

Cupboard 27
 Shelf 4
 No. 36
 1 book

TRIANGULATION.

Book No. ~~232~~, 1877.

67

Engineer Department, U. S. Army.

TOPOGRAPHICAL RECORDS.

Party No. _____ Section.

From Camp No. _____ at Soda Springs.

To Camp No. _____ at End of Season.

Atlas Sheet No. _____

Robert Thompson

1st Lieutenant
Corps of Engineers

In charge of party.

Geographical Surveys West of 100th Meridian.

Thompson

1875—

no. 332

TOPOGRAPHICAL RECORDS.

Book No. 332, 1877.

U. S. ENGINEER OFFICE.

EXPLORATIONS AND SURVEYS
WEST OF THE 100TH MERIDIAN.

CORPS OF ENGINEERS,
IN CHARGE.

Party No. 1, Utah Div'n

From

To

Date: Aug. 23 - 1877.

G. Thompson

Topographical Assistant.

REMARKS.

Blank lined area for remarks.

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Date: Aug 23, 77
Station: A 53 Th. 4953

Observer: Aug. 26, 77
Instrument: Q 55- 4953

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|------------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| m. w. | 139.23.00 | | | |
| K | 177.03.00 | | | |
| L | 143.43.30 | | | |
| Sherman | 118.02.00 | | <u>on</u> | |
| Cave Butte | 330.36.30 | | | |
| H | 241.32.30 | | | |

Tahos. Sta - Q 54 Aug. 25, 77
4953

| | | | | |
|------------|-----------|--|-----------|--|
| m. w. | 344.31.30 | | | |
| n. Ogden | 179.00.30 | | | |
| X | 172.26.00 | | <u>on</u> | |
| H | 49.46.00 | | | |
| K | 4.47.00 | | | |
| Sherman | 325.34.00 | | | |
| Cave Butte | 214.05.30 | | | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-----------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| m. w. | | | | 229.43.30 | |
| X | | | | 61.15.30 | |
| K | | | <u>on</u> | 315.29.30 | |
| n. Ogden | | | | 69.43.30 | |
| S. - " - | | | | 74.37.30 | |
| Blk Butte | | | | 30.37.30 | |
| Q | | | | 79.03.00 | |

A 56 Aug 27, 77 Th. 4953

| | | | | | |
|-------|--|--|-----------|-----------|--|
| m. w. | | | | 343.43.30 | |
| A 8 | | | <u>on</u> | 186.22.00 | |
| K | | | | 45.58.00 | |
| L | | | | 337.06.00 | |

Date:

Station: Δ 57 Camp 52 Aug 27, 77 Th. 4953

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------|------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| m, w | 330.48.00 | | <u>on</u> | |
| L | 316.30.00 | | | |
| M = Sherman | 282.04.30 | | | |
| Δ 8 | 175.27.30 | | | |
| Δ 58 | Aug 28, 77 | Th. 4953 | | |
| m, w | 38.38.30 | | <u>on</u> | |
| Δ 8 | 237.05.30 | | | |
| X | 219.32.30 | | | |
| H | 171.57.00 | | | |
| K | 115.16.30 | | | |
| M | 353.25.30 | | | |
| Δ 59 | Aug 28, 77 | Th - 4953 | | |
| m, w | 311.56.30 | | <u>on</u> | |
| L | 312.06.30 | | | |
| H | 263.59.00 | | | |
| K | 209.21.30 | | | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-----------------|------------|------------------|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| Δ 60 | Aug 28, 77 | Th. 4953 | | | |
| m, w. | | | <u>on</u> | 201.30.00 | |
| L | | | | 213.37.00 | |
| H | | | | 330.18.30 | |
| K | | | | 280.07.30 | |
| Putnam | | | | 254.21.00 | |
| Δ 61 | Aug 28, 77 | See Station Book | | | |
| m, w | | | <u>on</u> | 128.24.00 | |
| K | | | | 209.51.30 | |
| Putnam | | | | 181.00.30 | |
| L | | | | 129.40.00 | |
| M | | | | 82.18.30 | |
| Δ 62 | Aug 29, 77 | Th. 4953 | | | |
| meander Sta VII | | | | | |
| m, w. | | | <u>on</u> | 120.50.30 | |
| L | | | | 71.29.00 | |
| M | | | | 36.12.30 | |
| Δ 8 | | | | 323.18.30 | |
| K | | | | 219.14.30 | |

Date: 1877
 Station: Miscellaneous Meander Stations

Observer: Th
 Etc. Instrument: 495-3

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------------------------|------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| meander Sta. 23 | d 53 | | | 304.49.00 |
| aug. 24 | Cave Butte | | | 206.40.30 |
| | X | <u>on</u> | | 163.58.00 |
| | Blk Butte | | | 137.14.30 |
| meander Sta VI = <u>on</u> | m. n. | | | 46.07.30 |
| aug. 29 | K | | | 140.00.30 |
| | L | <u>on</u> | | 4.57.30 |
| | M | | | 227.51.00 |
| VII = <u>on</u> | d 8 | | | 249.43.30 |
| Camp 53 Aug. 29 | m. n. | | | 185.11.30 |
| | K | | | 261.50.00 |
| | L | <u>on</u> | | 140.21.30 |
| | M | | | 115.01.30 |
| | Polon's | | | 201.56.00 |
| | Time | 7.05 p.m. | | |
| d 63 Aug. 29 Th. 4953 | m. n. | | | 183.31.30 |
| | L | | | 141.15.30 |
| | M | <u>on</u> | | 107.45.30 |
| | d 8 | | | 31.52.30 |
| | K | | | 279.48.30 |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-------------------|------------|-------|-----------------|----------------------|--|
| | Vernier A. | B. | | | |
| d 64 | | | | | |
| aug. 30.77 | m. n. | | | 86.37.00 | This will be fixed by intersection from H and K + M. |
| Th. 4953 | Bisgah | | | 74.58.00 | |
| | L | | | 51.47.00 | |
| | M | ✓ | | 30.50.00 | |
| | d 11 | ✓ | | 333.25.00 | |
| | d 8 | ✓ | | 314.28.00 | |
| | H | | | 230.22.30 | |
| | K | ✓ | | 128.55.30 | |
| d 65 | m. n. | | | 186.51.00 | |
| aug. 30.77 | H | | | 324.25.30 | <u>bad</u> |
| | K | | | 223.19.30 | |
| | M | | | 126.00.30 | |
| Camp 54 Sept 1.77 | K | | | 23.01.30 | n 89 1/2 W |
| | L | | | 233.00.30 | n 61 W E |
| | M | | | 214.18.30 | n 80 E |
| Camp 55 Sept 1.77 | K | | | 215.40.30 | |
| | m. n. | | | 84.50.00 | |
| | Polon's | | | 102.00.30 | |
| | Time | 6.55- | | | |

Date:

Station:

Observer:

Instrument: 4953

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|--|---|------------------------|-----------------|---|---|----|-----------------|----------------------|--|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| Sta. IV of meander Sept. 1, 77 | 28 K | 90.26.30 33.27.30 | S 85° W | | | | | | |
| | Round Pt- | 329.53.30 | | | | | | | |
| | S. Putnam | 310.07.30 | | | | | | | |
| Sta. VI of meander Sept 6, 77 | 269 Sherman Sedgwick | 437 E 871 E 896 | | 134. 10. 30 61. 32. 30 0. 06. 30 | | | | | |
| Sta. V of meander Sept 8, 77 | Putnam Sedgwick 251 Bisgah m. w | | | 33-02-30 91-21-30 198-33-30 179-21-30 244-31-30 | | | | | |
| Sta. I of meander Sept 28, 77 | 279 n. Putnam " S Round Pt- | S 35° W S 39° 15' E | | 252-29-00 43-10- 28-57- 5-49- 326-53- | | | | | |
| Sta. III of meander, Sept 28, 77 | Putnam Round Pt- 279 | S 67° E S 8 1/2° E | | 275-53- 248-35- 219-50- | | | | | |
| | | | | | Meander Sta II, Sept 8 th ' 77 | | | | Sedgwick 342-02.30 S 25-15 E Putnam 259.13.30 S 55-45 W |

Date:

Station:

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| | 179.41.10 | | | | |
| | 178-39-00 | | | 198-08-40 | |
| | 278-39-10 | | | 298-8-40 | |
| | 18-39-10 | | | 38-8-40 | |
| | 118-39-40 | | | 138-10-00 | |
| | -38-00 | | | -8-10 | |
| | -38-00 | | | -8-30 | |
| | 300 | | | 280 | |
| | 50 | | | 46.67 | |

