Volume

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R0361

BOOK A-361

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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 the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

.....

..... *Chainman.*

..... *Chainman.*

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

SEAL

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

.....

..... *Moundman.*

..... *Moundman.*

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

SEAL

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

.....

..... *Axman.*

..... *Axman.*

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

SEAL

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

..... *Flagman.*

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

SEAL

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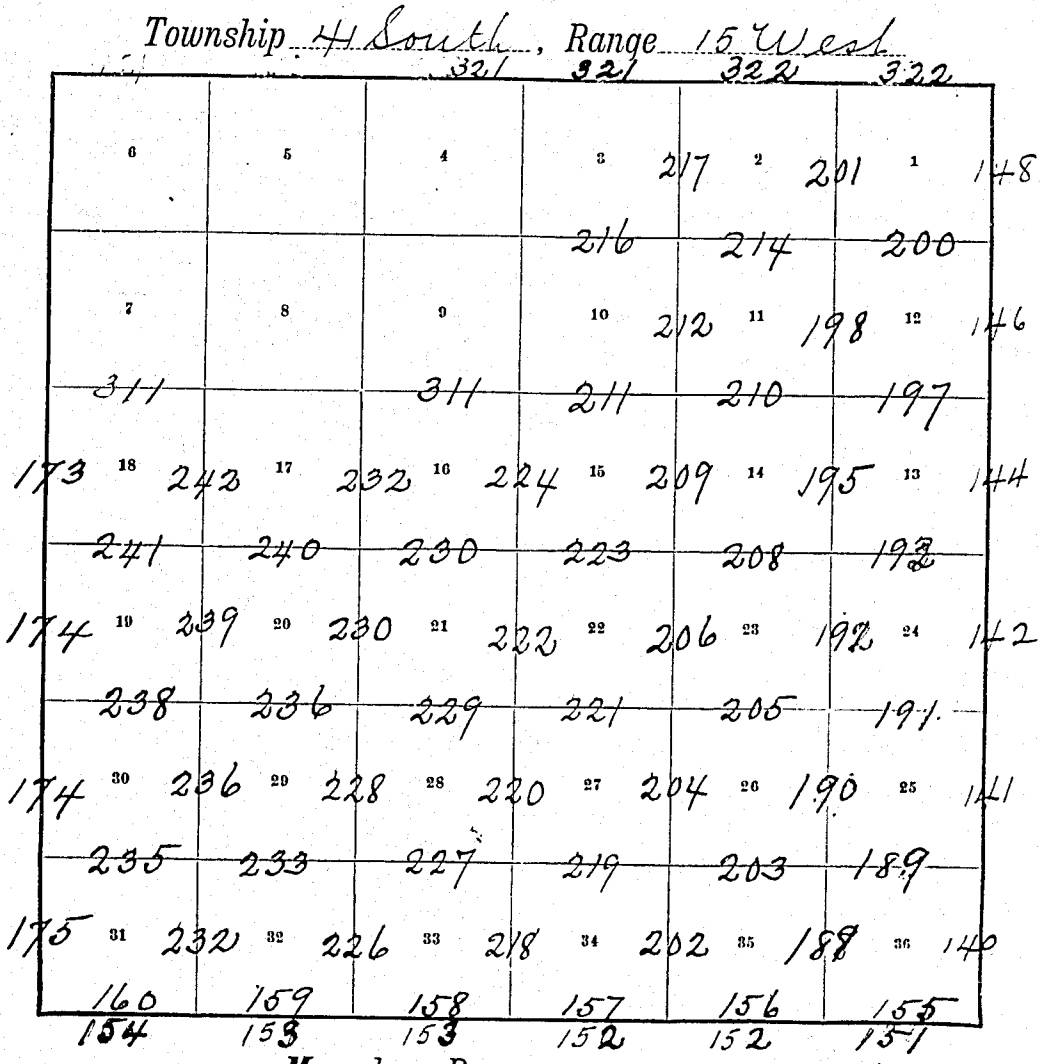
Township 4 South, Range 15 West



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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 the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

.....

..... *Chainman.*

..... *Chainman.*

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

SEAL

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

.....

..... *Moundman.*

..... *Moundman.*

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

SEAL

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

.....

..... *Axman.*

..... *Axman.*

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

SEAL

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

..... *Flagman.*

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

SEAL

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Township 42 S., *Range* 13 W.

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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 the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of
.....

....., *Chainman.*

....., *Chainman.*

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

.....

SEAL

.....

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

....., *Moundman.*

....., *Moundman.*

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

.....

SEAL

.....

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

....., *Axman.*

....., *Axman.*

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

.....

SEAL

.....

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

....., *Flagman.*

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

.....

SEAL

.....

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INDEX DIAGRAM.

Township 43 S., *Range* 13 W.

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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 the [illegible] and plumb the tally pins, either by sticking or dropping the same; that [illegible] to all notable objects, and the true lengths of all lines that we assist in [illegible] to the best of our skill and ability, and in accordance with instructions given us, in the survey of

.....

....., *Chainman.*

....., *Chainman.*

[illegible] to before me this .....
day of ....., 190

.....

.....

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

.....

....., *Moundman.*

....., *Moundman.*

[illegible] to before me this .....
day of ....., 190

.....

.....

We, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners [illegible] to instructions given us, to the best of our skill and ability, in the survey of

.....

....., *Axman.*

....., *Axman.*

[illegible] to before me this .....
day of ....., 190

.....

.....

I, ..., do solemnly swear that I will well and truly [illegible] according to instructions given me, to the best of my skill and ability, in the

.....

....., *Flagman.*

[illegible] to before me this .....
day of ....., 190

.....

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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 the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of

.....

....., *Chainman.*

....., *Chainman.*

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

SEAL

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

.....

....., *Moundman.*

....., *Moundman.*

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

SEAL

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

.....

....., *Axman.*

....., *Axman.*

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

SEAL

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

....., *Flagman.*

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

SEAL

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BOOK A-361

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No. 40 South, Range No. 9 West,

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Scott E. Stewart and Frank C. French, *United States Deputy Surveyors*

Under ~~his~~ their Contract No. 308, *dated* March 17, 1909. *~~190xx~~*

Survey commenced September 13, 1909. *~~190xx~~*

Survey completed October 6, 1909. *~~190xx~~*

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

John T.Jarvis	Chainman
M.Hyrum Harris	Chainman
William H.Stratton	Moundman
Edmund A.Hendrix	Moundman
John A.Humphries	Axman
Laurence C.Snow	Axman
Carl F.Eyring	Flagman

For preliminary affidavits see book "D" Tp. 44 S., R. 7 W.

For corrective work;-

John H.Cottam,	Chainman.
Eldon Snow,	Chainman.

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6 pg 17-18 do not exist

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PRELIMINARY OATHS OF ASSISTANTS.

WE, John H. Cottam and Eldon Snow 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 corrective survey of Subdivision of T. 40 S. R. 9 W. of Salt Lake Base and Meridian Utah.

John H. Cottam, *Chainman.*

Eldon Snow, *Chainman.*

Subscribed and sworn to before me this 9th day of October, 1910

SEAL

Scott P. Stewart
U. S. Deputy Surveyor.

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

....., *Moundman.*

....., *Moundman.*

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

SEAL

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

....., *Axman.*

....., *Axman.*

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

SEAL

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

....., *Flagman.*

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

SEAL

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Subdivision of T.40 S.,R.9 W.-Continued]

Chains

At 7 h 26 m a.m.,l.m.t.,I set off 37°17'N.,on the lat. arc;3°56'N.,on the decl.arc;and determine a meridian with the solar,and mark a point thereof by a cross on the stone already set 5.00 chs.N.of the cor.;this mark falls 0.29 ins.east of the meridian determined by Polaris observation.

The solar apparatus by p.m.and a.m.observations defines positions for meridians respectively about 0'18"west and 0'15"east of the meridian established by Polaris observations;therefore I conclude that the adjustments of the transit are satisfactory.

The magnetic bearing of the meridian at 8 h 0 m a.m.,l.m.t, is N.16°02'W.,the angle thus determined gives the mag, decl.16°02'E.

From the Standard cor.of secs.35 and 36,on S.bdy.of Tp. heretofore described.

I run

N.0°1'W.,bet.secs.35 and 36.

Over mountainous land;through dense undergrowth .

Asc.

8.00 Begin abrupt ascent,bears NE and SW.

14.00 Leave undergrowth,bears E.and W.

Enter heavy timber,bears E.and W.

17.00 Top of spur,120 ft.above sec.cor.,bears E.and W.

Desc.

27;00 Wash,20 lks.wide,4 ft.deep,in bottom of hollow,100 ft. below ridge,course SE.

There are a few aspen trees in bottom of hollow.

Asc.

34.00 Foot of ledge,30 ft.high,bears NW and SE.

34.40 Top of same ledge,bears NW and SE.

Asc.more gradually.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 35 in W half and S 36 in E half;from which
	A pinon pine,16 ins.dia.,bears N.37°30'E.245 lks. dist..mkd.¼ S 36 B T.
	A pinon pine,14 ins.dia.,bears S.77°30'W.252 lks. dist..mkd.¼ S 35 B T.
55.50	Top of ridge,600 ft.above hollow,bears NW and SE.
	Leave timber,bears NW and SE.
	Desc.
56.00	Desc.more abruptly,bears NW and SE.
75.00	Foot of steep descent,bears NW and SE.
	Desc.gradually.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.25,26,35,and 36,mkd.on brass cap
	T 40 S S 26 in NW.
	R 9 W S 25 in NE.
	S 36 in SE.;and
	S 35 in SW.quadrants;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 and clay loam;2nd rate.
	Timber,cedar,pinon,and aspen.
	Undergrowth,sage ,oak,and mahogany brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	East,on a random line bet.secs.25 and 36.
40.00	Set temp.¼ sec.cor.
79.96	Intersect E.bdy.of Tp.,19 lks.N.of the cor.of secs.25, 30,31,and 36,which is a sandstone,5x8x8 ins.,above ground,

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	N.89°52 'W.,on a true line bet.secs.25 and 36.
	Over mountainous land;through dense undergrowth and scattering timber .
	Asc.
14.00	Top of ridge,300 ft.above sec.cor.,bears N.and S.
	Desc.
24.50	Top of ledge,100 ft.high,bears N.and S.
25.00	Foot of ledge,bears N.and S.
30.00	Bottom of canon ,100 ft.below ridge,course S.20°E.
	There is a small creek,2 ins.deep,and 1 lk.wide,in bottom of this canon.
	Asc.
35.00	Leave timber,bears N.and S.
39.98	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 25 ins N half and S 36 in S half;dig pits,18x18x12 ins.,E and W of post, 3 ft.dist.;and raise a mound of earth,3½ ft.base and 1½ ft.high,N.of cor.
52.00	Top of steep ascent,bears N.and S.
	Asc.gradually.
57.00	Top of ridge,500 ft.above canon,bears N.and S.
	Desc. through heavy timber.
65.00	Bottom of hollow,200 ft.below ridge,course S.30°E.
	Asc.
	Leave timber,bears N.30°W.and S.30°E.
79.96	The cor.of secs.25,26,35,and 36.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	with dense undergrowth,79.96 chs.
	September 13,1909:At this cor.I set off 3°50'N.,on the decl.arc;and at 11 h 56 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°18'N.,which is the proper lat.nearly.
	N.0°1'W.,bet.secs.25 and 26.
	Over mountainous land;through dense undergrowth and scattering timber .
	Asc.
10.50	Top of ridge,100 ft.above sec.cor.,bears E.and W.
	Desc.
18.00	Bottom of hollow,25 ft.below ridge,course E.
	Asc.
22.50	Top of ridge,25 ft.above hollow,bears NE and SW.
	This is a divide ridge.
	Desc.
40.00	Set an iron post,3 ft.long,1 in .in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 26 in W half and S 25 in E half;from which
	An oak,4 ins.dia.,bears N.59°45'E.,35 lks. dist..mkd.¼ S 25 B T.
	A n oak,4 ins.dia.,bears N.57°15'W.,39 lks. dist..mkd.¼ S 26 B T.
43.00	Bottom of hollow,200 ft.below ridge,course S.45°W.
	Asc.
57.50	Top of rocky spur,80 ft.above hollow,bears E.and W.
	Desc.
64.50	Bottom of hollow,30 ft.below spur,course S.70°E.
	Asc.
72.50	Top of ridge,40 ft.above hollow,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	ground,for cor.of secs.23,24,25,and 26,mkd.on brass cap
	T 40 S S 23 in NW.
	R 9 W S 24 in NE.
	S 25 in SE.;and
	S 26 in SW.quadrants;from which
	An oak,4 ins.dia.,bears N.57°30'E.,108 lks.
	dist..mkd.T 40 S R 9 W S 24 B T.
	A yellow pine,18 ins.dia.,bears N.68°00'W.,270lks.
	dist.,mkd.T 40 S R 9 W S 23 B T.
	No other trees within limits;raise a mound of stone,
	2 ft.base,1-½ ft.high,W.of cor.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine and yellow pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	September 13,1909.
	———
	September 14,1909:At 7 h 26 m a.m.,l.m.t.,I set off 37°
	19'N.,on the lat.arc;3°33'N.,on the decl.arc;and determine
	a meridian with the solar at the cor.of secs.23,24,25,and
	26.
	Thence ⊥ run
	S.89°52'E.,on a random line bet.secs.24 and 25.
40.00	Set temp.¼ sec.cor.
80.06	Intersect E.bdy.of Tp.,5 lks.S.of the cor.of secs.19,24,
	25,and 30,which is a sandstone,5x8x8 ins.above ground,
	frimly set,and mkd.and witnessed as described.by the
	surveyor general.
	Thence I run
	N.89°54'W.,on a true line bet.secs.24 and 25.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Over mountainous land;through dense undergrowth and scattering timber .
	Asc.
22.50	Top of ridge,150 ft.above cor.,bears N.and S.
	Desc.
33.50	Bottom of hollow,40 ft.below ridge,course S.
	A small spring bears South 3.00 chs.,course S.
	Asc.
40.03	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 24 in N half and S 25 in S half;from which
	An oak,4 ins.dia.,bears N.25°15'E.,100 lks. dist..mkd.¼ S 24 B T.
	An oak,12 ins.dia.,bears S.33°15'W.,235 lks. dist..mkd.¼ S 25 B T.
47.50	Top of divide ridge,60 ft.above hollow,bears N.and S.
	Desc.
53.80	Bottom of hollow,60 ft.below ridge,course S.
	Asc.
69.00	Top of ridge,40 ft.above hollow,bears N.and S.
	Desc.
80.06	The cor.of secs.23,24,25,and 26.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar,pinon pine,and yellow pine,and oak.
	Undergrowth,oak.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.06 chs.

N.0°1'W.,bet.secs.23 and 24.

Over mountainous land;through scattering timber and scattering undergrowth.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Desc.
22.50	Road from Orderville to saw mill,bears N.80°E.and S.80°W.
23.50	Clear creek,3 lks. wide,3 ins.deep,in bottom of canon, 200 ft.below ridge,course S.80°W.
	Asc.
38.00	Top of spur,80 ft.above canon,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 23 in T half and S 24 in E half;from which
	A cedar,8 ins.dia.,bears N.48°00'E.,55 lks. dist..mkd.¼ S 24 B T.
	A pinon pine,16 ins.dia.,bears N.5[illegible]°00'W.,197 lks. dist..mkd.¼ S 23 B T.
41.50	Bottom of hollow,20 ft.below ridge,course S.70°E.
	Asc.
71.50	Top of ridge,100 ft.above hollow,bears N.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.13,14,23,and 24,mkd.on brass cap
	T 40 S S 14 in NW.
	R 9 W S 13 in NE.
	S 24 in SE.;and
	S 23 in SW.;quadrants;from which
	An oak,4 ins.dia.,bears N.20°15'E.,36 lks. dist..mkd.T 40 S.,R.9 W S 13 B T.
	An oak,4 ins.dia.,bears S.58°15'E.,225 lks. dist..mkd.T 40 S R 9 W S 24 B T.
	An oak,4 ins.dia.,bears S.83°15'W.,83 lks. dist..mkd.T 40 S R 9 W S 23 B T.
	An oak,4 in.dia.,bears N 61°00'W.,82 lks. dist..mkd.T 40 S R 9 W S 14 B T.
	Land,mountainous .
	Soil,clay loam;2nd rate.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains		
	Timber,cedar and pinon pine.	
	Undergrowth,oak.	
	Good grass for grazing.	
	Mountainous land,80 00 chs.	
	September 14,1909:At the noon hour the sky is overcast and solar observations are impossible.	
	———	
	S.89°54'E.,on a random line bet.secs.13 and 24.	
40.00	Set temp.¼ sec.cor.	
80.20	Intersect E.bdy.of Tp.,10 lks.N.of the cor.of secs.13,18, 19,and 24,which is a limestone,6x10x10 ins.,above ground, firmly set,and mkd.and witnessed as described.by the surveyor general.	
	Thence I run	For correctiv notes see pa 97
	N.89°50'W.,on a true line bet.secs.13 and 24.	
	Over mountanous land;through dense undergrowth and scattering timber .	
	Asc.	
8.60	Road from Ordervilleto Lemon Ranch ,bears N.and S.	
17.00	Top of divide ridge,150 ft.above sec.cor.,bears N.and S	
	Desc.	
22.30	Bottom of canon,40 ft.below ridge,course S.	
	There is a small spring 50 lks.N.of line.	
	Asc.	
40.10	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 13 in N half and S 24 in S half;from which	
	An oak,4 ins.dia.,bears N.76°45'E.,93 lks. dist..mkd.¼ S 13 B T.	
	An oak,6 ins.dia.,bears S.78°45'W.,101 lks. dist..mkd.¼ S 24 B T.	
48.00	Top of ridge,30 ft.above canon,bears N.and S.	

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Note.A sheep corral bears South about 15.00 chs.dist.
	Desc.
64.60	Bottom of hollow,35 ft.below ridge,course S.
	Asc.
78.50	Top of ridge,40 ft.above hollow,bears N.and S.
	Desc.
80.20	The cor.of secs.13,14,23,and 24.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth 80.20 chs.
	September 14,1909.

	September 15,1909:At 7 h 26 m a.m.,l.m.t.,I set off 37° 20'N.,on the lat.arc;3 °10'N.,on the decl.arc;and determined the meridian,with the solar,at the cor.of secs. 13.14,23,and 24.
	Thence I run
	N.0°1'W.,bet.secs.13 and 14.
	Over mountainous land;through dense undergrowth.
	Asc.gradually.
11.20	Top of smooth ledge,bears NE and SW.
	Desc.abruptly .
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 14 in W half and S 13 in E half;from which
	An oak,4 ins.dia.,bears N.55°E.,49 lks.
	dist..mkd.¼ S 13 B T.
	An oak,4 ins.dia.,bears S.33°30'W.,21 lks.
	dist..mkd.¼ S 14 B T.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
42.00	Foot of steep descent,40 ft.below ¼ sec.cor.,bears NE and SW.
	Desc.gradually.
77.00	Enter heavy timber,bears E.and W.
77.40	Desc.abruptly,bears E.and W.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.11,12,13,and 14,mkd.on brass cap
	T 40 S S 11 in NW
	R 9 W S 12 in NE.
	S 13 in SE.;and
	S 14 in SW.quadrants;from which
	An oak,4 ins.dia.,bears N.66°15'E.,51 lks.
	dist..mkd.T 40 S R 9 W S 12 B T.
	A yellow pine,48 ins.dia.,bears S.63°15'E.,22 lks.
	dist..mkd.T 40 S R 9 W S 13 B T.
	An oak,4 ins.dia.,bears S.57°30'W.,40 lks.
	dist..mkd.T 40 S R 9 W S14 B T.
	A yellow pine,30 ins.dia.,bears N.46°30'W.,157 lks
	dist..mkd.T 40 S R 9 W S 11 B T.
	Land,mountainous .
	Soil,sandy and clay loam,2d rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.

	S.89°50'E.,on a random line bet.secs.12 and 13.
40.00	Set temp.¼ sec.cor.
80.08	Intersect E.bdy.of Tp.,21 lks.S.of the cor.of secs.7,12, 13,and 18,which is a limestone,6x12x12 ins.above ground, firmly set,and mkd.and witnessed as described by the surveyor general.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Thence I run
	N.89°59'W.,on a true line bet.secs.12 and 13.
	Over mountainous land;through dense undergrowth and scattering timber .
	Desc.
2.20	Bottom of hollow,30 ft.below sec.cor.,course N.
	Asc.
15.00	Top of ridge,30 ft.above hollow,bears N.and S.
	Desc.
31.00	Enter heavy timber,bears N.and S.
40.04	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 12 in N half and S 13 in S half;from which
	A cedar,5 ins.dia.,bears N.53°15'E.,51 lks. dist..mkd.¼ S 12 B T.
	A cedar,6 ins.dia.,bears S.32°W.,35 lks. dist..mkd.¼ S 13 B T.
65.25	Begin descent over ledges,bears N.and S.
65.35	Foot of ledges,100 ft.below top.,bears N.and S.
79.70	Wash,50 lks.wide,5 ft.deep,in bottom of hollow,350 ft. below ridge,course N.60°W.
	Asc.
80; 08	The cor.of secs.11,12,13,and 14.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered
W	with dense undergrowth,80.08 chs.
	September 15,1909:At this cor.I set off 3°04'N.,on the decl.arc;and at 11 h 55 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°21'N.,which is the proper lat.nearly.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	N.0°1'W.,bet.secs.11 and 12.
	Over mountainous land;through scattering timber and dense undergrowth,
	Desc.
.15	Wash,50 lks.wide,10 ft.deep,in bottom of hollow,10 ft. below sec.cor.,course N.60°W.
	Asc. abruptly.
11.00	Top of rocky spur,60 ft.above canon,bears E.and W.
	Asc.along west slope of ledges.
26.40	Top of spur,1250 ft.above last spur,bears NW and SE.
	Desc.abruptly .
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 11 in W half; and S 12 in E half;from which
	A yellow pine,8 ins.dia.,bears S.24°E.,190 lks. dist..mkd.¼ S 12 B T.
	An oak,4 ins.dia.,bears S.78°W.,22 lks. dist..mkd.¼ S 11 B T.
	Desc.more abruptly.
55.00	Creek,5 lks.wide,4 ft.deep,in bottom of Orderville Gulch, 100 ft.below ridge,course S.60°W.
	Asc.abruptly.
77.00	Top of ridge,100 ft.above Gulch,bears NE and SW.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.1,2,11,and 12,mkd.on brass cap
	T 40 S S 2 in NW.
	R 9 W S 1 in NE.
	S 12 in SE.;and
	S 11 in SW.quadrants;from which
	A pinon pine,5 ins.dia.,bears N.38°E.,37 lks. dist..mkd.T 40 S R 9 W S 1 B T.
	A pinon pine,10 ins.dia.,bears S.37°30'E.,25 lks. dist..mkd.T 40 S R 9 W S 12 B T.
	A pinon pine,5 ins.dia.,bears S.38°50'W.,62 lks; dist..mkd.T 40 S R 9 W S 11 B T.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	A cedar,10 ins.dia.,bears N.56°15'W.,29 lks. dist..mkd.T 40 S R 9 W S 2 B T.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine and yellow pine.
	Undergrowth,oak.
	Mountainous land,or land covered with dense undergrowth
	80.00 chs.
	September 15,1909.

	September 16,1909:At 7 h 25 m a.m.,l.m.t.,I set off 37° 21'N.,on the lat.arc;2°47'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.1,2,11,and 12.
	Thence I run
	S.89°59'E.,on a random line bet.secs.1 and 12.
40.00	Set temp.¼ sec.cor.
80.24	Intersect E.bdy.of Tp.,23 lks.S.of the cor.of secs.1,6, 7,and 12,which is a gypsum stone,6x8x6 ins.,above ground, firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	S.89°51'W.,on a true line bet.secs.1 and 12.
	Over mountainous land;through heavy timber and scattering undergrowth.
	Desc.
10.00	A sheep corral bears S.10.00 chs.dist.
20.00	A dug out house bears S.,20.00 chs.
	This house is at the west edge of a field of about 30 acres and is owned by John Lemon.He has about 10.00 acres of cultivated land in the field.He is not living on the place.
29.00	Leave heavy and enter scattering timber,bears N.and S.
29.20	Creek,2 lks.wide,1 in deep,in bottom of canon,150 ft

Subdivision of T 40 S., R.9 W.-Continued.

Chains	
	below sec.cor.,course NW.
	Asc.
35.00	Top of spur,50 ft.above canon,bears N.and S.
	Desc.
40.12	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 1 in N half and S 12 in S half;from which
	An oak,4 ins.dia.,bears N.62°W.,42 lks. dist..mkd.¼ S 1 B T.
	An oak,4 ins.dia.,bears S.5°W.,56 lks. dist..mkd.¼ S 12 B T.
40.20	Fence,belonging to John Lemon,bears N.20°E.and S.20°W.
45.00	Creek,4 lks.wide,4 ins.deep,in bottom of Orderville Gulch 30 ft.below spur,course S.60°W.
	Asc.
63.00	Top of ridge,30 ft.above canon,bears N.and S.
	Desc.
64.00	Bottom of hollow,20 ft.below spur,course S.
	Asc.
77.00	Enter heavy timber,bears N.70°E.and S.70°W.
78.60	Top of ridge,25 ft.above hollow,bears N.and S.
	Desc.
80.24	The cor.of secs.1,2,11,and 12.
	Land,mountainous .
	Soil,clay loam and gravelly;2nd and 3rd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and service berry.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.24 chs.
	September 16,1909:At this cor.I set off 2° 41 'N.,on the decl.arc;and at 11 h 55 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°22'N.,which is the proper lat.nearly.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	N.0°1'W.,on a random line bet.secs.1 and 2.
40.00	Set temp.¼ sec.cor.
87.59	Intersect N.bdy.of Tp.,10 lks.W.of the cor.of secs.1,2, 35,and 36,which is a sandstone,6x9x6 ins.,above ground, firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	S.0°3'W.,on a true line bet.secs.1 and 2.
	Over mountainous land;through heavy timber and scattering undergrowth.
	Asc.
21.50	Top of ridge,200 ft.above sec.cor.,bears E.and W.
	Desc.
36.00	Top of perpendicular ledge,200 ft.high,bears E.and W.
45.50	Foot of abrupt descent,bears E.and W.Desc.gradually.
47.59	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 2 in W half and S 1 in E half;from which
	A pinon pine,5 ins.dia.,bears N.73°E.,59 lks. dist..mkd.¼ S 1 B T.
	A cedar,4 ins.dia.,bears S.14°W.,106 lks. dist..mkd.¼ S 2 B T.
61.00	Begin abrupt descent,bears NW and SE.
61.50	Bottom of hollow,200 ft.below ridge,course SE.
	Asc.
62.00	Top of ridge,150 ft.above hollow,bears NW and SE.
	Desc.
87.10	Rocky hollow,100 ft.below ridge,course SW.
	Asc.
87.59	The cor.of secs.1,2,11,and 12.
	Land,mountainous .
	Soil,clay loam,2nd rate .
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak brush.
	Good grass for grazing.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Mountainous or heavily timbered land,87,59 chs.
	September 16,1909.

	September 17,1909:At 7 h 25 m a.m.,l.m.t.,I set off 37° 17'N.,on the lat.arc;2°24'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.2,3,34,and 35,on S.bdy.of Tp.,heretofore described.
	Thence I run
	N.0°1'W.,bet.secs.34 and 35.
	Over mountainous land;through dense undergrowth and scattering timber .
	Asc.
2.00	Top of spur,10 ft.above sec.cor..,bears E.and W.
	Desc.
10.00	Begin rapid descent,bears NE and SW.
39.75	South edge of Canon,bears NE and SW.
	Note:The point for ¼ sec.cor. will fall in canon on nearly perpendiculay ledges where it will be impossible. to set the cor.:Therefore at this point ,
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for witness cor.to ¼ sec.cor..mkd.on brass cap W C ¼ S 34 in W half and S 35 in E half;from which
	An oak,4 ins.dia.,bears N.83°30'E.,80 lks. dist..mkd.W C ¼ S 35 B T.
	An oak,4 ins.dia.,bears S.6°W.,87 lks. dist..mkd. W C ¼ S 34 B T.
40.00	Falls on smooth ledge cannot be set.
40.50	Clear Creek,4 lks.wide,3 ins.deep,in bottom of canon, 500 ft.below sec.cor.,course S.20°W.
	Asc.
46.20	Road from Orderville to saw mill,bears N.30°E.and S.30°W.
75.00	Foot of steep ascent,bears N.70°E.and S.70°W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the., ground,for cor.of secs.26,27,34,and 35,mkd.on brass cap

T 40 S S 27 in NW.

R 9 W S 26 in N E.

S 35 in SE.;and

S 34 in SW.quadrants;fromwwhich

A pinon pine,8 ins.dia.,bears N.51°E,52 lks. dist..mkd.T 40 S R 9 W S 26 B T.

A pinon pine,6 ins.dia.,bears S.75°15'E.,90 lks. dist..mkd.T 40 S R 9 W S 35 B T.

A cedar,6 ins.dia.,bears S.51°30'W.,45 lks. mkd.T 40 S R 9 W S 34 B T.

A pinon pine,6 ins.dia.,bears N.19°45'W.,52 lks. dist..mkd.T 40 S R 9 W S 27 B T.

Land,mountainous .

Soil,clay loam;2nd rate.

Timber,cedar, and pinon pine.

Undergrowth,oak and service berry brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 80.00 chs.

East,on a random line bet.secs.26 and 35.

40.00 Set temp.¼ sec.cor.

80.06 Intersect N.and S.line,14 lks.N.of the cor.of secs.25,26, 35,and 36.

Thence I run

N.89 °54'W.,on a true line bet.secs.26 and 35.

Over mountainous land;through scattering timber and dense undergrowth.

Asc.

5.50 Top of divide ridge,60 ft.above sec.cor.,bears N.20°E. and S.20°W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Desc.
6.75	Enter heavy timber,bears E.and W.
9.00	Leave timber,bears E.and W.
17.50	Bottom of swale,60 ft.below ridge,course N.
	Asc.
25.80	Top of ridge,60 ft.above swale,bears N.and S.
	Enter scattering timber,bears N.and S.
	Desc.gradually.
40.03	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..,mkd.on brass cap ¼ S 26 in N half and S 35 in S half;from which
	A pinon pine,20 ins.dia.,bears N.22°00'W.,50 lks. dist..mkd.¼ S.26 B T.
	A mahogany,6 ins.dia.,bears S.46°00'W.,27 lks. dist..mkd.¼ S 35 B T.
40.50	Descend abruptly,bears N.and S.
41.40	Ledge,50 ft.high,bears N.and S.
	Enter ledges,bears N.and S.
42.00	Leave ledges,bears N.and S.
55.00	Foot of descent,200 ft.below ridge,bears N.20°E.and S.20° W.
55	Enter bottom of canon.
55.20	Road from Orderville to saw mill,bears N.20°E.and S.20°W.
55.25	Fence,bears N.20°E.and S.20°W.
	Enter Jolly field.
57.00	Clear Creek,6 lks.wide,6 ins.deep,in canon bottom,course S.20°W.
60.00	Jolly's house bears S.60 lks.dist.
61.10	Fence,bears N.20°E.and S.20°W.
	Leave field.
	Enter heavy timber,bears N.20°E.and S.20°W.
	Asc.abruptly from canon bottom.
80.06	The cor.of secs.26,27,34,and 35.
	Land,mountainous and level.

Subdivision of T.40 S., R.9 W.-Continued.

Chains

Soil, clay loam; 2nd rate.

Timber, cedar and pinon pine and yellow pine.

Undergrowth, oak and service berry brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.06 chs.

September 17, 1909: At this cor. I set off 2°16'N. on the decl. arc; and at 11 h 55 m a.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 37°18'N., which is the proper lat. nearly.

N.0°18'W., bet. secs. 26 and 27.

Over mountainous land; through scattering timber and dense undergrowth.

Asc. abruptly.

3.00 Top of ledge, 100 ft. high, bears E. and W.

Desc. abruptly.

4.00 Bottom of hollow, 15 ft. below ledge, course E.

Asc.

6.50 Top of ridge, 30 ft. above hollow, bears E and W.

Desc.

20.00 Bottom of hollow, 30 ft. below ridge, course E;

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. mkd. on brass cap ¼ S 27 in W half and S 26 in E half; from which

A cedar, 7 ins. dia., bears S.31°45'E., 274 lks. dist. mkd. ¼ S 26 B T.

A cedar, 8 ins. dia., bears N.19°45'W. 115 lks. dist. mkd. ¼ S 27 B T.

42.00 Top of ridge, 15 ft. above hollow, bears N.60°W. and S.60°E.

Desc. along east slope of ridge.

75.00 Bottom of hollow, 75 ft. below ridge, course S.60°E.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Asc.abruptly.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.22,23,26,and 27,mkd.on brass cap T 40 S S 22 in NW . R 9 W S 23 in NE. S 26 in SE.;and S 27 in SW.quadrants;from which A pinon pine,6 ins.dia.,bears N.44°30'E.,64 lks. dist..mkd.T 40 S R 9 W S 23 B T. A cedar,6 ins.dia.,bears S.48°E.,96 lks. dist..mkd.T 40 S R 9 W S 26 B T. A pinon pine,8 ins.dia.,bears S.64°W.,130 lks. dist..mkd.T 40 S R 9 W S 27 B T. A yellow pine,14 ins.dia.,bears N.40°10'W.,153 lks. dist..mkd.T 40 S R 9 W S 22 B T. From this cor.A spring bears about S.21°15'E.,about 16.75 chs.dist.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	September 17,1909.

September 18,1909:At 7 h 25 m a.m.,l.m.t.,I set off 37° 19'N.,on the lat.arc;2°01'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.22,23,26,and 27.

Thence I run

S.89°54'E.,on a random line bet.secs.23 and 26.

Subdivision of T.40 S., R.9 W.-Continued.

Chains	
40.00	Set temp. ¼ sec.cor.
80.00	Intersect N.and S.line, 2 lks.S.of the cor.of secs.23, 24, 25 and 26.
	Thence I run
	N.89°55'W., on a true line bet.secs.23 and 26.
	Over mountainous land; through dense undergrowth and scattering timber .
	Asc.
2.00	Top of ridge, 20 ft.above sec.cor., bears N.and S.
	Desc.
19.20	Road from Orderville to saw mill, bears N.and S.
20.00	Clear Creek, 3 lks.wide, 2 ins.deep, in bottom of hollow, 60 ft.below ridge, course S.
	Asc.
25.30	Trail, bears N.and S.
40.00	Set an iron post, 3 ft.long, 1 in in dia., 26 ins.in the ground, for ¼ sec.cor..mkd.on brass cap ¼ S 23 in N half and S 26 in S half; and raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
41.00	Top of ridge, 100 ft.above canon, bears N.and S.
	Desc.
66.00	Bottom of hollow, 30 ft.below ridge, course S.
	Asc.
78.50	Point of rocky spur, 20 ft.above hollow, bears N.and S.
	Desc.
80.00	The cor.of secs.22, 23, 26, and 27.
	Land, mountainous .
	Soil, clay loam; 2nd rate.
	Timber, cedar and pinon pine .
	Undergrowth, oak brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.

Subdivision of T. 40 S., R. 9 W.- Continued.

Chains	
	N.0° 1'W.bet.secs.22 and 23,
	Over mountainous land; ascending through scattering timber and dense undergrowth.
20.00	Top of ridge, 100 ft.above sec.cor., bears E. and W. Desc.abruptly.
30.00	Begin gentle descent, bears N.70° E. and S.70° W.
	Leave timber, bears N.70° E. and S.70° W.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., mkd.on brass cap, ¼ S 22 in W. half and S 23 in E.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
55.00	Begin abrupt descent, bears E. and W.
71.00	Bottom of hollow, 600 ft.below ridge, course N.10° W. Asc.
75.00	Top of ridge , 20 ft.above hollow, bears N.20° W. and S.20° E. Desc.
77.40	Bottom of hollow, 20 ft.below ridge, course N.30° W. Asc.
80.00	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground for cor.of secs.14,15,22, and 23, mkd.on brass cap T 40 S S 15 in NW. R 9 W S 14 in NE. S 23 in SE., and S 22 in SW.quadrants; from which
	A yellow pine 16 ins.dia., bears S.44° 30'W.161 lks.dist., mkd. T 40 S R 9 W S 22 B T
	No other bearing trees within limits; raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Note: From this cor.a sheep corral bears S.30° W. about 12.00 chs.dist.
	A small spring bears S.18° E. about 21.00 chs.dist.
	Land, mountainous
	Soil, clay loam; 2d rate.
	Timber, cedar and pine.

Chains	
	Undergrowth, oak and service berry.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth
	80.00 chs.
	September 18, 1909: At this cor. I set off 1° 55' N. on the decl. arc; and at 11 h. 54 m. a.m. l.m.t., I observe the sun on the meridian; the resulting lat. is 37°20' N., which is the proper lat. nearly.
	S.89° 55' E. on a random line bet. secs. 14 and 23,
40.00	Set temp. ¼ sec. cor.
79.95	Intersect N. and S. line 2 lks. S. of the cor. of secs. 13, 14, 23, and 24. Thence I run
	N.89° 56' W. on a true line bet. secs. 14 and 23,
	Over mountainous land; descending through dense undergrowth and scattering timber.
5.50	Bottom of hollow, 40 ft. below sec. cor., course S. Asc.
8.00	Top of spur, 15 ft. above hollow, bears N.20° W. and S.20° E. Desc.
12.50	Bottom of swale, 10 ft. below ridge, course S.40° E. Asc.
25.00	Top of ridge 60 ft. above swale, bears NE. and SW. Desc.
30.00	Enter heavy timber, bears NE. and SW.
32.80	Desc. abruptly over ledges, bearing NE. and SW.
33.00	Foot of ledges, 200 ft. below top bears NE. and SW.
39.97½	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground for ¼ sec. cor., mkd. on brass cap ¼ S 14 in N. half and S 23 in S. half; from which
	A pine 12 ins. dia. bears N.23° E. 4 lks. dist. mkd. ¼ S 14 B T
	A pine 5 ins. dia. bears S.26° 15' W. 40 lks. dist. mkd. ¼ S 23 B T

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
41.00	Top of ledge,30 ft.high,bears NE and SW.
75.00	Foot of steep descent,bears N.and S.
	Leave timber,bears N.and S.
79.95	The cor.of secs.14,15,22,and 23.
	Land,mountainous
	Soil,clay loam;2nd rate.
	Timber,pine.
	Undergrowth,oak .
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,79.95 chs.
	September 18,1909.

September 19,1909:At 7 h 24 m a.m.,l.m.t.,I set off 37°20' N.,on the lat.arc;1°37'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.14,15,22,and 23.

Thence I run

N.0°1'W.,bet.secs.14 and 15.

Over mountainous land;through dense undergrowth .

	Desc.
1.50	Wash,20 lks.wide,3 ft.deep,course W.
	Asc.
4.00	Top of ridge,40 ft.above wash,bears E.and W.
	Desc.
6.20	Wash in head of hollow,20 lks.wide,20 ft.below ridge,cours W.
	Asc.
7.00	Top of steep ascent,bears E.and W.
	Asc.gradually.
14.00	Begin abrupt ascent,bears NW and SE.
	Leave dense undergrowth,bears NW and SE.
	Enter heavy timber,bears NW and SE.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
19.50	Coal out crop,2.00 chs.East of line,seam 4 ft.thick.
28.00	Top of ridge,100 ft.above hollow,bears NW and SE.
	Leave timber and enter dense undergrowth,bears NW and SE.
	Desc.abruptly.
32.00	Foot of steep descent,bears E.and W.
	Desc.gradually.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the gr ground,for ¼ sec.cor..mkd.on brass cap ¼ S 15 in W half and S 14 in E half;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.
46.00	Desc.abruptly,bears E.and W.
59.60	Bottom of hollow,course N.20°W.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the g ground,for cor.of secs.10,11,14,and 15,mkd.on brass cap
	T 40 S S 10 in NW.
	R 9 W S 11 in NE.
	S 14 in SE.
	S 15 in SW.quadrants;from which
	A pinon pine,8 ins.dia.,bears N.20°E.,205 lks.
	dist..mkd.T 40 S R 9 W S 11 B T.
	No other trees within limits;raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
	Land,mountainous.
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage and oak brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.

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

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
40.00	Set temp.¼ sec.cor.
80.18	Intersect N.and S.line ,19 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.
	Over mountainous land;through dense undergrowth .
	Desc.abruptly.
2.50	Top of ridge,60 ft.above sec.cor.,bears N.and S.
	Desc.gradually.
28.70	Creek,3 lks.wide,1 in.deep,in bottom of hollow,100 ft. below ridge,course NW.A small spring bears SE.3.00 chs.dist.
	Asc.
35.00	Top of ridge,15 ft above hollow,bears N.and S.
	Desc.
40.09	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the gro ground,for ¼ sec.cor..mkd.on brass cap ¼ S 11 in N half and S 14 in S half;from which
	An oak,4 ins.dia.,bears N.73°W.,49 lks. dist..mkd.¼ S 11 B T.
	An oak,4 ins.dia.,bears S.44°E.,188 lks. dist..mkd.¼ S 14 B T.
47.50	Begin rapid descent,bears NE and SW.
58.20	Foot of steep descent,bears NE and SW.
	Enter flat.
	Desc.gently.
71.50	Leave flat,bears N.and S.
	Desc.rapidly. through scattering timber .
80.18	The cor.of secs.10,11,14,and 15.
	Land,mountainous and level.
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth, 80.18 chs.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	September 19,1909:At this cor.I set off 1°32 ' N .,on the decl.arc;and at 11h 54 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°21'N.,which is the proper lat.nearly.
	N.0°1'W.,bet.secs.10 and 11.
	Over mountainous land;through dense undergrowth.
	Asc.
7.20	Top of ridge,10 ft.above sec.cor..,bears E.and W.
	Desc.abruptly.
15.00	Begin more abrupt descent,bears E.and W.
25.45	Creek,3 ins.deep,5 lks.wide,in bottom of Orderville Gulch 150 ft.below ridge,course S.75°W.
	Asc.abruptly.
26.00	Enter heavy timber,bears E.and W.
	Leave dense and enter scattering undergrowth,bears E.and W.
40.00	Point 150 ft.above Gulch.
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 10 in W half and S 11 in E half;from which
	A cedar,4 ins.dia.,bears S.42°30'E.,88 lks. dist;.mkd.¼ S 11 B T.
	A cedar,12 ins.dia.,bears S.46°30'W.,43 lks. dist..mkd.¼ S 10 B T.
47.50	Top of ridge,40 ft.above ¼ sec.cor.,bears E.and W.
	Desc.
55.50	Bottom of hollow,40 ft.below ridge,course S.40°E.
	Asc.abruptly.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.2,3,10,and 11,mkd.on brass cap
	T 40 S S 3 in NW.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

R 9 W S 2 in NE.

S 11 in SE.;and

S 10 in SW.quadrants;from which

A cedar,16 ins.dia.,bears N.43°E.,48 lks.

dist..mkd.T 40 S R 9 W S 2 B T.

A pinon pine,6 ins.dia.,bears S.46°30'E.,41 lks.

dist..mkd.T 40 S R 9 W S 11 B T.

A pinon pine,10 ins.dia.,bears S.32°W.,75 lks.

dist..mkd.T 40 S R 9 W S 10 B T.

A pinon pine,6 ins.dia.,bears N.60°30'W.,65 lks.

dist..mkd.T 40 S R 9 W S 3 B T.

Land,mountainous .

Soil,clay loam and rocky;2nd and 3rd rate.

Timber,cedar and pinon pine.

Undergrowth,oak and service berry.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,80;00 chs.

September 19,1909.

September 20,1909:At 7 h 24 m a.m.,l.m.t.,I set off 37° 21 'N.,on the lat.arc;1°14'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.2,3,10, and 11.

Thence I run

N.89°56'E.,on a random line bet.secs.2 and 11

40;00 Set temp.$\frac{1}{4}$ sec.cor.

79.98 Intersect N.and S.line,14 lks.N.of the cor.of secs.1,2, 11,and 12.

Thence I run

N.89°58'W.,on a true line bet.secs.2 and 11.

Over mountainous land;through heavy timber and dense undergrowth.

4 Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Desc.
.50	Bottom of wash,20 lks.wide,3 ft.deep,in bottom of hollow, 20 ft.below sec.cor.,course SW.
	Asc
13.75	Top of ridge,10 ft.above hollow,bears NE and SW.
	Desc.
15.00	Bottom of hollow,20 ft.below ridge,course S.30°W.
	Asc.
16.30	Top of spur,20 ft.above hollow,bears NW and SE.
	Desc.
18.30	Bottom of hollow,30 ft.below ridge,course SE.
	Asc.
22.40	Top of ridge,50 ft.above hollow,bears NW and SE.
	Desc.
25.00	Bottom of hollow,40 ft.below ridge,course SE.
	Asc.
39.99	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the gro ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 2 in N half and S 11 in S half;from which
	A pinon pine,7 ins.dia.,bears N.3°30'W.,34 lks. dist..mkd.¼ S 2 B T.
	A cedar,6 ins.dia.,bears S.20°W.,20 lks. dist..mkd.¼ S 11 B T.
59.60	Top of ridge,30 ft.above hollow,bears N.and S.
	Desc.abruptly along south slope of mountain.
65.00	Bottom of hollow,150 ft.below ridge,course S.
	Asc.
66.00	Asc.more gradually.,bears N.and S.
75.00	Top of ridge,20 ft.above bottom of hollow,bears NW and SE.
	Desc.
79.98	The cor.of secs.2,3,10,and 11.
	Land.,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Undergrowth,oak and service berry.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,79.98 chs.
	September 20,1909:At this cor.I set off 1°08'N.,on the decl.arc;and at 11 h 54 m Am.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°21'N.,which is the proper lat.nearly.
	N.0°1'W.,on a random line bet.secs.2 and 3.
40.00	Set temp.¼ sec.cor.
87.70	Intersect N.bdy.of Tp.,10 lks.E.of the cor.of secs. 2,3,34,and 35,which is a sandstone,6x10x8 ins.above ground, firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	S.0°5'E.,on a true line bet.secs.2 and 3.
	Over mountainous land;through scattering timber and dense undergrowth.
	Asc.abruptly.
37.45	Foot of perpendicular ledge,100 ft.high,bears NE and SW.
	Asc.abruptly over ledges.
40.65	Top of ledges,bears NE and SW.
	Thence over mesa.
47.70	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 3 in W half and S 2 in E half;from which
	A cedar,8 ins.dia.,bears S.43°30' E.,27 lks. dist..mkd.¼ S 2B T.
	A cedar,6 ins.dia.,bears S.16°W.,57 lks. dist..mkd.¼ S 3 B T.
49.15	Top of perpendicular ledge,250 ft.high,bears E.and W.
	Desc.from mesa.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
61.35	Top of vertical ledge,75 ft.high,bears E.and W.
61.55	Foot of ledge,75 ft.high,bears E.and W.
63.75	Begin more gradual descent,bears E.and W.
82.75	Top of ridge,350 ft.below mesa,bears NW and SE.
	Desc.
87.70	The cor.of secs.2,3,10,and 11.
	Land,mountainous and rolling mesa.
	Soil,clay loam and rocky;2nd and 4th rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak,service berry,and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	87.70 chs.
	September 20,1909.
	September 21,1909:At 7 h 23 m a.m.,l.m.t.,I set off 37° 17'N.,on the lat.arc;0°51'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,33, and 34,on S.bdy.of Tp.,heretofore described.
	Thence I run
	N.0°2'W.,bet.secs.33 and 34.
	Over mountainous land;through dense undergrowth and scattering timber .
	Asc.
29.00	Top of ridge,140 ft.above sec.cor.,bears N.60°W.and S.60° E.
	Desc.
31.00	Bottom of hollow,20 ft.below ridge,course S.60°E.
	Asc.
34.50	Top of steep ascent,bears E.and W.
	Asc.gradually.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.¼ S 33 in W half

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	and S 34 in E half;from which
	A pinon pine,8 ins.dia.,bears N.16°45'E.,115 lks. dist.,mkd.¼ S 34 B T.
	A pinon pine,5 in.dia.,bears N.65°15'W.,65 lks. dist.,mkd.¼ S 33 B T.
48;00	Begin abrupt ascent,bears NE and SW.
60.00	Top of ledge,40 ft.high,bears N.50°E.and S.50°W.
61.00	Top of spur,50 ft.above top of ledge,bears N.50°E.and S. 50°W.
	Desc.
66.00	Bottom of hollow,20 ft.below ridge,course E.
	Leave timber,bears E.and W.
70.00	Top of ascent,bears NE and SW.
	Desc.gradually over rolling ground.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.27,28,33,and 34,mkd.on brass cap
	T 40 S S 28 in NW.
	R 9 W S 27 in NE.
	S 34 in SE.;and
	S 33 in SW.quadrants;dig pits,18x18x12 ins. in each sec.;5½ ft.dist.;and raise a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Land,mountainous and rolling .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak,mahogany,service berry ,and bitter brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	East,on a random line bet.secs.27 and 34.
40.00	Set temp.¼ sec.cor.
80.20	Intersect N.and S.line,23 lks.N.of the cor.of secs.26,27,

Subdivision of T.40 S.,R.9.W.-Continued.

Chains	
	34,and 35.
	Thence I run
	N.89°50'W.,on a true line bet.secs.27 and 34.
	Over mountainous land;through scattering timber and dense undergrowth.
	Asc.
11.00	Top of ridge,50 ft.above sec.cor.,bears N.20°W.and S.20°E
	Asc.
15.00	Leave timber,bears NW and SE.
20.00	Creek,2 lks.wide,2 ins. deep,in bottom of hollow,100 ft. below ridge,course S.10°W.E.
	Asc.
27.00	Top of ridge,60 ft.above hollow,bears N.30°W.and S.30°E.
	Enter timber,bears N.30°W.and S.30°E.
	Desc.
40.10	Set an iron post,3 ft.long,1 ins.dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 27 in N half and S 34 in S half;from which
	A cedar,10 ins.dia.,bears N.37°E.,45 lks. dist..mkd.¼ S 27 B T.
	A cedar,20 ins.dia.,bears S.70°50'W.,31 lks. dist..mkd.¼ S 34 B T.
46.50	Bottom of hollow,20 ft.below ridge,course S.30°E.
	Asc.
50.00	Enter ledge,bears N.10°W.and S.10°E.
51.50	Leave ledges,bears N.10°W.and S.10°E.
61.00	Top of abrupt ascent,200 ft.above hollow,bears N.30°W.and S.30°E.
	Leave timber,bears N.30°W.and S.30°E.
	Asc.gradually.
67.00	Top of ascent,bears N.and S.
	Thence over rolling mountain .
80.20	The cor.of secs.27,28,33,and 34.
	Land,mountainous and rolling .

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Soil,clay loam;2nd rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak ,service berry,and bitter brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth
	80.20 chs.
	September 21,1909:At this cor.I set off 0°45'N.,on the decl.arc;and at 11 h 53 m a.m.,l.m.t.,I observe the sun on the merdian,the resulting lat.is 37°18'N.,which is the proper lat.nearly.
	N.0°2'W.,bet.secs.27 and 28.
	Over rolling mountain ;through dense undergrowth and and scattering timber .
	Desc.gradually;
11.00	Begin abrupt descent,bears NE and SW.
16.00	Bottom of hollow,50 ft.below sec.cor.,course W.
	Asc.
23.00	Top of spur,50 ft.above hollow,bears E.and W.
	Desc.abruptly along NW slope of high ridge,
	Enter pine timber,bears E.and W.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in W half and S 27 in E half;from which
	A spruce,20 ins.dia.,bears S.70°30'E.,71 lks. dist..mkd.¼ S 27 B T.
	No other trees within limits;raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
41.00	Leave timber,bears N.20°E.and S.20°W.
45.00	Foot of steep descent,bears N.20°E.and S.20°W.
46.00	Enter heavy aspen timber,bears E.and W.
	Desc.more gradually,bears E.and W.
50.00	Begin abrupt descent,bears E.and W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
55.00	Bottom of hollow,600 ft.below ridge,course W.
	Asc.
	Leave aspen timber,bears E.and W.
65.00	Top of ridge,100 ft.above hollow,bears N.80°W.and S.80°E.
	Desc.
79.00	Creek,4 lks. wide,3 ins.deep,in bottom of canon,150 ft. below ridge,course W.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.21,22,27,and 28,mkd.on brass cap
	T 40 S S 21 in NW.
	R 9 W S 22 in NE.
	S 27 in SE.;and
	S 28 in SW.;quadrants;from which
	An oak,4 ins.dia.,bears N.72°50'E.,25 lks. dist;.mkd.T 40 S R 9 W S 22 B T.
	An oak,5 ins.dia.,bears S.55°10'E.,22 lks. dist..mkd.T 40 S R 9 W S 27 B T.
	An oak,3 ins.dia.,bears S.45°20'W.,28 lks. dist..mkd.T 40 S R 9 W S 28 B T.
	An oak,3ins.dia.,bears N.11°30'W.,26 lks. dist..mkd.T 40 S R 9 W S 21 B T.
	Land,mountainous .
	Soil,sandy and clay.;2nd rate.
	Timber,aspen,cedar,and pine.
	Undergrowth,oak,
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	September 21,1909

September 22,1909:At 7 h 23 m a.m.,l.m.t.,I set off 37°19' N.,on the lat.arc;0°27'N.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.22,21,27,and

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	28.
	Thence I run
	S.89°50'E.,on a random line bet.secs.22 and 27.
40.00	Set temp.¼ sec.cor.
80.12	Intersect N.and S.line,14 lks.S.of the cor.of secs.22,23, 26,and 27.
	Thence I run
	N.89°56'W.,on a true line bet.secs.22 and 27.
	Over mountainous land;through dense undergrowth.
	Desc.
3.00	Bottom of hollow,50 ft.below sec.cor.,course S.
	Asc.
11.00	Top of ridge;40 ft.above hollow,bears N.and S.
	Desc.
16.00	Bottom of hollow,50ft.below ridge,course N.
	Asc.
20.50	Top of spur,25 ft.above hollow,bears N.and S.
	Desc.
35.00	Enter scattering timber,bears N.and S.
40.06	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground;for ¼ sec.cor..mkd.on brass cap ¼ S 22 in N half and S 27 in S half;from which
	A red pine,24 ins.dia.,bears N.16°W.,82 lks. dist..mkd.¼ S 22 B T.
	An oak,3 ins.dia.,bears S.6 °W.,72 lks. dist..mkd.¼ S 27 B T.
40.20	Bottom of swale,60 ft.below ridge,course N.
	Asc.abruptly.
51.00	Top of rocky spur,50 ft.above hollow,bears N.and S.
	Desc.abruptly.
77.00	Creek,4 lks.wide,3 in.s.deep,in bottom of canon,120 ft. below ridge,course S.70°W.
	Asc.
80.12	The cor.of secs.21,22,27,and 28.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and service berry.
	Good grass for grazing.
	Mountainous land,or land covered withdense undergrowth,
	80.12 chs.
	———
	N.0°2'W.,bet.secs.21 and 22.
	Over mountainous land;through dense undergrowth.
	Asc.
5.00	Enter scattering timber,bears E.and W.
13.00	Top of ridge,200 ft.above sec.cor.,bears E.and W.
	Desc.
26.50	Begin abrupt descent,bears NE and SW.
	Leave timber,bears NE and SW.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in W half and S 22 in E half;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.
41.00	Foot of steep descent,60 ft.below ridge,bears NE and SW.
	Desc.gentle slope.
59.50	Begin abrupt descent,bears N.70°E.and S.70°W.
70.00	Foot of descent,bears N.70°E.and S.70°W.
	Desc.gradually.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.15,16,21,and 22,mkd.on brass cap
	T 40 S S 16 in NW.
	R 9 W S 15 in NE.
	S 22 in SE.;and
	S 21 in SW.quadrants;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.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Land,mountainous and rolling .
	Soil,sandy and clay loam,2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and maple brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	September 22,1909:At this cor.I set off 0°22'N ,on the decl.arc;and at 11 h 53 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°20'N.,which is the proper lat.nearly.

	S.89°56'E.,on a random line bet.secs. 15 and 22.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,10 lks.S.of the cor.of secs.14,15, 22,and 23.
	Thence I run
	West,on a true line bet.secs.15 and 22.
	Over mountainous land;through dense undergrowth.
	Desc.
9.20	Wash,10 lks.wide,3 ft.deep,in bottom of hollow,50 ft. below sec.cor.,course N.20°W.
	Asc.
16.60	Top of spur,20 ft.above hollow,bears N.and S.
	Desc.
18.30	Bottom of hollow,30 ft.below ridge,course N.20°W.
	Creek,1 lk.wide,2 ins.deep,in bottom.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 15 in N half and S 22 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
45.00	Wash,20 lks.wide,3 ft.deep,course N.20°W.
	Asc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

50.00 Top of ascent,40 ft.above hollow,bears N.and S.

Thence over flat.

Leave dense and enter scattering undergrowth,bears N.and S.

80.00 The cor.of secs.15,16,21,and 22.

Land,mountainous and level.

Soil,clay and sandy loam;2nd rate.

No timber .

Undergrowth,oak brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 50.00 chs.

September 22,1909.

September 23,1909:At 7 h 23 m a.m.,l.m.t.,I set off 37° 20'N.,on the lat.arc;0°04'W.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs. 15,16,21,and 22.

Thence I run

N.0°2'W.,bet.secs.15 and 16.

Over level flat;through dense undergrowth.

19.00 Begin abrupt descent,bears E.and W.

Enter heavy timber,bears E.and W.

37.00 Bottom of hollow,150 ft.below sec.cor.,course N.20°W.

Asc.gradually.

39.00 Top of ridge,10 ft.above hollow,bears N.20°W.and S.20°E.

Desc.

40.00 Set an iron post,3 ft.long,1 in. in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 16 in W half and S 15 in E half;from which

A pinon pine,12 ins.dia.,bears N.7°05'E.,152 lks. dist..mkd.¼ S 15 B T.

A cedar, 4 ins.dia.,bears S.78°55'W.,12 lks. dist..mkd.¼ S 16 B T.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
45.00	Bottom of hollow,50 ft.below ridge,course N.30°W.
	Asc.
49.50	Top of spur,30 ft.above hollow,bears N.36°W.and S.35°E.
	Desc.
54.00	Bottom of hollow,30 ft.below ridge,course N.40°W.
	Asc.
60.00	Top of ridge,50 ft.above hollow,bears N.W and SE.
	Desc.
65.00	Begin abrupt descent,bears E.and W;
75.20	Foot of steep descent,200 ft.below ridge,bears East and S.75°W.
	Enter bottom of Orderville Gulch.
75.30	Creek,10 lks.wide, 6 ins.deep,in canon,course N.85°W.
78.00	Leave bottom of canon,bears N.85°E.and S.85°W.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.9,10,15,and 16,mkd.on brass cap
	T 40 S S 9 in NW.
	R 9 W S 10 in N E.
	S 15 in SE.;and
	S 16 in SW.quadrants;from which
	A cedar,10 ins.dia.,bears N.77°25'E.,115 lks.
	dist..mkd.T 40 S R 9 W S 10 B T .
	A cedar,6 ins.dia.,bears N.29°10'W.,105 lks.
	dist..mkd.T 40 S R 9 W S 9 B T.
	No other trees within limits;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous and level.
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine .
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	East, on a random line bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
80.16	Intersect N.and S.line,7 lks.S.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.
	Over mountainous land;through scattering undergrowth .
	Desc.gradually.
20.80	Wash ,20 lks.wide,5 ft.deep,in bottom of hollow,40 ft. below sec.cor.,course N.
	Asc.
24.00	Top of ridge,20 ft above hollow,bears N.and S.
	Desc.gradually.
30.90	Bottom of hollow,30 ft.below ridge,course N.85°W.
	Asc.
32.00	Top of ridge,40 ft.above hollow,bears N.and S.
36.50	Bottom of hollow,50ft.below ridge,course S.80°W.
	Asc.
40.08	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.corl. mkd.on brass cap ¼ S 10 in N half and S 15 in S half;from which
	A pinon pine,8 ins.dia.,bears N.12°E.,29 lks. dist..mkd.¼ S 10 B T.
	A pinon pine,8 ins.dia.,bears S.20°W.10 lks. dist..mkd.¼ S 15 B T.
43.00	Top of spur,40 ft.above hollow,bears N.80°E.and S.80°W.
	Desc.
43.60	Bottom of hollow,10 ft.below ridge,course W.
	Desc.in hollow.
43.90	Leave hollow,course S.70°W.
	Asc.
44.50	Top of spur,10 ft.above hollow,bears N.and S.
	Desc.

Subdivision of T. 40 S., R. 9 W.- Continued.

Chains	
45.50	Bottom of hollow, 50 ft.below ridge, course NW. Asc.
46.60	Top of spur, 20 ft.above hollow, bears N.40° W. and S. 40° E. Desc.
51.00	Foot of descent 60 ft.below spur, bears N.60° E. and S. 60° W. Enter bottom of Orderville Gulch.
56.20	Creek 10 lks.wide, 6 ins.deep, course S.80° W.
58.00	Leave canon bottom bears N.60° E. and S.60° W. Asc.abruptly.
66.25	Top of spur, 30 ft.above canon, bears N. and S. Desc. Enter dense undergrowth.
74.00	Bottom of hollow, 30 ft.below ridge, course S. Asc.
80.16	The cor.of secs.9,10,15, and 16.
	Land, mountainous.
	Soil, clay loam; 2nd rate.
	Timber, cedar and pinon pine.
	Undergrowth oak and sagebrush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth 80.16 chs.
	September 23, 1909: At the noon hour the sky is overcast and solar observations are impossible.
	N.0° 2'W.bet.secs.9 and 10,
	Over mountainous land; through heavy timber and scattering undergrowth;asc.abruptly.
4.00	Top of rocky spur, 75 ft.above sec. cor., bears NE. and SW. Desc.
6.20	Bottom of hollow, 15 ft.below ridge, course SW. Asc.
12.00	Top of ridge, 25 ft.above hollow, bears NE. and SW.

Subdivision of T. 40 S., R. 9 W.- Continued.

Chains.	
15.00	Bottom of hollow, 20 ft.below ridge, course SW. Asc.abruptly.
26.90	Top of ridge, 200 ft.above hollow, bears NW. and SE. Desc.
38.00	Head of hollow,30 ft.below ridge, course SE. Asc.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., mkd.on brass cap ¼ S 9 in W. half and S 10 in E.half; from which A cedar 4 ins.dia.bears S.80°30'E. 28 lks.dist. mkd.¼ S 10 B T A cedar 4 ins.dia.bears N.36° W. 22 lks.dist. mkd.¼ S 9 B T
52.00	Top of ridge, 30 ft.above hollow, bears NW. and SE. Desc.
59.00	Bottom of hollow, 40 ft.below ridge, course SE. Asc.
69.40	Top of ridge, 40 ft.above last ridge, bears NW. and SE. Desc. Coal outcrop at this point.
73.00	Bottom of hollow, 75 ft.below ridge, course SE. Asc.
75.00	Top of ridge, 50 ft.above hollow, bears NW. and SE. Desc.
80.00	Note: When we submitted an estimate of the number of posts required to complete this survey,the probable necessity for using extra posts for witness cors.was not taken into consideration;also when the bids for the work were submitted it was our opinion that a part of the north end of T.42 S.R.9 W.and part of the S.end of T.41 S.R 9 W.could not be surveyed at all on account of the rough nature of the country,and so stated in our bid;but

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

during the progress of the field work we discovered that we could survey all of said townships.But were compelled to set a number of extra posts as witness corners;consequently we find that there will not be enough 2 inch posts to finish this township;We therefore decide to set the remaining iron posts in the most available positions and to set stone corners in the remaining places.

Set a sandstone,14x10x5 ins.,9 ins.in the ground,for cor. of secs.3,4,9,and 10,mkd.with 5 notches on S and 3 notches on E .edges;from which

A pinon pine,12 ins.dia.,bears N.61°45'E.,50 lks. dist..mkd.T 40 S R 9 W S 3 B T.

A pinon pine,10 ins.dia.,bears S.77°45'E.,54 lks. dist..mkd.T 40 S R 9 W S 10 B T.

A pinon pine,6 ins.dia.,bears S.41°30'W.,57 lks. dist..mkd.T 40 S R 9 W S 9 B T.

A pinon pine,12 ins.dia.,bears N.13°15'W.,58 lks. dist..mkd.T 40 S R 9 W S 4 B T.

Land,mountainous .

Soil,clay loam;2nd rate.

Timber,cedar and pinon pine.

Undergrowth,sage and oak brush.

Good grass for grazing.

Mountainous or heavily timbered land ,80.00 chs.

September 23,1909.

September 24,1909:At 7 h 22 m a.m.,l.m.t.,I set off 37° 22'N.,on the lat.arc;0°19'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,9,and 10.

Thence I run

N.89°57'E.,on a random line bet.secs.3 and 10.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line,12 lks.N.of the cor.of secs.2,3,10 and 11.
	Thence I run
	N.89°58'W.,on a true line bet.secs.3 and 10.
	Over mountainous land;through dense undergrowth and heavy timber .
	Desc.
7.50	Bottom of hollow,30 ft.below sec.cor.,course S.30°E.
	Asc.
29.50	Top of ridge,50 ft.above hollow,bears N.20°W.and S.20° E.
	Leave heavy and enter scattering timber,bears N.and S.
	Desc.
40.05	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 3 in N half and S 10 in S half;from which
	An oak,3 ins.dia.,bears N.66°W.,68 lks. dist..mkd.½ S 3 B T.
	An oak,4 ins.dia.,bears S.25°W.,142 lks. dist..mkd.¼ S 10 B T.
41.00	Enter heavy timber,bears N.and S.
55.00	Bottom of hollow,60 ft.below ridge,course S.30°E.
	Asc.
71.00	Top of ridge,40 ft.above hollow,bears N.30°W.and S.30° E.
	Desc.
73.00	Bottom of hollow,50 ft.below ridge,course S.30°E.
	Asc.
76.00	Top of ridge,50 ft.above hollow,bears N.30°W.and S.30°E.
	Desc.
79.00	Bottom of hollow,30 ft.below ridge,course SE.
	Asc.
80.10	The cor.of secs.3,4,9,and 10.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.10 chs.
	September 24,1909.:At the noon hour the sky is overcast and solar observations are impossible.
	—
	N.0°2'W.,on a random line bet.secs.3 and 4.
40.00	Set temp.¼ sec.cor.
88.18	Intersect N.bdy.of Tp.,23 lks.E.of the cor.of secs.3,4,33, and 34,which is a sandstone,6x7x6 ins.,above ground, firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	S.0°12'E.,on a true line bet.secs.3 and 4.
	Over mountainous land;through heavy timber and dense undergrowth.
	Desc.
18.20	Bottom of hollow,50 ft.below sec.cor.,course N.20°E.
	A small spring bears S.20°W.about 100 lks.dist.
	Asc.
20.00	Top of ridge,75 ft.above hollow,bears N.30°W.and S.30°E.
	Desc.
43.00	Bottom of same hollow,60 ft.below ridge,course N.40°W.
	Asc.
47.00	Bottom of hollow,10 ft.above last hollow,course N.20°E.
	Asc.
48.18	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 4 in W half and S 3 in E half;from which
	A pinon pine,8 ins.dia.,bears S.22°E.,60 lks.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	dist..mkd.¼ S 3 B T.
	A pinon pine,4 ins.dia.,bears N.82°W.,61 lks.
	dist..mkd.¼ S 4 B T.
50.50	Leave timber,bears E.and W.
58.00	Bottom of hollow,14 ft.above last hollow,course NE.
	Asc.
	Note:The center of a pond 3 chs.N.and S.by 10.00 chs.
	E.and W.,bears NE about 15.00 chs.dist.
63.00	Enter heavy timber,bears E.and W.
	Begin abrupt ascent,bears E.and W.
65.55	Top of ridge,40 ft.above hollow,bears E.and W.
70.00	Head of hollow,90 ft.below ridge,course SE.
	Asc.
83.80	Top of ridge,30 ft.above hollow,bears NE and SW.
	Desc.abruptly.
88.18	The cor.of secs.3,4,9,and 10.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with
	dense undergrowth,88.18 chs.
	September 24,1909.

September 25,1909:At 7 h 22 m a.m.,l.m.t.,I set off 37° 17'N.,on the lat.arc;0°43'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.4,5,32,and 33,on S.bdy.of Tp.,heretofore described.

Thence I run

N.0°3'W.,bet.secs.32 and 33.

Over mountainous land;through heavy timber and dense undergrowth.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

Asc.

6.00 Top of ridge,40 ft.above sec.cor.,bears N.60°E.and S.60°W

Leave timber,bears N.60°E.and S.60°W.

Desc.gradually.

27.50 Bottom of hollow,25 ft.below ridge,course S.80°W.

Asc.

33.75 Top of ridge,75 ft.above hollow,bears N.70°E.and S.70° W.

Enter heavy timber,bears N.70°E.and S.70°W.

Desc.

40.00 Set an iorn post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 32 in W half and S 33 in E half;from which

A pinon pine,6 ins.dia.,bears N.12°55'E.,128 lks. dist..mkd.¼ S 33 B T.

No other trees within limits;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

43.00 Bottom of hollow,30 ft.below ridge,course W.

Asc.

46.00 Top of ridge,30 ft.above hollow,bears E.and W.

Desc.

47.00 Leave timber,bears E.and W.

Desc.through dense oak brush.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.28,29,32,and 33,mkd.on brass cap

T 40 S S 29 in NW.

R 9 W S 28 in NE.

S 33 in SE.;and

S 32 in SW.quadrants;from which

A pinon pine,8 ins.dia.,bears N.11°50'E.,337 lks. dist..mkd.T 40 S R 9 W S 28 B T.

A pinon pine,9 ins.dia.,bears N.27°38'W.,212 lks. dist..mkd.T 40 S R 9 W S 29 B T.

No other thee within limits;dig pits,18x18x12 ins.,in secs.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	32 and 33;5½ ft.dist.;and raise a mound of earth.4 ft. base,2 ft.high,W.of the cor.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak,sage,deer,mahogany,and bitter brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.
	East,on a random line bet.secs.28 and 33 .
40.00	Set temp.¼ sec.cor.
80.22	Intersect N.and S.line,14 lks.N.of the cor.of secs.27,28 33,and 34.
	Thence I run
	N.89°54'W.,on a true line bet.secs.28 and 33.
	Over mountainous land;through dense undergrowth.
	Desc.
3.50	Begin abrupt descent over ledges,bears N.30°E.and S.30°W
	Enter scattering timber,bears N.30°E.and S.30°W.
4.80	Foot of ledges,bears N.30°E.and S.30°W.
13.00	Leave timber,bears N.and S.
35.00	Foot of steep descent,bears NE and SW.
	Desc,gradually.
40.11	Set an iorn post,3 ft.lond,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in N half and S 33 in S half;from which
	An oak,3 ins.dia.,bears N.49°30'W.,33 lks. dist.mkd.¼ S 28 B T.
	An oak,3 ins.dia.,bears S.50°30'W.,30 lks. dist..mkd.¼ S 33 B T.
57.00	Desc.into hollow,bears N.60°W.and S.60°E.
67.00	Bottom of hollow,50 ft.below ¼ sec.cor.,course N.60°W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Asc.
75.00	Top of ridge,20 ft.above hollow,bears N.60°W.and S.60°E.
	Desc.
80.22	The cor.of secs.28,29,32,and 33.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.22 chs.
	September 25,1909:At this cor.I set off 0 °49'S.,on the decl.arc;and at 11 h 52 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°18'N.,which is the proper lat.nearly.
	———
	N.0°3'W.,bet.secs.28 and 29.
	Over mountainous land;through dense undergrowth .
	Desc.
2.00	Bottom of hollow,10 ft below sec.cor.,course S.80°W.
	Asc.
22.00	Top of ridge,20 ft.above hollow,bears E.and W.
	Desc.
33.00	Bottom of hollow,20 ft.below ridge,course W.
	Asc.
39.00	Top of ridge,20 ft.above hollow,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in W half and S 28 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
50.00	Bottom of hollow,40 ft.below ridge,course W.
	Asc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
73.00	Top of ridge,40 ft.above hollow,bears E.and W..
	Desc.
78.00	Bottom of hollow ,80 ft.below ridge,course N.75°W.
	Enter scattering timber,bears N.75°W.and S.75°E.
	Asc.
79.50	Top of ridge,25 ft.above hollow,bears N.75°W.and S.75°E.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.20,21,28,and 29,mkd.on brass cap
	T 40 S S 20 in NW.
	R 9 W S 21 in NE.
	S 28 in SE.;and
	S 29 in SW.quadrants;from which
	A cedar,24 ins.dia.,bears N.76°35'E.,31 lks.
	dist..mkd.T 40 S R 9 W S 21 B T.
	A cedar,10 ins.dia.,bears S.4°E.,50 lks.
	dist..mkd.T 40 S R 9 W S 28 B T.
	A pinon pine,6 ins.dia.,bears S.16°W.,38 lks.
	dist..mkd.T 40 S R 9 W S 29 B T.
	A cedar,24 ins.dia.,bears N.66°W.,31 lks.
	dist..mkd.T 40 S R 9 W S 20 B T.
	Land,mountainous .
	Soil,clay and sandy loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage,mahogany,and oak brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.

