

21
City Engineer's Office
TIDE LOTS

2
LEVEL
F.B. 21

21

*Return to City Engineers Office
City Hall, San Diego, Cal.*

MICROFILMED
DEC 3 1964

21

*Return to City Engineers Office
City Hall, San Diego, Cal.*

Survey of Tidal Lake No. 1

1

Dist	Angle	True Course	Magnetic Course
------	-------	-------------	-----------------

535.7	96° 15' L	335° 45' E	
-------	-----------	------------	--

264.69	86° 30' L	354° 30' W	340° 50' W
--------	-----------	------------	------------

204.60			
--------	--	--	--

204.25			
--------	--	--	--

18.06			
-------	--	--	--

12.50			
-------	--	--	--

0	40° R	N 89° W	N 52° 40' W
---	-------	---------	-------------

		S 71° 0' W	S 57° 20' W
--	--	------------	-------------

See book 63

Edge of Bank

Stake

1166
1168

1167

1165

1164

40° R.P. 072 S. 110° W. Pueblo

25+0.4 90° 30'

Dist	Angle	True course	Magnetic course
------	-------	-------------	-----------------

1735.14	55 1/2° R	N 34 1/4° E	
---------	-----------	-------------	--

231.0	101 30° R	N 21 1/4° W	N 34° 45' W
-------	-----------	-------------	-------------

297.0	63° 0' L	S 57 1/4° W	S 43° 45' W
-------	----------	-------------	-------------

506.88	24° 0' L	N 59 3/4° W	N 70° 15' W
--------	----------	-------------	-------------

0		N 35 3/4° W	N 49° 15'
---	--	-------------	-----------

beginning at the N.W. cor^r of No 1*

Dist	angle	True Course	M. C.
217.8			
1329.9		334 1/4 W	
07.50			
1287.0	29° 30' L	N 65° 1/4 W	N 69° 25' W
5.00			
2.00			
23.1	12° 45' R	N 26 1/4 W	N 39° 50' W
0.		N 39 W	N.E. Cr of 1

217.8

1329.9

334 1/4 W

07.50

1287.0 29° 30' L N 65° 1/4 W N 69° 25' W

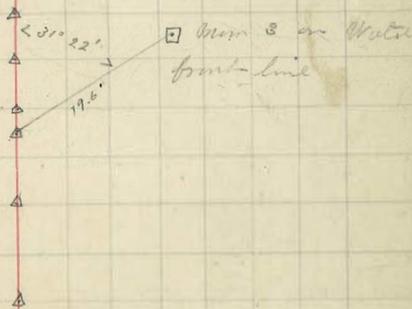
5.00

2.00

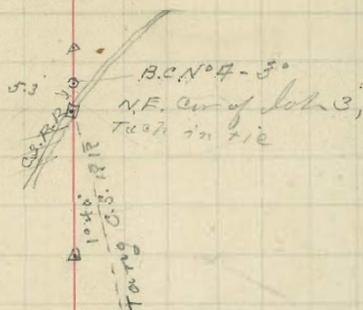
23.1 12° 45' R N 26 1/4 W N 39° 50' W

0. N 39 W
Beginning at N.E. Cr of 1

low tide



cor.	Dist	Angle	True course	M.C.
	429.0			
D to E	101.64	9° 0' R	S 18° 30' W	S 5° 0' W
	130			
C to D	2102.1	90° 0' L	S 9° 30' W	S 4° 0' E
	2102.1			
	16700			
B. to C.	5.81	27° 45' L	N 80° 30' W	S 86° 0' W
	5.81			
A to B	50.1		N 55° 1/4 W	N 69° 25' W
Beginning of the NE cut				

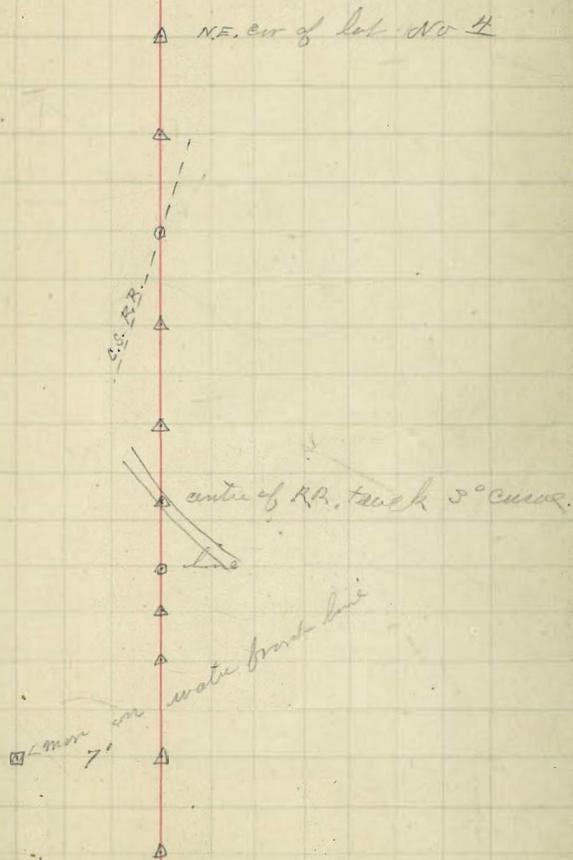


The image shows an open notebook with two pages of grid paper. The left page features a table with 6 columns and 20 rows, defined by red vertical lines and light blue horizontal lines. The right page features a table with 10 columns and 20 rows, also defined by red vertical lines and light blue horizontal lines. A small blue number '7' is located in the top right corner of the right page. The notebook is placed on a dark background.

Tide Lot No H

2+26 - 7 Sept 8

Sta	Dist	Angle	True course	M.C.
B to D	22+88.2			
	19+50			
	14+81			
	22+88.2			
	12+50			
	6+50		N 69° 0' W	
	+71			
	23'			
B to C	339.9	25° 0' R	N 55° 30' W	N 69° 30' W
	2+00			
	339.9			
	2+26			
A to B	0		N 80° 30' W	S 86° 0' W
Beginning at N.E. cor of lot 3				



The image shows an open notebook with two blank ledger pages. Each page is ruled with a grid of 12 columns and 20 rows. A prominent red vertical line is drawn on the left side of each page, creating a margin. The right page has a blue number '9' in the top right corner. The pages are cream-colored and appear to be blank, with some minor smudges and a small dark spot on the left page.

The image shows an open notebook with two pages. The pages are cream-colored and feature light blue horizontal ruling. The left page is divided into seven vertical columns by red lines. The right page has a single vertical red line near the right edge. The number '10' is printed in the top right corner of the right page. The notebook is set against a dark background.

Survey of Field Lot No 6

1341.78

12

Sta	Dist	Angle	Bearing	Course
-----	------	-------	---------	--------

IDE	561			
-----	-----	--	--	--

561'

C to D	13+86	62° 30' L	N 57° 30' W	N 70° 50' W
--------	-------	-----------	-------------	-------------

12+0

1386'

7+00

2+07

B to C	1341.78	60° 30' R	N 8° 0' E	N 8° 25' W
--------	---------	-----------	-----------	------------

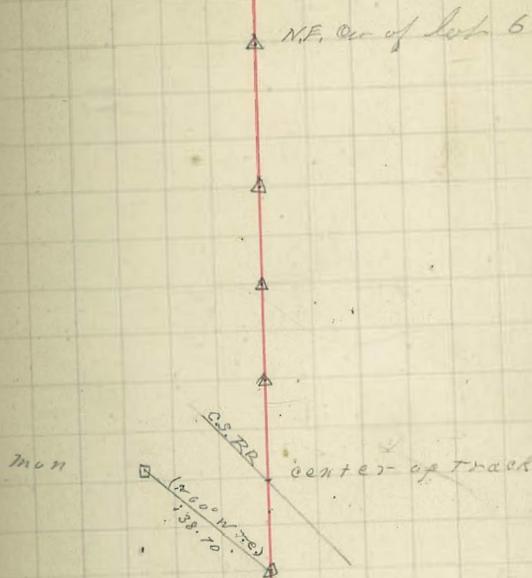
1341.78'

