0°10'E.,bet.secs.26 and 27.
	Descend over sandy land,through dense artemisia.
18.25	Hollow,100 ft.deep,course W.
	Ascend.
40.00	Set a sandstone,24x12x6 ins.,18 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,dig pits,18x18x12 ins.,N.and

Subdivisions of T.23 S., R.15 E.

CHAINS

S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

42.00 Ridge, bears N.W. and S.E.

Descend.

50.00 Hollow, 50 ft. deep, course S.E.

Ascend.

80.00 Set a sandstone, 18x8x5 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, 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, sandy, 3rd. rate.

No timber. Undergrowth, artemisia.

Mountainous land or dense undergrowth on 80.00 chs.

East, on a random line, bet. secs. 23 and 26.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 23-24-25 and 26.

Thence I run

S. 89°55' W., on a true line,

Bet. secs. 23 and 26.

Ascend gradually over sandy land, through dense artemisia.

40.02 Set a charred cottonwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 23 on N. face, 26 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.

80.04 The cor. of secs. 22-23-26 and 27.

Land, rolling.

Soil, sandy 2nd. rate.

No timber. Undergrowth artemisia.

Dense undergrowth on 80.04 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS

N.0°10'E.,bet.secs.22 and 23.

Ascend over sandy land,through dense artemisia.

30.00 Ridge,bears E.and W.

Descend.

40.00 Set a sandstone,26x8x6 ins.,19 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.

80.00 Set a sandstone,18x14x4 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,and raise a mound of stone, 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.

Pits impracticable.

Land,rolling.

Soil,sandy,2nd.rate.

No timber. Undergrowth, artemisia.
Dense undergrowth on 80.00 chs.

N.89°55'E.,on a random line,bet.secs.14 and 23.

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

80.08 Intersect N.and S.line,7 lks.S.of the cor.of secs. 13-14-23 and 24.

Thence I run

S.89°52'W.,on a true line,bet.secs.14 and 23

Descend over rocky land,through dense artemisia.

40.04 Hollow,100 ft.deep,course N.

Set a sandstone,24x12x5 ins.,18 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.

Ascend.

58.00 Rocky ridge,bears N.and S.

Leave rocky land,descend over sandy land.

80.08 The cor.of secs.14-15-22 and 23.

Land,mountainous.

Subdivisions of T.23 S.,R.15 E.

CHAINS

Soil,rocky and sandy,3rd.rate.

No timber. Undergrowth, artemisia.

Mountainous land on 80.08 chs.

January 19: At this cor.I set off 20°22'S.on decl.arc, and at 12h.11m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°49'N.

N.0°10'E.,bet.secs.14 and 15.

Descend over rolling sandy land,through dense artemisia.

40.00 Set a sandstone,24x14x4 ins.,18 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.

46.20 Hollow,100 ft.deep,course N.E.

Ascend.

70.00 Ridge,bears N.E.and S W.

Descend.

80.00 Hollow,50 ft.deep,course N.E.

Set a sandstone,24x8x6 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,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, artemisia.

Dense undergrowth on 80.00 chs.

N.89°52'E.,on a random line,bet.secs.11 and 14.

40.00 Set temp.¼ sec.cor.

80.06 Intersect N.and S.line,7 lks.S.of the cor.of secs. 11-12-13 and 14.

Thence I run

S.89°49'W.,on a true line,

Bet.secs.11 and 14.

Subdivisions of T.23 S.,R.15 E.

CHAINS

Descend over rocky land.

19.50 Hollow,100 ft.deep,course N.

Ascend.

30.00 Ridge,bears N.and S.

Descend.

40.00 Set a sandstone,15x6x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone, 3 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

45.00 Hollow,100 ft.deep,course N.E.

Abrupt ascent.

71.00 Ridge,bears N.E.and S.W.

Descend.

80.00 The cor.of secs.10-11-14 and 15,in hollow,50 ft.deep, course N.E.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

N.0°10'E.,bet.secs.10 and 11.

Ascend over sandy land,through dense artemisia.

7.50 Spur,projects N.E.

Descend.

10.50 Hollow,1[illegible] ft.deep,course N.E.

Ascend.

21.[illegible] Ridge,[illegible] ins N.E.and S.W.

Descend.

[illegible] Set a quartzite stone,18x7x5 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.

[illegible] Set a sandstone,18x8x6 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.edge,dig pits,18x18x18 ins.,in each sec,

Subdivisions of T.23 S.,R.15 E.

CHAINS

5½ ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.

Land,mountainous.

Soil,sandy,3rd.rate.

No timber. Undergrowth, artemisia.

Mountainous land on 80.00 chs.

N.89°49'E.,on a random line,bet.secs.2 and 11.

40.00 Set temp.¼ sec.cor.

80.08 Intersect N.and S.line,5 lks.N.of the cor.of secs. 1-2-11 and 12.

Thence I run

S.89°51'W.,on a true line,

Bet.secs.2 and 11.

Ascend over sandy land,through dense artemisia.

25.50 Ridge,bears N.and S.

Descend.

40.04 Set a sandstone,20x8x4 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.

42.00 Hollow,75 ft.deep,course N.

Ascend.

80.08 The cor.of secs.2-3-10 and 11.

Land,rolling.

Soil,sandy,3rd.rate.

No timber. Undergrowth, artemisia.

Dense undergrowth on 80.08 chs.

N.0°10'E.,on a random line,bet.secs.2 and 3.

40.00 Set temp.¼ sec.cor.

81.74 Intersect N.bdy.of Tp.,9 lks.E.of the reestablished cor. of secs.2-3-34 and 35,heretofore described.

Thence I run

S.0°06'W.,on a true line,

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Bet.secs.2 and 3.
	Ascend abruptly over rocky land.
3.20	Rocky ridge,bears E.and W.
	Abrupt descent over broken gypsum spurs.
27.80	Foot of abrupt descent,bears E.and W.
	Gradual descent over solid sandstone.
35.80	Hollow,150 ft.deep,course N.E.
	Ascend.
41.74	Set a sandstone,18x10x3 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.
42.00	Leave sandstone ledges,ascend over sandy land,through dense artemisia.
81.74	The cor.of secs.2-3-10 and 11.
	Land,mountainous.
	Soil,rocky and sandy,3rd.and 4th.rate.
	No timber. Undergrowth, artemisia.
	Mountainous land on 81.74 chs.
	January 19,1906.

	January 20: At 8h.11m.,a.m.,l.m.t.,I set off 38°47'N.on lat.arc,20°09'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.27-28-33 and 34,heretofore described.
	Thence I run
	S.0°09'W.,on a random line,bet.secs.33 and 34.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
78.33	Intersect S.bdy.of Tp.,28 lks.E.of the reestablished cor. of secs.3-4-33 and 34,heretofore described.
	Thence I run
	N.0°21'E.,on a true line,
	Bet.secs.33 and 34.
	Descend over sandy land.
2.25	Hollow,100 ft.deep,course S.W.
	Ascend.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
38.33	Set a sandstone,24x14x8 ins.,18 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.
43.00	Begin ascent over solid sandstone,
63.00	Begin abrupt ascent over sandstone spurs,projecting S.W.
78.33	The cor.of secs.27-28-33 and 34.
	Land,mountainous.
	Soil,sandy and rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 78.33 chs.

N.0°09'E.,bet.secs.27 and 28.

	Ascend abruptly over broken sandstone ledges.
7.00	Rocky spur,projects S.E.
	Descend.
10.50	Hollow,75 ft.deep,course S.E.
	Ascend.
15.00	Ridge,bears N.E.and S.W.
	Descend.
40.00	Set a quartzite stone,18x8x5 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.
50.75	Hollow,150 ft.deep,course W.
	Ascend.
63.00	Spur,projects W.
	Descend.
70.00	Hollow,100 ft.deep,course S.W.
	Ascend.
80.00	Set a sandstone,15x12x6 ins.,10 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 80.00 chs.
	Past,on a random line,bet.secs.22 and 27.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.02	Intersect N.and S.line,9 lks.S.of the cor.of secs. 22-23-26 and 27.
	Thence I run S.89°56'W.,on a true line, Bet.secs.22 and 27.
	Ascend over sandy land,through dense artemisia.
15.50	Ridge,bears N.and S.
	Descend.
22.00	Hollow,100 ft.deep,course S W.
	Ascend.
29.75	Ridge,N.E.and S.W.
	Descend over broken land.
40.01	Set a sandstone,24x15x4 ins.,18 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.
79.85	Hollow,100 ft.deep,course S.
	Ascend.
80.02	The cor.of secs.21-22-27 and 28.
	Land,mountainous.
	Soil,sandy,3rd.rate.
	No timber. Undergrowth, artemisia.
	Mountainous land on 80.02 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS

N.0°09'E.,bet.secs.21 and 22.

Ascend over sandy land.

10.50 Begin abrupt ascent over gypsum,bearing E.and W.

31.00 Begin abrupt ascent over sandstone ledges,bearing N.E. and S.W.

36.30 Sandstone spur,projects S.E.

Descend.

40.00 Hollow,100 ft.deep,course S.E.

Set a sandstone,36x12x4 ins.,27 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.

Ascend.

45.50 Ridge,bears E.and W.

Descend.

75.00 Leave sandstone ledges,bearing E.and W.

Over sandy land.

80.00 Set a sandstone,18x12 x4 ins.,12 ins.in the ground,for cor of secs.15-16-21 and 22,marked

23 S.,on N.E.and

15 E.on S.E.face,with 3 notches on S.and E.edges,and rai e a mound of stone,2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,sandy and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 80.00 chs.

N.89°56'E.,on a random line,bet.secs.15 and 22.

40.00 Set temp.¼ sec.cor.

80.08 Intersect N.and S.line,7 lks.S.of the cor.of secs. 14-15-22 and 23.

Thence I run

S.89°53'W.,on a true line,

Bet.secs.15 and 22.

Subdivisions of T.23 S.,R15 E.

CHAINS	
	Descend over rolling sandy land,through dense artemisia.
8.00	Hollow,100 ft.deep,course N.
	Ascend.
40.04	Set a sandstone,24x10x5 ins.,18 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.
80.08	The cor.of secs.15-16-21 and 22.
	Land,rolling.
	Soil,sandy,3rd.rate.
	No timber. Undergrowth artemisia.
	Dense undergrowth on 80.08 chs.
	January 20: At this cor.I set off 20°10'S.on decl.arc, and at 12h.11m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°49'N.
	N.0°09'E.,bet.secs.15 and 16.
	Descend over sandy land,through dense artemisia.
23.75	Hollow,50 ft.deep,course N.E.
	Ascend.
25.00	Spur,projects E.
	Descend.
27.50	Hollow,75 ft.deep,course E.
	Ascend.
31.00	Ridge,bears E.and W.
	Descend.
34.00	Hollow,75 ft.deep,course E.
	Ascend.
40.00	Ridge,bears E.and W.
	Set a sandstone,18x6x6 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.
	Descend.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
47.50	Hollow,100 ft.deep,course E.
	Ascend.
60.50	Ridge,bears N.E.and S.W.
	Abrupt descent over rocky land.
80.00	Set a granite stone,24x8x5 ins.,18 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,and raise a mound of stone,2 ft base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,sandy and rocky,3rd.rate.
	No timber. Undergrowth, artemisia.
	Mountainous land or dense undergrowth on 80.00 chs.
	N.89°53'E.,on a random line,bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
80.06	Intersect N.and S.line,9 lks.S.of the cor.of secs. 10-11-14 and 15.
	Thence I run
	S.89°49'W.,on a true line,
	bet.secs.10 and 15.
	Ascend over sandy land,through dense artemisia.
19.00	Ridge,bears N.E.and S.W.
	Descend.
32.00	Hollow,75 ft.deep,course N.E.
	Ascend.
40.03	Set a sandstone,18x9x5 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.
58.00	Ridge,bears N.and S.
	Descend.
78.00	Hollow,100 ft.deep,course N.
	Ascend.
80.00	The cor.of secs.9-10-15 and 16.

Subdivisions of T.23 S., R.15 E.

CHAINS	
	Land, mountainous.
	Soil, sandy and rocky, 3rd. rate.
	No timber. Undergrowth, artemisia.
	Mountainous land or dense undergrowth on 80.00 chs.
	N.0°09'E., bet. secs. 9 and 10.
	Descend over sandy land, through dense artemisia.
12.50	Hollow, 50 ft. deep, course N.W.
	Ascend.
16.50	Spur, projects N.W.
	Descend over rolling land.
40.00	Set a quartzite stone, 15x8x6 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.
80.00	Set a sandstone, 18x7x5 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, 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. Undergrowth artemisia.
	Dense undergrowth on 80.00 chs.
	N.89°49'E., on a random line, bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 2-3-10 and 11.
	Thence I run
	S.89°50'W., on a true line,
	Bet. secs. 3 and 10.
	Ascend over rolling sandy land, through dense artemisia.
40.00	Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and

Subdivisions of T.23 S., R.15 E.

CHAINS

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.

43.50 Ridge, bears N. and S.

Descend.

80.00 The cor. of secs. 3-4-9 and 10.

Land, rolling.

Soil, sandy, 3rd. rate.

No timber. Undergrowth, artemisia.

Dense undergrowth on 80.00 chs.

N. 0°09' E., on a random line, bet. secs. 3 and 4.

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

81.97 Intersect N. bdy. of Tp., 3 lks. E. of the reestablished cor. of secs. 3-4-33 and 34, heretofore described.

Thence I run

S. 0°08' W., on a true line,

Bet. secs. 3 and 4.

Descend over rolling sandy land, through dense artemisia.

35.00 Enter solid sandstone.

41.97 Set a sandstone, 20x12x11 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.

45.00 Leave solid sandstone, over sandy land.

71.00 Hollow, 100 ft. deep, course E.

Ascend.

81.97 The cor. of secs. 3-4-9 and 10.

Land, rolling.

Soil, rocky and sandy, 3rd. rate.

No timber. Undergrowth, artemisia.

Dense undergrowth on 81.97 chs.

January 20, 1906

Subdivisions of T.23 S., R.15 E.

CHAINS	
	January 21: At 8h.11m., a.m., l.m.t., I set off 38°47'N. on lat. arc, 19°56'S., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 28-29-32 and 33, heretofore described.
	Knowing that the line bet. secs. 32 and 33, will not close within limits on the south bdy. of the Tp.,
	I run S.0°08'W., on a true line,
	Bet. secs. 32 and 33.
	Ascend abruptly over broken sandstone ledges,
2.00	Top of abrupt ascent, bears N.W. and S.E.
	Leave rocky land, ascend over sandy land, through dense artemisia.
32.50	Ridge, bears N.W. and S.E.
	Descend.
40.00	Set a sandstone, 28x5x4 ins., 21 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.
66.00	Begin abrupt descent, over broken sandstone ledges, bearing N.E. and S.W.
75.02	Intersect S. bdy. of Tp., 5.63 chs., S.86°09'E., of the cor. of secs. 4-5-32 and 33, heretofore described.
	Set a sandstone, 24x6x4 ins., 18 ins. in the ground, for closing cor. to secs. 32 and 33, marked C C on N. with 4 grooves on E. and 2 grooves on W. faces, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
	I destroy all marks on the cor. of secs. 4-5-32 and 33, that pertain to T.23 S.
	Land, mountainous.
	Soil, sandy and rocky, 3rd. and 4th. rate.
	No timber. Undergrowth, artemisia.
	Mountainous land or dense undergrowth on 75.02 chs.

Subdivisions of T.23 S., R.15 E.

CHAINS

From the cor. of secs. 28-29-32 and 33,

I run

N.0°08'E., bet. secs. 28 and 29

Descend over rocky land.

.50 Hollow, 150 ft. deep, course N.W.

Abrupt ascent.

1.90 Rocky spur, projects N.W.

Abrupt descent.

6.00 Hollow, 150 ft. deep, course W.

Abrupt ascent.

7.90 Rocky spur, projects W.

Abrupt descent, over broken and rocky land.

29.00 Hollow, 200 ft. deep, course S.W.

Abrupt ascent.

33.40 Rocky spur, projects S.W.

Abrupt descent.

36.00 Hollow, 100 ft. deep, course S.W.

Ascend.

40.00 Set a sandstone, 28x6x3 ins., 21 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.

77.00 Spur, projects S.E.

Descend.

78.75 Hollow, 100 ft. deep, course S.E.

Ascend abruptly over gypsum.

80.00 Set a sandstone, 28x12x8 ins., 21 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, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky and gypsum, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

Subdivisions of T.23 S., R.15 E.

CHAINS	
	East, on a random line, bet. secs. 21 and 28.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 21-22-27 and 28.
	Thence I run
	N. 89°59' W., on a true line,
	Bet. secs. 21 and 28.
	Ascend over clay spurs, projecting S.W.
40.02	Set a sandstone, 24x12x3 ins., 18 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.
58.00	Begin abrupt ascent over gypsum, bearing N.E. and S.W.
75.00	Spur, projects S.
	Abrupt descent.
80.04	The cor. of secs. 20-21-28 and 29.
	Land, mountainous.
	Soil, clay and gypsum, 3rd. rate.
	No timber.
	Mountainous land on 80.04 chs.
	January 21: At this cor. I set off 19°57' S. on decl. arc, and at 12h. 11m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°48' N.
	N. 0°08' E., bet. secs. 20 and 21.
	Ascend abruptly over gypsum.
3.50	Top of abrupt ascent, bears E. and W.
	Ascend over sandy land, through dense artemisia.
40.00	Set a sandstone, 18x6x6 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.
43.00	Ridge, bears N.E. and S.W.
	Descend.
54.00	Begin abrupt rocky descent, bears N.E. and S.W.

Subdivisions of T.23 S.,R.15 E.

CHAINS

80.00 Set a sandstone,18x12x4 ins.,12 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,gypsum,sandy and rocky,3rd.rate.

No timber. Undergrowth, artemisia.

Mountainous land on 80.00 chs.

S.89°59'E.,on a random line,bet.secs.16 and 21.

40.00 Set temp.¼ sec.cor.

80.10 Intersect N.and S.line,9 lks.S.of the cor.of secs. 15-16-21 and 22.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.16 and 21.

Ascend over sandy land.

10.50 Enter rocky land.

24.00 Spur,projects N.

Descend.

29.00 Hollow,100 ft.deep,course N.

Ascend.

40.05 Set a sandstone,15x8x5 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.

47.50 Rocky ridge,bears N.and S.

Descend.

80.10 The cor.of secs.16-17-20 and 21.

Land, mountainous.

Soil,sandy and rocky,3rd.rate.

No timber.

Mountainous land on 80.10 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	N.0°08'E.,bet.secs.16 and 17.
	Descend over rocky land.
2.00	Hollow,150 ft.deep,course W.
	Ascend.
28.00	Rocky ridge,bears N.E.and S.W.
	Descend.
40.00	Set a sandstone,28x12x4 ins.,21 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.
42.00	Hollow,50 ft.deep,course S.W.
	Ascend.
60.00	Rocky ridge,bears E.and W.
	Descend.
80.00	Set a granite stone,18x12x8 ins.,12 ins.in the ground for, cor.of secs.8-9-16 and 17,marked with 4 notches on S.and E.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.
	N.89°57'E.,on a random line,bet.secs.9 and 16.
40.00	Set temp.¼ sec.cor.
80.12	Intersect N.and S.line,9 lks.S.of the cor.of secs. 9-10-15 and 16.
	Thence I run
	S.89°53'W.,on a true line,
	Bet.secs.9 and 16.
	Ascend over sandy land.
7.00	Begin ascent over rocky land.
18.00	Rocky spur,projects N.
	Descend.

Subdivisions of T.23 S.,R.15 E.

CHAINS

22.00 Hollow,100 ft.deep,course N.E.

Ascend.

30.50 Spur,projects N.E.

Descend.

33.50 Hollow,100 ft.deep,course N.

Ascend.

39.00 Ridge,bears N.and S.

Descend.

40.06 Set a quartzite stone,30x10x4 ins.,23 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.

40.10 Hollow,100 ft.deep,course N.W.

Ascend.

53.50 Rocky spur,projects N.W.

Abrupt descent.

80.12 The cor.of secs.8-9-16 and 17.

Land,mountainous.

Soil,sandy and rocky,3rd.rate.

No timber.

Mountainous land on 80.12 chs.

January 21,1906.

January 22: At 8h.12m.,a.m.,l.m.t.,I set off 38°50'N.on lat.arc,19°42'S.on decl.arc,and determine a meridian, with the solar,at the cor.of secs.8-9-16 and 17.

Thence I run

N.0°08'E.,bet.secs.8 and 9.

Descend over rolling and rocky land,through dense artemisia.

See Notes Book page 2

40.00 Hollow,100 ft.deep,course N.E.

Set a quartzite stone,20x12x10 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.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Pits impracticable.
	Ascend.
59.00	Ridge, bears N.E. and S.W.
	Descend.
80.00	Set a quartzite stone, 20x8x8 ins., 15 ins. in the ground, fo cor. of secs. 4-5-8 and 9, marked with 5 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.
	Soil, rocky, 3rd. rate.
	No timber. Undergrowth, artemisia.
	Mountainous land or dense undergrowth on 80.00 chs.
	N.89°53'E., on a random line, bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line, 25 lks. N. of the cor. of secs. 3-4-9 and 10.
	Thence I run
	N.89°56'W., on a true line,
	Bet. secs. 4 and 9.
	Descend over sandy land, through dense artemisia.
32.00	Hollow, 75 ft. deep, course N.
	Ascend.
40.03	Set a quartzite stone, 24x6x4 ins., 18 ins. in the ground, fo 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.
46.00	Ridge, bears N. and S.
	Descend.
61.00	Hollow, 100 ft. deep, course N.
	Ascend.
68.00	Ridge, bears N. and S.
	Descend.
79.00	Hollow, 100 ft. deep, course N.

See corrective notes Book 4 page 2

See corrective notes Book 4 pages 2 & 3

Subdivisions of T.23 S., R.15 E.

CHAINS

Ascend.

80.06 The cor. of secs.4-5-8 and 9.

Land, mountainous.

Soil, sandy 3rd. rate.

No timber. Undergrowth artemisia.

Mountainous land on 80.06 chs.

See notes B page 02

N.0°08'E., on a random line, bet. secs.4 and 5.

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

81.65 Intersect N. bdy. of Tp., 3 lks. W. of the reestablished cor. of secs.4-5-32 and 33, heretofore described.

Thence I run

S.0°09'W., on a true line,

Bet. secs.4 and 5.

Ascend over rocky land.

9.40 Rocky spur, projects S.E.

Descend.

13.50 Hollow, 100 ft. deep, course E.

Ascend.

18.50 Spur, projects E.

Descend.

19.00 Mail trail, from Green river to Hanksville, bears N.E. and S.W.

23.50 Hollow, 100 ft. deep, course E.

Ascend.

41.65 Set a quartzite stone, 24x12x6 ins., 18 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.

For Corr Notes book 4 page 3.

Pits impracticable.

63.25 Ridge, bears N.E. and S.W.

Descend.

68.00 Hollow, 100 ft. deep, course N.E.

Ascend.

81.65 The cor. of secs.4-5-8 and 9.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Land,mountainous.
	Soil,sandy and rocky,3rd.rate.
	No timber.
	Mountainous land on 81.65 chs.
	January 22: At this cor.I set off 19°43'S.on decl.arc, and at 12h.12m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°50'N.
	At the cor.of secs.29-30-31 and 32,heretofore described, knowing the line bet.secs.31 and 32,will not close within limits,on the south bdy.of the Tp.,I run S.0°08'W.,on a true line, Bet.secs.31 and 32.
	Descend over solid sandstone.
7.50	Hollow,150 ft.deep,course S.W.
	Ascend over rocky land.
13.75	Rocky spur,projects W.
	Descend.
34.00	Same hollow,100 ft.deep,course S.E.
	Ascend.
38.50	Rocky spur,projects E.
	Abrupt descent.
40.00	Set a sandstone,24x10x4 ins.,18 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.
44.00	Same hollow,150 ft.deep,course S.W.
	Ascend.
59.00	Spur,projects S.W.
	Descend.
67.00	Hollow,75 ft.deep,course W.
	Ascend.
68.00	Leave rocky land,over sandy land.
71.86	Intersect S.bdy.of Tp.,5.40 chs.,S.87°52'E.,of the cor. of secs.5-6-31 and 32,heretofore described.

Subdivisions of T.23 S.,R.15 E.

CHAINS

Set a sandstone,28x12x5 ins.,21 ins.in the ground,for closing cor.of secs.31 and 32,marked C C on N.with 5 grooves on E.and 1 groove on W.faces,and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

I destroy all marks on the cor.of secs.5-6-31 and 32,that pertain to T.23 S.

Land,mountainous.

Soil,sandy and rocky,3rd.and 4th.rate.

No timber.

Mountainous land on 71.86 chs.

From the cor.of secs.29-30-31 and 32,I run

N.0°08'E.,bet.secs.29 and 30.

Ascend abruptly over solid sandstone.

9.00 Sandstone ridge,bears N.E.and S.W.

Descend over rocky land.

16.00 Hollow,100 ft.deep,course W.

Ascend.

31.70 Ridge,bears N.E.and S.W.

Descend.

36.00 Hollow,100 ft.deep,course S.W.

Ascend.

40.00 Set a sandstone,20x10x4 ins.,15 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 Begin abrupt ascent over broken sandstone ledges,bearing N.W.and S.E.

72.00 Sandstone spur,projects W.

Abrupt descent.

76.00 Hollow,150 ft.deep,course W.

Abrupt ascent.

80.00 Sandstone spur,projects W.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Set a sandstone,28x12x4 ins.,21 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,sandy and rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 80.00 chs.
	East,on a random line,bet.secs.20 and 29.
40.00	Set temp.¼ sec.cor.
79.92	Intersect N.and S.line,19 lks.S.of the cor.of secs.20-21-28 and 29.
	Thence I run S.89°52'W.,on a true line, Bet.secs.20 and 29.
	Descend over gypsum.
1.00	Hollow,150 ft.deep,course S.E.
	Abrupt ascent over broken sandstone ledges.
6.25	Sandstone spur,projects S.E.
	Abrupt descent.
14.75	Hollow,150 ft.deep,course S.
	Abrupt ascent.
39.96	Set a sandstone,20x10x4 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.
45.50	Ridge,bears N.E.and S.W.
	Descend.
79.92	The cor.of secs.19-20-29 and 30.
	Land,mountainous.
	Soil,gypsum,sandy and rocky,3rd.and 4th.rate.
	No timber.
	Mountainous land on 79.92 chs. January 22,1906.

Subdivisions of T.23 S.,R.15 E.

CHAINS

January 23: At 8h.12m.,a.m.,l.m.t.,I set off 38°48'N.on lat.arc,19°29'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.19-20-29 and 30.

Knowing the line bet.secs.19 and 30 will not close within limits on the W.bdy.of the Tp.,I run

West,on a true line,

Bet.secs.19 and 30.

Descend over solid sandstone.

2.40 Begin abrupt descent,bears N.and S.

13.50 Foot of abrupt descent,bears N.and S.,150 ft.below sec.cor.

Descend over sandy land.

40.00 Set a sandstone,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.

43.50 Hollow,100 ft.deep,course S.W.

Ascend.

53.00 Ridge,bears N.E.and S.W.

Descend over rolling land.

85.61 Intersect W.bdy.of Tp.,10.41 chs.,S.0°14'W.,of the cor. of secs.19-24-25 and 30,heretofore described.

Set a sandstone,20x10x5 ins.,15 ins.in the ground,for closing cor.of secs.19 and 30,marked C C on E.,with 2 grooves on S.and 4 grooves on N.faces,and raise a mound f stone,2 ft.base,1½ ft.high,E.of cor.

Pits impracticable.

I destroy all marks on the cor.of secs.19-24-25 and 30, that pertain to R.15 E.

Land,mountainous.

Soil,sandy and rocky,3rd.and 4th rate.

No timber.

Mountainous land on85.61 chs.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	N.0°08'E.,bet.secs.19 and 20.
	Descend over solid sandstone.
9.75	Hollow,100 ft.deep,course W.
	Ascend.
14.00	Sandstone spur,projects W.
	Abrupt descent.
35.00	Foot of sandstone ledges,bearing N.E.and S.W.
	Descend over sandy land.
40.00	Set a sandstone,20x8x6 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.
62.50	Hollow,200 ft.deep,course N.W.
	Ascend abruptly over gypsum.
75.00	Gypsum spur,projects W.
	Abrupt descent.
80.00	Set a sandstone,24x12x5 ins.,18 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,sandy and gypsum,3rd.and 4th.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.89°52'E.,on a random line,bet.secs.17 and 20.
40.00	Set temp.¼ sec.cor.
79.00	Intersect N.and S.line,3 lks.S.of the cor.of secs. 16-17-20 and 21.
	Thence I run
	S.89°51'W.,on a true line,
	Bet.secs.17 and 20.
	Descend over broken and rocky land.
31.00	Hollow,200 ft.deep,course S.W.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Abrupt ascent.
35.00	Spur,projects S.W.
	Descend.
37.00	Hollow,150 ft.deep,course S.W.
	Ascend.
39.25	Set a sandstone,20x11x5 ins.,15 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,N.of cor.
	Pits impracticable.
41.00	Spur,projects S.W.
	Descend.
44.00	Hollow,150 ft.deep,course S.W.
	Abrupt ascent.
47.50	Ridge,course N.E.and S.W.
	Descend abruptly over cypress breaks.
70.00	The cor.of secs.17,18,19 and 20.
	Land,mountainous.
	Soil,sandy and gravel,3rd.rate.
	No timber.
	Mountainous land on W.and S.

Knowing the line bet.secs.18 and 19 will not close within limits on the W.side of the Tp.,I run

Test,on a true line,

Bet.secs.18 and 19.

Descend abruptly over cypress breaks.

4.00 Hollow,100 ft.deep,course S.W.

Ascend.

7.25 Spur,projects S.W.

Descend abruptly over broken land.

21.50 Hollow,150 ft.deep,course N.W.

Ascend,along south side of hollow.

35.00 Descend.

40.00 Bend in same hollow,course from N.E.to N.W.

Set a sandstone,24x12x4 ins.,18 ins.in the ground,for ¼

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	sec.cor.,marked $\frac{1}{4}$ on N.face,and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
	Ascend.
49.00	Spur,projects N.
	Descend.
58.00	Mail trail,from Greenriver to Hanksville,bears N.E.and S.W.
63.50	Same hollow,150 ft.deep,course S.W.
	Ascend.
66.00	Descend.
70.00	Same hollow,150 ft.deep,course N.W.
	Ascend.
72.00	Descend.
74.50	Same hollow,150 ft.deep,course S.W.
	Ascend.
85.25	Intersect W.bdy.of Tp.,10.96 chs.,S.0°14'W.,of the cor. of secs.13-18-19 and 24,heretofore described.
	Set a sandstone,24x10x4 ins.,18 ins.in the ground,for closing cor.of secs.18 and 19,marked C C on E.,with 3 g grooves on N.and S.faces,and raise a mound of stone,2 ft. base,1½ ft.high,E.of cor.
	Pits impracticable.
	I destroy all marks on the cor.of secs.13-18-19 and 24, that pertain to R.15 E.
	Land,mountainous.
	Soil,gypsum and sandy,3rd.rate.
	No timber.
	Mountainous land on 85.25 chs.
	N.0°08'E.,bet.secs.17 and 18.
	Descend over gypsum.
1.25	Hollow,100 ft.deep,course W.
	Ascend.
3.40	Gypsum spur,projects W.
	Abrupt descent.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
15.25	Hollow,150 ft.deep,course S.W.
	Abrupt ascent.
25.00	Rocky ridge,bears N.E.and S.W.
	Descend over broken land.
40.00	Set a sandstone,24x10x4 ins.,18 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.
47.50	Hollow,150 ft.deep,course S.W.
	Abrupt ascent.
80.00	Set a sandstone,24x12x3 ins.,18 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,and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,gypsum and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	January 23: At this cor.I set off 19°22'S.on decl.arc, and at 12h.12m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 32°50'N.
	N.89°51'E.,on a random line,bet.secs.8 and 17.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.98	Intersect N.and S.line,14 lks.N.of the cor.of secs. 8-9-16 and 17.
	Thence I run
	S.89°57'W.,on a true line,
	Bet.secs.8 and 17.
	Descend over rocky land.
.40	Hollow,100 ft.deep,course N.
	Ascend.
23.50	Ridge,bears N.and S.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	Descend.
37.25	Hollow,75 ft.deep,course S.W.
	Ascend.
39.99	Set a sandstone,20x12x4 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.
44.00	Spur,projects S.W.
	Descend.
79.98	The cor.of secs.7-8-17 and 18.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 79.98 chs.
	Knowing the line bet.secs.7 and 18 will not close within limits on the W.bdy.of the Tp.,I run
	West,on a true line,
	Bet.secs.7 and 18.
	Descend over rocky land.
8.00	Hollow,100 ft.deep,course S.W.
	Ascend.
10.90	Mail trail from Greenriver to Hanksville,bears N.E.and S.W.
23.25	Ridge,bears N.E.and S.W.
	Descend.
37.50	Hollow,50 ft.deep,course N.W.
	Ascend.
40.00	Set a sandstone,24x8x4 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.
	Pits impracticable.
51.50	Ridge,bears N.W.and S.E.
	Descend over gypsum breaks.
85.02	Intersect W.bdy.of Tp.,10.86 chs.,S.0°14'W.,of the cor.of

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	secs.7-12-13 and 18,heretofore described.
	Set a sandstone,14x10x4 ins.,10 ins.in the ground,for closing.cor.of secs.7 and 18,marked C C on E.,with 4 grooves on S.and 2 grooves on N.faces,and raise a mound of stone, 2 ft.base,1½ ft.high,E.of cor.
	Pits impracticable.
	I destroy all marks on the cor.of secs.7-12-13 and 18, that pertain to R.15 E.
	Land,mountainous.
	Soil,rocky and gypsum,3rd.rate.
	No timber.
	Mountainous land on 85.02 chs.
	N.0°08'E.,bet.secs.7 and 8.
	Ascend over sandy land.
11.00	Mail trail from Greenriver to Hanksville,bears N.E.and S.W.,on top of ridge,bearing E.and W.
	Descend.
16.00	Hollow,50 ft.deep,course W.
	Ascend.
21.50	Spur,projects W.
	Descend.
31.00	Hollow,100 ft.deep,course N.W.
	Ascend.
36.00	Rocky spur,projects W.
	Abrupt descent.
40.00	Point for cor.falls on the face of a perpendicular sandstone ledge,6 ft.high,bearing E.and W.;I cut a cross (X),at exact point for ¼ sec.cor.,mark ¼ on W.side of cross, and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
41.00	Hollow,150 ft.deep,course S.W.
	Abrupt ascent.
54.00	Rocky spur,projects E.
	Descend.

See Co Notes Pages 3

Subdivisions of T.23 S.,R.15 E.

CHAINS	
58.50	Hollow,100 ft.deep,course E.
	Abrupt ascent.
65.20	Rocky ridge,bears N.E.and S.W.
	Abrupt descent over granite boulders.
79.00	Head of hollow,course N.W. Ascend.
80.00	Set a granite stone,24x10x6 ins.,18 ins.in the ground,for cor.of secs.5-6-7 and 8,marked with 5 notches on S.and E. 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.
	N.89°57'E.,on a random line,bet.secs.5 and 8.
40.00	Set temp.¼ sec.cor.
79.90	Intersect N.and S.line,16 lks.N.of the cor.of secs. 4-5-8 and 9.
	Thence I run
	N.89°56'W.,on a true line,
	Bet.secs.5 and 8.
	Ascend over rocky land.
4.00	Spur,projects N.
	Descend.
10.50	Hollow,75 ft.deep,course N.E.
	Ascend.
1[illegible].10	Ridge,bears N.E.and S.W.
	Descend.
21.25	Hollow,100 ft.deep,course N.E.
	Ascend.
27.50	Spur,projects N.E.
	Descend.
32.30	Hollow,75 ft.deep,course N.E.
	Ascend.
39.95	Set a sandstone,18x8x5 ins.,12 ins.in the ground,for ¼

Subdivisions of T.23 S.,R.15 E.

CHAINS

sec.cor.,marked ¼ on N.face,and raise a mound of stone,
2 ft.base,1½ ft.high,N.of cor.
Pits impracticable.

41.25 Mail trail from Greenriver to Hanksville,bears N.E.and S W.

76.00 Rocky ridge,bears N.and S. *see Corre otes Boo Page 4.*

Descend.

79.90 The cor.of secs.5-6-7 and 8.

Land,mountainous.

Soil,rocky.3rd.rate.

No timber.

Mountainous land on 79.90 chs.

January 23,1906.

January 24: At 8h.12m.,a.m.,l.m.t.,I set off 38°50'N.on lat.arc,19°14'S.on decl.arc,and determine a meridian wit the solar,at the cor.of secs.5-6-7 and 8.

Knowin g the line bet.secs.6 and 7 will not close within limits on the W.bdy.of the Tp.,I run

West on a true line,

Bet.secs.6 and 7.

Descend over rocky land.

1.50 Hollow,75 ft.deep,course N.W.

Ascend. *See Corr Notes Bo Page 5.*

8.50 ocky spur,projects N.

Descend over broken and rocky land.

38.00 Hollow,150 ft.deep,course S.W.

Ascend.

40.00 Set a granite stone,24x15x8 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of s one 2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

48.00 Ridge,bears N.E.and S.W.

Descend.

68.00 Hollow,150 ft.deep,course S.W.

Ascend over sandy land.

Subdivisions of T.23 S.,R.15 E.

CHAINS	
84.66	Intersect W.bdy.of Tp.,11.29 chs.,S.0°14'W.of the cor.of secs.1-6-7 and 12,heretofore described.
	Set a sandstone,24x12x4 ins.,18 ins.in the ground,for closing cor.of secs.6 and 7,marked C C on E.,with 5 grooves on S.and 1 groove on N.faces,and raise a mound of stone, 2 ft.base,1½ ft.high,E.of cor.
	Pits impracticable.
	I destroy all marks on the cor.of secs.1-6-7 and 12,that pertain to R.15 E.
	Land,mountainous.
	Soil,sandy and rocky,3rd.rate.
	No timber.
	Mountainous land on 84.66 chs.

See Corrective Notes Book 4 Page 5

	N.0°08'E.,on a random line,bet.secs.5 and 6.
40.00	Set temp.¼ sec.cor.
81.33	Intersect N.bdy.of Tp.,5 lks.E.of the reestablished cor. of secs.5-6-31 and 32,heretofore described.
	Thence I run
	S.0°06'W.,on a true line,
	Bet.secs.5 and 6.
	Ascend over rocky land.
.50	Ridge,bears N.W.and S.E.
	Abrupt descent.
4.30	Hollow,150 ft.deep,course N.W.
	Abrupt ascent.
12.50	Rocky ridge,bears E.and W.
	Descend abruptly over broken and rocky land.
32.00	Hollow,200 ft.below ridge,course S.E.
	Abrupt ascent.
36.00	Rocky spur,projects S.E.
	Abrupt descent.
41.33	Set a quartzite stone,20x12x8 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,and raise a mound of

See Corrective Notes Book 4 Page 5

Subdivisions of T.23 S.,R.15 E.

CHAINS	
	stone,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
45.00	Hollow,100 ft.deep,course E.
	Ascend.
47.00	Spur,projects N.E.
	Descend.
54.00	Hollow,100 ft.deep,course N.E.
	Ascend.
72.00	Rocky ridge,bears N.W.and S.E.
	Descend.
81.33	The cor.of secs.5-6-7 and 8.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 81.33 chs.

See Correctotes Bo age 5.

January 24,1906.

GENERAL DESCRIPTION

This township lies in the breaks between San Rafael and Green rivers and the surface is broken by many deep ravines and hollows.

