

EL CAPITAN
Pipe Line Survey
Levels — N^o 2

W190

#190

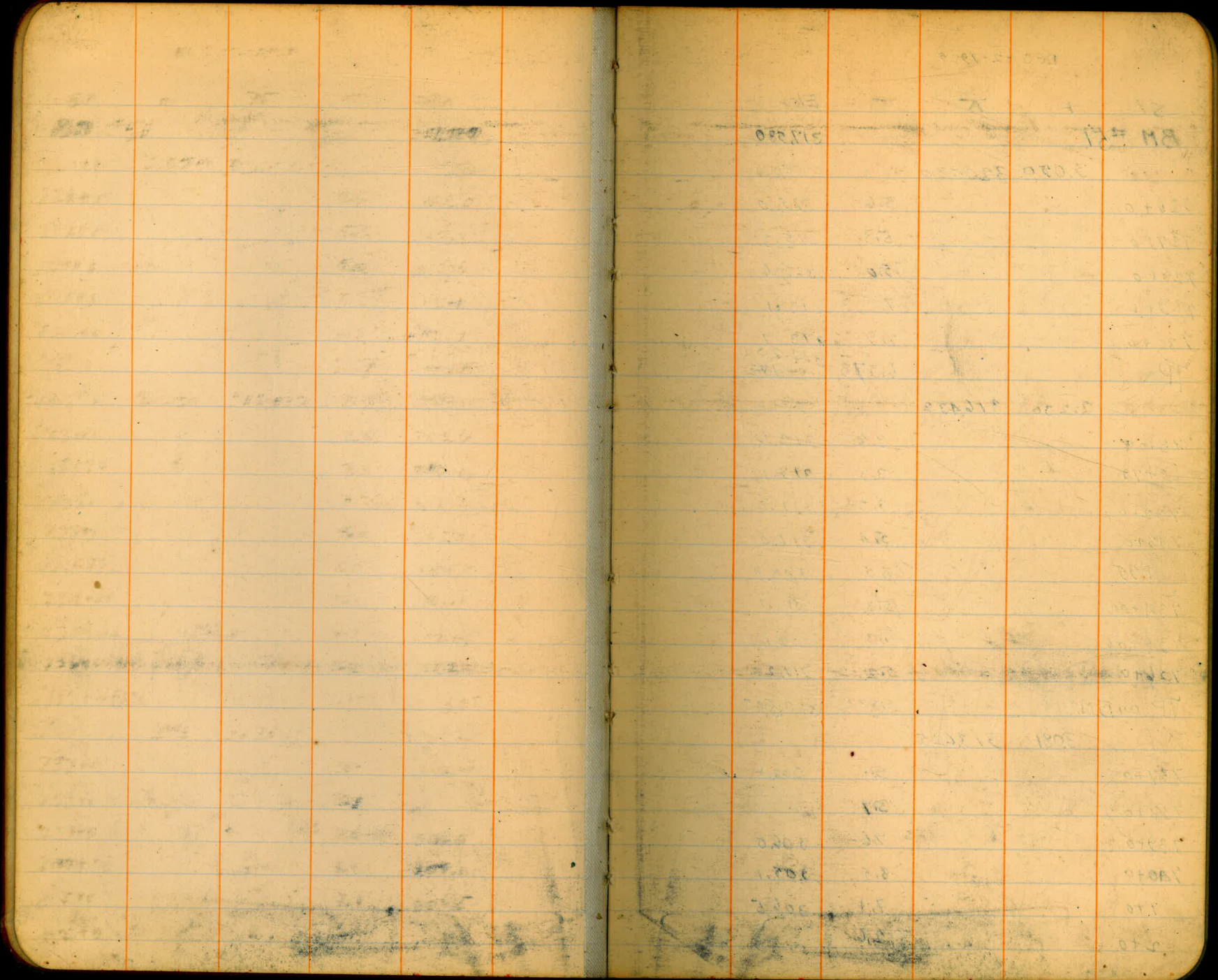
Preliminary Survey El Capitan Pipe Line
Levels and Profile No. 2
C. M. Boren

Sta. 725+00 to 1036+20

Subtract 9.926

MICROFILMED

JAN 9 1965



1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

1900

dec - 2 - 1925

Stc	+	-	Elc
BM #78			317.530
	3.050	320.580	
726+0		5.6	315.0 ✓
727+0		5.3	315.3 ✓
728+0		5.0	315.4 ✓
729+0		7.5	313.1 ✓
730+0		7.9	312.7 ✓
TP		6.378	314.202 102
	2.230	316.432	
731+0		3.8	312.4 ✓
+73		3.3	313.1 ✓
732+0		3.2	313.2 ✓
733+0		5.4	311.0 ✓
+35		7.5	308.9 ✓
734+00		5.3	311.1 ✓
735+00		4.3	312.1 ✓
736+0		5.2	314.2 ✓
TP on BM (79)		5.887	310.545
	3081	317.625	
737+0		50	308.6 ✓
738+0		5.7	307.9 ✓
739+0		7.6	306.0 ✓
740+0		8.5	305.1 ✓
1+0		7.1	306.5 ✓
2+0		2.6	311.0 ✓

on fence post R 736+50 ✓

Sta	+	313.62 ⁶ T	-	Elev	PER
742	+50		2.4	311.2	PER
743	+0		2.7	310.9	PER
744	+0		3.7	309.9	ations checked
	5+0		4.9	308.7	PER
TP			4.835	308.79 ¹	
	0.375	309.16 ⁶			
746	+00		2.7	306.5	
	7+0		6.3	302.9	
747	+50		7.8	301.4	Record. Elev
	8+0		7.0	302.2	
749	+0		6.2	303.1	
BM #80			2.937	306.22 ⁹	306.390
750	+00		6.0	303.2	
751	+00		4.1	305.1	
	2+0		3.3	305.9	
TP			2.195	306.97 ¹	Nail in Post
	10.802	317.77 ³			
753	+0		8.7	309.1	
	4+0		4.2	313.6	
	+50		2.6	315.2	
	5+0		2.2	315.6	
	6+0		2.0	315.8	
TP			1.713	316.05 ⁶⁰	
	2.675	318.73 ⁵			

40' L 390
749+75

Sta	T	318.737 ⁵ K	-	Elev
757+0			3.7	315.0
8+0			5.3	313.4
+94			5.2	313.5
759+0			6.8	311.9
+15			5.4	313.3
+20			8.1	310.6
+30			7.8	310.9
+40			5.7	313.0
760+0			4.2	312.5
1+0			4.3	314.4
2+0			1.8	316.9
TP (turn here)			2.095	316.39
B.M. (81)			1.165	317.20
	9.285	326.854		
763+0			7.9	319.0
764+0			7.7	319.2
5+0			4.9	322.0
6+0			7.8	319.1
7+0			2.7	324.2
TP			0.055	326.99
	10.195	336.994		
7+50			9.3	317
8+0			8.2	328.8
9+0			6.6	320.4
770+0			7.7	322.2

BM #81
checked

Profile tube run from BM #761495 to BM #770+38

Corrected Profile

Sta	T	on Fine BM Near 761 + 2 (Hub 10'R)	317.569 ⁷⁰	BM #81
761+0			9.8	314.4
761+60			6.8	317.4
762+0			7.2	317.0
763+0			5.8	318.4
+50			4.3	317.9
764+0			7.3	316.9
765+0			6.0	318.2
766+0			3.2	321.0
766+0			6.1	318.1
767+0			1.0	323.2
TP			0.847	323.37 ⁵
	11.963	335.337 ⁸		
+40			9.7	326.6
768+00			7.4	327.9
769+0			5.9	329.4
770+0			4.1	331.2
+28			2.6	332.7 ³
B.M.			1.205	334.13 ³
				334.131

check
eb to
hat
PER

CORRECT ELEV BM

Error of 1.0' Between 761+35 + 770+38

336.068

336.774

∧

-

Elcv.

← Correct
Elev

335.057
926

734.131

Sta	+	∧	-	Elcv.	← Correct Elev
770+28				3.4	✓
BN #82				1.937	335.057 334.131
771+0				0.4	335.0
TP				1.105	335.889 334.963
	5.305	340.268			Beg on TP ↑
771+50				3.3	337.0 ✓
2+0				3.3	337.0 ✓
4+0				5.0	336.3 ✓
3+0				7.4	332.9 ✓
4+0				9.6	330.7 ✓
5+0				8.9	331.4 ✓
TP				7.812	332.436 ✓
	8.045	340.501			
6+0				7.8	332.7
777+0				6.4	334.1
8+0				5.4	335.1
9+0				4.0	336.5
780+0				1.7	338.8
TP				0.905	339.596 ✓
	9.682	349.278			341.113 P.E.R.
780+80	B.M. #83			7.665	341.619
1+0				8.7	340.6
2+0				5.7	343.6
T35				4.7	344.6
3+0				4.3	345.0

