

Cupboard 27
Shelf 2
No. 22
1 book

COMPUTATIONS
OF
LATITUDES & DEPARTURES
OF
TOPOGRAPHICAL MEANDERS

No. 263.

263



TOPOGRAPHICAL RECORDS.

Book No. *263*, 1876.

U. S. ENGINEER OFFICE.

EXPLORATIONS AND SURVEYS

WEST OF THE 100TH MERIDIAN.

CORPS OF ENGINEERS,
IN CHARGE.

Party No. *H California Section*
From *Cañon City*
To *Lees Mill.*
Date: *Nov 26th 1876.*

William A. Cowles
J Calvert - S. Pillsbury Topographical Assistant. S

REMARKS.

Meanders contained in this book will be found disconnected at some points, this was owing to the fact that on various occasions the party was divided into two, and meanders separately run by each of the topographers

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Camp

Rendezvous At Canyon City

To Camp

1 at Sintro Ranch

Date:

Sept 5th 1876.

Spiller Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
Camp	ad											
	37											
	96		.22	S 70 E	S 53 3/4 E	.22						
	120		.43	N 73 E	N 89 3/4 E	.43						
	314		.15	"	N 89 3/4 E	.15						
	380		.16	N 31 E	N 44 3/4 E	.16						
	449		1.03	N 54 1/2 E	N 71 1/4 E	1.03						
	588		.75	"	"	.75						
	1210		.89	N 55 1/4 E	N 72 E	.89						
	1591		.75	N 51 3/4 E	N 68 1/2 E	.75						
	1980		1.21	N 44 E	N 60 3/4 E	1.21						
	2424		.83	N 43 1/4 E	N 60 E	.83						
	2776		1.23	N 107 E	N 63 1/4 E	1.23						
	3802		.91	N 11 1/2 E	N 28 1/4 E	.91						
	3691		.58	N 56 3/4 E	N 73 1/2 E	.58						
	3938		1.39	"	"	1.39						
	4517		.34	N 33 1/2 E	N 50 1/4 E	.34						
	4660		.55	N 60 E	N 76 3/4 E	.55						
	4891		.16	N 68 E	N 84 3/4 E	.16						
	4960		.56	S 78 E	S 61 1/2 E	.56						
	5195		.23	N 81 E	S 82 1/4 E	.23						
	5292		.62	N 31 W	N 14 1/4 W	.62						
	5553		1.54	N 27 E	N 14 3/4 W	1.54						
	6196		.95	N 15 1/2 E	N 32 1/4 E	.95						
	6591		.16	N 40 3/4 E	N 60 1/2 E	.16						
	6661			S 66 1/2 E	S 49 3/4 E							

Camp

1 Sutter Ranch

To Camp

2 at Bucklands Ranch

Date:

Sept 8th '76.

near Old St. Churchill

Colo

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
Camp 1	6661											
a	6732	71	.02									
1	7607	875	2.23	N 45 E	N 61 3/4 E	2.23						
2	8570	963	2.26	N 49 E	N 65 3/4 E	2.24						
3	9540	970	2.28	S 88 E	S 71 1/4 E	2.22						
4	1037	1397	3.29	N 87 1/4 E	S 76 E	3.14						
5	1988	951	2.24	N 46 1/4 E	N 63 E	2.11						
6	2456	918	2.16	N 87 1/2 E	S 75 3/4 E	2.03						
7	3435	529	1.24	N 85 1/2 E	S 74 3/4 E	1.24						
8	4391	956	2.25	N 67 3/4 E	N 84 1/2 E	2.15						
Camp 2	4861	470	1.11	N 70 1/2 E	N 87 1/4 E	1.09						

Variation 16 3/4

Camp 2 Sutoro Ranch
 To Camp 3 at Gates' Ranch

Date: Sept 11th

Cowles, Computer

STATION.	Distance by— <i>time</i>	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
		0	1.20	N 30 W		1.20						
		1	1.50	N 56 E		1.50						
		2	.75	N 65 E		.75						
		3	1.50	N 40 1/2 E		1.50						
		4	3.00	N 4 E		3.00						
		5	3.00	S 3/4 E		3.00						
		6	1.10			1.10						

Camp 5 of Ray Town
 To Camp 6 Hill and Jones Ranch

Date: Sept 16th
 McCauson Slough
 , Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	4811											
1	5824 1013		2.39	S 82 E	S 65 E	2.39						
	473	3	1.11	S 80 1/2 E	S 63 1/2 E	1.08						
2	6297 1234	4	2.90	S 75 1/2 E	S 58 1/2 E	2.80						
3	7531 380	3	.89	S 45 E	S 28 E	.87						
4	7911 471	6	1.11	"	"	1.05						
5	8382 585	3	1.38	S 70 1/2 E	S 53 1/2 E	1.34						
School 6	8967 924	4	2.17	S 76 1/2 E	S 59 1/2 E	2.09						
7	9891 534	3	1.26	N 89 1/2 E	S 73 1/2 E	1.22						
8	525 400	3	.94	N 58 E	N 75 E	.92						
9	925 460	3	1.08	N 58 1/2 E	N 75 1/2 E	1.05						
Camp	1385											

17-10

2.17
 1.26
 3.43

Camp

6 at Hill and Gunnes

To Camp

7 Sand Spring Station.

Date:

$\frac{-}{+}$

Sept 17th
Circles

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	2089											
1	940 3029		2.16	S 75 E	S 58 E	2.16						
2	1194 4223		2.80	N 85 E	S 78 E	2.80						
3	826 5049		1.90	S 70 E	S 53 E	1.90						
4	709 5758		1.63	S 61 E	S 44 E	1.63						
5	884 6642		2.03	S 55 E	S 38 E	2.03						
6	452 7094		1.04	S 62 E	S 45 E	1.04						
7	206 7300		.47	N 87 E	S 76 E	.47						
	1625 8925		3.74	S 81 E	S 64 E	3.74						

1194
 2029
 4223
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 6642
 7094
 7300
 8925

 2089

Camp 7 Sand Spring
 To Camp 8 at West Gate

Date: Sept 19th
 Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	9672											
1	702 930		2.19	S 82 1/2 E	S 65 1/2 E	2.19						170
2	1212 510	3	1.20	N 42 E	N 59 E	1.14						
3	1363 151	3	.33	N 53 1/2 E	N 70 1/4 E	.35						
4	1843 480	4	1.13	N 66 1/2 E	N 83 1/2 E	1.09						
a	1843 147	4	1.20	"	"	1.15						
	1990 364	3	3.84	"	"	.84						
5	2354 1537	2	3.62	N 62 1/2 E	N 74 1/2 E	3.55						
6	3891 1550	2	3.88	N 67 E	N 84 E	3.80						
7	5441 1703	0	1.42	N 74 E	S 89 E	1.42						
8	6144 1347	3	3.17	N 67 1/2 E	N 84 1/2 E	3.07						
9	7491 470	1	1.11	N 71 E	N 88 E	1.10						
10	7961 350	2	.82	N 73 1/2 E	S 89 1/2 E	.82						
	8311											

