

W

500-1

1911

1911

1911

No. 100

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide.

Side Slopes 1 on 1.

Single Track Embankment.

MICROFILMED

541A

| H | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 | H |
|----|------|------|------|------|------|------|------|------|------|------|----|
| 0 | 8.0 | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 8.7 | 8.8 | 8.9 | 0 |
| 1 | 9.0 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 | 9.6 | 9.7 | 9.8 | 9.9 | 1 |
| 2 | 10.0 | 10.1 | 10.2 | 10.3 | 10.4 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 | 2 |
| 3 | 11.0 | 11.1 | 11.2 | 11.3 | 11.4 | 11.5 | 11.6 | 11.7 | 11.8 | 11.9 | 3 |
| 4 | 12.0 | 12.1 | 12.2 | 12.3 | 12.4 | 12.5 | 12.6 | 12.7 | 12.8 | 12.9 | 4 |
| 5 | 13.0 | 13.1 | 13.2 | 13.3 | 13.4 | 13.5 | 13.6 | 13.7 | 13.8 | 13.9 | 5 |
| 6 | 14.0 | 14.1 | 14.2 | 14.3 | 14.4 | 14.5 | 14.6 | 14.7 | 14.8 | 14.9 | 6 |
| 7 | 15.0 | 15.1 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 7 |
| 8 | 16.0 | 16.1 | 16.2 | 16.3 | 16.4 | 16.5 | 16.6 | 16.7 | 16.8 | 16.9 | 8 |
| 9 | 17.0 | 17.1 | 17.2 | 17.3 | 17.4 | 17.5 | 17.6 | 17.7 | 17.8 | 17.9 | 9 |
| 10 | 18.0 | 18.1 | 18.2 | 18.3 | 18.4 | 18.5 | 18.6 | 18.7 | 18.8 | 18.9 | 10 |
| 11 | 19.0 | 19.1 | 19.2 | 19.3 | 19.4 | 19.5 | 19.6 | 19.7 | 19.8 | 19.9 | 11 |
| 12 | 20.0 | 20.1 | 20.2 | 20.3 | 20.4 | 20.5 | 20.6 | 20.7 | 20.8 | 20.9 | 12 |
| 13 | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.5 | 21.6 | 21.7 | 21.8 | 21.9 | 13 |
| 14 | 22.0 | 22.1 | 22.2 | 22.3 | 22.4 | 22.5 | 22.6 | 22.7 | 22.8 | 22.9 | 14 |
| 15 | 23.0 | 23.1 | 23.2 | 23.3 | 23.4 | 23.5 | 23.6 | 23.7 | 23.8 | 23.9 | 15 |
| 16 | 24.0 | 24.1 | 24.2 | 24.3 | 24.4 | 24.5 | 24.6 | 24.7 | 24.8 | 24.9 | 16 |
| 17 | 25.0 | 25.1 | 25.2 | 25.3 | 25.4 | 25.5 | 25.6 | 25.7 | 25.8 | 25.9 | 17 |
| 18 | 26.0 | 26.1 | 26.2 | 26.3 | 26.4 | 26.5 | 26.6 | 26.7 | 26.8 | 26.9 | 18 |
| 19 | 27.0 | 27.1 | 27.2 | 27.3 | 27.4 | 27.5 | 27.6 | 27.7 | 27.8 | 27.9 | 19 |
| 20 | 28.0 | 28.1 | 28.2 | 28.3 | 28.4 | 28.5 | 28.6 | 28.7 | 28.8 | 28.9 | 20 |
| 21 | 29.0 | 29.1 | 29.2 | 29.3 | 29.4 | 29.5 | 29.6 | 29.7 | 29.8 | 29.9 | 21 |
| 22 | 30.0 | 30.1 | 30.2 | 30.3 | 30.4 | 30.5 | 30.6 | 30.7 | 30.8 | 30.9 | 22 |
| 23 | 31.0 | 31.1 | 31.2 | 31.3 | 31.4 | 31.5 | 31.6 | 31.7 | 31.8 | 31.9 | 23 |
| 24 | 32.0 | 32.1 | 32.2 | 32.3 | 32.4 | 32.5 | 32.6 | 32.7 | 32.8 | 32.9 | 24 |
| 25 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 25 |
| 26 | 34.0 | 34.1 | 34.2 | 34.3 | 34.4 | 34.5 | 34.6 | 34.7 | 34.8 | 34.9 | 26 |
| 27 | 35.0 | 35.1 | 35.2 | 35.3 | 35.4 | 35.5 | 35.6 | 35.7 | 35.8 | 35.9 | 27 |
| 28 | 36.0 | 36.1 | 36.2 | 36.3 | 36.4 | 36.5 | 36.6 | 36.7 | 36.8 | 36.9 | 28 |
| 29 | 37.0 | 37.1 | 37.2 | 37.3 | 37.4 | 37.5 | 37.6 | 37.7 | 37.8 | 37.9 | 29 |
| 30 | 38.0 | 38.1 | 38.2 | 38.3 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 30 |
| 31 | 39.0 | 39.1 | 39.2 | 39.3 | 39.4 | 39.5 | 39.6 | 39.7 | 39.8 | 39.9 | 31 |
| 32 | 40.0 | 40.1 | 40.2 | 40.3 | 40.4 | 40.5 | 40.6 | 40.7 | 40.8 | 40.9 | 32 |
| 33 | 41.0 | 41.1 | 41.2 | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.8 | 41.9 | 33 |
| 34 | 42.0 | 42.1 | 42.2 | 42.3 | 42.4 | 42.5 | 42.6 | 42.7 | 42.8 | 42.9 | 34 |
| 35 | 43.0 | 43.1 | 43.2 | 43.3 | 43.4 | 43.5 | 43.6 | 43.7 | 43.8 | 43.9 | 35 |
| 36 | 44.0 | 44.1 | 44.2 | 44.3 | 44.4 | 44.5 | 44.6 | 44.7 | 44.8 | 44.9 | 36 |
| 37 | 45.0 | 45.1 | 45.2 | 45.3 | 45.4 | 45.5 | 45.6 | 45.7 | 45.8 | 45.9 | 37 |
| 38 | 46.0 | 46.1 | 46.2 | 46.3 | 46.4 | 46.5 | 46.6 | 46.7 | 46.8 | 46.9 | 38 |
| 39 | 47.0 | 47.1 | 47.2 | 47.3 | 47.4 | 47.5 | 47.6 | 47.7 | 47.8 | 47.9 | 39 |
| 40 | 48.0 | 48.1 | 48.2 | 48.3 | 48.4 | 48.5 | 48.6 | 48.7 | 48.8 | 48.9 | 40 |

The paper stock of this book is made of a high grade 50% rag paper having a water resisting surface and is sewed with Bing Special Enamel Waterproof Thread.

Made in U. S. A.

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1½ see inside of back cover.

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El Capitan Lakeside Pipe Line

INDEX

Final \pm Profile after Backfill
and Calculation of Backfill Cu Yds.

11400 - 103+54

1-9

103+54 to 313

10-30

313 to 427+07

30-40

The paper stock of this book is made
of a high grade 50% rag paper
and is sewed with plain special
Raymond Waterproof Thread.

1911

Final & profile Over Backfill

Oct. 21 1936
3078
13 Bell
Moore

| | | | | |
|---------|-------|--------|-------|-------------------|
| BM | 0.95 | 571.17 | | 570.22 |
| TP | | | 11.99 | 559.18 |
| | 1.77 | 560.95 | | |
| 11+00 | | | 14.0 | 46.9 |
| 11+08 | | | 12.3 | 48.6 |
| +17 | | | 4.6 | 56.3 |
| +50 | | | 1.9 | 59.0 |
| TP | 12.42 | 572.78 | 0.59 | 560.36 |
| 12+00 | | | 4.2 | 68.6 |
| +50 | | | 0.6 | 72.2 |
| TP | 7.81 | 580.02 | 0.57 | 572.21 |
| 12+80 | | | 7.0 | 73.0 |
| +86 | | | 10.0 | 70.0 |
| +95.7 | | | 9.4 | 70.6 |
| 13+13.4 | | | 6.6 | 73.4 |
| +70 | | | 6.3 | 73.7 |

580.02 ✓

14100 7.1 72.9 ✓

+25 8.7 71.3 ✓

15100 10.9 69.1 ✓

16100 11.1 68.9 ✓

TP 4.17 572.97 11.24 <568.78> ✓

17100 5.1 67.9 ✓

18100 4.9 68.1 ✓

19100 4.0 69.0 ✓

20100 4.7 68.3 ✓

+50 4.8 68.2 ✓

21100 5.9 67.1 ✓

TP 5.10 572.90 5.17 <567.80> ✓

22100 7.8 65.1 ✓

23100 9.6 63.3 ✓

24100 9.7 63.2 ✓

TP 4.99 572.77 5.12 <567.78> ✓

25100 9.1 63.7 ✓

26100 7.5 65.3 ✓

572.77 ✓

26+50 5.5 67.3 ✓

27+06 5.5 67.3 ✓

28+00 4.4 68.4 ✓

29+00 2.4 70.4 ✓

T.P. 11.12 583.27 0.62 (572.15) ✓

30+00 7.0 76.3 ✓

+60 3.2 80.1 ✓

31+00 2.4 80.9 ✓

32+00 3.9 79.4 ✓

33+00 5.6 77.7 ✓

T.P. 158 580.91 3.94 (579.33) ✓

34+00 6.3 74.6 ✓

+30 7.7 73.2 ✓

35+00 (Equation) 11.7 69.2 ✓

T.P. 0.64 568.75 12.80 (568.11) ✓

+50 3.3 65.4 ✓

36+00 5.6 63.1 ✓

+45 7.7 61.0 ✓

✓
568.75

| | | | | |
|-------|------|--------|-------|----------------------------|
| 37+00 | | | 8.1 | 60.6 ✓ |
| +25 | | | 10.9 | 58.4 ✓ <i>Remind offer</i> |
| +50 | | | 12.5 | 57.9 ✓ |
| +75 | | | | 57.1 ✓ |
| 39+00 | | | 10.8 | 56.2 ✓ |
| | | | | 57.4 ✓ |
| TP | 2.66 | 563.22 | 8.19 | 56.9 ✓ |
| 38+50 | | | 3.4 | 59.8 ✓ |
| 39+00 | | | 4.8 | 58.4 ✓ |
| +50 | | | 7.7 | 55.5 ✓ |
| 40+00 | | | 9.0 | 54.2 ✓ |
| +90 | | | 11.5 | 51.7 ✓ |
| TP | 2.45 | 553.71 | 11.96 | 51.2 ✓ |
| 41+00 | | | 2.0 | 51.7 ✓ |
| +50 | | | 1.9 | 51.8 ✓ |
| 42+00 | | | 1.9 | 51.8 ✓ |
| +50 | | | 3.1 | 50.1 ✓ |
| 43+00 | | | 3.9 | 49.9 ✓ |
| 44+00 | | | 4.9 | 48.8 ✓ |
| 45+00 | | | 4.6 | 49.1 ✓ |

4

insurance filled 11/17/36

L E RT

190

51.2 ✓
-12.0
2.0

41+00

46.7 ✓
7.0
13.0

+50

44.9 ✓
8.8
13.0

42+00

44.1 ✓
9.6
13.0

+50

50.6 ✓
3.1
7.0

553.71

46+00 4.9 48.8 ✓

R 0.26 550.42 3.55 <550.16> ✓

47+00 4.0 46.4 ✓

48+00 6.2 44.2 ✓

49+00 7.3 43.1 ✓

R 4.17 547.90 6.69 <543.73> ✓

50+00 5.0 42.9 ✓

51+00 4.8 43.1 ✓

52+00 4.1 43.8 ✓

53+00 4.1 43.8 ✓

54+00 5.7 42.2 ✓

55+00 4.7 43.2 ✓

55+54.94 ✓

55+04.94 5.2 42.7 ✓

56+00 7.0 40.9 ✓

57+00 8.0 39.9 ✓

450 9.2 38.7 ✓

58+00 9.0 38.9 ✓

547.90 ✓

59+00 7.1 538.8 ✓

TR. 4.56 543.41 9.05 <538.85> ✓

60+00 4.5 38.9 ✓

61+00 5.0 38.4 ✓

62+00 4.9 38.5 ✓

63+00 5.4 38.0 ✓

64+00 5.7 37.7 ✓

65+00 6.2 37.2 ✓

66+00 6.7 36.7 ✓

67+00 6.7 36.7 ✓

68+00 7.6 35.8 ✓

69+50 7.3 36.1 ✓

69+00 6.2 37.2 ✓

TR. 5.93 537.48 ✓

2.58 540.06 ✓

Ken B.M. 9 2.87 <537.19> ✓

Rec. elev. 537.23 ✓

| | | | | |
|--------------------|------|--------|------|--------|
| B.11 ⁰⁹ | C.58 | 543.81 | | 537.23 |
| 70+00 | | | 5.0 | 38.8 |
| 71+00 | | | 3.3 | 40.5 |
| 72+00 | | | 2.4 | 41.4 |
| 73+00 | | | 2.1 | 41.7 |
| 74+00 | | | 3.0 | 40.8 |
| $\bar{\Pi}$ | 1.33 | 542.42 | 2.72 | 541.09 |
| 75+00 | | | 2.1 | 40.3 |
| 76+00 | | | 3.0 | 39.4 |
| 77+00 | | | 4.3 | 38.1 |
| 78+00 | | | 5.5 | 36.7 |
| 79+00 | | | 6.9 | 35.5 |
| 80+00 | | | 8.3 | 34.1 |
| 81+00 | | | 10.0 | 32.4 |
| 82+00 | | | 11.6 | 30.8 |
| 83+00 | | | 12.1 | 30.3 |
| 84+00 | | | 12.6 | 29.8 |
| 85+00 | | | 12.6 | 29.8 |

Oct 22 1936
Soper
Isbell
Moore

7

542.42 ✓

P. 2.30 532.07 12.65 <529.77> ✓

86+00 3.2 28.9 ✓

87+00 4.0 28.1 ✓

88+00 5.1 27.0 ✓

89+00 5.5 26.6 ✓

89+50 7.8 24.3 ✓

90+00 8.6 23.5 ✓

91+00 8.1 24.0 ✓

92+00 7.6 24.5 ✓

92+70 5.8 26.3 ✓

93+00 6.1 26.0 ✓

94+00 6.1 26.0 ✓

95+00 4.0 28.1 ✓

96+00 1.5 30.6 ✓

P. 6.47 537.15 1.39 <530.68> ✓

97+00 4.7 32.4 ✓

98+00 3.8 33.3 ✓

99+00 4.0 33.1 ✓

537.15 ✓

100+00

5.6 31.5 ✓

101+00

7.6 29.5 ✓

102+00
(Equation)

11.6 25.5 ✓

IT,

12.73 (524.42) ✓

2.68 527.10 ✓

103+00

4.3 22.8 ✓

103+54

5.0 22.1 ✓

ck on B.N.H.A.