Left on fence post at 770+38

checked
Tolere
P

Had nailed to fence post 10'R 780+80

Sta			Elev
	349.278		
7+0		5.6	348.7
+80		6.6	342.7
785+0		5.9	343.4
786+0		3.4	345.9
7+0		2.1	347.2
TP		2.071	347.251
	8.645	355.896	
788+0		6.7	349.2
9+0		4.4	351.5
+79	PI	3.3	352.6
BM #84 - 8' R. on fence		2.986	352.910
790+0		4.2	351.7
+45		4.5	351.4
791+0		7.9	348.0
+50		7.7	348.2
792+0		10.9	345.0
+38		10.5	345.4
+42		12.3	343.6
+46		10.4	345.5
+72		9.8	346.1
793+0		11.4	344.5
TP		11.207	344.649
	2.071	346.720	
794+00		5.7	341.0
+50		10.1	336.6

✓ PER

checked by P.E.R.

checked to here - emb

✓ PER

Units notified to Post 8R. 789+79

570 + 346.720 ✓
 795+0 8.8 337.9
 6+00 6.3 340.4
 770 10.5 336.2 ✓
 TP 10.344 336.376 ✓

0.510 336.886 ✓

798+0 2.9 334.0
 9+0 4.4 332.1
 800+00 7.5 329.4
 +60 9.3 327.6

805⁸⁵ 50' L on Eucalyptus 4.631 332.255 ✓ FER

50' L 800+70

1+00 5.8 331.1
 1757 1.5 335.4
 802+00 2.60 334.7
 +65 1.8 335.1
 3+0 2.0 334.9
 470 5.9 331.0

805+0 9.6 327.3 ✓
 TP 11.481 325.405 ✓

0.952 326.357 ✓

782 5.2 321.2
 6+0 0.9 319.5
 7+0 10.1 316.3 ✓

TP 9.987 316.370 ✓
 326

0.545 316.915 ✓

808 4.1 312.8

✓ checked by FER

~~error~~
 corrected
 ←

Checked by PER

Sta	+	915 316.89	—	—	ERV
808+15			4.1		312.8
+64			8.3		308.5 ⁶
808+25			8.9		307.9 307.0 ⁰
809+0			6.1		310.7 ⁹
810+0			9.1		307.7 ⁸
811+0			12.2		304.6 ⁷
810+85 B.M. Nail in post 30L			8.605		308.236 308.310
TP			9.287		307.628 PER
	3.420	311.048			
812+0			7.4		303.6
+53			7.2		303.8
+65			12.1		298.9
813+00 P.I.			11.5		299.5
TP			11.84A		299.204
	7.260	306.464			
814+0			10.9		295.6
815+ TP			16.20		294.774
	5.656	300.470			
815+0			7.5		293.0
+43			8.5		292.0
+70			4.0		296.5
816+0			5.7		294.8
+70			7.2		296.3
+88			5.0		295.5
817+0			12.1		288.4

~~20.8~~ ~~reference~~

peg line to set BM at Sta 815+20
 Previously overlooked
 BM near 810+85 308.236
 0.200 308.436
 TP 8.7A3 297.695
 2.415 302.108
 BM #67 11.637 290.471 ←
 IS Hub nailed to fence post 30 R Sta 815+20

Sto	T	T	-	EIFI
		300.470		
817+10			4.7	295.8
817+73			1.3	299.2
TP			1.125	299.345
	9.252	308.597		
818+0.6			10.8	297.8
+54			4.1	304.5
819+0.0			10.9	297.7
+54			1.1	307.7
820+0			2.5	306.1
TP			6.269	302.397
	5.320	307.657		
+35			5.5	302.2
+60			0.5	307.2
821+0			3.4	304.9
+38			0.5	307.2
+45			2.4	305.3
+70			0.0	307.7
822+0			2.8	304.9
+40			7.1	300.6
823+0			6.5	301.2
+17			5.5	302.2
+65			7.0	300.7
+75			6.3	301.4
824-Dack			9.6	298.1
TP 823+0 of Ford			9.845	297.738 297.812

checked by ER

824 Back = 823 Forward
Elev. Last Line - Last Page

Sta	+	+	-	Peg 297.812 Elev
823				—
	2.312	300.124		
823+50			2.5	297.6
824+0			0.3	299.8
+14			0.0	300.1
+65			3.9	296.2
825+0			8.1	292.0
TP			1.067	293.057
	11.671	310.728		
826+0			1.5	309.2
B.M. #89			2.549	308.179
+70			0.4	310.3
827+0			0.7	310.0
828+0			5.6	305.1
+75			4.4	306.3
829+0			8.3	302.4
TP			8.605	302.123
	4.788	306.911		
+50			5.1	301.8
+60			8.1	298.8
830+0			8.5	298.4
+25			8.9	298.0
+40			6.9	300.0
+70			7.3	299.6
831+0			4.7	302.2

checked
by PEP

PEP

nail in Post St. 825+88 2'L

Peg Line to set a B.M. @ Sta 824+40

B.M. near 825+88 318.105

0.723 318.828

B.M. #88 9.397 309.431 Hub

nail to post at Sta 824+40 3'L

23

Sto	+	π	-	Elev
TP		306.911 ✓		
			1.924	304.987 ✓
	14304	316.291		
831+83			6.9	309.4 ✓
832+0			7.6	308.7 ✓
+60			6.3	310.0 ✓
833+0			3.5	312.6 ✓
TP				
			3.185	313.106 ✓

PER
checked

Sta	+	TP	Peg	ERI	313.106
	10.374	323.480			
833+45			5.1	318.4	checked by REK
831 +85			6.4	317.1	
83 834+0			5.0	318.5	
+20			3.6	319.9	
8 +35			5.3	318.2	
4 +65			6.4	317.1	
835+0			6.0	317.5	
+83			6.3	317.2	
836+00			5.5	318.0	
BN #90	Noil in post		2.975	319.505	REK
837+0			5.6	317.9	
838+0			3.2	320.3	
+33			1.2	322.3	
TP			1.800	321.080	
	4.347	326.027			
839+0			1.5	324.5	
+28			2.1	323.7	
840+0			8.2	317.8	
+45			11.8	314.2	
841+0			12.1	313.9	
TP			0.534	315.493	
	3.530	319.023			
842+92			3.0	316.0	
2+0			4.1	314.9	

24 Sta 836400

319.023 ✓

± checks
to P.E.

Sta	+		✓	EKV
842+54			11.9	307.1
+76			9.0	310.0
310			10.4	308.6
TP			11.409	307.614 ✓
	2.730	310.344 ✓		
844+0			4.6	305.7
+87			4.4	305.9
845+00			6.5	303.8
+45			6.5	303.8
150			7.8	302.5
+60			7.7	302.6
846+0			11.4	298.9
#90			9.695	
B.M. 846+10 Boulder		TP on line	9.695	300.649 ✓
	0.517	301.166 ✓		
846+12			3.8	297.4
150			12.0	298.2
+70			11.4	289.8
847+00			7.4	293.8
TP			11.877	289.289 ✓
	4.323	293.612 ✓		
848+0			1.1	292.5
+45			0.4	293.2
+80	(see sub turn) opp page			
849+10			7.4	286.2
+30			1.6	292.0

Sta		293.612 ✓	-	Elcv	✓ checked by P.R.
850+0			7.5	286.1	
851+0			9.1	284.5	
TP 8' RT 851+10			10.956	282.656	
Sub TP			10.660	282.952	
	1.795	284.747			
848+85			11.8	272.9	
Ret to TP 851+10	elcv			282.656	
	6.934	288.690			
852+0			4.8	283.9	
BM #92 1' L 851+98 Pt Rock			3.488	285.202 ✓ P.R.	
853+0			7.9	280.8	
+20			2.1	286.6	
+53 P.I.			2.0	286.7	
854+0			6.9	281.8	
+30			10.2	278.5	
TP			11.563	277.227 ✓	
	2.935	280.062 ✓			
855+0			3.6	276.5	
+55	0.7. Culvert Head Blk.		10.7	269.4	
	Bottom wash is 4' Lower Measured with Rod		12.7	265.4	
+65			10.6	269.5	
+80			3.0	277.1	
856+0			2.1	278.0	
857+0			5.1	274.0	
+57			4.2	275.2	

Refer Preceding Page

281.1

Sta	+	280.062 ✓ T	-	Elev	✓ PE / checked
858+0			5.0	270.1	
+60			5.4	274.7	
TP			7.385	272.677 ✓	
	5.550	278.227 ✓			
859+0			6.5	271.7	
+35			8.3	269.9	
+64.6			6.7	271.5	
+75			6.5	271.7	
+94			9.2	269.0	
860+0			12.0	266.2	
+85			12.0	266.0	
+90			8.4	269.8	
861+0			8.0	270.2	
TP			10.713	267.514 ✓	
	3.310	270.824 ✓			
+18			5.0	265.8	
TP			10.830	259.994 ✓	
	0.815	260.809 ✓			
862+0			3.8	257.0 ✓	
+0			2.0	258.8 ✓	
+10			4.9	255.9	
864+0			4.7	256.1	
#93 BM 20 P 863+80			2.867	259.942 ✓	TEP
+83			0.5	260.3	
865+0			0.0	260.8	

on High pointing large boulder

Sta	+	260,809	-	ECV
TP			5.197	255.612 ✓
	11,899	267,511 ✓		
866+0			5.9	261.6 ✓
+25			2.0	265.5 ✓
867+0			0.6	266.9 ✓
TP			0.517	266.994 ✓
	8,450	275,444 ✓		
+21			7.1	268.3 ✓
868+0			6.7	268.7 ✓
+40			1.4	274.0 ✓
+70			3.6	271.8 ✓
869+0			2.3	273.1 ✓
TP + B.M. #9A			3.103	272.341 ✓
	9,131	281,472 ✓		
+93			6.1	275.4 -
870+0			6.0	275.5 ✓
TP			3,405	278.067 ✓
	11,040	289,107 ✓		
871+0			5.0	284.1 -
+08			5.7	283.4 -
+50			7.4	281.7 -
872+0	871+89.9		6.4	282.7 ✓
873+0	872+89		10.5	278.6 -
+10	+99		7.2	281.9 -
TP			11.421	277.686 ✓