September 25,1909.

September 26,1909:At 7 h 21 m a.m.,l.m.t.,I set off 37° 19'N.,on the lat.arc;1°06'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs. 20,21,28,and 29.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Thence I run
	S.89°54'E.,on a random line bet.secs.21 and 28
40.00	Set temp.¼ sec.cor.
80.28	Intersect N.and S.line ,at the cor.of secs.21,22,27,and 28.
	Thence I run
	N.89°54'W.,on a true line bet.secs.21 and 28.
	Over mountainous land;through dense undergrowth.
	Desc.gradually.
14.50	Bottom of wash,20 lks.wide,4 ft.deep,course S.
	Asc.
15.50	Top of spur,20 ft.above wash,bears N.and S.
	Desc.
20.00	Bottom of hollow,40 ft.below spur,course S.
	Asc.
22.50	Top of ridge,20 ft.above hollow,bears N.and S.
	Enter scattering timber,bears N.and S.
	Desc.
28.00	Bottom of hollow,40 ft.below ridge,course S.
	Asc.
31.50	Top of ridge, 30 ft.above hollow,bears N.and S.
	Desc.abruptly .
40.14	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in N half and S 28 in S half;from which
	A cedar,12 ins.dia.,bears N.30°W.,44 lks. dist..mkd.¼ S 21 B T.
	A pinon pine,16 ins.dia.,bears S.38°30'E.,70 lks. dist..mkd.¼ S 28 B T.
41.00	Foot of abrupt descent,bears N.80°W.and S.80°E.
	Desc.gradually.
51.50	Creek,1 lk.wide,2 ins.deep,in bottom of canon, 100 ft.below ridge,course N.75°W.
	Asc.
55.00	Top of spur,20 ft.above canon,bears N.60°W.and S.60°E.

Subdivision of T.40 S.,R.9 W.-Continued;

Chains	
	Desc.
59.50	Bottom of hollow,30 ft.below ridge,course N.50°W.
	Asc.abruptly.
67.00	Top of ridge,80 ft.above hollow,bears N.60°W.and S.60°E.
	Desc.abruptly.
80.28	The cor.of secs.20,21,28,and 29.
	Land,mountainous .
	Soil,clay and sandy loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak,maple,and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.28 chs.
	N.0°3'W.,bet.secs.20 and 21.
	Over mountainous land;through heavy timber .
	Asc.
9.00	Top of ridge,75 ft.above sec.cor.,bears N.60°W.and S.60°E
	Desc.
15.00	Creek,4 lks.wide,2 ins.deep,in bottom of canon,80 ft. below ridge,course N.80°W.
	Asc.
21.00	Top of ridge,200 ft.above canon,bears E.and W.
	Desc. rapidly.
36.00	Foot of steep descent,bears E.and W.
	Thence descend gentle slope.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 20 in W half and S 21 in E half;from which
	A cedar,20 ins.dia.,bears S.54°30'E.,150 lks. dist..mkd.¼ S 21 B T.
	A pinon pine,8 ins.dia.,bears S.3°25'W.,63 lks. dist..mkd.¼ S 20 B T.
48.00	Begin abrupt descent,bears E.and W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
61.00	Bottom of hollow,300 ft.below ridge,course N.70°W.
	Asc.
67.00	Top of ridge,30 ft.above hollow,bears N.80°W.and S.80°E.
	Desc.
76.00	Bottom of hollow,20 ft.below ridge,course S.80°W.
	Asc.
80.00	For reasons already explained,
	Set a limestone,18x10x6 ins.,12 ins.in the ground,for cor.of secs.16,17,20,and 21,mkd.with 3 notches on S.and 4 notches on E edges;from which
	A pinon pine,10 ins.dia.,bears N.37°30'E.,48 lks. dist..mkd.T 40 S R 9 W S 16 B T.
	A pinon pine,14 ins.dia.,bears S.15°10'E.,24 lks. dist..mkd.T 40 S R 9 W S 21 B T.
	A pinon pine,8 ins.dia.,bears S.11°50'W.,130 lks. dist..mkd.T 40 S R 9 W S 20 B T.
	A cedar,8 ins.dia.,bears N.47°15'W.,30 lks. dist..mkd.T 40 S R 9 W S 17 B T.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar, and pinon pine.
	Undergrowth,sage .
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	September 26,1909:At this cor.I set off 1°12'S.,on the decl.arc;and at 11 h 51 m a.m.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°20'N.,which is the proper lat.nearly.
	S.89°54'E.,on a random line bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
80.22	Intersect N.and S.line,10 lks.S.of the cor.of secs.15,16, 21,and 22.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Thence I run
	N.89°58'W.,on a true line bet.secs.16 and 21.
	Over mountainous land;through dense undergrowth.
	Asc.gradually.over flat.
3.50	Leave flat,bears N.and S.
	Desc.
6.00	Bottom of hollow,30 ft.below flat,course N.
	Asc.
10.00	Top of ridge,30 ft.above hollow,bears N.and S.
	Desc.abruptly.
16.80	Bottom of hollow,60 ft.below ridge,course N.
	Enter scattering timber,bears N.and S.
	Asc.
22.00	Top of ridge,30 ft.above hollow,bears N.and S.
	Desc.
24.30	Begin abrupt descent,bears N.and S.
	Enter heavy timber,bears N.and S.
29.75	Ledge,100 ft.high,bears N.and S.
34.20	Bottom of hollow,200 ft.below ridge,course N.
	Asc.
	Leave timber,bears N.and S.
39.60	Top of ridge,30 ft.above hollow,bears N.and S.
	Enter scattering timber,bears N.and S.
	Desc.abruptly.
40.11	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for +¼ sec.cor.,mkd.on brass cap ¼ S 16 in N half and S 21 in S half;from which
	A pinon pine,8 ins.dia.,bears N.16°E.,31 lks. dist.,mkd.¼ S 16 B T.
	A pinon pine,8 ins.dia.,bears S.14°E.,77 lks. dist.,mkd.¼ S 21 B T.
43.60	Bottom of hollow,30 ft.below ridge,course N.
	Asc.
47.00	Top of ridge,50 ft.above hollow,bears N.and S.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Desc.
63.00	Bottom of hollow,70 ft below ridge,course N.60°W.
	Asc.
68.50	Top of spur,30 ft.above hollow,bears N.and S.
	Desc.abruptly.
70.00	Bottom of same hollow,40 ft.below spur,course S.70°W.
	Asc.
80.22	The cor.of secs.16,17,20,and 21.
	Land,mountainous and level.
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.22 chs.
	September 26,1909.

September 27,1909:At 7 h 21 m a.m.,l.m.t.,I set off 37° 20'N.,on the lat.arc;1°30'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs. 16,17,20,and 21.

Thence I run

N.0°3'W.,bet.secs.16 and 17.

Over mountainous land;through heavy timber .

	Asc.
8.00	Top of ridge,120 ft.above sec.cor.,bears E.and W.
	Desc. abruptly.
31.40	Creek,10 lks.wide,6 ins.deep,in bottom of Orderville Gulch,400 ft.below ridge,course S.80°W.
	Asc.gradually in bottom of canon.
	Leave heavy and enter scattering timber,bears N.80°E. and S.80°W.
40.00	Set an iron post,3 ft.long,1 in..in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 17 in W half

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

and S 16 in E half;from which

A cedar,4 ins.dia.,bears S.30°E.,42 lks.
dist..mkd.¼ S 16 B T.

A cedar,6 ins.dia.,bears N.56°W.,122 lks.
dist..mkd.¼ S 17 B T.

40.60 Wash,20 lks.wide,3 ft.deep,course S.20°E.

Enter heavy timber,bears N.20°W.and S.20°E.

Leave canon bottom,bears NE and SW.

Asc.abruptly,point of ridge.

48.00 Desc.from ridge,bears S.and N.20°E.

52.30 Bottom of hollow,40 ft.below ridge,course S.20°W.

Asc.along bottom of hollow,

57.60 Leave hollow Course S.;comes from N.10°W.

Asc.

67.70 Top of ascent,bears N.10°W.and S.10°E. 400 ft.above hollow.

Thence over flat ridge top .

74.00 Leave ridge,bears N.20°W.and S.

Desc.

80.00 For reasons already explained,

Set a sandstone,14x8x7 ins.,9 ins.in the ground,
for cor.of secs.8,9,16,and 17,mkd.with 4 notches
on S.,and 4 notches on E.edges;from which

A pinon pine,8 ins.dia.,bears N.72°30'E.,39 lks.
dist..mkd.T 40 S R 9 W S 9 B T.

A pinon pine,6 ins.dia.,bears S.11°30'E.,110 lks.
mkd.T 40 S R 9 W S 16 B T.

A cedar,5 ins.dia.,bears S.18°30'W.,122 lks.
dist..mkd.T 40 S R 9 W S 17 B T.

A pinon pine, 6 ins.dia.,bearsN.50°W.,43 lks.
dist.,mkd.T 40 S R 9 W S 8 B T.

Land,mountainous .

Soil,clay loam;2nd rate.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Timber,cedar,pinon pine,and red pine.
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	S.89°58'E.,on a random line bet.secs.9 and 16.
40.00	Set temp.¼ sec.cor.
80.20	Intersect N.and S.line,5 lks.E.of the cor.of secs.9,10,15 and 16.
	Thence I run
	West,on a true line bet.secs.9 and 16.
	Over mountainous land;through heavy timber .
	Asc.
1.00	Top of spur,10 ft.above sec.cor..bears N.and S.
	Desc.
5.00	Bottom of hollow,30 ft.below ridge,course S.10°E.
	Asc.
8.40	Begin abrupt ascent,bears N.and S.
19.00	Top of ridge,100 ft.above hollow,bears N.and S.
	Desc.abruptly.
21.80	Bottom of hollow,70 ft.below ridbe,course S.10°W.
	Asc.abruptly.
25.00	Top of ridge,40 ft.above hollow,bears N.10°E.and S.10°W.
	Desc.
29.60	Begin abrupt descen,bears N.20°E.and S.20°W.
33.00	Bottom of hollow,70 ft.below ridge,course S.25°W.
	Asc.
40.10	Top of ridge,80 ft.above hollow,bears N.30°E.and S.30° W.
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 9 in N half and S 16 in S half;from which
	A pinon pine,12 ins.dia.,bears N.8°40'E., 37 lksl

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	dist..mkd.¼ S 9 B T.
	A pinon pine,18 ins.dia.,bears S.38°10'W., 25 lks. dist..mkd.¼ S 16 B T.
40.30	Begin abrupt descent;bearing N.20°E.and S.20°W.
42.00	Bottom of hollow,60 ft.below ridge,course S.30°W. Asc.abruptly.
47.10	Top of ridge,60 ft.above hollow,bears N.30°E.and S.30°W. Desc.abruptly.
50.20	Bottom of hollow,50 ft.below ridge,course S.20°W. Asc.abruptly.
57.25	Top of ridge,60 ft.above hollow,bears N.15°E.and S.15°W. Desc.abruptly.
60.40	Bottom of hollow,40 ft.below ridge,course S.10°W. Asc.abruptly.
63.60	Top of ridge,50 ft.abovehollow,bears N.and S. Desc.
68.40	Bottom of hollow,40 ft.below ridge,course S. Asc.
70.40	Top of ridge,700 ft.above hollow,bears N.and S. Desc.abruptly.
75.00	Bottom of hollow,40 ft.below ridge,course S. Asc.
80.20	The cor.of secs.8,9,16,and 17.
	Land,mountainous .
	Soil,clay and sandy loam;3rd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.20 chs.
	September 27,1909:At the noon hour the sky is overcast and solar observations are impossible.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	N.0°3'W.,bet.secs.8 and 9.
	Over mountainous land;through dense undergrowth.
	Desc.
3.00	Bottom of hollow,20 ft.below sec.cor.,course SE.
	Asc.
7.75	Top of spur,30 ft.above hollow,bears S.30°E.and N.30°W.
	Desc.
12.75	Bottom of hollow,15 ft.below ridge,course S.20°E.
	Asc.
19.00	Top of ledge,40 ft.high,bears E.and W.
25.00	Top of ridge,150 ft.above hollow,bears E.and W.
	Desc.
40.00	Set an iorn post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 8 in W half and S 9 in E half;from which
	An oak,3 ins.dia.,bears S.65°E.,269 lks. dist..mkd.¼ S 9 B T.
	An oak,3 ins.dia.,bears N.76°30'W.,402 lks. dist..mkd.¼ S 8 B T.
40.50	Bottom of hollow,30 ft.below ridge,course E.
	Asc.
60.50	Top of ridge,25 ft.above hollow,bears E.and W.
	Desc.abruptly.
71.00	Begin more gradual descent,bears E.and W.
75.00	Bottom of hollow,75 ft.below ridge,course E.
	Asc.
77.00	Top of ridge,80 ft.above hollow,bears E.and W.
	Desc.
80.00	Set a sandstone,18x9x6 ins.,12 ins.in the ground,for cor.of secs.4,5,8,and 9,mkd.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.
	Land,mountainous.
	Soil,clay loam;2nd rate.

Subdivision of T.40 S.,R.9 W.--Continued.

Chains	
	No timber .
	Undergrowth,oak ,sage,and mahogany.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	September 27,1909.
	September 28,1909:At 7 h 21 m a.m.,l.m.t.,I set off 37° 22'N.,on the lat.arc;1°53'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.4,5,8, and 9.
	Thence I run
	East,on a random line bet.secs.4 and 9.
40.00	Set temp.¼ sec.cor.
80.12	Intersect N.and S.line,16 lks.S.of the cor.of secs.3,4, 9,and 10.
	Thence I run
	S.89°53'W.,on a true line bet.secs.4 and 9.
	Over mountainous land;through heavy timber and scattering undergrowth.
	Asc.
1.75	Top of ridge,20 ft.above sec.cor.,bears NW and SE.
	Desc.
5.70	Bottom of hollow,25 ft.below ridge,course S.35°E.,
	Leave timber, bears N.35°W.and S.35°E.
	Asc.
17.00	Top of ridge,30 ft.above hollow,bears N.and S.
	Desc.
21.00	Bottom of hollow,20 ft.below ridge,course S.20°E.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Enter heavy timber,bears N.20°W.and S.20°E.
	Asc.
40.06	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 4 in N.half and S 9 in S half;from which
	A cedar,14 ins.dia.,bears N.39°30'W.,53 lks. dist..mkd.¼ S 4 B T.
	A cedar,16 ins.dia.,bears S.0°15'W.,59 lks. dist..mkd.¼ S 9 B T.
44.00	Top of ridge,100 ft.above hollow,bears NE and SW.
	Desc.
52.00	Bottom of hollow,70 ft.below ridge,course N.
	Leave timber and enter dense undergrowth,bears N.and S.
	Asc.
55.00	Top of spur,20 ft.above hollow,bears N.and S.
	Desc.
60.30	Bottom of hollow,25 ft.below ridge,course N.30°E.
	Asc.
80.12	The cor.of secs.4,5,8,and 9.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak,sage,and service berry.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,80.12 chs.
	September 28,1909:At this cor.I set off 1°59'S.,on the decl. arc;and at 11 h 51 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°22'N.,which is the proper lat.nearly.

	N.0°3'W.,on a random line bet.secs.4 and 5.
40.00	Set temp.¼ sec.cor.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
88.55	Intersect N.bdy.of Tp.,7 lks.E.of the cor.of secs.4,5,32, and 33,which is a sandstone,10x10x5 ins.,above ground, firmly set,and mkd.and witnessed as described.by the surveyor general.
	Thence I run
	S.0°6'E.,on a true line bet.secs.4 and 5.
	Over mountainous land;through scattering timber and dense undergrowth.
	Asc.
2.50	Top of spur,20 ft.above sec.cor.,bears N.30°W.and S.30°E.
	Desc.
6.50	Bottom of hollow,30 ft.below ridge,course N.30°W.
	Asc.
8.50	Top of ridge,80 ft.above hollow,bears NW and SE.
	Desc.
16.50	Bottom of swale, 50 ft.below ridge,course N.30°W.
	Asc.
26.20	Top of spur,80 ft.above hollow,bears E.and W.
	Desc.
31.00	Bottom of hollow,50 ft.below ridge,course E.
	Asc.
36.50	Top of ridge,150 ft.above hollow,bears E.and W.
	Desc.
48.55	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 5 in W half and S 4 in E half ;from which
	A pinon pine,2 4 ins.dia.,bears S.74°30'E.,73 lks. dist..mkd.¼ S 4 B T.
	A pinon pine,5 ins.dia.,bears S.70°15'W.,19 lks. dist..mkd.¼ S 5 B T.
50.50	Bottom of canon,250 ft.below ridge,course E.
	Asc.
59.50	Top of rocky spur,140 ft.above canon,bears E.and W.
	Desc.
61.50	Same canon,100 ft.below spur,course N.30°E.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Asc.
64.50	Top of spur,50 ft.above canon,bears E.and W.
	Desc.
68.50	Bottom of canon,50 ft.below spur,course N.10°W.
	Asc. Leave timber,bears E.and W.
81.50	Coal out crop,bears E.and W. Vein 4 ft.thick.
85.50	Top of abrupt ascent,bears E.and W.
	Asc.gradually.
88.55	The cor.of secs.4,5,8,and 9.
	Land,mountainous .
	Soil,clay and gravelly loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and service berry.
	Good grass for grazing.
	Mountainous or heavily timbered land,88.55 chs.
	September 28,1909.
	—
	September 29,1909:At 7 h 20 m a.m.,l.m.t.I set off 37°17' N.,on the lat.arc;2°16'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.5,6,31,and 32.,on S.bdy.of Tp.,heretofore described.
	Thence I run
	N.0°3'W.,bet.secs.31 and 32.
	Over mountainous land;through scattering timber and dense undergrowth.
	Asc.rapidly.
10.50	Top of spur,40 ft.above hoE.,bears N.30°E.and S.30°W.
	Desc.
12.00	Bottom of hollow,25 ft.below ridge,course S.40°W.
	Asc.
20.60	Top of ridge,120 ft above hollow,bears N.70°W.and S.70°E.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Desc.
36.60	Bottom of hollow,60 ft.below ridge,course N.10°E.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 31 in W half and S 32 in E half;from which
	An oak,3 ins.dia.,bears N.75°30'E.,60 lks. dist..mkd.¼ S 32 B T.
	An oak,3 ins.dia.,bears N.33°15'W.,62 lks. dist..mkd.¼ S 31 B T.
47.00	Top of ridge,35 ft.above hollow,bears E.and W.
	Desc.
72.00	Top of ledge,20 ft.high,bears E.and W.
76.00	Bottom of canon,60 ft.below ledge,course N.30°E.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.29.30,31,and 32,mkd.on brass cap
	T 40 S S 30 in NW.
	R 9 W S 29 in NE.
	S 32 in SE.;and
	S 31 in S_W.quadrants;from which
	A pinon pine,7 ins.dia.,bears N.66°E.,20 lks. dist..mkd.T 40 S R 9 W S 29 B .T.
	A cedar,8 ins.dia.,bears S.20°E.,47 lks. dist..mkd.T 40 S R 9 W S 32 B T.
	A pinon pine,4 ins.dia.,bears S.43°W.,32 lks. dist..mkd.T 40 S R 9 W S 31 B T.
	A pinon pine,12 ins.dia.,bears N.83°30'W.,83 lks. dist..mkd.T 40 S R 9 W S 30 B T.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and service berry .
	Good grass for grazing.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Mountainous land,or land covered with dense undergrowth
	80.00 chs.
	September 29,1909:At this cor.I set off 2°22'S.,on the decl.
	arc;and at 11 h 50 m a.m.,l.m.t.,I observe the sun on the
	meridian,the resulting lat.is 37°18'N.,which is the proper
	lat.nearly.
	East,on a random line bet.secs.29 and 32.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line,19 lks.S.of the cor.of secs.
	28,29,32,and 33.
	Thence I run
	S.89°52'W.,on a true line bet.secs.29 and 32.
	Over mountainous land;through dense undergrowth.
	Desc.
4.00	Bottom of hollow,50 ft.below sec.cor.,course S.75°W.
	Enter heavy timber,bears N.75°W.and S.75°E.
	Asc.
23.00	Top of spur,30 ft.above hollow,bears NE and SW.
	Desc.
32.00	Bottom of same hollow,course NW.
	Asc.
	Leave heavy timber and enter scattering timber,bears NW
	and SE.
39.97	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
	ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in N half
	and S 32 in S half;from which
	A pinon pine,6 ins.dia.,bears N.15°15'W.,70 lks.
	dist..mkd.¼ S 29 B T.
	A cedar,10 ins.dia.,bears S.60°55'W.,40 lks.
	dist..mkd.¼ S 32 B T.
44.00	Top of ridge,100 ft.above hollow,bears N.and S.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	Desc.
44.25	Leave timber,bears N.and S.
56.00	Begin abrupt descent,bears N.10°E.and S.10°W.
	Enter heavy timber,bears N.10°E.and S.10°W.
61.00	Bottom of hollow,50 ft.below ridge,course N.20°W.
	Asc.
62.70	Top of steep ascent,bears N.and S.
	Asc.gradually.
71.40	Top of ridge,60 ft.above hollow,bears N.and S.
	Desc.
77.50	Bottom of hollow,100 ft.below ridge,course N.
	Asc.
79.94	The cor.of secs.29,30,31,and 32.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,oak and bitter brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,79.94 chs.

September 29,1909.

September 30,1909:At 7 h 20 m a.m.,m.m.t.,I set off 37° 18'N.,on the lat.arc;2°40'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.29,30,31, and 32.

Thence I run

West,on a random line bet.secs.30 and 31.

40.00	Set temp.¼ sec.cor.
81.60	Intersect W.bdy.of Tp.,7 lks.S.of the cor.of secs.25,30, 31,and 36,which is a sandstone,6x10x5 ins.,above ground, firmly set,and mkd.and witnessed as described by the surveyor general.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Thence ⊥ run
	S.89°57'E.,on a true line bet.secs.30 and 31.
	Over mountainous land;through dense undergrowth .
	Asc.
6.00	Top of ridge,50 ft.above sec.cor.,bears N.and S.
	Desc.
10.50	Bottom of hollow,15 ft.below ridge,course S.20°E.
	Asc.
25.90	Trail,bears NW and SE .
30.50	Top of ridge,40 ft.above hollow,bears N.and S.
	Desc.
41.60	Set an iron post,3 ft.long,1 in.in dia.,26 ins in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 30 in N half and S 31 in S half;from which
	A pinon pine,6 ins.dia.,bears N.14°W.,90 lks. dist..mkd.¼ S 30 B T.
	A pinon pine,10 ins.dia.,bears S.24°W.,64 lks. dist..mkd.¼ S 31 B T.
42.50	Begin steep descent,bears N.30°E.and S.30°W.
46.50	Bottom of hollow,60 ft.below ridge,course N.30°E.
	Asc.
51.50	Top of ridge,50 ft.above hollow,bears N.and S.
	Desc.
56.50	Bottom of hollow,20 ft.below ridge,course N.25°W.
	Asc.
64.50	Top of ridge,60 ft.above hollow,bears N.and S.
	Desc.
81.60	The cor.of secs.29,30,31,and 32.
	Land,mountainous .
	Soil,clay and gravelly loam;2nd rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak,and mahogany.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	81.60 chs.
	September 30,1909:At this cor.I set off 2°45'S.,on the decl.arc;and at 11 h 50 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°18'N.,which is the proper lat.nearly.
	N.0°3'W.,bet.secs.29 and 30.
	Over mountainous land;through heavy timber and dense undergrowth.
	Desc.
6.00	Bottom of canon,100 ft.below sec.cor.,course N.10°W.
	Asc.,along east side of canon.
34.00	Top of spur,20 ft.below hollow,bears E.and W.
	Desc.
38.00	Bottom of hollow,50 ft.below spur,course N.20°W.
	Asc.
39.80	South bank of wash,bears E.and W.,course W.
	Note :The point for ¼ sec.cor.,will fall in wash,therefore at this point
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for witness cor.to ¼ sec.cor.mkd.on brass cap W C ¼ S 30 in W half and S 29 in E half;from which
	A yellow pine,24 ins.dia.,bears N.35°E.,46 lks. dist..mkd. W C ¼ S 29 B T.
	A yellow pine,24 ins.dia.,bears S.18°W.,135 lks. dist.,mkd.W C ¼ S 30 B T.
40.00	Point for ¼ sec.cor.falls in wash,course W.
40.20	N.edge of wash,course W.
	Asc.
43.00	Top of spur,20 ft.above hollow,bears E.and W.
	Desc.
45.00	Bottom of hollow,30 ft.below ridge,course S.65°W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Asc.
60.00	Top of ridge,140 ft.above hollow,bears N.80°E.and S.80°W.
	Desc.
68.00	Bottom of hollow,15 ft.below ridge,course E
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.19,20,29,and 30,mkd.on brass cap
	T 40 S S 19 in NW.
	R 9 W S 20 in NE.
	S 29 in SE.;and
	S 30 in SW.quadrants;from which
	A yellow pine,30 ins.dia.,nears N.47°45'E.,125 lks. dist..mkd.T 40 S R 9 W S 20 B T.
	A yellow pine,30 ins.dia.,bears S.48°E.,162 lks. dist..mkd.T 40 S R 9 W S 29 B T.
	A yellow pine,30 ins.dia.,bears S.19°30'W.,100 lks. dist..mkd.T 40 S R 9 W S 30 B T.
	A yellow pine,24 ins.dia.,bears N.58°W.,115 lks. dist..mkd.T 40 S R 9 W S 19 B T.
	Land,mountainous .
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak and mahogany.
	Good grass for grazing.
	Mountainous or heavily timberedland,or land covered with dense undergrowth,80.00 chs.

September 30,1909.

October 1,1909:At 7 h 20 m a.m.,l.m.t.,I set off 37°19'N., on the lat.arc;3°03'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19.20,29,and 30.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Thence I run
	N.89°52'E.,on a random line bet.secs.20 and 29.
40.00	Set temp¼ sec.cor.
79.78	Intersect N.and S.line,30 lks.N.of the cor.of secs.20, 21,28,and 29.
	Thence I run
	N.89°55'W.,on a true line bet.secs.20 and 29.
	Over mountainous land;through dense undergrowth and scattering timber.
	Desc.
7.80	Bottom of hollow,100 ft.below sec.cor.,course NW.
	Asc.
23.00	Top of spur,40 ft.above hollow,bears N.and S.
	Desc.
26.00	Bottom of hollow,40 ft.below ridge,course S.30°W.
	Asc.
37.00	Top of ridge,125 ft.above hollow,bears N.and S.
	Desc.
39.89	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 20 in N half and S 29 in S half;from which
	A pinon pine,8 ins.dia.,bears N.18°E.,144 lks. dist..mkd.¼ S 20 B T.
	A pinon pine,8 ins.dia.,bears S.74°E.,124 lks. dist..mkd.¼ S 29 B T.
69.00	Bottom of hollow,150 ft.below ridge,course SE.
	Asc.
76.00	Top of ridge,40 ft.above hollow,bears NW and SE.
	Desc.
79.50	Bottom of hollow,10 ft.below ridge,course S.45°E.
	Asc.
79.78	The cor.of secs.19,20,29,and 30.
	Land,mountainous .
	Soil,clay loam;2nd rate.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak and service berry.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	79.78 chs.
	October 1,1909:At this cor.I set off 3°09'S.,on the decl.
	arc;and at 11 h 50 m a.m.,l.m.t.I observe the sun on the
	meridian with resulting lat.is 37°19'N.,which is the
	proper lat.nearly.
	———
	N.89°57'W.,on a random line bet.secs.19 and 30.
40.00	Set temp.¼ Sec.cor.
82.04	Intersect W.bdy.of Tp.,2 lks.S.of the cor.of secs.19,24,
	25,and 30,which is a limestone,6x10x10 ins.,above ground,
	firmly set,and mkd.and witnessed as described by the
	surveyor general.
	Thence I run
	S.89°56'E.,on a true line bet.secs.19 and 30.
	Over mountainous land;through heavy timber and dense
	undergrowth.
	Asc.
9.00	Top of ridge,50 ft.above sec.cor.,bears N.and S.
	Desc.
23.00	Foot of steep descent,bears N.30°W.and S.30°E.
	Desc.gradually.
27.00	Bottom of canon,50 ft.below ridge,course N.30°W.
	Asc.gradually.
29.00	Begin abrupt ascent,bears N.30°W.and S.30°E.
42.04	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
	ground,for ¼ sec.cor..mkd.on brass cap ¼ S 19 in N half
	and S 30 in S half;from which
	A pinon pine,14 ins.dia.,bears N.4°W.,45 lks.
	dist..mkd.¼ S 19 B T.

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Subdivision of T.40 S.,R.9 W.-Continued.

Chains

A pinon pine,12 ins.dia.,bears S.6°E.,35 lks. dist..mkd.$\frac{1}{4}$ S 30 B T.

50.00 Top of ridge,500 ft.above canon,bears N.and S.

Desc.

55.00 Bottom of hollow,150 ft.below ridge,course N.

Asc.

60.50 Top of abrupt ascent,bears N.and S.

Asc.gradually.

78.50 Top of ridge,200 ft.above hollow,bears N.and S.

Desc.

82.04 The cor.of secs.19,20,29,and 30.

Land,mountainous .

Soil,clay loam and rocky;2nd and 4th rate.

Timber,cedar,pinon pine,and yellow pine.

Undergrowth,oak and service berry.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,82.04 chs.

October 1,1909.

October 2,1909:At 7 h 20 m a.m.,l.m.t.,I set off 37°19'N., on the lat.arc;3°26'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,20,29,and 30.

Thence I run

N.0°3'W.,bet.secs.19 and 20.

Over mountainous land;through heavy timber and dense undergrowth.

Asc.

9.00 Top of ridge,20 ft.above sec.cor.,bears N.60°W.and S.60°E.

Desc.gradually.

26.00 Begin abrupt descent over ledges,bears E.and W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

31.00 Bottom of canon,75 ft.below ridge,course NW.

Asc.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 19 in W half and S 20 in E half;from which

A pinon pine,4 ins.dia.,bears N.80a°E.,72 lks. dist..mkd.¼ S 20 B T.

A cedar,14 ins.dia.,bears N.11°15'W.,74 lks. dist..mkd.¼ S 19 B T.

52.70 Edge of ledge,bears E and W.

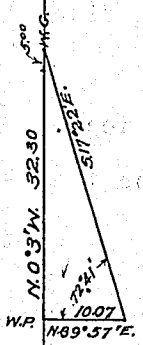
57.70 Note:From here north the line crosses Orderville Gulch, and is too rough to be chained,Therefore at this point Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for witness point,mkd.on brass cap W P in W half; from which

A pinon pine,10 ins.dia.,bears N.80°E.,72 lks. dist.,mkd. W P B T.

A pinon pine,8 ins.dia.,bears N.21°15'W.,29 lks. dist.. mkd. W P B T.

Note:In order to get better base for triangulation I return to,

52.70 To determine the distance across the canon,I set a flag on line on north side of canon and from this point I measure a base N.89°57'E.,10.07 chs.to point from which flag on north side of Orderville Gulch bears N.17°22'W., which makes the angle at the base 72°41'(no longer base could be obtained on account of the rough nature of the country.)Then I cross canon to flag on north edge from which the east end of base bears S.17°22'E.,which agrees with the other angle ;therefore I calculate the distance across the canon as follows:



log Tan 72°41' + log base = distance or

10.506146+ 1.003029 = 1.509175 which gives a distance of 32.30 chs.which added to 52.70 makes

85.00 North edge of Orderville Gulch on top of perpendicular wall,bears E.and W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

For reasons already explained I

Set a sandstone,24x14x6 ins.,18 ins.in the ground,for witness cor.to cor.of secs.17,18,19,and 20,mkd.W C on NE face;with 3 nothes on S and 5 notches on E edges; from which

A cedar,14 ins.dia.,bears N.56°45'E.,52 lks. dist..mkd. W C T 40 S R 9 W S 17 B T.

A cedar,14 ins.dia.,bears S.30°E.,52 lks. dist..mkd. W C T 40 S R 9 W S 20 B T.

A pinon pine,8 ins.dia.,bears N.67°10'W.,81 lks. dist..mkd. W C T 40 S R 9 W S 18 B T.

No other trees within limits;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

80.00 Point for cor.of secs.17,18,19,and 20 falls in Orderville Gulch,cor.not set.

Land,mountainous

Soil,clay loam and rocky;2nd and 4th rate.

Timber,cedar and pinon pine and yellow pine.

Undergrowth,oak and service berry.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs.

October 2,1909:At this cor.I set off 3°32'S.,on the decl. arc;and at 11 h 50 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°20'N.,which is the proper lat.nearly.

From the witness cor.to cor.of secs.17,18,19,and 20, which is 5.00 chs.N.0°3'W.,from true cor.point, I run

S.89°55'E.,on a random offset line bet.secs.17 and 20.

3.00 Offset S.0°3'E.,5.00 chs.to random line bet.secs.17 and 20. Set temp.witness cor .to cor.of secs.17,18,19,and 20.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Thence continue S.89°55'E.,on random line bet.secs.17 and 20.
6.99	Top of ridge and edge of ravines across which it is impossible to chain;therefore I place a flag on top of ledges on east edge of ravines and measure a base N.0°5' E. 22.08 chs.to point from which the flag on east side of ravines bears S.67°26'E.,which makes the angle at the base 67°31';then I proceed to the flag just sighted from which the north end of base bears N.67°26'W.,which agrees with the other angle therefore I calculate the distance across as follows:
	log 22.08 +log tan 67°31 ' =log of number,or
	1.343999 + 10.383133 = 1.727132 which gives 53.35
	which added to 6.99 makes
60.34	East edge of ledges,Set temp.witness point.
79.84	Intersect N.and S.line,5 lks.S.of the cor.of secs. 16,17, 20,and 21.
	Thence I run
	N.89°57'W.,on a true line bet.secs.17 and 20.
	Over mountainous land;through heavy timber .
	Asc.
14.00	Top of ridge,30 ft.above sec.cor.,bears NE and SW.
	Desc.abruptly.
19.50	East edge of impassable ledges.
	Set an iron post,3 ft.long,1 in.in dia.,25 ins.in the ground,for witness point,mkd.on brass cap W P in N half; from which
	A cedar,10 ins.dia.,bears N.24°30'E.,87 lks.
	dist..mkd. W P B T.
	A pinon pine,18 ins.dia.,bears S.6°45'W.,48 lks.
	dist..mkd. W P B T.
	Thence over ravines and ridges ; topography approximate
24.00	Perpendicular ledge,100 ft.high.,bears NE and SW.
26.00	Creek,10 lks.wide,5 ins.deep,in bottom of Orderville Gulch,1000 ft.below witness cor.,course SW.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Asc.abruptly over ledges,
27.00	Ledge,50 ft high,bears NE and SW.
31.00	Top of ledge,200 ft.high,bears NE and SW.
38.00	Top of ridge,500 ft.above canon,bears N.and S.
	Desc.over ledges.
39.92	Point for ¼ sec.cor.falls in triangulation.
64.50	Bottom of canon,500 ft.below ridge,course S.
	Asc.abruptly.
72.85	Top of ridge,600 ft.above canon,bears N.10°W.and S.10°E.
	Desc.
76.84	Top of ledge,200 ft.high,bears N.10°W.and S.10°E.
	For reasons already explained I
	Set a sandstone,15x8x6 ins.,10 ins.in the ground,for
	witness cor.to cor.of secs.17,18,19,and 20,mkd.W C on NE
	face;with 3 notches on S and 5 notches on E edges:from
	which
	A cedar 14,ins.dia.bearsN.35°30'E.,109 lks.
	dist..mkd.W C T 40 S R 9 W S 17 B T.
	A pinon pine,10 ins.dia.,bears S.26°30'E.,32 lks.
	dist..mkd. W C T 40 S R 9 W S 20 B T.
	A cedar,30 ins.dia.,bears S.62°30'W.,18 lks.dist.,
	mkd.W C T.40 S R 9 W S 19 B T.
	A cedar,28 ins.dia.,bears N.31°W.,42 lks.
	dist..mkd ..W C T 40 S R 9 W S 18 B T.
	Thence offset N.0°3'W.,5.00 chs.,thence on offset line
	N.89°57'W., 3.00 chs..making
79.84	The witness cor.to cor.of secs.17,18,19,and 20.
	Land,mountainous.
	Soil,rocky;4th rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,79.84 chs.

October 2,1909.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	October 3,1909:At 7 h 19 m a.m.,l.m t.,I set off 37°20'N., on the lat.arc;3°49'S.,on the decl.arc;and determine a meridian with the solar at the witness cor.to cor.of secs. 17,18,19,and 20.
	Thence I run
	N.89°56'W.,on random offset line bet.secs.18 and 19.
3.00	Offset S.0°3'E.,to sec.line. Set temp.cor.
	Thence N.89°56'W.,on random line bet.secs.18 and 19.
40.00	Set temp.¼ sec.cor.
82.38	Intersect W.bdy.of Tp.,21 lks.N.of the cor.of secs. 13,18,19,and 24,which is a limestone,6x10x10 ins.,above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	N.89°55'E.,on a true line bet.secs.18 and 19.
	Over mountainous land;through scattering timber.
	Desc.abruptly.
12.25	Bottom of canon,800 ft.below sec.cor.,course S.
	Asc.abruptly over ledges.
23.00	Top of abrupt ascent,bears N.and S.
	Asc.gradually.
27.00	Leave ledges,bears N.and S.
42.38	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 18 in N half and S 19 in S half;from which
	A cedar,10 ins.dia.,bears N.4°E.,35 lks. dist..mkd.¼ S 18 B T.
	A cedar,9 ins.dia.,bears S.57°15'E.,36 lks. dist..mkd.¼ S 19 B T.
50.25	Top of ridge,700 ft.above canon,bears N.and S.
	Desc.
60.20	Bottom of canon,700 ft.below ridge,course S.10°E.
	Asc;
65.00	Top of ridge,800 ft.above canon,bears N.and S.
	Desc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
72.30	Bottom of canon,1000 ft.below ridge,course S.20°W. Asc.abruptly over ledges.
79.38	Top of perpendicular ledge,bears N.10°E.and S.10°W. Set a sandstone,16x12x5 ins.,11 ins.in the ground,for witness cor.to cor.of secs.17,18,19,and 20,mkd.W C on NE face;with 3 notches on S and 5 notches on E edges; from which
	A pinon pine,6 ins.dia.,bears N.11°30'E.,32 lks. dist..mkd.W C T 40 S R 9 W S 17 B T.
	A yellow pine,10 ins.dia.,bears S.80°E.,17 lks. dist..mkd.W C T 40 S R 9 W S 20 B T.
	A cedar,12 ins.dia.,bears W.40°30'W.,55 lks. dist..mkd.W C T 40 S R 9 W S 18 B T.
	No other trees within limits;raise a mound of stone,2 ft base,1½ ft.high,W.of cor.
	Thence offset N.0°3'W.,5.00 chs.
	Thence on offset line N.89°55'E.,3.00 chs.making
82.38	The witness cor.to cor.of secs.17,18,19.and 20,
	Land,mountainous .
	Soil,gravelly and rocky;3rd and 4th rate.
	Timber,cedar,pinon pine,and yellow pine.
	Good grass for grazing.
	Mountainous land;82.38 chs.
	October 3,1909:At this cor.I set off 3°55'S.,on the decl. arc;and at 11 h 49 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°20'N.,which is the proper lat.nearly.

From the witness cor.to cor.of secs.17,18,19,and 20.,which is 5.00 chs.N.0°3'W.,from true cor.point ,

I run

N.0°3'W.,bet.secs.17 and 18(Counting distances from true cor.point.)

Over mountainous land;through heavy timber and scattering

Subdivision of T.40 S., R.9 W.-Continued.

Chains	
	undergrowth.
	Asc.abruptly over ledges.
5.00	Witness cor.to cor.of secs.17,18,19,and 20.,
10.00	Top of ridge,200 ft.above witness cor.,bears NE and SW.
	Desc.abruptly over ledges.
20.00	Bottom of canon,500 ft.below ridge,course SW.
	Asc.abruptly over ledges.
39.90	Top of vertical ledge,50 ft.high,bears E and W.
40.00	Set an iron post,3 ft.long,1 in in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 18 in W half and S 17 in E half;from which
	A pinon pine,10 ins.dia.,bears E.,2 lks. dist..mkd.¼ S 17 B T.
	A pinon pine,10 ins.dia.,bears S.60°W.,10 lks. dist..mkd.¼ S 18 B T.
45.50	Top of ridge,600 ft.above canon,bears N.60°W.and S.60°E.
	Leave ledges,bears N.60°W.andnS 60°E.
	Desc.
53.75	Bottom of hollow,100 ft.below ridge,course E.
	Asc.
57.00	Top of spur,80 ft.above hollow,bears E.and W.
	Desc.
60.00	Bottom of hollow,60 ft.below ridge,course S.80°E.
	Asc.
65.00	Top of ridge,75 ft.above hollow,bears E.and W.
	Desc.
70.50	Bottom of hollow,60 ft.below ridge,course S.80°E.
	Asc.
80.00	Point 120 ft.above hollow..
	For reasons already explained ,
	Set a limestone,14x12x7 ins.,9 ins.in the ground,for cor of secs.7,8,17,and 18,mkd.with 4 notches on S and 5 notches on E edges;from which
	A yellow pine,14 ins.dia.,bears S.30°30'E.,377 lks.

Subdivision of T.40 S.,R.9 W.- Continued.

Chains	
	dist..mkd.T 40 S R 9 W S 17 B T.
	A yellow pine,24 ins.dia.,bears S.38°30'W.,296 lks.
	dist..mkd.T 40 S R 9 W S 18 B T.
	A yellow pine,16 ins.dia.,bears N.55°15'W.,100 lks.
	dist..mkd.T 40 S R 9 W S 7 B T.
	No other trees within limits;raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
	Land,mountainous .
	Soil,clay loam and rocky;2nd and 4th rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	October 3,1909.
	—
	October 4,1909:At 7 h 19 m a.m.,l.m.t.,I set off 37°21'N., on the lat.arc;4°12'S.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.7,8,17,and 18
	Thence I run
	S.89°57'E.,on a random line bet.secs.8 and 17.
40.00	Set temp.¼ sec.cor.
79.90	Intersect N.and S.line,10 lks.N.of the cor.of secs.8,9, 16,and 17.
	Thence I run
	N.89°53'W .,on a true line bet.secs.8 and 17.
	Over mountainous land;through heavy timber and scattering undergrowth.
	Asc.abruptly.
3.30	Top of ridge,50 ft.above sec.cor.,bears N.20°W.and S.20°E.
	Desc.abruptly.
7.60	Bottom of hollow,60 ft.below ridge,course S.
	Asc.abruptly.
9.80	Top of ridge,50 ft.above hollow,bears N.and S.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	Desc.
15.00	Bottom of hollow,100 ft.below ridge,course S.10°E.
	Asc.abruptly.
24.00	Top of ridge,200 ft.above hollow,bears N.and S.
	Desc.abruptly.
39.00	Bottom of canon,100 ft.below ridge,course S.60°W.
	Asc.
39.95	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 8 in N half and S 17 in S half;from which
	A pinon pine,10 ins.dia.,bears S.36°E.,70 lks. dist..mkd.¼ S 17 B T.
	A pinon pine,8 ins.diam.,bears N.49°15'W.,32 lks. dist..mkd.¼ S 8 B T.
41.00	Top of ridge,50 ft.above canon,bears N.60°E.and S.60°W.
	Desc.
49.00	Bottom of canon,50 ft.below ridge,course S.
	Asc.
51.70	Top of ridge,75 ft.above hollow,bears N.and S.
	Desc.
57.00	Bottom of hollow,50 ft.below ridge,course S.20°W.
	Asc.
63.20	Top of spur,20 ft.above hollow,bears N.10°E.and S.10°W.
	Desc.
72.00	Creek,1 lk.wide,2 ins.deep,in bottom of canon,200 ft.below spur,course S.20°E.
	There is a spring about 10.00 chs.up this canon,not seen from line .
	Asc.abruptly.
79.90	The cor.of secs.7,8,17,and 18.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar,pinon pine,and yellow pine.
	Good grass for grazing.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Undergrowth,oak and service berry.
	Mountainous or heavily timbered land,79.90 chs.
	October 4,1909:At this cor.I set off 4°18'S.,on the decl. arc;and at 11 h 49 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°21°N.,which is the proper lat.nearly.
	—
	S.89°55'W.,on a random line bet.secs.7 and 18.
40.00	Set temp.¼ sec.cor.
82.75	Intersect W.bdy.of Tp., 16 lks.S.of the cor.of secs.7,12, 13,and 18,which is a limestone,6 x12x12 ins.,above ground, firmly set,and mkd.and witnessed as described.by the surveyor general.
	Thence I run
	S.89°58'E.,on a true line bet.secs.7 and 18.
	Over mountainous land;through scattering timber and scattering undergrowth.
	Desc.
17.00	Creek,2 lks.wide,2 ins.deep,in bottom of canon,400 ft. below sec.cor.,course S.20°E.
	There is a spring in the canon about 16.00 chs.northerly from this point not seen from line.
	Asc.
23.75	Top of spur,70 ft.above canon,bears N.and S.
	Desc.
32.50	Bottom of hollow,40 ft.below spur,course S.30°W.
	Asc.
42.75	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 7 in N half and S 18 in S half;from which
	A cedar,14 ins.dia.,bears N.9°15'E.,100 lks. dist..mkd.¼ S 7 B T.
	A yellow pine,34 ins.dia.,bears S.57°30'W.,235 lks.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	dist..mkd.¼ S 18 B T.
51.50	Top of ridge,60 ft.above hollow,bears N.and S.
	Desc.
58.00	Bottom of hollow,80 ft.below ridge,course S.30°E.
	Asc.
61.00	Top of spur,30 ft.above hollow,bears N.and S.
	Desc.
70.00	Bottom of hollow,100 ft.below ridge,course S.16°E.
	Asc.
77.25	Top of rocky spur,130 ft.above hollow,bears N.and S.
	Desc.
82.75	The cor.of secs.7,8,17,and 18.
	Land,mountainous.
	Soil,clay loam,2nd rate.
	Timber,cedar,pinon pine,and yellow pine.
	Undergrowth,oak and service berry brush.
	Good grass for grazing.
	Mountainous land,82.75 chs.

October 4,1909.

October 5,1909:At 7h19 m a.m.,l.m.t.,I set off 37°21'N., on the lat.arc;4°35'S.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.7,8,17,and 18.

Thence I run

N.0°3'W.,bet.secs.7 and 8.

Over mountainous land;through scattering timber and scattering undergrowth.

	Asc.
8.00	Top of ridge 80 ft.above sec.cor.,bears E.and W.
	Desc.
12.00	Bottom of hollow,80 ft.below ridge,course S.70°E.
	Asc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
25.50	Top of ridge,130 ft.above hollow,bears N.70°W.and S.70°E.
	Desc.
28.00	Bottom of hollow,80 ft.below ridge,course S.70°E.
	Asc.
33.00	Top of spur,75 ft.above hollow,bears E and W.
	Desc.
35.60	Bottom of hollow,40 ft.below spur,course E.
	Asc.
38.00	Top of spur,50 ft.above hollow,bears E.and W.
	Desc.
39.60	Bottom of hollow,60 ft.below spur,course E.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 7 in W half and S 8 in E half ;from which
	A pinon pine,6 ins.dia.,bears S.42°15'E.,29 lks. dist..mkd.¼ S 8 B T.
	A pinon pine,14 ins.dia.,bears S.27°W.,50 lks.dist., mkd.¼ S 7 B T.
40.50	Top of spur,60 ft.above hollow,bears E.and W.
	Desc.
41.80	Bottom of hollow,20 ft.below spur,course S.65°E
	Asc.
48.20	Top Of ridge,100 ft.above hollow,bears E.and W.
	Desc.
56.00	Bottom of hollow,80 ft.below ridge,course S 80°E.
	Asc.
61.00	Top of ridge,75,ft.above hollow,bears NW and SE.
	Desc.
68.00	Bottom of hollow,60 ft.below ridge,course SE.
	Asc.
70.50	Top of spur,40 ft.above h llow,bears NE and SW.
	Desc.
72.00	Bottom of same hollow,40 ft.below spur,course S.30°W.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	Asc.
80.00	Point 70 ft.above hollow.
	For reasons already explained I
	Set a sandstone,14x10x5 ins.9 ins.in the ground,for cor. of secs.5,6,7,and 8,mkd.with 5 notches on S.,and E. edges;from which
	A pinon pine,5 ins.dia.,bears N.79°30'E.,41 lks. dist..mkd.T 40 S R 9 W S 5 B T.
	A pinon pine,12 ins.dia.,bears S.26°E.,33 lks. dist..mkd.T 40 S R 9 W S 8 B T.
	A pinon pine,6 ins.dia.,bears S.18°30'W.,31 lks. dist..mkd.T 40 S R 9 W S 7 B T.
	A pinon pine,5 ins.dia.,bears N.33°W.,52 lks. dist..mkd.T 40 S R 9 W S 6 B T.
	Land,mountainous ;
	Soil,clay loam;2nd rate.
	Timber,cedar,pinon pine and yellow pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	October 5,1909:At this cor.I set off 4°42'S.,on the decl. arc;and at 11 h 49 m a.m.,l.m.t.,I observe the sun on the sun on the meridian the resulting lat,is 37°22'N.,which is the proper lat.nearly.

	S.89°53'E.,on a random line bet.secs.5 and 8.
40.00	Set temp.¼ sec.cor.
80.02	Intersect N.and S.line,7 lks.S.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.
	Over mountainous land;through scattering undergrowth.
	Asc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
3.50	Top of ridge,20 ft.above sec.cor.,bears N.and S.
	Desc.
13.00	Bottom of hollow,25 ft.below ridge,course N.
	Asc.
16.00	Top of ridge,30 ft.above hollow,bears N.and S.
	Desc.
19.00	Bottom of hollow,40 ft.below ridge,course N.
	Enter scattering timber,bears N.and S.
	Asc.
25.00	Top of spur,40 ft.above hollow,bears NW and SE.
	Desc.
31.00	Bottom of wash,20 lks.wide,10 ft.deep,in bottom of hollow,20 ft.below ridge,course S.
	Asc.
37.50	Top of ridge,60 ft.above hollow,bears N.30°E.and S.30°W.
	Desc.
38.40	Bottom of hollow,30 ft.below ridge,course N.30°E.
	Asc.
40.01	Point 40 ft.above hollow .
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor;.mkd.on brass cap ¼ S 5 in N half and S 8 in S half;from which
	A pinon pine,8 ins.dia.,bears N.24°W.,225 lks. dist..mkd.¼ S 5 B T.
	A cedar,16 ins.dia.,bears S.49°W.,97 lks. dist..mkd.¼ S 8 B T.
41.00	Top of ridge,60 ft.above hollow,bears N.15°E.and S.15°W.
	Desc.
44.00	Bottom of hollow,60 ft.below ridge,course N.15°E.
	Asc.
49.00	Top of ridge,60 ft.above hollow,bears N.15°W.and S.15°E.
	Desc.
51.50	Bottom of hollow,50 ft.below ridge,course N.15°W.
	Asc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
54.50	Top of ridge,40 ft.above hollow,bears NW and SE.
	Desc.
58.00	Bottom of hollow,30 ft.below ridge,course S.10°E.
	Asc.
60.00	Top of ridge,30 ft.above hollow,bears NW and SE.
	Desc.
70.50	Bottom of hollow,50 ft.below ridge,course S.30°E.
	Asc.
73.80	Top of ridge,60 ft.above hollow,bears NW and SE.
	Desc.
76.00	Bottom of hollow50 f .below ridge,course S.30°E.
	Asc.
80.02	The cor.of secs.5,6,7,and 8.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar,piñon pine ,and yellow pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous land,80.02 chs.

October 5,1909.

October 6,1909:At 7 h 18 m a.m.,l.m.t.,I set off 37°22'N. on the lat.arc;4°58'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.5,6,7,and 8.

Thence I run

N.89°58'W.,on a random line bet.secs.6 and 7.

40.00	Set temp.¼ sec.cor.
83.16	Intersect W.bdy.of Tp.,16 lks.S.of the cor.of secs.1,6,7, and 12.which is a gypsum stone,5x8x6 ins.above ground, firmly set,and mkd.and witnessed as described by the surveyor general.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains

Thence I run

S.89°51'E.,on a true line bet.secs.6 and 7.

Over mountainous land;through scattering timber and dense undergrowth.

Desc.

11.50 Bottom of hollow,100 ft.below sec.cor.,course S.20°E.

Asc.

15.50 Top of spur,25 ft.above hollow,bears N.20°W.and S.20°E.

Desc.

21.50 Bottom of hollow,30 ft.below spur,course S.20°W.

Asc.

30.50 Top of ridge,40 ft.above hollow,bears N.60°W.and S.60°E.

Desc.

39.75 Leave timber,bears N.60°W.and S.60°E.

40.16 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 6 in N half and S 7 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.

55.50 Bottom of hollow,100 ft.below ridge,course N.10°W.

Asc.abruptly.

68.50 Begin more gentle ascent,bears N.and S.

72.50 Enter heavy timber,bears NE and SW.

Leave undergrowth,bears NE and SW.

74.50 Top of ridge,60 ft.above hollow,bears NE and SW.

Desc.

83.16 Theor.of secs.5,6,7,and 8.

Land,mountainous .

Soil,gravelly and clay;3rd rate.

Timber,cedar,pinon pine,and yellow pine.

Undergrowth,oak ,service berry ,and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,83.16 chs.

October 6,1909:At the noon hour the sky is overcast and solar observations are impossible.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	N.0°3'W.,on a random line bet.secs.5 and 6.
40.00	Set temp.¼ sec.cor.
88.45	Intersect N.bdy of Tp.,16 lks.E.of the cor.of secs.5,6, 31,and 32,which is a stationary sandstone,4x3x2 ft.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	Thence I run
	S.0°10'E.,on a true line bet.secs.5 and 6.
	Over mountainous land;through heavy timber and dense undergrowth.
5.00	Foot of ledges,bears NW and SE.
6.50	Top of ledges,150 ft.above foot,bears NW and SE.
20.50	Top of ridge,300 ft.above sec.cor.bears NE and SW.
	Desc.
28.50	Bottom of hollow,150 ft.below ridge,course N.30°E.
	Asc.
31.50	Top of spur,50 ft.above hollow,bears NE and SW.
	Desc.
35.50	Top of ledges,bears NE and SW.
38.50	Foot of ledges,100 ft.below top,bears NE and SW.
43.50	Bottom of hollow,30 ft.below foot of ledges,course NE.
	Asc.
48.45	Set an iron post,3 ft.long,1 in in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 6 in W half and S 5 in E half;from which
	A yellow pine,12 ins.dia.,bears S.28°45'E.,56 lks. dist..mkd.¼ S 5 B T.
	A yellow pine,12 ins.dia.,bears S.18°W.,39 lks. dist.mkd.¼ S 6 B T.
63.50	Top of ridge,40 ft.above hollow,bears N.15°W.and S.15'E.
	Desc.
70.50	Bottom of hollow, 30 ft.below ridge,course N.80°W.
	Asc.
80.30	Top of ridge,25 ft.above hollow,bears N.10°E.and S.10°W.
	Desc.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
85.50	Bottom of hollow,75 ft.below ridge,course SE.
	Asc.
88.45	The cor.of secs.5,6,7,and 8.
	Land,mountainous .
	Soil,clay loam;2nd rate.
	Timber,cedar and pinon pine and yellow pine.
	Undergrowth,oak and sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,or land covered with dense undergrowth,88.45 chs.

October 6,1909.

General Description.

This township is practically all high ,rough ,and mountainous;it is cut from northeast to southwest by Orderville Gulch and Clear Creek.Orderville Gulch gets extremely rough toward the western part of the township.Both of these canons contain creeks which with their tributaries furnish an abundance of water for stock watering purposes. There is considerable cedar,pinon pine,and yellow pine timber all over the township.

Mr. Jolly has a ranch and about 60 acres of cultivated land in sections 26 and 35,his house is in sec.35;value of improvements about $1000.00 .

John Lemon has a house and cultivated land in section 12 Also a corral and about 200 rods of fence;value of improvements about $250.00 .

There are a number of coal outcrops,the coal is of lignitic grade and not sufficient was seen to class the land as coal lands.

No indications of oil were seen.

Subdivision of T.40 S.,R.9 W.-Continued.

Chains	
	No indications of mineral were found in the township. With the exception of the ledges the soil is mostly clay loam;2nd rate.
	The undergrowth,which is abundant throughout the township, is principally oak brush with some,sage,service berry, larb.and bitter brush.
	There is an abundance of good grasses growing in all parts of the township .
	There is a small meadow in the SE¼ of sec.22, and one also in the NE¼ of sec.27;neither seen from line.
	There is a small spring in the SW¼of sec.22, not seen from line.
	Frank C Fendl
	U.S.Deputy Surveyor .
	October 6,1909.

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Corrective Notes Sub.T.40 S.,R.9 W.

Note:Since the returns were filed of this township and since the examination in the field by Frank J.VanWinkle about April 25 to May 5 1910,Deputy Snow has made certain corrections on the E.bdy.of this Tp.namely at the cor.of secs.13,18,19 and 24, having moved this corner to the North about 36 lks., this is the only change of a section corner made by Deputy Snow on this east bdy. . However,on the W.bdy. of the Tp.the cor.of secs.19,24,25 and 30;the cor.of secs.25,30,31 and 36;and also the Standard Corner of Tp.40 S.,Rs.9 and 10 W.,have all been moved to the westward by Deputy Snow in order to correct errors in his work,since the field examination above mentioned, therefore,in order to find the true lenght of miles, and the courses of my lines closing on the above named corner from this subdivision,I proceed as follows: Survey commenced October 10,and exeuted with a Young and Sons light mountain transit No.7381 with solar attachment.The horizontal 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 latitude and declination arcs.

The instrument was examined,tested on the meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,on Oct.24,1910,immediately after this work was done.

October 10,1910:At 7 h 47 m a.m,l.m.t.,I set off 37°19'W.,on the lat.arc;6°26'S.,on the decl.arc;and determine a meridian with the solar at the cor.of secs. 19,20,29 and 30,which is an iron post,3 ft.long,2 ins in dia.,12 ins above ground,firmly set and marked and witnessed as described in the original notes

Thence I run

Corrective Notes Subdivision of T.40 S.,R.9 W.-Cont.

	Chains	
		N.89°56'W.,bet.secs.19 and 30.
origi- notes page	40.00	The ¼ sec.cor.,bet.secs.19 and 30.,which is an iron post, 1 in.in dia.,12 ins.above ground,firmly set and marked and witnessed as described in the originnal notes.
	82.54	The corrected cor.of secs.19,24 25 and 30,on W.bdy.of Tp. limestone,6x10x10 ins.above ground,firmly set and marked and witnessed as described by the surveyor general. No change in topography on this mile. The true length of this mile is therefore 82.54 chs. instead of 82.04 as reported in original notes. October 10,1910:At this cor.I set off 6° 31'S., on the decl.arc; and at 11 h 47 m a.,m.l.m.t.,I observe the sun on the meridian,the resulting lat.37°19'N., which is the proper lat.nearly.
		From the cor.of secs.29,30,31 and 32.,which is an iron post,2 ins.in dia.,12 ins.above the ground,firmly set and marked and witnessed as described in the original notes.
		I run
		N.89°57'W.,bet.secs.30 and 31.
original es see ge 68	40.00	The ¼ sec.cor.bet.secs.30 and 31 which is an iron post, 1 in.in dia.,12 ins.above ground,marked and witnessed as described in the origianl notes.
	82.73	The corrected cor.of secs.25,30,31&36 on W.bdy.of Tp., a sandstone,6x10x5 ins.above ground,firmly set and marked and witnessed as described by the surveyor general. The true length of this mile is therefore 82.73 chs. instead of 81.60 as reported in the original notes. No change in topography on this mile.

Corrective notes Subdivision of T.40 S.,R.9 W.-Cont.

Chains

Note:The closing distance bet.the closing cor.of Tp.41 S.,Rs.9 and 10 W.,on the Standard Parallel and the Standard Corner of Tp.40 S.,Rs.9 and 10 W.,I re-measure on account of the Standard Corner having been shifted to the West by Deputy Snow,this distance as originally reported was 8.29 chs.,I now find it to be W.9.69 chs. from the closing cor.above mentioned to the corrected Standard Corner above mentioned, making the S.bdy.of sec. 31, 82.60 chs.in length.

October 10,1910.

October 11,1910: At 7 h 47 m a.m.l.m.t.,I set off 37°20'N.,on the lat.arc; 6°49'S.,on the decl.arc; and determine a meridian with the solar at the cor.of secs.13,14 23 and 24.

Thence I run

East on a random line bet.secs.13 and 24.

39.90 Fall 12 lks.N.of the original ¼ sec.cor.

79.86 Fall 37 lks.N.of the corrected cor.of secs.13,18,19 and 24 on E bdy. of Tp.,which is a limestone,6x10x10 ins. above ground,firmly set and marked and witnessed as described by the surveyor general.

Thence I run

N.89°44' W.,on a true line bet.secs.13 and 24,

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inal
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page

Corrective Notes Subdivision of T.40 S., R.8 E.-Cont.

Chains	
39.93	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground for ¼ sec.cor..mkd.on brass cap ¼ S 13 in N half and S 24 in S half;from which
	An oak,4 ins.in dia.,bears N.68°15'E.,90 lks. dist..mkd. ¼ S 13 B T.
	An oak,6 ins.in dia.,bears S.86°W.,86 lks. dist..mkd. ¼ S 24 B T.
	I destroy all trace of the old original cor.
79.86	The cor.of secs.13,14,23 and 24., which is an iron post, 2 ins.in dia.,12 ins.above ground,firmly set.and marked and witnessed as described in the original notes.

October 11,1910 11.:30 a.m.

Scott R Stewart

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 Scott R. Stewart, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the corrective survey of Subdivision of T. 40 S. R. 9 W. of Salt Lake Base and Meridian, Utah showing the respective capacities in which they acted:

John H. Cottam, *Chainman.*
Eldon Snow, *Chainman.*
, *Moundman.*
, *Moundman.*
, *Axman.*
, *Axman.*
, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Scott R. Stewart, United States Deputy Surveyor, in surveying all those parts or portions of the corrective survey of Subdivision of T. 40 S. R. 9 W. 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.

John H. Cottam, *Chainman.*
Eldon Snow, *Chainman.*
, *Moundman.*
, *Moundman.*
, *Axman.*
, *Axman.*
, *Flagman.*

Subscribed and sworn to before me this 11th day of October, 1910

SEAL

Scott R. Stewart
U. S. Deputy Surveyor.

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Scott P. Stewart, 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 17th day of March, 1909, 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 corrective survey of Subdivision of T. 40 S. R. 9 W.

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.

Scott P. Stewart
United States Deputy Surveyor.

Subscribed by said Scott P. Stewart, and sworn to before me this 5th day of January, 1911, xxx

Thomas Hull
U.S. Surveyor General for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

_____, 190

The foregoing field notes of the survey of _____

executed by _____
under his contract No. _____, dated _____, 190 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

_____
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

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Frank C. French, 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 Subdivisions of T. 44 S. R. 7 W.; T. 43 S. R. 9 W.; T. 41 S. R. 9 W.; and T. 40 S. R. 9 W.; of Salt Lake Base and Meridian, Utah, showing the respective capacities in which they acted:

John T. Jarvis, Chainman.
M. Hyrum Harris, Chainman.
William H. Stratton, Moundman.
Edmund A. Hendrix, Moundman.
John A. Humphries, Axman.
Lawrence C. Snow, Axman.
Carl F. Eyring, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank C. French, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivisions of T. 44 S. R. 7 W. T. 43 S. R. 9 W.; T. 41 S. R. 9 W.; and T. 40 S. R. 9 W. 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.

John T. Jarvis, Chainman.
M. Hyrum Harris, Chainman.
William H. Stratton, Moundman.
Edmund A. Hendrix, Moundman.
John A. Humphries, Axman.
Lawrence C. Snow, Axman.
Carl F. Eyring, Flagman.

Subscribed and sworn to before me this 7th day of October, 1909.

SEAL

Frank C. French
U.S. Deputy Surveyor.

6—161

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Frank C. French, 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 17th day of March, 1909, 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 Subdivisions of T.44 S.R.7W. T.43 S.R.9W.; T.41 S.R.9W.; and T.40 S.R.9W.

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes in books D.K.C.& R. 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.

Frank C. French
United States Deputy Surveyor.

Subscribed by said Frank C. French, and sworn to before me this 22 day of January, 1910., ~~190x~~

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 15, 1911, ~~xxx~~

The foregoing field notes of the survey of the subdivisional lines of Township No.40 South, Range No.9 West, of the Salt Lake Base and Meridian, Utah,

executed by Scott P. Stewart and Frank C. French under ~~his~~ their contract No. 308, dated March 17, ~~1909~~, 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-361

M.S.B.

FIELD NOTES

OF THE ~~XXXXX~~ Retracement OF THE

NORTH BOUNDARY

of

Township No. 40 South, Range No. 9 West.

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Scott P. Stewart and Frank C. French, *United States Deputy Surveyor,* s

Under ~~his~~ their *Contract No.* 308, *dated* March 17, 1909. ~~190~~

~~Survey~~ Retracement *commenced* October 7, 1909. ~~190~~

~~Survey~~ Retracement *completed* October 7, 1909. ~~190~~

6—151

1-03-00

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

John T. Jarvis	Chainman
M. Hyrum Harris	Chainman
William H. Stratton	Moundman
Edmund A. Hendrix	Moundman
John A. Humphries	Axman
Laurence C. Snow	Axman
Carl F. Eyring	Flagman

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BOOK A-361

INDEX DIAGRAM.

Township 40 South, *Range* 9 W.

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, John T. Jarvis and M. Hyrum Harris 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~~ retracement of part of N. bdy T. 40 S. R. 9 W. of Salt Lake Base and Meridian Utah

John T. Jarvis, Chainman.

M. Hyrum Harris, Chainman.

Subscribed and sworn to before me this 6th day of October, 1909

Frank C. French
U. S. Deputy Surveyor.

SEAL

WE, William H. Stratton and Edmund A. Hendrix do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the ~~survey of~~ retracement of part of N. bdy T. 40 S. R. 9 W. of Salt Lake Base and Meridian, Utah.

William H. Stratton, Moundman

Edmund A. Hendrix, Moundman

Subscribed and sworn to before me this 6th day of October, 1909

Frank C. French
U. S. Deputy Surveyor

SEAL

WE, John A. Humphries and Laurence C. Snow do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the ~~survey of~~ retracement of part of N. bdy T. 40 S. R. 9 W. of Salt Lake Base and Meridian Utah

John A. Humphries, Axman

Laurence C. Snow, Axman

Subscribed and sworn to before me this 6th day of October, 1909

Frank C. French
U. S. Deputy Surveyor

SEAL

I, Carl F. Eyring, 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~~ retracement of part of N. bdy T. 40 S. R. 9 W. of Salt Lake Base and Meridian, Utah.

Carl F. Eyring, Flagman

Subscribed and sworn to before me this 6th day of October, 1909

Frank C. French
U. S. Deputy Surveyor

SEAL

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Retracement North bdy.T.40 S.,R.9 W.

Survey commenced October 6,1909,and executed with a Gurley Explorer's transit No.957,with solar attachment.The horizontal limb is provided with two double verniers placed opposite to each other,reading to a single minute of arc;which is also the least count of the latitude and declination arcs.

The instrument was examined,tested on the meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,on July 3,1909.

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

At the cor.of secs.5,6,31,and 32,on N.bdy.of Tp.,heretofore described,latitude 37°22'31''N.,longitude 112°51'09'' W.,I set off 37°23'N.,on the lat arc. 5 ° 06 ' S.,on the decl.arc; and at 4 h 48 m p.m.,l.m.t.,I determine a meridian with the solar,and mark a point thereof on the stone firmly set in the ground,5.00 chs.N.of the cor.

At 6 h 32 m p.m.,l.m.t.,I observe Polaris at eastern elongation,in accordance with the Manual,and mark a point thereof on the stone firmly set in the ground,5.00 chs. N.of the cor.

October 6,1909.

October 7,1909;At 7 h 0 m a.m.,l.m.t., I lay off the azimuth of Polaris 1°28.6' to the west and marka point in the meridian determined by cutting a small groove in the stone already set 5.00 chs.N.of the cor.;this mark falls 0.38 ins.east of the meridian established by Polaris observation.

At 7 h 18 m a.m.,l.m.t.,I set off 37°23'N.,on the lat.

Retracement North bdy.T.40 S.,R.9 W.,-Continued.

5°21'S.,on the decl arc;and mark a point on the meridian determined with the solar,by a cross on the stone already set 5.00 chs.N.of the cor.;this mark falls 0.39 ins. east of the meridian determined by Polaris observation.
The solar apparatus by p.m.and a.m. observation defines positions for meridians respectively about 0'20'' west and 0'20'' east of the meridian determined by Polaris observation therefore I conclude that the adjustments of the instrument are satisfactory.
The magnetic bearing of the meridian at 7 h 30 m a.m.,is N.15°57'W.,the angle thus determined gives the mag.decl. 15°57'E.

Note:On account of the closing made on the north bdy.,bet. secs.5 and 6,I deem it necessary to retrace the N.bdy. of secs.6 as follows:
West,on retracement line bet.secs.6 and 31.

40.70 Fall 54 lks.N.of the ¼ sec.cor.,bet.secs.6 and 31, which is a sandstone,6x9x6 ins.,above ground,firmly set and mkd.and witnessed as described by the surveyor general.

83.00 Fall 109 lks.N.of the cor.of Tp.39 and 40 S.,Rs.,9 and 10 W.,which is a sandstone,6x9x8 ins.above ground,frimly set,and mdk.and witnessed as described by the surveyor general.The course of this line is therefore S.89°15'W., 83.00 chs.
Note:No change in topography from original notes.

October 7,1909.

Boundaries of T.40 S., R.9 W.

Latitudes, departures, and closing errors.

Line designated	Course	Distance	Latitudes		Departures	
			N.	S.	E.	W.
		chs.	chs.	chs.	chs.	chs.
W.bdy.T.40 S.,R.9 W.	North	487.00	487.00			
N.bdy.T.40 S.,R.9 W.	N.89°15'E.	83.00	1.09		82.99	
N.bdy.T.40 S.,R.9 W.	East	400.00			400.00	
E.bdy.T.40 S.,R.9 W.	South	488.00		488.00		
8th Standard Par.S.	West	481.20				482.60
Convergency					.55	
Totals			488.09 488.00	488.00	483.54 482.60	482.60
Error in lat.			.09			
Error in dep.					0.94	

October 7,1909.

Note:
There being no notary public, or other officer authorized to administer oaths, within a reasonable distance at the beginning or ending of the surveys embraced in this contract; therefore, in order to save time and expense, I administer the preliminary and final oaths of my assistants myself.

Frank C. Frank

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 Frank C. French, 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~~ retracement of part of N. bdy. of T. 4 S. R. 9 W. of Salt Lake Base and Meridian, Utah: showing the respective capacities in which they acted:

John T. Jarvis, *Chainman.*
M. Hyrum Harris, *Chainman.*
William H. Stratton, *Moundman.*
Edmund A. Hendrix, *Moundman.*
John A. Humphries, *Axman.*
Lawrence C. Snow, *Axman.*
Carl F. Eyring, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Frank C. French, United States Deputy Surveyor, in ~~surveying~~ retracing all those parts or portions of the part of N. bdy. of T. 4 S. R. 9 W. 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.

John T. Jarvis, *Chainman.*
M. Hyrum Harris, *Chainman.*
William H. Stratton, *Moundman.*
Edmund A. Hendrix, *Moundman.*
John A. Humphries, *Axman.*
Lawrence C. Snow, *Axman.*
Carl F. Eyring, *Flagman.*

Subscribed and sworn to before me this 7th day of October, 1909.

SEAL

Frank C. French
U. S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

[illegible], United States Deputy Surveyor, d[illegible] [illegible] received from [illegible] [illegible] bearing date of the [illegible] day of [illegible] 190[illegible], I have well, faithfully, and truly, in my ow[illegible] [illegible] with the instructions furnished by the United States Surveyor [illegible] the Manual of Surveying Instructions, and the laws of the [illegible]

[illegible] of the [illegible] [illegible] which are represented in the [illegible] by me, and under my direction, and I do further solemnly [illegible] have been established and perpetuated in strict accordance with [illegible] and the special written instructions of the United States Surveyor [illegible] and in the specific manner described in the field notes, and that [illegible] PERFORMANCE.