9672
 10602
 9672
 930

Camp 8 at West Gate
 To Camp a at Chalk Wells

Date: Sept 25

Cawles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
8312												
8526	214		.50	S 85 E	S 68 1/2 E	.50						
9052	526	3	1.24	S 80 E	S 63 1/2 E	1.20						
9698	646	2	1.52	S 75 E	S 58 1/2 E	1.50						
9855	154	3	.37	S 72 E	S 55 1/2 E	.37						
983	928	2	2.42	S 37 E	S 20 1/2 E	2.37						
1690	707	4	1.66	S 14 E	S 2 1/2 W	1.60						
2135	445	4	1.05	S 32 E	S 15 1/2 E	1.00						
2644	559	3	1.32	S 65 E	S 48 1/2 E	1.30						
3038	344	4	.81	N 80 E	S 83 1/2 E	.81						
3318	280	5	.66	N 88 E	S 75 1/2 E	.63						
3479	161	3	.38	S 16 1/2 E	S	.38						
3730	251		.58	S 4 W	S 20 1/2 W	.58						
4414	684	4	2.20	S 53 E	S 36 1/2 E	2.10						
4887	473	2	1.13	S 56 3/4 E	S 40 1/4 E	1.10						
6077	1190	3	2.80	N 89 E	N 74 1/2 E	2.70						
6472	395	4	.93	S 15 E	S 1 1/2 W	.90						
6647	175		.41	S 38 E	S 21 1/2 E	.41						

16-27-08

Camp

a at Chalk Well

To Camp

b East Gate

Date:

Sept 26th

Cawles

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
a	odem 6646											
1	376 7822/852	.88		n 26 W	n 9 1/2 E							
2	7874/411		4.00	n 8 E	n 24 1/2 E							
3	8285/4198	.96		n 5 E	n 21 1/2 E							
Camp	2583		9.865	n 11 W	n 5 1/2 E							

Camp *b At East Gate*
 To Camp *8 West Gate*

Date:

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
<i>6</i>	<i>2584</i>											
<i>1</i>	<i>3103</i>	<i>3</i>	<i>1.22</i>	<i>N 45 W</i>	<i>N 28 1/2 W</i>	<i>1.20</i>						
<i>2</i>	<i>4636</i>	<i>3</i>	<i>3.61</i>	<i>S 85 1/2 W</i>	<i>N 78 W</i>	<i>1.51</i>						
<i>3</i>	<i>6579</i>	<i>4</i>	<i>3.40</i>	<i>S 46 W</i>	<i>S 62 1/2 W</i>	<i>3.27</i>						
<i>Camp</i>	<i>7401</i>	<i>4</i>	<i>3.11</i>	<i>S 71 3/4 W</i>	<i>S 88 1/4 W</i>	<i>3.00</i>						

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Camp 8 at West Gate
 To Camp 9 Pattersons Ranch

Date: Sept 28th 13
 Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1	7453 2751 254		6.47									
2	1072 1326	4	2.52	N 32 E	N 49 E							
3	1800 3126	4	4.24	N 20 E	N 37 E							
4	146 3272	5	.34	N 13 E	N 30 E							
5	480 3752	0	1.13	N 13 E	N 30 E							
6	1153 4905		2.71	N 10 1/2 E	N 6 1/2 E							
7	11401 6306	2	3.30	N 10 1/2 E	N 27 1/2 E							
8	221 6527	3	1.52	N 14 E	N 31 E							
	1379 7906	2	3.24	N 36 E	N 53 E							

11

Camp 9 at Patterson's
 To Camp 10 at Antonio Maestretti

Date: Oct 2nd
 Cowles
 , Computer 14

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
10	7931											
	1051		2.47	S 41 1/2 E	S 24 1/2 E	2.47						17
1	8982-486	4	1.85	S 48 E	S 31 E	1.85						
2	9769-969	3	2.28	S 40 E	S 23 E	2.28						
3	836-396		.930	S 23 E	S 6 E	1.93						
4	1232-571		1.34	S 25 E	S 8 E	1.34						
5	1853-461		1.08	S 10 E	S 7 W	1.08						
6	2264-153		.363	S 24 E	S 7 E	.36						
7	2419-580		1.37	N 8 1/2 E	S 7 1/2 E	1.37						
8	2999-453		1.06	N 50 E	N 67 E	1.06						
9	3452-539		1.27	N 75 E	N 87 E	1.27						
10	3991-149		.35	N 89 3/4 E	S 73 1/4 E	.35						
	4140											

Camp

Camp 10

Automes

To Camp 11

Bichins Ranch

Date:

Oct 7th

Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	4151											
1	1284		3.02	N 83 E	S 80 E	3.02						
	5435											
1	2178	6	5.21	N 70 E	N 87 E	5.18						
2	7613											
2	1375	3	3.23	N 70 1/2 E	N 87 1/2 E	3.25						
3	8988											
3	462	2	1.13	N 72 E	N 89 E	1.13						
4	9470											
4	387	3	.91	N 82 E	S 81 E	.91						
Summit 5	9857											
5	490	3	1.15	N 60 E	N 77 E	1.15						
6	447											
6	421	4	.99	N 49 E	N 66 E	.99						
7	868											
7	1181	3	2.78	N 38 E	N 55 E	2.78						
8	2049											
8	1694	2	3.98	N 62 E	N 79 E	3.98						
	3743											

$$\begin{array}{r} 1284 \\ 5435 \\ \hline 6719 \\ 2178 \\ 7613 \\ \hline 10391 \\ 1375 \\ 8988 \\ \hline 20473 \\ 462 \\ 9470 \\ \hline 30943 \\ 387 \\ 9857 \\ \hline 40800 \\ 490 \\ 447 \\ \hline 41297 \\ 868 \\ 2049 \\ \hline 42845 \\ 1694 \\ 3743 \\ \hline 46588 \end{array}$$

$$\begin{array}{r} 1284 \\ 5435 \\ \hline 6719 \\ 2178 \\ 7613 \\ \hline 10391 \\ 1375 \\ 8988 \\ \hline 20473 \\ 462 \\ 9470 \\ \hline 30943 \\ 387 \\ 9857 \\ \hline 40800 \\ 490 \\ 447 \\ \hline 41297 \\ 868 \\ 2049 \\ \hline 42845 \\ 1694 \\ 3743 \\ \hline 46588 \end{array}$$