The soil is generally rocky or sandy and there is no land adapted for agricultural purposes in the township. There is no timber,mineral or settlers in this township. There is no water in the township.

Harvey A. Hirst
U.S.Deputy Surveyor.

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PAGE

O K 4-341

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:

....., *Chainman.*

....., *Chainman.*

For final affidavits see book "U" Tp.21 S., R. 15 E. ....., *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 as been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the orner monuments established, according to the instructions furnished by the United States Surveyor

eneral for .....

....., *Chainman.*

For final affidavits see book "U" Tp. 21 S., R. 15 E. ....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

ubscribed and sworn to before me this .....

day of ....., 190

SEAL

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surveyo solemnly swear that, in pursuance of a contract received from ..... United States Surveyor General for ....., bearing date c ..... 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 affidavits see book "U" Tp. 21 S., R. 15 E.

..... of the ..... meridian, in the ..... of ....., 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 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, March 18, 1

The foregoing field notes of the survey of the Subdivisional lines of Towns No. 23 South, Range No. 15 East of the Salt Lake Base and Meridian Utah,

executed by Harvey D. Heist and Earl V. Woolley under their contract No. 291, dated June 3, 190 5, having critically examined, and the necessary corrections and explanations made, the said field notes, an 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 offi

United States Surveyor G

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4—679.

BOOK A-341

4.

C-O-R-R-E-C-T-I-V-E

FILED
AUG 15 1908

FIELD NOTES

To Book "M" Original Field Notes

OF THE SURVEY OF THE

S U B D I V I O N S

of

Township No. 23 South,

Range No. 15 EAST,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey H. Heist and Earl V. Woolley, *United States Deputy Surveyors*

der ~~his~~ their *Contract No.* 291, *dated* June 3, *190*5

rvey commenced July 15, *190*8

rvey completed July 17, *190*8

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BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Earl Woolley	Chainman
Walter Stumm,	"
Walter Stumm,	Moundman
Claude L. Heist,	Axman
Earl Woolley	Flagman

Volume

#

R0341

6—151

BOOK A-341

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Meanders Page

G—151

PRELIMINARY OATHS OF ASSISTANTS.

WE, Earl Woolley, and Walter Stumm,

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 a measuring, to the best of our skill and ability, and in accordance with instructions given us, in t corrective

subdivisions of Ts.21 & 23 S.,R.15 E.,T.23 S.,R.17 E.,Ts.23 & 24 S R.4½ W.and T.19 S.,R.1 W.,S.L.B.& M.,in the state of Utah.

Earl Woolley, Chai.

Walter Stumm, Chai.

Subscribed and sworn to before me this 15th. day of July, 1908

SEAL

Fanny H. Heist
U.S.Deputy Surveyor

~~WE~~, I, Walter Stumm, ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establis of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the su corrected

Subs.of Ts.21 & 23 S.,R.15 E.,T.23 S.,R.17 E.,Ts.23 & 24 S.,R.4½ and T.19 S.,R.1 W.,S.L.B.& M.,in the state of Utah.

Walter Stumm, Moun

, Moun

Subscribed and sworn to before me this 15th. day of July, 1908

SEAL

Fanny H. Heist
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 c and other duties, according to instructions given ~~us~~ me to the best of ~~our~~ my skill and ability, in the corrective

Subs.of Ts.21 & 23 S.,R.15 E.,T.23 S.,R.17 E.,Ts.23 & 24 S.,R.4½ and T.19 S.,R.1 W.,S.L.B.& M.,in the state of Utah.

Claude L. Heist, A

, A

Subscribed and sworn to before me this 15th. day of July, 1908

SEAL

Fanny H. Heist
U.S.Deputy Surveyor

I, Earl Woolley, 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, corrective survey of Subs.of Ts.21 and 23 S.,R.15 E.,T.23 S.,R.17 E.,Ts.23 & 2 R.4½ W.,and T.19 S.,R.1 W.,S.L.B.& M.,in the state of Utah.

Earl Woolley, Fla

Subscribed and sworn to before me this 15th. day of July 1908

SEAL

Fanny H. Heist
U.S.Deputy Surveyor

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.23 S.,R.15 E.

CHAINS

Survey commenced, July 15,1908, and executed with the instrument described in book " A " of original field notes.

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:

I begin at the cor.of secs.8-9-16 and 17,T.23 S., R.15 E.,described in original field notes, latitude, 38°49'N.,longitude 110°19'W. ; I set off 38°49'N.,on lat.arc,21°30'N.,on decl.arc, and at 4h.6m.,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 11h.55m.,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.N.of my station.

July 15, 1908

July 16: At 7 a.m.,I lay off the azimuth of Polaris, 1°31'to the west,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.6m.,a.m.,l.m.t.,I set off 38°49'N.,on lat.arc, 21°24'N.,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, 0'26" west and east

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.23 S.,R.15 E.

CHAINS	
	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°38'W., the angle thus determined gives the mag. decl. 15°38'E.
	From the cor. of secs. 8-9-16 and 17, I run
	N.0°08'E., bet. secs. 8 and 9
40.00	Set original stone, a quartzite stone, 20x12x10 ins., 15 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.
40.78	Position of original ¼ sec. cor., bears E. 10 lks. dist. I destroy all traces of original cor.
80.00	Set original stone, a quartzite stone, 20x8x8 ins., 15 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, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
	From this point the position of the original sec. cor. bears N.11°15'E., 70 lks. dist.
	I destroy all traces of the original sec. cor.
	Note: There is no change of topography on this line.
	N.89°53'W., on a random line. bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
79.94	Intersect the cor. of secs. 3-4-9 and 10, described in original field notes.
	Thence I run
	S.89°53'W., on a true line,
	Bet. secs. 4 and 9.
39.80	The original ¼ sec. cor. bet. secs. 4 and 9, bears N.34 lks. dist.
39.97	Set original stone, a quartzite stone, 24x16x4 ins., 18 ins.

See original cut. Book, M page 34.

See original cut. Book M page 34

CHAINS

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.

I destroy all traces of the original ¼ sec.cor.

79.94 The cor.of secs.4-5-8 and 9.

Note:
There is no change of topography on this line.

See origin notes B M page 435

N.0°08'E., on a random line, bet.secs.4 and 5.

40.00 Set temp.¼ sec.cor.

81.71 Intersect the N.bdy.of the Tp., 14 lks.W.of the cor.of secs.4-5-32 and 33, described in original field notes.

Thence I run

S.0°14'W., on a true line,

Bet.secs.4 and 5.

41.20 The original ¼ sec.cor.bears E., 8 lks.dist.

41.71 Set original stone, a quartzite stone, 24x12x6 ins., 18 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.

I destroy all traces of the original ¼ sec.cor.

81.71 The cor.of secs.4-5-8 and 9

Note:
There is no change of topography on this line.

See notes B M page

July 16, 1908.

July 17: At 8h.06m., a.m., l.m.t., I set off 38°49'N., on lat.arc, 21°14'N., on decl.arc, and determine a meridian with the solar, at the cor.of secs.7-8-17 and 18, described in original field notes.

Thence I run

N.0°08'E., bet.secs.7 and 8

39.95 The original ¼ sec.cor., bears W.3 lks.dist.

40.00 Falls on the smooth surface of a sandstone ledge, I cut a cross (X), at exact point for ¼ sec.cor., marked ¼ on W.side of cross, and raise a mound of stone, 2 ft.base, 1½ ft.high, W.of cor.

See origin notes B M page 45 & 46

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.33 S., R.15 E.

	CHAINS	
		Pits impracticable.
		I destroy all traces of the original ¼ sec.cor.
See original Field Book No page 45 & 46	80.00	Set original stone, a granite stone, 24x10x6 ins., 18 ins. in the ground, for cor. of secs.5-6-7 and 8, marked with 5 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
		Pits impracticable.
		The position of the original cor. of secs.5-6-7 and 8, bears N.59°30'W., 26 lks. dist.
		I destroy all traces of the sec.cor.
		Note: There is no change of topography on this line.
		N.89°57'E., on a random line, bet. secs.5 and 8.
	40.00	Set temp. ¼ sec.cor.
	79.82	Intersect N. and S. line, 10 lks. N. of the cor. of secs. 4-5-8 and 9.
		Thence I run N.89°59'W., on a true line, Bet. secs.5 and 8.
See original Field Book No page 46 & 47	39.91	Set original stone, a sandstone, 18x8x5 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.
		The position of the original ¼ sec.cor., bears N.52 lks.
		I destroy all traces of the original ¼ sec.cor.
	79.82	The cor. of secs.5-6-7 and 8.
		Note: There is no change of topography on this line.

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.23 S.,R.15 E.

CHAINS		
	West,on a true line,bet.secs.6 and 7.	
39.89	The original ¼ sec.cor.bears N.10 lks.dist.	
40.00	Set original stone,a granite stone,24x15x8 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. Pits impracticable. I destroy all traces of the original ¼ sec.cor.	
84.79	Intersect the closing cor.of secs.6 and 7,described in original field notes,on the W.bdy.of the Tp. The marks on the E.face of stone were obliterated,I mark C C on E.face. July 17 : At this cor.I set off 21°11'N.,on decl.arc, and at 0h.06m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 38°50'N.	See origin notes B Tp pa 47+4
	N.0°08'E.,on a random line,bet.secs.5 and 6.	
40.00	Set temp.¼ sec.cor.	
81.39	Intersect N.bdy.of Tp.,3 lks.E.of the cor.of secs. 5-6-31 and 32,described in original field notes. Thence I run S.0°07'W.,on a true line, Bet.secs.5 and 6.	
41.39	Set original stone,a quartzite stone,20x12x8 ins.,15 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. Position of original ¼ sec.cor.bears E.,10 lks.dist. I destroy all traces of original ¼ sec.cor.	See ori. on Tp pages +49
81.39	The cor.of secs.5-6-7 and 8.	

July 17,1908

Harvey D. Hirst

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 arking the lines and corners described in the foregoing field notes of the survey of ..... owing the respective capacities in which they acted:

..... *Chainman.*

or list of names and final oaths of assistants see book 11 ... *Chainman.*

Tp. No. 19 S., R. 1 W. ..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

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

ee 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 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

4-III

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Survey
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 S
General for ....., the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of .....

For final affidavit see book 11 Tp. No. 19 S.. R. 1 W.

..... of the
..... meridian, in the ..... of ....., 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 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 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, Sept.5, 1

The foregoing field notes of the corrective survey of the subdivisions of Township No.
South, Range No.15 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D.Heist and Earl V.Woolley
under ~~his~~ their contract No. 291 , dated June 3, , 190 5, having
critically examined, and the necessary corrections and explanations made, the said field notes, an
corrective surveys they describe, are hereby approved.

Thomas Hull
United States Survey 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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4—679.

M.M.L.
N.E.B.

" N "
BOOK A-341

FILED
APR 14 1905

FIELD NOTES

OF THE RE SURVEY OF THE

G-R-E-E-N R-I-V-E-R G-U-I-D-E M-E-R-I-D-I-A-N

through

Township No. 22 South,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyor,* s

der ~~his~~ their *Contract No.* 291, *dated* June 3, *190* 5

rvey commenced January 24, *190* 6

rvey completed January 26, *190* 6

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6-07-98

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Elmer Petty,	Chainmen
Melvin D.Heist,	"
Robert R.Raycraft,	"
Claude Gresham,	"
Daniel R.Adams,	Moundman,
Willmer E.Tomlinson,	Flagman.

Volume
#
R0341

BOOK A-341

INDEX DIAGRAM.

Township 22 South, , *Range* 15 East.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Elmer Petty, Melvin D. Heist and Robert R. Raycraft, Claude
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 re
Green River Guide Meridian, through Tps. 21 and 22 S., R. 15 E.
S.L.B. & M., in the state of Utah.

Elmer Petty — Robert R. Raycraft, Chai
Melvin D. Heist — Claude Gresham, Chain

Subscribed and sworn to before me this 24th.
day of January, 1906

SEAL

Harvey D. Heist
U.S. Deputy Surveyor

~~WE~~, I, Daniel R. Adams and
do solemnly swear that ~~we~~ I will well and truly perform the duties of moundm~~en~~a in the establish
of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the su
Green River Guide Meridian, through Tps. 21 and 22 S., R. 15 E.
S.L.B. & M., in the state of Utah.

Daniel R. Adams, Mound
, Mound

Subscribed and sworn to before me this 24th.
day of January, 1906

SEAL

Harvey D. Heist
U.S. Deputy Surveyor.

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 su

, Aa
, Aa

Subscribed and sworn to before me this
day of , 190

SEAL

I, Willmer E. Tomlinson, 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 Green River Guide Meridian, through Tps. 21 and 22 S., R. 15 E.
S.L.B. & M., in the state of Utah.

Willmer E. Tomlinson, Flag

Subscribed and sworn to before me this 24th.
day of January, 1906

SEAL

Harvey D. Heist
U.S. Deputy Surveyor.

6—151

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian through T.22 S.

Survey commenced,January 24,1906,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.15 and 16 E., on the Green River Guide Meridian,heretofore described, in approximate latitude 38°51'N.,longitude 110°14'W.,I set off 38°51'N.on lat.arc,19°10'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 11h.07m.,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.

January 24,1906.

January 25: At 7h.30m.,a.m.,I lay off the azimuth of Polaris,1°32'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.12m.,a.m.,l.m.t.,I set off 38°51'N.on lat.arc, 19°00'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.
The solar apparatus,by p.m.and a.m.observations,defines positions for meridians,about 0'26"west and 0'21" east of the meridian established by the Polaris observation,

E, bdy. of T.22 S., R.15 E.

Resurvey of the Green River Guide Meridian, through T.22 S.

CHAINS

therefore, I conclude that the adjustments of the instrum. are satisfactory.

The magnetic bearing of the true meridian at 8h.30m., a.m., is N.15°50'W.; the angle thus determined gives the mag. decl. 15°50'E.

From the Tp. cor. heretofore described, I run N.0°14'E., retracing along the Green River Guide Meridian, bet. secs. 31 and 36, at 40.56 chs. Intersect the ¼ sec. cor. bet. secs. 31 and 36 and at 80.68 chs. Intersect the cor. of sec. 25-30-31 and 36, I continue my retracement line and find the course of this line to be N.0°14'E., but the cors. set on the line will not correspond with the survey of T.23 S., R.15 E.

January 25, 1906.

January 26: As the Green River Guide Meridian through T.23 S., is defective in chaining, I resurvey it setting cors. for R.15 E., and changing the existing cors. to refer to R.16 E. only.

I proceed as follows:

At 8h.13m., a.m., l.m.t., I set off 38°51'N. on lat. arc, 18°45'S. on decl. arc. and determine a meridian with the polar at the cor. of Tps. 22 and 23 S., Rs. 15 and 16, E., on the Green River Guide Meridian, heretofore described.

Thence I run

N.0°14'E., on E. bdy. of sec. 36.

with two sets of chainmen.

Ascend over rocky land.

[illegible].00 Rocky spur, projects N.W.

Descend.

21.00 Hollow, 100 ft. deep, course S.W.

Ascend.

38.25 Rocky spur, projects W.

Descend.

Difference of measurement of 40.00 chs. by two sets of

CHAINS	
	chainmen is 6 lks.,position of middle point,
	By the 1st.set,39.97 chs.
	By the 2nd.set,40.03 chs.,the mean of which is
40.00	Set a sandstone,22x12x5 ins.,10 ins.in the ground,for $\frac{1}{4}$ sec.cor for sec.36,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.
40.56	Intersect the $\frac{1}{4}$ sec.cor.bet.secs.31 and 36,which is a limestone,12x4x4 ins.above ground,marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor.that pertain to R.15 E.
45.00	Foot of descent,bears N.E.and S.W.
	Gradual ascent over smooth sandy slope.
	Difference of measurement of 80.00 chs.by two sets of chainmen is 4 lks.,position of middle point,
	By the 1st.set,79.98chs.,
	By the 2nd.set,80.02 chs.,the mean of which is
80.00	Set a sandstone,24x8x6 ins.,18 ins.in the ground,for cor.of secs.25 and 36,marked with 1 notch on S.and 5 notches on N.edges,and raise a mound of stone,2 ft.base $1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky and sandy,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.0°14'E.,along E.bdy.of sec.25.
	Ascend gradually over sandy slope.
.68	Intersect cor.of secs.25-30-31 and 36,which is a limestone,11x7x6 ins.above ground,marked and witnessed as described by the surveyor general.
	I desctroy all marks on this cor.that pertain to R.15 E.
	Begin ascent over rocky land.

E, bdy. of Tp. 22 S., R. 15 E.

Resurvey of the Green River Guide Meridian, through T. 22 S.

CHAINS	
10.75	Rocky spur, projects S.W.
	Descend.
17.00	Hollow, 100 ft. deep, course S W.
	Abrupt ascent over broken sandstone ledges.
20.50	Top of abrupt ascent, 150 ft. above sec. cor., bears E. and W.
	Gradual ascent, over sandy land.
38.50	Rocky spur, projects W.
	Descend.
	Difference between measurement of 40.00 chs., by two sets of chainmen is 6 lks., position of middle point
	By the 1st. set, 39.97 chs.,
	By the 2nd. set, 40.03 chs., the mean of which is
40.00	Sets sandstone, 18x7x5 ins., 12 ins. in the ground, for ¼ sec. cor. for sec. 25, marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
40.93	Intersect the ¼ sec. cor. to secs. 25 and 30, which is a lava stone, 9x7x4 ins. above ground, marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor. that pertain to R. 15 E.
53.00	Road to Green River, bears N.E. and S.W.
	Difference between measurements of 80.00 chs. by two sets of chainmen is 4 lks., position of middle point
	By 1st. set, 80.02 chs.,
	By 2nd. set, 79.98 chs., the mean of which is
80.00	Set a sandstone, 28x12x4 ins., 21 ins. in the ground, for cor. of secs. 24 and 25, marked with 2 notches on S. and 4 notches on N. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, sandy and rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.22 S.

CHAINS

N.0°14'E.,along E.bdy.of sec.24.

Over rolling,sandy and rocky land,descend.

1.15 Intersect cor.of secs.19-24-25 and 30,which is a limestone,10x5x4 ins.above ground,marked and witnessed as described by the surveyor general.

I destroy all marks on this cor.that pertain to R.15 E.

18.75 Begin abrupt descent over rocky land,bearing E.and W.

27.00 Hollow,100 ft.deep,course E.

Ascend.

33.25 Ridge,bears E.and W.

Descend.

Difference between measurement of 40.00 chs.by two sets 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 sandstone,20x10x5 ins.,18 ins.in the ground,for ¼ sec.cor.for secs.24,marked ¼ on W.face,and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

41.31 Intersect the ¼ sec.cor.for secs.19 and 24,which is a conglomerate stone,8x6x4 ins.above ground,marked and witnessed as described by the surveyor general.

I destroy all marks on this cor.that pertain to R.15 E.

67.00 Head of hollow,course N.

Thence along east side of hollow,descend.

Difference between measurement of 80.00 chs.by two sets of chainmen is 6 lks.,position of middle point

By 1st.set,79.97 chs.,

By 2nd.set,80.03 chs.,the mean of which is

80.00 Set a sandstone,24x10x5 ins.,18 ins.in the ground,for cor.of secs.13 and 24,marked with 3 notches on N.and S. edges,and raise a mound of stone,2 ft.base,1½ ft. high,W.of cor.

Pits impracticable.

Land,mountainous.

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.22 S.

CHAINS	
	Soil,sandy and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	January 26: At this cor.I set off 18°46'S.on decl.arc, and at 12h.13m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°54'N.
	N.0°14'E.,along E.bdy.of sec.13.
	Descend over clay.
1.25	Hollow,100 ft.deep,course E.
	Ascend.
1.41	Intersect the cor.of secs.13-18-19 and 24,which is a which is a limestone,12x8x2 ins.above ground,marked and witnessed as described by the surveyor general.
	I destroy all traces on this cor.that pertain to R.15 E.
6.00	Spur,projects E.
	Descend.
10.50	Hollow,100 ft.deep,course N.W.
	Ascend.
16.00	Spur,projects W.
	Descend over sandy land.
	Difference between measurement 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 sandstone,18x12x3 ins.,12 ins.in the ground,for ¼ sec.cor.for sec.13,marked ¼ on W.face,and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
41.11	Intersect witness cor.to ¼ sec.cor.bet.secs.13 and 18, which is a limestone,12x7x4 ins.above ground,marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor.that pertain to R.15 E.
42.00	Wide hollow,150 ft.deep,course N.E.
	Ascend.

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian, through T.22 S.

CHAINS	
61.50	Begin abrupt ascent, bears E.and W.
69.25	Ridge, bears N.W.and S.E.
	Descend.
	Difference between measurement of 80.00 chs., by two sets of chainmen is 8 lks., position of middle point
	By 1st.set, 80.04 chs.,
	By 2nd.set, 79.96 chs., the mean of which is
80.00	Set a sandstone, 20x6x6 ins., 15 ins.in the ground, for cor.of secs.12 and 13, marked with 4 notcheson S.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.
	Soil, clay, sandy and rocky, 3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.0°14'E., along E.bdy.of sec.12.
	Descend over clay land.
1.50	Hollow, 100 ft.deep, course N.W.
	Ascend.
1.99	Intersect the cor.of secs.7-12-13 and 18, which is a limestone, 10x6x6 ins.above ground, marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor.that pertain to R.15 E.
2.20	Spur, projects N.W.
	Descend.
11.75	Hollow, 100 ft.deep, course N.W.
	Ascend.
21.50	Spur, projects W.
	Descend.
30.00	Hollow, 100 ft.deep, course N.E.
	Ascend.
34.00	Spur, projects N.E.

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.22 S.

CHAINS	
	Descend.
37.35	Hollow,75 ft.deep,course N.E.
	Ascend.
	Difference between measurement of 40.00 chs.,by two sets chainmen is 6 lks.,position of middle point
	By 1st.set,39.97 chs.,
	By 2nd.set,40.03 chs.,the mean of which is
40.00	Set a limestone,22x11x3 ins.,16 ins.in the ground,for $\frac{1}{4}$ sec.cor.for sec.12,marked $\frac{1}{4}$ on W.face,and raise a mound of stone,2 ft.deep,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
42.16	Intersect the $\frac{1}{4}$ sec.cor.for secs.7 and 12,which is a sandstone,6x5x4 ins.above ground,marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor.that pertain to R.15 E.
66.75	Hollow,100 ft.deep,course N.E.
	Ascend.
76.00	Ridge,bears N.E.and S.W.
	Descend.
	Difference between measurement of 80.00 chs.by two sets of chainmen is 8 lks.,position of middle point
	By 1st.set,80.04 chs.
	By 2nd.set,79.96 chs.,the mean of which is
80.00	Set a quartzite stone,20x6x6 ins.,15 ins.in the ground, for cor.of secs.1 and 12,marked with 5 notches on S.and 1 notch on N.edges,and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,clay and sandy,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.22 S.

CHAINS	
	N.0°14'E.,along E.bdy.of sec.1.
	Descend over sandy land.
2.06	Intersect cor.of secs.1-6-7- and 12,which is a limestone 8x5x3 ins.above ground,marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor.that pertain to R.15 E.
5.75	Hollow,150 ft.deep,course S.E.
	Ascend,abruptly.
13.50	Top of abrupt ascent,bears N.W.and S.E.
	Gradual ascent.
22.50	Ridge,bears E.and W.
	Descend.
	Difference between measurement of 40.00 chs.by two sets of chainmen is 2 lks.,position of middle point
	By 1st.set,40.01 chs.,
	By 2nd.set,39.99 chs.,the mean of which is
40.00	Set a granite stone,20x11x10 ins.,15 ins.in the ground, for ¼ sec.cor.for sec.1,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.
41.25	Hollow,75 ft.deep,course E.
	Ascend.
42.21	Intersect the ¼ sec.cor.bet.secs.1 and 6,which is a limestone,8x6x4 ins.above ground,marked and witnessed as described by the surveyor general.
	I destroy all marks on this cor.that pertain to R.15 E.
48.00	Ridge,bears E.and W.
	Descend.
53.00	Hollow,100 ft.deep,course E.
	Ascend.
63.00	Spur,projects E.
	Descend.
66.00	Hollow,75 ft.deep,course E.
	Ascend.

E.bdy.of T.22 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.22 S.

CHAINS	
74.00	Ridge,bears E.and W.
	Abrupt descent.
76.59	Foot of abrupt descent,bears E.and W.
	Gradual descent.
87.00	Hollow.100 ft.deep,course S.E.
	Ascend.
	Difference between measurement to Tp.cor.by two sets of chainmen is 4 lks.,position of cor.
	By 1st.set,87.96 chs.
	By 2nd,set,88.00 chs.,the mean of which is
87.98	Intersect the cor.of Tps.21 and 22 S.,Rs.15 and 16 E., which is a granite stone,8x8x4 ins.above ground,marked and witnessed asdescribed by the surveyor general.
	Land,mountainous.
	Soil,clay and rocky,3rd.rate.
	No timber.
	Mountainous land on 87.98 chs.

January 26,1906.

For general description,see subdivisions of T.22 S.,R. 15 E.

For table of latitude and departures,see North bdy.of T.22 S.,R.15 E.

Harvey L. 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

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

.....

wing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

For final affidavits see book "R" T. 21 S., R. 15 E. ....., *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.*

For final affidavits see book "R", T. 21 S., R. 15 E. ....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

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

SEAL

.....

.....

BOOK A-341

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Survey
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 m
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
United States, surveyed all those parts or portions of .....

For final affidavits see book "R" T. 21 S., R. 15 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 sol
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 ..... 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, March 18

The foregoing field notes of the re survey of the Green River Guide Meridian through Township No. 22 South, between Ranges No.15 and 16 E. of t Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Earl V. Woolley
under ~~his~~ their contract No. 291, dated June 3, 190 5, having
critically examined, and the necessary corrections and explanations made, the said field notes, re 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 offi

United States Surveyor Ge

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BOOK A-341

FILED

APR 14 1905

FIELD NOTES

OF THE ~~SURVEY~~ retracement OF THE

E-A-S-T B-O-U-N-D-A-R-Y

of

Township No. 22 South.

Range No. 14 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyor,* s

er his Contract No. 291, *dated* June 3, *190* 6

racement *commenced* January 27, *190* 6

racement *completed* January 27, *190* 6

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6.01.06

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Robert R. Raycraft,	Chainman.
Claude Gresham,	"
Daniel R. Adams	Moundman
Willmer E. Tomlinson	Flagman.

For preliminary affidavits see book "A" Tp. 23 S., R. 17 E.

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Volume
#
R0341

BOOK A-341

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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 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

.....

..... *Chai*

..... *Chai*

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 establis
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 an
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

Retracement of the E.bdy.of T.22 S.,R.14 E.

CHAINS

Survey commenced,January 27,1906,and executed with the instrument described in book "A",of this survey.

I know the instrument to be in adjustment from recent observation made January 24 and 25,1906,and recorded in book "N",of this survey.

I begin at the cor.of Tps.22 and 23 S.,R.14 E.,which was the cor.of Tps.22 and 23 S.,Rs.14 and 15 E.on a revious survey,heretofore described.

At 8h.13m.,a.m.,l.m.t.,I set off 38°51'N.on lat.arc,18°3 S.on decl.arc,and determine a meridian with the solar, thence I run

North,retracing bet.secs.31 and 36.

Ascend over clay land.

2.00 Begin abrupt ascent,bears E.and W.

10.40 Top of peak,200 ft.high,on line.

Thence along top of ridge,bearing N.and S.

23.500 Rocky ridge,bears E.and W.and junction with ridge,from S.

Abrupt descent.

31.00 Hollow,150 ft.below ridge,bears N.W.

Ascend.

36.00 Ridge,bears S.E.and N.

Thence along ridge.

38.55 The ¼ sec.cor.bet.secs.31 and 36,which is a sandstone, 18x10x3 ins.above ground,marked and witnessed as described by the surveyor general,bears E.17 lks.dist.

45.00 Leave ridge,bears N.E.and S.

Descend.

50.50 Hollow,100 ft.deep,course N.E.

Ascend.

53.40 Rocky spur,projects E.

Descend.

59.00 Hollow,100 ft.deep,course N.W.

Ascend.

79.00 The cor.of secs.25-30-31 and 36,which is a quartzite stone,

Retracement of the E.bdy.of T.22 S.,R.14 E.

CHAINS	
	7x7x7 ins.above ground,marked and witnessed as described by the surveyor general,bears W.1 lk.dist.
	The course of the first half of this line is therefore N.0°15'E.and the course of the second half N.0°15'W.
	Land,mountainous.
	Soil,clay and rocky,3rd.rate.
	No timber.
	Mountainous land on 79.00 chs.
	North,retracing bet.secs.25 and 30.
	Descend over rolling clay land.
17.75	Hollow,75 ft.deep,course N.W.
	Ascend.
30.50	Ridge,bears N.W.and S.E.
	Descend.
40.50	Fall 22lks.W.of $\frac{1}{4}$ sec.cor.bet.secs.25 and 30,which is a sandstone,10x10x8 ins.above ground,marked and witnessed as described by the surveyor general.
	In bottom of hollow,100 ft.deep,course N.W.
	Abrupt ascent.
47.25	Rocky ridge,bears E.and W.
	Abrupt descent.
50.25	Hollow,100 ft.deep,course W.
	Ascend.
57.50	Ridge,bears E.and W.
	Descend.
62.50	Hollow,100 ft.deep,course W.
	Abrupt ascent.
69.50	Ridge,bears E.and W.
	Abrupt descent.
72.00	Hollow,100 ft.deep,course W.
	Ascend.
76.00	Spur,projects E.
	Descend.

Retracement of the E.bdy.of T.22 S.,R.14 E.

CHAINS	
80.76	Fall 44lks.W.of cor.of secs.19-24-25 and 30,which is a sandstone,18x12x6 ins.above ground,marked and witnessed as described by the surveyor general. The course of this line is therefore N.0°19'E. Land,rolling and mountainous.
	Soil,clay and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.76 chs.
	North,retracing bet.secs.19 and 24.
	Descend over rocky land.
.25	Hollow,50 ft.deep,course S.E.
	Ascend.
11.00	Ridge,bears N.E.and S.W.
	Descend.
16.15	Road from San Rafael to Greenriver,bears N.E.and S.W.
22.00	Hollow,75 ft.deep,course S.W.
	Ascend.
28.00	Rocky spur,projects S.W.
	Descend.
37.00	Hollow,150 ft.deep,course S.W.
	Ascend.
40.70	The ¼ sec.cor.bet.secs.19 and 24,which is a sandstone, 12x10x8 ins.above ground,marked and witnessed as described by the surveyor general,bears E.2.8 lks.dist.
41.25	Begin abrupt ascent over sandstone ledges,bearing E.and W.
44.00	Top of ledges,100 ft.high,bear N.E.and S.W.
	Gradual ascent over sandy land.
55.00	Ridge,bears N.E.and S.W.
	Descend.
66.50	Hollow,75 ft.deep,course N.E.
	Ascend.
75.00	Spur,projects E.
	Descend.
80.98	The cor.of secs.13-18-19 and 24,which is a limestone,

Retracement of the E.bdy.of T.22 S.,R.14 E.

CHAINS	
	10x8x4 ins.above ground,marked and witnessed as described by the surveyor general bears E.56 lks.dist.
	The course of this line is therefore N.0°24'E.
	Land,mountainous.
	Soil,sandy,clay and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.98 chs.
	January 27: At this cor.I set off 18°30'S.on decl.arc, and at 12h.13m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°54'N.
	North,retracing bet.secs.13 and 18.
	Descend over sandy land.
7.25	Hollow,50 ft.deep,course E.
	Ascend.
12.00	Ridge,bears E.and W.
	Descend.
40.66	The ¼ sec.cor.bet.secs.13 and 18,which is a limestone,6x6x5 ins above ground,marked and witnessed as described by the surveyor general,bears E.26 lks.dist.
64.00	Hollow,50 ft.deep,course E.
	Ascend.
67.00	Spur,projects E.
	Descend.
80.35	The cor.of secs.7-12-13 and 18,which is a sandstone, 6x5x4 ins.above ground,marked and witnessed as described by the surveyor general,bears E.51 lks.dist.,
	The course of this line is therefore N.0°22'E.
	Land,rolling.
	Soil,sandy,3rd.rate.
	No timber.

Retracement of the E.bdy.of T.22 S.,R.14 E.

CHAINS

North, retracing bet.secs.7 and 12.

Descend over sandy land.

20.00 Hollow, 75 ft.deep, course E.

Gradual ascent.

40.36 The $\frac{1}{4}$ sec.cor.bet.secs.7 and 12, which is a shale stone, 8x8x2 ins.above ground, marked and witnessed as described by the surveyor general, bears E.27 lks.dist.

80.60 The cor.of secs.1-6-7 and 12, which is a sandstone, 10x8x4 ins.above ground, marked and witnessed as described by th surveyor general, bears E.54 lks.dist.

The course of this line is therefore N.0°23'E.

Land, rolling.

Soil, sand and clay, 3 rd.rate.

No timber.

North, retracing bet.secs.1 and 6.

Ascend over clay land.

34.00 Begin abrupt ascent, bears N.W.and S.E.

36.20 Ridge, 200 ft.above sec.cor, bears N.W.and S.E.

Descend.

38.00 Hollow, 30 ft.deep, course N.E.

Ascend.

40.08 Spur, projects N.E.

The $\frac{1}{4}$ sec.cor.bet.secs.1 and 6, which is a deposit with mound of earth and pits, as described by the surveyor gen ral, bears E.28 lks.dist.

Descend.

64.00 Hollow, 75 ft.deep, course N.E.

Ascend.

68.00 Spur, projects N.E.

Descend.

71.50 Hollow, 75 ft.deep, course E.

Ascend.

80.17 Spur, projects E.

The cor.of Tps.21 and 22 S., Rs.14 and 15 E., which is a

Retracement of the E.bdy.of T.22 S.,R.14 E.

CHAINS

limestone,12x10x3 ins.above ground,marked and witnessed as described by the surveyor general.bears E.56 lks.

The course of this line is therefore N.0°24'E.

Land,rolling and mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 80.17 chs.

January 27,1906.

For general description see subdivisions of T.22 S.,R.15 E.

For table of latitudes and departures,see N.bdy.of T.22 S.,R.15 E.

Harvey M. Flint

U.S.Deputy Surveyor.

BOOK A-341

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 .....

.....

owing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

or final affidavits see book "T", Tp. 21 S., R. 14 E. ....., *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

eneral for .....

r final affidavits see book "T", Tp. 21 S., R. 14 E. ..... *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 Surveyor, 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 Surveyor General for , the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of

For Final [illegible] "T" Tp. 21 S., R. 14 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 swear that all the corners of said survey have been established and perpetuated in strict conformity 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 of 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, [illegible], 18 ,

The foregoing field notes of the XXXXXX retracement of the East Boundary of Tp. 22 South, Range 14 East of the Salt Lake Base and Meridian, U

executed by Harvey L. Heist and Earl V. Woolley under their contract No. 291 , dated June 7, , 1905; having critically examined, and the necessary corrections and explanations made, the said field notes, and retracements they describe, are hereby approved.

[signature]
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

6—151

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BOOK A-341

FILED

APR 14 1905

FIELD NOTES

OF THE re SURVEY OF THE

N-O-R-T-H- B-O-U-N-D-A-R-Y

of

Township No. 22 South,

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyors*

ler ~~his~~ their *Contract No.* 291, *dated* June 3, *190* 5

vey commenced January 28, *190* 6

vey completed January 28, *190* 6

6—151

3-17-60
2 65-00
3-86

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Robert R. Raycraft,	Chainman
Claude Gresham,	"
Daniel R. Adams,	Moundman
Willmer E. Tomlinson	Flagman

For preliminary affidavits see book "B" Tp. 27 S., R. 17 E.

BOOK A-341

INDEX DIAGRAM.

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

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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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

6—1bl.

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
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 as
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su

..... *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 establis
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 c
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

6—151

Resurvey of the N.bdy.of T.22 S.,R.15 E.

Survey commenced,January 28,1906,and executed with the instrument described in book "A",of this survey.

I know the instrument to be in adjustment,from recent observations made January 24 and 25,1906,and recorded in book "N",of this survey.

From the resurvey of the E.and S.bdys.and the retracement of the W.bdy.of this township,I know that the N.bdy.of the Tp.will not close within limits for course or distance

I therefore proceed to resurvey the N.bdy.as follows:

At the cor.of Tps.21 and 22 S.,Rs.15 and 16 E.,heretofore described on the Green River Guide Meridian,at 8h.13m., a.m.,l.m.t.,I set off 38°56'N.on lat.arc,18°15'S.on decl. arc,and determine a meridian with the solar,

Thence I run

West,bet.secs.1 and 36.

Descend over clay land.

3.25 Wash,15 lks.wide,8 ft.deep,in hollow,100 ft.deep,course S.E.

Ascend.

24.00 Clay spur,projects N.

Descend.

25.75 Hollow,50 ft.deep,course N.

Ascend.

27.00 Clay spur,projects N.

Descend.

30.75 Hollow,75 ft.deep,course N.

Ascend.

31.10 Mail trail from Greenriver to Hanksville,bears N.E.and S.W.

40.00 Set a charred cottonwood post,3 ft.long,3 ins.sq,with r marked stone,24 ins.in the ground,for reestablished ¼ sec.cor.,marked ¼ S 36 on N.face,1 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.

The old ¼ sec.cor.,which is a cottonwood post,2 ins.sq. bears N.60 lks.dist.,I destroy all traces of the old ¼ sec.cor.

Resurvey of the N.bdy.of T.22 S.,R.15 E.

CHAINS	
50.75	Spur,projects N.
	Descend.
59.75	Hollow,100 ft.deep,course N.
	Ascend.
62.00	Spur,projects N.
	Descend.
65.50	Hollow,75 ft.deep,course N.
	Ascend.
69.00	Spur,projects N.
	Descend.
71.70	Hollow,75 ft.deep,course N.
	Ascend.
79.00	Spur,projects N.
	Descend.
80.00	Hollow,50 ft.deep,course N.
	Seta charred cottonwood post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for reestablished cor. of secs.1-2-35 and 36,marked
	T.21 S.,S.36 on N.E.,
	R.15 E.,S.1.on S.E.,
	T.22 S.,S.2,on S.W.and
	S.35,on N.W.face,with 1 notch on E.and and 5 notches on W.edges,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.
	The old cor.of secs.1-2-35 and 36,which was a cottonwood post,2 ins.sq.,bears N.0°10'E.,80 lks.dist.
	I destroy all traces of the old cor.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.

Resurvey of the North Bdy. of T.22 S., R.15 E.

CHAINS

West, bet. secs. 2 and 35.

Ascend over clay land.

8.00 Spur, projects N.E.

Descend.

11.75 Hollow, 75 ft. deep, course N.E.

Ascend.

23.00 Spur, projects N.E.

Descend.

24.00 Hollow, 75 ft. deep, course N.E.

Ascend.

30.00 Spur, projects N.E.

Descend.

32.50 Hollow, 75 ft. deep, course N.E.

Ascend.

36.00 Spur, projects N.E.

Descend.

40.00 Set a charred cottonwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for reestablished 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.

The old ¼ sec. cor. which is a cottonwood post, 2 ins. sq., bears N. 11° 00' W., 95 lks. dist.; I destroy all traces of the old cor.

40.75 Hollow, 75 ft. deep, course N.E.

Ascend.

46.50 Spur, projects N.E.

Descend.

51.00 Hollow, 75 ft. deep, course N.E.

Ascend.

55.00 Spur, projects N.E.

Descend.

57.00 Hollow, 75 ft. deep, course N.E.

Ascend.