2.92 524.18 ✓²

notes checked
& plotted on
office set profile
Account 10/20/96
XTR

Rec. elev. 524.22

Final & Profile

| | | | | Grade Bottom Trench |
|----------|------|--------|--------|---------------------|
| B.M #14A | | | 524.22 | 515.44 518.58 |
| 103+54 | 1.79 | 526.01 | 522.1 | 514.6 |
| 104+00 | | | 4.2 | 21.8 |
| +12 | | | 4.1 | 21.9 |
| +60 | | | 5.7 | 20.3 |
| +80 | | | 7.3 | 18.7 |
| 105+00 | | | 7.7 | 18.5 |
| +50 | | | 8.1 | 17.9 |
| 106+00 | | | 9.9 | 16.0 |
| TR | 1.12 | 517.46 | 9.67 | 516.34 |
| 107+00 | | | 2.2 | 15.3 |
| 108+00 | | | 3.0 | 14.1 |
| 109+00 | | | 4.4 | 13.1 |
| 110+00 | | | 5.2 | 12.3 |
| 111+00 | | | 5.5 | 11.8 |
| 112+00 | | | 5.9 | 11.1 |
| 113+00 | | | 7.2 | 10.3 |

EMR EMR

Oct 23 1936
Singer
13bell
Moore

Backfill

| Depth Fill ft | Average Depth Fill | Distance | Page Total Cuyds |
|---------------|--------------------|----------|------------------|
| 7.5 | 7.95 | 46.0 | 53.54 |
| 8.4 | 8.6 | 12.0 | 15.58 |
| 8.8 | 8.65 | 48.0 | 62.84 |
| 8.5 | 7.95 | 20.0 | 23.28 |
| 7.4 | 7.35 | 20.0 | 20.79 |
| 7.3 | 7.5 | 50.0 | 53.53 |
| 7.7 | 7.1 | 50.0 | 49.38 |
| 6.5 | 6.95 | 100.0 | 95.65 |
| 7.4 | 7.7 | 100.0 | 111.20 |
| 8.0 | 7.45 | 100.0 | 106.02 |
| 6.9 | 6.65 | 100.0 | 89.43 |
| 6.4 | 6.35 | 100.0 | 83.20 |
| 6.3 | 6.3 | 100.0 | 82.17 |
| 6.3 | 5.85 | 100.0 | 72.83 |
| 5.4 | | | 919.44 |

EMR EMR EMR

EMR

| | | | | |
|---------------|------|--------|-----------|----------------------------|
| | ✓ | 517.46 | | ✓ |
| 114100 | | | 7.3 510.2 | ✓ 504.6 |
| 115100 | 4.98 | 514.42 | 8.02 | ✓ (509.44) |
| 116100 | | | 4.2 | ✓ 504.3 |
| 117100 | | | 5.0 | ✓ 504.0 |
| 118100 | | | 4.6 | ✓ 503.9 |
| 119100 | | | 4.6 | ✓ 503.8 |
| 120100 | | | 4.0 | ✓ 503.7 |
| 121100 | | | 4.5 | ✓ 503.6 |
| 122100 | | | 3.7 | ✓ 503.4 |
| 123100 | | | 3.9 | ✓ 503.2 |
| ck on BM 417A | | | 4.22 | ✓ (510.20) Rec Elev 510.23 |
| B.M. 177 | 3.67 | 513.90 | | ✓ (510.23) |
| 124100 | | | 3.4 | ✓ 502.9 |
| 125100 | | | 3.9 | ✓ 502.6 |
| 126100 | | | 4.3 | ✓ 502.3 |
| 127100 | | | 4.9 | ✓ 502.0 |
| 128100 | | | 5.4 | ✓ 501.7 |

EMR EMR

| | | | | | |
|--|---------------------|----------|-------|-----|---------|
| | F. 11 | Distance | Cu | 50s | |
| | $\frac{10}{7.5}$ | 5.5 | 100.0 | ✓ | 65.57 |
| | $\frac{10.4}{7.1}$ | 5.6 | 100.0 | ✓ | 69.72 |
| | $\frac{5.1}{5.R}$ | 5.7 | — | — | — |
| | $\frac{8.2}{6.2}$ | 5.8 | 100.0 | ✓ | 66.61 |
| | $\frac{9.3}{5.1}$ | 5.55 | 100.0 | ✓ | 66.61 |
| | $\frac{10.0}{8.0}$ | 5.6 | 50.0 | ✓ | 33.82 |
| | $\frac{0.7}{1.1}$ | 5.9 | 50.0 | ✓ | 37.45 |
| | $\frac{10.0}{4.0}$ | 6.0 | 40.0 | ✓ | 33.28 |
| | $\frac{0.9}{1.3}$ | 6.7 | 60.0 | ✓ | 51.79 |
| | $\frac{10.0}{6.R}$ | 6.3 | 100.0 | ✓ | 92.54 |
| | $\frac{0.90}{13.R}$ | 7.3 | 100.0 | ✓ | 102.91 |
| | | 7.3 | — | — | — |
| | | 7.45 | 100.0 | ✓ | 106.02 |
| | | 7.6 | 100.0 | ✓ | 107.06 |
| | | 7.4 | 100.0 | ✓ | 103.94 |
| | | 7.3 | 100.0 | ✓ | 99.80 |
| | | 7.0 | 100.0 | ✓ | 94.61 |
| | | 6.9 | 100.0 | ✓ | 94.61 |
| | | 6.8 | 12.96 | ✓ | 1078.08 |

* Add 6" Overdepth
510.15 + 18.
= 510.33
= 510.33

* EMR EMR EMR 1078.08

513.90

323

| | | | |
|--------|------|--------|---------------|
| 126100 | 5.7 | 508.2 | 501.4 |
| +70 | 58 | 08.1 | 501.2 |
| 127100 | 5.6 | 08.3 | 501.1 |
| 128100 | 6.6 | 07.3 | 500.6 |
| TR | 3.43 | 509.93 | 7.40 (506.50) |
| 129100 | 3.7 | 06.2 | 500.1 |
| 130100 | 3.6 | 06.3 | 499.6 |
| 131100 | 3.6 | 06.3 | 499.1 |
| 132100 | 4.2 | 05.7 | 498.6 |
| 133100 | 4.1 | 05.8 | 498.6 |
| 134100 | 4.6 | 05.3 | 498.5 |
| 135100 | 5.3 | 04.6 | 498.4 |
| 136100 | 5.2 | 04.7 | 498.4 |
| TR | 2.65 | 507.21 | 5.37 (504.50) |
| 137100 | 3.2 | 04.0 | 498.1 |
| 138100 | 3.1 | 04.1 | 497.8 |
| 139100 | 3.3 | 03.9 | 497.5 |
| 140100 | 3.7 | 03.5 | 497.2 |

5mR 5mR

F.11.

Level Sec.

| | |
|------|------|
| 0.85 | 04.7 |
| 5.4 | 9.2 |
| 6.8 | 17.8 |
| 07.3 | 02.8 |
| 6.6 | 11.1 |
| 2.8 | 14.8 |

| | |
|------|-----|
| 0.27 | 7.2 |
| 15.8 | |

| | |
|------|------|
| 06.3 | 00.3 |
| 3.6 | 9.6 |
| 10.8 | 17.8 |

| | |
|------|------|
| 06.3 | 02.8 |
| 3.6 | 2.1 |
| 10.8 | 7.2 |

| | |
|------|-------|
| 05.9 | 500.0 |
| 5.8 | 9.9 |
| 10.8 | 21.8 |

| | |
|------|-----|
| 5.8 | 4.1 |
| 15.8 | |

| | |
|------------|-----|
| Level Sec. | 7.2 |
|------------|-----|

| | |
|-----|-----|
| 6.8 | 6.5 |
|-----|-----|

| | |
|-----|------|
| 6.2 | 6.25 |
|-----|------|

| | |
|-----|-----|
| 6.3 | 6.1 |
|-----|-----|

| | |
|-----|-----|
| 5.9 | 6.1 |
|-----|-----|

| | |
|-----|------|
| 6.3 | 6.35 |
|-----|------|

| | |
|-----|------|
| 6.4 | 6.35 |
|-----|------|

| | |
|-----|------|
| 6.3 | 6.35 |
|-----|------|

| | | |
|------|-------|-------|
| 6.8 | 100.0 | 92.54 |
| 6.85 | 70.0 | 65.50 |
| 7.05 | 30.0 | 29.32 |
| 6.95 | 100.0 | 95.65 |
| 6.7 | 100.0 | 83.20 |
| 6.35 | 100.0 | 83.20 |
| 6.0 | 100.0 | 82.17 |
| 6.6 | 100.0 | 93.57 |
| 7.1 | 100.0 | 98.76 |
| 7.1 | 100.0 | 99.80 |
| 7.15 | 100.0 | 99.80 |
| 7.2 | 100.0 | 96.69 |
| 7.0 | 100.0 | 96.69 |
| 6.8 | 100.0 | 86.32 |
| 6.2 | 100.0 | 81.13 |
| 6.3 | 100.0 | 78.02 |
| 6.1 | 100.0 | 78.02 |
| 5.9 | 100.0 | 78.02 |
| 6.3 | 100.0 | 83.20 |
| 6.4 | 100.0 | 83.20 |
| 6.3 | 100.0 | 83.20 |

5mR 5mR 5mR

1327.09
5mR

| | 507.21 | | | |
|--------|--------|--------|-------|----------|
| 141+00 | 4.6 | 502.6 | 496.9 | |
| 142+00 | 5.0 | 02.2 | 496.6 | |
| 143+00 | 5.4 | 01.8 | 496.3 | |
| 150 | 4.9 | 02.3 | 496.2 | |
| 144+00 | 5.5 | 01.7 | 496.0 | |
| 145+00 | 5.3 | 01.9 | 495.9 | |
| TP | 6.72 | 508.17 | 5.76 | (501.45) |
| 146+00 | 5.5 | 02.7 | 495.8 | |
| 147+00 | 5.7 | 02.5 | 495.7 | |
| 135 | 5.0 | 03.2 | 495.7 | |
| 148+00 | 4.8 | 03.4 | 495.6 | |
| 149+00 | 4.7 | 03.5 | 495.5 | |
| 150+00 | 5.1 | 03.1 | 495.4 | |
| 151+00 | 5.2 | 02.8 | 495.3 | |
| 152+00 | 5.5 | 02.7 | 495.2 | |
| 153+00 | 5.5 | 02.7 | 495.0 | |
| 154+00 | 5.4 | 02.8 | 494.9 | |

chen B. N. 20

4.64 (503.53) (Rec'd) 503.52
 emr emr

| Fill | Average Fill | Distance | |
|--|-----------------|----------|--------|
| | 6.0 | 100.0 | 75.94 |
| 5.7 | 5.65 | 100.0 | 68.69 |
| 5.6 | 5.55 | 100.0 | 66.61 |
| 5.5 | 5.8 | 50.0 | 35.90 |
| 6.1 | 5.9 | 50.0 | 36.93 |
| 5.7 | 5.85 | 100.0 | 72.83 |
| 6.0 | 6.45 | 100.0 | 85.28 |
| 6.9 | 6.85 | 100.0 | 93.57 |
| Level Sec | 6.8 | 25.0 | 25.00 |
| $\frac{5.8}{4.R} \frac{5.9}{7.R} \frac{5.9}{10.R}$ | 7.5 | 75.0 | 82.63 |
| $\frac{4.7}{5.R} \frac{6.6}{9.R} \frac{6.6}{12.R}$ | 7.8 | 100.0 | 115.35 |
| $\frac{4.7}{5.R} \frac{6.6}{8.R} \frac{6.6}{10.R}$ | 8.0 | 100.0 | 114.32 |
| $\frac{5.0}{4.R} \frac{6.6}{7.R} \frac{6.6}{10.R}$ | 7.7 | 100.0 | 106.02 |
| $\frac{5.7}{4.R} \frac{7.5}{8.R} \frac{7.5}{10.R}$ | 7.2 | 100.0 | 103.94 |
| $\frac{5.8}{2.R} \frac{7.6}{6.R} \frac{7.6}{10.R}$ | 7.5 | 100.0 | 109.13 |
| $\frac{5.3}{3.R} \frac{7.5}{7.R} \frac{7.5}{10.R}$ | 7.7 | 100.0 | 112.24 |
| $\frac{5.2}{2.R} \frac{7.1}{6.R} \frac{7.1}{10.R}$ | 7.8 | | |

emr emr emr

1304.38 m
emr

Nov. 4 1936

14

Super
13bell
Moore

Fill Average Distance
F.H.

| Station | Grade | Fill | Average Distance |
|----------|-------|--------|------------------|
| 154 | | 7.8 | |
| B.M. 20 | 4.15 | 507.67 | 503.52 |
| | | | 515/6 |
| 155+00 | 5.4 | 02.3 | 494.9 |
| +50 | 5.3 | 02.4 | 495.3 |
| +85 | 6.8 | 00.9 | 495.6 |
| 156+00 | 7.1 | 00.6 | 495.7 |
| +25 | 7.1 | 00.6 | 495.7 |
| P. | 7.32 | 509.73 | 502.41 |
| 156+85 | 4.1 | 05.6 | 496.5 |
| 157+00 | 4.0 | 05.7 | 496.6 |
| 150 | 4.7 | 05.0 | 497.0 |
| 158+00 | 3.8 | 05.9 | 497.4 |
| 150 | 4.0 | 05.7 | 497.9 |
| 159+00 | 4.8 | 04.9 | 498.3 |
| +50 | 4.6 | 05.1 | 498.7 |
| +96.95 | 3.4 | 06.3 | 499.0 |
| +99.85 | 3.3 | 06.4 | 499.1 |
| 160+08.1 | 3.3 | 06.4 | 499.1 |
| 161+00 | 4.5 | 05.2 | 498.6 |
| 162+00 | 5.0 | 04.7 | 498.3 |

Equation -
 $159 + 54.35 = 159 + 62.16$
 Bag Stone Backfill }
 no Backfill to }
 be allowed. }
 End Stru Backfill }

51 7.0 6.8
4.0R 7.0R 15.0R
7.4
53 6.8 6.9
6.0R 6.0R 15.0R
7.1
6.1
level sides
5.3
6.1
required
4.9
6.1

| Fill | Average Distance |
|--------|------------------|
| 7.8 | |
| 7.6 | 100 |
| 109.13 | |
| 7.4 | 50 |
| 50.93 | |
| 7.1 | 35 |
| 30.94 | |
| 6.1 | 15 |
| 11.70 | |
| 6.1 | 25 |
| 19.50 | |
| 6.1 | 60 |
| 65.48 | |
| 9.1 | 15 |
| 21.04 | |
| 9.1 | 50 |
| 64.41 | |
| 8.0 | 50 |
| 61.30 | |
| 8.5 | 50 |
| 60.27 | |
| 7.8 | 50 |
| 50.41 | |
| 6.6 | 50 |
| 43.16 | |
| 6.4 | 38.54 |
| 36.06 | |
| 7.3 | 11.15 |
| 7.3 | 91.9 |
| 87.90 | |
| 6.6 | 100 |
| 86.32 | |
| 6.5 | 100 |
| 89.43 | |
| 6.4 | |
| 798.55 | |