Camp a Austin
 To Camp 12 Silver Age

Date: Oct 15th
 Cowles, Computer 20

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
Austin	odum 8549											
1	1492 141		3.51									
2	549 408 694		.96	S 3 W	S 20 W							
3	1243 569		1.63	S 2 1/2 W	S 19 1/2 W							
4	1812 522 2334		1.34	S 21 1/2 W	S 38 1/2 W							
			1.23	S 22 W	S 39 W							

Camp 12 Silver Age Star,
 To Camp 13 Capt. John Thomas

Date:

Oct 16th
 Cowles

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
Camp 12	2337											
1	1058		2.49	S 18 1/2 W								
	3495		7.77	S 15 W								
Camp	3306											
	6801											Meander incomplete

Camp 16 McMahan's Ranch
 To Camp 17 Line

Date:

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
16	1562											
1	2348		1.85	S 45 W	S 60 3/4 W	1.85						
a	2909		1.35	S 46 1/2 W	S 62 1/4 W	1.35						15 3/4
2	3121		.49	S 80 W	N 84 1/2 W	.49						
3	3556		1.02	S 72 W	S 84 3/4 W	1.02						
4	4688		2.54	S 45 W	S 60 3/4 W	2.54						
Camp	4988		.70	S 43 W	S 58 3/4 W	.70						
	3376					7.95						
	10128											
	6752											
	77648											

1052
 13246
 2104
 24286

Camp 16 at McMahans Ranch
 To Camp 18 at Lyons

Date: Oct 31st 11
 Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
16	7402											
	868		2.06	N 1 E	N 1 3/4 E	2.06						15 3/4
1	8270	894	2.10	N 18 1/2 E	N 34 1/4 E	2.10						
2	9164	948	2.23	N 25 E	N 40 3/4 E	2.23						
3	212	1244	2.93	N 5 E	N 20 3/4 E	2.93						
4	1456	1014	2.38	N 10 E	N 25 3/4 E	2.38						
5	2470	629	1.48	N 26 1/2 E	N 42 1/4 E	1.48						
6	3099	618	1.45	N 10 W	N 5 3/4 E	1.45						
7	3717	1194	2.75	N 1/2 W	N 15 1/2 E	2.75						
Logans	4911	1060	2.44	N 1/2 E	N 15 1/4 E	2.44						
	5771											

629
 210
 1887
 1258
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Camp

18 Wynn Ranch

To Camp

19 Petersens

Date:

Nov 1st

Curves.

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
18	5971											
1	6647	706	1.64	N 29 1/2 W	N 13 3/4 W							
2	8060	1383	3.25	N 72 1/2 W	N 56 3/4 W							
3	8691	681	1.48	N 82 W	N 66 1/4 W							
4	9944	1253	2.95	S 59 1/2 W	S 46 1/4 W							
5	1660	1676	3.80	S 30 1/2 W	S 46 1/4 W							
6	2176	516	1.21	S 25 W	S 40 3/4 W							
Camp 19	2846	670	1.87	S 61 1/2 W	S 77 1/4 W							

Camp 19 at Petersens
 To Camp 20 at Ellsworth.

Date: Nov 30
 Cowles, Computer

STATION.	Distance by— time	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
Camp	2871											
1	3747		2.06	S 42° W	S 57 3/4° W							
2	6267 12.45		5.93	S 25° W	S 40 3/4° W							
3	1-20 1-40		2.06	S 1° W	S 16 3/4° W							
4	2-06 2-17		1.53	S 43 1/2° W	S 59 1/4° W							
5	3-51 4-07		5.52	S 17 1/2° W	S 33 1/4° W							
6	4-13 4-26		3.53	S 11 1/2° E	S 27 1/4° W							
7	4-54 4-58		2.00	"	"							
8	5-38		2.35	S 33° W	S 48 3/4° W							

Camp a Chalk Well
 To Camp 20 at Ellsworth

Date: Nov 8th
 Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	4274											
1	4867 593 410	3	1.40	S 40 E	S 24 1/4 E	1.40						
2	5277 791 791	3	.96	S 50 E	S 34 1/4 E	.96						
3	6062 194 194	4	1.86	N 59 E	N 74 3/4 E	1.86						
4	6262 909 909	3	.45	N 86 1/2 E	S 44 3/4 E	.45						
5	7171 1003 1003	5	2.14	S 40 E	S 24 1/4 E	2.14						
6	8174 713 713	3	2.36	S 11 1/2 E	S 4 1/4 W	2.36						
7	8887 484 484	4	1.68	S 7 1/4 E	S 8 1/2 W	1.68						
8	9371 119 119	-20	1.18	S 4 E	S 11 3/4 W	1.18						
9	9490 355 355		.233	S 35 E	S 19 1/4 E	.233						
10	9845 474 474		.823	S 85 E	S 69 1/4 E	.823						
	419		1.15	S 6 E	S 9 3/4 W	1.15						

Camp 21.
To Camp 22

Welsh's Spr
Cold Spr.

Date: Nov 10th
Cowles, Computer

STATION.	Distance by— <i>odometer</i>	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	2772											
1	4554 1782		4.19	S 41 1/2 W	S 54 1/2 W	4.19						
2	6497 1943		4.57	S 72 W	S 88 W	4.57						
3	8362 1865		4.39	S 76 1/2 W	N 87 1/2 W	4.39						
4	9510 1148		2.70	S 62 W	S 78 W	2.70						
5	1589 1979		4.66	S 71 1/2 W	S 87 1/2 W	4.66						
	1772 183		.43	S 25 1/2 W	S 41 1/2 W	.43						

Camp 22 Cold Spr.
 To Camp 23 Dead Horse Well

Date: November 13th
 Cowles, Computer

STATION.	Distance by— <i>odm</i>	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
22	1772 436		1.02	S 9 1/4 W	S 25 1/4 W	1.02						
1	2208 1566	3	3.92	S 55 3/4 W	S 71 3/4 W	3.92						
2	3874 970	2	2.28	S 58 1/2 W	S 74 1/2 W	2.28						
3	4844 1035	2	2.44	S 60 W	S 76 W	2.44						
4	5879 845 6724	2	1.99	N 86 W	N 70 W	1.99						

Camp 23 Dead Horse Well
 To Camp 24 Deep Hollow Sta

Date: November 14th
 Cowles, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	6725											
1	8463	738	4.09	N	N 16 E	4.09						
2	9480	1017	2.39	N 32 W	N 16 W	2.39						
3	850	1270	2.99	N 50 W	N 34 W	2.99						
4	1168	318	.75	N 46 W	N 30 W	.75						
5	1908	740	1.74	N 34 1/2 W	N 18 1/2 W	1.74						
6	2551	643	1.51	N 22 W	N 6 W	1.51						
Camp	2748	197	.46	N 15 W	N 1 E	.46						