[illegible]
United States Deputy Surveyor

[illegible] 1910.xxx

[illegible]
U.S. Surveyor-General

APPROVAL.

[illegible]

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

[illegible] Utah, March 11, 1911xx

[illegible] PERFORMANCE OF [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] March [illegible] 1905, having [illegible] [illegible] field notes, and [illegible]

[illegible]
United States Surveyor General

[illegible] of the field notes of the above [illegible] surveys [illegible] [illegible] and to the original notes on file in this office.

[illegible]
United States Surveyor General

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Page

4—679.

A.

BOOK A-361

FILED
JAN 25 1910

FIELD NOTES

OF THE SURVEY OF THE

SOUTH AND EAST BOUNDARIES

of

Township No.41 South, Range No.15 West

And

Retracement of North Boundary

Township No.42 South

Range No.15 West

Of the ~~Salt Lake Base and~~ *Meridian,*

State of Utah.

AS SURVEYED BY

Andrew J. Stewart Jr. and Leo A. Snow, *United States Deputy Surveyor,*s

Under ~~his~~ their *Contract No.* 309, *dated* March 17, 1909. ~~x190~~

Survey commenced May 3, 1909. ~~x190~~

Survey completed May 12, 1909. ~~190~~

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BOOK A-36I

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman
George W.Worthen	Chainman
Samuel Brooks	Moundman
Rawl Worthen	Moundman
John A.Humphries	Axman
John T.Jarvis	Flagman

BOOK A-361

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley and George W. Worthen 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; 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 E. and S. bdys. T. 41 S., R. 15 W. Salt Lake Base and Meridian, Utah.

Hillman Dalley, Chainma

George W. Worthen, Chainma

Subscribed and sworn to before me this 3rd day of May 1909. 190x

SEAL

Leo A. Snow
U S. Deputy Surveyor

We, Samuel Brooks and Rawl Worthen 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 E. and S. Bdys. T. 41 S., R. 15 W., Salt Lake Base and Meridian, Utah.

Samuel Brooks, Moundma

Rawl Worthen, Moundma

Subscribed and sworn to before me this 3rd day of May 1909. 190x

SEAL

Leo A. Snow
U. S. Deputy Surveyor.

~~We~~, I, John A. Humphries ~~and~~ do solemnly swear that ~~we~~ will well and truly perform the duties of axman in the establishment of corne and other duties, according to instructions given ~~us~~ me to the best of ~~our~~ my skill and ability, in the survey E. and S. bdys. T. 41 S., R. 15 W., Salt Lake Base and Meridian, Utah.

John A. Humphries, Axma

, Axma

Subscribed and sworn to before me this 3rd day of May 1909. 190x

SEAL

Leo A. Snow
U. S. Deputy Surveyor.

I, John T. Jarvis, do solemnly swear that I will well and tru perform the duties of flagman according to instructions given me, to the best of my skill and ability, in th survey of E. and S. bdys. T. 41 S., R. 15 W., Salt Lake Base and Meridian, Utal

John T. Jarvis, Flagma

Subscribed and sworn to before me this 3rd day of May 1909. 190x

SEAL

Leo A. Snow
U. S. Deputy Surveyor

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East Boundary T. 41 S., R. 15 W.

Survey commenced May 3, 1909, and executed with a W. and L.E.Gurley light mountain transit, No. ---- with solar attachment.

The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitudes and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, April 26, 1909.

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

At the cor.of Tps.41 and 42 S., Rs.14 and 15 W.,which is a black lava stone 20 x 12 x 10 ins.in mound of stones as described by the surveyor general; lat.37° 10' 14" N.; long.113° 24' 39" W., I set off 37° 10'N.on the lat.arc; 15° 43'N.on the decl.arc; and at 3 h. 57 m. p.m.l.m.t., determine a meridian with the solar and mark a point thereof on a stone firmly set in the ground 5.00 chs.N.of the cor.

May 3, 1909.

May 4: At 4 h. 44m. a.m.l.m.t.I observe Polaris at e eastern elongation in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N.of the cor.

At 7 h. 30 m.a.m.l.m.t.I lay off the azimuth of Polaris 1° 28.6' to the west and mark appoint in the meridian

thus determined by cutting a small groove in the stone already set 5.00 chs.N.of the cor.; this mark falls 0.37 ins.E.of the meridian determined with the solar.

At 7 h. 57 m.a.m.l.m.t.I set off 37° 12'N.on the lat.arc; 15° 55'N.on the decl.arc; and mark the meridian determined with the solar by a cross on the stone already set 5.00 chs.N.of the cor.; this mark falls 0.37 ins. E.of the meridian determined by the Polaris observation.

The solar apparatus by p.m.and a.m.observations defines positions for meridians respectively about 0' 19" W. and 0' 19" E.of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8 h. 30 m. a.m.is N.16° 45'W.; the angle thus determined gives the mag.decl.16° 45'E.

From the Tp.cor.already described, I run

North bet.secs.31 and 36,

Over mountainous land; descending through undergrowth.

9.25 Bottom of wash 25 lks.wide, 6 ft.deep, in hollow, 20 ft. below cor., course S.20° E. Ascend along hollow.

13.75 Leave wash at bend, course S.10° E. [illegible]. Ascend.

18.00 Bottom same wash, 20 lks.wide, 5 ft.deep, course S.10° E. Ascend.

31.50 Bottom same wash, 15 lks.wide, 4 ft.deep, course S.20° E. Ascend.

35.00 Bottom of wash, 10 lks.wide, 4 ft.deep, course S.5° E. Ascend.

39.85 Top of ridge, 50 ft.above wash, bears E. and W. Descend.

East Boundary of T.4I S.,R.I5 W.continued

Chains	
40.00	Set an iron post, 3ft. long, Iin. dia.,26 ins. in the ground for ¼ sec.cor.,marked on brass cap ¼ S36 on W.half and and S 3d on E. half; raise a mound of stone 2ft. base,I½ ft. high W. of cor.Pits impracticable.
42.00	Bottom of hollow 35 ft. below cor. course W.
	Asc.
46.00	Top spur 30 ft. above hollow bears E. and W.
	Desc.
63.00	Bottom of hollow 5o ft. below ridge course S I5° W.
	Asc.
72.50	Begin abrupt ascent of vol. ridge bears N 60°E and S60° W
	Asc.
73.86	Top vol.ridge and ledge 50 ft. high bears N 60° E and S60°W.
	Asc.
80.00	Set an iron post 3ft. long, 3ins. dia.,24 ins inthe ground fer cor of secs. 25,30,3Iand 36,marked on brass cap
	T 4I S in N.half.
	R I4W. S30 in N.E.
	R I5 W.S 25 in N.W.
	S 3I in S.E., and
	S 36 in S.W. qudrants. Raise a mound of stone 2ft. base I½ft. high W. of cor. Pits impracticable.
	Land mountainous.
	Soil, Sandy and rocky; 3rd and 4th rates.
	Undergrowth,sage and evergreen brush,Oose and cactus. Good grass for grazing. Mountainous lands 80.00chs.

North bet. secs.25 and 30

Over mountainous lands;through dense sage,evergreen,oak and buck brush and cactus.

Desc.

5.00 Bottom of hollow I00f t. below cor. course N80°E.

Asc.

32.70 Old road bears N.E. and S.W.

East Boundary T.4I S.R I5W.-Continued.

Chains.	
33.60	Top of ridge 200ft. above hollow bears E and W.
	Desc.
40.00	Set an iron post, 3ft. long, I inch in dia. 26 ins. in the ground, for ¼ sec. cor. ,marked on the brass cap
	¼ S 25 on W. half and
	S 30 on E. half. Raise a mound of stone 2ft. base I½ft. high W. of cor. Pits impracticable.
50.50	Bottom of hollow 75 ft. below cor, course S70°W.
	Asc. over broken sandstone ledges.
6I.00	Top of ridge I00ft. above hollow bears N70°E and S70°W.
	Desc.
66.50	Bottom of hollow 75 ft. below ridge course S70°W.
	Asc.
80.00	Set an iron post 3ft. long 3Ins. dia., 24ins. in the ground for cor of secs. I9, 24, 25 and 30, marked on brass cap
	T. 4I S. in N. half,
	R I4 W. S I9 in. NE.
	R I5 W. S 24 in N.W.
	S 30 in S.E. and
	S 25 in S.W. Qudrants. Raise mound of stone 2ft. base I½ft. high W. of cor. Pits impracticable.
	Land mountainous.
	Soil sandy and rocky 3rd and 4th rate.
	Undergrowth, sage, evergreen, oak and buck brush and cactus.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 80.00 chs.
	Exceptionally difficult to survey 80.00 chs.

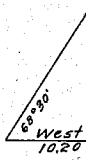
North bet. secs. I9 and 24.

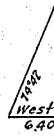
Over mountainous land; through scattering timber and sage, and evergreen brush.

	Asc.
4.00	Foot of perpendicular sandstone ledges and ridge 300ft. high bears N60°E and S60°W. Impossible to ascend.

East Boundary T. 41 S., R. 15 W. - Continued.

Chains	
	I therefore returned 15 chs.S. and set a flag on line on top of ridge, and from this point I measure a base W. 10.20 chs., from which point the flag on the ridge bears N.21° 30'E.; then from the flag on the ridge the W.end of base bears S.21° 30'W. Impossible to take longer base on account of ledges.
	I compute the distance as follows: Tan.68° 30' x base, or 2.53865 x 10.20 equals 25.89; 25.89 less 15.00 equals
10.89	Top of ridge, 300 ft.above cor. bears N.60° E. and S. 60° W. Descend.
11.20	Edge of canon, 300 ft.deep; impassable. I therefore measure a base west 6.40 chs., from which the flag on line on opposite side bears N.15° 18'E., and from the flag on north side, the W.end of base bears S.15° 18' W. Impossible to take longer base, on account of the ledges.
	I compute the distance across the canyon as follows: Tan. 74° 42' x base, or 3.65538 x 6.40 equals 23.39; 23.39 plus 10.89 equals
34.28	N.side of canon, bears NE. and SW.
36.20	Top of spur, 50 ft.above edge of canyon,bears E.and W. Desc.
38.30	Bottom of hollow, 40 ft.below spur,course E. Ascend.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, ¼ S 24 on W.half, S 19 on E.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.Pits impracticable.
41.50	Top of ridge,30 ft.above ¼ sec.cor., bears NE. and SW. Descend.
48.00	Bottom of hollow,200 ft.below ridge,course N.30° E. Asc.
53.00	Top of spur, 125 ft.above hollow, bears E. and W. Descend.





East Boundary T. 41 S., R. 15 W.- Continued.

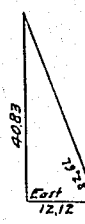
Chains.	
54.40	Bottom of hollow, 75 ft.below spur, course N.60° E. Ascend.
56.40	Top of spur, 75 ft.above hollow, bears N.60° E. and S. 60° W.
62.50	Bottom of hollow, 100 ft.below spur, course NE.Ascend.
68.00	Top of spur, 40 ft.above hollow, bears NW. and SE. Descend.
72.80	Bottom of hollow, 50 ft.below ridge, course S.60° E. Ascend.
76.25	Top of ridge, 65 ft.above hollow, bears N.60° W. and S. 60° E. Descend.
80.00	Set an iron post 3 ft.long, 3 ins.dia.24 ins.in ground,and mound of earth and stone for cor.of secs.13,18.19,and 24, marked on brass cap, T 41 S in N.half, R 14 W S 18 in NE. R 15 W S 13 in NW. S 19 in SE., and S 24 in SW.quadrants; raise a mound of stone 2 ft. base, 1½ ft.high W.of cor.Pits impracticable.
	Land, mountainous.
	Soil, rocky;4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, sage and evergreen.
	Mountainous land 80.00 chs.
	At the noon hour sky obscures the sun, no obs.for lat. this day. May 4, 1909.

May 5: At 7 h. 57 m.a.m.l.m.t.I set off 37° 15'N.on lat. arc;16°12'N.on decl.arc;and determine a mer.with the solar at the cor.of secs.13,18,19, and 24.Thence I run North bet.secs.13 and 18,

Over mountainous,through scattering timber and under-

East Boundary T. 41 S., R. 15 W.- Continued.

Chains.	
	growth. Descend.
5.00	Bottom of canyon, 100 ft.below sec.cor., course SE.
	It is impossible to chain farther on this line; therefore I return to the sec.cor. To determine the distance to the top of the series of ledges ahead I place a flag on line at the top and from the corner measure a base E. 12.12 chs., from which the flag bears N.16° 32'W. Then from the flag on line the end of base bears S.16° 32'E. Impossible to take longer base, on account of ledges.
	I compute the distance as follows: Tan.of 73° 28' x base or 3.36875 x 12.12 equals 40.83. I therefore measure S.83 lks., and at
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in ground and mound of earth and stone for ¼ sec.cor., marked on brass cap, ¼ S 13 on W.half, S 18 on E.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. Pits impracticable.
	May 5, 1909: At this cor.I set off 16° 15'N.on the decl. arc; and at 11 h. 57 m. a.m.l.m.t.observe the sun on the meridian; the resulting lat.is 37° 13'N., which is the proper lat.nearly.
40.83	Top of series of sandstone ledges about 1000 ft.high, bears E. and W. Ascend.
55.00	Top of spur, 125 ft.above ledges bears NE. and SW. Descend.
58.00	Bottom of hollow, 50 ft.below spur, course SW. Ascend.
60.00	Top of sandstone ridge 100 ft.above hollow, bears E. and W. Descend.
78.00	Bottom of hollow, 125 ft.below ridge, course S.60° W. Ascend.
80.00	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in th. ground and mound of earth and stone for cor.of secs. 7,12,13, and 18, marked on brass cap,



East Boundary T. 41 S..R. 15 W.- Continued.

Chains	
	T 41 S in N.half,
	R 14 W S 7 in NE.
	R 15 W S 12 in NW.,
	S 18 in SE., and
	S 13 in SW.quadrants; from which
	A pinon pine 9 ins.dia.bears N.41° E. 153 lks.dist. marked T 41 S R 14 W S 7 B T
	A pinon pine, 7 ins.dia.bears S.35° 40'E. 9 lks. dist., marked T 41 S R 14 W S 18 B T
	A pinon pine 8 ins.dia.bears S.31° 30'W. 29 lks.dist. marked T 41 S R 15 W S 13 B T
	A pinon pine, 8 ins.dia.bears N.62° 40'W. 27 lks. dist., marked T 43 S R 15 W S 12 B T
	Land, mountainous.
	Soil, sandy and rocky; 3d and 4th rates.
	Timber, pinon pine and cedar.
	Undergrowth sage and buck brush.
	Mountainous land 80.00 chs.
	Exceptionally difficult to survey 80.00 chs.
	May 5, 1909.
	May 6: At 7 h. 57 m.a.m.l.m.t.I set off 37° 14'N.on the lat.arc; 16° 28'N.on decl.arc; and determine a meridian with the solar at the cor.of secs.7,12,13, and 18. Thence I run
	North bet.secs.7 and 12
	Over mountainous land; through scattering timber and sage; ascend.
1.00	Top of ridge, 15 ft.above cor., bears E. and W.
	Descend.
7.00	Bottom of swale 20 ft.below ridge, course E.
	Ascend.

East Boundary T. 41 S. R. 15 W.— Continued.

Chains.

12.50 Top of spur 70 ft above hollow, bears E. and W.

Desc.

25.00 Enter heavy timber.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 in. in ground for ¼ sec. cor. mkd. on brass cap

¼ S.12 on W. half

S. 7 on E. half from which

A pinon pine 7 in. dia. bears N. 31° 45' E. 44 lks. dist. mkd. ¼ S.7 B. T.

A pinon pine 8 in. dia. bears S. 72° 25' W. 54 lks. dist, mkd. ¼ S. 12 B.T.

42.00 Old road bears E. and W.

80.00 Set an iron post 3 ft. long 3 in. dia. 24 in. in the ground for the cor. of sec. 1, 6, 7, and 12, mkd. on brass cap

T. 41 S. in N. half

R. 14 W. S. 6 in N.E.

R. 15 W. S. 1 in N.W.

S. 7 in S.E. and

S. 12 in S.W. quadrant; from which

A cedar 8 in. dia. bears N. 47° 15' E. 75 lks. dist., mkd. T. 41 S., R. 14 W. S. 6 B. T.

A pinon pine 4 in. dia. bears S. 42° 50' E. 22 lks. dist., mkd. T. 41 S., R. 14 W. S.7 B.T.

A cedar 10 in. dia. bears S. 46° 50' W. 84 lks. dist. mkd. T. 41 S., R. 15 W. S.12 B.T.

A cedar 24 in. in dia. bears N. 46° 30' W. 71 lks. dist., mkd. T. 41 S. R. 15 W., S.1 B.T.

Land, mountainous and level.

Soil, sandy loam, second rate.

Timber, cedar and pinon pine.

Undergrowth, sagebrush.

Mountainous, or heavily timbered land 55.00 chs.

Exceptionally difficult to survey 55.00 chs.

East Boundary, T. 41 S., R. 15 W.- Continued.

Chains.	
	May 6, 1909; at this cor. I set off 16° 32' N. on the decl. arc.; and at 11 h. 57 m. a.m. l.m. t. observe the sun on the meridian. The resulting lat. is 37° 15' N. which is the proper lat.; nearly.
	N. bet. sec. 1 and 6.
	Over mountainous lands through heavy timber and dense undergrowth.
	Desc.
2.85	Bottom of hollow 30 ft. below cor. course S. 20° E.
	Asc.
7.35	Top of ridge 60 ft. above hollow bears E. and W.
	Desc.
28.50	Bottom of canyon 150 ft. below ridge, course E.
	Asc.
40.00	Set an iron post 3 ft long, 1 in. in dia. 26 in. in ground for the ¼ sec. cor. mkd. on brass cap ¼ S. 1 on W, half S. 6 on E, half from which A pinon pine 8 in. dia. bears E. 50 lks. dist. mkd. ¼ S. 6 B. T. A pinon pine 6 in. dia. bears S. 74° W. 8 lks. dist., mkd. ¼ S. 1 B. T.
55.20	Top of spur 250 ft. above canyon bears E. and W.
	Desc.
61.65	Bottom of hollow 70 ft. below spur, course E.
	Asc.
71.00	Top of ridge 150 ft. above hollow bears E. and W.
	Desc.
84.82	Intersect 8th Standard Parallel South 25.20 chs. E. of Stand. ¼ sec. cor. on S. bdy. of sec. 36, which is a sand stone 10x15x5 ins. above ground, firmly set and marked and witnessed as described by the Surveyor General.
	Set an iron post 3 ft. long 3 ins. dia. 24 in. in the

East Boundary, T. 41 S.,R. 15 W.- Continued.

Chains. ground, for closing cor.of Tps. 41 S., Rs. 14 and 15 W., mkd. on brass cap

T. 40 S. in N. Half

T. 41 S. C. C. in S. half

R. 14 W. S. 31 in N.E.

R. 14 W. S. 6 in S. E.

R. 15 W. S. 1 in S. W. and

R. 15 W. S. 36 in NW. quadrants, from which

A pinon pine 8 in. dia. bears S. 22° 37' E. 70 lks. dist, mkd. T. 41 S., R.14 W., S. 6 B. T.

A pinon pine 8 in. dia., bears S. 58° W. 55 lks. dist, mkd. T. 41 S. R. 15 W., S. 1 B. T.

Land, mountainous.

Soil, Clay and rocky, 2nd and 4th rates.

Timber, cedar and pinon pine.

Undergrowth, sage and service berry brush.

Mountainous or heavily timbered land or land covered with dense undergrowth, 84.82 chs.

Exceptionally difficult to survey, 84.82 chs.

May 6, 1909.

General Description.

This bdy. passes over a series of sandstone ridges and hollows having first a southwesterly trend and then changeing to southeasterly direction. They are quite difficult to ascend.

Sage is the predominating brush though there are some quantities of otherkinds. Scrub cedar and pinon pine gradually give way to heavier and better growths in the northern parts.

Leo A. Snow.

U. S. Deputy Surveyor

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Page

RETRACEMENT NORTH BOUNDARY T. 42 S., R. 15 W.

Chains | Survey commenced May 11, 1909, and executed with a W. & L.E.Gurley light mountain transit No. .... with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the Surveyor General for Utah, Apr.26, 1909.

At the corner of Tps.41 and 42 S., Rs.14 and 15 W., heretofore described, lat.37° 10' 14" N.; long.113° 24' 39" W., I set off 37° 10'N. on lat.arc; 17° 50'N.on decl. arc, and at 7 h. 56 m.a.m.l.m.t.determine a meridian with the solar.

Note: For complete test of instrument see notes of E. bdy.T. 41 S., R. 15 W.

I destroy the old Tp.cor.above described, and in the exact place,

Set an iron post 3 ft.long, 3 ins.dia., 34 ins.in the ground, for cor.of Tps.41 and 42 S., Rs.14 and 15 W. mkd.on brass cap,

T 41 S in N.half,

T 42 S in S.half,

R 14 W S 31 in NE.

S 6 R 14 W in SE.

S 1 R 15 W in SW., and

R 15 W S 36 in NW.quadrants; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. Thence I run N.89°.44'W. along S.bdy.of sec.36

40.92 | Fall 5 lks.S.of the ¼ sec.cor., which is a sandstone 8 x 6 x 4 ins.above ground,marked and witnessed as described by the surveyor general.

The course of this line is therefore N.89° 40'W.

Retracement North Boundary T. 42 S., R. 15 W.

Chains.	
	Thence I run
	North 89° 52'W.on retracement line
32.61	Fall 2½ lks.N.of closing cor.of sec.1 and 2, which is a sandstone 14 x 8 x 3 ins.above ground, mkd.and witnessed as described by the surveyor general.
38.57	Fall 3 lks.N.of the old cor. of secs.1,2,35, and 36, which is a sandstone 8 x 7 x 6 ins.above ground, mkd. and witnessed as described by the surveyor general.
	The course of this line is therefore N.89° 55'W.
	Thence I run
	N.89° 52'W.on S.bdy.sec.35
38.71	Fall 15 lks.N.of the old ¼ sec.cor., which is a sandstone 7 x 5 x 7 ins.above ground, marked and witnesed as described by the surveyor general.
	The course of this line is therefore S.89° 55'W.
	Thence I run
	N.89° 47'W. and at
41.48	Fall 21 lks.N.of the old cor.of secs.2,3,34, and 35, which is a red sandstone 9 x 4 x 6 ins.above ground, marked and witnessed as described by the surveyor general.
	The course of this line is therefore S.89° 55'W.
	From the old cor.of secs.2,3,34, and 35 I run
	N.89° 48'W.on S.bdy.of sec.34,
40.88	Fall 17 lks.N.of the old ¼ sec.cor., which is a volcanic stone 9 x 6 x 5 ins.above ground, mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore S.89° 57'W.
	I continue from old ¼ sec.cor., and run west
34.77	Fall 11 lks.N.of closing cor.of secs.3 and 4, which is a volcanic stone 10 x 8 x 4 ins.above ground, mkd.and

Retracement North Boundary T. 42 S., R. 15 W.

Chains	
	The course of this half-mile is therefore S.89° 52'W.
	From the old cor.of secs.31 and 32, I run
	West on S.bdy.sec.31,
40.18	Fall 4 lks.S.of the old ½ sec.cor., which is a sandstone 8 x 8 x 7 ins.above ground, marked and witnessed as described by the surveyor general.
	The course of this half-mile is therefore N.89° 57'W.
	I continue the measurement from old cor., running west
75.46	Fall 3 lks.S.of NW.cor.of Tp.42 S., R., 15 W., which is a volcanic stone 8 x 10 x 5 ins.above ground, marked and witnessed as described by the surveyor general.
	The course of this line is therefore N.89° 57'W.
	Thence I run South
4.70	The closing cor.of Tp.42 S., R. 16 W., which is a volcanic stone 10 x 9 x 7 ins.above ground, marked and witnessed as described by the surveyor general.
	Thence I run
	West on S.bdy.sec.31,
5.15	The closing cor.of Tp.41 S., Rs.15 and 16 W., heretofore described.
	May 11, 1909.

South Boundary T. 41 S., R. 15 W.

Chains.	
	The north boundary of T. 42 S., R. 15 W. being out of limit for distance, I survey this line for the S.bdy. of T. 41 S., R. 15 W. only.
	May 12, 1909: At 7 h. 56 m.a.m.l.m.t.I set off 37° 10' N.on lat.arc; 18° 05'N.on decl.arc; and determine a meridian with the solar at the re-established cor.of Tps.41 and 42 S., Rs.14 and 15 W. heretofore described.
	Thence I run
	N.89° 40'W. on S.bdy.of sec.36,
	Ascending through undergrowth.
7.30	Road bears N.15° E. and S.15° W.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, ¼ S 36 in N.half; and raise a mound of stone 2 ft.base, 1½ ft.high N.of cor.
40.92	Intersect the old ¼ sec.cor., heretofore described;I destroy the marks on the old cor.pertaining to sec.36.
[illegible]	Thence I run N.89° 55'W.
71.10	Top of mountain about 150 ft.above Tp.cor. bears S.80° W. and N.85° E.
	Descend.
73.53	Intersect the closing cor.of secs.1 and 2,, heretofore described.
79.49	Intersect the cor.of secs.1,2,35, and 36, heretofore described.Destroy marks pertaining to secs.35 and 36.
	Thence I run S.89° 55'W.
80.00	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of secs.35 and 36, marked on brass cap
	T 41 S S 35 in NW. and
	R 15 W S 36 in NE.quadrant; raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Land, mountainous.
	Soil, sandy and stony; 2d and 3d rates.

South Boundary T. 41 S., R. 15 W.

Chains	
	No timber.
	Undergrowth greasewood, iron wood and cactus.
	Mountainous land 80.00 chs.
	S.89° 55'W. on S.bdy.sec.35,
	Descending over NW.slope of mountain; through scattering undergrowth.
38.20	Intersect old ¼ sec.cor. heretofore described. I destroy marks pertaining to sec.35.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, ¼ S 35 in N.half; and raise a mound of stone 2 ft.base, 1½ ft.high N.of cor.
58.50	Wash at foot of mountain about 8 lks.wide, 5 ft.deep, drains S80° W.
	Road in bottom of wash bears N.80° E. and S.80° W.
60.90	Same wash 12 lks.wide,4 ft.deep, drains N.70° W. Road in bottom follows wash.
	Descend gradually.
68.40	Wood road bears N.80° E. and S.70° W.
69.40	Wash 60 lks.wide, 4 ft.deep, drains S.70° W.
79.68	Intersect cor.of secs.2,3,34, and 35, heretofore described.I destroy marks pertaining to secs.34 and 35.
80.00	Thence I run S.89° 57'W.and at
80.00	Set an iron post 3 ft.long, 3 ins.dia. 24 ins.in the ground, for cor.of secs.34 and 35, marked on brass cap T 41 S S 34 in NW. and R 15 W S 35 in NE.quadrants; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Land,mountainous and broken.
	Soil, sandy and stony; 2d and 4th rates.
	No timber.Undergrowth greasewood and sagebrush.
	Mountainous land 80.00 chs.
	S.89° 57'W. along S.bdy.sec.34,
	Descending gradually through scattering undergrowth.

South Boundary T. 41 S., R. 15 W.

Chains	
.40	Road from Washington wood hills bears N. and S.
.70	Old road bears N. and S.
3.00	Wash 9 lks.wide, 4 ft.deep, drains S. and SW.
	Ascend.
13.50	Wash 12 lks.wide, 8 ft.deep, drains S.80° W.
20.00	Begin abrupt ascent over broken ridges.
29.20	Trail bears N. and S.
29.50	Wash, 30 lks.wide, 5 ft.deep, drains S.
	Ascend gradually on slope of black ridge bears N. and S.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground for ¼ sec.cor., marked on brass cap, ¼ S 34 in N.half; and raise a mound of stone 2 ft.base, 1½ ft. high N.of cor.
40.56	Intersect old ¼ sec.cor., heretofore described. I destroy marks pertaining to sec.34.
	Thence I run S.89° 48'W. and at
57.00	Ascend volcanic ridge bearing N. and S.75° W.
70.00	Volcanic knoll about 300 ft.high bears N. about 30 chs.
72.50	Point of lava ridge about 300 ft.above ¼ sec.cor. bears NE.; thence along S.face of volcanic ridge over boulders.
74.50	Descend over SW.slope of ridge.
75.33	Intersect closing cor. of secs.3 and 4 heretofore described.
80.00	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of secs.33 and 34, marked on brass cap T 41 S S 33 in NW. R 15 W S 34 in NE.quadrants; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Land, mountainous.
	Soil, sandy, and stony; 4th rate.
	No timber.
	Mountainous land 40.00 chs.
	May 12, 1909: At this cor. I set off 18° 08'N.on decl.

Chains	
	arc; and at 11 h. 56 m.a.m l.m.t.observe the sun on the meridian; the resulting lat.is 37° 10'N. which is the proper lat.nearly.
	S.89° 48'W.on S.bdy.of sec.33,
	Descending over steep broken S.slope of lava bench or ridge; through scattering undergrowth.
1.06	Intersect the old cor.of secs.33 and 34, heretofore described. I destroy marks pertaining to secs.33 and 34.
	Thence I run N.89° 56'W.
2.25	Old road bears NW. and SE.
6.68	Ascend SE.slope of ridge.
17.00	Point of lava bench or ridge about 300 ft. high bears N.70° E. and W.
21.70	Descend abruptly.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, ¼ S 33 in N.half; and raise a mound of stone 2 ft.base, 1½ ft.high N.of cor.
40.58	Wash, 12 lks.wide, 6 ft.deep, drains S.30° W.
	Ascend on S. and SE.slope of ridge.
41.30	Intersect old ¼ sec.cor.heretofore described. I destroy marks pertaining to sec.33.
	Thence S.89° 56'W.
67.50	Ravine 20 ft.deep, drains S.
72.40	Old road to wood hills bears S.50° E. and N.50° W.
73.69	Intersect closing cor.of secs.4 and 5, heretofore described.
76.60	Wood road from Washington to cedars bears S.50° W. and N.50° E.
80.00	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of secs.32 and 33, marked on brass cap T 41 S S 32 in NW. and R 15 W S 33 in NE.quadrants; and raise a mound of

South Boundary T. 41 S. R. 15 W.

Chains	
	stone, 2 ft.base, 1½ ft.high W.of cor.
	Land, mountainous.
	Soil, sandy, clay, and stony; 2d and 4th rates.
	No timber.
	Undergrowth, greasewood and iron wood.
	Mountainous land 80.00 chs.
	S.89° 56'W.on S.bdy.sec.32,
	Over broken lava ridges;through scattering undergrowth.
2.00	Intersect old cor.of secs.32 and 33, heretofore described. Destroy marks pertaining to secs.32 and 33.
	Thence S.89° 57'W.
25.65	Ravine 50 ft.deep, course S.
34.25	Top of ascent on E.side of lava bench bears N. and S.
	Descend over top of bench and broken lava ledges.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 32 in N.half; and raise a mound of stone 2 ft.base, 1½ ft.high N.of cor.
42.29	Intersect old ¼ sec.cor., heretofore described. I destroy marks pertaining to sec.32.
	Thence S.89° 52'W.
52.85	Trail bears N. and S.
54.60	Cottonwood Creek and Ditch, 7 lks.wide, 6 ins.deep, course SW. Ascend.
71.85	Old road bears S.20° W. and N.
74.25	Descend gradually on E.slope of hollow bears S.10° W. and N.10° E.
75.33	Intersect old closing cor.for secs.5 and 6, heretofore described.
79.55	Bottom of hollow, drains S.
80.00	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground, for cor.of secs.31 and 32, marked on brass cap T 41 S S 31 in NW.

South Boundary T. 41 S., R. 15 W.

Chains.	
	R 15 W S 32 in NE.quadrants; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. Destroy marks on old cor.which pertain to secs.31 and 32.
	Land, mountainous.
	Soil, sandy, clay, and stony; 4th rate.
	No timber. Undergrowth iron wood.
	Mountainous land 80.00 chs.
	S.89° 52'W.along S.bdy.sec.31.
	Through scattering greasewood and sagebrush.
2.57	Intersect the old cor.of secs.31 and 32, heretofore described. Destroy marks pertaining to secs.31 and 32.
	Thence I run N.89° 57'W.
13.50	Begin rapid descent over volcanic ledges on W.slope of lava bench, bears N. and S.
20.75	Bottom of hollow at foot of volcanic ridge, drains S.
	Ascend E.slope of red sandstone ridge.
37.75	Top of ridge, 75 ft.high, bears N. and S.30° W.
39.75	Descend on W.slope of ridge.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap ¼ S 31 in N.half; and raise a mound of stone 2 ft.base, 1½ ft. high N.of cor.
42.75	Intersect old ½ sec.cor., heretofore described. I destroy all marks on old cor.pertaining to sec.31.
46.50	Hollow, 20 ft.deep, drains S.40° W.
	Ascend.
50.50	Top of ridge, about 37 ft.high bears N. 10° E. and S. 10° W.
	Descend on W.slope.
56.75	Wash 60 lks.wide, 10 ft.deep, drains S.40° W. Ascend.

South Boundary T. 41 S., R. 15 W.

Chains.	
70.75	Top of ridge about 150 ft.high, bears north about 10.00 chs., thence NE. and S.85° W.
75.46	Intersect N.W.cor.of Tp.42 S., R. 15 W., heretofore described.
	Land, mountainous and broken.
	Soil, sandy, clay and stony; 3d and 4th rates.
	No timber.
	Undergrowth, greasewood, sage and iron wood.
	Mountainous land 75.46 chs.

May 12, 1909.

For general description see notes of the subdivision of this township.

Wm. A. Smart.

U.S.Dep.Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Leo A. Snow, 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 E. and S. bdys. T. 41 S., R. 15 W., Salt Lake Base and Meridian, Utah, showing the respective capacities in which they acted:

Hillman Dalley, *Chainman.*
George WWorthen, *Chainman.*
Samuel Brooks, *Moundman.*
Rawl Worthen, *Moundman.*
John A. Humphries, *Axman.*
, *Axman.*
John T. Jarvis, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Leo A. Snow, United States Deputy Surveyor, in surveying all those parts or portions of the E. and S. bdys. T. 41 S., R. 15 W., and retracement of the North Boundary of Township 42 South, Range 15 West 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.

Hillman Dalley, *Chainman.*
George W. Worthen, *Chainman.*
Samuel Brooks, *Moundman.*
Rawl Worthen, *Moundman.*
John A. Humphries, *Axman.*
, *Axman.*
John T. Jarvis, *Flagman.*

Subscribed and sworn to before me this 31st day of May 1900. ~~x 190 x~~

SEAL

Leo A. Snow.
U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, 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 17th day of March 1909, 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the E. and S. bdys. T. 41 S., R. 15 W., and retracement of North Boundary Township 42 South, Range 15 West

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.

Leo A. Snow
United States Deputy Surveyor

Subscribed by said Leo A. Snow, and sworn to before me this 17 day of January, 1910

John D. Woodbury
Clerk Dist. Court

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 1911

The foregoing field notes of the survey of the South and East Boundaries of Township No. 41 South, Range No. 15 West of the Salt Lake Base and Meridian Utah,; and retracement of North Boundary Township No. 42 South Range No. 15 West of the Salt Lake Base and Meridian, Utah,

executed by Andrew J. Stewart Jr. and Leo A. Snow under ~~his~~ their contract No. 309, dated March 17, 190 9, 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-361

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FILED
JAN 25 1910

M.S.B.

FIELD NOTES

OF THE re SURVEY OF THE

Pine Valley Guide Meridian

through

Township No. 41 South

Between Ranges 15 and 16 West

Of the Salt Lake Base and Meridian ~~Meridian,~~

State of Utah.

AS SURVEYED BY

Andrew J. Stewart Jr., and Leo A. Snow, *United States Deputy Surveyors,*

Under ~~his~~ their *Contract No.* 309, *dated* March 17, 1909. ~~190~~

Survey commenced May 7th, 1909. ~~190~~

Survey completed May 10 1909. ~~190~~

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman.
George W. Worthen	Chainman
Samuel Brooks	Chainman
Rawl Worthen	Chainman
John A. Humphries	Moundman
John T. Jarvis	Flagman

BOOK A-361

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley, George W. Worthen, Samuel Brooks and Rawl Wort
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 assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

Pine Valley Guide Meridian, through Tp. 41 S. bet. Rs. 15 and 16 W.,
Salt Lake Base and Meridian, Utah.

Hillman Dalley, Chainm
George W. Worthen, Chainm

~~Subscribed and sworn to before me this 3rd day of May 1909.~~

SEAL

~~Leo A. Snow~~
~~U.S. Deputy Surveyor.~~

~~We, I John A. Humphries and do solemnly swear that I 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~~

~~Pine Valley Guide Meridian through Tps. 41 S. Rs. 15 and 16 W.,~~
~~Salt Lake Base and Meridian.~~

Samuel Brooks, Chainm ~~Moundm~~
Rawl Worthen, Chainm ~~Moundm~~

Subscribed and sworn to before me this 3rd day of May 1909.

SEAL

Leo A. Snow
U.S. Deputy Surveyor.

~~We~~, I John A. Humphries ~~and~~
do solemnly swear that I will well and truly perform the duties of ~~axmen~~ moundman 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
Pine Valley Guide Meridian through Tp. 41 S. bet. Rs. 15 and 16 W.,
Salt Lake Base and Meridian, Utah.

John A. Humphries Mound ~~Axm~~
Axm

Subscribed and sworn to before me this 3rd day of May 1909.

SEAL

Leo A. Snow
U.S. Deputy Surveyor.

I, John T. Jarvis, 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
the survey of Pine Valley Guide Meridian through Tp. 41 S. Rs. 15 and 16 W.
Salt Lake Base and Meridian, Utah.

John T. Jarvis, Flagm

Subscribed and sworn to before me this 3rd day of May 1909.

SEAL

Leo A. Snow
U.S. Deputy Surveyor.

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Survey commenced May 7, 1909, and executed with a W. and L.E.Gurley light mountain transit No. .... with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct, and was approved by the Surveyor-General for Utah on April 26, 1909.

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 p.m.and a.m.hours with a meridian established by Polaris observation I proceed as follows:

At the closing cor.of Tps.41 and 42 S., R. 16 W. which is a volcanic stone 10 x 9 x7 ins.above ground, firmly set and mkd.and witnessed as described by the surveyor general, lat.37° 10'14" N.; long.113° 31' 08" W., I set off 37° 10' N.on the lat.arc; 16° 53'N.on the decl.arc; and at 4h. 56 m.p.m.l.m.t.I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground 5.00 chs.N.of the cor.

May 7, 1909.

May 8: At 4 h. 28 m'a.m.l.m.t.I observe Polaris at eastern elongation in accordance with the Manual of Instructions, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs.N.of the cor.

At 7 h. 30 m.a.m.l.m.t.I lay off the azimuth of Polaris 1° 28.6' to the west and mark the meridian thus deter-

Chains.

mined by cutting a small groove in the stone already set 5.00 chs.N.of the cor.; this mark falls 0.27 ins.east of the mark determined with the solar.

At 7 h. 56 m.a.m.l.m.t.I set off 37° 10'N.on the lat.arc; 17° 02'N.on the decl.arc; and mark the meridian determined with the solar by a cross on the stone already set 5.00 chs.N.of the cor.; this mark falls 0.31 ins.east of the meridian established by Polaris observation.

The solar apparatus by p.m.and a.m.observations defines positions for meridians respectively about 0' 14" west and 0' 16" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8 h. 30 m.a.m. is N. 16° 46'W.; the angle thus determined gives the mag.decl.16°46'E.

From the closing cor.above described I run

North on a random line bet.secs.31 and 36,

Over mountainous land; through dense sagebrush and cactus. Ascend.

4.70 Intersect cor.of Tps.41 and 42 S., R. 15 W., which is a volcanic stone 8 x 10 x 5 ins.above ground, mkd.and witnessed as described by the surveyor general.

326.88 Intersect N.bdy.of sec.18, T. 41 S., R. 15 W. 5.15 chs. E.of the cor.of secs.7,12,13 and 18, hereinafter described. The falling being out of limit, and there being no subdivisions dependent upon this line I resurvey as follows:

Sky overcast, no obs.for lat.this day. May 8, 1909.

May 9, 1909: At 7 h. 56 m.a.m.l.m.t., I set off 37° 14' N.on the latitude arc; 17° 19' N. on the decl. arc

survey of the Pine Valley Guide Meridian through Tps. 41 S. bet. Rs.

Chains.	15 and 16 W.
	and determine a meridian with the solar at the cor. of sec.7, 12, 13 and 18, which is a volcanic stone 6x8x5 ins. above ground, mkd. and witnessed as described by the surveyor general.
	Thence I run
	South on a resurvey line bet.sec. 13 and 18.
	Over mountainous lands; through scattering timber and sagebrush.
	Desc. gradually over volcanic formation
46.88	Set an iron post 3 ft. long, 1 in. in dia. 26 ins. in the ground for ¼ sec. cor.mkd. on brass cap
	¼ S. 13 on W. half
	S. 18 on E. half, raise a mound of stone 2 ft.base, 1½ft. high W. of cor., old ¼ cor. not found.
81.90	Bottom of hollow 50 ft. below ¼ cor. course E.
	Asc.
86.88	Set an iron post 3 ft. long, 3 ins. in dia. 24 ins. in the ground for corner of sections 13 and 24, mkd. on brass cap
	T. 41 S. in N. half
	R. 16 W. S. 13 in N.W. and
	S. 24 in S.W. quadrants, raise a mound of stone 2 ft. base, 1½ ft high, W. of cor., destroyed old cor.
	May 9, 1909, at this cor. I set off 17° 21' N. on a decl. arc. and at 11 h. 56 m. a. m. l. m. t., observe the sun on the meridian, the resulting lat. is 37° 13' N., which is the proper lat., nearly.
	Land, mountainous and level.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, sage.
	Good grass for grazing.
	Mountainous land 86.88 chs.

Resurvey of Pine Valley Guide Mer. through Tps. 41 S. Rs. 15 and 16 W.

Chains. South bet. sec. 19 and 24

Over mountainous lands through sage.

Asc.

38.00 Top of spur, 50 ft. above cor. bears E. and W.

Desc. gradually.

40.00 Set an iron post 3 ft. long 1 in. in dia. 26 ins. in the ground for ¼ sec. cor. mkd. on brass cap

¼ S. 24 in W. half

S.19 in E. half, raise a mound of stone 2 ft. base 1½ ft. high W. of cor. I destroy the old cor.

80.00 Set an iron post 3 ft. long 3 ins. in dia. 24 ins. in the ground for corner of sections 24 and 25, marked on brass cap

T. 41 S. in N. half

R. 16 W. S. 24 in N.W. and

S. 25 in S. W. quadrants, raise mound of stone 2 ft. base 1½ ft high, W. of cor. Pits impracticable. I destroy the old cor.

Land mountainous and level.

Soil, gravelly and rocky, 4th rate.

Undergrowth, sage brsuh.

Good grass for grazing.

Mountainous lands 80.00 chs.

May 9, 1909.

May 10, 1909, at 7 h. 56 m. a. m. l. m.t., I set off 17° 34' n. on the decl. arc., and 37° 12' N. on the lat. arc., and determine a meridian at the cor. of secs. 24, and 25.

Thence I run

South bet. sec. 25 and 30.

Over mountainous lands through sage brush.

Desc. gradually

rvey Pine Valley Guide Mer., through T.41 S., bet.Rs.15 and 16 W.

Chains.	
29.00	Top of volcanic spur, 25 ft.below cor., bears NW. and S.E. Desc.abruptly.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., mkd.on brass cap, ¼ S 25 in W.half, S 30 in E.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. I destroy the old cor.
42.00	Bottom of hollow 20 ft.below cor., course S.70° E. Ascend gradually over sand flats.
43.00	Enter cactus.
80.00	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of secs.25 and 36. mkd. on brass cap, T 41 S in N.half, R 16 W S 25 in NW., and S 36 in SW.quadrants; raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. I destroy the old cor. Land, mountainous. Soil, sandy and rocky; 3d and 4th rates. Undergrowth, sagebrush and cactus. Good grass for grazing. Mountainous land 80.00 chs. May 10, 1909: At this cor.I set off 17° 37'N.on the decl. arc; and at 11 h. 56 m.a.m.l.m.t.I observe the sun on the meridian; the resulting lat.is 37° 11'N. which is the proper lat.nearly.

South bet.secs.31 and 36,

	Over mountainous land; through sage and cactus; still ascending over sandy land.
31.50	Top of ridge, 150 ft.above cor., bears E. and W. Desc.

Chains	
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., mkd.on brass cap, ¼ S 36 in W. half, S 31 in E.half; and raise a mound of stone 2 ft. base, 1½ ft.high W.of cor.
	I destroy the old cor.
	Continue descent.
60.15	Bottom of hollow, 40 ft.below ridge, course E. Ascend.
64.35	Top of ridge, 75 ft.above hollow, bears E. and W.
	Descend.
80.00	Intersect N.bdy.of Tp.42 S., R. 16 W. 5.15 chs.W.of the closing cor.of Tps.41 and 42 S., R. 16 W.
	Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for closing cor.of Tp.41 S., Rs.15 and 16 W. mkd. on brass cap,
	T 41 S C C in N.half,
	T 42 S in S.half,
	R 15 W S 31 in NE.
	R 15 W S 6 in SE,
	R 16 W S 1 in SW., and
	R 16 W S 36 in NW.quadrants; raise a mound of stone 2 ft.base, 1½ ft.high N.of cor.
	I destroy marks on closing cor.of Tps.41 and 42 S., R.16 W. that pertain to Tp.41 S.; and destroy marks on cor.of Tps.41 and 42 S., R. 15 W. that pertain to Tp.41 S.;leaving this corner marked as the NW.cor.of T.42 S.R.15 W. only.
	Land, mountainous.
	Soil, sandy and rocky; 4th rate.
	Undergrowth, sage and cactus.
	Good grass for grazing.
	Mountainous land 80.00 chs.
	May 10, 1909.

Resurvey of Pine Valley Guide Meridian Through Tps.41 S.Rs.15& 16W.

Boundaries of Tp. 41 S. R. 15 W.

Latitudes departures and closing errors.

Line Designated	Course	Distance.	Latutudes		Departures	
		chs.	N. chs.	S. chs.	E. chs.	W. chs.
West boundary.	North	326.88	326.88			
N.bdy.sec.18	S89°54'E	40.36		.07	40.36	
N.bdy.sec.18	S89°42'E	40.89		.21	40.89	
N.bdy.sec.17	East	80.00			80.00	
N.bdy.sec.16	N87°41'E	80.30	3.24		80.23	
W.bdy.secs.10&3	North	160.32	160.32			
8th Stand.Par.S.	S89°40"E	135.49		.79	135.49	
8thStand. Par.S.	N87°08'E	40.68	2.03		40.63	
8th Stand.Par.S.	S86°20'E	40.00		2.56	39.91	
8th Stand.Par.S.	East	25.20			25.20	
E.bdy.Tp.	South	484.82		484.82		
S.bdy.sec. 36	N89°40'W	40.92	.24			40.92
S.bdy.sec. 36	N89°55'W	38.57	.05			38.57
S.bdy.sec. 35	S89°55'W	80.19		.12		80.19
S.bdy.sec. 34	S89°57'W	40.88		.04		40.88
S.bdy.sec. 34	S89°48'W	40.50		.14		40.50
S.bdy.sec. 33	N89°56'W	40.24	.05			40.24
S.bdy.sec. 33	S89°56'W	40.70		.05		40.70
S.bdy.sec. 32	S89°57'W	40.29		.04		40.29
S.bdy.sec. 32	S89°52'W	40.28		.09		40.28
S.bdy.sec. 31	N89°57'W	75.46	.06			75.46
E.bdy.sec. 31	South	4.70		4.70		
S.bdy.sec. 31	West	5.15				5.15
Convergency		.41			.41	
Totals			493.87	493.63	483.12	483.18
				493.87		483.12
Error in lat.				.76		
Error in dep.						.06

GENERAL DESCRIPTION.

This boundary passes over a gently sloping volcanic formation with very few interuptions. There is a little or no timber. The undergrowth consists mostly of sage and cactus. For a complete description see subdivisions.

Leo A. Smith

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 _____

Leo A. Snow, 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 Pine Valley
ide Meridian through Tps. 41 S. bet.Rs. 15 and 16 W.Salt Lake Base and
ridian, Utah
wing the respective capacities in which they acted:

llman Dalley — George W. Worthen, *Chainmen.*
muel Brooks — Rawl Worthen, *Chainmen.*
ohn A. Humphries, *Moundman.*
_____, *Moundman.*
_____, *Axman.*
_____, *Axman.*
ohn T. Jarvis, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

Leo A. Snow, United States Deputy Surveyor, in surveying al
se parts or portions of the Pine Valley Guide Meridian through Tp. 41 S. bet.
. 15 and 16 W.

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

Hilliman Dalley, *Chainman.*
George W. Worthen, *Chainman.*
Samuel Brooks, Chainman ~~Moundman~~
Rawl Worthen, Chainman ~~Axman~~
John A. Humphries, Moundman. *Axman.*
_____, *Axman.*
John T. Jarvis, *Flagman.*

scribed and sworn to before me this 21st
day of May 1909, 1909

SEAL

Leo A. Snow
U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, United States Deputy Surveyor, [illegible] swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of 17th day of March 1909, 190 , I have well, faithfully, and truly, in my [illegible] proper person, and in strict conformity with the instructions furnished by the United States Surve[illegible] General for Utah, the Manual of Surveying Instructions, and the laws of United States surveyed all those parts or portions of The Pine Valley Guide Meridian through Tp. 41 S., Rs. 15 and 16 W.

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

Leo A. Snow
United States Deputy Surve[illegible]

Subscribed by said Leo A. Snow, and sworn to before me this [illegible] day of January, 190[illegible]

John T. Woodbury
Clerk Dist. Cou[illegible]

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 1911 xx

The foregoing field notes of the survey of the Pine Valley Guide Meridian, thr[illegible] [illegible] Tp. 41 South, between Ranges 15 and 16 West of the Salt Lak[illegible] [illegible], Utah,

[illegible] Jr. and Leo A. Snow [illegible] dated March 17, 190 9, having [illegible] [illegible] and the necessary corrections and explanations made, the said field notes, and [illegible] [illegible] are hereby approved.

Thomas Hull
United States Surveyor Gene[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 office

United States Surveyor Gene[illegible]

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4—679.

BOOK A-361

C.

M.B.

FILED
JAN 25 1910

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No.41 South, Range No.15 West

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Andrew J. Stewart Jr. and Leo A. Snow, *United States Deputy Surveyor,*s

nder their ~~his~~ *Contract No.* 309., *dated* March 17, 1909., ~~190~~

urvey commenced May 13, 1909., ~~190~~

urvey completed May 29, 1909., ~~190~~

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46-73-27 58-23

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

~~Hillman Dalley~~	Chainman
~~George W. Worthen~~	Chainman
Samuel Brooks	Moundman
Rawl Worthen	Moundman
John A. Humphries	Axman
John T. Jarvis	Flagman

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BOOK A-361

INDEX DIAGRAM.

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Meanders Page

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PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley and George W. Worthen

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

Subdivision T/41 S., R.15 W., Salt Lake Base and Meridan, Utah.

Hillman Dalley, Chainma

George W. Worthen, Chainma

Subscribed and sworn to before me this 3rd day of May 1909. ~~190~~

Leo A. Snow

U.S. Deputy Surveyor

SEAL

We, Samuel Brooks and Rawl Worthen

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

Subdivision T/41 S., R15 W. Salt Lake Base and Meridian, Utah.

Samuel Brooks, Moundma

Rawl Worthen, Moundma

Subscribed and sworn to before me this 3rd day of May 1909. ~~190~~

Leo A. Snow

U.S. Deputy Surveyor.

SEAL

~~We~~ I, John A. Humphries ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corne and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey

Subdivision T/41 S., R.15 W., Salt Lake Base and Meridian, Utah.

John A. Humphries, Axma

, Axma

Subscribed and sworn to before me this 3rd day of May 1909. ~~190~~

Leo A. Snow

U.S. Deputy Surveyor

SEAL

I, John T. Jarvis, do solemnly swear that I will well and tru perform the duties of flagman according to instructions given me, to the best of my skill and ability, in t survey of Subdivision T/41 S., R.15 W., Salt Lake Base and Meridian, Utah.

John T. Jarvis, Flagma

Subscribed and sworn to before me this 3rd day of May 1909. ~~190~~

Leo A. Snow

U.S. Deputy Surveyor.

SEAL

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Subdivision of T. 4I S.,R.I5 W.

Survey commenced May I2,I909,and executed with a W.and L. E. Gurley light mountain transit,No. ,with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined,tested on the meridian at Salt Lake City, found correct,and was approved by the Surveyor General for Utah,on April 26th,I909.

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

At the cor. of secs.35 and 36 on S. bdy. of Tp.heretofore described,latitude 37° 10' 14" N,longitude II3° 25' 44" W. I set off I8° 12'N,on the decl. arc.; 37° 10' N on the lat. arc.and at 4h56m p. m., l.m.t.,Idetermine a meridian with the solar, and mark a point thereofon a stone firmly set in the ground 5.00 chs. N. of cor.

May I2th, I909.

May I3 th,I909; At 4h 8.3m a.m.,l.m.t.,I observe Polaris at eastern elongation in accordance with the manual, and mark a point in the line thus determined by a tack driven in a wooden plug set inthe ground 5.00 chs. N. of the cor. At 7h 30m,a.m., l.m.t.,I lay off the azimuth of Polaris I° 28.6' to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.,this mark falls 0.30 ins. east of the meridian determined with the solar.

At 7h 56m a.m., l.m.t.,I set off 37° I2' N on the lat. arc.;I8° 20' N. on the decl. arc.;and mark the meridian determined with the solar,by a cross on the stone already set 5.00 chs.N. of the cor.; this mark falls0.30 east of

Subdivision of T. 4I S. R. I5 W. Continued

the meridian determined by the Polaris observation. The solar appratus by p.m. and a.m. observations defines positions for meridians respectively about 0' I6" west and 0' I6" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8h 30m a.m., is N. I6° 44' W., the angle thus determined gives the Mag. decl. I6° 44' E.

From the cor. of secs. 35 and 36 heretofore described I run

N 0° 0I' W., bet. secs. 35 and 36.

Over mountainous land; through dense undergrowth.

Desc.

25.00 Bottom of canon 200ft. below cor. course S 80° W.

Asc.

30.09 Top of spur 60ft. above canon bears E. and W.

Desc.

37.00 Bottom of hollow 50ft. below spur course S.W.

Asc.

40.00 Set an iron post 3ft. long, I in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap

¼ S 35 on W. half and

S 36 on E. half; raise a mound of stone 2ft. base I½ft. high W. of cor. Pits impracticable.

Continue Asc.

50.00 Top of ridge I00ft. above ¼ cor. bears N75°E and S75°W.

Desc.

60.25 Bottom of canon 400ft. below ridge course S60° W.

Asc.

76.83 Top sandstone ridge 350ft. above canon bears E. and W.

Desc. abruptly.

80.00 Set an iron post 3ft. long, 2 in. dia. 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, marked on brass

Subdivision T. 4I S.,R. I5 W. Continued.

Chains.	
	cap
	T 4I S,S 26 in NW.
	R I5 W S 25 in NE.
	S 36 in SE.,and
	S 35 in SW. quadrant, raise a mound of stone
	2ft. base I½ ft. high W. of cor.
	Land,mountainous .
	Soil,sandy and rocky 3rd. rate.
	Undergrowth,sage and evergreen brush and cactus and Oose.
	Good grass for winter grazing.
	Mountainous land or land covered with dense undergrowth
	80.00 chs.
	Exceptionally difficult to survey 80.00 chs.

	S 89° 47'E on a random line bet. secs. 25 and 36.
40.00	Set a temp.¼ cor.
80.04	Intersect E. bdy. Tp.,30 lks. S.of the cor.of secs. 25,30
	3I and 36. heretofore described.
	Thence I run,
	West on true line bet. secs. 25 and 36.
	Over mountainous lands: through dense undergrowth.
	Asc.
7.50	Top of ridge 30 ft.above cor. bears N. and.S.
	Desc.
I5.80	Bottom of wash 30 lks. wide 3ft. deep course S I0° E.
	Asc.
I6.00	Old road bears N.and S.
I7.00	Begin asc. of vol. reef,or ledge.
20.00	Top of ledge bears N. and S.
40.02	Set an iron post 3ft. long, I in. in dia. 26 ins. in the
	ground,for the ¼ sec. cor.,marked on brass cap
	S 25 ¼ on N. half and
	S 36 on S half;raise a mound of stone 2 ft. base
	I½ ft. high N. of cor.

Subdivision of Tp. 4I S. R. I5 W. Continued.

Chains.	
	Asc.
45.00	Top of N. slope of volcanic cone 50 ft. above cor. and ridge. Bears N. and S. Descend.
64.66	Begin abrupt desc. N. and S.
7I.75	Bottom of canon 400 ft. below vol. cone course S4° W.
	Asc.
76.00	Top ridge I50 ft. above canon bears N. and S.
	Desc.
76.80	Begin abrupt desc. bears N. and S.
80.04	The cor. of secs. 25, 26, 35 and 36, 200 ft. below top of ridge.
	Land mountainous.
	Soil, gravelly and rocky; 3rd and 4th rate.
	Undergrowth, sage and rabbit brush and cactus.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 80.04 chs.
	Exceptionally difficult to survey 80.04 chs.
May 13:	At this cor. I set off I8° 23'N on the decl. arc. and at IIh 56m a.m., l.m.t., observe the sun on the meridian the resulting latitude is 37° 11' N; which is the proper lat. nearly.

	N 0° I' W bet. secs. 25 and 26.
	over mountainous lands, through scatering timber and undergrowth. Desc.
4.50	Bottom of hollow 60 ft. below cor. course W.
	Asc.
9.50	Top sandstone spur 300 ft. above hollow bears E. and W.
	Desc.
28.00	Bottom of canon 250 ft. below spur course S.W.
	Asc. along canon edge.
40.00	Set an iron post 3 ft. long, I in. dia., 26 ins. in the ground for the ¼ sec. cor. marked on brass cap S 26 ¼ on W. half and S 25 on E. half, raise a mound of stone 2 ft. bas I½ ft. high W. of cor.

Subdivision of Tp. 4I S. R. I5 W. Continued.

Chains.	
46.25	Top of spur 300 ft. above canon bears E. and W.
	Desc.
52.00	Bottom of hollow 60 ft below spur course S 30° W.
	Asc.
69.75	Top of spur I25 ft. above hollow bears E. and W.
	Desc.
72.00	Bottom of hollow 60 ft. below spur course S 30° E.
	Asc.
80.00	Set an iron post 3 ft. long, 2 ins. dia.,24 ins. in the ground,for cor. of secs: 23,24,25,and 26, marked on brass cap
	T 4I S. S 23 in N.W.
	R I5 W. S 24 in N.E.
	S 25 in S.E. and
	S 26 in S.W. quadrants,raise a mound of stone 2 ft. base I½ ft. high W. of cor.
	Land,mountainous .
	Soil,rocky 4th rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage and evergreen brush.
	Mountainous land 80.00 chs.
	Exceptionally difficult to survey 40.00 chs.
	May I3 th. I909.

May I4,I909: At 7h 56m a. m.,l.m.t.,I set off I8° 35' N on decl. arc.; 37° 12' N on the lat. arc. ;and determine a meridian with the solar,at the cor. of secs. 23,24,25,and 26.

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

40.00	Set a temp. ¼ cor.
80.I2	Intersect E. bdy. of Tp. I6 lks. N. of cor of secs. I9, 24,25 and 30,heretofore described.
	Thence I run;
	N 89° 53' W bet. secs. 24 and 25. on true line
	Over mountainous land through scatering timber and under-growth.

Subdivision of Tp. 4I S. R. I5 W. Continued.

Chains.	
	Asc.
4.75	Foot of sandstone ledge bears NE and SW.
I3.50	Top sandstone ridge and ledge 400 ft. high bearsNE.&SW.
	Desc.
27.00	Foot of ridge and ledge bears N.E. and S.W.
36.50	Bottom of hollow 70 ft. below foot of ridge course S.
	Asc.
40.06	Set an iron post 3 ft. long, I in. dia., 26 ins. in the ground for ¼ sec. cor.,marked on brass cap S 24 ¼ on N. half and S 25 on S. half; raise a mound of stone 2 ft. base I½ ft. high N. of Cor.
4I.00	Top of ridge I00 ft.above hollow bears N. and S.
	Desc.
45.50	Bottom of hollow 80 ft. below ridge course S30° E.
	Asc.
50.00	Top of ridge I00 ft.above hollow bears N. and S.
	Desc.
60.00	Bottom of hollow I00 ft. below ridge courseS20° W.
	Asc.
65.00	Top of ridge I25 ft. above hollow bears S 20° W.
	Desc.
80.I2	The cor. of secs. 23,24,25 and 26.
	Land,mountainous .
	Soil,sandy and rocky 3rd. and 4th. rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage and buck brush.
	Mountainous land 80.I2 chs.

N 0° I' W bet. secs. 23 and 24.

Over mountainous land;through scattering timber and undergrowth.

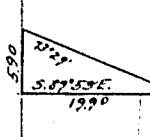
	Asc.
I2.00	Top of sand ridge 50 ft/ above cor. bears E. and W.
I5.00	Desc. over sand and sand boulders, bears E.and W.
32.00	Bottom of swale 20 ft, below ridge course west.
	Asc.

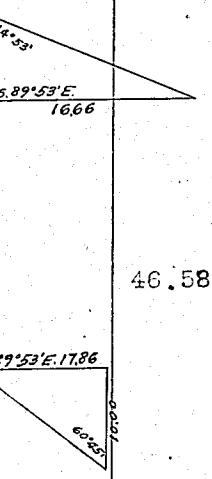
Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains	
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, ¼ S 23 in W.half, S 24 in E.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
41.25	Foot of a series of sandstone ledges and ridges, bear NW. and SE. and N. and S.
57.00	Top of series and top of west slope of ridge, 400 ft. above foot bears E. and W. Descend.
80.00	Set an iron post 3 ft.long, 2 ins.dia., 26 ins.in the ground, for cor.of secs.13,14,23, and 24, marked on brass cap,
	T 41 S S 14 in NW.
	R 15 W S 13 in NE.
	S 24 in SE., and
	S 23 in SW.quadrant; raise a mound of stone 2 ft. base, 1½ ft.high W.of cor.
	Land, mountainous.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, juniper, cactus,oose, sage and oak brush.
	Mountainous land 60.00 chs.
	Exceptionally difficult to survey 36.75 chs.
	May 14: At this cor.I set off 18° 37'N.on the decl.arc; and at 11 h. 56 m.a.m.l.m.t.observe the sun on the meridian; the resulting lat.is 37° 13'N., which is the proper lat.nearly.

S.89° 53'E.on random line bet.secs.13 and 24,

It is impracticable to chain to the top of the ridge; therefore I set a flag on line on top and measure a base at right angles to line 5.90 chs., from which the flag on line bears S.73° 22'E. and the N.end of base bears from the flag N.73° 22'W. Impossible to ob-





Chains.	
	tain longer base on account of ledges. I compute the distance as follows: Tan.73° 29' x base, or 3.37234 x 5.90 equals 19.90 chs.
19.90	Top of ridge.
29.92	Bottom of canon and foot of impassable ledge. I measure a base N.0° 7'E. 4.50 chs., from which the flag on line bears S.74° 46'E.,and from flag the N.end of base bears N.74° 46'W. Impossible on account of ledges to obtain longer base. I compute the dist.as follows:Tan. 74° 53' x base, or 3.70188 x 4.50 equals 16.66 chs. 16.66 plus 29.92 equal 46.58
46.58	Top of perpendicular ledge, impossible to chain down. I find it impossible to get a suitable base on top for triangulation; therefore I erect a flag at this point and descend to a suitable place on line. To determine the distance I measure a base S.0° 7'W. 10.00 chs.; from S.end of base flag bears N.60° 38'W.; I compute the distance as follows: Tan.60° 45' x base, or 1.78563 x 10.00 equals 17.86 chs.; 46.58 plus 17.86 =
64.44	(Impossible to obtain longer base on account of ledges) I continue my random line.
80.22	Intersect E.bdy.of Tp.5 lks.S.of the cor.of secs.13,18, 19, and 24, heretofore described.Thence I run N.89° 55'W.on true line bet.secs.13 and 24, Ascending over mountainous land; through scattering timber and undergrowth.
5.75	Top of ridge,135 ft.above cor.bears N. and S.Asc.gently.
28.00	Foot of perpendicular ledge and abrupt ascent,bears NE. and SW. Desc.
33.65	Edge of impassable ledge. Point for ¼ sec.cor.falls on ledge; therefore at
33.70	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in ground and mound of earth and stone for witness ¼ sec.cor., mkd.on brass cap W C¼T.41 S.R.15 W S 13 in N.half, S 24 in S.half

Subdivision of Tp. 4I S. R. I5 W. Continued.

Chains.

S. 24 in S. half; raise a mound of stone 2 ft. base I½ ft. high N. of cor. Desc.

50.30 Bottom of canon 275 ft. below cor. course N.E.

Asc.

60.32 Top of ridge 270 ft. above canon bears N. and S.W.

Desc.

80.22 The cor. of secs. I3, I4, 23 and 24.

Land, mountainous.

Soil, sandy and rocky 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage, Oose, cactus, and juniper.

Mountainous land 80.22

Exceptionally difficult to survey 64.5I chs.

May I4, I909.

May I5 th, I909: At 7h 56m a.m., l.m.t., I set off I8° 50' N on the decl. arc.; 37° I3' N on the lat. arc.; and determine a meridian with the solar at the cor. of secs. I3, I4, 23 and 24.

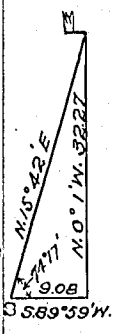
Thence I run

N 0° I' W. bet. secs. I3 and I4

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

This cor. is at the foot of a series of impassable ledges. To determine the distance to the top I set a flag on line on top and from this corner measure a base S89°59' W. 9.08 chs. from which point the flag on top bears N. 15° 42' E.; and from the flag on top the west end of base bears S. 15°42' W. I compute the distance across as follows:



Tan. 74° 17' x base, or, 3.55364 x 9.08 = 32.27 chs. (Impossible to obtain longer base on account of ledges)

32.27 Top of series of ledges and ridge 700 ft. above corner bears N. 80° W. and S. 80° E.

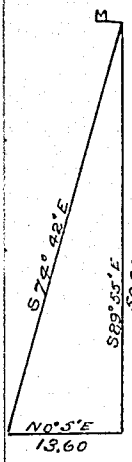
Desc.

Subdivision of Tp. 41 S., R. 15 W. Continued.

Chains.	
37.50	Bottom of hollow 30 ft. below ridge. Course E.
	Asc.
40.00	Set an iron post 3 ft. long, 1 ins. in dia., 26 ins. in the ground for ¼ sec. cor. mkd. on brass cap
	S. 14 ¼ on W. half and
	S. 13 on E. half; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
42.00	Top of spur 75 ft. above hollow bears N.E. and S.W.
	Desc.
65.50	Bottom of hollow 235 ft. below ridge, course N.E.
	Asc.
72.50	Top of spur 150 ft. above hollow, bears N.E. and S.W.
	Desc.
80.00	Set an iron post 3 ft. long, 2 ins. in dia. 24 ins. in the ground, for the cor. of secs. 11, 12, 13 and 14, mkd. on brass cap
	T. 41 S. S. 11 in N.W.
	R. 15 W. S. 12 in N.E.
	S.13 in SE. S. 14 in S. W. quadrant; from which
	A Pinon pine, 6 ins. dia. bears N. 8° 30' E. 84 lks. distant, mkd. T. 41 S. R. 15 W. S. 12 B.T.
	A Pinon pine 4 ins. dia. bears S. 42° 15' E., 29 lks. distant, marked T. 41 S. R. 15 W. S. 13 B. T.
	A Pinon pine 8 ins. dia. bears N. 45° 36' W 60 lks. distant, marked T 41 S R 15 W S 11 B T
	No other trees within limits, raise a mound of stone 2ft base, 1½ ft. high, W of cor.
	Land, mountainous.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, sage and buck brush.
	Mountainous or heavily timbered land 80.00 Chs.
	Exceptionally difficult to survey 80.00 chs.

Subdivision of Tp. 41 S. R 15 W. Continued.

Chains	
	S 89° 55' E on a random line bet. secs. 12 and 13.
10.00	Edge of impassable canon.
	It is impossible to get a base for triangulation at this point. I therefore return to the sec. cor. and erect a flag on line on the opposite side of the canon.
	To determine the distance across I measure a base N 0°5' E, 13.60 chs. from which the flag on E side of canon bears S 74° 42' E; and from the flag on E side the N end of base bears N 74° 42' W. I compute the distance as follows:
	Tan. 74° 47' x base, or, 3.67638 x 13.60 = 50.00 chs.
50.00	East edge of canon.
	Point for ¼ cor. falls in canon.
80.16	Intersect E boundary of Tp. 28 lks. S of the cor. of secs. 7, 12, 13 and 18, heretofore described.
	Thence I run
	S 89° 53' W on a true line bet. secs. 12 and 13.
	Over mountainous land; through scattering timber.
	Asc.
5.00	Top of ridge 100 ft. above cor. bears N and S.
	Desc.
10.00	Bottom of hollow 150 ft. below ridge; course S.
	Asc.
16.00	Top of spur 125 ft above hollow, bears N and S. Desc.
30.00	East side of canon, 400 ft. deep, bears NW. and SE. Bitter
30.00	Creek, about 2 lks. wide, in bottom, drains southerly.
30.00	Set an iron post 3 ft. long, 1 in. in dia. 26 ins. in mound of earth and stone for witness ¼ sec. cor. mkd. on brass cap
	T. 41 S R 15 W S 12 in N half
	S 13 in S half and
	W C ¼ in W half; raise a mound of stone 2 ft. base, 1½ ft. high N of cor.
70.16	West side of canon bears N E and S W.
76.00	Hollow 25 ft. deep; course N E.



Subdivision Tp. 41 S R 15 W - Continued.

Chains.

Asc.

80.16 The cor. of secs. 11, 12, 13 and 14, 100 ft. above hollow.

Land, mountainous.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Mountainous land 80.16.

Exceptionally difficult to survey 80.16.

May 15, 1909. At this corner I set off 18° 52' N on the decl. arc, and at 11 h. 56 m. a.m., l. m. t., I observe the sun on the meridian, the resulting latitude is 37° 14' N, which is the proper latitude, nearly.

N 0° 1' W bet. secs. 11 and 12.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

6.00 Bottom of hollow 100 ft. below cor. course N 80° E.

Asc.

9.50 Top of spur 100 ft. above cor. bears NE. and SW.

Desc.

21.25 Bottom of hollow 200 ft. below spur course N 80° E.

Asc.

23.75 Top of spur 125 ft. above hollow bears NE. and SW.

Desc.

40.00 Point for ¼ cor. fall on edge of canon where it is impossible to perpetuate the cor. I therefore offset west 0.25 chs. and

Set an iron post 3 ft. long, 1 in. dia., 26 ins. in a mound of earth and stone, for witness ¼ sec. cor. marked on brass cap T 41 S R 15 W on N.

S 11 WC ¼ on W. half and

S 12 on E. half; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains	
45.00	Bottom of box canon, 300 ft.below ridge and 100 ft. below ¼ cor., course E. and SE. Asc.
50.00	Top of spur, 150 ft.above canon, bears E. and W. Desc.
55.00	South edge of box canon, 100 ft.deep, course SE.
61.25	North edge of box canon, bears NW. and SE. Asc.
70.00	Top of ridge, 150 ft.above canon, bears NW. and SE. Desc.
71.50	Old road bears N.60° E. and S.60° W.
72.75	Bottom of hollow, 50 ft.below ridge, course SW. Asc.
74.00	Top of spur, 60 ft.above hollow, bears NE. and SW. Desc.
76.00	Bottom of hollow, 30 ft.below spur, course SW.
80.00	Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the ground for cor.of secs.1,2,11, and 12, marked on brass cap, T 41 S S 2 in NW. R 15 W S 1 in NE. S 12 in SE., and S 11 in SW.quadrants; from which A pinon pine, 7 ins.in dia., bears N.60° E. 65 lks. dist., marked T 41 S R 15 W S 1 B T A pinon pine, 6 ins.dia.bears S.67° 30'E. 82 lks. dist., marked T 41 S R 15 W S 12 B T A pinon pine, 8 ins.dia.bears S.47° 45'W. 64 lks. dist., marked T 41 S R 15 W S 11 B T A pinon pine 6 ins.dia.bears N.60° 30'W. 33 lks. dist., marked T 41 S R 15 W S 2 B T Land, mountainous. Soil. rocky and gravelly; 3d rate. Timber, cedar and pinon pine.

