

# FIELD JOURNAL.

Book No. *203*, 187*5*.

## TOPOGRAPHICAL RECORDS.

Party No. \_\_\_\_\_, Section. \_\_\_\_\_

From Camp No. \_\_\_\_\_, at *Agua Fria*

To Camp No. \_\_\_\_\_, at *Hell Cañon*

Atlas Sheet No. \_\_\_\_\_

*Anton Karl, Topog.*

In charge of party.

Engineer Department, U. S. Army.

Geographical Surveys West of 100th Meridian.



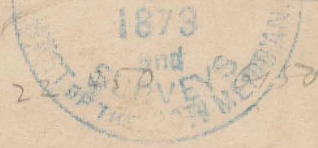
### MAIN FIELD STATIONS.

1. Geographical position of station.
2. Physical geography details; especially giving the physical peculiarities of the location.
3. Meteorological conditions, general and special, while observations were conducted.
4. Description of observatory; including personnel of party, name of telegraph operator, and name of telegraph company whose wire has been employed.
5. Description of instruments used.
6. Points with which connections were made; nights of observation, and observers; also name of computer or computers.
7. Tabulation of stars used, and number of observations.
8. Instrumental values; circumstances of telegraphic communication, *i. e.* length of circuit batteries, number of relays, repeaters, &c.
9. Uniform tables of time-reductions at receiving station.
10. Uniform tables of time-reductions at sending station.
11. Grouping of series of exchange signals, including means of single and serial results.
12. Personal equation.
13. Probable error by least squares.
14. Resulting longitude.
15. Reduction of the latitude observations properly grouped, with discussion of results.
16. Resulting astronomical co-ordinates.



No. 203.

Anton Karb.



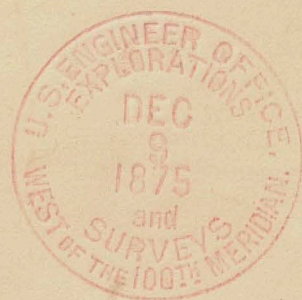
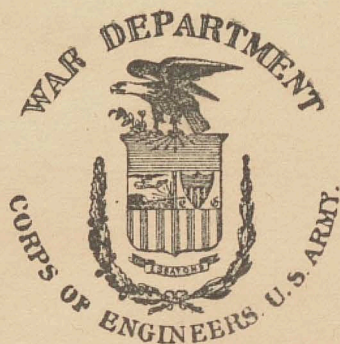
at 2.25

18  
5  
18 = 5

35  
70

26/95





~~ASTRONOMICAL~~ RECORDS,

Book No. *203*, 1875-

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U. S. ENGINEER OFFICE.

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GEOGRAPHICAL AND GEOLOGICAL  
EXPLORATIONS AND SURVEYS  
WEST OF THE 100th MERIDIAN.

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*Corps of Engineers,*  
IN CHARGE.



Party No. \_\_\_\_\_

From \_\_\_\_\_

To \_\_\_\_\_

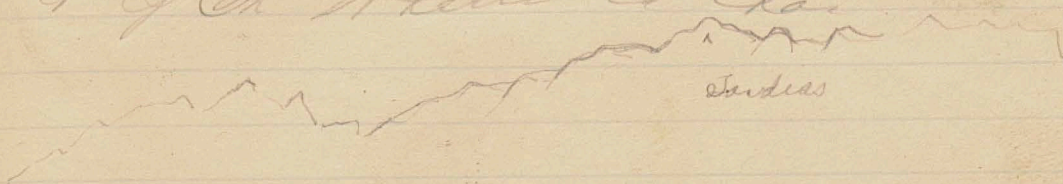
REMARKS.

Anton Karl, Tohogin



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Profile of Triangulation Station  
 of Survey of Exploration & Survey  
 west of the 100<sup>th</sup> Meridian  
 of J. M. Meade in Chas.  
 Sandias



Location of Albuquerque M. M. 249.30  
 Crater (VII) 206. <sup>2.59</sup>  
 Sandia 317.35. { 528 ft.  
 252.5

249.30  
 24  
 265.30 North  
 85 South

317.35  
 265.30  
 52.5

265.30  
 206  
 59.30

143  
 85  
 28

279.30  
 14  
 652  
 206

279.30  
 206  
 73.30  
 60



A  
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Camp No 35 to No 34, at Agua Triatoyag rapd. A Karl

Wade Aug 11<sup>th</sup> 1875 Shiloh measured

Youngs Strait

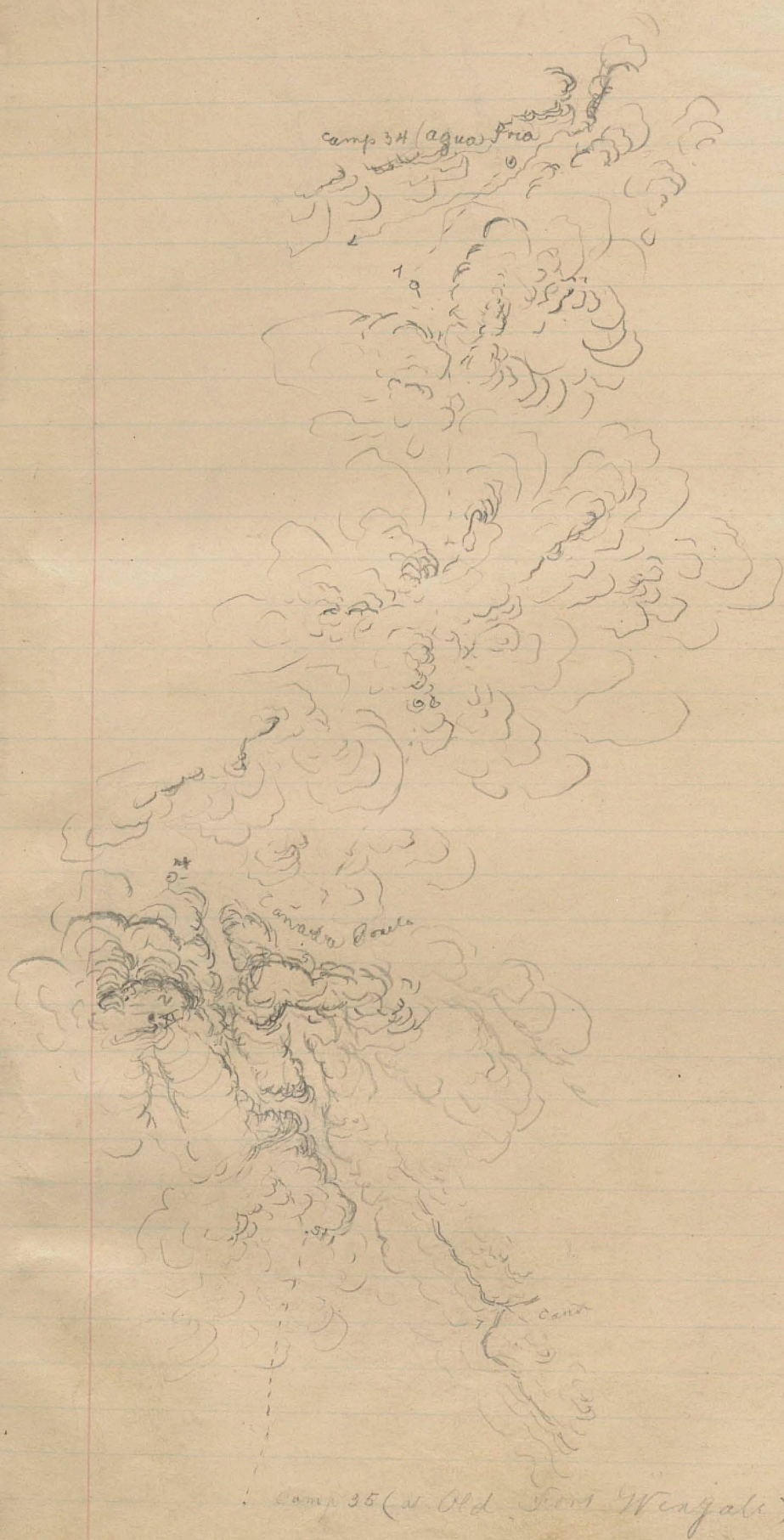
Side Party.

Station	Distance	Altitude	Mag Bearing	Remarks
Camp 35.	9.15 (2.8)	22.575.	522 W.	S. Canion 800 ft.
Station 1.	10.5 (3.)	22.460.	528 W.	S. W. Taylor N 41 W Canion N.
2	not 24 hours. 12.30 (1.3)	20.800.	536 W.	(A) Station VI.
3	3. (1.5)	21.900	561 W.	
4	4.55 (2.)	21.700	N 50 W.	
5	5.35 (2.2)		N 87 W.	(C) S 42 W.
6	6.10 (1.5)	21.350	552 W.	
7	6.45 (1.5)	21.700	N 50 W.	

Camp 34 7.12 74.2 21.650. Agua Triatoyag

May 1st -  
N. Sat  
S. Sat  
E. Sept  
W. Sept  
O. Fall







II office work C & S record.

Mr Taylor 23.30

Ms. M. 344.30

(49)

20

223.46

22

54.382

(26)

15

157

765.30

105  
04  
Exp 6-82 (h)

295.2b

Ac. 062

283

7

(28)

Centro Colorado

Sarge Valley

valley of Rio Puerco of  
the Mts.

[illegible]

5200



Round Mt. pt (near town)  
14.5 ft. x 10 in. 14

Katila's crater

Handing Crater

2  
344  
140  
390  
22



Magbar  
N Sat  
S Sat  
E Sept  
West Sept  
Travel

Camp No 34 to No 36 at the Castles R. Topogr. a late  
date Aug 13/845  
Instruments used for topog.

Station  
Distance  
Chained  
Feet.  
Bearing  
N 10 E

Camp 34  
7 0.4  
21 600  
7200  
N 20 E

1  
7 20.4  
21 300  
7050  
N 44 E

2  
7 30.9  
21 225  
7650  
N 57 E

3  
7 05.8  
21 225  
7650  
N 35 E

4  
8 15.4  
21 275  
7475  
N 40 E

4 1/2  
8 25.4  
21 275  
7475  
N 45 E

5  
8 35.6  
21 275  
7475  
N 52 E

5 1/2  
8 52.1.3  
21 275  
7475  
N 79 E

6  
9 10.6  
21 100  
7750  
N 80 E

7  
9 35.4  
21 175  
7750  
N 44 E

8  
10 38.1.1  
21 375  
7475  
N 50 E

9  
11 5.12  
21 570  
7300  
N 32 E

10  
11 35.4  
21 600  
7000  
N 88 E

10 1/2  
11 45.12  
21 600  
7000

11  
12 24.12  
21 600  
7000

12  
1.5.9  
22 300  
6400  
546 E

13  
1.00.6  
22 250  
6450  
N 81 E

14  
1.45  
22 200  
6400

14  
1.45  
22 200  
6400

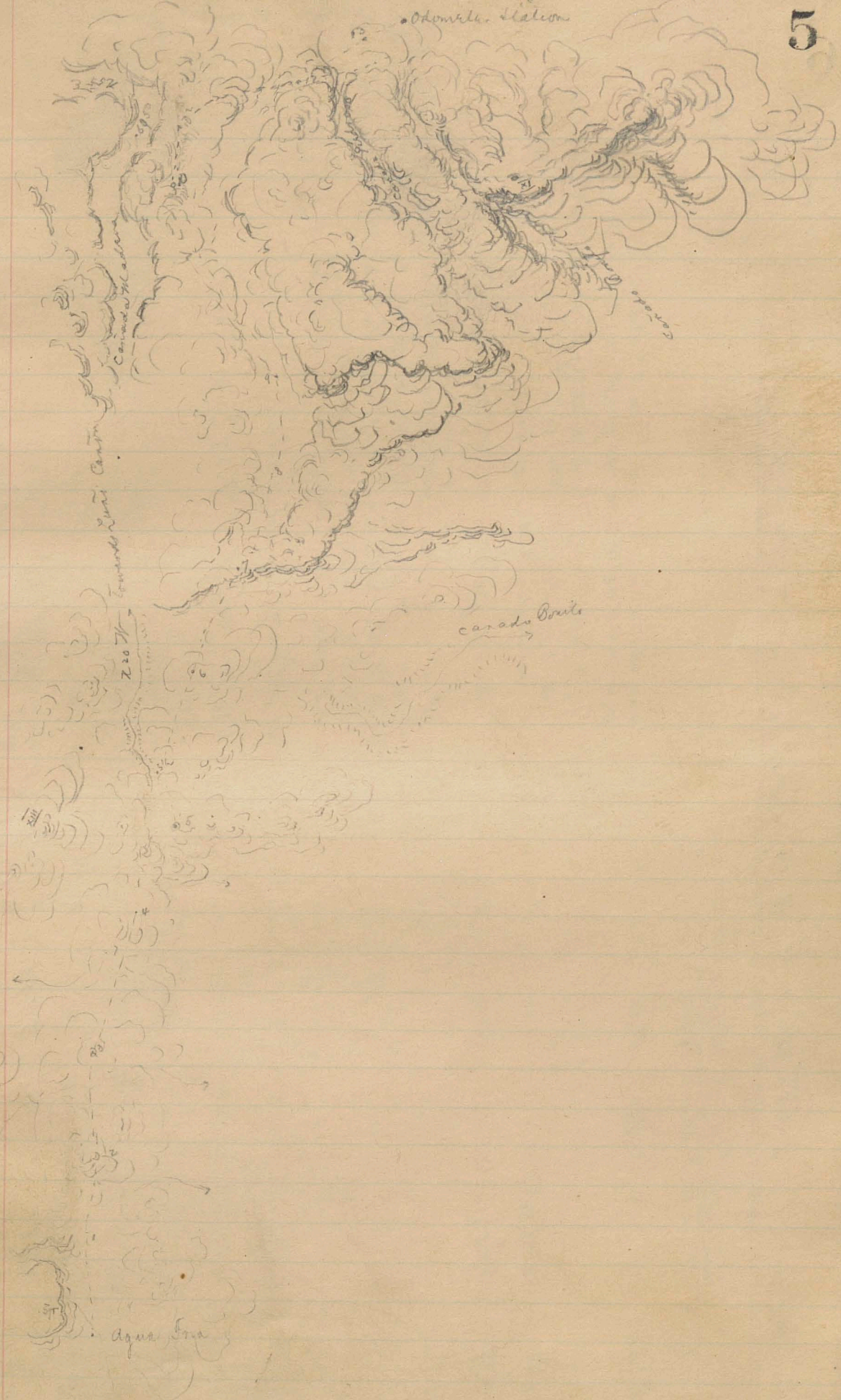
14  
1.45  
22 200  
6400

14  
1.45  
22 200  
6400

14  
1.45  
22 200  
6400

on Odonates Station 1 at August 11 1845







Camp N<sup>o</sup> 34 to N<sup>o</sup> 36 at ~~Clinton~~, 1<sup>st</sup> M Topographer

at Carb. Date Aug 18<sup>th</sup> 1875

Instrument used Young's Transit

Station	Elevation	Observed	Dist.	Bearing
14	466 (110)	22.300	8400	N 77 E

Station 15	1161 (115)	22.450	6200	N 81 E
------------	------------	--------	------	--------

16	1830 (154)	22.450	6200	N 40 E
----	------------	--------	------	--------

17	2061 (154)	22.425	6225	N 66 E
----	------------	--------	------	--------

18	2740 (151)	22.400	6250	N 84 E
----	------------	--------	------	--------

19	3390 (16)	22.400	6200	N 42 E
----	-----------	--------	------	--------

20	4074 (17)	22.450	6200	S 71 E
----	-----------	--------	------	--------

21	4520 (19)	22.550	6100	
----	-----------	--------	------	--

22	4970 (30)	22.600	6000	N 78 E
----	-----------	--------	------	--------

23	6380 (32)	22.600	5975	N 62 E
----	-----------	--------	------	--------

24	6515 (112)	"	"	S 89 E
----	------------	---	---	--------

Camp 36	7027	22.700	5850	Camp on grass
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Wagon road from Agassiz Sta. to old Fort N<sup>o</sup> 12 N  
 260) S 67 W (39) N 84 W (38) N 68 W (37) N 55 W (36) N 34 W (35) N 14 W  
 (34) N 4 E (33) N 9 E (32) N 12 E (31) N 14 E (30) N 19 E (29) N 24 E (28) N 69 E  
 (27) N 79 E (26) N 77 E (25) S 65 E (24) S 60 E (23) S 58 E (22) S 45 W  
 at Station 2 got on road and followed it

From Station 3 to old Fort Wingate  
 (55) N 52 W (56) N 28 W (57) N 9 W (58) N 2 W (59) S 73 W (60) S 80 W (61) S 86 W (62) N 87 W  
 (63) N 15 E (64) N 25 E (65) N 35 E (66) N 45 E (67) N 55 E (68) N 65 E (69) N 75 E (70) S 85 E (71) S 95 E (72) S 105 E  
 Road to old Fort Wingate

Road through Saw beds

230 W Taylor N 27 E S 58 W

Road to new Fort Wingate

Road to new Fort Wingate

crossed Gallo Cr.

the Carthage Ranch

Camp on grass

Mag var  
 N Sat  
 S Sat  
 E Sept  
 W Sept  
 D April



McCallum R. Camp 36

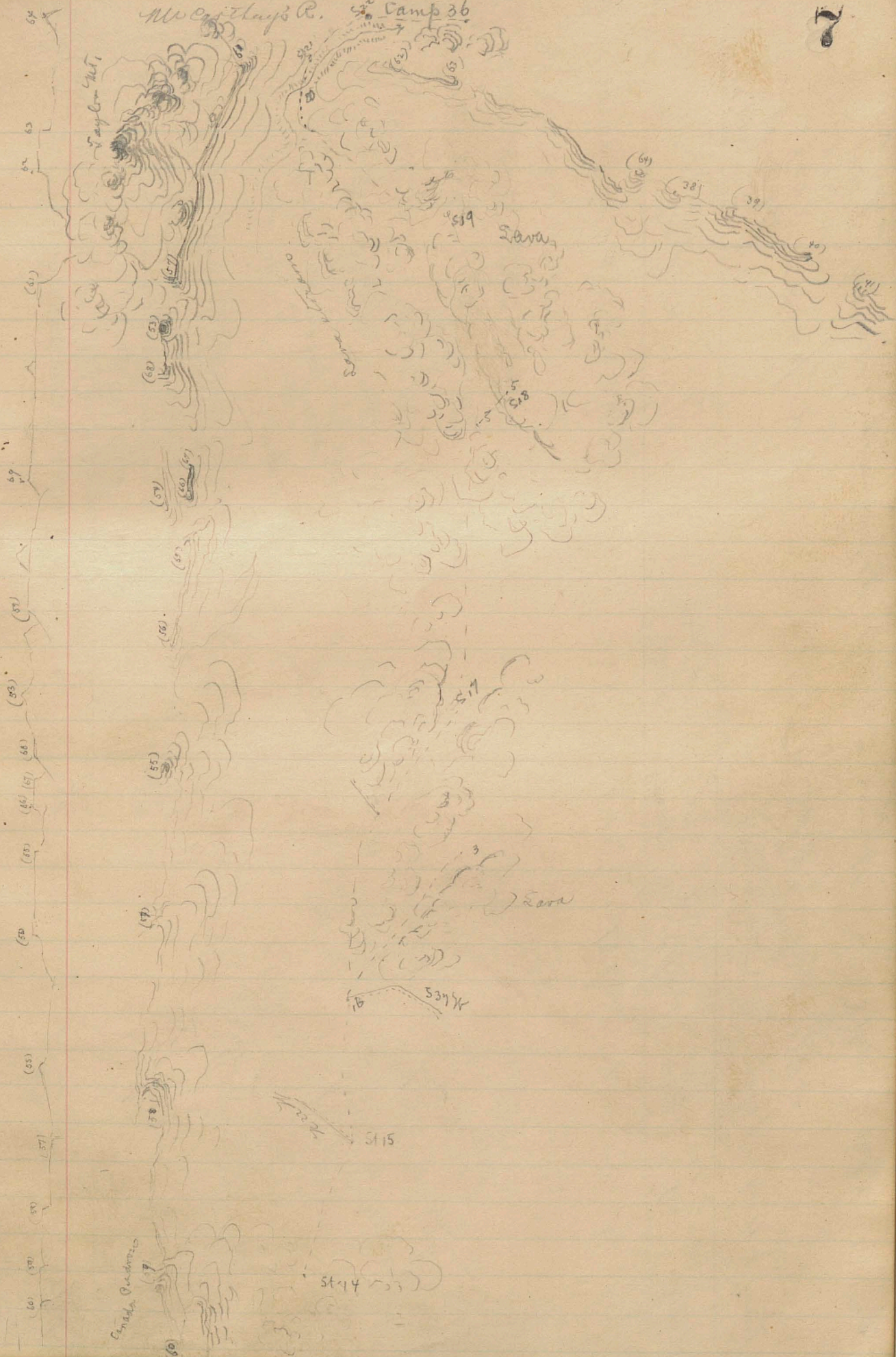
2

Taylor Mt.

Sava

Sava

Canada Pass





Camp No 36 to No 37 at Caversham Topograph. Moore  
 Date Aug 17/895 Instrument used Yungo  
 Transit 4489 Main Party

Magn Bar  
 N Sat  
 S Sat  
 E West  
 W West  
 Travel

Station	Distance by	Per cent Reduct.	Mag. Bearing	Observed Height	Remarks
Camp 36	71245	1.	N 37 E	22.900	5550
Station 1	71265	on wagon road	N 56 E	22.800	5700
Station 2	7170	2.4	N 71 E	22.830	5725
Station 3	8840	1.10	N 76 E	22.875	5700
Station 4	9281	3.9	N 71 E	22.850	5725
Station 5	9281	3.9	N 71 E	22.850	5725
Station 6	9281	3.9	N 71 E	22.850	5725
Station 7	9281	3.9	N 71 E	22.850	5725
Station 8	9281	3.9	N 71 E	22.850	5725
Station 9	9281	3.9	N 71 E	22.850	5725
Station 10	9281	3.9	N 71 E	22.850	5725
Station 11	9281	3.9	N 71 E	22.850	5725
Station 12	9281	3.9	N 71 E	22.850	5725
Station 13	9281	3.9	N 71 E	22.850	5725
Station 14	9281	3.9	N 71 E	22.850	5725
Station 15	9281	3.9	N 71 E	22.850	5725
Station 16	9281	3.9	N 71 E	22.850	5725
Station 17	9281	3.9	N 71 E	22.850	5725
Station 18	9281	3.9	N 71 E	22.850	5725
Station 19	9281	3.9	N 71 E	22.850	5725
Station 20	9281	3.9	N 71 E	22.850	5725
Station 21	9281	3.9	N 71 E	22.850	5725
Station 22	9281	3.9	N 71 E	22.850	5725
Station 23	9281	3.9	N 71 E	22.850	5725
Station 24	9281	3.9	N 71 E	22.850	5725
Station 25	9281	3.9	N 71 E	22.850	5725
Station 26	9281	3.9	N 71 E	22.850	5725
Station 27	9281	3.9	N 71 E	22.850	5725
Station 28	9281	3.9	N 71 E	22.850	5725
Station 29	9281	3.9	N 71 E	22.850	5725
Station 30	9281	3.9	N 71 E	22.850	5725
Station 31	9281	3.9	N 71 E	22.850	5725
Station 32	9281	3.9	N 71 E	22.850	5725
Station 33	9281	3.9	N 71 E	22.850	5725
Station 34	9281	3.9	N 71 E	22.850	5725
Station 35	9281	3.9	N 71 E	22.850	5725
Station 36	9281	3.9	N 71 E	22.850	5725
Station 37	9281	3.9	N 71 E	22.850	5725
Station 38	9281	3.9	N 71 E	22.850	5725
Station 39	9281	3.9	N 71 E	22.850	5725
Station 40	9281	3.9	N 71 E	22.850	5725
Station 41	9281	3.9	N 71 E	22.850	5725
Station 42	9281	3.9	N 71 E	22.850	5725
Station 43	9281	3.9	N 71 E	22.850	5725
Station 44	9281	3.9	N 71 E	22.850	5725
Station 45	9281	3.9	N 71 E	22.850	5725
Station 46	9281	3.9	N 71 E	22.850	5725
Station 47	9281	3.9	N 71 E	22.850	5725
Station 48	9281	3.9	N 71 E	22.850	5725
Station 49	9281	3.9	N 71 E	22.850	5725
Station 50	9281	3.9	N 71 E	22.850	5725
Station 51	9281	3.9	N 71 E	22.850	5725
Station 52	9281	3.9	N 71 E	22.850	5725
Station 53	9281	3.9	N 71 E	22.850	5725
Station 54	9281	3.9	N 71 E	22.850	5725
Station 55	9281	3.9	N 71 E	22.850	5725
Station 56	9281	3.9	N 71 E	22.850	5725
Station 57	9281	3.9	N 71 E	22.850	5725
Station 58	9281	3.9	N 71 E	22.850	5725
Station 59	9281	3.9	N 71 E	22.850	5725
Station 60	9281	3.9	N 71 E	22.850	5725
Station 61	9281	3.9	N 71 E	22.850	5725
Station 62	9281	3.9	N 71 E	22.850	5725
Station 63	9281	3.9	N 71 E	22.850	5725
Station 64	9281	3.9	N 71 E	22.850	5725
Station 65	9281	3.9	N 71 E	22.850	5725
Station 66	9281	3.9	N 71 E	22.850	5725
Station 67	9281	3.9	N 71 E	22.850	5725
Station 68	9281	3.9	N 71 E	22.850	5725
Station 69	9281	3.9	N 71 E	22.850	5725
Station 70	9281	3.9	N 71 E	22.850	5725
Station 71	9281	3.9	N 71 E	22.850	5725
Station 72	9281	3.9	N 71 E	22.850	5725
Station 73	9281	3.9	N 71 E	22.850	5725
Station 74	9281	3.9	N 71 E	22.850	5725
Station 75	9281	3.9	N 71 E	22.850	5725
Station 76	9281	3.9	N 71 E	22.850	5725
Station 77	9281	3.9	N 71 E	22.850	5725
Station 78	9281	3.9	N 71 E	22.850	5725
Station 79	9281	3.9	N 71 E	22.850	5725
Station 80	9281	3.9	N 71 E	22.850	5725
Station 81	9281	3.9	N 71 E	22.850	5725
Station 82	9281	3.9	N 71 E	22.850	5725
Station 83	9281	3.9	N 71 E	22.850	5725
Station 84	9281	3.9	N 71 E	22.850	5725
Station 85	9281	3.9	N 71 E	22.850	5725
Station 86	9281	3.9	N 71 E	22.850	5725
Station 87	9281	3.9	N 71 E	22.850	5725
Station 88	9281	3.9	N 71 E	22.850	5725
Station 89	9281	3.9	N 71 E	22.850	5725
Station 90	9281	3.9	N 71 E	22.850	5725
Station 91	9281	3.9	N 71 E	22.850	5725
Station 92	9281	3.9	N 71 E	22.850	5725
Station 93	9281	3.9	N 71 E	22.850	5725
Station 94	9281	3.9	N 71 E	22.850	5725
Station 95	9281	3.9	N 71 E	22.850	5725
Station 96	9281	3.9	N 71 E	22.850	5725
Station 97	9281	3.9	N 71 E	22.850	5725
Station 98	9281	3.9	N 71 E	22.850	5725
Station 99	9281	3.9	N 71 E	22.850	5725
Station 100	9281	3.9	N 71 E	22.850	5725



(100)

(99)

(98)

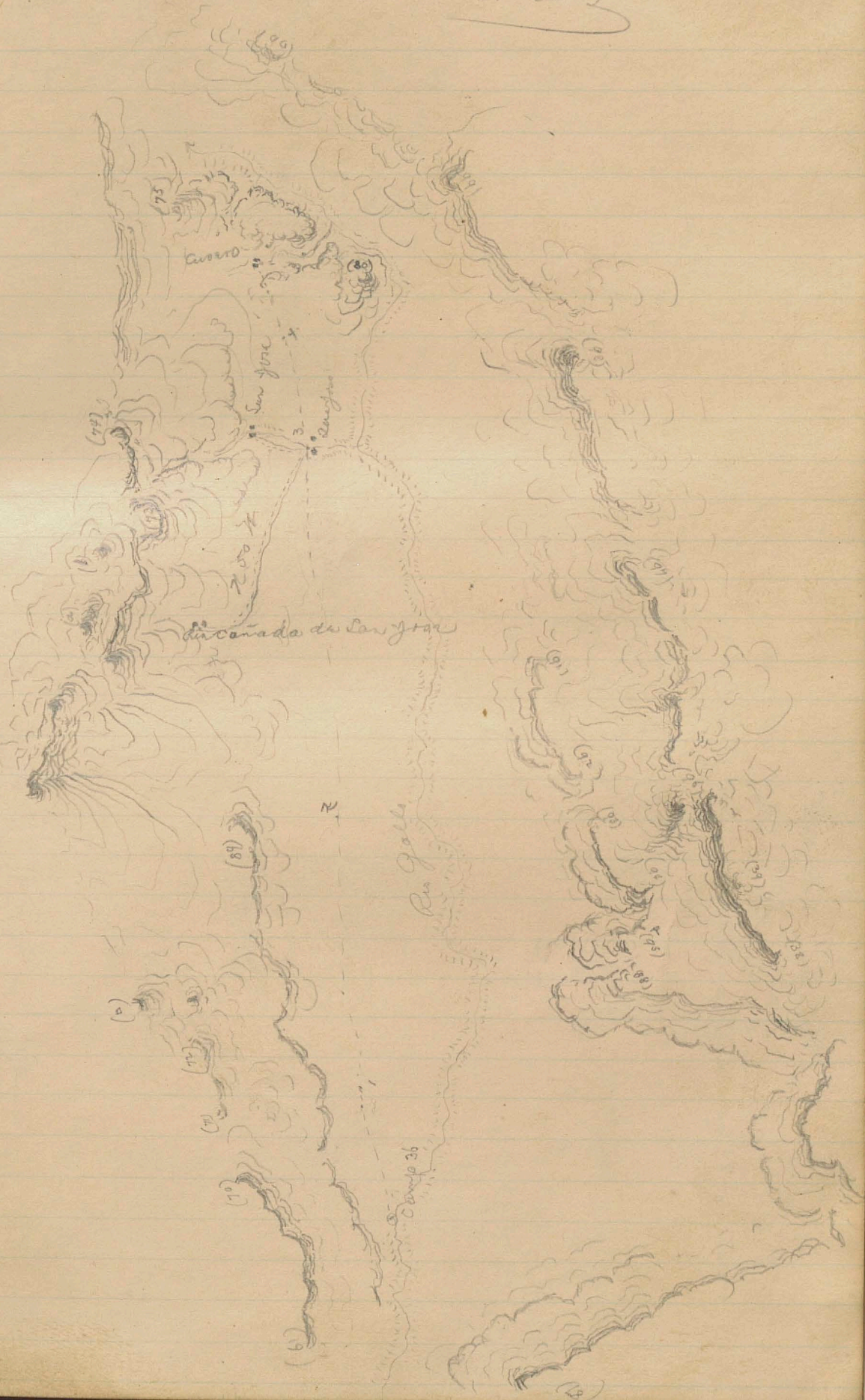
(97)

9

*Miles*

*N.*

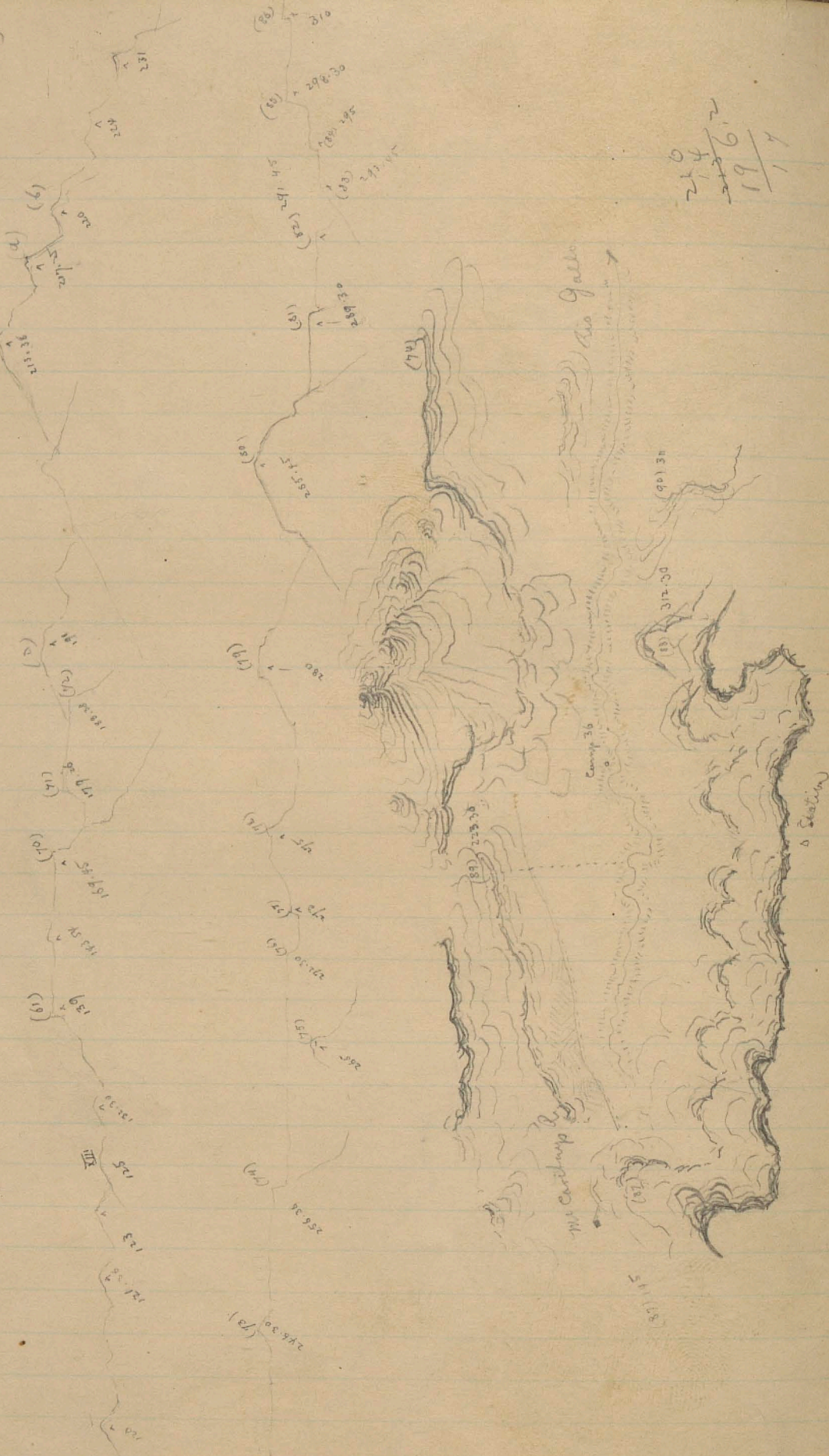
*Saylor*





Station near III Camp 36 at Mc Carthy's Ranch & M  
 M. W. 210.30. Aug 3<sup>rd</sup> 1875