0 at Tr 88-869+75

PER

Sta	+	-		277.686 ✓
	0.448	278.134 ✓		
879+35	+24	0.2	277.9 ✓	
874+0	873+89	4.8	273.3 ✓	PER
	+69 +48	8.5	269.6 ✓	
	+70 +58	11.0	267.1 ✓	
	+75 +63	9.4	268.7 ✓	
875+0	874+87.5	3.5	271.6 ✓	
	+12 +99.5	2.5	275.6 ✓	
	+30 875+27.5	6.2	271.9 ✓	
	+59 PI=875+40.5	6.3	271.8 ✓	
876+0	875+87.5	7.0	271.1 ✓	
	+20 876+07.5	11.0	267.1 ✓	
TP		10.605	267.529 ✓	
	1.534	269.063 ✓		
	+95 876+82.5	7.3	261.8 ✓	
	+96 +83.5	3.4	265.7 ✓	
877+0	876+87	4.4	264.7 ✓	
	+02 +1988	4.8	264.3 ✓	
	+05 +91	6.2	260.9 ✓	
	+12 +97.5	9.6	259.5 ✓	
#95				
B.M. TP	on Boulder	10.628	258.435 ✓	
	3.688	262.123 ✓		
	+28 877+13.5	9.8	262.3 ✓	
	+60 877+43.5	2.9	259.2 ✓	
878+0	PI=877+85.5	3.4	258.7 ✓	

15 L 877+28

Sta	+		-	Elev.
878	+25	878+10.5	3.4	258.7 ✓
	+45	+30.5	2.8	259.5 ✓
	+65	+50.5	13.0	249.1 ✓
	+80	+65.5	7.6	254.5 ✓
	+95	+80.5	9.7	252.4 ✓
	+98	+83.5	11.4	250.7 ✓
879	+00	879+85	10.3	251.8 ✓
	+25	879+10	10.3	251.8 ✓
	+40	879+25	10.2	251.9 ✓
TP	All		16.744	250.179 ✓
		2.506		252.685 ✓
TP			10.645	242.040 ✓
		9.907		251.947
TP			0.309	251.638
#96 B.M.		9.168		260.806
		+TP	9.239	251.567
		1.110		252.677
TP			2.280	250.395
		9.390		259.785
TP			7.370	252.415
		5.316		257.731
#97 B.M. on oak tr			1.915	255.816
TP		+906	1.906	255.825
		3.985		259.810
#98 B.M. Sta		Sta 903+30	8.183	251.627

Point on Rock 877+50 on Line

ON Boulder west of Rd 30' RT 889+52

6.525 258.152

251.553

B.M. 37' L of 902+88 0.600 259.478 B.M. #99

897+75 - 20' R ↑

spot on Boulder 4' from Rd culv

Dec 7-1228

			251.627
B.M.			251.627
TP	9.838	261.465	
		0.841	260.624
#100	11.804	272.458	
B.M. + TP	on Boulder	2.798	269.660
TP	9.683	279.343	
		0.693	278.650
TP	9.842	288.492	
		0.175	288.317
#101	11.010	299.327	
B.M. + TP		1.145	298.182
TP	1.415	299.597	
		11.605	287.992
#102	5.730	293.722	
B.M.		1.071	292.651
TP		1.090	292.662
TP	11.988	304.650	
		0.313	304.337
#103	11.570	315.847	
TP + B.M.		1.998	313.849
TP	11.235	325.084	
		0.920	324.164
#104	10.300	334.469	
TP + B.M.		11.050	323.414
TP	0.205	323.619	
		11.511	312.108

Top of Hub sta 908+00

Boulder 10' L 912+90

Lath stream by Sumac 18' R 918+70

Lath ditch beside a Rock Co' L sta 924

all elevations correct to here

CMB
NCC 22

			312.408
TP	1.134	313.242	
			11.620 301.622
#105 B.M. X	1.773	303.395	
TP			6.127 297.268
			5.195 298.200
#106 B.M. & TP	4.850	303.050	
			1.380 301.670
#107 B.M.	8.092	309.762	
			0.630 309.132
TP	4.936	314.068	
			11.689 302.380
TP	1.545	303.925	
			6.352 297.573
#108 TP & B.M.	11.365	308.938	
			0.260 308.678
TP	11.432	320.110	
			1.374 318.736
TP	10.935	329.671	
			0.195 329.476
#109 B.M. & TP	11.730	341.206	
			0.865 340.341
TP	11.757	352.098	
			0.340 351.758

Top of Sta stake 928+0

on small point of Sta 35' R 930+70

Lath in Ground 2' R 938+85

15' R 942+25

Hub 20' R 953+00

Lath driven 25' L. 956+40

Sta	+	-	Elev
Began Near Dec 11 1:30 PM			
T.P. + BM			351.758 x
FP	11.823	363.581	
		0.370	363.211
FP	10.658	373.869	
		0.478	373.391
#160 BM + FP	10.738	384.129	
		0.459	383.670
FP	10.845	394.515	
		0.369	394.146
#198 BM + FP	8.365	402.511	
		7.400	395.111
FP	1.252	396.363	
		11.884	384.479
#142 BM + FP	2.150	386.629	
		2.693	376.936
#118 BM + FP	1.200	378.136	
		6.574	371.562
FP	2.690	374.252	
		11.070	363.182
	0.525	363.707	
FP		11.872	351.835
FP	2.447	354.282	
		10.263	344.019
FP	0.985	345.004	

See Preceding page

Hub in ground 30' L 959+85

9621 60' x 18' Pt of Line - is a Hub.

Point on Boulder 12' L of St. 968+00

Hub 10' L 974+00

Well drilled near Sta 977+00

Dec 12 1:40 PM

on 977+00

all Elevations Correct to here

Checked to Near CMB
Dec 19

Dec 23

Note see "A" Line B.M. From Here
To Sta

Stk	+	345.004	-	Elev
#114 B.M. TP			4.614	333.390
TP	0.658	334.048	c.	322.394 322.320
TP	1.128	323.522	11.654	
TP			11.952	311.970
TP	3.642	315.612		313.717 303.797
#115 B.M. TP	0.155	303.946	11.821	
TP			11.150	292.796
TP	0.618	293.414		
TP			11.736	281.678
TP	0.373	282.951		
TP			11.534	270.517
DCO	14-1925			
#116 TP + B.M.	11.545	282.062		
TP			5.025	277.037
TP	11.192	288.179		
TP			1.347	286.832
TP	11.778	298.610		
TP			1.206	297.404
TP	11.329	308.733		
TP	11.256		1.720	307.013
#117 TP + B.M.	11.256	318.269		
TP			0.952	317.317

10' L Sta 98A+0 2x2 Hub

985+20 on C

Lath driven 12' Left of Sta 985+70

Peg 986+

Lath driven 5' R Sta 989+12

2x2 Hub 6' R 990+92

BM	+	x	-	
	9.821	327.138		317.317
TP			0.835	326.303
	10.399	336.702		
TP			1.460	335.242
	11.407	346.649		
# 115 B.M. + TP			2.803	343.846
	2.432 ³	356.174 ²⁰		Error of too caught in check
	2.432	346.278		
# 116 B.M. + TP			11.828	334.450
	0.992	335.442		
TP			11.793	323.649
	5.803	329.452		
TP			11.772	317.680
	1.471	319.151		
TP			11.921	307.230
	3.112	310.342		
TP			11.690	298.652
	0.138	298.790		
TP			11.224	287.566
	0.117	287.683		
TP			11.249	276.434
	8.425	284.864		
# 117 B.M.			11.766	272.993
# 118 B.M. + TP			0.750	284.109

2x2 Hub - 18' R-Stk 999+00

0 Hub 65' L-Stk 1000+35

Lath driven i.R. stc 1001+28

Lath driven a.d. L stc 1002+00

2x2 Hub driven 30 L 1007+80

Lath driven i.t. 1011+82

B.M.			284.109
TP	11.265	295.374	0.460 294.914
TP	11.870	306.744	0.348 306.436
TP	10.550	336.984	0.658 316.328
^{#119} B.M. + TP	9.161	325.489	4.843 320.646
TP	10.282	330.928	0.961 329.967
TP	10.232	340.199	0.580 340.019
TP	11.955	351.574	0.599 350.975
TP	10.183	361.158	0.862 360.291
^{#120} B.M. + TP	7.540	367.831	7.539 360.292
TP	3.162	363.454	8.317 355.137
^{#121} B.M. + TP	6.015	361.152	11.500 349.652
TP	0.480	350.132	11.620 338.512
	2.299	340.811	