Chains	
	Undergrowth, sage, oak, and sarvis berry brush.
	Mountainous or heavily timbered land, or land covered with dense undergrowth 80.00 chs.
	Exceptionally difficult to survey 80.00 chs.
	N.89° 53'E. on a random line bet. secs.1 and 12,
40.00	Set temp. ½ sec. cor.
80.20	Intersect E. bdy. of Tp.16 lks. N. of the cor. of secs.1,6, 7, and 12, heretofore described.
	Thence I run
	West on a true line bet. secs.1 and 12,
	Over mountainous land; through scattering timber and dense undergrowth; ascend.
16.40	Top of ridge 250 ft. above cor., bears N. and S.
	Desc.
40.10	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., marked on brass cap, S 1 ¼ on N. half and S12 on S. half; from which
	A cedar 10 ins. dia. bears N.65° 30'E. 67 lks. dist. marked ¼ S 1 B T
	A cedar 11 ins. dia. bears S.25° 30'W. 9 lks. dist. marked ¼ S 12 B T
46.50	Bitter Creek, 2 lks. wide, 1 in. deep, in bottom of hollow 400 ft. below ridge, course S.10° E.
	Asc.
77.00	Top of spur, 100 ft. above creek bears N.60° W. and S.60° E. Desc.
80.20	The cor. of secs.1,2,11, and 12, 60 ft. below spur.
	Land, mountainous.
	Soil, gravelly and clay; 3rd rate.
	Timber, cedar and pinon pine.
	Undergrowth, oak, serviceberry, and buck brush.

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains.	
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth 80.20 chs.
	May 15, 1909.
	May 16: At 3 h.56 m.p.m.l.m.t.I set off 19°08' N.on decl.arc; 37°16' N.on lat.arc; and determine a meridian with the solar at the cor.of secs.1,2,11, and 12.
	Thence I run
	N.0° 1'W.bet.secs.1 and 2,
	Ascending over mountainous land; through heavy timber and dense undergrowth.
2.78	Top of ridge, 80 ft.above cor., bears N.60° W. and S. 60° E.
	Desc.
14.94	Bottom of hollow, 60 ft.below ridge, course SE.
	Asc.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, S 2 ¼ on W.half and S 1 on E.half; from which
	A pinon pine 10 ins.dia.bears N.34° 10'E. 17 lks. dist., marked ¼ S 1 B T
	A pinon pine 4 ins.dia.bears S.72° 25'W. 36 lks. dist., marked ¼ S 2 B T
55.95	Top of ridge, 300 ft.above hollow, bears NE. and SW.
	Desc.
77.75	Bottom of hollow, 250 ft.below ridge, course E.
	Asc.
80.50	Top of ridge, 100 ft.above hollow, bears E. and W.
	Desc.
86.70	Intersect the 8th Standard Parallel South S.87° 08'W. 15.15 chs.from the standard cor.of secs.35 and 36 and N.87° 08'E. 25.53 chs.from the standard ¼ sec.cor.

Subdivision of T. 41 S., R. 15 W.- Continued.

Chains.

sec.35 T. 40 S., R. 15 W., heretofore described.

Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground, for closing cor.of secs.1 and 2, marked on brass cap,

T 40 S R 15 W in N.half,

S 36 in NE.

S 35 C C in NW.

S 1 in SE., and

S 2 in SW.quadrants; from which

A cedar 16 ins.dia.bears S.63° E. 65 lks.dist. marked T 41 S R 15 W S 1 B T

A pinon pine, 10 ins.in dia., bears S.22° 40'W.41 lks.dist., marked T 41 S R 15 W S 2 B T

Land, mountainous.

Soil, gravelly and clay; 3d rate.

Timber, cedar and pinon pine.

Undergrowth, oak, sage, and serviceberry brush.

Good grass for grazing.

Mountainous or heavily timbered land or land covered with dense undergrowth 86.70 chs.

Exceptionally difficult to survey 86.70 chs.

May 16, 1909.

May 17, 1909: At 7 h. 56m.a.m.l.m.t.I set off 19° 17'N. on the decl.arc; 37°10'N.on lat.arc;and determine a meridian with the solar at the cor.of secs.34 and 35 on S.bdy.of Tp.,heretofore described. Thence I run

N.0° 1'W.bet.secs.34 and 35,

Ascending over mountainous land;through dense undergrowth.

40.00 Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, S 34 ¼ on W.half and S 35 on E.half; raise a mound of stone 2 ft. base, 1½ ft.high W.of cor.

Subdivision of T. 41 S., R. 15 W.- Continued.

Chains	
63.45	Top of ridge 60 ft.above cor., bears E. and W.
	Descend.
79.50	Bottom of hollow, 25 ft.below ridge, course SW.
	Ascend.
80.00	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground, for cor.of secs.26,27,34, and 35, marked on brass cap,
	T 41 S S 27 in NW.
	R 15 W S 26 in NE.
	S 35 in SE., and
	S 34 in SW.quadrants; raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Land, mountainous and level.
	Soil, sandy loam; 2d rate.
	Undergrowth, sage, evergreen and rabbit brush, oose and cactus.
	Good grass for grazing.
	Mountainous or land covered with dense undergrowth 80.00 chs.
	N.89° 55'E.on a random line bet.secs.26 and 35,
40.00	Set temp. ¼ sec.cor.
80.06	Intersect N. and S.line 45 lks.N.of the cor.of secs.25, 26,35, and 36. Thence I run
	N.89° 45'W.on a true line bet.secs.26 and 35,
	Over mountainous land; descending through dense undergrowth.
12.00	Bottom of canon 200 ft.below cor., course S. Ascend.
15.00	Begin ascent over sandstone ledges, bears N. and S.
17.50	Top of ledges 100 ft.high and enter heavy sand bears N. and S. Ascend.
37.25	Leave sand; begin ascent of ridge.
39.50	Top of sandstone ridge, 100 ft.above ledges, bears N.

Chains	
	25° W. and S.25° E.
40.03	Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, S 26¼ in N.half, and S 35 in S.half; raise a mound of stone 2 ft.base, 1½ ft.high N.of cor. Descend.
41.50	Bottom of swale, 20 ft.below ridge, course S. Ascend.
46.00	Top of ridge 15 ft.above swale bears NE. and SW. Desc.
55.00	Foot of descent; enter dense undergrowth.Descend.
68.75	Edge of hollow, 50 ft.below foot bears E. and W. Thence along side of hollow.
79.00	Bottom of hollow, 20 ft.below edge, course SW. Ascend.
80.06	The cor.of secs.26,27,34, and 35, heretofore described.
	Land, mountainous.
	Soil, sandy and rocky; 4th rate.
	Undergrowth oose, sage and evergreen brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth 80.06 chs.
	Exceptionally difficult to survey 80.06 chs.
	May 17: At this cor.I set off 19°19'N.on the decl.arc; and at 11 h. 56 m.a.m.l.m.t.observe the sun on the meridian; the resulting lat.is 37° 11'N., which is the proper lat.nearly.

N.0° 1'W.bet.secs.26 and 27,

	Over mountainous land; ascending through dense undergrowth.
11.80	Top of ridge, 100 ft.above cor., bears NE. and SW.Desc.
19.15	Bottom of hollow, 50 ft.below ridge,course SW. Ascend.
34.40	Top of spur ridge, 75 ft.above hollow, bears NE. and SW. Descend.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap,

Description of Tp. 41 S. R. 15 W.- Continued.

S 27 ½ on W. half and

S 26 on E. half; raise a mound of stone 2.ft. base 1½ ft. high W. of cor.

40.65 Bottom of hollow 50 ft. below ridge course SW.

Ass.

45.50 Top of ridge 65 ft. above hollow bears E. and W.

Dens.

47.75 Bottom of hollow 60 ft. below ridge course SE.

Ass.

80.00 Set an iron post 3 ft. long ,2 ins. in dia.,24 ins. in the ground for cor.of secs. 22,23,26 and 27.,marked on brass cap

T 41 S S 22 in NW.

R 15 W S 23 in NE.

S 26 in SE. and

S 27 in SW. quadrants; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.

Land, mountainous .

Soil, sandy and rocky 4 th. rate.

Undergrowth, sage, and evergreen brush and cactus.

Good grass for grazing.

Mountainous land or land covered with dense undergrowth 80.00 chs.

Exceptionally difficult to survey 80.00 chs.

May 17 1909.

May 18 th,1909: I set off 19° 32' E on the decl. arc; 37° 12' N on the lat. arc; and at 7h 54m a.m. l.m.t., determine a meridian with the solar at the cor. of secs. 22,23,26 and 27.

Thence I run

S 89° 45' E.on a random line bet. secs. 23 and 26.

40.00 cSet a temp. ¼ sec.cor.

79.98 Intersect N.and S. line 20 lks. S. of the cor. of secs. 23,24,25 and 26.

Subdivision of Tp. 41 S.R.15 W.- Continued.

Chains.	
	Thence I run N 89° 55' W bet. secs. 23 and 26, on true lin
	Over mountainous land, through dense undergrowth.
	Asc.
16.75	Top of ridge 30 ft. above cor. bears N 20° E and S20°W.
	Desc. abruptly.
37.50	End of abrupt descent.
	Continue desc.
39.99	Set an iron post 3 ft, long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap S 23 ¼ on N. half S 26 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
44.00	Bottom of hollow 450 ft. below ridge course S 20° W.
	Asc.
50.75	Top of ridge 50 ft. above hollow bears N 15° W and S 15°
	Desc.
60.25	Bottom of hollow 30 ft. below ridge course S 30° E.
	Asc.
69.00	Top of ridge 40 ft. above hollow bears NW. and SE.
	Desc.
75.00	Wash 15 lks. wide 3 ft. deep in hollow 25 ft. below ridge course S 30° E.
	Asc.
79.98	The cor. of secs. 22, 23, 26 and 27. heretofore described.
	Land, mountainous.
	Soil, sandy and rocky 4th. rate.
	Undergrowth, sage and evergreen brush and cactus.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth
	79.98 chs.
	Exceptionally difficult to survey. 79.98. chs.

N 0° 1' W bet. secs. 22 and 23.

Over mountainous land through dense undergrowth.

Asc.

Subdivision of Tp. 41 S. R. 15 W.- Continued.

Chains.

4.15 Bottom of hollow 10 ft. above cor.course S 60° E.

Asc.

22.50 Top of spur 100 ft. above hollow bears NE. and SW.

Desc.

26.40 Bottom of hollow 150 ft. below spur course NE.

Asc.

33.00 Top of ridge 65 ft above hollow bears E. and W.

Desc.

38.25 Bottom of hollow 60 ft. below ridge course S 70° E.

Asc.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground ,for ¼ sec. cor. marked on brass cap

S 22 ¼ on W. half and

S 23 on E. half; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.

70.00 Top of spur 450 ft. above cor. bears NW. and SE.

Desc.

76.50 Bottom of hollow 50 ft. below spur course E.

Asc.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor of secs. 14, 15, 22 and 23, marked on brass cap

T 41 S S 15 in NW.,

R 15 W S 14 in NE.,

S 23 in SE. and

S 22 in SW. quadrants; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.

Land,mountainous.

Soil,sandy and rocky 4th rate.

Undergrowth, evergreen,sage and oak brush and cactus.

Good grass for grazing.

Mountainous land or land covered with dense undergrowth 80.00 chs.

Exceptionally difficult to survey 80.00 chs.

Subdivision of Tp. 41 S. R. 15 W.- Continued.

Chains.

May 18th,1909.At the cor. of secs. 14,15,22 and 23 I set off 19° 33' N on the decl. arc; and observe the sun on the meridian, at 11h 56m a.m. l.m.t., the resulting lat. is 37° 13' N. which is the proper lat. nearly.

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

40.00 Set a temp. ¼ sec. cor.

80.00 Intersect the N. and S. line at the cor. of secs. 13, 14, 23 and 24, heretofore described.

Thence I run

N 89° 55' W. on a true line bet. secs. 14 and 23.

Over mountainous land through scattering undergrowth.

Descend at once over a series of ledges.

32.00 Foot of ledges 400 ft. below cor. bears N. and S.

Continue descent.

38.20 Bottom of hollow 60 ft. below foot of ledges course S.

Asc.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap

S 14 ¼ on N. half and

S 23 on S. half. raise a mound of stone 2 ft. base 1½ ft. high N. of cor.

50.00 Edge of hollow 50 ft. above hollow course N 80° E.

Ascend up hollow.

60.10 Leave hollow course N80° E.

72.00 Foot of steep ascent bears N. and S.

80.00 The cor. of secs. 14, 15, 22 and 23. heretofore described

Land, mountainous.

Soil, sandy and rocky 4-th rate.

Undergrowth, evergreen, sage, Mt. rush and sarvis berry br

Good grass for grazing.

Mountainous land 80.00 chs.

May 18th,1909.

May 19th,1909: At 7h 56m a.m., l.m.t., I set off 19° 44' N on the decl. arc; 37° 13' N on the lat. arc. and deter-

Subdivision of Tp. 41 S. R.15 W.- Continued.

Chains.	
	mine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23.
	Thence I run
	NO° 1' W bet. secs. 14 and 15.
	Over mountainous lands through dense undergrowth.
	Asc.
19.75	Top of spur 200 ft. above cor. bears E. and W.
	Desc.
27.15	Bottom of hollow 300 ft. below spur course E.
	Asc.
32.50	Top of spur 300 ft. above hollow bears E. and W.
	Desc.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap
	S 15 ¼ on W. half and
	S 14 on E. half; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
47.00	Bottom of hollow 450 ft. below spur course E.
	Asc.
50.00	Top of spur 100 ft. abpve hollow bears E. and W.
	Desc.
66.00	Bottom of canon 200 ft. below spur course S 35° E.
	Asc.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 10, 11 , 14 and 15. marked on brass cap
	T 41 S S 10 in NW.,
	R 15 W S 11 in NE.,
	S 14 in SE., and
	S 15 in SW. quadrants; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
	Land, mountainous.
	Soil, rocky 4th. rate.
	Undergrowth, evergreenand sage brush and mountain rush.
	Mountainous land or land covered with dense undergrowth

Subdivision of Tp. 41 S. R. 15 W. — Continued.

Chains.

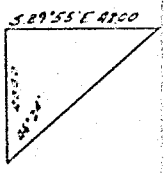
80.00 chs.

Exceptionally difficult to survey 80.00 chs.

May 19: At this cor. I set off 19° 46' N on the decl. arc. and at 11h 56m a.m., l.m.t., observe the sun on the meridian the resulting latitude is 37° 14' N which is the proper latitude nearly.

S 89° 55' E on a random line bet. secs. 11 and 14.

4.00 Bottom of canon and foot of impassible ledges.



It is impossible to get a good base for triangulation here; therefore I erect a flag at this point and climb the ridge to point on line N. 89°59' E. of cor. from which the ¼ cor. bet. secs. 14 and 15 bears S 46° 23' W. I compute the distance as follows:

Tan 46° 24' x base or 1.05010 x 40.00 = 42.00 chs.

42.00 Top of ridge and ledges.

I return 2.00 chs. and at

40.00 Set a temp. ¼ cor.

80.08 Intersect N. and S. line 5 lks. S. of the cor. of secs. 11, 12, 13 and 14.

Thence I run

N 89° 57' W on a true line bet. secs. 11 and 14.

Over mountainous lands through heavy timber and scatterin undergrowth.

Desc.

4.75 Bottom of hollow 150 ft. below cor. course NE.

Asc.

9.50 Top of spur 150 ft. above hollow bears NE. and SW.

Desc.

15.00 Bottom of hollow 125 ft. below spur course NE.

Asc.

21.00 Top of spur 100 ft. above hollow bears N. and S.

Desc.

27.00 Bottom of head of hollow 15 ft. below spur course N.

Subdivision of Tp. 41 S.R.15 W.- Continued.

Chains.	
38.00	Top of ridge and series of ledges 50 ft. above hollow bears N 80° W and S 80° E.
	Desc. almost abruptly.
40.04	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. marked on brass cap. S 11 ¼ on N. half and S 14 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
76.00	Bottom of hollow 600 ft. below ridge course S.
80.08	The cor. of secs. 10,11,14 and 15.
	Land, mountainous.
	Soil, gravely and rocky 3 rd rate.
	Timber, cedar and pinon pine.
	Undergrowth, sage, oak, and sarvisberry brush.
	Good grass for grazing.
	Mountainous or heavily timbered land 80.08. chs.
	Exceptionally difficult to survey 80.08 chs.
	May 19th, 1909.

May 20, 1909: At 7h 56m a. m., l.m.t., I set off 37° 14' N on the lat. arc; 19° 57' N on the decl. arc; and determine a meridian with the solar at the cor. of secs. 10,11,14 and 15. Knowing from previous retracements that I will not intersect the cor. of secs. 9,10,15, and 16 within limits, I run West on a true line bet. secs. 10 and 15.

Over mountainous land, through scattering timber and dense undergrowth.

	Asc.
4.50	Top of spur 100 ft. above cor. bears N 20°W and S 20° E.
	Desc.
13.00	Bottom of canon 200 ft. below spur course S20° E.
	Asc.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap

Subdivision of Tp. 41 S. R. L5 W.- Continued.

Chains.

S 10 ¼ on N. half and

S 15 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.

52.70 Top of spur 900 ft. above bottom of canon bears N. and S.

Desc.

62.50 Bottom of hollow 200 ft. below spur course S.

Asc.

71.50 Top of vol. ledge 20 ft. high bears N. and S.

79.00 Old road bears N and S 20° E.

Continue Asc.

81.15 Intersect N. and S. line ~~extended southward~~ 5.32 chs. S. of the old cor. of secs. 9,10,15 and 16; which is a vol. stone 10x9x6 ins. above ground marked and witnessed as described by the surveyor general.

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 10 & 15, marked on brass ca

T 41 S R 15 W on N. half,

S 10 in NE.,

S 15 in SE.,

S 16 C C in SW. and

S 9 in NW. quadrants; raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

Land mountainous.

Soil sandy, rocky and clay 3rd rate.

Undergrowth sage and mountain rush.

Good grass for grazing.

Timber cedar and pinon pine.

Mountainous land or land covered with dense undergrowth 81.15 chs.

Exceptionally difficult to survey 81.15 chs.

Destroy marks on old corner pertaining to secs. 10 and 15

N 0° 1 W bet. secs. 10 and 11.

Over mountainous land through scattering undergrowth and timber.

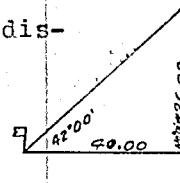
Subdivision of Tp. 41 S. R. 15 W.- Continued.

Chains.

Asc.

2.00 Foot of a series of impassible ledges bears E. and W.

To obtain the distance to the top I return to the sec. cor. and measure a base S 89° 59' W 40.00 chains. From the west end of base the flag placed on top bears N 47°59' E and from the flag the west end of base bears S 47°59' W. I compute the distance as follows:



Tan 42° x base or 0.90040 x 40.00 = 36.02 chs.

36.02 Top of series of ledges 800 ft. above sec. cor. bears E and W.

Continue Asc.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for the ¼ sec. cor., marked on brass cap

S 10 ¼ on W half and

S 11 on E half; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.

51.00 Top ridge and divide 200 ft. above cor. bears N75°W and S 75° E.

Desc.

64.50 Bottom of hollow 200 ft. below ridge course S E.

Asc.

68.50 Top of ridge 150 ft. above hollow bears E and W.

Desc.

73.45 Bottom of hollow 125 ft. below ridge course E.

Asc.

75.75 Top of spur 80 ft. above hollow bears E and W.

Desc.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the cor. of secs. 2, 3, 10 and 11, marked on brass cap

T 41 S S 3 in NW.

R 15 W S 2 in NE.

S 11 in SE., and

S 10 in SW. quadrant; from which

A pinon pine 6 ins. dia. bears N58° E 112 lks. dist., marked T 41S R 15 W S 2 B T.

Subdivision of Tp. 41 S. R. 15 W. Continued.

Chains

A cedar 14 ins. dia., bears S 62° 15' E 22 lks. dist., marked T 41 S R 15 W S 11 B T.

A cedar 12 ins. in dia., bears S 25° 30' W 70 lks. dist., marked T41 S R 15 W S 10 B T.

No other trees with in limits raise a mound of stone 2 ft base, 1½ ft. high W. of cor.

Land, mountainous.

Soil, rocky 4th rate.

Undergrowth, juniper, sage and mountain rush.

Good grass for grazing.

Timber, Cedar and pinon pine.

Mountainous land 80.00 chs.

May 20th, 1909. At this cor. I set off 19° 58' N on the decl arc and at 11h 56m a.m., l.m.t. observe the sun on the meridian, the resulting latitude is 37° 15' N which is the proper lat. nearly.

S 89° 57' E on a random line bet. secs. 2 and 11.

40.00 Set a temp. ¼ cor.

80.12 Intersect N. and S. line 3 lks. N. of the cor. of secs. 1, 2, 11, and 12; heretofore described.

Thence I run

N 89° 56' W on a true line bet. secs. 2 and 11.

Over mountainous land through scattering timber and under growth.

Asc.

3.00 Top of spur 30 ft. above cor. bears N. and S.

Desc.

11.75 Bottom of hollow 50 ft. below ridge course SE.

Asc.

16.25 Top of spur 60 ft. above hollow bears N. and S.

Desc.

27.75 Bottom of hollow 80 ft. below spur course SE.

33.00 Bottom of bend in same hollow course NE.

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains	
	Ascend.
40.06	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, S 2 ¼ on N.half and S 11 on S.half; from which A cedar 14 ins.dia.bears N.22° 30'E. 57 lks.dist marked ¼ S 2 B T A pinon pine 7 ins.dia.bears S.49° 45'W. 63 lks. dist., marked ¼ S 11 B T
50.00	Top of spur, 250 ft.above hollow, and 180 ft.above cor. bears N. and S.Descend.
51.00	Enter heavy timber and dense undergrowth, bears N. and S.
65.00	Old ditch grade bears N.70° W. and S.20° E.
71.00	Wash, 15 lks.wide, 10 ft.deep, course S.10° E.
75.00	Wash, 10 lks.wide, 5 ft.deep, course SE.
78.80	Old road bears NW. and SE.
80.12	The cor.of secs.2,3,10, and 11; heretofore described.
	Land, mountainous.
	Soil, rocky and clay; 4th rate.
	Undergrowth, juniper, mountain rush, sage and oak brush.
	Timber, cedar and pinon pine.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth 29.12 chs.
	Exceptionally difficult to survey 29.12 chs.
	May 20, 1909.

May 21, 1909: At 7 h. 56 m.a.m.l.m.t.I set off 20° 09'N. on the decl.arc; 37° 15'N.on the lat.arc; and determine a meridian with the solar at the cor.of secs.2,3,10, and 11.

Knowing from previous retracements that I will not intersect the cor.of secs.3,4,9, and 10 within limits,I run

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains.	
	West between secs.3 and 10 on true line,
	Over mountainous land; ascending through heavy timber and dense undergrowth.
38.00	Top of ridge, 250 ft.above cor., bears N. and S. Desc.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap,
	S 3 ¼ on N.half, and
	S 10 on S.half; from which
	A pinon pine, 9 ins.dia.bears N.20° W. 76 lks.dist. marked ¼ S 3 B T
	A pinon pine, 8 ins.dia.bears S.56° W. 46 lks.dist. marked ¼ S 10 B T
49.50	Bottom of hollow, 225 ft.below ridge,course S.20° W.Asc.
63.75	Top of ridge,250 ft.above hollow,bears N. and S.Desc.
68.50	Bottom of hollow,200 ft.below ridge, course S. Asc.
73.65	Top of ridge,200 ft.above hollow,bears N. and S.Descend.
77.00	Leave heavy timber;enter scattering timber bears N.and S.
77.15	Old road bears N. and S.
79.40	Bottom of hollow,150 ft.below ridge, course SW.
81.14	Intersect N. and S.line 5.35 chs.S.of the cor.of secs.4 and 9,which is a sandstone 14x12x8 ins.above ground, mkd.and witnessed as described by the surveyor general.
	Set an iron post 3 ft.long,2 ins.dia., 24 ins.in the ground,for closing cor.of secs.3 and 10,mkd.on brass cap, T 41 S R 15 W in N.
	S 4 in NW.
	S 3 in NE.
	S 10 in SE.; and
	S 9 CC in SW.quadrants;raise a mound of stone 2 ft.base,1½ ft.high E.of cor. I destroy all marks on old cor.pertaining to secs.3 and 10.
	Land,mountainous.
	Soil, rocky; 4th rate.
	Timber,cedar and pinon pine.
	Undergrowth sage and juniper.
	Mountainous land 81.14 chs.

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains	
	May 21, 1909: At the cor.of secs.2.3.10, and 11 I set off 20° 11'N.on the decl.arc; and at 11 h. 56 m.a.m. l.m.t.observe the sun on the meridian; the resulting latitude is 37°15', which is the proper lat.nearly.
	N.0° 1'W.bet.secs.2 and 3,
	Over mountainous land; through heavy timber and dense undergrowth. Desc.
.40	Old road bears NW. and SE.
2.00	Bottom of wash 10 lks.wide, 3 ft.deep, course S.60° E.
15.00	Bottom of wash 10 lks.wide, 4 ft.deep, course SE.
	Asc.almost abruptly.
35.00	Top of abrupt ascent, bears E. and W., 300 ft.above cor.
	Continue asc.
40.00	Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for ½ sec.cor., marked on brass cap S 3 ½ on W.half, and S 2 on E.half; from which
	A cedar 11 ins.in dia., bears N.55° 30'E. 16 lks. dist., marked ½ S 2 B T
	A pinon pine, 9 ins.dia.bears S.37° W. 51 lks.dist. marked ½ S 3 B T
44.50	Top of ridge, 30 ft.above top of ascent, bears E. and W.Desc.
49.00	Old road bears N.60° E. and S.60° W.
54.00	Bottom of hollow, 150 ft.below ridge, course NE. Asc.
59.00	Top of spur, 50 ft.above hollow, bears E. and W.
	Desc.
73.50	Bottom of hollow, 125 ft.below spur, course E. Asc.
81.25	Bottom of hollow, 15 ft.above hollow, course SE.
85.30	Intersect the Eighth Standard Parallel South 14.05 chs. N.89° 40'W.of the stand.cor.of secs.34 and 35, which is a volcanic stone 11 x 14 x 6 ins.above ground, marked and witnessed as described by the Surveyor General.

SUBDIVISION OF T. 41 S., R. 15 W.-Continued.

Chains. Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the ground for the closing cor.of secs.2 and 3, marked on brass cap

T 40 S R 15 W in N.half.

S 34 C C in NW.

S 35 in NE.

S 2 in SE., and

S 3 in SW.quadrants; raise a mound of stone 3 ft. base, 1½ ft.high S.of cor.

Land, mountainous.

Soil, clay and rocky; 4th rate.

Timber, cedar and pinon pine.

Undergrowth mountain rush, juniper, oose,and sagebrush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth 85.30 chs.

Exceptionally difficult to survey 85.30 chs.

May 21st, 1909.

May 22, 1909: At the cor.of secs.33 and 34 on S.bdy.of Tp., heretofore described, I set off 20° 21'N.on the decl.arc; 37° 10'N.on the lat.arc; and at 7 h. 56 m. a.m.l.m.t., determine a meridian with the solar.

Thence I run

N.0° 2'W.bet.secs.33 and 34,

Over mountainous land; through scattering undergrowth.

Asc.abruptly over volcanic spur.

1.00 Top of volcanic spur,150 ft.above cor.,bears E.and W.De

7.00 Begin abrupt descent.

23.00 Bottom of hollow,200 ft.below spur,course NE. Asc.

40.00 Set an iron post 3 ft.long, 1 in.in dia., 20 ins.in the ground, for ¼ sec.cor., marked on brass cap,

Subdivision of T.41 S.,R.15 W.-Continued.

Chains	
	S 33 ¼ on W half and S 34 on E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
60.00	Top of volcanic ridge,200 ft.above cor.,bears E.and W. Desc.abruptly.
66.00	Bottom of hollow,150 ft.below ridge,course E.xn Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.27,28,33,and 34,mkd.on brass cap T 41 S S 28 in NW, R 15 W S 27 in NE. S 34 in SE.;and S 33 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor. Land,mountainous. Soil,rocky;4th rate. No timber. Undergrowth,evergreen,sage brush,and mountain rush. Good grass for grazing. Mountainous land,80.00 chs. May 22, 1909
	———
	March 1,1910:U.S.Examiner of Surveys,F.J.VanWinkle found the ¼ sec.cor.bet.secs.27 and 34 in error;therefore I re-run said line as follows: S.89°56'E.,on a random line bet.secs.27 and 34.
40.00	Set temp.¼ sec.cor.the ¼ sec.cor.bears S.77°E.87 lks. I destroy the old cor.
79.80	Intersect N.and S.line,7 lks.N.of the cor.of secs. 26,27, 34,and 35. Thence I run N.89°53'W. ,on a true line bet.secs.27 and 34. Over mountainous land;through dense undergrowth. Asc.
3.00	Top of sandstone ridge,50 ft.above cor.,bears NE and SW. Desc.

Subdivision of T.41 S.,R.15 W.-Continued.

Chains	
26.00	Bottom of hollow,75 ft.below ridge,course S.30°W.
	Asc.
39.90	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 27 in N half and S 34 in S half;~~mkd.on brass cap ¼ S 27 in N half and S 34 in S half~~;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
66.50	Begin steep ascent,bears N.and S.
79.80	The cor.of secs.27,28,33,and 34.
	Land,mountainous .
	Soil,sandy loam and sandy and rocky;2nd and 4th rate.
	Undergrowth,sage and evergreen brush and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.80 chs.

May 22,1909:At the cor.of secs.27,28,33,and 34,I set off 20°23'N.,on the decl.arc;and at 11 h 56 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°11'N.,which is the proper lat.nearly.

March 1,1910:U.S.Examiner of Surveys,F.J.VanWinkle found the cor.of secs.21,22,27,and 28 in error;therefore I re-run the lines leading up to said cor.as follows:

N.0°2 'W.,bet.secs.27 and 28.

Over mountainous land;through scattering undergrowth.

	Asc.
9.00	Top of volcanic spur,70 ft.above cor.,bears E.and W.
	Desc.
30.00	Bottom of hollow,200 ft.below spur,course E.
	Asc.
40.00	Fall 16 lks. West of old ¼ sec.cor.which I destroy.
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in W half

Subdivision of T.41 S.,R.15 W.-Continued.

Chains	
	and S.27 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
68.00	Top of volcanic ridge,250 ft.above hollow,bears NE and SW.
	Desc.
77.50	Bottom of hollow,75 ft.below ridge,course S.70°E.
	asc.
80.00	Fall 6 lks.south and 32 lks.West of the old cor.of secs. 21,22,27,and 28,which I destroy.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.21,22,27,and 28,mkd.on brass cap
	T 41 S S 21 in NW.
	R 15 W S 22 in NE.
	S 27 in SE.;and
	S 28 in SW.quadrants;and raise a mound of stone,
	2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous .
	Soil,rocky;4th rate.
	No timber.
	Undergrowth,sage and evergreen brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	March 1,1910:For reasons stated at beginning of last mile
	I run from the cor.just established.
	S.89°53'E.,on a random line bet.secs.22 and 27.
40.00	Set temp. ¼ sec.cor.The old ¼ sec.cor.bears west 17 lks. and south 6 lks.which I destroy.
79.82	Intersect N.and S .line 7 lks.S.of the cor.of secs.22,23, 26,and 27 .
	Thence I run
	N.89°56 ' W.,on a true line bet.secs.22 and 27.
	Over mountainous land;through dense undergrowth.
	Asc.rapidly.
4.00	Begin more gradual ascent,bears N.and S.
11.20	Top of ridge,125 ft.above cor.,bears N.and S.
	Desc.

Subdivision of T.41 S.,R.15 W.-Continued.

Chains	
33.00	Bottom of hollow,100 ft.below ridge,course SE. Asc.
39.91	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 22 in N half and S 27 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
57.00	Top of ridge,250 ft.above hollow,bears N.10°E.and S.10°W. Desc.
63.00	Head of hollow,100 ft.below ridge,course S.30°W. Asc.abrup
79.50	Top of abrupt ascent; bears NE. and SW.
79.82	The cor.of secs.21,22,27,and 28.
	Land,mountainous.
	Soil,sandy and rocky;3rd and 4th rate.
	Undergrowth,soap weed,sage,mountain rush,and buck brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.82 chs.
	March 1,1910:Note:For reasons explained at the beginning of the line bet.secs.27 and 28.
	I run
	N.0°02'W.,on retracement line bet.secs.21 and 22.
	Over mountainous land;through scattering undergrowth.
	asc.over volcanic slope.
31.00	Top of ridge,60 ft.above sec.cor.,bears NW and SE. Desc.
37.00	Bottom of hollow,100 ft.below ridge,course E.
	Asc.abruptly.
40.00	Intersect the old ¼ sec.cor. described as follows:
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in W half and S 22 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
69.00	Top of abrupt ascent,bears NE and SW.
	Continue asc.
80.00	Intersect the cor.of secs.15,16,21,and 22,described as follows:
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.21 and 22 only;knowing from previous survey that the line bet.secs.15 and 16 will not close within limit on this cor. Marked brass cap

Subdivision of Tp. 41 S. R15 W.- Continued.

Chains.	
	T 41 S S 21 in SW. and
	R 15 W S 22 in SE. quadrant; raise a mound of
	stone 2 ft. base 1½ ft. high W. of cor.
	Land, mountainous.
	Soil, rocky 4th rate.
	Undergrowth, soap weed, evergreen and sage brush.
	Good grass for grazing.
	Mountainous land 80.00 chs.
	May 22, 1909:
	S 89° 49' E on a random line bet. secs. 15 and 22.
40.00	Set a temp. ¼ cor.
80.04	Intersect N. and S. line 25 lks.S. of the cor. of secs.
	14,15,22 and 23, heretofore described.
	Thence I run
	West on a true line bet. secs. 15 and 22.
	Over mountainous land through scattering timber and dense
	undergrowth.
	Asc.
12.60	Top of sandstone ridge 300 ft. above cor. bears N. and S.
	Desc.
25.00	Bottom of hollow 400 ft. below ridge course S.
	Asc.
36.00	Asc. over a series of volcanic ledges bearing N. and S.
40.02	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the
	ground for ¼ sec. cor. marked on brass cap
	S 15 ¼ on N. half and
	S 22 on S. half; raise a mound of stone 2 ft.
	base 1½ ft. high N. of Cor.
47.00	Leave vol. ledges bears NE and S.
61.00	Top of ridge 300 ft. above hollow bears N. and S.
	Desc.
67.00	Bottom of hollow 270 ft. below ridge course S.
	Asc.
72.00	Top of ascent bears N. and SW.
	with the solar, by a cross on the stone already [illegible]

Subdivision of Tp. 41 S. R. 15 W. -Continued.

Chains.	
80.04	The cor. of sec. 21 and 22 heretofore described.
	Land, mountainous.
	Soil, rockey and gravely 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, juniper, black grease wood, and sage brush.
	Good Grass for grazing.
	Mountainous land or land covered with dense undergrowth
	80.04 chs.
	May 23, 1909: At this cor. I set off 20° 35' N on the decl. arc and at 11h 57m a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 37° 12' N which is the pro latitude nearly.
	Note. Knowing from previous closings that the lines bet. secs. 15 and 16, 16 and 17, 17 and 18 will not close within limits I abandon random line and begin at the ¼ co bet. secs. 15 and 16, which is a vol. stone 15 x 10 x 4 ins above ground marked and witnessed as described by the surveyor general.
	Thence I run
	South, on a true line bet. secs. 15 and 16.
	Over mountainous land through scattering timber and dense undergrowth. Desc.
5.50	Top of abrupt desc. bears E. and W.
10.00	Bottom of hollow 60 ft. below top course E.
	Asc.
30.10	Old road bears NE and SW.
30.35	Top of ridge 100 ft. above hollow bears E. and W.
	Desc.
35.00	Bottom of hollow 125 ft. below ridge course S 70° E.
40.25	Top of ridge 75 ft above hollow bears E. and W.
45.43	Intersect E. and W. line 1.17 chs. S89°56'W of the cor. of secs. 21 and 22 heretofore described. (This course determined in survey of line between secs. 16 and 21.)

Subdivision of Tp. 41 S.R. 15 W. Continued.

Chains.

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 15 and 16, mkd. on brass cap

T 41 S R 15 W in W. half

S 15 in NE.

S 22 in SE.

S 21 CC in SW., and

S 16 in NW. quadrant; raise a mound of stone 2 ft. base 1½ft. high N. of cor.

Land mountainous.

Soil rocky 4th rate.

Timber cedar and pinon pine.

Undergrowth, juniper, and sage brush.

Mountainous land or land covered with dense undergrowth

45.43 chs.

May 23: At this cor. latitude 37° 13' N, longitude 113° 27' 54" W., I set off 37° 13' N on the lat. arc; 20° 38' N on the decl. arc; and at 4h 57m p.m, l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground 5.00 chs. N. of the cor.

May 23, 1909.

May 24th, 1909: At 3h 28m a.m., l.m.t., I observe Polaris at eastern elongation in accordance with the manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs. N. of the cor. of secs. 15 and 16.

At 7h 30m a.m., l.m.t., I lay off the azimuth of Polaris 1° 28.6 ' to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor., this mark falls 0.40 ins. east of the meridian determined with the solar.

At 7h 57m a.m., l.m.t., I set off 37° 13' N. on the lat. arc; 20 44' N on the decl. arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs.

Subdivision of Tp. 41 S. R. 15 W.- Continued.

Chains.	
	N. of the cor.; this mark fall 0.40 ins. east of the meridian determined with the Polaris observation.
	The solar appratus by p.m. and a.m. observations defines positions for meridians respectively about 0° 0'20" west and 0° 0' 20"east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the meridian at 8h20m a.m., l/m.t. is N 16° 45' W., the angle thus determined gives the Mag. decl. N 16° 45' E.
	May 24,1909: At 9h 57m a.m., l.m.t., I set off 20° 45' N. on the decl. arc; 37° 10' N on the lat. arc; and determine a meridian with the solar at the cor. of secs. 32 and 33. on S.bdy. of Tp., heretofore described. Thence I run N 0° 3' W. bet. secs. 32 and 33.
	Over mountainous land through scattering undergrowth.
	Asc.
2.00	Top of vol. ridge 75 ft. above cor. bears N 25° E and W. Ascend gradually.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. marked on brass cap S 32 ¼ on W. half and S 33 on E. half; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
55.00	Top of vol. ledge and top of abrupt desc. bears N 70° E and S 70° W.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the cor. of secs. 28, 29, 32 and 33, marked on brass cap T 41 S S 29 in NW. R 15 W S 28 in NE. S 33 in SE., and S 32 in SW. quadrant ; raise a mound of sto

Subdivision of T.41 S.,R.15 W.-Continued.

Chains 2 ft.base,1½ ft.high,W.of cor.

Land,mountainous.

Soil,rocky;4th rate.

Undergrowth,sage and evergreen brush.

Good grass for grazing.

Mountainous land,80.00 chs.

May 24,1909:At the noon hour the sky is overcast and solar observations are impossible.

March 1,1910:U.S.Examiner of Surveys F.J.VanWinkle found the ¼ sec.cor.bet.secs.28 and 33 out in alignment ; therefore I re-run the line as follows:

East ,on a random line bet.secs.28 and 33.

40.00 Set temp.¼ sec.cor.

Note:The old ¼ sec.cor.bears South 06 lks.dist.I destroy the old cor.

79.88 Intersect N.and S.line,16 lks.S.of the cor.of secs.27,28, 33,and 34.

Thence I run

S.89°53'W.,on a true line bet.secs.28 and 33.

Over mountainous land;through scattering undergrowth,Asc.

6.25 Top of volcanic ridge,100 ft.above sec.cor.,bears NE and SW. Desc.

8.00 Old road,bears N and SW.

25.00 Bottom of hollow,60 ft.below ridge,course SW.Asc.

35.00 Top of ridge,50 ft.above hollow,bears N.and S. Desc.

39.94 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in N half and S 33 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.

42.00 Begin abrupt ascent over volcanic formation,bears N.and S.

79.88 The cor.of secs.28,29,32,and 33.

Land,mountainous.

Soil,gravelly and rocky;4th rate.

Undergrowth,evergreen and sage brush,

Good grass for grazing.

Mountainous land,79.88 chs.

Subdivision of T.41 S.,R.15 W.-Continued.

Chains	
	May 24,1909:
	N.0°3'W.,bet.secs.28 and 29.
	Over mountainous land;through dense undergrowth.
	Asc.
2.00	Top of sand ridge,40 ft.above sec.cor.,bears E.and W.
	Desc.
5.00	Bottom of hollow,20 ft.below ridge,course SW.
	Asc.
10.00	Top of spur,40 ft.above hollow,bears E.and W.
	Desc.
13.00	Edge of bend in hollow,20 ft.below ridge,bears NW and SE.
16.50	North side of bend in hollow,bears N.20°E.and S.20°W.
	Asc.
39.95	Top of ridge,50 ft.above hollow,bears NE and SW.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in W half and S 28 in E half;and raise a mound of stone,2 ft/base, 1½ ft.high,W.of cor.
64.00	Bottom of hollow,30 ft.below ridge,course SW.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.20,21,28,and 29,mkd.on brass cap
	T 41 S S 20 in NW.
	R 15 W S 21 in NE.
	S 28 in SE.;and
	S 29 in SW.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous.
	Soil ,sandy;4th rate.
	No timber.
	Undergrowth,sage brush,black greasewood and cactus.
	Good grass for grazing.
	Mountainous land;or land covered with dense undergrowth, 80.00 chs.

Subdivision of T.41 S.,R.15 W.-Continued.

Chains	
	March 1,1910:U.S.Examiner F.J.VanWinkle ,found the cor. of secs.21,22,27,and 28 in Error;therefore after moving said cor.I re-run the line bet.secs.21 and 28 as follows:
	N.89°53'E.,on a random line bet.secs.21 and 28.
40.00	Set temp. ¼ sec.cor.
40.21	Fall 2 lks.N.of ¼ sec.cor. which I destroy.
79.96	Intersect N.and S.line,5 lks.S.of the cor.of secs.21,22, 27,and 28.
	Thence I run
	S.89°51'W.,on a true line bet.secs.21 and 28.
	Over mountainous land;through scattering timber and dense undergrowth.
	Desc.
11.50	Bottom of hollow,20 ft.below sec.cor.,course S.60°E.
	Asc.
19.50	Old road,bears N.and SE.
39.98	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in N half and S 28 in S half;and raise a mound of stone,2 ft. base,1½ ft.high,N.of cor.
44.00	Top of ridge,20 ft.above hollow,bears N.and S.
	Desc.
50.00	Begin abrupt descent over volcanic ledges,bears N60°W. and SE.
66.00	Foot of abrupt descent and ledges,200 ft.below ridge, bears N.and S.
79.96	The cor.of secs.20,21,28,and 29.
	Land,mountainous.
	Soil,rocky;3rd rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage and buck brush and juniper.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.96 chs.

Chains	
	May 25,1909:Note:The morning observation is omited on account of having to re-run the line bet.secs.21 and 28.
	N.0°3'W.,bet.secs.20 and 21.
	Over mountainous land ;through scattering timber and dense undergrowth.
	Asc.over volcanic ridges and ledges.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor., mkd.on brass cap ¼ S 20 in W half and S 21 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
40.50	Top of volcanic ridge,50 ft.above sec.cor.,bears NW and SE
	Continue ascent .
45.00	A mound of stone on the East bdy,of the Dixie National Forest Reserve,bears S.81°W.,2.74 chs.dist.
50.00	Top of ridge,100 ft.high,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.20 and 21 only; as I know from previous surveys that the line bet.secs.16 and 17 will not close within limits lon this S.cor. Marked brass cap
	T 41 S S 20 in SW.;and
	R 15 W S 21 in SE quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor,
	Land,mountainous .
	Soil,rocky and gravelly;4th rate.
	Timber,cedar and pinon pine.
	Undergrowth,juniper,evergreen,greasewood and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	May 25,1909:At this cor.I set off 20°57'N.,on the decl. arc;and at 11 h 57 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°13'N.,which is the proper lat.nearly.
	N.89°53'E.,on a random line bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.

Subdivision of Tp. 41 S., R. 15 W.- Continued.

Chains.

80.02 Intersect N. and S.line 7 lks.N.of the cor.of secs.21 and 22. heretofore described.

Thence I run

S.88° 30'W. on true line bet.secs.16 and 21,

Over mountainous land; through scattering timber and dense undergrowth. Ascend.

33.70 Old road bears N. and S.

34.75 Stone mound on the S.bdy.of the Dixie National Forest Reserve bears N. 75 lks.dist.

40.01 Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap,

S 16 ¼ on N.half, and

S 21 on S.half; raise a mound of stone 3 ft.base, 1½ ft.high N.of cor.

72.00 Top of volcanic ridge 30 ft.above cor., bears NE. and SW. Descend.

80.02 The cor.of sections 16, and 21, heretofore described.

Land, mountainous.

Soil, rocky and gravelly; 4th rate.

Timber, cedar and piñon pine.

Undergrowth, sage, greasewood and dense brush.

Good grass for grazing.

Mountainous land or land covered with dense undergrowth 80.02 chs.

May 25, 1909.

May 26: At 7 h. 57 m.a.m.l.m.t.I set off 21° 06'N.on the decl.arc; 37° 13'N.on the lat.arc; and determine a meridian with the solar at the ¼ sec.cor. between secs. 16 and 17, which is a volcanic stone 12 x 10 x 6 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains.	
	South on true line bet.secs.16 and 17,
	Over mountainous land; through scattering timber and dense undergrowth;descending over gentle volcanic slope.
41.95	Intersect E. and W.line 1,55 chs.N.89°57'W.of the cor. of secs.20 and 21, heretofore described. (Course determined in survey of line bet.secs.17 and 20.)
	Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the ground,for closing cor.of secs.16 and 17,marked on brass cap, T 41 S R 15 W in N.half,
	S 17 in NW.
	S 16 in NE.
	S 21 in SE., and
	S 20 C C in SW.quadrant;raise a mound of stone 2 ft.base,1½ ft.high N.of cor.
	Land,mountainous and level.
	Soil, gravelly; 4th rate.
	Timber,cedar and pinon pine.
	Undergrowth,juniper, sage, and greasewood.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 41.95 chs.
	From the cor.of secs.31 & 32 on S.bdy.of Tp.,heretofore described,
	N.0° 3'W.bet.secs.31 and 32,
	Descending over mountainous land;through scattering undergrowth.
2.55	Bottom of hollow,10 ft.below cor.,course S.30° E. Asc.
6.75	Bottom of same hollow,course SW. Ascend.
22.00	Bottom of same hollow,course SE.
25.00	Bottom of same hollow, course S.30° W.
35.00	Bottom of same hollow, course SE. Ascend.
40.08	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground,for ¼ sec.cor.,marked on brass cap, S 31 ¼ on W.half,S 32 on E.half;raise a mound of stone 2 ft.base

Subdivision of Tp. 41 S.R. 15 W. - Continued.

Chains.	
	$1\frac{1}{2}$ ft.high W.of cor.
54.00	Top of spur 75 ft. above sec. cor.bears E. andW.
	Desc.
58.15	Road to St. George bears NW.and SE.
	Asc.
67.70	Cottonwood ditch and creek 7 lks. wide 6 ins. deep good water course S E.
74.80	Old fence post line on ridge 25 ft. above ditch bearsE.& W.
80.00	Set an iron post 3 ft. long,2 ins. in dia., 24 ins. in the ground for the cor. of secs. 29,30,31 and 32, marked on brass cap
	T 41 S S 30 in NW.
	R 15 W S 29 in NE.
	S 32 in SE.,and
	S 31 in SW.quadrant ;raise a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high W. of cor.
	Land,mountainous.
	Soil,gravely and rocky, 3rd rate.
	Undergrowth,sage,and buck brush,oose.and soap weed.
	Good grass for grazing.
	Mountainous land 80.00 chs.
	May 26,1909: At this cor. I set off 21° 07' N on the decl. arc; and at 11h 57m a.m.,l.m.t., observe the sun on the meridian the resulting lat. is 37° 12' N which is the proper latitude nearly.
	N 89° 55' E on a random line bet. secs. 29 and 32.
40.00	Set a temp. $\frac{1}{4}$ sec.cor.
79.90	Intersect N. and S. line at the cor. of secs.29,28,32and 33. heretofore described.
	Thence I run
	S 89° 55' W on a true line bet. secs. 29 and 32.
	Over mountainous land through scattering undergrowth.
	Desc.

Subdivision of Tp. 41 S. R. 15 W. - Continued.

Chains.	
3.00	Bottom of hollow 15 ft. below cor. course S 30° E.
	Asc.
24.00	Top of ridge 50.ft. above hollow bears NE. and SW.
	Desc.
31.00	Bottom of hollow 40 ft. below ridge course S.
	Asc.
39.95	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. marked on brass cap S 29 ¼ on N. half and S 32 on S. half, raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
41.50	Old road bears NE. and SW.
48.75	Top of vol. ridge 90 ft. above cor. bears N. and S.
	Desc.
55.50	Old road bears N70° W and S 70° E.
58.00	Bottom of hollow 100 ft. below ridge course SE.
	Asc.
66.90	Road bears N 20° E and S 20° W.
75.00	The S. gable of Wm. H. Thompson's house bears N.10°53' E.
79.90	The S. gable end of Wm. H. Thompson's house bears N 15° E
	The cor. of secs. 29, 30, 31 and 32, heretofore described.
	Land, mountainous.
	Soil, sandy, gravely, and rocky, 4th rate.
	Undergrowth, evergreen, cactus, oose, and sage brush.
	Good grass for grazing.
	Mountainous land 79.90 chs.

May 26, 1909.

May 27 1909: At 7h 57m a.m., l.m.t., I set off 21° 16' N on the decl. arc; 37°13' N on the lat. arc; and obtain a mer with the solar at the cor. of secs. 29, 30, 31 and 32.

Knowing from previous retracements that I will not close within limits on the cor. of secs. 25 and 36 T.41 S.R.16 W

Subdivision of Tp. 41 S. R. 15 W. - Continued.

Chains.	
	I run N.89° 57' W. on true line bet. secs. 30 and 31.
	Over mountainous land; ascending through scattering under-growth.
7.70	Top of ridge and fence post line 30 ft. bears N. and S.
	Desc.
9.65	Cottonwood ditch and creek 7 lks. wide 6 ins. deep course SE.
18.45	Road to St. George bears NW. and SE.
26.50	Bottom of hollow 40 ft. below ridge course SE. Asc.
39.00	Top of ridge 25 ft. above hollow bears N. and SW.
	Desc.
40.00	Set an iron post 3 ft. long 1 in. in dia., 26 ins. in a mound of earth and stone, marked on brass cap S 30 ¼ on N. half and S 31 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
43.00	Begin abrupt descent bears N. and SW.
58.50	Bottom of hollow 150 ft. below ridge course S.
	Asc.
72.20	Top of vol. ridge 100 ft. above hollow bears N. and S.
	Desc.
83.15	Intersect the W. bdy. 4.70 chs. N. of the cor. of secs. 25 and 36 T.41 S.R.16 W. heretofore described.
	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. secs. 30 and 31, marked on brass cap T 41 S in N. half S 30 in NE. S 31 R 15 W in SE. S 36 R 16 W in SW., and S 25 C C in NW. quadrant; raise a mound of stone 2 ft. base 1½ ft. high E. of cor.
	Land, mountainous.
	Soil, gravely and rocky.
	Undergrowth, sage and evergreen brush and cactus.
	Good grass for grazing.
	Mountainous land 83.15 chs.

~~Subdivision of Tp. 41 S. R. 15 W.- Continued.~~

Chains.	
	N 0° 3' W. bet. secs. 29 and 30.
	Over mountainous land through scattering undergrowth.
	Asc. over rocky vol. slope.
36.75	Top of small spur bears E. and W.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., marked on brass cap,
	S 30 ¼ on W. half, and
	S 29 on E. half, raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
41.00	Wm. H. Thompson's wire fence bears E. and W. about 7.00 chs and then turns N. Enter heavy sand, bears E. and W.
41.50	Enter dense sage bears E. and W.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the cor. of secs. 19, 20, 29 and 30, marked on brass cap
	T 41 S S 19 in NW.
	R 15 W S 20 in NE.
	S 29 in SE., and
	S 30 in SW. quadrant; raise a mound of stone 2 ft. base 1½ ft. high W. of cor.
	Land, mountainous.
	Soil, sandy and rocky 4th rate.
	Undergrowth, sage and evergreen brush and cactus.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 38.50 chs.
	May 27, 1909: At this cor. I set off 21° 18' N on the decl. arc; and at 11h 57 m a.m., l.m.t., observe the sun on the meridian the resulting latitude is 37° 12' N which is the proper lat. nearly.

	N 89° 55' E. on a random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.90	Intersect the N. and S. line 11 lks. N. of the cor. of secs. 20, 21, 29 and 28 heretofore described.

Subdivision of Tp. 41 S. R. 15 W. - Continued.

Chains.	
	Thence I run
	West on a true line bet. secs. 20 and 29.
	Over mountainous land through dense undergrowth.
	Desc.
22.50	Bottom of hollow 50 ft. below cor. course S. E.
	Asc.
39.95	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ secs. cor. marked on brass cap
	S 20 ¼ on N. half, and
	S 29 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
45.00	Top of pass in ridge 60 ft. above hollow bears N. and S.
	Desc.
47.20	Wm. H. Thompson's pasture fence bears N. and S.
58.85	Cor. of Wm. H. Thompson's fence bears NW. and S.
	Enter cultivated field, leave undergrowth.
65.90	Wire fence bears N. and S. leave cultivated field and enter dense undergrowth.
67.00	Bottom of hollow 50 ft. below pass course S 10° W.
	Asc. over heavy sand.
79.90	The cor. of secs. 19, 20, 29 and 30 heretofore described.
	Land, mountainous and level.
	Soil, sandy, sandy loam and rocky; 2d and 4th rates.
	Undergrowth, sage, evergreen, and grease wood brush and cactus.
	Mountainous land or land covered with dense undergrowth 72.85 chs.
	May 27, 1909.

May 28, 1909: At 7h 57m a.m., l.m.t., I set off 21° 26' N on the decl. arc; 37° 12' N on the lat. arc; and obtain a meridian with the solar, at the cor. of secs. 19, 20, 29, and 30. Knowing that I will not close within limits on the cor. of secs. 24 and 25 T. 41 S., R. 16 W. I run

Subdivision of Tp. 41 S. R. 16 W. [illegible]

Chains.

N89° 57'W. on a true line bet.secs.19 and 30.

Over mountain us land through scattering timber and undergrowth.

Asc.

2.00 Begin abrupt asc. bears N 10° E and S 10° W.

12.25 Top of ridge 150 ft. above cor. bears N. and S.

Desc.

24.50 Bottom of hollow 125 ft. below ridge course S.

Asc.

[illegible] Top of ridge 100 ft. above hollow bears NE. and SW.

Desc.

40.00 Set an iron post 3 ft. long, 1 in dia., 26 ins. in the ground for ¼ sec. cor/marked on brass cap.

S 19 ¼ on N. half and

S 30 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.

[illegible].75 Cottonwood ditch and creek 9 lks. wide 6 ins. deep course S.

62.[illegible] Road to St. George bears N. and S.

70.[illegible] Bottom of hollow 125 ft. below ridge course S.

Asc.

[illegible].20 Intersect W. bdy. 4.64 chs. N. of the cor. of secs. 24 and 25 T. 41 S. R. 16 W. heretofore described.

Set an iron post [illegible] ft. long, 2 ins. dia., 24 ins. in ground for [illegible] corner of secs.19 and 30 marked on brass cap

T 41 S in N. half

S 19 in NE.

R 16 W S 30 in SE.

R 16 W S 25 in SW., and

S 24 C C in W W. quadrant; raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

Land, mountainous.

Soil, rocky and gravely 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage and evergreen brush and cactus.

Subdivision of Tp.41 S., R. 15 W.- Continued.

Chains.	
	Mountainous land 83.20 chs.
	May 28: At the noon hour sky overcast; obs.for latitude impossible.
	N.0° 03'W.bet.secs.19 and 20,
	Over mountainous land; through scattering timber and dense undergrowth. Ascending through sand.
23.90	Foot of abrupt ascent,bears NW. and E.Leave sand.
26.50	Top of ridge and abrupt ascent, 125 ft.above corner, bears NW. and E. Descend.
31.50	Bottom of hollow, 75 ft.below ridge,course NE. Ascend.
40.00	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, S 19 ¼ on W.half and S 20 on E.half; raise a mound of stone 2 ft. base, 1½ ft.high W.of cor.
71.65	Bottom of wash, 15 lks.wide, 3 ft.deep, in hollow, 50 ft.above first hollow, course S.60° E. Ascend.
73.25	Same wash in hollow, course SW.
78.50	Same wash in hollow, course SE.
79.50	Same wash in hollow course S.30° W.
80.00	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground for cor.of secs.19 and 20 only, knowing from previous surveys that the line bet.secs.17 and 18 will not close within limits on this corner. Marked brass cap T 41 S S 19 in SW., R 15 W S 20 in SE quadrant; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Land mountainous.
	Soil, rocky and sandy; 4th rate.
	Timber, cedar and pinon pine.

Subdivision of Tp.41 S., R. 15 W. - Continued

Chains.	Undergrowth, oak, sage, and evergreen brush and cactus.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth 80.00 chs.
	May 28, 1909.
	May 29; At 7 h. 57 m.a.m.l.m.t.I set off 21° 36'N.on the decl.arc; 37° 13'N.on lat.arc; and determine a meridian with the solar at the cor.of secs.19 and 20,
	Thence I run
	East on a random line bet.secs.17 and 20,
40.00	Set temp. ¼ sec.cor.
79.98	Intersect N. and S.line 7 lks.N.of the cor.of secs.20 and 21, heretofore described. Thence I run
	N.89° 57'W.on a true line bet.secs.17 and 20,
	Over mountainous land; through scattering timber and dense undergrowth; descend.
10.00	Begin abrupt descent, over volcanic formation, bears N. 20° E. and S. 20° W.
	Descend.
39.99	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., marked on brass cap, S 17 ¼ on N. half, and S 20 on S.half; raise a mound of stone 2 ft. base, 1½ ft.high N.of cor.
52.25	Bottom of hollow, 150 ft.below abrupt descent, course N W. Ascend.
61.75	Top of ridge, 100 ft.above hollow, bears N. and S.
	Descend.
79.65	Wash, 15 lks.wide, 3 ft.deep, in hollow, 225 ft. below ridge, course SW.
79.98	The cor.of secs.19 and 20, heretofore described.

Subdivision of Tp. 41 S. R. 15 W.- Continued.

Chains.	
	Land, mountainous.
	Soil, gravely 3rd rate.
	Timber, cedar and pinon pine.
	Undergrowth, sage, oak, and evergreen brush and juniper.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth
	79.98 chs.
	Knowing that I will not close within limits on the cor. of secs. 13 and 24 T. 41 S., R. 16 W., I run N 89° 57' W on a true line bet. secs. 18 and 19. Over mountainous land through scattering timber and dense undergrowth. Ascend
3.50	Begin ascent of series of ledges and ridge bears N. and S.
13.00	Top of ridge and ledges 150 ft above cor. bears N. and S.
	Desc.
19.50	Bottom of hollow 100 ft. below ridge course S 20° W.
	Asc.
20.00	Old road bears N 20° E and S 20° W.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. marked on brass cap S 18 ¼ on N. half and S 19 on S. half; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.
41.00	Top of black vol. ridge 250 ft. above hollow bears NE and SW.
	Desc.
46.10	Cottonwood ditch and creek 8lks wide 9 ins. deep course S 15° W.
47.00	Road to St. George bears N 15° E and S 15° W.
64.00	Bottom of gulch 200 ft. below ridge course S.
	Asc.
83.08	Intersect W. bdy. 4.60 chs. N. of the cor. of secs. 13 and 24 T. 41 S., R. 16 W., heretofore described, Set an iron post 3 ft. long 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 18 and 19 marked on brass cap

Subdivision of Tp. 41 S. R. 15 W.- Continued.

Chains.

T 41 S on N. half

S 18 in NE/

R 15 W S 19 in SE.

R 16 W S 24 C C in SW.,and

S 13 in NW. quadrant;raise a mound of stone 2 ft. base 1½ ft. high E. of cor.

Land,mountainous.

Soil,rocky 4th rate.

Timber,cedar and pinon pine.

Undergrowth,sage, oak,and evergreen brush and soap weed

Good grass for grazing.

Mountainous land or land covered with dense undergrowth

83.08 chs.

May 29 th,1909: At this cor. I set off 21° 37' N. on the decl. arc; and at 11h 57m a.m.,l.m.t.,observe the sun on the meridian the resulting lat. is 37° 15' N. which is the proper latitude nearly.

From the ¼ sec cor. bet. secs.17 and 18 which is a vol. stone 12 x 10 x4 ins. above ground marked and witnessed as described by the surveyor general, I run

South on a true.line bet. secs. 17 and 18.

Over mountainous land through scattering timber and undergrowth.

Asc..

4.40 Top of spur 50 ft. above cor. bears E. and W.

Desc.

15.00 Old road bears N60°W and S 60° E.

17.70 Bottom of hollow 100 ft. below ridge course S E.

Asc.

34.90 Top of spur 20 ft. above hollow bears NE. and SW.

Desc. over series of ledges.

39.10 Foot of series of ledges 100 ft. below top bears NE.and

Subdivision of Tp. 41 S. R. 15 W.--Continued.

Chains.

41.89 Intersect E. and W. line 1.70 chs. N.89° 57' W of the cor. of secs. 19 and 20. heretofore described.

Set an iron post 3 ft. long, 2 ins. dia. 24 ins. in ground, for closing corner of secs. 17 and 18 marked on brasscap

T 41 S R 15 W on N. half

S 18 in NW.

S 17 in NE.

S 20 in SE., and

S 19 C C in SW/ quadrant; raise a mound of stone 2 ft. base 1½ ft. high N. of cor.

Land, mountainous.

Soil, sandy and rocky 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage, evergreen and oak brush.

Good grass for grazing.

Mountainous land 41.89 chs.

May 29th, 1909.

GENERAL DESCRIPTION.

This township is all mountainous land. The ridges are quite steep but not very high. and have a general southerly trend.

In the western part they are all volcanic lava flows while in the eastern portion the native red sandstone is predominating in which deep gulches have been cut thus making travel difficult.

Some of the canons are boxed especially so in the eastern part but in general are not impassable to a footman.

The soil is generally rocky and gravelly except in a few places where it is sandy loam or sandy; and ranges from 3rd to 4th rate. The soil is sufficiently good to

Subdivision of Tp. 41 S. R. 15 W. -Continued.

support a good growth of grasses for early spring range.

The prevailing timber is cedar and pinon pine and is heaviest inthe north eastern part. Practically none at all is found in the southern half, of the township.

This township being on the south slope of the Pine Valley Mountains receives an abundance of sunshine and as a consequence the undergrowth is quite dense in places while in others there is scarcely any at all.
Sage is the most important kind and seems to be at home in all parts while oak is confined to the upper parts and evergreen and cactus to the lower, sandy and volcanic regions.

The township is not well watered. The Cottonwood Creek runs through the western part and furnishes all the water to the region, with the exception of Bitter Creek in the Norteast which is unfit for man but is used by cattle.

Wm. H. Thompson has a claim in section 29 consisting of good lumber house and rock correl and cultivated field of about 40 acres with a pasture all inclo by a good barbed wire fence. Total area 160 acres.
Value of improvements $2000.00

In this township there is no evidence of natural oil hydrocarbons, and no locations were noted for such.

Leo A. Snow.
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 Leo A. Snow, 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 T. 41 S., R. 15 W., Salt Lake Base and Meridian, Utah showing the respective capacities in which they acted:

~~Hillman Dalley~~, *Chainman.*
George W. Worthen, *Chainman.*
Samuel Brooks, *Moundman.*
~~Rawl Worthen~~, *Moundman.*
, *Axman.*
John A. Humphries, *Axman.*
John T. Jarvis, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Leo A. Snow, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivision T/41 S., R. 15 W. 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

Hillman Dalley, *Chainman.*
George W. Worthen, *Chainman.*
Samuel Brooks, *Moundman.*
Rawl Worthen, *Moundman.*
John A. Humphries, *Axman.*
, *Axman.*
John T. Jarvis, *Flagman.*

Subscribed and sworn to before me this 31st day of May 1909. ~~190~~

SEAL

Leo A. Snow
U. S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, United States Deputy Surveyo
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing date o
17th day of March 1909. ~~190X~~, I have well, faithfully, and truly, in my
proper person, and in strict conformity with the instructions furnished by the United States Surv
General for Utah, the Manual of Surveying Instructions, and the laws o
United States, surveyed all those parts or portions of ~~Subdivision T/41 S., R. 15 W.~~

of the Salt Lake
Base and meridian, in the State of Utah, which are represented i
foregoing field notes as having been surveyed by me, and under my direction; and I do further sole
swear that all the corners of said 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.

Leo A. Snow
United States Deputy Surv

Subscribed by said Leo A. Snow and sworn to before me
this 17 day of January, 1910

John T. Woodh
Clerk dist. C

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 1911

The foregoing field notes of the survey of the Subdivisional lines of Townshi
No. 41 South, Range No. 15 West of the Salt Lake Base and Meridian,
Utah.

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 1909, 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 Ge

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4—679.

BOOK A-361

D.

FILED
MAY 31 1910

FIELD NOTES

Retracement
OF THE ~~SURVEY~~ OF THE

SUBDIVISION

of

Township No.42 South, Range No.13 West,

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Andrew J.Stewart Jr. and Leo A.Snow, *United States Deputy Surveyor,*

Under ~~his~~ their *Contract No.* 309, *dated* March 17,1909. ~~190~~

Survey commenced May 20, *1909.*

Survey completed May 27, *1909.*

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Maeser Dalley	Chainman
Hector McQuarrie	Chainman
Edward A.Hendrix	Moundman
John Stewart	Moundman
Laurence Snow	Axman
Ren Stewart	Flagman

BOOK A-361

INDEX DIAGRAM.

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

Meanders Page .....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Maeser Dalley and Hector McQuarrie do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same we will report the true distances to all notable objects, and the true lengths of all lines that we as measuring, to the best of our skill and ability, and in accordance with instructions given us, in the ~~sur~~ Retracement Subdivision T.42 S.,R.13 W.,Salt Lake Base and Meridia

Maeser Dalley, Chai

Hector McQuarrie, Chai

Subscribed and sworn to before me this 20th day of May 1909., 190

SEAL

Andrew J. Stewart Jr

U.S.Deputy Surveyor

WE, Edward A.Hendrix and John Stewart 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 Retracement Subdivision T.42 S.,R.13 W.,Salt Lake Base and Meridia

Edward A. Hendrix Moun

John Stewart, Moun

Subscribed and sworn to before me this 20th day of May 1909., 190

SEAL

Andrew J. Stewart Jr.

U.S.Deputy Surveyor.

~~WE~~ I Laurence Snow ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of ~~axmen~~ 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 ~~sur~~ Retracement Subdivision of T.42 S.,R.13 W.,Salt Lake Base and Mer

Laurence Snow As

, As

Subscribed and sworn to before me this 20th day of May 1909., 190

SEAL

Andrew J. Stewart Jr

U.S.Deputy Surveyor.

I, Ren Stewart, 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~~ Retracement Subdivision T.42 S.,R.13 W.,S alt Lake Base and

Ren Stewart, Flag

Subscribed and sworn to before me this 20th day of May 1909., 190

SEAL

Andrew J. Stewart Jr.

U.S.Deputy Surveyor.

6—151

Retracement Subdivision of T.42 S., R.13 W.

Survey commenced May 20,1909,and excuted with a Young and Sons light mountain transit,No.7381,with solar attachment,The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the latitude and declination arcs.
The instrument was examined,tested on the meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,April 26,1909.
I examine the adjustemnts of the instrument and correct the level and collimation errors;then,to test the solar apparatus by comparing its indications resulting from solar observations made during p.m.and a.m. hours,with a meridian established by Polaris observation,I proceed as follows:
Begin at the cor.of secs.27,28,33 and 34,latitude 37°06' [illegible]''N.,longitude 113°14'55''W.,I set off 37°06'N., on the lat.arc;20°01'N.,on the decl.arc;and at 3 h 56 m p m l m t.,I determine a meridian with the solar and mark a point htereof on a stone firmly set in the ground,5.00 chs.N.of the cor.

May 20,1909.

May 21,1909:At 3 h 36.3 m a.m.,l.m.t.,I observe Polaris at eastern elongation in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs.N. of the cor.At 7 h 30 m a.m.,l.m.t.,I lay off the azimuth of Polaris 1°28.6' to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N.of the cor.This mark fall 0.28 ins.east of the meridian determined with the

Retracement Subdivision of T.42 S.,R.13 W.-Continued.

Chains	
	solar.
	At 7 h 56 m a.m.,l.m.t.,I set off 37°06'N.,on the lat. arc;30°09'N.,on the decl.arc;and mark the meridian determined with the solar by a cross on the stone already set 5.00 chs.N.of the cor.;this mark falls 0.36 ins.east of the meridian established by Polaris observation.
	The solar apparatus by p.m.and a.m.observations defines positions for meridian respectively about 0'15'' west and 0'19"east of the meridian determined by Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the meridian at 8 h 30 m a.m. is N.16°55'W.,the angle thus determined gives the mag. decl.16°55'E.
	Note:Before beginning the subdivision of this township I proceed to retrace the lines adjoining the work as follows:Begin at the cor.of secs.27,28,33 and 34,which is a white sandstone,10x10x6 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
	I destroy the old cor.and re-establish it in the same place as follows: Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground for cor.of secs.27,28,33 and 34..mkd.on brass cap
	T 42 S S 28 in NW.
	R 13 W S 27 in NE.
	S 34 in SE;and
	S 33 in SW.quadrants;raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Thence I run
	N.0°2'W.,on a retracement line bet.secs.27 and 28.
40.02	Intersect the ¼ sec.cor.bet.secs.27 and 28,which is a lava stone,12x12x6 ins.above ground,firmly set and mkd. and witnessed as described by the surveyor general.

Retracement Subdivision of T.42 S.,R.13 W.-Continued.

Chs.	
	I destroy the old cor.and re-establish it in the same place as follows:
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in W half and S 27 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
80.06	Intersect the cor.of secs.21,22,27,and 28,which is a lava stone,8x8x6 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	I destroy the old cor.and re-establish it in the same plce as follows:
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.21,22,27,and 28,mkd.on brass cap
	T 42 S S 21 in NW.
	R 13 W S 22 in NE.
	S 27 in SE.;and
	S 28 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	The course of this line is therefore N.0°02'W.,80.06 chs.
	No change in topography from original notes.
	———
	N.0°02'W.,on a retracement line bet.secs.21 and 22.
39.95	Intersect the ¼ sec.cor.bet.secs.21 and 22,which is a limestone,12x10x10 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general,
	I destroy the old cor.and re-establish it in the same place as follows:
	Set an iron post,3 ft.long,1 in. n dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in W half and S 22 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
79.95	Intersect the cor.of secs.15,16,21,and 22,which is lava stone,14x12x6 ins.,above ground,fimmly set and mkd.and

Retracement of Subdivision of T.42 S.,R.13 W.-Continued.

Chains witnessed as described by the surveyor general,
I destroy the old cor.and re-establish it in the same place as follows:
Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground for cor.of secs. 15,16,21and 22,mkd.brass cap
T 42 S S 16 in NW.
R 13 W S 15 in NE.
S 22 in SE.and
S 21 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft high,W.of cor.
The course of this line is therefore N.0°2'W.,79.95 chs.
No changes in tography from original notes.
May 21,1909:At this cor.I set off 20°11'N.,on the decl arc;and at 11 h 56 m a.m.,l.m.t.,I observe the sun onn the meridian,the resulting lat.is 37° 08 'N.,which is the proper lat.nearly.

N.0°2'W.,on a retracement line bet.secs.15 and 16.
40.00 Intersect ¼ sec.cor.bet secs.15 and 16,which is a volcanic stone,16x10x8 ins.above ground,firmly set,and mkd. and witnessed as described by the surveyor general.
I destroy the old cor.and re-establish it in the same place as follows:
Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.mkd.on brass cap ¼ S 16 in W half and S 15 in E half;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 Intersect cor.of secs.9,10,15 and 16,which is a volcanic stone,14x12x6 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general,
I destroy the old cor.and re-establish it in the same place as follows:

Retracement of Subdivision of T.42 S.,R.13 W.-Continued.