Prancing & Mt Taylor 213.36. hgt Pair 280 Crater 285.45 VIII 125 Camp 36. 257.30 (1 mile distant)



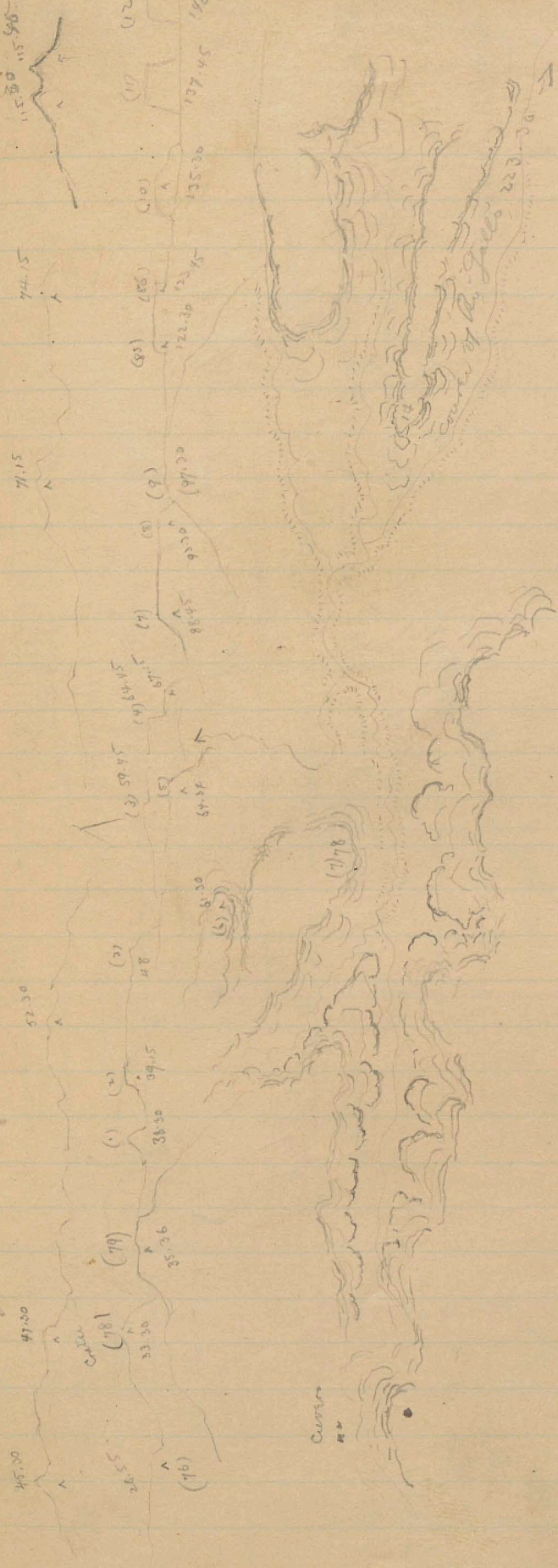
214  
 214  
 19  
 19



Original 17<sup>th</sup> 1875

IV

Topog. Station in the 80 near Curriers & M (M.M. 339.30)



XIII  
To (24) 243.30. M 231.30. Cur 225.15, (66) 245.30. San Jose 251.15 (38) 210.30 ( ) 205.30 ( ) 202.45 (44) 173.35  
(99) 169.45 (100) 165.15 To Camp: 37 (1 mile distant) 353.30  
(97) 190.30

Chenwood N<sup>o</sup> 2048 road on at 5 o'clock P.M. 22, 275, 6450



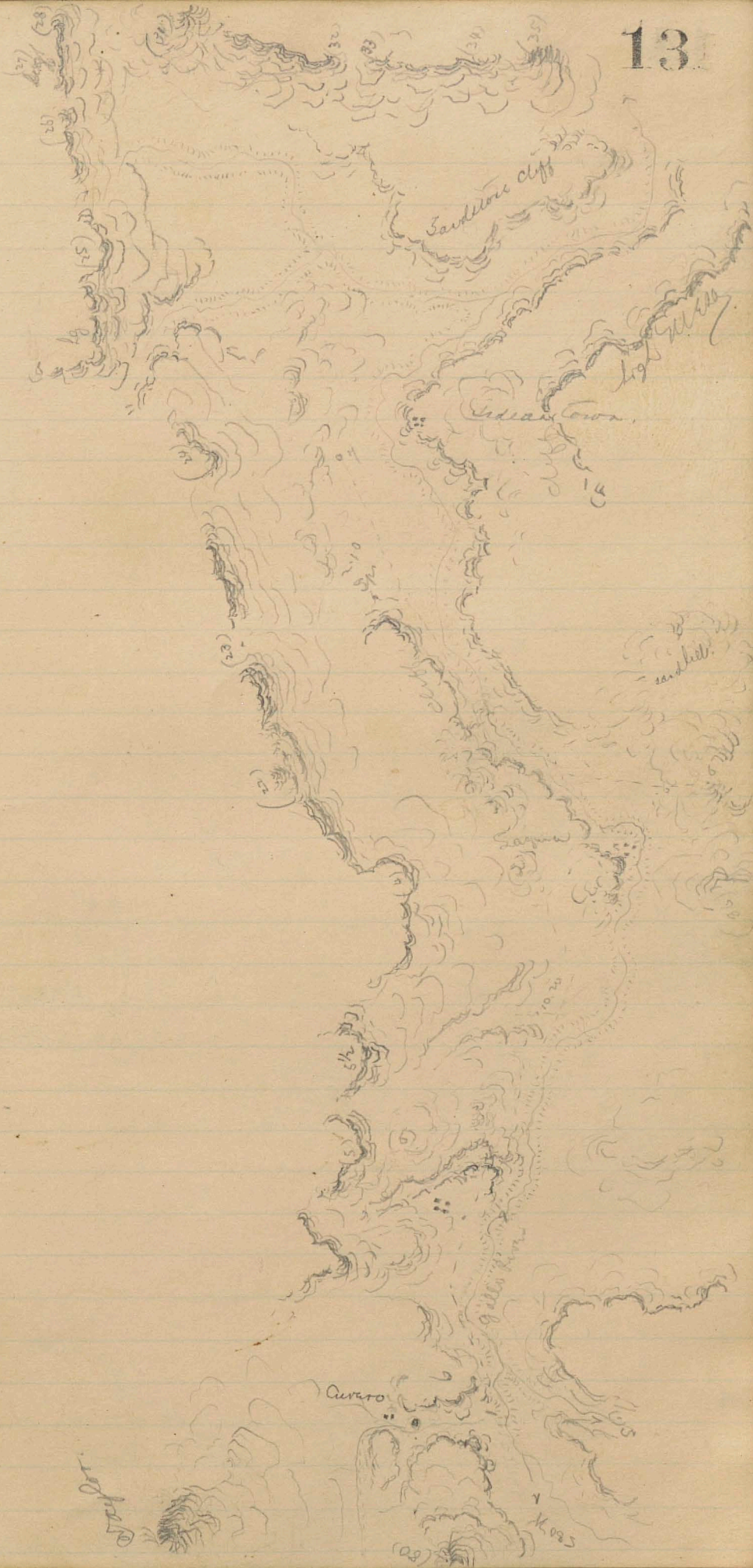
Camp No 37 to No 1 at 4 miles S.W. of El Estero, Texas. (Return on train minimum to Rio San Jose about May 1st.)

Date Aug 18<sup>th</sup> 1875 Instrument used forings

Franklin & Co. Main Party.

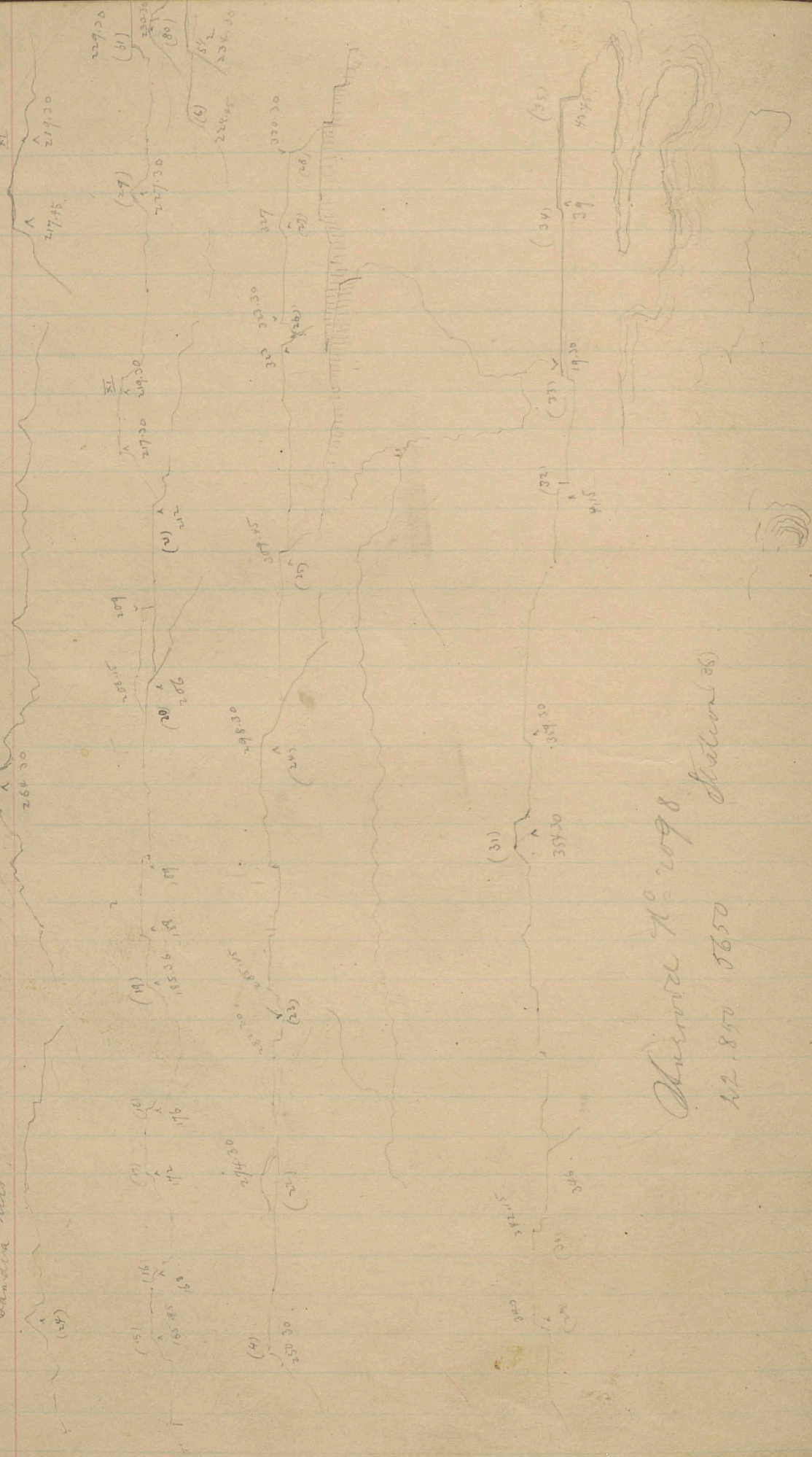
Station	Distance by	Pct. Reduct.	Mag. Bearing	Observed No. 1875	Remarks
Camp 37	7.30	1.7	S 33 E	22.925	(80) 2.697 (80) 2) S 82 W (6) S 88 W
1	8.15 (10)	.4	S 74 E	23.050	
2	8.25	.4	N 84 E	"	
3	8.35	1.6	N 83 E	23.025	(5) 2.75 E (4) N 82 E (6) N 65 E (10) 2) S 84 W (6) S 87 W (4) S 89 W (4) S 90 W
4	9.15	1.3	"	"	Chadron town
5	9.50	1.3	"	"	average from "North" bridged
6	9.58	1.9	S 87 E	22.100	(80) S 88 W (6) S 85 W (5) N 82 W (4) N 82 E (13) S 88 E
7	10.20	1.7	"	center with water not permeable	
8	11.5	1.5	N 75 E	23.100	Bridge at town of Laguna (80) S 89 W
9	12.40	1.2	N 70 E	"	(52) N 83 W (4) N 44 W (4) S 89 W
10	12.10	1.2	"	"	(79) 2.79 E
11	2.50	2.1	N 60 E	23.250	(52) 2.84 W to Chadron town on Main S 88 E







Standard Mts



Quinn 7<sup>th</sup> 2098 Station (36)

22.850 5650



From Station, E. of Mendocino  
Sierra Nevada

Sierra Nevada (Pelona)

15

En Sadrans

Sigle S282E

S86E

S74E

S70E

S69E

Cone

N40W

Station near Camp 1 of Lido party Aug 18<sup>th</sup>  
M M 206.

To Mt Taylor 139.30 to En Sadrans 357

to Mangana Mts (a) 312.15 (b) 314.30 (c) 315.15 (d) 314.45

to Cone 252. to (35) 303 to Sierra Nevada (d) 3.30 (e) 5.15 (f) 7

(37) 7 = 325.15 (38) 7 = 328. to Pelona Sierra Nevada 19.30

to Camp on drain running S to Rio San Jose (334) (3/4 miles distant

to El Rito 25. to (39) 334. (40) 340

En Sadrans

(37)

(38)

(39)

(40)

San Jose

Cerro Verde Pelona

El Rito

Camp

Station

near Camp 1 of Lido party



Camp No 37 to No 1 (by station of El Rio) <sup>train running to Rio</sup> San Jose, Mexico 2700

Tapanog

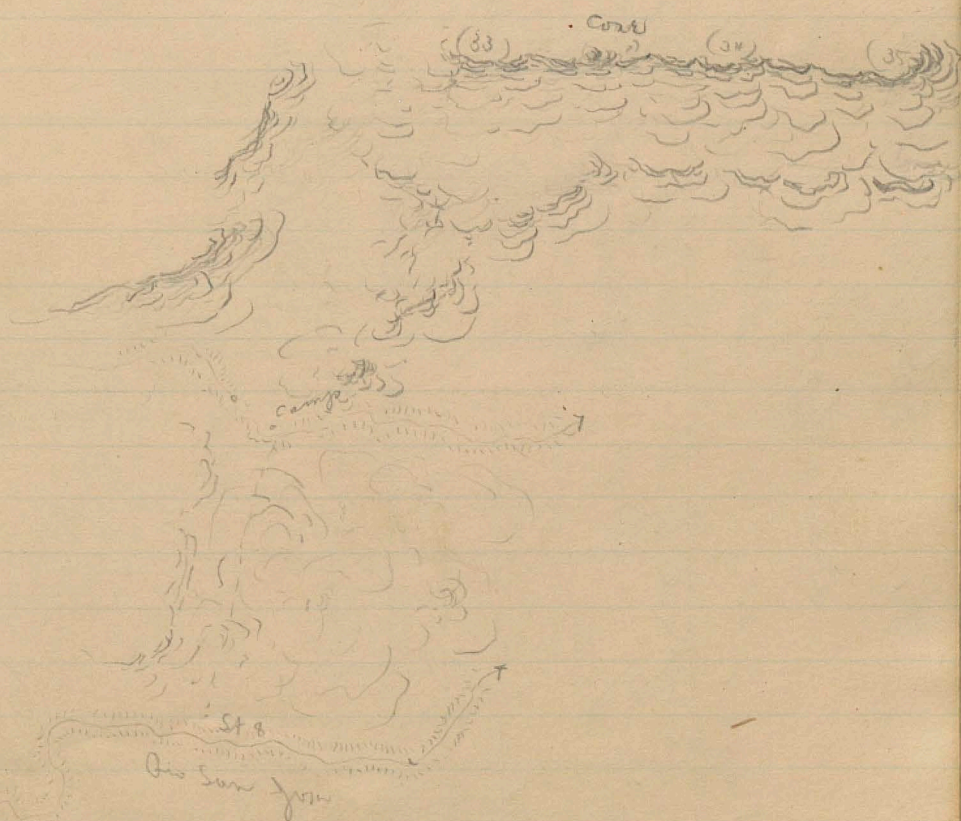
date Aug 18 = 1845 <sup>Chetumal used Youngs</sup>

Transect No. Man Carty.

Mag 18  
N Sat  
S Sat  
E Sat  
W Sat  
Stand

Station	Distance by Path	Perct Product	Mgs Bearing	Sheppard No 298	Remarks
8	3.55	1.2	N 40 E	5300	5. Redwood Grove of Stat 8 S 44 N 75 Brownells
Camp	4.30	15.5		5200	87 E & Sierra Tuxtepec & El Rio S (33) 7286 (34) N 67 E (55) 777 E







Camp No. 1 to No. 2 40 miles S.W. of Mesa de Papago. ariz.   
 Date Aug 19<sup>th</sup> / 84<sup>th</sup> Instruments used Youngs

Traverse No. Main Party

Station	Distance by Watch	Baromet	Magni. Bearing	Ascent to 1000	Remarks
Camp 1	7.10	2.4	N 45 E	23.275	5775
St 1	8.40	2.4	N 59 E	22.550	6070
2 (Wind)	9.10	2.4	N 20 E	22.465	5900
St 2	3.15	7.0	S 41 E	23.070	6100
St 3	6.20	1.	S 41 E	23.100	5760
Camp 2	6.43	19.8		23.070	5300
				5760	5725

(35 on Mesa) Summit at Base of Mesa 23.225 5725

Magn. Bar.   
 W. Bar.   
 S. Bar.   
 E. Bar.   
 W. Bar.   
 Chisel





to Rio San Jose



Camp No 2 to No 4 at  
 date 1875

Magyar  
 N Sat  
 S Sat  
 E Sept  
 W Sept  
 Travel

Magyar

1875 Instrument used

Party

Station	Distance by Water	Per or Reduced	Magyar Drawing	Remarks
Camp 2	5.20		88 E	23 17
Stat 1	5.50			57 60
				W. M. & S.
				W. M. & Station Y 172. S. 40. 17. 43

23 17

88 E

57 60

W. M. & S.

W. M. & Station Y 172. S. 40. 17. 43



near Camp 2 of Aug. 19. d. 1875-

Section 4 of Lake Party

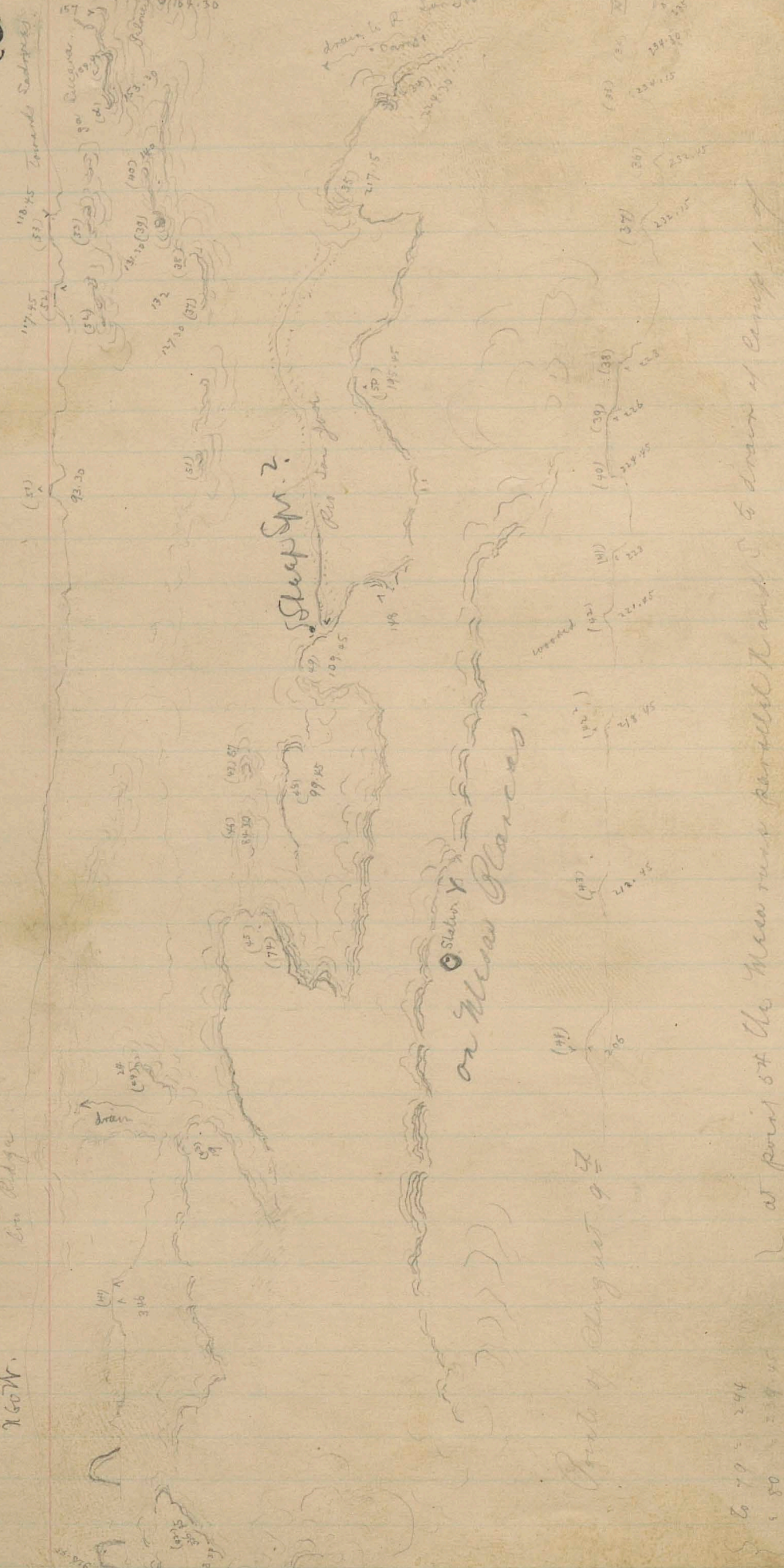
Sandia. 133.45

Sadrone 245.15



Mag. var.

Station Y on log. cliff. W. 22.7. 30 August 1911  
 S. 710 Taylor 265 Cal. 220 333.15  
 1882  
 160W.



at point 54 the main runs parallel N and S to drain of Camp 1

to 49 = 244

580 234.00

of station near the center of the map

Point of August 9<sup>th</sup>







Camp No 2 to No 3 at <sup>drain of Rio San Jose from Sta. Fendle</sup> <sup>amount 188</sup> Sapogn. arkan

Aug. 20<sup>th</sup> 1875 1875 Shelbourn used young

Transit No. Main Party.

Station	Distance by Road	Per cent. Reduced	Magnet Bearing	Magnetic North		Remarks	Mag. Var
				Inclination	Declination		
Camp 2	5.20	.8	58 E	23.00	5760		N. Sat
Stat 1	5.40	1.2	55 W	23.300	5750	to Station 172	S. Sat
" 2	6.30	4.8	55 W	23.325	5725	Sadown 8.15 E. Sadown N 81 E	E. Sat
" 3	8.30			23.350	5700	Sharp Sp.	N. Sat
On Sharp Spring 4.5 m.							Travel

(54) 7452



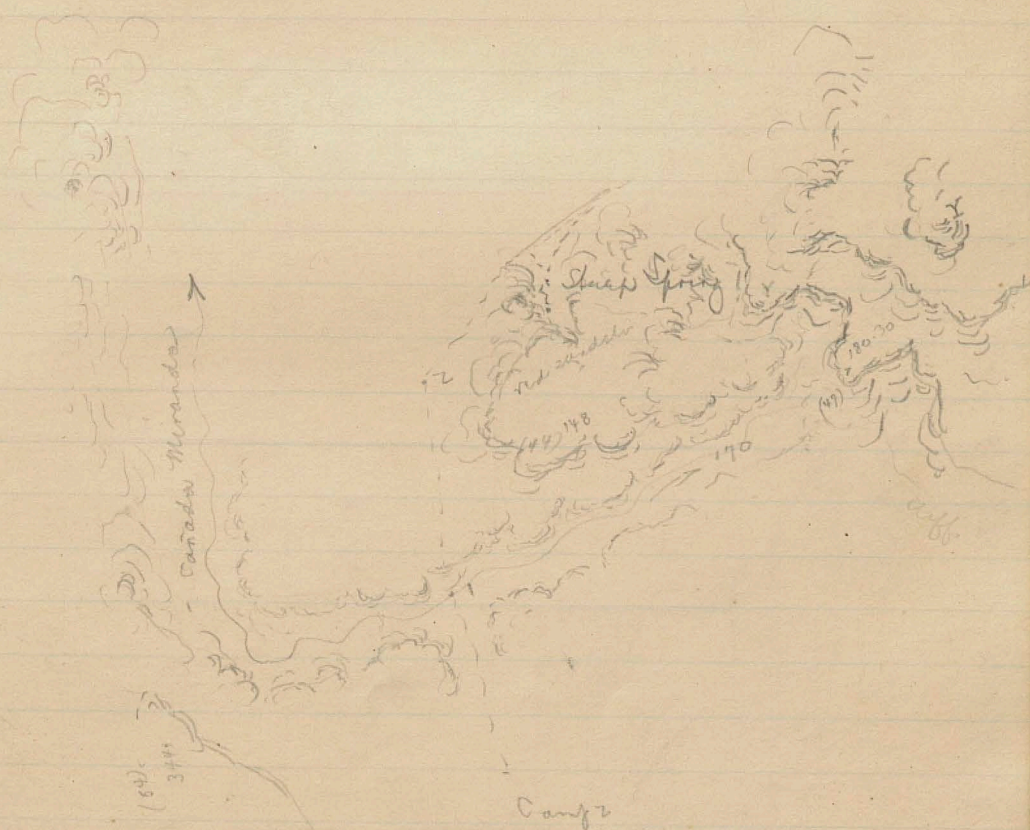
Topogr. Station from Station 1. of

M. W. 238.45

25

August 20<sup>th</sup> 1875 Harrods Co. 2098

5



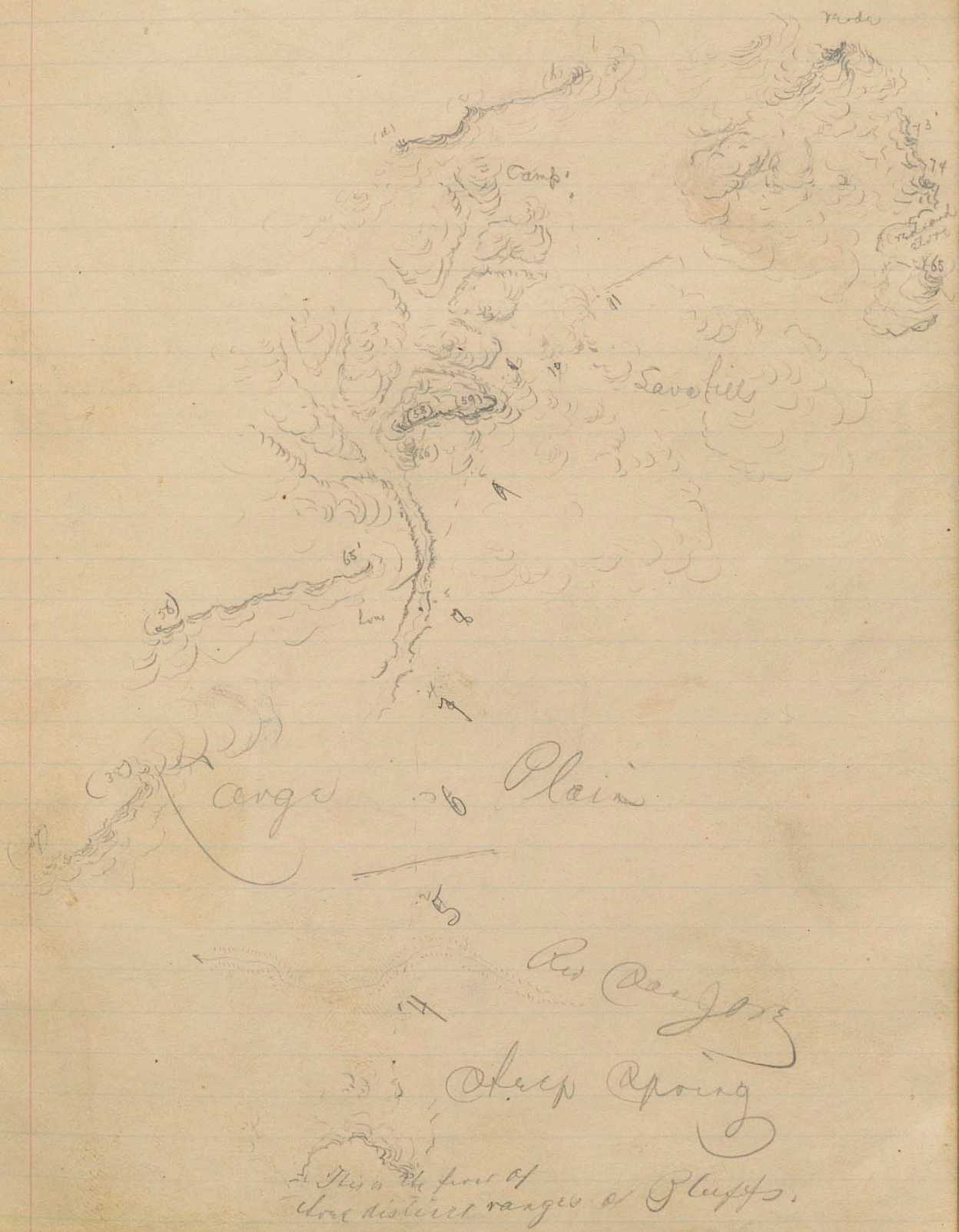


Camp No 2 to No 3 at <sup>train from S. to Verde & Rio San Jose</sup>  
 stopped at road

Station No 3 at <sup>20<sup>th</sup></sup> 1875 between road & young  
 Main Party

Station	Distance by Horse	Per cent Road	Mag. Bracing	Distance No 2098	Remarks	Mag. for N. 2098 S. 2098 E. 2098 N. 2098 S. 2098
May 3rd	11 miles	.8	S 54 W	23.350	23.350	Sanded Mts N 51 E near Taylor N 67 W
Station 4	11.20 <sup>up 15 min</sup>	3.2	S 27 W	23.425	5000	Washed Mts N 51 E (37) S 46 E (38) S 46 E (38) S 70 E
5	12.20 <sup>down 10 min</sup>	2.8	S 13 W	23.425	5000	Washed S 15 W (56) S 24 W (58) S 24 W (59) S 42 W
6	1.10	1.2	S 16 W	23.425	5000	crossed Rio San Jose (E. 2098) S 42 W
7	2.30	1.2	S 16 W	23.425	5000	(57) N 84 E (58) N 77 E (59) S 73 E Sanded Mts N 50 E
8	3	1.2	S 16 W	23.425	5000	Mts Taylor N 55 W (61) N 57 W (62) N 57 W (63) N 57 W (64) N 57 W
9	3.30	1.2	S 15 W	23.425	5000	T. 310 45 Taylor 257 Sanded Mts 3 Sanded Mts S 70 W
10	4.25	.8	S 9 W	22.925	5550	(44) M. 74.15 } got on wagon road (Y) 73 Taylor 18 Sanded Mts 122 in brush to left of road
11	5 PM	2.4	S 35 E	22.875	5550	M. 74 96.25 Taylor 43. Y 98.30 Taylor 193.30 Y 250 30 M. 74 245.35 (55) 232 Taylor 428 74.15 74.15 Sanded Mts 445 E (56) S 29 E (57) S 29 E
Camp 3	6 PM	2.6		22.700	5760	(25) (R. 2098) (55) S 33 W Sanded Mts 445 E (56) S 29 E (57) S 29 E Sanded Mts 445 E (56) S 29 E (57) S 29 E



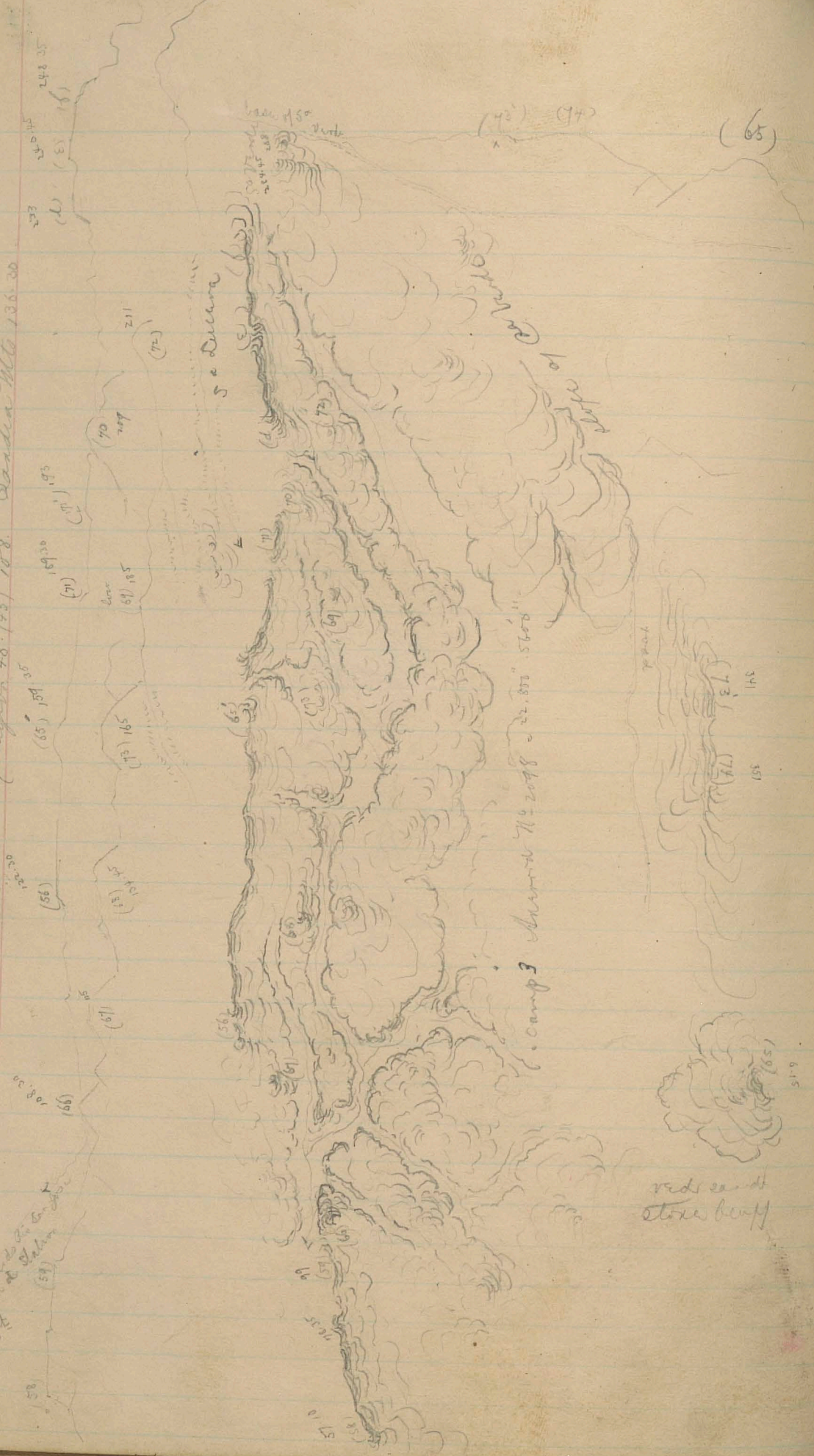




Station near Camp 3 of Lake party. Aug 27 25. Summit of Sheep Mts.

