

Sutherland-San Vicente Conduit
Preliminary Location

"H" Line - Change - Sta. 183+03.16

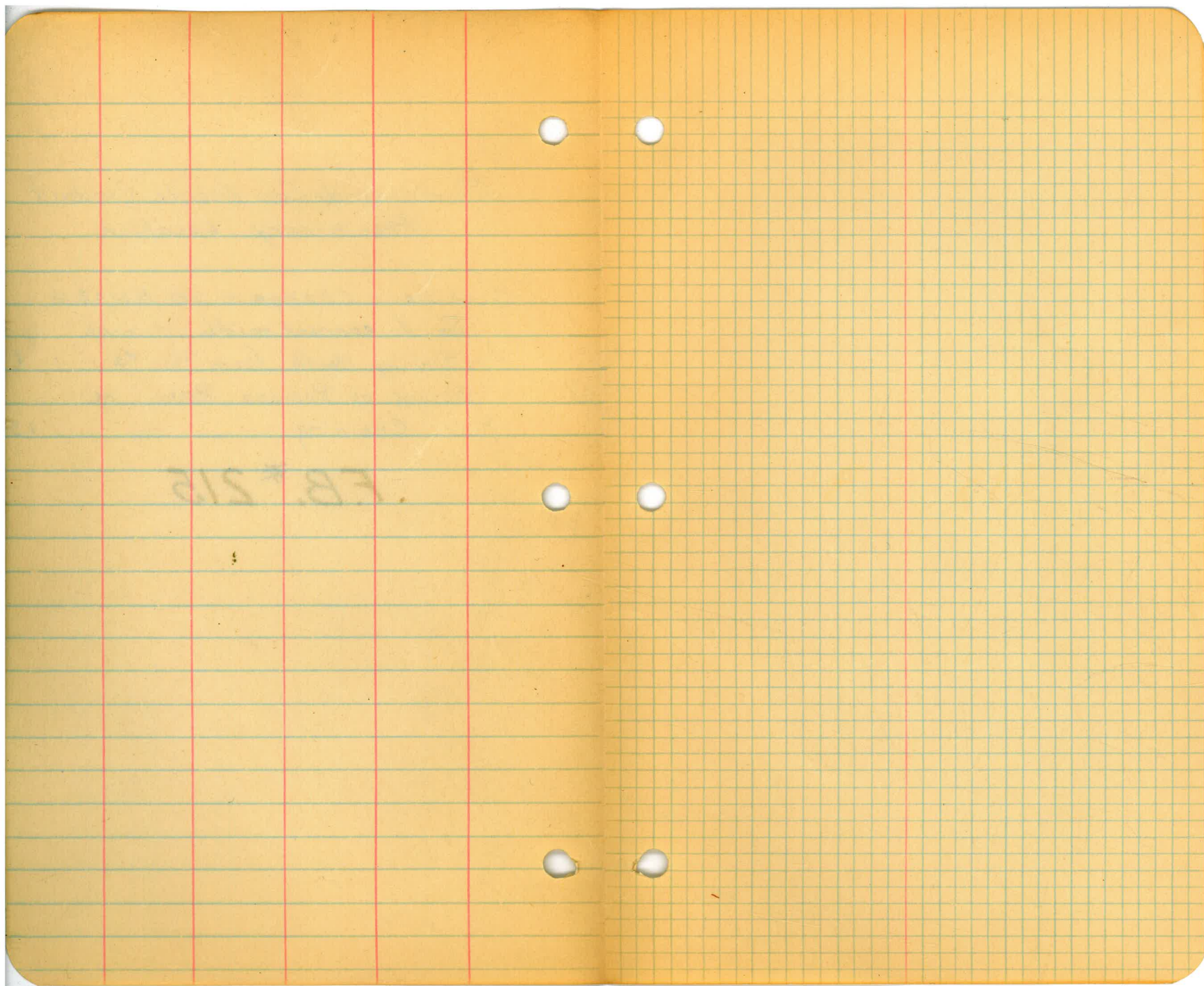
So. to connect with "H" Line

Running North from Pass #2 ---- 1

Record of Ramona Base Line

Chaining - - - - - 13

F.B. # 215



van Horn

1

Preliminary Location South to S.V.
Conduit

H' Line Linechange
B.C. 183403.16, South to Connect
with H' Line Running North
from Pass # 2 -

191
+50
190
+50
189
+21⁰⁹ E.C.

802.92
~~803.67~~

C.C. 5 37° 58' 54" N
Mag 5 38° 30" W

188
+75
+56⁹³ P.I.
+50
+25
187
+92⁰⁹ B.C.
+50

21⁰⁵ out 0⁴ Δ 12019.06
46⁰² .. 1²⁷ R 600
T 64.74
L 129.00

97096
48689.94

57⁷⁷ out 2⁸⁰
32⁸⁵ out 0⁹⁰
7⁹ out 0⁰⁵

186
+50
185
+50
184
+90⁴⁷ E.C.
+75

413 296

C.C. 5 50° 48' N
Mag 5 50° 45' W

+50
+25
+03¹⁶ B.C.
183

15⁰⁵ out 1³ Δ 50018
R 100
T 46.95
L 87.32
45⁰⁰ + 10⁷⁵
21⁰⁸ .. 2⁴⁰

97360
49007.95

Preliminary Location Conduit
south to S.V.

H Line change sta B.C 183+03.16

198

+50

197

+50

+32⁶⁶ E.C.

+25

196

+75

+59²² P1

+50

+25

195

+77⁶² B.C.

+50

194

+50

193

+50

192

+50

191

+50

190

+50

189

392.51

8⁰⁸ out 0¹⁵32⁹⁹ out 2⁷³57.33 out 8³⁷70.83 out 13⁰³46.96 out 5⁶⁰22.34 out 1²⁵C.C. S. 6° 26' E
Mag. S. 6° 00' E.

Δ 44° 25' L

R 200

T 81.65

L 155.04

X

802.92

Mag. S. 38° 30' W.

Line Change Prel. Loc South
to S.V. Conduit Sta 183+03.16
to End

+53 ¹⁹ E.C.		$\Delta 19^{\circ} 37' L$
+25	20 ³ out 2 ⁰	R 200
+19 ¹⁹ P.I.		T 34.58
		L 68.48
204	15 ³ out 0 ⁵⁸	
+84 ²¹ B.C.		
+50		
203		
+50		
+17 ¹⁹ E.C.		
202	17 ¹⁵ out 0 ⁷⁵	$\Delta 37^{\circ} 09' L$
+75	42 ²⁰ " 4 ⁴⁵	R 200
+54 ⁷² P.I.		T 67.21
+50	64 ⁵⁵ out 9 ⁷⁰	L 129.68
+25	37 ² out 3 ⁵²	
201	12 ⁵ out 0 ⁴⁰	
+87 ⁵¹ B.C.		
+50		
200+00 ⁶⁴ E.C.		
+75	24.8 out 1.87	$\Delta 84^{\circ} 40' R$
+50	48 ⁰⁶ out 11 ⁰²	R 100
+43 ⁹⁷ P.I.		T 91.10
+25	66 ⁰⁸ out 24 ⁹²	L 147.77
199	45 ⁴⁸ out 10.9	
+75 ⁸⁷	21 ⁹⁶ out 243	
+32 B.C.		