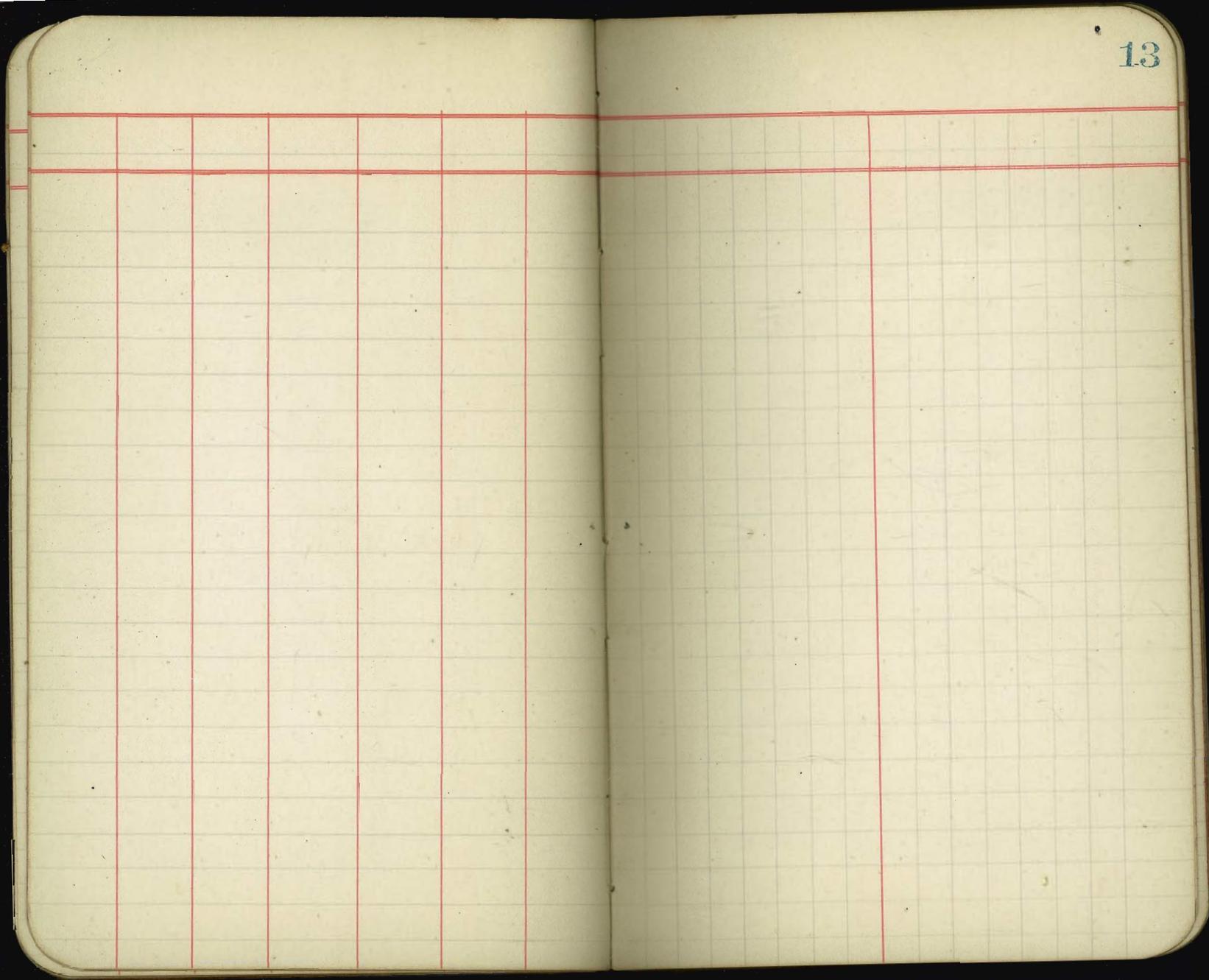
7+00

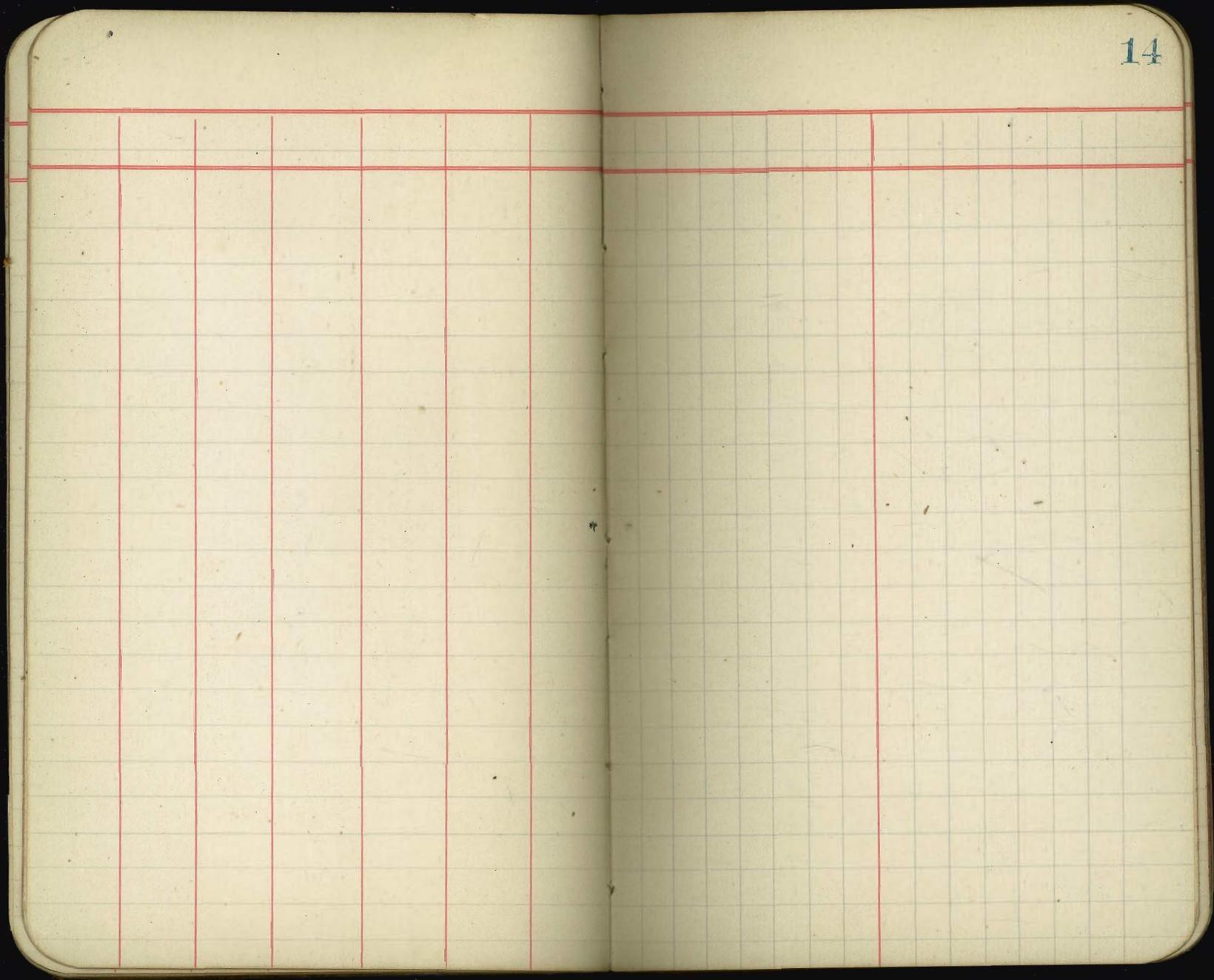
A to B	0		N 55° 30' W	N 69° W
--------	---	--	-------------	---------