IX  
 mapping from base of Sheep Mts.  
 5. of Aug 26. 44

M. M. 95. 7337  
 Taylor 48. 143. 108. Soda Mts 136. 30



Camp 3 Summit 22,878 - 22,878 5608"

red sand stone bluff



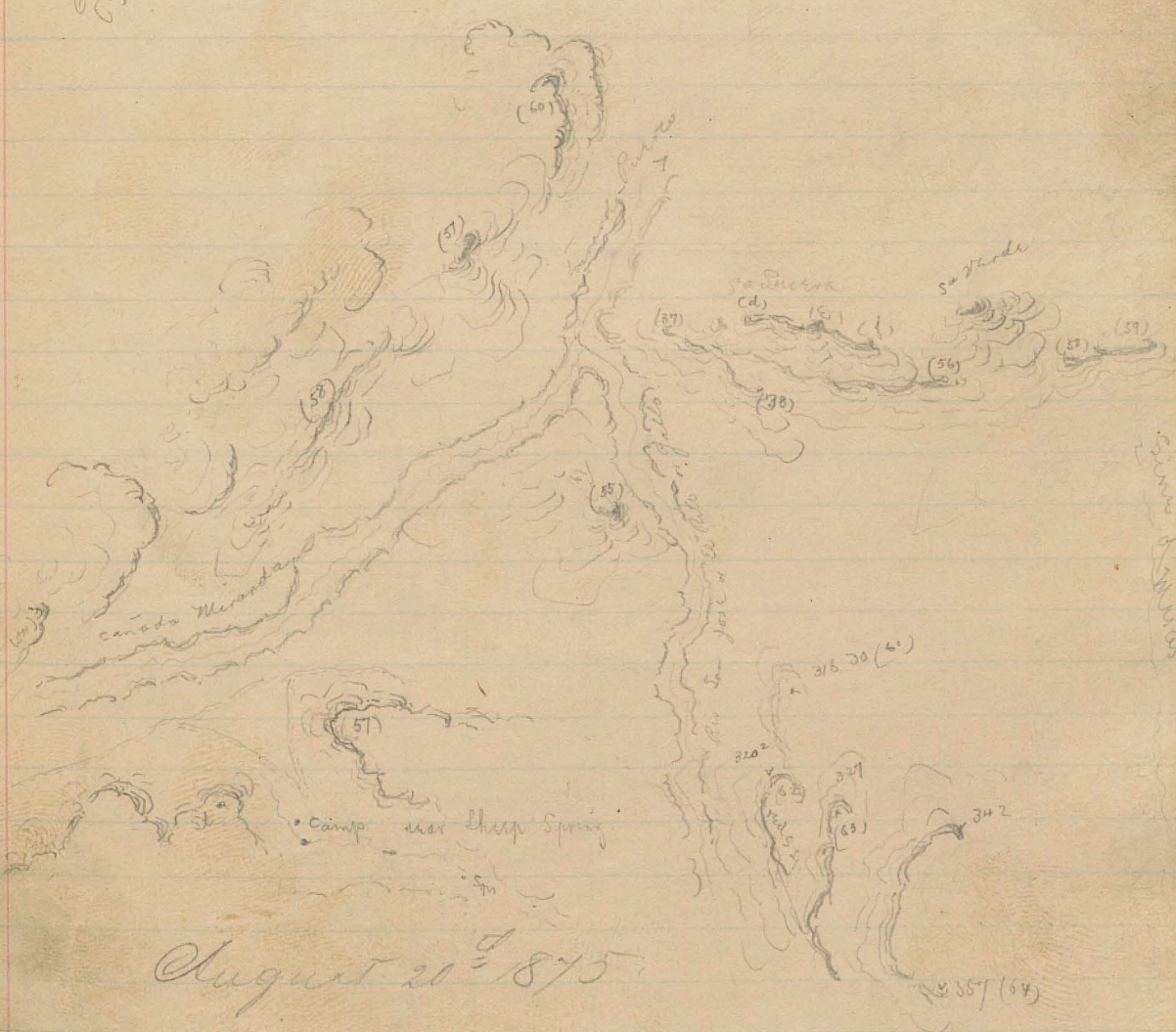
Popoq Station near Chaco Spring August, 20<sup>th</sup>  
41. 34. 45.

8680  
2045  
6635

To Mt Taylor 324.15

(39) 205

0 (54) 841 (58) 154.15 (57) 168 (60) 171.30 (55) 192 (37) 193 20 (38) 292.30 Succra (d) 217  
(2) 218 (6) 221 (56) 22.45 S<sup>o</sup> Verde 231.30 (58) 233 (59) 237 (57) 291.30  
to Camp 1/2 mile distant ) 349



August 20<sup>th</sup> 1875



Station <sup>of August 20th</sup> No 3 at train from Sa Vender Topographer  
 Camp No 3 to Rio San Jose  
 Date 1875  
 Party

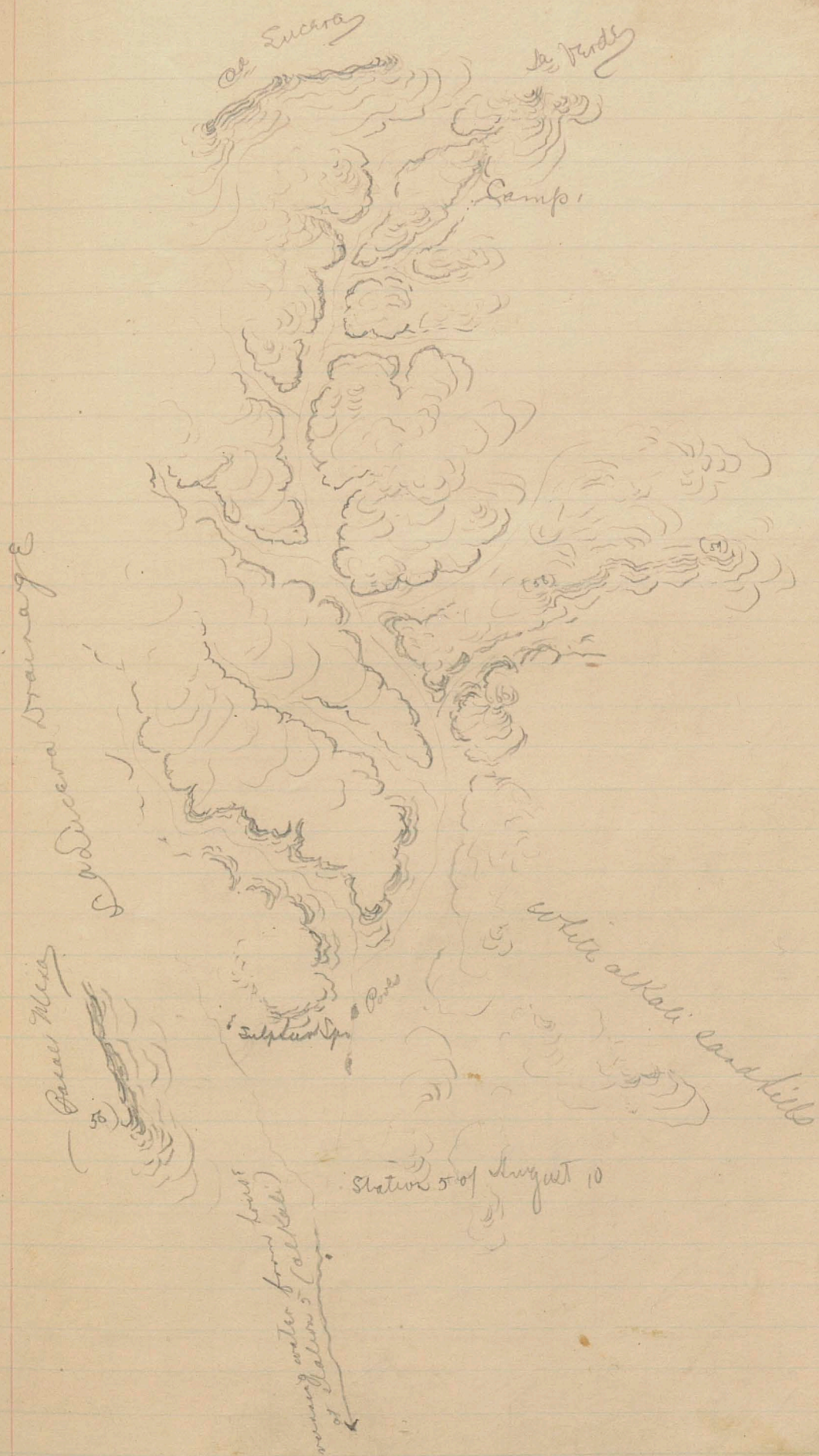
Magran  
 N Lat  
 S Lat  
 E Sept  
 W Sept  
 Travel

Station Distance by Road  
 by  
 Mag. Bearing  
 Observed to  
 Chelco Street

Remains to

The distance from Camp  
 to Station 5 of August 10 was  
 made on foot over mule  
 having been away early in the  
 morning the sketch on page  
 31 is an exact map of the  
 route made







Station of August 20<sup>th</sup> Camp  
Camp No. 8 to No. 4

at distance from S. a. Lucca to  
Riv. ran for 2.5 mi.

Topogr.

Mag. ran  
N. Sat  
S. Sat  
S. Sat  
S. Sat  
S. Sat

Arkand

Water Aug 20<sup>th</sup> = 1875

W.

Main Party

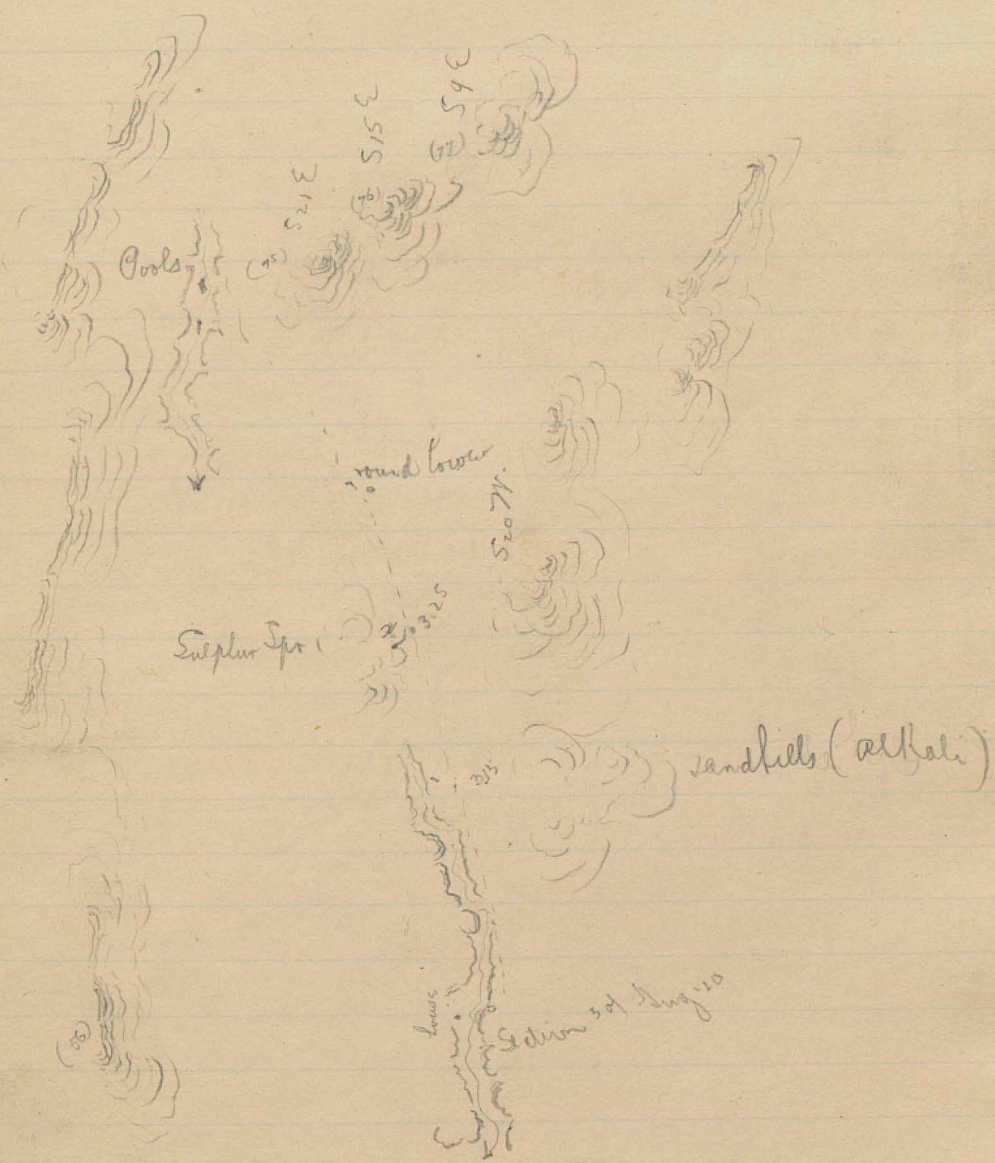
Station	Distance P. or by Road	Mag Prancing	Remarks
Station 8. 3 P.M.	1.5	59 E	
1	3.15	7	
2	4 P.M.	2.2	
3	4.15	.7	
Camp 4	4.35	1.2	
		5.3	

Land of drain is water ground

or Sulphur Spr. Taylor 100 ft. N. 71° W.  
on round stone tower



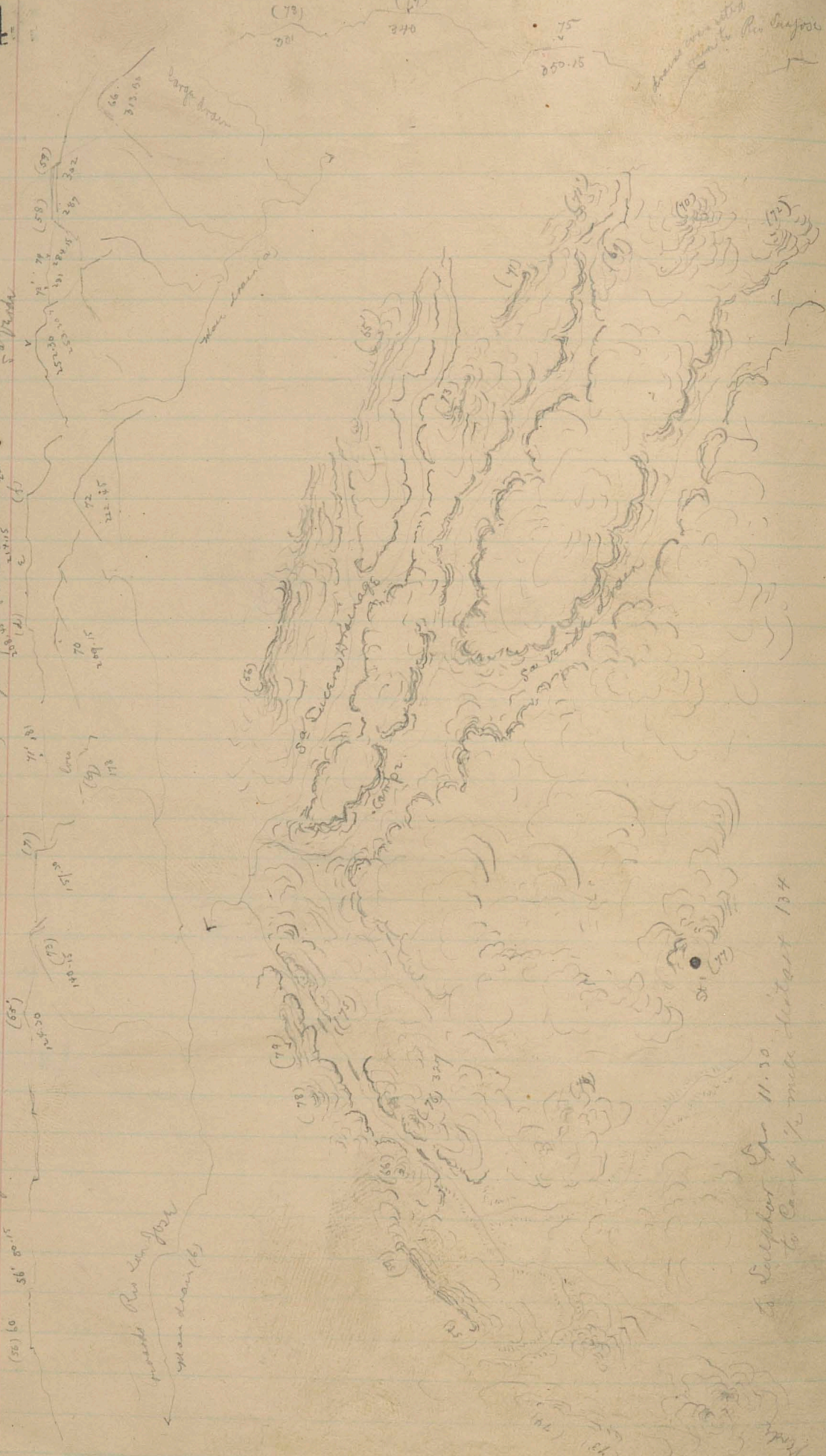
1771  
60 2





XII

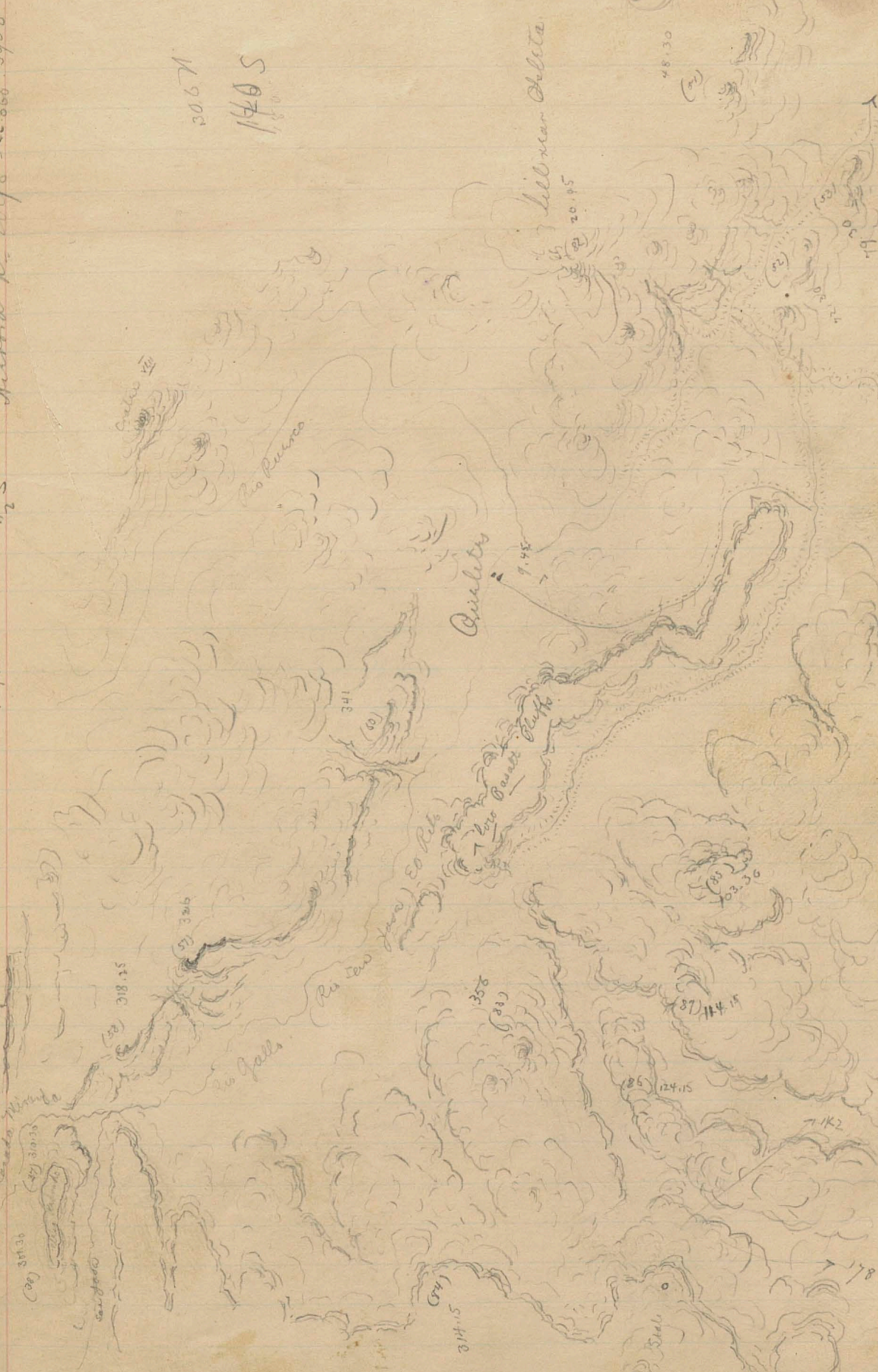
Topog. Station near Mts. Suesca  
 M. W. 42. Howard N. 2098  
 M. Taylor 357.45 Y. 38.45. 42 (worked) 317.  
 22.900 5700  
 30.5 8.0 Suesca  
 1.15 1.15 (4)



Suesca Sp. 11.30  
 to Camp 1/2 mile distant 134



XIII  
Station 6 near Camp 4 (August 22 1895) M 320.00  
Cabrera 312.45 (43) 335 Crater 354.50 Harding M 5.15  
Ladron 126.20 I 298.36 (188)  
" 2 S Meroid No 2198 = 22.660 5900



1405  
3067

48.30  
(m)

Liberal Delta

18

18

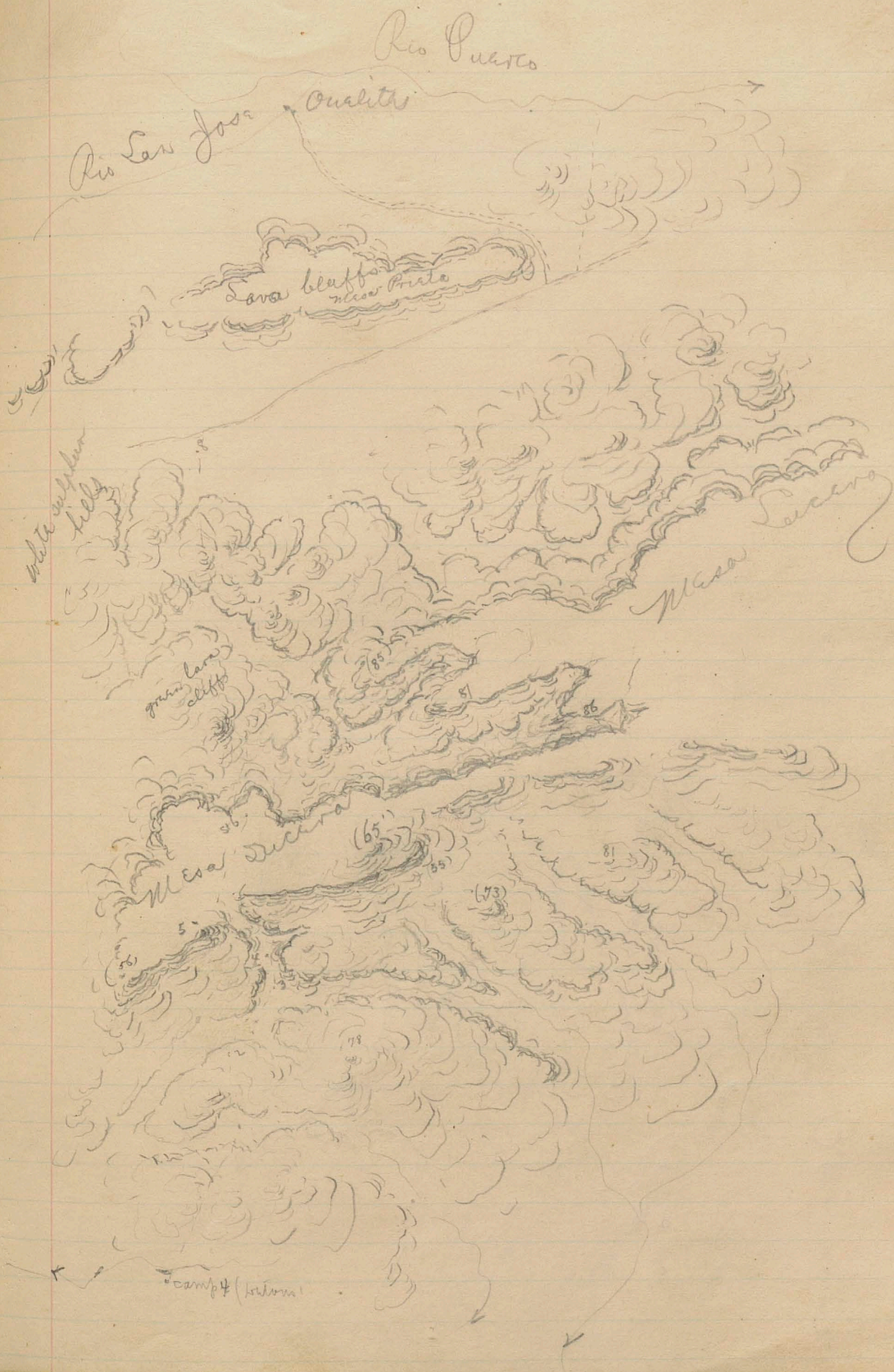


Velvet

Vopographien Karl  
Grunge Thales.

May. 20.  
N. Lat  
S Lat  
E Sept  
W. Sept  
More



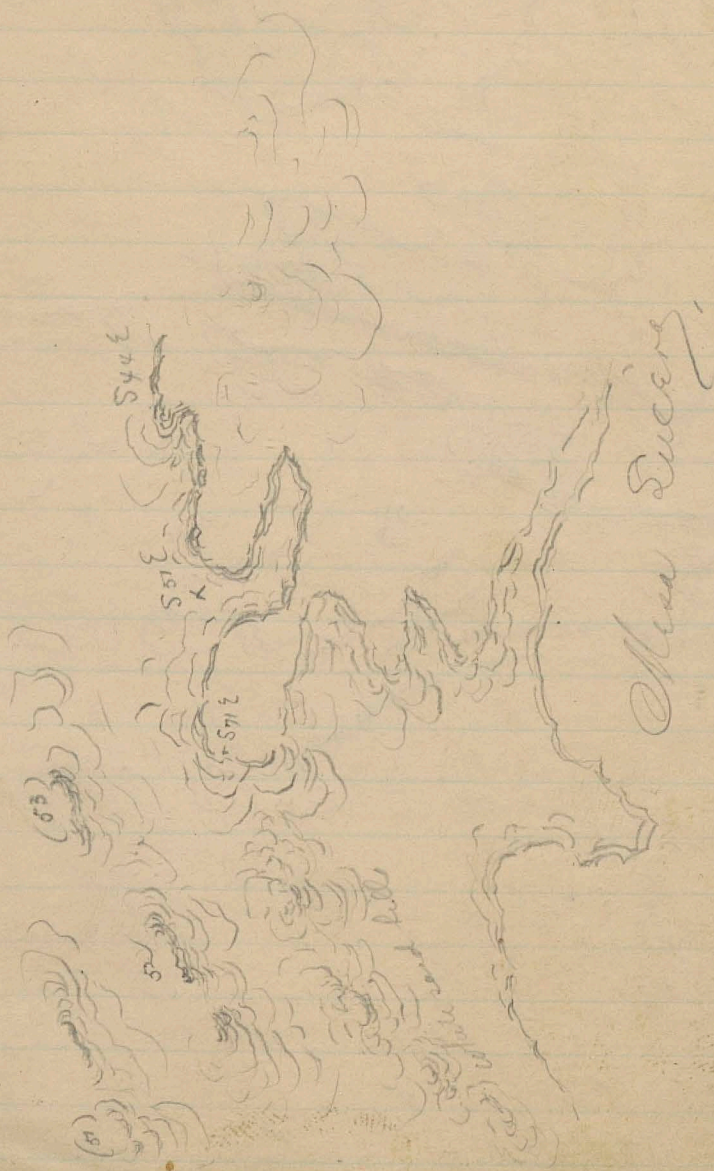




KTV

Sodona S 28° E Sandia N 36° E

Aug. 22<sup>nd</sup> 1895





Station 8 of August 22 of Lake party. M. M. 28 second of 1898  
22,500 - 6400

Cabon 15.45 Sandie 66.30 Sedona 183.48 (17) 106

123 (52) 131 53 136 129 126 117 105 100 88 30 81 33 54 80

to Rio Grande

1/2 only

1/2 only

1/2 only

1/2 only

1/2 only

1/2 only

1/2 only

1/2 only

1/2 only



XIV

Forrester

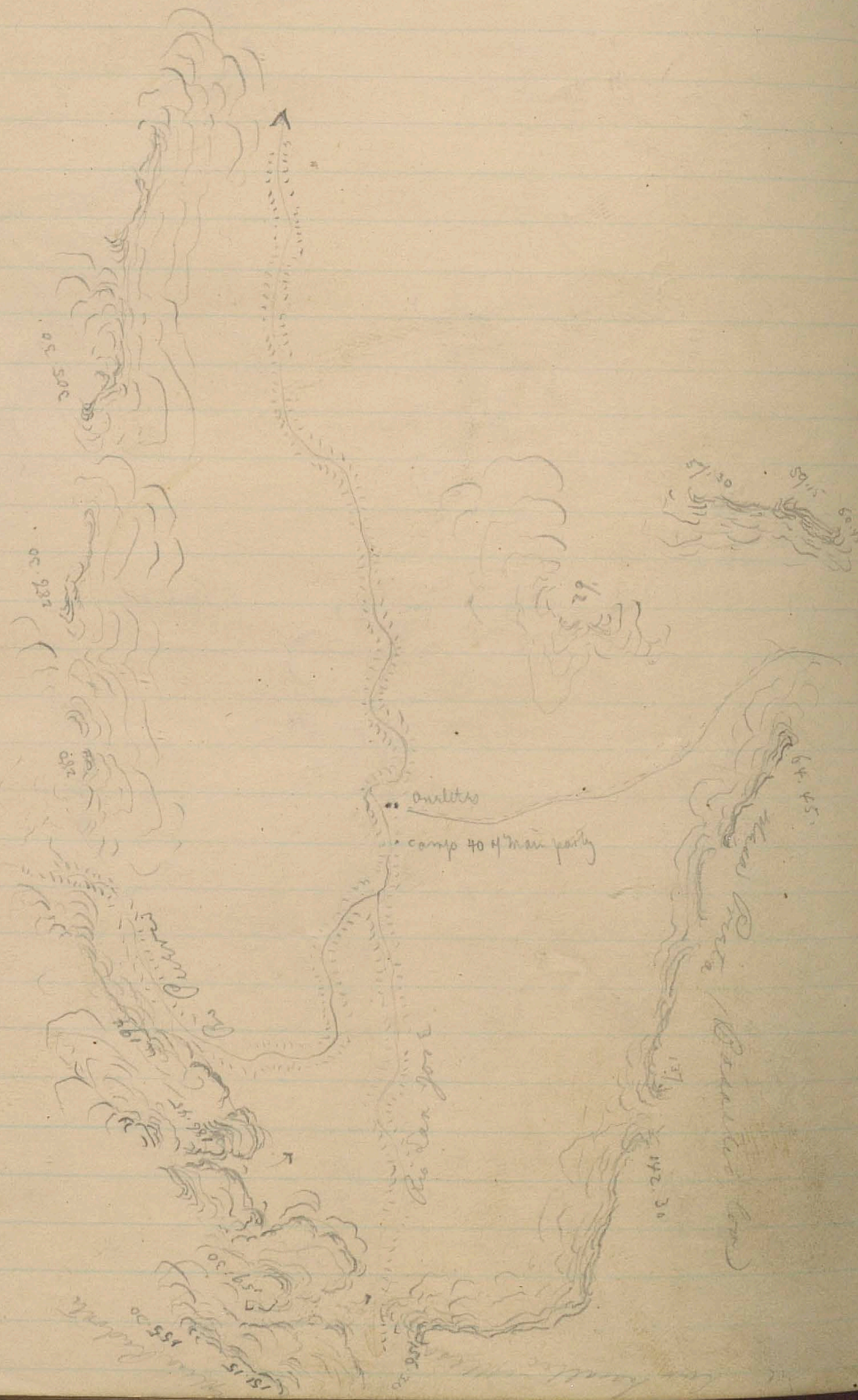
Pin Puma

San Juan

San Juan



Station at *Chacabuta* N. M. August 23<sup>rd</sup> 1895 M. M. 234.35  
 Mt. Taylor 188.45. Saddle Mt. 274.45 Saddle 47. Mangera 319.5  
 Summit No 2048. = 23,825. 4660.





**XV.**

August 23<sup>rd</sup>

M. 411. 247. 40. Taylor. 165. 20. (43) 242. 30. Sanders 144. 36. Saddons 71. Gales 243. 30.

August 11. 1098. 22. 930. 5825. and 1096. 513.