269.31

 cc. 5.41⁰⁵ W.
 Mag 5.41³⁰ W.

245.18

 cc. 5.78¹⁴ W.
 Mag 5.78⁰⁰ W.



+25 1°40'55"

214 0°29'20"

+89⁷⁸ B.C.

+50

213

+50

212

+50

211

+50

210

+50

+29²² E.C. 10°58'30"

+25 10°21'12"

Δ21°57' L

209 6°46'51"

R=200

+91³⁹ P.I.

T=38.79

+75 3°12'30"

L=76.62

+52⁶⁰ B.C.

D=28°38'50"

+50

208

+50

207

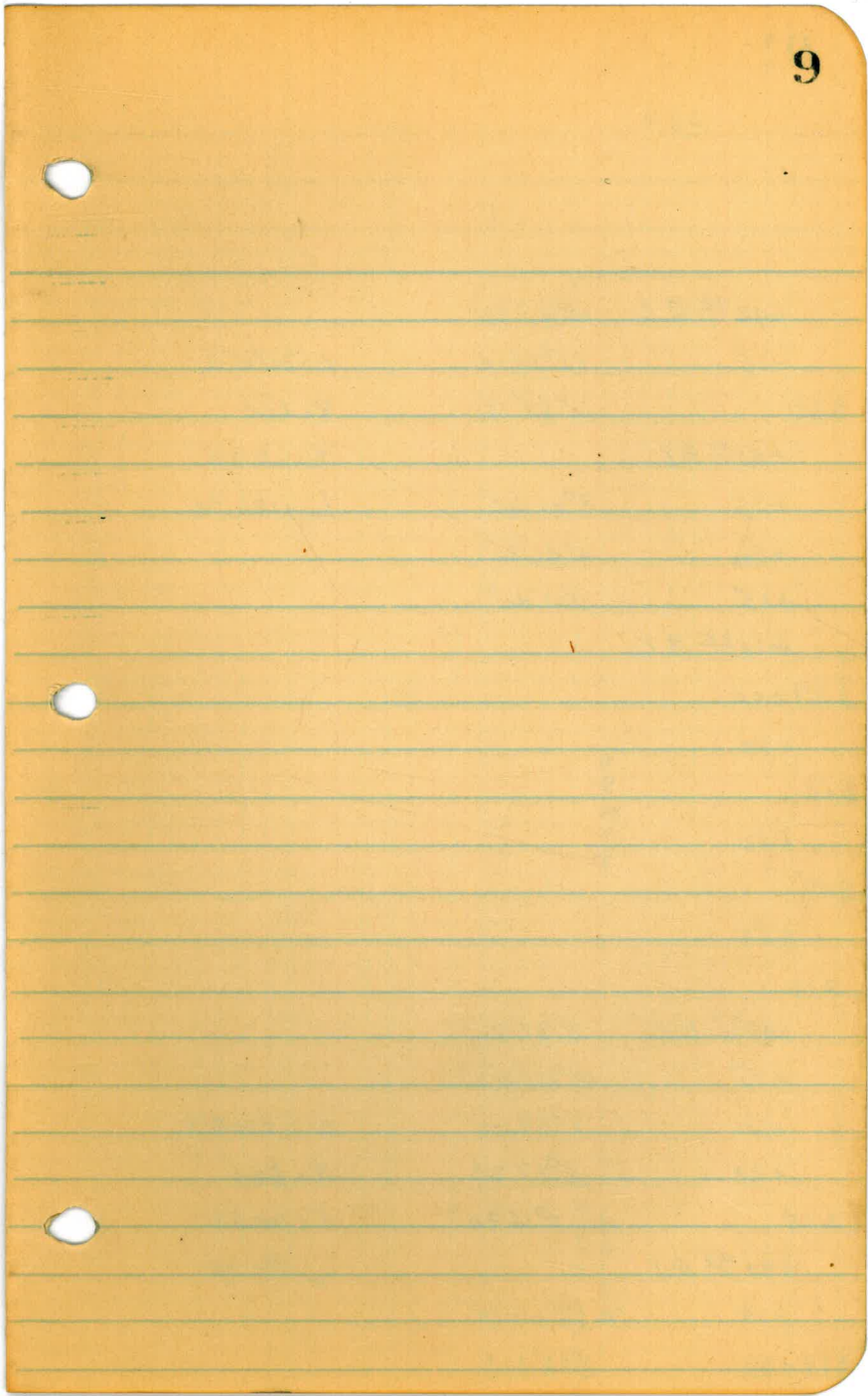
+50

206

+50

205

600.02
mdg = 50°10' E472.78
mdg = 52°45' W

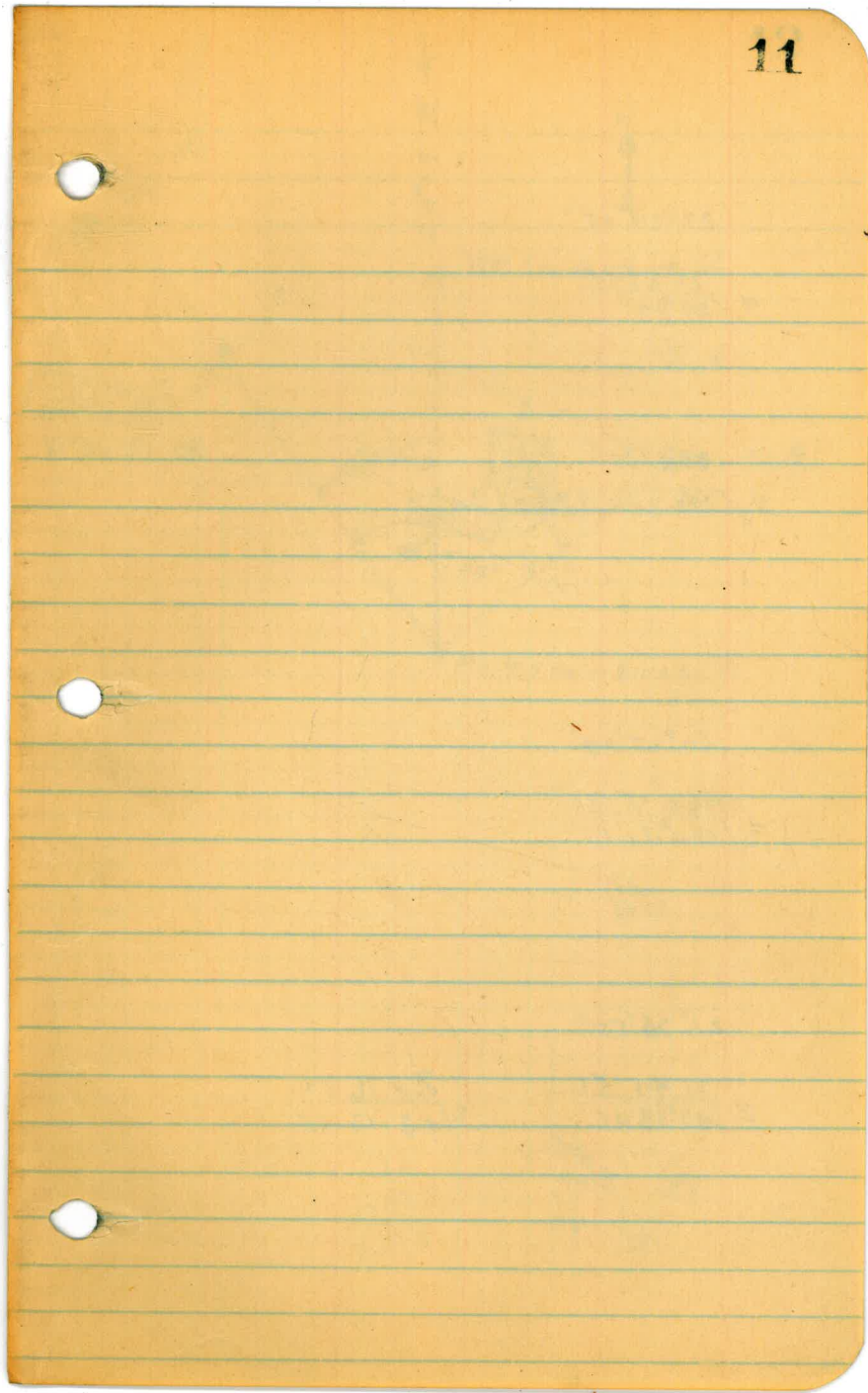


+42 ⁹⁶ E.C.	18°53'0"	
+25	15°31'10"	$\Delta = 36°11' L$
220	11°56'10"	$R = 200$
+82° P.I.		$T = 65.34$
+75	8°21'20"	$L_c = 126.30$
+50	4°46'30"	
+25	1°11'40"	
+16 ⁶⁶ B.C.		
219+00		
+50		
218		
+50		
217		