6MR 6MR 6MR
 798.55
 6MR

509.73

| | | | |
|--------|------|--------|-------|
| 163+00 | 5.5 | 504.2 | 497.9 |
| 164+00 | 6.6 | 03.1 | 497.5 |
| 165+00 | 6.8 | 02.9 | 497.1 |
| 166+00 | 7.2 | 02.5 | 496.6 |
| 167+00 | 7.1 | 02.6 | 495.5 |
| +50 | 7.4 | 02.3 | 494.9 |
| TP | 4.16 | 506.18 | 7.71 |
| 168+00 | 5.4 | 500.8 | 494.4 |
| 169+00 | 6.7 | 497.5 | 493.2 |
| 170+00 | 6.8 | 99.4 | 492.0 |
| +50 | 8.1 | 98.1 | 492.0 |
| 171+00 | 7.7 | 98.5 | 491.9 |
| +50 | 8.0 | 98.2 | 491.8 |
| 172+00 | 7.0 | 97.2 | 491.8 |
| +50 | 7.5 | 96.7 | 491.7 |
| 173+00 | 8.9 | 97.3 | 491.6 |
| 174+00 | 9.2 | 77.0 | 491.5 |
| 175+00 | 8.7 | 97.5 | 491.4 |

cmr cmr

* Add 6" over depth on account of Rock Condition
57% 166+25 to 166+75 = 50' x 5.6 x 5 = 5.19 Cu Yds *
528-10 cmr

| | | | |
|------|------|------|-------|
| F:11 | 6.35 | 100. | 83.20 |
| 6.3 | 5.95 | 100. | 74.91 |
| 5.6 | 5.7 | 100. | 69.72 |
| 5.8 | 5.85 | 100. | 72.83 |
| 5.9 | 6.5 | 100. | 86.32 |
| 7.1 | 7.25 | 50. | 50.93 |
| 7.4 | 6.9 | 50. | 47.30 |
| 6.4 | 6.35 | 100. | 83.20 |
| 6.3 | 6.85 | 100. | 93.57 |
| 7.4 | 6.75 | 50. | 45.75 |
| 6.1 | 6.35 | 50. | 41.60 |
| 6.6 | 6.5 | 50. | 43.16 |
| 6.4 | 5.9 | 50. | 36.93 |
| 5.4 | 5.2 | 50. | 29.67 |
| 5.0 | 5.35 | 50. | 32.27 |
| 5.7 | 5.4 | 100. | 69.72 |
| 5.5 | 5.8 | 100. | 71.80 |
| 6.1 | | | |

cmr cmr cmr

* 5.19
103.496
cmr



506.18 ✓

| | | | | |
|-----------------|------|----------|---------|------------------|
| 176+00 | | 7.8 | 498.4 ✓ | 491.2 ✓ |
| +35 | | 4.6 | 501.6 ✓ | 491.2 ✓ |
| 177+00 | | 6.0 | 500.2 ✓ | 491.1 ✓ |
| 178+00 | | 6.8 | 499.4 ✓ | 491.0 ✓ |
| +50 | | 7.1 | 499.1 ✓ | 490.3 ✓ |
| 179+00 | | 6.0 | 500.2 ✓ | 489.6 ✓ |
| +28 | | 5.2 | 501.0 ✓ | 489.3 ✓ |
| +50 | | 8.4 | 497.8 ✓ | 488.9 ✓ |
| 180+00 | | 9.5 | 496.7 ✓ | 488.3 ✓ |
| TP | 2.86 | 499.64 ✓ | 9.40 | 496.78 ✓ |
| 181+00 | | 5.5 | 94.1 ✓ | 486.9 ✓ |
| +50 | | 7.4 | 92.2 ✓ | 486.2 ✓ |
| 182+00 | | 7.9 | 91.7 ✓ | 485.6 ✓ |
| 183+00 | | 8.4 | 91.2 ✓ | 484.6 ✓ |
| 184+00 | | 9.5 | 90.1 ✓ | 483.7 ✓ |
| +35 | | 9.0 | 90.6 ✓ | 483.4 ✓ |
| Ch. on B. 11823 | | 6.00 | 498.64 | Rec. den. 473.67 |
| 185+00 | | 9.5 | 90.1 ✓ | 482.9 ✓ |
| | | | EMR | EMR |

16

Fill.

| | | | |
|--------|---------|--------|-----------|
| | 6.65 ✓ | 100. ✓ | 89.43 ✓ |
| 7.2 ✓ | 8.8 ✓ | 35 ✓ | 46.91 ✓ |
| 10.4 ✓ | 9.75 ✓ | 65 ✓ | 99.92 ✓ |
| 9.1 ✓ | 8.75 ✓ | 100. ✓ | 132.98 ✓ |
| 8.4 ✓ | 8.6 ✓ | 50 ✓ | 64.93 ✓ |
| 8.8 ✓ | 9.7 ✓ | 50 ✓ | 76.34 ✓ |
| 10.6 ✓ | 11.15 ✓ | 28 ✓ | 51.17 ✓ |
| 11.7 ✓ | 10.3 ✓ | 22 ✓ | 36.33 ✓ |
| 8.9 ✓ | 8.65 ✓ | 50 ✓ | 65.45 ✓ |
| 8.4 ✓ | | | |
| | 7.8 ✓ | 100. ✓ | 113.28 ✓ |
| 7.2 ✓ | 6.6 ✓ | 50 ✓ | 44.19 ✓ |
| 6.0 ✓ | 6.05 ✓ | 50 ✓ | 38.49 ✓ |
| 6.1 ✓ | 6.35 ✓ | 100. ✓ | 83.20 ✓ |
| 6.6 ✓ | 6.5 ✓ | 100 ✓ | 86.32 ✓ |
| 6.4 ✓ | 6.8 ✓ | 35 ✓ | 32.39 ✓ |
| 7.2 ✓ | | | |
| | 7.2 ✓ | 65 ✓ | 65.54 ✓ |
| 7.2 ✓ | | | |
| EMR | EMR | EMR | 1126.87 ✓ |
| | | | EMR |

499.64

| | | | |
|--------|------|--------|--------------|
| 186+00 | 10.5 | 89.1 | 482.9 |
| 187+00 | 11.3 | 88.3 | 482.8 |
| 188+00 | 11.7 | 87.9 | 482.8 |
| 189+00 | 10.6 | 89.0 | 482.7 |
| TP | 7.37 | 496.45 | 10.56 489.08 |
| 190+00 | 6.8 | 89.6 | 482.6 |
| 191+00 | 6.1 | 90.3 | 482.6 |
| 192+00 | 6.0 | 90.4 | 482.5 |
| 193+00 | 4.6 | 91.8 | 482.5 |
| 194+00 | 3.4 | 92.0 | 482.4 |
| 195+00 | 3.7 | 92.7 | 482.4 |
| 196+00 | 4.7 | 91.7 | 482.0 |
| 197+00 | 4.9 | 91.5 | 481.6 |
| 198+00 | 5.6 | 90.8 | 481.4 |
| 199+00 | 7.4 | 89.0 | 480.8 |
| 200+00 | 8.8 | 87.6 | 480.4 |
| 201+00 | 9.3 | 87.1 | 480.1 |
| 202+00 | 8.4 | 88.0 | 479.8 |

510

Fill

| | | | |
|------|-------|-------|--------|
| 6.7 | 100. | 90.46 | |
| 6.2 | 5.85 | 100. | 72.83 |
| 5.5 | 5.3 | 100. | 61.43 |
| 5.1 | 5.7 | 100. | 69.72 |
| 6.3 | 6.65 | 100. | 89.43 |
| 7.0 | 7.35 | 100. | 103.94 |
| 7.7 | 7.8 | 100. | 113.28 |
| 7.9 | 8.6 | 100. | 129.87 |
| 9.3 | 9.95 | 100. | 157.87 |
| 10.6 | 10.45 | 100. | 168.24 |
| 10.3 | 10.0 | 100. | 158.91 |
| 9.7 | 9.8 | 100. | 154.76 |
| 9.9 | 9.75 | 100. | 153.72 |
| 9.6 | 8.9 | 100. | 136.09 |
| 8.2 | 7.7 | 100. | 111.20 |
| 7.2 | 7.1 | 100. | 98.76 |
| 7.0 | 7.6 | 100. | 109.13 |
| 8.2 | | | |

EMR EMR EMR

1979.64

EMR

| | | | | | |
|--------|------|---------------------|------|---------------------|--------------------|
| | | 496.45 [✓] | | | |
| 203+00 | | | 8.6 | 87.8 [✓] | 479.5 [✓] |
| TP | 4.15 | 491.87 [✓] | 8.73 | 487.72 [✓] | |
| 204+00 | | | 5.1 | 86.8 [✓] | 479.2 [✓] |
| 205+00 | | | 5.5 | 86.4 [✓] | 478.9 [✓] |
| 206+00 | | | 5.8 | 86.1 [✓] | 478.6 [✓] |
| 207+00 | | | 6.4 | 85.5 [✓] | 478.3 [✓] |
| 208+00 | | | 7.0 | 84.9 [✓] | 478.0 [✓] |
| +45 | | | 7.2 | 84.7 [✓] | 477.8 [✓] |
| 209+00 | | | 9.1 | 82.8 [✓] | 477.5 [✓] |
| 210+00 | | | 7.8 | 84.1 [✓] | 477.0 [✓] |
| +60 | | | 4.9 | 87.0 [✓] | 476.6 [✓] |
| 211+00 | | | 4.8 | 87.1 [✓] | 476.3 [✓] |
| 212+00 | | | 6.0 | 85.9 [✓] | 475.7 [✓] |
| 213+00 | | | 8.2 | 83.7 [✓] | 475.0 [✓] |
| 214+00 | | | 8.8 | 83.1 [✓] | 474.3 [✓] |
| 215+00 | | | 9.2 | 82.7 [✓] | 473.9 [✓] |
| TP | 5.16 | 488.17 [✓] | 8.86 | 483.01 [✓] | |
| 216+00 | | | 4.7 | 83.5 [✓] | 473.8 [✓] |
| | | | | EMR | EMR |

18

| | | | |
|------|-------------------|------------------|---------------------|
| Fill | 8.25 [✓] | 100 [✓] | 122.61 [✓] |
| | 8.3 [✓] | | |
| | 7.95 [✓] | 100 [✓] | 116.39 [✓] |
| | 7.6 [✓] | | |
| | 7.55 [✓] | 100 [✓] | 108.09 [✓] |
| | 7.5 [✓] | 100 [✓] | 107.06 [✓] |
| | 7.5 [✓] | 100 [✓] | 103.94 [✓] |
| | 7.2 [✓] | 100 [✓] | 97.72 [✓] |
| | 6.9 [✓] | 45 [✓] | 42.57 [✓] |
| | 6.9 [✓] | 55 [✓] | 42.91 [✓] |
| | 5.3 [✓] | 100 [✓] | 80.09 [✓] |
| | 7.1 [✓] | 60 [✓] | 79.79 [✓] |
| | 10.4 [✓] | 40 [✓] | 68.54 [✓] |
| | 10.8 [✓] | 100 [✓] | 169.28 [✓] |
| | 10.2 [✓] | 100 [✓] | 147.50 [✓] |
| | 8.7 [✓] | 100 [✓] | 132.98 [✓] |
| | 8.8 [✓] | 100 [✓] | 134.02 [✓] |
| | 8.8 [✓] | | |
| | 9.25 [✓] | 100 [✓] | 143.38 [✓] |
| | 9.7 [✓] | | |
| | EMR | EMR | EMR |

1696.84[✓]
~~EMR~~

| | | | | |
|---------------|--------|------|--------|-------------------|
| | 488.17 | | | |
| 217+00 | | 4.4 | 83.8 | 473.6 |
| 218+00 | | 5.4 | 82.8 | 473.4 |
| Ch on B.M. 26 | | 4.55 | 483.62 | Rec. elev. 482.59 |

Nov. 5 1938
Super
Isbell
Moore

| | | | | |
|---------|-------|--------|--------|--------|
| B.M. 26 | 0.47 | 484.05 | 483.58 | |
| 219+00 | | 2.9 | 81.1 | 473.1 |
| 220+00 | | 4.2 | 79.8 | 472.7 |
| 221+00 | | 4.8 | 79.2 | 472.4 |
| 222+00 | | 4.9 | 79.1 | 472.0 |
| 223+00 | | 4.6 | 79.4 | 471.5 |
| 224+00 | | 3.3 | 80.7 | 471.1 |
| 225+00 | | 3.8 | 80.2 | 470.6 |
| I.P. | 12.93 | 492.32 | 4.66 | 479.39 |
| 226+00 | | 14.4 | 77.7 | 470.1 |
| 227+00 | | 15.6 | 76.7 | 470.7 |
| +60 Int | | | 77.8 | 471.1 |
| 228+00 | | 13.8 | 78.5 | 471.9 |

| | | | |
|------|------|------|--------|
| Fill | | Dist | Co 7ds |
| 10.2 | 9.95 | 100 | 157.87 |
| 9.4 | 9.8 | 100 | 154.76 |
| 8.7 | 8.7 | 100 | 131.94 |
| 8.0 | 7.55 | 100 | 108.09 |
| 7.1 | 6.95 | 100 | 95.65 |
| 6.8 | 6.95 | 100 | 95.65 |
| 7.1 | 7.5 | 100 | 107.06 |
| 7.9 | 8.75 | 100 | 132.98 |
| 9.6 | 9.6 | 100 | 150.61 |
| 9.6 | 8.7 | 100 | 131.94 |
| 7.8 | 6.9 | 100 | 94.61 |
| 6.0 | 6.35 | 60 | 49.92 |
| 6.7 | 6.65 | 40 | 35.77 |
| 6.6 | | | |
| | | * | 20.74 |

* Allow for Overdepth on account of
 Rock Condition Starting to 226
 5.6 x 200 x .5 = 20.74 Co 7ds
 EMLR
 528
 20

1467.59
 EMLR

| | | | | |
|--------|--------|-------------|-------|--------|
| +47 | 492.32 | | 479.6 | 472.8 |
| 229+00 | | 11.4 | 480.9 | 474.4 |
| 175 | | 9.0 | 83.3 | 476.6 |
| 230+00 | | 7.5 | 84.8 | 477.4 |
| +45 | | 4.0 | 88.3 | 479.0 |
| +86 | Int | | 89.9 | 480.4 |
| 231+00 | | 1.8 | 90.5 | 480.7 |
| TP | 5.78 | 497.69 | 0.41 | 491.91 |
| 232+00 | | 5.1 | 92.6 | 482.6 |
| +35 | Int | | 92.8 | 483.3 |
| 233+00 | | 4.5 | 93.2 | 483.4 |
| 234+00 | | 5.2 | 92.5 | 483.6 |
| +14 | Int | | 92.5 | 483.6 |
| 235+00 | | 5.2 | 92.5 | 481.6 |
| +30 | | 6.6 | 91.1 | 480.9 |
| +50 | | 10.0 | 87.7 | 478.7 |
| TP | 0.50 | 485.52 | 12.67 | 485.02 |
| 236+00 | | 5.5 | 80.0 | 472.0 |
| +32 | | 11.8 | 73.7 | 468.0 |
| +73.24 | | Interpetals | 71.5 | 462.7 |
| TP | 1.16 | 473.97 | 12.71 | 472.81 |
| +80.64 | | Interpetals | 71.1 | 462.2 |
| 237+00 | | 4.0 | 70.0 | 462.1 |
| 238+00 | | 5.1 | 68.9 | 461.3 |

Int Int

| | | | |
|------|-------|-------|--------|
| Fill | 6.7 | 47.0 | 42.52 |
| 6.8 | 6.65 | 53 | 47.40 |
| 6.5 | 6.6 | 75 | 66.29 |
| 6.7 | 7.05 | 25 | 24.43 |
| 7.4 | 8.35 | 45 | 56.11 |
| 9.3 | 9.4 | 41 | 60.05 |
| 9.5 | 9.65 | 14 | 21.23 |
| 9.8 | | | |
| | 9.9 | 100 | 156.83 |
| 10.0 | 9.75 | 35 | 53.80 |
| 9.5 | 9.65 | 65 | 98.57 |
| 9.8 | 9.35 | 100 | 145.43 |
| 8.9 | 8.9 | 14 | 19.05 |
| 8.9 | 9.9 | 86 | 134.87 |
| 10.9 | 10.55 | 30 | 51.10 |
| 10.2 | 9.6 | 20 | 30.12 |
| 9.0 | | | |
| | 8.4 | 50 | 62.86 |
| 7.8 | 6.75 | 32 | 29.28 |
| 5.7 | 7.25 | 41.24 | 42.01 |
| 8.8 | 8.85 | 7.4 | |
| 8.9 | 8.4 | 19.36 | 24.34 |
| 7.9 | 7.75 | 100.0 | 112.24 |
| 7.6 | | | |