Lath on Q St. 1012+60

Lath driven 7 L St. 1018+16

2x2 Hub 7 L St. 1025+00

Dec 15

Boren
Simson

2x2 Hub driven 10 R 1036+90

Sta	+	340.811	-	Eq
BM + TP #122			11.893	328.918
→ #123	1.233	330.151		
BM + TP			5.230	324.921
	10.143	335.064		
TP			0.154	334.910
	11.030	345.940		
TP			0.411	345.529
	7.420	352.949		
BM + TP			8.058	344.891
	0.462	345.359		
TP			11.781	333.572
	4.218	387.790		
BM + TP			8.823	329.962
	1.775	330.737		
TP			11.547	319.191
	1.160	320.350		
TP			3.740	316.610
	10.035	326.645		
BM + TP			1.242	325.403
	4.618	330.021		
TP			11.205	318.816
	1.147	319.963		
TP			11.650	308.313
	1.436	309.749		
BM + TP			11.738	298.011

2x2 Hub driven 55' ± R. Sta 1042+00

2x2 Hub driven 60' R Sta 1045+80

2x2 Lath driven 13' L Sta 1053+68

2x2 Hub 15' Left Sta 1061+00

2x2 Hub driven 18' L 1072+50

2x2 Hub driven 15' R Sta 1079+30

Sto	+	-	Elev	BM
	1.436	299.447	298.011	BM
TP			11.702	287.745
	1.248	288.993		
TP			11.621	277.372
	3.167	280.539		
BM + TP			11.423	269.116
	1.255	290.371		
TP			11.779	258.582
	2.387	260.979		
BM + TP			2.837	258.142
	Dec 10 2-50 PM			
	2.121	260.263		
TP			11.650	248.613
	1.327	242.940		
TP			11.445	238.425
	0.890	239.385		
TP + BM			9.713	230.272
	4.260	233.932		
TP			11.697	222.235
	1.248	223.483		
TP			11.485	211.998
	0.891	212.889		
TP			11.867	201.022
	1.420	202.442		
BM + TP			11.883	190.559

2x2 Hub 40' R 1085+75

2x2 Hub 18' L ~~1088~~+73

was up the Line this A.M.

2x2 Driven 7' L Ste 1097+40

2x2 Driven 11' R 1102+72

Dec 17

Borch
Simson
Tuplinger

Elcy

Stc	+	x	-	
				190.559 ✓
TP	1.445	192.004 ✓	11.877	180.133 ✓
TP	1.192	181.319 ✓	11.915	169.404 ✓
TP	0.344	169.748 ✓	11.830	157.918 ✓
TP	0.343	158.261 ✓	11.796	146.465 ✓
TP	0.921	147.386 ✓	11.877	135.509 ✓
TP	3.578	139.087 ✓	11.673	127.414 ✓
TP	0.170	127.584 ✓	11.866	115.718 ✓
TP	1.177	116.895 ✓	11.558	105.337 ✓
TP	0.532	105.862 ✓	11.977	93.885 ✓
B.M. + TP	2.208	96.100 ✓	8.255	87.845 ✓
TP	1.205	89.050 ✓	5.046	84.004 ✓
TP	11.215	95.219 ✓	1.393	93.826 ✓
TP	11.595	105.421 ✓		

2x2 Hub nailed to fence post 80' L 1107+00

Sta	+	x	-	Elev
		105.421		
BM + TP (125)	Nail in 8" brace		0.640	104.781"
	10.011	114.792"		
TP			0.437	114.355"
	11.763	126.118"		
TP			0.860	125.258"
	10.865	136.123"		
TP			1.853	134.270
	9.942	144.212"		
BM + TP (126)			6.900	137.312
	11.128	148.440		
TP			7.490	140.950
	6.554	147.504		
TP			11.651	135.853
(127)	2.746	138.599		
BM + TP			11.375	127.224
	1.755	128.979		
TP			11.666	117.313
	0.813	118.126		
BM + TP (128)			10.957	107.169
	1.321	108.490		
TP			11.250	97.240
	2.025	99.265		
BM (129)			1.310	97.955
TP			1.370	97.895

End of Present
List of BM's
Jan 12-1926
CMB

117.099

1' L "A" Line Sta 128+97

Hub nailed to post 35' R Sta "A" 141+0

Nail in fence post 20' R "A" 144+55

2x2 Hub 15' L A 149+10

Hub nailed to fence Post 18' L "A" 153+25

Hub 30' R "A" 159+85

Sta	+	-	97.895	Elev
	8.613	106.508		
TP			1.218	105.290
TP (130)	9.679	114.969		
TP + B.M.			4.073	120.894 ✓
	10.600	121.496		
TP			0.450	121.046
	9.570	130.616		
TP			1.005	129.611 ✓
(31)	8.699	138.310		
B.M. + TP			2.377	135.933 135.938
	8.277	144.270		
TP			0.305	143.905
	9.425	153.330		
B.M. + TP			0.485	152.845 152.855
	10.305	163.650		
TP			0.317	163.333
	10.036	173.369		
B.M. + TP			0.397	172.972 172.987
	11.285	184.257		
TP			0.320	183.937
	11.145	195.082		
B.M. + TP			5.882	189.200 189.220
	11.105	200.305		
			0.235	200.070
	8.572	208.442		

Hub driven in flat 65' R. R. 171+00
 Next 11 B.M. are corrected to distribute
 0.054' of error. See This column

Head of Bolt in North End of fellow Guard in Fairmount
 County Br. at about Sta. 1151+25±

Hub on Edge of Road near Sta. 1157+00
 Dec 10

(Boren
 Simson)

Hub 10' L Sta. 1162+63

Hub 25' R 1170+65

st.	+	-	Elev	
		208.642		
TP			0.081	208.561
	8.467	217.028		
BM + TP			3.515	213.513 213.528
	10.558	224.071		Hub 5' L 1177+50
TP			0.288	223.783
	9.925	232.678		
TP			0.150	232.528
	9.105	241.633		
BM + TP			1.355	240.278 240.308
	10.668	250.946		Hub 8' L 1198+00
TP			0.464	250.482
	11.420	261.902		
TP			0.309	261.593
	10.478	272.071		
TP			0.688	271.383
	11.555	282.938		wrong 15. Probabl 1198+21
BM + TP			1.447	281.491 281.526
	10.890	292.371		Hub 22' R 1189+21
TP + BM			1.451	290.920 290.960
	11.522	302.442		at sta 1200 Lath direct at sta 1200
TP			0.317	303.125
	11.725	313.850		
TP			0.123	313.727
	10.650	324.377		
B.M. + TP			2.674	321.703 321.748
				Hub 6' L sta 1205+96

Sta	+	X	-	321.703 Elev
TP	10.028	331.731		
			0.463	331.268
TP	9.398	340.666		
			1.400	339.266
TP	10.375	349.641		
			0.981	348.660
TP	10.792	359.452		
			1.575	357.877
TP	4.622	362.498		
			4.521	357.978
TP	2.085	360.063		358.028
			3.496	356.567
TP	9.957	365.524		
			1.728	363.796
				363.852
Record Elevation as per Mr Mills Letter of Dec 9 -				363.85

See Error of 9.00'

at Sta 807

Makes Elev of Brass plug

at Pauley + Elcajon = 364.722

363.

on man hole cover in Olive St.

Iron bolt in alley

Brass Plug in curb bet Sta X Elcajon
+ Pauley

Dec 21-1925

Boren Level
Simson - Rod

Sta				BM
BM	7	7	-	306.228
TP	9.530	315.808	0.380	316.428
TP on BM	3.696	318.523	0.972	317.551
TP	11.929	329.480	0.867	328.613
BM	11.402	340.015	5.910	334.105

BM on sycamore near 749+

Test of
adjustment of level
Collimation OK
Level tube out 1.0
✓'s OK.
adjusted tube to reverse.

Near 770+30

(Note - the ^{above} check on BM shows that an Error
of +1.0' was made. In first trip over.

below, with Simson at the Level, Saffat Rod.

Near 749+ on syc tr.

I Return to B.M. as below and Run Redcheck ^{Line}

BM	9.956	316.184	1.450	314.734
TP	5.390	320.184	2.586	317.594
TP on B.M.	5.785	323.329	1.870	321.459
TP	4.850	326.309	2.838	323.471
TP	12.000	335.471	1.365	334.106
TP on B.M.	6.300	340.406	Use	334.105
		7.085	333.320	

BM on post near 770+0

Sta	+	-	Peg	333320	Previous Elevation	
				Elev	(not correct)	
	9685	343.005				
TP on B.M.			1.432	341.573	342.539	B.M. near 780+80
	8.455	350.028				
TP			4.185	345.843		
	8625	354.468				
TP on B.M.			1.595	352.873	353.836	B.M. near 789+79
	1.823	354.696				
TP			9.031	345.665		Nail in fence post R 792+70
	2.175	347.840				
TP			2.415	338.425		
	0.298	338.723				
TP on B.M.			6.498	332.225	333.191	B.M. on Eucalyptus Cr 50' Lev 800+50
	5.745	337.970				
TP			11.873	326.097		
	1.497	327.594				
TP			10.875	316.719		
	0.205	316.924				
B.M. + TP			8.604	308.320	309.246	on nail in fence 30' L 811+0