+50		
216		
+89 ²⁷ E.C.	9°31'30"	
+75	8°51'40"	
+50	7°39'00"	$\Delta = 19°03' L$
+25	6°27'20"	$R = 600$
215	5°15'40"	$T = 100.67$
+90 ⁴⁵ P.I.		$L_c = 199.49$
+75	2°09'10"	
214+50	2°52'30"	

993.90

600.02

Mag = 80°16'

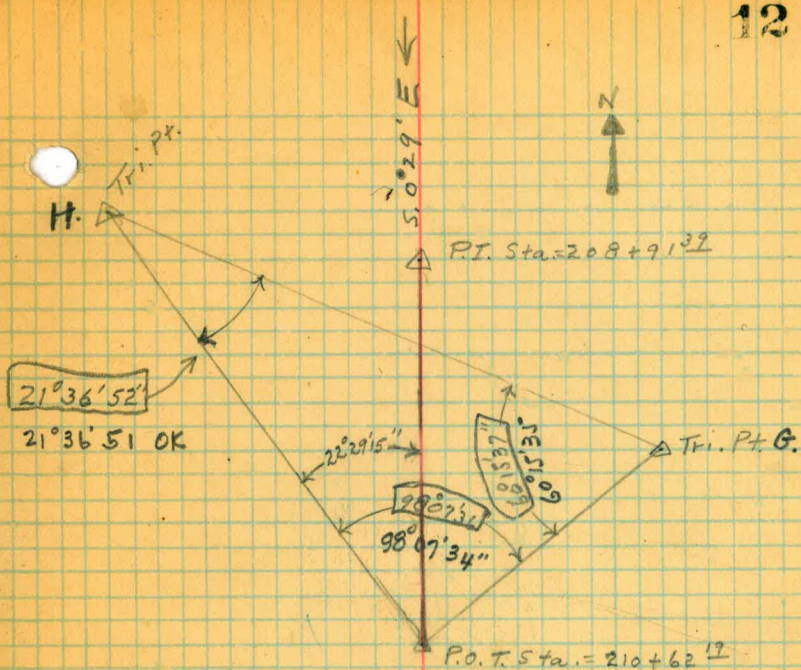


$$\begin{array}{r}
 27^{\circ}29'15'' \\
 4 \overline{) 27^{\circ}29'15''} \\
 \underline{89^{\circ}57'} \\
 1137 \\
 \hline
 98^{\circ}07'35'' \\
 4 \overline{) 397^{\circ}30'25''} \\
 \underline{98^{\circ}07'36''} \\
 1125 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 60^{\circ}15'30'' \\
 2 \overline{) 60^{\circ}15'37''} \\
 \underline{120^{\circ}31'15''} \\
 27 \\
 \hline
 2/75
 \end{array}$$