Beginning at the N.E. cor of Lot 4

$$\begin{array}{r} 2' \\ 66 \\ \hline 120 \\ 1386 \end{array}$$







Survey of tide lot No 6

Sta	Dist	Angle	Bearing	M.C.
-----	------	-------	---------	------

18+39.42

14+34

11+70

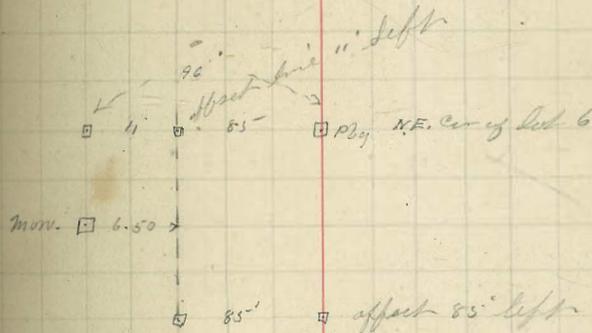
1839.42

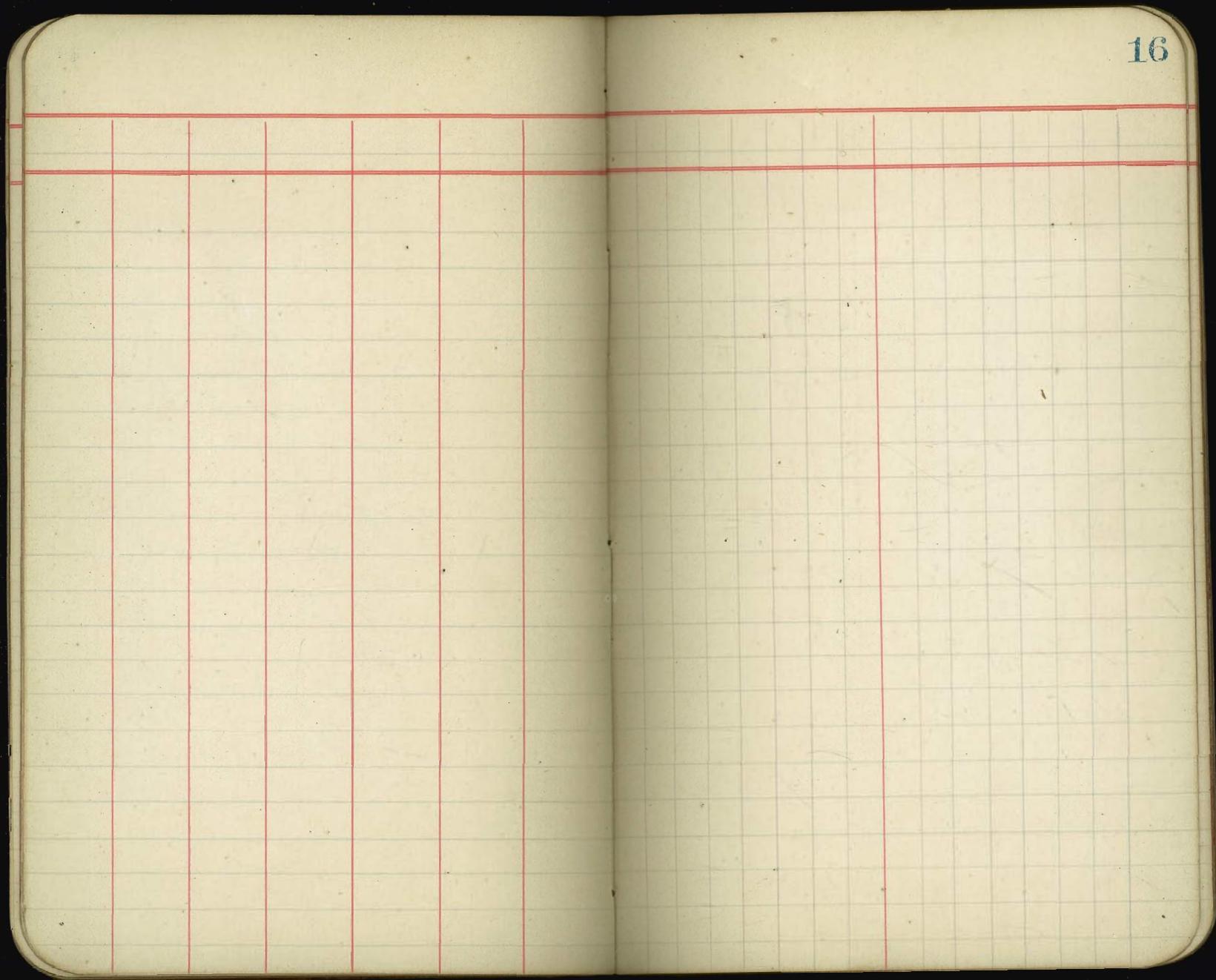
10+40

A to B

N57°30'W N70°50'W

Beginning at N.E. cor of lot 5





Survey of Tract lot 7

Sta	Dist	Angle	Bearing	M.C.
-----	------	-------	---------	------

2416.6' 17+0
7+00

A.T.D. N57°31'W N68°W NE of RR
Beginning of N.E. cor of lot 6

Line 96' 85' NE. cor of lot 6
85'

Hayes Line

The Hayler line along the
East line of San Diego Bay.

No.	Angle	Course	Dist.	
1		N 39° 0' W	2616.9	N.E. cor of Tide lot No 1
"		" "	23.1	
2 ✓	12° 45' Right	N 26° 15' W	1287.0 ✓	
3	29° 30' Left	N 55° 45' W	1329.9 ✓	N.E. cor of Tide lot No. 2
"		" "	1518.1 ✓	
4 ✓	24° 45' Left	N 80° 30' W.	2102.1 ✓	N.E. cor of Tide lot No. 3
"		" " " "	339.9 ✓	
5	25° 0' Right.	N 53° 30' W	2288.2 ✓	N.E. cor of Tide lot No. 4
"		" " " "	1341.8 ✓	
6 ✓	60° 30' Right	N 5° 0' E	1386.0 ✓	
7 ✓	62° 30' Left	N 57° 30' W	561.0 ✓	N.E. cor of Tide lot No 5
"		" " " "	1839.4 ✓	N.E. cor of Tide lot No 6
"		" " " "	2415.6 ✓	
8	9° 30' Left	N 67° 0' W	188.1	N.E. cor of Tide lot No 7
"		" " " "	1791.9	
9	36° 0' Right	N 31° 0' W	424.4	N.E. cor of Tide lot No 8

The Hayes line

Sta	Angle	Course	Dist	Station	Dist	Sta
-----	-------	--------	------	---------	------	-----

8'

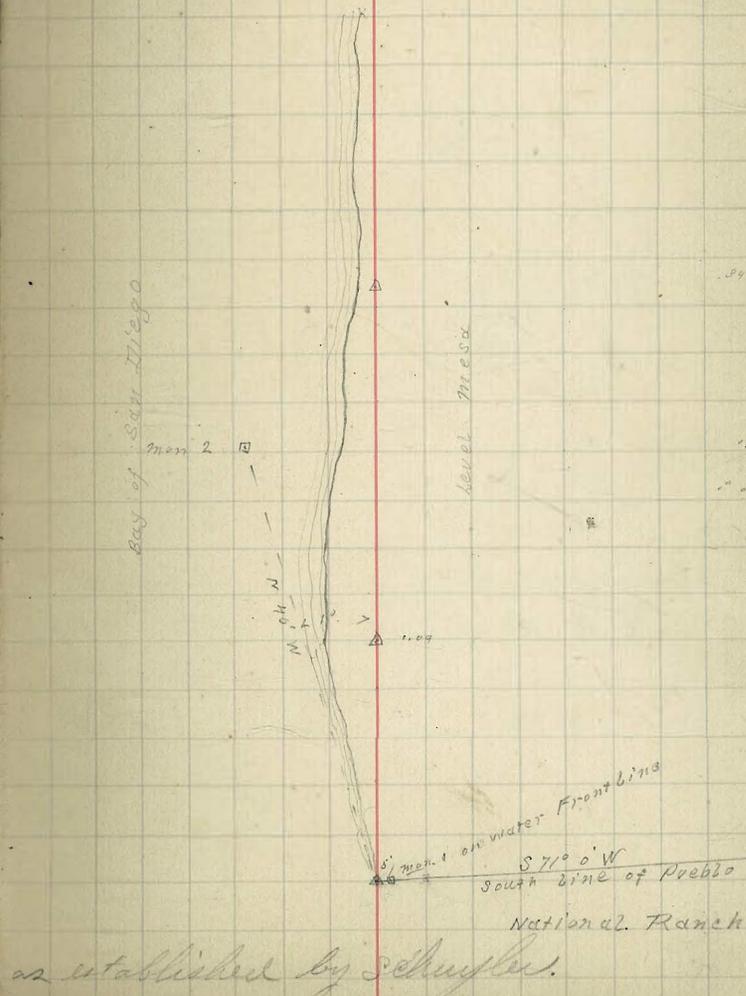
C to D		$0^{\circ} 0'$	8.24	8.25	12+50
--------	--	----------------	------	------	-------

B to C		$0^{\circ} 0'$	7.48	7.49	5.01
--------	--	----------------	------	------	------

N 62° 40' W

A to B	$1^{\circ} 0'$ Right	N 39° 0' W	0.0	5.00	5.01
--------	----------------------	------------	-----	------	------

Beginning at S.W. cor^r of Pueblo of San Diego, F.S. to Mon 2 on Shore line



The Hayes line

Sta	Angle	Course	Dist	Stadia	Dist	chain
H to I	29° 00' R	N 55° 45' W				12 + 87 = 0
G to H	0° 00'		8.36	8.37		4 + 50 266.0
F to G	12° 45' R	N 26° 15' W				7 + 40 26 + 16.9
E to F						
D to E	-1° 10'		5.40	541.0		20 + 75

Bay of San Diego

Mar 3.