222  
53

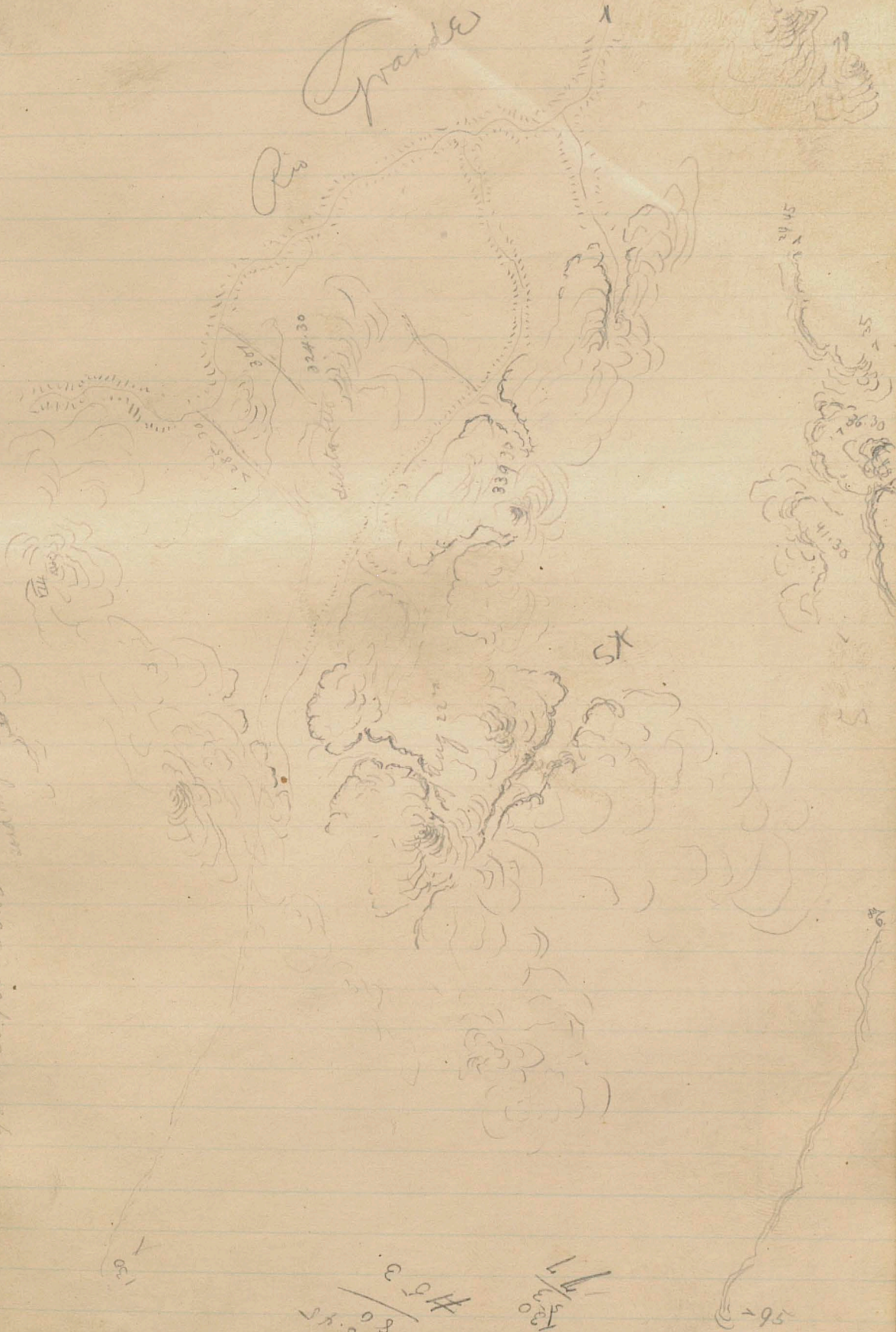
41

31.20

(51)

Grande

Rio



217.45  
180  
#233.45  
#53

7/30

295



Camp Notes to the H. or Delta N. M. Synagogue a Rail  
 Date August 23<sup>rd</sup> 1875 Instrument used Jorgo  
 Francis the Man Party

Station	Distance by	Alt. or Road	Mgn. Bearing	Known Groups	Check Feet	Remarks
Camp 40	7.40	1.6	S 27 E	23.825	4660	crossing of Rio Puerco
Station 1	8.30	3.4	N 60 E	23.850	4645	
" 2	10.0	1.2	N 87 E	23.810	5210	MT Taylor N 44.35 (43) 119 45 Sandia N 152 W 152
" 3	11.10 AM	1.2	S 74 E	23.305	5200	Sanderson 292.45 71.5 W 14.30 MT Taylor N 71.7 W Sandia N 36 E Sanderson S (51) S 68.2 E
" 4	11.35	1.2	N 74 W	23.300	5225	S 76 E struck a wagon road MT Taylor N 71.7 W Sanderson S 53 W Sandia N 134 E
" 5	12.	1.7	N 30 E	23.375	5750	(82) N 49 E MT Taylor N 72 W Sanderson S 57 W Sandia N 133 E
" 6	12.45	2.4	N 30 E	23.375	5750	on drain / left wagon road on wagon road bearing E and W Taylor N 74 W Marzala S 99 E / 6) N 39 W
" 7	1.40		N 74 E	22.960	5600	Sandia N 31 E Sanderson S 50 W Marzala S 86 E
" 8	2.30	2.4	N 74 E	23.200	5850	Sanderson S 42 W Sandia N 25 E Marzala S 85 E
" 9	3.30	2.4	N 74 E	23.600	4900	struck road large stream Sandia N 22 E Sanderson S 47 W to level of road
" 10	4.15	1.6	N 84 E	23.650	4850	at road (43) N 15 W Sandia N 20 E S 50 E Sanderson S 85 E
Back	4.40	1.2	S 64 E	23.800	4700	
		20.3				

Major  
 N. E.  
 S. E.  
 E. S. E.  
 W. S. E.  
 W. S. E.







May per  
May per.  
N Eat  
S Eat  
E Sept  
W Sept  
W Travel



4950  
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2426  
2175  
2510

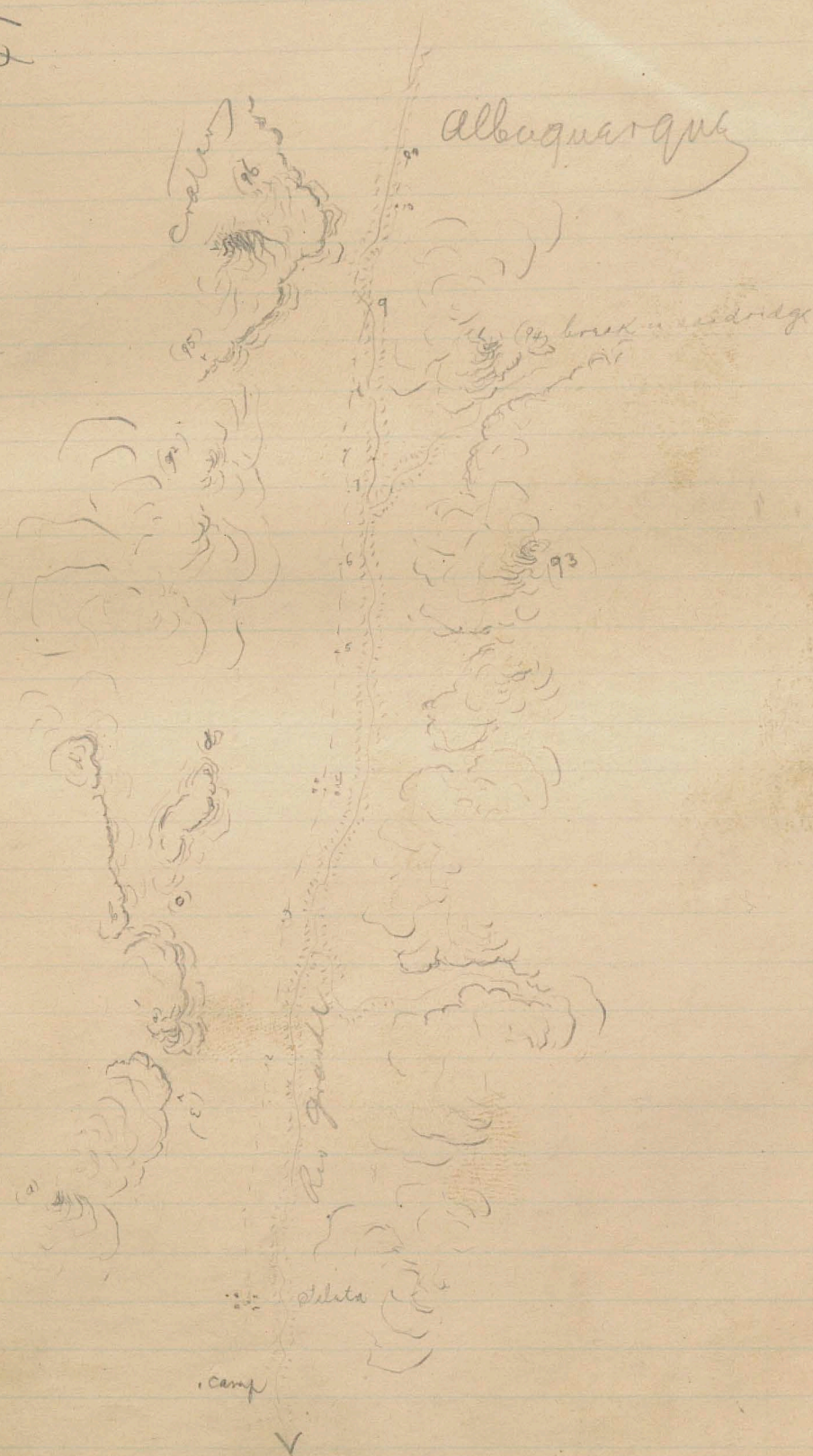
435 = 56

94

44

2510  
4950  
4160

435 = 9













St of Albuquerque  
to Rio Grande

7.8	3.20	.8	2	23.275	52000
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4.45(5)

Cramp, 5 vol. 2K

881

Baldy 168 Sandia 214

23, 100 54.92/26.43

2125

126 8

Sandia 152 Crater 244.15

(8) 112 m. m. 64.30

Shish, 1953, 1954, 1957

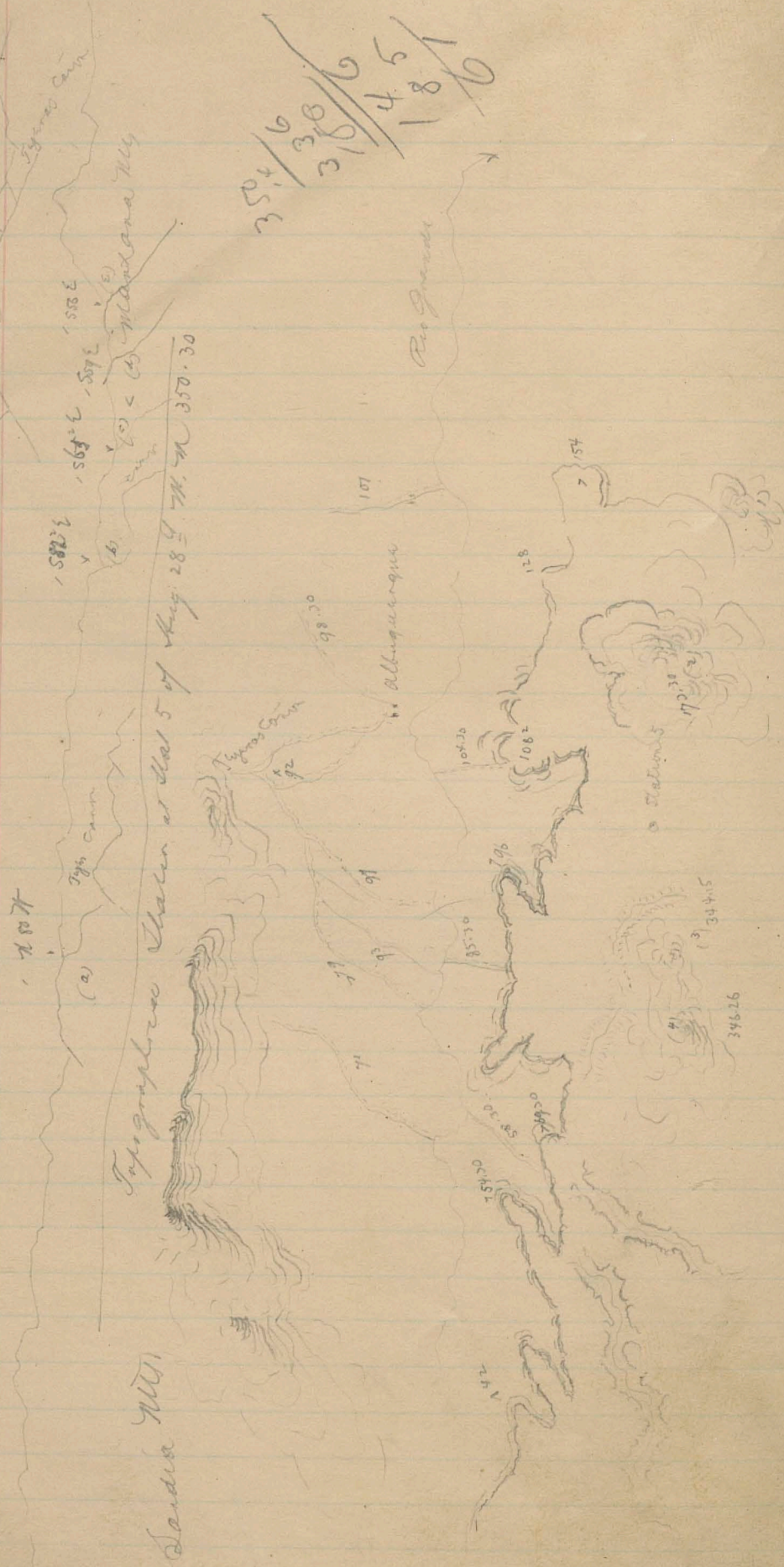
2/11/13

~~St. Elizabeth~~









354/6  
308/6  
318/6  
45/6  
185/6

Chen

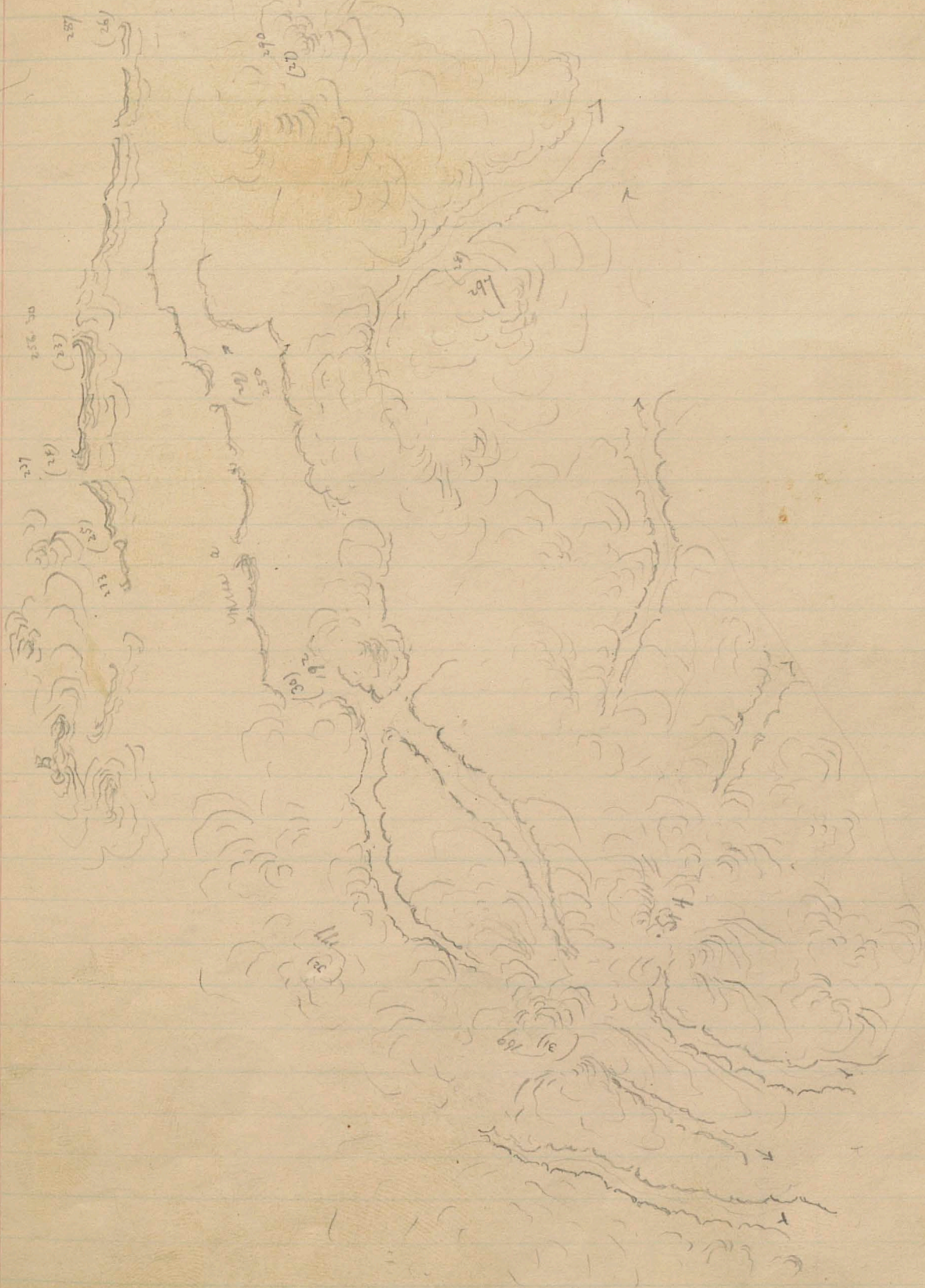
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over the ground

XIII Station on Station 4 of Aug 29 1875 M 216.30  
Serdia 325.15. Warkana 10 Crater Sadronay 42.15 Station 184.30 A 181.30 B 215



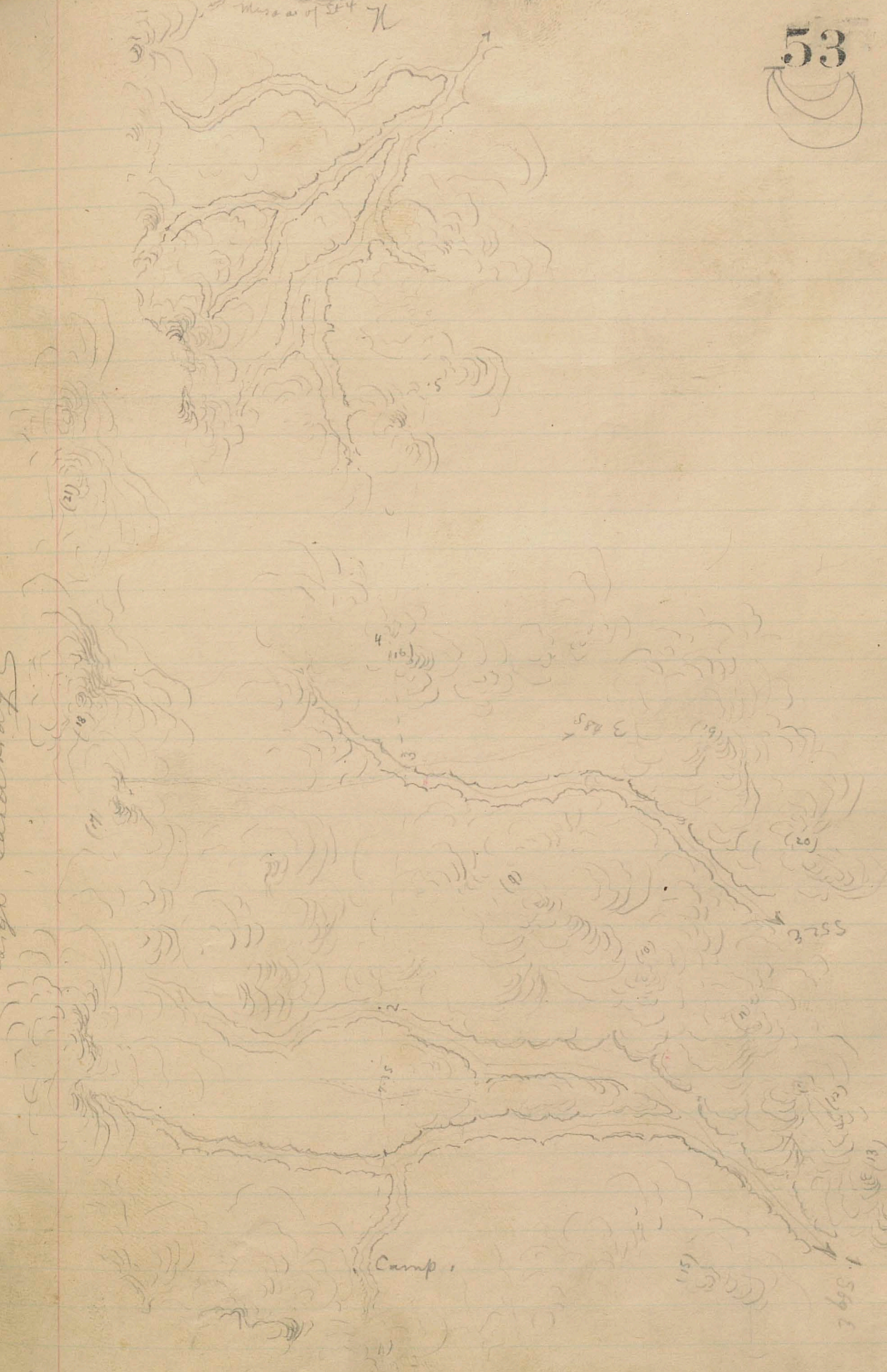


Topography of Karl



Mesa as of St 4 7

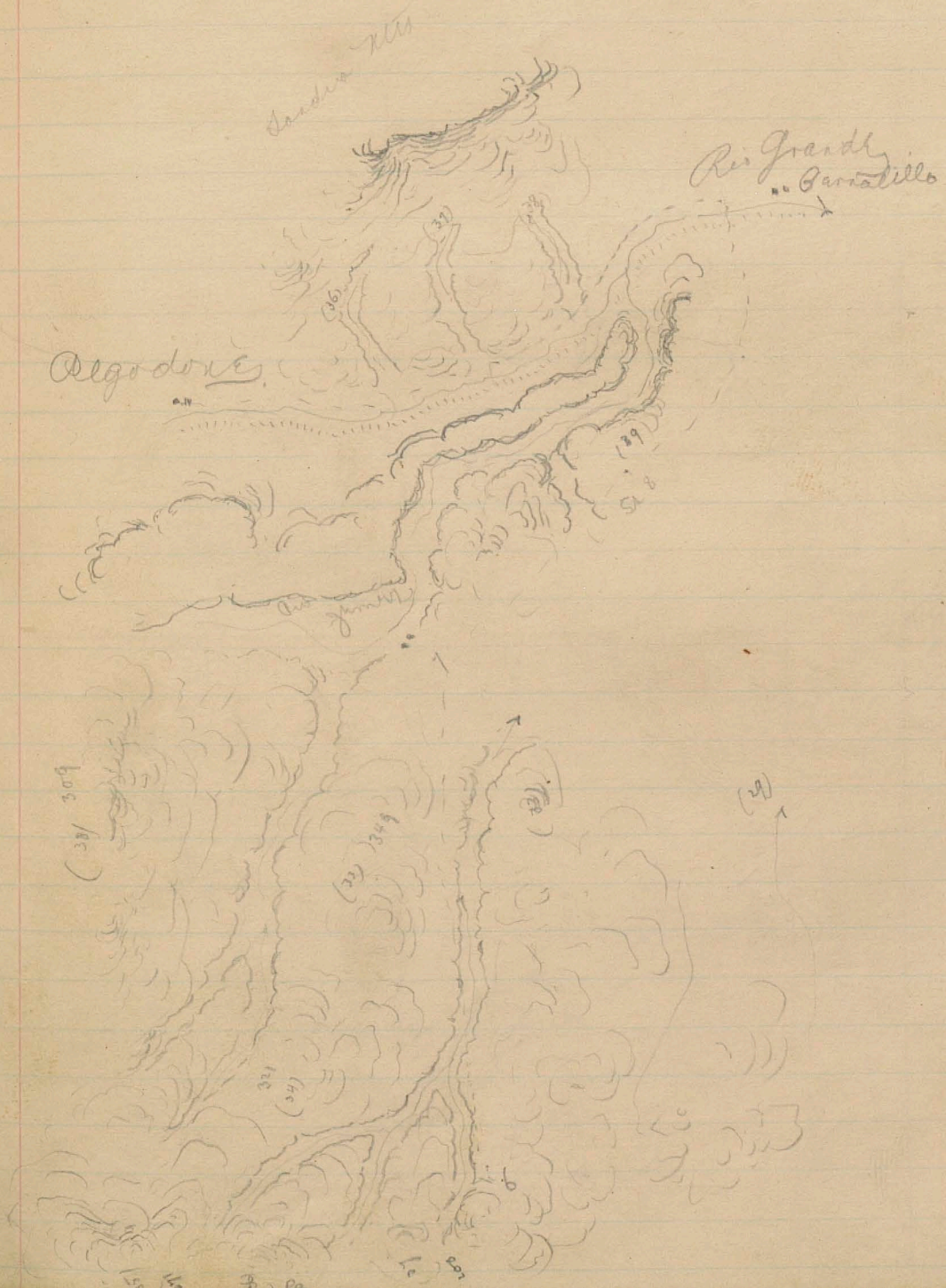
High Sandridge













Camp No 44 to 45 at Santo Domingo Tyrographer A. Karl  
 Date August 30<sup>th</sup> 1875- Instruments used Youngs Transit  
 Main Party

Mag net  
 N Det.  
 S Det.  
 E Det.  
 Westing-  
 House

Station	Distance by Hatch	Pict	Mag	Curvature to 1875	Remarks
Camp 44	7.5		S 70 E		Water 39.45 Sandia. 357.15
34	7.55	2	S 26 E	23.675 4875	18.15 M M 189 R. Grande 100 yards from Camp Mica ascending on right bank Arroyo San Francisco Sandia. S 11 E to more (Car) N 41 W San Felipe N 13 W
2	8.30	1.2	crossed arroyo		
	8.40	.4	S 15 E	23.500 5700	(40)? N 78 E crossed arroyo Taylor 2.30 Crossed river monument 77 Titilla 140 S. Baldy 151.45 Sandia 254. (a) 104.45. M M 114.45 (40) 136 This station is at the edge of high hill which looks from here a big flat extends to Rio Grande
	8.55	6	in drain		
	9.10	1.5	in heavy drain	23.125 8850	







Magban  
N Sat  
S Sat  
E Sept  
W Sept  
Travel

$\frac{334}{2} = 167$







Map  
Sat  
Sat  
Sat  
Sat  
Travel

Camp No 44 to No 45 at Santo Domingo N. M. Topograph at Ant  
Date Aug 30<sup>th</sup> 1895 Instrument used Youngs Transit

Stations. Distance by Proct. May  
Hatch Red. Perry Survey

Remarks

St 6	12.40 (12.50)	2.6	N 8 E	22.800	5850	N M. 130	Sandia 187 Taylor 257.15 (SF) Baldy 36 Crater (46) 338 (42) 144.15 (43) 178.26	Calder 282.45. Conchilla 19
St 7	1.55. (2.15.)	2.6	N 30 E	22.950	5875.		Crater 216.15 Tetilla 15.15 Sandia 183.30 Taylor 285.30	
	2.25. running stream			23.175	5450.		Calder 275.30 (40) 117.33 (47) 88 (40) 117.15 (48) 120.15 (42) 108 (46) 199	
8	3.	on 1.8	N 15 E	23.00	5303		N M 357 Mt Taylor 246, Sandia 184. Tetilla 15	N M 356.30
9	3.23.	1.	N 20 W	23.00	5200		(47) 143.30 (48) 163 Taylor 230.15 Sandia 188.30 Tetilla 1	
10	4.5	bed of Rio Tancitaro	N 15 N	23.375.	5200		Sandia 57 H. Mazor 547.2 E Tetilla 112.5	
11	4.55.	1.6	N 42 W	23.300	5300 on flat		Sandia 53 H. Mazor 545 E	grains pt. No 2 H
	5.30	large drain		23.450	5153			
	6.05	got out of cañon into valley of Rio Grande						
	6.5	on stage road						
	8.10	on drain						
	8.30	in drain						
	6.53	5. on drain						
Camp	7.30	7.15						

Indian town of Santo Domingo



Rio Galientes

Platan

Platan

Rio Tuerto dry

Arroyo San Francisco running

Arroyo del Rio Chico

6





Camp. N 45. to N 46 on Rio Galisteo N.M. Shyog, at Karl  
 date Aug. 31st 1895 Instrument used Young's theodolite  
 Main Party

Station	Distance	P.O.	May	Remarks
Camp	7.40	588 E	23.625	4900
Sta 1	8.50	546 E	23.375	5775
	9.30 on La Banderita		23.550	4975
	9.40 crossed road			
	9.50 crossed drain			
	10.20	569 E	23.300	5275
	11.50			
	11.25	in drain	N 71	
	11.30	drain	N 71	
3	11.38	569 E	23.250	5300
	11.45	drain	N 71	
	11.52	drain	N 71	
	12.	in drain	very large	
	12.15	large drain	23.250	5300
	12.30	ditto	N 87 E	
	12.45		23.175	5400
Sta 4	1.	3.2	N 87 E	
	stopped			

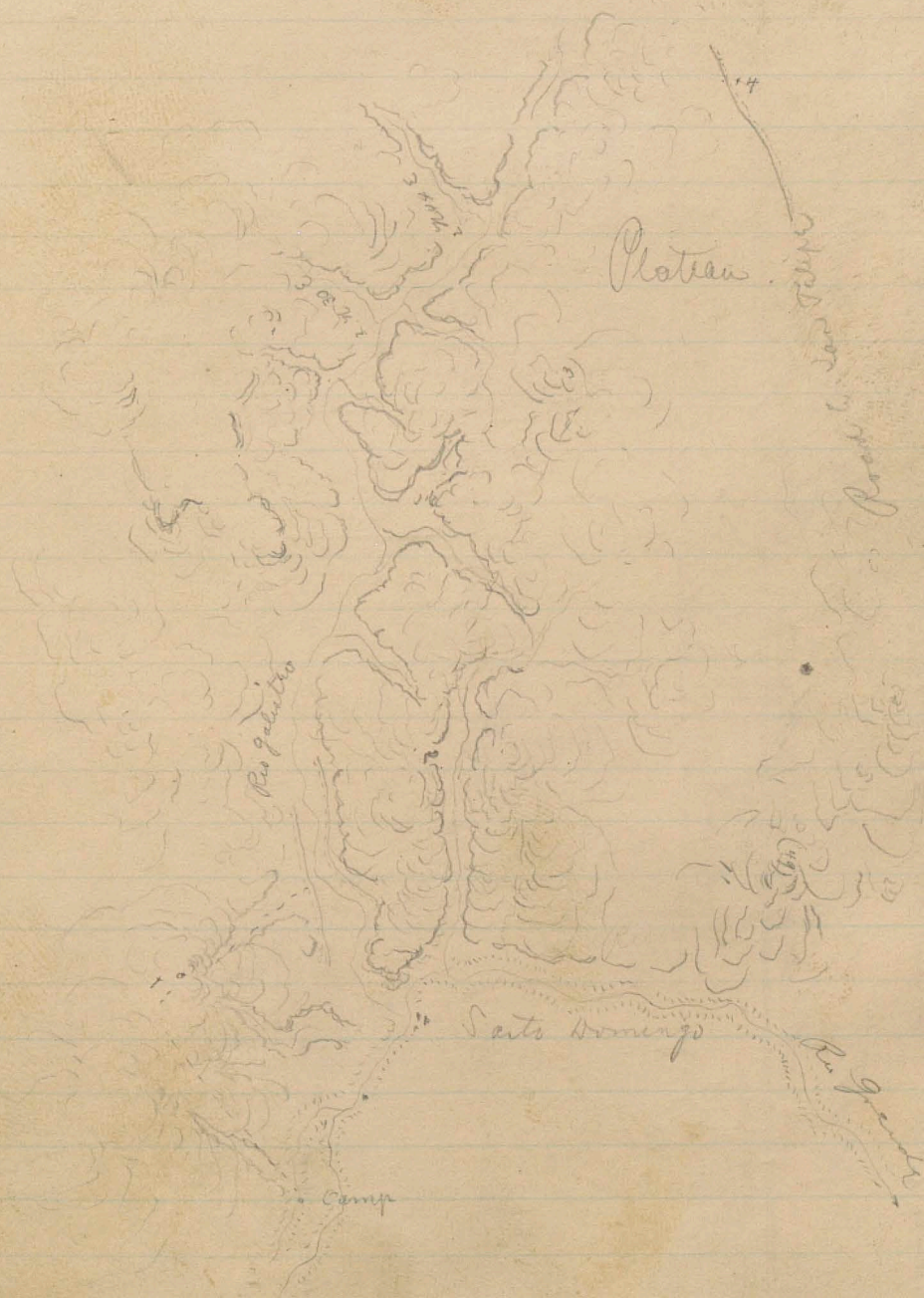
Remarks

Sandia S2W Placer 500 E  
 Sandia 55% M M 70.45 Petilla 107 Sandia 256.45. Crater 280  
 (25% 302 (34) 30.15)  
 in bed of Rio Galisteo  
 N.M. 67.30 Petilla 91.2 Baldy 107 Sandia 256.45. Crater 280  
 2 (25%) 315.15 Placer 194.45 (49) 242 (44) 26.30 26.49 45  
 in big plateau Sandia S12W N 24 N 44 N  
 Petilla N 18 E (49) S 8 W  
 M M 294.30 Petilla 297.45 Baldy 328.30 (24) 260.45 (26) 270.30  
 Sandia 135.30 Placer 68.30

11.29 bar  
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 11.58  
 11.59  
 12.00



16. 3 Topog. Station





Camp 45 to Camp 46 on Rio Galisteo 4 m. above Aconc  
 Date August 31<sup>st</sup> 1895 Helminths used young. Fresh.  
 No. 1111

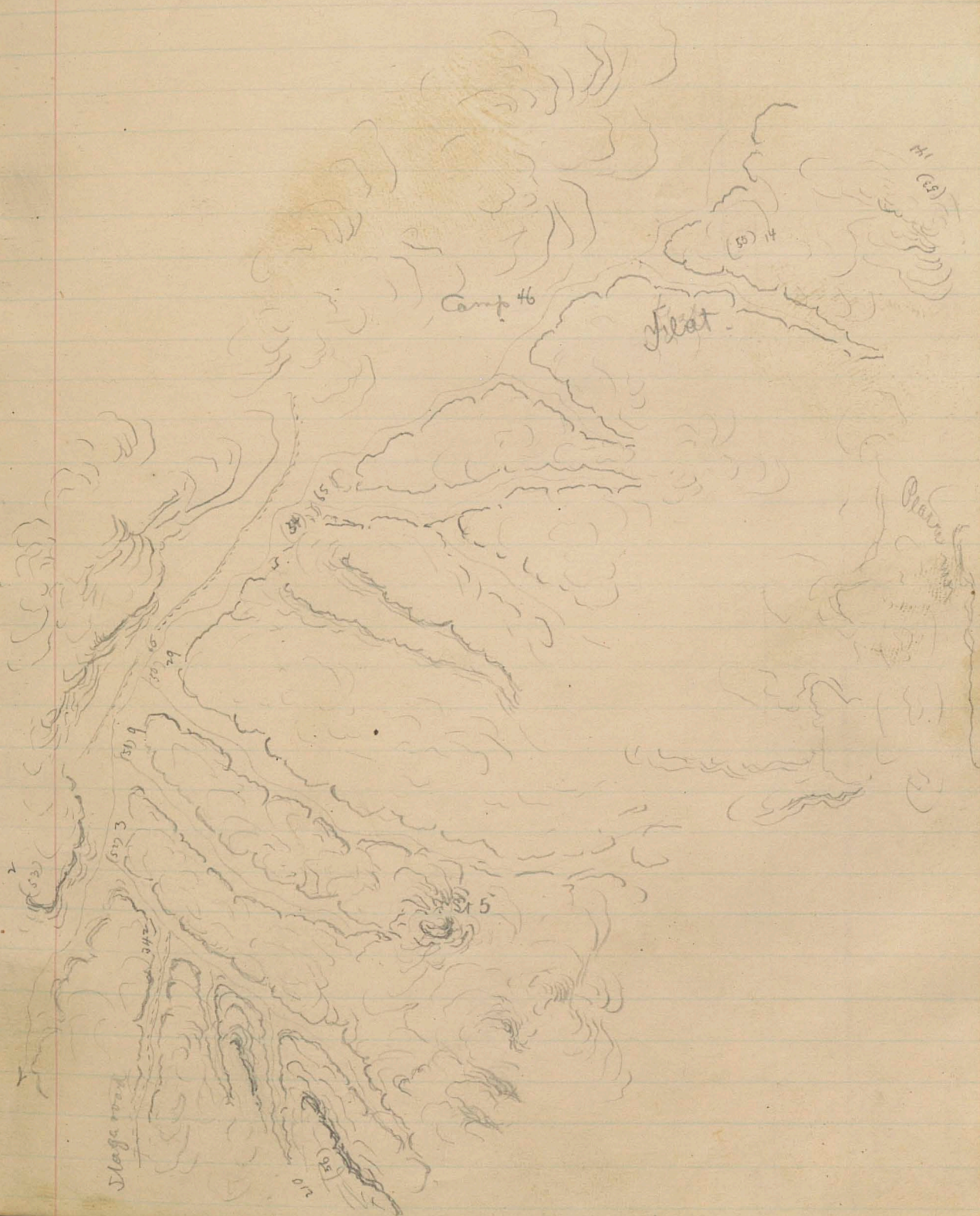
Station	Outlets	May Paving	Barrow Quicks	Feet	Notes
St 5	1.30				large drain
	1.50				large drain
	2.				heavy drain
	2.20				bottom of hill (station)
St 5	2.40	1.6	23.125	5750	25.15. Stilla 13 <sup>th</sup> Baldy 55
	3.10		22.900	5700	Placer 171 (24) 338 (26) 357
St 6	4.	1.2	20.700	5300	Baldy 130 <sup>th</sup> E (24) 748 <sup>th</sup> St 5. 52 E in bed of Rio Galisteo
Camp 46. 5 2					
		16.7			

11.5

Mag. per.  
 N. Sat.  
 S. Sat.  
 E. Sat.  
 N. Sat.  
 Travel

Section 234 Taylor 271







Trwin Camp 46 to Camp 7047 at Galathea 2. M. Topography

axane date Sept 1st 1950 Instrument used Youngs Transit

Stn.	Balance May	Placer	Placer	Placer	Placer
by	Placing	Placer	Placer	Placer	Placer
Camp 46	7.15 (4.8)	260 E	23.475	5750	5750
Station 1	9.30 (3.)	517 E	22.200	6600	6600
	(11.30)				
	12.15 large drain		23.50	5600	5600
				19	
2.	12.55 (2.8)	566 E	23.175	5425	5425
	2. PM	large drain from S.W.			
3	2.10 (2.4)	576 E	23.125	5475	5475
	2.30	drain from	574		
	2.40	drain from	7 E		
4	3.10 (3.)		23.075	5525	5525
5	4.30				
	(6.50)	(4.)	23.100	5500	5500
Camp 845.200			22.900	5600	5600

Remnants S 43 45 N.