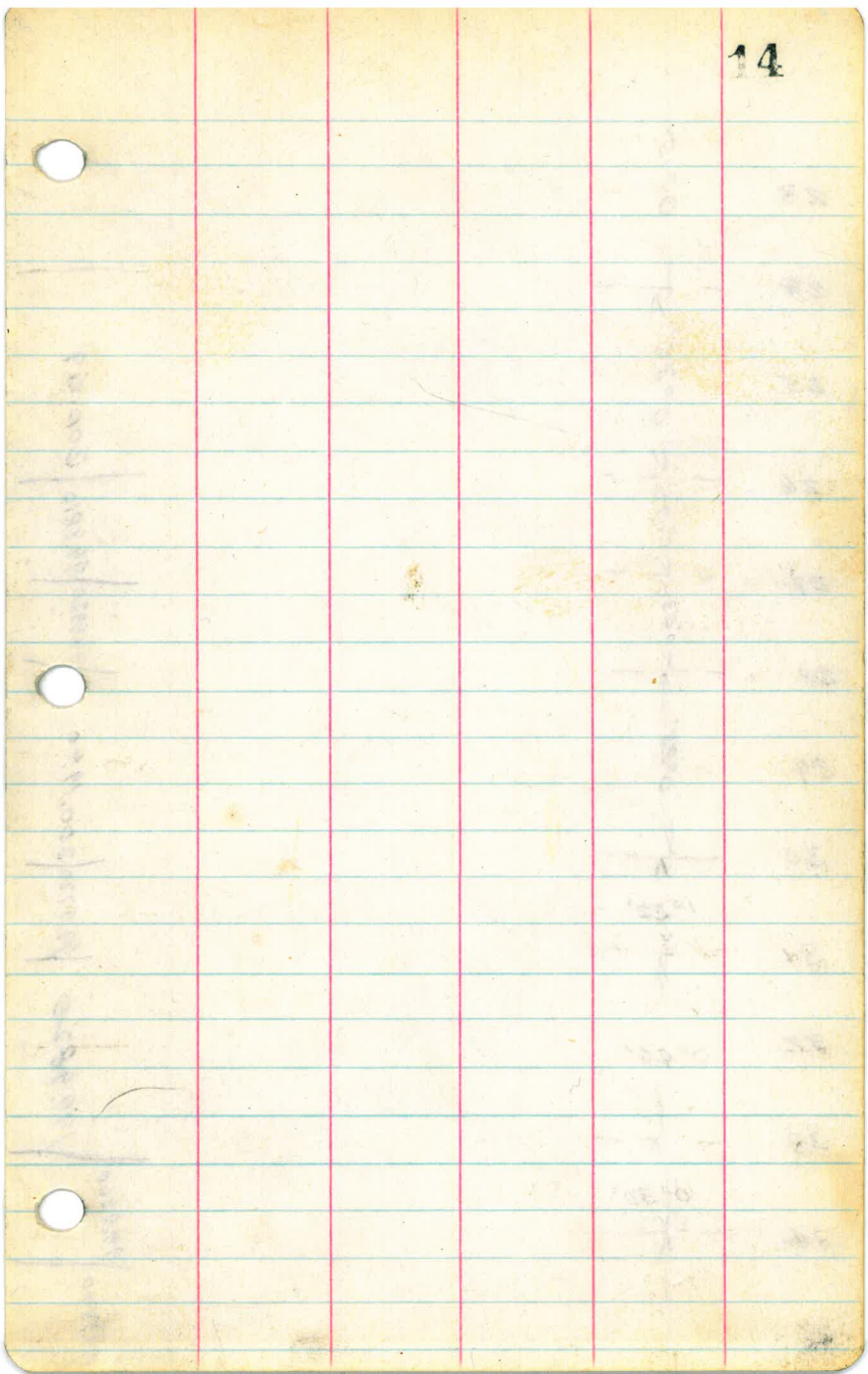
$$\begin{array}{r}
 21^{\circ}36'55'' \\
 2 \overline{) 214151} \\
 \underline{43^{\circ}28'45''} \\
 183 \quad 44 \\
 \underline{51} \quad 88 \\
 2 \overline{) 105} \quad 98
 \end{array}$$

$$\begin{array}{r}
 213652 \\
 2 \overline{) 431345} \\
 \underline{36} \\
 2 \overline{) 11352} \\
 \underline{2} \overline{) 105}
 \end{array}$$