Class Ex Backfill

7.4

None class Ex

Int Int Int

1278.53

473.97 ✓

| | | | | | |
|--------|------|----------|------|---------|---------|
| 239+00 | | | 6.0 | 468.0 ✓ | 460.6 ✓ |
| 240+00 | | | 6.3 | 67.7 ✓ | 459.9 ✓ |
| 241+00 | | | 6.6 | 67.4 ✓ | 459.1 ✓ |
| 242+00 | | | 7.5 | 66.5 ✓ | 458.3 ✓ |
| 243+00 | | | 9.7 | 64.3 ✓ | 457.6 ✓ |
| ∑ | 1.24 | 465.5 ✓ | 9.70 | 464.27 | — |
| 244+00 | | | 1.9 | 63.6 ✓ | 456.8 ✓ |
| 245+00 | | | 3.4 | 62.1 ✓ | 456.1 ✓ |
| 246+00 | | | 3.9 | 61.6 ✓ | 455.3 ✓ |
| 247+00 | | | 4.9 | 60.6 ✓ | 454.6 ✓ |
| 248+00 | | | 5.7 | 59.8 ✓ | 453.8 ✓ |
| 249+00 | | | 6.6 | 58.9 ✓ | 453.1 ✓ |
| 250+00 | | | 7.3 | 58.2 ✓ | 452.6 ✓ |
| 251+00 | | | 8.1 | 57.4 ✓ | 452.0 ✓ |
| ∑ | 3.58 | 460.77 ✓ | 8.32 | 457.19 | — |
| 252+00 | | | 3.7 | 57.1 ✓ | 451.4 ✓ |
| 253+00 | | | 4.6 | 56.2 ✓ | 450.8 ✓ |
| 254+00 | | | 4.9 | 55.9 ✓ | 450.1 ✓ |

EMR EMR

F.11

| | | | |
|-------|--------|--------|----------|
| | 7.5 ✓ | 100. ✓ | 107.06 ✓ |
| 7.4 ✓ | 7.6 ✓ | 100. ✓ | 109.13 ✓ |
| 7.8 ✓ | 8.05 ✓ | 100. ✓ | 118.46 ✓ |
| 8.3 ✓ | 8.25 ✓ | 100. ✓ | 122.61 ✓ |
| 8.2 ✓ | 7.45 ✓ | 100. ✓ | 106.02 ✓ |
| 6.7 ✓ | 6.75 ✓ | 100. ✓ | 91.50 ✓ |
| 6.8 ✓ | 6.40 ✓ | 100. ✓ | 84.24 ✓ |
| 6.0 ✓ | 6.15 ✓ | 100. ✓ | 79.06 ✓ |
| 6.3 ✓ | 6.15 ✓ | 100. ✓ | 79.06 ✓ |
| 6.0 ✓ | 6.0 ✓ | 100 ✓ | 75.94 ✓ |
| 6.0 ✓ | 5.85 ✓ | 100 ✓ | 72.83 ✓ |
| 5.7 ✓ | 5.65 ✓ | 100. ✓ | 68.69 ✓ |
| 5.6 ✓ | 5.5 ✓ | 100. ✓ | 65.57 ✓ |
| 5.4 ✓ | 5.55 ✓ | 100. ✓ | 66.61 ✓ |
| 5.7 ✓ | 5.55 ✓ | 100. ✓ | 66.61 ✓ |
| 5.4 ✓ | 5.55 ✓ | 100. ✓ | 66.61 ✓ |
| 5.7 ✓ | 5.55 ✓ | 100. ✓ | 66.61 ✓ |

EMR EMR EMR

1380.00 ✓
EMR

460.77

255+00

5.6

455.2

449.6

256+00

6.0

54.8

448.1

cken B.M. = 30

6.67

454.10

Relev. 454.11

Nov. 20 1936
Soper
Isbell
Moore

B.M. #30

454.11

9.72 463.83

257+00

9.7

54.1

447.3

+80

11.6

52.2

446.3

+88

10.1

53.7

446.2

258+00

9.8

54.0

446.1

+60

8.7

55.1

447.2

+85

2.9

60.9

447.4

259+00

3.4

60.4

447.6

260+00

4.3

59.5

449.3

+40

Int Ground.

59.3

450.0

+50

59.3

449.9

261+00

4.7

59.1

449.7

262+00

5.9

57.9

449.3

time

time

Rect. Condition

* Allow for overdepth on account of Rect. Condition
Sta 259+00 to 261+00
5.6 X 1.5 X 200' = 20.74

Fill.

Average

5.6

5.65

100.

68.69

5.6

6.0

100.

75.94

6.4

time

time

time

Total here 15536.60
time

6.6

100.0

88.39

6.8

6.35

80.0

66.56

5.9

6.7

8.0

7.24

7.5

7.7

12.0

13.32

7.9

8.0

600

70.46

8.1

10.8

25.0

43.88

13.5

13.15

15.0

33.63

12.8

11.5

100.0

190.02

10.2

9.75

40.0

61.49

9.3

9.35

10.0

14.54

9.4

9.4

50.0

73.23

9.4

9.0

100.0

138.17

8.6

20.74

821.67

| | | | | |
|------------|--------|------|----------|---------------|
| | 463.83 | | | |
| 263+00 | | 6.9 | 456.9 | 448.9 |
| R | | 6.53 | (457.30) | - |
| | 4.79 | | 462.09 | |
| Knob BM#31 | | 1.17 | (460.92) | 460.90 |
| | | | | Rec. elev |
| | | | | Nov. 21, 1936 |
| | | | | Supt |
| | | | | Isbell |
| | | | | Moore |
| BM#31 | | | 460.90 | |
| | 0.78 | | 461.88 | |
| 264+00 | | 3.9 | 58.0 | 448.5 |
| 265+00 | | 3.9 | 58.0 | 448.3 |
| 266+00 | | 5.1 | 56.8 | 448.0 |
| 267+00 | | 4.4 | 57.5 | 447.8 |
| 268+00 | | 5.4 | 56.5 | 447.5 |
| 269+00 | | 6.5 | 55.4 | 447.3 |
| 270+00 | | 7.8 | 54.1 | 447.0 |
| +50 | | 8.0 | 53.9 | 446.6 |

bm#l bm#l

* Allow for over depth or overprint of
 Rec. Condition Site 265+50 to 267+25.
 5.6 x .5 x 175' = 18.15 Cu Yds.
 Same 270+25 to 280+00 = 5.6 x .5 x 975' = 101.1 Cu Yds.

558.6 453.9
 8.3 8.0
 100.0 10.7

| Fill | Average | Dist | Cu Yds |
|------|---------|-------|--------|
| 8.0 | 8.3 | 100.0 | 123.65 |
| | | | |
| | 8.75 | 100.0 | 132.98 |
| | | | |
| | 9.5 | | |
| | 9.6 | 100.0 | 150.61 |
| | 9.7 | | |
| | 9.25 | 100.0 | 148.35 |
| | 8.8 | | |
| | 9.7 | 100.0 | 143.35 |
| | 9.0 | | |
| | 9.35 | 100.0 | 145.43 |
| | 8.1 | | |
| | 8.55 | 100.0 | 128.83 |
| | 7.1 | | |
| | 7.6 | 100.0 | 109.13 |
| | 7.3 | | |
| | 7.2 | 50.0 | 50.41 |
| | | | 18.15 |
| | | | 101.11 |

12470

461.88 ✓
270+70 8.4 53.5 446.5 ✓ ✓

TP 8.54 <453.34> -

1.91 455.25 ✓

271+00 2.2 53.0 446.3 ✓ ✓

150 3.0 52.2 445.9 ✓ ✓

272+00 3.9 51.3 445.5 ✓ ✓

150 4.4 50.8 445.4 ✓ ✓

160 4.6 50.6 445.3 ✓ ✓

273+00 4.3 50.9 445.2 ✓ ✓

Fill Av Dist Cuyds
53.4 53.4 45.9 7.15 20.0 20.0 ✓
8.5 9.5 16.0 7.0
10.0 2.0R 21.0R

53.1 52.7 45.8
21. 2.0 9.4
10.0 2.0R 22.0R

52.8 46.0
24 9.6
10.0 14.0R ✓

49.2 47.3 51.5
6.0 5.9 3.7
2.0 8.0 10.0 ✓
8.0 45.8 ✓
9.4
5.0R 14.0R

50.8 46.0 51.3
4.4 6.3 3.9
2.0 8.0 11.0 ✓
50.3 45.8 ✓
4.4 9.4
2.0R 13.0R

50.0 49.0 51.7
4.6 6.3 3.5
2.0 8.0 11.0 ✓
50.5 45.7 ✓
4.6 9.5
3.0R 12.0R

50.4 48.5 49.1
4.3 6.2 6.1
5.0 11.0 17.0 ✓
45.6
9.2
11.0R

432.72

lmmr lmmr

452.7

| | 455.25 | | | Fill | AV | Dwt | Coyds |
|--------|--------|--------|--------|--|------|-------|--------------|
| 273+50 | 4.8 | 450.4 | 445.10 | 50.4 48.0 48.2 4.8 7.2 7.0 1.0L 2.0L 10.0L 50.4 45.6 4.8 9.6 3.0R 12.0R | | | |
| +87 | 5.7 | 49.5 | 445.0 | 52.4 52.3 2.8 2.9 2.0L 14.0L 49.5 45.7 5.7 9.5 6.0R 14.0R | | | 74.73 |
| 274+00 | 2.8 | 52.4 | 445.0 | 52.1 45.8 3.1 9.4 10.0L 17.0R | | | |
| +06 | 3.1 | 52.1 | 445.0 | 52.1 52.1 46.0 3.1 3.1 9.2 10.0L 10R 17.0R | | | |
| +15 | me | 52.2 | 445.0 | | 7.2 | 7.45 | 35.0 37.11 |
| +50 | 2.6 | 52.6 | 444.9 | 52.4 53.0 2.8 2.2 10.0L 10.0R | 7.7 | | |
| 275+00 | 2.9 | 52.3 | 444.7 | | 7.6 | | |
| 276+00 | 2.2 | 53.0 | 444.5 | | 8.5 | 8.05 | 100.0 118.46 |
| TP | 2.01 | 453.24 | | | | | |
| | 5.48 | 458.72 | | | | 9.15 | 100.0 141.28 |
| 277+00 | 4.7 | 54.0 | 444.2 | | 9.8 | | |
| 278+00 | 4.9 | 53.8 | 444.0 | | 9.8 | 9.8 | 100.0 154.76 |
| 279+00 | 4.9 | 53.8 | 443.7 | | 10.1 | 9.95 | 100.0 157.87 |
| +60 | 4.1 | 54.6 | 443.6 | 54.3 55.0 4.4 3.7 10.0L 10.0R | 11.0 | 10.55 | 60.0 102.19 |

lme lme

841.49

458.72 ✓
 280+00 3.6 455.1 ✓ 443.5 ✓

TR 7.99 (450.73) ✓

3.01 453.74 ✓

280+50 3.9 49.8 ✓ 443.3 ✓

281+00 3.7 50.0 ✓ 443.2 ✓

150 3.8 49.9 ✓ 443.0 ✓

282+00 4.3 49.4 ✓ 442.9 ✓

150 5.6 48.1 ✓ 442.7 ✓

283+00 6.0 47.7 ✓ 442.5 ✓

bml bml

54.9 55.1 52.0 ✓
 3.8 3.6 4.7 ✓
 10.0L 2.0R 2.0R ✓
 51.5 7.2 16.0 ✓
 14.0R 22.0R ✓

11.3 ✓

40.0 ✓

74.35 ✓

49.5 47.8 52.0 ✓
 3.9 3.9 1.7 ✓
 30L 7.0L 15.0L ✓
 49.8 47.8 47.1 ✓
 4.9 5.9 6.6 ✓
 5.0R 7.0R 14.0 ✓

52.0 47.4 47.7 ✓
 3.7 6.3 6.0 ✓
 20L 7.0L 14.0L ✓
 52.0 46.5 47.1 ✓
 5.9 7.2 14.0 ✓
 7.0R 11.0R ✓

49.9 48.3 ✓
 3.8 5.4 ✓
 30L 11.0L ✓
 30L 46.5 ✓
 3.0R 7.2 ✓

49.4 47.0 ✓
 4.3 6.5 ✓
 6.0R 11.0L ✓
 4.3 46.6 ✓
 7.0R 7.1 ✓
 6.0 ✓

48.1 46.3 ✓
 5.6 7.4 ✓
 8.0L 12.0L ✓
 8.0 ✓
 5.0R ✓

47.7 45.9 ✓
 6.0 8.0 ✓
 3.0L 8.0L ✓
 47.7 46.2 ✓
 6.0 7.5 ✓
 5.0R 8.0R ✓

453.68

528.03 ✓

| | 455.03 | | | |
|----------------|------------|------|----------|----------|
| 288+00 | | 6.7 | 448.3 ✓ | 440.6 ✓ |
| 289+00 | | 7.3 | 47.7 ✓ | 440.0 ✓ |
| 290+00 | | 6.8 | 48.7 ✓ | 439.6 ✓ |
| 291+00 | | 6.0 | 49.0 ✓ | 439.2 ✓ |
| +50 | Int ground | | 48.6 ✓ | 439.0 ✓ |
| 292+00 | | 6.8 | 48.2 ✓ | 439.0 ✓ |
| 293+00 | | 7.9 | 47.1 ✓ | 438.9 ✓ |
| 294+00 | | 7.6 | 47.4 ✓ | 438.7 ✓ |
| 295+00 | | 8.6 | 46.4 ✓ | 438.3 ✓ |
| 296+00 | | 9.6 | 45.4 ✓ | 438.0 ✓ |
| TR | | 9.65 | 445.38 | - |
| | 3.93 | | 449.31 ✓ | |
| 297+00 | | 4.4 | 44.9 ✓ | 437.6 ✓ |
| ck. on B.M. 34 | | 5.72 | 443.59 ✓ | 443.61 ✓ |

6m2 6m2

| Fill | Av | Dnt | Cuyds |
|------|--------|---------|----------|
| 7.7 | 7.45 ✓ | 100.0 ✓ | 106.02 ✓ |
| 7.7 | 7.7 ✓ | 100.0 ✓ | 111.20 ✓ |
| 9.1 | 8.4 ✓ | 100.0 ✓ | 125.72 ✓ |
| 9.8 | 9.45 ✓ | 100.0 ✓ | 147.50 ✓ |
| 9.6 | 9.7 ✓ | 50.0 ✓ | 76.34 ✓ |
| 9.2 | 9.4 ✓ | 50.0 ✓ | 73.23 ✓ |
| 8.2 | 8.7 ✓ | 100.0 ✓ | 131.94 ✓ |
| 8.7 | 8.45 ✓ | 100.0 ✓ | 126.76 ✓ |
| 8.1 | 8.4 ✓ | 100.0 ✓ | 125.72 ✓ |
| 7.4 | 7.75 ✓ | 100.0 ✓ | 112.24 ✓ |
| | 7.35 ✓ | 100.0 ✓ | 103.94 ✓ |
| 7.3 | | | |

1240 61

Nov. 23 1936
Soper
15 bell
Moore

Trench 5.6 wide to Sta 311+98.48
See by 528 Then 2x for Spec Y and Anchor Value 29
Clear 34' to 412+25.5 Then Trench 4.6 wide
& See by 528 for Deduction for Pipe etc.
Fill Average Dist Cuydos