South Putnam (Oct 7)

| | | |
|-----|--------|-------------|
| 238 | Putnam | (239) 52-40 |
| | | 338-52-10 |
| | | 78-53-10 |
| | | 178-53-10 |
| | | 358-52-20 |
| | | 118-52-20 |

230
46

| OBJECTS. | READINGS. | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------|-----------|-----------------|----------------------|
| Putnam | 293-20-10 | | 33-15-10 |
| | 133-13-20 | | 233-13-30 |
| | -12-40 | | -12-10 |

14
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| | | |
|--------|--------------|-----------|
| Oct 7, | South Putnam | 238-52-10 |
| " | Putnam | 237-42-25 |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|--------------|
| | Vernier A. | B. | | | |
| | 217-39-20 | | | 226-52-15 | Round Pt - |
| | - - - | | | 326-51-50 | Hayy day |
| | - - - | | | 66-52-10 | ju. S. |
| | - - - | | | 166-52-50 | many pins |
| | 337-39-40 | | | -51-20 | in woods and |
| | 97-38-40 | | | - - - - | plain |

| | | | |
|--------|-----------|--|-----------|
| Pisgah | 297-31-10 | | 37-31-40 |
| | 137-32-05 | | 237-32-30 |
| | -32-00 | | -31-30 |
| | 177-31-05 | | |

32.00

300
42.86

| | |
|---------------------|-----------|
| Oct 7 th | 297-31-05 |
|---------------------|-----------|

| | | | |
|----------|-----------|--|-----------|
| Meads Pt | 351-53-10 | | 0° 0' 0" |
| | 91-53-30 | | 100 0 0 |
| | 191-53-30 | | 200 good |
| | 291-53-50 | | 300 00 00 |
| | -53-40 | | 119-59-40 |
| | -53-10 | | 239-59-20 |

170
28.33

Date:
 Station: \odot 66 Sept 1, 1877

Observer: *U*
 Instrument: 495-3

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------|------------|-----|-----------------|----------------------|
| | Vernier A. | B. | | |
| m. n | 29.02.30 | | | |
| High K | 213.26.30 | mt. | ✓ | <i>om</i> |
| Piggah | 8.28.30 | ✓ | ✓ | |
| Shuman M | 300.20.00 | ✓ | ✓ | |
| Pulnam | 7056.00 | ✓ | ✓ | |

\odot 67 Su Mountain Sta; look.

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-----------------|------------|------------|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| meander Sta. IV | | Sight 2.77 | | | |
| \odot 8 | 90 | 26 | 30 | | |
| K | 33 | 27 | 30 | | S 85° W |
| Round Pt- | 329 | 53 | 30 | | |
| Pulnam (?) | 310 | 04 | 30 | | |

meander Sta I Sept 4.77

K 42.20.30 Round Pt- 330.45.00
Pulnam 297.37.00

\odot 68 Sept. 2.77 *U* - 495-3

| | | | | |
|-------------------|-----------|-----|----|----|
| meander Sta no. 6 | m. n | 228 | 43 | 30 |
| | K | 6 | 24 | 00 |
| | L | 148 | 49 | 00 |
| | M | 135 | 36 | 30 |
| | \odot 8 | 84 | 8 | 30 |

meander Sta. V Sept 8.77

Pulnam 33.02.30
K 91.21.30
 \odot 51 198.33.30
Piggah 179.21.30
m. n, 244.31.30

Piggah

228 43
17 40

246 23

Date: Mt. Putnam
 Station: Sept. 17, 77

on

Observer & Sient. Young, Art. Thompson
 Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| S | Sherman | | | 10° 21' 15" |
| Thompson | 0 0 0 | | | 10 22 50 |
| Lt. Young # | 0 0 0 | | | 10 - 21 - 05 |
| | 0 0 0 | | | 10 - 21 - 40 |
| T | 100 00 00 | | | 110 - 21 - 05 |
| Y | 100 00 00 | | | 110 - 21 - 25 |
| T | 100 00 00 | | | |
| T | 200 00 00 | | | |
| Y | 200 00 00 | | | |
| T | 300 00 00 | | | |
| Y | 300 00 00 | | | |
| T | 120 00 00 | | | |
| Y | 120 | | | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|--------------------------------|
| | Vernier A. | B. | | | |
| S | Sedgwick | | | 20° 56' 05" | Naomi |
| | 20 56 05 | | | 20 57 10 | S |
| | 20 56 05 | | | 20 56 05 | 23° 48' 40" |
| | 20 56 50 | | | 23 50 05 | 54-16-10 |
| | | | | 23-48-45 | 54-16-50 |
| | | | | 23 48 - 55 | 54-16-05 |
| | | | | | 54-16-50 |
| | | | | | 123-48-45 154-16-05 |
| | | | | 120-56-05 | 123-48-45 |
| | | | | 120-56-40 | 154-16-05 |
| | | | | 120-56-25 | 123-49-00 |
| | | | | | 154-16-20 |
| | | | | | 123-48-45 |
| | | | | | 154-16-05 |
| | | | | 220-56-05 | 223-48-35 |
| | | | | 220-56-10 | 254-15-50 |
| | | | | | 223-48-30 |
| | | | | | 254-15-55 |
| | | | | 320-56-05 | 323-48-25 |
| | | | | 320-56-15 | 354-16-05 |
| | | | | | 323-48-55 |
| | | | | | 354-16-35 |
| | | | | 140-56-25 | 143-48-55 |
| | | | | 140-55-25 | 174-16-5 |
| | | | | | 143-48-50 |
| | | | | | 174-15-30 |
| | | | | | 51.15 |
| | | | | | 325 |
| | | | | | 150 |
| | | | | | 11.15 |
| | | | | | 145 |
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These are separate and distinct sets, not remain readings by different observers.

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Patrol
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Bannock

Observer:

hmi -

Instrument:

clear
steady -

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|------------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| Deep Creek | 071-35-40 | | | North deep creek |
| 80-17-20 | 84-35-40 | | | 92-12-15 |
| 80-19-00 | 85-36-30 | | | 92-13-00 |
| 80-17-20 | 84-35-25 | | | 92-12-15 |
| 80-17-0 | 84-37-30 | | | 92-13-10 |
| 180-17-20 | 184-35-15 | | | 192-12-05 |
| 180-17-20 | 184-35-15 | | | 192-12-05 |
| 180-17-20 | 184-35-00 | | | 192-11-55 |
| 180-16-55 | 184-34-55 | | | 192-11-15 |
| 280-16-45 | 284-34-45 | | | 292-11-15 |
| 280-17-20 | 284-34-55 | | | 292-11-30 |
| 20-17-15 | 24-35-25 | | | 32-12-05 |
| 20-17-55 | 24-35-30 | | | 32-12-35 |
| 200-17-05 | 204-35-20 | | | 212-11-55 |
| 200-17-10 | 204-34-45 | | | 212-11-50 |

27.3d

11 28 5
22 5 33
11 27 0

415
137 355
22 45

5 30 5
28 4
16 5

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|------------|----------------|--------|-----------------|----------------------|-------------------------|
| | Vernier A. (1) | B. (2) | | | |
| Bannock Pk | | | | of (indif.) | (2) North Bannock Salmo |
| 98-56-45 | | | | 103-25-20 | |
| 98-56-10 | | | | 103-26-20 | |
| 98-56-25 | | | | 103-25-30 | |
| 98-56-15 | | | | 103-25-40 | |
| 198-56-05 | | | | 203-25-00 | |
| 198-56-20 | | | | 203-25-15 | |
| 198-55-30 | | | | 203-24-40 | |
| 298-55-05 | | | | 303-24-15 | |
| 298-55-15 | | | | 303-24-20 | |
| 38-56-10 | | | | 43-25-15 | |
| 38-56-20 | | | | 43-25-25 | |
| 218-56-0 | | | | 223-24-40 | |
| 218-55-40 | | | | 224-24-40 | |

320
240
13 80
28
170
675

Lehd & sent in

Date:

Sept. 18, 77

Station:

S. Putnam

Observer:

Sent, Young, & Ant. Mambue

Instrument:

1459

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|-------------|----|-----------------|---|-------|--|-------|---|----------------------|--------------------|
| | Vernier A. | B. | | | | Vernier A. | B. | | | |
| | Pogah | | | Meade | | Sherman | | | Sedgwick | |
| T | 0 - 00 - 00 | | | 49-24-40 | | 63-02-05 | | | 85-55-45 | |
| Y | 0 - 00 - 00 | | | 49-24-35 | | 63-02-05 | | | 85-55-10 | |
| Y | 0 - 00 - 00 | | | 49-24-35 | } | 63-01-00 | | | 85-53-30 | |
| | ✓ | | | | | ✓ | | | ✓ | |
| T | 100 00 00 | | | 149-24-25 | | 163-02-05 | | | 185-54-35 | |
| Y | 100-00-00 | | | 149-24-20 | | 163-02-00 | | | 185-54-20 | |
| Y | 200-00-00 | | | 249-24-30 | | 263-02-00 | | | 285-54-30 | Aneroid 12 |
| T | 300-00-00 | | | 349-24-05 | | 3-01-55 | | | 25-54-45 | 1 h.m 21.74 65° |
| | | | | $\begin{array}{r} 190 \\ 50 \\ 49 \\ 10 \end{array}$ | 21.14 | $\begin{array}{r} 370 \\ 35 \\ 70 \\ 10 \\ 60 \\ 56 \\ 40 \end{array}$ | 52.86 | $\begin{array}{r} 275 \\ 275 \end{array}$ | 21.67 66 2 h.m | |
| | | | | $\begin{array}{r} 25 \\ 85 \\ 55 \\ 55 \\ 45 \\ 40 \end{array}$ | | | | | | |

Date:

Station:

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|---------------------------------|-------------------------------|-----------------|----------------------|----------------------|-------|-----------------|----------------------|-----------------------------|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| | N | North Oxden | | NS = Elphorn | Deep Creek | | Barrnack | | |
| | 88-13-40 | | | 121-13-00 | 148-25-00 | | | 161-05-20 | North Deep Creek |
| | 88-13-40 | | | 121-13-00 | 148-24-50 | | | 161-04-50 | |
| | 88-11-10 | | | 121-11-00 | 148-22-50 | | | 161-03-30 | |
| | 188-12-50 | | | 221-12-55 | 248-24-10 | | | 261-04-35 | |
| | 188-12-50 | | | 221-12-50 | 248-24-10 | | | 261-04-30 | |
| | 288-13-30 | | | 321-12-35 | 348-24-15 | | | 361-04-10 | |
| | 28-13-05 | 37-21-25 37-29-05 | | 61-12-50 | 88-24-35 | 15,7) | | 101-05-05 | |
| | 150 225 405 540 720 | 37-21-25 37-29-05 54-43 | | 190 61 250 | 510 7 40 35 | | | 240 | |

Date:

Station:

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. | |
|--------------------|------------|----|-----------------|----------------------------------|-------------------------------------|-----------|-----------------|----------------------|----------|-----------|
| | Vernier A. | B. | | | Vernier A. | B. | | | | |
| good Bannock Pt | 164-45-15 | | good | (230-11-05) Salmon R. Mt. (d) | Pulnam | | | Teton | Pisgah | |
| | 164-44-50 | | | 257-51-05 | | 254-09-35 | | | | 335-59-55 |
| | 164-42-40 | | | 257-51-10 | | 254-09-35 | | | | 335-59-50 |
| | | | 257-48-45 | 254-08-00 | 335-57-40 | 259-58-30 | | | | |
| | 264-44-25 | | | 357-50-05 | 354-09-20 | 75-00-05 | | good | | |
| | 264-44-25 | | | 357-50-00 | 354-09-15 | 76-00-00 | | good | | |
| indf - | 364-44-30 | | indf - | 97-50-55 | 94- 00 ⁰⁹ -10 | 176-00-05 | | good | | |
| | 104-45-05 | | | 197-51-15 | 194-09-35 | 276-00-20 | | good breezy S.W. | | |

Date:

Station:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-----------------------------|---------------|----|-------------------------|----------------------|
| | Vernier A. | B. | | |
| Camp 65 at Nord-Hall, Idaho | | | | |
| Sight | 23, 187 | 7 | 4953 | |
| m. n | 257 10 30 | | | |
| Wag Staff | 279 57 00 | | n 22 ⁴⁵ W | |
| n. Putnam | 100 03 00 | | S 22 1/2 E | online |
| Salmon R. Mt. | 325 25 30 | | | |
| Butte (3) | 319 51 30 | | | |
| Salmon R. Mt. | 310 22 00 | | | |
| Polaris | 273 - 39 - 00 | | 273. 31. 30 8. h. m. | |
| Time - | 6. 30 approx. | | N 16 ³⁰ W | |

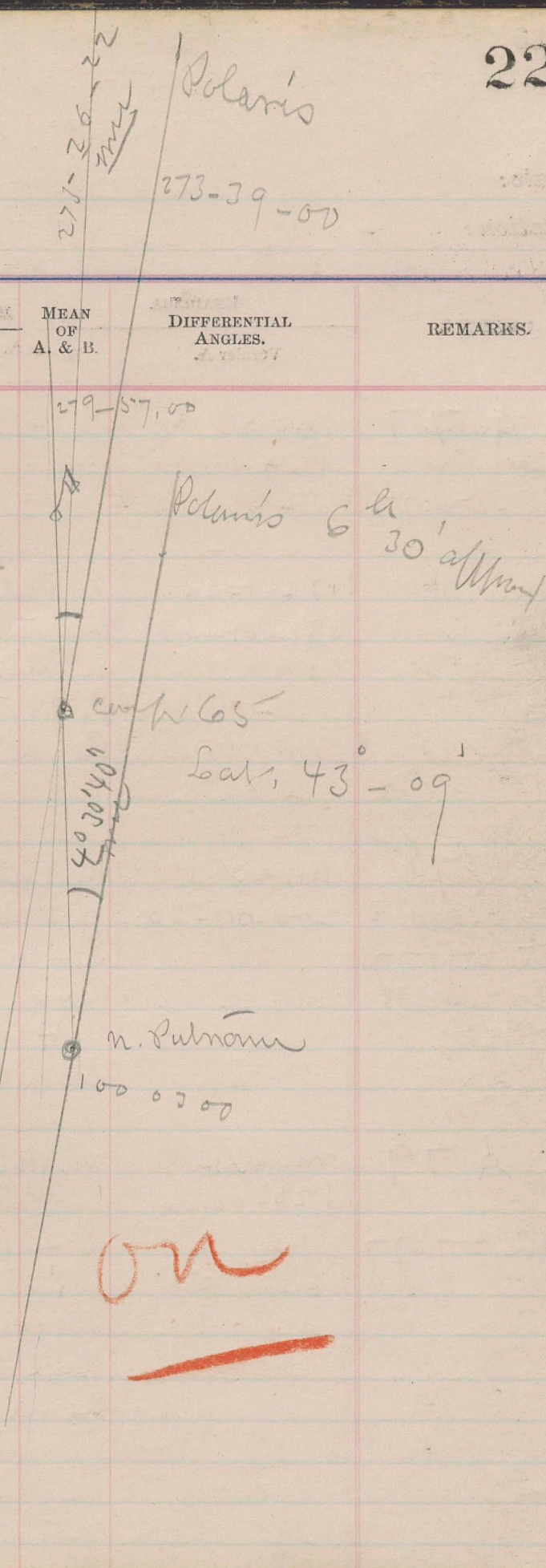
at Camp 65 True north = 275 26 22
 " " Variation = 18 15 52

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|------------------------|
| | Vernier A. | B. | | | |
| | | | 279-57.00 | | |
| | | | | | Wag Staff Nord Hall - |
| | | | | | Polaris 6 h 30' approx |
| | | | | | Camp 65 |
| | | | | | Lat, 43° - 09' |
| | | | | | n. Putnam |
| | | | | | 100 03 00 |

273-39-00
 Polaris
 279-57-00
 275-26-22



279 57 00
 275 26 22
 430 40

Date: Sept 30, 77

Station: d, 81

Observer: H

Instrument: 495-3

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-----------|------------|--------|-----------------|----------------------|
| | Vernier A. | B. | | |
| m. w | 70-36-30 | | | |
| m. Pulman | 38-22-30 | | | |
| " " | 34-19-00 | ✓ | ✓ | |
| S " | 19-24-00 | | | |
| Ledgwick | 313-13-00 | ✓ | ✓ | 313 |
| H | 287-26- | bad ht | | |
| Deer Cr | 238-47- | ✓ | ✓ | m |
| Bannock | 222-35-30 | ✓ | | |
| Butte (1) | 129-56-30 | | | |
| " (2) | 111-46-30 | | | |
| " (3) | 107-24-30 | | | |
| d, 80 | 282-16-30 | | | |

meander Sta - X Oct 1, 77

| | | |
|----------|---------------|---------------|
| m. w - | S = Ekholm Th | Deer Creek Th |
| 23-54-00 | 232-32-30 | 174-31-30 |

meander Sta - VII Oct 8, 77.

| | | | |
|----------|-----------|-----------|-----------|
| m. w - | Oxford | Wentons | Deer Cr |
| 15-57-00 | 218-41-00 | 181-37-00 | 139-53-30 |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| Bannock | | | | | |
| (83) d | 92-44 | | | | (82) |
| | | | | | 91-20-30 |