End of 2nd course Hayes line

Chollas creek

Line

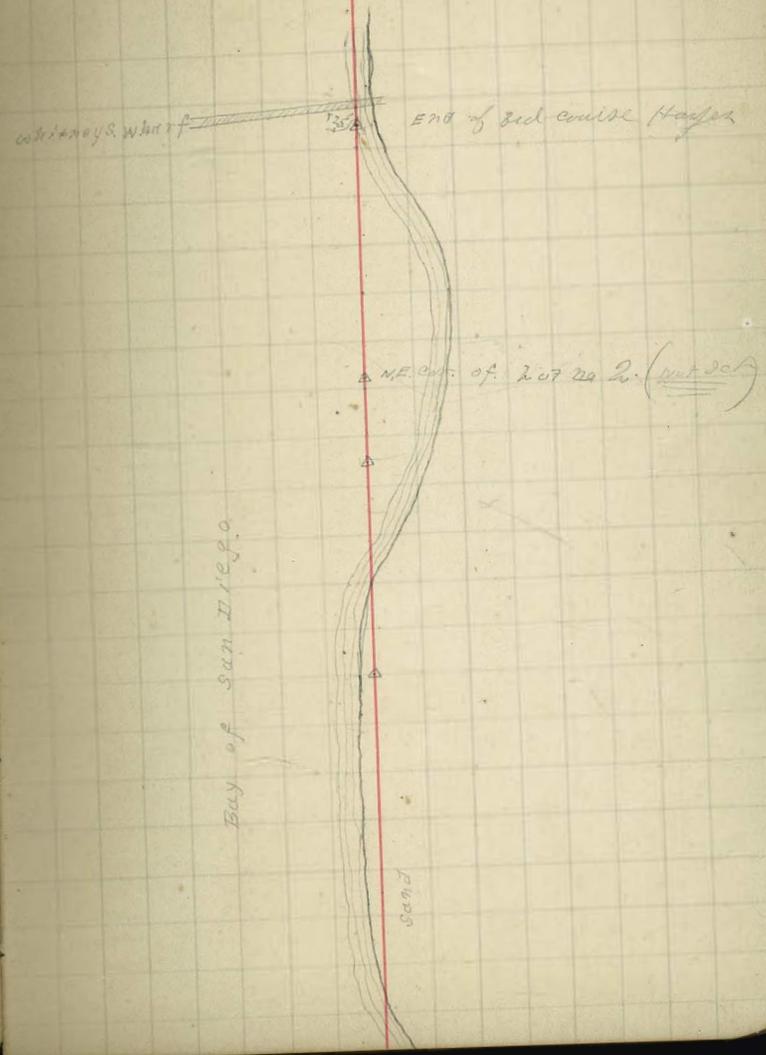
End of 1st course Hayes line

NE cor. Tide Lot No 1

10'

The Hayes Line

Sta	Angle	Course	Dist.	Staded	Dist
			375° 35' W		
K to L	24° 45' E	N 80° 30' W		18+28	
J to K	0° 10'		6.97	6.98.0	11+50
I to J					7+0



The Hayes Line

Sta	Angle	Course	Vert Angle	Stadia	Dist
n to n			-2° 30'	6.57	6.58
					17.44

n to m			+3° 00'	9.83	9.84
					84.00



The Hayes line

Sta	Angle	course	vert. angle	Stadia	Dist.
-----	-------	--------	-------------	--------	-------

p.t. d.

15+00

9+90

o.t.p.

7+50

2+50

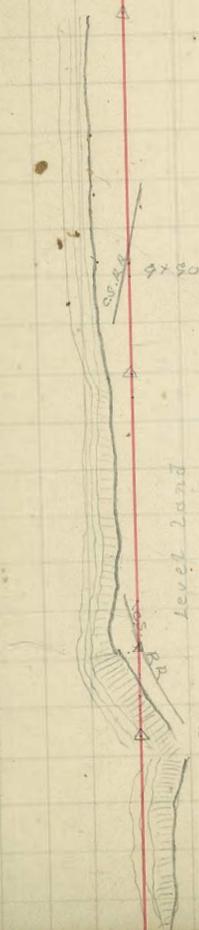
1+00

m.t.o.

25° 0' P. N 55° 30' W

N 69° 0' W

24+42



End of 4th course Hayes line

The Hayes Line

Sta	Angle	course	Angle	Stadia	Dist
			out		
A. to S.	60° 30' R.	N 5° 0' E		1241.5	
A. to R.				2256.2 = 0	

N 2° 30' W

A. to S. 60° 30' R. N 5° 0' E

1241.5

A. to R.

2256.2 = 0

Bay of San Diego

man

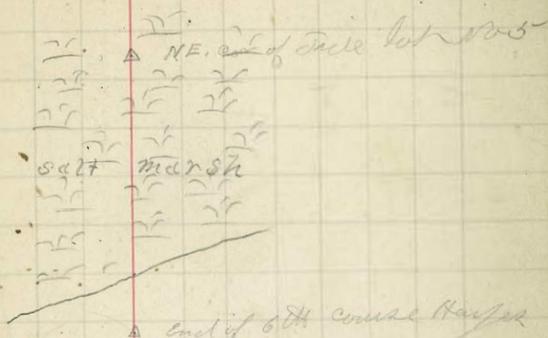
Mar 31

End of 3rd course
by Hayes line

NE. cor of Field Lt. N. V.

The Hayes line

$S^{\frac{1}{2}}$	Angle	course	Dist. Angle	Stadia	Dist.
					581. = 0
			N 71° 0' W		
U to V.	62° 30' E	N 57° 30' W			137.86
T to U					127.00
B to I					74.00



The Hayes line

Sta	Angle	course	Dist. feet	Stadia	Dist.
-----	-------	--------	---------------	--------	-------

21

22

19

18

17

16

15+50

7+0

65

2

1.8 E. center of track

60

1.8 E. center of track

60

The Hayes line

Sta	Angle	course	Dist	Notes
14				
13				
12				
11				
10				
9				
8				
7				
6				
5				
4				
3				
2				
1				
24				
23				
22				
21				

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

+58.5 ←

1+75

24 + 16.6 = 0

23

22

21

N 75° W

point where a parallel line 66
left of course running N 57° 30' W
intersects inside line of lot 7

NE. cor. of tide lot No 7

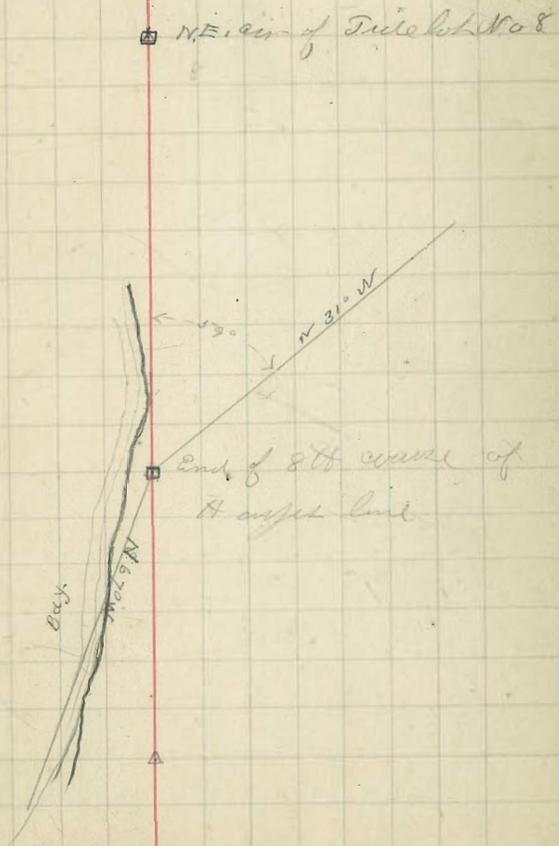
End of 7th course of Hayes

→ thru west 366 (one of 76° 30' W)
 Set line 50' N of NE cor of lot 82

3	0
2	0
1	0
0	0
+	18.6 = 0 90° 0' Right N
2	0
1	0
0	0
+	96.7
3	4
3	3
1	2
1	0
0	0
+	75.3 = 0 32° 30' Left W
17	
16	
15	

N 51° 21' W

N 67° 0' W



Survey of Tide lot no 9.