B.M. 34

<443.67>

3.89 447.50

7.1

100.0

98.76

298+00

3.4

44.1

437.2

6.9

6.7

100.0

90.46

299+00

4.1

43.4

436.9

6.5

6.5

100.0

86.32

300+00

4.5

43.0

436.5

6.5

6.45

100.0

85.28

301+00

4.9

42.6

436.2

6.4

6.4

100.0

84.24

302+00

5.3

42.2

435.8

6.4

6.5

100.0

86.32

303+00

5.4

42.1

435.5

6.6

6.5

100.0

86.32

304+00

5.9

41.6

435.2

6.4

6.15

90.0

71.15

+90 Int ground

40.7

434.8

5.9

5.85

100.0

7.28

305+00

6.9

40.6

434.8

5.8

TP

2.63

444.10

6.03

<441.47>

6.15

100.0

79.06

306+00

3.7

40.4

433.9

6.5

6.45

100.0

85.28

307+00

4.7

39.4

433.0

6.4

6.35

100.0

83.20

308+00

5.0

39.1

432.8

6.3

6.45

100.0

85.28

309+00

4.9

39.2

432.6

6.6

6.95

100.0

95.65

310+00

4.4

39.7

432.4

7.3

7.35

100.0

103.94

311+00

4.1

40.0

432.2

7.8

7.3

98.4

101.26

311+98.4

Int Ground
Trench 5.6 wide

38.8

432.0

6.8

Area 25.0

<312+00>

Use for Int only

<5.3

38.8

6mm 6mm

311+98.4

1329 80

| Station | Description | Width | Depth | Area | Volume |
|-----------------|------------------------------|-------|-------|--------|--------|
| 312+05 | Trench 8.6 wide | 8.6 | 5 | 438.9 | 432.2 |
| 312+10 | " 10.6 wide | 10.6 | 5 | 439.0 | 432.5 |
| 312+14.8 | E edge Anchor | | 5 | 439.1 | 432.5 |
| 312+17.3 | (V. Chamber on 36" line) | | 5.0 | 439.1 | |
| 312+17.3 | (V. chamber on 20" line) | | 5.1 | 39.0 | |
| 312+25.5 | W Side Valve Cham. | | 5.0 | 39.1 | 432.7 |
| 312+27.96 | 73.5' 28" pipe | | | | |
| 312+28.26 | | | | | |
| 312+50 | | | 6.0 | 38.1 | 432.7 |
| 313+00 | | | 6.2 | 37.9 | 432.5 |
| 312+00 | | | | 37.9 | 432.5 |
| 313+00 | Yenturi Meter Struc Backfill | | 5.1 | 37.9 | 432.5 |
| 313+21.5 | | | | 37.9 | 432.5 |
| 313+25.8 | 36" Pipe | | | 37.9 | 432.5 |
| 313+55.8 | | | | 37.8 | 432.0 |
| 313+58.1 | | | 6.3 | 37.8 | 432.4 |
| 313+67.8 | Water Cham | | | | |
| 313+70.3 | Begin 36" Pipe | | 6.3 | 37.8 | 432.4 |
| 314+00 | | | | | 519.21 |
| 405 | Grade Break | | 6.5 | 37.6 | 431.6 |
| ck on USGS B.M. | | | 5.20 | 438.70 | 438.93 |

6mm 6mm

| Station | Description | Width | Depth | Area | Volume |
|---------|--------------------|-------|-------|---------|---------|
| 6.7 | Fill | 42.6 | 6.7 | 285.62 | 1907.5 |
| 6.5 | Fill | 53.9 | 6.5 | 350.35 | 2277.25 |
| 6.6 | Fill | 55.0 | 6.6 | 363.00 | 2385.00 |
| 6.4 | Backfill | 24.85 | 6.4 | 159.04 | 1038.06 |
| Average | | 22.55 | 24.5 | 552.47 | 20.46 |
| 5.4 | | 20.25 | | | |
| Average | | 20.25 | 50.5 | 1022.62 | 37.87 |
| 5.4 | | 20.25 | | | |
| 5.4 | | 20.25 | | | |
| 5.7 | | 18.75 | | | |
| 5.8 | | 19.21 | | | |
| 5.4 | | 20.25 | | | |
| 5.4 | Req. Cham Struc Ex | 21.15 | | | |
| 5.8 | | 19.21 | | | |
| 6.0 | | 5.9 | | | |
| | | | 34.7 | | |
| | | | | | 138.06 |

Class B Backfill Included.

4.6 Trench See 5.8

Req. Cham Struc Ex

| | 444.10 | | | |
|---------------------------------------|--------|--------|--------|-------|
| 315+00 | | 6.8 | 427.3 | 431.4 |
| T.P. | | 6.75 | 437.35 | |
| | 4.35 | 441.70 | | |
| 316+00 | | 4.5 | 37.2 | 431.2 |
| $316+11.775 = 316+06.4$ (Equation) | | | | |
| 317+00 | | 4.9 | 36.8 | 431.0 |
| 318+00 | | 5.4 | 36.3 | 430.8 |
| 319+00 | | 5.5 | 36.2 | 430.6 |
| 320+00 | | 5.3 | 36.4 | 430.4 |
| 321+00 | | 5.6 | 36.1 | 430.2 |
| +87 Interpolated Grade change | | | 36.0 | 430.0 |
| 322+00 | | 5.7 | 36.0 | 430.0 |
| 323+00 | | 5.0 | 36.7 | 430.1 |
| 324+00 | | 4.8 | 36.9 | 430.2 |
| 325+00 | | 4.0 | 37.7 | 430.3 |
| +46 Taper | | | 38.2 | 430.3 |
| 326+00 | | 3.0 | 38.7 | 430.8 |
| 327+00 | | 2.7 | 39.0 | 431.7 |
| 328+00 | | 2.1 | 39.6 | 432.6 |

time time

| Fill | Average | Dist | |
|------|---------|--------|--------|
| 5.9 | 5.95 | 95 | 70.03 |
| | 5.95 | 100.0 | 73.72 |
| 6.0 | | | |
| | 5.9 | 105.36 | 76.78 |
| 5.8 | | | |
| | 5.65 | 100.0 | 68.61 |
| 5.5 | | | |
| | 5.55 | 100.0 | 66.91 |
| 5.6 | | | |
| | 5.8 | 100.0 | 71.16 |
| 6.0 | | | |
| | 5.95 | 100.0 | 73.72 |
| 5.9 | | | |
| | 5.95 | 87.0 | 64.14 |
| 6.0 | | | |
| | 6.00 | 13.0 | 9.69 |
| 6.6 | | | |
| | 6.3 | 100.0 | 79.68 |
| 6.7 | | | |
| | 6.65 | 100.0 | 85.65 |
| 7.4 | | | |
| | 7.05 | 100.0 | 92.46 |
| 7.9 | | | |
| | 7.65 | 46.0 | 47.23 |
| 7.9 | | | |
| | 7.9 | 54.0 | 57.75 |
| 7.3 | | | |
| | 7.6 | 100.0 | 101.83 |
| 7.0 | | | |
| | 7.15 | 100.0 | 94.16 |

1133 ⁵²

441.70

| | | | |
|-----------------|--------|--------|--------|
| 329+00 | 0.8 | 440.9 | 433.6 |
| Pen B.M. 36 | 0.67 | 441.03 | 441.06 |
| + 94 Int | | 442.3 | 434.4 |
| B.M. 36 12.84 | | 453.87 | |
| 330+00 | 11.5 | 42.4 | 434.5 |
| 331+00 | 10.9 | 43.0 | 434.7 |
| 332+00 | 9.7 | 44.2 | 435.0 |
| +62 Interpolate | | 44.9 | 435.2 |
| 333+00 | 8.5 | 45.4 | 436.7 |
| 334+00 | 6.1 | 47.8 | 440.6 |
| 335+00 | 2.7 | 51.2 | 444.6 |
| IP | 0.87 | 453.00 | |
| 12.83 | | 465.83 | |
| 336+00 | 10.1 | 55.7 | 449.0 |
| 337+00 | 5.5 | 60.3 | 453.4 |
| 338+00 | 1.2 | 64.6 | 457.9 |
| +89 Interpolate | | 68.8 | 461.8 |
| IP 12.84 | 478.42 | 0.25 | 465.58 |
| 339+00 | 9 | 68.4 | 462.2 |
| 340+00 | 5.6 | 72.8 | 465.7 |
| +68 | | 74.6 | 468.0 |

| | | | |
|------|------|-------|--------|
| Fill | Av | Dist | |
| 7.3 | 7.15 | 100.0 | 94.16 |
| | 7.6 | 94.0 | 95.72 |
| 7.9 | | | |
| | 7.9 | 6.0 | 6.42 |
| 7.9 | 8.1 | 100.0 | 110.35 |
| 8.3 | 8.75 | 100.0 | 121.42 |
| 9.2 | 9.45 | 62.0 | 82.68 |
| 9.7 | 9.2 | 38.0 | 49.05 |
| 8.7 | 7.95 | 100.0 | 107.79 |
| 7.2 | 6.9 | 100.0 | 89.91 |
| 6.6 | | | |
| | 6.65 | 100.0 | 85.65 |
| 6.7 | | | |
| 6.9 | 6.8 | 100.0 | 88.20 |
| | 6.8 | 100.0 | 88.20 |
| 6.7 | 6.85 | 89.0 | 79.25 |
| 7.0 | | | |
| | 7.10 | 11.0 | 10.35 |
| 7.2 | | | |
| | 7.15 | 100.0 | 94.16 |
| 7.1 | | | |
| 6.6 | 6.85 | 68.0 | 60.55 |

1263 17 X

478.42

| | | | |
|-----------------|--------|--------|--------|
| 341+00 | 2.9 | 475.5 | 468.3 |
| +87 Grade Break | | 75.6 | 469.0 |
| 342+00 | 2.8 | 75.6 | 468.9 |
| 343+00 | 2.4 | 76.0 | 468.5 |
| +25 | } Int. | 75.4 | 468.4 |
| +37 | | 75.2 | 468.1 |
| +67 | | 74.5 | 467.8 |
| 344+00 | 4.6 | 73.8 | 466.8 |
| 345+00 | 8.0 | 70.4 | 463.9 |
| 346+00 | 11.2 | 67.2 | 460.9 |
| +35 Int. | | 66.5 | 459.9 |
| 347+00 | 13.3 | 65.1 | 459.0 |
| TP | 12.92 | 465.50 | |
| 0.66 | 466.16 | | |
| 348+00 | 2.8 | 63.4 | 457.8 |
| 349+00 | 3.7 | 62.5 | 456.5 |
| 350+00 | 5.6 | 60.6 | 455.2 |
| 351+00 | 6.6 | 59.6 | 454.0 |
| TP on BM#39 | 6.21 | 459.95 | |
| BM#39 | 6.44 | 466.36 | 459.92 |
| 351+41 | 6.2 | 60.2 | 453.4 |
| 451 | 10.1 | 56.3 | 453.3 |
| | | BMR | BMR |

| Fill | Av | Dist | Cu yds |
|------|------|-------|--------|
| 7.2 | 6.9 | 32.0 | 28.77 |
| 6.6 | 6.9 | 87.0 | 78.22 |
| 6.7 | 6.65 | 13.0 | 11.13 |
| | 7.1 | 100.0 | 93.31 |
| 7.5 | 7.25 | 25.0 | 23.98 |
| 7.0 | 7.05 | 12.0 | 11.09 |
| 7.1 | 6.90 | 30.0 | 26.97 |
| 6.7 | 6.85 | 33.0 | 29.39 |
| 7.0 | 6.75 | 100.0 | 87.35 |
| 6.5 | 6.4 | 100.0 | 81.39 |
| 6.3 | 6.45 | 35.0 | 28.78 |
| 6.6 | 6.35 | 65.0 | 52.34 |
| 6.1 | | | |
| | 5.85 | 100.0 | 72.02 |
| 5.6 | 5.8 | 100.0 | 71.16 |
| 6.0 | 5.7 | 100.0 | 69.46 |
| 5.4 | 5.5 | 100.0 | 66.05 |
| 5.6 | | | |
| | 6.2 | 41.0 | 31.97 |
| 6.8 | 4.9 | 10.0 | 5.58 |
| 3.0 | | | |

868 952

| | 466.36 | | | |
|----------------|--------|--------|-------|--|
| 354468 | 10.3 | 456.1 | 453.1 | |
| +73 | 6.7 | 59.7 | 453.0 | |
| 352400 | 6.9 | 59.5 | 453.2 | |
| 353400 | 6.9 | 59.5 | 453.9 | |
| 354400 | 6.1 | 60.3 | 454.3 | |
| 355400 | 5.0 | 61.4 | 455.2 | |
| 356400 | 3.4 | 63.0 | 455.8 | |
| +21 | | 63.0 | 456.0 | |
| 357400 | 3.6 | 62.8 | 454.9 | |
| 358400 | 5.0 | 61.4 | 453.6 | |
| 359400 | 6.9 | 59.5 | 452.3 | |
| 360400 | 8.7 | 57.7 | 451.0 | |
| +07 | | 57.6 | 450.9 | |
| 361400 | 10.4 | 56.0 | 450.0 | |
| 362400 | 12.2 | 54.2 | 449.0 | |
| T _n | 12.75 | 453.61 | | |
| 0.98 | 454.59 | | | |
| 363400 | 1.9 | 52.7 | 448.0 | |
| 364400 | 3.0 | 51.6 | 447.0 | |
| 365400 | 4.0 | 50.6 | 446.0 | |

6m2 6m2

| Fill | Av | Dist | |
|------|------|-------|--------|
| 3.0 | 3.0 | 17.0 | 3.99 |
| 6.7 | 4.85 | 5.0 | 2.75 |
| 6.3 | 6.5 | 27.0 | 22.43 |
| 5.6 | 5.95 | 100.0 | 73.72 |
| 5.8 | 5.7 | 100.0 | 69.46 |
| 6.2 | 6.0 | 100.0 | 74.57 |
| 7.2 | 6.7 | 100.0 | 86.50 |
| 7.0 | 7.1 | 21.0 | 19.60 |
| 7.9 | 7.45 | 79.0 | 78.43 |
| 7.8 | 7.85 | 100.0 | 106.09 |
| 7.2 | 7.5 | 100.0 | 100.13 |
| 6.7 | 6.95 | 100.0 | 90.76 |
| 6.7 | 6.7 | 7.0 | 6.05 |
| 6.0 | 6.35 | 93.0 | 74.89 |
| 5.2 | 5.6 | 100.0 | 67.76 |
| | 4.95 | 100.0 | 56.68 |
| 4.7 | | | |
| 4.6 | 4.65 | 100.0 | 51.57 |
| 4.6 | 4.6 | 100.0 | 50.72 |