Date:

Station:

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|--|------------|---------------------|-----------------|------------------------------|
| | Vernier A. | B. | | |
| meander Sta. VI m. w. Montanis Pk Elkhorn Oxbnd - | 120-06-30 | 236-27-30 | | 9-31-30 |
| meander Sta VII m. w. - Oxbnd Montanis (83) d | 157-27-30 | 323-56-30 | | 210-58-30 |
| meander Sta II m. w. - Shinnon d Castle Rock | 64-48-00 | 234 ²⁰ E | | 27-57-30 272 ³⁰ E |
| meander Sta V m. w. Shinnon Cave Bt Oxbnd (3) | 70-59-00 | 311-12-30 | | 126-07-00 |
| meander Sta VIII Shinnon d 10 | 350-20-00 | 225 E | | 309-20-00 |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|---|------------|-----------|-----------------|----------------------|-------------------------------|
| | Vernier A. | B. | | | |
| Ledgwich Blk Butte | 86-07-00 | | | | 328-30-00 |
| also IX Oct. 8, 77 Round Pt - Pt. South of (83) | 169-57-00 | | | | 230-48-00 |
| Cave Butte d 69(?) | 338-00-00 | 557.30 E | | | 85-07-30 N 15 ¹⁵ E |
| Blk Butte Beach Loni Butte | 226-23-30 | | | | 267-05-30 |
| New Mill Creek Settlement Turns n Cave Butte 0 = | 274-50-00 | 269-24-30 | | | 241-01-00 545 ²⁰ E |

Date: Oct. 2, 77
 Station: 82

Observer:
 Instrument: 1459

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------------|------------|---------|-----------------|----------------------|
| | Vernier A. | B. | | |
| distance 50 ft Monument | Putnam | 0-00-00 | | Jedgwick |
| 171-45-00 | 0-00-00 | | | 91-59-25 |
| | | | | 91-59-25 |
| | | | | 91-59-25 |

31

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-----------|------------|-----------|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| S | Deep Creek | Bannock | | | |
| 157-49-55 | 201-16-35 | 227-22-55 | | | |
| 151-49-55 | 201-16-30 | 227-22-45 | | | |
| 151-49-55 | 201-16-40 | 227-22-40 | | | |

Date: October 2

Station: 83

all good

Observer: L. J. Perry

Instrument: 1459

314
360
54

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|------------------|-----------|-----------------|----------------------|----------|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| Barnock | 00-00-00 | | | Putnam | 131-06-30 (Indy) | Sherman | | Sidgwick | |
| | 0-00-00 | | | | 131-06-30 | | | 222-36-55 | |
| | | | | | | 214-55-00 | | 222-37-20 | |
| | 100-0-0 | | | | 231-06-35 | 314-54-40 | | 322-36-30 | |
| | 100-0-0 | | | | 231-06-20 | 314-54-35 | | 322-36-30 | |
| | 200-0-0 | | | | 331-06-30 | 54-54-50 | | 62-36-30 | |
| | 200-0-0 | | | | 331-06-20 | 54-55-0 | | 62-36-30 | |
| | ✓ | | | | ✓ 06-25 | | | ✓ 36-30 | |
| | 300-0-0 | | | | 71-06-30 | 154 | | 162-37-25 | |
| | 300-0-0 | | | | 71-06-30 | 154-55-10 | | 162-37-25 | |
| | | | | | | 154-55-0 | | | |

on

431
362
71

561
360
661

Date:

Observer:

Station:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|----------------------|---------|-----------------|----------------------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| H | | | | North S. | S | | | | Barnock |
| | 261-03-45 | (error) | | 277-23-20 | 283-13-45 | | | 333-30-40 | good |
| | 261-04-00 | | | 277-23-40 | 283-13-50 | | | 333-30-50 | good |
| | 361-04-00 | | | 17-23-40 | 23-13-45 | | | 73-30-50 | good |
| | 361-03-30 | | | 17-24-0 | 23-13-25 | | | 73-30-30 | good |
| | 101-4-0 | | | | 123-13-45 | | | 173-30-0 | good |
| | 200-00-00 | | | 117-23-40 | 123-13-50 | | | 173-31-0 | good |
| | 101-3-55 | | | 117-23-40 | | | | | |
| | 201-4-0 | | | 217-24-0 | 223-13-55 | | | 273-30-30 | good |
| | 201-3-50 | | | 217-23-40 | 223-13-50 | | | 273-30-30 | good |

Handwritten mark

Date: Oct. 3, 77

Station: d 84 on all good

Observer: W. S. Hunter

Instrument: 4953

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------------------|--|----|---|----------------------|
| | Vernier A. | B. | | |
| m, w, 124° 0' 30" | d 83 125° 46' 30" 125. 38. 30 125. 38 00 | | Sedgwick 38. 34. 00 38. 34. 30 38. 34 00 34-10 ✓ | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|---|--|
| | Vernier A. | B. | | | |
| S. | | | | Deh Cr 263° 35' 00" 263. 34 30 263. 35. 00 34-50 ✓ | Bannock 230° 39' 00" 230. 38. 30 230. 38. 00 38. 30 ✓ |

on d 85 Oct. 3, 77

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------------------|---|----|--|----------------------|
| | Vernier A. | B. | | |
| m. w 202° 49' 30" | d 83 197. 9. 30 197 13 30 197 13 30 | | down 115. 58. 30 115. 58 30 115. 59. 00 | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|--|---|---|
| | Vernier A. | B. | | | |
| down | | | down 50° 1' 00" 50. 0 30 50. 0 30 | down 345° 46' 30" 345. 45 30 345. 46. 00 | down 312. 27' 30" 312 26. 00 312, 28. 00 |

d 86 Oct 5, 77

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|------------------|--------------------------|---------|-------------------------------|----------------------|
| | Vernier A. | B. | | |
| m. w 95-08-30 | Rondel Pt 349. 20. 00 | had bad | H = Clifton Peak 302-50-00 | |
| | d 83 255-42. 00 | | d 82 254-24-30 | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|--------------------------------|--------------------------------|--------------|
| | Vernier A. | B. | | | |
| n, S | | | n, S 285-29-30 S 10 15 E | S = Elk Horn Peak 283-19-00 | (info state) |

Date: Oct 7th 1877
 Station: K F Sedgwick
 Lent in Oct 8th

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|------------------------|------------|--------------|-----------------|----------------------|
| | Vernier A. | B. | | |
| Sherman | 85 | Putnam | | |
| or or or | 183-01-05 | 237-42-25 | | |
| S Point South | 85 | Point Putnam | | |
| | 138-42-55 | 190-04-35 | 238-52-35 | |
| North S. | 83 | 75 (C) | | |
| | 146-09-35 | 197-19-25 | 245-21-05 | |
| Loose Cr = Clear Creek | 82 | Blackfoot Cr | | |
| | 156-00-05 | 198-09-00 | 260-00-00 | |
| Deep Creek | By Basin | 8. 69 (C) | | |
| | 165-20-25 | 217-38-30 | 291-21-55 | |
| Bannock | 81 (2) | Meade | | |
| | 178-39-05 | 215-42-55 | 351-52-10 | |

or

74 49 37
 81 42 36
 156 32 07
 Observer: Check
 Instrument:
 57 32 11
 98 59 55
 156 32 06
 156 32 07

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|--------------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| n. Ogden | | | 1 | 57-32-35 | III |
| Elkhorn | | | 5 | 287-40-55 | |
| | | | | 57 32 11 | |
| n. Ogden | | | 1 | 74-49-55 | III |
| Loose Cr (2) | | | 5 | 360 00 00 | |
| (Shival 0°) | | | | 14-08-05 | |
| | | | 5 | 374-08-05 | |
| | | | | 74-49-37 | |
| S Putnam | | | | 199-00-35 | III |
| | | | | 360 00 00 | |
| | | | 5 | 134-59-35 | |
| | | | | 494-59-35 | |
| | | | | 98-59-55 | |
| Loose Cr (2) | | | 1 | 81-43-10 | III |
| Loose Cr | | | | 360 00 00 | |
| Putnam | | | | 48-32-30 | |
| | | | 5 | 408-32-30 | |
| | | | | 81-42-30 | |

156
 32
 21
 120
 150

Date:

Station:

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------|------------|-----------|--------------------------|----------------------|
| | Vernier A. | B. | | |
| Putnam Pisgah | 59-48-50 | | 1711 | |
| | 299-02-05 | | | |
| | 59-48-25 | | | |
| Putnam Meade | 114-10-40 | | 1111 | |
| | 360-00-00 | | | |
| | 210-51-25 | | | |
| | 570 51-25 | | | |
| | 114-10-17 | | | |
| Meade N. Ouden | 89-17-50 | | 1111 | |
| | 360-00-00 | | | 176-17-51 |
| check | 87 00-05 | | | 360-00-00 |
| 176-17-55 | 447-00-05 | | | 536-17-13 |
| 87 00 05 | 89-24-01 | | | 89-22-59 |
| 89-17-50 | | | | |
| | 265-34-15 | | | |
| | 176 17 55 | | | |
| | 89 16 20 | | | |
| Meade 1 | 89-17-50 | 178-34-55 | 89 ⁸⁶ 17 50.0 | |
| N. Ouden 2 | 178-34-55 | 89-17-05 | 89 17 18.0 | |
| 3 | 267-52-00 | 89 17-05 | 89 17 20.0 | |
| 4 | 357-08-35 | 89 16-35 | 89 17 08.7 | |
| 5 | 446-26-15 | 89-17-48 | 89 17 17.0 | |
| | | | 113.7 | |
| | | | 22.7 | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-------------|------------|----|-----------------|-----------------------|----------|
| | Vernier A. | B. | | | |
| Checks | | | | | |
| n.og. | | | | | |
| Putnam | | | | 156 22 06.5 | |
| Pitt-Pisgah | | | | 59 48 25.0 | |
| Put. Meade | | | | 114 10 17.0 | |
| Meade-n.og. | | | | 89 17 17.0 | |
| | | | | <u>360 00 40.5</u> | |

| | | | | |
|----------|-------------|--|--|------|
| Putnam | | | | 22.7 |
| Garrison | 51446-26-15 | | | |
| | 89 17 17 | | | |

Date:

Station:

Oct 9th 77
 290 *on*

Observer:

Instrument: 1459

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------|--------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| North S | 2 88 | | 2 89 | |
| 0 0 0 | 6 - 36 - 5 | | 10 - 56 - 25 | |
| 100 - 0 - 0 | 106 - 35 - 0 | | 110 - 55 - 20 | |
| 200 - 0 - 0 | 6 - 35 - 30 | | 210 - 56 - 5 | |
| 300 - 0 - 0 | 6 - 35 - 25 | | 310 - 55 - 55 | |

Round Pt
 220 - 52 - 10
 820 - 50 - 30
 60 - 52 - 10
 160 - 52 - 50

Sedgwick
 279 - 54 - 10
 19 - 54 - 10
 119 - 54 - 50
 219 - 54 - 30

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|---------------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| Putnam | | | | S. Putnam | |
| 208 - 24 - 45 | | | | 212 - 55 - 40 | |
| 308 - 23 - 50 | | | | 312 - 54 - 10 | |
| 48 - 25 - 25 | | | | 53° - 55 - 10 | |
| 148 - 25 - 30 | | | | 152 - 56 - 0 | |

N.S.
 100 good
 good
 good
 good

Tem Reading
 12m 50 / 22.650
 12:30 50 / 22.650
 1 PM 48.0 22.650
 1.50 42.0 22.700
 2 PM 52.0 22.700

~~Lat 41~~

Possibly for Elkham(?)
 Oct 12th

Date: Oct 15 77
 Station: Elkhorn Peak = S

Observer: S. W. Young + Ant. Krumm
 Instrument: 1459.

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------------------------------|------------|--------------|-----------------|----------------------|
| | Vernier A. | B. | | |
| Bannock Salmon Run (a) Big Butte | | | | indefinite |
| 0.00-00 | 8-10-35 | 20-35-35 | | |
| 0.00-00 | 8-1-00 | 20-36-30 | | |
| 100.00-00 | 108.1 | 10 120.36.35 | | |
| 200.00-00 | 208.1-00 | 220.36.00 | | |
| 300.00-00 | 308.1-00 | 320.35.30 | | |
| 120.00-00 | 128.1-45 | 140.36.30 | | |
| 240.00-00 | 248.1-50 | 260.35.30 | | |
| 0.00-00 | | | 80 | 90 |
| 1.00-00 | | | 71 | 43 |

| Putnam | Smith Putnam | Teton |
|----------|--------------|-----------|
| 57-01-30 | 60-09-10 | |
| 57.2 00 | 60.8 55 | |
| | 160.9 30 | 184 00 50 |
| 257.2 05 | 260.9 20 | 284.1 00 |
| 357.1 20 | 0 9 10 | 24.1 50 |
| 177.2 00 | 180.9 35 | 204.1 20 |
| 297.2 00 | 300.9 10 | 324.0 50 |

57-02-00 60-9-25
 555
 50.71
 819
 2437

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|------------|------------|-----------------------|-------------------|----------------------|----------|
| | Vernier A. | B. | | | |
| S.R.M. (b) | S.R.M. (c) | S.R.M. (d) | | | |
| 21-12-10 | 29-79-30 | 30-17-45 | | | |
| 21-12-40 | 29.20 30 | 30.18 15 | | | |
| 121 12.50 | 129.20.00 | 130.18.15 | | | |
| 221.12.50 | 229.20.00 | 230.17.45 | | | |
| 321.12.25 | 329.19.50 | 330.17.10 | | | |
| 141.12.30 | 149.20.00 | 150.18.15 | | | |
| 261.11.50 | 269.19.30 | 270.17.25 | | | |
| | 19.86 | 24.00 1380 5429 | 180 170 350 | | |

| Peopah | Sedgwick | Print | Stanton |
|-----------|-----------|-----------|---------|
| | 104-42-15 | | meade |
| | 104.42.15 | | |
| 190.35.50 | 204.41.50 | 219.10.35 | |
| 290.19.05 | 304.41.15 | | |
| 30.20.10 | 44.42.15 | 59.11.30 | |
| 210.20.00 | 224.41.45 | 239.11.30 | |
| 330.19.30 | 344.41.45 | | 4.15.00 |

90-19-30 104-41-40
 120
 75
 195
 39.
 150
 240
 8120
 525

Date:

Station:

Observer:

Instrument:

70°pk-157-05-05

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|---------------------|------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| Sherman Castle Rock | | | | H = Oxford Pk. |
| | 148-32-35 | | 156.34 | 58 |
| | 148.32 00 | | 156.34 | 35 |
| | 222-58 00 | 248.31.30 | 256.33 | 40 |
| | 322-54.50 | 348.30.50 | 356.32 | 30 |
| | 62-58.30 | 88.32 00 | 96.34 | 20 |
| | 242-58.20 | 268.31.50 | 276.34 | 30 |
| | 2-58.10 | 28.32 00 | 36.34 | 20 |

122-58-30

80
13.33
180
165
345
49-29
130
120
50
114

49-29

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|------------|------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| X S. Ogden | | | | N. Ogden |
| | 207-08-00 | 207-18-40 | 210-06-05 | 210-06-05 |
| | | 207-23-45 | 210-06-30 | 210-06-30 |
| | | | 310-04-30 | 310-04-30 |
| | 47-22.40 | 49-27-50 | 50-5-15 | 50-5-15 |
| | 147-22.50 | 149-27-15 | 150-5-10 | 150-5-10 |
| | 327-22-35 | 329-27-00 | 330-5-00 | 330-5-00 |
| | 87-23-10 | | 90-4-50 | 90-4-50 |

220
180
40
5.71

210-05-10

450
18.75

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|-----------|-----------------|----------------------|--------------------------|
| | Vernier A. | B. | | | |
| N | | | | | P (snob) Antelope Island |
| | 176-49-30 | 189-33-30 | 202-51-00 | 222-29-05 | |
| | 176-49-20 | 189-34-00 | 202-51-00 | 222-29-10 | |
| | 276-48-20 | 289-33-50 | 302-49-20 | 322-27-50 | |
| | 116-47-45 | 129-32-55 | 142-50-00 | 62-28-00 | |
| | 116-48-15 | 129-32-45 | 142-50-00 | | |
| | 296-48-25 | 309-31-50 | | | |
| | 56-48-10 | 69-31-50 | 82-49-10 | | |

176-48-20

185
165
205
30.62
400
57.14

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|-----------|-----------------|----------------------|--------------------------|
| | Vernier A. | B. | | | |
| Antelope | | | | | Promontory N. Promontory |
| | 222-29-5 | 235-09-00 | 242-13-05 | (432) | |
| | " 29-10 | 235-9-35 | 242-12-20 | (422) | |
| | 322-27-50 | 335-6-55 | 342-11-50 | (412) | |
| | 62-28-0 | 75-8-00 | 82-42-00 | | |
| | 125 | 175-8-20 | 182-42-05 | | |
| | 31.25 | 355-7-20 | 2-4-150 | | |
| | | 115-7-40 | 122-41-20 | | |