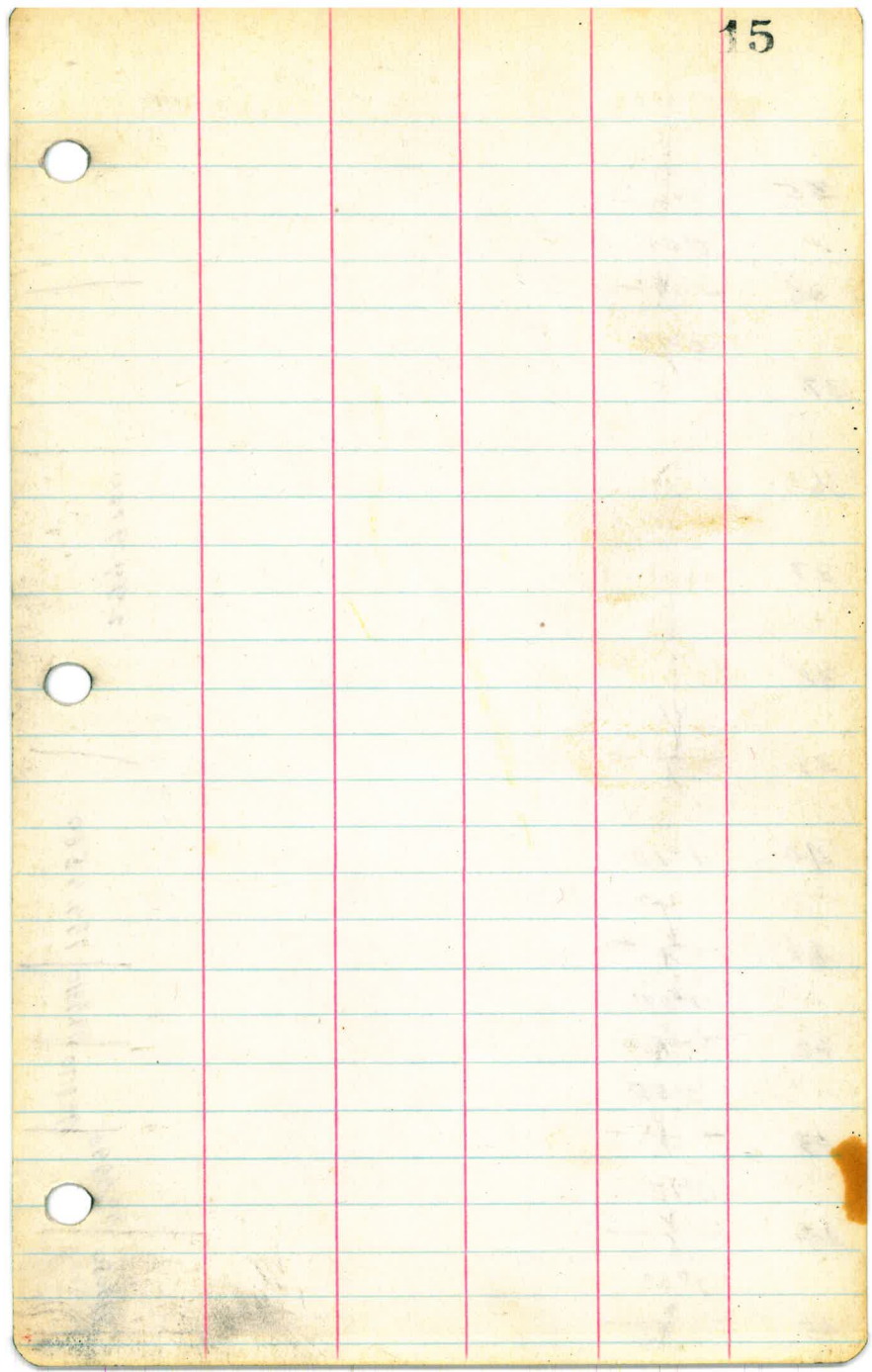


Record of
Ramona Base line
Chaining

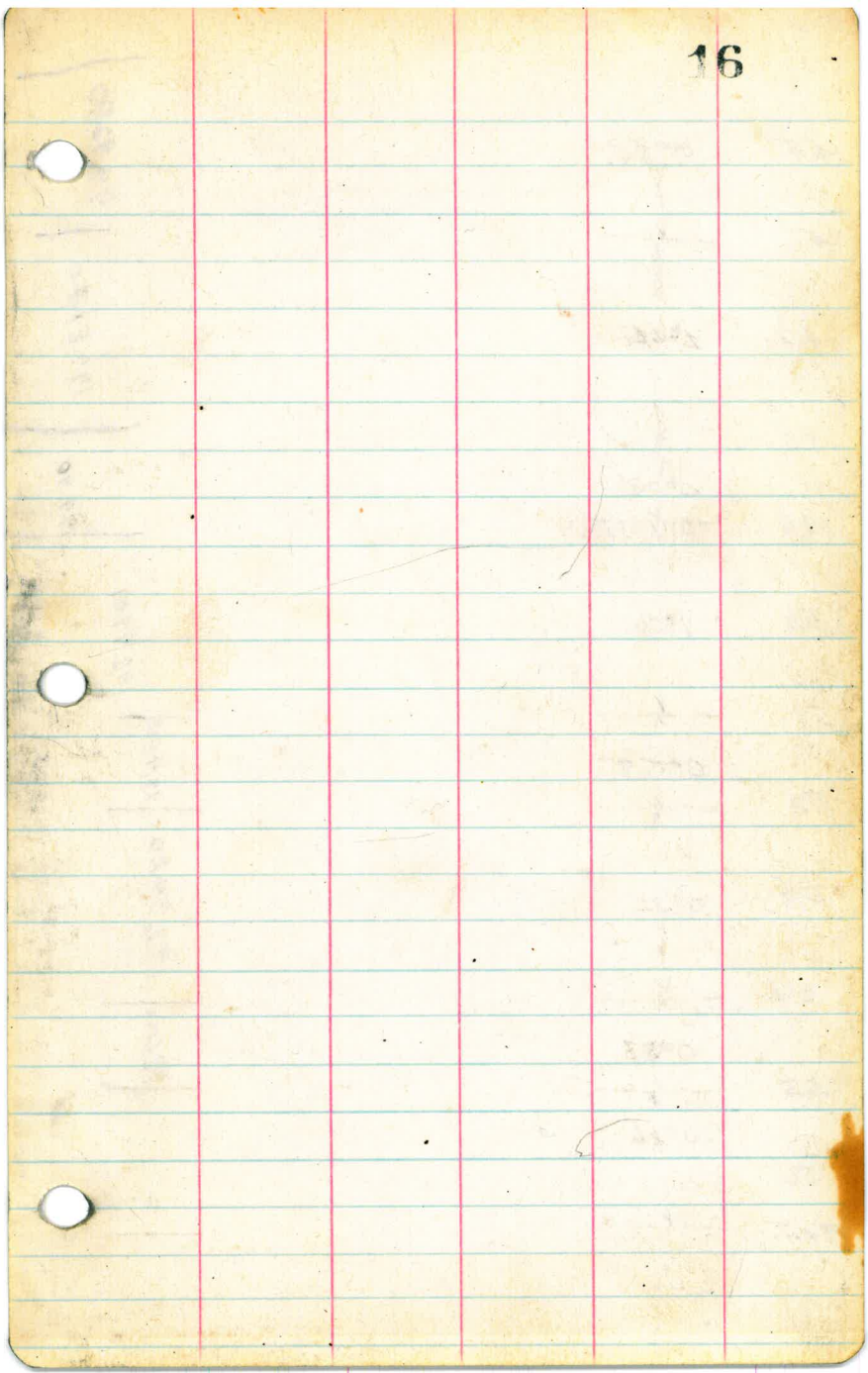
Record		Chaining		Base Line
STA.	DIST.	Clear	WARM	
		Roll	Ther	
0+78.49	S. Concrete Monument			
	20.61	13 #	80	
1+00				
	99.90	20 #	80	
2+00				
	99.98	20 #	80	
3+00				
	50.30	20 #	80	
3+50				
	49.77	20 #	79	
4+00				
	99.71	20 #	76	
5+00				
	100.0	20 #	78	
6+00				
	99.94	20 #	78	
7+00				
	99.98	20 #	78	
8+00				
	75.0	20 #	78	
8+75				
	50.0	20 #	76	
9+25				
	74.95	20 #	76	
10+00				



23	0°15'	
24		
25	0°36'	
26		
27	0°43'	
28		99.9810 99.9810 200.09
29	0°28'	
30		99.9720 200.1940
31	1°22'	
32	0°46'	99.9820
33		
34	0°30'	99.9840 99.9960