Aug 26 1891

70

31

Sta	Angle	Course							
9									
+50									
8									
7									
6									
5									
4									
3									
2									
1									
0									

9

+50

8

7

6

5

4

3

2

1

N
M.T. 0.81 N

N

0 = a point 60' East of N.E. cor lot 8

as set in the point

70' East of N.E. cor 8
not seen

Sta.	Angle	course.																		
20																				
19																				
18																				
17																				
+50																				
16																				
15																				
14																				
13																				
12																				
11																				
10																				

20

19

18

17

+50

16

15

14

13

12

11

10

18+

21

31.8 ΔNE on 1/29

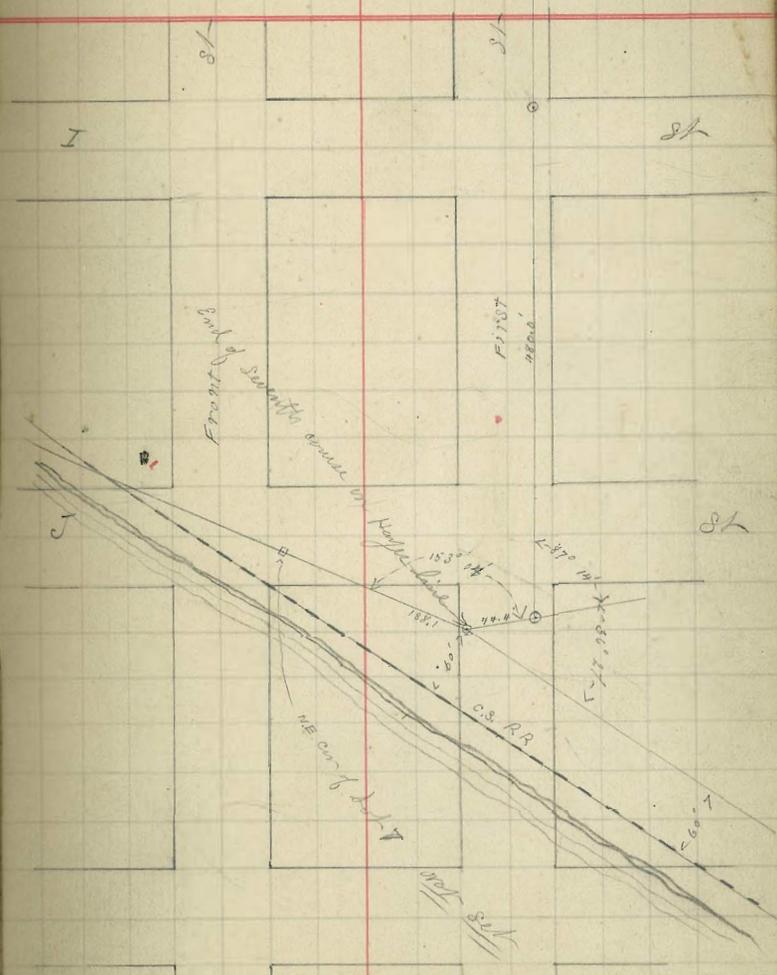
Survey of East Boundary of
Tide lot No 9

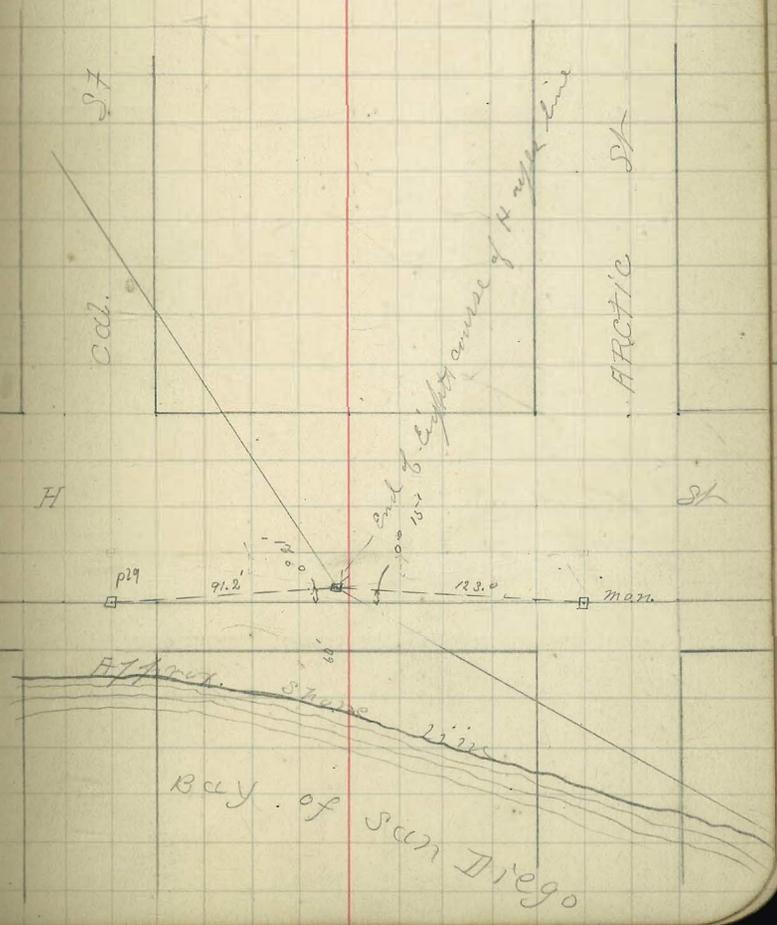
Aug 27 1891

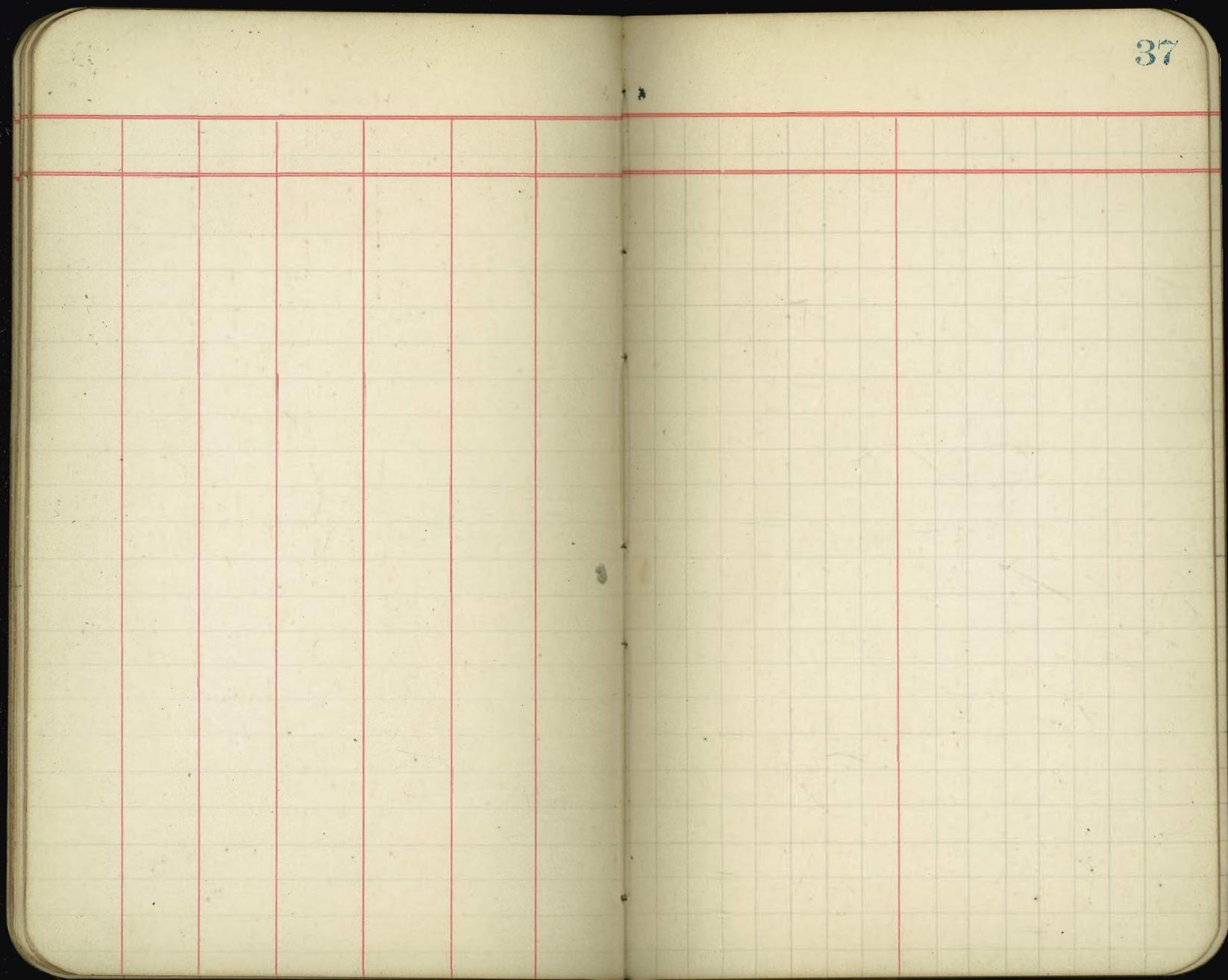
Humboldt Transit
Cotton Head Chain
Hensley Brass Chain
Williams