235-08-50 242-42-20

220
120
40
5
170
120
50
6.25

Date:

Station:

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|--|----------------------|----------------------|-----------------|----------------------|
| | Vernier A. | B. | | |
| <i>Jamquid-</i> | | | | |
| Buell Pt. | Distant Pt. | Distant Pt. | | |
| 262-53-05 | 263-58-15 | 264-56-45 | | |
| 262-52-35 | 263-58-00 | 264-56-40 | | |
| 362-52-40 | 263-56-50 | 264-56-10 | | |
| 102-52-25 | 103-58-00 | 104-55-30 | | |
| 202-51-55 | 203-57-20 | 204-55-45 | | |
| 22-52-00 | | | 120 | |
| 142-51-50 | | | 81 | |
| | | | <u>205</u> | |
| 262-52-25 | | | 411 | |
| | 175 | | | |
| | <u>21.87</u> | | | |
| <i>Desert Pt. Clear Creek Black Pine</i> | | | | |
| 271-36-25 | 287-42-15 | 298-03-05 | | |
| 271-35-45 | 287-42-00 | 298-2-20 | | |
| 11-35-00 | 27-41-45 | 38-1-55 | | |
| 111-36-00 | 127-42-20 | 138-1-50 | | |
| 211-35-00 | 227-42-15 | 238-1-00 | | |
| 331-35-00 | | 58-1-00 | | |
| 154-34-30 | | 178-1-00 | | |
| 271-35-45 | | 298-1-55 | | |
| | 205 | | | |
| | <u>25.62</u> | | | |
| | | | 45.62 | |
| | | | 185 | |
| | | | <u>182</u> | |
| | | | 365 | |

287
280
527
366
167

Desert Pt. Clear Creek Black Pine

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|--------------------------|------------|-----------|-----------------|----------------------|----------------------|
| | Vernier A. | B. | | | |
| Good Creek N. Good Creek | Deep Creek | Bannock | | | |
| 307-58-30 | 315-03-00 | 345-38-45 | | | 360-00-55 |
| 307-56-40 | 315-00-50 | 345-37-30 | | | 360-00-55 |
| 47-57-20 | 55-2-00 | 85-37-25 | | | Good |
| 147-57-45 | 155-2-30 | 185-37-55 | | | Good |
| 247-57-30 | 255-1-20 | 285-37-00 | | | 359-59-35 |
| 67-57-10 | 75-1-30 | 105-37-45 | | | Good |
| 187-56-30 | 195-1-00 | 225-37-10 | | | Good |
| | | | 130 | | |
| 307-58-00 | | 345-38-20 | 182 | | Good |
| | | | <u>310</u> | | |
| | | | 44.29 | | |
| | | | | 230 | |
| | | | | <u>122</u> | |
| | | | | 350 | |
| | | | | | 43.75 |
| Black Pine | | | | | |
| 298-05-00 | | | | | |
| Black Pine | | | | | |
| 298-07-50 | | | | | |
| Cahd Oct 15 to mail | | | | | |

Date: Oct 18th 1877
 Station: H = Oxford Pk

Observer: Asst Thompson
 Instrument: 1459

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|--------------|----------------------|-----------|-----------------|----------------------|------------|-----------|-----------------|----------------------|----------|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| 0 00 00 | Elkhorn | 0-00-00 | | Promontory | 267-51-05 | 267-50-5 | | | |
| 5-27-45 | Deep Creek | 5-27-45 | | Pt North of " | 270-54-30 | 270-54-5 | | | |
| 15-59-05 | Bannock | 15-59-05 | | North " | 284-26-25 | 284-26-20 | | | |
| 20-28-20 | North S | 20-28-05 | | Pt in Blue Sky Range | 292-46-25 | | | | |
| N.W. of p 83 | Sharp Point | 39-12-05 | | Banquet | 295-15-10 | 295-14-25 | | | |
| | Point E of p 83 | 44-22-40 | | Druck Peak | 299-54-05 | | | | |
| | 83 | 48-03-35 | | Blue Peak (bad) | 318-57-05 | | | | |
| | 81 | 50-43-05 | | Blue Peak | 329-53-45 | 329-52-45 | | | |
| | Point Point | 65-37-30 | | Goose Creek | 335-41-25 | 335-40-15 | | | |
| 67-11-50 | South Putnam | 67-11-15 | | North " | 341-46-05 | 341-45-20 | | | |
| 96-58-0 | Sedgwick | 96-58-05 | | Elkhorn (good) | | | | | good |
| 104-11-30 | Pisgah | 104-11-45 | | 75 (C) Station | 70-44-10 | | | | |
| 122 46-5 | L | 122-45-40 | | Blue Peak | 76-25-00 | | | | |
| | 69 (?) | 123-25-45 | | Pt North Sedgwick | 91-26-10 | | | | |
| 133-26-10 | Sherman | 133-26-55 | | Mrade | 139-16-05 | | | | |
| 168-23-45 | Castle Rock | 168-24-35 | | | | | | | |
| | Oxford Town | 167-30-00 | | | | | | | |
| | 10 | 173-51-10 | | | | | | | |
| 201-15-15 | Jrvin Point N | 201-17-00 | | | | | | | |
| 207-50-40 | "N | 207-51-05 | | | | | | | |
| | Cave B note | 209-24-05 | | | | | | | |
| | South "H" | 222-20-30 | | | | | | | |
| 234-37-10 | "P" (not good) | 234-37-45 | | | | | | | |
| 240-37-0 | South Ogden | 242-47-05 | | | | | | | |
| 243 | "X" | 243-40-25 | | | | | | | |
| | High Pt. North Ogden | 245-31-30 | | | | | | | |
| 252, 55 50 | Black Butte | 252-56-25 | | | | | | | |

Date: October 20th 1877
 Station: North S = Fontaine Rk

Observer: H. G. S. & Asst. Thompson
 Instrument: 1459

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------------|------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| Bannock | 0-00-00 | 120 | | 240 |
| Big Butte | 27-48-05 | 147-48-10 | | 267-47-20 |
| Sharp Point | 36-39-05 | | | |
| 85 | 38-28-10 | | | |
| 89 | 34-00-55 | | | |
| 88 | 36-56-20 | | | |
| 90 | 43-54-10 | | | |
| 83 | 47-49-50 | 167-49-45 | | 287-50-00 |
| Pt South of 83 | 50-30-40 | 170-30-00 | | 290-30-20 |
| Putnam | 65-18-25 | 185-18-05 | | 305-17-30 |
| South " | 68-44-05 | 188-43-10 | | 308-43-00 |
| Round Point | 72-36-55 | 192-35-25 | | 312-35-30 |
| Islands | 94-19-35 | 214-18-05 | | 334-18-20 |
| Puyub | 101-26-10 | 221-24-45 | | 341-24-50 |
| North of Sep. | 113-48-05 | | | |
| State 86 | 115-22-10 | | | |
| Sedgwick | 121-54-40 | 244-52-20 | | 1-52-15 |
| "L" | 130-34-35 | | | |
| Sherman | 138-18-25 | 258-16-55 | | 18-16-50 |
| 69 (?) | 144-44-40 | | | |
| Castle Rock | 164-45-50 | 284-44-00 | | 44-44-20 |
| 10 | 168-51-50 | | | |
| Oxford | 186-48-40 | 306-46-50 | | 66-46-55 |
| "N" | 192-04-35 | 312-02-45 | | 72-03-00 |
| "O" | 203-27-15 | 323-25-25 | | 83-25-10 |
| proposed | 204-51-45 | | | |
| "P" | 215-13-00 | 335-11-10 | | 95-11-10 |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|------------------|------------|-----------|-----------------|----------------------|-----------|
| | Vernier A. | B. | | | |
| "X" | 220-25-25 | 340-23-10 | | | 101-24-15 |
| Black Butte | 221-05-25 | 341-04-00 | | | 101-04-10 |
| South Ogden (?) | 222-09-15 | 342-07-20 | | | 102-07-30 |
| High Pt N. Ogden | 222-28-25 | 342-26-20 | | | 102-27-05 |
| North Ogden | 222-50-10 | 342-48-20 | | | 102-48-20 |
| Pt on Shuler Bay | 231-35-10 | | | | |
| Alchorn | 259-13-45 | 19-12-15 | | | 139-12-30 |
| Desert Pk | 280-35-05 | 40-33-30 | | | 160-33-50 |
| Levine Creek | 294-53-30 | | | | |
| Black Pine W | 301-54-25 | | | | |
| " " | 302-34-15 | | | | |
| " " | 303-28-35 | 63-27-50 | | | 183-27-15 |
| High Canyon " | 303-34-05 | 32-45 | | | |
| Moore bench | 314-33-05 | 74-32-45 | | | 194-32-10 |
| North " | 321-21-05 | 81-19-50 | | | 201-19-45 |
| Pt South Dr. Cr. | 334-31-30 | | | | |
| Deep Creek | 341-36-25 | 101-35-30 | | | 221-34-35 |
| Pt West Main St. | 351-06-05 | | | | |
| Bannock | good | good | | | 359-59-00 |
| Proximity | 121-55 | | | | 121-55-00 |