Chains

Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground for cor.of secs.9,10,15 and 16.mkd.on brass cap

T 42 S S 9 in NW..

R 13 W S 10 in NE.

S 15 in SE.and

S 16 in SW.quadrants: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 course of this line is therefore N.0°2'W.,80.00 chs.

No change in topography from original notes.

N.0°2'W.on a retracement line bet.secs.9 and 10.

40.00 Falls 2 lks.W.of the ¼ sec.cor.bet secs.9 and 10,which is a volanic stone 12x12x6 ins.above ground,firmly set, and mkd.and witnessed as described by the surveyor general.

I destroy the old.cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground for ¼ sec,cor..mkd.on brass cap ¼ S 9 in W half and S 10 in E half;and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.

80.00 Falls 4 lks.W.of the cor.of secs.3,4,9 and 10,which is a volanic stone,14x10x6 ins.above ground,firmly set, and mkd.andwitnessed as described by the surveyor general.I destroy the old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground for cor.of secs.3,4,9 and 10..mkd.on brass cap

T 42 S S 4 in NW.

R 13 W S 3 in NE.

S 10 in SE;and

Chains S 9 in SW.quadrants: 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 course of this line is therefore North,80.00 chs.

No change in topography from origianal notes.

May 21,1909.

May 22,1909:At 7 h 56 m a.m.,l.m.t.,I set off 37°09'N. on lat.arc; 20°21'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,9 and 10.

Thence I run

East on a retrocement lint bet.secs.3 and 10.

40.05 Intersect ¼ sec.cor.bet.secs.3 and 10,which is a volanic stone,12x12x8 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.

I destroy yhe old cor.and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd on brass cap ¼ S 3 in N half and S 10 in S half;and raise a mound of stone,2 ft. base,1½ ft.high,N.of cor.

80.05 Intersect cor.of secs.2,3,10 and 11,which is a volanic stone,14x10x10 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.

I destroy the old cor.and re-establish it in the same placeas follows:

Set an iron post,3 ft.long,2 insin ida.,24 ins.in the ground for the cor.of secs.2,3,10 and 11..mkd on brass cap

T 42 S S 3 in NW.

R 13 W S 2 in NE.

S 11 in SE;and

Retracement of Subdivision of T.42 S.,R.13 W.,2Continued.

Chains

S 10 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

The course of this line is therefore East 80.05 chs.

No change in topography from original notes.

May 22,1909:At this cor.I set off 20°23'N.,on the decl. arc.;and at 11 h 56 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°09'N.,which is the proper lat.nearly.

Begin at the cor.of secs.1,2,11 and 12,which is a limestone,15x12x4 ins.above ground,firmly set and mkd. and witnessed as described by the surveyor general.

Thence I run

West on a retracement line bet.secs.2 and 11.

38.28 Fall 9 lks.S.of the ¼ sec.cor.bet.secs.2 and 11,which is a trachyte stone,4x9x6 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.

I destroy the old corner and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground for ¼ sec.cor.,mkd.on brass cap ¼ S 2 in N half and S 11 in S half;raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.

The course of this line is therefore N.89°52'W.,38.28 chs.

No change in topography from origianl notes.

S.0°1'E.,on a retracement line bet.secs.11 and 12.

Retracement of Subdivision of T.42 S.,R.13 W.-Continued.

Chains	
40.37	Fall 33 lks.East of the ¼ sec.cor.,be .secs.11 and 12., which is a limestone,6x8x5 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
80.83	Fall 46 lks.East of the cor.of secs.11,12,13and 14,which is a limestone,6x12x6 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore;South half, S.0°10'W.,40.46 chs.;North half S.0°27'W.,40.37 chs.
	No change in topography from original notes.
	May 22,1909.
	May 23,1909:At 7 h 57 m a.m.,l.m.t.,I set off 37°08'N., on the lat.arc;20°33'N.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.11,12, 13 and 14.
	Thence I run
	West on retracement line bet.secs.11 and 14.
11.00	Find no trace of W C.
37.90	Fall 89 lks.N.of the ¼ sec.cor.bet.secs.11 and 14, which is a limestone,12x8x6 ins.above ground.
	Note:This corner is not described in the notes furnished by the surveyor general's office and as I found no W C at 11.00 chs.and found a well established ¼ sec.cor at this point I assume that the cor.was set by the former deputy but not described.
	I destroy the old cor.and re-establish it in the same place as follows:
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground for ¼ sec.cor..mkd.on brass cap ¼

Retracement of Subdivision of T.42 S., R.13 W-Continued.

chains	
	S 11 in N half and S 14 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	The course of this line is therefore S.88°39'W.,37.90 chs.
	No change in topography from original notes.
	S.0°2'E.,on a retracement line bet.secs.13 and 14.
40.47	Falls 52 lks.W.of the ¼ sec.cor.,between secs.13 and 14,which is a trachyte stone,5x10x6 ins.above ground, firmly set and mkd.and witnessed as described by the surveyor general.
81.00	Falls 104 lks.W.of the cor.of secs.13,14,23 and 24,which is a basaltic stone,6x10x8 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore S.0°46'E.,81.00 chs.
	No change in topography from original notes.
	May 23,1909:At this cor.I set off 20°35'N.,on the decl.arc; at 11 h 57 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°08'N.,which is the proper lat.nearly.
	S.0°1'E.,bet.secs.23 and 24.
40.00	Fall 1 lk.E.of the ¼ sec.cor.,bet.secs.23 and 24,which is a basaltic stone,6x12x5 ins.above the ground,firmly set and mkd.and witnessed as described by the surveyor general.
80.00	Fall 2 lks.E.of the cor.of secs.23,24,25,and 26.,which is a basaltic stone,6x10x8 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore South,80.00 chs.

Retracement of Subdivision of [illegible] S., R.13 W.-Continued.

Chains No change in topography from original notes.

Next on a retracement line bet.secs.23 and 26.

[illegible].56 Fall [illegible] lbs.p.of the ¼ sec.cor.,bet.secs.23 and 26, which is a trachyte stone,4x[illegible] ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.

The course of this line is therefore N.[illegible]°35'W.,[illegible].56 chs.

No change in topography from original notes.

Note:Finding that Sec.2 will not close,I decide to retrace the north side of said section as follows:

Commencing at the closing cor.of secs.2 and 3,[illegible].42 N., [illegible] W.,which is a black lava stone,6x10x10 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.

Thence I run

Next on a retracement line along n.side of Sec.2.

[illegible].[illegible] The cor.of secs.24 and 25,which is a black lava stone, [illegible] ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.

[illegible].45 Fall 17½ lbs.p.of the ¼ sec.cor.,which is a limestone, [illegible] ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.

[illegible].[illegible] Fall [illegible] lbs.p.of the cor.of secs.[illegible] and [illegible],which is a limestone,[illegible] ins.above ground,firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N.[illegible]°[illegible]'E.,[illegible] chs.

May [illegible],1[illegible].

[illegible]

U.S.Deputy Surveyor.

Boundaries of T.42 S.,R.13 W.

Latitudes,departures and closing errors.

Line designated	Course	dist-ance	Latitudes N.	Latitudes S.	Departures. E.	Departures. W.
		chs.	chs.	chs.	chs.	chs.
Sub.T.,42 S.,R.13 W.						
Bet.secs.27 and 28 21 and 22,15 and 16.	N.0°2'W.	240.01	240.01			.14
Sub.T.42 S.,R.13 W.						
Bet.secs.9 and 10.	North	80.00	80.00			
Sub.T.42 S.,R.13 W.						
Bet.secs.3 and 10.	East	80.05			80.05	
Sub.T.42 S.,R.13 W.						
Bet,secs.2 and 3.	N.0°1'W.	82.18	82.18			.02
N.bdy.T.42 S.,R.13 W.	N.89°45'E.	78.90	.34		78.90	
Sub.T.42 S.,R.13 W.						
Bet.secs.1 and 2.	S.0°6'E.	80.12		80.12	.14	
Sub.T.42 S.,R.13 W.						
Bet.secs.11 and 12.	S.0°27'W.	40.37		40.37		.32
Sub.T.42 S.,R.13 W.						
Bet.secs.11 and 12.	S.0°10'W.	40.46		40.46		.12
Sub.T.42 S.,R.13 W.						
Bet.secs.13 and 14.	S.0°46'E.	81.00		81.00	1.09	
Sub.T.42 S.,R.13 W.						
Bet.secs.23 and 24. 25 and 26.	South	160.00		160.00		
Sub.T.42 S.,R.13 W.						
Bet.secs.26 and 35	West	80.00				80.00
Sub.T.42 S.,R.13 W.						
Bet.secs.34 and 35	S.0°01'E.	80.00		80.00	.02	
S.bdy.T.42 S.R.13 W.	West	80.00				80.00
Sub.T.42 S.,R.13 W.						
Bet.secs.33 and 34.	N.0°2'W.	80.00	80.00			.05
Convergency					.15	
Totals			482.53	481.95	160.35	160.65
Errors in lat.and dep.			481.95			160.35
			.58			.30

May 23,1909.

Andrew J. Stewart Jr.

S.U.Deputy Surveyor.

Volume

#

R0361

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew J. Stewart Jr., United States Deputy Surveyor, to assist in running, measuring, and ...ing the lines and corners described in the foregoing field notes of the ~~xxxxxx~~ Retracement Subdivision T.42 S., R.13 W., Salt Lake Base and Meridian, ...ing the respective capacities in which they acted:

Maeser Dalley, *Chainman.*

Hector McQuarrie, *Chainman.*

Edward A. Hendrix, *Moundman.*

John Stewart, *Moundman.*

Laurence Snow, *Axman.*

, *Axman.*

Ren Stewart, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew J. Stewart, United States Deputy Surveyor, in surveying all ...e parts or portions of the Retracement of Subdivision T.42 S., R.13 W., of the Salt Lake ...ase and meridian, 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 ...eral for Utah

Maeser Dalley, *Chainman.*

Hector McQuarrie, *Chainman.*

Edward A. Hendrix, *Moundman.*

John Stewart, *Moundman.*

Laurence Snow, *Axman.*

, *Axman.*

Ren Stewart, *Flagman.*

...cribed and sworn to before me this 3rd day of July 1909, 190

SEAL

Andrew J. Stewart Jr.

U.S. Deputy Surveyor

...51

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew J. Stewart Jr., United States Deputy Surve
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing dat
17th day of March 1909. xxx, I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States S
General for Utah, the Manual of Surveying Instructions, and the law
United States, surveyed all those parts or portions of the Retracement Subdivision
of T.42 S., R.13 W.,

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

Andrew J. Stewart Jr.
United States Deputy S

Subscribed by said Andrew J. Stewart Jr., and sworn to before me
this 6th day of April, 1910, xxx

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 191

The foregoing field notes of the ~~survey~~ of the retracement of subdivision o
Township No. 42 South, Range No. 13 West of the Salt Lake Base a
Meridian, Utah.

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 1909, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
~~surveys~~ retracements they describe, are hereby approved.

Thomas Hull
United States Surveyor

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

United States Surveyor

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Page

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4—679.

BOOK A-361

E.

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FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No. 42 South, Range No. 13 West,

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Andrew J. Stewart Jr. and Bee A. Snow, *United States Deputy Surveyors*

under their *Contract No.* 309, *dated* March 17, 1909. ~~xx190~~

Survey commenced May 24, 1909, ~~1900~~

Survey completed May 28, 1909. ~~x190~~

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6-43-98

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

~~Maeser Dalley~~	~~Chainman~~
Hector McQuarrie	Chainman
Edward A.Hendrix	Moundman
John Stewart	Moundman
Laurence Snow	Axman
Ren Stewart	Flagman

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BOOK A-361

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Township 42 South, *Range* 13 West

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, Maeser Dalley and Hector McQuarrie 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 assi measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surv

Subdivision of T.42 S.,R.13 W.,T.43 S.,R.13 W.,and T.43 S.,R.15 W. Salt Lake Base and Meridian. Utah.

Maeser Dalley, Chain

Hector McQuarrie, Chain

Subscribed and sworn to before me this 20th day of May 1909. ~~190xx~~

SEAL

Andrew J. Stewart Jr

U.S.Deputy Surveyor

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

Subdivision of T.42 S.,R.13 W.,T.43 S.,R.13 W.,and T.43 S.,R.15 W. Salt Lake Base and Meridian. Utah.

Edward A. Hendrix, Mound

John Stewart, Mound

Subscribed and sworn to before me this 20th day of May 1909. ~~190xx~~

SEAL

Andrew J. Stewart Jr

U.S.Deputy Surveyor.

~~We, I Laurence Snow and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of co and other duties, according to instructions given ~~us~~ me to the best of ~~our~~ my skill and ability, in the surv

~~Subdivision of T.42 S.,R.13 W.,T.43 S.,R.13 W.,and T.43 S.,R.15 W.~~ Salt Lake Base and Meridian. Utah

Laurence Snow, Ax

, Ax

Subscribed and sworn to before me this 20th day of May 1909. ~~190xx~~

SEAL

Andrew J. Stewart Jr

U.S.Deputy Surveyor.

I, Ren Stewart, 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.42 S.,R.13 W.,T.43 S.,R.13 W.,and T.43 S.~~ R.15 W.Salt Lake Base and Meridian. Utah

Ren Stewart, Flagm

Subscribed and sworn to before me this 20th day of May 1909. ~~190xx~~

SEAL

Andrew J. Stewart Jr.

U.S.Deputy Surveyor.

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Subdivision of T.42 S.,R.13 W.

Chains

Survey commenced May 24,1909,and executed with a Young & Sons light mountain transit,No.7381,with solar attachment.The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the latitude and declination arcs.

The instrument was examined,tested on the true meridian Salt Lake City,found correct,and was approved by the surveyor general for Utah,on April 26,1909.

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

Begin at the witness corner to cor.of secs.14,15,22 and 23 latitude 37°08'N. ,longitude 113°13'50"W.,I set off 37°08'N., on the lat.arc; 20°49'N., on the decl arc; and at 4 h 57 m p.m.,l.m.t.,I determine a meridian with the solar and mark a point thereof on a stone firmly set in the ground 5.00 chs.N.of the Cor.

May 24,1909.

May 25,1909;At 3 h 21 m a.m.l.,m.t.,I observe Polaris at eastern elongation in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs.N.of the cor. At 7 h 30m a.m.,l.m.t.,I lay off the azimuth of Polaris 1°29' to the west and mark a point in the meridian thus determined by cutting a small groovve in the

Subdivision of T.42 S.,R.13 W.-Continued.

Chains

stone already set 5.00 chs.N.ofthe cor.this mark falls .28 ins.east of the meridian determined with the solar.

At 7 h 57 m.a.m.,l.m.t.,I set off 37°08'N.,on the lat. arc;20°55'N.,on the decl.arc;and mark the meridian determined with the solar by a cross on the stone already set 5.00 chs.N.of the cor.;this mark falls .36 ins.east of the meridian established by Polaris observation.

The solar apparatus by p.m.and a.m.observations defines positions for meridians respectively about 0'15''west and 0'19'' east of the meridian determined by Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at at 8 h 30 a.m. is N.16°55'W.,the angle thus determined gives the mag.decl.16°55'E.

Note:Beginning at the witness corner to the cor.of secs.14,15,,22 and 23 which is a limestone,10x10x8 ins. above ground,firmly set,and mkd.and witnessed as described by the surveyor general.

Note;As the sec.cor.will fall in perpendicular ledge which can not be perpuated,I do not destroy the witness corner.

Thence I run

N.0°1'W.bet.secs.22 and 23.

2.25 Point for cor.of secs.14,15,22 and 23,falls on steep side of Box Canon where cor.cannot be perpetuated.

Land,mounatainous.

Subdivision of-T.42 S.,R.13 W.1-Continued.

Chains	
	Soil,rocky;4th rate.
	No.timber.
	No undergrowth.
	Mountainous land,2.25 chs.
	———
	From the point of cor.of sec.14,15,22 and 23.
	Thence I run
	N.0°1'W.,on a random line bet.secs.10,11,14 and 15, setting temp.¼ sec.cor.at intervals of 40.00 chs.and at 159.90 falls .09 lks.W.of the cor.of secs.2,3,10 and11 heretofore described and answers to a correction of 4½ lks.or 2 minutes west per mile.
	May 25,1908:At this cor.I set off 20°57'N.,on the decl. arc;11 h 57 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°09'N.,which is the proper lat.nearly.
	Thence I run
	S.0°3'E.,on a true line bet.secs.10 and 11.
	Over mountainous land,through dense undergrowth and scattering timber.
	Desc.through cultivated field.
11.00	Hurrican Field Canal,10 lks.wide 2 ft.deep course S. 65°W.
	Leave cultivated field,bears N.20°E.and S.20°W.
	Asc.
27.50	Begin steep ascent of ledges over Hurrican Fault,bears N.10°E.and S.10°W.
39.95	Point for ¼ sec.cor.falls in ledges,impossible to perpetuate.
	Therefore at
41.90	Set an iron post,3 ft.long,1 in.in dia.,15 ins.in the ground on solid rock bottom,and surrounded by mound of stone,for ¼ sec.cor..mkd.on brass cap T 42 S R 13 W

Subdivision of T.42 S., R.13 W.-Continued.

Chains	
	W C ¼ in N half and S 10 in W half and S 11 in E half; raise a mound of stone, 2 ft. base 1½ ft. high, W. of cor.
42.00	Top of series of ledges, 700 ft. above Canal, bears N.10°E. and S.10°W.
47.00	Top of spur, 100 ft. above sec. cor., bears E. and W. Desc.
50.75	Bottom of hollow, 50 ft. below spur, course West.
52.50	Same hollow, course N.30°E.
55.00	Same hollow, course NW.
	Asc.
63.25	Top of spur, 60 ft. above hollow, bears E. and W.
	Desc.
65.85	Bottom of hollow, 25 ft. below spur, course NE.
	Asc.
79.90	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 10, 11, 14 and 15. mkd. on brass cap
	T 42 S S 10 in NW.
	R 13 W S 11 in NE.
	S 14 in SE. and
	S 15 in SW. quadrants; raise amound of stone
	2 ft. base, 1½ ft/high, W. of cor.
	Land, mountainous.
	Soil, rocky; 4th rate.
	Timber, cedar.
	Undergrowth, oose, sage brush and evergreen.
	Good grass for grazing.
	Mountinous land, or lands covered with dense undergrowth, 79.90 chs.

May 25, 1909

Subdivision of T.42 S., R.13 W.-Continued.

Chains	
	May 26,1909:At 7 h 57 m.a.m.,l.m.t.,I set off 37°08'N., on the lat.arc;21°06'N.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.10,11,14 and 15.
	Thence I run
	S.0°3'E.,on a true line bet.secs.14 and 15.
	Over mountainous land,through dense undergrowth.
	Asc.
19.00	Top of spur,100 ft.above sec.cor.,bears E.and W.
21.50	Top of ledges,200 ft.high,bears N.60°E.and S.60°W.
	Desc.
30.50	Bottom of canon,457 ft.below spur,course SW.
	Asc.
35.00	Top of ledges,400 ft.high,bears NE.and SW.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 15 in W half and S 14 in E half;and raise amound of stone,2 ft.base, 1½ ft.high.W.of cor.
41.70	Top of spur,125, ft.above sec.cor.,bears E.and W.
64.60	Top of perpendicular sandstone ledge,600 ft.high, bears NW.and SE.
	Desc.
72.40	Bottom of Box Canon,,500 ft.below spur,course NW.
	Asc.
73.35	Begin abrupt ascent,bears NW.and SE.
80.00	Point for the cor.of secs.14,15,22 and 23,which is 2.25 chs.N.of the witness corner.
	Land,mountainous.
	Soil,rocky,4th rate.
	No timber.
	Undergrowth,greasewood.
	Good grass for grazing.
	Mountainous land,ot land covered with dense undergrowth, 80.00 chs.
	May 26,1909:At this cor.I set off 21°07'N.,on the

Subdivision of T.42 S.,R.13 W.-Continued.

Chains decl.arc;and at 11 h 57 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°08'N.,which is the proper lat.nearly.

Begin at the cor.of secs.27,28,33 and 34,heretofore described,I run

East bet.secs.27 and 34.

15.00 Intersect W C to ¼ sec.cor.,bet.secs.27 and 34,which is a limestone,18x8x 6 ins.above ground,firmly set and mkd. and witnessed as described by the surveyor general.

Note:I destroy the marks on the old corner.

25.00 Foot of Hurrican Fault,bears N.and S.

40.00 ¼ sec.cor.falls in ledges,where corner cannot be perpetuated therefore at

43.53 Top of ledges,1500 ft.above sec.cor.,bears N.and S.

Setan iron post,3 ft.long 1 in.in dia.,26 ins.in the ground for witness ¼ sec.cor..mkd.on brass cap T 42 S.R 13 W W C ¼ in N half;S 27 in N half and S 34 in S half;raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.

East on a randon line bet.the East half of secs.27 and 34

36.81 Intersect the N.and S.line 2 lks.N.of the cor.of secs. 26,27,34 and 35,which is a laval stone,16x8x8 ins..above ground,firmly set.and mkd/and witnessed as described by the surveyor general.

I destroy the old corner and re-establish it in the same place as follows:

Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground for cor.of secs.26,27,34 and 35..mkd.on brass cap

T 42 S S 27 in NW.

R 13 W S 26 in NE.

S 35 in SE;and

Subdivision of T.42 S.,R.13 W.-Continued.

Chains	
	S 34 in SW,Quadrants and raise a mound of stone,4 ft.base,2 ft.high,W.of cor.
	Thence I run
	N.89°58'W.on a true line bet.secs.27 and 34.
	Over mountainous land;through dense undergrowth.
	Asc.
20.00	Top of Hurrinane Fault,200 ft.above sec.cor.,bears N. and S.
	Desc.over broken ledges.
36.81	Intersect W.C.to ¼ sec.cor.bet.secs.27 and 34.
	Land,Mountainous,
	Soil,rocky,4th rate.
	No timber.
	Undergrowth,sage,oose,mountain rush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 36.81 chs.
	May 26,1909.

May 27,1909:At 7 h 57 m a.m.,l.m.t.,I set off 37°07' N., on the lat.arc;21°16'N.,on the decl.arc.and determine a meridian with the solar at the cor.of secs.21,22,27 and 28.

Beginning at the cor.of secs.21,22,27 and 28 heretofore described.

Thence I run

East bet secs.22 and 27.

28.00 W.C.to ¼ sec.cor.bet.secs.22 and 27, which is a cross cut in the limestone boulder,mkd.and witnessed as described by the surveyor general.

Subdivision of T.42 S.,R.13 W.-Continued.

Chains	
	I obliterate mks.
	Continue East.
40.00	Set an iron post,3 ft.long,1 in.in dia.,14 ins.in the ground,on solid rock of sandstone,and surrounded by mound of stone;for ¼ sec cor..mkd. on brass cap ¼ S 22 in N half and S 27 in S half;and raise a mound of stone 2,ft.base,1½ ft/high,N.of cor.
	Thence I run
	East on a random line bet.the E. half of secs.22 and 27.
40.48	Intersect the N.and S.line 9 lks.N.of the cors.of secs. 22,23,26 and 27,which is a black lava stone,18x6x6 ins. above ground,firmly set and mkd.and witnessed as described by the surveyor general.
	I destroy the old corner and re-establish it in the same place as follows:
	Set an iron post, 3 ft.long,2 ins.in dia.,24 ins.in the ground for cor.of secs.22,23,26 and 27.mkd.on brass cap
	T 42 S S 22 in NW.
	R 13 W S 23 in NE.
	S 26 in SE.and
	S 27 in SW,quadrants; and raise a mound of earth and stone,4 ft.base,2 ft.high W.of cor.
	Thence I run
	N.89°52'W.,on a true line bet.secs.22 and 27.
	Over mountainous;land through dense undergrowth.
	Desc.
1.00	Bottom of Canon,20 ft.below sec.cor.,course N.20°E.
	Asc.
23.75	Top of Hurrincane Fault,200 ft.above Canon,bears N.and S.
	Desc.over broken ledges.
40.48	¼ sec.cor.bet.secs.22 and 27.
	Land,mountainous.

Subdivision of T.42 S.,R.13 W.-Continued.

Chains	
	Soil,rocky;4th rate.
	No timber.
	Undergrowth,evergreen,oose,catus and greasewood.
	Good grass for grazing.
	Mountinous land,or land covered with dense undergrowth,
	40.48 chs.

	Beginning at the cor.of secs.13,14,23 and 24.
	Thence I run
	West bet.secs . 14 and 23.
30.00	Fall 17 lks.N.of the W C which,is a volcanic stone,
	12x10x4 ins.above ground,firmly set and mkd.and
	witnessed as described by the surveyor general.
	The falling shows the course of this line to be
	S.89°41'W.,therefore I destroy all trace of this corner
	and from the corner point continue S.89°41'W.,
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
	ground,for ¼ sec.cor.mkd.on brass cap ¼ S 14 in N half
	And S 23 in S half;and raise a mound of stone, 2 ft.
	base,1½ ft.high N.of cor.
	Thence I run
	West on a randon line bet.the W.half of secs.14 and 23.
39.27	Intersect N.and S.line 83 lks.N.of the point for cor.
	of secs.14,15,22 and 23,which is 2.25 chs.N.of the
	W C
	Thence I run
	N.89°40'E.,on a true line bet.secs.14 and 23.
	Over mountainous land,through dense undergrowth.
	Desc.
9.70	Bottom of Canon,400 ft.below W C ,course N.80°W.
	Asc.
10.39	Perpendicular wall,800 ft.above Canon,bears N.80°E.and

Subdivision of T.42 S.,R.13 W.-Contunied.

Chains	
	S.80°W.
11.00	Top of spur,200 ft.above canon,bears N.and S.
	Desc.
12.75	Wash,100 lks.wide,80.00 ft.deep in bottom of Box Canon, 450 ft.below spur,course NW.
	Asc.
17.50	Top of spur,50 ft.above Box Canon,bears N.and S.
	Desc.
22.64	Enter wash,15 ft.deep,course N.80°W.
29.40	Leave wash,course S.80°W.
39.27	The ¼ sec.cor.bet.secs.14 and 23.
	Land,mountinous.
	Soil, rocky;4th rate.
	No timber.
	Undergrowth,sage brush,mountain rush,and greasewood.
	Good grass for grazing.
	Mountinsous land,or land covered with dense undergrowth, 39.27 chs.
	May 27,1909:At this cor.I set off 21°18'N.,on the decl. arc;and at 11 h 57 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°08'N.,which is the proper lat. nearly.

Beginning at the cor.of secs.15,16,21 and 22,heretofore described.

Thence I run

East bet.secs.15 and 22.

Subdivision of T.42 S., R.13 W.-Continued.

Chains	
25.00	Intersect the W.C.to ¼ sec.cor.,bet.secs.15 and 22,which is a sandstone 10x8x6 ins.above ground,firmly set.and mkd.and witnessed as described by the surveyor general. I destroy this cor.
	Thence continued East on true line bet.secs.15 and 22.
	Over mountainous land;through dense undergrowth.
	Asc.over Hurricane Fault and ledges.
40.00	¼ sec.cor.falls on ledge and cannot be set,therefore at
41.32	Top of ledge,1200 ft.above [illegible].cor.point.
	Set an iron post,3 ft.long,1[illegible].in dia.,26 ins.in the ground,for witness ¼ sec.cor..mkd.on brass cap T 42 S.,R.13 W W 6 ¼ in N half;S 15 in N hald and S 22 in S half; and raise a mound of earth and stone,4 ft.base,2 ft.high, N.of cor.
	Thence I run
	East,[illegible],on a random line bet.the E half of.secs.15 and 22.
39.00	Intersect N.and S.line,23 lks.N.of the point for cor.of secs.14,15,22 and 23,which is 2.25 chs.N.of the W.C.
	Thence I run
	N.89°48'W.,on a true line bet.the.E half of sec.15 and 22
	Over mountainous land,through dense undergrowth.
	Asc.abruptly over ledges.
1.80	Base of ledge,bears N.and SE.
3.30	Top of ledge,200 ft.high,bears N.and SE.
11.00	Top of abrupt ascent,bears N.and SE.
	Leave ledges.
	Desc..
15.00	Bottom of hollow,50 ft.below ledge,course NE.
	Asc.
24.50	Top of Hurricane ridge,800 ft.above hollow,bears N.and S.
39.00	The W.C.to ¼ sec.cor.bet.secs.15 and 22.
	Land,mountainous.
	Soil,rocky;4th rate.

Subdivision of T.42 S.,R.13 W.-Continued.

Chains	
	No timber.
	Undergrowth,evergreen,oose,and mountain rush.
	Good grass for grazing.
	Mountinaousland,or land covered with dense undergrowth,
	39.00 chs.
	May 27,1909.
	May 28,1909:At 7 h 57 m a.m.,l.m.t.,I set off 37°08'N., on the lat.arv;21°26'N.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.11,12, 13 and 14.
	Beginning at the ¼ sec.cor.bet.secs.11 and 14 heretofore described.
	Note:From retracements already made I know that the line running W.from this cor.will not intersect the N.and S.line within limit,therefore I run W.on a true line bet.the W. half of secs.11 and 14.
	Over mountainous land;through dense undergrowth.
	Desc.
10.00	Bottom of hollow,125 ft.below sec.cor.,course NW.
	Asc.
23.00	Top of spur,60 ft.above hollow,bears N.30°W.and S.30°E.
	Desc.
31.00	Bottom of hollow,50 ft.below spur,course N.30°W.
	Asc.
34.00	Top of ridge,60 ft.above hollow,bears N.and S.
	Desc.
40.15	Falls 71.lks.N.of the cor.of secs.10,11,14 and 15.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the

Subdivision of T.42 S., R.13 W.-Continued.

Chains

40.23 Intersect N.and S.line,1 lk.N.of the cor.of secs.10 and 15.

Thence I run

N.89°39'W.,on a true line bet.secs.10 and 15.

Over mountainous land,through scattering timber and dense undergrowth.

Asc.

7.00 Top of Hurricane Fault,100 ft.above cor.bears N.10°E. and S.10°W.

Desc.over ledges.

40.23 The ¼ sec.cor.bet.secs.10 and 15.

40.75 Foot of ledges,bears N.and S.

Land,mountainous.

Soil,rocky;4th rate.

Timber,cedars.

Undergrowth,sage,oose and evergreen.

Good grass for grazing.

Mountainous land or land covered with dense undergrowth, 40.75 chs.

May 28;1909:At this cor.I set off21°28'N.,on the decl. arc;and at 11 h 57 m a.m,,l.m.t.,I observe the sun on the meridian,the resulting lat 37°08'N., which is the proper lat.nearly.

Beginning at the ¼ sec.cor.bet.secs.2 and 11,heretofore described.Note:

Knowing from closings already made that the lines running W;from this cor.will not intersect the N.and S.line within limit,therefore I run W.on a true line bet.the W.half of secs.2 and 11.

Over mountainous land,through dense undergrowth.

Subdivision of T.42 S., R.13 W.-Continued.

Chains ground for closing corner of secs.11 and 14..mkd.on brass cap

T 42 S R 13 W in N.

S 11 in NE.

S 14 in SE. quadrants;

C C S 10 S 15 in W.half,

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

Note:I destroy all marks on the cor.of secs.10,11,14 and 15 that pertain to sec.11 and 14.

Land,mounatinous.

Soil,rocky;4th rate.

No timber.

Undergrowth,sage,oose,and mountain rush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

40.15 chs.

Beginning at the ¼ sec.cor.bet.secs.10 and 15,which is a black lava,16x12x6 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general. I destroy the old corner and re-establish it in the same place as follows:

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground for ¼ sec.cor..mkd.on brass cap ¼ S 10 in N half and S 15 in S half;and raise a mound of stone, 2 ft/base,1½ ft.high N.of cor.

Thence I run

S.89°40'E.on a random line bet.the E half of secs.10 and 15.

Subdivision of T.42 S., R.13 W.-Continued.

Chains	Desc.
13.10	Begin abrupt descent of Hurricane Fault, bears N.5°E. and S.5°W.
33.00	End of abrupt descnet, bears N. and S.
36.50	Hurrican Canal, 10 lks. wide 2 ft. deep, bears N. and S.20°W.
	Enter cultivated field.
40.52	Intersect N. and S. line, 2.70 chs. Northw. of cor. of secs. 2, 3, 10 and 11, heretofore described.

Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground for closing cor. to cor. of secs. 2 and 11.. mks. on brass cap

T 42 S R 13 W in N half

S 3 C C in NW.

S 2 in NE;
S 11 in SE: and
S 10 in SW. quadrants; raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor. I destroy all marks on the old cor. pertaining to secs. 2 and 11.

Land, mountainous.
Soil, gravelly and sandy loam; 2d rate.
No timber. Undergrowth sage, oose, and mountain rush.
Mountainous land 33.00 chs. May 28, 1909.

GENERAL DESCRIPTION.

This fractional township takes in what is known as the Hurricane Fault, which drops off from the East tier of secs. to the West tier about 2000ft. There is some good land along the top of the mountin vavuable forgrazing. The soil is generally gravelly and sandy loam; 2nd rate. There is some scattering cedar and pinon pine timber in the township. There are no settlers in the township. I found no trace of minerals in the township.

Andrew J. Stewart Jr.
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 oath of assistants see book "R", *Chainman.*

T. 43 S., R. 15 W.

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

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

se parts or portions of the .....

.....

.....

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

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

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

neral for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

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

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surve
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing date
..... day of ....., 190 , I have well, faithfully, and truly, in n
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 oath of deputy see book "R" T.43 S., R. 15 W.

..... 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
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, a
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. April 19,1911

The foregoing field notes of the survey of the Subdivision of Township No.4 South, Range No.13 West of the Salt Lake Base and Meridian, Utah,

executed by Andrew J.Stewart Jr.and Leo A.Snow
under their contract No. 309, dated March 17, 190 9, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor G

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

.....
United States Surveyor G

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Page

4—679.

BOOK A-361

F.

FIELD NOTES

Retracement
OF THE ~~SURVEY~~ OF THE

M.S.B.

FILED
JAN 29 1910

NORTH BOUNDARY

of

Township No.43 South, Range No.13 West.

Of the Salt Lake Base and *Meridian,*

State of Utah.

AS SURVEYED BY

drew J.Stewart Jr.and Leo A.Snow, *United States Deputy Surveyor,* s

nder ~~his~~ their *Contract No.* 309, *dated* March 17,1909. ~~190~~

~~survey~~ retracement *commenced* May 28,1909, ~~190~~

~~survey~~ retracement *completed* May 31,1909. ~~190~~

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Maeser Dalley	Chainman
Hector McQuarrie	Chainman
Edmund A.Hendrix	Moundman
John Stewart	Moundman
Laurence Snow	Axman
Ren Stewart	Flagman

BOOK A-361

INDEX DIAGRAM.

Township 43 South, *Range* 13 West

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, Maeser Dalley and Hector McQuarrie 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 Retracement North Bdy.T.43 S.,R.13 W.,Salt Lake Base and Meridian,

Maeser Dalley, Chai

Hector McQuarrie, Chai

Subscribed and sworn to before me this 20th day of May 1909. 190

Andrew J. Stewart Jr.

U.S.Deputy Surveyor.

SEAL

We, Edmund A.Hendrix and John Stewart 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 Retracement North bdy.T.43 S.,R.13 W.,Salt Lake Base and Meridian,

Edmund A. Hendrix, Moun

John Stewart, Moun

Subscribed and sworn to before me this 20th day of May 1909. xxxx

Andrew J. Stewart Jr.

U.S.Deputy Surveyor.

SEAL

xxxxI Laurence Snow axxx do solemnly swear that I will well and truly perform the duties of ~~axmen~~ in the establishment of and other duties, according to instructions given me to the best of my skill and ability, in the su Retracement North bdy.T.43 S.,R/13 W.,Salt Lake Base and Meridian

Laurence Snow

A

Subscribed and sworn to before me this 20th day of May 1909. ~~190~~

Andrew J. Stewart Jr.

U.S.Deputy Surveyor.

SEAL

I, Ren Stewart, 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, Retracement North bdy.T.43 S.,R.13 W.,Salt Lake Base and Me Utah.

Ren Stewart, Fla

Subscribed and sworn to before me this 20th day of May 1909. xxx

Andrew J. Stewart

U.S.Deputy Surveyor.

SEAL

Retracement N.bdy.T.43 S.,R.13 W.

Survey commenced May 28,1909,and executed with a Young and Sons light mountain transit ,No. 7381 ,with solar attachment.The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the verniers of the latitude and declination arcs.
The instrument was examined,tested on the meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,on April 26,1909.
I examined the adjustments of the instrument and correct the level and collimation errors;then,to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m.hours with a meridian determined by Polaris observation;I proceed as follows:
At the cor.of Tps.42 and 43 S.,Rs.13 and 14 W.,which is a sandstone,18x9x8 ins.above ground,firmly set,and mkd. and witnessed as described by the surveyor general;latitude 37°05'00"N.,longitude 113°18'09"W.,I set off 37°05'N.,on the lat.arc;21°31'N.,on the decl.arc;and at 4 h 57 m p.m l.m.t.,I determine a meridian with the solar,and mark a point thereof on a stone firmly set in the ground 5.00 chs.N.of the cor.

May 28,1909.

May 29,1909:At 3 h 5 m a.m.,l.m.t.,I observe Polaris at eastern elongation,in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground,5.00 chs.N.of the cor.
At 7 h 30 m a.m., l.m.t.,I lay off the azimuth of Polaris 1°28.6'to the west,and mark a point in the meridian thus determined by cutting a small groove in the stone already

Retracement N.bdy.T.43 S.,R.13 W.-Continued.

Chains

set 5.00 chs.N.of the cor.;this mark falls 0.38 ins.east of the meridian determined by the solar.

At 7 h 57 m a.m.,l.m.t.,I set off 37°07'N.,on the lat. arc;21°36'N.,on the decl.arc;and mark a point in the meridian determined with the solar,by a cross on the stone already set 5.00 chs.N.of the cor.;this mark falls 0.31 ins.east of the meridian established by Polaris observation;

The solar apparatus by p.m.and a.m.observations defines positions for meridians respectively about 0'20"west and 0'16"east of the meridian determined by Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory .

The magnetic bearing of the meridian at 8 h 30 m a.m.,l.m.t.,is N.16°45'W.,the angle thus determined gives the mag. decl.16°45'E.

From the cor.of Tps.42 and 43 S.,Rs.13 and 14 W.,heretofore described .

Note:Before proceeding with the subdivision of this Tp.,I determine to retrace the N.bdy.as follows.

East;on a retracement line bet.secs.6 and 31.

53.15 Fall 12 lks.S.of the ¼ sec.cor.bet.secs.6 and 31,which is a gray sandstone 8x6x5 ins.,above ground,firmly set and mkd.and witnessed as described by the surveyor general.

93.15 Fall 22 lks.S. of the cor;of secs.5,6,31,and 32,which is a black lava stone,6x10x6 ins.,above ground firmly set, and mkd.and witnessed as described by the surveyor general

The course of this line is therefore N.89°52'E.,93.15 chs.

No change in topography from original notes.

Retracement North bdy.T.43 S.,R.13 W.-Continued.

Chains	
	East,on a retracement line bet.secs.5 and 32.
40.00	Fall 8 lks.S.of the ¼ sec.cor.bet.secs.5 and 32,which is a sandstone,10x8x5 ins.,above ground,firmly set,and mkd.and witnessed as described.by the surveyor general.
80.00	Fall 16 lks.S.of the cor.of secs.4,5,32,and 33,which is a volcanic stone,10x8x8 ins.,above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore N.89°53'E.,80.00 chs.
	No change in topography from original notes.
	May 29,1909:At this cor.I set off 21°37'N.,on the decl.arc and at 11 h 57 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°05'N.,which is the proper lat.nearly.
	East ,on a retracement line bet.secs.4 and 33.
39.98	Fall 6 lks.S.of the ¼ sec.cor..bet,secs.4 and 33,which is a volcanic stone,11x9x5 ins.,above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
79.65	Fall 12 lks.S.of the cor.of secs.3,4,33,and 34,which is a gray limestone,8x8x6 ins.,above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore N.89°55'E.,79.65 chs.
	No change in topography from original notes.
	May 29,1909.
	May 30,1909:At 7 h 57 m a.m.,l.m.t.,I set off 37°05'N.,on the lat.arc;21°45'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,33,and 34.
	Thence I run

Retracement North bdy.T.43 S.,R.13 W.-Continued.

Chains	
	East,on retracement line bet.secs.3 and 34.
39.95	Fall 7 lks.S.of the ¼ sec.cor.bet.secs.3 and 34,which is a limestone,8x6x4 ins.,above ground,firmly set,and mkd. and witnessed as described by the surveyor general.
79.89	Fall 14 lks.S.of the cor.of secs.2,3,34,and 35,which is a limestone,10x9x5 ins.,above ground,firmly set,and mkd. and witnessed as described by the surveyor general.
	The course of this line is therefore N.89°54'E.,79.89 chs.
	No change in topography from original notes.
	May 30,1909:At the noon hour the sky is overcast and solar observations are impossible.
	East,on a retracement line bet.secs.2 and 35.
39.90	Fall 6 lks.S.of the ¼ sec.cor.bet.secs.2 and 35,which is a volcanic stone,15x12x8 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
79.80	Fall 12 lks.S.of the cor.of secs.1,2,35,and 36,which is a gray limestone,8x6x4 ins.,above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	The course of this line is therefore N.89°55'E.,79.80 chs.
	No change in topography from original notes.
	May 30,1909.
	May 31,1909:At 7 h 57 m a.m.,l.m.t.,I set of 37°05'N.,on the lat.arc;21°54'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.1,2,35,and 36,on N.bdy.of Tp.
	Thence I run
	East,on a retracement line bet.secs.1 and 36.

Retracement N.bdy.T.43 S.,R.13 W.-Continued.

Chains

40.10 Fall 6 lks.S.of the ¼ sec.cor.bet.secs.1 and 36,which is a volcanic stone,12 x8x7 ins.above ground,firmly set, and mkd.and witnessed as described by the surveyor general.

80.18 Fall 12 lks.S.of the cor.of Tps.42 and 43 S.,Rs.12 and 13 W.,which is limestone,14x11x8 ins.,above ground,firly set,and mkd.and witnessed as described by the surveyor general.

The course of this line is therefore N.89°55'E.,80.18 chs.

No change in topography from original notes.

I destroy all trace of old cor. and replace it with an Iron post,3 ft.long,3 ins.in dia.,24 ins.,in the ground,for cor.of Tps.42 and 43 S.,Rs.12 and 13 W.,mkd. on brass cap

T 42 S in N half .

T 43 S in S.half.

R 13 W S 36 in NW.

R 12 W S 31 in NE.

R 12 W S 6 in SE.;and

R 13 W S 1 in SW.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,S.of cor.

May 31,1909.

Andrew J. Stewart Jr

U.S.Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew J. Stewart Jr., 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~~ Retracement North Bdy/.T.43 S.,R.13 W.,Salt Lake Base and Meridian,Utah, ...ing the respective capacities in which they acted:

Maeser Dalley, *Chainman.*
Hector McQuarrie, *Chainman.*
Edmund A.Hendrix, *Moundman.*
John Stewart, *Moundman.*
Laurence Snow, *Axman.*
, *Axman.*
Ren Stewart, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew J. Stewart Jr., United States Deputy Surveyor, in surveying all ...e parts or portions of the Retracement North Bdy..T.43 S.,R.13 W. of the Salt Lake Base and meridian, 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 ...eral for Utah

Maeser Dalley, *Chainman.*
Hector McQuarrie, *Chainman.*
Edmund A. Hendrix, *Moundman.*
John Stewart, *Moundman.*
Laurence Snow, *Axman.*
, *Axman.*
Ren Stewart, *Flagman.*

...scribed and sworn to before me this 3rd day of July 1909., ~~190x~~

SEAL

Andrew J. Stewart Jr.
U.S.Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew J. Stewart Jr., United States Deputy Surv
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing da
17th day of March 1909/. xxx, 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 lav
United States, surveyed all those parts or portions of Retracement North
Bdy. T. 43 S., R. 13 W.

of the Salt Lake
Base and meridian, in the State of Utah, which are represent
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 accorda
the Manual of Surveying Instructions, and the special written instructions of the United States S
General for Utah and in the specific manner described in the field notes,
the foregoing are the original field notes of such ~~xxxxx~~ retracement.

Andrew J. Stewart Jr.
United States Deputy S

Subscribed by said Andrew J. Stewart Jr., and sworn to ~~before me~~
this 6th day of April, 1910., ~~xxx~~

SEAL

Thomas Hull
U.S. Surveyor General
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19,

The foregoing field notes of the ~~Survey xx~~ Retracement of the North Bounda
of Township No. 43 South, Range No. 13 West of the Salt Lake Base a
Meridian, Utah,

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 190 9, hav
critically examined, and the necessary corrections and explanations made, the said field notes,
~~surveys~~ retracements they describe, are hereby approved.

Thomas Hull
United States Surveyor

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

United States Surveyor

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BOOK A-361

FIELD NOTES

Retracement
OF THE ~~SUBJECT~~ OF THE

SUBDIVISION

of

Township No. 41 South, Range No. 15 East

of the Salt Lake Base and Meridian,

State of Utah.

AS SURVEYED BY

[illegible] J. Stewart Jr. and Leo A. [illegible], United States Deputy Surveyor,

Chief
Under [illegible] Contract No. [illegible] dated March 11, 1909.

[illegible] commenced May 11, 1909.

[illegible] completed May 11, 1909.

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman
George W. Worthen	Chainman
Samuel Brooks	Moundman
Rawl Worthen	Moundman
John A. Humphries	AXman
John T. Jarvis	Flagman

BOOK A-361

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PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley and George W. Worthen

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 ~~sur~~

Retracement Subdivision T.41 S.,R.15 W.Salt Lake Base and Meridian,

Hillman Dalley, Chain

George W. Worthen, Chain

Subscribed and sworn to before me this 3rd day of May 1909., ~~190~~

Leo A. Snow

SEAL

U.S.Deputy Surveyor

We, Samuel Brooks and Rawl Worthen

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~~

Retracement Subdivision T/41 S/,R/15 W.Salt Lake Base and Meridian

Samuel Brooks, Mound

Rawl Worthen, Mound

Subscribed and sworn to before me this 3rd day of May 1909., ~~190~~

Leo A. Snow

SEAL

U.S.Deputy Surveyor

~~We~~ I, John A.Humphries ~~are~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of co and other duties, according to instructions given ~~us~~ me to the best of ~~our~~ my skill and ability, in the ~~sur~~

Retracement Subdivision of T.41 S.,R.15 W.,Salt Lake Base and Meri Utah.

John A Humphries, Ax

, Ax

Subscribed and sworn to before me this 3rd day of May 1909., ~~190~~

Leo A. Snow

SEAL

U? S.Deputy Surveyor

I, John T.Jarvis, 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~~ Retracement Subdivision T/41 S.,R.15 W.,Salt Lake Base and M Utah.

John T. Jarvis, Flag

Subscribed and sworn to before me this 3rd day of May 1909., ~~190~~

Leo A. Snow

SEAL

U.S.Deputy Surveyor.

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Retracement Subdivision of Tp.41 S., R. 15 W.

Chains. Survey commenced May 30, 1909, and executed with the instrument described in book "A" of this survey.

At the cor.of secs.7,12,13, and 18, T. 41 S., bet.Rs.15 and 16 W., heretofore described, lat.37° 14' 33" N.; longitude 113° 31' 08" W.; I set off 37° 14'N.on the lat.arc; 21° 45'N.on the decl.arc, and at 7 h. 57 m. a.m.l.m.t., obtain a meridian with the solar.

Thence I run

East on a retracement line bet.secs.7 and 18,

40.36 Fall 7 lks.N.of the ¼ sec.cor. which is a volcanic stone 9 x 10 x 3 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

The course of this half-mile is therefore S.89° 54'E. and distance 40.36 chs.

I offset over the ¼ sec.cor., and continue east, with continuous chaining, and at

81.25 Fall 28 lks.N.of the cor.of secs.7,8,17, and 18, which is a limestone 10 x 8 x 4 ins.above ground, marked and witnessed as described by the surveyor general.

The course of this half-mile is therefore S.89° 42'E. and distance 40.89 chs.

No change in topography from old notes.

From the cor.of secs.9,10,15 and 16. I run

West on a retracement line bet.secs.9 and 16,

40.13 Fall 162 lks.N.of the ¼ sec.cor., which is a volcanic stone 10 x 9 x 6 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

80.23 Fall 3.24 chs.N.of the cor.of secs.8,9,16, and 17, which is a sandstone 8 x 10 x 6 ins.above ground, firmly set and marked and witnessed as described by the surveyor

general.

The course of this line is therefore S.87° 41'W. and a distance 80.30 chs.

No change in topography from old notes.

May 30, 1909: At this cor.I set off 21° 46'N.on the decl.arc; and at 11 h. 57 m.a.m.l.m.t.observe the sun on the meridian; the resulting lat.is 37° 14'N., which is the proper lat.nearly.

Leo A. Snow.

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

Leo A. Snow, 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~~
tracement Subdivision T.41 S., R.15 W Salt Lake Base and Meridian, Utah
owing the respective capacities in which they acted:

Hillman Dalley, *Chainman.*
George W. Worthen, *Chainman.*
Samuel Brooks, *Moundman.*
Rawl Worthen, *Moundman.*
John A. Humphries, *Axman.*
, *Axman.*
John T. Jarvis, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

Leo A. Snow, United States Deputy Surveyor, in surveying al
ose parts or portions of the Retracement Subdivision T.41 S., R.15 W.,

of the Salt Lak
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
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 Utah.

Hillman Dalley, *Chainman.*
George W. Worthen, *Chainman.*
Samuel Brooks, *Moundman.*
Rawl Worthen, *Moundman.*
John A. Humphries, *Axman.*
, *Axman.*
John T. Jarvis, *Flagman.*

ubscribed and sworn to before me this 31st
day of May 1909.

SEAL

Leo A. Snow
U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, United States Deputy Surve
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing date
17th day of March 1909, 190X, I have well, faithfully, and truly, in r
proper person, and in strict conformity with the instructions furnished by the United States Su
General for Utah, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of Retracement Subdivision

T.41 S.,R.15 W.

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

Leo A. Snow
United States Deputy Su

Subscribed by said Leo A. Snow, and sworn to before me
this 17 day of January, 1910

John T. Woodbury,
Clerk Dist. Cou

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 191

The foregoing field notes of the ~~surveys of~~ Retracement of the Subdivisional lines of Fractional Township No.41 South, Range No. 15 West of th Salt Lake Base and Meridian, Utah.

executed by Andrew J.Stewart Jr. and Leo A.Snow
under ~~his~~ their contract No. 309, dated March 17, 1909, havi
critically examined, and the necessary corrections and explanations made, the said field notes, a
~~surveys~~ retracements they describe, are hereby approved.

Thomas Hull
United States Surveyor G

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

United States Surveyor G

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BOOK A-361

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FIELD NOTES

Retracement
OF THE ~~XXXXX~~ OF THE

EIGHTH STANDARD PARALLEL SOUTH

Through Range 15 West

Of the Salt Lake Base and *Meridian.*

State of Utah.

AS SURVEYED BY

Andrew J. Stewart Jr. and Leo A. Snow *United States Deputy Surveyor,* [illegible]

Under ~~XXX~~ their *Contract No.* 309 *dated* March 17, 1909. ~~xxxx~~

Retracement
~~Survey~~ *commenced* May 14, 1909. ~~xxxx~~

Retracement
~~Survey~~ *completed* May 16, 1909. ~~xxxx~~

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman
George W. Worthen	Chainman
Samuel Brooks	Moundman
Rawl Worthen	Moundman
John A. Humphries	Axman
John T. Jarvis	Flagman

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BOOK A-361

INDEX DIAGRAM.

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BOOK A-361

PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley and George W. Worthen do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same we will report the true distances to all notable objects, and the true lengths of all lines that we as measuring, to the best of our skill and ability, and in accordance with instructions given us, in the ~~sur~~ Retracement Eighth Standard Parallel South, through Range 15 W., Sa Lake Base and Meridian, Utah.

Hillman Dalley, Chai
George W. Worthen, Chai

Subscribed and sworn to before me this 3rd day of May 1909. ~~x190x~~

Leo A. Snow
~~U.S. Deputy Surveyor.~~

SEAL

We, Samuel Brooks and Rawl Worthen do solemnly swear that we will well and truly perform the duties of moundmen in the establis of corners, according to the instructions given us, to the best of our skill and ability, in the ~~sur~~ Retracement Eighth Standard Parallel South, through Range 15 W., Sa Lake Base and Meridian, Utah.

Samuel Brooks, Moun
Rawl Worthen, Moun

Subscribed and sworn to before me this 3rd day of May 1909. ~~x190x~~

Leo A. Snow
U.S. Deputy Surveyor.

SEAL

~~We~~, I John A. Humphries ~~xxxd~~ do solemnly swear that ~~we~~ 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 ~~sur~~ Retracement Eighth Standard Parallel South, through Range 15 W., Salt Lake Base and Meridian, Utah.

John A. Humphries, A
, A

Subscribed and sworn to before me this 3rd day of May 1909. ~~x190x~~

Leo A. Snow
~~U.S. Deputy Surveyor.~~

SEAL

I, John T. Jarvis, 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~~ Retracement Eighth Standard Parallel South, through Range 15 Salt Lake Base and Meridian, Utah.

John T. Jarvis, Flag

Subscribed and sworn to before me this 3rd day of May 1909. ~~x190x~~

Leo A. Snow
U.S. Deputy Surveyor.

SEAL

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RETRACEMENT OF 8th STANDARD PARALLEL SOUTH, THROUGH R.15 W.

Chains. Survey commenced May 16, 1909, and executed with a W.& L.E.Gurley light mountain transit No. with solar attachment.The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the surveyor general for Utah on Apr.26, 1909.

At the closing cor.bet.secs.3 and 4 on the 8th Stand. Parallel South, R. 15 W., which is a volcanic stone 9 x 9 x 6 ins.above ground, firmly set, and marked and witnessed as described by the surveyor general, at 6h.56 m. a.m.l.m.t. I set off 37° 17'N.on the lat.arc 19°04' N.on the decl.arc; and determine a meridian with the solar.

Thence I run

East on a retracement line along S.bdy.of sec.33,

16.30 Fall 9 lks.N.of the standard corner of secs.33 and 34, which is a sandstone 6 x 11 x 6 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89° 40'E. 16.30 chs.

East on retracement line along S.bdy.of sec.34,

40.02 Fall 23 lks.N.of the Standard $\frac{1}{4}$ sec.cor., which is a sandstone 6 x 8 x 5 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

78.22 Fall 46 lks.N.of the standard cor.of secs.34 and 35,

[illegible] which is a trachyte stone 6 x 11 x 5 ins.above ground firmly set and marked and witnessed as described by the surveyor general.

The course of this line is therefore S.89° 40'E. 78.82 chs.

Note: There is no change in topography from old notes.

East along the S.bdy.of sec.35,

40.37 Fall 23 lks.N.of the standard ¼ sec.cor., which is a sandstone 8 x 14 x 9 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

The course of this half-mile is therefore S.89° 40'E. 40.37 chs.

[illegible] Fall 2.07 chs.S.of the standard cor.of secs.35 and 36, which is a trachyte stone 6 x 12 x 8 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

The course of this half mile is therefore N.87° 08'E. 40.68 chs.

No change in topography from old notes on this mile.

May 16: At this cor.I set off 19°06' N.on the decl.arc; and at 11 h. 56m.a.m.l.m.t.observe the sun on the meridian; the resulting lat.is 37°17'N.,which is the proper lat.nearly.

From the standard cor.of secs.35 and 36 I run

East along the S.bdy.of sec.36,

Retracement of 8th Standard Parallel South through Range 15 W.

Chains.

39.92 Fall 2.56 chs. N. of the st. ¼ cor. which is a sandstone 10x15x5 ins. above ground firmly set and marked and witnessed as described by the surveyor general.

The course of this half is therefore S 86° 20' E 40.00 chs.

No change in topography from old notes.

Thence I run

East from the st. ¼ cor.

25.20 Intersect the closing cor. of Tps. 41 S. Rs. 14 and 15 W. heretofore described.

Note: No change in topography from old notes.

Geo. R. Snow

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

Leo A. Snow, United States Deputy Surveyor, to assist in running, measuring, and arking the lines and corners described in the foregoing field notes of the ~~xxxxx~~ retracement of ~~Eighth~~ ~~Standard Parallel South, through Range 15 W., Salt Lake Base and Mer.~~ Utah, owing the respective capacities in which they acted:

Hillman Dalley, *Chainman.*

George W. Worthen, *Chainman.*

Samuel Brooks, *Moundman.*

Rawl Worthen, *Moundman.*

John A. Humphries, *Axman.*

, *Axman.*

John T. Jarvis, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

Leo A. Snow, United States Deputy Surveyor, in surveying all hose parts or portions of the Retracement Eighth Standard Parallel South, through Range 15 W., Salt Lake Base and Meridian.

~~of the~~

~~xxxxx~~ ~~xxxxx~~ian, 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 orner monuments established, according to the instructions furnished by the United States Surveyor eneral for Utah.

Hillman Dalley, *Chainman.*

George W. Worthen, *Chainman.*

Samuel Brooks, *Moundman.*

Rawl Worthen, *Moundman.*

John A. Humphries, *Axman.*

, *Axman.*

John T. Jarvis, *Flagman.*

Subscribed and sworn to before me this 31st day of May 1909. ~~xxx~~

SEAL

Leo A. Snow,

U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, United States Deputy Surve
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing dat
17th day of March 1909. ~~190~~, I have well, faithfully, and truly, in
proper person, and in strict conformity with the instructions furnished by the United States S
General for Utah, the Manual of Surveying Instructions, and the law
United States ~~[illegible]~~ retracement all those parts or portions of Eighth Standard Parallel
South, through Range 15 W.,

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

Leo A. Snow
United States Deputy S

Subscribed by said Leo A. Snow, and sworn to before me
this 17 day of January 1910

John T. Woodlu
Clerk Dist. C

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, April 19,

The foregoing field notes of the ~~survey~~ Retracement of the Eighth Stan
Parallel South, through Range No.15 West of the Salt Lake Base a
Meridian, Utah,

executed by Andrew J.Stewart Jr. and Leo A.Snow
under Contract No. 309, dated March 17, 1909, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
~~[illegible]~~ they describe, are hereby approved.

Thomas Hull
United States Surveyor

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

United States Surveyor

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BOOK A-361

I.

FILED
JAN 29 1910

M.S.B.

FIELD NOTES

OF THE SURVEY OF THE

EAST BOUNDARY

of

Township No.43 South, Range No.13 West.

Of the Salt Lake Base and *Meridian,*

State of Utah.

AS SURVEYED BY

Andrew J Stewart Jr. and Leo A. Snow, *United States Deputy Surveyors*

Under ~~his~~ their *Contract No.* 309, *dated* March 17, 1909., ~~190~~

Survey commenced May 31, 1909., ~~190~~

Survey completed June 3, 1909., ~~190~~

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Maeser Dalley	Chainman
Hector McQuarrie	Chainman
Edmund A.Hendrix	Moundman
John Stewart	Moundman
Laurence Snow	Axman
Ren Stewart	Flagman

BOOK A-361

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Maeser Dalley and Hector McQuarrie 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 surv

E.bdy.T.43S.,R.13W., Salt Lake Base and Meridian, Utah.

Maeser Dalley, Chain
Hector McQuarrie, Chain

Subscribed and sworn to before me this 20th day of May 1909, 190.

SEAL

Andrew J. Stewart Jr.
U.S. Deputy Surveyor

WE, Edmund A. Hendrix and John Stewart 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

E.bdy.T43 S.,R.13 W., Salt Lake Base and Meridian, Utah.

Edmund A. Hendrix, Mound
John Stewart, Mound

Subscribed and sworn to before me this 20th day of May 1909, 190

SEAL

Andrew J. Stewart Jr.
U.S. Deputy Surveyor

~~WE~~, I Laurence Snow ~~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 sur

E.bdy.T.43 S.,R.13 W., Salt Lake Base and Meridian, Utah.

Laurence Snow, A
, A

Subscribed and sworn to before me this 20th day of May, 1909, 190

SEAL

Andrew J. Stewart Jr.
US. Deputy Surveyor.

I, Ren Stewart, 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 E.bdy.T.43 S.,R.13 W., and the Salt Lake Base and Meridian, Utah.

Ren Stewart, Fla

Subscribed and sworn to before me this 20th day of May 1909, 190

SEAL

Andrew J. Stewart Jr.
U.S. Deputy Surveyor.

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East bdy.T.43 S.,R.13 W.

Survey commenced May 31,1909,and executed with a Young and Sons light mountain transit No.7382,with solar attachment.The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the verniers of the latitude and declination arcs. The instrumant was examined,tested on the meridian at Salt Lake City,found correct,and was approved by the Surveyor General for Utah,on April 26,1909.

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

At the cor.of Tps.42 and 43 S.,Rs.12 and 13 W.,heretofore described,latitude 37°05'00"N.,longitude 113°11'40"W.,I set off 37°05'N.,on the lat.arc;21°58'N.,on the decl. arc;and at 4 h 57 m a.m.,l.m.t.,I determine a meridian with the solar,and mark a point thereof on a stone firmly set in the ground,5.00 chs.N.of the cor.

May 31,1909.

June 1,1909:At 2 h 53 m a.m.,l.m.t.,I observe Polaris at eastern elongation,in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground,5.00 chs.N.of the cor.;

At 7 h 30 m a.m.,l.m.t.,I lay off the azimuth of Polaris 1°28'.6 to the west ,and mark a point in the meridian thus determined by a groove cut in the stone already set 5.00 chs.N.of the cor.;this mark falls 0.34 ins.east of the meridian determined by the solar.

East bdy.T.43 S.,R.13 W.-Continued.

Chains

At 7 h 58 m a.m.,l.m.t.,I set off 37°05'N.,on the lat.arc; 22°02'N.,on the decl.arc;and mark the meridian determined by the solar,by a cross on the stone already set 5.00 chs. N.of the cor.;this mark falls 0.39 ins.east of the meri - dia.established by Polaris observation.

The solar apparatus by p.m.and.am.observations defines positions for meridians respectively about 0'17"west and 0'20"east of the meridian determined by Polaris obser vation;therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m.,l.m. t.,is N.16°40'W.,the angle thus determined gives the mag. decl.16°40'E.

From the cor.of Tps.42 and 43 S.,Rs.12 and 13 W.,hereto- fore described.

I run

South,bet.secs.1 and 6.

Over mountainous land;through scattering undergrowth and scattering timber .

Asc.

1.80 Top of low spur,30 ft.high,bears N.70°W.and S.70°E.

Desc.

5.00 Bottom of hollow,30 ft.below spur,course N.70°W.

Asc. gradually.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 1 in W half and S 6 in E half;from which

A pinon pine,8 ins.dia.,bears N.10°50'E.,29 lks dist..mkd.¼ S 6 B T.

A pinon pine,8 ins.dia.,bears S.52°10'W.,36 lks. dist..mkd.¼ S 1 B T.

East bdy.of T.43 S.,R.13 W,-Continued.

Chains	
	And raise a mound of stone,2 ft.base,1½ ft high,W.of cor.
51.50	Begin abrupt ascent of ridge, bears N.20°E.and S.20°W.
66.25	Top of spur,200 ft.above ¼ sec.cor.,bears E.and W.
	Desc.abruptly .
68.25	Bottom of canon,125 ft.below spur,course N.75°W.
	Asc.
71.90	Top of spur,150 ft.above canon,bears N.75°W.and S.75°E.
	Desc.
77.50	Bottom of canon,150 ft.below spur,course N.75°W.
	Asc.abruptly.
80.00	Set an iron post,3 ft.long,3 ins.dia.,24 ins.in the
	ground,for cor.of secs.1,6,7,and 12,mkd.on brass cap
	T 43 S in N half
	R 13 W S 1 in NW.
	R 12 W S 6 in NE.
	S 7 in SE.;and
	S 12 in SW.quadrants;from which
	A cedar,12 ins.dia.,bears N.39°50'E.,117 lks.
	dist..mkd.T 43 S R 12 W S 6 B T.
	A pinon pine,8 ins.dia.,bears S.25°E.,34 lks.
	dist..mkd.T 43 S R 12 W S 7 B T.
	A cedar,12 ins.dia.,bears S.87°W.,30 lks.
	dist..mkd.T 43 S R 13 W S 12 B T.
	A pinon pine,6 ins.dia.,bears N.45°30'W.,57 lks
	dist..mkd.T 43 S R 13 W S 1 B T.
	Land,mountainous
	Soil,north half sandy mixed with oil shale and south
	half sandy mixed with rocks and sandstone boulders;3rd
	rate;
	Timber,cedar and pinon pine.
	Undergrowth,sagebrush and greasewoods.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	June 1,1909:At this cor.I set off 22°03'N.,on the decl.

East bdy.of T.43 S.,R.13 W.-Continued.

Chains	
	arc.and at 11 h 58 m a.m.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°04'N.,which is the proper lat.nearly.
	South,bet.secs.7 and 12.
	Over mountainous land;through scattering timber and scattering undergrowth.
	Asc.
.45	Top of spur,30 ft.above sec.cor.,bears E.and W.
	Desc.
3.75	Bottom of hollow,50 ft.below spur,course N.75°W.
	Asc.
29.70	Top of spur,250 ft.above hollow,bears N.70°W.and S.70°E
	Desc.
36.30	Head of canon,75 ft.below spur,course S.70°W.
	Asc.
39.45	Top of ascent,200 ft.above canon,bears NW and SE.
	Enter heavy timber,bears NW and SE.
	Thence over rolling top of table land know as Little Creek Mountain.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 12 ins W half and S 7 in E half;from which
	A pinon pine,6 ins.dia.,bears N.87°E.,42 lks. dist..mkd.¼ S 7 B T.
	A pinon pine,10 ins.dia.,bears S.23°30'W.,56 lks. dist..mkd.¼ S 12 B T.
80.00	Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.7,12,13,and 18,mkd.on brass cap
	T 43 S in N half
	R 13 W S 12 in NW.
	R 12 W S 7 in NE.

East bdy.T.43 S.,R.13 W.-Continued.

Chains

S 18 in SE.;and

S 13 in SW.quadrants;from which

A cedar,30 ins.dia.,bears N.20°E.,35 lks.

dist..mkd.T 43 S R 12 W S 7 B T.

A cedar,8 ins.dia.,bears S.13°E.,37 lks.

dist..mkd.T 43 S R 12 W S 18 B T.

A cedar,16 ins.dia.,bears S.39°15'W.,55 lks.

dist..mkd.T 43 S R 13 W S 13 B T.

A pinon pine,7 ins.dia.,bears N.81°30'W.,27 lks

dist..,mkd.T 43 S R 13 W S 12 B T.

Land,mountainous and rolling .

Soil,sandy and rocky;2nd and 4th rate.

Timber,cedar and pinon pine.

Undergrowth,sage brush .

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

80.00 chs.

June 1,1909.

June 2,1909:At 7 h 58 m a.m.,l.m .t.I set off 37°03'N.,

on the lat.arc;22° 10'N.,on the decl.arc;and determine

a meridian with the solar,at the cor.of secs.7,12,13,and

18.Thence I run

South,bet.secs.13 and 18.

Over rolling top of Little Creek Mountain;through heavy

timber and scattering undergrowth.

Desc.gradually.

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

ground,for ¼ sec.cor..mkd.on brass cap ¼ S 13 in W half

and S 18 in E half;from which

A cedar,14 ins.dia.,bears N.80°E.,24 lks.

dist..mkd.¼ S 18 B T.

East bdy.T.43 S.,R.13 W.-Continued.

Chains

A pinon pine,8 ins.dia.,bears N.75°W.,13 lks.
dist..mkd.½ S 13 B T.

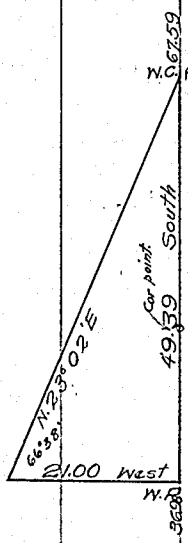
And raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.

67.59 Edge of mountain,bears NW and SE.

Note:From here south the line descends over a precipitious ledge 400 ft.high and continues over ledges which cannot be chained over;therefore at this point I

Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for witness cor.to cor.of secs.13,18,19,and 24, mkd.on brass cap

T 43 S in N half.
R 13 W S 13 in NW.
R 12 W W C S 18 in NE.;
S 19 in SE.;and
S 24 in SW quadrants;from which
A cedar,16 ins.dia.,bears N.33°E.,45 lks.
dist..mkd.W C T 43 S R 12 W S 18 B T.
A cedar,12 ins.dia.,bears N.54°W.,27 lks.dist.,
mkd.W C T 43 S R 13 W S 13 B T.



No other trees within limits;raise a mound of stone,2 ft base,1½ ft.high,W.of cor.

Note:In order to determine the distance across the ledges I place a flag at this point,and as it is impossible to get a suitable base at this point I proceed to a point on line at the foot of the ledges on a small ridge which bears E and W.;from this point I measure a base West 21.00 chs. to a point from which the flag on top of ledge bears N.23°02'E.;from flag the W.end of base bears S.23° 02'W.; I therefore calculate the distance as follows:

tan 66°58' x base or 2.35205 x 21.00 = 49.39 which added to 67.59 makes 116.98 or 36.98 chs.on next mile

116.98 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for witness point,mkd.on brass cap W p in W half; and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

East bdy.of T.43 S.;R.13 W.-Continued.

Chains	
	June 2,1909:At this cor.I set off 22°11'N.,on the decl.arc; and at 11 h 58 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°02'N.,which is the proper lat.nearly.
80.00	The point for cor.of secs.13,18,19,and 24 falls on ledges and cannot be set.
	Land,mountainous and rolling .
	Soil,sandy loam and rocky;2nd and 4th rate.
	Timber,cedar and pinon pine .
	Undergrowth,sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.
	South,bet.secs.19 and 24.
	From witness point which is 36.98 chs.South of the point for cor.of secs.13,18,19,and 24.
	Note:From the point for cor.of secs.13,18,19,and 24 to this point the line passes over a series of ledges and ravines .
	Thence over mountainous land;through scattering timber and scattering undergrowth.
	Desc.
40.00	Counting from sec.cor.point,
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in.the. ground,for ¼ sec.cor..mkd.on brass cap ÷ S 24 in W half and S 19 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
45.00	Bottom of hollow,250 ft.below ridge,course SW.
	Asc.
47.00	Top of spur,30 ft.above hollow,bears E.and W.
	Desc.
51.50	Bottom of hollow,50 ft.below ridge,course S.80°W.

East bdy.of T.43 S.,R.13 W.-Continued.

Chains	
	Asc.
56.15	Top of spur,50 ft.above hollow,bears E.and W.
	Desc.
60.00	Bottom of hollow,25 ft.below spur,course N.20°W.
	Asc.
68;20	Top of gypsum ridge,50 ft.above hollow,bears E.and W.
	Desc.
70.00	Bottom of hollow,20 ft.below ridge,course S.30°W.
	Asc.
75.22	Top of spur,150 ft.above hollow,bears E.and W.
	Desc.
80.00	Point 200 ft.below ridge,
	Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.19,24,25,and 30,mkd.on brass cap
	T 43 S in N half.
	R 13 W S 24 in NW.
	R 12 W S 19 in NE.
	S 30 in SE.;and
	S 25 in SW.quadrants;and raise a mound of stone,
	2 ft.base,1½ ft.high,W. of cor.
	Land,mountainous .
	Soil,sandy and clay loam and rocky;2nd and 4th rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage and rabbit brush.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	June 2,1909.

June 3,1909:At 7 h 58 m a.m.,l.m.t.,I set off 37°02'N.,on the lat.arc;22°18'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,24,25,and 30.

Thence I run

South,bet.secs.25 and 30.

East bdy. of T.43 S.,R.13 W.-Continued.