34

beginning at the N.W. cor of Tide
lot No 8, Run $88^{\circ} 14' E$ 182.0,
thence North 269.9; thence East 155
thence North 750' line, thence 850' line,
thence 411.1' (at this point
set a point 58.6' West which is the
end of the course which runs $112^{\circ} 29'$
 E 2333.1) continued North 306.8'
thence 90° left 58.6' to N.E. cor of
Tide lot No 9.







S 59° W 427' = W 366.0'
S 219.9'

39

Sta	Dist	Angle	course	B. e.
	2751			
E	366.0	90° L	W	S 76° 30' W
D	363.6	90° 0' R	N	N 13° 25' W
C	218.6	90° 0' R		
B	429.3	32° 30' W	W	S 76° 30' W
A	1017	9° 30' R		N 57° 30'

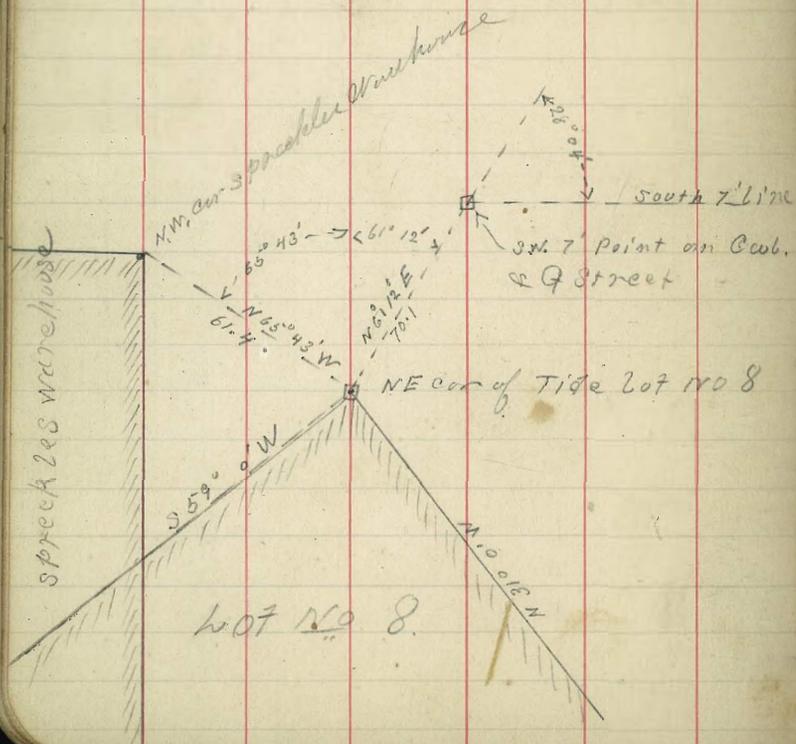
A NE cor of lot 8

Beginning at a point 393.6' N 67° W from
NE cor of lot 7 Run N 57° 30' W

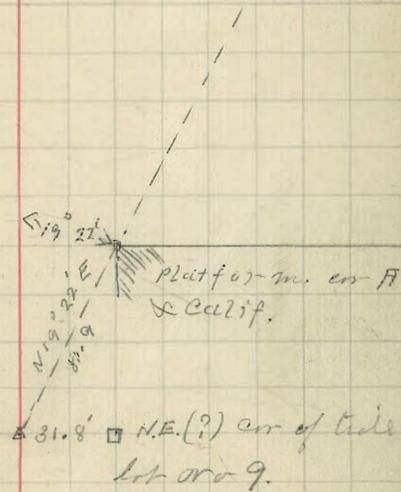
Tide points for N.B. cor of Tide
Lot 8

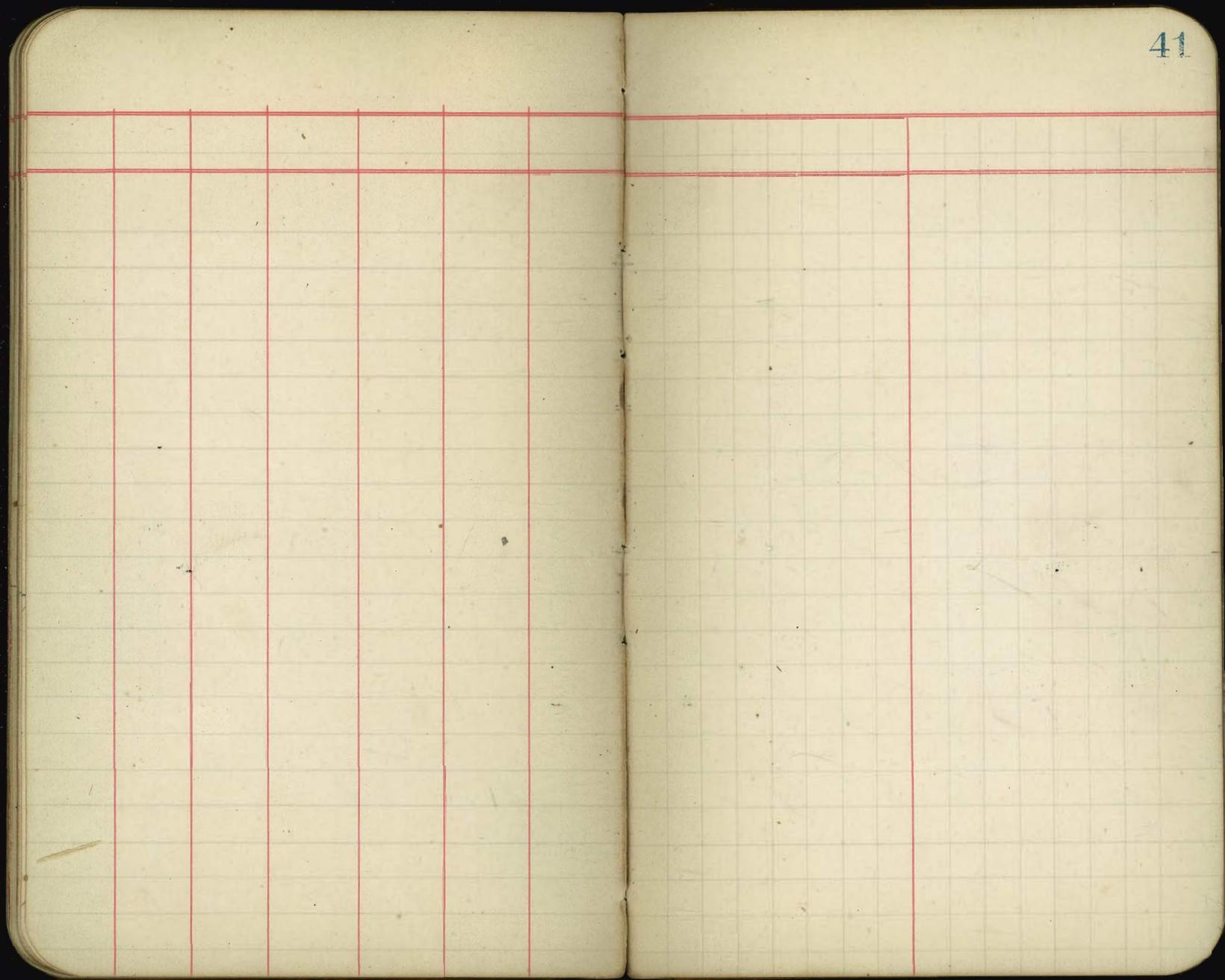
40

28' 00"
61' 12"
87' 06"