68.00 Begin gradual ascent, bears N.W. and S.E.

Resurvey of the North Bdy. of T. 22 S., R. 15 E.

CHAINS	
80.00	Set a charred cottonwood post, 3 ft. long, 4 ins., sq., with marked stone, 24 ins. in the ground, for reestablished cor. of secs. 2-3-34 and 35, marked T. 21 S., S. 35, on N.E., R. 15 E., S. 2, on S.E., T. 22 S., S. 3 on S.E., and S. 34 on N.W. 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. The old sec. cor., which is a cottonwood post, 2 ins. sq., bears, N. 16°00'W., 1.16 chs. dist. I destroy all traces of the old cor. Land, mountainous. Soil, clay, 3rd. rate. No timber. Mountainous land on 80.00 chs.
	West, bet. secs. 3 and 34.
	Gradual ascent over clay land.
34.50	Ridge, bears N.W. and S.E.
	Descend.
36.30	Hollow, 50 ft. deep, course S.E
	Ascend.
40.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for reestablished ¼ sec. cor., marked ¼ S 34 on N. face and 3 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. No trace can be found of the old cor.
42.00	Spur, projects S.E.
	Descend.
48.00	Road from San Rafael to Greenriver, bears N.E. and S.W.
49.50	Hollow, 50 ft. deep, course S.E.
	Ascend.
65.00	Spur, projects S.E.

Resurvey of the North Bdy. of T.22 S., R.15 E.

CHAINS

Descend.

78.50 Hollow, 50 ft. deep, course S.E.

Ascend.

80.00 Set a redwood post, 3 ft. long, 4 ins. sq., with marked stone 24 ins. in the ground, for reestablished cor. of secs. 3-4-33 and 34, marked T. 21 S., S 34 on N.E.,

R. 15 E., S. 3 on S.E.,

T. 22 S., S 4 on S.W. and

S 33 on N.W. face, 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.

No trace can be found of the old sec. cor.

Land, rolling.

Soil clay.

No timber.

West, bet. secs. 4 and 33.

Ascend over clay land.

6.00 Spur, projects S.E.

Descend.

16.00 Hollow, 50 ft. deep, course S.E.

Ascend.

23.00 Spur, projects S.E.

Descend.

31.00 Enter dense greasewood brush.

36.80 Wash, 10 lks. wide, 5 ft. deep, in hollow, 75 ft. deep, course S.E.

Ascend.

40.00 Set a redwood post, 3 ft. long, 3 ins. sq., with marked ston , 24 ins. in the ground, for reestablished 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.

Resurvey of the North Bdy. of T.22 S., R.15 E.

CHAINS	
	No trace can be found of the old ¼ sec.cor.
46.00	Leave greasewood brush.
80.00	Set a redwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for reestablished cor. of secs. 4-5-32 and 33, marked T. 21 S. S 33 on N.E., R. 15 E., S 4 on S.E. T. 22 S., S. 5 on S.W., and S 32 on N.W. face, 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.
	No trace can be found of the old sec.cor.
	Land, rolling.
	Soil, clay, 3rd. rate.
	No timber.
	Dense undergrowth on 15.00 chs.
	January 28: At this cor. I set off 18°15'S. on decl. arc, and at 12h. 13m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°56'N.
	West, bet. secs. 5 and 32.
	Ascend over rolling clay land.
40.00	Set a quartzite stone, 18x6x4 ins., 12 ins. in the ground, for reestablished 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.
	No trace can be found of the old ¼ sec. cor.
76.00	Ridge, bears N.E. and S.W.
	Descend.
79.25	Hollow, 50 ft. deep, course N.
	Ascend.
80.00	Set a quartzite stone, 18x6x5 ins., 12 ins. in the ground, for reestablished 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.

Resurvey of the North Bdy. of T.22 S., R.15 E.

CHAINS

Pits impracticable.

No trace can be found of the old sec. cor.

Land, rolling.

Soil, clay, 3rd. rate.

No timber.

West, bet. secs. 6 and 31.

Ascend over clay land.

1.50 Spur, projects N.

Descend.

12.75 Hollow, 75 ft. deep, course N.E.

Ascend.

18,75 Spur, projects N.E.

Descend.

29.50 Hollow, 75 ft. deep, course N.E.

Ascend.

40.00 Set a sandstone, 20x15x3 ins., 15 ins. in the ground, for reestablished $\frac{1}{4}$ 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.

No trace can be found of the old $\frac{1}{4}$ sec. cor.

57.00 Spur, projects N.E.

Descend.

72.50 Hollow, 100 ft. deep, course N.E.

Ascend over broken land.

82.60 Intersect W. bdy. of Tp., S. 0° 24' W., 3.86 chs. dist. from the cor. of Tps. 21 and 22 S., Rs. 14 and 15 E., heretofore described.

Set a limestone, 28x10x3 ins., 21 ins. in the ground, for closing cor. to Tps. 21 and 22 S., R. 15 E., marked

C C R. 15 E., on E.,

T. 21 S., on N., and

T. 22 S., on S. face, with 6 grooves on N. S. and E. faces;

dig pits, 30x24x12 ins., crosswise on each line, N. and S.

Resurvey of the North Bdy. of T.22 S., R.15 E.

CHAINS

4 ft. and E. of stone, 8 ft. dist.; and raise a mound of earth 5 ft. base, 2½ ft. high, E. of cor.

I destroy all marks on the cor. of Tps. 21 and 22 S., Rs. 14 and 15 E., that pertain to R.15 E.

Land, mountainous

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 82.60 chs.

January 28, 1906.

For general description see, Subdivisions of T.22 S., R. 15 E.

BOUNDARIES OF T.22 S., R.15 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
E. Bdy. of T.22 S. R.14 E.	N.0°15'E.	38.55	38.55		.17	
	N.0°15'W.	40.45	40.45			.18
	N.0°19'E.	80.76	80.76		.44	
	N.0°24'E.	80.98	80.98		.56	
	N.0°22'E.	80.35	80.35		.51	
	N.0°23'E.	80.60	80.60		.54	
	N.0°24'E.	76.31	76.31		.53	
N. Bdy. of T.22 S. R.15 E.	East	482.60			482.60	
Green River G. Meridian, E. bdy.	S.0°14'W.	487.98		487.98		1.99
S. Bdy.	West	484.52				484.52
E. bdy. of T.23 S. R.14 E.	N.0°14'E.	10.00	10.00		.04	
Convergency					.59	
			488.00	487.98	485.98	486.69
			487.98		485.98	485.98
Error in lat.			0.02	Error in dep.		0.71

Harry D. First

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 Harvey D. Heist, 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~~ resurvey of the N. & E. ys. of Ts. 22 and 23 S., R. 17 E., and the S. bdys. of Ts. 21-22 and 23 S., R. E. and T. 23 S., R. 17 E., S. L. B. & M., in the state of Utah.

owing the respective capacities in which they acted:

Robert R. Raycraft, *Chainman.*

Claude Gresham, *Chainman.*

Daniel R. Adams *Moundman.*

Moundman.

Axman.

Axman.

Willmer E. Tomlinson *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in ~~surveying~~ resurveying all ose parts or portions of the N. & E. bdys. of Ts. 22 and 23 S., R. 17 E., and the S. bdys. of Ts. 21-22 and 23 S., R. 15 E. and T. 23 S., R. 17 E., S. L. B. & M., in the state of Utah

~~of the~~

an, in the state of Utah, which are represented the foregoing field notes as having been surveyed by him and under his direction; and that said re 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 Utah.

Robert R. Raycraft, *Chainman.*

Claude Gresham, *Chainman.*

Daniel R. Adams, *Moundman.*

Moundman.

Axman.

Axman.

Willmer E. Tomlinson, *Flagman.*

scribed and sworn to before me this 28th. day of January, 190 6

SEAL

Harvey D. Heist
U. S. Deputy Surveyor.

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BOOK A-341

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Point, [illegible] solemnly swear that, in pursuance of a contract received from Edward [illegible], United States Surveyor General for Utah, [illegible] 3rd. day of June, [illegible] proper person, and in strict conformity with the [illegible] General for Utah, [illegible] United States resurveyed [illegible] the N. and S. [illegible] S., R. 17 E. and the S. [illegible] R. 17 E.

[illegible] and [illegible] state [illegible] Utah [illegible]

[illegible]

APPROVAL.

[illegible]

The foregoing [illegible]

executed by Harvey D. Point [illegible] under his contract No. [illegible], dated June 3, [illegible] critically examined, and the necessary corrections and explanations [illegible] resurveys they describe, are hereby approved.

United States Surveyor Gen[illegible]

I certify that the foregoing transcript of the field notes of the above described surveys [illegible], has been correctly copied from the original notes on file in this [illegible]

United States Surveyor Gen[illegible]

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BOOK A-341

FILED
APR 14 1905

FIELD NOTES

OF THE SURVEY OF THE

S-U-B-D-I-V-I-S-I-O-N-S

of

Township No. 22 South,

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyor,*s

ler ~~*his*~~ their *Contract No.* 291, *dated* June 3, *1905*

vey commenced January 29, *1906*

vey completed February 7, 1906, *1906*

6—151

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NAMES AND DUTIES OF ASSISTANTS.

Robert R. Raycraft,	Chainman
Claude Gresham,	"
Daniel R. Adams	Moundman
Willmer E. Tomlinson	Flagman

For preliminary affidavits see book "A" Tp. 27 S., R. 17 E.

[illegible]

[illegible]

Township [illegible]. [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]

BOOK A-341

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will k
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

..... Mo

..... Mo

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 abi
survey of .....

.....

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

SEAL

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Survey commenced, January 29, 1906, and executed with the instrument described in book " A ", of this survey.
	I know the instrument to be in adjustment from recent observations made January 24 and 25, 1906, and recorded in book " N " ,of this survey.
	At 8h.13m., a.m., l.m.t., I set off 38°51'N. on lat. arc, 17°50'S. on decl. arc, and determine a meridian with the solar, at the reestablished cor. of secs. 1-2-35 and 36, heretofore described, on the S. bdy. of the Tp.
	The E. bdy of the Tp. having a course E. of due north I run accordingly as follows:
	N.0°13'E., bet. secs. 35 and 36.
	Ascend over broken and rocky land.
19.50	egin abrupt ascent over gypsum breaks, bearing N.E. and S.W.
29.00	Rocky ridge, bears N.E. and S.W.
	Descend.
40.00	Set a sandstone, 20x7x6 ins., 15 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.
60.00	Hollow, 100 ft. deep, course N.E.
	Ascend.
80.00	Set a sandstone, 20x12x5 ins., 15 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked with 1 notch on S. and E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, clay, gypsum and rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.

	East, on a random line, bet. secs. 25 and 36.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect Green River Guide Meridian, 14 lks. S. of the

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	cor.of secs.25 and 36,heretofore described.
	Thence I run
	S.89°54'W.,on a true line,
	Bet.secs.25 and 36.
	Descend over sandy land.
5.25	Road to Green River,bears N.and S.
8.50	Hollow,300 ft.deep,course S.
	Gradual ascent.
21.00	Begin abrupt ascent over gypsum breaks,bearing N.E.and S.W.
26.00	Rocky ridge,bears N.E.and S.W.
	Descend.
40.03	Set a sandstone,22x10x4 ins.,16 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.
47.50	Hollow,100 ft.deep,course N.E.
	Ascend.
80.06	The cor.of secs.25-26-35-and 36.
	Land,mountainous.
	Soil,sandy,gypsum,and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.06 chs.
	N.0°13'E.,bet.secs.25 and 26.
	Ascend over rocky land.
10.00	Rocky ridge,bears N.E.and S.W.
	Descend abruptly over broken and rocky land.
40.00	Set a sandstone,24x12x4 ins.,18 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.
40.75	Hollow,150 ft.deep,course W.
	Abrupt ascent.
46.00	Rocky ridge,bears E.and W.

Subdivisions of T.22 S.,R.15 E.

CHAINS

Begin abrupt descent over broken and rocky land.

80.00 Set a quartzite stone,15x8x6 ins.,10 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,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.

January 29:At this cor.I set off 17°59'S.on decl.arc, and at 12h.13m.,l.m.t.,observe the sun on the meridian, the resulting lat,is 38°53'N.

N.89°54'E.,on a random line,bet.secs.24 and 25.

40.00 Set temp.¼ sec.cor.

80.06 Intersect Green River Guide Meridian,12 lks.N.of the cor.of secs.24 and 25,heretofore described.

Thence I run

S.89°59'W.,on a true line,

Bet.secs.24 and 25.

Ascend over sandy land.

12.00 Begin abrupt ascent over rocky land.

14.00 Rocky ridge,bears N.E.and S.W.

Abrupt descent.

22.50 Hollow,150 ft.deep,course N.

Ascend.

26.50 Ridge,bears N.W.and S.E.

Descend.

35.00 Hollow,100 ft.deep,course N.

Ascend.

40.03 Set a quartzite stone,20x12x7 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.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
44.50	Ridge,bears N.and S.
	Descend.
49.00	Hollow,100 ft.deep,course N.
	Ascend.
53.50	Ridge,bears N.and S.
	Descend.
57.50	Hollow,100 ft.deep,course N.
	Ascend.
60.00	Spur,projects N.E.
	Descend.
62.50	Hollow,75 ft.deep,course N.E.
	Ascend.
66.00	Spur,projects N.
	Descend.
69.50	Hollow,100 ft.deep,course N.E.
	Ascend.
76.00	Ridge,bears N.and S.
	Descend.
79.50	Hollow,100 ft.deep,course N.W.
	Ascend.
80.06	The cor.of secs.23-24-25 and 26.
	Land,mountainous.
	Soil,sandy,rocky and clay,3rd.rate.
	No timber.
	Mountainous land on 80.06 chs.
	N.0°13'E.,bet.secs.23 and 24.
	Descend over rocky land.
1.25	Hollow,100 ft.deep,course N.W.
	Ascend.
13.00	Spur,projects W.
	Descend.
27.00	Hollow,75 ft.deep,course W.
	Ascend.
40.00	Rocky spur,projects W.

Subdivisions of T.22 S.,R.15 E.

N

Set a sandstone,22x7x6 ins.,16 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.

Abrupt descent.

50.00 Hollow,150 ft.deep,course N.E.

Abrupt ascent.

57.00 Spur,projects N.E.

Descend.

61.25 Hollow,100 ft.deep,course E.

Ascend.

63.50 Ridge,bears E.and W.

Descend.

80.00 Set a quartzite stone,18x8x7 ins.,12 ins.in the ground, for cor.of secs.13-14-23 and 24,marked with 3 notches on S.and 1 notch on E.edges,and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

N.89°59'E.,on a random line, bet.secs.13 and 24.

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

80.06 Intersect Green River Guide Meridian,5 lks.S.of the cor. of secs.13 and 24,heretofore described.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.13 and 24.

Descend over gravelly land.

.75 Hollow,75 ft.deep,course N.

Ascend.

4.50 Spur,projects N.

Descend.

See Corr ctes Bo age 3

Subdivisions of T.22 S.,R.15 E.

CHAINS	
9.50	Hollow,100 ft.deep,course N.E.
	Ascend.
22.00	Ridge,bears N.E.and S.W.
	Descend.
29.80	Hollow,100 ft.deep,course N.W.
	Ascend.
33.50	Spur,projects N.E.
	Descend.
36.75	Hollow,75 ft.deep,course N.W.
	Ascend.
38.00	Rocky spur,projects N.W.
	Abrupt descent.
40.03	Set a sandstone,20x10x5 ins.,15 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.
41.50	Enter bottom of wide hollow,150 ft.deep,course N.E.
	Over sandy bottom of hollow.
52.00	Leave hollow,course N.E.
	Abrupt ascent.
61.00	Spur,projects N.E.
	Descend.
80.06	The cor.of secs.13-14-23 and 24.
	Land,mountainous.
	Soil,gravel,sand,rocky and clay,3rd.rate.
	No timber.
	Mountainous land on 80.06 chs.

January 29,1906.

January 30: At 8h.13m.,a.m.,l.m.t.,I set off 38°54'N. on lat.arc,17°43'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.13-14-23 and 24.

Thence I run N.0°13'E.,bet.secs.13 and 14.

Subdivisions of T.22 S.,R.15 E.

CHAINS

Descend over clay land.

5.00 Hollow,150 ft.deep,course E.

Abrupt ascent.

15.00 Ridge,bears N.E.and S.W.

Descend.

40.00 Set a quartzite stone,20x8x6 ins.,15 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.

42.00 Hollow,50 ft.deep,course E.

Ascend.

44.00 Spur,projects E.

Descend.

49.00 Hollow,75 ft.deep,course S.E.

Ascend.

80.00 Set a limestone,15x13x4 ins.,10 ins.in the ground,for cor. of secs.11-12-13 and 14,marked with 4 notches on S.and1 notch on E.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.

Soil,clay,and rocky,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

N.89°57'E.,on a random line,bet.secs.12 and 13.

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

80.04 Intersect Green River Guide Meridian,16lks.S.of the cor. of secs.12 and 13,heretofore described.

Thence I run

N.89°56'W.,on a true line,

Bet.secs.12 and 13.

Descend over clay land.

1.00 Hollow,75 ft.deep,course N.

Ascend.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
38.50	Ridge,bears N.W.and S.E.
	Abrupt descent along steep south slope.
40.02	Set a limestone,28x18x3 ins.,21 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,100 ft.deep,course S.
	Ascend.
43.50	Spur,projects S.
	Abrupt descent.
53.50	Hollow,100 ft.deep,course S.
	Ascend.
56.00	Clay spur,projects S.
	Descend.
58.00	Hollow,75 ft.deep,course S.
	Ascend.
60.75	Clay spur,projects S.
	Descend.
63.50	Hollow,75 ft.deep,course S.
	Ascend.
68.60	Clay spur,projects S.
	Descend.
71.00	Hollow,75 ft.deep,course S.
	Ascend over clay spurs.
80.04	The cor.of secs.11-12-13 and 14.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.04 chs.
	N.0°13'E.,bet.secs.11 and 12.
	Ascend abruptly over clay land.
6.75	Ridge,bears E.and W.
	Descend over broken land.

Subdivisions of T.22 S.,R.15 E.

CHAINS

37.00 Hollow,150 ft.below ridge,course N.E.

Ascend.

38.20 Spur,projects N.E.

Descend.

39.80 Mail trail from Greenriver to Hanksville,bears N.E.and S.W.

40.00 Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 11 on W.face and 12 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.

42.50 Hollow,50 ft.deep,course N.E.

Ascend.

44.00 Spur,projects N.E.

Descend.

51.00 Hollow,100 ft.deep,course N.E.

Ascend.

52.25 Spur,projects N.E.

Descend.

54.75 Hollow,75 ft.deep,course N.E.

Ascend.

58.50 Spur,projects N.E.

Descend.

61.50 Hollow,50 ft.deep,course N.E.

Ascend.

66.00 Spur,projects N.E.

Descend.

71.50 Hollow,50 ft.deep,course N.E.

Ascend.

78.00 Spur,projects E.

Descend.

80.00 Set a quartzite stone,12x8x8 ins.,8 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,and raise a mound of stone,2

Subdivisions of T.22 S., R.15 E.

CHAINS	
	ft.base, 1½ ft.high, W.of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, clay, 3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	January 30: At this cor. I set off 17°43'S. on decl.arc, and at 12h.13m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°56'N.
	———
	S.89°56'E., on a random line, bet.secs.1 and 12.
40.00	Set temp.¼ sec.cor.
79.98	Intersect Green River Guide Meridian, 3 lks.N.of the cor. of secs.1 and 12, heretofore described.
	Thence I run
	N.89°57'E., on a true line,
	Bet.secs.1 and 12.
	Ascend over clay land.
6.50	Spur, projects N.
	Descend.
10.75	Hollow, 75 ft.deep, course N.
	Ascend.
14.00	Spur, projects N.
	Descend.
17.00	Hollow, 100 ft.deep, course N.E.
	Ascend.
39.99	Set a quartzite stone, 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.
59.75	Spur, projects N.E.
	Descend.
66.25	Mail trail from Greenriver to Hanksville, bears N.E.and S.W.
71.75	Hollow, 100 ft.deep, course N.E.

Subdivisions of T.22 S.,R.15 E.

CHAINS

Ascend.

79.98 The cor.of secs.1-2-11 and 12.

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 79.98 chs.

N.0°13'E.,on a random line,bet.secs.1 and 2.

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

87.69 Intersect N.bdy.of Tp.,5 lks.E.of the reestablished cor. of secs.1-2-35 and 36,heretofore described.

Thence I run

S.0°11'W.,on a true line,

Bet.secs.1 and 2.

Ascend abruptly over clay land.

9.50 Ridge,bears E.and W.

Descend.

47.69 Set a quartzite stone,20x8x4 ins.,15 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.

50.00 Hollow,50 ft.deep,course S.E.

Ascend.

52.25 Spur,projects S.E.

Descend.

70.00 Wash,50 lks.wide,50 ft.deep,in hollow,100 ft.deep, course E.

Ascend over broken land.

87.69 The cor.of secs.1-2-11 and 12.

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 87.69 chs.

January 30,1906.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	January 31: At 8h.14m.,a.m.,l.m.t.,I set off 38°51'N. on lat.arc,17°27'S.on decl.arc,and determine a meridian with the solar,at the reestablished cor.of secs.2-3-34 and 35,heretofore described,on the S.bdy.of the Tp.
	Thence I run
	N.0°13'E.,bet.secs.34 and 35.
	Descend abruptly along steep,broken and rocky east slope.
34.50	Hollow,200 ft.below sec.cor.,course N.E.
	Abrupt ascent.
40.00	Sandstone spur,projects E.
	Point for cor.falls on the solid sandstone; I cut a cross (X),at exact point for ¼ sec.cor.,mark ¼ on W.side of cross,and raise a mound of stone,2 ft.base,1½ ft.high, W.of cor.
	Pits impracticable.
	Descend.
51.00	Hollow,150 ft.deep,course N.E.
	Abrupt ascent over rocky land.
66.45	Rocky spur,projects N.E.
	Abrupt descent.
80.00	Set a sandstone,20x8x5 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,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.

	East,on a random line,bet.secs.26 and 35.
40.00	Set temp.¼ sec.cor.
80.02	Intersect N.and S.line,12 lks.S.of the cor.of secs. 25-26-35 and 36.
	Thence I run

Subdivisions of T.22 S.,R.15 E.

CHAINS

S.89°55'W.,on a true line,

Bet.secs.26 and 35.

Ascend over rocky land.

5.00 Rocky ridge,bears N.E.and S.W.

Descend.

33.00 Hollow,100 ft.deep,course N.

Ascend.

40.01 Set a sandstone,24x12x4 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.

Pits impracticable.

44.00 Rocky ridge,bears N.and S.

Descend.

62.25 Hollow,150 ft.deep,course N.

Abrupt ascent.

66.75 Rocky spur,projects N.

Descend.

69.00 Hollow,100 ft.deep,course N.

Ascend.

73.00 Rocky spur,projects N.

Descend.

77.00 Hollow,100 ft.deep,course N.

Ascend.

80.02 The cor.of secs.26-27-34 and 35.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 80.02 chs.

N.0°13'E.,bet.secs.26 and 27.

Descend over rocky land.

9.00 Hollow,100 ft.deep,course N.E.

Ascend.

13.50 Rocky spur,projects N.E.

Descend.

31.00 Hollow,75 ft.deep,course N.E.

ee Correc
otes Boo
Page 1

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Ascend.
34.00	Ridge, bears N.E. and S.W.
	Descend.
40.00	Set a sandstone, 24x10x4 ins., 18 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.
53.75	Hollow, 75 ft. deep, course N.E.
	Ascend.
57.00	Ridge, bears N.E. and S.W.
	Descend.
79.75	Hollow, 100 ft. deep, course N.E.
	Ascend.
80.00	Set a sandstone, 24x10x5 ins., 18 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked with 2 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
	Land mountainous.
	Soil, rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.
	January 31: At this cor. I set off 17°26'S. on decl. arc, and at 12h. 14m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°53'N.

See Corrective Notes Book 3 Page 1

	N.89°55'E., on a random line, bet. secs. 23 and 26.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.12	Intersect N. and S. line 21 lks. N. of the cor. of secs. 23-24-25 and 26.
	Thence I run
	N.89°56'W., on a true line,
	Bet. secs. 23 and 26.
	Ascend over rocky land.

See Corrective Notes Book 3 Pages 1 and 2

Subdivisions of T.22 S.,R.15 E.

11.50 Rocky spur,projects N.

Descend.

17.00 Hollow,100 ft.deep,course N.E.

Ascend.

29.00 Ridge,bears N.and S.

Descend.

34.00 Hollow,100 ft.deep,course N.

Ascend.

38.50 Spur,projects N.

Descend.

40.06 Set a sandstone,20x12x4 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.

47.00 Hollow,100 ft.deep,course N.E.

Ascend.

57.00 Ridge,bears N.E.and S.W.

Descend.

63.00 Hollow,50 ft.deep,course N.

Ascend.

74.00 Rocky spur,projects N.

Descend.

79.00 Hollow,100 ft.deep,course N.E.

Ascend.

80.12 The cor.of secs.22-23-26 and 27.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 80.12 chs.

See Correc Notes Boo Pages 1an

N.0°13'E.,bet.secs.22 and 23.

Ascend over rocky land.

1.95 Mail trail from Greenriver to Hanksville,bears N.E.and S.W.

6.25 Spur,projects N.E.

See Correc Notes Bo Page 2

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Descend.
21.00	Hollow,100 ft.deep,course N.E.
	Ascend.
29.50	Ridge,bears N.E.and S.W.
	Descend.
33.00	Head of hollow,course N.
	Along east side of hollow,descend.
40.00	Set a sandstone,24x14x3 ins.,18 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.
49.00	Hollow,150 ft.deep,course N.E.
	Abrupt ascent.
79.00	Ridge,bears E.and W.
	Abrupt rocky descent.
80.00	Set a sandstone,24x12x4 ins.,18 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,and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountai ous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.

See Corrective Notes Book 3 Page 2

	S.89°56'E.,on a random line,bet.secs.14 and 23.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S.line,14 lks.S.of the cor.of secs. 13-14-23 and 24.
	Thence I run
	S.89°58'W.,on a true line,
	Bet.secs.14 and 23.
	Descend over gravelly land.
6.00	Hollow,75 ft.deep,course N.E.
	Ascend.

Subdivisions of T.22 S., R.15 E.

CHAINS	
14.25	Ridge, bears N.E. and S.W.
	Descend.
40.02	Set a quartzite stone, 24x9x8 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.
	Pits impracticable.
44.95	Mail trail from Greenriver to Hanksville, bears N.E. and S.W.
52.50	Hollow, 100 ft. deep, course N.
	Ascend abruptly over broken and rocky land.
80.04	The cor. of secs. 14-15-22 and 23.
	Land, mountainous.
	Soil, gravelly and rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.04 chs.
	January 31, 1906.

February 1: At 8h. 14m., a.m., l.m.t., I set off 38°54'N. on lat. arc, 17°10'S. on decl. arc, and determine a meridian with the solar, at the cor. of secs. 14-15-22 and 23.

Thence I run

N.0°13'E., bet. secs. 14 and 15.

	Descend abruptly over broken and rocky land.
9.50	Hollow, 100 ft. deep, course E.
	Ascend over sandy land.
40.00	Set a quartzite stone, 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.
50.00	Ridge, bears N.W. and S.E.
	Descend.
53.50	Hollow, 50 ft. deep, course S.E.
	Ascend.
70.00	Spur, projects S.E.
	Descend.
76.00	Hollow, 75 ft. deep, course S.E.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Abrupt ascent.
80.00	Set a quartzite stone,20x9x9 ins.,15 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,sandy and clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.89°58'E.,on a random line,bet.secs.11 and 14.
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line,5 lks.S.of the cor.of secs. 11-12-13 and 14.
	Thence I run S.89°56'W.,on a true line, Bet.secs.11 and 14.
	Ascend over clay land.
5.25	Clay spur,projects S.
	Descend over broken land.
17.00	Mail trail from Greenriver to Hanksville,bears N.E.and S.W.
40.05	Hollow,100 ft.deep,course S.
	Set a quartzite stone,24x10x4 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.
	Pits impracticable.
	Ascend over broken land.
56.00	Spur,projects S.
	Descend.
72.75	Hollow,100 ft.deep,course S.E.
	Ascend.
80.10	The cor.of secs.10-11-14 and 15.
	Land,mountainous.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.10 chs.
	N.0°13'E.,bet.secs.10 and 11.
	Ascend abruptly over clay land.
1.35	Spur,projects S.E.
	Descend.
5.00	Hollow,100 ft.deep,course S.E.
	Abrupt ascent.
15.50	Ridge,bears N.W.and S.E.
	Descend over broken 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 ¼S10 on W. and 11 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.
50.50	Hollow,100 ft.deep,course N.E.
	Ascend.
55.50	Ridge,bears N.E.and S.W.
	Abrupt descent.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.2-3-10 and 11, marked T.22 S.,S.2 on N.E., R.15 E.,S.11 on S.E., S.10 on S.W.,and S.3 on N.W.face,with 5 notches on S.and 2 notches on E.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.
	Band,Mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	February 1: At this cor.I set off 17°09'S.on decl.arc,

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°56'N.
	N.89°56'E.,on a random line,bet.secs.2 and 11.
40.00	Set temp.¼ sec.cor.
79.98	Intersect N.and S.line,3 lks.N.of the cor.of secs. 1-2-11 and 12.
	Thence I run
	S.89°57'W.,on a true line,
	Bet.secs.2 and 11.
	Ascend over rolling clay land.
12.25	Spur,projects N.E.
	Descend.
18.00	Hollow,100 ft.deep,course N.E.
	Ascend.
39.00	Ridge,bears N.E.and S.W.
	Descend.
39.99	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 2 on N. face,11 on S.face,dig pits,18x18x12 ins.,E.and W.of pc 3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft high,N.of cor.
43.00	Hollow,50 ft.deep,course N.E.
	Ascend.
50.00	Ridge,bears N.E.and S.W.
	Descend.
58.00	Hollow,75 ft.deep,course N.E.
	Ascend.
77.70	Spur,projects N.
	Descend.
79.98	The cor.of secs.2-3-10 and 11.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 79.98 chs.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	N.0°13'E.,on a random line,bet.secs.2 and 3.
40.00	Set temp.¼ sec.cor.
87.67	Intersect N.bdy.of Tp.,7 lks.E.of the reestablished cor. of secs.2-3-34 and 35,heretofore described.
	Thence I run
	S.0°10'W.,on a true line,
	Bet.secs.2 and 3.
	Descend over rolling clay land.
47.67	Set a pine post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼S3 on W.face, 2 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.
48.00	Wash,1.00 ch.wide,10 ft.deep,in hollow,100 ft.deep,course E.
	Ascend.
70.25	Spur,projects N.E.
	Descend.
78.00	Hollow,100 ft.deep,course N.E.
	Ascend.
87.67	The cor.of secs.2-3-10 and 11.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 87.67 chs.
	February 1,1906.

February 2: At 8h.14m.,a.m.,l.m.t.,I set off 38°51'N. on lat.arc,16°53'S.on decl.arc,and determine a meridian with the solar,at the reestablished cor.of secs.3-4-33 and 34,heretofore described,on the S.bdy.of the Tp.

Thence I run

N.0°12'E.,bet.secs.33 and 34.

Ascend over clay land.

5.50 Begin abrupt ascent over broken sandstone ledges,bearing

Subdivisions of T.22 S.,R.15 E.

CHAINS

E.and W.

19.55 Rocky ridge,200 ft.above sec.cor.,bears E.and W.

Descend over gravelly land.

40.00 Set a sandstone,20x9x4 ins.,15 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.

53.50 Hollow,75 ft.deep,course N.W.

Ascend.

58.20 Rocky spur,projects W.

Descend.

70.05 Mail trail from Greenriver to Hanksville,bears N.E.and S.W.

80.00 Set a sandstone,18x10x5 ins.,12 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,rocky and gravelly ,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

East,on a random line,bet.secs.27 and 34.

40.00 Set temp.¼ sec.cor.

80.02 Intersect N.and S.line,12 lks.S.of the cor.of secs. 26-27-34 and 35.

Thence I run S.89°55'W.,on a true line, Bet.secs.27 and 34.

Ascend over rocky land.

3.00 Spur,projects N.

Descend.

6.00 Hollow,100 ft.deep,course N.

Ascend.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
11.00	Rocky spur,projects N.
	Descend.
14.00	Hollow,100 ft.deep,course N.
	Ascend.
39.00	Rocky ridge,bears N.and S.
	Descend.
40.01	Set a quartzite stone,20x10x7 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.
44.00	Hollow,100 ft.deep,course N.
	Ascend.
49.00	Rocky spur,projects N.
	Descend.
53.50	Hollow,100 ft.deep,course N.
	Abrupt ascent.
67.50	Spur,projects N.
	Descend.
72.10	Mail trail from Greenriver to Hanksville,bears N.E. and S.W.
80.02	The cor.of secs.27-28-33 and 34.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 80.02 chs.

N.0°12'E.,bet.secs.27 and 28.

	Descend over rocky land.
4.50	Hollow,100 ft.deep,course N.E.
	Ascend.
9.00	Rocky spur,projects E.
	Descend.
19.00	Hollow,100 ft.deep,course E.
	Ascend.

Subdivisions of T.22 S.,R.15 E.

CHAINS.	
33.10	Rocky ridge,bears N.E.and S.W.
	Descend.
40.00	Set a sandstone,22x9x8 ins.,16 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.
71.00	Begin abrupt descent,bears E.and W.
80.00	Set a quartzite stone,28x8x6 ins.,21 ins.in the ground, for cor.of secs.21-22-27 and 28,marked 2 notches on S. and 3 notches on E.edges,and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	February 2,: At this cor.I set off 16°52'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°53'N.

	N.89°55'E.,on a random line,bet.secs.22 and 27.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.94	Intersect N.and S.line,7 lks.S.of the cor.of secs. 22-23-26 and 27.
	Thence I run
	S.89°52'W.,on a true line,
	Bet.secs.22 and 27.
	Ascend abruptly over rocky land.
1.45	Mail trail from Greenriver to Hanksville,bears N.E.and S,W.
10.25	Rocky ridge,bears N.E.and S.W.
	Abrupt descent.
23.00	Hollow,150 ft.deep,course N.
	Leave rocky land,ascend over gravelly land.

See Corrective Notes Book 3 Pages 2 and 3

Subdivisions of T.22 S.,R.15 E.

CHAINS

26.00 Ridge,bears N.and S.

Descend.

29.50 Hollow,100 ft.deep,course N.

Ascend.

37.00 Spur,projects N.E.

Descend.

39.97 Set a sandstone,20x13x4 ins.,15 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.

44.75 Hollow,100 ft.deep,course N.E.

Ascend over broken land.

79.94 The cor.of secs.21-22-27 and 28.

Land,mountainous.

Soil,rocky and gravelly,3rd.rate.

No timber.

Mountainous land on 79.94 chs.

ee Correction Notes Book 3 Pages 2and3

N.0°12'E.,bet.secs.21 and 22.

Descend over gravelly land.

24.00 Hollow,100 ft.deep,course N.E.

Ascend.

32.00 Rocky ridge,bears N.E.and S.W.

Abrupt descent.

40.00 Set a sandstone,15x7x6 ins.,10 ins.in the ground,for $\frac{1}{4}$ secs 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.

70.50 Hollow,100 ft.deep,course N.E.

Ascend.

80.00 Set a limestone,18x8x5 ins.,12 ins.in the ground,for cor.of secs.15-16-21 and 22,marked

22 S.,on N.E.,and

15 E.,on S.E.face,with 3 notches on S.and E.edges,

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,gravelly and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.89°52'E.,on a random line,bet.secs.15 and 22.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,9 lks.N.of the cor.of secs. 14-15-22 and 23.
	Thence I run
	S.89°56'W.,on a true line,
	Bet.secs.15 and 22.
	Ascend abruptly over rocky land.
6.50	Rocky spur,projects N.
	Descend.
8.00	Hollow,75 ft.deep,course N.
	Ascend.
9.75	Rocky spur,projects N.
	Abrupt descent.
15.50	Hollow,100 ft.deep,course N.W.
	Ascend.
21.50	Spur,projects N.E.
	Descend. Enter dense greasewood brush.
35.00	Enter hollow,100 ft.deep,course from W.to N.E.
	Thence along hollow.
40.00	Set a sandstone,16x11x4 ins.,11 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.
64.00	Leave hollow,course from N.W.to E.
	Ascend.
68.00	Leave greasewood brush.
74.00	Spur,projects N.

Subdivisions of T.22 S.,R.15 E.

CHAINS

Descend.

76.00 Hollow,75 ft.deep,course N.E.

Ascend.

80.00 The cor.of secs.15-16-21 and 22.

Land,mountainous.

Soil,rocky and gravelly,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

February 2,1906.

February 3: At 8h.14m.,a.m.,l.m.t.,I set off 38°54'N. on lat.arc,16°36'S.on decl.arc,and determine a meridian, with the solar,at the cor.of secs.15-16-21 and 22.

Thence I run

N.0°12'E.,bet.secs.15 and 16.

Ascend abruptly over rocky land.

3.00 Rocky spur,projects E.

Descend.

13.00 Hollow,100 ft.deep,course S.E.

Abrupt ascent.

18.50 Spur,projects S.E.

Descend.

21.50 Hollow,75 ft.deep,course S.E.

Ascend.

24.80 Spur,projects S.E.

Descend.

28.00 Hollow,75 ft.deep,course S.E.

Ascend over broken land.

30.00 Spur,projects S.E.

Descend.

35.00 Hollow,75 ft.deep,course S.E.

Ascend over broken land.

40.00 Set a conglomerate stone,18x7x5 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,dig pits,18x18x12 ins.,

Subdivisions of T.22 S. R 15 E.

CHAINS

N.and S.of stone,3 ft.dist.,and raise a mound of earth, 3½ ft.base,1½ ft.high,W.of cor.

77.00 Begin abrupt ascent,bears N.W.and S.E.

78.00 Ridge,bears N.W.and S.E.

Descend.

81.50 Set a quartzite stone,18x12x6 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,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 clay,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

N.89°56'E.,on a random line,bet.secs.10 and 15.

40.00 Set temp.¼ sec.cor.

79.96 Intersect W.and S.line,3 lks.N.of the cor.of secs. 10-11-14 and 15.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.10 and 15.

Ascend over clay land.

1.00 Spur,projects S.

Descend.

2.00 Hollow,100 ft.deep,course S.E.

Ascend.

17.00 Ridge,bears N.W.and S.E.

Descend.

[illegible].00 Hollow,150 ft.deep,course S.E.

Ascend over broken land.

[illegible].00 Spur,projects N.E.

Descend.

30.98 Set a sandstone,18x14x5 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a mound of stone,

Subdivisions of T.22 S.,R.15 E.

CHAINS

2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

42.50 Hollow,100 ft.deep,course N.E.

Ascend.

56.35 Spur,projects N.E.

Abrupt descent.

58.75 Hollow,150 ft.deep,course N.E.

Abrupt ascent.

61.50 Spur,projects N.E.

Abrupt descent.

65.00 Hollow,100 ft.deep,course N.E.

Abrupt ascent.

70.00 Ridge,bears N.E.and S.W.

Descend.

75.00 Hollow,75 ft.deep,course N.E.

Ascend.

76.50 Spur,projects N.E.

Descend.

77.75 Head of hollow,course N.E.

Ascend.

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

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 79.96 chs.

N.0°12'E.,bet.secs.9 and 10.

Descend abruptly over broken clay land.

38.25 Hollow,150 ft.below sec.cor.,course N.E.

Ascend over broken 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 9 on W. face,10 on E.face,dig pits,18x18x18 ins.,N.and S.of post, 3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft. high,W.of cor.