Inscription found in Monument
 Fontaine's Rk
 Topog. Station 135
 Sept 23 - 1877 - U. S. Geol. Survey of
 the Territories. J. A. Fontaine, Henry Ganck

All good

Date:

Station: North S = Fontaine Pt

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|---------------------|------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| Bannock Putnam Sedy | 0 00 00 | 65-18-40 | 121 | 52-50 |
| | 100 00 00 | 165-19-00 | 221 | 53-15 |
| | 200 00 00 | 265-18-25 | 321 | 52-40 |
| | 300 00 00 | 365-18-50 | 61 | 53-30 |
| "N" | | | | |
| | 192-03-30 | 222-48-45 | 259 | 13-00 |
| | 292-03-30 | 322-48-20 | 359 | 13-00 |
| | 32 0 3-35 | 62-48-30 | 99 | 13-05 |
| | 132-04-30 | 162-49-10 | 199 | 13-50 |
| Deep Creek | | | | |
| | 341-35-00 | | | |
| | 81-35-00 | | | |
| | 181-34-55 | | | |
| | 281-35-10 | | | |
| Bannock | | | | |
| good | | | | |
| good | | | | |
| good | | | | |
| good | | | | |
| Amesid 12 | | | | |
| | 21.785 | 1-25 PM | | 70.0 |
| | 21.800 | 3 | | 59.0 |

| REMARKS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------------------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| land to mail | | | | |
| Oct 21, 77 | | | | |
| can be computed as an | | | | |
| cross right station - or used | | | | |
| as a secondary | | | | |

Date: Oct 27 - 77

Station: 2

Observer: Th

Instrument: 4953

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|--------------------------|-------------------|-----------------------------------|-----------------|-----------------------------------|
| | Vernier A. | B. | | |
| d 94 | m. n 206-41-30 | Cexford 206-58-30 | | Pontonus |
| d 95 | 183-30-30 | 185-26-30 | | |
| d 96 ^{all good} | 40-43-00 | 46-05-00 | | 76-20-00 |
| d 97 | 321-01-30 | | | |
| d 98 | 113-17-30 | 114-53-00 260-04-00 | | 149-08-30 289-20-30 |
| d 99 | 252-10-00 | 260-04-00 | | 289-20-30 |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|----------------------------------|-----------------------------------|-----------------|----------------------|---------------------------|
| | Vernier A. | B. | | | |
| Elkham | 250-00-00 | Barnack 262-18-30 | | 267.53-30 | Reln Beetle. 257-08-00 |
| | 228-34-30 | 239-40-30 | | 245-30-30 | 30-34-00 |
| | 85-11-00 | 96-23-30 | | 101-53-30 | |
| | 3-55-30 | 15-46-30 | | 20-56-00 | 168-06-30 |
| | 158-54-30 85-11-00 | 169-44-00 308-27-00 | | 175-38-00 | 319-37-30 |
| | | 308-27-00 | | 313-01-30 | 94-11-00 |

79
2
81

79 ~~points~~
in ice any 23
10 out 30

Date: Oct. 30. 77
Station: Tobog, Stations (see Mountain Sta. Book)

Observer:
Instrument: 81 15 Nov 38

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|--|-----------------|------------------------|-----------------|----------------------|
| | Vernier A. | B. | | |
| Completed C.J.K. 100 | m.n 282-37 | Oxford 289-54-30 | ✓ 313-16-30 | Pontaines |
| 101 | 236-06-00 | 243-37-30 | 267-20-00 | |
| 102 | 95-08-30 | 103-24-00 | 177-00-30 | |
| now completed C.J.K. 103 | 336-26-30 | Sidwich ✓ 346-20-00 | 322-50-30 | Sherman ✓ |
| now 3-77 104 | 10030-30 | 113-16-00 | 81-32-30 | |
| 105 - also Camp 92 at Saimaniee now 10-77 | m.n 34-10-00 | | | |
| W. Mt. Elkhorn | 51-33-00 | | | |
| Oxford | 4-39-00 | | | |
| (93) | 331-04-30 | | | |
| (96) | 307-34-30 | | | |
| (97) | 302-23-30 | | | |
| (102) | 280-10-30 | | | |
| (100) | 278-31-00 | | | |
| (101) | 276-36-30 | | | |
| Elkh Butte | 271-24-30 | | | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|------------|------------|-------------|-----------------|----------------------|--------------|
| | Vernier A. | B. | | | |
| Elkhorn ✓ | 319-46-00 | Black Butte | 234-21-30 | 255-56-00 | ✓ Sherman |
| 273-43-30 | 97-38-30 | | | | |
| 133-30-30 | 312-33-00 | 47-41-30 | 69-15-30 | | |
| N-✓ | 0- | Castle Rock | 210 | | |
| 274-12-30 | 233-02-30 | 309-34-30 | 306-23-30 | | |
| Elkh Butte | 22-30-30 | 329-49-00 | 52-40-30 | | |

to local Δ from Sta-VI Nov 12th
 m.n - 291-30
 Elkhorn 319-31-30
 (98) 220-03-30
 (97) 221-28-00
 (100) 179-35-00
 Elkh Butte 166-26-00
 X 153-27-00
 M. Ogden 147-06-00

Date:

Nov. 13th

Station:

Observer:

Instrument:

49 53

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. | |
|--------------------------------------|------------|-----------|-----------------|----------------------|------------|-------|-----------------|----------------------|----------|------------|
| | Vernier A. | B. | | | Vernier A. | B. | | | | |
| 106 Nov. 13 th 4953 | m. n | 134-33 | | 107 | 58-03-30 | 40-03 | Blk Pine | 236-43-30 | 42.5 | 23.030 |
| | Deep bk. | 178-09 | | 108 | 44-25 | | | | | 11.30 a.m. |
| | Elkhorn | 142-06-30 | | Blk. Pt. | 27-15 | | | | | 42.5 |
| | 109 | 78-31-30 | | Prominent | 324-07 | | | | | |
| | 109 (?) | 62-13-30 | | North " | 310-06-30 | | | | | |

81
6
87 to Nov 13

Date: Nov 13, 77
Station: 109

Nov 13 44.5 22.880 1.45
Observer: Lot, Young
Instrument: 1459

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------------|------------|---------------|-----------------|----------------------|
| | Vernier A. | B. | | |
| | Q 106 | | | |
| (1) | 0-00-00 | Deep Ck. | | Barrack |
| (2) | 0-00-00 | 44-12-50 | 46-53-40 | |
| (3) | 0-00-00 | 44-11-00 | 46-51-10 | |
| | | 44-10-50 | 46-51-05 | |
| me 2+3 bits all good | | | | |
| | "N" | Bull Pt (Dad) | "X" | |
| | 177-32-45 | 198-48-50 | 219-53-00 | |
| | | 198-47-00 | 219-50-40 | |
| | | 198-47-00 | 219-50-30 | |
| | Bull Pt | Desert Pt | Bull Pt | Pine |
| | 298-24-10 | 303-26-45 | 348-12-50 | |
| | 298 | | 348-10-00 | |
| | 298-21-10 | 303-23-00 | 348-09-30 | |
| | | | 348-09-45 | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|-----------|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| | Elkhorn | Fontaine | Sedgwick | Oxford | |
| | 77-31-20 | 80-54-10 | 107-20-05 | 115-04-20 | |
| | 77-28-50 | 80-51-40 | 107-17-50 | 145-02-20 | |
| | 77-28-30 | 80-57-20 | 107-17-20 | 115-02-10 | |
| | 77-28-40 | | | | |
| | Antelope | Q 108 | Promontory (C) | North Pass | |
| | 245-52-45 | 247-40-40 | 262-27-45 | 278-35-20 | |
| | 245-50-00 | 247-38-40 | 262-25-40 | 278-33-20 | |
| | 245-50-00 | | 262-25-30 | 278-33-00 | |
| | | | | 278-33-10 | |
| | Q 106 | | | | |
| | 2'-30" | | | | |
| | good | | | | |
| | " | | | | |