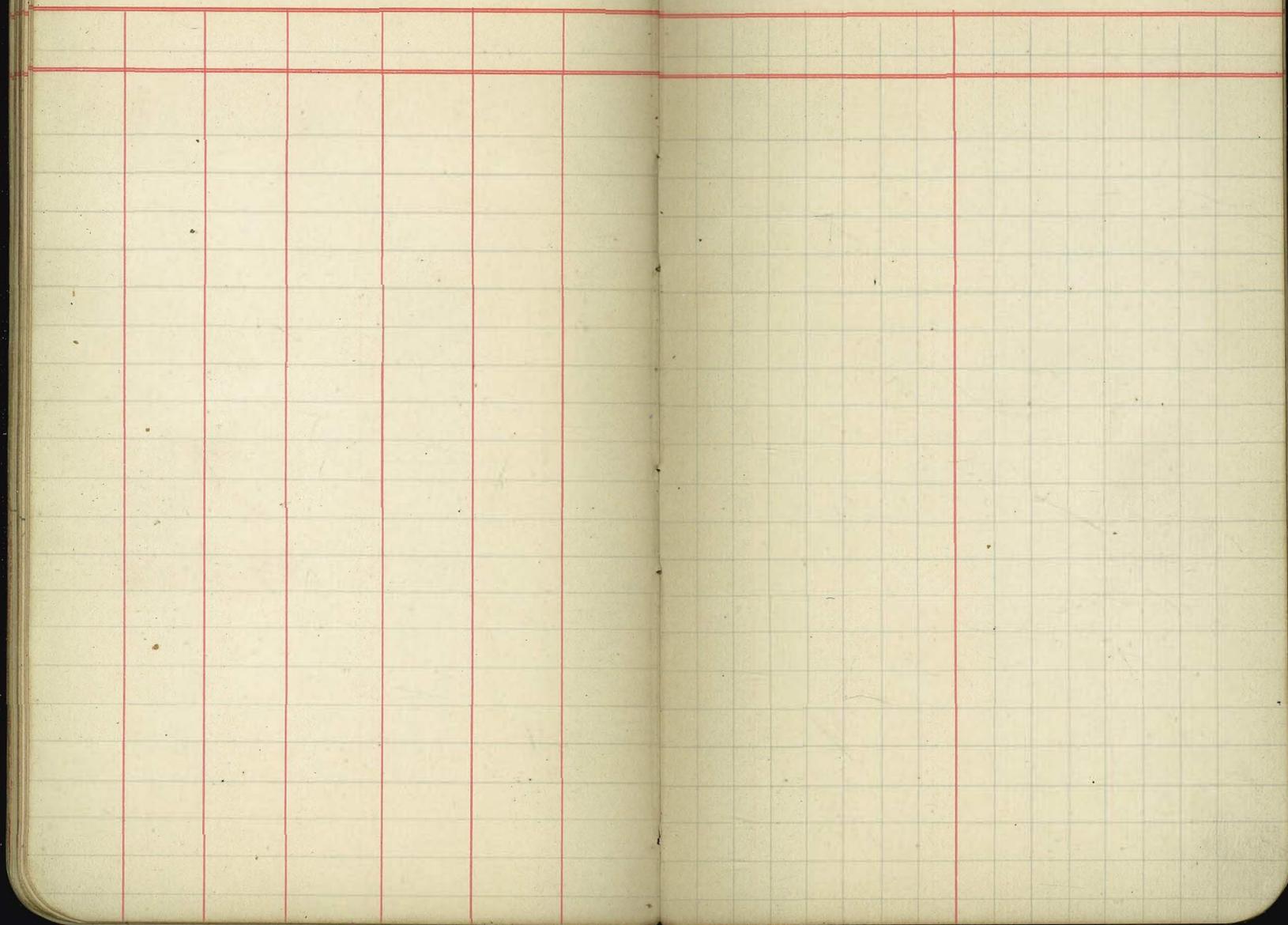


of St





North	Course	N	S	E	W
1398.3	N 67° W	546.3			1287.1
1017.0	N 57° 30' W	546.3			857.8
					<u>429.3</u>



Tide Lot No 2

44

Tide Lot No 3

Sta	Angle	course	Dist.
-----	-------	--------	-------

1

Sta	Angle	course	Dist.
-----	-------	--------	-------

Beginning at the N.E. cor of No. 2

1		N 55° 45' W	518.1	
2	24° 45' Left	N 80° 30' W	2102.1	NE cor of No 3
3	90° 0' Left	S 9° 30' W	101.64	
4	9° 0' R.	S 18° 30' W	429.0	
5	108° L.	S 84° 30' E	1716.0	
6	36° 15' L.	N 59° 15' E	396.0	
7	47° R.	S 73° 45' E	231.0	
8	11° 30' R.	S 62° 15' E	237.6	
9	41° 0' R.	S 21° 15' E	165.0	
10	124° 30' L.	N 34° 15' E	217.8	

Tide Lot No 4

Sta	Angle	course	Dist
Beginning at NE. cor of No 3			
1		N 80° 30' W	339.9
2	25° 0' R.	N 55° 30' W	2288.22
3	90° 0' L.	S 34° 30' W	157.80
4	2° 30' R.	S 37° 0' W	396.0
5	93° 15' L.	S 56° 15' E	803.22
6	3° 0' R.	S 53° 15' E	1716.00
7	79° 0' L.	N 47° 45' E	132.00
8	48° 0' R.	S 84° 15' E	231.00
9	77° 15' L.	N 18° 30' E	429.00
10	9° 0' L.	N 9° 30' E	101.64
	90° 0'		

Tide lot No 5

Sta	Angle	course	Dist
Beginning at NE cor of lot No 4			
1		N 55° 30' W	1341.78
2	60° 30' R.	N 5° 0' E	1386.00
3	62° 30' L.	N 57° 30' W	561.00
4	101° 0' L.	S 21° 30' W	686.40
5	35° 30' R.	S 57° 0' W	808.50
6	91° 45' L.	S 34° 45' E	726.00
7	30° 0' L.	S 64° 45' E	693.00
8	29° 45' R.	S 35° 0' E	528.00
9	20° 45' L.	S 55° 45' E	825.00
10	87° 15' L.	N 37° 0' E	396.00
11	2° 30' L.	N 34° 30' E	151.80
	90° 0' L.		

360° check

Tide Lot No 9

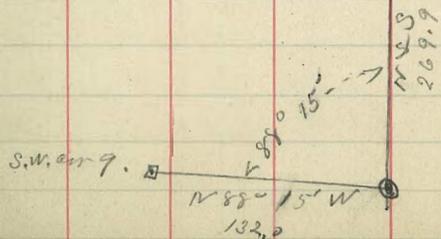
Tide Lot No 7

Course	Dist	Angle
--------	------	-------

Beginning at N.W. cor and running along West boundary

N	$0\frac{3}{4}^{\circ}$ E	155.4	
N	$10\frac{3}{4}^{\circ}$ W	1584.0	$2^{\circ} 30'$ Left
N	$7\frac{1}{4}^{\circ}$ E	594.0	$9^{\circ} 0'$ Right
N	89° E	198.0	$81^{\circ} 45'$ Right
S	1° E	306.9	$90^{\circ} 0'$ Right
S	$2^{\circ} \frac{1}{2}$ W	2333.1	$3^{\circ} 30'$ Right
N	$88^{\circ} \frac{1}{4}$ W	132.0	$85^{\circ} 45'$ Right
			$92^{\circ} 30'$ Right

pt. on S. wharf



21 Oct. 1

Nov. 18

Bay of San Diego



level mesa

East Boundary of Lot No 9

2331
30
2181

101.8
31.8
48
31.8

Dist	course	N.	S.	E.	W.
2333.1	N 2° 30' E	2331.0		101.8	
306.9	N 1° 0' W	306.8			5.35
198.0	S 89° 0' W		3.46		197.9
594.0	S 7° 15' W		589.0		75.2
1584.0	S 1° 45' E		1583.4	48.4	
455.4	S 0° 45' W		455.4		6.0
132.0	S 88° 15' E		4.0	131.9	
		<u>2637.8</u>	<u>2635.8</u>	<u>281.1</u>	<u>284.6</u>
		<u>2635.3</u>		<u>281.1</u>	
		2.5			3.4