Recorded

333.191
333.225
956

Profile

Bn.			258.435	
	3.960	262.321		
TP		10.995	251.400	✓
	1.935	253.335		
880+0	879+84.5	9.1	<u>244.2</u>	✓
TP		8.793	244.542	
	DCC 22			
	4.163	248.705		
880+70	880+54.5	8.9	239.8	✓
+82	+66.2	6.4	242.3	✓
881+0	880+84.2	8.9	239.8	✓
+15				
+20	880+99.2	2.4	246.3	✓
+27	PI=881+11	0.8	247.9	✓
+54	+38.2	3.7	245.0	✓
+60	.44	1.7	247.0	✓
882+0	881+84.2	3.7	245.0	✓
+35	+19.2	5.2	243.5	✓
TP		0.275	248.430	
	9.575	258.005		
832+70	832+64.2	9.6	248.4	✓
883+0	832+84	7.9	250.1	✓
+62	+45.5	2.2	255.8	✓
+72	+55.5	1.7	257.3	✓
TP		9.124	248.861	
	0.730	249.611		

15' L Sta 877+28 point of Boulder

4
BIPPER



Sta	+	249.611 X	-	Mag Elev	
883+90	173.3		6.0	243.6	✓
884+00	883+83.3		6.6	243.0	✓
	+35		4.9	244.7	✓
T.P.			0.730	248.881	
	11.910	260.791			
884+50	+33.3	16.7	3.6	257.2	✓ ✓
	+62	PI=884+45.3	2.2	258.6	✓
885+0	884+83.3		2.3	258.5	✓
TP			1.613	259.178	
	10.755	269.933			
886+0	885+83	17	8.7	261.2	✓
	+16	PI=885+94	7.1	262.8	✓
TP			1.296	268.637	
	8.287	276.924			
+68	886+51		5.1	271.8	✓
887+00	886+83		2.9	274.0	✓
+27	887+10		0.6	276.3	✓
+33	" + 16		1.0	278.9	✓
+50	" + 33		7.1	269.8	✓
+60	" + 43		6.3	270.6	✓
+72	" + 55		8.5	268.4	✓
TP			6.630	270.294	
	9.390	279.684			
887+72	PI=887+74.1	17.9	0.3	279.4	✓
888+0	887+82		5.6	274.5	✓

Same T.P. as above

PP.P.

St.	+	-	Elev
TP		279.684	
	0.681	268.631	
888+20	988+02	9.7	258.9 ✓
+51	888+38	3.9	264.7 ✓
+72	888+53	11.4	257.2 ✓
+84	" +64	11.5	257.1 ✓
TP		11.852	256.799
	0.670	257.449	
889+00	888+78	1.9	255.5 ✓
+22	889+00	4.7	252.7 ✓
TP on B.M.		5.881	251.568 251.567
	11.555	263.122	uscol B.M. Elev
889+42	889+20	1.8	261.3 ✓
TP		3.400	259.422
	11.556	271.298	
889+55	889+33	5.7	265.6 ✓
890+00	" +78	3.3	268.0 ✓
TP		1.826	269.452
	2.405	271.917	
+21	890+00	0.4	271.5 ✓
+34	PI = 890+119	3.5	268.4 ✓
+85	890+63	9.1	262.8 ✓
TP		11.622	260.295
	0.085	260.380	
891+00	890+77.5	4.3	254.1 ✓

Record Elev

Point of Boulder 30 west 889+

260.380

Sta

891+12	890+90	12.1	248.3	✓
+30	89H09.5	4.1	256.3	✓
+55	" + 32	2.2	258.2	✓
+75	" + 51.7	3.8	256.6	✓
+95	" + 71.7	1.8	258.6	✓
892+00	891+76.7	2.5	257.9	✓
+12	891+80.7	10.2	250.2	✓
+28	892+04.7	9.9	250.5	✓
TP		0.395	259.985	✓
	10.578		270.563	
+50	" 26.8	4.2	266.4	✓
+91	P.I. = 892+67.8	3.3	267.3	✓
893+0	892+86.5	4.9	265.7	✓
+12	892+88.5	11.8	258.8	✓
+16	892+92.5	12.3	258.3	✓
+20	" + 96.5	11.0	257.6	✓
+35	893+11.3	3.5	267.1	✓
+70	" + 64.3	5.0	265.6	✓
894+0	" + 76.3	7.5	263.1	✓
+29	PI = 894+05.2	0.0	270.6	✓
+40	894+16.3	3.1	267.5	✓
+46	" + 22.3	4.9	263.7	✓
+60	" + 36.3	5.5	265.1	✓
+90	" + 66.3	4.6	266.0	✓
895+00	894+76.3	6.3	264.3	✓

892+93

270.563

895+12	894+89	10.3	260.3	✓
+27	895+00	3.3	267.3	✓
+80	+53.8	1.0	269.6	✓
TP		9.345	261.218	✓
	4.521		265.739	
896+00	895+73.8	9.4	256.3	✓ P.P.P.
TP		1.720	262.019	
	8.224		272.243	
+20	895+93.8	5.2	267.0	✓
+43	PI=846+168	4.3	267.9	✓
897+00	896+73.2	7.5	264.7	✓
+32	897+03.8	10.1	262.1	✓
TP		11.157	261.086	Record ELEV
	0.218		261.304	
897+70	897+43.8	5.0	256.3	✓
TP on B.M.		5.495	255.809 255.816	
	5.163		260.999	Use B.M. ELEV as Record
898+0	897+73.8	0.6	260.4	✓
899+0	898+73.8	1.8	268.2	✓
+30	899+03.2	2.4	258.6	✓
TP		0.380	260.599	
	2.910		263.509	
900+00	899+73.8	0.8	262.7	✓
+70	900+44	4.1	259.4	✓
+73	" + 46.8	5.4	258.1	✓
+76	" + 49.8	4.6	258.9	✓

on Oak tr near 897+50 (20'R)

263.509

901+0	900+73.4	5.2	258.3	✓
+10	900+83.4	4.4	259.6	✓
+25	901.0	1.0	262.5	✓
TP		0.635	262.894	✓
	11.473		274.347	
TP		1.758	272.589	
	7.324		279.913	
901+82	901+65.8	3.7	276.2	✓
902+00	901+73.8	3.5	276.4	✓
+20	901+93.8	1.9	278.0	✓
TP		10.295	269.618	
	2.140		271.958	
		10.036	261.722	
	0.990		262.712	
TP on B.M.		5.166	257.477	526
			257.978	
	USE B.M. ELEV			
	4.575		262.053	
902+75	902+49	9.6	252.5	✓
903+00	902+73.4	10.5	251.6	✓
+50	903+34.4	9.3	252.8	✓
+67	" +41.4	2.0	260.1	✓
TP		0.835	261.218	
	11.023		272.241	
904+00	903+73.4	9.8	262.4	✓
+45	904+39.4	3.50	268.7	✓

Record of Elev

N
X
X
↓

Dec 23 - Borch
Simpson

see List of culverts

272.241

905+0	904+73.4	0.5	271.7	✓
TP		0.238	272.003	✓
	11.347		283.350	
TP		0.855	282.495	PER
	11.470		293.965	
906+00	905+73.4	11.1	282.9	✓
907+00	906+73.4	2.0	292.0	✓
TP		0.191	293.774	
	7.800		301.574	
907+70	907+44.4	3.5	298.1	✓
908+00	907+73.4	3.5	298.1	✓
TP	on B.M.	3.491	298.083	298.108
	use B.M. EICK			
	1.501		299.609	
909+00	908+73.4	8.2	291.4	✓
TP		11.057	288.552	✓
	1.593		290.145	
910+00	909+73.4	6.3	283.8	✓
TP	1	10.854	278.291	✓
	1.758		280.049	
910+89	910+62.6	5.4	274.6	✓
TP		11.240	268.809	
	4.465		273.274	
911+0	910+73.4	4.4	268.9	✓
+16	910+89.4	8.9	264.4	✓
+26	911+0	8.2	265.1	✓

Hub Sta 908

I in Private Road

Dog spr creek

273.274

911+38	911+12	6.0	267.3	✓	
+82	911+56	5.8	267.5	✓	
912+0	911+73.4	2.8	270.5	✓	
TP		0.407	272.867	✓	PER
	10.105		282.972		
912+42	912+16	3.5	279.5	✓	
+52	11+26	2.5	280.5	✓	
TP		0.267	282.705		282.705
	11.068		293.773		
913+00	912+73.8	4.2	289.6	✓	
TP on B.M.		1.198	292.575		292.577
	use B.M.				
	9.980		302.557		
914+00	913+73.8	6.9	295.7	✓	
915+00	914+73.8	2.1	300.5	✓	
TP		1.565	300.992		
	8.978		309.970		
916+0	915+73.8	4.0	306.0	✓	
917+0	916+73.8	2.7	307.3	✓	
TP		1.450	308.520		
	7.966		316.486		
918+00	917+73.8	6.5	310.0	✓	
TP on B.M.		2.710	313.776		313.775
	11.090		324.865		
919+00	918+73.8	8.8	316.1	✓	

on Boulder near Sta. 913

Record 12121

324.865

920+00	919+73.8	3.6	321.3	✓	
TP		0.900	323.965	✓	
	11.135	335.160			
921+00	920+73.8	7.9	327.3	✓	
922+00	921+"	4.1	331.1	✓	
+36	922+10	3.9	331.3	✓	
923+00	" +73.8	6.3	328.9	✓	
924+00	923+"	11.9	323.3	✓	
TP		11.635	323.525	✓	
	2.785	326.310			
TP on BM.		2.960	323.350	323.040	
	USE Record Elev				
	0.720	324.060			
925+00	924+73.8	6.0	318.0	✓	
926+00	PI = 925+73.8	11.1	319.9	✓	
TP		10.950	313.110		
	0.210	313.320			
927+00	926+73.8	6.2	307.1	✓	
+58	927+32	9.4	303.9	✓	
+64	927+38	8.7	304.6	✓	
928+00	927+73.8	12.1	301.2	✓	
TP		11.773	301.547	301.548	
	0.306	301.854			
+45	928+29	8.0	293.8	✓	
TP		11.542	290.312		