Camp

a On Carson Lake

To Camp

b Near Houston Well

Date:

November 20th
Cowles

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
a	10.45			S 68 3/4 W	4.25	S 80 1/4 W						
1	11-22 12-39			S 45 W	2.10	S 61 1/2 W						
2	1-12 1-51			S 67 W	1.30	S 80 1/2 W						
3	1-57 2-23			S 52 3/4 W	2.35	S 69 1/4 W						
4	3-05 3-50			S 77 W	.78	W 86 1/2 W						
5	4-14 4-28 5-28 -38 5-50			S 89 W	3.00	W 74 1/2 W						
					1.48							
					.60							

Camp 1 at *Petro*
 To Camp a *Cow Spring*

Date: *Sept 7th 11*
Spiller, Computer

STATION.	Distance by— <i>Trim</i>	Per cent of Reduction.	Reduced Distance. <i>Estimated</i>	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.50	S. 79° E	S 62 1/2 E	.50						
2			3.75	S. 7 1/2 E	S 9 W	3.75						
3			.60	S. 56° E	S 39 1/2 E	.60						
4			1.00	"	"	1.00						
4			.60	S. 80 1/2 E	S 64 E	.60						
5			1.50	S. 32° E	S 15 1/2 E	1.50						
6			.90	S. 25 E	S 8 1/2 E	.90						
7			1.75	N 52 1/2 W	W 69 E	1.75						
8			1.25	"	"	1.25						
Camp 9			2.00	S. 7° E	S 9 1/2 W	2.00						

Var 16 1/2 E

Spring near Mt Lyon -

Camp *a* at *Cow Spring*
 To Camp *2* *Bucklands*

Date: *Sept 9th*
Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance. <i>Estimated</i>	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			2.00	N 29° E	N 45 1/2 E	2.00						
2			1.00	"	"	1.00						
3			1.10	N 38 1/2 E	N 55 E	1.10						
4			1.15	N 26 3/4 E	N 43 1/4 E	1.15						
5			1.65	"	"	1.65						
6	<i>20</i>		.50	N 30° E	N 46 1/2 E	.50						
7	<i>20</i>		.50	N 80° E	S 83 1/2 E	.50						
8	<i>00</i>		1.00	N 35° E	N 51 1/2 E	1.00						
9	<i>30</i>		1.50	N 40° W	N 23 1/2 W	1.50						
10			.60	N 18° E	N 34 1/2 E	.60						
11			1.75	S 73° E	S 56 1/2 E	1.75						
12			3.00	S 35° E	S 19 1/2 E	3.00						
13			.75	N 75° E	S 88 1/2 E	.75						
14			3.00	N 34° E	N 50 1/2 E	3.00						
15			1.00	N 22° W	N 5 1/2 W	1.00						
16			1.50	N 8° W	N 8 1/2 E	1.50						

16 1/2

Camp 2 Bucklands
To Camp a Madswort

Date:

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	4861											
x 1	5139	278	-20	.61	n 36 w	n 19 3/4 w	.61					
2	6000	861			n 8 e	n 24 1/2 e	2.02					
x 3	6154	154			n 35 w	n 18 3/4 w	.36					
4	6379	225			n 28 1/2 w	n 12 1/4 w	.53					
x 5	6833	454			n 3 e	n 19 1/4 e	1.07					
6	6984	151			n 24 w	n 7 1/2 w	.36					
x 7	7117	133			n 39 w	n 22 3/4 w	.31					
8	7572	455			n 4 w	n 12 1/4 e	1.07					
x 9	8137	565			"	"	1.83					
10	8254	117			"	"	.27					
x 11	8547	293			n 4 w	"	.61					
12	8670	123			n 8 1/4 w	n 7 1/2 e	.29					
13	9050	380			"	"	.89					
x 14	9242	192			n 40 w	n 23 3/4 w	.45					
x 15	9584	342			n 12 1/2 w	n 3 1/4 e	.80					
16	188	504	448	60	"	"	1.04					
17	375	187			n 50 e	n 66 1/4 e	.44					
x 18	582	207	187	20	n 74 e	s 89 3/4 e	.44					
19	711	129			n 1 w	n 15 1/4 e	.29					
x 20	1732	1021			n 42 1/2 w	n 26 1/4 w	2.40					
21	2214	482			n 41 w	n 24 3/4 w	1.13					
22	2353	139			n 12 e	n 28 1/2 e	.33					
23	2658	305			n 28 w	n 11 3/4 w	.72					
x 24	3173	515			n 28 w	n 11 3/4 w	1.21					
x 25	3550	377			n 35 w	n 18 3/4 w	.88					
26	3691	141			n 56 w	n 39 3/4 w	.43					
27	4240	549			n 47 w	n 30 3/4 w	1.39					
28	4612	372			"	"	.67					
29	5115	503			n 41 w	n 24 3/4 w	1.18					
30	5400	285			n 70 w	n 53 3/4 w	.64					

9900
4861
5039
5443
425) 11484 (27.021
850
2984
2976
900
850
500
9900
9584
316
183
504

Camp

Bucklands

To Camp

Wadsworth

Date:

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	5400											
31	5500	100		N 31 W	N 14 3/4 W	.23						
x 32	5566	66		N 75 W	N 58 3/4 W	.15						
33	5920	354		N 11 1/2 W	N 4 3/4 E	.83						
x 34	6049	129		N 50 W	N 33 3/4 W	.30						
x 35	6445	396	146 -250	N 57 E	N 73 1/4 E	.34						

Camp *b* Desert Sta
 To Camp *5* Raytown in Carson Riv

Date: *Sep 4*
Spiller, Computer 44

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	<i>9748</i>											
	<i>2912</i>			<i>S 45 E</i>	<i>S 28 E</i>	<i>5.57</i>						
	<i>2860</i>	<i>679</i>		<i>N 86 E</i>	<i>S 77 E</i>	<i>1.60</i>						
	<i>3539</i>	<i>642</i>		<i>S 85 1/4 E</i>	<i>S 68 1/4 E</i>	<i>1.51</i>						
	<i>4181</i>			<i>N 86 E</i>	<i>S 77 E</i>	<i>1.69</i>						
	<i>4899</i>	<i>718</i>		<i>S 80 E</i>	<i>S 63 E</i>	<i>2.18</i>						
	<i>5826</i>	<i>927</i>		<i>S 72 1/2 E</i>	<i>S 55 1/2 E</i>	<i>4.23</i>						
	<i>7628</i>	<i>1802</i>		<i>S 72 E</i>	<i>S 55 1/2 E</i>	<i>.38</i>						
	<i>7787</i>	<i>159</i>		<i>N 85 E</i>	<i>S 78 E</i>	<i>.05</i>						
	<i>7810</i>	<i>23</i>										