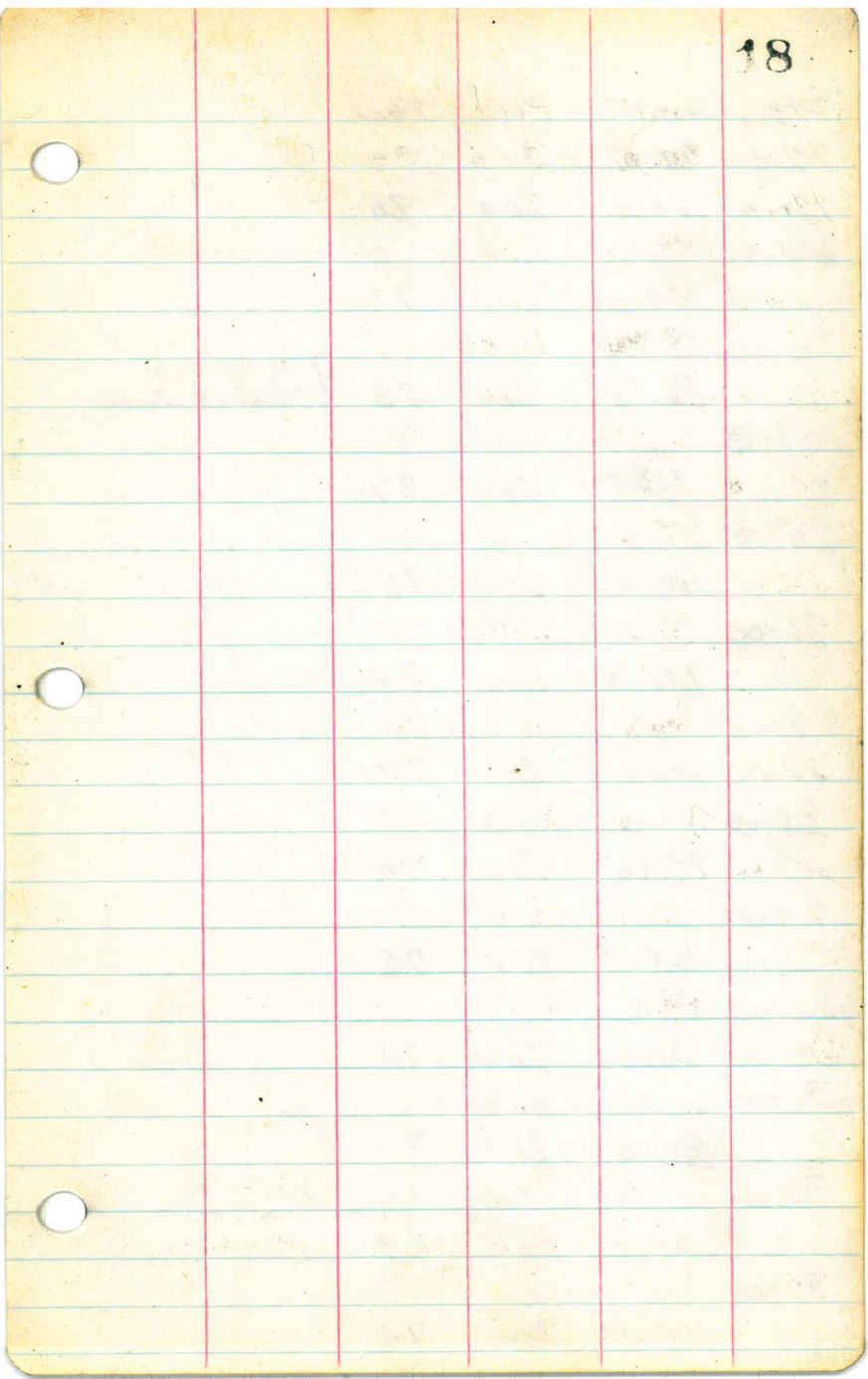
35				
	$0^{\circ}44$			
36	$\frac{Y}{X}$			
	$0^{\circ}48$			
37				
36				
37				299.9700
38				
39	$\frac{Y}{X}$			
40	$1^{\circ}10$			
41	$\frac{Y}{X}$			
	$1^{\circ}07'$			99.9810 99.9580
42	$\frac{Y}{X}$			
	$0^{\circ}55$			99.9170 99.9810
43	$\frac{Y}{X}$			
	$0^{\circ}12$			99.9990
44	$\frac{Y}{X}$			
	$1^{\circ}40$			99.9080
45	$\frac{Y}{X}$			



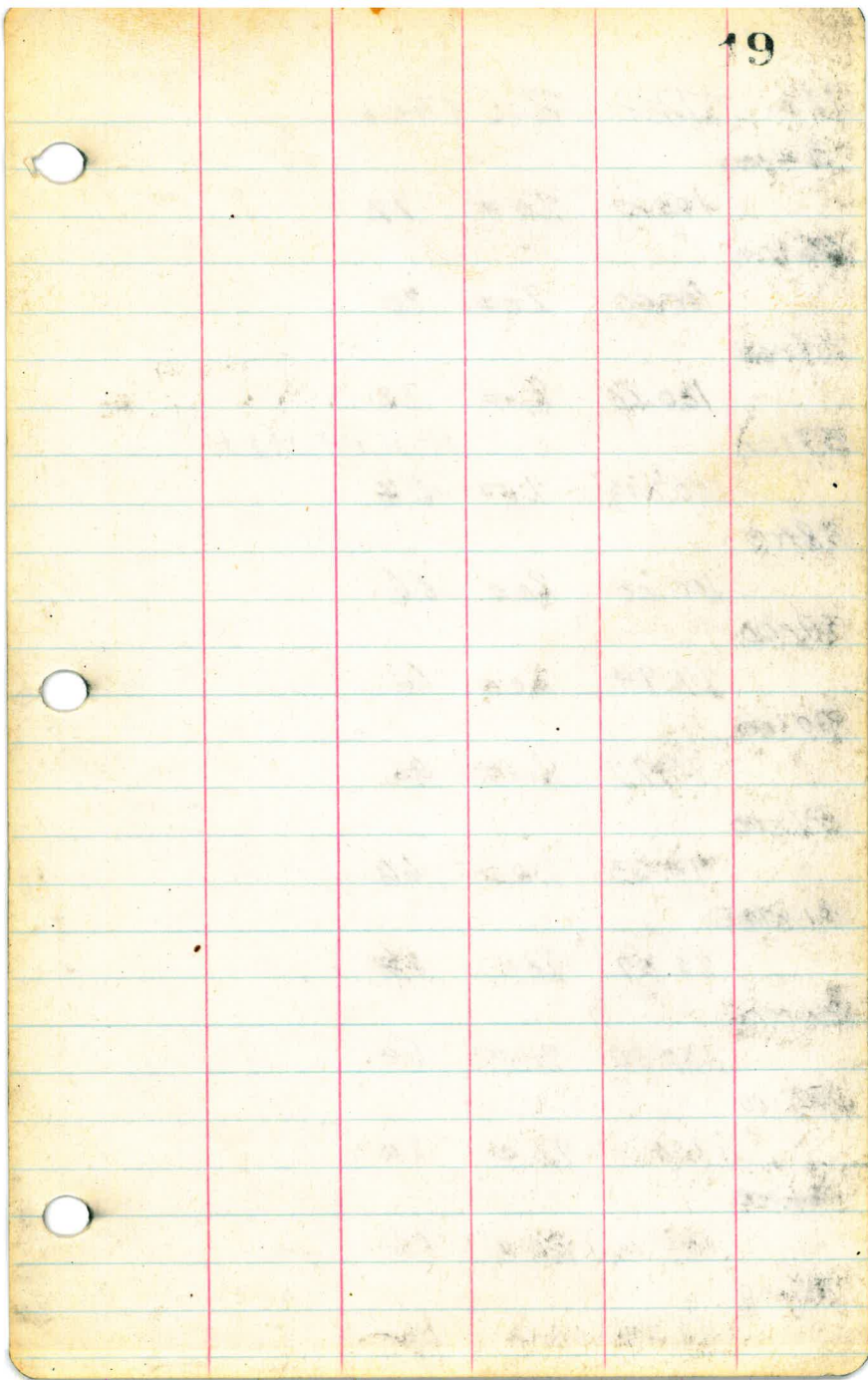
45	0°20'				99,9280
46					199,8140
47	1°05'				99,90
48					198,9201
49	0°03'				99,4858
50	1°00'				199,3420
51					99,6150
52	0°59'				199,3420
53	0°32'				99,6150
54					199,3420
55	0°33'				99,6150
56	0°26'				199,3420
P.O.T.					99,6150