Subdivisions of T.22 S.,R.15 E.

[illegible]

[illegible] Ridge,bears N.E.and S.W.

Abrupt descent.

[illegible] Set a pine post,3 ft.long,4 ins.sq.,with marked stone,

24 ins.in the ground,for cor.of secs.3-4-9 and 10,marked

T.22 S.,S.3 on N.E.,

R.15 E.,S.10 on S.W.,

S.9,on S.E.,and

S.4 on N.W.face,with 5 notches on S.and 3 notches on E.

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,clay,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

February 3: At this cor.I set off 16°35'S.on decl.arc,

and at 12h.14m.,l.m.t.,observe the sun on the meridian,

the resulting lat.is 38°56'N.

N.89°57'W.,on a random line,bet.secs.3 and 10.

[illegible] Set temp.¼ sec.cor.

[illegible] Intersect N.and S.line,5 lks.S.of the cor.of secs.

3-4-10 and 11.

Thence I run

S.89°55'W.,on a true line,

Bet.secs.3 and 10.

Leave d over clay land.

[illegible] Fallen, [illegible] ft.deep,course N.

Passed.

[illegible] Ridge,bears N.E.and S.W.

Descend.

[illegible] Fallen,[illegible] ft.deep,course N.

Passed.

[illegible] 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 3 on N.

Subdivisions of T.22 S.,R.15 E.

CHAINS

face,10 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.

44.00 Spur,projects N.E.

Descend.

51.10 Hollow,50 ft.deep,course N.E.

Ascend.

78.00 Spur,projects N.

Descend.

79.98 The cor.of secs.3-4-9 and 10.

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 79.98 chs.

N.0°12'E.,on a random line,bet.secs.3 and 4.

40.00 Set temp.¼ sec.cor.

87.86 Intersect N.bdy.of Tp.,5 lks.E.of the reestablished cor. of secs.3-4-33 and 34,heretofore described.

Thence I run

S.0°10'W.,on a true line,

Bet.secs.3 and 4.

Descend over rolling clay land.

17.75 Hollow,75 ft.deep,course S.E.

Ascend.

33.75 Road,from San Rafael to Greenriver,bears N.E.and S.W.

43.00 Spur,projects N.E.

Descend.

47.86 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 4 on W. face,3 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.

48.00 Hollow,50 ft.deep,course N.E.

Ascend.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
61.00	Spur, projects N.E.
	Descend .
70.50	Hollow, 50 ft. deep, course N.E.
	Ascend.
78.00	Spur, projects N.E.
	Descend.
86.75	Hollow, 50 ft. deep, course N.E.
	Ascend.
87.86	The cor. of secs. 3-4-9 and 10.
	Land, mountainous.
	Soil, clay, 3rd. rate.
	No timber.
	Mountainous land on 87.86 chs.
	February 3, 1906.

February 4: At 8h. 14m., a.m., l.m.t., I set off 38°51'N. on lat. arc, 16°18'S. on decl. arc, and determine a meridian with the solar, at the reestablished cor. of secs. 4-5-32 33, heretofre described, on the S. bdy. of the Tp.

Thence I run

N. 0°11'E., bet. secs. 32 and 33.

	Aacend over sandy land.
24.00	Begin abrupt ascent over broken sandstone ledges, bearing N.W. and S.E.
39.00	Rocky spur, projects W.
	Descend.
40.00	Set a quartzite stone, 20x8x6 ins., 15 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.
44.00	Hollow, 100 ft. deep, course S.W.
	Ascend.
46.25	Spur, projects W.
	Descend.
48.00	Head of hollow, course S.W.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Ascend.
52.50	Rocky ridge, bears E. and W.
	Abrupt descent.
80.00	Set a quartzite stone, 15x8x5 ins., 10 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, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, sandy and rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.
	East, on a random line, bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line, 9 lks. S. of the cor. of secs. 27-28-33 and 34.
	Thence I run
	S. 89°56' W., on a true line,
	Bet. secs. 28 and 33.
	Descend over rocky land.
6.00	Hollow, 100 ft. deep, course N.E.
	Ascend.
28.00	Ridge, bears N. and S.
	Descend over rolling land.
40.02	Set a sandstone, 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.
80.04	The cor. of secs. 28-29-32 and 33.
	Land, mountainous.
	Soil, rocky and sandy, 3rd. rate.
	No timber.
	Mountainous land on 80.04 chs.

Subdivisions of T.22 S.,R.15 E.

CHAINS

N.0°11'E.,bet.secs.28 and 29.

Descend over rolling,sandy land.

38.00 Hollow,75 ft.deep,course N.E.

Ascend.

40.00 Set a sandstone,20x11x4 ins.,15 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.

47.00 Ridge,bears N.E.and S.W.

Descend.

56.00 Hollow,75 ft.deep,course N.E.

Ascend.

62.00 Spur,projects N.E.

Descend.

78.50 Hollow,75 ft.deep,course E.

Ascend.

80.00 Set a quartzite stone,18x9x8 ins.,12 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

Land,mountainous.

Soil,sandy and rocky,3rd.rate.

No timber.

Mountainous land on 80.00 chs.

February 4: At this cor.I set off 16°17'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°53'N.

N.89°56'E.,on a random line,bet.secs.21 and 28.

4[illegible].00 Set temp.¼ sec.cor.

80.02 Intersect N.and S.line,12 lks.N.of the cor.of secs. 21-22-27 and 28.

Thence I run

N,89°59'W.,on a true line,

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Bet.secs.21 and 28.
	Ascend abruptly over rocky land.
4.50	Top of abrupt ascent,150 ft.above sec.cor.,bears N.W.and S.E.
	Gradual ascent.
26.00	Rocky ridge,bears N.and S.
	Abrupt descent.
30.50	Hollow,150 ft.deep,course N.
	Ascend.
40.01	Set a sandstone,20x10x7 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.
41.50	Spur,projects N.
	Descend.
57.00	Hollow,100 ft.deep,course N.
	Ascend.
60.65	Rocky spur,projects N.
	Descend.
63.00	Hollow,100 ft.deep,course N.
	Ascend.
80.02	The cor.of secs.20-21-28 and 29.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 80.02 chs.
	N.0°11'E.,bet.secs.20 and 21.
	Ascend over rocky land.
3.00	Rocky spur,projects N.E.
	Descend.
10.25	Hollow,100 ft.deep,course N.E.
	Ascend.
30.75	Sandstone ridge,bears N.E.and S.W.
	Descend over broken land.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
40.00	Set a quartzite stone,20x7x6 ins.,15 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.
	Over sandy land.
80.00	Set a quartzite stone,24x6x5 ins.,18 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,and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,sandy and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	S.89°59'E.,on a random line,bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
79.92	Intersect N.and S.line,7 lks.S.of the cor.of secs. 15-16-21 and 22.
	Thence I run
	S.89°58'W.,on a true line,
	Bet.secs.16 and 21.
	Ascend abruptly over rocky land.
7.00	Ridge,bears N.E.and S.W.
	Abrupt descent.
18.00	Hollow,100 ft.deep,course N.E.
	Ascend.
24.50	Spur,projects N.
	Descend.
26.75	Hollow,100 ft.deep,course N.
	Ascend.
39.96	Set a sandstone,18x8x5 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.

Subdivisions of T.22 S.,R.15 E.

CHAINS

Pits impracticable.

41.75 Ridge,bears N.W.and S.E.

Descend.

49.00 Hollow,75 ft.deep,course S.E.

Ascend.

70.00 Ridge,bears N.W.and S.E.

Descend.

79.40. Hollow,75 ft.deep,course N.W.

Ascend.

79.92 The cor.of secs.16-17-20 and 21.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 79.92 chs.

February 4,1906.

February 5: At 8h.14m.,a.m.,l.m.t.,I set off 38°54'N. on lat.arc,16°00'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.16-17-20 and 21.

Thence I run

N.0°11'E.,bet.secs.16 and 17.

Descend over sandy land.

1.00 Hollow,75 ft.deep,course N.W.

Ascend.

6.75 Spur,projects N.W.

Descend.

11.25 Hollow,75 ft.deep,course S.E.

Ascend over rolling land.

40.00 Set a sandstone,20x8x4 ins.,15 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 quartzite stone,20x10x4 ins.,15 ins.in the ground, for cor.of secs.8-9-16 and 17,marked with 4 notches on S.and E.edges,and raise a mound of stone,2 ft.base,1½ ft.

Subdivisiona of T.22 S.,R.15 E.

CHAINS	
	high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,sandy,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.89°58'E.,on a random line,bet.secs.9 and 16.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.08	Intersect N.and S.line,3 lks.N.of the cor.of secs. 9-10-15 and 16.
	Thence I run
	S.89°59'W.,on a true line,
	Bet.secs.9 and 16.
	Ascend over clay land.
3.00	Ridge,bears N.W.and S.E.
	Abrupt descent.
32.00	Foot of abrupt descent,bears N.W.and S.E.
	Gradual descent.
40.04	Set a quartzite stone,20x8x5 ins.,15 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.
66.00	Hollow,75 ft.deep,course S.E.
	Ascend.
80.08	The cor.of secs.8-9-16 and 17.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.08 chs.
	N.0°11'E.,bet.secs.8 and 9.
	Ascend over clay land.
32.00	Begin abrupt ascent,bears N.W.and S.E.
36.00	Ridge,bears N.W.and S.E.
	Descend.

Subdivisions of T.22 S. R.15 E.

CHAINS

40.00 Set a sandstone, 20x9x8 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.

46.00 Hollow, 100 ft. deep, course N.E.

Ascend.

51.00 Spur, projects N.E.

Descend.

68.00 Hollow, 100 ft. deep, course N.E.

Ascend.

71.00 Spur, projects N.E.

Descend.

76.00 Hollow, 100 ft. deep, course N.E.

Ascend.

80.00 Set a quartzite stone, 20x12x12 ins., 15 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, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

February 5: At this cor. I set off 15°59'S. on decl. arc, and at 12h. 14m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°56'N.

N.89°59'E., on a random line, bet. secs. 4 and 9.

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

80.02 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 3-4-9 and 10.

Thence I run

S.89°54'W., on a true line,

Bet. secs. 4 and 9.

Descend over clay land.

Subdivisions of T.22 S., R.15 E.

CHAINS	
2.00	Hollow, 50 ft. deep, course N.E.
	Ascend.
13.00	Ridge, bears N.E. and S.W.
	Descend.
19.00	Hollow, 75 ft. deep, course N.E.
	Ascend.
21.00	Spur, projects N.
	Descend.
22.35	Hollow, 50 ft. deep, course N.
	Ascend.
26.50	Spur, projects N.
	Descend.
32.80	Hollow, 75 ft. deep, course N.E.
	Ascend.
35.00	Spur, projects N.E.
	Descend.
37.50	Hollow, 100 ft. deep, course N.E.
	Ascend.
40.01	Set a limestone, 36x10x3 ins., 27 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.
44.50	Spur, projects N.E.
	Descend.
64.00	Hollow, 100 ft. deep, course N.E.
	Abrupt ascent.
80.02	The cor. of secs. 4-5-8 and 9.
	Land, mountainous.
	Soil, clay, 3rd. rate.
	No timber.
	Mountainous land on 80.02 chs.
	N. 0°11' E., on a random line, bet. secs. 4 and 5.
40.00	Set temp. $\frac{1}{4}$ sec. cor.

Subdivisions of T.22 S.,R.15 E.

CHAINS

87.86 Intersect N.bdy.of Tp.,5 lks.E.of the reestablished cor. of secs.4-5-32 and 33,heretofore described.

Thence I run

S.0°09'W.,on a true line,

Bet.secs.4 and 5.

Descend over clay land.

23.00 Hollow,75 ft.deep,course E.

Ascend.

36.00 Spur,projects N.E.

Descend.

41.00 Hollow,75 ft.deep,course N.E.

Ascend.

47.86 Set a redwood post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 5 on W. face,4 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.

61.30 Spur,projects N.E.

Descend.

66.75 Road from San Rafael to Greenriver,bears N.E.and S.W.in bottom of hollow,100 ft.deep,course N.E.

Ascend.

85.50 Ridge,bears N.E.and S.W.

Abrupt descent.

87.86 The cor.of secs.4-5-8 and 9.

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 87.86 chs.

February 5,1906.

February 6: At 8h.14m.,a.m.,l.m.t.,I set off 38°51'N. on lat.arc,15°42'S.on decl.arc,and determine a meridian with the solar,at the reestablished cor.of secs.5-6-31

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	and 32,heretofore described,on the S.bdy.of the Tp.
	Thence I run
	N.0°11'E.,bet.secs.31 and 32.
	Descend over rocky land.
14.00	Hollow,100 ft.deep,course N.E.
	Abrupt ascent.
16.25	Spur,projects N.E.
	Descend over broken land.
40.00	Set a sandstone,18x10x5 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.
63.00	Hollow,100 ft.deep,course N.W.
	Ascend.
75.00	Ridge,bears N.W.and S.E.
	Descend.
79.60	Hollow,75 ft.deep,course N.W.
	Ascend.
80.00	Set a quartzite stone,18x10x8 ins.,12 ins.in the ground,f for cor of secs.29-30-31 and 32,marked with 1 notch on S.and 5 notches on E.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.
	East,on a random line,bet.secs.29 and 32.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line,7 lks.S.of the cor.of secs. 28-29-32 and 33.
	Thence I run
	S.89°57'W.,on a true line,
	Bet.secs.29 and 32.
	Descend over sandy land.

Subdivisions of T.22 S.,R.15 E.

CHAINS

23.00 Hollow,75 ft.deep,course N.

Ascend.

29.00 Spur,projects N.

Descend.

34.00 Hollow,75 ft.deep,course N.

Ascend.

39.00 Ridge,bears N.and S.

Descend.

39.97 Set a sandstone,18x10x6 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.

42.00 Hollow,50 ft.deep,course N.

Ascend.

46.00 Spur,projects N.E.

Descend.

55.00 Hollow,100 ft.deep,course N.E.

Ascend.

66.50 Ridge,bears N.W.and S.E.

Descend.

73.50 Hollow,100 ft.deep,course N.W.

Ascend.

75.50 Spur,projects N.W.

Descend.

79.94 The cor.of secs.29-30-31 and 32.

Land,mountainous.

Soil,rocky,3rd.rate.

No timber.

Mountainous land on 79.94 chs.

Knowing the line bet.secs.30 and 31 will not close within limits on the west bdy.of the Tp.,I run

West,on a true line,

Bet.secs.30 and 31.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Descend over clay land.
.50	Hollow,75 ft.deep,course N.W.
	Ascend.
5.00	Spur,projects N.W.
	Descend.
11.00	Hollow,100 ft.deep,course N.W.
	Ascend.
16.00	Rocky ridge,bears N.W.and S.E.
	Abrupt descent.
22.00	Hollow,100 ft.deep,course N.W.
	Ascend.
24.00	Spur,projects N.W.
	Descend.
26.00	Hollow,100 ft.deep,course N.W.
	Ascend.
30.00	Spur,projects N.W.
	Descend.
35.00	Hollow,100 ft.deep,course N.W.
	Ascend.
40.00	Set a sandstone,18x15x3 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.
44.50	Ridge,bears N.and S.
	Descend.
84.49	Intersect W.bdy.of Tp.,9.02 chs.,S.0°15'E.of the cor. of secs.25-30-31 and 36,heretofore described.
	Set a quartzite stone,20x8x5 ins.,15 ins.in the ground, for closing cor.of secs.30 and 31,marked C C on E.,with 1 grooveon S.and 5 grooves on N.faces,and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high,E.of cor.
	Pits impracticable.
	I destroy all marks on the cor.of secs.25-30-31 and 36 that pertain to R.15 E.
	Land,mountainous.

Subdivisions of T.22 S., R.15 E.

CHAINS

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 84.49 chs.

N.0°11'E., bet. secs. 29 and 30.

Ascend over rocky land.

1.00 Spur, projects N.W.

Descend.

3.25 Hollow, 50 ft. deep, course N.W.

Ascend.

7.50 Spur, projects N.W.

Descend.

10.00 Hollow, 75 ft. deep, course N.W.

Ascend.

14.50 Spur, projects N.W.

Descend.

18.00 Hollow, 75 ft. deep, course N.W.

Ascend.

36.50 Rocky ridge, bears N.E. and S.W.

Descend.

40.00 Set a sandstone, 18x8x6 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.

51.00 Hollow, 100 ft. deep, course N.W.

Ascend.

72.00 Ridge, bears N.W. and S.E.

Descend.

78.00 Hollow, 75 ft. deep, course E.

Ascend.

80.00 Set a quartzite stone, 24x7x4 ins., 18 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, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Pits impracticable.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	February 6: At this cor.I set off 15°41'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°53'N.
	N.89°57'E.,on a random line,bet.secs.20 and 29.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.98	Intersect N.and S.line,9 lks.N.of the cor.of secs. 20-21-28 and 29.
	Thence I run N.89°59'W.,on a true line, Bet.secs.20 and 29.
	Ascend over rocky land.
6.00	Ridge,bears N.E.and S.W.
	Descend.
9.00	Hollow,75 ft.deep,course N.E.
	Ascend.
11.25	Spur,projects N.E.
	Descend.
13.10	Hollow,50 ft.deep,course N.E.
	Ascend.
15.00	Ridge,bears N.and S.
	Descend.
33.00	Hollow,100 ft.deep,course N.W.
	Ascend.
39.99	Point for $\frac{1}{4}$ sec.cor.,falls on a smooth sandstone floor; 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.

Subdivisions of T.22 S., R.15 E.

CHAINS

42.00 Spur, projects N.

Descend.

45.75 Hollow, 75 ft. deep, course N.E.

Ascend over broken land.

79.98 The cor. of secs. 19-20-29 and 30.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 79.98 chs.

Knowing the line bet. secs. 19 and 30 will not close within limits on the west bdy. of the Tp., I run

West, on a true line,

Bet. secs. 19 and 30.

Ascend over rocky land.

9.75 andstone ridge, bears N.E. and S.W.

Descend.

40.00 Set a sandstone, 24x8x3 ins., 18 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.

41.25 Hollow, 50 ft. deep, course S.

Ascend.

43.50 Spur, projects S.

Descend.

53.00 Hollow, 75 ft. deep, course S.W.

Ascend.

60.00 Spur, projects S.W.

Descend.

72.00 Hollow, 75 ft. deep, course S.W.

Ascend.

77.00 Ridge, bears N.E. and S.W.

Descend.

84.30 Intersect W. bdy. of Tp., 9.75 chs., S. 0° 19' W., of the cor. of secs. 19-24-25 and 30, heretofore described.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Set a quartzite stone,18x6x6 ins.,12 ins.in the ground, for closing cor.of secs.19 and 30,marked C C on E.,with 2 grooves on S.and 4 grooves on N.faces,and raise a mound of stone,2 ft.base,1½ ft.high,E.of cor.
	Pits impracticable.
	I destroy all marks on the cor.of secs.19-24-25 and 30, that pertains to R.15 E.
	Land,mountainous.
	Soil,rocky,3rd.rate.
	No timber.
	Mountainous land on 84.30 chs.
	N.0°11'E.,bet.secs.19 and 20.
	Ascend over rocky land.
4.45	Ridge,bears N.E.and S.W.
	Descend.
17.50	Hollow,75 ft.deep,course N.E.
	Ascend.
20.00	Spur,projects N.E.
	Descend.
34.00	Hollow,100 ft.deep,course E.
	Ascend.
40.00	Set a sandstone,24x6x4 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.
	Pits impracticable.
54.00	Begin abrupt ascent over sandstone ledges,bearing E.and W.
58.50	Sandstone ridge,bears E.and W.
	Descend over broken and rocky land.
80.00	Hollow,30 ft.deep,course S.W.
	Set a sandstone 20x10x8 ins.,15 ins.in the ground,for cor.of secs.17-18-19 and 20,marked with 3 notches on S.

Subdivisions of T.22 S., R.15 E.

CHAINS	
	and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Pits impracticable.
	Land, mountainous.
	Soil, sandy and rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.
	S.89°59'E., on a random line, bet. secs. 17 and 20.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S. line, 6 lks. S. of the cor. of secs. 16-17-20 and 21.
	Thence I run
	S.89°58'W., on a true line,
	Bet. secs. 17 and 20.
	Ascend over rocky land.
6.50	Spur, projects N.
	Descend.
13.25	Hollow, 75 ft. deep, course N.E.
	Ascend, over broken land.
39.98	Set a sandstone, 20x14x8 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.
46.75	Rocky ridge, bears N. and S.
	Abrupt descent.
49.00	Hollow, 100 ft. deep, course N.
	Ascend over broken and rocky land.
71.75	Ridge, bears N. and S.
	Descend.
79.96	The cor. of secs. 17-18-19 and 20.
	Land, mountainous.
	Soil, rocky, 3rd. rate.
	No timber.
	Mountainous land on 79.96 chs.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Knowing the line bet.secs.18 and 19 will not close within limits on the west bdy.of the Tp.,I run
	West,on a true line,
	Bet.secs.18 and 19.
	Ascend over sandy land.
1.00	Spur,projects S.
	Descend.
8.50	Hollow,75 ft.deep,course N.W.
	Ascend.
13.00	Spur,projects N.
	Descend.
15.00	Road from San Rafael to Greenriver,bears N.E.and S.W.in hollow,75 ft.deep,course N.E.
	Ascend.
34.75	Rocky ridge,bears N.E.and S.W.
	Descend.
39.60	Hollow,100 ft.deep,course N.E.
	Ascend.
40.00	Set a sandstone,18x7x6 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.
65.00	Ridge,bears N.E.and S.W.
	Descend.
71.00	Hollow,50 ft.deep,course N.
	Ascend.
80.50	Rocky spur,projects N.
	Descend.
82.50	Hollow,50 ft.deep,course N.E.
	Ascend.
83.90	Intersect W.bdy.of Tp.,10.71 chs.S.0°24'W.,of the cor.of secs.13-18-19 and 24,heretofore described.
	Set a quartzite stone,20x8x6 ins.,15 ins.in the ground, for closing cor.of secs.18 and 19,marked C C on E.,with 3 grooves on N.and S.faces,and raise a mound of stone,

Subdivisions of T.22 S., R.15 E.

CHAINS	
	2 ft.base, 1½ ft.high, E.of cor.
	Pits impracticable.
	I destroy all marks on the cor.of secs.13-18-19 and 24 that pertain to R.15 E.
	Land, mountainous.
	Soil, rocky, 3rd.rate.
	No timber.
	Mountainous land on 83.90 chs.
	February 6, 1906.

	February 7: At 8h.14m., a.m. l.m.t., I set off 38°54'N.on lat.arc, 15°24'S.on decl.arc, and determine a meridian with the solar, at the cor.of secs.17-18-19 and 20.
	Thence I run
	N.0°11'E., bet.secs.17 and 18.
	Ascend over rocky land.
3.00	Spur, projects W.
	Descend.
9.35	Hollow, 75 ft.deep, course N.W.
	Ascend.
12.25	Spur, projects N.W.
	Descend.
29.50	Hollow, 75 ft.deep course N.W.
	Ascend.
40.00	Set a sandstone, 24x6x4 ins., 18 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.
41.50	Spur, projects N.W.
	Descend.
51.00	Hollow, 50 ft.deep, course N.E.
	Ascend.
54.50	Spur, projects N.E.
	Descend.
59.00	Road, from San Rafael to Greenriver, bears N.E.and S.W.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
63.75	Wash,1.00 ch.wide,15 ft.deep,in hollow,75 ft.deep,course S.E.
	Ascend.
80.00	Set a quartzite stone,20x8x7 ins.,15 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,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 clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.89°58'E.,on a random line,bet.secs.8 and 17.
40.00	Set temp.¼ sec.cor.
79.92	Intersect N.and S.line,3 lks.N.of the cor.of secs. 8-9-16 and 17.
	Thence I run
	S.89°59'W.,on a true line,
	Bet.secs.8 and 17.
	Ascend over clay land,
1.25	Ridge,bears N.and S.
	Descend over rolling land.
39.96	Set a quartzite stone,15x6x6 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.
71.00	Road from SanRafael to Greenriver,bears N.E.and S.W.
79.92	The cor.of secs.7-8-17 and 18.
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 79.92 chs.

Subdivisions of T.22 S.,R.15 E.

CHAINS

Knowing the line bet.secs.7 and 18 will not close within limits on the west bdy.of the Tp.,I run

West,on a true line,

Bet.secs.7 and 18.

Descend over rolling clay land.

28.00 Wash,75 lks.wide,10 ft.deep,in hollow,75 ft.deep,course S.E.

Ascend over rolling land.

40.00 Set a limestone,20x9x3 ins.,15 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.

83.55 Intersect W.bdy.of Tp.,11.07 chs.,S.0°22'W.,of the cor. of secs.7-12-13 and 18,heretofore described.

Set a quartzite stone,12x8x6 ins.,8 ins.in the ground, for closing cor.of secs.7 and 18,marked C C on E.,with 4 grooves on S.and 2 grooves on N.faces,and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high,E.of cor.

Pits impracticable.

I destroy all marks on the cor.of secs.7-12-13 and 18 that pertain to R.15 E.

Land,rolling.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 83.55 chs.

N.0°11'E.,bet.secs.7 and 8.

Ascend over rolling clay land.

40.00 Set a conglomerate stone,20x12x4 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.

62.00 Begin abrupt ascent,bears N.W.and S.E.

80.00 Set a cobblestone,12x8x8 ins.,8 ins.in the ground,for cor.of secs.5-6-7 and 8,marked with 5 notches on S.and E.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	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 80.00 chs.
	February 7, 1906 : At this cor. I set off 15°22'26"S. on de. arc, and at 12h. 14m., l.m.t., observe the sun on the meridi- the resulting lat. is 38°56'N.
	N.89°59'E., on a random line, bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
80.08	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 4-5-8 and 9.
	Thence I run
	S.89°57'W., on a true line,
	Bet. secs. 5 and 8.
	Ascend abruptly over rocky land.
7.00	Ridge, bears N.E. and S.W.
	Descend.
12.50	Hollow, 100 ft. deep, course N.
	Ascend.
16.25	Spur, projects N.
	Descend.
28.00	Road from San Rafael to Greenriver, bears N.E. and S.W., in hollow, 100 ft. deep, course N.E.
	Ascend.
37.00	Spur, projects N.E.
	Descend.
39.10	Hollow, 50 ft. deep, course N.E.
	Ascend.
40.04	Set a quartzite stone, 15x10x10 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,

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	3½ ft.base,1½ ft.high,N.of cor.
40.50	Spur,projects N.E.
	Descend.
46.50	Hollow,100 ft.deep,course N.E.
	Abrupt ascent.
52.50	Spur,projects N.E.
	Descend.
55.75	Hollow,100 ft.deep,course N.E.
	Ascend.
59.00	Ridge,bears N.E.and S.W.
	Descend.
71.50	Hollow,75 ft.deep,course N.E.
	Ascend.
74.00	Spur,projects N.E.
	Descend.
75.00	Head of hollow,course N.E.
	Ascend.
76.50	Ridge,bears N.W.and S.E.
	Abrupt descent.
80.08	The cor.of secs.5-6-7 and 8.
	Land,mountainous.
	Soil,clay and rocky,3rd.rate.
	No timber.
	Mountainous land on 80.08 chs.
	Knowing the line bet.secs.6 and 7 will not close within limits on the west bdy.of the Tp.,I run West,on a true line, Bet.secs.6 and 7.
	Descend abruptly over clay land.
8.00	Foot of abrupt descent,bears N.W.and S.E.
	Descend over rolling land.
40.00	Set a sandstone,20x10x4 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.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
	Pits impracticable.
83.16	Intersect West bdy.of Tp.,11.70 chs.S.0°23'W.,of the cor. of secs.1-6-7 and 12,heretofore described.
	Set a quartzite stone,24x12x5 ins.,18 ins.in the ground, for closing cor.of secs.6 and 7,marked C C on E.,with 5 grooves on S.and 1 groove on N.faces,dig pits,24x18x12 ins.,crosswise on each line,N.and S.,3 ft.,and E.of stone,7 ft.dist.,and raise a mound of earth,4 ft.base, 2 ft.high,E.of cor.
	I destroy all marks on the cor.of secs.1-6-7 and 12, that pertain to R.15 E.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 83.16 chs.
	N.0°11'E.,on a random line,bet.secs.5 and 6.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
87.94	Intersect N.bdy.of Tp.,9 lks.E.of the reestablished cor. of secs.5-6-31 and 32,heretofore described.
	Thence I run
	S.0°07'W.,on a true line,
	Bet.secs.5 and 6.
	Ascend over clay land.
2.25	Ridge,bears N.E.and S.W.
	Descend.
8.75	Hollow,50 ft.deep,course E.
	Ascend.
46.00	Ridge,bears N.E.and S.W.
	Descend.
47.94	Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 6 on W.face,5 on E.face,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.

Subdivisions of T.22 S.,R.15 E.

CHAINS	
53.00	Hollow,100 ft.deep,course N.E.
	Ascend.
73.75	Ridge,bears N.E.and S.W.
	Descend.
75.25	Hollow,100 ft.deep,course N.E.
	Ascend.
82.50	Ridge,bears N.W.and S.E.
	Abrupt descent.
87.94	The cor.of secs.5-6-7 and 8.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 87.94 chs.

February 7,1906.

GENERAL DESCRIPTION.

This township lies in the breaks between San Rafael and Green Rivers and is broken by many ravines and hollows. The soil is generallyeither rocky or sandy while in the northern portion the soil is adobe clay;there is no land adapted for agricultural purposes in the township. There is no water,timber,mineral or settlers found in this township.

Harry L. Feist

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 arking the lines and corners described in the foregoing field notes of the survey of ..... owing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

For final affidavits see book "U" Tp. 21 S., R. 15 E. ....., *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 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 .....

For final affidavits see book "U" Tp. 21 S., R. 15 E. ....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

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

SEAL

-151

BOOK A-341

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

..... United States Deputy Surve[illegible]

[illegible] 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 [illegible] proper person, and in strict conformity with the instructions furnished by the United States Su[illegible] General for ....., the Manual of Surveying Instructions, and the laws United States, surveyed all those parts or portions of .....

[illegible] Book [illegible] Tp. 21 S. R. 15 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 so swear that all the corners of said survey have been established and perpetuated in strict accordan[illegible] the Manual of Surveying Instructions, and the special written instructions of the United States Su[illegible] General for ..... and in the specific manner described in the field notes, a[illegible] the foregoing are the original field notes of such survey.

.....

United States Deputy Su[illegible]

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, March 18 ....

The foregoing field notes of the survey of the Subdivisional lines of Towns No. [illegible] South, Range No. 15 East of the Salt Lake Base and Meridi[illegible] Utah,

[illegible] Harvey [illegible] and Earl V. Woolley ..... [illegible] No. [illegible] dated June 7, 1905, havi[illegible] [illegible] the necessary corrections and explanations made, the said field notes, [illegible] hereby approved.

[signature]

United States Surveyor [illegible]

[illegible] foregoing transcript of the field notes of the above-described surveys in ..... has been correctly copied from the original notes on file in this [illegible]

United States Surveyor [illegible]

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3.

BOOK A-341

FILED
MAR 6 1907

CORRECTIVE

FIELD NOTES

to Book "Q" Original Field Notes
OF THE SURVEY OF THE

SUBDIVISIONSm

of

Township No. 22 South,

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

arvey D. Heist and Earl V. Woolley, *United States Deputy Surveyor,*s

er their *Contract No.* 291, *dated* June 3, *190*5

ey *commenced* March 3, *190*7

ey *completed* March 3, *190*7

6—151

NAMES AND DUTIES OF ASSISTANTS.

Charles Stumm,	Chainman
Earl Woolley,	"
Charles Stumm,	Moundman
Earl Woolley	"
Charles Stumm,	Flagman

For preliminary affidavits see book 1 Corrective Notes.

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Volume
#
R0341

BOOK A-341

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Meanders Page.....

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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 su

.....

..... , *Chai*

..... , *Chai*

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

.....

..... , *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 an
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

6—1.1

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.22 S.,R.15 E.

CHAINS

Survey commenced,March 3,1907,and executed with the instrument described in book "A",of this survey.

I know the instrument to be in adjustment from recent observations made February 28 and March 1,1907,and recorded in book " / ",of this survey.

At 8h.12'a.m.,l.m.t.,I set off 38°52'N.,on lat.arc,7°04'S. on decl.arc,and determine a meridian with the solar,at the cor.of secs.26-27-34 and 35,described in original field notes.

Thence I run

N.0°13'E.,bet.secs.26 and 27.

40.00 The original ¼ sec.cor.,bears N.26°E.,12 lks.dist.

Set same cor.; a sandstone,24x10x4 ins.,18 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.

I destroy all traces of the original cor.

80.00 The original cor.of secs.22-23-26 and 27,bears N.26°30'E., 16 lks.dist.,

See original field Book P page 13+14

Set same stone; a sandstone,24x10x5 ins.,in mound of stone and earth,for cor.of secs.22-23-26 and 27,marked with 2 notches on S.and E.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.

I destroy all traces of the old cor.

There is no change of topography on this line.

S.89°56'E.,on a random line,bet.secs.23 and 26

40.00 Set temp.¼ sec.cor.

79.84 Intersect N.and S.line,2⅔ lks.N.of the cor.of secs. 23-24-25 and 26,described in original field notes.

See original field Book Q page 14+15

Thence I run

N.89°46'W.,on a true line,bet.secs.23 and 26.

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.22 S.,R.15 E.

See original Notes Book Q pages 14 & 15

CHAINS	
39.65	The original $\frac{1}{4}$ sec.cor.,bears N.5 lks.dist.
39.92	Set same stone; a sandstone,20x12x4 ins.,15 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.
	I destroy all traces of the old cor.
79.84	The cor.of secs.22-23-26 and 27.
	Note: There is no change of topography on this line.

N.0°13'E.,bet.secs.22 and 23.

See original Notes Book Q pages 15 & 16

40.00	The original $\frac{1}{4}$ sec.cor.,bears N.9 lks.dist.
	Set same stone; a sandstone,24x14x3 ins.,18 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.
	I destroy all traces of the original cor.
80.00	Intersect the cor.of secs.14-15-22 and 23,described in original field notes.
	Note: There is no change of topography on this line.
	March 3: At this cor.I set off 7°01'S.on decl.arc,and at 0h.12m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 38°54'N.

From the cor.of secs.22-23-26 and 27,I run S.89°52'W.,on a random line,bet.secs.22 and 27.

See original Notes Book Q pages 24 & 25

40.00	Set temp. $\frac{1}{4}$ sec.cor.
79.88	Intersect N.and S.line,7 lks.S.of the cor.of secs. 21-22-27 and 28,described in original field notes.
	Thence I run

N.89°55'E.,on a true line,bet.secs.22 and 27.

39.94	The original $\frac{1}{4}$ sec.cor.,bears N.42°E.,10 lks.dist.
	Set same stone; a sandstone,20x13x4 ins.,15 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.

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.22 S.,R.15 E.

CHAINS

Pits impracticable.

I destroy all traces of original cor.

79.88 The cor.of secs.22-23-26 and 27.

Note:
There is no change of topography on this line.

From the cor.of secs.13-14-23 and 24,described in origina field notes of this survey,I run

N.89°57'E.,on a random line,bet.secs.13 and 24.

40.00 Set temp. ¼ sec.cor.

80.06 Intersect the cor.of secs.13 and 24,on E.bdy.of Tp., described in original field notes.

Thence I run

S.89°57'W.,on a true line,bet.secs.13 and 24.

39.35 The original ¼ sec.cor. bears S.1.04 chs.dist.

40.03 Set same stone; a sandstone,20x10x5 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ on N.face,and raise a moun of stone,2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

I destroy all traces of original cor.

80.06 The cor.of secs.13-14-23 and 24.

Note:
There is no change of topograpy on this line.

March 3,1907

Fancy A. First
U.S.Deputy Surveyor

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of this survey,in order to save time and expense,I administer the preliminary and final oaths for corrective survey in Tps.21 and 22 S.,R.17 E. and T.22 S.,R.15 E.,myself.

Fancy A. First
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 Harvey D. Heist, 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 corrective bdivisions of T. 21 and 23 S., R. 17 E., and T. 22 S., R. 15 E., S. L. B. & M. ah, owing the respective capacities in which they acted:

Charles Stumm, Chainman.

Earl Woolley, Chainman.

Charles Stumm, Moundman.

Earl Woolley, Moundman.

Axman.

Axman.

Charles Stumm, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in surveying all e parts or portions of the corrective subdivisions of Ts. 21 and 23 S., R. 17 E. d T. 22 S., R. 15 E., of the Salt Lake ase and meridian, in the state of Utah, which are represented e 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 ral for Utah.

Charles Stumm Chainman.

Earl Woolley, Chainman.

Charles Stumm, Moundman.

Earl Woolley, Moundman.

Axman.

Axman.

Charles Stumm, Flagman.

ribed and sworn to before me this 4th. ay of March, 190 7

SEAL

Harvey D. Heist
U. S. Deputy Surveyor

BOOK A-341

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, 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 3rd. day of June, 1905, 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 Utah, the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of corrective subdivisions of Ts. 21 and 23 S., R. 17 E., and T. 22 S., R. 15 E.

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 solem 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 Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

Harvey D. Heist
United States Deputy Su

Subscribed by said Harvey D'Heist, and sworn to before me this 9 day of March, 1907

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 18, 1

The foregoing field notes of the survey of corrective the Subdivisional lines of Townsh No. 22 South, Range No. 15 East of the Salt Lake Base and Meridia Utah,

executed by Harvey D. Heist and Earl V. Woolley under his contract No. 221, dated June 3, 1905, having critically examined, and the necessary corrections and explanations made, the said field notes, an surveys they describe, are hereby approved.

Thomas Hull
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 G

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4—679.

m. m. L

" R "

BOOK A-341

FILED
APR 14 1905

FIELD NOTES

OF THE RE SURVEY OF THE

G-R-E-E-N R-I-V-E-R G-U-I-D-E M-E-R-I-D-I-A-N

through

Township. No. 21 South,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyor,*s

r ~~his~~ their *Contract No.* 291, *dated* June 3, *190* 5

y commenced February 8, *190* 6

y completed February 10, *190* 6

6—151

high 2 65 00
low 3 63 50

NAMES AND DUTIES OF ASSISTANTS.

Elmer Petty,	Chainman
Melvin D.Heist,	"
Robert R.Raycraft,	"
Claude Gresham,	"
Daniel R.Adams,	Moundman
Willmer E.Tomlinson,	Flagman

For preliminary affidavits see book "H" Tp. 22 S., R. 15 E.

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Volume
#
R0341

BOOK A-341

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Township 21 South, , *Range* 15 East,

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30	29	28	27	26	25	4
31	32	33	34	35	36	3

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 assi measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surve

.....

....., *Chainm*

....., *Chai*

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 sur

.....

....., *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 su

.....

....., *Axe*

....., *Axe*

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 .....

....., *Flag*

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

.....

SEAL

.....

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

CHAINS

Survey commenced,February 8,1906,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.15 and 16 E., on the Green River Guide Meridian,heretofore described, in approximate latitude 38°56'N.,longitude 110°14'W.,I set off 38°56'N.on lat.arc,14°58'S.on decl.arc,and at 4h.14m.,p.m.,l.m.t.,determine a meridian with the solar, and mark a point thereof,on a stone,firmly set in the ground,5 chs.N.of the cor.

At 10h.08m.,p.m.,l.m.t.,I observe Polaris at western elongation,in accordance with Manual of Instruction,and mark a point in the line thus determined on a wooden peg, driven in the ground,5 chs.N.of my station.

February 8,1906.