47

4.706
2.128

0.850

Camp 5 Raytown ^(Commercial Hook of Sinclair Sta.)
 To Camp a Stillwater

Date: Sept 16
 S. Fuller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	9.50 am											
	9-30		3.50									
1	11.00 11.15		3.25	N. 60. E	277 E	3.25						
2	11.27		1.60	N. 76. E	86 E	1.60						
3	11.37 11.42 11.58 1.37		.40	N. 60. E	277 E	.40						
	5.15		80	"	"	.80						
			12.00	"	"	12.00						

Camp *a* Stillwater
 To Camp *b* La Plata

Date: *Sept 17th*
Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			4.25	N. 62½ E	N 79½ E	4.25						
2			2.10	N. 71½ E	N 88½ E	2.10						
3			2.00	S. 46 E	S 29 E	2.00						
a			1.60	S. 18 E	S 1 E	1.60						
4			.90	S. 12 E	S 5 W	.90						
a			.40	S. 27 E	S 10 E	.40						
b			.40	South	S 7 W	.40						
c			.40	S. 25 E	S 8 E	.40						
5			.40	S. 25 E	S 8 E	.40						
6			.40	S. 37 E	S 20 E	.40						
7			.20	S. 8 E	S 7 W	.20						
8			.15	S. 32 E	S 15 E	.15						
9			.40	S. 68 E	S 51 E	.40						
10			1.12	S. 85¼ E	S 68¼ E	1.12						
11			.50	N. 59½ E	N 76½ E	.50						
a			.75	"	"	.75						
12			.20	N. 85 E	S 78 E	.20						
13			1.20	N. 42½ E	N 59½ E	1.20						
14			.50	N. 70 E	N 84 E	.50						
15			.50	S. 80 E	S 63 E	.50						
16			.50	S. 70 E	S 55 E	.50						
17			.60	N. 22½ W	N 5½ W	.60						

Camp *b. San. Plain*
 To Camp *c. Head of Eleven mile Cañon*

Date: *Sept 18th*
Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.60	N. 22. E	N 38 1/2 E	.60						
2			.45	N. 6. W	N 10 1/2 E	.45						
3			1.25	East	S 76 1/2 E	1.25						
4			.90	N. 30. W	N 13 1/2 W	.90						
5			1.00	N. 55. W	N 38 1/2 W	1.00						
6			.50	N. 28. W	N 11 1/2 W	.50						
7			.30	N. 71. W	N 54 1/2 W	.30						
8			.65	N 24 1/2 W	N 8 W	.65						
9			1.20	"	"	1.20						
10			.20	"	"	.20						
			.70	"	"	.70						

Camp E

To Camp to 8 at West Gate

Date:

Sept 21st

Spiller

, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.45	S. 20. E	S 20 1/2 E	.45						
2			.75	S. 57 1/2 E	S 41 E	.75						
3			1.30	S. 43. E	S 27 E	1.30						
4			.75	S. 5. E	S 11 1/2 W	.75						
5			.45	S. 16. E	S 1/2 W	.45						
6			.45	S. 41. E	S 24 1/2 E	.45						
7			.20	S. 66. E	S 49 1/2 E	.20						
8			.25	S. 59. E	S 42 1/2 E	.25						
9			.10	East	S 73 1/2 W	.10						
10			.15	S. 53 1/2 E	S 67 E	.15						
11			1.50	N. 80. E	S 88 1/2 E	1.50						
	break											
12			1.25	S. 75. E	S 58 1/2 E	1.25						
13			1.25	N. 85 1/2 E	S 78 E	1.25						
14			.65	S. 85. E	S 68 1/2 E	.65						
15			2.50	S. 88. E	S 71 1/2 E	2.50						
16			2.80	" " "	"	2.80						
17			1.20	S. 74 1/2 E	S 58 E	1.20						
18			.10	" " "	"	.10						
19			.95	" " "	"	.95						
20			3.60	S. 85. E	S 68 1/2 E	3.60						

Camp 8 West Gate
 To Camp a Bench Creek

Date: September 28th 1944
 Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.70	N. 45 $\frac{1}{2}$ E	N 62 $\frac{1}{2}$ E	.70						
2			.75	N. 36 $\frac{1}{2}$ E	N 53 $\frac{1}{2}$ E	.75						
3			.85	N. 30. E	N 47 E	.85						
4			.40	North.	N 17 E	.40						
5			1.30	N. 26. E	N 43 E	1.30						
6			5.40	N. 12 $\frac{1}{2}$ W	N 4 $\frac{3}{4}$ E	5.40						
7			2.00	N. 27. W	N 10 W	2.00						
8			2.50	N. 3. W	N 14 E	2.50						
9			.90	N. 60. E	N 44 E	.90						
10			1.90	N. 6. E	N 23 E	1.90						
11			.45	N. 65. E	S 88 E	.45						
12			.40	N. 18. E	N 35 E	.40						

7

Camp c at Cherry Valley.
 To Camp 9 " Pattersons Ranch

Date: Oct 1 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduc-tion.	Reduced Distance.	BEARINGS.		Reduced Dis-tance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			1.00	S. 86.5	S 70 E	1.00						
2			.35	"	"	.35						
3			.50	"	"	.50						
4			2.00	S. 80.5	S 64 E	2.00						
5			2.25	S. 68 1/2	S 52 1/2 E	2.45						
6			.50	N. 79.5	S 85 E	1.60						
7			60	S. 77 1/2	S 61 1/2 E	2.80						
8			1.40	"	"	1.40						
			55 + 10	N. 78.5	S 86 E	55 + 10						

Camp 9 Pattersons Ranch
 To Camp a Hesatoya Peaks.