Fox GUSON π
Andrews Rec.
Hefferman H. Chain
MATT TOON π

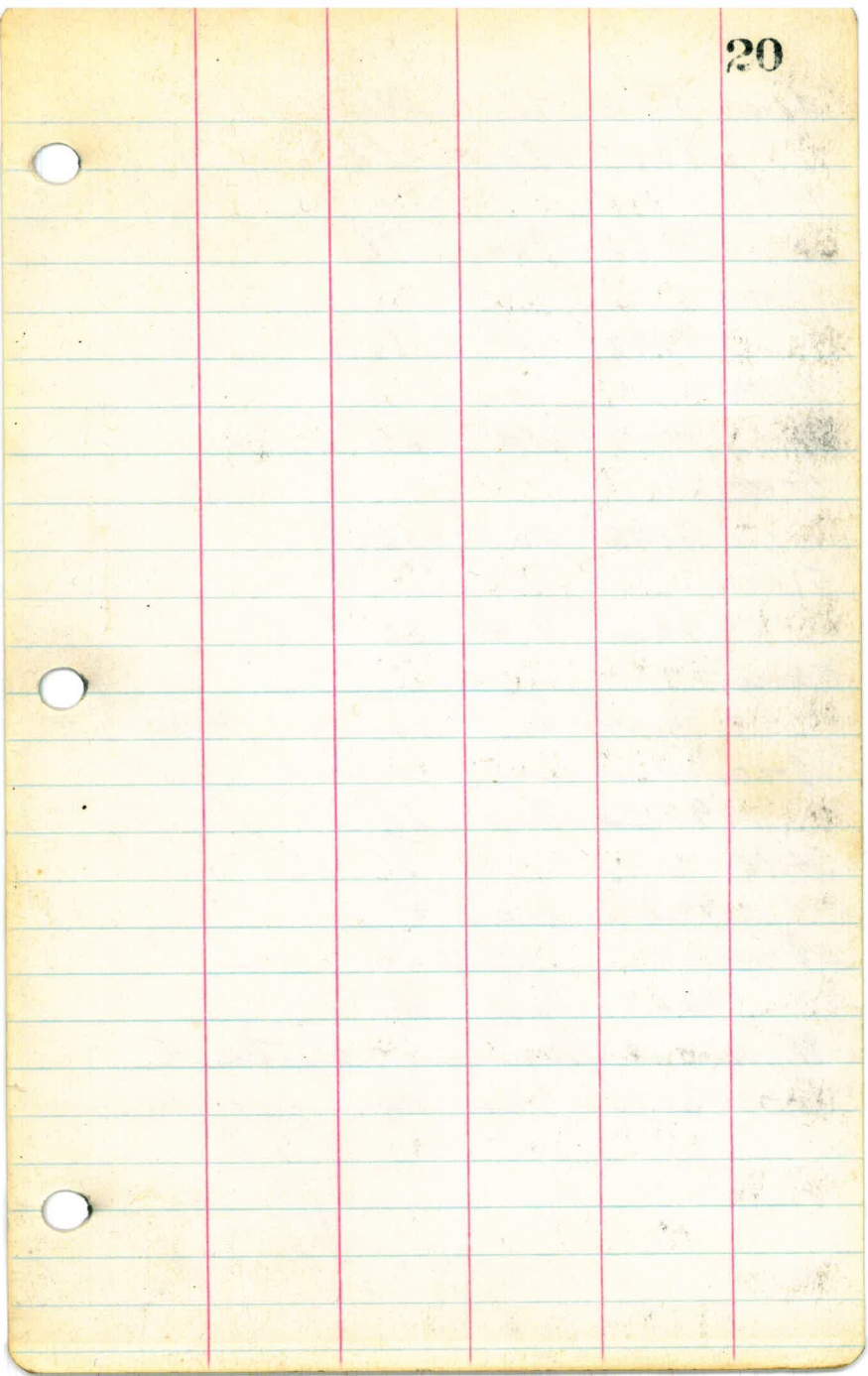
STA	Dist	Pull	Thet	
	100.0	20 #	74	
11+00	99.95	20 #	74	
12+00	99.96	20 #	76	
13+00	100.0	20 #	76	
14+00	99.98	20 #	74	
15+00	99.95	20 #	72	
16+00	100.0	20 #	70	
17+00	100.0	20 #	72	
18+00	100.0	20 #	74	
19+00	99.97	20 #	74	
20+00	100.0	20 #	72	
21+00	9.10	20 #	72	} Middle Concrete MONUMENT
21+09.9	90.87	20 #	74	



STA	DIST	PULL	THEY	
22+00	100.0	20#	76	
23+00	100.0	20#	72	
24+00	86.78	20#	72	} To Nail in Base of Tree
24+86.78	13.37	20#	72	
25+00	100.0	20#	72	
26+00	100.0	20#	74	
27+00	100.0	20#	74	
28+00	99.80	20#	74	
29+00	100.00	20#	72	
30+00	100.00	20#	74	
31+00	100.00	20#	74	
32+00	100.00	20#	74	
33+00	100.00	20#	74	



Sta.	Dist	Pull	Ther
34+00	100.0	20#	72
35+00	100.00	20#	70
36+00	100.00	20#	72
37+00			MAR 15 th 1927
	100.01 $\frac{3}{4}$ "	20#	64
38+00	100.00	20#	66
39+00	99.94	20#	66
40+00	99.97	20#	66
41+00	74.53	20#	66
41+74 ⁵³	25.47	20#	64
42+00	100.00	20#	64
43+00	100.00	20#	64
44+00	100.00	20#	66
45+00	99.59	20#	66



	Dist	PULL	Ther	
46+00	99.95	20#	66	
47+00	99.86	20#	66	
48+00	99.92	20#	66	
49+00	99.17	20#	66	
50+00	99.72	20#	66	
51+00	99.50	20#	66	
52+00	99.57	20#	66	
53+00	99.74	20#	66	
54+00	99.61	20#	66	
55+00	55.63	20#	66	
N. Concrete Monument on Base Line				
Hub	26.16	20#	66	End Baseline

35
Measurements
Base Line on West Side Mesa Grande
County Road Sta. 0+ being a point
4 ft. North of intersection with
Julian - Ramona Paving

#3	Hor.	#4	Hor.
Slope	Dist.	Slope	Dist.
Dist.		Dist.	