← Record Elev

Record Elev

Private Road goes West & East

Top of Stake 928

290.312

	1.901	292.213		
928+76	928+56	7.6	284.2	✓
+79	" + 54	11.2	281.0	✓
+82	" + 57	11.0	281.2	✓
+85	" + 60	8.5	283.7	✓
929+0	928+73.8	4.8	287.4	✓ P.E.R.
TP		0.954	291.259	
	10.460	301.719		
+95	929+29	5.9	295.8	✓
930+0	929+73.5	1.8	299.9	✓
TP on B.M.		4.530	297.189	297.194
	10.385	307.579		
930+50	$P1 = 930 + 18 = 948$	2.1	305.5	✓
+70	930+40	3.0	304.6	✓
931+0	930+70.0	5.3	302.3	✓
TP		11.756	295.823	
	0.883	296.706		
932+0	931+70.0	6.9	289.8	✓
+10	" + 80.0	7.7	289.0	✓
933+00	932+80.0	7.9	288.8	✓
934+00	933+ "	5.0	291.17	✓
TP		2.960	293.746	
	9.380	303.126		
935+00	$P1 = 934 + 58 = 992$	0.6	302.5	✓
6+0	935+60	4.8	298.3	✓

On Rock Near 930+70

303.126

937+0	934+58	4.8	298.3	✓	Record Elev
938+0	37+ "	5.2	297.9	✓	
+85	TP on BM	1.561	301.565	301.596	↓
	7095 308.681	USE Record Elev			
939+0	938+57	8.1	300.6	✓	
940+0	939+56	6.3	302.4	✓	
+75	PI=940+29	8.0	300.9	✓	
941+0	940+55	6.3	302.4	✓	
942+0	941+54.8	0.1	308.8	✓	
TP		1.520	307.161		Record Elev
	9330 316.491				

TP on BM 7.440 309.051 309.058

Dec 28 - 1925

Lath nearest 142+25 (15' R)

USE Record Elev

	5.262 53.7 4320				
942+92	PI=942+38	2.0	312.3	✓	Record Inst Rod
943+00	942+47	2.0	312.3	✓	
+100	943+47	9.0	305.3	✓	Boren Simson Ruplinger
TP		11.032	303.288		
	0.667 303.955				
945+00	944+47	7.8	296.1	✓	
TP		11.641	292.314		
	1.509 293.823				
+70	945+	4.3	289.5	✓	
946+00	945+46.3	6.1	287.7	✓	

293.823

946+30	945+80		7.1	286.7	✓
+36	945+85		9.8	283.9	✓
+40	945+90		9.8	284.0	✓
+45	945+95		10.1	283.7	✓
+50	946+0		7.5	286.3	✓
947+00	946+46		6.5	287.3	✓
948+00	947+ "		5.2	288.6	✓
949+00	948+ "		0.3	273.5	✓
TP		0.830	292.993		
	10.426	303.419			
950+0	949+46		4.7	298.7	✓
+45	949+90		3.4	300.0	✓
951+00	950+46	54.24	3.1	300.3	✓
+33	PI=950+98		1.6	301.8	✓
TP		0.082	303.337		
	10.401	313.738			
952+0	951+45		5.5	308.2	✓
TP on B.M.		5.047	308.691	308.678	
	11.372	320.650	Use Record		
953+00	952+40		6.2	314.5	✓
+38	PI=952+97	314.0	1.5	319.2	✓
+53	952+93		1.7	319.0	✓
954+0	953+29		10.0	310.4	✓
+08	953+37		12.2	308.45	✓
TP		0.740	319.910		

Record Error

Near 952+90

PC9
319.910

Sta	+	x	-	Elev	
	11.569	331.479			
955+0	954+80		6.2	325.3 ✓	
TP			0.806	330.673	
	10.435	341.108			
956+0	955+30		0.8	340.3 ✓	
TP			0.594	340.514	
	11.637	352.151			
TP			0.762	351.389	♀ PER
	11.356	362.745			
957+00	956+29		9.7	353.0 ✓	
TP		361.814	0.931	361.814	
	11.856	373.670			
958+00	957+29		5.9	367.8 ✓	
TP			0.354	373.316	Record Elev
	11.189	384.505			
959+00	958+29		7.7	376.8 ✓	
TP on Bm.			0.841	383.664	383670
				USE Record Elev	
	10.971	394.641			
960+00	957+29		7.9	386.7 ✓	
TP			0.509	394.132	
	10.050	404.182			
961+00	PI 960+21.8		7.2	397.0 ✓	
+50	960+80		3.8	400.4 ✓	
962+00	961+32		5.7	398.5 ✓	

30' L Sta 959+85

404.182

Return

TP on BM.

9.080 395.102 395.111

3,80472 1398.915 use Record Elev

963+00

PI = 962+27.9³⁹_{3.0}

6.4 392.5 ✓

+25

962+50

6.7 392.2 ✓

+54

962+80

10.4 388.5 ✓

+81

963+09

9.5 389.4 ✓

964+00

963+28

10.0 388.9 ✓

+50

963+16

11.2 387.7 ✓

TP

10.928 387.987

1.755 389.742

965+0

964+28

4.9 384.8 ✓

+40

964+68

6.0 383.7 ✓

+70

965+0

8.4 381.3 ✓

966+00

965+27

8.5 381.2 ✓

+75

966+02

10.1 379.6 ✓

967+00

966+27

11.1 378.6 ✓

TP

10.515 379.227

3.271 382.498

+40

966+69

4.4 378.1 ✓

+73

PI = 966+99.9^{73.1}_{37.510}

6.3 376.2 ✓

TP on BM.

5.573 376.925 376.930

4.092 381.028 use Record Elev

968+00

967+26

8.3 372.7 ✓

TP

11.802 369.226

1.372 370.598

wagon trail

← Record Elev

370.598

TP

11.743 358.855

0.190 359.045

369+0 968+27

4.0 355.0 ✓

+30 " +57

12.0 347.0 ✓

+45 " +72

5.6 353.4 ✓

TP

0.377 358.668

10.300 368.968

969+85 969+12

6.2 362.8 ✓

970+00 969+27

2.7 366.3 ✓

+50 " +77

1.3 367.7 ✓

TP

0.660 368.308

7.595 375.903

971+00 970+27

5.6 370.3 ✓

972+00 71+27

4.6 371.3 ✓

+30 971+57

5.6 370.2 ✓

+50 971+80

4.8 371.1 ✓

+70 972+0

6.2 369.7 ✓

973+00 972+27

6.2 369.7 ✓

+24 " +51

6.1 369.8 ✓

+45 " +72

4.1 371.8 ✓

+65 " +92

5.9 370.6 ✓

974+00 973+27

5.4 370.5 ✓

TP on BM.

4.322 371.581 371.562

1.088 372.650

Use Record

975+0 PI = 974 + 76.9

4.2 368.4 ✓

73.1
368.6

Record Elev

Sta.	+	π	-	Elev	
		372.650			
975+60	974+77		5.4	367.2	✓
976+0	975+27		7.6	365.0	✓
+30	" +57		7.7	364.9	✓
+50	" +77		10.4	362.2	✓
TP on B.M.			9.466	363.184	363.182
	0.611	363.793	use Record Elev		
977+00	976+24		3.8	360.0	✓
+80	977+00		8.7	355.1	✓
978+0	977+24		8.1	355.7	✓
+30	" +75		10.9	352.9	✓
TP			11.654	352.139	
	1.076	353.215			
979+0	978+35		2.6	350.6	✓
+60	65.0		3.8	349.4	✓
980+00	P.I. 979+35	7082	5.5	347.7	✓
981+00	980+35		8.2	345.0	✓
TP			9.205	344.010	344.019
	1.784	345.803			
982+0	981+35		5.9	339.9	✓
983+0	982+4		91.6	334.2	✓
984+00	983+4		11.6	334.2	✓
TP			11.541	334.262	
	1.666	335.928			
TP on B.M.			2.538	333.390	333.390
	1.765	335.155			

Lath Left 977+0

Record Elev

Record Elev

2 X 2 - Hubs Let 984+0

Sta	+	X	-	Elev
984+25	983+60		2.2	333.0 ✓
+78			10.9	324.3 ✓
TP			11.581	323.574 ✓
	1014	324.588		
984+90	984+25		4.3	320.3 ✓
985+00	" +35		7.2	317.4 ✓
TP			11.888	312.700 ✓
	0.434	313.134		
+18	984+53		0.5	312.6 ✓
+50	" +85		11.5	301.6 ✓
TP			11.375	301.769 ✓
	0.165	301.924		
TP on BM			9.125	292.799 292.796
	0.221	293.017		45c Record Elev
TP			11.041	281.976 ✓
	0.205	282.181		
986+0	985+		5.5	276.7 ✓
TP			11.663	270.518 270.517 ✓
	0.0A9	270.566		
+40			10.6	260.0 ✓
TP			11.101	259.465 ✓
	0.208	259.673		
TP			11.737	247.936 ✓
	0.875	248.811		
987+0			1.0	247.0 ✓
+25			9.6	239.2 ✓
				237.2 ✓

Record Elev

Record Elev

248.811

12' L Sta 985+70

Here at 4:15 PM

Note =
Turning in B.M. new H.I. is taken
from Record Elevation.