Date: Oct 2nd 1876
 Miller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			4.00	S. 25 1/2 E	S 29 E	4.00						
2			.50	S. 7 1/2 E	S 9 W	.50						
3			.25	S. 85 W	N 78 1/2 W	.25						
4			.35	S. 20 W	S 36 1/2 W	.35						
4			.60	West	N 73 1/2 W	.60						
5			.60	S. 40 W	S 56 1/2 W	.60						
6			.85	S. 25 E	S 8 1/2 E	.85						
7			.35	"	"	.35						
8			.45	"	"	.45						
9			.40	"	"	.40						
10			.90	S. 20 E	S 3 1/2 E	.90						
11			.30	East	S 73 1/2 E	.30						
a			.40	S. 60 E	S 43 1/2 E	.40						
12			.40	S. 25 E	S 8 1/2 E	.40						
a			.95	S. 5 E	S 7 1/2 W	.95						
13	445		<u>2.00</u> .25	S. 12 W	S 18 1/2 W	.25						

16 1/2

80°
8

Camp a Near Nesatoya Peak
 To Camp 10 Anton Mastratti's Ranch

Date: Oct 4 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			1.70	N. 50° E	N 67 E	1.70						
2			1.65	S. 68½ E	S 51½ E	1.65						
3			1.00	N. 64. E	N 81 E	1.00						
a			.25	S. 57. E	S 40 E	.25						
4			.25	S. 76. E	S 59 E	.25						
break												
1			.30	N. 29. E	N 46 E	.30						
2			1.50	" " "	" "	1.50						
3			.60	N 42½ W	N 25½ W	.60						
4			.40	N. 50. W	N 33 W	.40						
5			.75	N. 3. W	N 14 E	.75						
6			.25	N. 20. E	N 37 E	.25						
7			.60	N. 60. E	N 77 E	.60						
8			.30	N. 15. E	N 32 E	.30						
9			.50	N. 83. E	S 80 E	.50						

Camp 10 Antom Maestretta

Date: October 5 - 1876

To Camp a near Sta 6

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.60	N. 72. E	N 89 E	.60						57
2			.60	"	"	.60						
3			.95	N. 19 1/2 E	N 36 1/2 E	.95						
4			.30	N. 45. E	N 62 E	.30						
5			.75	N. 12 1/2 E	N 29 1/2 E	.75						
6			1.50	N. 19 3/4 W	N 2 3/4 W	1.50						
7			2.20	N. 20 1/4 W	N 3 1/4 W	2.20						
8			.30	N. 58. W	N 41 E	.30						
9			.50	N. 53. E	N 70 E	.50						
10			.25	N. 7. W	N 10 W	.25						
11			.15	N. 71. W	N 54 W	.15						
12			.10	N. 15. W	N 2 E	.10						
13			.60	N. 53. W	N 36 W	.60						
14			.25	N. 83. W	N 66 W	.25						
1			.25	North	N 17 E	.25						
2			1.60	N. 28. W	N 11 W	1.60						
3			1.00	N. 33. E	N 50 E	1.00						

Camp a near Sta-6
 To Camp b at Mt Airy -

Date: Oct-6 - 1876
 Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	Start meander at mouth of canon											
1			1.50	N. 7° E	N 24 E	1.50						17
2			.30	N. 35 W	N 18 W	.30						
3			2.00	N. 75 E	E	2.00						
4			.50	N. 24 1/2 E	N 41 1/2 E	.50						
5			2.80	N. 48 1/4 E	N 65 1/4 E	2.80						
6			1.50	N. 38 E	N 55 E	1.50						
7			.15	" " "	" "	.15						
8			1.50	N. 79 3/4 E	S 83 1/4 E	1.50						
9			2.50	S. 73 3/4 E	S 56 3/4 E	2.50						
10			.50	N. 73 1/2 E	S 89 1/2 E	.50						

Camp 6 at Mt Airy.
 To Camp 11 at Birchmans Ranch

Date: Oct. 7 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.30	S. 6. E	S 11 W	.30						
2			.50	S. 63. E	S 46 E	.50						
3			1.50	S. 73½ E	S 56½ E	1.50						
4			1.00	S. 63½ E	S 46½ E	1.00						
5			2.50	S. 65. E	S 48 E	2.50						
6			.50	S. 80½ E	S 63½ E	.50						
7			1.55	" " "	"	1.55						
8			.20	" " "	"	.20						
9			.10	S. 26. W	S 43 W	.10						

Camp 11 at Birchins
To Camp a Summit of Jayabe Mts.

Date: Oct 10 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.60	N. 81° E	S 82 E	.60						
2			1.10	S. 57 1/4 E	S 40 1/4 E	1.10						
3			1.75	"	"	1.75						
4			.50	S. 63 E	S 46 E	.50						
5			1.05	"	"	1.05						
6			.35	N. 74 1/2 E	S 88 1/2 E	.35						
7			1.55	S. 39 E	S 22 E	1.55						
8			.65	S. 56 E	S 39 E	.65						
9			1.25	S. 71 E	S 54 E	1.25						
10			.75	N. 44 E	N 61 E	.75						
11			.50	N. 36 E	N 53 E	.50						
200			2.00	East	S 73 E	2.00						

200

17

Camp *b* on Big Creek Foyake Mts
 To Camp *c* Head Kingston Creek

Date: Oct- 16 1876-

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
Started meander at sta 9 camp <i>b</i>												
1			.50	S. 36. E	S 1 1/2 E	.50						
2			.25	S. 9. E	S 7 1/2 W	.25						
3			.50	" " "	"	.50						
4			.65	S. 20. E	S 2 1/2 E	.65						
5			.85	" " "	"	.85						
6			.50	S. 45. E	S 2 9/2 E	.50						
7			.25	South	S 1 6/2 W	.25						
8			.60	S. 70. W	S 8 6/2 W	.60						

16 30

Camp d at Schmidteins
To Camp e Brassfield Cañon.

Date: Oct- 19 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduc-tion.	Reduced Distance.	BEARINGS.		Reduced Dis-tance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.25	S. 81. E	S 64 1/2 E	.25						
2			.35	S. 15. E	S 1 1/2 W	.35						
3			.80	S. 11. W	S 27 1/2 W	.80						
4			.60	S. 3. E	S 13 1/2 W	.60						
5			.20	S. 6. W	S 22 1/2 W	.20						
6			.25	S. 72. W	S 88 1/2 W	.25						
7			.90	N. 65. W	N 48 1/2 W	.90						
8			.50	S. 60. W	S 76 1/2 W	.50						
9			1.85	N. 80. W	N 63 1/2 W	1.85						
10			2.25	S. 75. W	N 88 1/2 W	2.25						
11			.50	S. 18. W	S 34 1/2 W	.50						
12			1.35	S. 26. E	S 9 1/2 E	1.35						
13			.30	N. 20. E	N 36 1/2 E	.30						

Camp *C* *Bransfield*
 To Camp *d(15)* at *Washington Nevada*

Date: *Oct 19 - 1876*

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.
				Magnetic.	True.	
1			.40	S. 20. W	S 36 W	.40
2			.90	S. 26. W	S 42 W	.90
3			1.00	" " "	" "	1.00
4			.45	S. 65. W	S 81 W	.45
5			.15	West	N 74 W	.15
6			.45	S. 84. W	N 78 W	.45
7			.65	" " "	" "	.65
8			.15	S. 59. W	S 75 W	.15
9			.20	" "	" "	.20
10			.40	" "	" "	.40
11			.60	N. 84. W	N 68 W	.60
12			.25	S. 60. W	S 76 W	.25
13			.40	N. 80. W	N 64 W	.40

Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.