(21)

11

0°11'

12

0°58'

13

0°20'

14

0°53'

15

0°03'

16

0°26'

17

0°26'

18

0°46'

19

0°46'

20

0°46'

21

0°15'

22

399.9960 | 199.9820 | 199.9940 | 199.95 | 99.9960 | 99.9980 | 99.9960

22

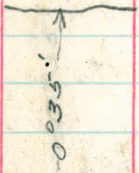
Base Line

Sta	Vert. Angle	#1 Slope Distance	Hor. Dist	#2 Slope Distance	Hor. Dist.
-----	-------------	----------------------	-----------	----------------------	------------

0+00

0+?

1

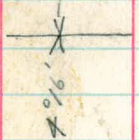


2

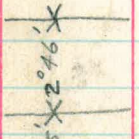
3

750 ✓

4

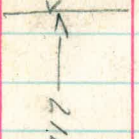


5



6

7

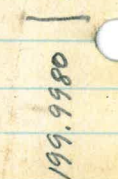
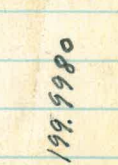
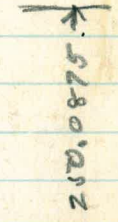


8

9



10



(H) Base Line

23

	Sta	Dist	Temp
Tree	24 +	.	
		1340	about 72° 13.385
	25		
	.	100.10	100.10
	26		
		99.95	100.00
	27		
		100.00	100.00
	28		
		99.80	99.80
	29		
		100.35	100.37
	30		
		100.00	100.00
	31		
		99.98	100.00
	32		
		100.00	99.95
	33		
		99.95	100.00
	34		
		100.00	100.00
	35		
		100.00	100.00
	36		

Sta	Dist		
36	100.00		99.99
37	100.00		100.00
38	99.97		99.97
39	100.00		100.03
40	100.00		100.00
41	99.95		99.95
42	99.85		99.83
43	100.00		100.00
44	99.90		99.92
45	99.95		99.93
46	99.95		99.95
47	99.85		99.85
48			

(A) Base Line

24

Sta	Dist	
48	99.90	99.90
49	99.20	99.18
50	99.75	99.75
51	99.50	99.50
52	99.55	99.60
53	99.75	99.72
54	99.60	99.60
55	81.79	81.79
POT	3091.99	3092.06
25	100.00	
24	100.10	
23		
22	100.00	

4

22		100.00
21		100.00
20	x	100.10
19		
18	70°	100.00
		100.00
17		
		100.00
16	^	
		99.96
15		
		100.00
14		
		100.04
13	65°	
		100.00
12		
		100.00
11		
		100.00
10		
		100.00
9	v	

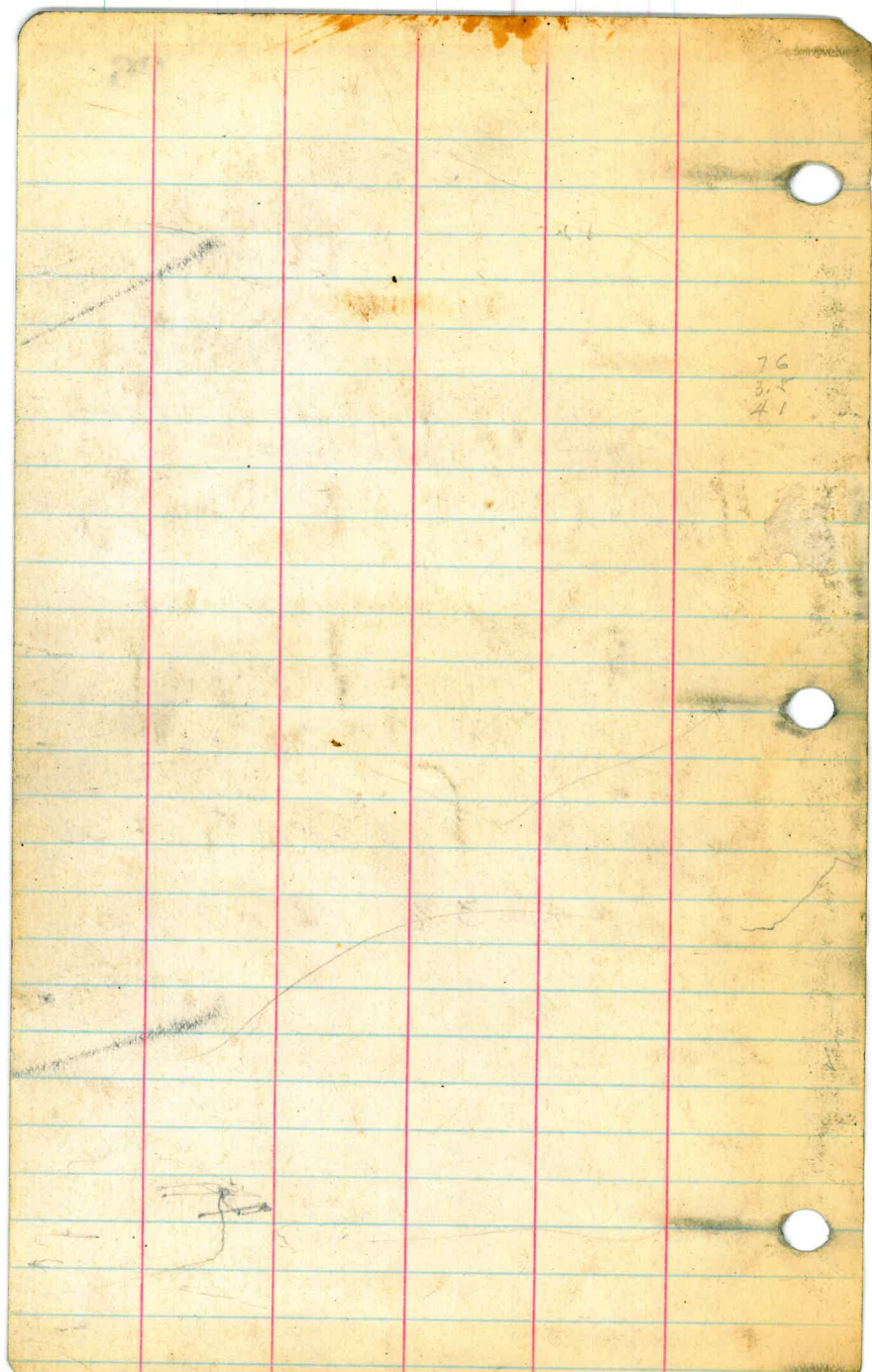
65° ^

5472.401 Total length
 Pass line

$$P.L. = 50 + 0.124$$

2029305 Bl #1 to #2

3443.396 Bl #2 to #3



76
3.5
41