Chains	
	Over mountainous land;through scattering timber and scattering undergrowth.
	Desc.
2.85	Wash,20 lks.wide,3 ft.deep,course SW.
	Asc.
3.75	Top of spur,40 ft.above wash,bears E.and W.
	Desc.
8.00	Wash,3 lks.wide,5 ft.deep,in bottom of hollow,40 ft. below ridge,course S.25°W.
	Asc.
9.00	Top of spur,30 ft.above hollow,bears N.80°E.and S.80°W.
	Desc.
15.00	Bottom of hollow,40 ft.below ridge,course N.80°W.
	Asc.
16.55	Top of ridge,50 ft.above hol low,bears N.75°E.and S.75°W
	Desc.
25.00	Bottom of hollow,40 ft.below ridge,course S.15°W.
	Asc.
27.20	Top of spur,20 f .above hollow,bears E.and W.
	Desc.
30.00	Bottom of hollow,60 ft below ridge,course N.80°W.
	Asc.
35.00	Top of ridge,75 ft.above hollow,bears N.15°W.and S.15°E.
	Desc.
37.50	Begin abrupt descent,bears E.and W.
40.00	Foot of ridge,80 ft.below top,bears E.and W.
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 25 in W half and S 30 in E half;from which
	A cedar,15 ins.dia.,bears S.86°E.,187 lks. dist..mkd.¼ S 30 B T.
	A cedar,10 ins.dia.,bears S.87°06'W.,170 lks. dist..mkd.¼ S 25 B T.
	Thence over nearly level land.

East bdy.T.43 S.,R.13 W.-Continued.

Chains

50.00 Leave scattering timber,bears E.and W.

Enter dense undergrowth,bears E.and W.

80.00 Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.25,30,31,and 36,mkd.on brass cap

T 43 S in NE half.

R 13 W S 25 in NW.

R 12 W S 30 in NE.

S 31 in SE.;and

S 36 in SW.quadrants;dig pits,18x18x12 ins.,in each sec.;5½ ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,W.of cor.

Land,mountainous and nearly level.

Soil,sandy and clay loam;2nd rate.

Timber,cedar and pinon pine.

Undergrowth,sage and rabbit brush and greasewood.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 80.00 chs.

June 3,1900:At this cor.I set off 22°19'N.,on the decl. arc;and at 11 h 58 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°01'N.,which is the proper lat.nearly.

South,bet.secs.31 and 36.

Over nearly level land;through dense undergrowth.

7.25 Road from Murricane to Kanab,bears N.60°W.and S.60°E.

20.00 Road from Murricane to Kanab,bears N.and W.

Asc.gentle slope bears N.and W.

28.00 Top of rocky ridge,30 ft.above road,bears N.10°E.and S. 10°W.

Desc.

40.00 Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid bedrock,and surrounded by mound of stone,

East bdy.T.43 S.,R.13 W.-Continued.

Chains

for ¼ sec.cor..mkd.on brass cap ¼ S 36 in W half and S 31 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Impossible to set post over 12 ins.in the ground.

45.25 Wash,10 lks.wide,4 ft.deep,in bottom of hollow,30 ft.below ridge,course W.

Asc.gradually.

60.38 Intersect Utah-Arizona bdy.line,12.91 chs.West of the 44th mile stone,which is a gray sandstone,24x14x12 ins., above ground,firmly set,and mkd.and witnessed as described by the surveyor general.

Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for closing cor.of Tps.43 S.,Rs.12 and 13 W., mkd.on brass cap

U T 43 S in N.half,

C C A in S.half,

R 13 W S 36 in NW.

R 12 W S 31 in NE.quadrants; dig pits,30x24x12 ins.

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

Land,rolling .

Soil,sandy and clay loam;2nd rate.

No timber.

Undergrowth,sage and rabbit brush and greasewood and cactus.

Good grass for grazing.

Land covered with dense undergrowth,60.38 chs.

June 3,1909.

BOOK A-361 12

Boundaries of T.43 S.,R.13 W.

Latitudes,Departures,and Closing Errors.

Line Designated	Course	dist-ance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		chs.	chs.	chs.	chs.	chs.
W.bdy.T.43 S.R.13 W.	North	459.52	459.52			
N.bdy.T.43 S.R.13 W.	N.89°52'E.	93.15	.22		93.15	
N.bdy.T.43 S.R.13 W.	N.89°53'E.	80.00	.16		80.00	
N.bdy.T.43 S.R.13 W.	N.89°55'E.	79.65	.12		79.65	
N.bdy.T.43 S.R.13 W.	N.89°54'E.	79.89	.14		79.89	
N.bdy.T.43 S.R.13 W.	N.89°55'E.	79.80	.12		79.80	
N.bdy.T.43 S.R.13 W.	N.89°55'E.	80.18	.12		80.18	
E.bdy.T.43 S.R.13 W.	South	460.38		460.38		
S.bdy.T.43 S.R.13 W.	West	493.99				493.99
Convergency					.55	
Totals			460.40	460.38	493.22	493.99
			460.38			493.22
Error in Lat.			.02			
Error in dep.						.77

General Description.

Note :For general description see notes of subdivision of Tp.

June 3,1909.

Andrew J. Stewart Jr.

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 Andrew J. Stewart Jr., 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 st bdy. T. 43 S., R. 13 W. Salt Lake Base and Meridian, Utah, wing the respective capacities in which they acted:

Maeser Dalley, *Chainman.*

Hector McQuarrie, *Chainman.*

Edmund A. Hendrix, *Moundman.*

John Stewart, *Moundman.*

Laurence Snow, *Axman.*

, *Axman.*

Ren Stewart, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew J. Stewart Jr., United States Deputy Surveyor, in surveying all se parts or portions of the E. bdy. T. 43 S., R. 13 W. of the Salt Lake Base and meridian, State of Utah, 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 Utah.

Maeser Dalley, *Chainman.*

Hector McQuarrie, *Chainman.*

Edmund A. Hendrix, *Moundman.*

John Stewart, *Moundman.*

Laurence Snow, *Axman.*

, *Axman.*

Ren Stewart, *Flagman.*

scribed and sworn to before me this 3rd day of June, 1909.

SEAL

Andrew J. Stewart Jr.

U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew J. Stewart Jr., United States Deputy Survey
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing date
17th day of March, 1909, I have well, faithfully, and truly, in m
proper person, and in strict conformity with the instructions furnished by the United States Su
General for Utah, the Manual of Surveying Instructions, and the laws
United States, surveyed all those parts or portions of E.bdy.T.43 S.,R.13 W.

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

Andrew J. Stewart
United States Deputy Su

Subscribed by said Andrew J. Stewart Jr., and sworn to before me
this 6th day of April 1910, 190X

Thomas Hull
U.S. Surveyor General
for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 1911

The foregoing field notes of the survey of the East Boundary of Township N
South, Range No.13 West of the Salt Lake Base and Meridian, Uta

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 1909, hav
critically examined, and the necessary corrections and explanations made, the said field notes,
surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor

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

United States Surveyor

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BOOK A-361

FILED
JAN 31 1910

J.

FIELD NOTES

Retracement
OF THE ~~SURVEY~~ OF THE

WEST AND NORTH BOUNDARIES

of

Township No.43 South, Range No.14 West,

Of the Salt Lake Base and *Meridian,*

~~State of Utah~~

AS SURVEYED BY

drew J.Stewart Jr. and Leo A.Snow, *United States Deputy Surveyors,*

nder ~~his~~ her *Contract No.* 309, *dated* March 17,1909., ~~190~~

etracement
~~vey~~ *commenced* June 1,1909. ~~190~~

etracement
~~vey~~ *completed* June 5,1909., ~~190~~

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5-03-36
6-05-15
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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman
Samuel Brooks	Chainman
John T. Jervis	Moundman
Henry Savage	Moundman
John A. Humphries	Flagman

BOOK A-361

INDEX DIAGRAM.

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31	32	33	34	35	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Hillman Dalley and Samuel Brooks

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

Retracement West and North Bdys.T.43 S.,R.14 W.,Salt Lake Base and Meridian, Utah.

Hillman Dalley, Chai

Samuel Brooks, Chai

Subscribed and sworn to before me this 3rd day of May 1909., ~~190x~~

Leo A. Snow

U.S.Deputy Surveyor.

SEAL

WE, John T. Jarvis ~~Henry~~ and Henry Savage

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

Retracement North and West Bdys.T.43 S.,R 14 W.,Salt Lake Base an Meridian, Utah.

John T. Jarvis, Moun

Henry Savage, Moun

Subscribed and sworn to before me this 3rd day of May 1909., 190

Leo A. Snow

U.S.Deputy Surveyor.

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, John A. Humphries, 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~~ Retracement North and West bdys.T.43 S.,R.14 W.,Salt Lake Base and Meridian, Utah.

John G Humphries, Fla

Subscribed and sworn to before me this 3rd day of May 1909., ~~190x~~

Leo A. Snow

U.S.Deputy Surveyor.

SEAL

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Retracement West Bdy.T.43S.,R14 W.

Survey commenced June 1,1909,and executed with a W. & L E.Gurley Light Mountain Transit No. - with solar attachment. The horizontal limb was provided with two double verniers placed opposite to each other reading 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 meridian at Salt Lake City.,found correct,and was approved by the Surveyor general for Utah on April 26,1909.

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

At the cor.of secs.25,30,31,and 36,latitude 37°00'39"N., longitude 113°24'39"W.,I set off 37°01'N.,on the lat. arc;22°06'N.,on the decl.arc;and at 3 h 58 m p.m.,l.m.t., I determine a meridian with the solar,and mark a point thereof on a stone firmly set in the sground 5.00 chs. N.of the cor.

June 1,1909 .

June 2,1909.At 2h 44.9m a.m.,l.m.t.,I observe Polaris at eastern elongation, in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground 5.00 chs.N. of the cor.

At 7 h 30 m a.m.,l.m.t.,I lay off the azimuth of Polaras 1°28.6'to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N.of the cor.:this mark falls 0.38

Retracement West Bdy.T.43 S.,R.14 W.- Continued.

Chains	
	ins.east of the meridian established by the solar.
	At 7 h 58 m a.m.,l.m.t.,I set off 37°01'N.,on the lat. arc;22°10'N.,on the decl.arc;and mark a point in the meridian determined by the solar by a cross on the stone already set 5.00 chs.N.of the cor.;this mark falls 0.32 ins.east of the meridian determined by the Polaris observation.
	The solar apparatus by p.m.and a.m.observations defines positions for meridians respectively about 0'20"west and 0'17"east of the meridian established by polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the meridian at 8 h 30 m a.m., is N.16°47'W.,the angle thus determined gives the mean mag.decl.16° 47'E.
	From the cor of secs.25,30,31,and 36,on W.bdy.of TP., which is a sandstone,12 x 4 x 5 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
	Note:Before Commencing the survey of this Tp.I proceed to retrace the West and North bdys. as follows:
	North,on retracement line bet.secs.25 and 30.
40.61	Intersect ¼ Sec.COr.bet.Secs.25 and 30,which is a sandstone,12x7x6 ins.,above ground,firmly set and mkd. and witnessed as described by the surveyor general.
80.02	Intersect the Cor. of Secs. 19,24,25,and 30,which is a sandstone,6x5x4 ins.above ground,firmly set and mkd.and described by the surveyor general.
	The course of this line is therefore North 80.02 chs.

Retracement West Bdy.T.43 S., R.14 W.-Continued.

Chs.	
	North on retracement line bet. Secs. 19 and 24.
40.05	Intersect the ¼ Sec. Cor. bet. Secs.19 and 24,which is a sandstone 5x5x4 ins.above ground,firmly set and mkd.and witnessed as described by the surveyor general.
80.10	Fall 15 lks.East of the Cor. of Secs. 13,18,19,and 24, which is a sandstone,6x5x4 ins.,above ground ,firmly set and mkd.and witnessed as described by the surveyor general. The course of the South½ of this lineis therefore N.40.05 chs.
	The course of the North ½ is N.0°13'W. 40.05 chs.
	No change in topography from original notes.
	June 2,1909 ;at this corner I set off 22°11'N.on the decl.ars;and at 11 h 58 m a.m.,l.m.t. I observe the sun on a meridian the resulting latitude is 37°02'N.,which is the proper latitude nearly.
	North on a retracemnet line bet Secs.13 and 18.
40.05	Ifall 3 lks.East of ¼ Sec.Cor. bet. Secs.13 and 18,which is a sandstone 10x7x4 ins., above ground,firmly set and mkd. and witnessed as described by the surveyor general.
80.10	Fall 7 lks.East of the Cor.of Secs.7,12,13,and 18, which is a sandstone,10x9xx6 ins .,above ground,firmly set and mkd. and witnessed as described by the surveyor general.
	The course of this line is therefore N.0°03'W. 80.10 chs.
	No change in topography from original notes.
	June 2,1909.

Retracement West Bdy.T.43 S.,R.14 W.

Chs.	
	June 3,1909;at 7 h 58 m a.m.l.m.t.I set off 37°03' N on the lat.arc; 22°18'N.on the decl.and determine a meridian with the Solar at the Cor. of Secs. 7,12,13,an 18,thence I run
	North on the retreaement line bet. Secs.7 and 12.
40.00	Intersect ¼ Sec. Cor. bet. Secs. 7 and 12,which is a sandstone,10x5x4 ins.,above ground,firmly set and mkd. and witnessed as described by the surveyor general.
79.99	Intersect the Cor. of Secs.1,6,7, and 12 , which is a sandstone, 10x9x7 ins.,above ground,firmly set and mkd. and witnessed as described by the surveyor general.
	The course of this line is therefore North 79.99 chs.
	No change in topography from origianl notes.
	June 3,1909; at this Cor. I set off 22°18'N.on the decl. arc;and at 11 h 58 m a.m.,l.m.t. I observe the sun on themeridian the resulting latitude is 37°04'N.which is the proper latitude nearly.
	North on a retracement line bet. Secs. 1 and 6.
40.00	Intersect ¼ Sec. Cor. bet. Secs. 1 and 6,which is a sandstone,10x5x4 ins.,above ground,firmly set and mkd. and witnessed as described by the surveyor general.
83.15	Intersect the Cor. of Tps.42 and 43 South R.15 W.,which i

Retracement West Bdy.T.43 S., R.14 W.

Chs. is a sandstone,20x10x8 ins.above ground,firmly set and mkd. and witnessed as described by the surveyor general.
The course of this line is therefore N.83.15 chs.
No change in topgralhy from original notes.

June 3,1909.

Retracement North bdy,T.43 S., R.14 W.

June 4,1909;at 7 h 58 m a.m.,13m.t.I set off 37°05' N. on the lat. arc;22°25'N. on the decl.arc;and determine a meridian withthe solar at the closing Cor.of Tps.42,and 43 S., R.14 W.,which is a sandstone,12x14x10 ins., above ground,firmly set and mkd.and witnessed as described by the surveyor general.
Note. From this cor,the cor. of Tps.42 and 43 S.,R.15 W., bears South 6.63 chs.
Thence I run
East, on retracement line bet.Secs.6 and 31.
44.70 Fall 3.1ks.South of the ¼ Sec. cor.bet. Secs. 6 and 31, which is a sandstone,16x11x4 ins., above ground,firmly set and mkd. and witnessed as described by the surveyor general.
84.70 Fall 8 1ks. South of the Cor. of Secs. 5,6,31 and 32, which is a sandstone,6x12x6 ins.,above ground,firmly set and mkd.and witnessed as described by the surveyor general.
The course of this line is therefore N.89°57'E. 84.70 chs.
No change in topgraphy from original notes.

Retracement North Bdy. T.43 S., R.14 W.-Continued.

Chs.

East, on a retracement linebet.Secs.5 and 32.

39.90 Fall 13 lks.South of the ¼ Sec.cor. bet. Secs. 5 and 32,which is a sandstone,18x10x4 ins., above ground,firmly set and mkd.and witnessed as described by the surveyor general.

80.10 Fall 26 lks. South of the cor. of Secs. 4,5,32 and 33, which is a sandstone,12x12x5 ins., above ground firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N.89°49'E. 80.10 chs

No change in topgraphy from original notes.

June 4,1909;at this cor. I set off 22°26 'N. on the decl. arc; and at 11 h 58 m a.m.,l.m.t. I observe the sun on the meridian,the resulting latitude is 37°05 ' N. which is the proper latitude nearly.

East,on retracement line bet. Secs.4 and 33.

40.04 Fall 14 lks. South of the ¼ Sec.cor.bet.Secs.4 and 33, which is a sandstone,6x10x5 ins. above ground.firmly set and mkd. and witnessed as described by the surveyor gene

80.08 Fall 28 lks.South of the cor. of Secs.3,4,33 and 34,whic is a sandstone,8x11x5 ins., above ground,firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N.89°48' E. 80.08 c

No change in topgraphy from origonal notes.

June 4,1909.

Retracement North Bdy.T.43 S., R.14 W.-Continued.

chs.

June 5,1909;at 7 h 58m a.m.,l.m.t. I set off 37°05'N. on the lat. arc;23°32'N. on the decl.arc;and determine a meridian with the solar at the cor. of Secs.5,4,33,and 34.

Thence I run

East, on retracement line bet. Secs. 3 and 34.

40.00 Fall 15 lks. South of the ¼ Sec.cor.bet.Secs.3 and 34, which is a sandstone 10x9x7 ins. above ground,firmly set and mkd.and witnessed as described by the surveyor general.

80.18 Fall 30 lks. South of the cor. of Secs. 2,3,34 and 35, which is a sandstone 8x10x4 ins.,above the ground,firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N.89°47'E. 80.18 chs.

No change in topgraphy from original notes.

East,on a retracement line bet. Secs.2 and 35.

40.05 Fall 14 lks South of the ¼ Secs.cor. bet. Secs. 2 and 35, which is a sandstone,5x11x8 ins., above ground , firmly set and mkd. and witnessed as described by the surveyor general.

80.07 Fall 28 lks. South of the cor, of Secs.1,2,35 and36, which is a sandstone, 7x9x5 ins., above ground,firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N.89°48'E. 80.07 chs.

No change intopography from original notes.

Retracement North Bdy. T.43 S., R.14 W.

chs. June 5.1909;at this cor.I set off 22°33'N. on the decl. a and at 11 h 58 m a.m.,l.m.t. I observe the sun on the meridian the resulting latitude is 37°05 ' N.which is th proper latitude nearly.

East,on retracement line bet. Secs.1 and 36.

40.00 Fall 15 lks. South of the ¼ Sec. cor.bet Secs. 1 and 36, which is a sandstone,6x5x4 ins,above ground,firmly set and mkd.and witnessed as described by the surveyor gener

80.02 Fall 30 lks.South of the cor. of Tps. 42 and 43 S., Rs.13 and 14 W.,which is a sandstone,12x10x8 ins.,above ground firmly set and mkd. and witnessed as described by the surveyor general.

The course of this line is therfore N.89°47' E.80.02 chs

No change in topography from original notes.

JUne 5,1909.

For General Description see notes of the Subdivision of this township.

Leo A. Snow.

June 5,1909 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

Leo A. Snow, 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 West and North Bdys. T. 43 S., R. 14 W., Salt Lake Base and Meridian, Utah. owing the respective capacities in which they acted:

Hillman Dalley, *Chainman.*

Samuel Brooks, *Chainman.*

John T. Jarvis, *Moundman.*

Henry Savage, *Moundman.*

, *Axman.*

, *Axman.*

John A. Humphries, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted

Leo A. Snow, United States Deputy Surveyor, in surveying all ose parts or portions of the Retracement West and North bdys. T. 43 S., R. 14 W.,

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 s been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the rner monuments established, according to the instructions furnished by the United States Surveyor neral for Utah

Hillman Dalley, *Chainman.*

Samuel Brooks, *Chainman.*

John T. Jarvis, *Moundman.*

Henry Savage, *Moundman.*

, *Axman.*

, *Axman.*

John A. Humphries, *Flagman.*

bscribed and sworn to before me this 27th day of June 1909. ~~xxx~~

SEAL

Leo A. Snow

U. S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, United States Deputy Surv
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing da
17th day of March 1909, 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 lav
United States, surveyed all those parts or portions of Retracement West and North
bdys. T. 43 S., R. 14 W.

of the Salt Lake
Base and meridian, in the State of Utah, which are represent
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 accorda
the Manual of Surveying Instructions, and the special written instructions of the United States
General for Utah and in the specific manner described in the field notes,
the foregoing are the original field notes of such survey.

Leo A. Snow
United States Deputy S

Subscribed by said Leo A. Snow, and sworn to before me
this 26th day of January, 1910.

John T. Woodhu
Clerk Dist. Cou

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19

The foregoing field notes of the ~~survey of~~ Retracement of the West and Nor
Boundaries of Township No. 43 South, Range No. 14 West, of the Sa
Lake Base and Meridian, Utah,

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 190 9, hav
critically examined, and the necessary corrections and explanations ~~made, the said~~ field notes
~~surveys~~ retracements they describe, are hereby approved.

Thomas Hull
United States Surveyor

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

United States Surveyor

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BOOK 4-151

FIELD NOTES

OF THE SURVEY OF THE

Guide Meridian

through

Townships No.42 South

Between Ranges Nos.13 and 14 West

Of the Salt Lake Base and *Meridian,*

State of Utah.

AS SURVEYED BY

Andrew J. Stewart Jr. and Leo A. Snow, *United States Deputy Surveyor,*

under the Contract No. 309 *dated* March 17,1909.

Survey commenced June 6,1909.

Survey completed June 8,1909.

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman
Samuel Brooks	Chainman
John T.Jarvis,	Chainman
Henry Savage	Chainman
George W.Worthen	Moundman
John A.Humphries	Flagman

BOOK A-361

INDEX DIAGRAM.

Township 43 South, *Range* 15 West

6	5	4	3	2	1	2
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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley Samuel Brooks and John T Jarvis and Henry Sav
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

Guide Meridian through Tp.43 S.,bet.Rs.13 and 14 W.,and Pine Valle
Meridian,through Tp.43 S.,bet.Ranges 15 and 16 W.,Salt Lake Base an
Utah.

Hillman Dalley, Cha
Samuel Brooks, Cha
John T. Jarvis Cha
Henry Savage Cha
Leo A. Snow

Subscribed and sworn to before me this 1st day of June 1909. ~~190x~~

SEAL

U.S.Deptuy Surveyor

~~We~~ I George W Worthen ~~are~~

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

Guide Meridian through Tp.43 S.,bet.Rs.13 and 14 W.,and Pine Vall
Guide Meridian,through Tp.43 S.,bet.Rs.15 and 16 W.,Salt Lake Bas
Meridian. Utah.

, Mou
George W. Worthen, Mou

Subscribed and sworn to before me this 1st day of June 1909. ~~190~~

Leo A. Snow

SEAL

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 su

_____, A
_____, A

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

SEAL

_____
_____

I, John A.Humphries, 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 Guide Meridian through Tp.43 S.,bet.Rs.13 and 14 W.,and Pi
Valley Guide Meridian,through Tp.43 S.,Bet.Rs.15 and 16 W.,Salt L
Base and Meridian. Utah.

John A Humphries, Fl

Subscribed and sworn to before me this 1st day of June 1909. ~~190x~~

Leo A. Snow

SEAL

U.S.Deputy Surveyor.

6—151

GUIDE MERIDIAN THROUGH T.43 S..BET.RS.13 and 14 W.

Survey commenced June 6, 1909, and executed with a W. and L.E.Gurley light mountain transit No. with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the Surveyor General for Utah April 26,1909.

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

At the cor.of Tps.42 and 43 S., Rs.13 and 14 W., latitude 37° 05' 00" N.; longitude 113° 18' 09.2" W., I set off 37° 05'N.on the lat.arc; 22° 41'N.on the decl. arc; and at 3 h. 58 m.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.

June 6, 1909.

June 7: At 2 h. 30 m.a.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.

At 7 h. 30 m.a.m.l.m.t.I lay off the azimuth of Polaris 1° 38.6' to the west, and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs.N.of the cor.; this mark

GUIDE MERIDIAN THROUGH T.43 S., BET.RS.13 and 14 W.

Chains

falls 0.30 ins.east of the mark determined by the solar.

At 7 h. 59 m.a.m.l.m.t., I set off 37° 05'N.on the lat arc; 22° 45'N.on the decl.arc; and mark the meridian determined with the solar, by a cross on the stone already set 5.00 chs.N.of the cor.; this mark falls 0.3 ins.east of the meridian determined by Polaris observation.

The solar apparatus by p.m.and a.m.observations defined positions for meridians respectively about 0'16" west and 0' 19" east of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8 h. 30 m a.m.is N.16° 45' W.; the angle thus determined gives the mag.decl.16°45'E.

From the cor.of Tps.42 and 43 S., Rs.13 and 14 W., heretofore described I run

South on a true line bet.secs.1 and 6,

Over rolling mountainous land; through dense sagebrush shadscales, and cactus. Asc.

2.00 Ridge,20 ft.above Tp.cor.,bears N.20°E.and S.20°W.Desc.

31.85 Bottom of long hollow,30 ft.below ridge.course N.20°E. Asc.

Difference between measurements of 40.00 chs.by two set 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 an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground for ¼ sec.cor., mkd.on brass cap ¼.S 1 on W.half and S 6 on E.half;and raise a mound of stone 2 ft.base 1½ ft.high W.of cor.Pits impracticable.

46.45 Sandstone ledge 6 ft.high bears N.20° E. and S.20° W.

Difference between measurements of 80.00 chs.by two set

GUIDE MERIDIAN.

Through T.43S. Bet.Rs.13 and 14 W.- Continued.

Chains. 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 an iron post 3 ft.long,3 ins.dis.,24 ins.in the ground. for cor.of secs.1.6.7.and 12,mkd.on brass cap

T 43 S in N half.

R 13 W S 6 in NE.

S 7 in SE.

S 12 in SW;and

R 14 W S 1 in N W.quadrant;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 mountains.

Soil,gravelly and sandy;3rd rate.

No timber.

Undergrowth,sage brush,shadscales and cactus.

Good grass for grazing.

Land mountainous,or land covered with dense undergrowth.

80.00 chs.

South,on a true line bet.secs.7 and 12.

Over rolling mountainous land;through dense undergrowth.

Asc.

7.00 Top of ridge,40 ft.above sec.cor.,bears N.30°E and S.30°W.

Desc.

Difference between measurements of 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 an iron post,3 ft.long,1 in.dia.,26,ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼S12 on W.half,S 7 on E. half;dig pits,18x18x12 ins.N.and S. of the post,3 ft. dist.; and raise a mound of earth,3½ ft.base,1½ ft.high,

GUIDE MERIDIAN.

Through T.43 S., Bet.Rs.13 and 14 W.-Continued.

Chains.

W. of cor.

73.00 Bottom of hollow,75 ft.below ridge,course NE.

Asc.

Difference between measurements of 80.00 chs. by two set of chaimen is 4 lks.,positoin of middle point.

By 1st set 79.98 chs.

By 2nd set 80.02 chs.;the mean of which is

80.00 Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.7,12,13,and 18,mkd.on brass cap

T 43 S on N half;

R 13 W S 7 NE:

S 18 in SE:

S 13 in SW;and

R14W S 12 in NW quadrant;dig pits 18x18x12ins. 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;2nd rate.

No timber.

Undergrowth,sage brush,bitter brush,shad scales,and cactus.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth

80.00 chs.

June 7,1909:At this cor.I set off 22°45'N.,on the decl. arc;and at 11 h 58 m a.m.,l.m.t.,I observed the sun on the meridian,the resulting.lat.is 37°03'N.,which is the pproper lat.nearly.

South,on a true line bet.secs.13 and 18.

Over rolling mountainous land;through dense undergrowth

Dese.

GUIDE MERIDIAN.

Through T.43 S.,Bet.Rs.13 and 14-Continued.

Chains.

10.00 Top of spur,20 ft.above hollow,bears E.and W.

Decs.

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.

By 2nd set 40.03 chs.;the mean of which is

40.00 Set an iron post,3 ft.long 1 in.in dia.,26 ins.in the ground,for the ¼ sec.cor.,mkd.on brass cap ¼ S 13 on W.half and S 18 on E.half;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.

Difference between measurements of 80.00 chs. by two sets of chainmen is 8 lks.;position of middle point,

By 1st set 79.96 chs.

By 2 nd set 80.04 chs.,the mean of which is

80.00 Set an iron post,3 ft.long,3 ins.dia.,24 ins.in the ground,for cor.of secs.13,18,19,and 24,mkd.on brass cap

R 14 WS13on NW:

R 13 W S 18 on NE:

S 19 on SE:

S.24 on SW.quadrants,and

T 43 S on N half;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 mountains.

Soil,sandy;2nd rate.

No timber.

Undergrowth,sage brush.cactus,greasewood,and rabbit brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 80.00 chs.

June 7,1909.

Through T.43 S.Bet.Rs.13 and 14 W.-Continued.

Chains.	
	June 8, 1909; At $7^h 59^m$ a.m., l.m.t., I set off 37°02'N., on the lat.arc; 22°51'N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.13, 18, 19, and 24.
	Thence I run
	South, on a true line bet.secs.19 and 24.
	Over rolling grounds; through dense undergrowht.
	Asc.
18.50	Top of spur, 30 ft.above sec.cor., bears E.and W.
	Desc.
24.25	Bottom of swale, 40 ft.below spur, course W.
	Asc.
	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.
	By 2nd set 40.03 chs.; the mean of which is
40.00	Set an iron post, 3 ft.long, 1 in.in dia., 12 ins.in the ground, in mound of earth and stone, mkd.on brass cap ¼ S 24 on W.half and S 19 on E. half; and raise a mound of stone 2 ft.base, 1½ ft.high, W.of cor.Impossible to set post over 12 ins.in the ground.
43.50	Top of ridge, 100 ft.above swale, bears NE.and W.
	Desc.abruptly over a series of ledges.
60.00	Leave ledges, bears NE.and SW.
67.25	Bottom of hollow, 1000 ft.below ridge, course SE.
	Asc.
72.50	Top of spur, 100 ft.above hollow, bears NW.and SE.
	Desc.
78.45	Bottom of hollow, below spur, course SE.
	Asc.
	Difference between measurements of 80.00 chs.by two set of chainmen is 12 lks.; position of middle point.
	By 1st set 79.94 chs.
	By 2nd set 80.06 chs.the mean of which is
80.00	Set an iron post 3 ft.long, 3 ins.dia., 12 ins.in the ground, in mound of earth and stone, for cor.of secs.

GUIDE MERIDIAN.

Through T.43 S., Bet.Rs.13 and 14 W.-Continued.

Chains.

19,24 and 25 and 30,mkd.on brass cap

T 43 S on N half

R 14 W S 24 on NW.

R 13 W S 19 on NE.

S 30 on SE.and

S 25 on SW quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor. Impossible to set post over 12 ins.in the ground.

Land mountainous.

Soil,sandy and rocky;2nd and 4th rate.

No timber.

Undergrowth,sage brush,greacewood,oose,and cactus.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

80.00 chs.

South,on a true line bet.secs.25 and 30.

Over rolling foot hills;through dense undergrowth.

Asc.

3.00 Top of spur,10 ft.above sec.cor.,bears NW.and SE.

Desc.gradually.

15.00 Foot of mountain,50 ft.below spur,bears E.and W.

Desc.gradually.

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.

By 2 nd set 40.03 chs.;the mean of which is

40.00 Set an iron post,1 in.in dia.,3 ft.long,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 25 on W. half;and S 30 on E.half;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.

GUIDE MERIDIAN.

Through T.43 S., Bet.Rs.13 and 14 W.-Continued.

Chains	
65.40	Road from Fort Pierce to Hurricane, bears N.80°E. and S.80°W.
72.00	Center of wash, 10 ft. deep, 100 lks. wide, course S.60°W. Difference between measurements of 80.00 chs. by two sets of chainmen is 10 lks.; position of middle point; By 1st set 79.95 chs. By 2nd set 80.05 chs.; the mean of which is,
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, mkd. on brass cap T 43 S. on N. half, R.14 W S 25 on NW. R.13 W S 30 on NE. S 31 on SE. and S 36 on SW quadrant; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, mountainous and hilly. Soil, sandy; 2nd rate. No timber. Undergrowth, sage, oose, mountain rush, and evergreen. Good grass for grazing. Mountainous land, or land covered with dense undergrowt 80.00 chs. June 8, 1909; At this cor., I set off 22°51'N., on the de arc; and st 11 h 59 m a.m., l.m.t., I observe the sun on meridian; the resulting lat. is 37°01'N., which is the proper lat. nearly.

South, on a true line bet. secs. 31 and 36.

Over rolling hills; through dense undergrowth.

Desc. gradually.

GUIDE MERIDIAN.

Through T.43 S., Bet.Rs.13 and 14 W.-Continued.

Chains.

36.45 Wash,75 lks.wide,10 ft.deep,course S.85°W.

Difference between measurements 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 an iron post,3 ft.long,1 in,dia.,26 ins.in the ground for ¼ sec.cor.;mkd.on brass cap ¼ S 36 on W. half;and S 31 on E.half;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.

52.00 Top of low ridge,25 ft.above ¼ sec.cor.,bears E.and W. Decs.gradually.

Difference between measurements of 59.52 chs.by 2 sets of chainmen is 2 lks.;position of middle point,

By 1st set 59.51 chs.

By 2 nd set 59.53 chs.;the mean of which is

59.52 Intersect Utah-Arizona boundary line,27.29 chs. West of the 38th mile cor.which is a sandstone,30x12x12 ins. above ground,firmly set,and mkd.and witnessed as described by the surveyor general.

Set an iron post,3 ft.long 3 ins.dia.,24 ins.in the ground for closing cor.of Tps.43 S.,Rs.13 and 14 W., mkd.on brass cap

U T 43 S., in N half; C C A in S.half,

R 14 W S 36 in NW;and

R 13 W S 31 in NE quadrant;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.Pits impracticable.

Land,rolling.

Soil,sandy;2nd rate.

No timber.

Undergrowth,greasewood and cactus.

Good grass for grazing.

Trend north from

GUIDE MERIDIAN.

Through T.43 S., Rs.13 and 14 W.- Continued.

Chains.

Land covered with dense undergrowth,59.52 chs.

June 8,1909.

Leo A. Sisul

U.S.Deputy Surveyor.

Volume
#
R0361

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____ showing the respective capacities in which they acted:

For list of names and final oath of assistants see book "O", *Chainman.*

T. 43 S., R. 16 W.

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

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

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

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

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surve
solemnly swear that, in pursuance of a contract received from .....
United States Surveyor General for ....., bearing date
..... day of ....., 190 , I have well, faithfully, and truly, in n
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 oath of deputy see book "O" T. 43 S., R. 16 W.
.....
.....
..... 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
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, a
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, April 19, 1911

The foregoing field notes of the survey of the Guide Meridian through Towns
No. 43 South, Between Ranges Nos. 13 and 14 West of the Salt Lake B
Meridian, Utah,
.....
.....
.....
.....

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 1909, havi
critically examined, and the necessary corrections and explanations made, the said field notes,
surveys they describe, are hereby approved.

Thomas Hall
United States Surveyor G

I certify that the foregoing transcript of the field notes of the above-described surveys in .....
....., has been correctly copied from the original notes on file in this o

.....
United States Surveyor G

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4—679.

S
BOOK A-361

FILED
JAN 29 1910

FIELD NOTES

M.S.B.

Retracement
OF THE ~~SURVEY~~ OF THE

UTAH - ARIZONA BOUNDARY

through

T.43 S.,

Range 13 West

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Andrew J. Stewart Jr. and Leo A. Snow, *United States Deputy Surveyor,*s

Under their *Contract No.* 309, *dated* March 17, 1909. ~~190~~

Retracement ~~Survey~~ *commenced* June 27, 1909, ~~190~~

Retracement ~~Survey~~ *completed* June 28, 1909. ~~190~~ x

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5 79 61

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Maeser Dalley	Chainman
Hector McQuarrie	Chainman
Edmund A.Hendrix	Moundman
John Stewart	Moundman
Laurence Snow	Axman
Ren Stewart	Flagman

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BOOK A-361

INDEX DIAGRAM.

Township 43 South, *Range* 13 West

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

1 1 2 2 3 3

Meanders Page

BOOK A-361

PRELIMINARY OATHS OF ASSISTANTS.

We, Maeser Dalley and Hector McQuarrie 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 s retracement Utah-Arizona bdy. through Range 13 West, of the Salt L Meridian, Utah.

Maeser Dalley, Cha

Hector McQuarrie, Cha

Subscribed and sworn to before me this 20th day of June, 1909.

SEAL

Andrew J. Stewart Jr

U.S. Deputy Surveyor

We, Edmund A. Hendrix and John Stewart 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 s Retracement Utah-Arizona bdy. through Range 13 West, of the Salt L Meridian, Utah.

Edmund A. Hendrix Mou

John Stewart, Mou

Subscribed and sworn to before me this 20th day of June, 190 9.

SEAL

Andrew J. Stewart Jr

U.S. Deputy Survey

~~We,~~ I Laurence Snow ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of axm~~en~~ in the establishment of and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the s retracement Utah-Arizona bdy. through Range 13 West, of the Salt L Meridian, Utah.

Laurence Snow,

Subscribed and sworn to before me this 20th day of June, 190 9.

SEAL

Andrew J. Stewart Jr

U.S. Deputy Surveyor

I, Ren Stewart, 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~~ retracement Utah-Arizona bdy. through Range 13 West, of the Salt Lake Meridian, Utah.

Ren Stewart, Fl

Subscribed and sworn to before me this 20th day of June, 190 9.

SEAL

Andrew J. Stewart Jr

U.S. Deputy Surveyor

6-13

Retracement Utah -Arizona Bdy. through Range 13 W.

Survey commenced June 27,1909, and executed with a Young and Sons light mountain transit, No.7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general, on April 26,1909.

At the 38th mile post on the Utah -Arizona bdy., heretofore described, I set off 37°00'N., on the lat.arc; 23°21'N. on the decl.arc; and at 8 h 3 m a.m., l.m.t., I determine a meridian with the solar.

Note: For more complete test of instrument see notes of Subdivision of Tp.43 S., R.13 W.

Note: On account of the closings on the Utah -Arizona bdy. I find it necessary to retrace part of said bdy. as follows.

East, on retracement line along 39th mile.

66.18 Intersect the closing cor. of secs.31 and 32, subdivision T.43 S., R.13 W., heretofore Described.

79.95 Intersect the 39th mile cor. on the bdy. which is heretofore described.

The course of this line is therefore East, 79.95 chs.

No change in topography from original notes.

East, on retracement line along 40th mile on Utah-Arizona bdy.

66.12 Intersect the closing cor. of secs.32 and 33, subdivision T.43 S., R.13 W., heretofore described.

80.00 Intersect the 40th mile cor, on the bdy., heretofore described.

The course of this line is therefore East 80.00 chs.

Retracement Utah-Arizona bdy.through Range 13 West.-Contd.

Chains

No change in topography from original notes.

June 27,1909,At this cor.I set off 23°21'N.,on the decl. arc;and at 0 h 3 m p.m.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°00'N.,which is the proper lat.nearly.

East,on retracement line along 41st mile on Utah-Arizona bdy.

65.85 Intersect the closing cor.of secs.33 and 34,Subdivision T.43 S.R.13 W.,heretofore described.

80.42 Intersect the 41st mile cor.on bdy.,heretofore described.

The course of this line is therefore East,80.42 chs.

No change in topography from original notes.

June 27,1909.

June 28,1909:At 8 h 3 m a.m.,l.m.t.,I set off 37°09'N., on the lat.arc;23°19'N.,on the decl.arc;and determine a meridian with the solar,at the 41st mile cor.on Utah-~~Ar~~ Arizona bdy.

Thence I run

East,on a retracement line along the 42nd mile

65.85 Intersect closing cor.of secs.34 and 35,subdivision of T.43 S.,R.13 W.,heretofore described.

78.34 Intersect 42nd mile cor.,on bdy.,heretofore described.

The course of this line is therefore East 78.34 chs.

No change in topography from original notes .

Retracement Utah Arizona Bdy. through Range 13 West.-Continued.

Chains	
	East, on retracement line along 43rd mile along Utah-Arizona bdy.
68.00	Intersect closing cor. of secs. 35 and 36, subdivision T. 43 S., R. 13 W., heretofore described.
80.90	Intersect 43rd mile cor. on the bdy., heretofore described. The course of this line is therefore East, 80.90 chs. No change in topography from origianl notes. June 28, 1909: At this cor. I set off 23°18'N., on the decl. arc; and at 0 h 3 m p.m., m.m.t., I observe the sun on the meridian the resulting lat. is 37°00'N., which is the proper lat. nearly.

East, on a retracement line along the 44th mile on Utah-Arizona bdy.

67.09	Intersect closing cor. of Tps. 43 S., Rs. 12 and 13 W., heretofore described.
80.00	The 44th mile cor. on the bdy. heretofore described. The course of this line is therefore East, 80.00 chs. No change in topography from original notes.

June 28, 1909.

Andrew J. Stewart Jr.
U.S. Deputy Surveyor.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Andrew J. Stewart Jr., 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 Retracement ...ah-Arizona bdy. through Range 13 West, of the Salt Lake Meridian, Utah, ...wing the respective capacities in which they acted:

Maeser Dalley, *Chainman.*

Hector McQuarrie, *Chainman.*

Edmund A. Hendrix, *Moundman.*

John Stewart, *Moundman.*

Laurence Snow, *Axman.*

, *Axman.*

...Ren Stewart, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Andrew J. Stewart Jr., United States Deputy Surveyor, in surveying all ...se parts or portions of the retracement Utah-Arizona bdy; through Range 13 West.

of the Salt Lake ...d 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 ...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.

Maeser Dalley, *Chainman.*

Hector McQuarrie, *Chainman.*

Edmund A. Hendrix, *Moundman.*

John Stewart, *Moundman.*

Laurence Snow, *Axman.*

, *Axman.*

Ren Stewart, *Flagman.*

...oscribed and sworn to before me this 29th day of June, 190 9.

SEAL

Andrew J. Stewart Jr.

U.S. Deputy Surveyor.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Andrew J. Stewart Jr., United States Deputy Surve
solemnly swear that, in pursuance of a contract received from Thomas Hull
United States Surveyor General for Utah, bearing dat
17th day of March, 190 9, I have well, faithfully, and truly, in r
proper person, and in strict conformity with the instructions furnished by the United States Su
General for Utah, the Manual of Surveying Instructions, and the law
United States, surveyed all those parts or portions of Retracement Utah-Arizona bdy.
through Range 13 West.

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

Andrew J. Stewart Jr.
United States Deputy S

Subscribed by said Andrew J. Stewart Jr., and sworn to before me
this 6th day of April 1910., ~~190 9~~

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19,

The foregoing field notes of the ~~survey~~ retracement of the Utah-Arizona
Boundary, through Range 13 West of the Salt Lake Meridian, Utah

executed by Andrew J. Stewart Jr. and Leo A. Snow
under ~~his~~ their contract No. 309, dated March 17, 1909, hav
critically examined, and the necessary corrections and explanations made, the said field notes,
~~surveys~~ retracements they describe, are hereby approved.

Thomas Hull
United States Surveyor

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

United States Surveyor

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4—679.

BOOK A-361

L.

M.S.B.

FIELD NOTES

OF THE SURVEY OF THE

~~SUBDIVISION~~

of

Township No. 43 South Range No. 13 West,

Of the ~~Salt Lake Base and~~ *Meridian,*

State of Utah

AS SURVEYED BY

drew J. Stewart, Jr. and Leo A. Snow, *United States Deputy Surveyor,* s

nder ~~his~~ their *Contract No.* 309, *dated* March 17, 1909. ~~100~~

urvey commenced June 4, 1909. ~~100~~

urvey completed June 26, 1909. ~~100~~

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59-42-44 67-11

BOOK A 361

NAMES AND DUTIES OF ASSISTANTS.

Maeser Dalley	Chainman
Hector McQuarrie	Chainman
Edmund A. Hendrix	Moundman
John Stewart	Moundman
Laurence Snow	Axman
Red Stewart	Flagman

For preliminary affidavits see book "H" T.42 S., R.13 W.

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INDEX DIAGRAM.

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18 61 63	17 47 62	16 35 48	15 23 36	14 7 24	13 8
19 64 66	20 49 65	21 37 51	22 25 39	23 11 26	24 13
30 67 69	29 52 68	28 40 53	27 28 41	26 14 29	25 16
31 70	32 54	33 42	34 30	35 16	36

Meanders Page

BOOK A-304

PRELIMINARY OATHS OF ASSISTANTS.

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

.....*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
.....

.....*Mou*

.....*Mou*

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

.....

SEAL

.....

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

.....

.....

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

.....

SEAL

.....

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

.....*F*

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

.....

SEAL

.....

Subdivision of T.43 S.,R.13 W.

Survey commenced June 4, 1909, and executed with a Young and Sons light mountain transit No.7382, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, April 26, 1909.

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

At the cor/of secs/1, 2, 35, and 36, on N.bdy. of TP., latitude 37°05'00"N., longitude 113°12'45"W., I set off 37° 05'N., on the lat.arc; 22°28'N., on the decl.arc; and at 3 h 58 m p.m., l.m.t., I determine a meridian with the solar and mark a point in the line thus determined on a stone firmly set in the ground, 5.00 chs.N. of the cor.

June 4, 1909.

June 5, 1909, At 2 h 38.4m a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined by a tack driven a a wooden plug set in the ground, 5.00 chs.N. of the cor.

At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris 1°28.6' to the west, and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs.N. of the cor.; this mark falls 0.32

ins. east of the meridian determined with the solar.

At 7 h 58 m a.m., l.m.t., I set off 37°05'N., on the lat. a 22°32'N., on the decl. arc: and mark the meridian determi ed with the solar, by a cross on the stone already set 5/00 chs. N. of the cor.; this mark falls 0.35 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'17" west and 0'18" east of the meridian established by Polaris observation; therefore I conclude that the adjustments o the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., is N.16°53'W., the angle thus determined, gives the mag decl. 16°53'E.

Begin at the cor/. of secs. 1, 2, 35 and 36, on N. bdy. of Tp. which is a limestone, 5x7x6 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor gen al.

Thence I run

S.0°1'E., bet. secs. 1 and 2.

Over rolling land; through dense undergrowth and scatte ing timber

Desc.

17.30 Begin abrupt descent over ledges, bears NW and SE.

23.30 Bottom of hollow, 125 ft. below sec. cor., bears N.40°W. and S.40°E.

Leave ledges, bears N.40°W. and S.40°E.

Asc.

38.00 Top of spur, 75 ft. above hollow, bears E. and W.

Desc.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

40.00 Set an iron post,3 ft.long;1 in.in dia.,12 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for ¼ sec.cor..mkd.on brass cap ¼ S 2 in W half and S 1 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor. Impossible to set post 26 ins.in ground.

42.00 Bottom of hollow,75 ft.below ridge,course N.60°W.

Asc.

50.00 Top of ridge,75 ft.above hollow,bears E.and W.

Desc.

62.70 Main wash,60 lks.wide,and 3 ft. deep,30 ft.below ridge, course N.30°W.in bottom of hollow,50 ft.below ridge.

Asc.

70.00 Begin more abrupt ascent;bears N.20°W.and S.20°E.

79.60 Top of volcanic spur,250 ft.above wash,bears E.and W.

Desc.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.1,2,11,and 12,mkd.on brass cap

T 43 S S 2 in NW.

R 13 W S 1 in NE.

S 12 in SE.;and

S 11 in SW.quadrants; and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Land,mountainous and rolling .

Soil,sandy and clay loam;2nd rate.

Timber,cedar and pinon pine.

Undergrowth,sage brush,greasewood and juniper brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 80.00 chs.

N.89°55'E.,on a random line bet.secs.1 and 12.

40.00 Set temp.¼ sec.cor.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

80.12 Intersect E.bdy.of Tp.21 lks.N.of the cor.of secs.1,6, 7,and 12,heretofore described.

Thence I run

N.89°56'W.,on a true line bet.secs.1 and 12.

Over mountainous land;through scattering timber and dense undergrowth.

Desc.

19.00 Bottom of canon,250 ft.below sec.cor.,course N.20°W.

Asc.

38.60 Top of ridge,225 ft.above canon,bears N.and S.

Desc.

40.06 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 1 in N half and S 12 in S half;and raise a mound of stone, 2 ft.base, 1½ ftlhigh,N.of cor.

45.00 Foot of abrupt descent,bears N.and S.

Desc.gradually.

70.60 Road from Hurricane to Kanab,bears N.and S.

75.00 Wash,30 lks.wide,3 ft.deep,in bottom of hollow,300 ft. below ridge,course N.10°W.

Asc.

80.12 The cor.of secs.1,2,11,and 12.

Land,mountainous and rolling.

Soil,sandy and clay loam;2nd rate.

Timber,cedar and pinon pine.

Undergrowth,greasewood and matchwood.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 80.12 chs.

June 5,1909:At this cor.I set off 22°33'N.,on the decl arc;and at 11 h 58 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°04'N.,which is the proper lat.nearly.

Subdivision of T.43 S.,R.13 W.-Continued.

Chain	
	S.0°1'E.,bet.secs.11 and 12.
	Over mountainous land;through greasewood and matchwood undergrowth and scattering timber .
	Desc. along east slope of volcanic mountain.
25.00	Foot of steep descent,150 ft.below sec.cor.,bears E.and W.
25.50	Bottom of hollow,150 ft.below sec.cor.,course E.
	Asc.
30.00	Trail,bears NE and SW.
35.00	Top of spur,25 ft.above hollow,bears E.and W.
	Desc.
36.65	Bottom of hollow,50 ft.below spur,course E.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 11 in W half and S 12 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
44.40	Top of volcanic mountain,200 ft.above hollow,bears N.80E°. and S.80°W.
	Thence across top of mountain.
52.40	Leave mountain top,bears N.60°E.and S.60°W.
	Desc.abruptly.
59.25	Foot of descent,200 ft.below ridge,bears E.and W.
60.75	Road from Hurricane to Kanab,bears N.75°E.and S.75°W.
61.00	Wash,10 lks.wide,3 ft.deep,in bottom of hollow,200 ft. below ridge,course S.75°W.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.11,12,13,and 14,mkd.on brass cap T 43 S S 11 in NW. R 13 W S 12 in NE., S 13 in SE.;and S 14 in SW.quadrants;and raise a mound of stone 2 ft.base ,1½ ft.high,W.of cor.
	Land,mountainous .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,greasewood and matchwood .
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	June 5,1909.
	June 6,1909:At 7 h 58 m a.m.,l.m.t.,I set off 37°03'N., on the lat.arc;22°39'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.11,12,13,and 14.
	Thence I run
	S.89°56'E.,on a random line bet.secs.12 and 13.
40.00	Set temp.¼ sec.cor.
80.00	Intersect E.bdy.of Tp.,10 lks.S.of the cor.of secs.7,12, 13,and 18,heretofore described.
	Thence I run
	West,on a true line bet.secs.12 and 13.
	Over rolling top of Litte Creek mountain;through heavy timber and scattering undergrowth.
	Asc.gradually.
23.33	Leave top of mountain,bears N.and S.Leave timber bears N.
	Desc.abruptly over ledges.
40.00	Set an iron post, 3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 12 in N half and S 13 in S half;and raise a mound of stone,2 ft.base 1½ ft.high,N.of cor.
55.00	Foot of abrupt descent,500 ft.below top of mountain, bears NE and SW.
	Leave ledges,bears NE.and SW.
	Desc.gradually.
62.00	Wash,20 lks.wide,4 ft.deep,in bottom of hollow,600 ft. below mountain,course SW.

Subdivision of T.43.S.,R.13 W.-Continued.

Chains	
	Asc.
66.45	Top of volcanic ridge,60 ft.above hollow,bears NE and SW.
	Desc.
77.00	Wash,5 lks.wide,2 ft.deep,course S.
	Asc.
77.85	Wood road,bears N and S..
80.00	The cor.of secs.11,12,13,and 14.
	Land,mountainous .
	Soil,clay and sandy loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage brush and greasewood.
	Good grass for grazing.
	Mountainous or heavily timbered land,80.00 chs.

	S.0°1'E.,bet.secs.13 and 14.
	Over mountainous land;through scattering undergrowth and scattering timber .
	Desc.
6.55	Wash,5 lks.wide,2 ft.deep,course NW.
8.80	Top of ridge,20 ft.above wash,bears N.20°W.and S.20°E.
	Desc.
11.75	Bottom of hollow,30 ft.below ridge,course W. Asc.
20.00	Leave timber,bears E.and W.
	Top of ascent,bears E.and W. Thence over nearly level land.
22.00	Wood road,bears NE and SW.
23.70	Enter scattering timber,bears E.and W.
23.80	Begin ascent,bears E.and W.
29.62	Same road,bears NW and SE.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 14 in W half and S 13 in E half;from which

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

A cedar,12 ins.dia.,bears N.66°25'E.,55 lks.
dist..mkd.¼ S 13 B T.
A cedar,8 ins.dia.,bears N.77°45'W.,12 lks.
dist..mkd.¼ S 14 B T.

45.00 Top of round knoll,20 ft.high,

Desc.

72.00 Ledge,30 ft high,bears N.30°W.and S.30°E.

Continue descent.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.13,14,23,and 24,mkd.on brass cap

T 43 S S 14 in NW.
R 13 W S 13 in NE.
S 24 in SE.;and
S 23 in SW.quadrants;from which
A cedar,12 ins.dia.,bears N.25°E.,152 lks.
dist..mkd.T 43 S R 13 W S 13 B T.
A cedar,8 ins.dia.,bears S.56°30'E.,105 lks.
dist..mkd.T 43 S R 13 W S 24 B T.
A cedar,4 ins.dia.,bears S.64°20'W.,12 lks.
dist..mkd.T 43 S R 13 W S 23 B T.
A cedar,6 ins.dia.,bears N.24°15'W.,122 lks.
dist..mkd.T 43 S R 13 W S 14 B T.

Land,mountainous and rolling .

Soil,sandy and clay loam;2nd rate.

Timber,cedar and pinon pine.

Undergrowth,sage brush,greasewood and matchwood .

Good grass for grazing.

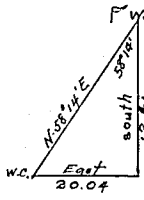
Mountainous land,80.00 chs.

June 6,1909:At the noon hour the sky is overcast and solar observations are impossible.

East;on a random line bet.secs.13 and 24.

Subdivision of T. 43 S., R. 13 W.- Continued.

Chains	
40.00	Set temp. ½ sec.cor.
70.00	Edge of series of perpendicular ledges. Impossible to chain farther. It is also impossible to offset from this point, therefore I return to a convenient point from which to offset, at
60.00	Set temp. witness cor.
	From this point a flag at the witness cor.to cor.of secs.13,18,19, and 24, which is 12.41 chs.north of cor. point bears N.58° 14'E.
	Thence I run north 12.41 chs.to a point from which the witness cor.to cor.of secs.13,18,19, and 24 bears East. From the witness cor.on Tp.line, the flag at 60.00 chs. bears S.58° 14'W.
	It is impossible to chain east from this point, therefore I use the distance just measured as a base for triangulation and compute the distance to the witness cor.to cor.of secs.13,18,19, and 24 as follows: Tan.58°14' x base, or 1.61493 x 12.41 equals 20.04, this distance added to 60.00 chs.makes
80.04	Intersect E.bdy.of Tp.at the witness cor.to cor.of secs. 13,18,19, and 24, heretofore described. Thence I run
	West on true offset line bet.secs.13 and 24,
	Descend along breaks of Little Creek Mountain; through scattering timber, and scattering undergrowth.
8.00	Ridge 300 ft.below cor., bears N. and S. Note: This distance is estimated. Descend.
20.04	Offset South 12.41 chs.to point on true line bet.secs. 13 and 24. Thence I run
	East 10.00 chs.to the point measured to on random line, and which is 10.04 chs.west of the point for cor.of secs. 13,18,19, and 24,
	Set an iron post 3 ft.long, 2 ins.dia., 24 ins.in the ground, for witness cor.to cor.of secs.13,18,19, and 24, marked on brass cap,



Subdivision of T. 43 S., R. 13 W.- Continued.

Chains	
	T 43 S R 13 W S 13 R 12 W S 18 in N.half, W C S 24 S 19 in S.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. Thence I run
	West on true line bet.secs.13 and 24, counting from point for cor.of secs.13,18,19, and 24,
	Over mountainous land; through scattering timber and scattering undergrowth.
	Desc.abruptly.
13.00	Top of ledge, 200 ft.high bears N.25° E. and S.25° W.
17.70	Bottom of hollow, 75 ft.below ledge, course S.55° W.
	Asc.
25.00	Top of spur, 75 ft.above hollow, bears NE. and SW.
	Desc.
27.30	Bottom of hollow, 75 ft.below ridge, course SW.
	Asc.
30.00	Top of gypsum ridge, 20 ft.above hollow, bears N.60° E. and S.60° W.
	Desc.
37.00	Wash, 10 lks.wide, 3 ft.deep, in bottom of hollow, 50 ft.below ridge, course SW.
	Asc.
37.50	Top of ridge, 20 ft.above hollow, bears NE. and SW.
	Desc.
40.02	Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., mkd. on brass cap ¼ S 13 in N.half, S 24 in S.half; from which
	A cedar 6 ins.dia.bears N.25° 45'W. 109 lks.dist. marked ½ S 13 B T
	A cedar 5 ins.dia.bears S.72° 30'E. 22 lks.dist. marked ¼ S 24 B T
46.00	Bottom of hollow, 10 ft.below ridge, course S.20° W.
	Asc.
51.70	Top of ridge, 30 ft.above hollow, bears SW. and NE.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Desc.
55.80	Wash,30 lks.wide,4 ft.deep,course S.10°W. in hollow,20 ft.below ridge.course S.10°W.
	Asc.
60.00	Top of spur,100 ft.above hollow,bears N.20°E.and S.20°W
	Desc.
64.00	Wash,10 lks.wide,2 ft.deep,in bottom of hollow,20 ft. below ridge,course S.20°W.
	Asc.
67.00	Top of spur,20 ft.above hollow,bears N.30°E.and S.30° W.
	Desc.
70.00	Wash,20 lks.wide,2 ft.deep,in bottom of hollow,15 ft.below spur,course SW.
	Asc.
74.00	Top of spur,30 ft.above hollow,bears N.30°W.and S.30°E.
	Desc.
74.80	Wash,30 lks.wide,3 ft.deep,course S.
	Continue descent.
80.04	The cor.of secs.13,14,23,and 24.
	Land,mountainous .
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,greasewood and matchwood.
	Good grass for grazing.
	Mountainous land,80.04 chs.

June 6,1909.

June 7,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;22°45'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.13, 14,23,and 24.

Thence I run

Subdivision of T.43 S., R.13 W.-Continued.

Chains	
	S.0°1'E., bet.secs.23 and 24.
	Over rolling mountainous land; through scattering timber and scattering undergrowth.
	Desc.
19.05	Bottom of wash, 40 lks.wide, 4 ft.deep, in bottom of broad hollow, 40 ft.below sec.cor., course S.
	Desc.
23.65	Leave wash and hollow, course S.15°W.
	Asc.
29.10	Same wash, 20 lks.wide, 4 ft.deep, course SE, in bottom of hollow, course SE.
	Asc.
31.65	Road from Hurricane to Kanab, bears N.25°W. and S.25°E.
	Leave timber, bears N.W. and SE.
39.50	Top of spur, 50 ft.above hollow, bears NW and SE.
	Desc.
40.00	Set an iron post, 3 ft.long, 1 in.in dia., 12 ins.in the ground, on solid rock bottom and surrounded by mound of stone, for ¼ sec.cor. mkd.on brass cap ¼ S 23 in W half and S 24 in E half; and raise a mound of stone, 2 ft. base, 1½ ft.high, W.of cor.
41.00	Bottom of hollow, 30 ft.below ridge, course S.30°E.
	Asc.
45.00	Top of spur, 30 ft.above hollow, bears NW and SE.
	Desc.
74.70	Bottom of hollow, 35 ft.below ridge, course S.25°E.
	Asc.
80.00	Set an iron post, 3 ft.long, 2 ins.in dia., 12 ins.in the ground, on solid rock bottom and surrounded by mound of stone, for cor. of secs.23, 24, 25, and 26, mkd.on brass cap T 43 S S 23 in NW. R 13 W S 24 in NE. S 25 in SE. and S 26 in SW. quadrants; and raise a mound of stone, 2 ft.base, 1½ ft.high, W.of cor.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Land,mountainous .
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinon pine,.
	Undergrowth,sage brush,greasewood,matchwood,and cactus.
	Good grass for grazing.
	Mountainous land,80.00 chs.
	June 7: At the noon hour sky overcast ;obs.for lat.impossible.
	East,on a random line bet.secs.24 and 25.
40.00	Set temp.¼ sec.cor.
80.20	Intersect E.bdy.of Tp.,25 lks.S.of the cor.of secs. 19,24,25,and 30,heretofore described.
	Thence I run
	S.89°49'W.,on a true line bet.secs.24 and 25.
	Over mountainous land;through scattering timber and dense undergrowth.
	Desc.
5.00	Bottom of hollow,40 ft.below sec.cor.,course S.
	Asc.
9.00	Top of ridge, 20 ft.above hollow,bears N.and S.
	Desc.
10.50	Foot of abrupt descent,bears N.and S.
	Desc.gradually.
19.00	Bottom of hollow,80 ft.below ridge,course SW.
	Asc.
37.55	Top of gypsum ridge,40 ft.above hollow,bears N.45°E.and S.45°W;
	Desc.
40.10	Set an iron post,3 ft.long,1 in.in dia.,24 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 24 in N half and S 25 in S half;from which
	A cedar,8 ins.dia.,bears N.45°E.,30 lks. dist..mkd.¼ S 24 B T.

Subdivision of T. 13 S. R. 13 W.-Continued.

Chains	
	A cedar, 4 ins.dia., bears S.45°30'E., 42 lks. dist..mkd. 1/4 S 25 B T.
47.65	Wash 12 lks.wide, 2 ft.deep, in bottom of hollow, 30 ft. below ridge, course S.75°E.
	Asc.
50.00	Top of spur, 40 ft.above hollow, bears NE and SW.
	Desc.
65.40	Road from Hurricane to Kanab, bears N.15°E.and S.15°W.
68.65	Wash, 50 lks.wide, 4 ft.deep, in bottom of broad hollow, 20 ft.below ridge, course S.20°E.
	Asc.
76.50	Top of spur, 30 ft.above hollow, bears N.15°W.and S.15°E.
	Desc.
77.25	Bottom of hollow, 30 ft.below spur, course S.15°E.
	Asc.
80.20	The cor.of secs.23, 24, 25, and 26.
	Land, mountainous .
	Soil, sandy and clay ;3rd rate.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush, matchwood, and rabbit brush.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth, 80.20 chs.
	June 7, 1909.

June 8, 1909: At 7 h 59 m a.m., l.m.t., I set off 37°02'N., on the lat.arc; 22°51'N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.23, 24, 25, and 26.

Thence I run

S.0°1'E., bet.secs.25 and 26.

Over rolling land; through scattering undergrowth.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Asc.
2.95	Top of spur,30 ft.above cor.,bears N.85°W.and S.85°E.
	Desc.
22.55	Bottom of hollow,75 ft.below ridge,course S.80°W.
	Asc.
26.65	Top of ridge,90 ft.above hollow,bears N.80°E.and S.80°W.
	Desc.
36.10	Bottom of hollow,85 ft.below ridge,course SW.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.india.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 26 in W half and S 25 in E half;and raise a mound of stone,2 ft.base 1½ ft.high,W.of cor.
44.75	Top of spur,80 ft.above hollow,bears E.and W.
	Desc.
49.10	Bottom of hollow,20 ft.below ridge,course N.30°E.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.25,26,35,and 36,mkd.on brass cap T 43 S S 26 in NW. R 13 W S 25 in NE. S 36 in SE.;and S 35 in SW.quadrants;and raise a mound of earth and stone,2 ft.base,1½ ft.high,W.of cor.
	Pits,impracticable.
	Land,rolling.
	Soil,sandy and clay loam;2nd rate.
	No timber.
	Undergrowth;sage brush,matchwood,and rabbit brush.
	Good grass for grazing.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	N.89°49'E.,on a random line bet.secs.25 and 36.
40.00	Set temp.¼ sec.cor.
80.00	Intersect E.bdy.of Tp.,7 lks.S.of the cor.of secs.25,30, 31,and 36,heretofore described.
	Thence I run
	S.89°46'W.,on a true line bet.secs.25 and 36.
	Over nearly level land;through dense undergrowth.
	Desc.gently.
11.40	Road from Hurricane to Kanab,bears N.80°W.and S.80°E.
30.00	Foot of descent,bears N.and S.
40.00	Set an iron post,3ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 25 in N half and S 36 in S half;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.
52.30	Wash,15 lks.wide,4 ft.deep,in broad hollow,course N.30° W.
62.50	Road from Hurricane to Kanab,bears N.and S.
70.00	Begin ascent,bears N.and S.
80.00	The cor.of secs.25,26,35,and 36.
	Land,nearly level.
	Soil,sandy and clay loam;2nd rate.
	No timber.
	Undergrowth,sage brush,matchwood and rabbit brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	June 8,1909:At this cor.I set off 22°51'N.,on the decl. arc;and at 11 h 59 m a.m.,l.m.t.,I observe the sun on th meridian the resulting lat.is 37°01'N.,which is the proper lat.nearly.

S.0°1'E.,on a true line bet.secs.35 and 36.

Subdivision of T.43 S.,R.13 W.

Chains	
	Over nearly level land;through scattering undergrowth. Asc.gently.
30.35	Road from St.George to Kanab,bears E.and W.
32.20	Road from St.George to Kanab,bears E.and W.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 35 in W half and S 36 in E half;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.
41.00	Top of flat ridge,20 ft.above sec.cor.,bears E.and W. Desc.gradually.
59.80	Intersect Utah-Arizona bdy.12.90 chs.West of the 43rd mile post,which is an iron post,3 ins.in dia.,and projecting 12 ins.above the ground,firmly set,and mkd. and witnessed as described by the surveyor general. Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.35,and 36,mkd.on brass cap C C A in S half U in N half. T 43 S S 35 in NW.;and R 13 W S 36 in NE.quadrants;dig pits,24x18x12 ins. crosswise on each line,E and W 3 ft.,and N.of post,7 ft. dist.;and raise a mound of earth,4 ft.base,2 ft.high,N. of cor.
	Land,nearly level.
	Soil,sandy loam;2nd rate.
	No Timber,
	Undergrowth,matchwood and greasewood.
	Good grass for grazing.

June 8,1909.

June 9,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°05' N.,

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	on the lat.arc;22°56'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.2,3,34,and 35,on N.bdy.of Tp.,heretofore described.
	Thence I run
	S.0°1'E.,bet.secs.2 and 3.
	Over rolling mountainous land;through dense undergrowth.
	Asc.
15.00	Top of flat ridge,30 ft.above sec.cor.,bears E.and W.
	Desc.
33.35	Bottom of hollow,40 ft.below ridge,course W.
	Asc.
38.90	Top of flat ridge, 20 ft.above hollow,bears S.80°E. and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,14 ins.in the ground,on solid rock ,and surrounded by mound of earth and stone,for ¼ sec.cor..mkd.on brass cap ¼ S 3 in W half and S 2 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
50.00	Bottom of hollow,50 ft.below ridge,course W.
	Asc.
67.65	Top of volcanic ridge,40 ft.above hollow,bears E.and W.
	Desc.
70.00	Bottom of hollow,40 ft.below ridge,course W.
	Asc.
75.00	Top of volcanic ridge,30 ft.above hollow,bears NW and SE
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.2,3,10,and 11,mkd.on brass cap
	T 43 S S 3 in NW.
	R 13 W S 2 in NE.
	S 11 in SE.;and
	S 10 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Soil,clay and sandy loam;2nd rate.
	No timber.
	Undergrowth,sage brush.matchwoon,greasewood,cactus,and oose.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	———
	N.89°55'E.,on a random line bet.secs.2 and 11 .
40.00	Set temp.¼ sec.cor.
79.76	Intersect N.and S.line,at the cor.of secs.1,2,11,and 12.
	Thence I run
	S.89°55'W.,on a true line bet.secs.2 and 11.
	Over rolling mountainous land;through dense undergrowth.
	Asc.along south slope of ridge..
10.00	Top of volcanic ridge,40 ft.above sec.cor1,bears N.and S.
	Desc.
20.00	Foot of steep descent,40 ft.below ridge,bears N.and S.
39.88	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 2 in N half and S 11 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
55.00	Bottom of hollow,100 ft.below ridge,course NW.
	Asc.
77.70	Top of volcanic ridge,70 ft.above hollow,bears N.30°W.and S.30°E.
	Desc.
79.76	The cor.of secs.2,3,10,and 11.
	Land,mountainous .
	Soil,sandy and clay loam;2nd rate.
	No timber.
	Undergrowth,greasewood,mountain rush,oose,and cactus .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Good grass for grazing.
	Mountainous land;or land covered with dense undergrowth, 79.76 chs.
	June 9,1909:At this cor.I set off 22°56'N.,on the decl.ar and at 11 h 59 m a.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°04'N.,which is the proper lat.nearly.

	S.0°1'E.,bet.secs.10 and 11.
	Over mountainous land;through dense undergrowth.
	Desc.
4.70	Bottom of hollow,30 ft.below sec.cor.,course NW.
	Asc.
20.00	Top of ridge,30 ft.above hollow,bears NW and SE.
	Desc.
25.00	Head of hollow,20 ft.below ridge,course S.70°E.
	Asc.
29.50	Top of spur,40 ft.above hollow,bears N.70°E.and S.70° W.
	Desc.
32.65	Begin abrupt descent,bears E.and W.
37.00	Bottom of canon,300 ft.below ridge,course N.80°E.
	Asc.abruptly.
39.20	Top of abrupt ascent,300 ft.above canon,bears E.and W.
	Asc.gradually.
40.00	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground, on solid rock bottom,and surrounded by mound of stone,for ¼ sec.cor..mkd.on brass cap ¼ S 10 in W half and S 11 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
41.50	Top of spur,50 ft.above top of ascent,bears N.75°E.and S.75°W.
	Desc.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
50.00	Bottom of swale,10 ft.below spur,course N.70°E.
	Asc.
59.00	Top of ridge,40 ft.above swale,bears N.70°E.and S.70°W.
	Desc.
67.90	Bottom of hollow,30 ft.below ridge,course NE.
	Asc.
78.00	Top of ridge,100 ft.above hollow,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.10,11,14,and 15,mkd.on brass cap
	T 43 S S 10 in NW.
	R 13 W S 11 in NE.
	S 14 in SE.;and
	S 15 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous ;
	Soil,sandy and clay loam and gravelly; 2nd and 3rd rate.
	No timber .
	Undergrowth,greasewood,matchwood,mountain rush,oose and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.

June 9,1909.

June 10,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°03'N.,on the lat.arc;23°1'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.10,11,14,and 15.

Thence I run

N.89°55'E.,on a random line bet.secs.11 and 14.

40.00	Set temp.¼ sec.cor.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
79.78	Intersect N.and S.line,5 lks.N.of the cor.of secs.11,12,13 and 14.
	Thence I run
	S.89°57'W.,on a true line bet.secs.11 and 14.
	Over mountainous land;through scattering timber and scattering undergrowth.
	Asc.
14.00	Leave timber,bears NE and S.
16.00	Top of ridge,50 ft.above sec.cor.,bears N.and S.
	Desc.abruptly
17.50	Foot of abrupt descent,bears N.and S.
26.30	Road from Hurricane to Kanab,bears N.20°E.and S.20°W.
39.89	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 11 in N half and S 14 in S half;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.
42.65	Wash,10 lks.wide,70 ft.deep,in bottom of hollow,50 ft.bel ridge,course S.20°E.
	Asc.
45.00	Begin more abrupt ascent,bears N.20°W.and S.20°E.
60.50	Top of ridge,30 ft.above hollow,bears N.30°E.and S.30° W.
	Desc.
71.50	Bottom of hollow,50 ft.below ridge,course NE.
	Asc.
79.78	The cor.of secs.10,11,14,and 15.
	Land,mountainous.
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,greasewood and matchwood.
	Good grass for grazing.
	Mountainous land,79.78 chs.

—

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	S.0°1'E.,bet.secs.14 and 15.
	Over mountainous land;through scattering timber and scattering undergrowth.
	Desc.
7.00	Head of swale,30 ft.below sec.cor.,course NE.
	Asc.
13.90	Top of Hurricane Ridge, bears N.60°W.and S.60°E.,12 ft.above swale. Descend.
15.00	Descend more abruptly,bears N.60°W.and S.60°E.
20.75	Bottom of hollow,170 ft.below ridge,course N.75°W.
	Asc.
23.70	Top of ridge,170 ft.above hollow,bears E.and W.
	Desc.
28.45	Begin abrupt descent,bears N.75°E.and S.75°W.
35.00	Bottom of hollow,200 ft.below ridge,course SW.
	Asc.
39.00	Top of ascent200 ft.above hollow,bears S.75°W.and N.75°E.
40.00	Set an iron post,3 ft.long,1 in.in dia.,14 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for ¼ sec.cor.;mkd.on brass cap ¼ S 15 in W half and S 14 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
41.00	Top of spur,20 ft.above ¼ sec.cor.,bears N.75°W.and S.75° E.
	Desc.
53.30	Bottom of hollow,175 ft.deep,course S.80°W.
	Asc.
56.65	Top of spur,100 ft.above hollow,bears N.80°E.and S.80°W.
	Desc.
62.70	Bottom of hollow,100 ft.below spur,course W.
	Asc.
75.75	Top of ridge,100 ft.above hollow,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

ground,for cor.of secs.14,15,22,and 23,mkd.on brass cap

T 43 S S 15 in NW.