Camp 15 at Washington Nevada.
 To Camp a Sth 7th Cottonwood Cañon

Date: Oct 22 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.30	S. 35. W	S 51 W	.30						
2			.40	S. 22. E	S 6 E	.40						
3			.95	S. 72. 2	S 56 E	.95						
4			.45	" "	" "	.45						
5			1.25	S. 43. E	S 27 E	1.25						

Camp a Cottonwood Cr
To Camp b Crossed Cañon.

Date: Oct 24 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduc-tion.	Reduced Distance.	BEARINGS.		Reduced Dis-tance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.40	S. 5. W	S 21 W	.40						
2			.50	S. 50. W	S 65 W	.50						
3			.30	S. 74. W	W	.30						
4			.65	" "	" "	.65						
5			1.35	S. 12. W	S 28 W	1.35						
6			.40	S. 40. E	S 24 E	.40						
7			.40	" "	" "	.40						
8			.60	" "	" "	.60						
9			.45	S. 80. E	S 64 E	.45						
10			.60	S. 10. E	S 6 W	.60						
11			1.25	S. 20. E	S 4 E	1.25						
12			.95	S. 76. W	W 88 W	.95						
13			.95	S. 9. E	S 4 W	.95						
14			.25	S. 65. E	S 49 E	.25						

Camp *b* Grosses Cañon.
 To Camp *16* Mc Mahon's Ranch.

Date: Oct 26th 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			.15	N. 57. W	N 41 W	.15						
2			.30	S. 4. E	S 12 W	.30						
3			1.20	S. 23. E	S 4 E	1.20						
4			.50	S. 10. W	S 26 W	.50						
5			.40	S. 47. W	S 63 W	.40						
6			1.50	N. 57. W	N 41 W	1.50						
7			.45	S. 50. W	S 66 W	.45						
8			.95	N. 62. W	N 46 W	.95						
9			.30	N. 75. W	N 59 W	.30						
10			1.55	N. 72. W	N 56 W	1.55						
11			.75	S. 9. W	S 25 W	.75						
12			1.45	"	"	1.45						
* 13			.55	"	"	.55						

End of meander + 3rd Station.

Camp a at Lone Tree
 To Camp b Antelope Spg

Date: Nov 1 - 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
a			.20	S. 40° W	S 55 3/4 W	.20						
1			.30	S. 64. W	S 79 3/4 W	.30						
2			1.10	S. 42. W	S 57 3/4 W	1.10						
3			.85	S. 47. W	S 62 3/4 W	.85						
4			3.10	S. 34. W	S 49 3/4 W	3.10						
5			.85	"	"	.85						
6			.25	"	"	.25						
7			3.10	"	"	3.10						
8			.70	S. 76° W	W 88 1/4 W	.70						
9			.25	S. 20. W	S 35 3/4 W	.25						
10			.10	West.	W 74 1/4 W	.10						

15 3/4

Camp *b* at Antelope Spring.
 To Camp *b* " " (Ellsworth + return)

Date: Nov 2 - 1876 -
 Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
a			.10	East	S 74 E	.10						16
1			.15	N. 20. E	N 35 E	.15						
2			.65	N. 10. E	N 25 E	.65						
3			.65	N. 13. E	N 28 E	.65						
4			.85	"	"	.85						
5			.50	"	"	.50						
6			1.30	"	"	1.30						
7			1.15	"	"	1.15						
8			1.60	N. 38. W	N 22 W	1.60						
9			.45	"	"	.45						
10			.45	N. 87. W	N 71 W	.45						
11			.20	N. 25. W	N 9 W	.20						
12			.65	N. 57. W	N 41 W	.65						
13			.40	N. 87. W	N 71 W	.40						
14			.30	N. 70. W	N 54 W	.30						
15			.25	S. 73. W	S 89 W	.25						
16			.25	S. 57. W	S 73 W	.25						

Camp a Antelope Spg
 To Camp b Campbells Spg

Date: Nov 4 - 1876 -
 Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.
				Magnetic.	True.	
1			2.50	N. 46° W	N 30 W	2.50
? a			1.30	N. 26½° W	N 10½ W	1.30
2			.40	N. 26½° W	N 10½ W	.40
3			.35	N. 1° E	N 17 E	.35

Camp b - Campbells Spg
 Camp 20 - Ellsworth

Date Nov 5 - 1876
 Spiller,

1	25		1.15	N. 52° W	N 36 W	1.15
2	9		.45	N. 18° W	N 2 W	.45
3	25		1.25	N. 1° E	N 17 E	.95
4	15		.75	N. 51¼° E	N 67¼ E	.75
5	2		.10	North	N 16 E	.10
6	9		.45	N. 35° E	N 51 E	.45
7	6		.25	N. 50° E	N 66 E	.25
8	6		.30	S. 75° E	S 59 E	.30
9	5		.25	N. 53° E	N 69 E	.25

Camp 20 at Ellsworth Nevada

Date: Nov 7 - 1876

To Camp 21 " Melches Spring including Visit to Illinois Mine

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	Started meander at Sta 3 of Nov. 5											
1			.35	S. 65° W	S 81 W	.35						
2			1.10	N. 80° W	N 64 W	1.10						
3			.55	N. 67½° W	N 51½ W	.55						
4			1.70	West-	N 74 W	1.70						
5			.35	S. 80° W	N 84 W	.35						
6			1.45	S. 50° W	S 66 W	1.45						
7			1.05	N. 65° W	N 49 W	1.05						
8			2.25	N. 77° W	N 61 W	2.25						
Illinois - 9			.60	S. 51° W	S 67 W	.60						
10												
11												
12												
13												
Valley 14			1.80	N. 80° E	S 84 E	1.80						
Melches			1.20	N. 85° E	S 79 E	1.20						

Camp 21 at Welshes Spg.
 To Camp a Tib-La-bah Spg.

Date: Nov 8th - 1876 -

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			1.50	N. 10. E	N 26 E	1.50						
2			1.20	N. 14 $\frac{1}{2}$ Tr	N 1 $\frac{1}{2}$ E	1.20						
3			1.25	N. 45 $\frac{1}{2}$ Tr	N 29 $\frac{1}{2}$ W	1.25						
4			1.00	"	"	1.00						
5			.25	N. 61 $\frac{1}{2}$ Tr	N 45 W	.25						
6			1.00	"	"	1.00						
7			.55	N. 60. Tr	N 44 W	.55						
8			.60	"	"	.60						
9			.90	"	"	.90						
10			.50	N. 10. Tr	N 6 E	.50						
11												

16

Camp "a" at Tit-babah Spg.
 To Camp "b" " Jis-sa-pok Spg.