1036.104

| | 454.59 | | | |
|----------|--------|-------|--------|-------|
| 366+00 | | 4.5 | 450.1 | 445.0 |
| 367+00 | | 4.5 | 50.1 | 444.0 |
| +98? Int | | | 50.0 | 442.9 |
| 368+00 | | 5.7 | 48.9 | 442.9 |
| 369+00 | | 9.2 | 46.4 | 439.5 |
| +92 Int | | | 41.6 | 436.3 |
| 370+00 | | 13.0 | 41.6 | 436.1 |
| R. | | 12.70 | 441.89 | |
| | 0.22 | | 442.11 | |
| 371+00 | | 3.5 | 38.6 | 433.8 |
| 372+00 | | 5.0 | 37.1 | 431.4 |
| 373+00 | | 7.6 | 34.5 | 429.1 |
| +21 Int | | | 33.7 | 428.6 |
| 374+00 | | 11.6 | 30.5 | 425.5 |
| R. | | 12.69 | 427.43 | |
| | 0.19 | | 429.62 | |
| 375+00 | | 1.9 | 27.7 | 421.7 |
| +40 | | 2.9 | 26.7 | 420.2 |
| 376+00 | | 6.0 | 23.6 | 417.8 |
| +19 | | | 22.6 | 417.1 |
| +75 | | 9.9 | 19.7 | 414.9 |
| 377+00 | | 10.6 | 19.0 | 414.0 |
| +38 Int | | | 17.9 | 412.5 |
| | | | time | time |

| Fill | Av | Dist | |
|------|------|-------|-------|
| 5.1 | 4.85 | 100.0 | 54.98 |
| 6.1 | 5.6 | 100.0 | 67.76 |
| 6.0 | 6.05 | 100.0 | 75.42 |
| 6.9 | 6.45 | 100.0 | 82.24 |
| 5.3 | 6.1 | 92.0 | 70.18 |
| 5.5 | 5.4 | 8.0 | 5.12 |
| | | | |
| | 5.15 | 100.0 | 60.09 |
| 4.8 | 5.25 | 100.0 | 61.79 |
| 5.7 | 5.55 | 100.0 | 66.91 |
| 5.4 | 5.25 | 21.0 | 12.98 |
| 5.1 | 5.05 | 79.0 | 46.13 |
| 5.0 | | | |
| | 5.50 | 100.0 | 66.05 |
| 6.0 | 6.25 | 40.0 | 31.53 |
| 6.5 | 6.15 | 60.0 | 46.28 |
| 5.8 | 5.65 | 19.0 | 13.03 |
| 5.5 | 5.15 | 56.0 | 33.65 |
| 4.8 | 4.9 | 25.0 | 13.96 |
| 5.0 | 5.2 | 38.0 | 23.16 |
| 5.4 | | | |

831.29

| | 429.62 | | | |
|----------|--------|--------|----------|----------|
| 378400 | | 13.6 | 416.0 ✓ | 411.7 ✓ |
| TP | | 12.76 | (416.82) | |
| | 0.83 | 417.69 | | |
| 379400 | | 3.2 | 414.5 ✓ | 410.4 ✓ |
| 380400 | | 4.6 | 13.1 ✓ | 409.1 ✓ |
| 381400 | | 5.8 | 11.9 ✓ | 407.8 ✓ |
| 382400 | | 7.2 | 10.5 ✓ | 406.5 ✓ |
| 383400 | | 7.7 | 10.0 ✓ | 405.2 ✓ |
| 384400 | | 8.3 | 09.4 ✓ | 404.0 ✓ |
| 385400 | | 8.6 | 09.1 ✓ | 402.7 ✓ |
| 386400 | | 11.2 | 06.5 ✓ | 401.4 ✓ |
| 387400 | | 13.1 | 04.6 ✓ | 400.1 ✓ |
| 388400 | | 13.4 | 04.3 ✓ | 398.8 ✓ |
| +14 Int. | | | 04.3 ✓ | 398.6 ✓ |
| 389400 | | 13.1 | 04.6 ✓ | 400.7 ✓ |
| +33 Int. | | | 06.3 ✓ | 401.5 ✓ |
| 390400 | | 8.0 | 09.7 ✓ | 404.7 ✓ |
| +82 | | | 14.8 ✓ | 408.7 ✓ |
| 391400 | | 1.8 | 15.9 ✓ | 409.4 ✓ |
| TP | 12.54 | 429.95 | 0.28 | (417.41) |
| +42 | | | 17.5 ✓ | 411.1 ✓ |
| 392400 | | 10.1 | 19.8 ✓ | 413.2 ✓ |

bmr bmr

| Fill | Av | Dist | |
|------|--------|--------|---------|
| 4.3 | 4.85 ✓ | 62.0 ✓ | 34.09 ✓ |
| | 4.2 ✓ | 100.0 | 43.90 ✓ |
| 4.1 | | | |
| 4.0 | 4.05 ✓ | 100.0 | 41.35 ✓ |
| 4.1 | 4.05 ✓ | 100.0 | 41.35 ✓ |
| 4.0 | 4.05 ✓ | 100.0 | 41.35 ✓ |
| 4.8 | 4.4 ✓ | 100.0 | 47.31 ✓ |
| 5.4 | 5.1 ✓ | 100.0 | 59.24 ✓ |
| 6.4 | 5.9 ✓ | 100.0 | 72.87 ✓ |
| 5.1 | 5.75 ✓ | 100.0 | 70.31 ✓ |
| 4.5 | 4.8 ✓ | 100.0 | 54.13 ✓ |
| | 5.0 ✓ | 100.0 | 57.53 ✓ |
| 5.5 | 5.6 ✓ | 14.0 | 9.49 ✓ |
| 3.9 | 4.8 ✓ | 86.0 | 46.55 ✓ |
| 4.8 | 4.35 ✓ | 33.0 | 15.33 ✓ |
| 5.0 | 4.9 ✓ | 67.0 | 37.41 ✓ |
| 6.0 | 5.5 ✓ | 82.0 | 54.87 ✓ |
| 6.5 | 6.3 | 18.0 | 14.34 ✓ |
| | 6.45 ✓ | 42.0 | 34.54 ✓ |
| 6.8 | | | 48.19 ✓ |
| 6.6 | 6.5 | 58.0 | |

82415
5x

| | 429.95 | | | | |
|------------|--------|-------------------|---------|--|--|
| + 32 Intra | | 420.8 ✓ | 414.3 ✓ | | |
| 393+00 | 7.1 | 422.8 ✓ | 416.1 ✓ | | |
| 394+00 | 4.7 | 25.2 ✓ | 418.7 ✓ | | |
| 395+00 | 1.8 | 28.1 ✓ | 421.3 ✓ | | |
| + 60 | | 429.1 ✓ | 422.9 ✓ | | |
| T.P. | 0.63 | 429.32 | | | |

6.00 435.32

| | | | | | |
|--------------|--------|-------------------|---------|--|--|
| 396+00 | 5.4 | 29.9 ✓ | 423.3 ✓ | | |
| 397+00 | 3.8 | 31.5 ✓ | 424.3 ✓ | | |
| + 40 | | 31.9 ✓ | 424.7 ✓ | | |
| 398+00 | 3.0 | 32.3 ✓ | 424.9 ✓ | | |
| 399+00 | 2.6 | 32.7 ✓ | 425.2 ✓ | | |
| 400+00 | 2.7 | 32.6 ✓ | 425.6 ✓ | | |
| + 08 | | 32.4 ✓ | 425.6 ✓ | | |
| Ch on B.M#43 | + 0.05 | 435.37 | 435.33 | | |

Nov. 25, 1936

517.11
752.11
Mans

| | | | | | |
|--------|------|--------|-------------------|--|--|
| B.M#43 | 0.08 | 435.41 | 435.33 | | |
| 401+00 | 4.9 | 30.5 ✓ | 423.9 ✓ | | |
| 402+00 | 6.8 | 28.6 ✓ | 422.0 ✓ | | |
| + 47 | | 27.2 ✓ | 421.1 ✓ | | |
| 403+00 | 9.4 | 26.0 ✓ | 419.5 ✓ | | |
| 404+00 | 13.0 | 22.4 ✓ | 416.4 ✓ | | |

EMR

EMR

| Fill | Av | Dist | |
|-------|--------|---------|---------|
| 6.5 ✓ | 6.55 ✓ | 32.0 ✓ | 26.86 ✓ |
| 6.7 ✓ | 6.6 ✓ | 68.0 ✓ | 57.66 ✓ |
| 6.5 ✓ | 6.6 ✓ | 100.0 ✓ | 84.79 ✓ |
| 6.8 ✓ | 6.65 ✓ | 100.0 ✓ | 85.65 ✓ |
| 6.2 ✓ | 6.5 ✓ | 60.0 ✓ | 49.85 ✓ |
| | 6.4 ✓ | 40.0 ✓ | 32.56 ✓ |

| | | | |
|-------|--------|---------|---------|
| 6.6 ✓ | | | |
| ✓ | 6.9 ✓ | 100.0 ✓ | 89.91 ✓ |
| 7.2 ✓ | 7.2 ✓ | 40.0 ✓ | 38.00 ✓ |
| 7.4 ✓ | 7.3 ✓ | 60.0 ✓ | 58.03 ✓ |
| 7.5 ✓ | 7.45 ✓ | 100.0 ✓ | 99.28 ✓ |
| ✓ | 7.25 ✓ | 100.0 ✓ | 95.87 ✓ |
| 7.0 ✓ | 6.9 ✓ | 8.0 ✓ | 7.19 ✓ |
| 6.8 ✓ | | | |

6.7 ✓ 92.0 79.58

| | | | |
|-------|--------|---------|---------|
| 6.6 ✓ | 6.6 ✓ | 100.0 ✓ | 84.79 ✓ |
| 6.6 ✓ | | | |
| 6.2 ✓ | 6.45 ✓ | 47.0 ✓ | 38.65 ✓ |
| 6.5 ✓ | 6.45 ✓ | 53.0 ✓ | 43.14 ✓ |
| 6.0 ✓ | 6.25 ✓ | 100.0 ✓ | 78.83 ✓ |

105064

| | 435.41 | | | |
|---|--------|--------|----------|--------|
| TP | | 12.63 | (422.78) | |
| | 1.80 | 424.58 | | |
| 405400 | | 5.1 | 19.5 | 413.4 |
| +76 Interpolate | | | 18.7 | 411.1 |
| 406400 | | 6.2 | 18.4 | 411.0 |
| 407400 | | 7.2 | 17.4 | 410.9 |
| 408400 | | 7.3 | 17.3 | 410.8 |
| 409100 | | 4.7 | 19.9 | 410.7 |
| +40 | | 3.9 | 20.7 | 410.6 |
| 410400 | | 3.8 | 20.8 | 410.6 |
| +40 | | 4.9 | 19.7 | 410.4 |
| +53 | | | 19.2 | 410.4 |
| 411400 | | 7.1 | 17.85 | 408.7 |
| +23 | | 7.9 | 16.7 | 407.8 |
| ck. 00 B.M. 114 | | 7.49 | (417.07) | 417.00 |
| 411742 | | | 11.8 | 405.7 |
| 411772 } Inter | | 13.1 | 11.5 | 405.60 |
| 411780 } ✓ | | | 11.3 | 405.7 |
| TP | | 12.22 | (412.30) | |
| 411780 ⁶⁵ = 411781 ⁰¹ | | | | |
| | 0.98 | 413.28 | | |
| (Equalizer) | | | | |
| 412400 | | 2.5 | 10.8 | 405.0 |
| +43 | | | 9.1 | 403.4 |
| | | | | Emc. |

| Fill | AV | Dist | |
|------|-------|-------|--------|
| | 6.05 | 100.0 | 75.42 |
| 6.1 | 6.85 | 76.0 | 67.68 |
| 7.4 | 7.5 | 24.0 | 24.03 |
| 6.5 | 6.95 | 100.0 | 90.76 |
| 6.5 | 6.5 | 100.0 | 83.09 |
| | 7.85 | 100.0 | 106.09 |
| 9.2 | 9.65 | 40.0 | 54.70 |
| 10.1 | 10.15 | 60.0 | 87.17 |
| 10.2 | 9.75 | 40.0 | 55.98 |
| 9.3 | 9.05 | 13.0 | 16.45 |
| 8.8 | 8.85 | 47.0 | 57.47 |
| 8.9 | 8.85 | 23.0 | 28.32 |
| | 7.5 | 51.2 | 51.27 |
| 6.1 | | | |
| 5.6 | | | |
| | 5.7 | 19.37 | 13.45 |
| 5.8 | 5.75 | 43.0 | 30.23 |
| 5.7 | | | 841.51 |

413.28

| | | | |
|--------|------|----------|-------|
| 412+50 | 4.5 | 08.8 | 403.4 |
| 413+00 | 5.4 | 07.9 | 403.2 |
| 414+00 | 4.7 | 08.6 | 402.8 |
| 415+00 | 4.4 | 08.9 | 402.4 |
| 416+00 | 4.8 | 08.5 | 402.0 |
| 417+00 | 6.2 | 07.1 | 401.6 |
| +45 | 6.9 | 06.4 | 401.4 |
| +55 | | 06.7 | 401.4 |
| 418+00 | 5.1 | 08.2 | 401.3 |
| +35 | 4.7 | 08.6 | 401.3 |
| 419+00 | 4.2 | 09.1 | 401.2 |
| 420+00 | 5.6 | 07.7 | 401.1 |
| 421+00 | 5.8 | 07.5 | 401.0 |
| 422+00 | 4.7 | 08.6 | 400.9 |
| T.P. | 5.00 | (408.28) | |

6.12 414.40

(Equation) $4 \cdot 22 + 210^2 = 422 + 3668$

| | | | |
|--------|-----|------|-------|
| 422+50 | 4.8 | 09.6 | 400.9 |
| +88.8 | 3.8 | 10.6 | 400.9 |

GMR

39

| Fill | AV | Dist | |
|------|------|-------|-------|
| 5.4 | 5.55 | 7.0 | 4.68 |
| 4.7 | 5.05 | 50.0 | 29.20 |
| 5.8 | 5.25 | 100.0 | 61.79 |
| 6.5 | 6.15 | 100.0 | 77.13 |
| 6.5 | 6.5 | 100.0 | 83.09 |
| 5.5 | 6.0 | 100.0 | 74.57 |
| 5.0 | 5.25 | 45.0 | 27.81 |
| 5.3 | 5.15 | 10.0 | 6.00 |
| 6.9 | 6.10 | 45.0 | 34.33 |
| 7.3 | 7.1 | 35.0 | 32.66 |
| 7.9 | 7.6 | 65.0 | 66.19 |
| 6.6 | 7.25 | 100.0 | 95.87 |
| 6.5 | 6.55 | 100.0 | 83.94 |
| 7.7 | 7.1 | 100.0 | 93.31 |
| - | - | - | - |
| - | 8.2 | 34.34 | 38.48 |
| - | - | - | - |
| 8.7 | 9.2 | 38.8 | 50.08 |
| 9.7 | | | |
| | | | |

859.13

Note - These Erosion marks
to get sufficient pages past
End

414.40

| | | | |
|--|-------|----------|-------|
| 423+07.4 | 4.0 | 410.4 | 400.8 |
| +16.78 Interpolate | | 410.5 | 400.8 |
| +19.8 Anchor | 3.8 | 410.6 | 400.8 |
| +22.78 | | 410.6 | 400.8 |
| 423+25 ¹⁵ - 423+27 ²⁸ Equation | | 410.7 | 400.8 |
| +62 Int | | 09.5 | 401.8 |
| 424+00 | 5.7 | 08.7 | 400.2 |
| +22 | | 07.8 | 399.9 |
| 425+00 | 9.9 | 04.5 | 397.6 |
| +42 Interpolate Grade Break | | 03.7 | 396.3 |
| T.P. | 10.11 | (404.29) | |
| 3.21 | | 407.50 | |

| | | | |
|--------------|-----|------|--------|
| 426+00 | 4.9 | 02.6 | 395.37 |
| +31.3 | 5.3 | 02.2 | 395.6 |
| +32.1 Anchor | | 02.2 | 395.6 |
| +42.8 | | 02.2 | 395.5 |
| +46.0 | 5.3 | 02.2 | 395.5 |
| +75 | 4.8 | 02.7 | 95.3 |
| 427+00 | 5.3 | 02.2 | 95.1 |
| +07 | 5.5 | 02.0 | 95.0 |

Ch. on County B.M.