February 9: At 7h.45m.,a.m.,l.m.t.,I lay off the azimuth of Polaris,1°32'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.14m.,a.m.,l.m.t.,I set off 38°56'N.on lat.arc, 14°46'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,about 0'26" west and east of the meridian established by the Polaris observation,

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

CHAIN

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°50'W.,the angle thus determined gives the mag. decl.15°50'E.

From the Tp.cor.heretofore described,I run North,retracing along the Green River Guide Meridian, bet.secs,31 and 36,at 40.00chs.intersect the ¼ sec.cor.bet. secs.31 and 36,which is a cottonwood post,3ins.sq.,well set,marked and witnessed as described by the surveyor general,I continue my line and at 80.93 chs.,the cor.of secs.25-30-31 and 36,which is a sandstone,10x5x5 ins. above ground,marked and witnessed as described by the surveyor general,bears E.,30 lks.dist.

The course of this line is therefore,1st.half,north 2nd.half,N.0°26'E.

North,retracing bet.secs.25 and 30,at 40.29 chs.,the ¼ sec.cor.which is a cottonwood post,3 ins.sq.,well set, marked and witnessed as described by the surveyor general,bears E.28 lks.dist. and at 80.58 chs.,the cor. of secs.19-24-25 and 30,which is a cottonwood post,4 ins. sq.well set,marked and witnessed as described by the surveyor general,bears E.41 lks.dist.

The course of this line is therefore,1st.half,N.0°24'E. 2nd.half,N.0°12'E.

North,bet.secs.19 and 24,on retracement line,at 40.26 chs.,the ¼ sec.cor.,which is a cottonwood post,3 ins.sq., well set,marked and witnessed as described by the surveyor general,bears E.,47 lks.dist.

The course of this line is therefore N.0°40'E.

I continue my retracement line north and find no trace of any cor.until at 120.45 chs.,fall 91 lks.W.of the cor. of secs.7-12-13 and 18,which is a cottonwood post,4 ins. sq.,well set,marked and witnessed as described by the surveyor general.

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian, through T.21 S.

CHAINS

The course of this line is therefore N.0°26'E.

North, retracing bet.secs.7 and 12, at 40.35 chs.fall 17½ lks.W.of the ¼ sec.cor.which is a limestone,7x6x6 ins. above ground,marked and witnessed as described by the surveyor general and at 80.07 chs.fall 35 lks.W.of the cor.of secs.1-6-7 and 12,which is a limestone,8x6x6 ins.above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°15'E.

North,retracing bet.secs.1 and 6,at 40.08 chs.,fall 17 lks.W.of the ¼ sec.cor.,which is a limestone,8x6x3 ins.above ground,marked and witnessed as described by the surveyor general and at 126.24 chs.,fall 53 lks. W.of the closing cor.to Tps.21 S.,Rs.15 and 16 E.,which is a sandstone,12x10x7 ins.,above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°15'E.

As the Green River Guide Meridian through T.21 S.,is found out of limits for chaining and several corners are missing,I resurvey this line,reestablishing all missing cors.and setting cors.for R.15 E.

February 9,1906.

February 10 : At 8h.14m.,a.m.,l.m.t.,I set off 38°56'N. on lat.arc,14°26'S.on decl.arc,and determine a meridian with the solar,at the cor.of Tps.21 and 22 S.,Rs.15 and 16 E.,heretofore described on the Green River Guide Meridian.

Thence I run,with two sets of chainmen.

North,along the east.bdy.of sec.36.

Ascend over broken clay land.

38.00 Top of ascent,bears N.W.and S.E.

Over level plateau,through dense artemisia.

Difference between measurements by two sets of chainmen,

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

to the old $\frac{1}{4}$ sec.cor.bet.secs.31 and 36 is 4 lks.
position of cor.

By 1st.set,40.02 chs.

By 2nd.set,39.98 chs.,the mean of which is

40.00 Intersect the $\frac{1}{4}$ sec.cor.bet.secs.31 and 36,heretofore described.

Thence I run,N.0°26'E.,with continous measurement
Difference between measurement of 80.00 chs.by two sets of chainmen is 6 lks.,position of middle point

By 1st.set,79.97 chs.,

By 2nd.set,80.03 chs.,the mean of which is

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.25 and 36,marked T.21 S.,S 36 on S.W.,and
R.15 E.,S.25 on N.W.face,with 1 notch on S.and 5 notches on N.edges,dig pits,24x24x12 ins.,in each sec,6 ft.dist, and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
Land,broken and level.
Soil,clay,on 38.00 chs.,3rd.rate.
balance,sandy loam,2nd.rate.
No timber. Undergrowth artemisia.
Mountainous land or dense undergrowth on 80.00 chs.

N.0°26'E.,along E.bdy.of sec.25.

Over level plateau,through dense artemisia.

.93 Intersect the cor.of secs.25-30-31 and 36,heretofore described.

I destroy all marks on this cor.that pertain to R.15 E.

Thence I run N.0°24'E.,

36.50 Road,from San Rafael to Green River,bears N.E.and S.W.
Difference between measurement 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

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

CHAINS

40.00 Set a redwood post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.for sec.25,marked ¼S25 on W.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.

41.22 Intersect the ¼ sec.cor.bet.secs.25 and 30,heretofore described.

I destroy all marks on this cor.that pertain to R.15 E.
Thence I run N.0°12'E.,with continous measurement.

63.00 Begin abrupt ascent over clay,bearing E.and W.

72.00 Clay ridge,bears E.and W.

Abrupt and broken descent.

Difference between measurement of 80.00 chs.by two sets of chainmen is 8 lks.,position of middle point

By 1st.set,80.04 chs.

By 2nd.set,79.96 chs.,the mean of which is

80.00 Set a redwood post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.24 and 25,marked T.21 S.,S 25,on S.W.

R.15 E.,S.24,on N.W.face,with 2 notches on S.and 4 notches on N.edges,dig pits,24x24x12 ins.,in.each.sec., 6 ft.dist.,and raise a mound of earth,4 ft.base,2 ft. high,W.of cor.

Land,level and mountainous.

Soil,sandy loam on 63.00 chs.,2nd.rate.

balance,clay,3rd.rate.

No timber. Undergrowth artemisia.

Mountainous land or dense undergrowth on 80.00 chs.

N.0°12'E.,along E.bdy.of sec.24.

Descend over clay land.

1.51 Intersect the cor.of secs.19 24 25 and 30,heretofore described.

I destroy all marks on this cor.that pertain to R.15 E.

Thence I run N.0°40'E.

E.bdy.of T.21 S.,R.15 E.

Resurvey of The Green River Guide Meridian,through T.21 S.

CHAINS	
8.00	Hollow,75 ft.deep,course N.E.
	Ascend.
10.00	Spur,projects E.
	Descend.
13.00	Same hollow,75 ft.deep,course N.W.
	Ascend.
15.75	Spur,projects W.
	Descend over rolling land.
	Difference between measurement of 40.00 chs.by two sets of chainmen,1s 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 redwood post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.for sec.24,marked ¼ S 24 on W.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.
41.77	Intersect the ¼ sec.cor.bet.secs.19 and 24,heretofore described.
	I destroy all marks on this cor.that pertain to R.15 E.
	Thence I run N.0°26'E.
76.50	Saleratus Wash,4.00 chs.wide,25 ft.deep,in hollow,100 ft.deep,course E.
	Ascend. Enter dense greasewood brush.
	Difference bet.measurement of 80.00 chs.by two sets of chainmen is 6 lks.,position of middle point
	By 1st.set,79.97 chs.,
	By 2nd.set,80.03 chs.,the mean of which is
80.00	Set a redwood post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.13 and 24,marked T.21 S.,S.24 on S.W.,
	R.15 E.,S.13 on N.W.face,with 3 notches on S.and N.edges dig pits,24x24x12 ins.,in each sec.,6 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian, through T.21 S.

CHAINS

Land, mountainous.

Soil, clay, 3rd.rate.

No timber. Undergrowth artemisia.

Mountainous land on 80.00 chs.

February 10: At this cor.I set off 14°25'S.on decl.arc, and at 12h.14m., l.m.t., observe the sun on the meridian, the resulting lat.is 38°59'N.

N.0°26'E., along E.bdy.of sec.13.

Ascend over sandy land, through dense artemisia.

1.92 Set a pine post, 3 ft.long, 4 ins.sq., with marked stone, 24 ins.in the ground, for reestablished cor.of secs.18 and 19, T.21 S., R.16 E., marked

T.21 S., S.19 on S.E., and

R.16 E., S.18 on N.E.face, with 3 notches on N.and S.edges, dig pits, 24x24x12 ins., in each sec., 6 ft.dist., and raise a mound of earth, 4 ft.base, 2 ft.high, E.of cor.

After diligent search no trace can be found of the old cor.of secs.13-18-19 and 24.

3.25 Wash, 20 lks.wide, 8 ft.deep, course S.E.

25.00 Leave greasewood and sandy land.

Over clay land.

Difference between measurements of 40.00 chs.by two sets 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 redwood post, 3 ft.long, 3 ins.sq., with marked stone, 24 ins.in the ground, for ¼ sec.cor.for sec.13, marked ¼ S.13 on W.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.

42.07 Set a redwood post, 3 ft.long, 3 ins.sq., with marked stone, 24 ins.in the ground, for reestablished ¼ sec.cor.for sec. 18, T.21 S., R.16 E., marked ¼ S 18 on E.face, dig pits, 18x18x12 ins., N.and S.of post, 3 ft.dist., and raise a

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

CHAINS

mound of earth,3½ ft.base,1½ ft.high,E.of cor.

No trace can be found of the old ¼ sec.cor.

66.00 Clay ridge,bears N.W.and S.E.

Descend.

74.00 Wash,50 lks.wide,15 ft.deep,course S.E.

Difference between measurement of 80.00 chs.by two sets of chainmen is 2 lks.,position of middle point

By 1st.set,80.01 chs.,

By 2nd.set,79.99 chs.,the mean of which is

80.00 Set a redwood post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.12 and 13,marked

T.21 S.S.13 on S.W.,and

R.15 E.,S.12 on N.W.face,with 4 notches on S.and 2 notch on N.edges,dig pits,24x24x12 ins.,in each sec.,6 ft. dist.,and raise a mound of earth,4 ft.base,2 ft.high, W.of cor.

Land,rolling.

Soil,sandy and clay,3rd.rate.

No timber. Undergrowth extensive old greasewood.

Dense undergrowth on 25.00 chs.

N.0°26'E.,along E.bdy.of sec.12.

Over rolling clay land.

2.22 Intersect the cor.of secs.7-12-13 and 18,heretofore described.

I destroy all marks on this cor.that pertain to R.15 E.

Thence I run N.0°15'E.,

9.30 Rio Grande Western Railroad,bears N.79°45'W.and S.79°45' E.

10.10 Telegraph line,bears N.79°45'W.and S.79°45'E.

12.00 Wash,1.00 ch.wide,15 ft.deep,course S.E.

17.35 Road,from Price to Greenriver,bears N.W.and S.E.

21.80 Wash,2.00 chs.wide,20 ft.deep,course S.E.

Difference between measurements of 40.00 chs.,by two sets of chainmen is 4 lks.,position of middle point,

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

CHAINS

By 1st.set,40.02 chs.,

By 2nd.set,39.98 chs.,the mean of which is

40.00 Set a redwood post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.for sec.12,marked ¼ S 12,on W.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.

42.47 Intersect the ¼ sec.cor.bet.secs.7 and 12,heretofore described.

I destroy all marks on this cor.that pertain to R.15 E.

Difference between measurement of 80.00 chs.by two sets of chainmen is 6 lks.,position of middle point

By 1st.set,80.03 chs.,

By 2nd.set,79.97 chs.,the mean of which is

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 and 12,marked T.21 S.,S.12 on S.W.,and

R.15 E.,S.1,on N.W.face,with 5 notches on S.and 1 notch on N.edges,dig pits,24x24x12 ins.,in each sec.,6 ft.dist., and raise a mound of earth,4 ft.base,1½ ft.high,W.of cor.

Land,rolling.

Soil,clay,3rd.rate.

No timber.

N.0°15'E.,along E.bdy.of sec.1.

Ascend over rolling clay land.

2.29 Intersect the cor.of secs.1-6-7 and 12,heretofore described.

I destroy all marks on this cor.that pertain to R.15 E.

30.00 Ridge,bears E.and W.

Descend.

Difference between measurements of 40.00 chs.,by two sets of chainmen is 6 lks.,position of middle point

By 1st.set,39.97 chs.,

E.bdy.of T.21 S.,R.15 E.

Resurvey of the Green River Guide Meridian,through T.21 S.

CHAINS	
	By 2nd.set,40.03 chs.,the mean of which is
40.00	Set a pine post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.for sec.1,marked ¼S 1,on W.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.
42.37	Intersect the ¼ sec.cor.bet.secs.1 and 6,heretofore described.
	I destroy all marks on this cor that pertain to R.15 E.
	Enter level land.
78.00	Leave level land,bears E.and W.
	Ascend.
87.50	Ridge,bears E.and W.
	Descend.
101.80	Hollow,50 ft.deep,course S.E.
	Ascend.
107.00	Ridge,bears N.W and S.E.
	Descend.
115.00	Hollow,50 ft.deep,course S.E.
	Ascend over rolling land.
	Difference between measurement to the closing cor.,by two sets of chainmen is 10 lks.,position of cor.
	By 1st.set,128.58 chs.,
	By 2nd.set,128.48 chs.,the mean of which is
128.53	The closing cor.of Tp.21 S.,Rs.15 and 16 E.,heretofore described.
	Land,level and rolling.
	Soil,clay,3rd.rate.
	No timber.

February 10,1906.

For general description,see subdivisions of T.21 S.,R. 15 E.

Harry W. Frost

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 Harvey D. Heist, 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~~ resurvey of the Green River Guide Meridian, through Tps. 21 and 22 S., R. 15 E. S.L.B.&M., in the state of Utah.
wing the respective capacities in which they acted:

Elmer Petty, *Chainman.*

Melvin D. Heist, *Chainman.*

Robert R. Raycraft, Chainman.

Claude Grenham, Chainman.

Daniel R. Adams *Axman.*

Axman.

Willmer E. Tomlinson *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in re surveying all parts or portions of the Green River Guide Meridian, through Tps. 21 and 22 S., R. 15 E., of the Salt Lake Base and meridian, in the state of Utah, which are represented e foregoing field notes as having been re surveyed by him and under his direction; and that said re survey been 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.

Elmer Petty — Robert R. Raycraft, *Chainman.*
Melvin D. Heist — Claude Grenham, *Chainman.*
Daniel R. Adams, *Moundman.*
Moundman.
Axman.
Axman.
Willmer E. Tomlinson, *Flagman.*

cribed and sworn to before me this 10th. day of February, 1906

SEAL

Harvey D. Heist
U. S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, 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 3rd. day of June, 190 5, I have well, faithfully, and truly, in m 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 laws United States, resurveyed all those parts or portions of the Green River Guide Merid through Tps. 21 and 22 S., R. 15 E.,

of the Salt Lake Base and meridian, in the state of Utah, which are represented foregoing field notes in books N. 1 R. as having been resurveyed by me, and under my direction; and I do further so swear that all the corners of said resurvey have been established and perpetuated in strict accordanc 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, an the foregoing are the original field notes of such resurvey.

Harvey D. Heist
United States Deputy Su

Subscribed by said Harvey D. Heist, and sworn to before me this 14th day of April, 1906

Thomas Bell
U. S. Surveyor General for Ut

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 18,

The foregoing field notes of the resurvey of the Green River Guide Meridian th through Township No. 21 South, between Ranges No. 15 and 16 East o Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Earl V. Woolley under their contract No. 291, dated June 3, 1905, havin critically examined, and the necessary corrections and explanations made, the said field notes, a resurveys they describe, are hereby approved.

Thomas 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 of

United States Surveyor G

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BOOK A-341

FILED
APR 14 1905

FIELD NOTES

RE
OF THE SURVEY OF THE

F-O-U-R-T-H S-T-A-N-D-A-R-D- P-A-R-A-L-L-E-L- S-O-U-T-H

through

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyor,s*

er ~~his~~ their *Contract No.* 291, *dated* June 3, *190*5

vey commenced February 11, *190* 6

vey completed February 11, *190*6

6—151

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2 10 75
2 10

NAMES AND DUTIES OF ASSISTANTS.

Elmer Petty,	Chainman.
Melvin D.Heist,	"
Robert R.Raycraft,	"
Claude Gresham,	"
Daniel R.Adams	Moundman,
Willmer E.Tomlinson	Flagman.

BOOK A-341

INDEX DIAGRAM.

Township 21 South, , *Range* 15 East,

7 5 4 2 1

6	5	4	3	2	1
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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

PRELIMINARY OATHS OF ASSISTANTS.

WE, Elmer Petty and Melvin D. Heist and Robert R. Raycraft, Claud
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 s
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 re
the Fourth Standard Parallel South, through R. 15 E., S.L.B. & M., in
of Utah.

Elmer Petty Robert R. Raycraft, Cha
Melvin D. Heist Claude Gresham, Cha

Subscribed and sworn to before me this 11,
day of February, 1906

SEAL

Harvey D. Heist
U.S. Deputy Surveyor

~~WE~~, I, Daniel R. Adams and
do solemnly swear that ~~we~~ I will well and truly perform the duties of moundmen in the estab
of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the s re
the Fourth Standard Parallel South, through R. 15 E., S.L.B. & M., in
state of Utah.

Daniel R. Adams Mou
, Mou

Subscribed and sworn to before me this 11th.
day of February, 1906

SEAL

Harvey D. Heist
U.S. Deputy Surveyor.

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, Willmer E. Tomlinson, 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~~ resurvey of the Fourth Standard Parallel South, through R
S.L.B. & M., in the state of Utah.

Willmer E. Tomlinson Fl

Subscribed and sworn to before me this 11th.
day of February, 1906

SEAL

Harvey D. Heist
U.S. Deputy Survey

6—151

Resurvey of the Fourth Standard Parallel South, through R.15 E.

CHAINS

Survey commenced, February 11, 1906, and executed with the instrument described in book "A", of this survey.

I know the instrument to be in adjustment from recent observations made, February 8 and 9, 1906, and recorded in book " R ", of this survey.

I begin at the Standard ¼ sec.cor., on the south bdy. of sec.35, T.20 S., R.15 E., which is a shale stone, 8x6x6 ins. above ground, marked and witnessed as described by the surveyor general.

At 8h.14m., a.m., l.m.t., I set off 39°02'S. on lat.arc, 14°07'S. on decl.arc, and determine a meridian with the solar, thence I run on retracement line, W. along the S. bdy. of sec.35, at 17.88 chs. intersect the closing cor. of Tp.21 S., Rs.15 and 16 E., heretofore described, and at 40.30 chs. the Standard cor. of secs.34 and 35, bears. N. 26 lks. dist., I continue my retracement line to the Stan. cor. of Tp.20 S., Rs.14 and 15 E. and find the line out of limits for both course and distance, with several corners missing.

As thereare no subdivisions depending on this line and no mineral claims tied to it, I resurvey this line as follows:

At 2h.14m., p.m., l.m.t., I set off 39°02'S. on lat.arc, 14°04'S. on decl.arc, and determine a meridian with the solar, at the stan. ¼ sec.cor. on the S. bdy. of sec.35.

Thence I run, with two sets of chainmen,

West, on S. bdy. of sec.35.

Ascend over rolling sandy land,

17.88 Intersect the closing cor. of Tp.21 S., Rs.15 and 16 E. heretofore described.

Difference between measurement of 40.00 chs., by two set. of chainmen is 2 lks., position of middle point,

By 1st. set, 40.01 chs,

By 2nd. set, 39.99 chs., the mean of which is

Resurvey of the Fourth Standard Parallel South, through R.15 E.

CHAINS	
40.00	Set a sandstone, 20x10x10 ins., 15 ins. in the ground, for reestablished stan. cor. of secs. 34 and 35, marked S.C. on N., with 2 grooves on E. and 4 grooves on W. faces, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
	The old stan. cor. of secs. 34 and 35, bears N. 48°14'W., 49 lks
	I destroy all trace of this cor.
	Land, rolling.
	Soil, clay, 3rd. rate.
	No timber.
	West, on S. bdy. of sec. 34.
	Ascend over clay land.
8.30	Clay spur, projects N.
	Descend.
10.50	Hollow, 50 ft. deep, course N.E.
	Ascend.
12.00	Spur, projects N.E.
	Descend.
13.50	HOllOW, 50 ft. deep, course N.E.
	Ascend.
15.00	Spur, projects N.E.
	Descend.
17.54	Hollow, 50 ft. deep, course N.E.
	Ascend.
19.00	Spur, projects N.E.
	Descend.
20.50	Hollow, 50 ft. deep, course N.E.
	Ascend.
23.00	Spur, projects N.E.
	Ascend.
26.00	Hollow, 50 ft. deep, course N.E.
	Ascend.
29.00	Spur, projects N.E.
	Descend.
39.00	Hollow, 50 ft. deep, course N.E.

Resurvey of the Fourth Standard Parallel South, through R.15 E.

CHAINS

Ascend.

Difference between measurement of 40.00 chs. by two sets of chainmen is 8 lks., position of middle point,

By 1st. set, 40.04 chs.,

By 2nd. set, 39.96 chs., the mean of which is

40.00 Set a sandstone, 15x9x4 ins., 10 ins. in the ground, for reestablished stan. $\frac{1}{4}$ sec. cor., marked S C $\frac{1}{4}$ 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. The old stan. $\frac{1}{4}$ sec. cor., bears N. 68°00' W., 81 lks. dist. I destroy all traces of this cor.

48.50 Clay ridge, bears N.W. and S.E.

Descend.

50.00 Hollow, 75 ft. deep, course N.W.

Ascend.

52.00 Spur, projects N.W.

Descend.

56.00 Hollow, 75 ft. deep, course S.

Ascend.

59.00 Spur, projects S.

Descend.

60.30 Hollow, 50 ft. deep, course S.

Ascend.

62.50 Spur, projects S.

Descend.

64.50 Hollow, 50 ft. deep, course S.

Ascend.

68.00 Spur, projects S.

Descend.

76.00 Hollow, 75 ft. deep, course S.

Ascend.

78.50 Spur, projects S.

Descend.

Difference between measurement of 80.00 chs. by two sets of chainmen is 10 lks., position of middle point

Resurvey of the Fourth Standard Parallel South, through R. 15 E.

CHAINS	
	By 1st. set, 79.95 chs.,
	By 2nd. set, 80.05 chs., the mean of which is
80.00	Set a sandstone, 20x10x8 ins., 15 ins. in the ground, for reestablished stan. cor. of secs. 33 and 34, marked S C on N., and 3 grooves on E. and W. faces, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
	After diligent search, no trace can be found of the old stan. cor. of secs. 33 and 34.
	Land, mountainous.
	Soil, clay, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.
	West, on S. bdy. of sec. 33.
	Descend over clay land.
.35	Hollow, 75 ft. deep, course S.E.
	Ascend over broken land.
29.75	Clay spur, projects S.
	Descend.
32.50	Hollow, 50 ft. deep, course S.E.
	Ascend.
35.25	Clay spur, projects S.E.
	Descend.
39.50	Hollow, 50 ft. deep, course S.
	Ascend.
	Difference between measurement of 40.00 chs. by two sets of chainmen is 6 lks., position of middle point
	By 1st. set, 39.97 chs.,
	By 2nd. set, 40.03 chs., the mean of which is
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for stan. ¼ sec. cor., marked S C ¼ S 33 on N. face, dig pits, 18x18x12 ins., E. and W. of post., 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft.

Resurvey of the Fourth Standard Parallel South, through R.15 E.

CHAINS

high, N. of cor.

No trace can be found of the old stan, ¼ sec. cor.

47.00 Spur, projects S.E.

Abrupt descent.

49.15 Hollow, 100 ft. deep, course S.E.

Ascend over broken land.

65.75 Ridge, bears N.W. and S.E.

Descend over broken land.

Difference between measurement 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, 18x7x6 ins., 12 ins. in the ground for reestablished cor. of secs. 32 and 33, marked S C on N., with 4 grooves on E. and 2 grooves on W. faces, dig pits, 24x18x12 ins., cross wise on each line, E. and W., 3 ft., and N. of stone, 7 ft. dist., and raise a mound of earth, 5 ft. base, 2 ft. high, N. of cor.

The old stam. cor. of secs. 32 and 33, bears N. 66°30' W., 2.04 chs. dist.

I destroy all traces of this cor.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

West, on S. bdy. of sec. 32.

Descend over clay land.

2.75 ollow, 50 ft. deep, course S.

Ascend.

7.00 Spur, projects S.

Descend.

12.50 Hollow, 50 ft. deep, course S.E.

Ascend.

Resurvey of the Fourth Standard Parallel South, through R.15 E.

CHAINS	
15.25	Hollow, 75 ft. deep, course S.E.
	Ascend.
17.00	Hollow, 75 ft. deep, course S.E.
	Ascend.
23.50	Spur, projects S.E.
	Descend.
28.50	Hollow, 50 ft. deep, course S.E.
	Ascend.
29.75	Spur, projects S.E.
	Descend.
33.00	Foot of descent, bears N.W. and S.E.
	Over level sandy land.
	Difference between measurement of 40.00 chs., by two sets of chainmen is 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, 28x14x10 ins., 21 ins. in the ground, for reestablished stan. $\frac{1}{4}$ sec. cor., marked S C $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
	The old stan. $\frac{1}{4}$ sec. cor., bears N.71°00'W., 2.34 chs. dist.
	I destroy all traces of this cor.
45.75	Wash, 40 lks. wide, 10 ft. deep, course S.E.
	Difference between measurement of 80.00 chs., by two sets of chainmen is 4 lks., position of middle point,
	By 1st. set, 79.98 chs.,
	By 2nd. set, 80.02 chs., the mean of which is
80.00	Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for reestablished stan. cor. of secs. 31 and 32, marked S.C., on N., with 5 grooves on E. and 1 groove on W. faces, dig pits, 24x18x12 ins., crosswise on each line, E. and W., 3 ft., and N. of stone, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	After diligent search, no trace can be found of the old

Resurvey of the Fourth Standard Parallel South, through R.15 E.

CHAINS

stan.cor.for secs.31 and 32.

Land, mountainous and level.

Soil, clay and sandy, 3rd. rate.

No timber.

Mountainous land on 33.00 chs.

West, on S.bdy.of sec.31.

Over level sandy land.

3.00 Leave level land, bears N.W.and S.E.

Ascend over rolling clay land.

Difference between measurement of 40.00 chs.by two sets of chainmen is 2 lks., position of middle point,

By 1st.set, 39.99 chs.,

By 2nd.set, 40.01 chs., the mean of which is

40.00 Set a sandstone, 15x10x4 ins., 10 ins.in the ground, for reestablished stan.$\frac{1}{4}$ sec.cor., marked S C $\frac{1}{4}$ 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.

No trace can be found of the old stan.$\frac{1}{4}$ sec.cor.

60.50 Ridge, bears N.and S.

Descend.

63.50 Hollow, 50 ft.deep, course S.

Ascend.

66.00 Clay spur, projects S.

Descend.

67.25 Hollow, 75 ft.deep, course S.

Ascend.

69.00 Clay spur, projects S.

Descend.

Difference between measurement by two sets of chainmen to a point south of the Stan.Tp.cor.is 8 lks.

position of middle point,

By 1st.set, 83.79 chs.,

By 2nd.set, 83.71 chs., the mean of which is

83.75 Fall 2.10 chs.S.of the standard cor.of Tp.20 S., Rs.14

Resurvey of the Fourth Standard Parallel South through R.15 E.

CHAINS

and 15 E., which is a sandstone, 5x10x6 ins. above ground, marked and witnessed as described by the surveyor general.

Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for standard cor. for Tp.20 S., R.15 E., marked S.C.20 S., on N., 15 E., on E., with 6 grooves on N. and E. faces, dig pits, 36x36x12 ins., on each line, N. and E. of stone, 8 ft. dist., and raise a mound of earth, 5 ft. base, 2½ ft. high, N.E. of cor.

I destroy all marks on the cor. of Tp.20 S., Rs.14 and 15 E., that pertain to R.15 E.

Land, rolling.

Soil, sandy and clay, 3rd. rate.

No timber.

February 11, 1906.

For general description see subdivisions of T.21 S., R.15 E.

BOUNDARIES OF T.21 S., R.15 E.
Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitude N.	Latitude S.	Departures E.	Departures W.
		Chs.	Chs.	Chs.	Chs.	Chs.
E.bdy.T.22 S. R.14 E.	N.0°24'E.	3.86	3.86		.03	
E.bdy.T.21 S. R.14 E.	N.0°15'E.	158.49	158.49		.69	
	N.0°52'E.	80.95	80.94		1.22	
	N.0°15'E.	80.58	80.58		.35	
	N.0°31'E.	79.68	79.68		.72	
Fourth Stan.	N.0°28'E.	127.20	127.20		1.03	
Par. South --	East	135.00			135.00	
	South	2.10		2.10		
Green River	East	345.87			345.87	
Guide Mer.---	S.0°15'W.	206.31		206.31		.90
	S.0°26'W.	120.45		120.45		.91
	S.0°40'W.	40.26		40.26		.47
	S.0°12'W.	40.29		40.29		.14
	S.0°24'W.	40.29		40.29		.28
	S.0°26'W.	40.93		40.93		.31
	South	40.00		40.00		
S.bdy.	West					482.60
Convergency					.59	
Totals			530.75	530.63	485.50	485.61
			530.63	-		485.50
Error in lat.			0.12	Error in dep.		0.11

Harry H. First
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 Harvey D.Heist, ... United States Deputy Surveyor, to assist in running, measuring, and ...rking the lines and corners described in the foregoing field notes of the ~~[illegible]~~ resurvey of ... Fourth Standard Parallel South, through R.15 E., S.L.B.& M., in the ...te of Utah.
...wing the respective capacities in which they acted:

...ter Petty, Robert R.Bayoroft, ... Chainman.
...vin D.Heist, Claude Gresham, ... Chainman.
...iel R.Adams ..... Moundman.
..... Moundman.
..... Axman.
..... Axman.
...lmer E.Tomlinson ..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D.Heist, ... United States Deputy Surveyor, in re surveying all ... parts or portions of the Fourth Standard Parallel South, through R.15 E., ... of the Salt Lake ...e and ... in the state of Utah, which are represented ... foregoing field notes and having been surveyed by him and under his direction, and that the survey ... been 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 ...ral for Utah.

Elmer Petty, Robert R. Bayoroft, ... Chainman.
Wilmer D. Heist, Claude Gresham, ... Chainman.
Daniel R. Adams ..... Moundman.
..... Moundman.
..... Axman.
..... Axman.
Wilmer E. Tomlinson ..... Flagman.

...scribed and sworn to before me this 11th. ... day of February, 1906.

Harvey D. Heist
U.S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, 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 3rd. day of June, 1905. I have well, faithfully, and truly, in my o proper person, and in strict conformity with the instructions furnished by the United States Surve General for Utah, the Manual of Surveying Instructions, and the laws of United States, resurveyed all those parts or portions of the Fourth Standard Parallel South, through R. 15 E.

of the Salt Lake Bas and meridian, in the state of Utah, which are represented in foregoing field notes as having been resurveyed 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 Su General for Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such resurvey.

Harvey D. Heist
United States Deputy Surve

Subscribed by said Harvey D. Heist, and sworn to before me this 14th day of April, 1906

Thomas Bull
U. S. Surveyor General for Uta

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 18, 1

The foregoing field notes of the resurvey of the Fourth Standard Parallel Sout through Range No. 15 East of the Salt Lake Base and Meridian, Utah

executed by Harvey D. Heist and Earl V. Woolley under their contract No. 291, dated June 3, 1905; having critically examined, and the necessary corrections and explanations made, the said field notes, an resurveys they describe, are hereby approved.

Thomas Bull
United States Surveyor Ger

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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" T "

BOOK A-341

FILED

APR 14 1905

FIELD NOTES

retracement
OF THE [redacted] OF THE

E-A-S-T B-O-U-N-D-A-R-Y

of

Township No 21 South,

Range No. 14 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyors*

under ~~his~~ their Contract No. 291, *dated* June 3rd., *190* 5

retracement *commenced* February 12, *190* 6

retracement *completed* February 12, *190* 6

6—151

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BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Robert R' Raycraft, Chainman.

Claude Gresham, "

Daniel R. Adams Moundman

Willmer E. Tomlinson Flagman

For preliminary affidavits see book "A" T. 23 S., R. 17 E.

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BOOK A-341

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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 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 a
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the ...

.....

....., *Chair*

....., *Chai*

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

.....

.....,

.....,

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

SEAL

.....

.....

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

....., *Fl*

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

SEAL

.....

.....

6—151

Retracement of the East Bdy. of T. 21 S., R. 14 E.

CHAINS

Survey commenced, February 12, 1906, and executed with the instrument described in book " A ", of this survey.

I know the instrument to be in adjustment, from recent observations made, February 8 and 9, 1906, and recorded in book " R ", of this survey.

I begin at the cor. of Tps. 21 and 22 S., R. 14 E., heretofore described.

At 8h. 14m., a.m., l.m.t., I set off 38 56'N. on lat. arc, 13 48'S. on decl. arc, and determine a meridian with the solar.

Thence I run,

North, on retracement line, bet. secs. 31 and 36.

Descend over rolling sandy land.

39.14 Fall 17 lks. W. of the ¼ sec. cor., which is a deposit with mound of stone, as described by the surveyor general.

78.49 Fall 34 lks. W. of the cor. of secs. 25-30-31 and 36, which is a cottonwood post, 2 ins. sq., marked and witnessed as described by the surveyor general.

The course of this line is therefore N. 0° 15' E.

Land, rolling.

Soil, sandy, 3rd. rate.

No timber.

North, on retracement line, bet. secs. 25 and 30.

Descend over clay land.

8.30 Wash, 5 lks. wide, 5 ft. deep, course N.E.

16.25 Wash, 5 lks. wide, 5 ft. deep, course N.E.

37.29 Fall 17 lks. W. of the ¼ sec. cor., which is a cottonwood post 2 ins. sq., marked and witnessed as described by the surveyor general.

80.00 Fall 35 lks. W. of the cor. of secs. 19-24-25 and 30, which is a cottonwood post, 2 ins. sq., marked and witnessed as described by the surveyor general.

The course of this line is therefore N. 0° 15' E.

Retracement of the E.bdy.of T.21 S.,R.14 E.

CHAINS	
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.
	North,on retracement line,bet.secs.19 and 24.
	Descend over rolling clay land.
40.45	Fall 59 lks.W.of the $\frac{1}{4}$ sec.cor.,which is a deposit,with pits and mound of earth,marked and witnessed as described by the surveyor general.
80.94	Fall 1.22 chs.W.of the cor.of secs.13-18-19 and 24,which a cottonwood post,2 ins.sq.,marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.0°52'E.,and the dist.80. 95chs.
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.
	North,on retracement line,bet.secs.13 and 18.
	Over rolling clay land.
34.00	Begin descent over rolling land,bears N.E.and S.W.
40.30	Fall 17 lks.W.of the $\frac{1}{4}$ sec.cor.,which is a deposit,with pits and mound of earth,as described by the surveyor general.
61.50	Foot of descent,bears N.E.and S.W.
	Over level sandy land.
80.58	Fall 35 lks.W.of the cor.of secs.7-12-13 and 18,which is cottonwood post,2 ins.sq.,marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.0°15'E.
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.

Retracement of the E.bdy.of T.21 S.,R.14 E.

CHAINS

North,on a retracement line,bet.secs.7 and 12.

Over level sandy land.

22.60 Wash,1.00 ch.wide,20 ft.deep,course S.E.

Begin abrupt ascent over broken and rocky land.

38.25 Road to Castle Valley,bears N.W.and S.E.on top of ridge, bearing N.W.and S.E. Descend.

40.20 Fall 36 lks.W.of the ¼ sec.cor.,which is a sandstone,12x9x5 ins.above ground,marked and witnessed as described by the surveyor general.

55.00 Foot of descent,bears E.and W.

Over level sandy land,through dense greasewood brush.

65.00 Wash,2.50 chs.wide,10 ft.deep,course S.E.

77.00 Leave greasewood brush.

79.68 Fall 73 lks.W.of the cor.of secs.1-6-7 and 12,which is a cottonwood post,2 ins.sq.,marked and witnessed as described by the surveyor general.

The course of this line is therefore N.0°31'E.

Land,level and mountainous.

Soil,sandy,rocky and clay,3rd.rate.

No timber.

Mountainous land on 32.40 chs.

February 12: At this cor.I set off 13°46'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 39°01'N.

North,on a retracement line,bet.secs.1 and 6.

Over level sandy land.

4.00 Begin ascent over rolling clay land,bearing N.W.and S.E.

19.00 Ridge,bears N.W.and S.E.

Descend.

29.00 Foot of descent,bears N.W.and S.E.

Over level land.

41.19 Fall 33 lks.W.of the ¼ sec.cor.,which is a cobblestone, 8x8x6 ins.above ground,marked and witnessed as described by the surveyor general.

Retracement of the E.bdy.of T.21 S.,R.14 E.

...INS	
90.00	Begin ascent,bears E.and W.
118.00	Clay spur,projects E.
	Gradual descent.
127.20	Fall 1.03 chs.W.of the closing cor.to Tp.21 S.,Rs.14 and 15 E.,on the Fourth Standard Parallel South,which is a cottonwood post,2 ins.sq.,with marks nearly obliterated, set 25.00 chs.E.of the stan.cor.of secs.34 and 35, and 15.00 chs.W.of the stan.$\frac{1}{4}$ sec.cor.on the S.bdy.of sec. 35,T.20 S.,R.14 E.

I reestablish this cor.at the same place as follows:

Set a sandstone,20x12x8 ins.,15 ins.in the ground,for closing cor.of Tp.21 S.,Rs.14 and 15 E.,marked

C C 21 S.,on S.,

15 E.,on E.,and

14 E.,on W.face,with 6 grooves on E.W.and S.faces;dig pits,30x24x12 ins.,crosswise on each line,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.

The reestablished cor.destroys all traces of the old cor

The course of this line is therefore N.0°28'E.

Land,level and rolling.

Soil,sandy and clay,3rd.rate.

No timber.

February 12,1906.

For general description see subdivisions of T.21 S., R.15 E.

For table of latitudes and departures,see Fourth Standard Parallel South.

Harvey D. Hirst

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 Harvey D. Heist, 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~~ retracement of e W. bdys. of Tps. 21-22 and 23 S., Rs. 15 and 17 E., S.L.B.& M., in the state Utah.
owing the respective capacities in which they acted:

Robert R. Raycraft, Chainman.
Claude Gresham, Chainman.
Daniel R. Adams, Moundman.
Moundman.
Axman.
Axman.
llmer E. Tomlinson, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in ~~surveying~~ retracing all se parts or portions of the W. bdys. of Tps. 21-22 and 23 S., Rs. 15 and 17 E., of the Salt Lake ase and meridian, in the state of Utah., which are represented the foregoing field notes as having been ~~surveyed~~ retraced 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 Utah.

Robert R. Raycraft, Chainman.
Claude Gresham, Chainman.
Daniel R. Adams, Moundman.
Moundman.
Axman.
Axman.
Willmer E. Tomlinson, Flagman.

bscribed and sworn to before me this 12th. day of February, 1906

SEAL

Harvey D. Heist
U.S. Deputy Surveyor.