Date: Nov 9. 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
1			1.00	S. 43. Tr	S 59 W	1.00						
2			.70	N. 65. Tr	N 49 W	.70						
2			.75	West.	N 74 W	.75						
3			1.55	N. 74. Tr	N 58 W	1.55						
4			.35	West.	N 74 W	.35						
5			4.10	"	"	4.10						
6			.60	N. 46. Tr	N 30 W	.60						
Camp at Jissapok Spg.												
Camp " Wah-ya-bah Spg.												
1			1.50	S. 57 1/4 Tr	S 73 1/4 W	1.50						
2			1.65	"	"	1.65						
Peak 3			2.60	S. 52. Tr	S 68 W	2.60						
Camp 4			3.00	N. 79. Tr	N 63 W	3.00						
Trak-yab-bah - S Hot Spg.												
1			2.25	S. 50. Tr	S 21 W	2.25						
2			.25	"	"	.25						
3			.45	South	S 16 W	.45						
4			1.10	S. 80. E	S 64 E	1.10						
5			1.30	S. 64. E	S 48 E	1.30						
6			.80	S. 53. Tr	S 69 W	.80						
7			2.25	S. 3. Tr	S 19 W	2.25						
8			.60	N. 75. E	S 89 E	.60						
9			.50	S. 60. E	S 44 E	.50						
10			1.20	S. 40. E	S 24 E	1.20						
11			.35	S. 80. E	S 64 E	.35						
12			1.10	S. 21. E	S 5 E	1.10						
Mill. 13			1.00	S. 16. E	S 1/2 E	1.00						

Camp 24 Deep Hollow
 To Camp 25 Sulphur Spring.

Date: Nov^r 16 - 1876 -
 Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	2748											
1	3170		422	N. 10. E	N 26 E	.99						
2	3480		310	N. 32. W	N 16 W	.73						
3	4151		671	"	"	1.58						
4	4939		788	N. 43. W	N 27 W	1.85						
5	5194		255	N. 43. W	N 7 W	.59						
6	5539		345	"	"	.81						
7	5745		206	N. 83 $\frac{1}{2}$ W	N 67 $\frac{1}{2}$ W	.48						
8	6345		600	N. 24 $\frac{1}{2}$ W	N 8 $\frac{1}{2}$ W	1.41						
9	7849		1504	N. 46. W	N 30 W	3.53						
10	8497		648	N. 55. W	N 39 W	1.52						
11	8826		329	N. 28. W	N 12 W	.77						
12	9119		293	N. 54 $\frac{1}{2}$ W	N 38 $\frac{1}{2}$ W	.68						
13	9761		642	N. 44. W	N 28 W	1.51						
14	9992		231	N. 77. W	N 61 W	.54						
15	391		299	N. 88. W	N 72 W	.70						
						17.73						

Camp 25 at Sulphur Apr 7
To Camp 26 at Allam Apr 8

Date: Nov 18 1876

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.
				Magnetic.	True.	
	371					
1	1515		2.64	N 47 1/2 Tr	S 63 1/2 W	2.64
2	1681		.38	S. 10. Tr	S 26 W	.38
3	2782		2.59	S. 62 3/4 Tr	S 78 3/4 W	2.59
4	4057		3.00	S. 41. Tr	S 57 W	3.00
5	4521		1.10	S. 25. Tr	S 41 W	1.10
6	4832		.73	S. 19. Tr	S 35 W	.73
7	5215		.90	S. 5. E	S 10 W	.90
8	5480		.62	S. 50 Tr	S 66 W	.62
9	5641		.37	West	N 74 W	.37
10	5677		.08	S 58 1/2 Tr	S 74 1/2 W	.08
			12.43			

Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.

Camp 26 Allans No 9
 To Camp 27 Walker River Agency.

Date: Nov 19 - 1876 -

Spiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	5680											
1	6117		1437	S. 24. Tr	S 40 W	1.02						
2	7284		1167	S. 12 1/2 E	S 3 1/2 W	2.74						
a	7650		366	S. 2 E	S 14 W	.86						
3	8017		367	S. 11 1/2 Tr	S 27 1/2 W	.86						
4	8590		573	" " "	"	1.34						
5	9059		469	" " "	"	1.10						
a	9500		441	S. 8. Tr	S 24 W	1.05	330					
6	9817		319	South.	S 16 W	.73						
7	514		597	"	"	1.40						
8	745		231	S. 8 1/2 Tr	S 24 1/2 W	.54						
9	987		242	South.	S 16 W	.57						
10	1648		661	"	"	1.55						
11	1959		311	S. 30. Tr	S 19 W	.73						
12	2681		722	"	"	1.69						
13	3069		388	S. 78. Tr	S 86 W	.91						
14	3395		326	N. 64. Tr	N 48 W	.76						
14	3475		80	"	0	.18						

Camp 27 Walker River Agency
 To Camp 28 Lee's Mill

Date: Nov 22nd 1876

Apsiller, Computer

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	3479											
2	3540		.14	S. 20. E	S 4 E	.14						
1	3773		.55	S. 69. Tr	S 85 W	.55						
2	4226		1.06	West	W 74 W	1.06						
3	4644		.98	N. 59. Tr	N 43 W	.98						
4	4976		.78	N. 75. Tr	N 59 W	.78						
5	5260		.66	"	"	.66						
6	5800		1.27	"	"	1.27						
7	6341		1.27	S. 84. Tr	N 80 W	1.27						
8	6750		.96	S. 88 1/2. Tr	N 75 1/4 W	.96						
9	7057		.72	S. 64. Tr	S 80 W	.72						
10	7337		.65	S. 34. Tr	S 50 W	.65						

Camp 29 on Carson River

To Camp 30 Carson City

Date: Nov 26 - 1876

Spiller, Computer

104 1/2

150

93 1/2

86 1/2

98 1/2

STATION.	Distance by—	Per cent of Reduction.	Reduced Distance.	BEARINGS.		Reduced Distance from Station to Station.	Northing.	Southing.	Easting.	Westing.	Aneroid No. feet.	REMARKS.
				Magnetic.	True.							
	2911											
1	3379		468	S. 88 1/2 W	75 1/2 W	1.10						
2	3893		514	S. 77 1/2 W	86 1/2 W	1.21						
3	4963		1070	S. 82 1/4 W	81 3/4 W	2.57						
4	5096		133	S. 41 1/2 W	57 1/2 W	.31						
5	6415		1319	S. 22 1/2 W	68 1/2 W	3.10						
6	7970		1555	S. 50 1/2 W	66 1/2 W	3.65						
7	8052		582	S. 60 W	76 W	.19						
						12.07						