M.M. 199.30 Placer 0° 30' Sandia 49.15 State 260  
 M.M. 33.30 Baldy 69 Cabezon 300 Placer 223 Sandia 257.15  
 Taylor 288.30 (426) 7.30 Tetilla 2 (204) 347.30  
 Crater 286.55 Twin Peak 71 Santa Fe 744. E time  
 at 8.25 8.35 8.45 9.5 drains running  
 around at base of mountain (Station 5) = 22.775.875  
 Location of slope of station Taylor 564 ft Sandia 533 ft  
 Placer 52 E  
 { junction of largest drain with Rio Galathea  
 coming from SE through ravine where Canada de los Alambreros enters into  
 Mearns point 107. Placer 176 2 330.50 hills + back valley  
 drain 75-100' high

Baldy 93.15 2 30.45 Placer 277 Mearns point 194 M 73  
 drain running into Rio Galathea from NE

X Baldy 157 Placer 2 Mearns point 269 291 (226) 106  
 large drains entering Rio Galathea from NE and SW  
 200 yards West of station 4.  
 M.M. 132.15 Mearns point 269 Placer 1 272 Tetilla 83  
 (426) 92.45 (224) 76  
 around Galathea, Mexican Town

May 1950  
 N. Cat  
 S. Cat  
 E. Cat  
 M. 1950  
 Travel





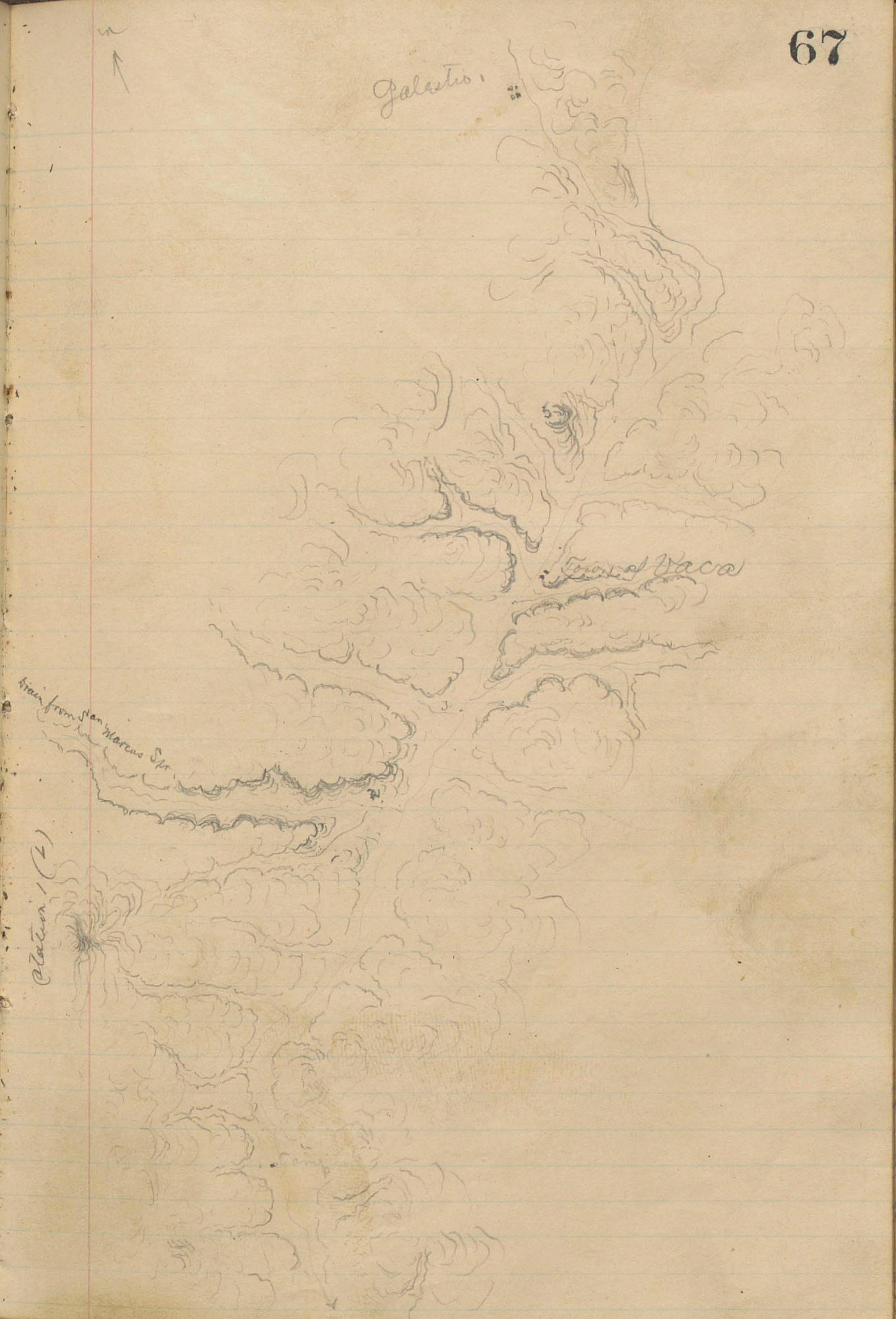
Galveston

53

Coast of Texas

Train from San Marcos Spr.

Platons (2)





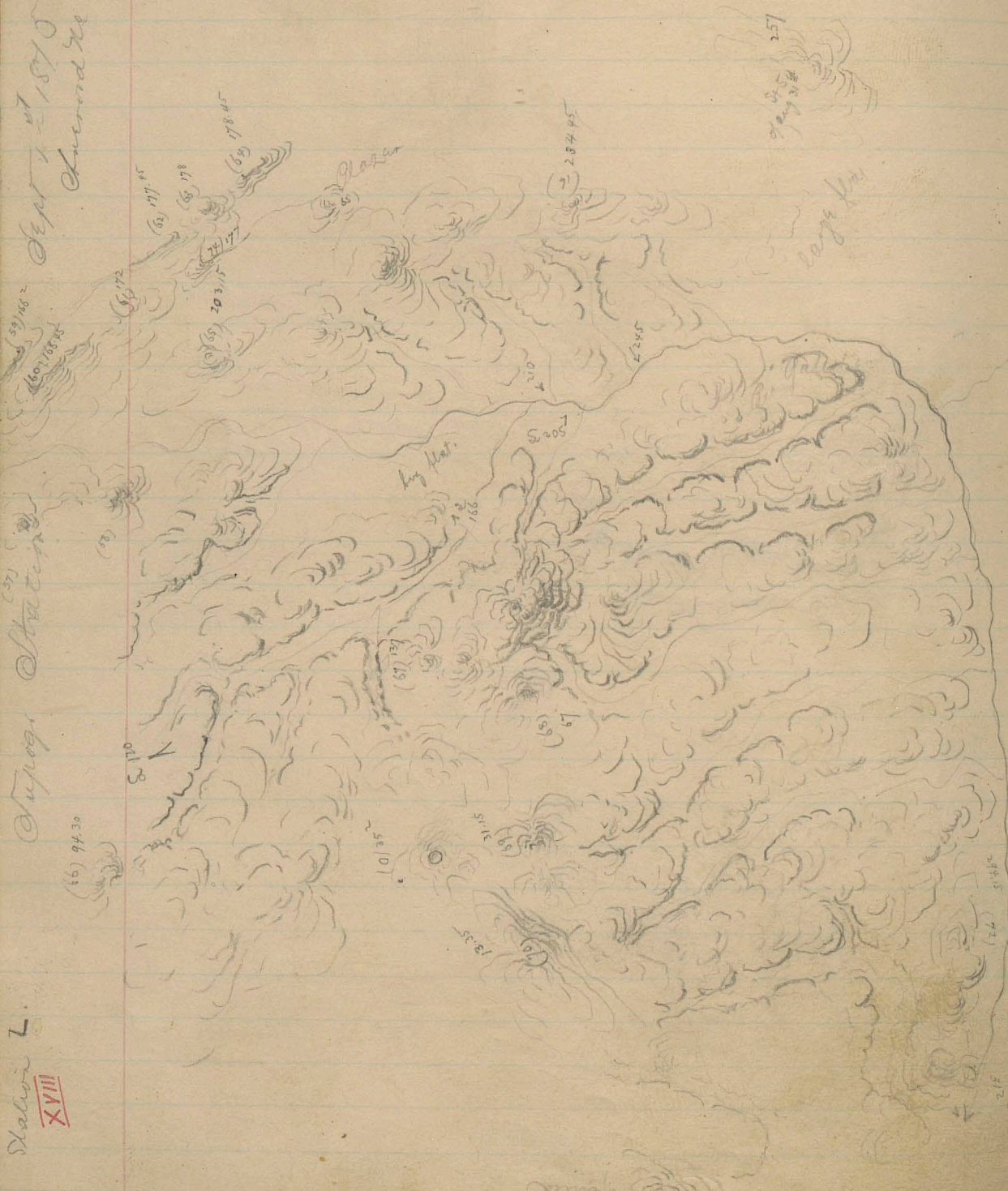
Course of Rio Galietas down to point 72 = 292  
 course of Rio Galietas up to point 57 = 155

S

Sept 1st 1870  
 Church & Rogers = 22,200. 6600'

Station L  
 XVIII  
 Dupont Station

Station L  
 XVIII









70

Amount on basis of Price 5900  
22,750



On March 1st 1884

71

~~198.45~~  
~~14~~

184.45 N.  
4.45 S.

~~189.45~~  
~~18~~

~~364.45~~  
~~338.45~~  
~~26~~

356.25

364.45  
356.45  
8 20





Camp 24 to 27 2 pag side party at d

536.45 K.

Kit. 19. 61.5

3 6.40 1. 387

Camp 710  
1 mile

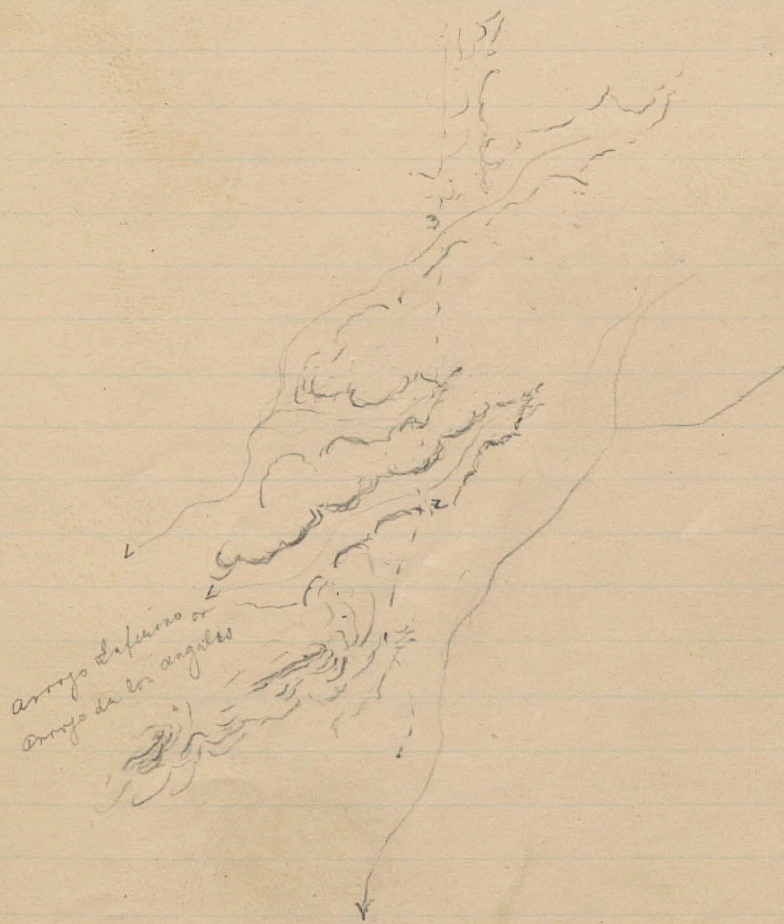
~~104~~  
~~104~~  
35045  
27015  
 829.15

$$\begin{array}{r} 284.45 \\ 244.15 \\ \hline 39 \end{array}$$

270  
180  
90

15. 6c







Camp 1 (side party) to Camp 48 at Santa Fe N. Mex., Arkan  
 Date Sept 3<sup>rd</sup> 1895. Measurements used Young Train R

Map  
 N. Sat  
 S. Sat  
 E. Sat  
 W. Sat  
 Front

Station  
 Camp 1

Water  
 7.20  
 7.40  
 (8.10)

Barometer  
 28.80  
 22.70  
 22.70

Wind  
 2.8  
 2.5  
 2.2

Direction  
 N. 75 W.  
 N. 55 W.  
 S. 50 E. R. Galathea

Time  
 1.8  
 1.2  
 1.0

Distance  
 2.8  
 2.5  
 2.2

Remarks  
 2.8  
 2.5  
 2.2

Notes  
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Summary  
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Conclusion  
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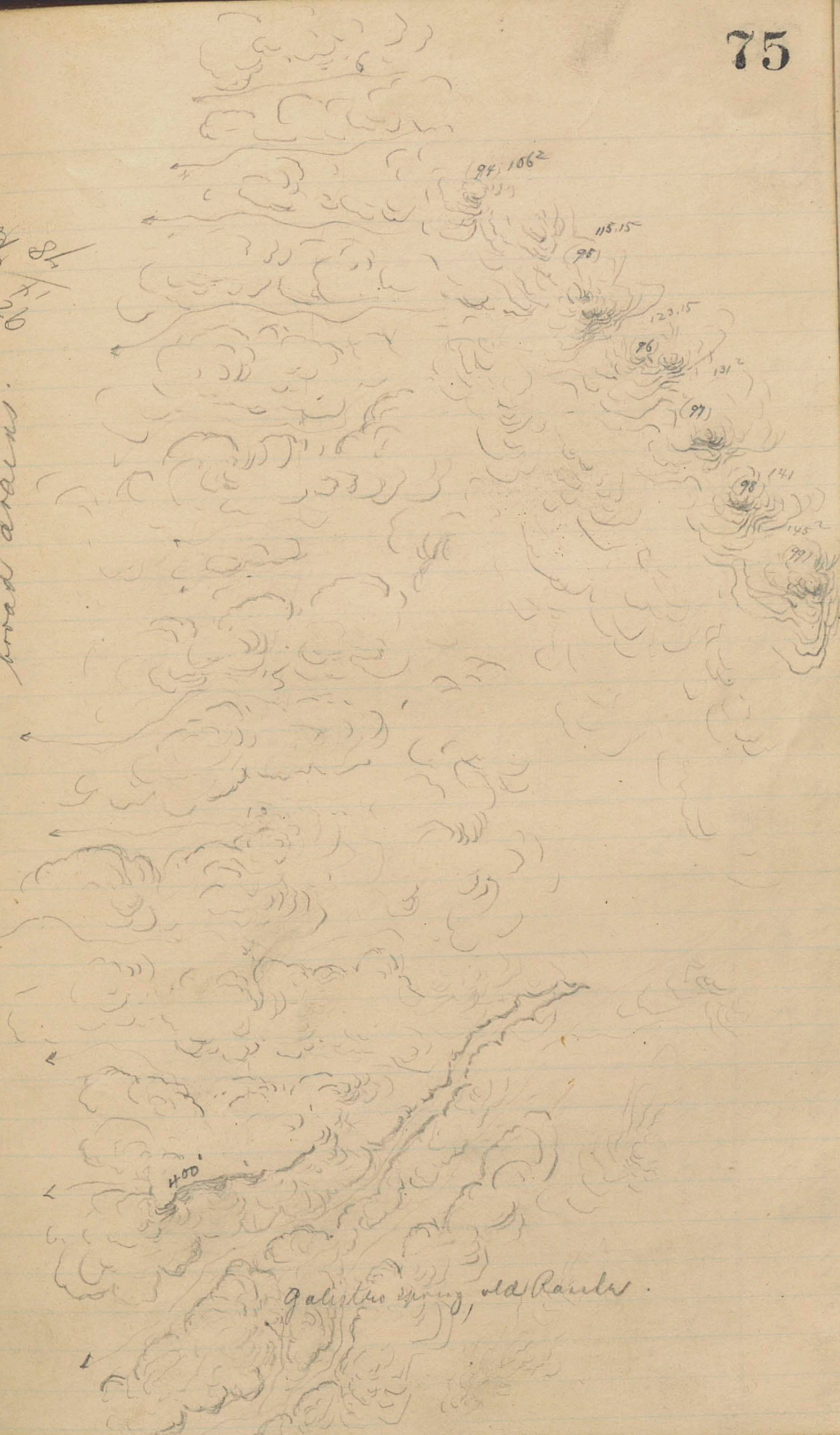
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Large rolling plain with  
broad drains. 26 ft





Camp No. 1 (subs party) to Camp 48 at Santa Fe N. W. Stopogr. at Carl  
 Date Sept 3rd 1895 Instrument used Youngs Transit 12

mag van  
 11 Oct  
 5 Sept  
 5 Sept  
 21 Sept  
 Travel

76

Station Distance by Post Mag. Watch Radio. Bearing. Azimuth. Dist.

Main Party

248

Station 4

12

12.10

12.17

2.0

12.25

12.45

1

1.10

1.15

1.2

1.50

.4

2.5

1.6

2.45

15

22.400

22.425

22.395

22.175

22.175

248

on drain

on drain

on large drain m. m. 67 (25) 2. Setella 324 Sandia 278.15

Taylor 307 Baldy 91 Can. Alon 234 Long 2 drain

on Arroyo Honda m. m. 143.15 Baldy 158.45

Blair 337.45 Sandia 354.50 Setella 34.45 (25) 20

on drain (deep ravine)

on small drain

small arroyo

Long drain m. m. 90 Baldy 118 Setella 334 Sandia 308

m. m. 57.15 (25) 207 Setella 297.45 Sandia 267.10 Baldy 88.2

on long drain

on arroyo

Sandia 278

Camp



santa Fe Cr.

santa Fe.

Range Platan descending  
towards Rio Galiceno

about 75' high.

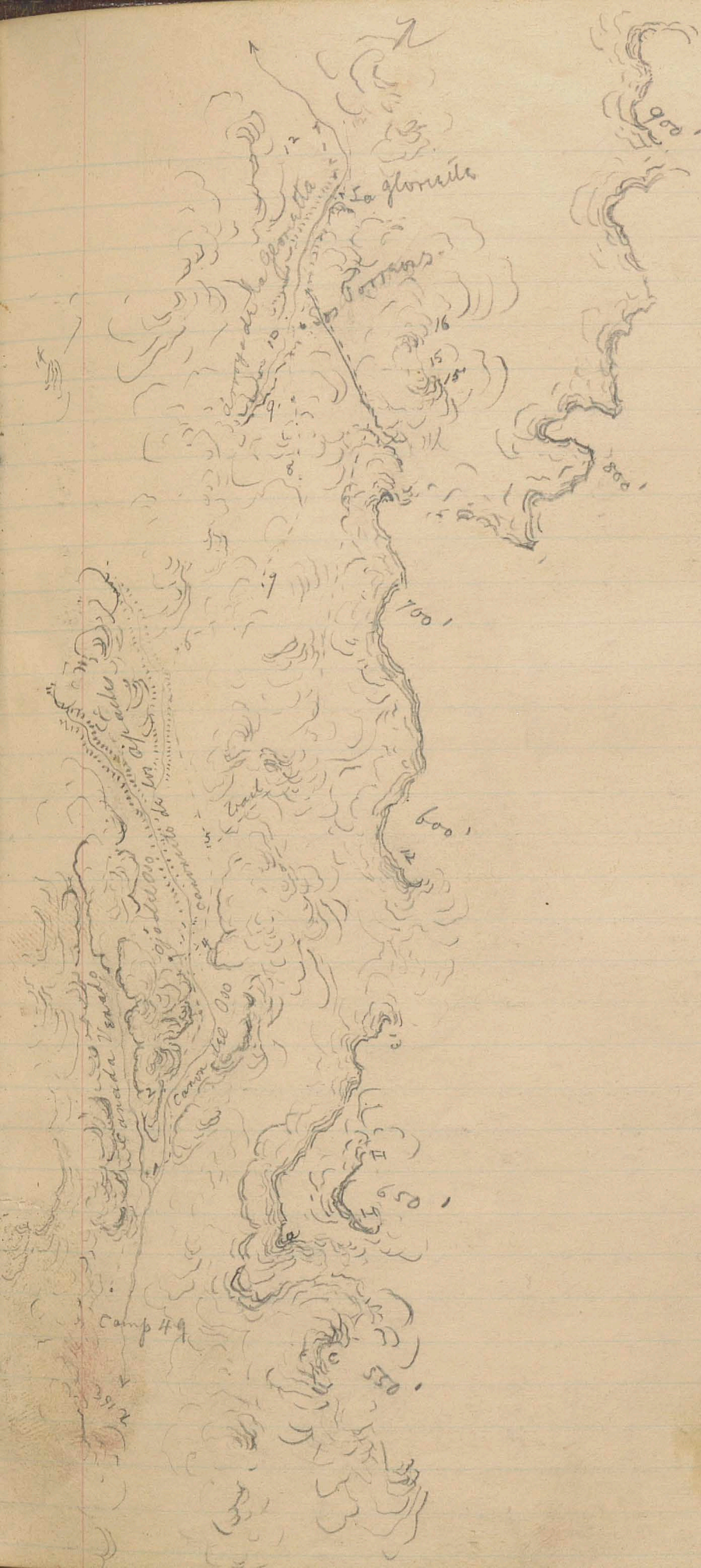


Camp No 49 to No 50 at Korkinokti. Topographer  
 Chien Lan date Sept. 14<sup>th</sup> 1875 Instrument used Yauyo  
 Transit No. Main Party

Mag. var.  
 N. lat.  
 S. lat.  
 East  
 West  
 Travel

Station	Distance Approx.	Post Road	Mag. Prism	Meridian Angle	Remarks
Camp 49	5911	16	N 60 E	22.325	St. a S 07 E a S 33 E
Station 1	6174	2	N 56 E	22.300	
2	6264	7	N 38 E	22.283	a S 7 W (11) N 32 E
3	6587	4	S 85 E	22.200	(12) S 07 E (13) S 25 E
4	6745	4+	N 37 E	22.160	
5	6943	1.4	N 44 E	22.150	
6	7032	13	N 65 E	21.950	a S 19 W
7	7690	13+	S 80 E	21.875	
8	7845	15	S 43 E	21.925	(3) S 07 E (14) N 32 W (15) S 18 E
9	8027	1.2	S 55 E	21.975	15' S 16 W (16) S 29 E (15) S
10	8534	2	S 55 E	21.125	
"	8630	0	S 71 E		town of San Francisco
12	8740		S 62 E		San Francisco

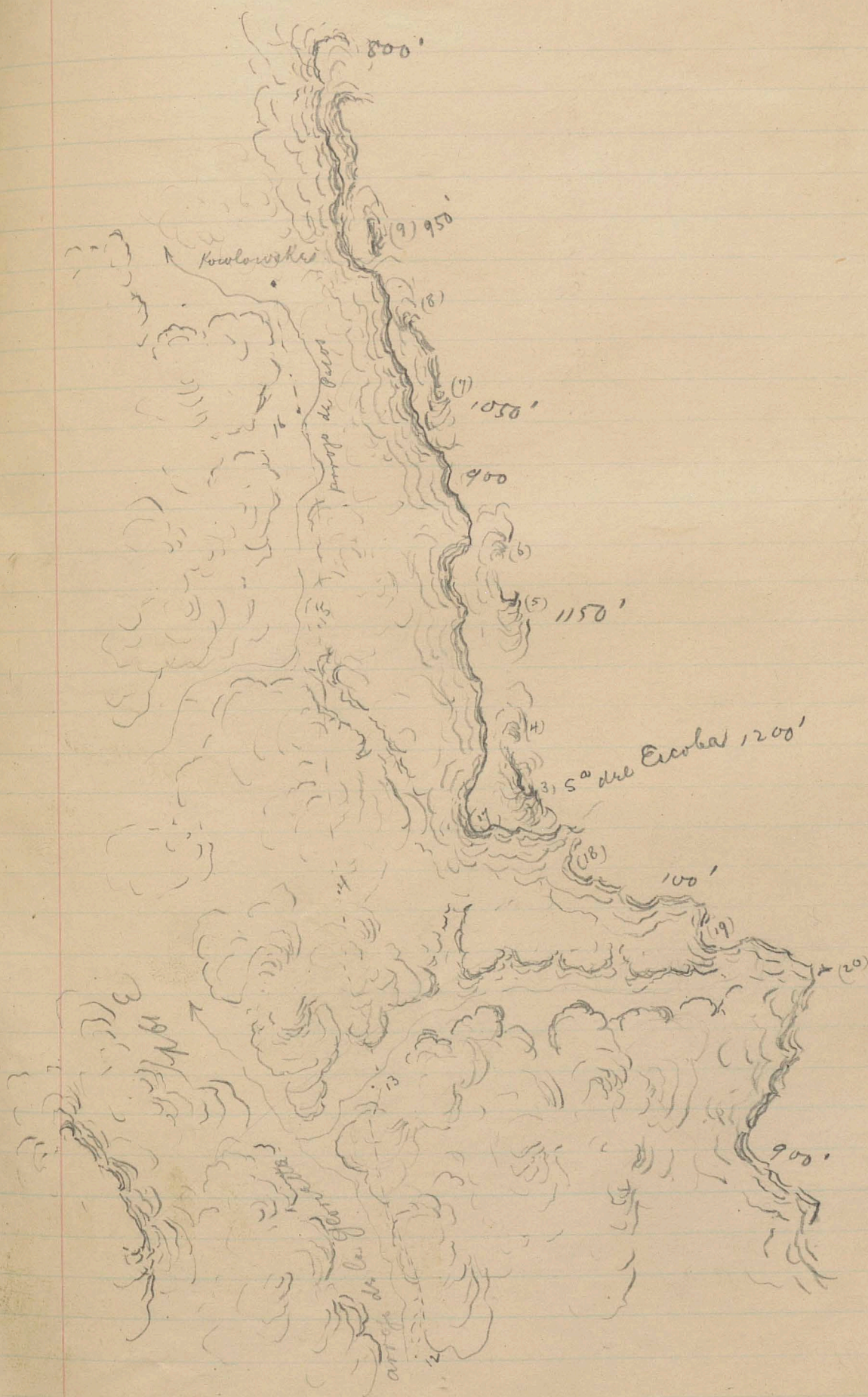










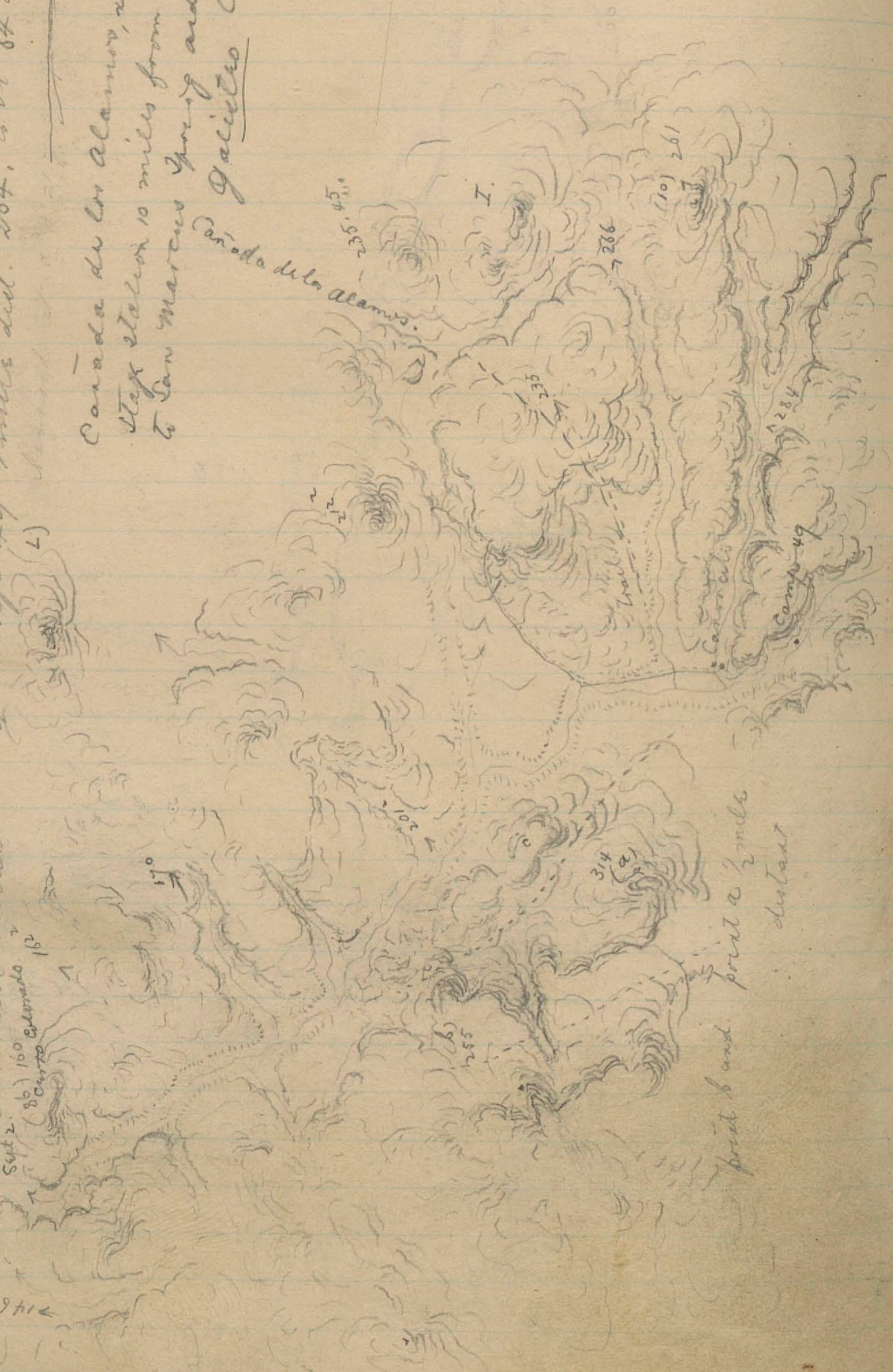




Topographical Station near Camocito (Camp 49)  
Sept. 13<sup>d</sup> 1875

Observations No 2098 = 21,650. 4300 M. M. 315  
Petilla 22310 L 196.40 Cerro Pelon 156 I 2.200  
To Camocito 1 mile distant 236 to Camp 49 1 mile dist. 264. to Pt 84 of Station L 125  
Sub 2. (85) 100 estimated 13  
Cerro Camocito 13

Cañada de los alamos, near Rock Canal  
Step station 10 miles from Santo Fe runs  
to San Marcos Spring and thence to the  
Gaietito Creek,