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BOOK A-341

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy S[illegible] solemnly swear that, in pursuance of a contract received from Edward H. Anderson, United States Surveyor General for Utah, bearing date 3rd. day of June, 190 5, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Su[illegible] General for Utah, the Manual of Surveying Instructions, and the laws [illegible] United States, ~~surveyed~~ retraced all those parts or portions of the W. bdys. of Tps. 21-22 and 23 Rs. 15 and 17 E., [illegible] of the Salt Lake Ba[illegible] and [illegible] meridian, in the state of Utah, which are represented in books A.D.G. L.O.T. foregoing field notes as having been surveyed by me, and under my direction; and I do further so[illegible] swear that all the corners of said survey have been established and perpetuated in strict accord[illegible] the Manual of Surveying Instructions, and the special written instructions of the United States S[illegible] General for Utah and in the specific manner described in the field notes, an[illegible] the foregoing are the original field notes of such survey.

Harvey D. Heist
United States Deputy Su[illegible]

Subscribed by said Harvey D. Heist, and sworn to before me this 14th day of April, 1906

Thomas Bell
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 18,

The foregoing field notes of the survey of retracement of the East Boundary of Township No. 21 South, Range No. 14 East of the Salt Lake Base a[illegible] Meridian, Utah,

executed by Harvey D. Heist and Earl V. Woolley under ~~his~~ their contract No. 291, dated June 3, 190 5, havin[illegible] critically examined, and the necessary corrections and explanations made, the said field notes, ~~surveys~~ retracements they describe, are hereby approved.

Thomas Bell
United States Surveyor G[illegible]

I certify that the foregoing transcript of the field notes of the above-described surveys in [illegible], has been correctly copied from the original notes on file in this o[illegible]

United States Surveyor G[illegible]

28

4—679.

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BOOK A-341

FILED
APR 14 1906

FIELD NOTES

OF THE SURVEY OF THE

S-U-B-D-I-V-I-S-I-O-N-S

of

Township No 21 South,

Range No.15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

Harvey D.Heist and Earl V.Woolley, *United States Deputy Surveyors*

der ~~*his*~~ their *Contract No.* 291, *dated* June 3, *190* 5

vey commenced February 13, *190* 6

vey completed February 21, *190* 6

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43.20 78
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BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

Robert R. Raycraft, Chainman.

Claude Gresham, "

Daniel R. Adams Moundman

Willmer E. Tomlinson Flagman

For preliminary affidavits see book "C" Tp. 23 S., R. 17 E.

Volume

#

R0341

BOOK A-341

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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 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 assi measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surv

.....

....., *Chai*

....., *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 establis 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

.....

.....

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Survey commenced,February 13,1906, and executed with the instrument described in book "A",of this survey.
	I know the instrument to be in adjustment,from recent observations made February 8 and 9,1906,and recorded in book " B ",of this survey.
	The east boundary of the township is out of limits of 21'of arc,for alignment,therefore I establish a sectional guide meridian as follows:
	At 8h.14m.,a.m.,l.m.t.,I set off 38°56'N.on lat.arc, 13°28'S.on decl.arc,and determine a meridian with the solar at the reestablished cor.of secs.1-2-35 and 36, heretofore described on the S.bdy.of the Tp.
	Thence I run a sectional guide meridian,
	North,bet.secs.35 and 36.
	Descend over rolling clay land.
8.75	Hollow,75 ft.deep,course E.
	Ascend.
40.00	Clay spur,projects E.
	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 W. face,36 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.
	Descend.
61.00	Wash,20 lks.wide,20 ft.deep,in hollow,50 ft.deep, course S.E.
	Ascend.
80.00	Set a redwood post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.25-26-35 and 36, marked T.21 S.,S.25 on N.E.,
	R.15 E.,S.36 on S.E.,
	S.35 on S.W.,and
	S.26 on N.W.face,with 1 notch on S.and E.edges, dig pits,18x18x12 ins.,in each sec,5½ ft.dist.,and

See Correct Notes Pag Book B.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	raise a mound of earth,4 ft.base;2 ft.high,W.of cor.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	North,bet.secs.25 and 26.
	Ascend over rolling clay land.
3.20	Road from San Rafael to Greenriver,bears N.E.and S.W.
37.50	Top of ascent,bears N.W.and S.E.
	Over level plateau.
40.00	Set a pinepost,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 26 on W.face, 25 on E.face,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.23-24-25 and 26, marked T.21 S.,S.24 on N.E., R.15 E.,S.25 on S.E., S.26,on S.W.,and S.23 on N.W.face,with 2 notches on S.and 1 notch on E.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 and level.
	Soil,clay on 37.50 chs.,3rd.rate. balance,sandy loam,2nd.rate.
	No timber.
	North,bet.secs.23 and 24.
	Over level plateau.
17.00	Begin abrupt descent,bearing N.W.and S.E.
28.00	Hollow,100 ft.deep,course N.E.

BOOK A-341

Subdivisions of T.21 S.,R.15 E.

CHAINS

Ascend.

31.00 Spur,projects N.E.

Descend.

33.00 Hollow,75 ft.deep,course N.W.

Ascend.

35.00 Spur,projects N.W.

Descend.

40.00 Set a redwood post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 23 on W. and 24 on E.face,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.

50.00 Saleratus Wash,3.00 chs.wide,30 ft.deep,in hollow,150 ft. deep,course E.

Ascend through dense greasewood brush.

70.50 Leave greasewood brush.

75.00 Clay knoll,50 ft.high,on line.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.13-14-23 and 24, marked T.21 S.,S.13 on N.E.,

63/17

R.15 E. S.24 on S.E.,

S.23 on S.W.,and

S.14 on N.W.face,with 3 notches on S.and 1 notch on E.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 and mountainous.

Soil,sandy loam on 17.00 chs.,2nd.rate.

balance,clay and sandy,3rd.rate.

No timber. Undergrowth greasewood.

Mountainous land or dense undergrowth on 63.00 chs.

North,bet.secs.13 and 14.

Ascend over rolling clay land.

40.00 Set a pine post,3 ft.long,3 ins.sq.,with marked stone,

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 14 on W. face,13 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.
48.50	Ridge,bears E.and W.
	Descend.
78.75	Wash,50 lks.wide,30 ft.deep,course N.E.
80.00	Set a redwood post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.11-12-13 and 14, marked T 21 S.,S 12 on N.E., R.15 E.,S.13 on S.E., S.14 on S.W.and S.11 on N.W.face,with 4 notches on S.and 1 notch on E.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,3rd.rate.
	No timber.
	February 13: At this cor.I set off 13°26'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 39°00'N.
	North,bet.secs.11 and 12.
	Over level clay land.
2.25	Wash,1.00 ch.wide,30 ft.deep,course E.
15.94	Rio Grande Western Railroad,bears N.78°30'E.and S.78° 30'W.
16.50	Telegraph line,bears N.78°30'E.and S.78°30'W.
21.50	Road from Greenriver to Price,bears E.and W.
33.50	Wash,3.00 chs.wide,30 ft.deep,course S.E.
40.00	Set a redwood post,3 ft.long,3ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 11 on W. 12 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.

Subdivisions of T.21 S.,R.15 E.

CHAINS

high,W.of cor.

51.00. Begin ascent over rolling land,bears E.and W.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.1-2-11 and 12, marked T.21 S.,S.1 on N.E.,

R.15 E.,S.12 on S.E.,

S.11 on S.W.and

S.2 on N.W.face,with 5 notches on S.and 1 notch on E.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,3rd.rate.

No timber.

The north bdy.of the Tp.,being the Fourth Standard Par.S.

I run North,on a true line,

Bet.secs.1 and 2.

Ascend over rolling clay land.

28.00 Wash,1.00 ch.wide,15 ft.deep,course S.E.

32.00 Wash,2.00 chs.wide,25 ft.deep,course S.E.

40.00 Set a sandstone,24x12x5 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.

97.00 Ridge,bears N.W.and S.E.

Descend.

121.00 Hollow,75 ft.deep,course E.

Ascend.

128.39 Intersect Fourth Standard Parallel South,19.26 chs.E.of the Stan.cor.of secs.33 and 34,T.20 S.,R.15 E.,heretofor described.

Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for closing cor.of secs.1 and2 marked C C T.21 S.R.15 E.on S.,

S.1 on E.,and S.2 on W.face,with 1 groove on E.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	and 5 grooves on W.faces,dig pits,24x18x12 ins.,cross-wise on each line,E.and W.3 ft.,and S.of post,7 ft. dist.,and raise a mound of earth,4 ft.base,2 ft.high, S.of cor.
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.
	February 13,1905.

	February 14: At 8h.14m.,a.m.,l.m.t.,I set off 38°57'N. on lat.arc,13°08'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.25-26-35 and 36.
	Thence I run
	East,on a random line,bet.secs.25 and 36.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.18	Intersect Green River Guide Meridian,3 lks.S.of the cor. of secs.25 and 36.heretofore described.
	Thence I run
	S.89°59'W.,on a true line,
	Bet.secs.25 and 36.
	Over level plateau
40.18	Set a pine post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 25 on N.face, 36 on S.face,dig pits,18x18x12 ins.,E.and W.of post.,3 ft.dist.,and raise a mound of earth,3$\frac{1}{2}$ ft.base,1$\frac{1}{2}$ ft. high,N.of cor.
51.00	Leave plateau,bears N.W.and S.E.
	Descend over rolling clay land.
80.18	The cor.of secs.25-26-35 and 36.
	Land,level and rolling.
	Soil,sandy loam on 51.00 chs,2nd.rate.
	balance,clay,3rd.rate.
	No timber.

See Corrective Notes Book 5 Page 1.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	From the cor.of secs.23-24-25 and 26,I run
	N.89°59'E.,on a random line,bet.secs.24 and 25.
40.00	Set temp.¼ sec.cor.
80.56	Intersect Green River Guide Meridian,5 lks.N.of the cor.
	of secs.24 and 25,heretofore described.
	Thence I run
	N.89°59'W.,on a true line,
	Bet.secs.24 and 25.
	Descend over rolling clay land.
40.56	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 N.face,
	25 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.
48.00	Foot of descent,bears N.W.and S.E.
	Over level plateau.
80.56	The cor.of secs.23-24-25 and 26.
	Land,rolling and level.
	Soil,clay on 48.00 chs.3rd.rate.
	balance sandy loam,2nd.rate.
	No timber.

	From the cor.of secs.13-14-23 and 24,I run
	S.89°59'E.,on a random line,bet.secs.13 and 24.
40.00	Set temp.¼ sec.cor.
81.32	Intersect Green River Guide Meridian,3 lks.N.of the cor.
	of secs.13 and 24,heretofore described.
	Thence I run
	N.89°58'W.,on a true line,
	Bet.secs.13 and 24.
	Over level sandy land,through dense greasewood brush.
41.32	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 N.face
	24 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.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	high N.of cor.
56.00	Leave greasewood brush.
81.32	The cor.of secs.13-14-23 and 24.
	Land,level.
	Soil,sandy,3rd.rate.
	No timber. Undergrowth greasewood.
	Dense undergrowth on 56.00 chs.
	February 14: At this cor.I set off 13°06'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°59'N.
	From the cor.of secs.11-12-13 and 14,I run S.89°58'E.,on a random line,bet.secs.12 and 13.
40.00	Set temp.¼ sec.cor.
81.92	Intersect Green River Guide Meridian,12 lks.S.of the cor.of secs.12 and 13,heretofore described.
	Thence I run S.89°57'W.,on a true line, Bet.secs.12 and 13.
	Ascend over broken clay land.
11.25	Wash,1.00 ch.wide,20 ft.deep,course S.E.
41.92	Set a redwood post,3 ft.long,3 ins.sq.,with marked stone 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 12 on N.face,13 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.
46.75	Wash,30 lks.wide,10 ft.deep,course N.E.
53.00	Wash,30 lks.wide,15 ft.deep,course N.E.
56.00	Wash,30 lks.wide,10 ft.deep,course N.E.
68.40	Wash,50 lks.wide,20 ft.deep,course N.E.
72.00	Wash,40 lks.wide,15 ft.deep,course N.E.
76.50	Wash,1.00 ch.wide,25 ft.deep,course N.E.
81.92	The cor.of secs.11-12-13 and 14.
	Land,broken by many washes.
	Soil,clay,3rd.rate.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	No timber.
	Mountainous land on 81.92 chs.

	From the cor.of secs.1-2-11 and 12,I run
	N.89°57'E.,on a random line,bet.secs.1 and 12.
40.00	Set temp.¼ sec.cor.
82.30	Intersect Green River Guide Meridian,3 lks.N.of the cor.
	of secs.1 and 12,heretofore described.
	Thence I run
	S.89°58'W.on a true line,
	Bet.secs.1 and 12.
	Ascend over clay land.
.75	Wash,20 lks.wide,10 ft.deep,course S.
6.00	Clay spur,projects S.
	Descend.
42.30	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 1,on N.
	face,12 on S.face,dig pits,18x18x12 ins.,E.and W.of pos ,
	and raise a mound of earth,3½ ft.base,1½ ft.high,N.of
	cor.
48.50	Wash,1.00 ch.wide,30 ft.deep,in hollow,50 ft.deep,
	course S.E.
	Ascend.
82.30	The cor.of secs.1-2-11 and 12.
	Land,rolling,
	Soil,clay,3rd.rate.
	No timber.
	February 14,1906.

	February 15: At 8h.14m.,a.m.,l.mt.,I set off 38°56'N.on
	lat.arc,12°47'S.on decl.arc,and determine a true meridia
	with the solar,at the reestablished cor.of secs.2-3-34
	and 35,heretofore described,on the S.bdy.of the Tp.
	Thence I run
	N.0°01'W.,bet.secs.34 and 35.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Gradual ascent over clay land.
2.50	Ridge, bears E. and W.
	Descend.
19.50	Hollow, 75 ft. deep, course E.
	Ascend.
35.00	Road from San Rafael to Greenriver, bears N.E. and S.W.
38.00	Ridge, bears N.E. and S.W.
	Descend.
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 ¼S 34 on W. face, 35 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.
56.50	Hollow, 75 ft. deep, course N.E.
	Ascend.
62.00	Spur, projects E.
	Descend.
75.50	Hollow, 75 ft. deep, course S.E.
	Ascend.
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked T.21 S.S26 on N.E., R.15 E.S 35 on S.E., S 34 on S.W. and S.27 on N.W. face, with 1 notch on S. and 2 notches on E. 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, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.
	East, on a random line bet. secs. 26 and 35.
40.00	Set temp. ¼ sec. cor.

See Corrective Notes Book 45 Page 2.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
80.02	Intersect N.and S.line,9 lks.S.of the cor.of secs. 25-26-35 and 36.
	Thence I run
	S.89°56'W.,on a true line,
	Bet.secs.26 and 35.
	Descend over rolling clay land.
7.55	Road from San Rafael to Greenriver,bears N.E.and S.W.
16.25	Wash,10 lks.wide,10 ft.deep,in bottom of hollow,50 ft. deep,course S.E.
	Ascend.
40.01	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 26 on N.face 35 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.
74.50	Clay spur,projects S.E.
	Descend.
80.02	The cor.of secs.26-27-34 and 35.
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.

See Correc otes Boo Page 2.

N.0°01'W.,bet.secs.26 and 27.

	Ascend over clay land.
5.00	Clay spur,projects S.E.
	Descend.
31.00	Hollow,50 ft.deep,course E.
	Ascend.
34.50	Spur,projects E.
	Descend.
40.00	Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 27 on W.face,26 on E.face,dig pits,18x18x12 ins., N.and S.of post,3 ft.dist.,and raise a mound of earth,

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	$3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
54.50	Hollow,75 ft.deep,course E.
	Begin abrupt ascent.
74.50	Top of ascent,bears N.W.and S.E.
	Over level plateau.
80.00	Set a sandstone,15x12x10 ins.,10 ins.in the ground,for cor.of secs.22-23-26 and 27,marked with 2 notches on S. and E.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 and broken.
	Soil,clay on 74.50 chs.,3rd.rate.
	balance sandy loam,2nd.rate.
	No timber.
	Mountainous land on 74.50 chs.
	N.89°56'E.,on a random line,bet.secs.23 and 26.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.08	Intersect N.and S.line,10 lks.N.of the cor.of secs. 23-24-25 and 26.
	Thence I run
	West,on a true line,bet.secs.23 and 26.
	Over level plateau.
40.04	Set a pine post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 23 on N.face 26 on S.face,dig pits,18x18x12 ins.,E.and W.of post., 3 ft.dist.,and raise a mound of earth,$3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft. high,N.of cor.
80.08	The cor.of secs.22-23-26 and 27.
	Land,level.
	Soil,sandy loam,2nd.rate.
	No timber.
	February 15: At this cor.I set off 12°45'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°58'N.

Subdivisions of T.21 S.,R.15 E.

CHAINS

N.0°01'W.,bet.secs.22 and 23.

Over level plateau.

35.50 Leave level land,bears N.W.and S.E.

Begin abrupt descent over broken and rocky land.

40.00 Set a sandstone,22x12x12 ins.,16 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.

49.00 Foot of descent,bears N.W.and S.E.

Descend gradually over sandy land.

53.00 Enter dense greasewood brush.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.14-15-22 and 23,marked

44.50
35.50

T.21 S.,S 14 on N.E.,

R.15 E.,S.23 on S.E.,

S.22 on S.W.and

S.15 on N.W.face,with 3 notches on S.and 2 notches on E. 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,rolling and mountainous.

Soil,sandy loam on 35.50 chs.,

balance sandy and rocky,3rd.rate.

No timber.

Mountainous land or dense undergrowth on 44.50 chs.

East,on a random line,bet.secs.14 and 23.

40.00 Set temp.¼ sec.cor.

80.04 Intersect N.and S.line,7 lks.S.of the cor.of secs. 13-14-23 and 24.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.14 and 23.

Over rolling clay land.

40.02 Set a charred cottonwood post,3 ft.long,3 ins.sq,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	$\frac{1}{4}$ S 14 on N.face,23 on S.face,dig pits,18x18x12 ins., E.and W.of post,3 ft.dist.,and raise a mound of earth, $3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high,N.of cor.
59.00	Enter dense greasewood brush.
70.00	Saleratus Wash,4.00 chs.wide,25 ft.deep,in hollow,100 ft. deep,course S.E.
	Gradual ascent.
80.04	The cor.of secs.14-15-22 and 23.
21 W. / 59 04	Land,rolling.
	Soil,clay and sand,3rd.rate.
	No timber. Undergrowth greasewood.
	Dense undergrowth on 21.00 chs.
	N.0°01'W.,bet.secs.14 and 15.
	Descend gradually over sandy land,through dense greasewood brush.
12.00	Saleratus Wash,2.00 chs.wide,25 ft.deep,in hollow,100 ft.deep,course S.E.
	Ascend.
	Leave greasewood brush.
40.00	Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 15 on W.face,14 on E.face,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.
54.50	Ridge,bears E.and W.
	Descend.
80.00	Set a redwood post,3 ft.long,4 ins.sq.,with marked stone 24 ins.in the ground,for cor.of secs.10-11-14 and 15, marked T.21 S.,S.11 on N.E.,
12/68	R.15 E.,S.14 on S.E.,
	S.15 on S.W.,and
	S.10 on N.W.face,with 4 notches on S.and 2 notch on E.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,

Subdivisions of T.21 S.,R.15 E.

CHAINS

W.of cor.

Land rolling.

Soil,sandy and clay,3rd.rate.

No timber. Undergrowth greasewood.

Dense undergrowth on 12.00 chs.

N.89°57'E.,on a random line,bet.secs.11 and 14.

40.00 Set temp.¼ sec.cor.

80.10 Intersect N.and S.line,3 lks.S.of the cor.of secs. 11-12-13 and 14.

Thence I run

S.89°56'W.,on a true line,

Bet.secs.11 and 14.

Ascend over rolling clay land.

40.05 Set a redwood post,3 ft.long,3 ins.sq.,with marked stone 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 11 on N. face,14 on S.face,dig pits,18x18x12 ins.,E.and W.of post,and raise a mound of earth,3½ ft.base,1½ ft.high, N.of cor.

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

Land,rolling.

Soil,clay,3rd.rate.

No timber.

Feb.15,1906.

February 16: At 8h.14m.,a.m.,l.m.t.,I set off 39°00'N. on lat.arc,12°27'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.10-11-14 and 15.

Thence I run

N.0°01'W.,bet.secs.10 and 11.

Over level clay land.

16.00 Road from Price to Greenriver,bears E.and W.

17.51 Rio Grande Western Railroad,bears N.70°15'W.and S.70°15'E

18.25 Telegraph line,bears N.70°15'W.and S.70°15'E.

37.00 Wash,10 lks.wide,10 ft.deep,course E.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
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 10 on W.face, 11 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.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.2-3-10 and 11,marked T.21 S.S.2 on N.E., R.15 E.,S.11 on S.E. S.10 on S.W.,and S.3 on N.W.face,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,3rd.rate.
	No timber.
	N.89°56'E.,on a random line,bet.secs.2 and 11.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S line,5 lks.N.of the cor.of secs. 1-2-11 and 12.
	Thence I run S.89°58'W.,on a true line, Bet.secs.2 and 11.
	Ascend over rolling clay land.
40.02	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 2 on N. face,11 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.
43.00	Spur,projects S.
	Descend.
54.00	Foot of descent,bears N.W.and S.E.
	Over level land.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
56.00	Wash,50 lks.wide,30 ft.deep,course S.E.
68.50	Wash,2.00 chs.wide,25 ft.deep,course S.E.
80.04	The cor.of secs.2-3-10 and 11.
	Land,rolling and level.
	Soil,clay,3rd.rate.
	No timber.
	The north bdy.of the Tp.,being the Fourth Stan.Par.S.,I run N.0°01'W.,on a true line, Bet.secs.2 and 3.
	Over level clay land.
13.00	Wash,1.00 ch.wide,10 ft.deep,course S.E.
	Begin ascent.
17.00	Clay spur,projects S.E.
	Descend.
24.50	Hollow,50 ft.deep,course S.E.
	Ascend 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 3 on W.face, 2 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.
117.00	Ridge,bears N.W.and S.E.
	Descend.
128.43	Intersect the Fourth Standard Parallel South,19.21 chs. E.of the Stan.cor.of secs.32 and 33,T.20 S.R.15 E., heretofore described.
	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for closing cor.of secs.2 and 3, marked C.C T.21.S.R.15 E.on S., S.2 on E.,and S.3 on W.face,with 2 grooves on E.and 4 grooves on W.faces,dig pits 24x18x12 ins crosswise on each line,E.and W.3 ft. and S.of post,7 ft.dist.,and raise a mound of earth,4 ft base,2 ft.high,S.of cor.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Land,rolling.
	Soil,clay,3rd.rate.
	No timber.
	February 16: At this cor.I set off 12°25'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 39°02'N.

	From the reestablished cor.of secs.3-4-33 and 34, heretofore described,on the S.bdy.of the Tp.,I run N.0°01'W.,bet.secs.33 and 34.
	Descend over clay land.
3.50	Hollow,30 ft.deep,course S.E.
	Ascend.
28.00	Ridge,bears N.W.and S.E.
	Descend.
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 W.face 34 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.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.27-28-33 and 34,marked T.21 S.S.27 on N.E., R.15 E.,S.34 on S.E., S 33 on S.W.,and S.28 on N.W.face,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,3rd.rate.
	No timber.

	East,on a random line,bet.secs.27 and 34.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,7 lks.S.of the cor.of secs.

Subdivisions of T.21 S.,R.15 E.

26-27-34 and 35.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.27 and 34.

Descend over clay land.

.25 Hollow,75 ft.deep,course S.

Ascend 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 27 on N.face 34 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 The cor.of secs.27-28-33 and 34.

Land,rolling.

Soil,clay,3rd.rate.

No timber.

N.0°01'W.,bet.secs.27 and 28.

Descend over rolling clay 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 28 on W.face 27 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.

66.75 Hollow,75 ft.deep,course E.

Ascend.

80.00 Set a sandstone,20x12x5 ins.,15 ins.in the ground,for co of secs.21-22-27 and 28,marked with 2 notches on S.and 3 notches on E.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.

Pits impracticable.

Land,rolling.

Soil,clay,3rd.rate.

No timber.

February 16,1906.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	February 17: At 8h.14m.,a.m.,l.m.t.,I set off 38°58'N. on lat.arc,12°06'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.21-22-27 and 28.
	Thence I run
	N.89°57'E.,on a random line,bet.secs.22 and 27.
40.00	Set temp.¼ sec.cor.
80.02	Intersect N.and S.line,5 lks.N.of the cor.of secs. 22-23-26 and 27.
	Thence I run
	S.89°59'W.,on a true line,
	Bet.secs.22 and 27.
	Over level plateau.
5.00	Leave plateau,bears N.W.and S.E.
	Descend.
9.00	Hollow,75 ft.deep,course S.
	Ascend.
14.25	Spur,projects S.E.
	Descend.
17.00	Hollow,75 ft.deep,course S.E.
	Ascend.
25.50	Spur,projects S.E.
	Descend.
36.50	Hollow,100 ft.deep,course S.E.
	Ascend.
38.75	Spur,projects N.
	Descend.
40.01	Hollow,40 ft.deep,course N.E.
	Set a sandstone,20x8x6 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.
	Ascend.
43.00	Top of ascent,bears N.E.and S.W.
	Over level plateau.
67.00	Leave plateau,bears N.W.and S.E.

Subdivisions of T.21 S.,R.15 E.

CHAINS

Descend over broken land.

80.02 The cor.of secs.21-22-27 and 28.

51/29.02 Land,level and mountainous.

Soil,sandy loam on 29.00 chs.

balance,clay and rocky,3rd.rate.

No timber.

Mountainous land on 51.00 chs.

N.0°01'W.,bet.secs.21 and 22.

Ascend over broken clay land.

9.00 Top of ascent,bears N.W.and S.E.

Over level plateau.

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 21 on W.face 22 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.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.15-16-21 and 22,marked

T.21 S.S.15 on N.E.,

R.15 E.,S.22 on S.E.,

S.21 on S.W.and

S.16 on N.W.face,with 3 notches on S.and E.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 level.

Soil,clay on 9.00 chs.,3rd.rate.

balance,sandy loam,2nd.rate.

No timber.

N.89°59'E.,on a random line,bet.secs.15 and 22.

40.00 Set temp.¼ sec.cor.

79.98 Intersect N.and S.line,3 lks.N.of the cor.of secs. 14-15-22 and 23.

Thence I run

[illegible] of T.21 S.,R.15 E.

[illegible]

West,on a true line,

Bet.secs.15 and 22.

Gradual ascent,over sandy land,through dense greasewood brush.

[illegible] 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 15 on N.face [illegible] on S.face,dig pits,18x18x18 ins.,N.and W.of post,3 ft dist.,and raise a mound of earth,3½ ft.base,1½ ft.high, N.of cor.

[illegible] Begin abrupt ascent,bearing N.W.and S.E.

Heavy greasewood brush.

[illegible] Clay spur,150 ft.above ¼ sec.cor.,projects N.

Ledged.

[illegible] Hollow,100 ft.deep,course N.

Ledged.

[illegible] Top of ascent,bears N.W.and S.E.

Over level plateau.

[illegible] The cor.of secs.15-16-21 and 22.

Land,level,rolling and mountainous.

Soil,sandy and clay on 74.00 chs.,3rd.rate.

Balance,sandy loam,2nd.rate.

No timber. [illegible]

Mountainous land or dense undergrowth on 74.00 chs.

N.3°01'E.,bet.secs.15 and 16.

Over level plateau.

[illegible] Begin abrupt descent,bears N.W and S.E.

[illegible] Foot of abrupt descent,bears N.W.and S.E.

Gradual descent over sandy land.

[illegible] Enter dense greasewood brush.

[illegible] 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 16 on W.face [illegible] on E.face,dig pits,18x18x18 ins.,N.and W.of post,3 ft dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	W.of cor.
48.00	Saleratus Wash,4.00 chs.wide,25 ft.deep,course S.E.
	Ascend.
51.00	Leave greasewood brush.
71.00	Road to Castle Valley,bears N.E.and S.W.
76.50	Ridge,bears N.W.and S.E.
	Descend.
80.00	Set a sandstone,28x12x4 ins.,21 ins.in the ground,for
15/5	cor.of secs.9-10-15 and 16,marked with 4 notches on S.
	and 3 notches on E.edges,and raise a mound of stone,
	2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,level,mountainous and rolling.
	Soil,sandy loam on 5.00 chs.,2nd.rate.
	balance clay or sandy,3rd.rate.
	No timber. Undergrowth greasewood.
	Mountainous land or dense undergrowth on 75.00 chs.
	February 17: At this cor.I set off 12°04'S.on decl.arc,
	and at 12h.14m.,p.m.,l.m.t.,observe the sun on the
	meridian,the resulting lat.is 39°00'N.
	East,on a random line,bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,3 lks.S.of the cor.of secs.
	10-11-14 and 15.
	Thence I run
	S.89°59'W.,on a true line,
	Bet.secs.10 and 15.
	Ascend over clay land.
16.55	Clay spur,projects N.
	Gradual descent.
40.00	Set a sandstone,18x12x3 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.

Subdivisions of T.21 S., R.15 E.

CHAINS	
70.75	Road to Castle Valley, bears N.E. and S.W.
	Ascend.
80.00	The cor. of secs. 9-10-15 and 16.
	Land, rolling.
	Soil, clay, 3rd. rate.
	No timber.
	N.0°01'W., bet. secs. 9 and 10.
	Descend over rolling clay land.
18.00	Foot of descent, bears N.W. and S.E.
	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 9 on W. face, 10 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.
42.75	Road from Price to Greenriver, bears N.W. and S.E.
46.37	Rio Grande Western Railroad, bears N.70°15'W. and S.70°15E
47.25	Telegraph line, bears N.70°15'W. and S.70°15'E.
53.00	Wash, 10 lks. wide, 10 ft. deep, course S.E.
63.00	Leave level land, bears N.W. and S.E.
	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. 3-4-9 and 10, marked T.21 S.S.3 on N.E., R.15 E., S.10 on S.E., S.9, on S.W. and S.4 on N.W. face, with 5 notches on S. and 3 notch on E. 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 level.
	Soil, clay, 3rd. rate.
	No timber.

Subdivisions of T.21 S.,R.15 E.

CHAINS

N.89°59'E.,on a random line,bet.secs.3 and 10.

40.00 Set temp.¼ sec.cor.

80.04 Intersect N.and S.line,5 lks.S.of the cor.of secs. 2-3-10 and 11.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.3 and 10.

Over level clay land.

28.00 Leave level land,bears N.W.and S.E.

Ascend.

40.02 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 3 on N.face 10 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.

42.50 Clay spur,projects S.

Descend.

80.04 The cor.of secs.3-4-9 and 10.

Land,rolling,and level.

Soil,clay,3rd.rate.

No timber.

The north bdy.of the Tp.being the Fourth Stan.Par.S.

I run N.0°01'W.,on a true line,

Bet.secs.3 and 4.

Ascend over rolling clay 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 4 on W. face,3 on E.face,dig pits,18x18x12 ins.,N.and S.of post, 3 ft.dist.,and raise a mound of stone,3½ ft.base,1½ ft. high,W.of cor.

61.00 Ridge,bears N.W.and S.E.

Descend.

70.00 Foot of descent,bears N.W.and S.E.

Over level land,through dense artemisia.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
128.46	Intersect the Fourth Standard Parallel South,19.23 chs. E.of the stan.cor.of secs.31 and 32,heretofore described. Set a sandstone,20x8x6 ins.,15 ins.in the ground,for closing cor.of secs.3 and 4,marked C C on S.face,and 3 grooves on E.and W.face,dig pits,crosswise on each line,E.and W.3 ft.and S.of post,7 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,S.of cor.
	Land,rolling and level.
	Soil,clay,3rd.rate.
	No timber. Undergrowth artemisia.
	Dense undergrowth on 58.46 chs.
	February 17,1906'
	February 18:At 8h.14m.,a.m.,l.m.t.,I set off 38°56'N. on lat.arc,11°45'S.on decl.arc,and determine a meridian with the solar,at the reestablished cor.of secs.4-5-32 and 33,heretofore described,on the S.bdy.of the Tp.
	Thence I run
	N.0°02'W.,bet.secs.32 and 33.
	Descend over rolling clay land.
11.75	Wash,20 lks.wide,5 ft.deep,course E.
17.00	Wash,20 lks.wide,5 ft.deep,course E.
28.00	Hollow,75 ft.deep,course E.
	Ascend.
40.00	Set a redwood post,3 ft.long,3 ins.sq.,with marked stone 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 32 on W. face,33 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.
65.00	Ridge,bears E.and W.
	Descend.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.28-29-32 and 33,marked T.21 S.S.28 on N.E., R.15 E.,S.33 on S.E.,

Subdivisions of T.21 S.,R.15 E.

S.32 on S.W.,and

S.29 on N.W.face,with 1 notch on S.and 4 notches on E. 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,3rd.rate.

No timber.

East,on a random line,bet.secs.28 and 33.

40.00 Set temp.¼ sec.cor.

79.92 Intersect N.and S.line,3 lks.S.of the cor.of secs. 27-28-33 and 34.

Thence I run

S.89°59'W.,on a true line,

Bet.secs.28 and 33.

Ascend over rolling clay land.

39.96 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 28 on N.face 33 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.

79.92 The cor.of secs.28-29-32 and 33.

Land,rolling.

Soil,clay,3rd.rate.

No timber.

N.0°02'W.,bet.secs.28 and 29.

Descend over rolling clay 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 29 on W.face 28 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.

70.00 Hollow,50 ft.deep,course E.

Ascend.

Subdivisions of T.21 S.,R15 E.

CHAINS	
80.00	Set a redwood post,3 ft.long,4 ins.sq.,with marked stone 24 ins.in the ground,for cor.of secs.20-21-28 and 29. marked T.21 S.S 21 on N.E. R.15 E.S.28 on S.E., S.29 on S.W.,and S.20 on N.W.face,with 2 notches on S.and 4 notches on E.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,3rd.rate.
	No timber.
	N.89°59'E.,on a random line,bet.secs.21 and 28.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,5 lks.S.of the cor.of secs. 21-22-27 and 28.
	Thence I run S.89°57'W.,on a true line, Bet.secs.21 and 28.
	Descend over broken clay land.
13.50	Hollow,75 ft.deep,course S.E.
	Ascend.
40.00	Spur,projects S.E.
	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 21 on N., 28 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.
47.50	Hollow,50 ft.deep,course S.E.
	Ascend.
52.30	Spur,projects S.E.
	Descend.
80.00	The cor.of secs.20-21-28 and 29.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Land,broken.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	February 18: At this cor.I set off 11°43'S.on decl.arc, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°58'N.
	N.0°02'W.,bet.secs.20 and 21.
	Ascend over broken clay hills.
37.00	Ridge,bears E.and W.runs to a plateau on the E.
	Descend.
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 20 on W.face 21 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.
66.00	Hollow,75 ft.deep,course N.E.
	Ascend.
72.50	Spur,projects N.E.
	Descend.
77.00	Hollow,75 ft.deep,course N.E.
	Ascend.
80.00	Set a sandstone,15x15x6 ins.,10 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,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 80.00 chs.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	N.89°57'E.,on a random line,bet.secs.16 and 21.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.06	Intersect N.and S.line,3 lks.N.of the cor.of secs. 15-16-21 and 22.
	Thence I run
	S.89°58'W.,on a true line,
	Bet.secs.16 and 21.
	Over level plateau.
14.00	Leave plateau,bears N.E.and S.W.
	Begin abrupt descent.
17.00	Hollow,75 ft.deep,course N.
	Ascend.
21.00	Spur,projects N.
	Descend.
24.00	Hollow,75 ft.deep,course N.
	Ascend.
26.50	Spur,projects N.
	Descend.
27.90	Hollow,75 ft.deep,course N.
	Ascend.
29.00	Spur,projects N.
	Descend.
32.00	Hollow,75 ft.deep,course N.
	Ascend.
33.75	Spur,projects N.
	Descend.
35.00	Hollow,75 ft.deep,course N.
	Ascend.
36.70	Spur,projects N.
	Descend.
39.50	Hollow,75 ft.deep,course N.
	Ascend.
40.03	Set a granite stone,20x10x5 ins.,15 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.

Subdivisions of T.21 S., R.15 E.

CHAINS	
	Pits impracticable.
41.50	Spur, projects N.
	Descend.
44.50	Hollow, 50 ft. deep, course N.
	Ascend.
47.75	Spur, projects N.
	Descend.
51.50	Hollow, 50 ft. deep, course N.
	Ascend.
61.25	Spur, projects N.
	Descend.
67.25	Hollow, 75 ft. deep, course N.
	Ascend.
72.50	Spur, projects N.E.
	Descend.
74.50	Hollow, 75 ft. deep, course N.E.
	Ascend.
80.06	The cor. of secs. 16-17-20 and 21.
66/14.06	Land, level and mountainous.
	Soil, sandy loam on 14.00 chs., 2nd. rate.
	balance clay and rocky, 3rd. rate.
	No timber.
	Mountainous land on 66.00 chs.

N.0°02'W., bet. secs. 16 and 17.

	Ascend over rocky land.
2.00	Spur, projects N.E.
	Descend.
7.00	Hollow, 75 ft. deep, course E.
	Ascend.
11.00	Ridge, bears E. and W.
	Descend abruptly.
18.00	Foot of abrupt descent, bears E. and W.
	Over level sandy land, through dense greasewood brush.
39.50	To south bank of Saleratus Wash, 25 ft. high, bears E. and W.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for witness cor.to ¼ sec.cor.,marked W C ¼ S 17 on W.face,16 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.
	Enter Saleratus Wash,course E.
40.00	Point for ¼ sec.cor.falls in the wash and is impracticabl to set on account of floods.
49.00	Leave wash,bank 10 ft.high,bears E.and W.
52.75	Road to Castle Valley,bears E.and W.
68.00	Leave level land,bears E.and W.
	Begin ascent over rolling clay land.
	Leave greasewood brush.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.8-9-16 and 17,marked T.21 S.S.9 on N.E.,
	R.15 E.S.16 on S.E.,
	S.17 on S.W,and
	S.8 on N.W.face,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 mountainous.
	Soil,rocky,sandy and clay,3rd.rate.
	No timber. Undergrowth greasewood.
	Mountainous land or dense undergrowth on 80.00 chs.

	N.89°58'E.,on a random line,bet.secs.9 and 16.
40.00	Set temp.¼ sec.cor.
80.08	Intersect N.and S.line,3 lks.N.of the cor.of secs. 9-10-15 and 16.
	Thence I run
	S.89°59'W.,on a true line,
	Bet.secs.9 and 16.
	Ascend over clay land.
8.00	Ridge,bears N.W.and S.E.

Subdivisions of T.21 S.,R.15 E.

CHAINS

Descend.

34.00 Hollow,100 ft.deep,course S.E.

Ascend.

40.04 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 9 on N.face, 16 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.

41.00 clay spur,projects S.

Descend.

45.00 Hollow,75 ft.deep,course S.E.

Ascend.

53.00 Clay spur,projects S.E.

Descend.

55.50 Hollow,100 ft.deep,course S.E.

Ascend.

56.20 Clay spur,projects S.E.

Descend.

63.00 Hollow,75 ft.deep,course S.E.

Ascend.

75.00 Clay spur,projects S.

Descend.

80.08 The cor.of secs.8-9-16 and 17.

Land,mountainous.

Soil,clay,3rd.rate.

No timber.

Mountainous land on 80.08 chs.

February 18,1906.

February 19: At 8h.14m.,a.m.,l.m.t.,I set off 39°00'N. on lat.arc,11°24'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.8-9-16 and 17.