Borell Rod
Simson Level
Fuflinger Record

Sta	+	248.811	-	Elev	
TP			9.516	239.295	
	4.448	243.743			
987+27			7.6	236.1	✓
+45			10.5	233.2	✓
+48			8.0	235.7	✓
+60			3.2	240.5	✓
+75			0.5	243.2	✓
TP			0.690	243.053	PER.
	11.345	254.398			
988+0			3.4	251.0	✓
TP			0.525	253.873	
	11.090	264.963			
+30			8.2	256.8	✓
+45			4.5	260.5	✓
+65			1.6	263.4	✓
TP			0.568	264.395	
	11.485	275.880			
989+0			1.8	274.1	✓
TP			1.585	274.295	
	5.601	279.896			
T.P. on B.M.			2.860	277.036	277.037
	11.140	288.177			
989+18			9.3	278.9	✓
+60			11.7	288.5	✓
TP			0.489	287.688	

Loth 5' R Sta 989+12

Rec'd Elev
↓

Sta.	+	π	-	Elev.
	11.486	299.174		
989+80			9.7	289.5 ✓
990+0			6.8	292.4 ✓
+30			2.5	296.7 ✓
T.P.			1.745	297.429
	11.124	308.553		
T.P.			1.127	307.926
	11.470	318.896		
T.P. on BM			1.560	317.336 317.317
	11.529	328.846		
9940			9.4	319.4 ✓
T.P.			1.024	327.822
	11.631	339.453		
991+43			2.9	336.6 ✓
T.P.			0.331	339.122
	8.435	347.607		
991+75			6.8	340.8 ✓
992+0			6.4	341.2 ✓
+75			4.7	342.9 ✓
993+0			4.0	343.6 ✓
+12			4.6	343.0 ✓
994+0			3.8	343.8 ✓
T.P. on BM			3.765	343.842 343.846
	4.345	348.191		
994+18			4.6	343.6 ✓

Record Elev.

Hub 6' R of 990+92

Hub 18' R of 994

Sta.	+	848.191 T	-	Elev.
994+30			3.6	344.6 ✓
+50			4.3	343.9 ✓
995+0			4.3	343.9 ✓
+50			4.7	343.5 ✓
+78			7.3	340.9 ✓
T.P.			11.160	337.031
	1.215	338.246		
996+0			2.9	335.3 ✓
T.P.			11.635	326.611
	0.537	327.148		
996+28			2.6	324.5 ✓
+50			9.5	317.6 ✓
T.P.			11.073	316.075
	0.595	316.670		
T.P.			11.552	305.118
	2.929	306.047		
T.P.			11.959	294.088
	0.824	294.912		
997+0			1.4	293.5 ✓
T.P.			11.491	283.421
	2.046	285.467		
T.P.			11.158	274.309
	1.889	276.198		
T.P.			10.990	265.208
	0.781	265.989		

Sta	+	T	-	Elev.
T. P.		265,989	11.798	254.191
	3.562	254,753		
997+90			11.5	246.3 ✓
998+0			7.5	250.3 ✓
T. P.			192.8	255,825
	11.070	266,835		
T. P.			0.060	266,835
	11.280	278,115		
+50			6.4	271.7 ✓
T. P.			0.350	277,765
	11.201	288,966		
+90			2.0	286,966 ✓
T. P.			0.352	288,614
	11.587	300,201		
999+0			10.0	290,201 ✓
T. P.			0.885	299,316
	10.615	309,931		
T. P.			0.159	309,772
	11.475	321,247		
+50			9.6	311.6 ✓
+70			6.0	315.2 ✓
1000+00			3.2	318.0 ✓
T. P.			0.145	321,102
	11.301	3384-03		
1000+35			10.1	322.4 ✓
				311.2 ✓

PER

Sta	+	332.403 T	-	Elev.	Record Elev.
T. P.			0.581	331.822	
	3.290	335.112			
T. P. on BM.			0.671	334.441	334.450
	0.702	335.152			
T. P.			11.570	323.582	✓
	1.142	324.724			✓
1000+75			8.7	316.0	✓
T. P.			11.943	312.781	
	0.595	313.376			
1001+00			1.8	311.6	✓
+30			6.8	306.6	✓
T. P.			11.643	301.733	
	1.209	302.942			
1001+60			6.2	296.7	✓
			11.008	291.234	
	1.150	293.084			
1002+00			5.5	289.6	✓
T. P.			11.912	281.872	
	0.491	282.363			
T. P.			11.020	271.343	
	0.558	271.901			
1003+00			5.2	266.7	✓
+30			8.2	263.7	✓
T. P.			11.645	260.256	

Hub 65' L of 1000+35

point of rock 1' L 1000+35

1002+70 Here 4:25 P.M. Dec. 29.

Red - Ins.

Blue - Red.

Red - Record.

2608.56

Sta.	+	π	-	Flor.
	0.770	261.026		
1003+53			2.5	258.5 ✓
T.P.			11.491	249.535 ✓
	1.117	252.652		
1004+0			1.8	248.2 ✓
+35			11.5	239.2 ✓
T.P.			11.370	237.222 ✓
	1.279	241.281		
1004+60			11.8	229.5 ✓
T.P.			11.717	229.564 ✓
	0.593	231.073		
1005+0			9.1	221.0 ✓
+10			9.2	220.9 ✓
+12			11.1	219.0 ✓
+25			9.5	220.6 ✓
+45			0.0	230.1 ✓
T.P.			0.125	229.898 ✓
	10.863	240.761		
T.P.			0.072	240.689 ✓
	10.690	251.379		
1006+0			6.4	245.0 ✓
+17			1.4	250.0 ✓
T.P.			0.065	251.314 ✓
	11.417	262.733		
+50			6.0	256.7 ✓

PFA

Sta.	+	Σ	-	Elev.	
		262.733			
+ 72			3.2	258.7	✓
+ 90			1.1	261.6	✓
1007+0			0.7	262.0	✓
T.P.			0.614	262.119	✓
	11.015	273.134			
+ 50			7.0	266.1	✓
+ 85			6.0	267.1	✓
+ 70			5.8	267.3	✓
1008+0			5.5	267.6	✓
T.P. on S. 4			0.065	273.069	272.993
	1.066	274.059			
1008+20			7.7	266.4	✓
T.P.			11.275	262.984	
	0.737	263.721			
1009+0			8.7	254.9	✓
T.P.			11.455	252.266	
	0.285	252.551			
+ 45			9.4	250.2	✓
+ 55			4.7	247.9	✓
T.P.			10.903	241.648	
	5.325	246.973			
+ 90			10.2	236.8	✓
1010+00			7.7	239.3	✓
1010+20			3.6	243.4	✓
+ 30			1.0	246.0	✓

Hub with nail 30L 1070+80

Sta.				Elon.
T.P.			0.166	246.807
	11.834	258.641		
1010+35			7.4	251.3 ✓
T.P.			1.599	257.042
	11.454	268.326		
1011+00			1.2	267.3 ✓
T.P.			0.067	268.459
	11.844	280.303		
1011+25			6.9	273.4 ✓
+35			4.7	275.6
T.P.			2.242	278.061
	6.611	284.672		
TR. on B.M.			0.660	284.012 284.109
	10.595	294.704		
+80			10.2	283.9 ✓
1012+0			9.5	285.2 ✓
+25			4.0	290.7 ✓
T.P.			0.095	294.619
	11.105	305.724		
+60.5			11.0	294.7 ✓
+78.0			10.8	294.9 ✓
1013+0			5.7	300.0 ✓
+30			1.6	304.1 ✓
T.P.			0.957	304.767
	10.554	315.321		

PRR

Record
↓
Elon.