315  
300  
284  
6  
300  
218  
88

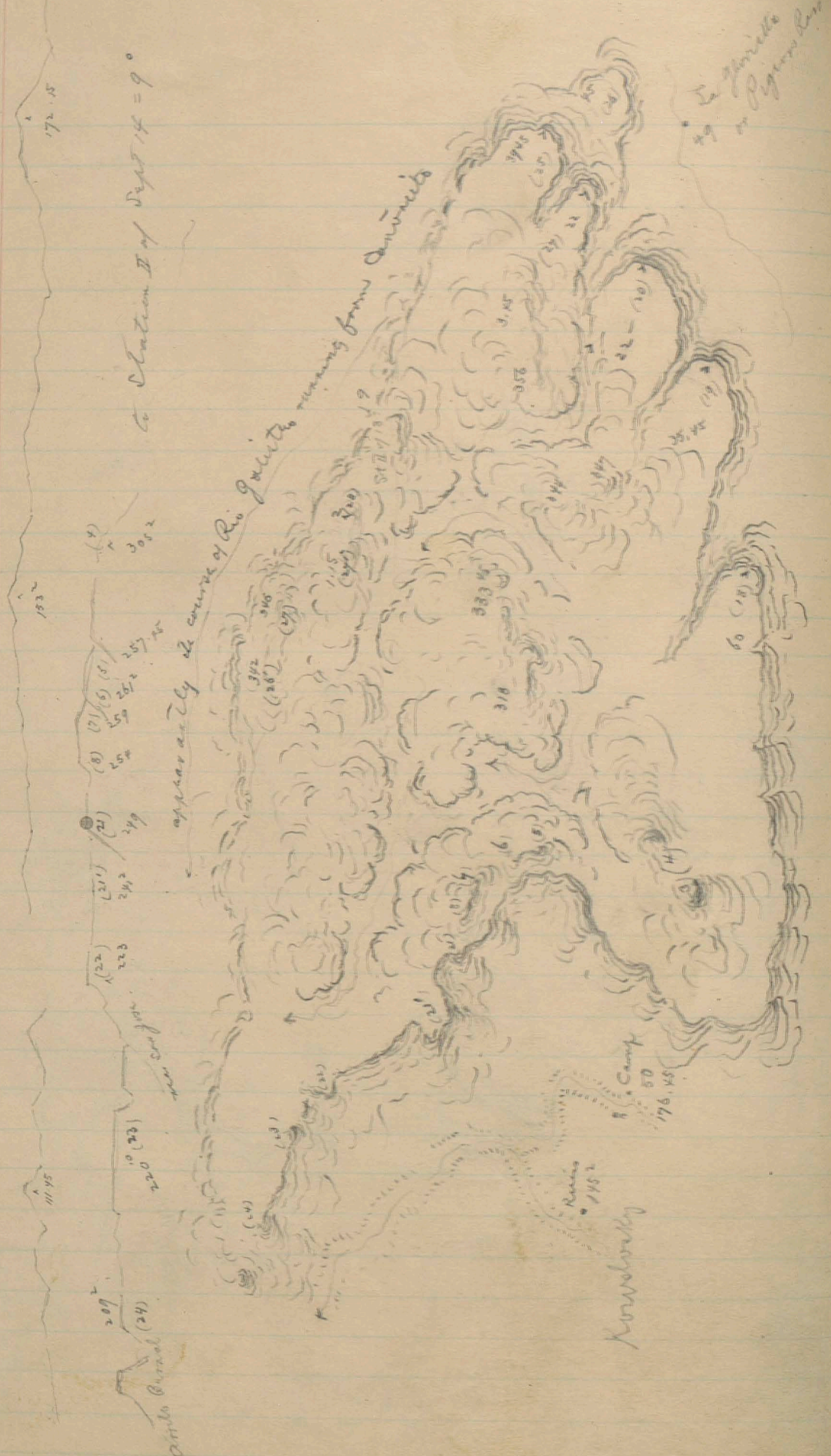
print band print a 1/2 mile distant







d'upio station on Prax (S de los Escobas) near Pico Ruiz Sept. 14<sup>th</sup> 1875  
 M. M. 105.30 around 72 2098 = 21.300 7650  
 Otella 12.15. L. 352 Prax 335 Cerro Pinal 208 40 (64 of 31 L 236)



to Station B of Sept 14 = 9°

Enguilla  
 or Pigeon Run

Nowhere



XXIII

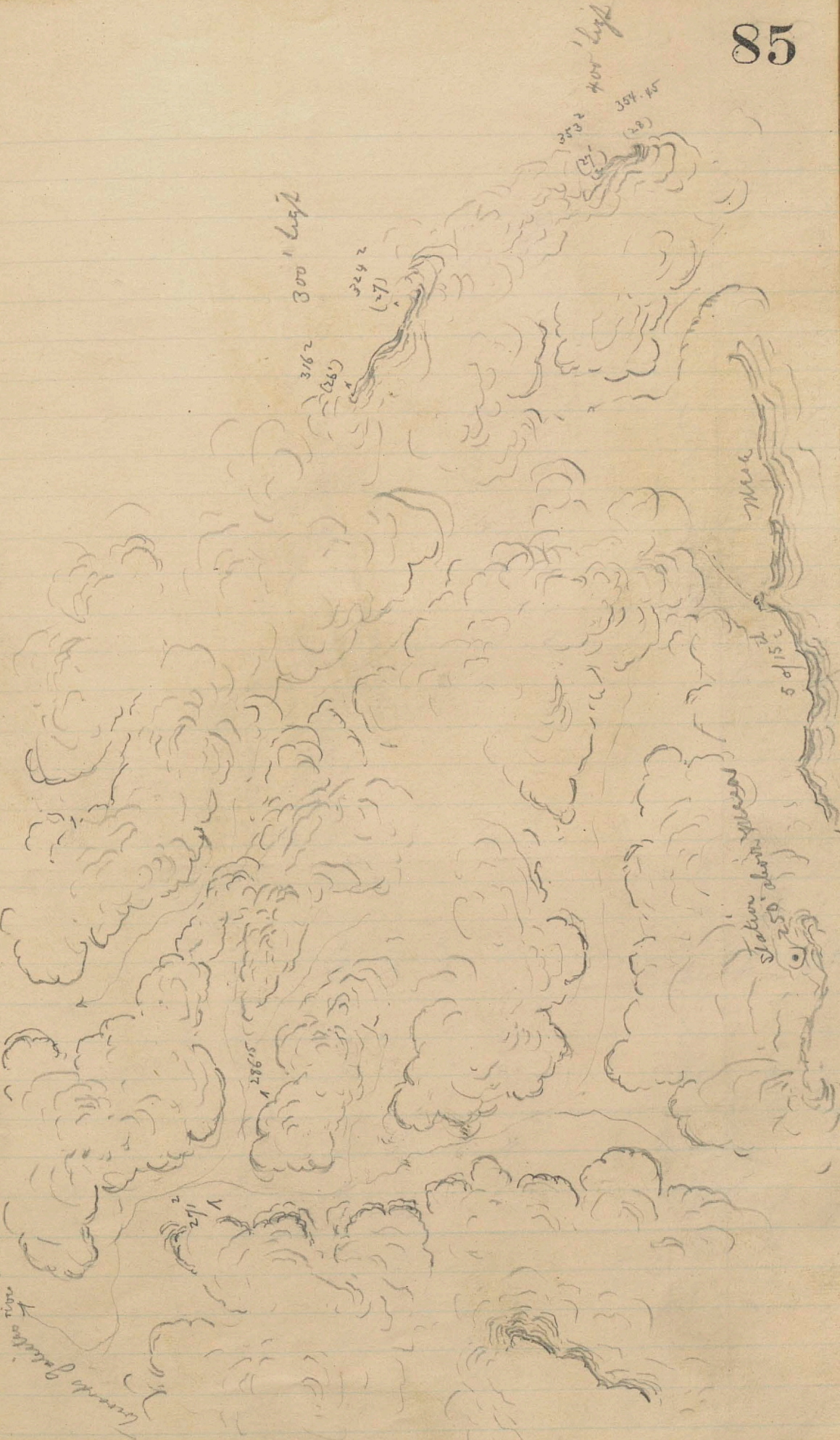
Sept 15<sup>th</sup> 1875

Station on New near S<sup>a</sup> del Ecobla  
Quarrel No. 2098 - 21,800 7050

Cerro Palen 304.10 Placer NW. 319. (64.9 - 266.15)

Flow

Escudo Galathea





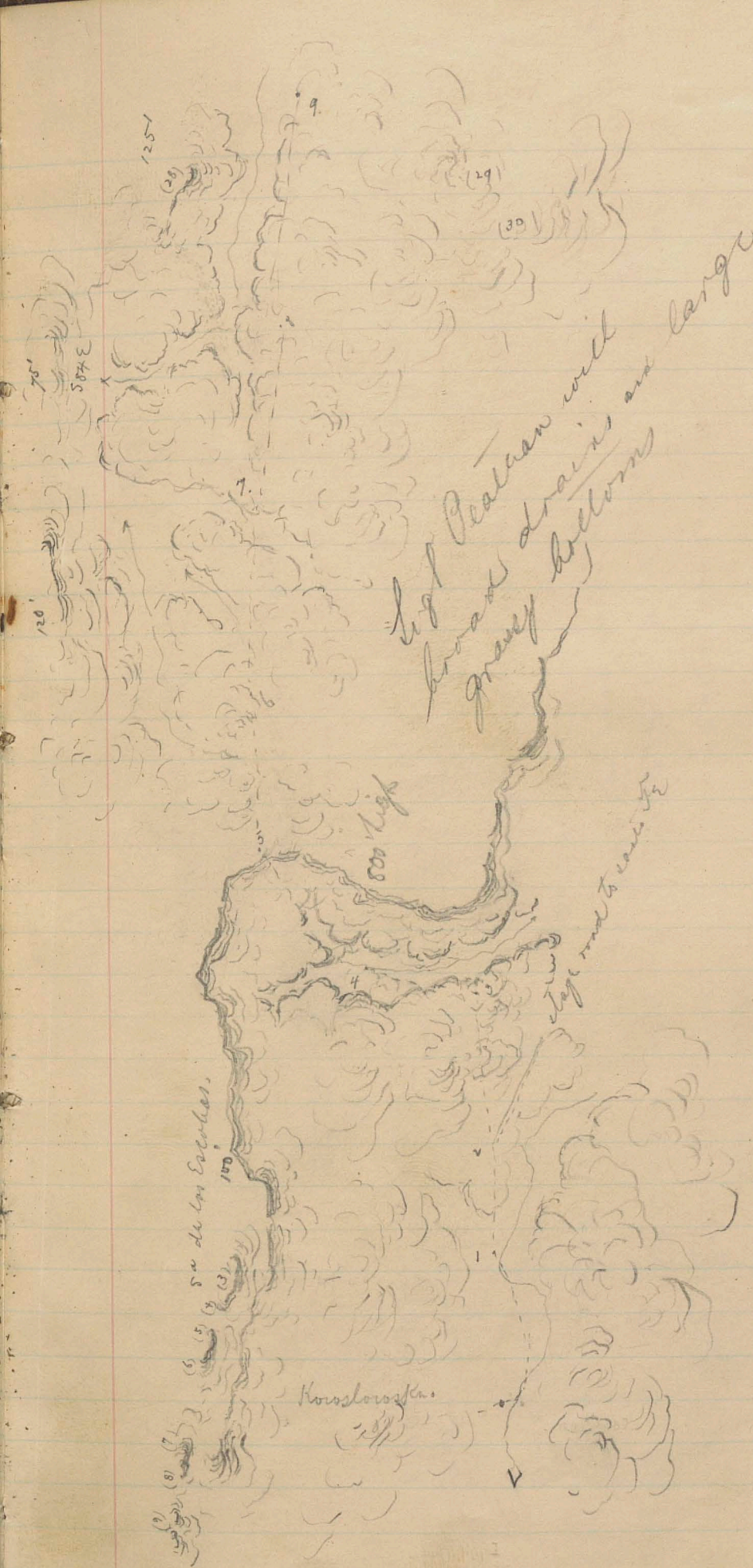
Camp 50 to N<sup>o</sup> 52 at Galvito Topographic Rail  
 Date Sept 13<sup>th</sup> 1895 The instruments used for survey  
 The Transit, the  
 Station, but only by water level  
 Camp 50, 7 1.5 N 67 W.  
 Station 1 7.35 (2.3) 7.84 W.  
 2 8.40 (1.5) S 74 W.  
 3 9.8 (1) S 89 W.  
 4 9.30 (1.7) S 20<sup>2</sup> W.  
 5 9.45 (1.5) S 21 W.  
 6 11.45 (2.0) S 35 W.  
 7 12.20 (1.0) S 21<sup>2</sup> W.  
 8 12.40 (2.0) S 19 W.  
 9 12.5 S 6 E.

Station	but only by water level	the transit	the level
Camp 50	7 1.5	N 67 W.	22.450 6250
Station 1	7.35 (2.3)	7.84 W.	22.400 6325
2	8.40 (1.5)	S 74 W.	22.225 6550
3	9.8 (1)	S 89 W.	22.1 6700
4	9.30 (1.7)	S 20 <sup>2</sup> W.	22.075 6925
5	9.45 (1.5)	S 21 W.	21.875 6975
6	11.45 (2.0)	S 35 W.	21.925 6925
7	12.20 (1.0)	S 21 <sup>2</sup> W.	22.00 6850
8	12.40 (2.0)	S 19 W.	22.05 6775
9	12.5	S 6 E.	22.150 6650

Enclosed is a map of the route from Camp 50 to Station 1. The route is marked with the following bearings and distances:  
 (1) S 32 E (18) S 22 W (19) S 40 W. forks of road  
 crossed arroyo.  
 on top of mesa, direction of road went upon  
 a high point & made topographic station and returned  
 to station 6  
 (20) S 12<sup>2</sup> W (29) S 52 W (30) S 85 W. to Station II of Sept 13 N 4<sup>2</sup> E  
 (28) N 6 E (29) N 11 W

May 1895  
 N. Sat.  
 S. Sat.  
 E. Sat.  
 W. Sat.  
 @ rail.







Camp No 50 to 52 at Galester 4. m. Topography at Kane  
 State Sept. 15-18, 1895  
 S. D. T. Williams and George Davis 42  
 and party.

May 2000  
 1. 500  
 5. 500  
 10. 500  
 15. 500  
 20. 500

Lamar Co.

Aug 2008  
 1. 500  
 5. 500  
 10. 500  
 15. 500  
 20. 500

Station 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16

Station 9  
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Agua Abajo primary waterhole in  
 small canon 520 W 1/2 mile from station  
 (31) 500 E

(32.) 79 E (33) 744 E (34) 580 E

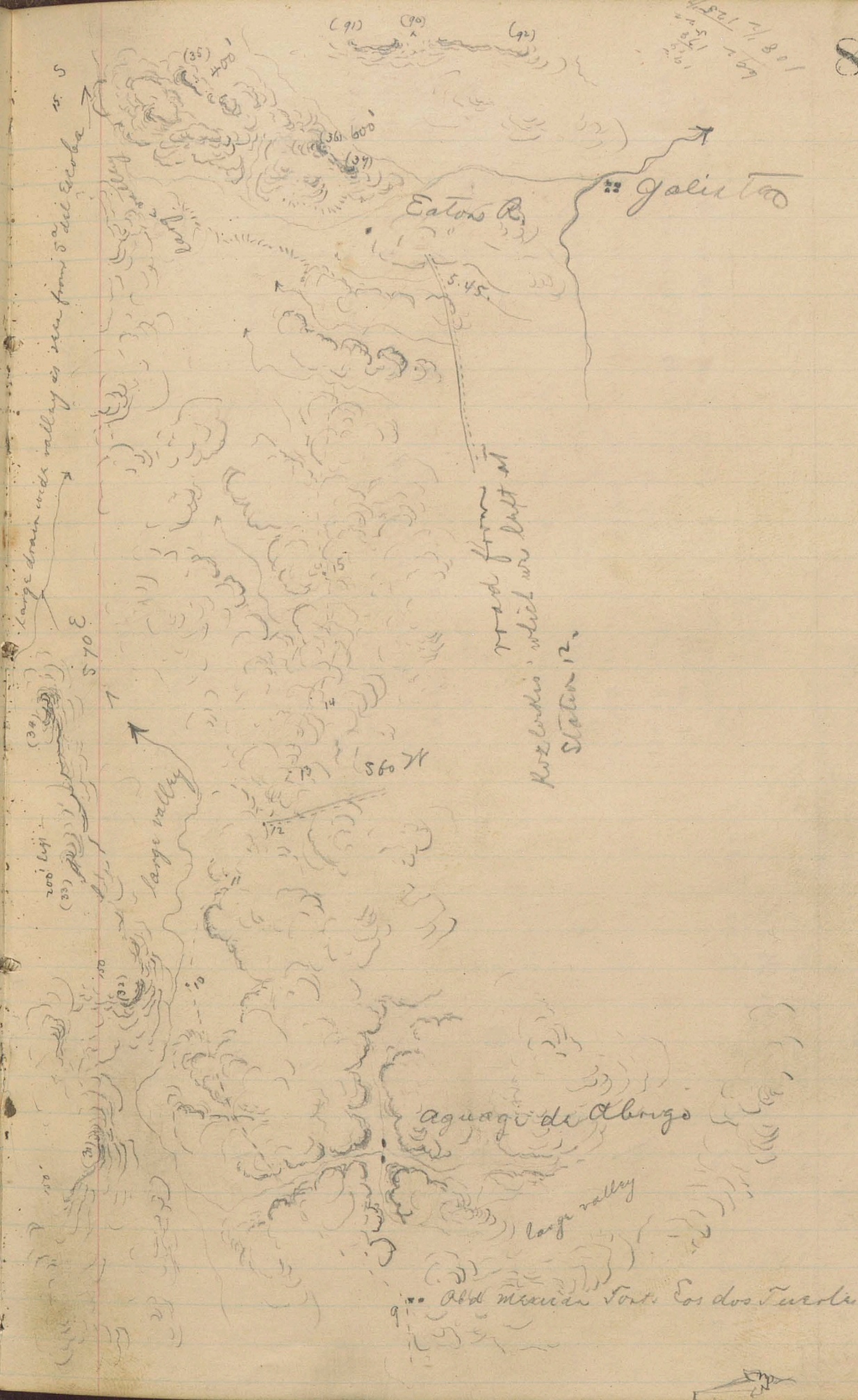
5<sup>th</sup> del Encoba 730 E (4) 732 E (5) 740 E (6) 741 E (7) 747 E (8) 753 E (9) 757 E  
 (34) 777 E on road turns off to town of Galester 560 W  
 on divide

Placer. 91.15 Sarden 89.45 Carrs Pilon 75.15 M. M. 25

Sarden 67.20 Placer 69<sup>2</sup> Carrs Pilon 52<sup>2</sup> M. M. 192  
 (35) 57<sup>2</sup> (36) 57<sup>2</sup> (37) 522<sup>2</sup> (91) 519<sup>2</sup> (90) 522<sup>2</sup> (92) 526<sup>2</sup>

At 4.15 is commenced making nearly making  
 it impossible to take any more notes and  
 from Station 15 to Galester the topography  
 is sketched by memory.







Camp No 52 & No 53 about 3 miles East of San Antonio Mts. 11/4 topographer A. Karl  
 Date Sept 17<sup>th</sup> 1895 Instrument used Yungas theodolite 454889

Station Ireland Pt. or by		Chazond 1898		Remarks	
Camp 52	2232	1.1	S 11 <sup>2</sup> W.	23.00	5625
" 1	2719	1.9	S 11 <sup>2</sup> W.	23.050	5550
" 2	3080			23.025	5575
" 2	3150	1.7	S 11 <sup>2</sup> W.	23.00	5625
" 3	3447	2.1	S 15 <sup>2</sup> W.	23.075	5525
" 4	4342	1.1	S 10 <sup>2</sup> W.	22.950	5675
" 5	4826	1.7	S 25 <sup>2</sup> W.	22.850	5800
" 6	5166	1.8	S 15 <sup>2</sup> W.	22.775	5900
" 7	5546	1.4	S 20 <sup>2</sup> W.	22.700	5975

Placer Mts. 330. Carrizo Pelon 289.25 M. M. 92  
 (38) 207 (38') 228<sup>2</sup> (39) 231.10 (40) 232.25 (41) 235.45 (42) 238 (43) 239.45  
 (44) 241 (45) 244 (46) 247 45  
 (47) 268 (48) 282 (49) 307 (50) 314<sup>2</sup> (51) 320<sup>2</sup> (52) 324<sup>2</sup> L 217  
 Placer Mts. 171 Carrizo Pelon 132<sup>2</sup> crossing of Rio Galisteo  
 down stream 196 M. M. 291.  
 large drain running to Galisteo  
 (26) 11 Placer Mts. 37 Carrizo Pelon 3574.15 M. M. 1574.  
 (38) 241 45 (38') 271<sup>2</sup> (39) 278 (40) 280 (41) 284.15 (42) 289<sup>2</sup>  
 (43) 291 (44) 292<sup>2</sup> (45) 297 (46) 303. (47) 147<sup>2</sup> (48) 158.45 (49) 170<sup>2</sup>  
 (50) 180 (51) 184<sup>2</sup> (52) 187<sup>2</sup> Carrizo Colorado or 88 Sept 22 17050  
 (53) 206 (54) 99.45 (55) 5. Carrizo (Mexico) 208  
 crossing of large drain / Sagrera (42) 24<sup>2</sup> (43) 27.15  
 (44) 28 (45) 34 (46) 40.50 (53) 177 (54) 204.15 Placer 140<sup>2</sup>  
 Carrizo Pelon 99 M. M. 255  
 S. del Escamela 77 Carrizo Colorado 58<sup>2</sup> Carrizo Pelon 289  
 (56) 91.15 (57) 93<sup>2</sup> M. M. 43.38 (58) 29.45 (59) 248<sup>2</sup>  
 M. M. 196 (61) 315.20 (60) 327 (62) 346 Sept 22 1700  
 (62) 354<sup>2</sup> (59) 177 (58) 189<sup>2</sup> S. del Escamela 228<sup>2</sup> Galisteo 204<sup>2</sup>  
 (63) 528 W (64) 531<sup>2</sup> W (65) 534 W (66) 538<sup>2</sup> W Galisteo 204<sup>2</sup>  
 (63) 548 W (64) 550 W (65) 555<sup>2</sup> W (66) 560<sup>2</sup> W (67) 546 E

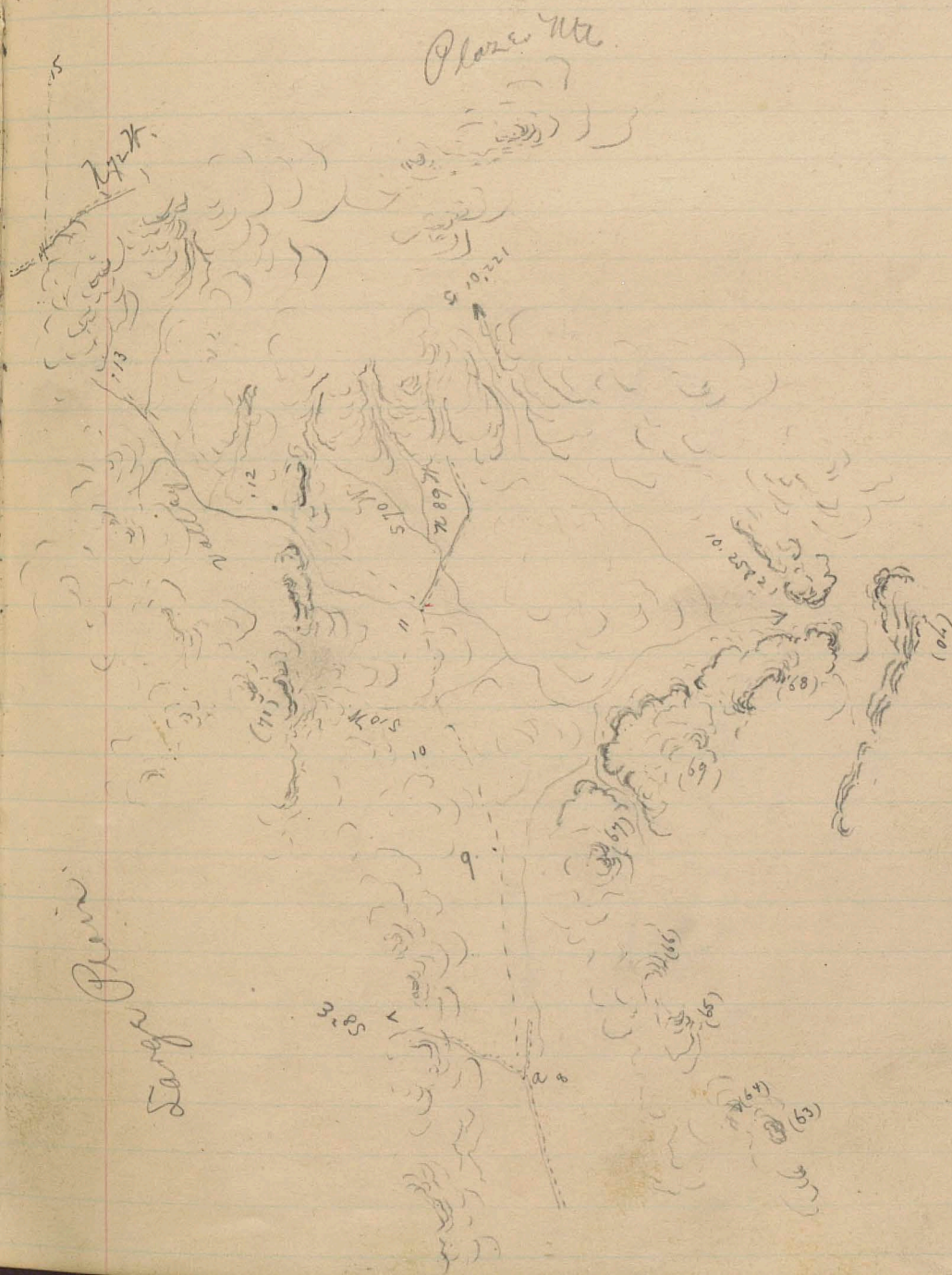
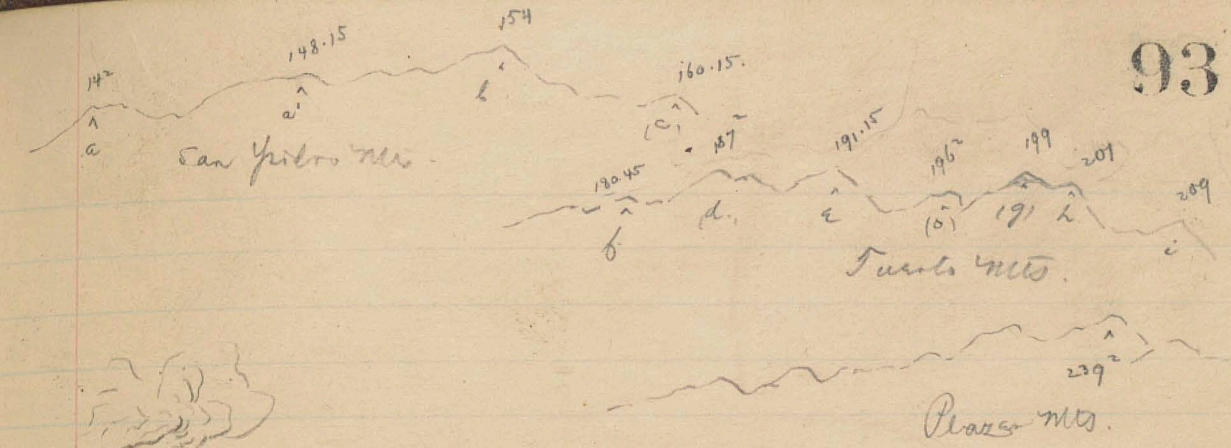










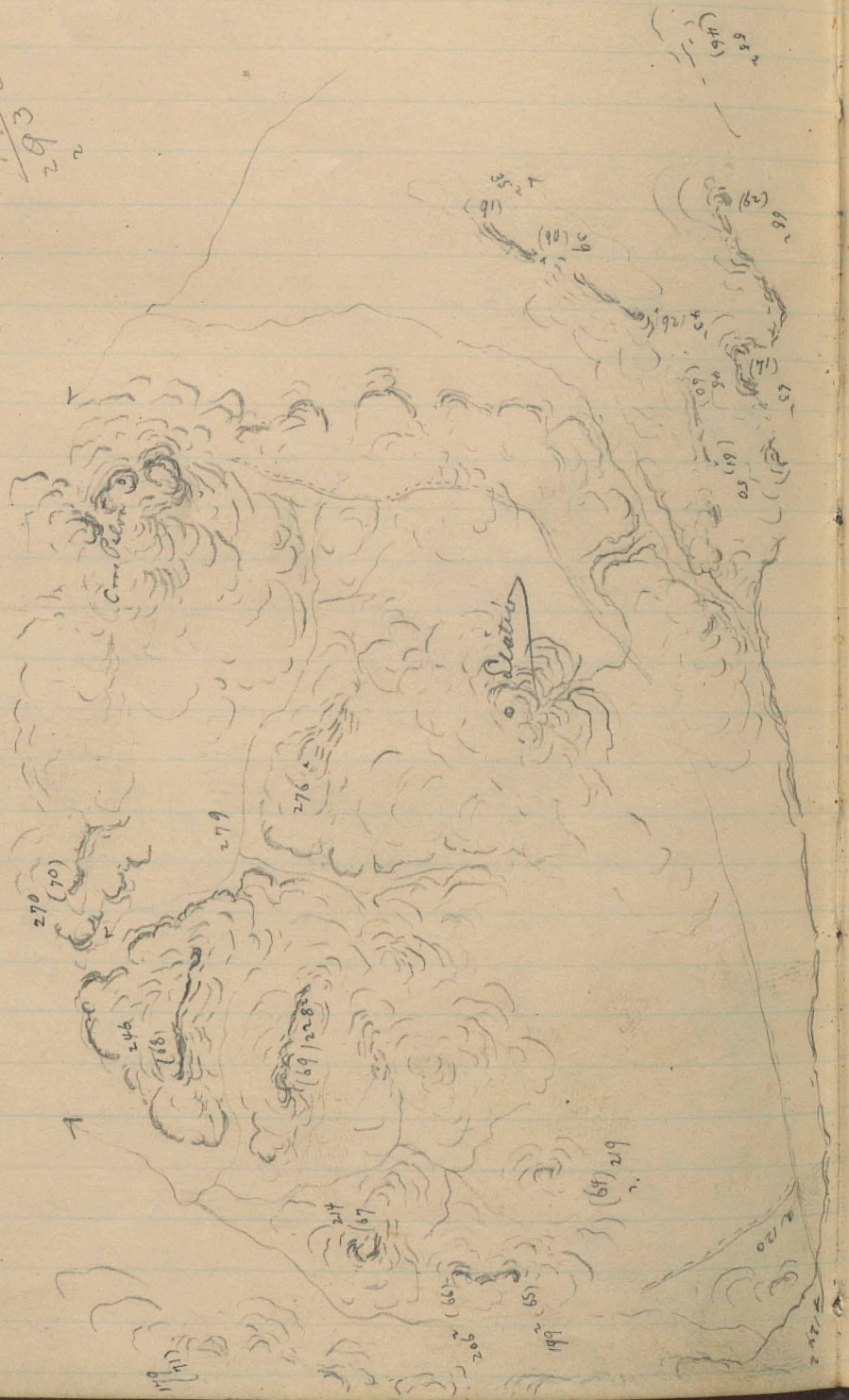
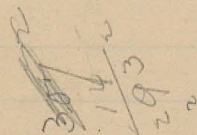




Topographical Station on point (B3) of Sept 14 1895  
 XXIII Charred No 2098 22.550.650  
 - 24. 442 307.30

Carrs Palom 320.15 L 264 30 ? Placer 218 5<sup>th</sup> los Escobas 340

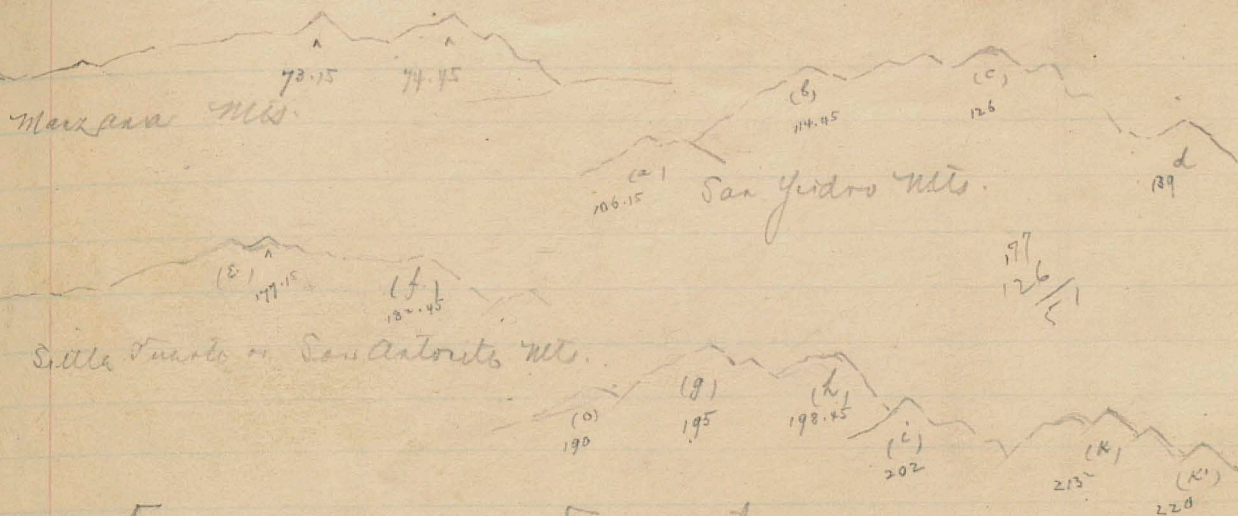
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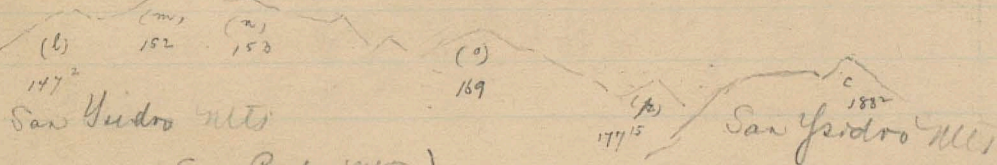
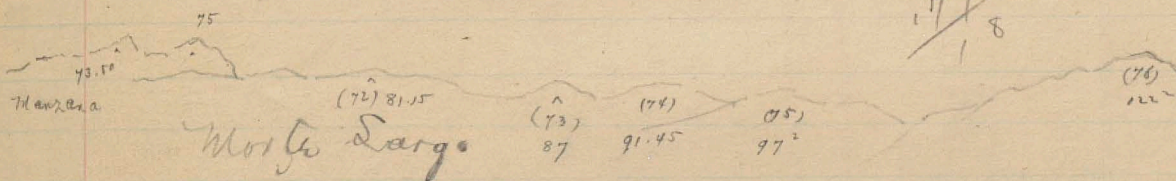


From Camp 53. Sept. 18<sup>th</sup> 1875

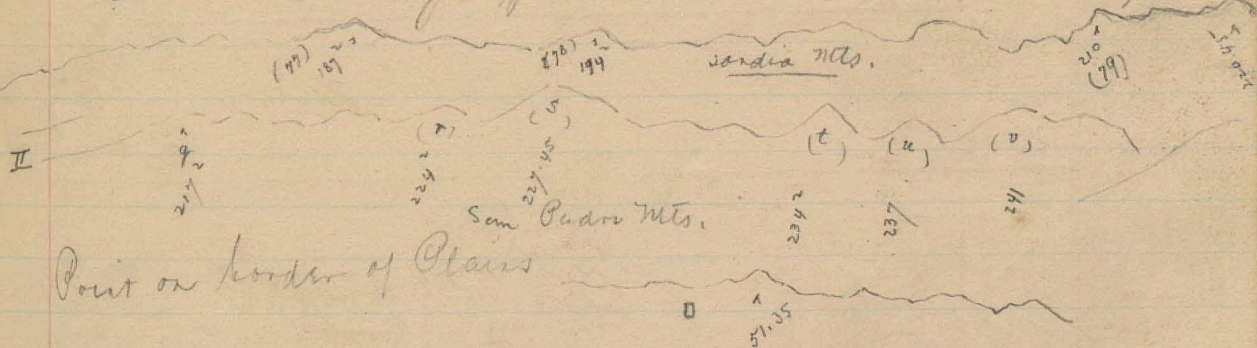
95



From Station 4 of Sept 18<sup>th</sup> 1875  
m m 239<sup>2</sup>



(San Ysidro Mts.)  
II Small range from Station 6 Sept 18<sup>th</sup> 1875





Camp No 53 to No 54 at Stejano L M. Synonymus A. Raul.  
 date Sept. 18<sup>th</sup> 1875. Station must use Youngs' Pass. M. 1889  
 New Party