Thence I run

N.0°02'W.,bet.secs.8 and 9.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Ascend over clay land.
10.00	Spur,projects W.
	Descend.
14.50	Hollow,50 ft.deep,course W.
	Ascend.
16.00	Ridge,bears N.W.and S.E.
	Descend over broken land.
40.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 8 on W.face, 9 on E.face,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.
51.00	Foot of descent,bears N.W.and S.E.
	Over level 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.4-5-8 and 9,marked
51/19	T.21 S.S.4 on N.E.,
	R.15 E.S.9 on S.E.,
	S.8 on S.W.,and
	S.5 on N.W.face,with 5 notches on S.and 4 notches on E. 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 level.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 51.00 chs.
	N.89°59'E.,on a random line,bet.secs.4 and 9.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.04	Intersect N.and S.line,7 lks.S.of the cor.of secs. 3-4-9 and 10.
	Thence I run
	S.89°56'W.,on a true line,
	Bet.secs.4 and 9.
	Descend over clay land.

Subdivisions of T.21 S.,R.15 E.

CHAINS

2.75 Hollow,50 ft.deep,course S.

Ascend.

9.75 Spur,projects S.

Descend.

11.00 Foot of descent,bears N.W.and S.E.

Over level land.

27.25 Wash,15 lks.wide,10 ft.deep,course S.

40.02 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 4 on N.face, 9 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.

From this cor.a sign board on the north side of the Rio Grande Western Railroad,marked "Sphinx",representing Sphinx Siding,bears S.11°15'W.,10.35 chs.dist.

42.00 Leave level land,bears N.and S.

Ascend.

45.50 Spur,projects S.

Descend.

50.00 Foot of descent,bears N.W.and S.E.

Over level land.

52.00 Telegraph line,bears N.42°10'W. and S.42°10'E.

52.79 Main line of the Rio Grande Western Railroad,bears N.42°10'W.and S.42°10'E.

53.08 Sphinx Siding,bears N.42°10'W.and S.42°10'E.

59.50 Road from Price to Greenriver,bears N.W.and S.E.

62.00 Wash,10 lks.wide,10 ft.deep,course S.E.

80.04 The cor.of secs.4-5-8 and 9.

Land,rolling and level.

Soil,clay,3rd.rate.

No timber.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	The north bdy.of the Tp.,being the Fourth Standard Parallel South,I run
	N.0°02'W.,on a true line,
	Bet.secs.4 and 5.
	Over level land.
23.00	Wash,10 lks.wide,10 ft.deep,course S.E.
27.25	Road from Price to Greenriver,bears N.W.and S.E.
30.08	Rio Grande Western Railroad,bears N.42°10'W.and S.42°10E.
30.80	Telegraph line,bears N.42°10'W.and S.42°10'E.
39.00	Leave level land,bears N.W.and S.E.
	Ascend over rolling clay 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.5 on W.face, 4 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.
128.57	Intersect Fourth Standard Parallel South,23.01 chs.E.of the Standard cor.of T.20 S.,R.15 E.,heretofore described. Set a sandstone,20x8x8 ins.,15 ins.in the ground,for closing cor.of secs.4 and 5,marked C C on S.,with 4 grooves on E.and 2 grooves on W.faces,and raise a mound of stone,2 ft.base,1½ ft.high,S.of cor.
	Pits impracticable.
	Land,level and rolling.
	Soil,clay,3rd.rate.
	No timber.
	February 19: At this cor.I set off 11°22'S.on decl.ard, and at 12h.14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 39°02'N.

	From the reestablished cor.of secs.5-6-31 and 32, heretofore described on the S.bdy.of the Tp.,I run
	N.0°03'W.,bet.secs.31 and 32.
	Gradual descent over rolling clay land.
40.00	Set a redwood post,3 ft.long,3 ins.sq.,with marked stone

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 31 on W. face,32 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.
56.00	Wash,50 lks.wide,15 ft.deep,course E.
80.00	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.29-30-31 and 32,marked T.21 S.,S.29 on N.E.
	R.15 E.S.32 on S.E.
	S.31 on S.W.,and
	S.30 on N.W.face,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.
	East,on a random line,bet.secs.29 and 32.
40.00	Set temp.¼ sec.cor.
80.02	Intersect N.and S.line,5 lks.S.of the cor.of secs. 28-29-32 and 33. Thence I run S.89°58'W.on a true line bet.secs.29 and 32 Ascend gradually over rolling clay land.
40.01	Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec cor.,marked ¼ S 29 on N.face,32 on S.face,dig pits,18x18x12 ins.,E.a and W.of post,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,N.of cor.
80.02	The cor.of secs.29-30-31 and 32.
	Land,rolling.
	Soil,clay loam,2nd.rate.
	No timber.

Subdivisions of T.21 S.,R.15 E.

CHAINS

Knowing the line bet.secs.30 and 31 will not close within limits on the W.bdy.of the Tp.,I run

West,on a true line,

Bet.secs.30 and 31.

Ascend gradually over rolling clay land.

40.00 Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 30 on N.face,31 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.

82.22 Intersect W.bdy.of Tp.,2.33 chs.,S.0°15'W.,of the cor. of secs.25-30-31 and 36,heretofore described.

Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for closing cor.of secs.30 and 31,marked C C T.21 S.,R.15 E.on E.

S.30 on N.,and

S.31 on S.face,with 1 groove on S.and 5 grooves on N.faces,dig pits,24x18x12 ins.,crosswise on each line, N.and S.of post,3 ft.and E.of post 7 ft.dist.,and raise, a mound of earth,4 ft.base, 2 ft.high E.of cor.

I destroy all marks on the cor.of secs.25-30-31 and 36, that pertain to R.15 E.

Land,rolling.

Soil,clay loam,2nd.rate.

No timber.

N.0°03'W.,bet.secs.29 and 30

Over rolling clay land.

40.00 Set a redwood post,3 ft.long,3 ins.sq.,with marked stone, 24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 30 on W. face,29 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.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground,for cor.of secs.19-20-29 and 30,

Subdivisions of T.21 S.,R.15 E.

CHAINS

marked T.21 S.S.20 on N.E.,

R.15 E.S.29 on S.E.,

S.30 on S.W.,and

S.19 on N.W.face,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.

February 19,1906.

February 20: 8h.14m.,a.m.,l.m.t.,I set off 38°58'N.on lat.arc,11°02'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.19-20-29 and 30.

Thence I run

N.89°58'E.,on a random line,bet.secs.20 and 29.

40.00 Set temp.¼ sec.cor.

80.04 Intersect N.and S.line,6 lks.N.of the cor.of secs. 20-21-28 and 29.

Thence I run

N.89°59'W.,on a true line,

Bet.secs.20 and 29.

Gradual ascent over rolling clay land.

15.50 Wash,50 lks.wide,15 ft.deep,course S.E.

28.00 Wash,40 lks.wide,15 ft.deep,course S.E.

40.02 Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 20 on N.face,29 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.

80.04 The cor.of secs.19-20-29 and 30.

Land,rolling.

Soil,clay loam,2nd.rate.

No timber.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Knowing the line bet. secs.19 and 30 will not close within limits on the W.bdy.of the Tp.,I run
	West,on a true line,
	Bet.secs.19 and 30.
	Ascend gradually over rolling clay land.
17.50	Wash,50 lks.wide,10 ft.deep,course N.E.
40.00	Set a charred cottonwood post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for ¼ sec.cor.,marked ¼ S 19 on N.face,30 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.
81.78	Intersect W.bdy.of Tp.,2.36 chs.,S.0°15'W.,of the cor. of secs.19-24-25 and 30,heretofore described.
	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for closing cor.of secs.19 and 30, marked C C T.21 S.,R.15 E.,on E.,
	S.19 on N.,and
	S.30 on S.face,with 2 grooves on S.and 4 grooves on N.faces,dig pits,24x18x12 ins.,crosswise on each line, N.and S.3 ft.and E.of post,7 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,E.of cor.
	I destroy all marks on the cor.of secs.19-24-25 and 30, that pertain to R.15 E.
	Land,rolling.
	Soil,clay loam,2nd.rate.
	No timber.
	N.0°03'W.,bet.secs.19 and 20.
	Ascend gradually over rolling land,
11.00	Wash,30 lks.wide,10 ft.deep,course E.
35.00	Begin abrupt ascent,bears E.and W.
40.00	Ridge,bears E.and W.
	Set a redwood post,3 ft.long,3 ins.sq.,with marked stone 24 ins.in the ground,for ¼ sec cor.,marked ¼ S 19 on W. face,20 on E.face,dig pits,18x18x12 ins.,N.and S.of post,

Subdivisions of T.21 S.,R.15 E.

3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft. high,W.of cor.

Descend.

51.00 Foot of descent,bears E.and W.

Over level 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.17-18-19 and 20,marked

T.21 S.S.17 on N.E.,

R.15 E.,S.20 on S.E.

S.19 on S.W.,and

S.18 on N.W.face,with 3 notches on S.and 5 notches on E. 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.

S.89°59'E.,on a random line,bet.secs.17 and 20.

40.00 Set temp.¼ sec.cor.

79.98 Intersect N.and S.line,9 lks.S.of the cor.of secs. 16-17-20 and 21.

Thence I run

S.89°57'W.,on a true line,

Bet.secs.17 and 20.

Ascend over rocky land.

7.25 Ridge,bears N.and S.

Descend.

10.00 Hollow,50 ft.deep,course N.

Ascend.

14.50 Spur,projects N.

Descend.

20.00 Foot of descent,bears N.E.and S.W.

Over level land.

39.99 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 17 on N.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	face,20 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.h high,N.of cor.
79.98	The cor.of secs.17-18-19 and 20.
90 59 98	Land,rolling.
	Soil,clay loam,2nd.rate.
	No timber.
	Mountainous land on 20.00 chs.

	Knowing the line bet.secs.18 and 19 will not close within limits on the W.bdy.of the Tp.,I run
	West,on a true line,
	Bet.secs.18 and 19.
	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 18 on N.f face,19 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.
80.56	Intersect W.bdy.of Tp.,3.33 chs.S.0°52'W.of the cor.of secs.13-18-19 and 24,heretofore described.
	Set a pine post,3 ft.long,4 ins.sq.,with marked stone, 24 ins.in the ground for closing cor.of secs.18 and 19.
	marked C.C T 21 S R 15 E on E.,
	S.18 on N.,and
	S.19 on S.face,with 3 grooves on N.and S.faces,
	dig pits,24x18x12 ins.,crosswise on each line,N.and S. 3ft.,and E.of post,7 ft.dist.,and raise a mound of earth 4 ft.base,2 ft.high,E.of cor.
	I destroy all marks on the cor.of secs.13-18-19 and 24 that pertain to R.15 E.
	Land,rolling.
	Soil,clay loam,2nd.rate.
	No timber.
	February 20: At this cor.I set off 11°00'S.on decl.arc,

Subdivisions of T.21 S.,R.15 E.

CHAINS

and at 12h.,14m.,l.m.t.,observe the sun on the meridian, the resulting lat.is 38°59'N.

N.0°03'W.,bet.secs.17 and 18.

Descend gradually over clay 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 18 on W.face, 17 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.

57.00 Begin abrupt descent,bearing E.and W.

63.75 Hollow,100 ft.deep,course E.

Ascend.

73.50 Road to Castle Valley,bears N.W.and S.E.

78.50 Clay spur,projects E.

Descend.

80.00 Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for cor.of secs.7-8-17 and 18,marked

93/57

T.21 S.,S.8 on N.E.,

R.15 E.,S.17 on S.E.,

S.18 on S.W.,and

S.7 on N.W.face,with 4 notches on S.and 5 notches on E. 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 loam on 57.00 chs.,2nd.rate.

balance clay,3rd.rate.

No timber.

Mountainous land on 23.00 chs.

N.89°57'E.,on a random line,bet.secs.8 and 17.

40.00 Set temp.¼ sec.cor.

80.04 Intersect N.and S.line,3 lks.N.of the cor.of secs. 8-9-16 and 17.

Thence I run

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	S.89°58'W.,on a true line,
	Bet.secs.8 and 17.
	Descend over clay land.
8.60	Enter Saleratus Wash,bank 25 ft.high,bears N.and S.
	Course of wash,S.
	Enter dense greasewood brush.
17.50	Leave Saleratus Wash,bank 20 ft.high,bears N.W.and S.E.
19.50	Wash,1.00 ch.wide,25 ft.deep,course N.E.
	Over level land.
40.02	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 8 on N.face 17 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.
51.00	Leave level land,and greasewood brush,bears N.W.and S.E.
	Ascend over rolling land.
80.04	The cor.of secs.7-8-17 and 18.
	Land,rolling and level.
	Soil,clay and sandy,3rd.rate.
	No timber. Undergrowth greasewood.
	Dense undergrowth on 42.40 chs.

	Knowing the line bet.secs.7 and 18 will not close within limits on the W.bdy.of the Tp.,I run
	West,on a true line,
	Bet.secs.7 and 18.
	Ascend over clay land.
12.00	Road to Castle Valley,bears N.W.and S.E.on top of ridge bearing N.W.and S.E.
	Descend.
18.50	Hollow,75 ft.deep,course S.E.
	Ascend.
20.00	Spur,projects S.E.
	Abrupt descent.

Subdivisions of T.21 S., R.15 E.

CHAINS

24.00 Foot of abrupt descent, bears N.W. and S.E.

Gradual descent.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 7 on N. face 18 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

41.50 Hollow, 75 ft. deep, course S.E.

Ascend.

62.00 Spur, projects N.

Abrupt descent.

70.00 Foot of abrupt descent, bears N. and S.

Over level sandy land.

79.71 Intersect W. bdy. of Tp., 3.93 chs. S. 0°15'W. of the cor. of secs. 7-12-13 and 18, heretofore described.

70/9.71

Set a sandstone, 15x10x8 ins., 10 ins. in the ground, for closing cor. of secs. 7 and 18, marked C C on E., with 4 grooves on S. and 2 grooves on N. faces, dig pits, 24x18x12 ins., crosswise on each line, N. and S. 3 ft., and E. of stone 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.

I destroy all marks on the cor. of secs. 7-12-13 and 18, that pertain to R.15 E.

Land, mountainous and level.

Soil, sandy and clay, 3rd. rate.

No timber.

Mountainous land on 70.00 chs.

N. 0°03'W., bet. secs. 7 and 8.

Descend over clay land.

19.75 Hollow, 100 ft. deep, course N.E.

Abrupt ascent over sandy land.

39.70 Spur, projects N.E.

Abrupt descent.

40.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for $\frac{1}{4}$

Subdivisions of T.21 S.,R.15 E.

CHAINS

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.

49.00 Foot of descent,bears N.W.and S.E.

Over level sandy land,through dense artemisia.

65.00 Wash,1.00 ch.wide,15 ft.deep,course N.E.

80.00 Set a sandstone,20x11x8 ins.,15 ins.in the ground,for cor.of secs.5-6-7 and 8,marked with 5 notches on S.and E.edges,and raise a mound of stone,2 ft.base,$1\frac{1}{2}$ ft.high, W.of cor.

Pits impracticable.

Land,rolling,level and mountainous.

Soil,clay and sandy,3rd.rate.

No timber, Undergrowth artemisia.

Mountainous land or dense undergrowth on 80.00 chs.

Feb.20,1906.

February 21,: At 8h.14m.,a.m.,l.m.t.,I set off 39°01'N.on lat.arc,10°41'S.on decl.arc,and determine a meridian with the solar,at the cor.of secs.5-6-7 and 8.

Thence I run

N.89°58'E.,on a random line,bet.secs.5 and 8.

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

80.06 Intersect N.and S.line,3 lks.N.of the cor.of secs. 4-5-8 and 9.

Thence I run

S.89°59'W.,on a true line,

Bet.secs.5 and 8.

Over level clay land.

40.03 Set a pine post,3 ft.long,3 ins.sq.,with marked stone,24 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ S 5 on N.face, 8 on S.face,dig pits,18x18x12 ins.,E.and W.of post.,3 ft dist.,and raise a mound of earth,$3\frac{1}{2}$ ft.base,$1\frac{1}{2}$ ft.high, N.of cor.

43.00 Leave level land,bears N.W.and S.E.

Subdivisions of T.21 S.,R.15 E.

CHAINS

Begin ascent.

54.35 Ridge,bears N.W.and S.E.

Abrupt descent.

55.50 Foot of descent,bears N.W.and S.E.

Over level sandy land,through dense greasewood brush.

78.00 Saleratus Wash,2.50 chs.wide,15 ft.deep,course S.

80.06 The cor.of secs.5-6-7 and 8.

3706/43.00 Land,rolling and level.

Soil,clay and sandy,3rd.rate.

No timber. Undergrowth greasewood.

Mountainous land or dense undergrowth on 37.06 chs.

Knowing the line bet.secs.6 and 7 will not close within limits on the W.bdy.of the Tp.,I run

West,on a true line,

Bet.secs.6 and 7.

Over level sandy land,through dense greasewood brush.

10.50 Leave level land and greasewood brush,bears N.W.and S.E.

Ascend over rolling clay land.

40.00 Set a sandstone,20x12x5 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.

Pits impracticable.

50.00 Spur,projects N.

Descend.

52.00 Hollow,50 ft.deep,course N.E.

Ascend.

54.00 Ridge,bears N.W.and S.E.

Abrupt descent.

62.00 Foot of abrupt descent,bears N.W.and S.E.

Over level sandy land.

79.00 Intersect W.bdy.of the Tp.,3.56 chs.S.0°31'W.,of the co of secs.1-6-7 and 12,heretofore described.

62/17. Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	ins.in the ground,for closing cor.of secs.6 and 7,marked T.21 S.R.15 E.on E., S.6 on N.,and S.7 on S.face,dig pits,24x18x12 ins.,crosswise on each line,N.and S.,3 ft.,and E.of post,7 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,E.of cor.
	I destroy all marks on the cor.of secs.1-6-7 and 12, that pertain to R.15 E.
	Land,level and rolling.
	Soil,sandy and clay,3rd.rate.
	No timber. Undergrowth greasewood.
	Dense undergrowth or mountainous land on 62.00 chs.
	The north bdy.of the Tp.,being the Fourth Standard Parallel South,I run
	N.0°03'W.,on a true line,
	Bet.secs.5 and 6.
	Over level sandy land,through dense greasewood brush.
17.00	Saleratus Wash,2.00 chs.wide,15 ft.deep,course S.E.
40.00	Set a sandstone,20x12x5 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.
46.00	Leave level land and greasewood brush,bears N.W.and S.E. Begin abrupt ascent.
53.00	Ridge,bears N.W.and S.E. Gradual descent over rolling land.
114.50	Road from Price to Greenriver,bears N.W.and S.E.
119.75	Rio Grande Western Railroad,bears N.42°10'W.and S.42°10'E.
120.50	Telegraph line,bears N.42°10'W.and S.42°10'E.
130.74	Intersect the Fourth Standard Parallel South,23.30 chs. E.of the standard cor.of secs.35 and 36,T.20 S.,R.14 E. which is a sandstone,10x5x5 ins.above ground,marked and witnessed as described by the surveyor general.

Subdivisions of T.21 S.,R.15 E.

CHAINS	
	Set a pine post,3 ft.long,4 ins.sq.,with marked stone,24 ins.in the ground,for closing cor.of secs.5 and 6, marked C C T.21 S.R.15 E on S.,
	S.5 on E.,and
	S.6 on W.face,with 5 grooves on E.and 1 groove on W.faces,dig pits,24x18x12 ins.,crosswise on each line, E.and W.,3 ft.,and S.of post.,7 ft.dist.,and raise a mound of earth,4 ft.base,2 ft.high,S.of cor.
	Land,level and rolling.
	Soil,sandy and clay,3rd.rate.
	No timber.
	Dnse undergrowth or mountainous land on 46.00 chs.

Connecting line.

From the stan.cor.of secs.35 and 36,heretofore described I run

East,along S.bdy.sec.36,T.20 S.,R.14 E.

	Ascend abruptly over clay land.
10.00	Ridge,bears N.and S.
	Descend.
18.50	Road from Price to Greenriver,bears N.W.and S.E.
19.60	Rio Grande Western Railroad,bears N.17°30'W.and S.17°30'E.
20.35	Telegraph line,bears N.17°30'W.and S.17°30'E.
23.30	The closing cor.of secs.5 and 6,heretofore described.
	Land,mountainous.
	Soil,clay,3rd.rate.
	No timber.
	Mountainous land on 23.30 chs.

February 21,1906.

General Description of T.21 S.,R.15 E.

This township on the west side of Green River and the surface is undulating ,draining towards the river. The soil is clay in the northern portion while about half of the soil of the southern portion is sandy or clay loam, capable of producing crops with irrigation. There is no water, timber, mineral or settlers found on this township.

Harry A. First
U.S.Deputy Surveyor.

Note:

There being no notary public or other officer authorized to administer oaths, within reasonable distar at the beginning or endin g of this survey, in order to save time and expense, I administer the necessary preliminary and final oaths to my assistants, for survey, resurvey and retracement under this portion of Contract No.291, myself.

Harry A. First
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 Harvey D. Heist, 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 subdivisions of Tps. 21-22 and 23 S., Rs. 15 and 17 E., S.L.B.& M., in the state of Utah. showing the respective capacities in which they acted:

Robert R. Raycraft, *Chainman.*

Claude Grosham, *Chainman.*

Daniel R. Adams *Moundman.*

Moundman.

Axman.

Axman.

Willmer E. Tomlinson *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in surveying all hose parts or portions of the subdivisions of Tps. 21-22 and 23 S., Rs. 15 and 17 E., S.L.B.& M., in the state of Utah.

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

Robert R. Raycraft, *Chainman.*

Claude Grosham *Chainman.*

Daniel R. Adams *Moundman.*

Moundman.

Axman.

Axman.

Willmer E. Tomlinson *Flagman.*

ubscribed and sworn to before me this 21st day of February, 1906.

SEAL

Harvey D. Heist
U.S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Survey solemnly swear that, in pursuance of a contract received from Edward H. Anderson, United States Surveyor General for Utah, bearing date 3rd. day of June, 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 laws United States, surveyed all those parts or portions of the subdivisions of Tps. 21-2 and 23 S., Rs. 15 and 17 E., of the Salt Lake B and meridian, in the state of Utah, which are represented in books C.F.J.M.Q.&U. 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 accordanc 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, an the foregoing are the original field notes of such survey.

Harvey D. Heist
United States Deputy Su

Subscribed by said Harvey D. Heist, and sworn to before me this 14th day of April, 1906

Thomas Bell
U.S. Surveyor General for Ut

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 18,

The foregoing field notes of the survey of the Subdivisional lines of Towns No. 21 South, Range No. 15 East of the Salt Lake Base and Meridian Utah,

executed by Harvey D. Heist and Earl V. Woolley under their contract No. 291, dated June 3, 1905, havin critically examined, and the necessary corrections and explanations made, the said field notes, a 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 off

United States Surveyor Ge

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4—679.

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C-O-R-R-E-C-T-I-V-E

FILED
AUG 15 1908

FIELD NOTES

To Book "U" Original Field Notes

OF THE SURVEY OF THE

S U B D I V I S I O N S

of

Township No. 21 South,

Range No. 15 East,

Of the Salt Lake Base and *Meridian,*

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Earl V. Woolley, *United States Deputy Surveyors*

under ~~his~~ their *Contract No.* 291, *dated* June 3, *190*5

Survey commenced July 18, *190*8

Survey completed July 18 *190*8

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BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

~~Earl Woolley,~~	Chainman
Walter Sturm,	"
Walter Sturm,	Moundman
Claude L.Heist,	Axman
Earl Woolley	Flagman

For preliminary affidavits see book 4. Tp. 23 S., R. 15 E.

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Volume
#
R0341

BOOK A-341

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Meanders Page

BOOK A-341

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; tl
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 establishm
of corners, according to the instructions given us, to the best of our skill and ability, in the survey

.....

.....*Moundm*

.....*Moundm*

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 corn
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 t
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

.....

.....

July 18: 1908: At 8h.06m.,a.m.,l.m.t.,I set off 38°57'N., on lat.arc,21°03'N.,on decl.arc,and determine a meridian with the solar,at the ¼ sec.cor.bet.secs.35 and 36, T.21 S.,R.15 E.,described in original field notes.

Thence I run

North W.,bet secs.35 and 36.

40.00 Intersect point of original cor.of secs.25-26-35 and 36, the original post has been recently destroyed,pits and mound of earth in good condition.

See original Notes Book 11 page 1

At exact point of original cor.,I set a sandstone, 18x13x4 ins.,12 ins.in the ground,for cor.of secs. 25-26-35 and 36,marked with 1 notch on S.and E.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.

No change of topgraphy on this line.

N.89°58'E.,on a random line,bet.secs.25 and 36.

40.00 Set temp.¼ sec.cor.

80.18 Intersect E.bdy.of Tp.3 lks.N.of the cor.of secs.25 and 36,described in original field notes.

Thence I run

S.89°59'W., on a true line,bet.secs.25 and 36

40.18 Point of original ¼ sec.cor.,original post broken off, pits and mound of earth in good condition.

See original Notes Book 11 page 6

At exact poin of original cor.,I set a sandstone,18x10x4 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ on N. 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.

80.18 The cor.of secs.25-26-35 and 36.

No change of topography on this line.

CORRECTIVE NOTES OF

SUBDIVISIONS OF T.21 S., R.15 E.

CHAINS

original to look page 10

The cor. of secs. 26-27-34 and 35, was erroneously marked, I remark as follows:

T 21 S S 26 on NE.,

R 15 E S 35 on SE.,

S 34 on SW., and

S 27 on NW. faces, with 2 notches on E. and 1 notch on S. edges.

---

original to look page 11

The ¼ sec. cor. between secs. 26 and 35 was erroneously marked, I remark as follows:

¼ S 26 on N. and S 35 on S. face.

July 18, 1908

Harvey M. Hirst
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.*

list of names and final oaths of assistants see book 11 Tp. S., R. 1 W. ....., *Chainman.*

....., *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, 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 11 Tp. No. 19 S., R. 1 W.

..... 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, Sept. 5, 190 5

The foregoing field notes of the corrective survey of the subdivision of Township No. 21 South, Range No. 15 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Earl V. Woolley under their contract No. 321, dated June 3, 1905, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the corrective surveys they describe, are hereby approved.

Thomas Bell

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

A-341

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4—679.

A.

BOOK A-341

FILED
DEC 31 1907

FIELD NOTES

OF THE SURVEY OF THE

Subdivisions of Township No. 20 South, Range No. 20 East.

Of the Salt Lake Base and *Meridian,*

Utah

AS SURVEYED BY

John T. Breckon, *United States Deputy Surveyor,*

der his Contract No. 299, *dated* September 9th, 1907

vey commenced October 24th, 1907

vey completed October 29th, 1907

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9-79-72

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

J. A. Harris Chainman

F. L. Buckson Chainman.

F. L. Buckson Moundman

Jos. Jackson Axman.

Jos Jackson Flagman.

BOOK A-341

INDEX DIAGRAM.

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Meanders Page

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Spr. Solar Aparatus, T. M. and A. M.

PRELIMINARY OATHS OF ASSISTANTS.

WE, F. L. Breckon and G. A. Harris

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 Subdivision of T. 20. S. R. 20. E. of the Salt Lake B & M Utah

G A Harris, Chainm.

F L Breckon, Chainm

Subscribed and sworn to before me this 24" day of October, 1907

Alden D Farnsworth
Notary Public

SEAL

I ~~WE~~, F. L. Breckon ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishm of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey Subdivision of T. 20. S. R. 20. E. of the Salt Lake B & M Utah.

F L Breckon, Mound...

, Mound...

Subscribed and sworn to before me this 24th day of October, 1907

Alden D Farnsworth
Notary Public

SEAL

~~WE~~, I. Jos. Jackson ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corn and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey Subdivision of T. 20. S. R. 20. E of the Salt Lake B & M Utah.

+ his mark } witness
Arthur A Taylor

Jos Jackson, Axm...

, Axm...

Subscribed and sworn to before me this 24" day of October, 1907

Alden D Farnsworth
Notary Public

SEAL

I, Jos. Jackson, do solemnly swear that I will well and t perform the duties of flagman according to instructions given me, to the best of my skill and ability, in survey of Subdivision of T. 20. S. R. 20 E. of the Salt Lake Utah.

+ his mark } witness
Arthur A Taylor

Jos. Jackson, Flagm...

Subscribed and sworn to before me this 24" day of October, 1907

Alden D Farnsworth
Notary Public

SEAL

6—151

Subdivision of T. 20 S. R. 20 E.

Chains.

Survey commenced Oct. 22nd 1907, and executed with a W. & L. E. Gurley light mountain transit with solar attachment, the horizontal limb having two verniers placed opposite to each other and reading to single minutes of arc;

The instrument was examined, tested on the true meridian at Salt Lake City, found correct; and approved by the Surveyor General for Utah, Oct. 22nd 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 Standard Cor. of Sec's 33 & 34, on the Fourth Standard Parallel S. latitude 39°.02 N. longitude 109°.43' W. I set off 39°.02' on the lat. arc, 11°.35' S. on the decl. arc; and at 3h 44m P.M. T. m.t. determine with the solar a true meridian, and mark a point thereof on a stake driven in the ground 2.35 ch. N. of the Cor.

Note, I test my transit at this point as it is the only accessible Cor. for a Polaris observation.

At 11h 18m P.M. T. m.t. I observe Polaris at upper culmination, in accordance with Manual of Instructions, and mark a point on the stake already set during solar observation, this mark falls 0.2 ins. W. of the mark determined by the solar.

Oct. 22nd 1907.

October 25th at 7h 44m A.M. T. m.t. I set off 39°.02 on the lat. arc; 11°.48' S. on the decl. arc; and mark a point in the meridian determined with the solar, by a mark on the stake already set, this point falls 0.2 ins. W. of the mark determined by the Polaris observation.

The solar apparatus, by P.M. and A.M.

2

Subdivision of T. 20 S. R. 20 E.

Chains

observations, defines positions for meridians, respectively about 0°.14" east and 0°.11" west of the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h 30m a. m. is N16°.20' W. the angle thus determined gives the Mag. decl. 16°.20' E.

At; 9h 44m a. m. l. m. t. I set off 39°.02' N on the lat. arc; 11°.5'.1 S on the decl. arc, and determine a true meridian with the solar; at the Standard Cor. of Secs 34 and 35, which is a red sandstone: 6×12×10 ins above ground, firmly set; marked and witnessed as described by the Surveyor General.

Thence I run

N0°.01' W bet. secs 34 & 35,

Enter scattering cedars and pines, ascend gradually,

3.50 Steeper ascent, over ledges and loose boulders,

16.20 Top of ridge, 500 ft. above Standard Cor, bears N.E. & S.W. descend gradually along west slope over loose boulders,

39.25 Point of ridge, bears E. & W, descend rapidly,

40.00 Set a sandstone 24×10×10 ins. 18 ins. in the ground, for 1/4 Sec. Cor. marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of Cor, Pits impracticable, from which

A cedar 18 ins. in diam. bears N13°.10' W 30 lks dist. marked 1/4 S 34 B T.

A pine 10 ins. in diam. bears N20°.15' E. 34 lks dist. marked 1/4 S 35 B T.

57.50 Head of gulch, course W. ascend.

72.40 Top of rocky ridge, bears E. & W. descend.

Subdivision of T. 20 S. R. 20 E.

over ledges and loose boulders.

80.00 Set a sandstone 18×10×8 ins. 12 ins. in the ground, for Cor. of Secs 26. 27. 34 & 35, marked 1 notch on S. and 2 notches on E. edge, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable. No bearing objects available.
Land, high mountains.
Soil, rocky, 4th rate.
Timber, Scattering scrub cedars & pines.
Mountainous land on 80.00 chs.

Oct. 25th At this Cor. I set off 11°.53 S on the decl. arc; and at 11h 44m l. m. t. observe the sun on the meridian, the resulting lat. is 39°.03'.

N 0°.01' W. bet. Secs 26 & 27.
Enter scattering cedars and pines. descend
3.80 Head of Canon, course W. ascend over loose boulders.
21.00 Top of ridge, bears E. & W. descend steep, over small ledges and loose boulders.
40.00 Set a sandstone 30×8×6 ins. 22 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. No bearing objects available.
44.50 Bottom of Canon 800 ft. deep. course W. ascend over ledges and boulders.
66.60 Top of ridge, bears E. & W. descend gradually
80.00 Set a sandstone 24×12×8 ins. 18 ins. in the ground, for Cor. of Secs 22. 23. 26 & 27, mark 2 notches on S. & E. edges; and raise a mound of stone 2 ft. base 1½ ft. high. W. of Cor. Pits impracticable.
No bearing objects available.
Land, high mountains.
Soil, rocky, 4th rate.
Timber, Scattering cedar and pine,
Mountainous land on 80.00 chains.

Oct. 25th 10

Subdivision of T. 20 S. R. 20 E.

Thence.	Oct. 26th at 8 h. 47 a. m. L. m. t. I set off 39°.02' W. on the lat. arc; 12°.11' D. on the decl. arc; and determine a true meridian with the Solar, at the Standard Cor. of Secs 3 3. and 34. which is a flint-stone 18x10x8 ins. above ground, firmly set; and marked and witnessed as described by the Surveyor General,
	Thence I run
	N 0°.02' W. bet. secs 33 & 34.
	Enter scattering cedars and pines, descend gradually over mesa.
2.30	Steeper descent.
14.50	Gulch, 60 ft. deep, course W. ascend gradually
34.00	Top of ascent; descend.
40.00	Set a sandstone 20x6x6 ins, 15 ins. in the ground, for 1/4 Sec. Cor. marked 1/4 on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high. W. of Cor. Pits impracticable. No bearing objects available.
40.30	Bottom of Gulch, course W. ascend.
54.00	Point of ridge, bears E. & W. descend 100 ft. to
57.00	Enter bottom and dense sage brush.
66.45	Dry wash, 1 ch. wide, 4 ft. deep, in bottom of Right-Fork of Thompson Canon, course S. W. Road in wash, bears N. E. & S. W.
71.20	Leave bottom and sage brush, ascend bluff 30 ft. high. bears N. E. & S. W.
72.00	Top of bluff, ascend gradually.
77.00	Point of ridge, 150 ft. high, bears E. & W. descend
80.00	Set a sandstone 18x12x6 ins, 12 ins. in the ground, for Cor. of Secs 27. 28. 33 & 34. marked 1 notch on S. and 3 notches on E. edge; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high. W. of Cor. Pits impracticable.
	from which
	A cedar 15 ins. in diam. bears N 60°.30 E. 44 lks dist. marked T 20 S R 20 E. S 27. B.T.
	A cedar 8 ins. in diam. bears S. 37° E. 50 lks dist. marked T 20 S R 20 E S 34. B.T.
	A cedar 10 ins. in diam. bears S 86°.35' W 42. lks

Subdivision of T. 20 S. R. 20 E.

Chains	
	dist: marked T. 20. S. R. 20. E S 33. 13. T.
	A cedar 10 ins. in diam. bears N 52°: 30' W
	76 lks dist: marked T. 20. S. R. 20 E. S. 28. B. T.
	Land, broken.
	Soil, gravelly & rocky. 3rd rate.
	Timber, scattering cedar and pine. dense
	sage brush on 14.20 chs.
	Mountainous land on 80.00 chs.
	East - on a random line bet: Secs 27 & 34.
40.00	Set temporary 1/4 Sec. Cor.
79.90	Intersect N. and S. line at 5 lks N. of the Cor.
	of Secs 26. 27. 34 & 35.
	Thence I run
	N 89° 58' W. on a true line bet: Secs 27 & 34.
	Enter scattering cedars and pines, descend
	along S. side of Canon over ledges and
	loose boulders
39.95	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,
	and raise a mound of stone 2 ft: base 1 ft:
	high, N. of cor. Pits impracticable, from which
	A cedar 8 ins. in diam. bears S 80° W. 18 lks.
	dist: marked 1/4 S. 34. B. T.
	A cedar 10 ins. in diam. bears N 2° W. 45 lks
	dist: marked 1/4 S. 27. B. T.
44.00	Point of ridge, bears N. W & S. E. descend carefully
51.70	Coal vein 3 ft: thick at foot of ledge 20 ft: high
	bears N. W & S. E.
60.00	Gulch. course W. from S. E. thence along gulch to
71.00	Right Fork Thompson Canon, course S. W.
	enter dense sage brush.
71.80	Dry wash, 50 lks wide, 4 ft: deep. course S. W.
	Road in wash. bears N. E & S. W.
75.00	Leave dense sage brush, ascend 100 ft: to
79.90	The cor. of Secs 27. 28. 33 & 34.
	Land, broken mountains.
	Soil, rocky. 4th rate.
	Timber, scattering cedars, dense sage brush
	on 41.00 chs.
	Mountainous land on 79.90 chains.

Oct 26th 190-.

[illegible]

[illegible]

at the Cor of Secs 27 28 33 & 34.

[illegible]

[illegible]

Subdivision of T. 20 S. R. 20 E. B.

Chains	
	Thence I run
	N 89° 07' W. on a true line bet. Sec's 22 & 27.
	Enter scattering cedars and pines, descend gradually along N. slope, over ledges and loose boulders.
15.00	Ascend gradually to
30.00	Ridge, bears N. & S. W. descend steep west slope.
39.96	Set a sandstone 20×8×6 ins. 15 ins. in the ground, for 1/4 Sec. Cor. marked 1/4 on N. face, and raise a mound of stones, 2 ft. base, 1½ ft. high, N. of Cor. Pits impracticable.
57.00	Gulch, 500 ft. below ridge, course S. W. ascend.
62.20	Rocky point of ridge, 300 ft. high, bears N. W. descend.
72.10	Dry wash, 100 ft. wide, 3 ft. deep, in bottom of Right Fork of Thompson Cañon, course S. ascend to
79.92	The Cor. of Sec's 21. 22. 27 & 28.
	Land, Broken mountains.
	Soil, rocky, 4th rate.
	Timber, Scattering scrub cedars and pines.
	Mountainous land on 79.92 chs.
	Oct. 27th 1907.
	Oct. 28th at 9h 44m a.m. l. m. t. I set off 39° 02' N. on the lat. arc; 12° 53' E. on the decl. arc; and determine a line meridian with the values at the Standard Cor. of Sec's 22 & 23. which is a sandstone 12×12×5 ins. above ground firmly set, marked and witnessed as described by the Surveyor General.
	Thence I run
	N. 0° 05' W. bet. sec's 22 & 23.
	Enter scattering cedars and pines, ascend.
6.15	Top of ridge, bears N. W. & S. E. descend over ledges and loose boulders.
18.00	Gulch 300 ft. deep, course E. ascend over ledges and boulders to
22.00	Point of ridge, bears E. & W. Leave timber. Thence along E. slope.
40.00	Set a sandstone 24×12×6 ins. 18 ins. in the ground for 1/4 Sec. Cor. marked 1/4 on W. face;

Subdivision of T. 20. S. R. 20. E.

Chains	
	and raise a mound of stone 2 ft. base, 1½ ft. high. W. of Cor. Pits impracticable
42.90	Point of ridge, bears E. & W. enter scattering cedars and pines descend over ledges and loose boulders.
56.80	Rocky gorge, 300 ft. deep, course E. ascend over ledges and boulders.
76.90	Ridge, bears E. & W. descend gradually to
80.00	Set a sandstone 22×12×5 ins. 16 ins. in the ground for Cor. of Secs 28. 29. 32 & 33. marked 1 notch on S. and 4 notches on E. edge; and raise a mound of stone, 2 ft. base, 1½ ft. high. W. of Cor. Pits impracticable
	Land, broken mountains.
	Soil, rocky. 4th rate.
	Timber, scattering scrub cedars and pines
	Mountainous land on 80.00 chs.
	East on a random line bet. secs 28 & 33.
40.00	Set temporary ¼ Sec. Cor.
79.96	Intersect N. & S. line 7 lks S. of Cor. of Secs 27. 28. 33 & 34.
	Thence I run
	S 89°.57' W. on a true line bet. secs 28 & 33.
	Enter scattering cedars and pines. ascend.
7.00	Coal croppings, bear N. E. & S. W.
8.00	Ridge 200 ft. above sec. cor. bears N. & S. descend.
9.00	Coal croppings, bear N. W. & S. E.
18.00	Head of rocky gulch, course S. E. ascend.
26.30	Coal croppings bear N. E. & S. W.
29.80	Divide between Right and Left Forks of Thompson Cañon, bears N. & S. descend.
32.70	Coal croppings, bear N. & S.
39.98	Set a sandstone 12×10×3 ins. 8 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, from which
	A cedar 24 ins. in diam. bears N 46°.15' E. 19 lks dist. marked ¼ S. 28. B. T.
	A pine 6 ins. in diam. bears S 41°.30' W. 27 lks

Subdivision of T. 20 S. R. 20 E.

chns.

dist: marked 1/4 S. 33. B.T.