R 13 W S 14 in NE.

S 23 in SE.;and

S 22 in SW.quadrants;and raise a mound of stone,

2 ft.base,1½ ft.high,W.of cor.

Land,mountainous .

Soil,sandy and clay loam;2nd rate.

Timber,cedar and pinon pine.

Undergrowth,sage,braush ,greasewood,and cactus .

Good grass for grazing.

Mountainous land,80.00 chs.

June 10,1909:At this cor.I set off23°01'N.,on the decl.

arc;and at 11 h 59 m a.m.,l.m.t.,I observe the sun on the

meridian the resulting lat.is 37°02'N.,which is the prope

lat.nearly.

N.89°57'E.,on a random line bet.secs.14 and 23.

40.00 Set temp.¼ sec.cor.

80.10 Intersect N.and S.line,16 lks.S.of the cor.of secs.13,14

23,and 24.

Thence I run

S.89°50'W.,on a true line bet.secs.14 and 23.

Over mountainous land;through scattering timber and

dense undergrowth.

Dese.

13.45 Bottom of wash,20 lks.wide,4 ft.deep,in bottom of hollow

50 ft.below sec.cor.,course S.10°E.

Ass.

15.55 Road from Hurricane to Kanab,bears N.25°W.and S.25°E.

20.00 Leave timber,bears N.and S.

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

ground,for ¼ sec.cor..mkd.on brass cap ¼ S 14 in N.half

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	and S 23 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
65.00	Top of Hurricane Ridge, 300 ft.above hollow,bears N. and S. Descend.
75.25	Bottom of hollow,150 ft.below ridge,course S.20°W.
	Asc.
78.50	Top of spur,20 ft.above hollow,bears N.and S.
	Desc.
80.10	The cor.of secs.14,15,22,and 23.
	Land,mountainous .
	Soil,sandy and clay loam;2nd rate.
	Timber,cedar and pinon pine.
	Undergrowth,sage brush,greasewood,matchwood,and cactus .
	Good grass for grazing.
	Mountainous land,80.10 chs.

June 10th,1909.

June 11,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°05'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.14,15,22,and 23.

Thence I run

S.0°1'E.,bet.secs.22 and 23.

Over mountainous land;through dense undergrowth,

Desc.along west slope of ridge;over broken ledges.

39.80	Bottom of hollow,200 ft.below ridge,course S.15°W.
	Asc.
	Leave ledges,bears N.15°E.and S.15°W.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 22 in W half and S 23 in E half;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
55.00	Top of spur,75 ft.above hollow,bears E.and W.
	Desc.
59.70	Ledge,75 ft.high,bears E.and W.
75.25	Wash,15 lks.wide,10 ft.deep,course SW.
76.75	Wash,20 lks.wide,3 ft.deep,course S.30°W.
80.00	Set an iron post,3 ft.long,1 in.in dia.,24 ins.in the ground,for cor.of secs.22,23,26,and 27,mkd.on brass cap T 43 S S 22 in NW. R 13 W S 23 in NE. S 26 in SE.;and S 27 in SW quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous .
	Soil,sandy and gravelly loam;2nd rate.
	No timber .
	Undergrowth,sage brush,greasewood,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	June 11,1909At the noon hour the sky is overcast and solar observations are impossible.
	———
	N.89°50'E.,on a random line bet.secs.23 and 26.
40.00	Set temp.¼ sec.cor.
80.06	Intersect N.and S.line,2 lks.N.of the cor.of secs.23,24, 25,and 26.
	Thence I run
	S.89°51'W.,on a true line bet.secs.23 and 26.
	Over mountainous land,through dense undergrowth.
	Asc.
2.85	Top of ridge,30 ft.above sec.cor.,bears N.20°W. and S.20°E.
	Desc.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
4.50	Bottom of hollow,20 ft.below ridge,course S.20°E.
	Asc.
7.75	Top of ridge,40 ft.above hollow,bears N.20°W.and S.20°E.
	Desc.
8.85	Bottom of hollow,40 ft,below ridge,course S.20°E.
	Asc.
18.00	Top of ridge,50 ft.above hollow,bears N.and S.
	Desc.
22.50	Bottom of hollow,40 ft.below ridge,course S.
	Asc.
39.15	Top of ridge,75 ft.above hollow,bears NE and SW.
	Desc.
40.03	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 23 in N half and S 26 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
41.15	Bottom of hollow,30 ft below ridge,course S.60°W.
	Asc.
44.50	Top of Hurricane Ridge, 60 ft.above hollow, bears N.15° W. and S.15° E. Descend.
55.00	Desc.more abruptly,bears N.15°W.and S.15°E.
59.00	Top of ledge,300 ft.high,bears N.and S.
73.00	Foot of steep descent,bears N.and S.
79.10	Bottom of hollow,375 ft.below ledge,course SW.
	Asc.
80.06	The cor.of secs.22,23,26,and 27.
	Land mountainous .
	Soil,sandy and clay loam;2nd rate.
	No timber .
	Undergrowth,sage brush ,greasewood,and cactus .
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.06 chs.

June 11,1909.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	June 12,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°02'N.,on the lat.arc;23°09'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.22,23,26,and 27.
	Thence I run
	S.0°1'E.,bet.secs.26 and 27.
	Over mountainous land;through dense undergrowth.
	Desc.abruptly.
.45	Bottom of hollow,10 ft.below sec.cor.,course S.80°W.
	Asc.abruptly.
14.25	Wash,10 lks.wide,10 ft.deep,course SW.
20.00	Top of ridge,150 ft.above hollow,bears E.and W.
	Desc.
37.15	Bottom of wash,75 lks.wide,6 ft.deep,in bottom of canon, 100 ft.below rid e,course N.80°W.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 22 in W half and S 26 in E half;and raise a mound of stone,2 ft.base,1 ft.high,W.of cor.
68.45	Enter ledges,bears N.10°E.and S.10°W.
73.10	Foot of perpendicular ledge,75 ft.high,bears N.10°E.and S.10°W.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,13 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for cor.of secs.26,27,34,and 35,mkd.on brass cap
	T 43 S S 27 in NW.
	R 13 W S 26 in NE.
	S 35 in SE.;and
	S 34 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous
	Soil,sandy loam and rocky;2nd and 4th rate.
	No timber .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,sage brush,shadscales,cactus and oose.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.

	N.89°51'E.,on a random line bet.secs.26 and 35.
40.00	Set temp.¼ sec.cor.
80.30	Intersect N.and S.line,14 lks.S.of the cor.of secs.25, 26,35,and 36 .
	Thence I run
	S.89°45'W.,on a true line bet.secs.26 and 35.
	Over rolling mountainous land;through scattering under-growth.
	Asc. gradually.
40.15	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 26 in N half and S 35 in S half;and raise a mound of stone,2 ft.base,1½ ft. high,N.of cor.
44.00	Begin more abrupt ascent,bears N.and S.
51.80	Top of Hurricane Ridge,75 ft.above sec.cor.; bears N.15° W..and S.15° E. Descend.
54.00	Bottom of hollow,40 ft.below ridge,course S.10°E.
	Asc.
60.00	Top of ridge,80 ft.above hollow,bears N. 20°W.and S.20° E.
	Desc.
80.30	The cor.of secs.26,27,34,and 35.
	Land,mountainous .
	Soil,sandy and clay loam;2nd rate.
	No timber .
	Undergrowth,sage brush,cactus ,oose,and greasewood.
	Good grass for grazing.
	Mountainous land,80.30 chs.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	June 12,1909At this cor.I set off 23°10'N.,on the decl.ar and at 11 h 59 m p.m.,l.m.t.,I observethe sun on the meridian,the resulting lat.is 37°01'N.,which is the proper lat.nearly.
	S.0°1'E.,on a true line bet.secs.34 and 35.
	Over rolling mountainous land;through dense undergrowth.
	Asc.over ledges.
15.40	Top of ledge,200 ft.high,bears N.10°W.and S.10°E.
	Continue over ledges.
23.65	Leave ledges,bears NE and SW.
34.30	Top of spur,50 ft.above top of ledge,bears N.80°E.and S.8 W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 34 in W half and S 35 in E half;and raise a mound of stone,2 ft.base,1 ft.high,W.of cor.
42.10	Bottom of hollow,150 ft.below spur,course N.80°W.
	Asc.
45.00	Top of spur,50 ft.above hollow,bears E.and W.
	Desc.
47.15	Road from St.George to Kanab,bears N.60°E.and S.60°W.
47.50	Bottom of hollow,40 ft.below ridge,course S.60°W.
	Asc.
55.00	Top of spur, 50 ft.above hollow,bears E.and W.
	Desc.
59.39	Intersect Utah-Arizona bdy.line,12.49 chs.West of the 42nd mile cor.,which is a gray sandstone,18x14x8 ins., above ground,firmly set,and mkd.and witnessed as describe by the surveyor general.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

ground,for closing cor.of secs.34 and 35,mkd.on brass cap

C C A in S.half

U in N.half.

T 43 S S 34 in NW.;and

R 13 W S 35 in NE.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.

Land,mountainous .

Soil,sandy and gravelly and rocky;2nd 3rd and 4th rate.

No timber .

Undergrowth,sage brush,shadscales,cactus,and greasewood.

Good grass for grazing.

Mountainous land ,or land covered with dense undergrowth, 59.39 chs.

June 12,1909.

June 13 ,1909:At 8 h 00 m a.m.,l.m.t.,I set off 37°05'N., on the lat.arc;23°13'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,33,and 34, on N.bdy.of Tp.,heretofore described.

Thence I run

S.0°2'E.,bet.secs.3 and 4.

Over nearly level land;through dense undergrowth.

Desc.gradually.

11.65 Wash,10 lks.wide,5 ft.deep,course N.75°W.

Asc.gradually.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 4 in W half and S 3 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.

53.55 Road from Hurricane to Fort Pierce,bears N.10°W.and S.10° E.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor. of secs.3,4,9,and 10,mkd.on brass cap

T 43 S S 4 in NW.

R 13 W S 3 in NE.

S 10 in SE.;and

S 9 in SW.quadrants;and raise a mound of stone, 2 ft.base.1½ ft.high,W.of cor.

Land,nearly level.

Soil,sandy and rocky;2nd and 3rd rate.

No timber .

Undergrowth,greasewood,evergreen,and matchwood.

Good grass for grazing.

Land covered with dense undergrowth,80.00 chs.

N.89°54'E.,on a random line bet.secs.3 and 10.

40.00 Set temp.¼ sec.cor.

79.94 Intersect N.and S.line,19 lks.S.of the cor.of secs.2,3, 10,and 11.

Thence I run

S.89°46'W.,on a true line bet.secs.3 and 10.

Over mountainous land;through dense undergrowth;and scattering timber.

Desc.

3.40 Bottom of hollow,30 ft.below cor.,course NW.

Asc.

22.00 Top of ridge,40 ft.above hollow,bears N.and S.

Desc.

24.40 Top of ledge,75 ft.high,bears N.25°W.and S.25°E.

Desc.

26.50 Bottom of swale,100 ft.below ledge,course NW.

Asc.

28.15 Top of ledge,100 ft.high,bears N.and S.on Hurricane Mt.

Subdivision of T.45 S.,R.13 W.-Continued.

Chains	
	Ridge, 150 ft.above hollow, bears N. and S.
	Desc.abruptly.
39.97	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 3 in N half and S 10 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
60.00	Foot of steep descent,bears N.20°W.and S.20°E.
	Desc.gently.
77.00	Road from Hurricane to Fort Pierce,bears N.and S.
79.94	The cor.of secs.3,4,9,and 10.
	Land,mountainous and nearly level.
	Soil,sandy and clay loam and rocky.2nd and 4th rate.
	Timber,cedar and pinon pine.
	Undergrowth,matchwood,oose,cactus,and mountain rush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.94 chs.
	June 13,1909:At this cor.I set off 23°13'N.,on the decl. arc;and at 12 hours M.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°04'N.,which is the proper lat.nearly.

	S.0°2'E.,bet.secs.9 and 10.
	Over nearly level land;through dense undergrowth.
	Asc.
7.00	Begin ascent of volcanic ridge,bears NW and SE.
27.50	Top of volcanic ridge,20 ft.above sec.cor.,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,24 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 9 in W half and S 10 in E half;and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
40.40	Wash,20 lks.wide,3 ft.deep,course SW.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Foot of descent,bears NE and SW.
	Thence over nearly level land,.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.9,10,15,and 16,mkd.on brass cap
	T 43 S S 9 in NW.
	R 13 W S 10 in NE.
	S 15 in SE.;and
	S 16 in SW.quadrants;and dig pits,18x18x12 ins.,i
	each sec.;5½ ft.dist.,and raise a mound of earth,4 ft. base,2 ft.high,W.of cor.
	Land, mountainous and nearly level.
	Soil,sandy and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,sage brush,evergreen,oose,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	June 13,1909.
	June 14,1909:At 8 h 00 m a.m.,l.m.t.,I set off 37°03'N.,o the lat. arc;23°16'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.9,10,15,and 16.
	Thence I run
	N.89°46'E.,on a random line bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
80.06	Intersect N.and S.line,14 lks.S.of the cor.of secs.10,11 14.and 15.
	Thence I run
	S.89°40'W.,on a true line bet.secs.10 and 15.
	Over mountainous land;through dense undergrowth.
	Asc.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
11.50	Top of Hurricane Ridge, 30 ft.above sec.cor.,bears N.& S.
	Desc.
27.67	Top of ledge,200 ft.high,bears N.and S.
40.03	Set an iron post,3 ft.long,1 in.in dia.,18 ins.in the ground,on solid rock bottom and surrounded by mound of earth and stone,for ¼ sec.cor..mkd.on brass cap ¼ S 10 in N half;and S 15 in S half;and raise a mound of stone, 2 ft.base,1½ ft.high,N.of cor.
71.40	Wash,15 lks.wide,5 ft.deep,course SW.
	Begin ascent over rolling land.
74.20	Road from Hurricane to Fort Piere ,bears N.10°W.and S.10° E.
80.06	The cor.of secs.9,10,15,and 16.
	Land,mountainous and nearly level.
	Soil,rocky and sandy ;4th and 2nd rate.
	No timber.
	Undergrowth,mountainous rush,cece,cactus ,and matchwood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.06 chs.

S.0°3'E.,bet.secs.15 and 16.

Over nearly level land;through dense undergrowth.

Desc.gently.

21.00	Wash,20 lks.wide,4 ft.deep,in bottom of hollow,30 ft. below sec.cor.,course SW.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 16 In W half and S 15 in E half;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.
60.00	Top of ridge,20 ft.above hollow,bears E.and W.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

Desc.

71.70 Bottom of hollow,30 ft.below ridge,course S.80°W.

Asc.

75.00 Top of ridge,20 ft.above hollow,bears N.70°E.and S.70°W.

Desc.

77.70 Road,bears N.60°E.and S.60°W.in bottom of hollow,30 ft. below ridge,course S.60°W.

Asc.

79.75 Top of ledge,15 ft.high,bears E.and W.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,14 ins.in the ground,on solid rock bottom,and surrounded by mound of earth and stone,for cor.of secs.15,16,21,and 22,mkd.on brass cap

T 43 S S 16 in NW.

R 13 W S 15 in NE.

S 22 in SE.;and

S 21 in SW.quadrants;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 and rocky;2nd and 4th rate.

No timber .

Undergrowth,ooase,and greasewood.

Good grass for grazing.

Land covered with dense undergrowth,80.00 chs.

June 14,1909:At this cor.I set off 23°16'N.,on the decl. arc.and at 12 hours M.T.,l.m.t.,I observie the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

N.89°40'E.,on a random line bet.secs.15 and 22.

40.00 Set temp.¼ sec.cor.

80.18 Intersect T.and S.line,25 lks.N.of the cor.of secs.14,15,

Subdivision of T.45 S.,R.18 W.-Continued.

Chains	
	22,and 23.
	Thence I run
	S.89°50'W.,on a true line bet.secs.15 and 22.
	Over mountainous land;through scattering undergrowth.
	Desc.over ledges.
35.00	Foot of ledges,bears N.and S.
	Continue descent.
40.09	Set an iron post,3 ft.long,1 in.in dia. 26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 15 in N half and S 22 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
50.00	Top of ledge,10 ft.high,bears N.and S.
53.30	Top of ledge,10 ft.high,bears N.and S.
58.75	Foot of descent,bears N.and S.
	Thence over nearly level land.
59.45	Road from Hurricane to Fort Pierce,bears N.and S.
80.18	The cor.of secs.15,16,21,and 22.
	Land,mountainous and nearly level.
	Soil,sandy loam and rocky;2nd and 4th rate.
	No timber .
	Undergrowth,sage brush,greasewood,oose,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 58.75 chs.
	June 14,1909.

June 15,1909:At 8 h 0 m a.m.,l.m.t.,I set off 57°02'N., on the lat.arc;23°19'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.15,16,21,and 22.

Thence I run

S.0°2'E.,bet.secs.21 and 22.

Over rolling land;through dense undergrowth,

Asc.gently.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
.75	Top of knoll,40 ft.high,
	Desc.
2.85	Foot of descent,bears E.and W.
18.65	Wash,10 lks.wide,5 ft.deep,course W.
	Asc.gently.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in W half and S 22 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
40.80	Top of ridge,40 ft.high,bears E.and W.
	Desc.
55.50	Bottom of hollow,30 ft.below ridge,course W.
	Asc.
70.90	Wash,10 lks.wide,4 ft .deep,course S.70°W.
	Asc.gently.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.21,22,27,and 28,mkd.on brass cap
	T 43 S S 21 in NW.
	R 13 W S 22 in NE.
	S 27 in SE.;and
	S 28 in SW.quadrants;and raise a mound of stone,
	2 ft.base,1½ ft.high,W.of cor.
	Land,rolling .
	Soil,sandy loam; 2nd rate.
	No timber .
	Undergrowth,sage brush,greasewood,evergreen,cactus,and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	June 15,1909:At this cor.I set off 23°19'N.,on the decl. arc;and at 12 hours M. p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	N.89°50'E.,on a random line bet.secs.22 and 27.
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line,19 lks.N.of the cor.of secs. 22,23,26,and 27.
	Thence I run
	S.89°58'W.,on a true line bet.secs.22 and 27.
	Over mountainous land;through dense undergrowth.
	Desc.
.20	Wash,20 lks.wide,4 ft.deep,in hollow,course S.
	Asc.
2.00	Top of spur,30 ft.above hollow,bears NE and SW.
	Desc.
14.00	Bottom of hollow,60 ft.below spur,course S.
	Asc.
17.17	Top of sandstone ledge,300 ft.high,bears N.and S.10°W.
	Continue over ledges.
26.70	Top of ridge,80 ft.above top of ledge,bears N.and S.
	Desc.abruptly over ledges.
37.50	Foot of ledges,500 ft.below ridge,bears N.and S.
	Continue descent.
40.05	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 22 in N.half and S 27 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
44.30	Road from Hurricane to Fort Pierce,bears N.10°W.and S.10°E.
80.10	The cor.of secs.21,22,27,and 28.
	Land,mountainous and rolling .
	Soil,sandy and rocky;2nd and 4th rate.
	No timber .
	Undergrowth,sage brush,shadscales,oose,evergreen,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	80.10 chs.
	June 15,1909.

	June 16,1909:At 8 h 0 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°22'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.21,22,27,and 28.
	Thence I run
	S.0°2'E.,bet.secs.27 and 28.
	Over rolling land;through dense undergrowth.
	Asc.gently.
10.00	Top of ridge,30 ft.above sec.cor.,bears E.and W.
	Desc.
26.10	Wash,10 ft.deep,50 lks.wide,in bottom of hollow,30 ft. below ridge,course N.80°W.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 28 in W half and S 27 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
77.70	Wash,20 lks.wide,20 ft.deep,course W.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.27,28,33,and 34,mkd.on brass cap
	T 43 S S 28 in NW.
	R 13 W S 27 in NE.
	S 34 in SE.;and
	S 33 in SW.quadrants;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 and clay loam; 2nd aand 3rd rate.
	No timber .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,sage brush,greasewood,cactus,and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	—
	N.89°58'E.,on a random line bet.secs.27 and 34.
40.00	Set temp.¼ sec.cor.
80.12	Intersect N.and S.line,10 lks.S.of the cor.of secs.26,27, 34,and 35.
	Thence I run
	S.89°54'W.,on a true line bet.secs.27 and 34.
	Over mountainous land;through dense undergrowth .
	Desc.over ledges.
2.00	Top of ledge,200 ft.high,bears N.and S.
	Desc.over ledges.
15.00	Foot of ledges,bears N.and S.
	Foot of steep descent,bears N.and S.
	Desc.gradually.
40.06	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 27 in N half and S 34 in S half;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.
42.20	Road from Hurricane to Fort Pierce,bears N.and S.
65.95	Wash,5 lks.wide,4 ft.deep,course NW.
70.10	Same wash,5 lks.wide,3 ft.deep,course SW.
72.75	Same wash,10 lks.wide,6 ft.deep,course N.75°W.
80.12	The cor.of secs.27,28,33,and 34.
	Land ,mountainous and rolling .
	Soil,sandy and gravelly loam;2nd rate.
	No timber.
	Undergrowth,greasewood,oose,and evergreen.
	Good grass for grazing.
	Mountainous land,or land covered with denseundergrowth,

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	80.12 chs.
	June 16,1909:At this cor.I set off 23°22'N.,on the decl.ar and at 12 h. M.p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°01'N.,which is the proper lat.nearly.
	S.0°2'E.,on a true line bet.secs.33 and 34.
	Over rolling land;through dense undergrowth.
	Asc.gradually.
15.00	Top of ridge,30 ft.above sec.cor.,bears N.80°E.and S.80°W
	Desc.
30.20	Bottom of hollow,40 ft.below ridge,course S.80°W.
	Asc.
33.80	Top of ridge,50 ft.above hollow,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 33 in W half and S 34 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
43.85	Bottom of hollow,30 ft.below ridge,course W.
	Asc.
55.00	Top of ridge,50 ft.above hollow,bears E.and W.
	Desc.
57.55	Bottom of hollow,80 ft.below ridge,course W.
	Asc.
59.30	Intersect Utah-Arizona bdy.,14.57 chs.West of the 41st mile cor.,which is an iron post,3 ins.in dia.,and projecting 1 ft.above ground,firmly set,and mkd.and witnesse as described by the surveyor general.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,forclosing cor.of secs.33 and 34,mkd.on brass cap
	C C A in S.half.
	U in N.half.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	T 43 S S 33 in NW.
	R 13 W S 34 in NE.quadrants; and raise a mound of earth and stone,2 ft.base,1½ ft.high,N.of cor.
	Pits, impracticable.
	Land,rolling .
	Soil,sandy and clay loam and gravelly;2nd and 3rd rate.
	No timber .
	Undergrowth,greasewood,evergreen,mountain rush and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,59.30 chs.
	June 16,1909.
	June 17,1909:At 8 h 1 m a.m.,l.m.t.,I set off 37°05'N.,on the lat.arc;23°24'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.4,5,32,and 33, on N.bdy.of Tp.,heretofore described.
	Thence I run
	S.0°3'E.,bet.secs.4 and 5.
	Over gently rolling land;through dense undergrowth.
	Asc.gently.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 5 in W half and S 4 in E half.and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
64.00	Begin ascent of volcanic mountain,bears NE and S.W.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,15 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for cor.of secs.4,5,8,and 9,mkd.on brass cap
	T 43 S S 5 in NW.
	R 13 W S 4 in NE.
	S 9 in SE.;and
	S 8 in SW quadrants;and raise a mound of stone,

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

2 ft.base,1½ ft.high,W.of cor.

Land,mountainous and rolling .

Soil,sandy loam and rocky;2nd and 4th rate.

No timber.

Undergrowth,greasewood,sage brush,cactus and evergreen.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

80 00 chs.

N.89°55'E.,on a random line bet.secs.4 and 9 .

40.00 Set temp.¼ sec.cor.

79.70 Intersect N.and S.line,5 lks.S.of the cor.of secs.3,4,9, and 10.

Thence I run

S.89°53'W.,on a true line bet.secs.4 and 9.

Over nearly level land;through dense undergrowth.

Asc.gently.

8.00 Begin ascent of volcanic mountain,bears N.and S.

37.50 Top of volcanic ridge,300 ft.above sec.cor.,bears N.20°E. and S.20°W.

Desc.

39.85 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 4 in N half and S 9 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.

46.00 Foot of descent,bears N.20°E.and S.20°W.

Thence across mesa.

77.50 Leave mesa,bears N.20°E.and S.20°W.

Desc.abruptly over rocky slope.

79.70 The cor.of secs.4,5,8,and 9.

Land,mountainous and level.

Soil,sandy and clay loam;2nd rate.

No timber.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,evergreen,greasewood,cactus,and oose.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	79.70 chs.
	June 17,1909:At this cor.I set off 23°24'W.,on the decl.
	arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the
	meridian,the resulting lat.is 37°04'N.,which is the
	proper lat.nearly.
	S.0°3'E.,bet.secs.8 and 9.
	Over mountainous land;through dense undergrowth.
	Asc.
6.00	Top of spur,30 ft.above sec.cor.,bears NE and SW.
	Desc.
39.50	Bottom of hollow,125 ft.below ridge,course W.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,20 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for ¼ sec.cor..mkd.on brass cap ¼ S 8 in W half and S 9 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
44.00	Top of spur,40 ft.above hollow,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in the dia.,24 ins.in the ground,for cor.of secs.8,9,16,and 17,mkd.on brass cap T 43 S S 8 in NW. R 13 W S 9 in NE. S 16 in SE.;and S 17 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous .
	Soil,rocky;4th rate.
	No timber .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth, evergreen, cactus, sage brush, and greasewood.
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth,
	80.00 chs.
	June 17, 1909.
	June 18, 1909: At 8 h 1 m a.m., l.m.t., I set off 37°03'N., on the lat.arc; 23°25'N., on the decl.arc; and determine a meridian with the solar, at the cor.of secs.8, 9, 16, and 17.
	Thence I run
	N.89°53'E., on a random line bet.secs.9 and 16.
40.00	Set temp.¼ sec.cor.
79.68	Intersect N.and S.line, 7 lks.S.of the cor.of secs.9, 10, 15.and 16.
	Thence I run
	S.89°50'W., on a true line bet.secs.9 and 16.
	Over rolling land; through dense undergrowth.
	Desc.
15.50	Wash, 10 lks.wide, 5 ft.deep, course S.10°W.
	Continue descent.
21.25	Bottom of hollow, 25 ft.below sec.cor., course S.10°E.
	Asc.
24.90	Top of sandstone ridge, 40 ft.above hollow, bears N.10°W. and S.10°E.
	Desc.
31.50	Bottom of hollow, 40 ft.below ridge, course S.25°E.
	Asc.
39.84	Set an iron post, 3 ft.long, 1 in.in dia., 14 ins.in the ground, on solid rock bottom; and surrounded by mound of stone, for ¼ sec.cor..mkd.on brass cap ¼ S 9 in N half and S 16 in S half; and raise a mound of stone, 2 ft.base, 1½ ft.high, N.of cor.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
65.00	Top of ridge,150 ft.above hollow,bears N.20°W.and S.20°E.
	Desc.
77.00	Top of ledge,20 ft.high,bears N.20°W.and S.20°E.
79.68	The cor.of secs.8,9,16,and 17.
	Land,mountainous and rolling .
	Soil,sandy and clay;2nd rate.
	No timber .
	Undergrowth,sage brush,greasewood;matchwood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	79.68 chs.
	S.0°3'E.,bet.secs.16 and 17.
	Over mountainous land;through dense undergrowth,
	Desc.
.60	Bottom of hollow,10 ft.below sec.cor.,course NW.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 17 in W half and S 16 in E half;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.
60.00	Top of sandstone ledge on ridge,100 ft.above hollow,bears E.and W.
	Desc.
66.00	Bottom of hollow,150 ft.below ridge,course S.80°W.
	Asc.
71.00	Enter a series of ledges,bears S.10°E.and W.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,12 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for cor.of secs.16,17,20,and 21,mkd.on brass cap
	T 43 S S 17 in NW.
	R 13 W S 16 in NE.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	S 21 in SE.;and
	S 20 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous.
	Soil,sandy and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,greasewood,matchwood,oose,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	June 18,1909:At this cor.I set off 23°25'N.,on the decl. arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.
	N.89°50'E.,on a random line bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
79.70	Intersect N.and S.line,at the cor.of secs.15,16,21,and 22.
	Thence I run
	S.89°50'W.,on a true line bet.secs.16 and 21.
	Over rolling land;through dense undergrowth.
	Desc. over ledges.
.75	Foot of sandstone ledges,bears N.30°E.and SW.
2.80	Road from Hurricane to Fort Pierce,bears NE and SW.
3.00	Bottom of hollow,20 ft.below ledges,course SW.
	Asc.
23.00	Top of spur,20 ft.above hollow,bears N.20°E.and S.20°W.
	Desc.
28.50	Bottom of hollow,30 ft.below spur,course S.10°W.
	Asc.
39.85	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock bottom,and surrounded by mound of

Subdivision of T.43 S.,R.15 W.- Continued.

Chains	
	stone,for ¼ sec.cor..mkd.on brass cap ¼ S 16 in N half and S 21 in S half;and raise a mound of stone,2 ft. base,1½ ft.high,N.of cor.
50.00	Enter sandstone rocks and boulders,bears N.15°W.and S. 15°E.
51.00	Top of sandstone ridge,75 ft.above hollow,bears N.15°W.and S.15°E.
	Leave boulders,bears N.15°W.and S.15°E.
	Desc.
65.80	Bottom of hollow,50 ft.below ridge,course S.10°E.
	Asc.
71.40	Top of sandstone ridge,70 ft.high,bears N.and S.
	Desc.
77.00	Bottom of hollow,60 ft.below ridge,course S.
	Asc.over ledges.
79.70	The cor.of secs.16,17,20,and 21.
	Land,mountainous and rolling .
	Soil,sandy and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,greasewood,evergreen,and oose.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.70 chs.

June 18,1909.

June 19,1909:At 8 h 1 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°27'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.16,,17,20,and 21.

Thence I run

S.0°3'E.,bet.secs.20 and 21.

Over mountainous land;through dense undergrowth.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Asc.over ledges.
7.94	Top of ridge,100 ft.above sec.cor.,bears NE and SW.
	Desc.over ledges.
10.32	Top of ledge,100 ft.high,bears NE and SW.
19.90	Botton of hollow,200 ft.below ridge,course NE.
	Asc.abruptly over ledges.
22.17	Top of abrupt ascent,bears E.and W.
	Asc.gradually over small ledges.
39.68	Top of ledge,100 ft.high,bears E.and W.
39.75	Top of ridge,250 ft.above hollow,bears E.and W.
	Desc.over ledges.
40.00	Set an iron post,3 ft.long,1 in.in dia.,14 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for ¼ sec.cor.,mkd.on brass cap ¼ S 20 in W half and S 21 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
43.50	Foot of descent,bears N.80°E.and S.80°W.
	Leave ledges,bears N.80°E.and S.80°W.
	Desc.gradually.
65.75	Road from Hurrinane to Fort Pierce ,bears N.60°E.and S.60°W.
	Bottom of hollow,350 ft.below ridge,course S.60°W.
	Asc. gently.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.20,21,28,and 29,mkd.on brass cap T 43 S S 20 in NW. R 13 W S 21 in NE. S 28 in SE.;and S 29 in SW.quadrants;dig pits,18x18x12 ins.,in each sec.;5½ ft.dist.;and raise a mound of earth,3½ ft. base,1½ ft.high,W.of cor.
	Land,mountainous and rolling .
	Soil,sandy and clay loam and rocky;2nd and 4th rate.
	No timber .
	Undergrowth,sage brush,evergreen,cactus,oose,and greasewo

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	June 19,1909:At this cor.I set off 23°26'N.,on the decl. arc;and at 0 h 1 m -p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

	N.89°50'E.,on a random line bet.secs.21 and 28.
40.00	Set temp.¼ sec.cor.
79.72	Intersect N.and S.line,19 lks.N.of the cor.of secs.21,22, 27,and 28.
	Thence I run
	S.89°58'W.,on a true line bet;secs.21 and 28.
	Over nearly level land;through dense undergrowth.
	Desc.
3.10	Wash,10 lks.wide,3 ft.deep,course NW.
	Asc.gently.
14.50	Enter gypsum beds,bears N.and S.
	Leave dense undergrowth and enter scattering undergrowth, bears N.and S.
15.50	Top of ridge,30 ft.above wash,bears N.and S.
	Desc.
16.50	Leave gypsum beds,bears N.and S.
	Enter dense undergrowth,bears N.and S.
39.86	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in N half and S 28 in S half;and 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.
79.72	The cor.of secs.20,21,28,and 29.
	Land,rolling.
	Soil,sandy loam and clay mixed with gypsum,2nd and 4th

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	rate.
	No timber .
	Undergrowth,sage brush,greasewood,evergreen,and cactus.
	Good grass for grazing.
	Land covered with dense undergrowth,77.72 chs.
	June 19,1909.

	June 20,1909:At 8 h 1 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°27'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.20,21,28,and 29.
	Thence I run
	S.0°3'E.,bet.secs.28 and 29.
	Over rolling land;through dense undergrowth.
	Desc.gently.
13.05	Wash,120 lks.wide,30 ft.deep,in bottom of hollow,50 ft below sec.cor.,course W.
	Asc.gently.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in W half and S 28 in E half;and 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.
42.05	Wash,10 lks.wide,7 ft.deep,course S.80°W.
79.90	Wash,10 lks.wide,3 ft.deep,in swale,20 ft.below ¼ sec.cor course.W.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in the dia.,24 ins.in the ground,for cor.of secs.28,29,32,and 33,mkd.on brass cap
	T 43 S S 29 in NW.
	R 13 W S 28 in NE.
	S 33 in SE.;and

a Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	S 32 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,greasewood,cactus,evergreen,oose,and shadscale.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	———
	N.89°58'E.,on a random line bet.secs.28 and 33.
40.00	Set temp.¼ sec.cor.
79 68	Intersect N.and S.line,2 lks.N.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.
	Over rolling land;through dense undergrowth.
	Desc.gently.
36.30	Begin more abrupt descent,bears NE and SW.
39.84	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in N half and S 33 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
45.85	Wash,10 lks.wide,4 ft.deep,in bottom of hollow,60 ft. below sec.cor.,course SW.
	Asc.
49.70	Top of ridge,30 ft.above hollow,bears NE and SW.
	Desc.
79.68	The cor.of secs.28,29,32,and 33.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,sage brush,greasewood,evergreen,and cactus.
	Good grass for grazing.

Subdivision of T.45 S.,R.13 W.-Continued.

Chains	
	Land covered with dense undergrowth,79.68 chs.
	June 20,1909:At this cor.I set off 23°27'N.,on the decl. arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°01'N.,which is the proper lat.nearly.
	S.0°3'E.,on a true line bet.secs.32 and 33.
	Over gently rolling ground,through dense undergrowth.
	Desc.
1.40	Wash,30 lks.wide,4 ft.deep,in hollow,80 ft.below sec.cor. course N.80°W.
	Asc.
35.00	Top of ridge,30 ft.above hollow,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 32 in W half and S 33 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
53.45	Wash,100 lks.wide,30 ft.deep in bottom of hollow,30 ft. below ridge,course W.
	Asc.
59.25	Intersect Utah,Arizona bdy.,13.88 chs.West of the 40th mile cor.,which is an iron post,,3rins.dia.,and projectin 1 ft.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.32 and 33,mkd.on brass cap
	C C A in S.half.
	U in N.half;
	T 45 S S 32 in NW.;and
	R 13 W S 33 in NE.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Land,rolling.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Soil,sandy loam;2nd rate.
	No timber .
	Undergrowth,sage brush,shadscales,evergreen,oose,cactus , and greasewood.
	Good grass for grazing.
	Land covered with dense undergrowth,59.25 chs.
	June 20,1909.

	June 21,1909:At 8 h 1 m a.m.,l.m.t.,I set off 37°05'N.,on the lat.arc;23°28'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.5,6,31,and 32,on N.bdy.of Tp.,heretofore described.
	Thence I run
	S.0°3'E.,bet.secs.5 and 6.
	Over rolling land;through dense undergrowth.
	Asc.
2.00	Top of low ridge,10 ft.above sec.cor..,bears E.and W.
	Desc.gently.
30.00	Bottom of hollow,75 ft.below ridge,course S.70°E.
	Asc.gently.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.;mkd.on brass cap ¼ S 6 in W half and S 5 in E half;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 an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.5,6,7,and 8,mkd.on brass cap
	T 43 S S 6 in NW.
	R 13 W S 5 in NE.
	S 8 in SE.;and
	S 7 in SW.quadrants;dig pits,18x18x12 ins.in each

Subdivision of T.43 S.,R.13 W.½Continued.

Chains	
	sec.;5½ ft.dist.;and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	NoTimber,
	Undergrowth,greasewood,bitter brush,cactus,and sage brush,
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	N.89°53'E.,on a random line bet.secs.5 and 8.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line,at the cor.of secs.4,5,8,and 9.
	Thence I run
	S.89°53'W.,on a true line bet.secs.5 and 8.
	Over mountainous land;through dense undergrowth.
	Desc.over volcanic rocks.
9.50	Foot of steep descent,bears N.20°E.and S.20°W.
	Leave rocks,bears N.20°E.and S.20°W.
	Desc.gently.
17.00	Wash,30 lks.wide,3 ft.deep,in broad hollow,300 ft.below sec.cor.,course N.10°E.
	Asc.gently.
33.00	Top of sand ridge,25 ft.above hollow,bears N.and S.
	Desc.gently.
39.97	Set an iron post,3 ft.long,1 in. in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 5 in N half and S 8 in S half ;and 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.
79.94	The cor.of secs.5,6,7,and 8.
	Land,mountainous and rolling .
	Soil,sandy loam and rocky;2nd and 4th rate.
	No timber.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,sage brush,greasewood,oose,cactus,and bitter brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.94 chs.
	June 21,1909:At this cor.I set off 23°27'N.,on the decl. arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°04'N.,which is the pr per lat.nearly.
	———
	S.89°52'W.,on a random line bet.secs.6 and 7.
40.00	Set temp.¼ sec.cor.
93.18	Intersect Guide Meridian,24 lks.S.of the cor.of secs.1,6, 7,and 12.heretofore described.
	Thence I run
	S.89°59'E.,on a true line bet.secs.6 and 7.
	Over rolling land;through dense undergrowth.
	Asc.
3.70	Top of spur,30 ft.above sec.cor.,bears NE and SW.
	Desc.
7.20	Bottom of hollow,30 ft.below spur,course NE.
	Asc.
26.60	Top of sand ridge,25 ft.above hollow,bears NE and SW.
	Desc.
53.18	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 6 in N half and S 7 in S half;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.
93.18	The cor.of secs.5,6,7,and 8.
	Land,rolling .
	Soil,sandy ;2nd rate.
	No timber .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,sage brush,shadscales,greasewoods,cactus,and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,93.18.chs.
	June 21,1909.
	June 22,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°04'N., on the lat.arc;23°28'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.5,6,7,and 8.
	Thence I run
	S.0°3'E.,bet.secs.7 and 8.
	Over rolling land;through dense undergrowth.
	Desc.gently.
8.00	Wash,6 lks.wide,2 ft.deep,course E.
	Asc.gently.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 7 in W half and S 8 in E half;and dig pits,18x18x12 ins.N.and S.of pos 3 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft.hig W.of cor.
63.15	Wash,10 lks.wide,4 ft.deep,course NE.
	Asc.gently.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.7,8,17,and 18,mkd.on brass cap T 43 S S 7 in NW.
	R 13 W S 8 in NE.
	S 17 in SE.;and
	S 18 in SW.quadrants;dig pits,18x18x12 ins.in each sec.;5½ ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,W.of cor.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,sage brush,greasewood,bitter brush,and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	———
	N.89°53'E.,on a random line bet.secs.8 and 17.
40.00	Set temp.¼ sec.cor.
79.88	Intersect N.and S.line,2 lks.N.of the cor.of secs. 8,9,16,and 17.
	Thence I run
	S.89°54'W.,one true line bet.secs.8 and 17.
	Over mountainous land;through dense undergrowth.
	Desc.
1.00	Hollow,10 ft.below cor.,course NW.
	Continue descent.
9.65	Bottom of hollow,20 ft.below sec.cor.,course NE.
	Asc.
33.15	Top of sandstone ridge,30 ft.above hollow,bears N.and S.
	Desc.
39.94	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 8 in N half and S 17 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
42.90	Wash,15 lks.wide,15 ft.deep,in bottom of hollow,75 ft. below ridge,course N.20°W.
	Asc.
45.35	Top of spur,50 ft.above hollow,bears N.and S.
	Desc.
53.10	Bottom of hollow,25 ft.below ridge,course NE.
	Asc.
70.00	Top of spur,60 ft.above hollow,bears N.10°E.and S.10°W.
	Desc.
79.88	The cor.of secs.7,8,17,and 18.
	Land,mountainous.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Soil,sandy loam and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,sage brush,greasewood,bitter brush,oose,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	79.88 chs.
	June 22,1909:At this cor.I set Off 23°27'N.,on the decl. arc;and at 0 h 2 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°03'N.,which is the proper lat.nearly.
	N.89°59'W.,on a random line bet.secs.7 and 18.
40.00	Set temp.¼ sec.cor.
93.45	Intersect Guide Meridian,3 lks.S.of the cor.of secs.7,12, 13,and 18 ,heretofore described.
	Thence I run
	S.89°58'E.,on a true line bet.secs.7 and 18.
	Over rolling land;through dense undergrowth.
	Asc.gradually.
10.00	Top of ridge,100 ft.above sec.cor..,bears NE and SW.
	Desc.
53.45	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 7 in N half and S 18 in S half;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.
84.00	Wash,2 lks.wide,2 ft.deep,course NW.
	Asc.gently.
93.45	The cor.of secs.7,8,17,and 18.
	Land rolling .
	Soil,sandy loam;2nd rate.
	No timber .

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Undergrowth,sage brush,greasewood,cactus,oose,and bitter brush.
	Good grass for grazing.
	Land covered with dense undergrowth,93.45 chs.
	June 22,1909.
	June 23,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°03'N.,on the lat.arc;23°27'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.7,8,17,and 18.
	Thence I run
	S.0°3'E.,bet.secs.17 and 18.
	Over rolling land;through dense undergrowth.
	Desc.gently.
15.60	Wash,50 lks.wide,20 ft.deep,course N.20°W.
	Asc.gradually.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 18 in W.half and S 17 in E half;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.
51.00	Top of ridge,200 ft.above wash,bears N.30°W.and S.30°E.
	Desc.abruptly.
55.00	Bottom of hollow,40 ft.below ridge,course NW.
	Asc.
70.00	Top of ridge,50 ft.above hollow,bears NE and SW.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,20 ins.in the ground,on solid rock bottom,and surrounded by mound of stone,for cor.of secs.17,18,19,and 20,mkd.on brass cap
	T 43 S S 18 in NW.
	R 13 W S 17 in NE.
	S 20 in SE.;and

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	S 19 in Sw.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Land,rolling .
	Soil;sandy loam;2nd rate.
	No timber.
	Undergrowth,mountain rush,greasewood,evergreen,and cactus
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	June 23,1909:At the noon hour the sky is overcast and solar observation are impossible.
	N.89°54'E.,on a random line bet.secs.17 and 20.
40.00	Set temp.¼ sec.cor.
79.78	Intersect N.and S.line,21 lks.S.of the cor.of secs.16,17, 20,and 21.
	Thence I run
	S.89°45'W.,on a true line bet.secs.17 and 20.
	Over mountainous land;through dense undergrowth.
	Ascend abruptly over ledges.
3.00	Top of ledges,150 ft.above sec.cor.,bears N.10°E.and S.10°W.
	Continue ascent,bears N.10°E.and S.10°W.
5.00	Top of ridge,20 ft.aboce top of ledge,bears N.and S.
	Desc.
15.50	Bottom of hollow,75 ft.below ridge,course NE.
	Asc.
39.80	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 17 in N half and S 20 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
51.25	Begin abrupt ascent,bears N.and S.
60.00	Top of sandstone ridge,200 ft.above hollow,bears N.and S.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Desc.
64.90	Bottom of hollow,150 ft.below ridge,course N.20°E.
	Asc.
69.50	Top of spur,50 ft.high,bears N.and S.
	Desc.
74.00	Bottom of hollow,80 ft.below spur,course N.60°E.
	Asc.
79.78	The cor.of secs.17,18,19,and 20.
	Land,mountainous .
	Soil,sandy loam and rocky;and gravelly;2nd ,3rd and 4th rate.
	No timber.
	Undergrowth,oose,cactus,sage brush,evergreen and greasewood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.78 chs.

June 23,1909.

June 24,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°02'N.,on the lat.arc;23°26'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.17,18,19,and 20.

Thence I run

N.89°58'W.,on a random line bet.secs.18 and 19.

40.00	Set temp.¼ sec.cor.
93.46	Intersect Guide Meridian,27 lks.S.of the cor.of secs. 13,18,19,and 24.,heretofore described.

Thence I run

S.89°48'E.,on a true line bet.secs.18 and 19.

	Asc.
53.46	Top of ridge,100 ft.above sec.cor.,bears N.20°E.and S.20°

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	W.
	Set an iron post,3 ft.long,1 in.in dia.,13 ins.in the ground,on solid rock,and surrounded by mound of earth and stone,for ¼ sec.cor..mkd.on brass cap ¼ S 18 in N half and S 19 in S half;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.
	Desc.
65.90	Bottom of hollow,250 ft.below ridge,course N.
	Asc.
74.90	Begin steep ascent,bears N.and S.over ledges.
78.90	Leave ledges,bears N.and S.
87.40	Top of ridge,300 ft.above hollow,bears NE and SW.
	Desc.
93.46	The cor.of secs.17,18,19,and 20.
	Land,rolling and mountainous.
	Soil,sandy and rocky;2nd and 4th rate.
	No timber .
	Undergrowth,sage brush,shadscales,oose,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 93.46 chs.
	June 24,1909:At this cor.I set off 23°26'N.,on the decl. arc;and at 0 h 2 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

	S.0°3'E.,bet.secs.19 and 20.
	Over mountainous land;through dense undergrowth.
	Desc.
.55	Top of sandstone ledge,20 ft.high,bears E.and W.
2.00	Bottom of hollow,30 ft.below sec.cor.,course N.80°E.
	Asc.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains

13.75 Top of ridge,100 ft.above hollow,bears E.and W.

Desc. over ledges.

20.80 Top of perpendicular ledge,300 ft.high,bears E.and W.

35.00 Foot of abrupt descent,500 ft.below ridge,bears N.60°W. and S.60°E.

Leave ledges,bears N.60°W.and S.60°E.

Desc.gently.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 19 in W half and S 20 in E half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.19,20,29,and 30,mkd.on brass cap

T 43 S S 19 in NW.

R 13 W S 20 in NE.

S 29 in SE.;and

S 30 in SW.quadrants;dig pits,18x18x 12 ins.,in each sec;5½ ft.dist.;and raise a mound ofearth,4 ft. base,2 ft.high,W.of cor.

Land ,mountainous and rolling.

Soil,sandy loam and rocky;2nd and 4th rate.

No timber .

Undergrowth,sage brush,greasewood,shadscales,evergreen, cactus,and oose.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth, 80.00 chs.

June 24,1909.

June 25,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°25'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,20,29,and 30.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Thence I run
	N.89°45'E.,on a random line bet.secs.20 and 29.
40.00	Set temp.¼ sec.cor.
79.80	Intersect N.and S.line,12 lks.N.of the cor.of secs.20,21, 28,and 29.
	Thence I run
	S.89°50'W.,on a true line bet.secs.20 and 29.
	Over nearly level land;through dense undergrowth.
	Desc.
15.90	Road from Hurricane to Fort Pierce,bears NE.and SW.
	Bottom of hollow,40 ft.below cor.,course SW.
	Asc.
33.40	Top of spur,40 ft.above hollow,bears N.and S.
	Desc.
39.90	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 20 in N half and S 29 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
50.00	Foot of descent,bears N.60°W.and S.60°E.
	Thence over nearlyllevel land.
79.80	The cor.of secs.19,20,29,and 30.
	Land,rolling .
	Soil;sandy loam;2nd rate.
	No timber .
	Undergrowth,sage brush,greasewood,oose,and cactus.
	Good grass for grazing.
	Land covered with dense undergrowth,79.80 chs.

	N.89°48'W.,on a random line bet.secs.19 and 30.
40.00	Set temp.¼ sec.cor.
93.41	Intersect Guide Meridian,9 lks.S.of the cor.of secs.19,24, 25,and 30,heretofore described.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Thence I run
	S.89°45'E.,on a true line bet.secs.19 and 30.
	Over rolling land;through dense undergrowth.
	Desc.
2.70	Bottom of hollow,60 ft.below sec.cor.,course S.30°E.
	Asc.
4.00	Top of spur,30 ft.above hollow,bears N.and S.
	Desc.gently.
53.41	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 19 in N half and S 30 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
54.40	Wash,15 lks.wide,4 ft.deep,course SW.
	Asc.gently.
93.41	The cor.of secs.19,20,29,and 30.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,evergreen,sage brush,and cactus.
	Good grass for grazing.
	Land covered with dense undergrowth,93.41 chs.
	June 25,1909:At this cor.I set off 23°25'N.,on the decl. arc;and at 0 h 2 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

	S.0°3'E.,bet.secs.29 and 30.
	Over rolling land;through dense undergrowth.
	Desc.gently.
18.10	Road from Hurricane to Fort Pierce,bears N.80°W.and S.80° E.
22.70	Wash,60 lks.wide,3 ft.deep,course S.80°W.
	Asc.gently.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 30 in W half and S 29 in E half;and 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.
69.70	Top of spur,20 ft.above ¼ sec.cor.,bears E.and W.
	Desc.gently.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.29,30,31,and 32,mkd.on brass cap
	T 43 S S 30 in NW.
	R 13 W S 29 in NE.
	S 32 in SE.;and
	S 31 in SW.quadrants;and raise a mound of stone,
	2 ft.base,1½ ft.high,W.of cor.
	Land,rolling.
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,greasewood,cactus,evergreen,and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	June 25,1909.

June 26,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°01'N., on the lat.arc;23°24'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.29,30,31,and 32.

Thence I run

N.89°50'E.,on a random line bet.secs.29 and 32.

40.00	Set temp.¼ sec.cor.
79.92	Intersect N.and S.line,16 lks.N.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.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	Over nearly level land;through dense undergrowth.
	Desc.gradually.
1.00	Wash,20 lks.wide,5 ft.deep,in bottom of hollow,course W.
	Continue descent.
6.00	Leave wash,course N.60°W.
	Asc.gradually.
6.85	Top of ascent,bears N.60°W.and S.60°E.
	Desc.gradually.
39.96	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in N half and S 32 in S half;and 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.
62.65	Wash,25 lks.wide,10 ft.deep,in hollow,30 ft.below ¼ sec. cor.,course S.75°W.
	Continue descent.
66.45	Same wash,30 lks.wide,10 ft.deep,in hollow,course N.60° W.
71.10	Same wash,20 lks.wide,6 ft.deep,in hollow,course S.60°W.
	Asc.
79.92	The cor.of secs.29,30,31,and 32.
	Land,rolling.
	Soil,sandy loam;2nd rate.
	No timber .
	Undergrowth,bitter brush,evergreen,shadscales,and greasewood.
	Good grass for grazing.
	Land covered with dense undergrowth,79.92 chs.

	N.89°45'W.,on a random line bet.secs.30 and 31.
40.00	Set temp.¼ sec.cor.
93.38	Intersect Guide Meridian,9 lks.N.of the cor.of secs.25,30,

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
	31,and 36,heretofore described.
	Thence I run
	S.89°48'E.,on a true line bet.secs.30 and 31.
	Over rolling land;through dense undergrowth.
	Asc.
53.38	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 30 in N half and S 31 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
82.55	Top of ridge,40 ft.above sec.cor.,bears N.and S.
	Desc.
93.38	The cor.of secs.29,30,31,and 32.
	Land,rolling .
	Soil sandy;2nd rate.
	No timber.
	Undergrowth,greasewood and shadscales.
	Good grass for grazing.
	Land covered with dense undergrowth,93.38 chs.
	June 26,1909:At this cor.I set off 23°23'N.,on the decl. arc;and at 0 h 2 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°01'N.,which is the proper lat.nearly.

	S.0°3'E.,on a true line bet.secs.31 and 32.
	Over rolling land;through dense undergrowth.
	Desc.gently.
3.45	Wash,20 lks.wide,4 ft.deep,in bottom of hollow,30 ft. below sec.cor.,course S.30°W.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 31 in W half and S 32 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.

Subdivision of T.43 S.,R.13 W.-Continued.

Chains	
42.15	Top of spur,50 ftlabove hollow,bears N.80°W.and S.80°E.
	Desc.
46.25	Bottom of hollow,50 ft.below spur,course S.80°W.
	Asc.
50.55	Top of spur,60 ft.above hollow,bears E.and W.
	Desc.
54.00	Foot of descent,60 ft.below spur,bears E.and W.
	Thence over nearly level land.
59.26	Intersect Utah-Arizona bdy.,13.77 chs.West of the 39th mile post,which is an iron post,3 ins.in dia.,projecting 1 ft.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.31,and 32,mkd.on brass cap
	C C A in S.half.
	U in N.half.
	T 43 S S 31 in NW.;and
	R 13 W S 32 in NE.;quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,greasewood,mountainorush,evergreen,oose,and c cactus.
	Good grass for grazing.
	Land covered with dense undergrowth,59.26 chs.

June 26,1909.

General Description.

The east half of this township is on a high rolling mountain

Subdivision of T.43 S.,R.13 W.-Continued.

and the western part is about 600 ft.lower;than the eastern part and is rolling in character and sandy ; producing a dense undergrowth,of sage brush,shadscales bitter brush,greasewood,cactus ,and oose.

There is only a little scattering cedar and pinon pine timber in the township except in the extreme eastern part on top of Little Creek mountain which is covered with a heavy growth of cedar and pinon pine.

There is no water in the township.

No direct indications of oil or mineral were found in the township.

There are no settlers in the township.

The soil is nearly all sandy and clay loam;2nd rate.

June 26,1909.

Anthony J. Stewart Jr.
U.S.Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

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

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

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

.....

showing the respective capacities in which they acted:

r list of names and final oath of assistants see book "R" ..... *Chainman.*

T. 43 S., R. 15 W.

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

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

those parts or portions of the .....

.....

.....

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

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

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

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

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

General for .....

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

.....

Subscribed and sworn to before me this .....

day of ....., 190

SEAL

.....

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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

[illegible] Oath of Deputy see Book No. [illegible] R. 15 W.

.....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, April 19,

The foregoing field notes of the survey of the subdivisional lines of Tow[illegible]
[illegible] South, [illegible] West of the Salt Lake Base and Meridian
[illegible],

executed by [illegible] Jr. and Lee A. Shaw
under his contract No. [illegible], dated March 17, 1909, havin
critically examined, and the necessary corrections and explanations made, the said field notes, a
surveys they describe, are hereby approved.

United States Surveyor G

I certify that the foregoing transcript of the field notes of the above-described surveys in
..... has been correctly copied from the original notes on file in this o

United States Surveyor G

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Page

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Page

4—679.

BOOK A-361

m.73

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No. 43 South, Range No. 14 West,

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

~~Andrew J. Stewart Jr/and Leo A Snow~~, *United States Deputy Surveyor,* s

Under ~~his~~ their *Contract No.* 309, *dated* March 17, 1909. ~~190~~

Survey commenced June 9, 1909. ~~190~~

Survey completed June 24, 1909. ~~190~~

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BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dalley	Chainman
Samuel Brooks	Chainman
John T. Jarvis	Moundman
Henry Savage	Moundman
John A. Humphries	Flagman

BOOK A-361

INDEX DIAGRAM.

Township 43 South, *Range* 14 West

6 47 49	5 56 48	4 24 37	3 13 25	2 2 14	1 3
7 50 52	8 39 51	9 27 40	10 15 28	11 4 16	12 5
18 53 55	17 41 54	16 29 42	15 17 30	14 5 18	13 7
19 56 58	20 42 57	21 31 43	22 19 32	23 8 20	24 9
30 59 62	29 44 60	28 32 45	27 21 33	26 10 22	25 11
31 63	32 46	33 35	34 23	35 12	36

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

We Hillman Dalley and Samuel Brooks 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

Subdivid on of T.43 S.,R.14 W., and T.43 S.,R.16 W.,Salt Lake Base a Meridian, Utah.

Hillman Dalley, Chain

Samuel Brooks, Chain

Subscribed and sworn to before me this 3rd day of May 1909. xxx

Leo A. Snow

U.S.Deputy Surveyor.

SEAL

We John T.Jarvis and Henry Savage 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

Subdivision of T.43 S.,R.14 W.,and T.43 S.,R.16 W.,Salt Lake Base a Meridian, Utah.

John T. Jarvis, Mound

Henry Savage, Mound

Subscribed and sworn to before me this 3rd day of May 1909. xxx

Leo A. Snow

USDeputy Surveyor

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

..... Ax

..... Ax

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

SEAL

I, John A.Humphries, 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, i survey of Subdivision of T.43 S.,R.14 W.,and T.43 S.,R.16 W.,Salt Lak Base and Meridian, Utah.

John A. Humphries, Flag

Subscribed and sworn to before me this 3rd day of May 1909. xxx

Leo A. Snow

U.S.Deputy Surveyor.

SEAL

Subdivision of T.43 S.,R.14 W.

Survey commenced June 9,1909;and executed with a W.and L.E. Gurley light mountain transit ,No.-.with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined tested on the meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,on April 26,1909.

Note :For complete test of instrument see notes of Guide Meridian,of E.bdy.T.43 S.,R.14 W.

At the cor.of secs.1,2,35,and 36,on N.bdy.of Tp.,heretofore described ,latitude 37°05'00"N.,longitude 113°19'15" W.,At 2 h22m a.m.,l.m.t.,I observe Polaris at eastern elongation,in accordance with the Manual ,and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground,5.00 chs.N.of the cor.

At 7 h 30 m a.m.,l.m.t.,I lay off the azimuth of Polaris 1°28.6'to the west,and mark a point in the meridian thus determined by cutting a small groove in the stone firmly set in the ground,5.00 chs.N.of the cor.

At 7 59 m a.m.,l.m.t.,I set off 37°05'N.,on the lat.arc; 22°56'N.,on the decl.arc;and mark the meridian determined with the solar by a cross on the stone already set 5.00 chs.N.of the cor.;on which the meridian falls 0.30 ins. east of the merdian determined with the Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m.,is N.16°46'W.,the angle thus determined gives the mag.decl. 16°46'E.

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
	From the cor.of secs.1,2,35,and 36,on N.bdy.of Tp.,heretofore described ,
	I run
	S.0°1'E.,bet.secs.1 and 2.
	Over mountainous land;through dense undergrowth.
	Asc.over low sandstone ledges.
25.00	Ledge,25 ft.high,bears NE and SW.
36.45	Top of sandstone knoll 25 ft.high,
	Leave ledges,bears NE and SW.
	Desc.
40.00	Bottom of swale,40 ft.below knoll,course N.20°E.
	Set an iron post,3 ft.long,1 ins.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 2 on W half and S 1 on E half;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.
	Asc.
46.00	Top of ridge,30 ft.above swale,bears N.20°E.and S.20°W.
	Desc.
79.00	Bottom of swale,25 ft.below ridge,course NE.
	Asc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.1,2,11,and 12,mkd.on brass cap T 43 S S 2 in NW. R 14 W S 1 in NE; S 12 in SE; and S 11 in SW quadrant;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;2nd rate.
	No timber.
	Undergrowth,greasewood,bitter brush,and cactus.
	Good grass for grazing.

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	N.89°47'E.,on a random line bet.secs.1 and 12.
40.00	Set temp.¼ sec.cor.
80.02	Intersect Guide Meridian,2 lks.S.of the cor.of secs.1,6,
	7,and 12,heretofore described.
	Thence I run
	S.89°46'W.,on a true line bet.secs.1 and 12.
	Over rolling mountainous land;through dense undergrowth.
	Desc.
14.00	Bottom of hollow,60 ft.below sec.cor.,course N.10°E.
	Asc.
21.50	Top of ridge,30 ft.above hollow,bears N.10°E.and S.10°W.
	Desc.
40.01	Set an iron post,3 ft.long,1 ins.dia.,26 ins.in the
	ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 1 on N.,and
	S 12 on S half;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.
80.02	The cor.of secs.1,2,11,and 12.
	Land,mountainous .
	Soil,sandy;2nd rate.
	No timber.
	Undergrowth,greasewood,cactus,oose,and bitter brush.
	Good grass for grazing .
	Mountainous land,or land covered with dense undergrowth,
	80.02 chs.
	June 9,1909:At this cor.I set off 22°56'N.,on the decl.
	arc;and at 11 h 59 m a.m.,l.m.t.,I observe the sun on
	the meridian ,the resulting lat.is 37°04'N.,which is the

Subdivision of T.43 S., R.14 W.-Continued.

Chains	
	proper lat.nearly.
	S.0°1'E.,bet.secs.11 and 12.
	Over rolling sand hills;through dense undergrowth.
	Asc.
35.00	Leave undergrowth,bears NE.and SW.
40.00	Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground, for ¼ sec.cor.;mkd.on brass cap ¼ S 11 on W.half,and S 12 on E.half;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.
	Top of sand ridge,100 ft.above sec.cor.,bears E.and W.
	Desc.
50.00	Enter dense undergrowth,bears E and W.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground for cor.of secs.11,12,13,and 14,mkd.on brass cap T 43 S S 11 in NW; R 14 W S 12 in NE; S 13 in SE;and S 14 in SW quadrant;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 sand hills.
	Soil,sand;3rd rate.
	No timber,
	Undergrowth,sage brush,oose,cactus,and bitter brush.
	No grass .
	Mountainous land,or land covered with dense undergrowth
	80.00 chs.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	N.89°46'E.,on a **random line bet.**secs.12 and 13.
40.00	Set temp.¼ sec.cor.
79.90	Intersect Guide Mer.,16 lks.N.of the cor.of secs. 7,12,13,and 18,on east bdy.of Tp.,heretofore described.
	Thence I run
	S.89°53'W.,on a true line bet.secs.12 and 13.
	Over rolling sand hills;through dense undergrowth.
	Desc.
8.00	Bottom of hollow,25 ft.below sec.cor.,course NE.
	Asc.gradually.
25.90	Begin more abrupt ascent,bearsN.20°E.and S.20°W.
39.95	Set an iron post,3 ft.long,1 ins.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 12 on N.half and S 13 on S half ;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.
74.90	Top of main ridge,20 ft.above ¼ sec.cor.,bears N.30°E. and S.20°W.
	Desc.
79.90	The cor.of secs.11,12,13,and 14.
	Land,mountainous .
	Soil,sand;3rd rate.
	No timber.
	Undergrowth,sage,bitter brush,cactus,and greasewood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.90 chs.

June 9,1909.

June 10,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°03 'N. on the lat.arc;23°01'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.11,12,13,and

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	14.
	Thence I run
	S.0°1'E.,bet.secs.13 and 14.
	Over mountainous land;through dense undergrowth.
	Asc.
5.00	Top of ridge,20 ft.above cor.,bears NE and SW.
	Desc.
29.75	Bottom of hollow,60 ft.below ridge,course NE.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 14 on W.half and S 13 on E.half;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.
68.00	Leave sandy ground and enter ledges and rocks,bears E.and W.
80.00	Set an iron post,3 ft.long 2 ins.dia.,12 ins.in the ground,in mound of earth and stone,for cor.of secs.13,14, 23,and 24,mkd.on brass cap T 43 S S 14 in NW; R 14 W S 13 in NE ; S 24 in SE ;and S 23 in SW quadrants;and raise a mound of s stone,2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous .
	Soil,sand and rocks;3rd rate.
	No timber,
	Undergrowth,greasewood,sage brush,and cactus.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	Impossible to set sec.cor.post over 12 ins.in the ground.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains.	
	N.89°53'E.,on a random line bet.secs.13 and 24.
40.00	Set temp.¼ sec.cor.
79.76	Intersect Guide Meridian,or E.bdy.Tp.,6 lks.N.of the cor.of secs.13,18,19,and 24.,heretofore described.
	Thence I run
	S.89°56'W.,on a true line bet.secs.13 and 24.
	Over mountainous land;through dense undergrowth.
	Desc.
14.00	Bottom of hollow,20 ft.below sec.cor.,course S.
	Asc.
39.88	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap,¼ S 13 on N.half, and S 24 on S.half;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.
65.00	Begin more abrupt ascent,over ledges and rocks,bears N.and S.
79.76	The cor.of secs.13,18,23,and 24.
	Land,mountainous .
	Soil,sandy and rocky;3rd and 4th rate.
	No timber.
	Undergrowth,sage brush,cactus,bitter brush,and oose.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 79.76 chs.
	June 10,1909:At this cor.I set off 23°01'N.,on the decl. arc;and at 11 h 59 m a.m.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
	S.0°1'E.,bet.secs.23 and 24.
	Over mountainous land;through dense undergrowth.
	Desc.
24.75	Bottom of hollow,75 ft.below sec.cor.,course SE.
	Asc.
26.75	Top of spur,25 ft.above hollow,bears E.and W.
	Desc.
31.95	Bottom of hollow,100 ft.below spur,course S.75°E.
	Asc.
37.00	Top of spur,75 ft.above hollow,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,in mound of earth and stone,for ¼ sec.cor..mkd. on brass cap ¼ S 23 on W.half and S 24 on E half;and raise a mound of stone,2 ft.base,1½ ft.high ,W.of cor.
60.00	Desc;abruptly over a series of ledges,bears E.and W.
71.00	Leave ledges,bears E.and W.
	Continue steep descent,bears E.and W.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground for cor.of secs.23,24,25,and 26,mkd .on brass cap T 43 S S 23 in NW; R 14 W S 24 in NE ; S 25 in SE and S 26 in SW;quadrant;dig pits,18x18x12 ins.in each section,5½ ft.dist;and raise a mound of earth;4 ft. base,2 ft.high,W.of cor.
	Land,mountainous .
	Soil,sandy and rocky;3rd and 4th rate.
	No timber.
	Undergrowth,sage,bitter brush,and squaw bush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	Impossible to set ¼ sec.cor.post over 12 ins.in the ground.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	N.89°56'E.,on a random line bet.secs.24 and 25.
40.00	Set temp. ¼ sec.cor.
79.68	Intersect Guide Mer.,5 lks.N.of the cor.of secs.19,24, 25,and 30,heretofore described.
	Thence I run
	S.89°58'W.,on a true line bet.secs.24 and 25.
	Over mountainous land;through dense undergrowth.
	Asc.
19.00	Top of ridge,100 ft.above sec.cor.,bears N.and S.
	Desc.
22.80	Bottom of hollow,200 ft.below ridge,course S.10°W.
	Asc.
35.00	Enter sandstone boulders,bears NE and SW.
39.84	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,in mound of earth,and stone,for ¼ sec.cor.,mkd. on brass cap ¼ S 24 in N half and S 25 in S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
42.00	Foot of perpendicular sandstone ledge,150 ft.high,bears NE and SW.
48.20	Top of flat ridge,500 ft.above hollow,bears NW and SE.
	Desc.
56.85	Top of perpendicular sandstone ledge,125 ft.high,bears N. 60°W.and S.60°E.
69.00	Bottom of hollow,400 ft.below ridge,course S.
	Asc.
72.50	Top of ridge,100 ft.above hollow,bears N.and S.
	Desc.
79.68	The cor.of secs.23,24,25,and 26.
	Land,mountainous.
	Soil,sandy and rocky;3rd and 4th rate.
	No timber.
	Undergrowth,sage brush and greasewood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	79.68 chs. June 10, 1909.
	Impossible to set post for ¼ sec.cor. over 12 ins.in the ground.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	February 26,1910:
	Note:The U.S.Examiner of Surveys F.J.Van Winkle having found the cor.of secs.25,26,35,and 36 missing(the cor. having been destroyed by floods);it becomes necessary to rerun the line bet.secs.25 and 26,as follows:
	S.0°01'E.,bet.secs.25 and 26.
	Over mountainous land;through dense undergrowth.
	Desc.
15.00	Bottom of holl w,200 ft.below sec.cor.,course W.
	Asc.
20.20	Top of spur,50 ft.above hollow,bears E.and W.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 26 in W half and S 25 in E half;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.
41.90	Bottom of hollow,200 ft.below spur,course SW.
	Asc.
44.60	Top of spur,100 ft.above hollow,bears E.nnd W.
	Desc.
53.50	Foot of steep descent,200 ft.below spur,bears E.and W.
	Thence over nearly level land.
76.20	Road from Fort Pierce to Hurricane,bears E.and W.
80.00	Point for cor.falls in wash where cor.has been washed out.Therefore I return to a suitable point on line and at
79.51	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for witness cor.to cor.of secs.25,26,35,and 36, mkd.on brass cap
	T 43 S S 26 in NW.
	W C R 14 W S 25 in NE.
	S 36 in SE.;and
	S 35 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains

Land ,mountainous and nearly level.

Soil,sandy ;2nd rate.

No timber .

Undergrowth,sage brush,cactus,and evergreen.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

80.00 chs.

Note:February 26,1910,U.S.Examiner of Surveys,F.J.Van-Winkle,found the cor.of secs.25,26,35,and 36 missing; which has this day been set by rerunning the line bet. secs.25 and 26.I now re-run the line bet.secs.25 and 36. N.89°58'E.,on a random line bet.secs.25 and 36.;from the point for cor.of secs.25,26,35,and 36,which is 49 lks. S.0°01'E.,from the witness cor.

40.00 Set temp.¼ Sec.cor. Destroy old ¼ sec.cor.

79.70 Intersect E.bdy.of Tp., Guide Meridian,5 lks.S .of the cor.of secs.25,30,31,and 36,heretofore described.

Thence I run

S.89°56'W.,on a true line bet.secs.25 and 36.

Over nearly level land;through dense undergrowth.

Desc.gradually.

12.50 Center of wash,75 lks.wide,10 ft.deep,course S.60°W.

Asc.

32.25 Top of low ridge,50 ft.above wash,bears N.20°E.and S.20° W.

Desc.gradually.

39.85 Set an iron post,3 ft.long,1 in.in dia.26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 25 in N half and S 36 in S half;dig pits,18x18x12 ins.,E.and W.of post,3 ft.dist.;and raise a mound of earth,3 ft.base,1½

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	high,N.of cor.
79.70	The point for cor.of secs.25,26,35,and 36,which is 49 lks.S.0°01'E.,from witness cor.
	Land nearly level.
	Soil,sandy;2nd rate.
	No timber.
	Undergrowth,sage brush,greasewood,cactus,and evergreen.
	Good grass for grazing.
	Land covered with dense undergrowth,79.70 chs.
	February 26,1910,U.S.Examiner F.J.VanWinkle ,found cor.of secs.25,26,35,and 36 missing which has this day been set by me;therefore I re-run the line bet.secs.35 and 36 as follows:
	From the point for cor.of secs.25,26,35,and 36,which is 49 lks.S.0° 01'E.from the witness cor.;
	I run S.0°01'E.,on a true line bet.secs.35 and 36. Over nearly level land;through dense undergrowth.
7.40	Center of Fort Pierce Wash,400 lks.wide,10 ft.deep,course N6
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 35 in W half; and S 36 in E half;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.
46.15	Road from St.George to Kanab,bears E.and W.
54.25	Wash,40 lks.wide,15 ft.deep,course S.80° E.
59.44	Intersect Utah-Arizona bdy line,27.02 chs.West of 37th mile cor.,which is an iron post,2 ins.in dia.,extending 1 ft.above ground,firmly set,and mkd.and witnessed as described by the surveyor general,and 53.21 chs.East of 36th mile cor.,on the bdy.,which is a sandstone,20x14x14 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.35 and 36,mkd.on brass cap
	T 43 S S 35 in NW.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains

R 14 W S 36 in NE quadrant; U in N.half, and

A C C in S half;and raise a mound of stone,

2 ft.base,1½ ft.high,N.of cor.Pits impracticable.

Land,nearly level.

Soil,sandy;2nd rate.

No timber.

Undergrowth,sage brush,greasewood,and evergreen.

Good grass for grazing.

Land,covered with dense undergrowth,59.44 chs.

June 11,1909.