306.8
31.8
275.0

219.9
30
269.9

274

A copy of the courses of the
Hayes line along the water front
of San Diego, beginning at the

course	Angle	Bearing	Dist
1		N 39° 0' W	2616.9
		N 39° 0' W	2640
2	12° 45' Right ✓	N 26° 15' W	1287.0
3	29° 0' Left ✓	N 53° 45' W	1329.9
		" "	1848.0
4	24° 45' Left	N 80° 30' W	2102.1
		" "	339.9
5	25° 0' Right	N 55° 30' W	2288.2 ✓
		" "	1341.78
			3629.98
6	60° 30' Right ✓	N 5° 0' E	1386.0
7	62° 30' Left ✓	N 57° 30' W	561.0
		" "	1839.42 ✓
		" "	2415.60 ✓
8	9° 30' Left	N 67° 0' W	188.1
		" "	1791.90
9	36° 0' R ₂	N 31° 0' W	424.38

40

SW. cor of Pueblo.

lot 1

o is S.W. cor of Pueblo also S.E. cor of Field
N.E. cor of Field lot no 1

N.E. cor of Field lot no 2

N.E. cor of Field lot no 3

N.E. cor of Field lot no 4

N.E. cor of lot 5

N.E. cor of lot 6

N.E. cor of lot 7

N.E. cor of lot 8 (Serves Hayes line)

14
of

cont Sta Angle course Vert Stadia Dist

1

2

3

4

5

6

7

8

9

A 0

at NE cor of 8 (9.9 West
43.3 South

18⁰ 30
18 40
4 50 N

90
51
9
(1.53)

Return to City Engineers Office
City Hall, San Diego, Cal.

N 80 30 W (24 30 left) 2102.1

518.1
90 67.4 16.9
1386.0 2340.0
69 40
13 30
90
15 40
4 20
3 20

1839 54 30
1227 13 40
612 40 50
N 69 40 W 90
15 20 76 30
13 30
398.6

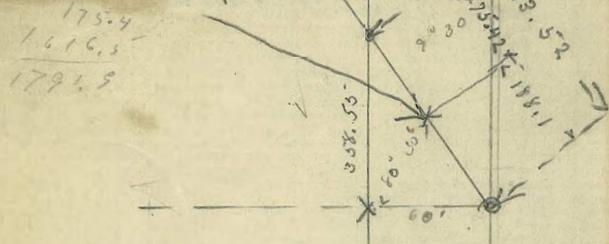
1398.3
393.6
1791.9
80 30
13 40
94 10

153.05
36.27
189.32
21 114
34 114
55 112
69 25
39 50
9 38
69 40
13 20
5-8-20
14734

(N 80° 30' W) (24° 30' left) (2102.1) (N 90° 30' W. m.c.)

(10 + HP)
71° 15'
13 40
67 5.5

Return to City Engineers Office
City Hall, San Diego, Cal.



175.4
1.616.5
1791.9
tan 80° 30' = 5.97576
60
3585.4560

log 60 = 1.778151
1.2 0.782391
cday cos 80°/2 2.560542 = 363.52

$\begin{array}{r} 180 \\ 13 \\ \hline 4 \end{array}$
 $\begin{array}{r} 30 \\ 40 \\ \hline 50 \end{array}$
 $\begin{array}{r} 90 \\ 31 \\ \hline 9 \end{array}$

Return to City Engineers Office
City Hall, San Diego, Cal.

N 80 30 W (24 30 left) 2102.1

$\begin{array}{r} 90 \\ 67 \\ \hline 23 \end{array}$
 $\begin{array}{r} 16.9 \\ 23 \\ \hline 39.9 \end{array}$
 $\begin{array}{r} 69 \\ 13 \\ \hline 82 \end{array}$
 $\begin{array}{r} 30 \\ 40 \\ \hline 70 \end{array}$
 $\begin{array}{r} 13 \\ 40 \\ \hline 53 \end{array}$

$\begin{array}{r} 189 \\ 1227 \\ \hline 612 \end{array}$
 $\begin{array}{r} 54 \\ 13 \\ \hline 67 \end{array}$
 $\begin{array}{r} 30 \\ 40 \\ \hline 70 \end{array}$
 $\begin{array}{r} 90 \\ 76 \\ \hline 166 \end{array}$
 $\begin{array}{r} 30 \\ 13 \\ \hline 43 \end{array}$
 $\begin{array}{r} 393.6 \end{array}$

$\begin{array}{r} 11 \\ 4 \\ \hline 62 \end{array}$
 $\begin{array}{r} 30 \\ 50 \\ \hline 80 \end{array}$
 $\begin{array}{r} 40 \\ 13 \\ \hline 53 \end{array}$
 $\begin{array}{r} 54 \\ 20 \\ \hline 74 \end{array}$
 $\begin{array}{r} 80 \\ 13 \\ \hline 93 \end{array}$

$\begin{array}{r} 21 \\ 34 \\ \hline 55 \end{array}$
 $\begin{array}{r} 114 \\ 114 \\ \hline 228 \end{array}$
 $\begin{array}{r} 69 \\ 59 \\ \hline 128 \end{array}$
 $\begin{array}{r} 25 \\ 50 \\ \hline 75 \end{array}$
 $\begin{array}{r} 38 \\ 38 \\ \hline 76 \end{array}$

(N 80 30 W) (24 30)

10 + HD
 $\begin{array}{r} 71 \\ 13 \\ \hline 84 \end{array}$
 $\begin{array}{r} 15 \\ 46 \\ \hline 61 \end{array}$

496.7 991.44

N 67 30 W (1016.5)
 1616.5
 1175.5
 148.1
 631.6

$\log 1616.5 = 3.208575$
 $\log \sin 67 = 9.964026$
 $3.172601 = \text{West}$
1488.1

$\log 1616.5 = 3.208575$
 $\log \cos 67 = 9.591878$
 $2.800453 = \text{North}$
631.6

~~$\begin{array}{r} 2.800453 \\ 0.005997 \\ \hline 2.806450 \end{array} = \text{cut } 631.6$
 $2.806450 = 640.4$~~

18
13 40
4 50 N

Return to City Engineers
City Hall, San Diego, Cal.

N 80 30 W (24 30 left) 2102.1

518.1

$$\begin{array}{r} 90 \\ 67 \\ \hline 23400 \end{array}$$

$$\begin{array}{r} 69 \\ 13 \\ \hline 8200 \end{array}$$

$$\begin{array}{r} 1399 \\ 1227 \\ \hline 612 \end{array}$$

$$\begin{array}{r} 54 \\ 13 \\ \hline 69 \end{array}$$

$$\begin{array}{r} 90 \\ 76 \\ \hline 166 \end{array}$$

$$\begin{array}{r} 15 \\ 55 \\ \hline 70 \end{array}$$

$$\begin{array}{r} 21 \\ 34 \\ \hline 55 \end{array}$$

$$\begin{array}{r} 69 \\ 59 \\ \hline 128 \end{array}$$

$$\begin{array}{r} 69 \\ 15 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 1398.3 \\ 393.6 \\ \hline 1791.9 \end{array}$$

$$\begin{array}{r} 153.05 \\ 36.27 \\ \hline 189.32 \end{array}$$

(14+34)

(N 80° 30' W) (24° 30' left) (2102.1) (N 93° 30' W. MC)

8
9
36°

13 40
5 03
45

Book no. 21

name

date

3 20
40
40

11
13 40
4 50 N

Return to City Engineers

City Hall, San Diego, Cal.

N 80 30 W (24 30 left) 2102.1

518.1
90
67 16.9
23400

69 30
13 40
3 5

13 40
8 20
3 20

1839
1227
612
54 40
13 40
40 0 W
N 69 40
15 20

90 30
76 30
13 30

393.6

1398.3

393.6

1791.9

4 30
50
62

54 30
13 40
40 13
5 15

30 30
13 40
9 10

153.05
56.27
189.32

21 114
34 114
55 112

69 25
59 50
9 38

69 40
13 40
55 20

14734

(N 40° 30' W) (24° 30' left) (2102.1) (N 90° 30' W. M.C.)

30
40
4 16

13 40
5 05
7 45

13 40
9 30
4 10

4 30
53 30
60 00

13 40
5 0

1050

73 40
13 40
59 40

13 40
8 20
5 20

1600

13 40
8 30
5 10