Station		Station		Remarks	
by		by		by	
Camp 53	686	8-1	S 18 N.	Corro Pilon 240	Gully 352 45. S. a. Escal 242 15
Station 1	990	6	S 18 N.	Man 64	343 <sup>2</sup> Manana 74 45
2	1263	7+	S 18 N.	junction spread which we left yesterday at	Station 8 in drain coming out below San
				Yodors and San Antonio Mts.	
				Baldy 328.15 Corro Pilon 349	S. a. Escal 347 Man 64 55
				Manana Mts.	
				M. M. 314.15	49 150.15 to Camp 330
3	1090	1.4	S 15 N.	(f) 275 (o) 248 (g) 288.45	(a) 212 (b) 211.10 (c) 224 (d) 240.45 (e) 271 <sup>2</sup>
4	1775	1.2	S 50 N.	Baldy 124 Pilon 139.15 (64)	Man 263.15 Manana 308
	2210			M. M. 11045 (a) 39 45	(h) 225 (i) 35 (j) 58 45 (k) 78 (l) 91 (m) 92.35
5	2750	2.1+	S 65 N.	M. M. 289 <sup>2</sup> Baldy 353 <sup>2</sup>	(n) 95 <sup>2</sup> (o) 107 <sup>2</sup> (p) 163 <sup>2</sup>
				junction of road	Man 333 45, Manana 75
				M. M. 245.45	Gully 231 (64) 308.45 Manana 58 <sup>2</sup> Sandia 131 (42) 55 <sup>2</sup>
6	3430	1.7 on drain	S 70 N.	(73) 61.15 (74) 64 <sup>2</sup> (75) 71 <sup>2</sup> (76) 48.15 (77) 153.45 (78) 161 <sup>2</sup> (79) 171 <sup>2</sup> (80) 182 <sup>2</sup>	
7	3675	1.8	S 65 N.	M. M. 303 <sup>2</sup> Sandia 220.45	(81) 184 <sup>2</sup> (82) 194 <sup>2</sup> (83) 204 <sup>2</sup> (84) 214 <sup>2</sup> (85) 224 <sup>2</sup> (86) 234 <sup>2</sup> (87) 244 <sup>2</sup> (88) 254 <sup>2</sup> (89) 264 <sup>2</sup> (90) 274 <sup>2</sup> (91) 284 <sup>2</sup> (92) 294 <sup>2</sup> (93) 304 <sup>2</sup> (94) 314 <sup>2</sup> (95) 324 <sup>2</sup> (96) 334 <sup>2</sup> (97) 344 <sup>2</sup> (98) 354 <sup>2</sup> (99) 364 <sup>2</sup> (100) 374 <sup>2</sup> (101) 384 <sup>2</sup> (102) 394 <sup>2</sup> (103) 404 <sup>2</sup> (104) 414 <sup>2</sup> (105) 424 <sup>2</sup> (106) 434 <sup>2</sup> (107) 444 <sup>2</sup> (108) 454 <sup>2</sup> (109) 464 <sup>2</sup> (110) 474 <sup>2</sup> (111) 484 <sup>2</sup> (112) 494 <sup>2</sup> (113) 504 <sup>2</sup> (114) 514 <sup>2</sup> (115) 524 <sup>2</sup> (116) 534 <sup>2</sup> (117) 544 <sup>2</sup> (118) 554 <sup>2</sup> (119) 564 <sup>2</sup> (120) 574 <sup>2</sup> (121) 584 <sup>2</sup> (122) 594 <sup>2</sup> (123) 604 <sup>2</sup> (124) 614 <sup>2</sup> (125) 624 <sup>2</sup> (126) 634 <sup>2</sup> (127) 644 <sup>2</sup> (128) 654 <sup>2</sup> (129) 664 <sup>2</sup> (130) 674 <sup>2</sup> (131) 684 <sup>2</sup> (132) 694 <sup>2</sup> (133) 704 <sup>2</sup> (134) 714 <sup>2</sup> (135) 724 <sup>2</sup> (136) 734 <sup>2</sup> (137) 744 <sup>2</sup> (138) 754 <sup>2</sup> (139) 764 <sup>2</sup> (140) 774 <sup>2</sup> (141) 784 <sup>2</sup> (142) 794 <sup>2</sup> (143) 804 <sup>2</sup> (144) 814 <sup>2</sup> (145) 824 <sup>2</sup> (146) 834 <sup>2</sup> (147) 844 <sup>2</sup> (148) 854 <sup>2</sup> (149) 864 <sup>2</sup> (150) 874 <sup>2</sup> (151) 884 <sup>2</sup> (152) 894 <sup>2</sup> (153) 904 <sup>2</sup> (154) 914 <sup>2</sup> (155) 924 <sup>2</sup> (156) 934 <sup>2</sup> (157) 944 <sup>2</sup> (158) 954 <sup>2</sup> (159) 964 <sup>2</sup> (160) 974 <sup>2</sup> (161) 984 <sup>2</sup> (162) 994 <sup>2</sup> (163) 1004 <sup>2</sup> (164) 1014 <sup>2</sup> (165) 1024 <sup>2</sup> (166) 1034 <sup>2</sup> (167) 1044 <sup>2</sup> (168) 1054 <sup>2</sup> (169) 1064 <sup>2</sup> (170) 1074 <sup>2</sup> (171) 1084 <sup>2</sup> (172) 1094 <sup>2</sup> (173) 1104 <sup>2</sup> (174) 1114 <sup>2</sup> (175) 1124 <sup>2</sup> (176) 1134 <sup>2</sup> (177) 1144 <sup>2</sup> (178) 1154 <sup>2</sup> (179) 1164 <sup>2</sup> (180) 1174 <sup>2</sup> (181) 1184 <sup>2</sup> (182) 1194 <sup>2</sup> (183) 1204 <sup>2</sup> (184) 1214 <sup>2</sup> (185) 1224 <sup>2</sup> (186) 1234 <sup>2</sup> (187) 1244 <sup>2</sup> (188) 1254 <sup>2</sup> (189) 1264 <sup>2</sup> (190) 1274 <sup>2</sup> (191) 1284 <sup>2</sup> (192) 1294 <sup>2</sup> (193) 1304 <sup>2</sup> (194) 1314 <sup>2</sup> (195) 1324 <sup>2</sup> (196) 1334 <sup>2</sup> (197) 1344 <sup>2</sup> (198) 1354 <sup>2</sup> (199) 1364 <sup>2</sup> (200) 1374 <sup>2</sup> (201) 1384 <sup>2</sup> (202) 1394 <sup>2</sup> (203) 1404 <sup>2</sup> (204) 1414 <sup>2</sup> (205) 1424 <sup>2</sup> (206) 1434 <sup>2</sup> (207) 1444 <sup>2</sup> (208) 1454 <sup>2</sup> (209) 1464 <sup>2</sup> (210) 1474 <sup>2</sup> (211) 1484 <sup>2</sup> (212) 1494 <sup>2</sup> (213) 1504 <sup>2</sup> (214) 1514 <sup>2</sup> (215) 1524 <sup>2</sup> (216) 1534 <sup>2</sup> (217) 1544 <sup>2</sup> (218) 1554 <sup>2</sup> (219) 1564 <sup>2</sup> (220) 1574 <sup>2</sup> (221) 1584 <sup>2</sup> (222) 1594 <sup>2</sup> (223) 1604 <sup>2</sup> (224) 1614 <sup>2</sup> (225) 1624 <sup>2</sup> (226) 1634 <sup>2</sup> (227) 1644 <sup>2</sup> (228) 1654 <sup>2</sup> (229) 1664 <sup>2</sup> (230) 1674 <sup>2</sup> (231) 1684 <sup>2</sup> (232) 1694 <sup>2</sup> (233) 1704 <sup>2</sup> (234) 1714 <sup>2</sup> (235) 1724 <sup>2</sup> (236) 1734 <sup>2</sup> (237) 1744 <sup>2</sup> (238) 1754 <sup>2</sup> (239) 1764 <sup>2</sup> (240) 1774 <sup>2</sup> (241) 1784 <sup>2</sup> (242) 1794 <sup>2</sup> (243) 1804 <sup>2</sup> (244) 1814 <sup>2</sup> (245) 1824 <sup>2</sup> (246) 1834 <sup>2</sup> (247) 1844 <sup>2</sup> (248) 1854 <sup>2</sup> (249) 1864 <sup>2</sup> (250) 1874 <sup>2</sup> (251) 1884 <sup>2</sup> (252) 1894 <sup>2</sup> (253) 1904 <sup>2</sup> (254) 1914 <sup>2</sup> (255) 1924 <sup>2</sup> (256) 1934 <sup>2</sup> (257) 1944 <sup>2</sup> (258) 1954 <sup>2</sup> (259) 1964 <sup>2</sup> (260) 1974 <sup>2</sup> (261) 1984 <sup>2</sup> (262) 1994 <sup>2</sup> (263) 2004 <sup>2</sup> (264) 2014 <sup>2</sup> (265) 2024 <sup>2</sup> (266) 2034 <sup>2</sup> (267) 2044 <sup>2</sup> (268) 2054 <sup>2</sup> (269) 2064 <sup>2</sup> (270) 2074 <sup>2</sup> (271) 2084 <sup>2</sup> (272) 2094 <sup>2</sup> (273) 2104 <sup>2</sup> (274) 2114 <sup>2</sup> (275) 2124 <sup>2</sup> (276) 2134 <sup>2</sup> (277) 2144 <sup>2</sup> (278) 2154 <sup>2</sup> (279) 2164 <sup>2</sup> (280) 2174 <sup>2</sup> (281) 2184 <sup>2</sup> (282) 2194 <sup>2</sup> (283) 2204 <sup>2</sup> (284) 2214 <sup>2</sup> (285) 2224 <sup>2</sup> (286) 2234 <sup>2</sup> (287) 2244 <sup>2</sup> (288) 2254 <sup>2</sup> (289) 2264 <sup>2</sup> (290) 2274 <sup>2</sup> (291) 2284 <sup>2</sup> (292) 2294 <sup>2</sup> (293) 2304 <sup>2</sup> (294) 2314 <sup>2</sup> (295) 2324 <sup>2</sup> (296) 2334 <sup>2</sup> (297) 2344 <sup>2</sup> (298) 2354 <sup>2</sup> (299) 2364 <sup>2</sup> (300) 2374 <sup>2</sup> (301) 2384 <sup>2</sup> (302) 2394 <sup>2</sup> (303) 2404 <sup>2</sup> (304) 2414 <sup>2</sup> (305) 2424 <sup>2</sup> (306) 2434 <sup>2</sup> (307) 2444 <sup>2</sup> (308) 2454 <sup>2</sup> (309) 2464 <sup>2</sup> (310) 2474 <sup>2</sup> (311) 2484 <sup>2</sup> (312) 2494 <sup>2</sup> (313) 2504 <sup>2</sup> (314) 2514 <sup>2</sup> (315) 2524 <sup>2</sup> (316) 2534 <sup>2</sup> (317) 2544 <sup>2</sup> (318) 2554 <sup>2</sup> (319) 2564 <sup>2</sup> (320) 2574 <sup>2</sup> (321) 2584 <sup>2</sup> (322) 2594 <sup>2</sup> (323) 2604 <sup>2</sup> (324) 2614 <sup>2</sup> (325) 2624 <sup>2</sup> (326) 2634 <sup>2</sup> (327) 2644 <sup>2</sup> (328) 2654 <sup>2</sup> (329) 2664 <sup>2</sup> (330) 2674 <sup>2</sup> (331) 2684 <sup>2</sup> (332) 2694 <sup>2</sup> (333) 2704 <sup>2</sup> (334) 2714 <sup>2</sup> (335) 2724 <sup>2</sup> (336) 2734 <sup>2</sup> (337) 2744 <sup>2</sup> (338) 2754 <sup>2</sup> (339) 2764 <sup>2</sup> (340) 2774 <sup>2</sup> (341) 2784 <sup>2</sup> (342) 2794 <sup>2</sup> (343) 2804 <sup>2</sup> (344) 2814 <sup>2</sup> (345) 2824 <sup>2</sup> (346) 2834 <sup>2</sup> (347) 2844 <sup>2</sup> (348) 2854 <sup>2</sup> (349) 2864 <sup>2</sup> (350) 2874 <sup>2</sup> (351) 2884 <sup>2</sup> (352) 2894 <sup>2</sup> (353) 2904 <sup>2</sup> (354) 2914 <sup>2</sup> (355) 2924 <sup>2</sup> (356) 2934 <sup>2</sup> (357) 2944 <sup>2</sup> (358) 2954 <sup>2</sup> (359) 2964 <sup>2</sup> (360) 2974 <sup>2</sup> (361) 2984 <sup>2</sup> (362) 2994 <sup>2</sup> (363) 3004 <sup>2</sup> (364) 3014 <sup>2</sup> (365) 3024 <sup>2</sup> (366) 3034 <sup>2</sup> (367) 3044 <sup>2</sup> (368) 3054 <sup>2</sup> (369) 3064 <sup>2</sup> (370) 3074 <sup>2</sup> (371) 3084 <sup>2</sup> (372) 3094 <sup>2</sup> (373) 3104 <sup>2</sup> (374) 3114 <sup>2</sup> (375) 3124 <sup>2</sup> (376) 3134 <sup>2</sup> (377) 3144 <sup>2</sup> (378) 3154 <sup>2</sup> (379) 3164 <sup>2</sup> (380) 3174 <sup>2</sup> (381) 3184 <sup>2</sup> (382) 3194 <sup>2</sup> (383) 3204 <sup>2</sup> (384) 3214 <sup>2</sup> (385) 3224 <sup>2</sup> (386) 3234 <sup>2</sup> (387) 3244 <sup>2</sup> (388) 3254 <sup>2</sup> (389) 3264 <sup>2</sup> (390) 3274 <sup>2</sup> (391) 3284 <sup>2</sup> (392) 3294 <sup>2</sup> (393) 3304 <sup>2</sup> (394) 3314 <sup>2</sup> (395) 3324 <sup>2</sup> (396) 3334 <sup>2</sup> (397) 3344 <sup>2</sup> (398) 3354 <sup>2</sup> (399) 3364 <sup>2</sup> (400) 3374 <sup>2</sup> (401) 3384 <sup>2</sup> (402) 3394 <sup>2</sup> (403) 3404 <sup>2</sup> (404) 3414 <sup>2</sup> (405) 3424 <sup>2</sup> (406) 3434 <sup>2</sup> (407) 3444 <sup>2</sup> (408) 3454 <sup>2</sup> (409) 3464 <sup>2</sup> (410) 3474 <sup>2</sup> (411) 3484 <sup>2</sup> (412) 3494 <sup>2</sup> (413) 3504 <sup>2</sup> (414) 3514 <sup>2</sup> (415) 3524 <sup>2</sup> (416) 3534 <sup>2</sup> (417) 3544 <sup>2</sup> (418) 3554 <sup>2</sup> (419) 3564 <sup>2</sup> (420) 3574 <sup>2</sup> (421) 3584 <sup>2</sup> (422) 3594 <sup>2</sup> (423) 3604 <sup>2</sup> (424) 3614 <sup>2</sup> (425) 3624 <sup>2</sup> (426) 3634 <sup>2</sup> (427) 3644 <sup>2</sup> (428) 3654 <sup>2</sup> (429) 3664 <sup>2</sup> (430) 3674 <sup>2</sup> (431) 3684 <sup>2</sup> (432) 3694 <sup>2</sup> (433) 3704 <sup>2</sup> (434) 3714 <sup>2</sup> (435) 3724 <sup>2</sup> (436) 3734 <sup>2</sup> (437) 3744 <sup>2</sup> (438) 3754 <sup>2</sup> (439) 3764 <sup>2</sup> (440) 3774 <sup>2</sup> (441) 3784 <sup>2</sup> (442) 3794 <sup>2</sup> (443) 3804 <sup>2</sup> (444) 3814 <sup>2</sup> (445) 3824 <sup>2</sup> (446) 3834 <sup>2</sup> (447) 3844 <sup>2</sup> (448) 3854 <sup>2</sup> (449) 3864 <sup>2</sup> (450) 3874 <sup>2</sup> (451) 3884 <sup>2</sup> (452) 3894 <sup>2</sup> (453) 3904 <sup>2</sup> (454) 3914 <sup>2</sup> (455) 3924 <sup>2</sup> (456) 3934 <sup>2</sup> (457) 3944 <sup>2</sup> (458) 3954 <sup>2</sup> (459) 3964 <sup>2</sup> (460) 3974 <sup>2</sup> (461) 3984 <sup>2</sup> (462) 3994 <sup>2</sup> (463) 4004 <sup>2</sup> (464) 4014 <sup>2</sup> (465) 4024 <sup>2</sup> (466) 4034 <sup>2</sup> (467) 4044 <sup>2</sup> (468) 4054 <sup>2</sup> (469) 4064 <sup>2</sup> (470) 4074 <sup>2</sup> (471) 4084 <sup>2</sup> (472) 4094 <sup>2</sup> (473) 4104 <sup>2</sup> (474) 4114 <sup>2</sup> (475) 4124 <sup>2</sup> (476) 4134 <sup>2</sup> (477) 4144 <sup>2</sup> (478) 4154 <sup>2</sup> (479) 4164 <sup>2</sup> (480) 4174 <sup>2</sup> (481) 4184 <sup>2</sup> (482) 4194 <sup>2</sup> (483) 4204 <sup>2</sup> (484) 4214 <sup>2</sup> (485) 4224 <sup>2</sup> (486) 4234 <sup>2</sup> (487) 4244 <sup>2</sup> (488) 4254 <sup>2</sup> (489) 4264 <sup>2</sup> (490) 4274 <sup>2</sup> (491) 4284 <sup>2</sup> (492) 4294 <sup>2</sup> (493) 4304 <sup>2</sup> (494) 4314 <sup>2</sup> (495) 4324 <sup>2</sup> (496) 4334 <sup>2</sup> (497) 4344 <sup>2</sup> (498) 4354 <sup>2</sup> (499) 4364 <sup>2</sup> (500) 4374 <sup>2</sup> (501) 4384 <sup>2</sup> (502) 4394 <sup>2</sup> (503) 4404 <sup>2</sup> (504) 4414 <sup>2</sup> (505) 4424 <sup>2</sup> (506) 4434 <sup>2</sup> (507) 4444 <sup>2</sup> (508) 4454 <sup>2</sup> (509) 4464 <sup>2</sup> (510) 4474 <sup>2</sup> (511) 4484 <sup>2</sup> (512) 4494 <sup>2</sup> (513) 4504 <sup>2</sup> (514) 4514 <sup>2</sup> (515) 4524 <sup>2</sup> (516) 4534 <sup>2</sup> (517) 4544 <sup>2</sup> (518) 4554 <sup>2</sup> (519) 4564 <sup>2</sup> (520) 4574 <sup>2</sup> (521) 4584 <sup>2</sup> (522) 4594 <sup>2</sup> (523) 4604 <sup>2</sup> (524) 4614 <sup>2</sup> (525) 4624 <sup>2</sup> (526) 4634 <sup>2</sup> (527) 4644 <sup>2</sup> (528) 4654 <sup>2</sup> (529) 4664 <sup>2</sup> (530) 4674 <sup>2</sup> (531) 4684 <sup>2</sup> (532) 4694 <sup>2</sup> (533) 4704 <sup>2</sup> (534) 4714 <sup>2</sup> (535) 4724 <sup>2</sup> (536) 4734 <sup>2</sup> (537) 4744 <sup>2</sup> (538) 4754 <sup>2</sup> (539) 4764 <sup>2</sup> (540) 4774 <sup>2</sup> (541) 4784 <sup>2</sup> (542) 4794 <sup>2</sup> (543) 4804 <sup>2</sup> (544) 4814 <sup>2</sup> (545) 4824 <sup>2</sup> (546) 4834 <sup>2</sup> (547) 4844 <sup>2</sup> (548) 4854 <sup>2</sup> (549) 4864 <sup>2</sup> (550) 4874 <sup>2</sup> (551) 4884 <sup>2</sup> (552) 4894 <sup>2</sup> (553) 4904 <sup>2</sup> (554) 4914 <sup>2</sup> (555) 4924 <sup>2</sup> (556) 4934 <sup>2</sup> (557) 4944 <sup>2</sup> (558) 4954 <sup>2</sup> (559) 4964 <sup>2</sup> (560) 4974 <sup>2</sup> (561) 4984 <sup>2</sup> (562) 4994 <sup>2</sup> (563) 5004 <sup>2</sup> (564) 5014 <sup>2</sup> (565) 5024 <sup>2</sup> (566) 5034 <sup>2</sup> (567) 5044 <sup>2</sup> (568) 5054 <sup>2</sup> (569) 5064 <sup>2</sup> (570) 5074 <sup>2</sup> (571) 5084 <sup>2</sup> (572) 5094 <sup>2</sup> (573) 5104 <sup>2</sup> (574) 5114 <sup>2</sup> (575) 5124 <sup>2</sup> (576) 5134 <sup>2</sup> (577) 5144 <sup>2</sup> (578) 5154 <sup>2</sup> (579) 5164 <sup>2</sup> (580) 5174 <sup>2</sup> (581) 5184 <sup>2</sup> (582) 5194 <sup>2</sup> (583) 5204 <sup>2</sup> (584) 5214 <sup>2</sup> (585) 5224 <sup>2</sup> (586) 5234 <sup>2</sup> (587) 5244 <sup>2</sup> (588) 5254 <sup>2</sup> (589) 5264 <sup>2</sup> (590) 5274 <sup>2</sup> (591) 5284 <sup>2</sup> (592) 5294 <sup>2</sup> (593) 5304 <sup>2</sup> (594) 5314 <sup>2</sup> (595) 5324 <sup>2</sup> (596) 5334 <sup>2</sup> (597) 5344 <sup>2</sup> (598) 5354 <sup>2</sup> (599) 5364 <sup>2</sup> (600) 5374 <sup>2</sup> (601) 5384 <sup>2</sup> (602) 5394 <sup>2</sup> (603) 5404 <sup>2</sup> (604) 5414 <sup>2</sup> (605) 5424 <sup>2</sup> (606) 5434 <sup>2</sup> (607) 5444 <sup>2</sup> (608) 5454 <sup>2</sup> (609) 5464 <sup>2</sup> (610) 5474 <sup>2</sup> (611) 5484 <sup>2</sup> (612) 5494 <sup>2</sup> (613) 5504 <sup>2</sup> (614) 5514 <sup>2</sup> (615) 5524 <sup>2</sup> (616) 5534 <sup>2</sup> (617) 5544 <sup>2</sup> (618) 5554 <sup>2</sup> (619) 5564 <sup>2</sup> (620) 5574 <sup>2</sup> (621) 5584 <sup>2</sup> (622) 5594 <sup>2</sup> (623) 5604 <sup>2</sup> (624) 5614 <sup>2</sup> (625) 5624 <sup>2</sup> (626) 5634 <sup>2</sup> (627) 5644 <sup>2</sup> (628) 5654 <sup>2</sup> (629) 5664 <sup>2</sup> (630) 5674 <sup>2</sup> (631) 5684 <sup>2</sup> (632) 5694 <sup>2</sup> (633) 5704 <sup>2</sup> (634) 5714 <sup>2</sup> (635) 5724 <sup>2</sup> (636) 5734 <sup>2</sup> (637) 5744 <sup>2</sup> (638) 5754 <sup>2</sup> (639) 5764 <sup>2</sup> (640) 5774 <sup>2</sup> (641) 5784 <sup>2</sup> (642) 5794 <sup>2</sup> (643) 5804 <sup>2</sup> (644) 5814 <sup>2</sup> (645) 5824 <sup>2</sup> (646) 5834 <sup>2</sup> (647) 5844 <sup>2</sup> (648) 5854 <sup>2</sup> (649) 5864 <sup>2</sup> (650) 5874 <sup>2</sup> (651) 5884 <sup>2</sup> (652) 5894 <sup>2</sup> (653) 5904 <sup>2</sup> (654) 5914 <sup>2</sup> (655) 5924 <sup>2</sup> (656) 5934 <sup>2</sup> (657) 5944 <sup>2</sup> (658) 5954 <sup>2</sup> (659) 5964 <sup>2</sup> (660) 5974 <sup>2</sup> (661) 5984 <sup>2</sup> (662) 5994 <sup>2</sup> (663) 6004 <sup>2</sup> (664) 6014 <sup>2</sup> (665) 6024 <sup>2</sup> (666) 6034 <sup>2</sup> (667) 6044 <sup>2</sup> (668) 6054 <sup>2</sup> (669) 6064 <sup>2</sup> (670) 6074 <sup>2</sup> (671) 6084 <sup>2</sup> (672) 6094 <sup>2</sup> (673) 6104 <sup>2</sup> (674) 6114 <sup>2</sup> (675) 6124 <sup>2</sup> (676) 6134 <sup>2</sup> (677) 6144 <sup>2</sup> (678) 6154 <sup>2</sup> (679) 6164 <sup>2</sup> (680) 6174 <sup>2</sup> (681) 6184 <sup>2</sup> (682) 6194 <sup>2</sup> (683) 6204 <sup>2</sup> (684) 6214 <sup>2</sup> (685) 6224 <sup>2</sup> (686) 6234 <sup>2</sup> (687) 6244 <sup>2</sup> (688) 6254 <sup>2</sup> (689) 6264 <sup>2</sup> (690) 6274 <sup>2</sup> (691) 6284 <sup>2</sup> (692) 6294 <sup>2</sup> (693) 6304 <sup>2</sup> (694) 6314 <sup>2</sup> (695) 6324 <sup>2</sup> (696) 6334 <sup>2</sup> (697) 6344 <sup>2</sup> (698) 6354 <sup>2</sup> (699) 6364 <sup>2</sup> (700) 6374 <sup>2</sup> (701) 6384 <sup>2</sup> (702) 6394 <sup>2</sup> (703) 6404 <sup>2</sup> (704) 6414 <sup>2</sup> (705) 6424 <sup>2</sup> (706) 6434 <sup>2</sup> (707) 6444 <sup>2</sup> (708) 6454 <sup>2</sup> (709) 6464 <sup>2</sup> (710) 6474 <sup>2</sup> (711) 6484 <sup>2</sup> (712) 6494 <sup>2</sup> (713) 6504 <sup>2</sup> (714) 6514 <sup>2</sup> (715) 6524 <sup>2</sup> (716) 6534 <sup>2</sup> (717) 6544 <sup>2</sup> (718) 6554 <sup>2</sup> (719) 6564 <sup>2</sup> (720) 6574 <sup>2</sup> (721) 6584 <sup>2</sup> (722) 6594 <sup>2</sup> (723) 6604 <sup>2</sup> (724) 6614 <sup>2</sup> (725) 6624 <sup>2</sup> (726) 6634 <sup>2</sup> (727) 664



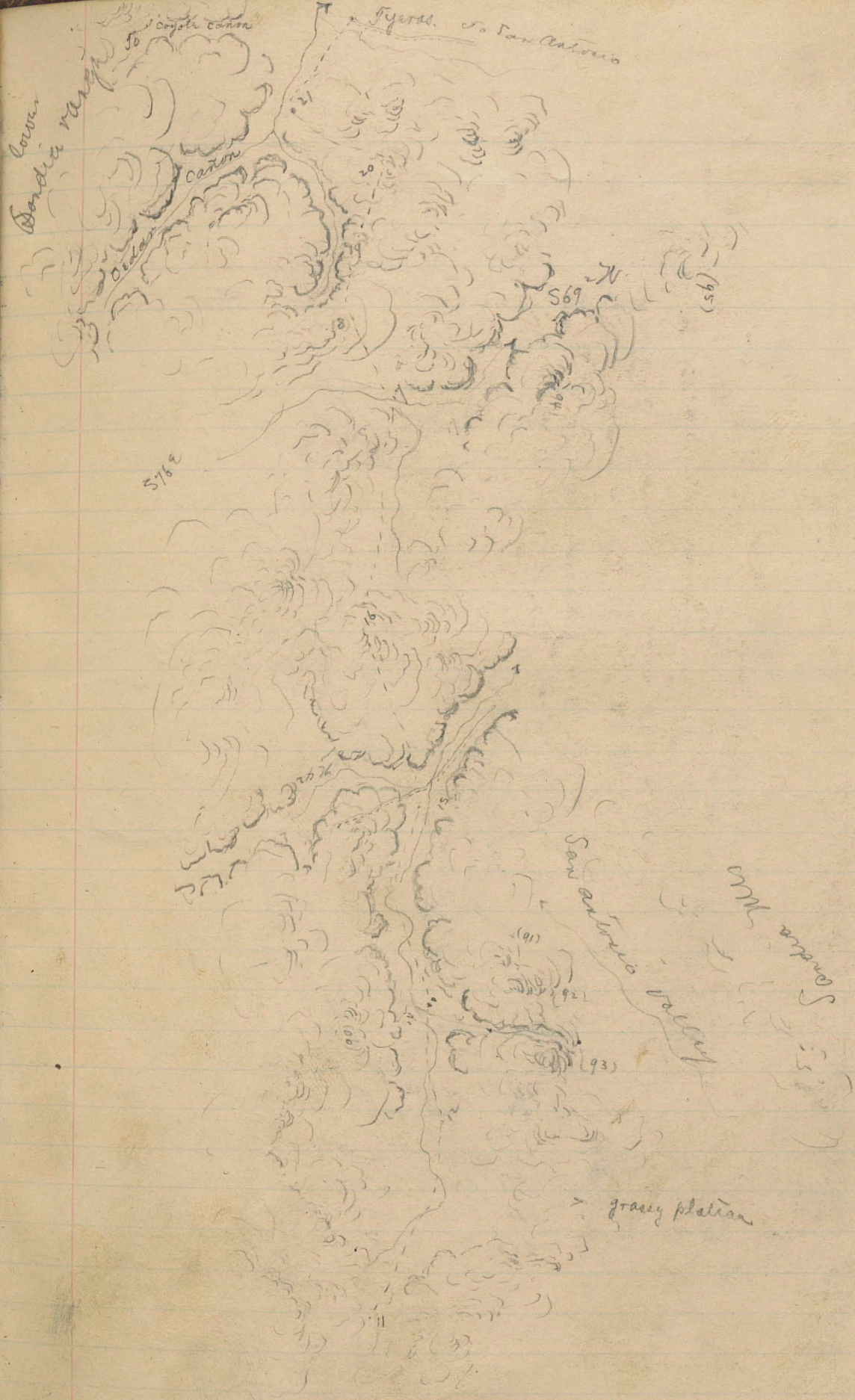




Camp No 53 to No 54 at Tejeras 2 m. topography of Karl  
 date Sept 18<sup>th</sup> 1875, Instrument used Youngs Transit No 4877

Station	Elev. at Station	Dist. at Station	Mag. Decl.	Remarks	
				Observed Height	Notes
Station 11	6076	.5	S 29 N	22.300	6570 (88) 191.45/89 196.30 to double Peak <sup>2 1/2</sup> m divide
" 12	6284	1	S 30 N	22.350	6450 (77) 122.15 (78) 137 to grassy plateau 226 m <sup>2 1/2</sup> m 233.45
" 13	6700	1	S 22 N	22.450	6325 valley half mile wide small ridges on each side 45 to 60
" 14	7190	.7	S 11 N	22.500	6250 (90) 524 N (92) 530 N (90) 538 N (90) 510 N Mexican town Gutierrez on Rio Tula in Canon
15	7520	.6	S 10 N	22.575	6175 Cornwell (90) 755 E (91) 539 N (92) 502 N (93) 726 N
16	7800	.8	S 34 N	22.550	6250 (77) 587 N (78) road to San Antonio
17	8130	.3	S 25 N	22.575	6175 On small divide
18	8250	.7	S 38 N	22.550	6200 (94) 740 N (95) 585 N (77) 776 N (78) 750 N
19	8535	.2	S 84 N	22.625	6108 (77) 742 N (78) 747 N (95) 735 N (94) 79 N on ridge
20	8650	.3	S 72 N	22.625	6106 small ridge
21	8800	.8	N 63 N	22.700	6000 small ridge
Camp	9130			22.750	5950 Town of Tejeras, in Tejeras Canon
				19.2	
				3.7	
				15.5	







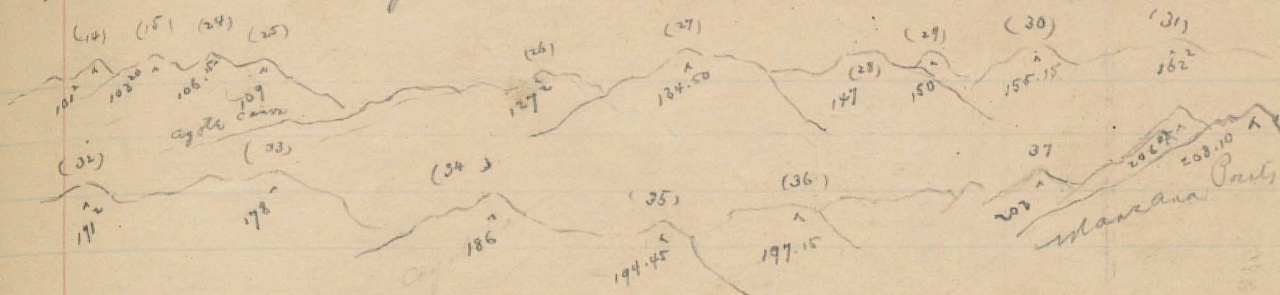




M M 67.15

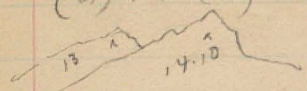
Sa Langa run from Station 16 of Sept. 19<sup>th</sup> 1875

101

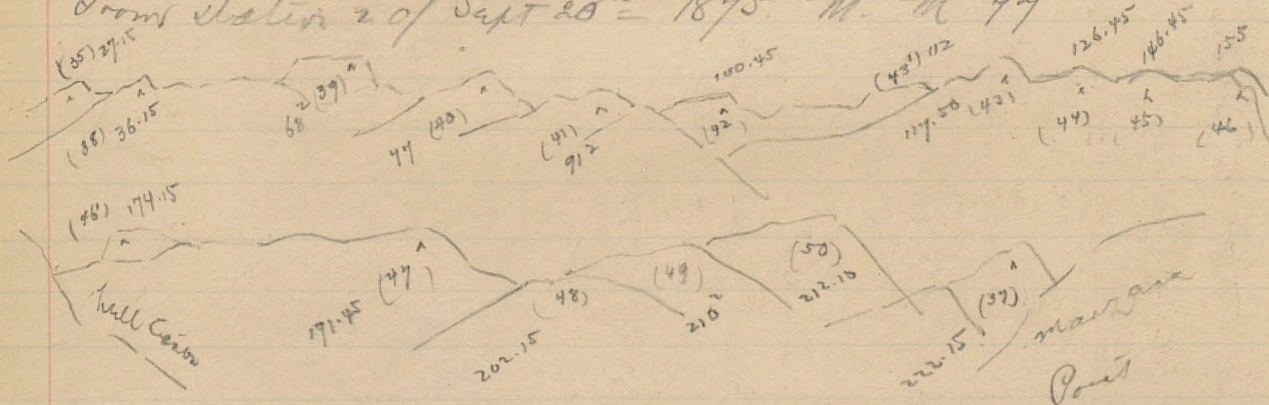


Peering to Sa Langa from Station 17 of Sept 19<sup>th</sup> 1875  
M M 234.15

(15) 258 (24) 259 (25) 261 (26) 271 (27) 281 (28) 295 (29) 302 (30) 317.45  
(31) 315.45 (32) 326 (33) 332 (34) 340.45 (35) 353 (36) 1 (37) 8



From Station 20 of Sept 20<sup>th</sup> 1875 M M 77





Camp No 546 No 17 etc party on down  
Sept. 19<sup>th</sup> 1875. Chulucuma road Yungo Drains. Ke 4889  
To top of the Atlatl

Station Inland Rd Mag Branch Chulucuma road  
Camp 04 9130 2  
N 65° W.