Loth 11 of 1211+82

Sta	+	-	Elev.
		315.221	
1013+50		8.6	306.7 ✓
+20		6.4	308.9 ✓
1014+0		5.2	310.1 ✓
+25		2.9	312.4 ✓
T.P.		0.466	314.855
	9.867	324.222	
+50		7.3	316.9 ✓
+91		4.9	319.3 ✓
1015+00		3.7	320.5 ✓
+25		3.2	321.0 ✓
+50		4.3	319.9 ✓
1016+0		10.6	313.6 ✓
+50		6.9	317.3 ✓
+85		6.0	315.2 ✓
1017+0		5.9	318.3 ✓
+60		3.9	320.9 ✓
1018+0		1.6	322.6 ✓
T. Ron B.M.		2.569	320.653 320.646
	11.515	332.161	
T.P.		2.190	322.971
	11.075	341.046	
1019+0		4.7	336.3 ✓
+35		2.9	338.1 ✓
+40		0.2	340.8 ✓
T.P.		0.317	340.729

PBR

Lot 72 1018+16

Sta	+	X	-	340.725 Elev	
	10.865	351.594			
+60			6.5	345.1	✓
102010			3.1	348.5	✓
T.P.			0.416	351.178	✓
	9.736	360.714			PER
+20			11.7	349.2	✓
+40			7.7	353.9	✓
102110			5.1	355.9	✓
+25			2.9	358.0	✓
+50			2.3	359.6	✓
T.P.			0.075	360.839	
	9.195	370.34			
1022100			9.1	360.9	✓
+20			7.3	362.7	✓
+45			6.7	363.3	✓
+60			4.6	365.4	✓
+75			4.4	365.6	✓
+90			5.7	364.3	✓
1023100			5.5	364.5	✓
+15			8.1	364.9	✓
+40			6.1	363.8	✓
+60			4.7	365.3	✓
+80			6.8	363.2	✓
1024100			7.2	362.8	✓
+20			6.0	364.0	✓

	+	T	-	Elev.	
1027+40			8.0	362.0	✓
+56			7.8	362.2	✓
+70			8.7	361.3	✓
1025+00			9.8	360.2	✓
T.P. on B.M.			9.726	361.307	360.292
	0.425	360.717			
+35			1.9	358.8	✓
1026+0			5.0	355.7	✓
+45			6.1	354.6	✓
+60			5.7	355.0	✓
+80			8.5	352.2	✓
1027+0			10.5	350.2	✓
T.P.			10.757	349.960	
	2.425	352.395			
+50			7.8	344.6	✓
+60			5.2	347.2	✓
1028+0			5.4	347.0	✓
+25			6.9	345.5	✓
1029+0			2.1	350.3	✓
T.P.			1.215	351.120	
	7.505	358.675			
+40			5.2	353.5	✓
+60			4.9	353.8	✓
+75			3.6	355.1	✓
1030+0			4.7	354.0	✓

2 x 2 1/2 7' L 12 25+0

Wagon Trail

2

	358.675		Flor.	
1030+60		4.3	354.4	✓
+75		2.6	356.1	✓
1031+0		3.5	355.2	✓
1032+0		3.7	355.0	✓
T.P.		3.519	355.157	✓
	6.635	341.792		✓
+30		5.7	356.1	✓
+35		6.8	355.0	✓
+50		6.7	355.1	✓
+70		4.0	357.8	✓
+75		3.7	358.1	✓
+90		6.4	355.4	✓
1033+0		6.2	355.6	✓
+12		5.7	356.1	✓
+25		6.6	353.2	✓
+45		6.6	357.2	✓
+63		6.7	355.7	✓
+80		5.9	355.9	✓
1034+0		3.4	358.2	✓
+20		6.2	355.6	✓
+65		5.7	356.1	✓
+80		7.6	354.2	✓
1035+0		6.6	355.3	✓
+35		9.0	352.18	✓
+75		10.1	351.7	✓

✓
PDR

Sta.	+	1	-	Elev	
+90			8.2	353.6	✓
1036+0			8.5	353.3	✓
+20			11.3	350.5	✓
T.P. on B.M.			12.102	352.690	349.652

361.792

Elev

353.6

353.3

350.5

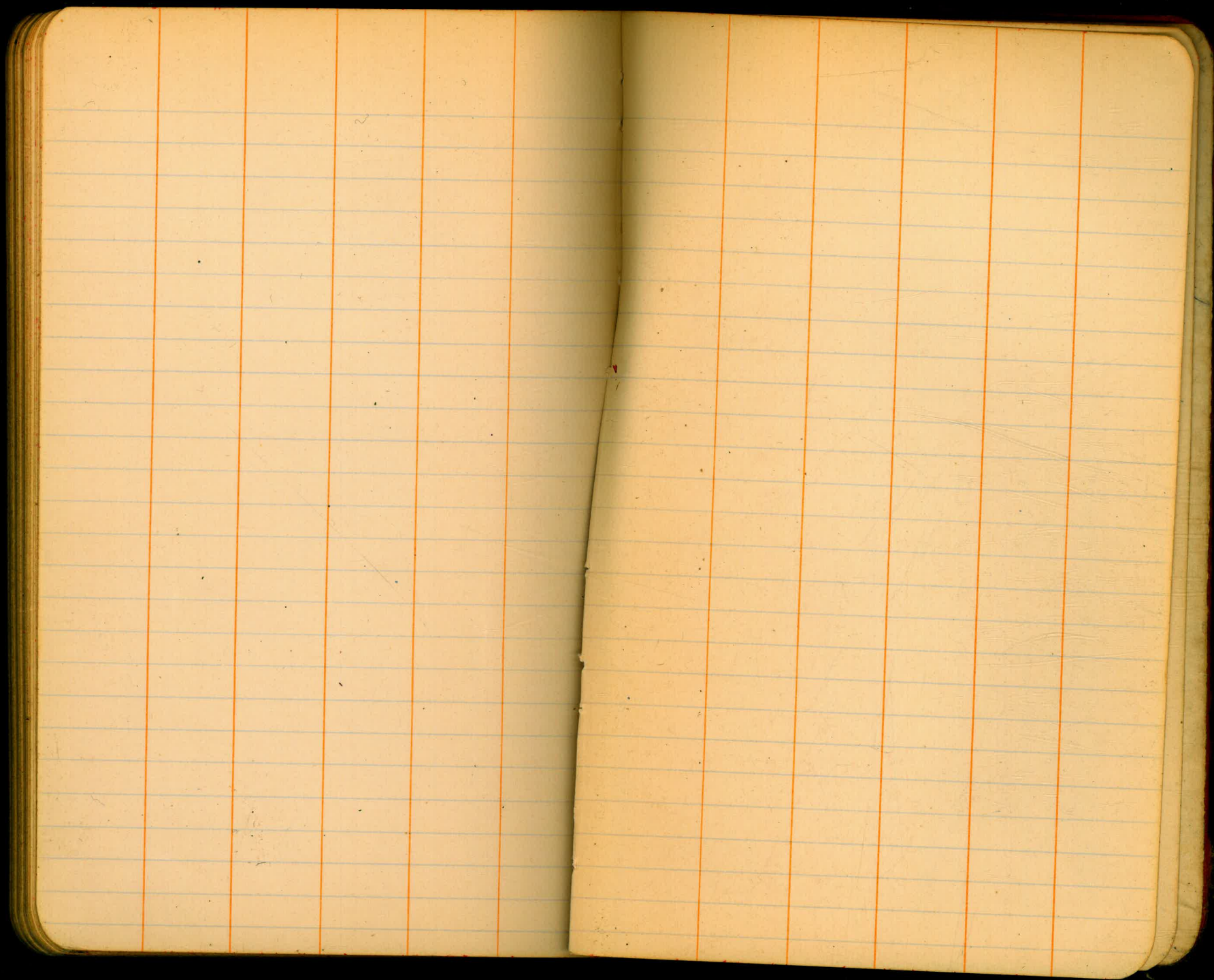
352.690

349.652

REMARKS
↓

9.12 Hub 10' R 1036+90

Here Due 71-



Blank lined page with orange vertical margin lines.

1 303.340
9.926

293.414

28 298.104

1.810 - 299.918

11.360

1.820

290.378

12.090

285.558

278.288

280.443
 $\underline{9.926}$
 270.517
 0.054

270.517
 $\underline{99}$
 269.528

303.72
 $\underline{891}$
 312.639

323032
 375956
 $\underline{896}$

Rab Ranch
 Ran...

381.488
 $\underline{9.926}$
 371.562

302.722
 $\underline{9.926}$
 292.796

335.057
 $\underline{9.952}$
 325.105

386.862
 $\underline{9.926}$
 376.936

318.609
 $\underline{9.926}$
 308.683

318.246
 $\underline{9.956}$
 308.290

318.85
 $\underline{0.084}$
 318.766

318.222
 $\underline{9.926}$
 308.296

363.796
 $\underline{0.084}$
 363.712

318.226
 $\underline{9.926}$
 308.300

373.722
 $\underline{9.926}$
 363.796

318.226
 $\underline{9.926}$
 308.300

26
 $\underline{528}$
 208

318.226
 $\underline{9.926}$
 308.300

373.722
 $\underline{9.926}$
 363.796

318.85
 $\underline{0.084}$
 318.766

251.627
 $\underline{6.525}$
 245.102

258.152
 $\underline{6.001}$
 252.151

257.582
 $\underline{3.654}$
 253.928

313.872
 $\underline{9.926}$
 303.946

313.717
 $\underline{9.926}$
 303.791

313.717
 $\underline{9.926}$
 303.791

325.538
 $\underline{9.926}$
 315.612

315.612
 $\underline{9.926}$
 305.686

333.448
 $\underline{9.926}$
 323.522

332.320
 $\underline{9.926}$
 322.394

363.85
 $\underline{9.926}$
 353.924

363.85
 $\underline{0.054}$
 363.801

303.340
 $\underline{9.926}$
 293.414

349.960
 $\underline{2426}$
 352.385

298.108
 $\underline{292.577}$
 5.531

323.032
 $\underline{9.926}$
 313.106

323.032
 $\underline{22}$
 323.010

323.032
 $\underline{350.2}$
 673.234

52.8
 $\underline{18}$
 42.4

42.4
 $\underline{12.8}$
 29.6

950.4