In head of rocky gulch, course S.W.

41.50 Leave gulch, ascend gradually.

46.00 Top of ascent; descend gradually.

52.30 Descend over ledges.

57.50 Enter bottom of Left Fork of Thompson Canon, bears N. & S. Enter dense sage bush.

60.80 Dry wash, 2 chs wide, 4 ft. deep, course S.

65.00 Leave bottom and sage brush, ascend to

79.96 The cor. of secs. 28. 29. 32 & 33.

Land broken mountains.

Soil, gravelly and rocky, 4th rate.

Timber, scattering scrub cedars and pines.

Dense sage brush on 7.50 chs.

Mountainous land on 79.96 chs.

Oct. 28th 1907.

Oct. 29th at 8h. 14m. A.M. 7.m.t. I set off 39°.03' N. on the lat. arc; 13°.11' S. on the decl. arc; and determine a true meridian the solar

Thence I run

N0°.03' W. bet. secs 28 & 29.

Enter scattering cedars and pines, descend.

12.10 Rocky gulch, 200 ft. deep, course E.

18.00 Point of ridge, bears E. & W, descend 150 ft;

24.10 Enter bottom, and dense sage brush.

35.10 Dry wash 25 lks wide, 8 ft. deep, course S.E.

36.00 Leave bottom and sage brush, ascend.

40.00 Set a sandstone 20 x 12 x 6 ins. 15 ins. in the ground, for 1/4 Sec. Cor. marked 1/4 on W. face; and raise a mound of stone, 2 base, 1 1/2 ft. high, W. of Cor. Pits impracticable from which

A pine 7 ins. in diam., bears S46°.15' W. 55 dist: marked 1/4 S. 29. B.T.

A cedar 12 ins. in diam. bears S7°.45' E. 40 ; marked 1/4 S. 28. B.T.

42.30 Point of ridge, 150 ft. high, bears E. & W, des

46.40 ch, course E. ascend.

51.20 Point of ridge 100 ft. high, bears E. & W. descend

54.20 Enter bottom and dense sage brush.

Subdivision of T. 20 S. R. 20 E.

Chains	
66.75	Dry wash 1.00 ch. wide, 10 ft. deep, course S. E. dry bed of Left Fork of Thompson Canon Creek
70.10	Same wash, 1.00 ch. wide, 10 ft. deep, course S. W.
76.00	Leave bottom and sage brush, ascend gradually.
80.00	Set a sandstone 24x12x8 ins. 18 ins. in the ground, for Cor. of Secs 20. 21. 28 & 29, marked 2 notches on S. and 4 notches on E. edge; and raise a mound of stone 2 ft. base, 1½ ft. high. W. of Cor. Pits impracticable. No bearing objects available. Land, Broken mountains. Soil, Gravelly and rocky, 4th rate. Timber, scattering cedars and pines, dense sage brush on 34.70 chs. Mountainous land on 80.00 chs.
	N 89° 57' E on a random line bet. Secs 21 & 28.
40.00	Set temporary ¼ Sec. Cor.
79.94	Intersect N. & S. line 7 lks N. of Cor. of Secs 21. 22. 27 & 28. Thence I run West on a true line bet. Secs 21 & 28. Enter scattering cedars and pines, ascend steep side of mountain over ledges and loose boulders.
27.60	Top of divide between Right and Left Forks of Thompson Canon 800 ft. above Sec. Cor. bears N. & S. descend steep slippery slope.
39.97	Impossible to set a Cor. to stand in place as the point for ¼ Sec. Cor. falls on steep rocky slope.
49.70	Foot of steep slope, head of gulch, course N. W.
49.94	Set a sandstone 16x12x5 ins. 12 ins. in the ground, for Witness Cor. to ¼ Sec. Cor. marked W. C. ¼ 21 on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of Cor. Pits impracticable, from which A cedar 18 ins. in diam. bears S 58° 15' W. 26 lks dist. marked W. C. ¼ S. 28. 13. T. A cedar 15 ins. in diam. bears N 11° 45' W 13 lks dist. marked W. C. ¼ S. 21. B. T.

Subdivision of T. 20 S. R. 20 E

thence along N. slope.
62.20 Point of ridge, bears N. W & S. E. descend steep slope, over loose boulders.
69.30 Enter bottom of Left Fork of Thompson Canon, bears N. & S. leave scattering cedars and pines enter dense sagebrush.
79.30 Dry bed of Left Fork of Thompson Canon Creek, 30 lks wide 8 ft. deep, course S. E. leave bottom and sage brush, ascend to
79.94 The cor. of Secs 20.21.28 & 29.
Land, broken mountains.
Soil, rocky, 4th rate.
Timber, scattering cedars and pines on 69.30
Dense sage brush on 10.00 chs.
Mountainous land on 79.94 chs.
Oct 29th 1907.

General Description.

The part of this township embraced in my survey is broken and high mountains.

The timber consists of scattering scrub cedars and pines of but little commercial value.

The only water is from seeps in the bottom of the wash in the N. W 1/4 of Sec. 27, which sinks a few hundred feet and sinks, also in the wash in the Left Fork of Thompson Canon in the N. W 1/4 of Sec. 28.

Henry T. Ballard et al have one man at work developing a vein of coal of commercial value in the N. W 1/4 of Sec. 27, this vein is 5 ft. thick, of good clean bituminous coal. The development work consists of two tunnels 50 ft. apart and running northerly, with crosscuts connecting said tunnels. The total amount of work done by tunnels, crosscuts and drifts over 800 feet at a cost of not less Seven thousand dollars.

The legal subdivisions are

6.
12

Subdivision of T. 20 S. R. 20 E.

are returned by me as coal lands, viz.
All of Sec. 27. N½, S.E¼ & E½ of S.W¼
Sec. 28. E½ and E½ of N.W¼ Sec. 34.
There are no other minerals found in
this part of this township.

John T. Breckon
U. S. Deputy Surveyor.

Volume
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R0341

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by John T. Breckon, 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 of T. 20. S. R. 20. E. of the Salt Lake B & M. Utah. showing the respective capacities in which they acted:

J. A. Harris, *Chainman.*
F. L. Breckon, *Chainman.*
, ~~*Moundman.*~~
F. L. Breckon, *Moundman.*
, ~~*Axman.*~~
Jos. Jackson, *Axman.*
Jos. Jackson, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John T. Breckon, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivision of T. 20. S. R. 20. 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.

F. L. Breckon, *Chainman.*
J. A. Harris, *Chainman.*
F. L. Breckon, *Moundman.*
, *Moundman.*
Jos. Jackson, *Axman.*
A. Taylor, *Axman.*
mark Jos. Jackson, *Flagman.*
A. Taylor

Subscribed and sworn to before me this 30th day of October, 1907

Aldew D. Farnsworth
Notary Public

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John T. Breckon, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 9th day of September, 1907, 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivisions of Township 20 South, Range 20 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 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.

John T. Breckon
United States Deputy Surveyor.

Subscribed by said John T. Breckon, and sworn to before me this 7th day of December, 1907

Thomas Hull
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 6, 1908

The foregoing field notes of the survey of the subdivision of fractional township No. 20 South, Range No. 20 East of the Salt Lake Base and Meridian, Utah,

executed by John T. Breckon under his contract No. 299, dated September 9, 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 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.

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BOOK A-341

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FIELD NOTES

OF THE SURVEY OF THE

Fourth Standard Parallel South Through Range 17 East.

Of the Salt Lake Base and *Meridian,*

Utah

AS SURVEYED BY

John T. Breckon, *United States Deputy Surveyor,*

nder his Contract No. 299, *dated* Sept. 9th, *1907*

urvey commenced November 10th, *1907*

urvey completed November 12th, *1907*

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High 3-40-00

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

F. L. Brockow Chainman

Edwin Dufford Chainman

Arlo B. Moss Chainman

W. K. Coleman Chainman

F. L. Brockow Moundman

Edwin Dufford Axman

William Brock Flagman

BOOK A-341

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PRELIMINARY OATHS OF ASSISTANTS.

WE, H. L. Breckon, Edwin Dufford, Orla B. Moss & W. K. Coleman 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 assi... measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surve... Fourth Standard Parallel S. through Range 17 East S. L. B & M. Utah.

H. L. Breckon
Edwin Dufford, Chain...
Orla B. Moss
W. K. Coleman, Chain...

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

Albert E. Peck
Notary Public

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

~~WE~~, I, H. L. Breckon ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establish... of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the surve... the Fourth Standard Parallel S. through Range 17 East S. L. B & M. Utah.

H. L. Breckon, Mound...
..., Mound...

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

Albert E. Peck
Notary Public

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

~~WE~~, I, Edwin Dufford ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of ... and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the surve... the Fourth Standard Parallel S. through Range 17 East S. L. B & M. Utah.

Edwin Dufford, Axm...
..., ...

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

Albert E. Peck
Notary Public

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

I, William Brock, do solemnly swear that I will well and t... perform the duties of flagman according to instructions given me, to the best of my skill and ability, in survey of the Fourth Standard Parallel S. through Range 17 East S. L. B & M. Utah.

William Brock, Flagm...

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

Albert E. Peck
Notary Pu...

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

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Fourth Standard Parallel S. through R. 17 E.

Survey commenced Nov. 10th 1907, and executed with a W. & L. E. Gurley mountain transit solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other and 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, found correct and was approved by the Surveyor General for Utah. Oct 22nd 1907.

I examine the adjustments of the ins., 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;

I begin at the Standard 1/4 Sec. Cor. on the south boundary of Sec. 33. T. 20. S. R. 17 E. which is a sandstone 12x16x12 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General. Latitude 39°.02' N. longitude 110°.04' W.

3h 44m P.M. L.m.t. I set off 39°.02' N. on the lat. arc; 16°.59' S. on the decl. arc; and determine a true meridian with the solar and mark a point thereof, on a stake driven firmly in the ground 5. chs. N. of the Cor.

At 10h 11m P.M. L.m.t. I observe Polaris at upper culmination, in accordance with instructions in the Manual, and mark the thus determined, by a tack in the stake already set 5.00 chs. N. of my station, on which the meridian falls 0.4 ins. west of the mark determined by the solar.

Nov. 10th 1907

Fourth Standard Parallel S. through R. 17. E.

Chains	
	Nov. 11th At 8h 44m A. M. l. m. t. I set off 39°02' N. on the lat. arc; 17°12' S. on the decl. arc; and determine a true meridian with the solar and mark the point thus determined, on the stake set yesterday at 5.00 chs. N. of my station, this mark falls 0.4 ins. west of the meridian established by the Polaris observation.
	The solar apparatus by P. M. and A. M. observations, defines positions for meridians, respectively about 0°21" east and 0°21" west of the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 9h 00m A. M. is N. 16°15' W. the angle thus determined gives the magnetic decl. 16°15' E.
	At this station I turn off from the meridian an angle of 90° toward the east and run
	East along the S. boundary of Sec. 33.
	Ascend gradually.
1.80	Dry wash 1.50 chs. wide. 15 ft. deep, course S. W.
20.00	Foot of steep ascent.
28.30	Foot of sandstone ledge, 100 ft. high, bears N. & S.
28.50	Top of ledge.
30.15	Foot of ledge 75 ft. high. bears N. & S.
30.25	Top of ledge.
32.25	Foot of ledge 50 ft. high, bears N. & S.
32.30	Top of ledge.
32.50	Top of ridge, 500 ft. above 1/4 Sec. Cor. bears N. & S. enter scattering cedars and pines, descend gradually over loose boulders.
	Difference between measurements of 40.00 chs by two sets of chainmen is 6 lks. position of middle point.
	By 1st set 40.03 chs.
	By 2nd set 39.97 chs. the mean of which is

Fourth Standard Parallel S. through R. 17 E.

Chains.	
40.00	Set a sandstone 18×12×10 ins. 12 ins. in the ground for Standard Cor. of Secs. 33 & 34, marked S.C. on N. with 3 grooves on E. & W. faces; and raise a mound of stone, 4 ft. base, 2 ft. high, N. of Cor. Pits impracticable, from which A pine 8 ins. in diam. bears N 77° 45' N. 49 lks dist. marked T. 20 S. R. 17 E. S. 33. B. T. A cedar 6 ins. in diam. bears N 75° 12' E. 34 lks dist. marked T. 20 S. R. 17 E. S. 34. B. T. Land, mountainous. Soil, Rocky, 4th rate. Timber, scattering cedars and pines. Mountainous land on 40.00 chs. Nov. 11th At this cor. I set off 17° 15' S. on the decl. arc; and at 11h 44m A. M. T. m. t. I observe the sun on the meridian; the resulting lat. is 39° 02'
	East along the South boundary of Sec. 34. Enter scattering cedars and pines, descend gradually over rocks and loose boulders.
22.75	Head of rocky gulch, 100 ft. deep, 6 chs. wide, course N. ascend to
27.00	Rocky point bears N & S, descend,
30.00	Sandstone ledge, 25 ft. high, bears N & S.
37.10	Gulch 50 ft. deep, 3 chs wide, course N. ascend.
38.60	Point of ridge, bears N & S, descend.
39.50	Dry wash, 30 lks wide, in bottom of Cañon course N. W.
	Difference between measurements of 40.00 chs. by two sets of chainmen is 4 lks, position of middle pond By 1st set 40.02 chs. By 2nd set 39.98 chs. the mean of which is
40.00	Set a sandstone 30×6×6 ins. 22 ins. in the ground, for Standard ¼ Sec. Cor. marked S.C. ¼ on N. face, and raise a mound of stone 4 ft. base, 2 ft. high, N. of Cor. Pits impracticable. No bearing objects available. Ascend over loose rocks and boulders along

Fourth Standard Parallel S. through R. 17. E.

S. slope, bears scattering cedars and pines.
54.25 Point of bluff, bears N. & S. descend.
57.00 Bottom of same cañon, course S.W. ascend
[illegible] Foot of ledge 50 ft. high, bears N.E. & S.W.
[illegible] Top of ledge.
62.20 Point of ridge, bears N.E. & S.W. ascend gradually.
78.00 Steeper ascent.
Difference between measurments of 80.00 chs by two sets of chainmen is 6 lks, position of middle point.
By 1st set 80.03 chs.
By 2nd set 79.97 chs. the mean of which is
80.00 set a sandstone 14×12×8 ins. 9 ins. in the ground, for Standard Cor. of Sec's 34 & 35.
Marked S.C. on N. with 2 grooves on E. and 4 grooves on W. face; and raise a mound of stone 4 ft. base, 2 ft. high. N. of Cor. Pits impracticable.
Land, mountainous.
Soil, rocky, 4th rate.
Timber, scattering cedars and pines on 40.00 chs
Mountainous land on 80.00 chs.

Nov. 11th 1907.

Nov. 12th at 8h 44m A.M. l.m.t. I set off 37°02' N. in the lat. arc; 17°29' S. on the decl. arc; and determine a true meridian with the solar.
Entering the S. boundary of Sec. 35.
ascend 50 ft. to
[illegible] Top of ridge, bears N. & S. descend.
[illegible] Bottom of cañon 100 ft. deep. course N.W. ascend
[illegible] Ridge, bears N. & S. descend gradually.
Difference between measurments of 40.00 chs. by two sets of chainmen is 2 lks, position of middle point.
By 1st set 39.99 chs.
By 2nd set [illegible] chs. the mean of which is
[illegible] set a sandstone 27×9×6 ins. 20 ins. in the ground for Standard 1/4 Sec. Cor. marked S.C. on W. face; and raise a mound of stone 2 ft. base, 2 ft. high N. of Cor. Pits impracticable.
[illegible] Bluff, course S.W. enter scattering cedars and pines, ascend steep side of ridge over rock.

Fourth Standard Parallel S. through R. 17 E.

and loose boulders.
69.90 Sandstone ledge, 40 ft. high, bears N. & S.
73.00 Top of ridge, 750 ft. above 1/4 Sec. Cor. bears N. & S. descend gradually.
78.50 Head of Gulch, 40 ft. deep. Course N. E. ascend.
Difference between measurements of 80.00 chs. two sets of chainmen is 8 lks position of middle point.
By 1st set 79.96 chs.
By 2nd set 80.04 chs. the mean of which is
80.00 Set a sandstone 24 x 12 x 5 ins. 18 ins. in the ground, for Standard Cor. of Secs 35 & 36, marked S.C. on N. with 1 groove on E. and 3 grooves on W. face; and raise a mound of stone 4 ft. base 2 ft. high, N. of Cor. Pits impracticable. from which
A cedar 12 ins. in diam. bears N 81° E. 59 lks dist. marked T. 20. S. R. 17. E. S. 36. B. T.
No other bearing objects available.
Land, mountainous.
Soil, rocky. 4th rate.
Timber, scattering cedars and pines on 37.60 chs
Mountainous land on 80.00 chains

East - along the S. boundary of Sec. 36.
Enter scattering cedars and pines, ascendally.
1.50 Point of ridge, bears N. & S. descend gradually.
12.80 Head of rocky gulch, 3 chs wide, 100 ft. deep. course N. ascend gradually.
Difference of measurement of 40.00 chs. by two sets of chainmen is 2 lks position of middle point.
By 1st set 39.99 chs.
By 2nd set 40.01 chs. the mean of which is
40.00 Set a sandstone 18 x 10 x 4 ins. 12 ins. in the ground for Standard 1/4 Sec. Cor. marked S.C. 1/4 on N. face; and raise a mound of stone 2 ft. base, 1 1/2 ft. high, N. of Cor. Pits impracticable from which
A pine 8 ins. in diam. bears N 27° 30' E. 21 lks dist. marked S.C. 1/4 S. 36. B. T.

Fourth Standard Parallel S. through R. 17 E.

Chains
42.25 Divide between Coal and Horse Cañons, bears N. E. & S. W. thence along S. slope,
[illegible] Head of gulch, course S. ascend.
[illegible] Top of sandstone ledge, 40 ft. high, bears N. W. & S. E. ascend gradually.
Difference of measurement of 80.00 chs by two sets of chainmen is 8 lks, position of middle point by 1st set 79.96 chs.
By 2nd set 80.04 chs, the mean of which is
80.00 set a sandstone 24 x 8 x 8 ins. 18 ins in the ground, for Standard Cor. of Tp. 20. S. R. 17 & 18 E. marked S. C. on N. with 6 grooves N. E. & W. faces, and raise a mound of stone 3 ft. base, 2 ft. high. N. of Cor. Pits impracticable from which
A pine 10 ins in diam, bears N 79° W. 220 lks dist. marked T. 20. S. R. 17. E. S. 36. B. T.
No other bearing trees available.

Land, mountainous.
Soil, Rocky, 4th rate,
Timber scattering cedar and pines,
Mountainous land on 80.00 chs.

Nov. 12th 1907.

General description.

The part of the Fourth Standard Parallel embraced in my survey is over rough and broken sandstone mountains, totally unfit for agriculture.
There is no water, and no indications of coal or other mineral on this line.
The timber consists of scrub cedars and pines about little commercial value.

John T. Breckon
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 John T. Breckon, 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 the Fourth ondard Parallel S. through Range 17 East S.L.B.&M. Utah, owing the respective capacities in which they acted:

F. L. Breckon, Chainman
Edwin Dufford, Chainman.
Arlo B. Moss, Chainman
W. K. Coleman, Chainman.
F. L. Breckon, Moundman.
~~Moundman.~~
Edwin Dufford, Axman.
~~Axman.~~
William Brock, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John T. Breckon, United States Deputy Surveyor, in surveying all ose parts or portions of the Fourth Standard Parallel South, through Range 17 East

of the Salt Lake Base and meridian, State of Utah, which are represented the foregoing field notes as having been surveyed by him and under his direction; and that said survey as 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 eneral for Utah

F. L. Breckon, Chainman
Edwin Dufford, Chainman.
Arlo B. Moss, Chainman
W. K. Coleman, Chainman.
F. L. Breckon, Moundman.
~~Moundman.~~
Edwin Dufford, Axman.
~~Axman.~~
William Brock, Flagman.

ubscribed and sworn to before me this 15th day of Nov, 1907

Albert E. Peck
Notary Public

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John T. Breckon, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of the 9th day of Sept., 1907, 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Fourth Standard Parallel, S. through Range 17 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 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.

John T. Breckon
United States Deputy Surveyor.

Subscribed by said John T. Breckon, and sworn to before me this 31st day of December, 1907

Thomas Hull
U.S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah. May 6, 1908

The foregoing field notes of the survey of the Fourth Standard Parallel South through Range 17 East of the Salt Lake Base and Meridian, Utah,

executed by John T. Breckon
under his contract No. 299, dated Sept. 9, 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 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.

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BOOK A-341

FIELD NOTES

OF THE SURVEY OF THE

East Boundary of Township No. 20. South. Range No. 17. East.

Of the SALT LAKE BASE and *Meridian,*

Utah,

AS SURVEYED BY

John T. Breckon, *United States Deputy Surveyor,*

Under his Contract No. 209, *dated* Sept. 9th, 1907

Survey commenced November 13th, 1907

Survey completed November 13th, 1907

6—121

Length 6 00 00'

BOOK 4-341

NAMES AND DUTIES OF ASSISTANTS.

F. L. Breckon Chainman

Edwin Dufford Chainman

F. L. Breckon Moundman

Arlo B. Moss Axman

W. K. Coleman Flagman

BOOK A-341

INDEX DIAGRAM.

Township 20 S., *Range* 17 E.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, F. L. Buckson and Edwin Dufford

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 the east boundary of T. 20 S. R. 17 E. S. L. B. & M. Utah

F. L. Buckson, Chainman

Edwin Dufford, Chainman

Subscribed and sworn to before me this 10th day of Nov., 1907

Albert E. Peck

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

Notary Public

~~WE~~, I, F. L. Buckson ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of the east boundary of T. 20 S. R. 17 E. S. L. B. & M. Utah

F. L. Buckson, Moundman

, Moundman

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

Albert E. Peck

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

Notary Public

~~WE~~, I, Arlo B. Moss ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axmen 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 the east boundary of T. 20 S. R. 17 E. S. L. B. & M. Utah.

Arlo B. Moss, Axman

, Axman

Subscribed and sworn to before me this 10th day of Nov., 1907

Albert E. Peck

SEAL

MY COMMISSION EXPIRES MAY 1ST. 1910.

Notary Public

I, W. K. Coleman, 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 the east boundary of T. 20 S. R. 17 E. S. L. B. & M. U

W K Coleman, Flagman

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

Albert E. Peck

SEAL

Notary Public

MY COMMISSION EXPIRES MAY 1ST.

6—151

East-bound of T. 20 S. R. 17 E.

Chains

Survey commenced November 18th 1907, with a W. & L. E. Gurley light-mountain transit with solar attachment, the horizontal limb being provided with two opposite verniers reading to 1' of arc;
I begin at the Stand'd Cor. of Tp. 20 S. Rs 17 & 18 E. established by me & hereto fore described.
Latitude 39°.02' N. Longitude 110°.00' W.
At this cor. at 11h. 44m a. m. l. m. t. I set off 39°.02' on the lat. arc; 17°48' S. on the decl. arc, and determine a true meridian with the solar.
Thence I run
North between Sec's 31 & 36.
Enter scattering cedars and pines, ascend
4.40 Top of ridge, bears N.W. & S.E. descend gradually along E. slope.
18.00 Head of gulch, course E. ascend gradually.
38.20 Divide between Coal and Horse Cañons, bears N.E. & S.W. thence along W. slope.
40.00 Set a sandstone 16x8x6 ins. 12 ins. in the ground, for 1/4 Sec. Cor. marked 1/4 on W. face, raise a mound of stone 2 ft. base, 1½ ft. high. W. of Cor. Pits impracticable, from which
A pine 10 ins. in diam. bears S 65°.35' W. 37 lks dist. marked 1/4 S 36 B T.
A cedar 8 ins. in diam. bears N 44°.30' E. 33 lks dist. marked 1/4 S. 31 B T.
54.30 Divide between Coal and Horse Cañons, bears N.W. & S.E. thence along E. slope.
79.00 Head of gulch, 20 ft. deep, course E.
80.00 Set a sandstone 18x12x3 ins. 12 ins. in the ground, for Cor. of Sec's 25. 30. 31 & 36. make 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, from which
A pine 10 ins. in diam. bears N 1° E. 9 lks marked T. 20 S. R. 18 E S. 30. B.T.
A pine 8 ins. in diam. bears S 87°.15' E. 29 lks dist. marked T 20 S. R. 18 E. S. 31 B T

East boundary of T. 20 S. R. 17 E.

Trees. A cedar 12 ins. in diam. bears S 75° 30' W 26 lks dist: marked T 20 S R 17 E S 36. 13 T
A pine 12 ins. in diam. bears N 33 W. 17 lks dist: marked T 20 S R 17 E S 25. 13 T
Land, Mountainous.
Soil, sandy and rocky 2nd and 4th rate.
Timber, scattering cedars and pines.
Mountainous land on 80.00 Chs.
November 13th 1907.

General Description.

This line is all on the top of a high ridge of mountain dividing Coal and Horse Canons.

There is no water, coal or other minerals on this line.

The timber consists of scrub cedars and pines of but little commercial value.

John T. Brecken
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 John T. Breckon, 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. 20 S. R. 17 E. S. L. B & M. Utah. showing the respective capacities in which they acted:

F. L. Breckon, *Chainman.*
Edwin Dufford, *Chainman.*
F. L. Breckon, *Moundman.*
, ~~*Moundman.*~~
Arlo B. Moss, *Axman.*
, ~~*Axman.*~~
W. K. Coleman, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John T. Breckon, United States Deputy Surveyor, in surveying all those parts or portions of the east boundary of T. 20 S. R. 17 E of the Salt Lake Base & 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

F. L. Breckon, *Chainman.*
Edwin Duffford, *Chainman.*
F. L. Breckon, *Moundman.*
, *Moundman.*
Arlo B. Moss, *Axman.*
, *Axman.*
W. K. Coleman, *Flagman.*

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

Albert E. Peck
Notary Public

SEAL

6—151

MY COMMISSION EXPIRES MAY 1ST. 1910.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John T. Breckon, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 9th day of Sept., 1907, 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the East boundary of Township 20 South, Range 17 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 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.

John T. Breckon
United States Deputy Surveyor.

Subscribed by said John T. Breckon, and sworn to ~~before me~~ this 3rd day of December, 1907

Thomas Hull
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 6, 1908.

The foregoing field notes of the survey of the fractional East Boundary of Township No. 20 South, Range No. 17 East of the Salt Lake Base and Meridian, Utah,

executed by John T. Breckon
under his contract No. 299, dated Sept. 9, 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 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.

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D.

BOOK A-341

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FIELD NOTES

OF THE SURVEY OF THE

Subdivisions of Township No. 20. South. Range No. 17. East.

Of the Salt Lake Base and *Meridian,*

Utah

AS SURVEYED BY

John T. Breckon, *United States Deputy Surveyor,*

nder his Contract No. 299, *dated* Sept. 9th., *1907*

rvey commenced November 14th, *1907*

rvey completed November 15th, *1907*

6—151

Lat 8.79-90

BOOK A-341

NAMES AND DUTIES OF ASSISTANTS.

F. L. Breckon Chainman

Edwin Duffard Chainman

F. L. Breckon Roundman

Arlo B. Moss Axman

W. K. Coleman Flagman

6—151

BOOK A-341

INDEX DIAGRAM.

Township [illegible] *Range* [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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PRELIMINARY OATHS OF ASSISTANTS.

WE, F. L. Breckon and Edwin Du[illegible]

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level [illegible] chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; [illegible] 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 [illegible]

Subdivisions of T. 20 S. R. 17 E. S. L. B & M. Utah.

F. L. Breckon, Chainm[illegible]

Edwin Dufford, Chain[illegible]

Subscribed and sworn to before me this 10th day of Nov, 1907.

Albert E. Peck
Notary Public
MY COMMISSION EXPIRES MAY 1S[illegible]

SEAL

~~WE,~~ I, F. L. Breckon ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundmen in the establis[illegible] of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey [illegible]

the Subdivisions of T. 20 S. R. 17 E. S. L. B & M. Utah.

F. L. Breckon, Moundm[illegible]

, Mound[illegible]

Subscribed and sworn to before me this 10th day of Nov, 1907.

Albert E. Peck
Notary Public
MY COMMISSION EXPIRES MAY 1ST. 19[illegible]

SEAL

~~WE,~~ I, Orlo B. Moss ~~and~~

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

the Subdivision of T. 20 S. R. 17 E. S. L. B & M. Utah.

Orlo B. Moss, Axm[illegible]

, Ax[illegible]

Subscribed and sworn to before me this 10th day of Nov, 1907.

Albert E. Peck
Notary Public
MY COMMISSION EXPIRES MAY 1ST. 1910.

SEAL

I, W. K. Coleman, do solemnly swear that I will well and [illegible] perform the duties of flagman according to instructions given me, to the best of my skill and ability, in [illegible] survey of the Subdivision of T. 20 S. R. 17 E. S. L. B & M. Ut[illegible]

W. K. Coleman, Flagm[illegible]

Subscribed and sworn to before me this 10th day of Nov., 1907.

Albert E. Peck
Notary Pu[illegible]
MY COMMISSION EXPIRES MAY 1ST. 1[illegible]

SEAL

6—161

Subdivision of T. 20 S. R. 17 E.

Survey commenced Nov 14th 1907.
executed with a W. & L. E. Gurley light-mountain transit with solar attachment.
The horizontal limb is provided with two double verniers reading to one minute of arc; which is also the least count of the latitude and declination arcs.
The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and approved by the Surveyor General of Utah, Oct. 22nd 1907.
At the Cor. of Secs 35 & 36. on the Fourth Standard Parallel S. established by me on Nov. 12th 1907. and heretofore described,
At 8h 44m a. m. L. m. t. I set off 59°.02' on the lat. arc; 18°.01' E. on the decl. arc; and determined a true meridian with the solar, and to check this solar observation I turn an angle of 90°.01' to the right to the Standard 1/4 Sec. Cor. on the south side of Sec. 36, and find that this observation checks with the line run by observation on Polaris.
Thence I run
N 10°.01' W between Secs 35 & 36.
Enter scattering cedars and pines, descend over loose rocks and boulders.
3.00 Gulch, course N. E. descend gradually along E. slope of ridge.
31.50 Point of ridge, bears N E & S. W. descend rapidly.
59.00 Head of gulch, course N. E. ascend.
40.00 Set a sandstone 18x10x6 ins. 12 ins. in the ground for 1/4 Sec. Cor. marked 1/4 on W. face, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable. No bearing objects available.
42.90 end of ridge, bears N. E & S. W. descend.
50.70 Bottom of Coal Canon, 1000 ft below Standard Cor. course N. W.
Coal vein 4 ft. thick, exposed in bottom of

Subdivision of T. 20. S. R. 17. E.

Chains	
	of Canon, ascend.
55.67	Top of sandstone ledge, 40 ft. high, bears N.W. & S.E.
61.00	Top of ridge 200 ft. high, bears E. & W.
	Mouth of tunnel No. 1. bears S 40° W. 5.00 chs.
	Mouth of tunnel No. 2. bears S 61° W. 7.60 chs.
	N. E. Cor. of log cabin bears S 48° 15' W 6.80 chs.
	Mouth of tunnel No. 3. bears S 75° 30' W. 10.00 chs.
	descend gradually.
65.80	Top of ledge 40 ft. high, bears N.E. & S.W.
70.20	Bottom of Gulch, course S.W. ascend.
76.00	Top of ledge, 60 ft. high, bears E. & W.
	ascend gradually to
80.00	Set a sandstone 30 x 12 x 9 ins. 22 ins. in the ground, for Cor. of Secs 25. 26. 35 & 36, marked 1 on E. and E. edges; and raise a mound of stone 2 ft. base 1½ ft. high, W. of Cor. Pits impracticable.
	No bearing objects available.
	Land, broken mountains.
	Soil, rocky, 4th rate.
	Timber, scattering scrub cedars & pines.
	Mountainous land on 80.00 chains.
	East on a random line bet. Secs 25 & 36.
40.00	Set temporary ¼ Sec. Cor.
79.96	Intersect E. bdy. of Tp. 7 lks S. of Cor. of Secs 25. 30. 31 & 36, heretofore described.
	Thence I run
	S 89° 57' W. on a true line bet. Secs 25 & 36.
	Enter scattering cedars and pines, ascend over loose rocks and boulders.
8.00	Divide between Coal and Horse Canons bears N. & S. descend.
21.20	Head of rocky gulch, 100 ft. deep, course S. ascend.
29.00	Point of rocky bluff, bears N. & S. descend
37.00	Head of rocky gulch, 100 ft. deep, course S. ascend.
39.95	Set a sandstone 20 x 10 x 6 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
No bearing objects available.
56.00 Top of high rocky point - bears N. & S. descend over ledges and loose boul
77.00 Head of gulch 600 ft. below ridge, course N. W. ascend to
79.96 The Cor. of Secs 25, 26, 35 & 36.
Land, broken mountains.
Soil, rocky, 4th rate.
Timber, scattering scrub cedars and pines.
Mountainous land on 79.96 chains.

nber 1 1890

Nov. 15th at 8h 15m A. M. L. M. T. I set off 39°02' on the lat: arc; 18°16' S. on the declare, and determine a true meridian with the solar, at the Standard Corner of Secs 34 & 35. established by me Nov 12-1907. heretofore described.
Thence I run
N 0°01' W. bet: secs 34 & 35.
Descend gradually,
15.40 Bottom of Canon, course N. from S. E.
18.40 bottom of Canon, course N. W. ascend,
23.00 Point of ridge, bears E & W. descend,
24.80 Bottom of small gulch, course S. W. as
26.44 Foot of sandstone ledge, 50 ft. high, bears N. E & S. W.
26.45 Top of ledge, ascend gradually.
40.00 Set a sandstone 16x12x6 ins. 12 ins. in the ground for 1/4 Sec. Cor. marked 1/4 on W. face, and raise a mound of stone 2 ft. base, 1½ ft. high, W. of Cor. Pits impracticable.
40.80 Foot of ledge, 40 ft. high bears E. & W.
42.00 Top of ledge, ascend gradually.
44.00 of ledge 50 ft. high. bears E. and W.

Subdivision of T. 20 S. R. 17. E.

Chains	
	Coal vein 2 ft. thick at foot of ledge, bears E. & W.
46.70	Top of ridge, bears E. & W. descend over ledges 150 ft. to
53.00	Foot of ledges, descend gradually.
66.20	Coal Canon, course N. W. Road, bears NW. & S. E., ascend.
76.80	Point of ridge, bears E. & W. descend.
80.00	Set a sandstone 18 x 12 x 6 ins. 12 ins. in the ground, for Cor. to Sec's 26. 27. 34 & 35 marked 1 notch on S. and 2 notches on E. edges, and raise a mound of stone 2 ft. base, 1½ ft. high. W. of Cor. Pits impracticable. Land, broken. Soil, Gravelly & rocky, 4th rate. No timber. Mountainous land on 80.00 chains.
	East on a random line bet. Sec's 26 & 35.
40.00	Set temporary 1/4 Sec. Cor.
79.94	Intersect W. & S. line 9 lks. S. of the Cor. of Sec's 25. 26. 35 & 36.
	Thence I run
	S 89°. 56' W on a true line bet. Sec's 26 & 35.
	Ascend 250 ft. to
13.00	Top of point of rocky ridge, bears N. & S. descend over ledges & loose boulders.
17.40	Top of ledge, 40 ft. high, bears N. & S.
17.50	Foot of ledge.
23.00	Bottom of gulch, 350 ft. deep, course S. Coal vein 3 ft. thick on E. side of bottom of gulch, ascend ledges and boulders.
29.40	Top of ledge 30 ft. high, bears N. E. & S. W.
31.50	Top of rocky point, bears N. & S. descend.
36.00	Top of ledge 20 ft. high, bears N. & S. descend
39.97	Set a sandstone 20 x 12 x 8 ins. 15 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. At foot of ledge 10 ft. high, bears N. & S.
41.00	Coal vein 2 ft. thick at foot of ledge 8 ft. high, descend gradually —

Subdivision of [illegible]

Chains	
42.50	Hollow, [illegible]
45.00	Ridge, [illegible]
64.25	Small gulch, [illegible]
67.50	Ridge, [illegible]
74.[illegible]	The Cor. of Lock [illegible]
	Land broken mountains.
	Soil, [illegible]
	[illegible]
	[illegible]
	[illegible]
	[illegible]

[illegible]

[illegible]

[illegible]

Subdivision of T. 20. S. R. 17. E.

the N. E 1/4 of S. E 1/4 of Sec. 35. and all of Sec. 36.

John T. Breckon
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 John T. Breckon, 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 Subdivision of T. 20 S. R. 17 E. S. L. B & M. Utah. showing the respective capacities in which they acted:

F. L. Breckon, *Chainman.*
Edwin Duffford, *Chainman.*
F. L. Breckon, *Moundman.*
, ~~*Moundman.*~~
Orlo B. Moss, *Axman.*
, ~~*Axman.*~~
W. K. Coleman, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted John T. Breckon, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivisions of T. 20 S. R. 17 E. of the Salt Lake Base & 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

F. L. Breckon, *Chainman.*
Edwin Duffford, *Chainman.*
F. L. Breckon, *Moundman.*
, *Moundman.*
Orlo B. Moss, *Axman.*
, *Axman.*
W. K. Coleman, *Flagman.*

Subscribed and sworn to before me this 15-th day of Nov., 1907

Albert E. Peck
Notary Public

SEAL

6—151

MY COMMISSION EXPIRES MAY 1ST. 1910.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, John T. Breckon, United States Deputy Surveyor, do [illegible] that in pursuance of a contract received from Thomas Hull [illegible] Utah, bearing date of the [illegible] Sept. 1907, I have well, faithfully, and truly, in my own [illegible] in strict conformity with the instructions furnished by the United States Surveyor [illegible] Utah, the Manual of Surveying Instructions, and the laws of the [illegible] all those parts or portions of the [illegible] of Township 20 South, [illegible] 17 East [illegible] of the Salt Lake [illegible] in the State of Utah, which are represented in the [illegible] having been surveyed by me, and under my direction; and I do further solemnly [illegible] of said survey have been established and perpetuated in strict accordance with [illegible] Instructions, and the special written instructions of the United States Surveyor [illegible] Utah and in the specific manner described in the field notes, and that [illegible] the original field notes of such survey.

John T. Breckon
United States Deputy Surveyor.

[illegible] by [illegible] John T. Breckon, and sworn to before me [illegible] day of December, 1907

Thomas Hull
U.S. Surveyor General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 6, 1908.

[illegible] field notes of the survey of the subdivision of fractional township No. 20 South, rabge No.17 East of the Salt Lake Base and Meridian, Utah.

[illegible] John T.Breckon [illegible] dated Sept.9, 1907, having been [illegible] corrections and explanations made, the said field notes, and the [illegible] approved.

Thomas Hull
United States Surveyor General.

[illegible] of the field notes of the above-described surveys in [illegible] correctly copied from the original notes on file in this office.

United States Surveyor General.