Station	9215	4	S 45° W.	Remarks
7	9390	8+	S 86° W	Crossed creek about 250 yards from Camp. S 86° E (97) S 66° E (100) S 48° E (11) S 62° E (3) S 45° W (4) S 83° W (5) N 77° W.
8	9630	19	S 46° W	(2) N 67° E (4) N 81° W (5) N 66° W (6) S 67° W (7) S 31° E crossed stream with running water
9	1231	7+	S 39° W	(4) N 9° W (5) N 37° W (6) N 65° W (7) N 47° E (8) S 80° W (9) S 65° W
10	405	3	N 44° W	(10) S 38° W (11) Rock S 47° E (12) round S 1° W
11	574	1	S 65° W	(1) N 45° E (11) S 71° E (12) S 39° E (10) S 59° W (9) N 39° W (19) N 21° W (8) N 44° W
12	1021	18	S 75° W	(10) S 59° W (10) S 72° E (12) S 30° E (9) N 9° W (9) N 62° E (8) N 39° E (13) N 62° W
13	1390	6	S 60° W	Alvarado slaty (11) N 86° E (12) S 63° E (10) S 75° E (16) S 28° W (17) S 38° W (13) N 32° W
14	1670	1.3	S 21° W	(13) N 57° W (9) N 42° E (5) N 15° E (5) N 5° E
15	2230	7	S 24° W	(17) S 20° E (16) S 52° W (12) S 76° E (14) S 68° E (15) N 26° W (13) N 36° E (16) S 46° W

104  
M. W. 193.45. M. T. Taylor 104  
18) 157.10 (5) 215.45 (8) 225 (19) 210.15 (17) 257.5 (13) 203 (13) 209 (20) 435.15 395.45

9900  
9215  
685  
1670  
2355 = 440 = 53  
2200  
1550

193.45  
194.45  
49  
113.66

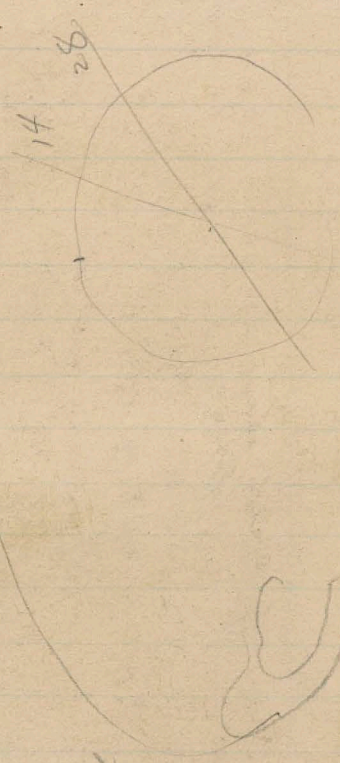
104  
M. W. 193.45. M. T. Taylor 104  
18) 157.10 (5) 215.45 (8) 225 (19) 210.15 (17) 257.5 (13) 203 (13) 209 (20) 435.15 395.45

296  
188  
116



92.00  
92.15  
68.50  
16.30  
23.55

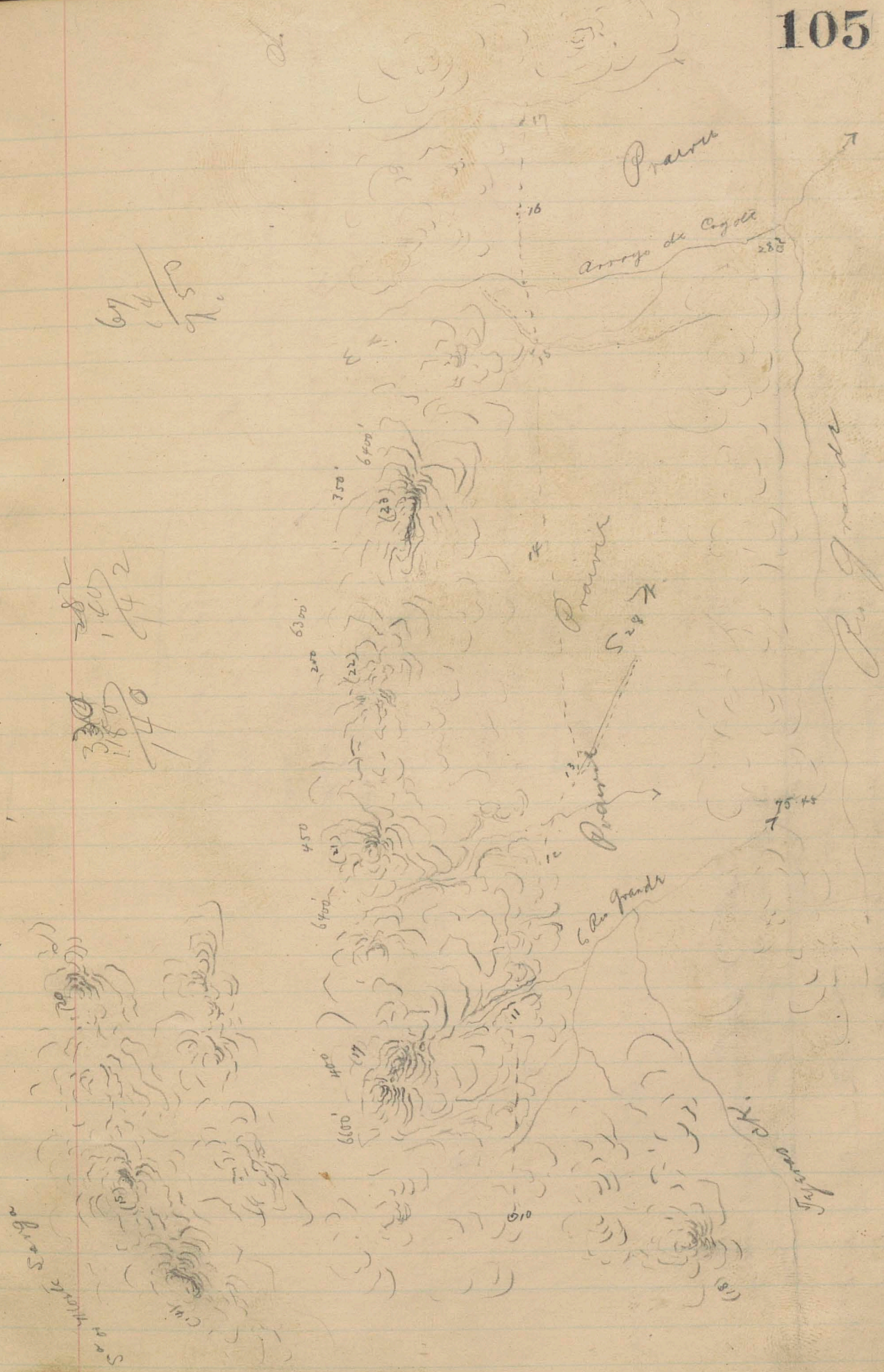
235











6700  
6400  
6300

6700  
6400  
6300

6700  
6400  
6300

Santa Rosa  
Cajon  
Sanga



Camp No 54 to No 1 2 miles west of mouth of the San Diego River  
 Sept 19<sup>th</sup> 1875 Measurement near Youngs Thomas No 4889  
 Solo party

Station 18  
 Station 19  
 Station 20  
 Station 21  
 Station 22  
 Station 23  
 Station 24  
 Station 25  
 Station 26  
 Station 27  
 Station 28  
 Station 29  
 Station 30  
 Station 31  
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 Station 98  
 Station 99  
 Station 100

Station 18	60.15	7.1	N 69 E	23.080	5500
19	64.88	3.3	S 55 E	22.925	5875
Camp	1965	19.8		22.900	5700

Remarks

on drain and trail

on drain and trail

M. M. 219.15. Taylor 124.45. Crater 148. Sadowsky 60<sup>2</sup>

on hill Canon wagon road coming in the direction of

large drain followed road

M. M. 325

M. M. Taylor 240 Crater 261.45 Sadowsky 176.45

M. M. 108.15

From station 19 to Camp 1 of solo party

no notes were taken save the general

direction of being to dark to read the compass,

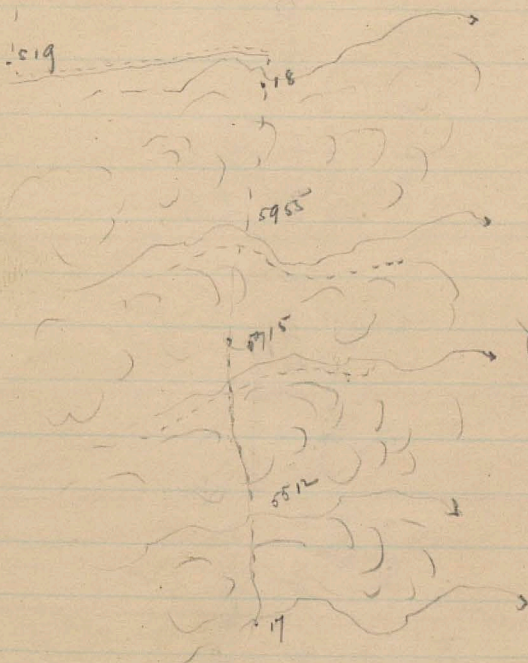
and the topographical work was

resumed at station 18 the following day

Sept 20<sup>th</sup> 1875



Camp Independence





Camp No. 6 No 55 at mouth of Hell Canyon in the topographic of Kane  
 Sept 20<sup>th</sup> 1898. Instrument used Junco Chassis No 4089

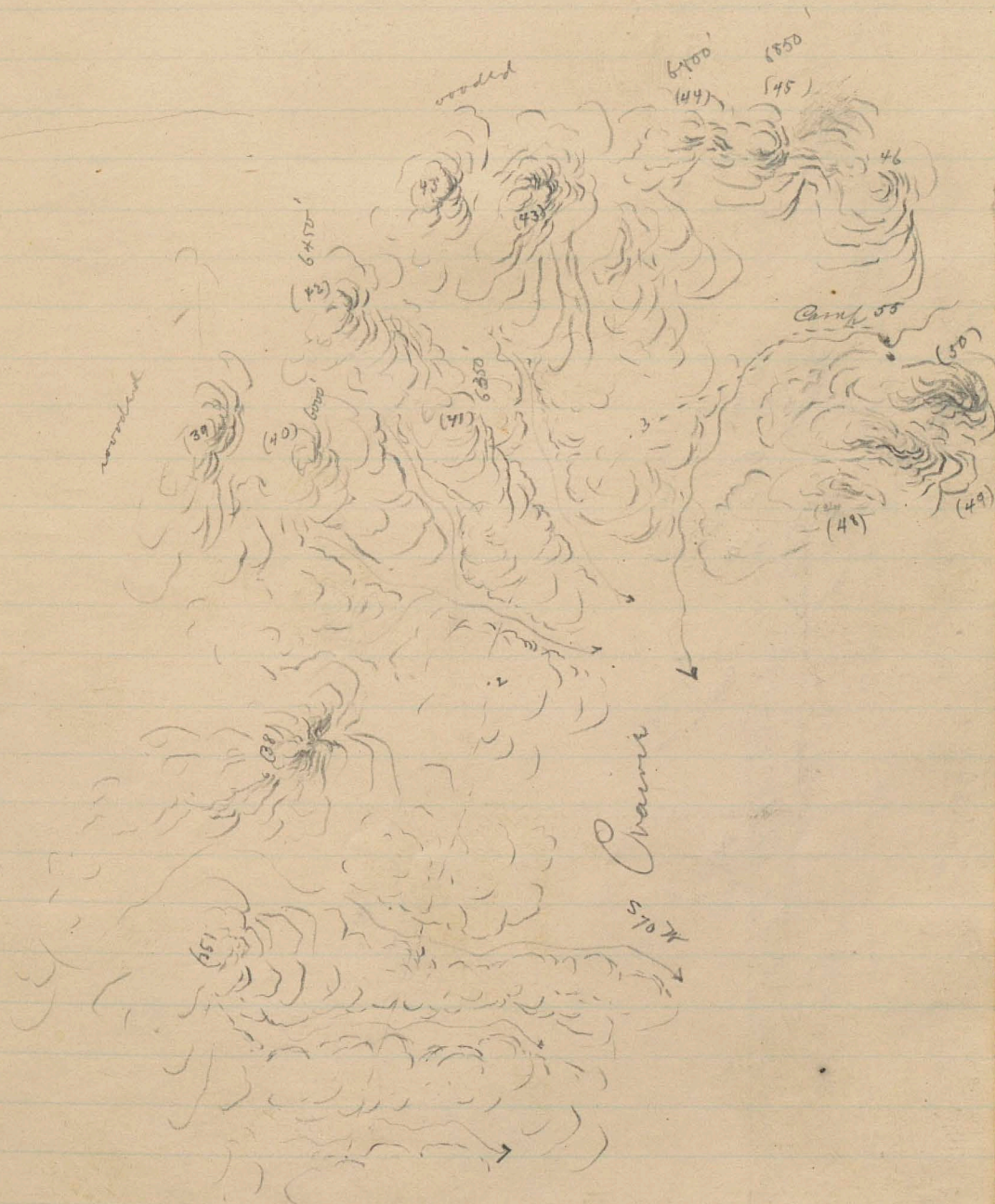
Station		P. M. H. G.		Remarks	
Station		P. M. H. G.		Remarks	
42.5	1.1	S 52 E	22975	M M 58 45 Taylor 333 Crater 307.45 Sandia 47	
89.5	.7	S 62 E	22850	M M 134 Taylor 49 45 Crater 71.15 Sadron 347 Mass 280	
				400 yds after leaving station we struck the same road which we had left and followed it (35) 175 <sup>2</sup> large drain running to the ground	
12.10	.7	S 77 E	22850	(38) 232.45 (36) 263 <sup>2</sup> (37) 273 Taylor 352 45 Crater 14 Sadron 292 Mass 230 45	
15.10	1.4		in drain		
21.25	1.2	S 34 E	22850		
22.900			22.900		

riders coming from Hell Canyon  
 (46) N 68 E (45) S 52 E (47) S 18 E (50) S 27 E (39) N 27 E  
 (38) N 38 E Hell Canyon is located between the  
 points 46 and 46'

Camp 55 22.07 4.1



13





Topographic Station at Entrance of Lee Canyon (Pfeifers)

near Camp 53 Sept 10<sup>th</sup> 1895 Oberlin W. 2098

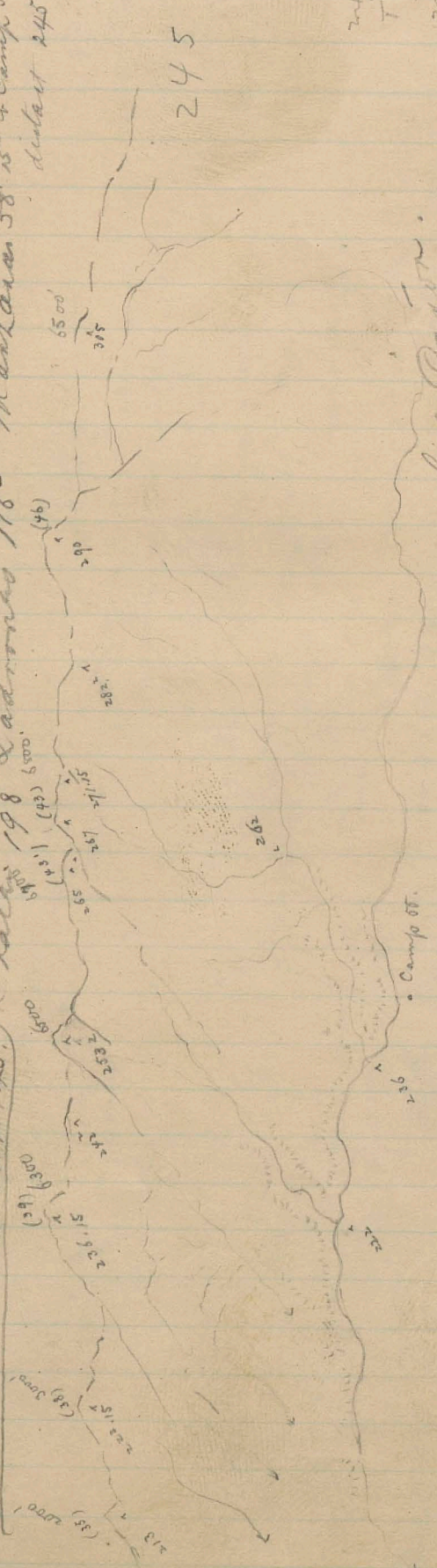
M. M. 209

Sanborn Mts. 241 40

Camp Garwood, the 23.330. the 1978

198 Ladronas 1162 Manxanas 58.15 to Camp 55 one mile

direct 245<sup>2</sup>



Camp 53

Lee Canyon

245

$$\begin{array}{r} 982 \\ 116 \\ \hline 18136 \end{array}$$

$$\begin{array}{r} 215 \\ 36 \\ \hline 251 \end{array}$$

$$\begin{array}{r} 215 \\ 36 \\ \hline 251 \end{array}$$

$$\begin{array}{r} 215 \\ 36 \\ \hline 251 \end{array}$$

$$\begin{array}{r} 215 \\ 36 \\ \hline 251 \end{array}$$

$$\begin{array}{r} 245 \\ 14 \\ \hline 259 \end{array}$$

$$\begin{array}{r} 245 \\ 14 \\ \hline 259 \end{array}$$



Mentana Salinas 58° 15'  
 Grater 81° 30'  
 Salinas 49° 45'  
 Grater 58°  
 Salinas 3°

$$\begin{array}{r}
 198 \\
 116.30 \\
 \hline
 81.30
 \end{array}$$

$$\begin{array}{r}
 241.45 \\
 198.45 \\
 \hline
 43
 \end{array}$$

$$\begin{array}{r}
 245.60 \\
 241.45 \\
 \hline
 4.15
 \end{array}$$

$$\begin{array}{r}
 198 \\
 116.30 \\
 \hline
 82.130 \\
 241.45 \\
 \hline
 198.45 \\
 43
 \end{array}$$

$$\begin{array}{r}
 116.30 \\
 58.15 \\
 \hline
 58.15
 \end{array}$$

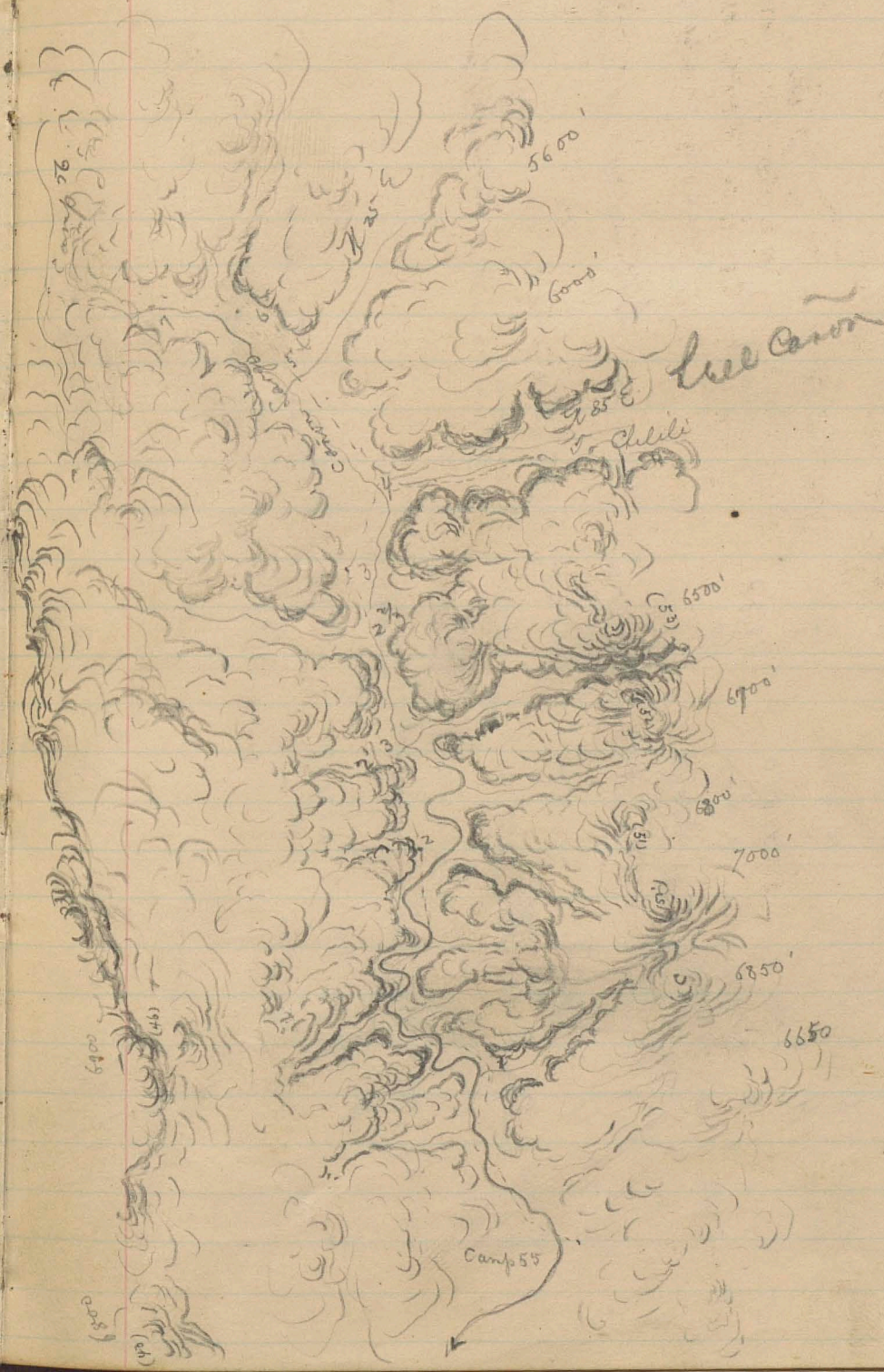
$$\begin{array}{r}
 259.14 \\
 \hline
 243
 \end{array}$$



Camp 4850 to 4250 at near Canon Ranch  
 Sept 21-5-1893 (Wednesday) and Youngs 4400 to 4000  
 New Party

Station	Alt. May	Alt. June	Alt. July	Remarks
Camp 55	22,290	22,910	22,910	Location of Camp 55. M. M. 187. 45. Elevator 124. 45 C 345. 45.
1	2490 (11)	22,850	22,850	(54) S 20° E (51) S 82° E (52) S 65° E (53) S 73° E
2	2953 (12)	22,700	22,700	(45) N 37° E (53) S 82° E (54) N 80° E (52) S 71° E (51) S 68° E (57) S (51) S 18° E
2 1/3	3470 (13)	22,600	22,600	(46) N 32° E (54) N 76° E (53) S 61° E (52) S 33° E (51) S 18° E
3	3635 (12)	22,550	22,550	Cañon narrow and very winding
4	4175 (14)	22,450	22,450	(55) S 62° E
5	4784 (14)	21,925	21,925	Cañon narrow with rocky bluffs.
6	4975 (16)			(44) N 89° W (55) N 58° W (57) N 34° E (59) S 38° E
7	5000			Large Cañon with unorganized
				(55) S 62° W
				It began raining & heavily as to make it impossible to take notes any further







Camp 1900 to 7254 at 90° 50' E. and 110° 25' N. through  
Sept 13<sup>th</sup> 1893. Helium was found. Pressure 164809

See Party

Station Or at  
Redd.

May  
Pravay

Meridian 2091  
Helium 111

Camp 08	8000 (.64)	576 E	21.900	6950
Station	8245 (.6)	527 E	21.900	6900
" 2	8520 (.4)	540 E	21.800	7050
" 2	8585 (.4)	545 E	21.900	6950
" 3	8870 (.4)	733 E	22.050	6800
4	9085 (.1)	783 E	22.125	6700
5	9570 (.17)	545 E	22.250	6525
6	9800 (.15)	535 N	22.300	6500
7	130 (.5)	540 N	22.350	6550
8	340 (.8)	560 N	22.250	6550
9	700 (.4)	578 N	22.150	6650
10	860 (.13)	523 N	22.125	6675

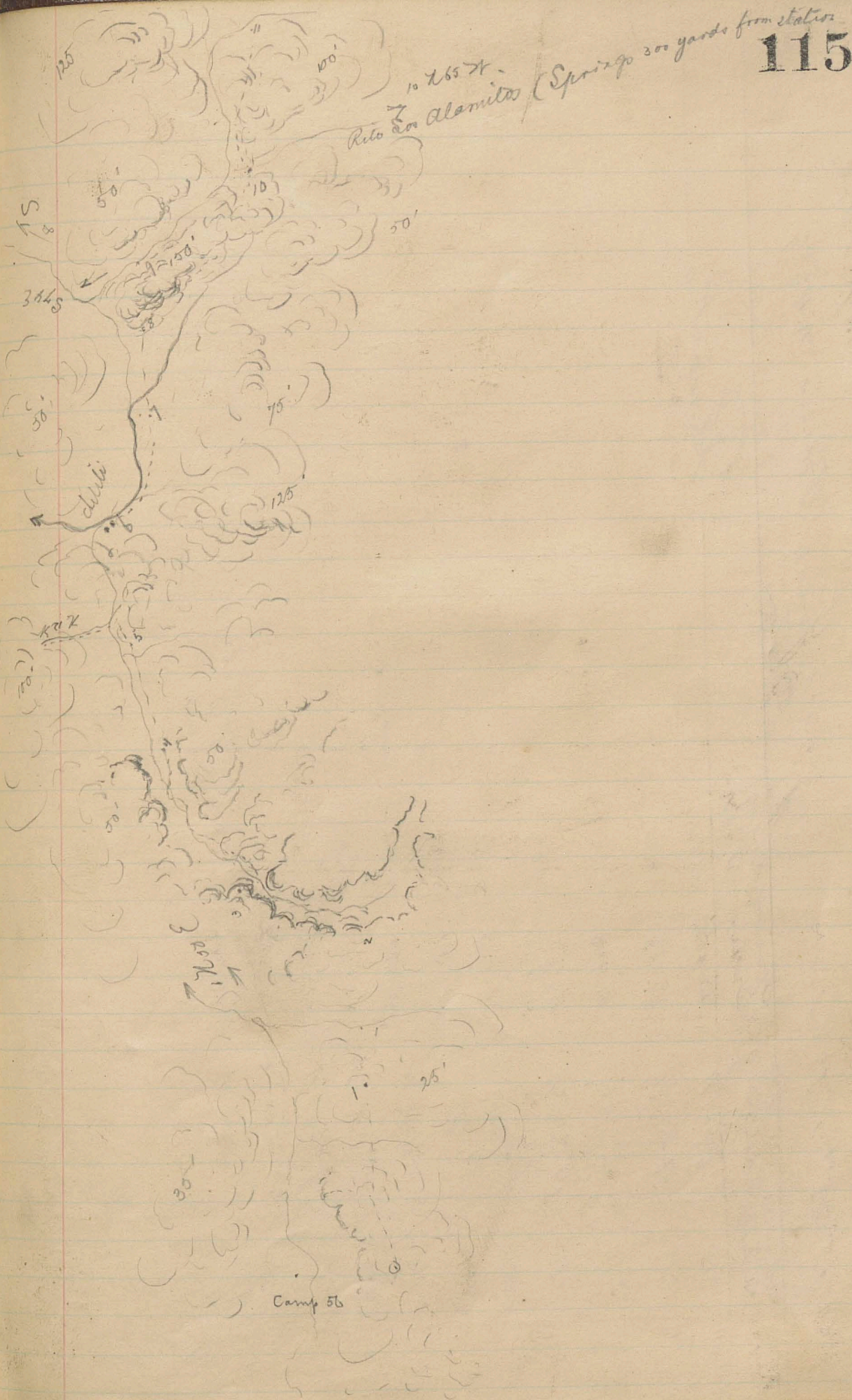
2 large drains with broad grassy valleys.  
on steep hill  
on bottom of hill a large drain.  
hills on both sides of road heavily timbered  
first a road coming from NE  
Town of Chile.

between 9 and 10 splendid grassy valley  
Cascades.

46

13467.7





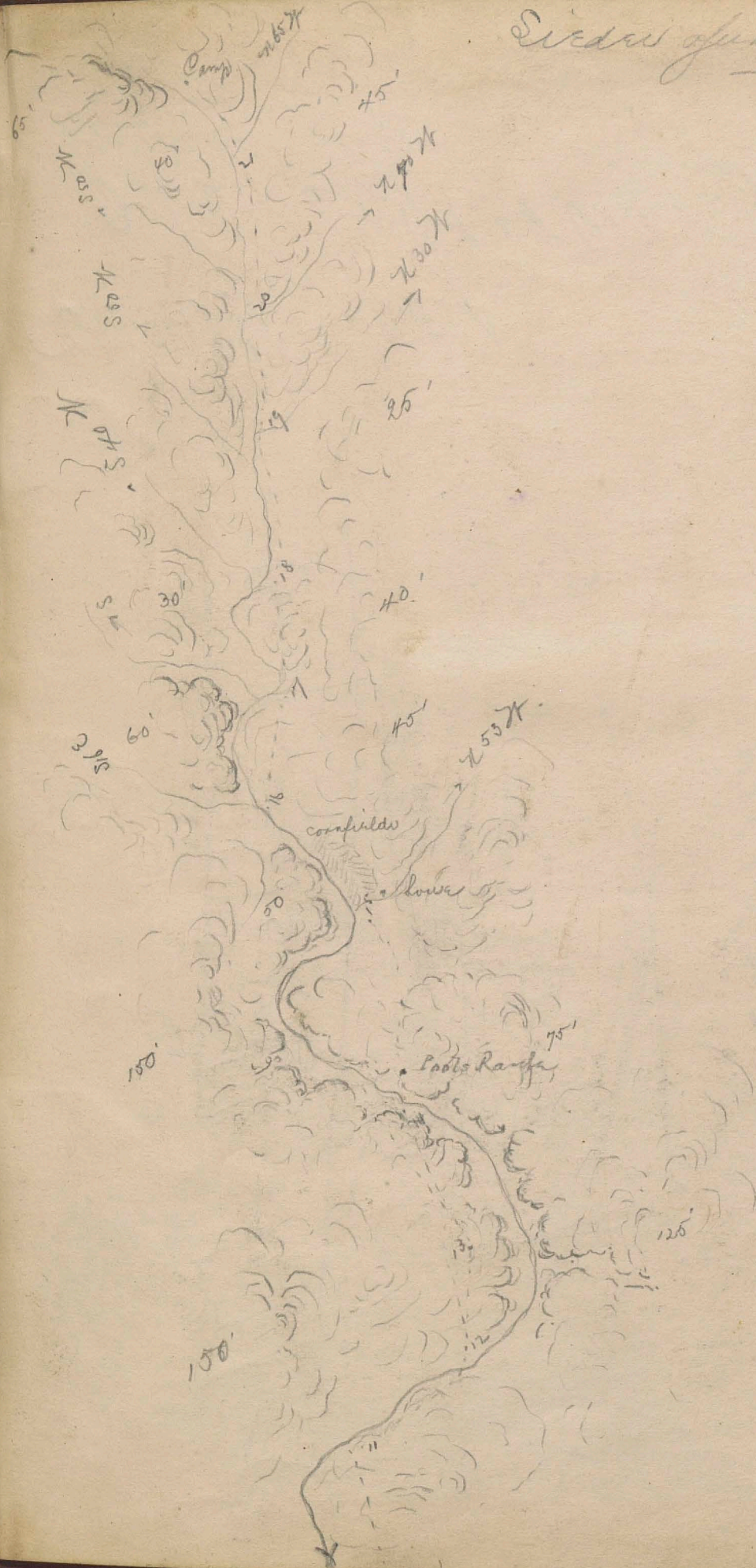


Camp N<sup>o</sup> 56 to N<sup>o</sup> 57 at 4.50 p.m. Casca in Manzanilla N<sup>o</sup> 4.50 p.m. Casca  
 Sept 28<sup>th</sup> 1893

Station	Water meters	Dist. to next station	Time from N <sup>o</sup> 56	Time from N <sup>o</sup> 57	Remarks
11	1070	.4 563 ft.	22.000	6800	
12	1205	.3 576 ft.	22.000	6800	
13	1370	.2 539 ft.	21.975	6875	
14	1470	.5 530 ft.	21.950	6900	
15	1655	.6 547 ft.	21.925	6950	
16	1900	.5 571 ft.	21.900	6975	OK today with the exception of a few waterholes
17	2110	.4 573 ft.	21.850	7025	
18	2300	.4 583 ft.	21.800	7100	
19	2480	.7 581 ft.	21.775	7125	
20	2510	.3 584 ft.	21.725	7175	
21	2950	.5 539 ft.	21.650	7200	from N <sup>o</sup> 4.50 p.m. Casca in Manzanilla N <sup>o</sup> 4.50 p.m. Casca
Camp 57	3135	11.4			



Sixteen miles north





Corazon 35. 20. 27.6

104 46.22

44

41  
14  
27

54  
14  
3

Capit

339  
14  
325

~~Arch~~

273 2650  
345

$$\sqrt[3]{[4x + 5y \cdot (ab + (bc - ca) + 2x)]}$$

$$2 \sqrt[3]{\frac{4a + 5}{3}}$$

Structure =

80  
2  
32  
32  
222



7307  
6650  
650

Taylor No 2

XII 120 ft.

Brain

~~6300~~  
~~6650~~

510

5300 or below

65 in stage oval

250

4