June 12,1909:At 7 h 59 m a.m.,l.m.t.,I set off 37°05'N., on the lat.arc;23°09'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.2,3,34,and 35, on N.bdy.of Tp.,heretofore described.

Thence I run

S.0°1'E.,bet.secs.2 and 3.

Over rolling sand hills;scattering undergrowth.

Asc.gradually.

40.00 Set an iorn post,3 ft.long,1 in.dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap,¼ S 3 on W half and S 2 on E.half;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.

55.00 Top of ridge,50 ft.above ¼ sec.cor.,bears NE and SW.

Desc.gradually.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,12 ins.in the ground,in mound of earth and stone,for cor.of secs.2,3, 10,and 11,mkd.on brass cap

T 43 S S 3 in NW.

Subdivision of T.43 S., R.14 W.-Continued.

Chains	
	R 14 W S 2 in NE;
	S 11 in SE ;and
	S 10 in SW quadrant;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 sand hills.
	Soil,sand;3rd rate.
	No timber .
	Undergrowth,scattering sage brush and cactus.
	No grass.
	Impossible to set sec.cor.post over 12 ins.in the ground.
	N.89°48'E.,on a random line bet.secs. 2 and 11.
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line,2 lks.S.of the cor.of secs. 1,2, 11,and 12.
	Thence I run
	S.89°47'W.,on a true line bet.secs.2 and 11.
	Over rolling sand hills;through scattering undergrowth.
	Desc.
1.00	Bottom of swale,10 ft.below sec.cor.,course NE.
	Asc.gradually.
30.00	Leave undergrowth,bears N.and S.Thence over barren sand dunes.
40.05	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap,¼ S 2 on N.half and S 11 on S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
41.50	Top of sand ridge,50 ft.above swale,bears N.40°E.and S. 20°W.
	Desc.gradually.
76.50	Bottom of hollow, 20 ft.above sec.cor.,course N.30° E.
	Ascend gradually.

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
80.10	The cor.of secs.2,3,10,and 11.
	Land,rolling sand hills.
	Soil,sand;3rd rate.
	Undergrowth,saattering sage brush and cactus.
	No grass .
	June 12,1909:At this cor.I set off 23°10'N.,on the decl. arc; and at 11 h 59 m a.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°04'N.,which is the proper lat.nearly.
	S.0°1'E.,bet.secs.10 and 11.
	Over rolling sand hills;through scattering sage brush.
	Desc.gradually.
6.00	Bottom of hollow,20 ft.above sec.cor.,bourse N.30°E.
	Asc.gradually.
40.00	Set an iron post,3 ft.long,1 ins.dia.,26 ins.in the ground, for ¼ sec.cor.mkd.on brass cap ¼ S 10 on W.Half and S 11 on E half;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.
41.55	Top of sand ridge(subject to change by the constant winds) 50 ft.above hollow,bears E.and W.
	Desc.
71.75	Leave moving sand dunes and enter dense undergrowth, bears E.and W.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground, for cor.of secs.10,11,14,and 15,mkd.on brass cap T 43 S S 10 in NW ; R 14 W S 11 in NE; S 14 in SE ;and S 15 in SW quadrant;

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Dig pits,18x18x12 ins.in each sec.5½ ft.dist;and raise a mound of earth,4 ft.base,2 ft.high,W.of cor.
	Land,rolling .
	Soil,sandy loam and barren sand;2nd and 3rd rate.
	No timber.
	Undergrowth,sage brush greasewood,and cactus.
	No grass .
	Land covered with dense undergrowth,8.25 chs.
	— —
	N.89°47'E.,on a random line bet.secs. 11 and 14.
40.00	Set temp.¼ sec.cor.
79.90	Intersect N.and S.line,5 lks.N.of cor.of secs.11,12,13, and 14.
	Thence I run
	S.89°49'W.,on a true line bet.secs. 11 and 14.
	Over rolling sand hills;through dense undergrowth.
	Desc.
22.00	Bottom of hollow,50 ft.below sec.cor.,course N.
	Asc.
39.95	Set an iron post,3 ft.long,1 in.dia.,26 ins.in the ground;for ¼ sec.cor. mkd.on brass cap ¼ S 11 on N half and S 14 on S half;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.
54.65	Top of sand ridge,100 ft.above hollow,bears N.and S.
	Desc.
68.15	Top of perpendicular ledge,20 ft.high,bears N.and S.
79.90	The cor.of secs.10,11,14,and 15.
	Land,rolling hills.
	Soil,sandy;2nd rate.
	No timber .
	Undergrowth,sage,cactus,and greasewood.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Good grass for grazing.
	Land covered with dense undergrowth,79.90 chs.
	June 12,1909.
	June 13,1909:At 8 h .00 m a.m.,l.m.t.,I set off 37° 03'N.,on the lat.arc;23°13'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs. 10,11,14,and 15.
	Thence I run
	S.0°1'E.,bet.secs.14 and 15.
	Over mountainous land;through dense undergrowth.
	Desc.gradually.
14.40	Leave sand and enter rocky ground,bears E.and W.
40.00	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,in mound of stone,for ¼ sec.cor.,mkd. on brass cap ¼ S 15 on W and S 14 on E.half;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
40.80	Enter a series of ledges,bears E.and W.
60.90	Top of ascent,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,15 ins.in the ground,and surrounded by mound of stone,for cor.of secs. 14,15,22,and 23,mkd.on brass cap T 43 S S 15 in NW R 14 W S 14 in NE ; S 23 in SE;and S 22 in SW quadrant;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor. Pits impracticable.
	Land,mountainous .
	Soil,sandy and rocky;2nd and 4th rate.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	No timber.
	Undergrowth,sage brush,greasewood,cactus,and bitter brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	Impossible to set ¼ sec.cor.post over 12 ins.in ground.
	Impossible to set sec.cor.post over 15 ins.in ground.

	N.89°49'E.,on a random line bet.secs.14 and 23.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line,5 lks.N.of the cor.of secs.13,
	14,23,and 24.
	Thence I run
	S.89°51'W.,on a true line bet.secs.14 and 23.
	Over mountainous land;through dense undergrowth.
	Asc.over rocks.
25.00	Top of ridge,100 ft.above sec.cor.,bears N.20°E.and S.
	20°W.
	Leave rocks and enter sand ,bears N.20°E.and S.20°W.
	Desc.
39.60	Bottom of hollow,80 ft.below ridge,course S W.
	Asc.
39.97	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
	ground,for ¼ sec.cor..mkd.on brass cap ¼ S 14 on N.half
	and S 23 on S half;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.
70.00	Leave sand and enter rocky ground,bears N.and S.
79.94	The cor.of secs.14,15,22,and 23.
	Land,mountainous .
	Soil,sandy and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,sage brush,cactus ,and bitter brush.

Subdivision of T. 43 S., R. 14 W.-Continued.

Chains	
	Good grass for grazing.
	Mountainous land, or land covered with dense undergrowth.
	79.94 chs.
	June 13, 1909: At this cor. I set off 23°13'N., on the decl. arc; and at 12 h 00 m.M. [illegible], l.m.t., I observe the sun on the meridian the resulting lat. is 37°02'N., which is the proper lat. nearly.
	S.0°1'E., bet. secs. 22 and 23.
	Over mountainous land; through scattering undergrowth.
1.00	Desc. abruptly over ledges.
10.00	Bottom of hollow, 1000 ft. below sec. cor., course S.60°W.
	Leave ledges, bears N.60°E. and S.60°W.
	Asc.
23.00	Top of ridge, 125 ft. above hollow, bears E. and W.
	Desc.
30.00	Bottom of hollow, 100 ft. below ridge, course W.
	Asc.
39.00	Top of ridge, 100 ft. above hollow, bears NE and SW.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor.. mkd. on brass cap ¼ S 22 on W half; and S 23 on E half; and raise a mound of stone, 2 fft. base, 1½ ft. high, W. of cor. Enter dense undergrowth.
80.00	Point, 300 ft. below ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, mkd. on brass cap
	T 43 S S 22 in NW ;
	R 14 W S 23 in NE;
	S 26 in SE and
	S 27 in SW quadrant; dig pits, 18x18x12 ins.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	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 and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,sage brush,cactus and evergreen.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.00 chs.
	N.89°51'E.,on a random line bet.secs.23 and 26.
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line,14 lks.S.of the cor.of secs.23,24, 25,and 26.
	Thence I run
	S.89°45'W.,on a true line bet.secs.23 and 26.
	Over mountainous land;through dense undergrowth.
	Desc.
7.05	Bottom of hollow,75 ft.below sec.cor.,course S.15°W.
	Asc.
15.30	Top of spur,80 ft.above hollow,bears N.15°E.and S.15° W.,
	Desc.
19.75	Bottom of hollow,150 ft.below ridge,course S.20°W.
	Asc.
36.85	Top of spur,100 ft.above hollow,bears S.10°W.and N.10° E.
	Desc.
40.05	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 23 on N half and S 26 on S half ;and raise a mound of stone,2 ft. base,1½ ft.high,N.of cor.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
44.10	Bottom of small box canon,125 ft.deep,course S.15°W.
	Asc.
46.90	Top of spur,90 ft.above canon,bears N.and S.
	Desc.
47.50	Enter nearly level land,bears N.and S.
80.10	The cor.of secs.22,23,26,and 27.
	Land,mountainous and nearly level.
	Soil,sandy and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,sage brush,greasewood,and evergreen.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.10 chs.
	June 13,1909.
	June 14,1909,At 8 h 00.9 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°16'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.22,23,26,and 27.
	Thence I run
	S.0°01'E.,bet.secs.26 and 27.
	Over nearly level land;through dense undergrowth,
	Desc.gradually.
21.00	Wash,20 lks.wide,12 ft.deep,course S.20°W.
32.50	Same wash,20 lks.wide,course S.15°E.
37.25	Same wash,20 lks.wide,course S.10°W.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,14 ins.in the ground,and surrounded by mound of stone,for ¼ sec.cor.. mkd.on brass cap ¼ S 27 in W half and S 26 in E half; 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. Impossible to set post over 14 ins.in the ground.
40.90	Top of spur,10 ft.above ¼ sec.cor.,bears E.and W.
	Desc.gradually.

Chains	
76.70	Road from St.George to Kanab,bears NW and SE.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.26,27,34,and 35,mkd.on brass cap
	T 43 S S 27 in NW.
	R 14 W S 26 in NE.
	S 35 in SE.;and
	S 34 in SW.quadrants;and raise a mound of stone,
	2 ft.base,1½ ft.high,W.of cor.
	Land,nearly level.
	Soil,sandy ;2nd rate.
	No timber.
	Undergrowth,sage brush,mountain rush,and greasewood.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	June 14,1909:At this cor.I set off 23°16'N.,on the decl. arc;and at 12 h.00m. M.m.,l.m.t.,I observe the sun on the meridian;the resulting lat.is 37°01'N.,which is the proper lat.nearly.
	February 26,1910:U.S.Examiner of surveys,F.J.VanWinkle found the cor.of secs.25,26,35,and 36 missing;and on this date I have set the cor.of secs.25,26,35,and 36,by running south bet.secs.25 and 26;and I therefore now re-run the line bet.secs.26 and 35 as follows:
	N.89°45'E.,on a random line bet.secs.26 and 35.
40.00	set temp.¼ sec.cor.
	Destroy old cor.
80.10	Intersect N.and S.line,7 lks.S.of the point for cor.of secs.25,26,35,and 36,which is 49 lks.S.0°01'E.from the witness cor.to said cor.
	Thence I run
	S.89°42'W.,on a true line bet.secs.26 and 35.
	Over nearly level land;through dense undergrowth.
	Desc.gradually.
3.50	Fort Pierce Wash,150 lks.wide,4 ft.deep,course NW.
30.00	Center of Fort Pierce Wash,300 lks.wide,5 ft.deep,course

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
	SW.
	Asc.gradually.
40.05	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 26 on N half and S 35 on S half;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.
47.70	Road,from Fort Pierce to Hurricane,bears N.75°E.and S. 75°W.
75.60	Road from St.George to Kanab,bears NW and SE.
80.10	The cor.of secs.26,27,34,and 35.
	Land,nealy level.
	Soil,sandy loam;2nd rate.
	Undergrowth,evergreen and sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.10 chs.
	S.0°1'E.,on a true line bet.secs.34 and 35.
	Over nearly level land;through dense undergrowth,
	Desc;gradually.
10.00	Road from Fort Pierce to Hurricane ,bears N.80°E.and S. 80°W.
18.00	Center of Fort Pierce Wash,500 lks.wide,10 ft.deep.course W.
21.85	Road from St.George to Kanab,bears N.80°E.and S.80°W.
27.00	Begin abrupt ascent, over volcanic rocks,bears NE and SW.
40.00	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,and surrounded by mound of earth and stone,for ¼ sec.cor.,mkd on brass cap ¼ S 34 on W.and S.35 on E. half ; and raise a mound of stone 2 ft.base,1½ ft. high,W.of cor.
	Impossible to set post over 12 ins.in the ground.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains

43.50 Top of ridge,250 ft.above Wash,bears NE and SW.

Desc.

51.00 Bottom of hollow,100 ft.below ridge,course NE

Asc.

58.88 Intersect Utah-Arizona bdy.line,26.98 chs.,West of the 36th mile cor.,which is a sandstone,20x14x14 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general,and 52.80 chs.East of the 35th mile cor.on the bdy.,which is hereafter described.

Set an iron post,3 ft.long,2 ins.in dia.,15 ins.in the ground,and surrounded by mound of stone,for closing cor. for secs.34 and 35,mkd on brass cap

A C C on S.half; U on N.half,

T 43 S S 34 in NW;

R 14 W S 35 in NE quadrants;and raise a mound of stone,2 ft.base,1½ ft,high,N.of cor.

Land,nearly level and mountainous.1

Soil,sandy loam and rocky;2nd and 4th rate.

No timber .

Undergrowth,sage brush,greasewood,evergreen,and cactus .

Good grass for grazing.

Mountainous land1 or land covered with dense undergrowth, 58.88 chs.

Impossible to set post for closing cor.24 ins.in the ground.

June 14,1909.

June 15,1909;At 8 h 00 m a.m,.l.m.t.,I set off 37°05'N. on the lat.arc; 23°19'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,33,and 34,on N.bdy.of Tp.,heretofore described.

Thence I run

Subdivision of T.43 S.,R.14 W.=Continued.

Chains

S.0°2'E.,bet.secs.3 and 4;

Over rolling sand hills;through dense undergrowth.

Desc.

1.00 Bottom of hollow,20 ft.below cor.,course N.20°E.

Asc.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd. on brass cap ¼ S 4 on W half and S 3 on E.half;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.

46.00 Top of ridge,100 ft.above hollow,bears E.and W.

Desc.

70.00 Bottom of broad hollow,20 ft.below ridge,course NE

Asc.

80.00 Set an iron post,2 ins.dia.,3 ft.long,24 ins.in the ground,for cor.of secs.3,4,9,and 10,mkd.on brass cap

T 43 S S 4 in NW ;

R 14 W S 3 in NE ;

S 10 in SE;and

S 9 in SW quadrant;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;2nd rate.

Undergrowth,bitter brush,sage brush,and greasewood.

Good grass for grazing.

Land covered with dense undergrowth,80.00 chs.

N.89°47'E.,on a random line bet.secs.3 and 10.

40.00 Set temp.¼ sec.cor.

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
80.20	Intersect N.and S.line,2 lks.N.of the cor.of secs. 2,3,10,and 11.
	Thence I run
	S.89°48'W.,on a true line bet.secs.3 and 10.
	Over rolling sand hills;through scattering undergrowth.
	Asc.
22.30	Top of ridge,100 ft.above sec.cor..bears NE and SW.
	Desc.
34.70	Bottom of hollow,75 ft.below ridge,course NE .
	Asc.
38.65	Top of ridge,50 ft.above hollow,bears NE and SW.
	Desc.
40.10	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 3 on N half and S 10 on S half;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.
48.95	Bottom of hollow,75 ft.below ridge,course NE.
	Asc.
67.20	Top of ridge,60 ft.above hollow,bears NE and SW.
	Desc.
80.20	The cor.of secs.3,4,9,and 10.
	Land,rolling sand hills.
	Soil,sandy;2nd rate.
	No timber.
	Undergrowth,sage,bitter brush,and greasewood.
	Good grass for grazing.

June 15,1909:At this cor.I set off 23°19'N.,on the decl. arc; and at 12 h. 00 m.M.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°04'N.,which is the proper lat.nearly.

Subdivision of T.43 S., R.14 W.=Continued.

Chains

S.0°2'E.,bet.secs.9 and 10.

Over rolling sand hills ;through dense undergrowth.

Asc.

13.00 Top of ridge,50 ft.above sec.cor.,bears NE and SW.

Desc.

32.00 Begin more abrupt descent,bears E.and W.

39.00 Foot of steep descent,bears W.and SE.

Enter scattering scrubby cedars,bears W.and SE.

Desc.gradually.

40.00 Set an iron post,3 ft.long ,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 9 on W half and S 10 on E half;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.

45.00 Head of hollow,20 ft.below cor.,course N.30°E.

Asc.

65.00 Top of sand ridge,75 ft.above hollow,bears E.and W.

Desc.

66.00 Leave timber,bears E.and W.

74.50 Descend abruptly over sandstone boulders,bears E.and W.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.9,10,15,and 16,mkd.on brass cap

T 43 S S 9 in NW ;

R 14 W S 10 in NE ;

S 15 in SE;and

S 16 in SW quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.

Land,mountainous and rolling .

Soil,sandy and rocky;2nd and 4th rate.

No timber. Scattering scrub cedars.

Undergrowth,sage brush,greasewood,and cactus.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	80.00 chs.
	N.89°48'E.,on a random line bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
80.30	Intersect N.and S.line,7 lks.S.of the cor.of secs.10,11, 14,and 15.
	Thence I run
	S.89°45'W.,on a true line bet.secs.10 and 15.
	Over mountainous land;through dense undergrowth.
	Desc.
15.00	Enter sandstone ledges and boulders,bears NW and SE.
35.95	Bottom of Swale,150 ft.below sec.cor.,course SW.
	Note:Point for ¼ sec.cor. will fall on steep ledgy ground where it will be impossible to perpetuate a cor;therefore at this point I
	Set an iron post,3 ft.long 1 in.in dia.,12 ins.in the ground,and surrounded with mound of stone,for witness cor.to ¼ sec.cor.,mkd. on brass cap WC¼S 10 T43S R14W in half and S 15 on S half;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Asc.over a series of sandstone ledges and boulders .
40.15	Point for ¼ sec.cor. falls on steep ledges,cor.not set.
80.30	The cor.of secs.9,10,15,and 16.
	Land,mountainous .
	Soil,sandy and rocky;2nd and 4th rate.
	No timber .
	Undergrowth,sage brush,bittier brush,and cactus .
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.30 chs.
	Impossible to set ¼ sec.cor.post over 12 ins.in ground.

Subdivision of T.43 S.,R.14 W.=Continued.

Chains	
	June 15,1909,
	June 16,1909:At 8h 00 m a.m.,l.m.t.,I set off 37°03'N., on the lat.arc;23°22'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.9,10,15,and 16.
	Thence I run
	S.0°2'E.,bet.secs.15 and 16.
	Over mountainous land;through scattering undergrowth.
	Desc.abruptly over sandstone ledges and boulders.
5.35	Top of perpendicular sandstone ledge,300 ft.high,bears E.and W.
10.00	Leave ledges,bears NW and SE.
	Continue descent over sandy ground.
	Enter dense undergrowth,bears NW and SE.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd. on brass cap ¼ S 16 on W half and S 15 on E.half;and dig pits,18x18x12 ins.N.and S. of post;and raise a mound of earth,3½ ft.base,1½ ft.high, W.of cor.
74.00	Wash,10 ft.deep,25 lks.wide,course S.10°W.
75.00	Same wash,25 lks.wide,course SE.
78.15	Same wash,25 lks.wide,course SW.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground, for cor.of secs.15,16,21,and 22,mkd.on brass cap T 43 S S 16 in NW ; R 14 W S 15 in NE ; S 22 in SE ;and S 21 in SW quadrants;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 .

Subdivision of T.43 S.R.14 W.-Continued.

Chains.

Soil, sandy and rocky; 2nd and 4th rate.

No timber.

Undergrowth, sage brush, evergreen, and cactus.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

80.00 chs.

N.89°45'E., on a random line bet. secs. 15 and 22.

40.00 Set temp ¼ sec. cor.

80.46 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 14, 15, 22, and 23.

Thence I run

S.89°40'W., on a true line bet. secs. 15 and 22.

Over mountainous land; through scattering undergrowth.

Desc. over ledges.

9.60 Top of perpendicular sandstone ledge, 300 ft. high, bears N.20°W. and S.80°E.

17.50 Foot of ledges, bears N.40°W. and S.50°E.

Continue descent.

Enter dense undergrowth, bears NW and SE.

40.23 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor.; mkd. on brass cap ¼ S 15 on N. half and S 22 on S. half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

80.46 The cor. of secs. 15, 16, 21, and 22.

Land, mountainous and nearly level.

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

No timber.

Undergrowth, sage brush, oose, and rabbit brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

Subdivision of T.43 S.,R.14 W;-Continued.

Chains	
	80.46 chs.
	June 16,1909:At this cor.I set off 23°22'N.,on the decl.arc; and at 12 h.00 m. M.,l.m.t.,I observe the sun on the meridian the resulting lat.is 37°02'N.,which is the proper lat.nearly.
	S.0°2'E.,bet.secs.21 and 22.
	Over nearly level land;through dense undergrowth.
	Desc.gradually over sand dunes.
25.00	Wash,25 lks.wide 10 ftdeep,course SE.
26.25	Same wash,25 lks.wide,6 ft.deep,course SW.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..,mkd.on brass cap ¼ S 21 in W half and S 22 in E half;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 an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.21,22,27,and 28,mkd.on brass cap T 43 S S 21 in NW. R 14 W S 22 in NE. S 27 in SE.;and S 28 in SW.quadrants;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 sand dunes.
	Soil,sand;3rd rate.
	No timber .
	Undergrowth,sage brush,evergreen,oose,and cactus.
	Good grass for grazing.
	Land,covered with dense undergrowth,80.00 chs.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	N.89°40'E.,on a random line bet.secs.22 and 27.
40.00	Set temp.¼ sec.cor.
80.44	Intersect N.and S.line,12 lks.N.of the cor.of secs. 22,23,26,and 27.
	Thence I run
	S.89°45'W.,on a true line bet.secs.22 and 27.
	Over rolling sand hills;through dense undergrowth.
	Asc.
18.75	Top of ridge,20 ft.above cor.,bears N.10°E.and S.10°W.
	Desc.
24.00	Bottom of hollow,20 ft.below ridge,course S.
	Thence over nearly level land gently descending.
40.22	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 22 in N half and S 27 in S half;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.
80.44	The cor.of secs.21,22,27,and 28.
	Land,rolling sand hills and nearly level.
	Soil,sandy;2nd rate.
	No timber .
	Undergrowth,evergreen and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.44 chs.

June 16,1909.

June 17,1909:At 8 h 01 m a.m.,l.m.t.,I set off 37°02'N. on the lat.arc;23°24'N.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.21,22,27,and 28.

Thence I run

S.0°2'E.,bet.secs.27 and 28.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Over nearly level land;through dense undergrowth.
	Desc.gradually.
34.00	Bottom of swale,30 ft.below sec.cor.,course SE.
	Asc.gradually.
40;00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 28 in W half and S 27 in E half;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.
40.40	Road from St.George to Kanab,bears N.60°W.and S.60°E.
56.30	Wash,15 lks.wide,6 ft.deep,course NE.
	Asc.
69.40	Top of ridge,50 ft.above wash,bears E.and W.
	Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.27,28,33,and 34,mkd.on brass cap
	T 43 S S 28 in NW.
	R 14 W S 27 in NE.
	S 34 in SE.;and
	S 33 in SW.quadrants;and raise a mound of stone
	2 ft.base,1½ ft.high,W of cor.Pits,impracticable.
	Land,rolling.
	Soil,sandy ;2nd rate.
	No timber .
	Undergrowth,sage brush,evergreen,and bitter brush,oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	———
	N.89°45'E.,on a random line bet.secs.27 and 34.
40.00	Set temp.¼ sec.cor.
80.30	Intersect N.and S.line,10 lks.N.of the cor.of secs.26,27, 34,and 35.
	Thence I run
	S.89°49'W.,on a true line bet.secs.27 and 34.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Over level land;through dense undergrowth.
2.50	Begin ascent of mesa,bears N.and S.
5.00	Top of ascent,50 ft.aboce cor.,bears N.and S.
	Thence over mesa.
17.50	Leave mesa,bears N.and S.
	Desc.
23.50	Bottom of swale,50 ft.below mesa,course S.
	Asc.
27.50	Road from St.George to Kanab,bears N.and S.
35.00	Top of ridge,100 ft.above swale,bears N.and S.
	Desc.
38.00	Bottom of hollow,50 ft.below ridge,course S.20°E.
	Asc.
40.15	Set an iron post,3 ft.long,1 in.in dia.12 ins.in ground, on solid rock bottom,in mound of stone,for ¼ sec.cor. mkd.on brass cap ¼ S 27 in N half and S 34 in S half; and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.Impossible to set post over 12 ins.in the ground.
41.00	Top of spur,50 ft.above hollow,bears N.30°W.and S.30°E.
	Desc.
50.50	Bottom of hollow,60 ft.below ridge,course SE.
	Asc.
61.90	Top of ascent,edge of flat ridge,50 ft.above hollow,bears NW and SE.
	Thence on top of ridge.
67.20	Leave ridge top ,bears N.and S.
	Desc.
70.00	Bottom of hollow,50 ft.below ridge,course SE.
	Asc.
80.30	The cor.of secs.27,28,33,and 34.
	Land,mountainous and level.
	Soil,sandy and rocky;2 d and 4th rate.
	No timber .

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Undergrowth,oose,sage brush,evergreen,cactus greasewood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	80.50 chs.
	June 17,1909:At this cor.I set off 23°24'N.,on the decl.
	arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the
	meridian,the resulting lat.is 37°01'N.,which is the
	proper lat.nearly.
	S.0°02'E.,on a true line bet.secs.33 and 34.
	Over rolling land;through dense undergrowth.
	Desc.
8.85	Wash,15 lks.wide,3 ft.deep,course SE.
	Continue descent.
15.00	Begin abrupt descent over ledges,bears E.and W.
19.00	Wash,10 lks.wide,3 ft.deep,course S.85°W.
29.50	Water ditch,6 lks.wide,3 ft.deep,course West.
30.30	Creek,15 lks.wide,3 ft.deep,in bottom of Fort Pierce
	Wash,300 ft.below sec.cor.,course S.60°W.
	Asc.
34.05	Road from St.George to Kanab,bears N.60°E.and S.60°W.
39.25	Begin abrupt ascent,bears N.60°E.and S.60°W.
40.00	Set an iron post,3 ft.long,1 in.in dia.,20 ins.in the
	ground,for ¼ sec.cor..mkd.on brass cap ¼ S 33 in W half
	and S 34 in E half;and raise a mound of stone,2 ft.base,
	1½ ft.high,W.of cor.
	Enter ledges,bears N.60°E.and S.60°W.
45.25	Top of abrupt ascent,50 ft.above ¼ sec.cor.,bears NE and
	SW.
	Leave ledges,bears NE and SW.
	Asc.gradually.
58.57	Intersect Utah-Arizona bdy.line,27.55 chs.West of the
	35th mile cor.which is an iron post, 3 ins.in dia.,and
	extends 1 ft.above ground,firmly set,and mkd.and witnessed
	as described by the surveyor general; and 52.71 chs.E.of
	34th mi.cor.on Utah-Arizona bdy.hereafter described.
	Set an iron post,3 ft.long,2 ins.in dia.,14 ins.in the

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	ground,on solid rock,and surrounded by mound of stone,for closing cor.of secs.33 and 34,mkd.on brass cap
	C C A in S half.
	U in N half.
	T 43 S S 33 in NW. and
	R 14 W S 34 in NE quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Land,mountainous and nearly level
	Soil,sandy loam and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,sage and bitter brush and oose.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	58.57 chs.
	June 17,1909.
	Note: February 19,1910;U.S.Examiner of Surveys F.J.VanWinkle found the cor.of secs.4,5,8,and 9,poorly set on a steep side hill where it could not be perpetuated;therefore on the above date I moved the above cor.22 lks.west,marking the same as a witness cor.Also in running north bet.secs. 8 and 9 the examiner found the ¼ sec.cor.,16 lks.west of line;but it could not be set on line on account of a wash at the cor.point;therefore I marked the ¼ Sec.cor.as a witness cor.I therefore re-run the four lines leading up t the cor.of secs.4,5,8,and 9,as follows:
	Feb.19:From the cor.of secs.4.5.32 & 33 on N.bdy.of Tp.. heretofore described, I run S.0°3'E.,bet.secs.4 and 5.
	Over rolling ground,through dense undergrowth.
	Asc.
5.00	Top of ridge,20 ft.above sec.cor.,bears N.60°W.and S.60° E.
	Desc.
19.00	Enter sandstone boulders and rocks,bears E.and W.
19.20	Bottom of hollow,50 ft.below ridge,course NW.
	Asc..
39.36	Foot of sloping sandstone ledge,50 ft.high,bears N.30°W.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	and S.30°E.
	Note:The point for ¼ sec.cor.will fall on ledge where it cannot be set;therefore at this point
	Set an ion post,3 ft.long,1 in.in dia.,13 ins.in the ground, on solid rock,and surrounded by mound of stone,for witness ¼ sec. cor.,mkd.on brass cap T 43 S R 14 W W C ¼ S 5 in W half and S 4 in E half;and raise a mound of stone,2 ft.base, 1½ ft.high,W.of cor.
40.00	Falls on sloping ledge¼cor.not set.
	Continue over ledges.
67.30	Begin abrupt descent over ledges,bears N.20°W.and S.20°E.
74.00	Foot of ledges,500 ft.below top,bears N.20°W.and S.20°E.
	Thence over gently rolling land.
80.00	Point for cor.falls on steep slope where a cor.cannot be permanently set ;therefore at a point 22 lks.west of the cor.point
	Setan iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for witness cor.to cor.of secs.4,5,8,and 9,mkd.on brass cap
	T 43 S S 5 in NW.
	W C R 14 W S 4 in NE.
	S 9 in SE.;and
	S 8 in SW.quadrants;and raise a mound of stone, 2 ft.base,1½ ft.high,W.of cor.
	Land,mountainous .
	Soil,sandy loam and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,greasewood,sage brush,cactus,and bitter brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	February 19,1910;For reasons already explained on page 36 I re-run the line bet.secs.4 and 9 as follows:

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	N.89°48'E.,on a random line bet.secs.4 and 9.from the point for cor.of secs.4,5,8,and 9,which is 22 lks.East of the witness cor.
40.00	Set temp.¼ sec.cor.
80.02	Intersect N.and S.line,at the cor.of secs.3,4,9,and 10.
	Thence I run
	S.89°48'W.,on a true line bet.secs.4 and 9.
	Over rolling sandxhills;through dense undergrowth.
	Desc.
15.00	Bottom of hollow,30 ft.below sec.cor.,course N.55°E.
	Asc.
40.01	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 4 in N half and S 9 in S half;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.
46.00	Top of ridge,75 ft.above hollow,bears NE and SW.
	Leave sandy soil and enter rocks and boulders,bears NE and SW.
	Desc.
70.00	Enter large sandstone boulders,bears N.and S.
74.10	Top of perpendicular ledge,300 ft.high,bears N.10°W.and S.10°E.
	Desc.abruptly over ledges.
78.00	Foot of ledges,400 ft.below top,bears N.10°W.and S.10°E.
80.02	The point for cor.of secs.4,5,8,and 9,which is 22 lks. East of the witness cor .of said secs.
	Land,mountainous and rolling .
	Soil,sandy loam and rocky;3rd and 4th rate.
	No timber.
	Undergrowth,sage brush,cactus,greasewood and bitter brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.02 chs.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	February 19,1910:For reasons already explained on page 36 I re-run the line bet.secs.8 and 9 as follows:
	S.0°3'E.,bet.secs.8 and 9,from the point for cor.of secs. 4,5,8,and 9,which is 22 lks.East of the witness cor.to said secs.
	Over rolling land;through scattering undergrowth.
	Asc.
1.55	Top of sandstone spur,30 ft.above cor.,bears E.and W.
	Desc.
38.10	Bottom of hollow,200 ft.below spur,course NW.
	Asc.
40.00	Falls in small wash,course NE.
	The cor.cannot be well perpetuated at this point therefore at a point 20 lks.West of the cor.point I
	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for witness cor.to ¼ sec.cor.,mkd.on brass cap T 43 S R 14 W in N half;W C ¼ S 8 in W half;and S 9 in E half;and raise a mound of stone,2 ft.base,1½ ft.high, W.of cor.
44.00	Top of spur,50 ft.above hollow,bears E.and W. Desc.
52.50	Bottom of hollow,25 ft.below spur,course W. Asc.
57.00	Top of sandstone spur,30 ft.above hollow,bears E.and W.
	Desc.
69.70	Wash,10 lks.wide,4 ft.deep,course N.70°W.
76.50	Wash,14 lks.wide,7 ft.deep,course W.
	asc.gently.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.8,9,16,and 17,mkd.on brass cap T 43 S S 8 in NW. R 14 W S 9 in NE. S 16 in SE.;and S 17 in SW. quadrants;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 hills,

Subdivision of T.40 S.,R.14 W.-Continued.

Chains

Soil,sandy ;3rd rate.

No timber.

Undergrowth,sage,cactus,evergreen,and bitter brush.

Good grass for grazing.

February 19,1910.

June 18,1909:

N.89°48'E.,on a random line bet.secs.9 and 16.

40.00 Set temp. Sec.cor.

79.00 Intersect N.and S.line,2 lks.S.of the cor.of secs.9,10,15,and 16.

Thence I run

S.89°47'W.,on a true line bet.secs.9 and 16.

Over mountainous land;through scattering undergrowth.

Asc.over ledges.

1.50 Top of perpendicular ledge,300 ft.high,bears N.and S.

Desc.over ledges.

9.00 Foot of ledge,400 ft.below top,bears NW and SE.

Enter dense undergrowth ,bears NW and SE.

Desc.gradually over rolling ground,

34.10 Bottom of wash,10 lks.wide,15 ft.deep,in bottom of hollow 100 ft.below foot of ledge,course SW. Asc.

39.00 Top of spur,60 ft.above hollow,bears N.and S. Desc.

39.09 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for 1/4 sec.cor.,mkd.on brass cap 1/4 S 9 in N half and S 16 in S half;and raise a mound of stone,2 ft.base,1 ft.high,W.of cor.

54.00 Bottom of hollow,30 ft.below spur,course SW. Asc.gently.

79.00 The cor.of secs.9,8,16,and 17.

Land,mountainous and rolling.

Soil,sandy loam and rolling ;3rd and 4th rate.

No timber.

Undergrowth,cactus,evergreen,sage,and mountain rush.

Good grass for grazing.

No streams land,or land covered with dense undergrowth.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	79.98 chs.
	June 18,1909.
	June 19,1909:At 8 h 1 m a.m.,l.m.t.,I set off 37°03'N., on the lat.arc;23°27'N.,on the decl.arc;and determine a meridian with the solar at the cor.of secs.8,9,16,and 17.
	Thence I run
	S.0°3'E.,bet.secs.16 and 17.
	Over gently rolling land;through dense undergrowth.
	Desc.gently.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 17 in W half and S 16 in E half;and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
40.20	Wash,14 lks.wide,3 ft.deep,course W.
	Continue descent.
60.00	Wash,5 lks.wide,2 ft.deep,course S.55°W.
	Continue descent.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.16,17,20,and 21,mkd.on brass cap
	T 43 S S 17 in NW.
	R 14 W S 16 in NE.
	S 21 in SE.;and
	S 20 in SW.quadrants;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,oose,sage brush,mountainous rush,and evergreen.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	N.89°47'E.,on a random line bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
79.96	Intersect N.and S.line,16 lks.S.of the cor.of secs.15, 16,21,and 22.
	Thence I run
	S.89°40'W.,on a true line bet.secs.16 and 21.
	Over gently rolling land;through dense undergrowth.
	Desc.gradually.
2.20	Wash,20 lks.wide,4 ft.deep,course SW.
	Continue descent.
39.98	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground for ¼ sec.cor..mkd.on brass cap ¼ S 16 in N half and S 21 in S half;dig pits,18x18x12 ins.,E and W of post,5 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft.high,N.of cor.
79.96	The cor.of secs.16,17,20,and 21.
	Land,rolling
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,evergreen,oose,cactus and greasewood.
	Good grass for grazing.
	Land covered with dense undergrowth,79.96 chs.
	June 19,1909:At this cor.I set off 23°26'N.,on the decl. arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 37°02'N.,which is the proper lat.nearly.

	S.0°3'E.,bet.secs.20 and 21.
	Over rolling land;through dense undergrowth.
	Desc.gradually.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	ground,for ¼ sec.cor..mkd.on brass cap ¼ S 20 in W half and S 21 in E half;dig pits,18x18x12 ins.N and S.of post, 3 ft.dist.;and raise a mound of earth,5½ ft.base,1½ ft. high,W.of cor.
58.45	Road from St.George to Kanab,bears NW and SE.
59.40	Wash,10 lks.wide,2 ft.deep,course SE.
	Asc.gradually.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.20,21,28,and 29,mkd.on brass cap
	T 43 S S 20 in NW.
	R 14 W S 21 in NE.
	S 28 in SE.;and
	S 29 in SW.quadrants;dig pits 18x18x12 ins.in each sec;5½ ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,W.of cor.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber .
	Undergrowth,cactus,ooso,sage brush,evergreen,and mountain rush.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.

	N.89°40'E.,on a random line bet secs.21 and 28.
40.00	Set temp.¼ sec.cor.
79.90	Intersect N.and S.line,at the cor.of secs.21,22,27,and 28.
	Thence I run
	S.89°40'W.,on a true line bet.secs.21 and 28.
	Over rolling land;through dense undergrowth.
	Desc.gently.
39.95	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the

Subdivision of T.43 S.,R.14 W.-Continued.

Chs.	
	ground,for ¼ sec.cor..mkd.on brass cap ¼ S 21 in N half and S 28 in S half;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.
57.65	Road from St.George to Kanab,bears NW and SE.
58.60	Wash,6 lks.wide,2 ft.deep,course SE.
	Asc.gradually.
79.90	The cor.of secs.20,21,28,and 29.
	Land,rolling .
	Soil,sandy loam;2nd rate.
	No timber .
	Undergrowth,cactus sage brush and mountain rush.
	Good grass for grazing.
	Land covered with dense undergrowth,79.90 chs.
	June 19,1909.

June 20,1909:At 8.h 1 m a.m.,l.m.t.,I set off 37°02'N., on the lat.arc;23°27'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.20,21,28,and 29.

Thence I run

S.0°3'E.,bet.secs.28 and 29.

Over rolling land;through dense undergrowth.

Asc.gradually.

40.00	Set an iron post,3 ft/long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in W half and S 28 in E half;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.
79.90	Rocky wash,30 lks.wide,3 ft.deep,course NE.
	Asc.gradually.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
80.00	Set an iron post,3 ft.long,2 ins.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, for cor.of secs.28,29,32,and 33,mkd.on brass cap T 43 S S 29 in NW. R 14 W S 28 in NE. S 33 in SE;and S 32 in SW.quadrants;and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor. Land,rolling . Soil,sandy loam;2nd rate. No timber . Undergrowth,sage,bitter brush,evergreen,oose,and cactus Good grass for grazing. Land covered with dense undergrowth,80.00 chs. Impossible to set sec.cor.post over 12 ins.in ground.
	———
	N.89°40'E.,on a random line bet.secs.28 and 33.
40.00	Set temp.¼ sec.cor.
79.92	Intersect N.and S.line 5 lks.N.of the cor.of secs.27,28, 33,and 34. Thence I run S.89°42'W.,on a true line bet.secs.28 and 33. Over rolling land;through dense undergrowth. Dense.
4.00	Wash,15 lks.wide,3 ft.deep,course SE. Asc.gradually.
39.96	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 28 in N half and S 33 in S half;dig pits,18x18x18 ins.,E and W of post,3 ft.dist.;and raise a mound of earth,3½ ft. base,1½ ft.high,N.of cor.
59.50	Top of sand ridge,75 ft.above ¼ sec.cor.,bears N.and S. Dense.

Subdivision of T.43 S.,R.14 W.-Contined.

Chains	
79.92	The cor.of secs.28,29,32,and 33.
	Land ,rolling.
	Soil,sandy loam and rocky;2nd and 3rd rate.
	No timber
	Undergrowth,oose,sage brush,evergreen,and cactus.
	Good grass forgrazing.
	Land covered with dense undergrowth,79.92 chs.
	June 20,1909:At this cor.I set off 23°27'N.,on the decl. arc;and at 0 h 1 m p.m.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°01'N.,which is the proper lat.nearly.
	S.0°3'E.,on a true line bet.secs.32 and 33.
	Over mountainous land,through dense undergrowth.
	Asc.gradually.
23.80	Top of sandstone ridge,100 ft.above sec.cor.,bears NW and SE.
	Desc. over ledges.
25.00	Foot of ledges,bears NW and SE.
	Continue descent over sand and loose rock.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 62 in W half and S 33 in E half;dig pits,18x18x12 ins.,N.and S.of post, and 3 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft.high,W.of cor.
58.85	Intersect Utah-Arizona bdy.,27.28 chs.West of the 34th mile post,which is an iron pipe 2 ins.dia.,projecting 2 ft. above ground, firmly set and mkd.and witnessed as describe by the Surveyor Gen.,and 52.78 chs.E.of 33d mile cor.hereafter described.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.32 and 33,mkd.on brass cap
	U in N.half,
	C C A in S.half,

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	T 43 S S 32 in NW.
	R 14 W S 33 in NE.quadrants;raise a mound of stone,2 ft.base,1½ ft.high,N.of cor.
	Land,mountainous.
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,cose cactus greasewood,shadscale,and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 58.85 chs.
	June 20,1909.

	June 21,1909:At 8 h 1 m a.m.,l.m.t.,I set off 37°05'N.,on the the lat.arc;23°28'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.5,6,31,and 32,heretofore described; on N,bdy.of Tp.
	Thence I run.
	S.0°03'E.,bet.secs.5 and 6.
	Over mountainous land;through dense undergrowth, Desc.
1.50	Top of sand ridge about 75 ft.above hollow,bears N.80°W. and S.80° E. Desc.
27.10	Bend in wash,20 lks.wide,10 ft.deep,course SW.
	Asc.
30.00	Same wash,20 lks.wide,10 ft.deep,course SE.
	Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 6 in W half and S 5 in E half;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.
60.00	Top of sandstone ridge,40 ft.above wash,bears E.and W. Desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.5,6,7,and 8,mkd.on brass cap
	T 43 S S 6 in NW.
	R 14 W S 5 in NE.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	S 8 in SE.;and
	S 7 in SW.quadrants;dig pits,18x18x12 ins.,in each sec.5½ ft.dist.;and raise a mound of earth,4 ft.base, 2 ft.high,W.of cor.
	Land,rolling.
Soil	Sandy loam;2nd rate.
	No timber .
	Undergrowth,cactus,sage,rabbit brush,and evergreen.
	Good grass for grazing.
	Land covered with dense undergrowth,80.00 chs.
	June 21,1909.
	February 19,1910:For reasons already explained on page 36 I re-run the line bet.secs.5 and 8 as follows:
	N.89°49'E.,on a random line bet.secs.5 and 8.
40.00	Set temp¼ sec.cor.
	The old ¼ sec.cor.bears South 2 lks.and east 2 lks.which I destroy.
80.22	Intersect N.and S.line,19 lks.N.of the point for cor.of secs.4,5,8,and 9,which is 22 lks.East of the witness cor. for secs.4,5,8,and 9.
	Thence I run
	S.89°47'W.,on a true line bet.secs.5 and 8.
	Over rolling land;through dense undergrowth.
	Desc.gradually.
19.20	Wash,18 lks.wide,4 ft.deep,course SW.
	Asc.gradually.
40.11	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 5 in N half and S 8 in S half;dig pits,18x18x12 ins.east and west of Post, 3 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft. high,N.of cor.
80.22	The cor.of secs.5,6,7,and 8.
	Land,rolling.
	Soil,sandy loam;2nd rate.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	No timber .
	Undergrowth,cactus,evergreen,rabbit brush and sage brush.
	Good grass for graing.
	Land covered with dense undergrowth,80.22 chs.
	February 19,1910.
	June 21,1909:At the cor.of secs.5,6,7,and 8 I set off 23°27'N.,on the decl.arc;and at 0 h 1 m p.m., l.m.t., I observe the sun on the meridian,the resulting lat.is 37°04'N.,which is the proper lat.nearly.
	Note:Knowing from the retracement of the west bdy.of Tp., the lines bet.secs.6 and 7 will not intersect the bdy. within allowable limits;
	I run
	S.89°57'W.,on a true line bet.secs.6 and 7.
	Over rolling land;through dense undergrowth.
	Desc.
17.60	Old road,bears N.and S.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 6 in N half and S 7 in S half;dig pits,18x18x12 ins.E and W.of post, 3 ft.dist.;and raise a mound of earth,3½ ft base,1½ ft. high,N.of cor.
53.00	Begin ascentof rocky slope,bears N.and S
64.65	Top of sandstone ridge,300 ft.above ¼ sec.cor.,bears N.10°E.and S.10°W.
	Desc.abruptly.
84.73	Intersect W.bdy.of Tp.,9.93 chs.North of cor.of secs. 1.6.7,and 12,heretofore described.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.6 and 7,mkd.on brass cap
	T 43 S in N half.
	R 15 W S 1 S 12 in W half.
	C C in E half.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	R 14 W S 6 in NE.;and
	S 7 in SE.quadrants;dig pits,24x18x12 ins. crosswise on each line N.and S.of post,3 ft.dist.;and E of post,7 ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,E.of cor.
	Note:I destroy all marks on the cor.of secs.1,6,7,and 12,which pertain to secs.6 and 7.
	Land,mountainous and rolling.
	Soil,sandy loam,rocky and clay;2nd 3rd and 4th rate.
	No timber.
	Undergrowth,sage and bitter brush,cactus,oose ,and evergreen.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth,
	84.73 chs.
	S.0°3'E.,bet.secs.7 and 8.
	Over rolling land through dense undergrowth.
	Desc.gradually.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 7 in W half and S 8 in E half;dig pits,18x18x12 ins.N.and S.of post,3 ft.dist.;and raise a mound of earth,3 ft.base,1½ ft.high,W.of cor.
53.00	Wash,30 lks.wide,10 ft.deep,course NW.
	Continue desc.
80.00	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.7,8,17,and 18,mkd.on brass cap
	T 43 S S 7 in NW.
	R 14 W S 8 in NE.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains

S 17 in SE.;and

S 18 in SW.quadrants;dig pits,18x18x12 ins.,in each sec.;5½ ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,W.of cor.

Land,nearly level.

Soil,sandy loam;2nd rate.

No timber .

Undergrowth,oaks,cactus,and evergreen.

Good grass for grazing.

Land covered with dense undergrowth,80.00 chs.

June 21,1909.

June 22,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°03'E., on the lat.arc; 26°28'E.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.7,8,17,and 18.

Thence I run

N.88°50'E.,on a random line bet.secs.8 and 17.

40.00 Set temp.¼ sec.cor.

80.18 Into cent.N.and S.line,at the cor.of secs.8,9,16,and 17.

Thence I run

S.88°50'W.,on a true line bet.secs.8 and 17.

Over nearly level land;through dense undergrowth.

Dense.gently.

4.50 Wash,20 lks.wide,4 ft.deep,course SW.

5.50 Same wash,15 lks.wide,3 ft.deep,course NW ;.

13.00 Enter same wash,15 lks.wide,4 ft.deep,course W.

14.00 Leave wash,course NW.

21.00 Same wash,16 lks.wide,4 ft.deep,course SW.

21.65 Same wash,20 lks.wide,3 ft.deep,course NW.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 8 in N half

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	and S 17 in S half;dig pits,18x18x12 ins.,E.and W.of post, 5 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft. high,N.of cor.
54.00	Same wash,15 lks.wide,6 ft.deep,course S.30°W.
	Continue descent.
80.12	The cor.of secs.7,8,17,and 18.
	Land,nearly level.
	Soil,sandy loam;2nd rate.
	No timber .
	Undergrowth,sage,cactus,mountain rush,rabbit brush,and oose.
	Good grass for grazing.
	Land covered with dense undergrowth,80.12 chs.
	S.89°57'W.,on a true line bet.secs.7 and 18.
	For reasons already explained.
	Over rolling land;through dense undergrowth.
	Desc.gently.
5.32	Old road,bears N.20°W.and S.20°E.
16.85	Wash,50 lks.wide,5 ft.deep,course NW.
	Asc.gradually.
39.20	Road from St.George to Kanab,bears NW and SE.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 7 in N half and S 18 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
55.80	Top of spur,75 ft.above wash,bears N and S.
	Desc.
61.00	Bottom of hollow,80 ft.below ridge,course N.10°W.
	Asc.
67.00	Top of spur,100 ft.above hollow,bears N.20°E.and S.20° W.
	Desc.abruptly.

Subdivision of T. 43 S.,R.14 W.-Continued.

Chains	
81.00	Bottom of hollow,150 ft.below ridge,course NW.
	Asc.
84.74	Intersect W.bdy.of Tp.,9.92 chs.North of the cor.of secs. 7,12,13,and 18,heretofore described.
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.7 and 18,mkd.on brass cap
	T 43 S in N half.
	S 12 in NW.
	S 7 CC in NE.
	R 14 W S 18 in SE.;and
	R 15 W S 13 in SW.quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,E.of cor.
	Land,mountainous and rolling .
	Soil,sandy loam,clay and rocky;2nd 3rd and 4th rate.
	No timber .
	Undergrowth,oose,cactus,rabbit brush,and evergreen.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 84.74 chs.
	June 22;1909:At the noon hour the sky is overcast and solar observations are impossible.
	I destroy marks on old cor.of secs.7,12,13, and 18, that pertain to secs.7 and 18.
	S.0°3'E.,bet.secs.17 and 18.
	Over gently rolling land;through dense undergrowth.
	Desc.
3.15	Wash,8 lks.wide,4 ft.deep,course W.
	Asc.gradually.
36.30	Road from St.Geroge to Kanab,bears NW and SE.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 18 in W half and S 17 in E half;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.

Subdivision of T.43 S., R.14 W.-Continued:

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, mkd. on brass cap T 43 S S 18 in NW. R 14 W S 17 in NE. S 20 in SE.; and S 19 in SW. quadrants; dig pits, 18x18x12 ins., to each sec. 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land rolling. Soil, sandy loam; 2nd rate. No timber. Undergrowth, sage and bitter brush, cone, cactus, and evergreen. Good grass for grazing. Land covered with dense undergrowth, 80.00 chs.
	———
	N. 89°50' E., on a random line bet. secs. 17 and 20.
40.00	Set temp. ¼ sec. cor.
80.12	Intersect N. and S. line, at the cor. of secs. 16, 17, 20, and 21.
	Thence I run
	S. 89°50' W., on a true line bet. secs. 17 and 20.
	Over nearly level land; through dense undergrowth.
	Dese.
24.00	Wash, 20 lks. wide, 2 ft. deep, course SW.
	Asc. gradually.
40.06	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 17 in N half and S 20 in S half; 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.
51.05	Road from St. Geroge to Kanab, bears NW and SE.
80.12	The cor. of secs. 17, 18, 19, and 20.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Land rolling.
	Soil,sandy loam;2nd rate.
	No timber.
	Undergrowth,oose,sage ,and rabbit brush,and cactus .
	Good grass for grazing.
	Land covered with dense undergrowth,80.12 chs.
	June 22,1909.
	June 25,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°02'N.,on the lat.arc;23°27'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.17,18,19,and 20.
	Thence I run
	For reasons already explained.
	S.89°57'W.,on a true line bet.secs.18 and 19.
	Over gently rolling land;through dense undergrowth.
	Desc.gently.
5.10	Wash,15 lks.wide,5 ft.deep,course N.25°E.
	Asc.
24.00	Top of sandstone ridge,125 ft.above wash,bears N.and S
	Desc.
28.00	Bottom of hollow,60 ft.below ridge,course N.15°E.
	Asc.over rocky slope.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 18 in N half and S 19 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
46.40	Top of ridge,200 ft.above hollow,bears NW and SE.
	Desc.abruptly over ledges.
84.72	Intersect W.bdy.of Tp.,10.00 chs.N.0°3'W.of the cor.of secs.13,18,19,and 24,heretofore described.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.18 and 19,mkd.on brass cap T 43 S in N half S 13 in NW. CC S 18 in NE. R 14 W S 19 in SE.;and R 15 W S 24 in SW;quadrants;dig pits,24x18x12 ins. crosswise on each line,N.and S.,3 ft.and East of post 7 ft.dist.;and raise a mound of earth,4 ft.base,2 ft.high, E.of cor.
	Note;I destroy all marks on the cor.of secs.13,18,19,and 24,which pertain to secs.18 and 19.
	Land,mountainous and rolling.
	Soil,sandy and clay loam and rocky;2nd and 4th rate.
	No timber.
	Undergrowth,oose,cactus,evergreen and sage brush.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 84.72 chs.

	S.0°3'E.,bet.secs.19 and 20.
	Over rolling land;through dense undergrowth.
	Desc.
22.40	Wash,20 lks.wide,3 ft deep,course N.60°E.
40.00	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone,for ¼ sec.cor.,mkd.on brass cap ¼ S 19 in W half and S 20 in E half;and raise a mound of stone,2 ft.base,1½ ft.high W. of cor.
42.00	Top of spur,10 ft.above ¼ sec.cor.,bears E.and W.
	Desc.
52.00	Bottom of hollow,70 ft.below spur,course SE.

Subdivision of T.43 S., R.14 W.-Continued.

Chains

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 14 ins. in the ground, on solid rock bottom, and raise a mound of stone, around post, for cor. of secs. 19, 20, 29, and 30, Impossible to set post over 14 ins. in the ground. Marked brass cap,

T 43 S S 19 in NW.

R 14 W S 20 in NE.

S 29 in SE.; and

S 30 in SW quadrants; and raise a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.

Land, mountainous and rolling.

Soil, sandy loam and gravelly; 2nd and 3rd rate.

No timber.

Undergrowth, evergreen, cactus and sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

June 27, 1909: At this cor. I set off 23°27' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t, I observe the sun on the meridian, the resulting lat. is 37°02' N., which is the proper lat. nearly.

N. 89°50' E., on a random line bet. secs. 20 and 29.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 20, 21, 28, and 29.

Thence I run

S. 89°53' W., on a true line bet. secs. 20 and 29.

Over gently rolling land; through dense undergrowth.

Desc. gently.

19.30 Wash, 5 lks. wide, 2 ft. deep, course N. 30° E.

Asc.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
40.02	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 20 in N half and S 29 in S half;dig pits,18x18x12 ins.E.and W.of post, 3 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft. high,N.of cor.
56.00	Bottom of hollow,20 ft.deep,course NE.
	Asc.
74.25	Top of spur,15 ft.above hollow,bears N.and S.
	Desc.
80.04	The cor.of secs.19,20,29,and 30.
	Land,rolling.
	Soil;sandy loam;2nd rate.
	No timber .
	Undergrowth,evergreen,oose,cactus,and sage brush.
	Good grass for grazing.
	Land covered with dense undergrowth.80.04 chs.

For reasons already explained I run S.89°57'W.,on a true line bet.secs.19 and 30.

Over mountainous land;through dense undergrowth.

Asc.

6.60	Top of sandstone ridge,50 ft.above sec.cor.,bears N.and S.20°E.
	Desc.over a series of ledges,
11.60	Leave ledges,bears N.and S.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 19 in N half and S 30 in S half;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.
	This cor.is 400 ft.below ridge,
82.50	Wash,10 lks.wide,18 ft.deep,in hollow,50 ft.below ¼ sec.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	cor.,course SW.
	Ass.
84.70	Intersect W.bdy.of Tp.,10.20 chs. North,of the cor.of sec.19,24,25,and 30,heretofore described.
	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for closing cor.of secs.19 and 30,mkd.on brass cap
	T 43 S in N half.
	S 24 in NW.
	C C S 19 in NE.
	R 14 W S 30 in SE.
	R 15 W S 25 in SW.quadrants;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.
	Note:I destroy all marks on the cor.of secs.19,24,25,and 30,which pertain to secs. 19 and 30.
	Land, mountainous and rolling .
	Soil,sandy and clay containing alkali;2nd and 4th rate.
	No timber .
	Undergrowth,mountainous rush and greasewood.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 84.70 chs.
	June 23,1909.

	June 24,1909:At 8 h 2 m a.m.,l.m.t.,I set off 37°02'E., on the lat.arc;23°26'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,20,29,and 30.
	Thence I run
	S.0°3'E.,bet.secs.29 and 30.
	Over mountainous land;through dense undergrowth.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	Asc.
8.00	Top of ridge,50 ft.above sec.cor.,bears N.30°W.and SE.
	Desc.over ledges.
32.00	Leave ledges,at foot of steep descent,400 ftlbelow ridge bears NW and SE.
	Desc.gradually.
40.00	Set an iron post,3 ft.long,1 in in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 30 in W half and S 29 in E half;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.
65.60	Wash,50 lks.wide,3 ft.deep,course SE.
	Asc.gradually.
80.00	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for cor.of secs.29,30,31,and 32,mkd.on brass cap T 43 S S 30 in NW. R 14 W S 29 in NE. S 32 in SE.;and S 31 in SW.quadrants;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 and clay loam and gypsum;2nd and 4th rate.
	No timber.
	Undergrowth,cactus ,sage,mountain rush,oose,and shad-scales.
	Good grass for grazing.
	Mountainous land,or land covered with dense undergrowth, 80.00 chs.
	N.89°53'E.,on a random line bet.secs.29 and 32.
40.00	Set temp.¼ sec.cor.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
80.10	Intersect N.and S.line,7 lks.N.of the cor.of secs.28.29, 32,and 33.
	Thence I run
	S.89°56'W.,on a true line bet.secs.29 and 32.
	Over mountainous land;through dense undergrowth.
	Dese.
1.50	Wash,20 lks.wide,3 ft.deep,course NE.
	Ase.
33.00	Top of sandstone ridge,200 ft.above wash,bears N.85°W.and S.85°E.
	Dese.
40.05	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor..mkd.on brass cap ¼ S 29 in N half and S 32 in S half;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.
71.00	Wash,35 lks.wide,5 ft.deep,course S.
	Ase.
80.10	The cor.of secs.29,30,31,and 32.
	Land,mountainous
	Soil,sandy loam and clay mixed with gypsum;2nd and 4th rate.
	No timber .
	Undergrowth,sage and greasewood and evergreen brush.
	Good grass for grazing.
	Mountainous land or land covered with dense undergrowth, 80.10 chs.
	June 24,1909:At this cor:I set off 23°26'N.,on the decl. arc;and at 0 h 2 m p.m.,l.m.t.,I observe the sun on the meridian ,the resulting lat.is 37°01'N.,which is the proper lat.nearly.

Subdivision of T.43 S.,R.14 W.-Continued.

Chains	
	For reasons already explained I run
	S.89°57'W.,on a true line bet.secs.30 and 31.
	Over rolling land;through dense undergrowth.
	Asc.
2.15	Top of of gypsum ridge,25 ft.above sec.cor.,bears N.and S.
	Desc.
24.50	Wash,10 lks.2 ft.deep,in bottom of hollow,60 ft.below ridge,course SW.
	Asc.
31.00	Top of spur,50 ft.above hollow,bears N.30°W.and S.30° E.
	Desc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for ¼ sec.cor.,mkd.on brass cap ¼ S 30 in N half and S 31 in S half;and raise a mound of stone,2 ft.base, 1½ ft.high,N.of cor.
50.00	Foot of descent,50 ft.below ridge,bears N W.and SE.
	Thence over nearly level land.
75.60	Road from St.George to Kanab,bears N.20°W.and S.20°E.
84.77	Intersect W.bdy.of Tp.,10.20 chs.North of the cor.of secs.25,30,31,and 36,heretofore described.
	Set an iron post,3 ft.long,2 ins.dia.,24 ins.in the ground,for closing cor.of secs.30 and 31,mkd.on brass cap
	T 43 S in N half
	S 25 in NW.
	C C S 30 in NE.
	R 14 W S 31 in SE.;and
	S 15 W S 36 in SW.quadrants;dig pits,24x18x12 ins. 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.
	Note:I destroy all marks on the cor.of secs.25,30,31,and 36,which pertain to secs.30 and 31.
	Land,mountainous and level.
	Soil,sandy and clay loam mixed with gypsum;3rd rate.

Subdivision of T. 43 S., R. 14 W.- Continued.

Chains. No timber.

Undergrowth, evergreen, cactus, shadscales, and sagebrush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth

84.77 chs.

S.0° 3'E.on a true line bet.secs.31 and 32,

Over rolling land; ascending through dense undergrowth.

4.20 Top of gypsum ridge, 15 ft.above sec.cor., bears NW. and SE. Desc.

40.00 Set an iron post 3 ft.long, 1 in.dia., 26 ins.in the ground, for ¼ sec.cor., mkd.on brass cap, ¼ S 31 in W. half and S 32 in E.half; and raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.

43.20 Wash, 20 lks.wide, 2 ft.deep, in bottom of hollow, 40 ft. below ridge, course S.60° E. Asc.

45.50 Top of ridge,30 ft.above hollow,bears E.& W. Desc.gradually

58.28 Intersect Utah-Arizona bdy.line 27.35 chs.West of the 33d mile post, which is an iron post projecting 1 ft. above ground, and 3 ins.square, firmly set and mkd.and witnessed as described by the surveyor general; and 53.04 chs.east of the 32d mile cor. on the Utah-Arizona bdy., which is an iron pipe 2 ins.dia., extending 2 ft.above ground, firmly set and marked and witnessed as described by the surveyor general.

Set an iron post 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.31 and 32, mkd.on brass cap

U in N.half ,

C C A in S.half,

T 43 S S 31 in NW.; and

R 14 W S 32 in NE.quadrants; dig pits 24 x 18 x 12 ins.crosswise on each line E. and W. 3 ft. and N.

Subdivision of T. 43 S., R. 14 W.- Continued.

Chains. of post 7 ft.dist.; and raise a mound of earth 4 ft. base, 2 ft.high N.of cor.

Land, mountainous and rolling.

Soil, sandy and clay loam, mixed with gypsum; 3d rate.

No timber.

Undergrowth, evergreen, sage, and greasewood.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth 58.28 chs.

June 24, 1909.

GENERAL DESCRIPTION.

The northwestern part of this township is a high rolling country, sloping northeast;andd composed largely of moving barren sand hills without much vegetation; while the remainder of the township is about 400 ft. lower than the northeastern, and is nearly level, except for a high ridge running through the western tier of sections from north to south. The soil is practically all sandy; 2d and 3d rates. In the western tier of sections there is some clay soil mixed with gypsum. The greater part of the land in the central part of the township is well adapted for dry farming.

The only water in the township is the Fort Pierce Creek, which rises in sec.34, and runs through secs. 33 and 34. This water is quite heavily charged with minerals of different kinds, and is not very good to drink.

Fort Pierce, which is now only the remains of an old circular rock wall, is located in the north central part of sec.34, not seen from line.

There is practically no timber in the township. No mineral nor oil indications were seen in the township.

Subdivision of T. 43 S., R. 14 W.- Continued.

There are no settlers in the township.

Leo A. Snow.

June 24, 1909. U.S.Deputy Surveyor.

Volume
#
R0361

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

.....

showing the respective capacities in which they acted:

For list of names and final oath of assistants see book "P", ..., *Chainman.*

T. 43 S., R. 16 W. ....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

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

.....

.....

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

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

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

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

SEAL

.....

.....

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

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

For final oath of deputy see book "R" T. 43 S., R. 16 W.

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

.....
United States Deputy Surveyo

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

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 191

The foregoing field notes of the survey of the Subdivisional lines of Township 43 South, Range No.14 West of the Salt Lake Base and Meridian, Utah,

executed by Andrew J.Stewart Jr. and Leo A.Snow
under their contract No. 309, dated March 17, 1909, having be
critically examined, and the necessary corrections and explanations made, the said field notes, and t
surveys they describe, are hereby approved.

Thomas Hall
United States Surveyor Gener

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 Gener

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BOOK A-361

II.

FIELD NOTES

OF THE SURVEY OF THE

[illegible]

[illegible]

[illegible]

of the [illegible] *Meridian,*

[illegible]

AS SURVEYED BY

[illegible], *United States Deputy Surveyor.*

Under his Contract No. [illegible], *dated* [illegible], *190*

Survey commenced [illegible], *190*

Survey completed [illegible], *190*

BOOK A-361

NAMES AND DUTIES OF ASSISTANTS.

Hillman Dulley	Chainman
Samuel Brooks	Chainman
John T. Jarvis	Moundman
Henry Savage	Moundman
John A. Humphries	Flagman

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BOOK A-361

INDEX DIAGRAM.

Township [illegible] *South*, *Range* [illegible] *West*

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

Meanders Page [illegible]

PRELIMINARY OATHS OF ASSISTANTS.

We, Hillman Dalley and Samuel Brooks 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~~ Retracement Utah-Arizona Bdy. through Range 14 W. of the Salt Lake Meridian, Utah.

Hillman Dalley, Chainm
Samuel Brooks, Chainm

Subscribed and sworn to before me this 3rd day of May, 1909.

Leo A. Snow
U.S. Deputy Surveyor

SEAL

We, John Jarvis and Henry Savage 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~~ Retracement Utah-Arizona Bdy. Through Range 14 West, of the Salt Lake Meridian, Utah.

John T. Jarvis, Moundm
Henry Savage, Moundm

Subscribed and sworn to before me this 3rd day of May, 1909.

Leo A. Snow
U.S. Deputy Surveyor

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, John A. Humphries, 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~~ Retracement Utah-Arizona Bdy through Range 14 West, of the Salt Lake Meridian, Utah.

John A. Humphries Flagm

Subscribed and sworn to before me this 3rd day of May, 1909.

Leo A. Snow
U.S. Deputy Surveyor.

SEAL

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Retracement Utah-Arizona Bdy. through Range 14 W.

Chains	
	Survey commenced June 25,1909,and executed with a W.and L.E.Gurley light mountain transit,No. ,with solar attachment.The horizontal limb is provided with two double verniers placed opposite to each other,reading to single minutes of arc;which is also the least count of the verniers of the latitude and declination arcs.
	The instrument was examined,tested on the meridian at Salt Lake City,found correct,and was approved by the surveyor general for Utah,on April 26,1909.
	At the 31st mile cor.on the Utah -Arizona bdy.line,which is an iron post,3 ins.sq.,and projecting 1 foot above ground,firmly set,and mkd.and witnessed as described by the surveyor general,in latitude 37° 00' N.,longitude 113°25'45"W.,I set off 37°00'N.,on the lat.arc; 23°25'N., on the decl.arc;and at 8 h 2 m a.m.,l.m t.,I determine a meridian with the solar.
	Note :For complete test of instrument see notes of Subdivision of T.43 S.,R.14 W.
	Note:On account of closing made on the Utah -Arizona bdy. in the subdivision of T.43 S.,R.14 W..I deem it necessary to retrace said bdy.
	East,on retracement line along the 32nd mile.
79.97	Intersect the 32nd mile post,heretofore described .
	The course of this line is therefore East,79.97 chs.
	No change in topography from original notes.
	East,on retracement line along 33rd mile.
53.04	Intersect closing cor.of secs.31 and 32,heretofore described.
80.39	Intersect 33rd mile cor.,heretofore described.
	The course of this line is therefore East,80.39 chs.
	No change in topography from original notes.

Retracement. Utah -Arizona bdy. through Range 14 West-Contd.

Chains	
	East, on retracement line along the 34th mile.
52.78	Intersect the closing cor. of secs. 32 and 33, heretofore described.
80.06	Intersect the 34th mile cor., heretofore described.
	The course of this line is therefore East, 80.06 chs.
	No change in topography from original notes.
	East, on retracement line along 35th mile.
52.71	Intersect closing cor. of secs. 33 and 34, heretofore described.
80.26	Intersect the 35th mile cor., heretofore described.
	The course of this line is therefore East, 80.26 chs.
	No change in topography from original notes.
	June 25, 1909: At this cor. I set off 23°25'N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 37°00'N., which is the proper lat. nearly.
	East, on retracement line along the 36th mile.
52.80	Intersect closing cor. of secs. 34 and 35, heretofore describe
79.78	Intersect the 36th mile cor., heretofore described.
	The course of this line is therefore East 79.78 chs.
	No change in topography from original not es.
	East, on reatracement line along the 37th mile.
53.21	Intersect the closing cor. of secs. 35 and 36, heretofore described.
80.23	Intersect the 37th mile cor., heretofore described.
	The course of this line is therefore East 80.23 chs.
	No change in topography from original notes.

Retracement Utah-Arizona bdy.;through Range 14 W.-Continued.

Chains	
	East,on retracement line along 38th mile.
52.63	Intersect closing cor.of Tps.43 S.,Rs.13 and 14 W.,heretofore described.
79.92	Intersect the 38th mile cor.,heretofore described.
	The course of this line is therefore East,79.92 chs.
	No change in topography from original notes.

June 25,1909.

Leo A. Snow.
U.S.Deputy Surveyor.

Boundaries T. 43 S., R. 14 W.

LATITUDES, DEPARTURES, AND CLOSING ERRORS.

Line Designated	True Bearing	Dist.	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		chs.	chs.	chs.	chs.	chs.
West Boundary. .	North	168.07	168.07	.....	.....	.....
West Boundary	N.0°13'W.	40.05	40.05	.....	.....	.15
West Boundary	N.0° 03'W.	80.10	80.10	.....	.....	.07
West Boundary	North	169.77	169.77	.....	.....	.....
North Boundary	N.89°57'E.	84.70	.07	.....	84.70	.....
North Boundary	N.89°49'E.	80.10	.25	.....	80.10	.....
North Boundary	N.89° 48'E.	80.08	.27	.....	80.08	
North Boundary	N.89°47'E.	80.18	.30	.....	80.18	
North Boundary	N.89° 48'E.	80.07	.27	.....	80.07	
North Boundary	N.89° 47'E.	80.02	.30	.....	80.02	
East Bdy. or G.M.	South	459.52	.....	459.52	.....	.....
Utah-Arizona Bdy.	West	485.00	.....	.....	.....	485.00
Convergency					.57	
T o t a l s			459.45	459.52	485.72	485.22
Error in lat. and dep.				459.45	485.22	
				.07	.50	

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Leo A. Snow, 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~~ Retracement Utah-Arizona bdy., through Range 14 West, of the Salt Lake Mer., Utah, showing the respective capacities in which they acted:

Hillman Dalley, *Chainman.*

Samuel Brooks, *Chainman.*

John T. Jarvis, *Moundman.*

Henry Savage, *Moundman.*

, *Axman.*

, *Axman.*

John A. Humphries, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Leo A. Snow, United States Deputy Surveyor, in surveying all those parts or portions of the Retracement Utah Arizona bdy. through Range 14 W. of the Salt Lake meridian, State of 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.

Hillman Dalley, *Chainman.*

Samuel Brooks, *Chainman.*

John T. Jarvis, *Moundman.*

Henry Savage, *Moundman.*

, *Axman.*

, *Axman.*

John A. Humphries, *Flagman.*

Subscribed and sworn to before me this 25th day of June, 1909.

SEAL

Leo A. Snow,

U. S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Leo A. Snow, United States Deputy Surveyor, d solemnly swear that, in pursuance of a contract received from Thomas Hull United States Surveyor General for Utah, bearing date of th 17th day of March, 190 9, I have well, faithfully, and truly, in my ow proper person, and in strict conformity with the instructions furnished by the United States Surveyo General for Utah, the Manual of Surveying Instructions, and the laws of th United States, surveyed all those parts or portions of Retracement Utah Arizona Bdy. through Range 14 West.

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

Leo A. Snow.
United States Deputy Surveyo

Subscribed by said Leo A. Snow, and sworn to before me this 26th day of January, 1910.

John T. Woodbury
Clerk Dist. Court.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 19, 191

The foregoing field notes of the ~~surveyor~~ Retracement of the Utah-Arizona Boundary line through Range No. 14 West of the Salt Lake Meridian, Ut from the 32d to 38th mile corners.

executed by Andrew J. Stewart Jr. and Leo A. Snow under ~~his~~ their contract No. 309, dated March 17, 1909, ~~190~~, having be critically examined, and the necessary corrections and explanations made, the said field notes, and t ~~surveys~~ retracements they describe, are hereby approved.

Thomas Hull
United States Surveyor Gener

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 Gener

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