Date: Nov - 16 - 77
Station: 110

Observer: JH
Instrument: 4953

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|---------------|------------|----|-----------------|----------------------|------------|----|-----------------|----------------------|---|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| m. n. | 293-24-30 | | | | | | | | Amended 13 27.64 - 420 10 a.m. |
| Oxford | 284-10-30 | | | | | | | | |
| (93) | 268-44-00 | | | | | | | | |
| Castle Rock | 247-22-00 | | | | | | | | |
| Blk Butte | 215-06-30 | | | | | | | | |
| X | 168-52-30 | | | | | | | | |
| M. Promontory | 83-18-00 | | | | | | | | |
| (106) | 333-18-30 | | | | | | | | |
| (108) | 325-25-00 | | | | | | | | |
| Elkham | 311-33-00 | | | | | | | | |

87
 4
 91

Date:

Station: 113

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------|-------------|-----------|-----------------|----------------------|
| | Vernier A. | B. | | |
| m. n. | m. n. | 293-23-30 | | |
| | Oxford. | 283-37-30 | | |
| | q 110 | 275-04 | | |
| | " 93 | 268-18-30 | | |
| | " 111 | 244-25-30 | | |
| | " 112 | 238-44- | | |
| | Black Butte | 221-26 | | |
| | "X" | 171-53-30 | | |
| | North Snow. | 81-55-30 | | |
| | q 106 | 326-14 | | |
| | " 108 | 318-24 | | |

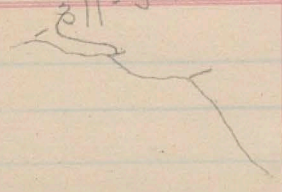
Ameroid 13
 23,375 41.5

Time = 2.10 h.m

Observer:

Instrument:

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| | 30 | | | | |



91
2
93

Date: nov. 18, 77
Station: of Meander

Observer: Thompson
Instrument: 495-J

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| Meander Sta. 1 | | | | |
| m. w. | 185-15-00 | | | |
| Elkhorn | 213-46-00 | | | |
| (100) | 150-31-30 | | | |
| (101) | 143-50-30 | | | |
| Blk Butte | 87-20-30 | | | |
| X | 50 25 30 | | | |
| n. Ogden light pt | 42-16-00 | | | |

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|-------------------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | |
| Meander Sta. 1 | | | | | |
| m. w. | | | | 344-03-30 | |
| Blk Butte | | | | 300-33-30 | |
| O | | | | 246-46-00 | |
| X | | | | 211-48-00 | |
| North Og. (light) | | | | 201-28-30 | |
| (100) | | | | 350-08-30 | |

Date:

Nov, 19th 77

Station:

114

Observer:

M

Instrument:

4950

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|------------------------|-------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| w. w. | 50-26-30 | | | |
| Ox Ford | 53-16-30 | | | |
| Blk Butte | 12-07-30 | | | |
| "O" | 317-48 | | | |
| "L" | 285-41 | | | |
| Hg Pt North Og | 270-33-30 | | | |
| North Og | 271-25-30 | | | |
| End Hill | 255-43+0-42 | | | |
| North Prom | 176-13-30 | | | |
| Station VII Nov 17 | 128-07 | | | |
| Q 113 | 119-40+0-52 | | | |
| " 111 | 111-26+1-13 | | | |
| " 112 | 110-28-30 | | | |
| " 106 | 97-18-30 | | | |
| " 108 (C.) | 93-22-30 | | | |
| 109 | 93-12 | | | |
| Elchhorn | 76-01-30 | | | |
| Fontaine | 72-18-30 | | | |
| Postage | 66-11 | | | |
| Johnson's Point N. End | 19-47 | | | |
| + ranch | 3-04 | | | |
| " " S. End | 3-04 | | | |
| Square Town | 347-46 | | | |
| Hampton Brig | 300-00 | | | |

Wrong

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|----------|------------|----|-----------------|----------------------|-----------------|
| | Vernier A. | B. | | | |
| | | | | | Inverid 13 |
| | | | | | 23.920 |
| | | | | | 10.40 am |
| | | | | | 44 ⁰ |
| | | | | | 48.00 |

Date:

Nov 19

Station:

118

Observer:

Instrument:

4950

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. | REMARKS. |
|------------------|-----------------------|----|-----------------|----------------------|------------|----|-----------------|----------------------|----------|
| | Vernier A. | B. | | | Vernier A. | B. | | | |
| <u>tree</u> - | 273-35 | | | | | | | | |
| | 17-38 | | | | | | | | |
| m. n | 255-57 | | | | | | | | |
| α 114 | 339-06-30 | | | | | | | | |
| Black Bk. | 219-44 | | | | | | | | |
| Jopona Ranch | 253 253-44 | | | | | | | | Campo. |
| Ho | 231-31 | | | | | | | | |
| Hg. Pt. North Og | 218-08-30 | | | | | | | | |
| North Ogden | 218-01-30 | ✓ | | ✓ | | | | | |
| South Og. (?) | 215-36-30 | | | | | | | | |
| End Hill | 207-53-30 | | | | | | | | |
| South Prom. | 173-13 | | | | | | | | |
| Promontory | 166-27-30 | ✓ | | ✓ | | | | | |
| Blind Spg. Hill | 148-53-30 | | | | | | | | |
| North Prom. | 119-31-30 | ✓ | | ✓ | | | | | |
| Sta. III Nov 17 | 67-03-30 | | | | | | | | |
| α 113 | 57-19 | | | | | | | | |
| " 117 | 52-49 | | | | | | | | |
| " 111 | 48-55 | | | | | | | | |
| " 112 | 47-46-30 | | | | | | | | |
| " 106 | 39-55-30 | | | | | | | | |
| " 116 | 39-57-30 | | | | | | | | |
| " 108 | 35-51 | | | | | | | | |
| " 115 | 38-18 | | | | | | | | |
| Elkhorn | 20-23-30 | ✓ | | | | | | | |
| Oxford | 358-11-30 | | | | | | | | |

Answer 13

June 1st 30^m
 Temp 47^o
 Bar. 23.68

Date: Nov. 19th
 Station: 119

Observer:
 Instrument: 495-3

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------|-------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| M. W. | 148-11 | | | |
| Bel. Bar. | 117-11-30 | | | |
| "O" | 59-27-30 | | | |
| "Jo | 28-44-30 | | | |
| Hq. Pt. North Sq. | 11-37-30 | | | |
| End Hill | 8-20 + 1-17 | | | |
| Prommory | 318-05 | | | |
| Behind Spq. Hill | 294-23 | | | |
| North Prom. | 267-45 | | | |
| Sta VII No 17 | 211-53 | | | |
| p 113 | 201-46 | | | |
| " 111 | 194-04-30 | | | |
| " 112 | 192-54-30 | | | |
| " 117 | 171-55-30 | | | |
| " 116 | 167-03-30 | | | |
| " 118 | 154-29 | | | |

| REMARKS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| | | | | Averaged 13 |
| | | | | Time 2.40 |
| | | | | Temp 45. |
| | | | | Bar. 23.82 |

93
100 h den

Date: Nov. 19th
Station: 120

Observer:
Instrument: 4953

| OBJECTS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|-------------------|------------|----|-----------------|----------------------|
| | Vernier A. | B. | | |
| m n | 349-05-30 | | | |
| Black Butte | 322-53-30 | | | |
| "O" | 262-22-30 | | | |
| Hamplins Ridge | 259-23-30 | | | |
| End Hill | 216-12-30 | | | |
| Dwison Rd. Mt. g. | 202-30 | | | |
| Nebos | 198-10-30 | | | |
| S. Promontory | 165-25-30 | | | |
| Promontory | 157-54-30 | | | |
| Blind Spg. Hill | 125-49 | | | |
| North Prom. | 104-43-30 | | | |
| Sta. VII Mt 17 | 48-21-30 | | | |
| " 113 | 38-38-30 | | | |
| " 111 | 31-48-30 | | | |
| " 112 | 30-46-30 | | | |
| " 119 | 8-38 | | | |
| " 118 | 1-33-30 | | | |

| REMARKS. | READINGS. | | MEAN OF A. & B. | DIFFERENTIAL ANGLES. |
|----------|------------|----|-----------------|--------------------------------------|
| | Vernier A. | B. | | |
| | | | | Ameroid 13 |
| | | | | June 3.30 |
| | | | | Temp 47 |
| | | | | Bar. 23.90 |
| | | | | Ameroid readings called for date. |

Ben

¹⁶⁵
64
78 284

224-32-30

165-20-10
33-19-40

122-00-30

54

5

6.4-32-35

890-40-50

824-34-0

65-36-50

425-37-10

344-31-30

181-05-40

101-05-40

65-36-50

166-42-30

179

13-17-30

217-39-20

204-21-50

178-39-20

13-17-30

165-21-50