7.30 400.20 400.22

11/24/56
el. in
217

| | | | |
|------|------|-------|-------|
| Fill | Av | Dist | |
| 9.6 | 9.65 | 18.6 | 25.44 |
| 9.7 | 9.65 | 9.38 | 12.83 |
| | | (6.0) | None |
| 9.8 | 9.85 | 2.37 | 3.32 |
| 9.9 | 9.3 | 34.72 | 45.41 |
| 8.7 | 8.6 | 38.0 | 45.17 |
| 8.5 | 8.2 | 22.0 | 24.65 |
| 7.9 | 7.4 | 78.0 | 76.77 |
| 7.4 | 7.15 | 42.0 | 39.55 |
| | 7.05 | 58.0 | 53.63 |

| | | | |
|-----|------|--------|-------|
| 6.7 | 6.65 | 32.1 | 27.49 |
| 6.6 | | (10.7) | None |
| 6.7 | 7.05 | 32.2 | 29.77 |
| 7.4 | | | |
| 7.1 | 7.25 | 25.0 | 23.97 |
| 7.0 | 7.05 | 7.0 | 6.47 |

414.47

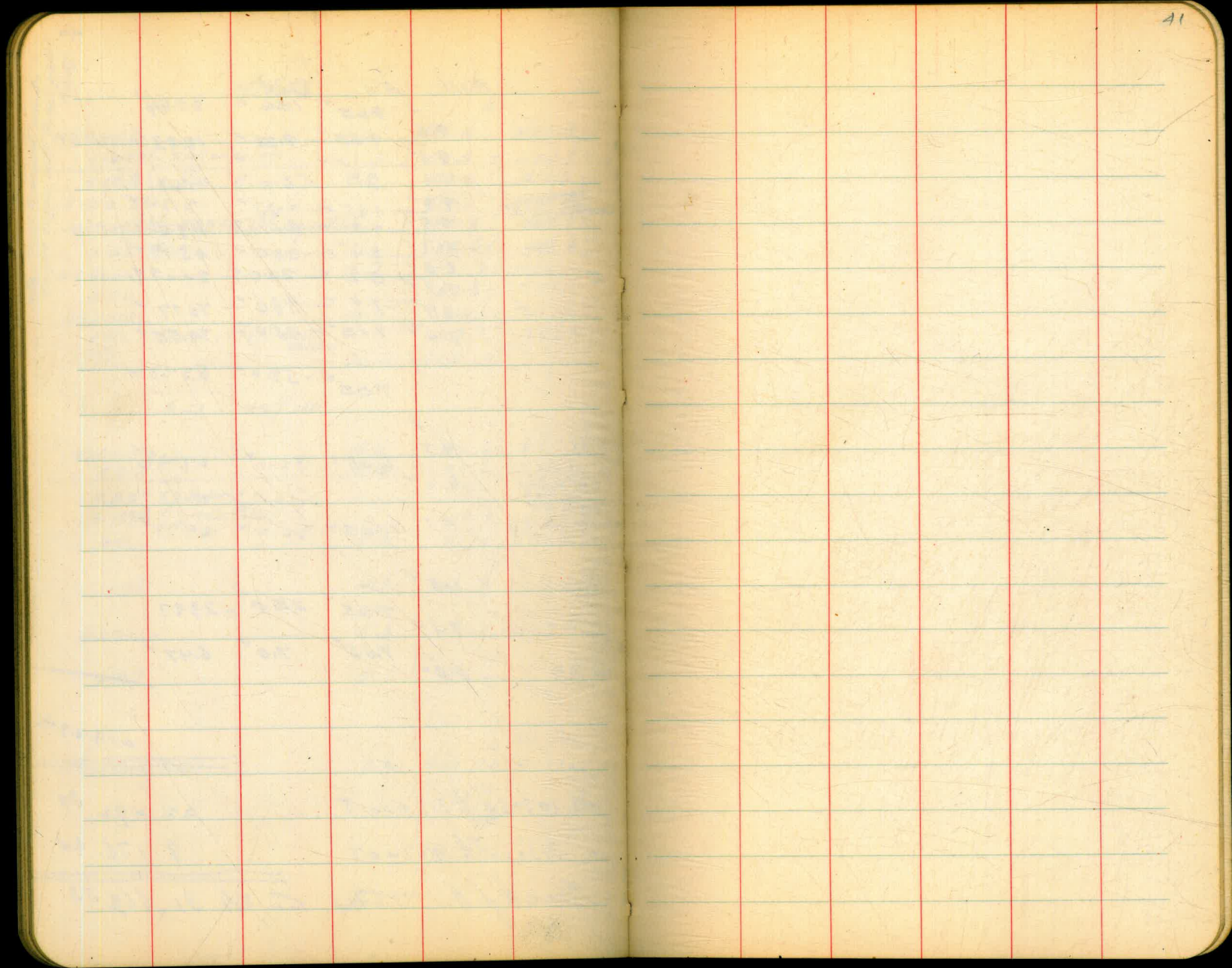
to 103+54 to 313+00.5

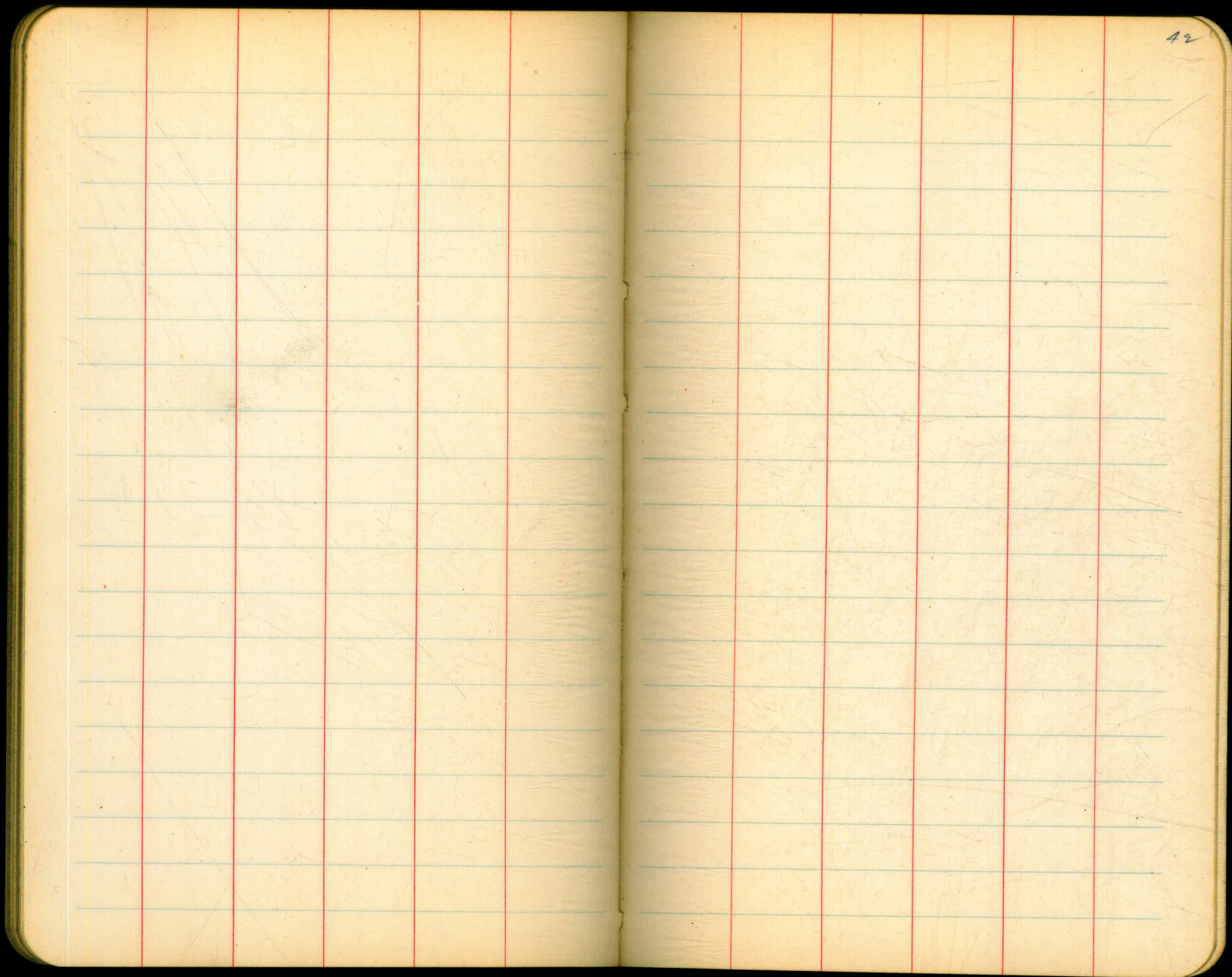
22 492.89

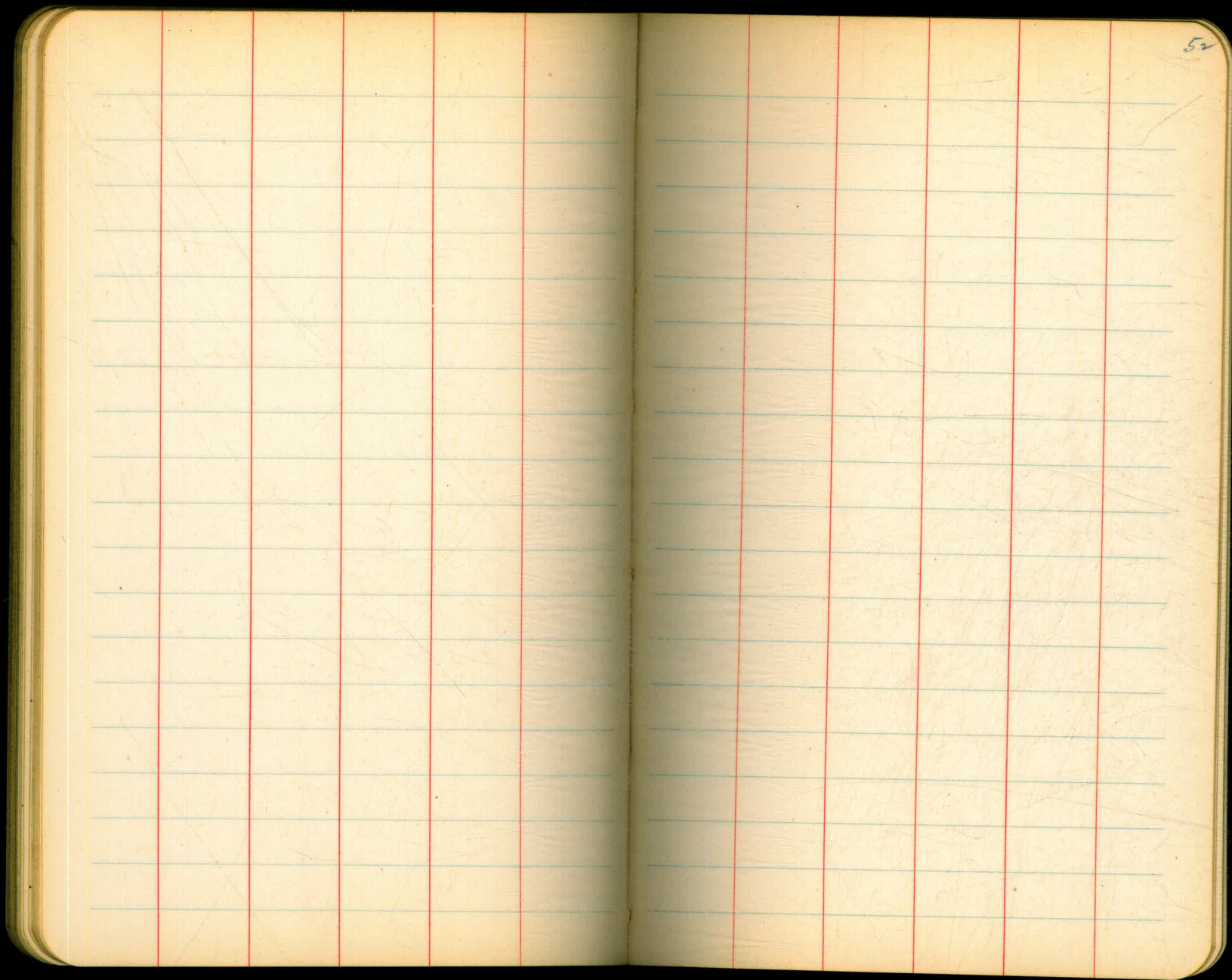
" 313+00.5 to 427+07

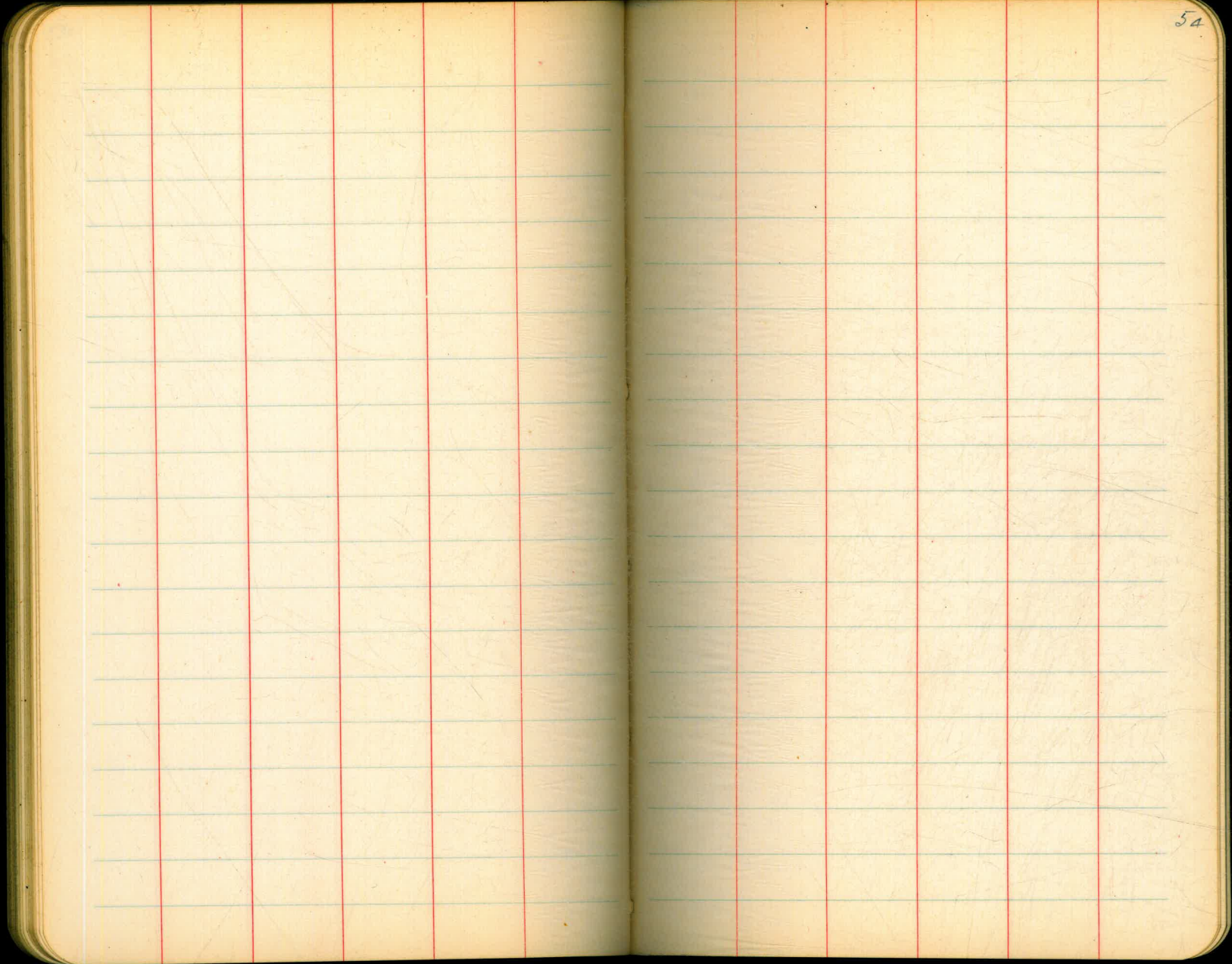
9 176.64

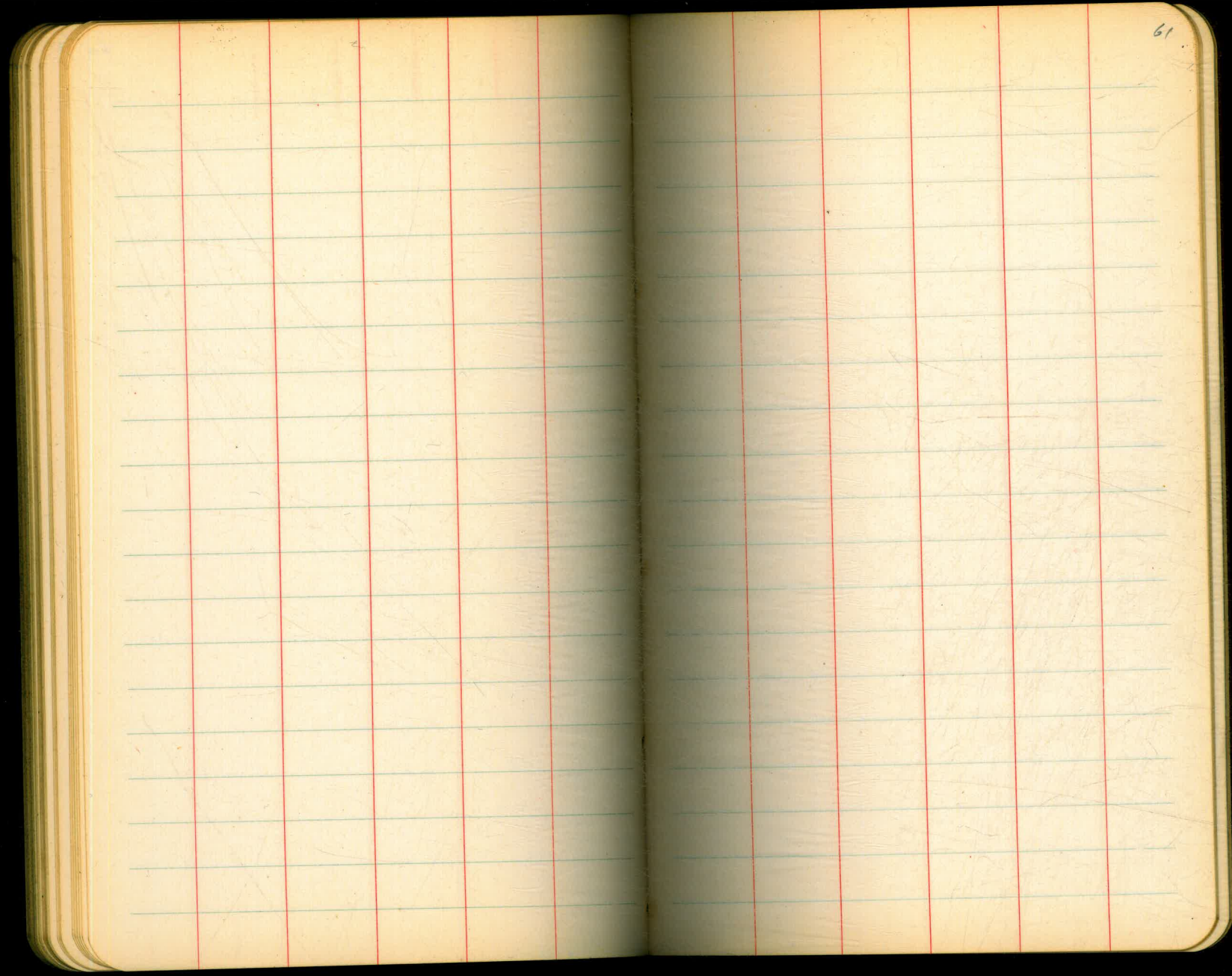
Backfill Total Cu Yds 31,669.53

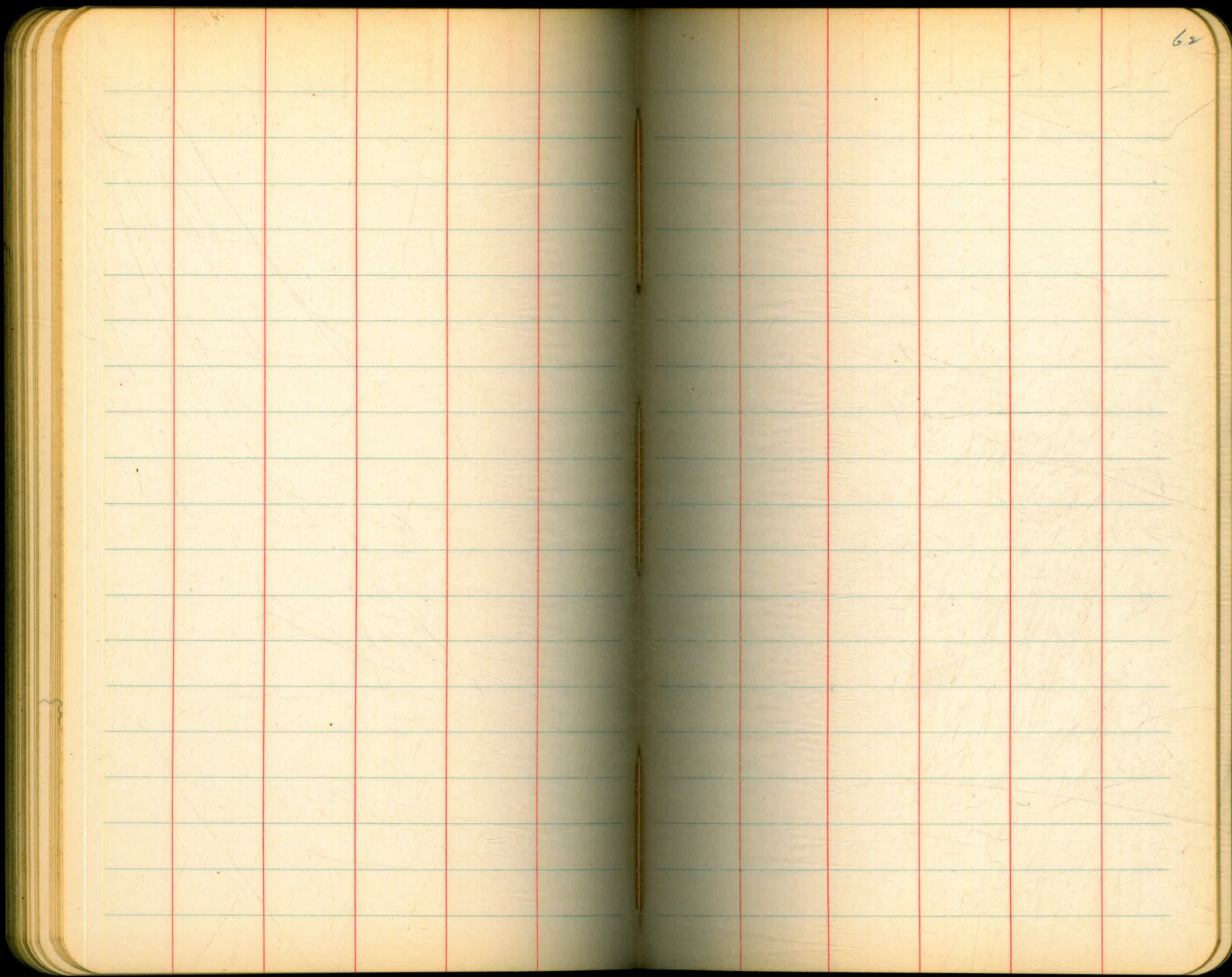


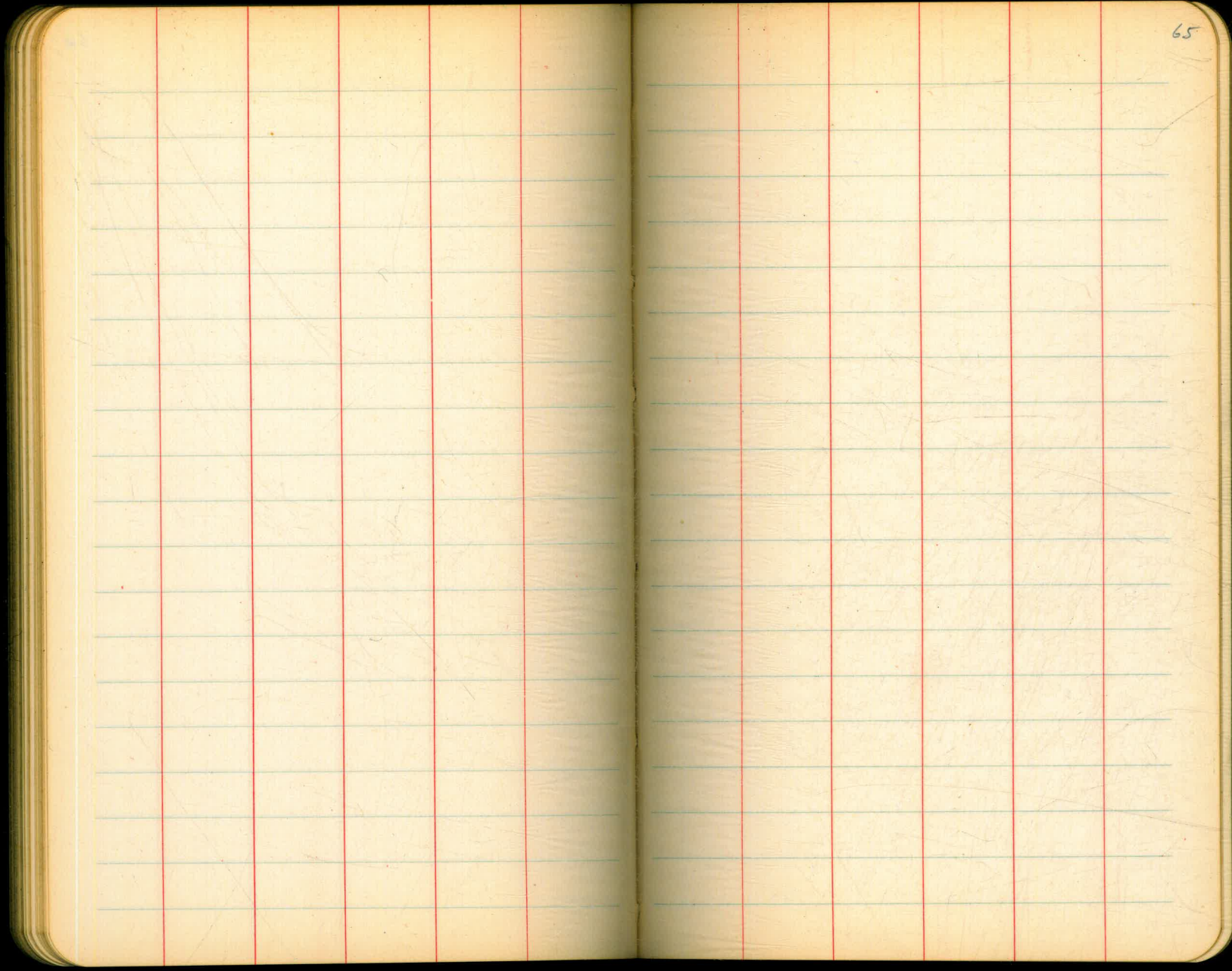


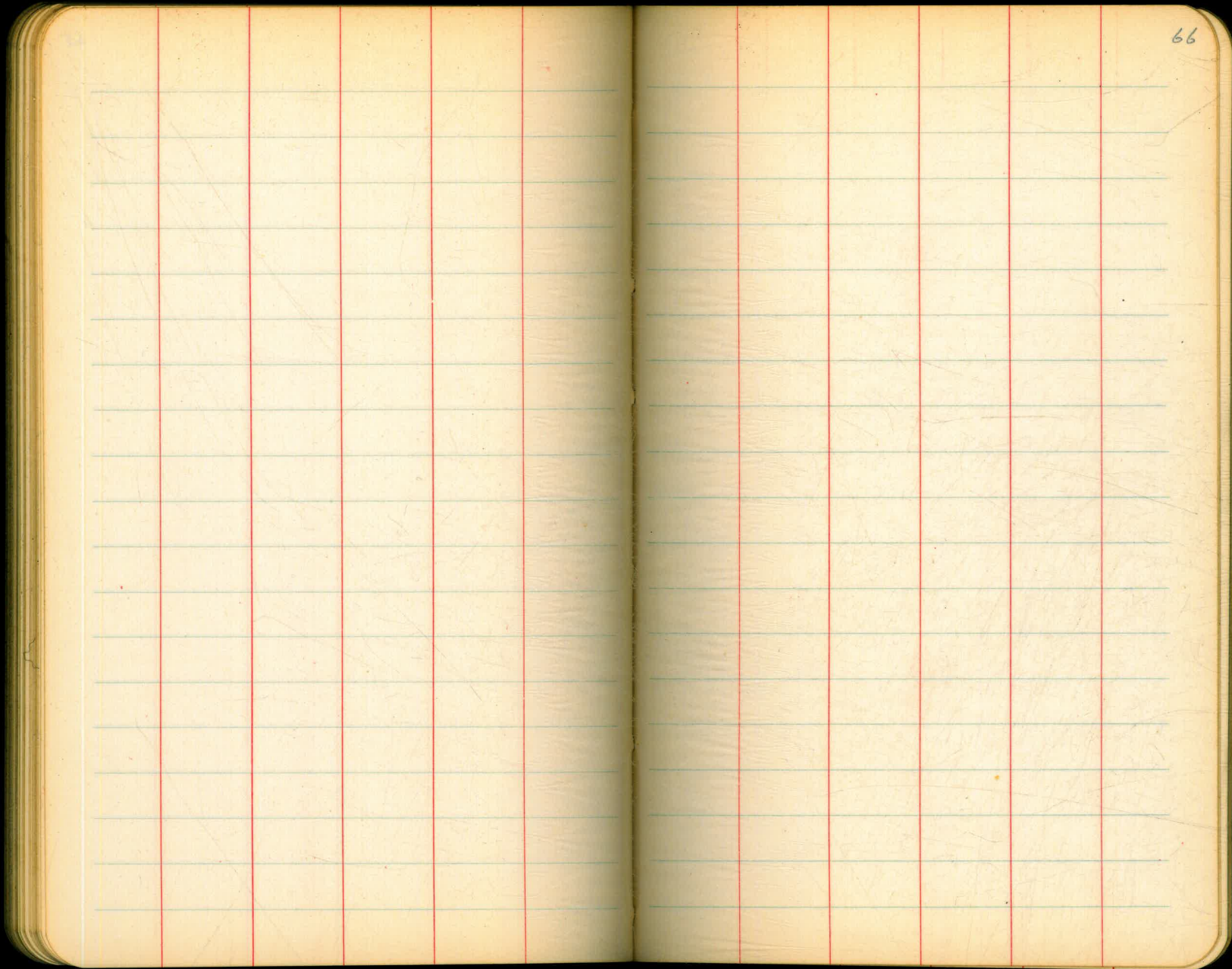




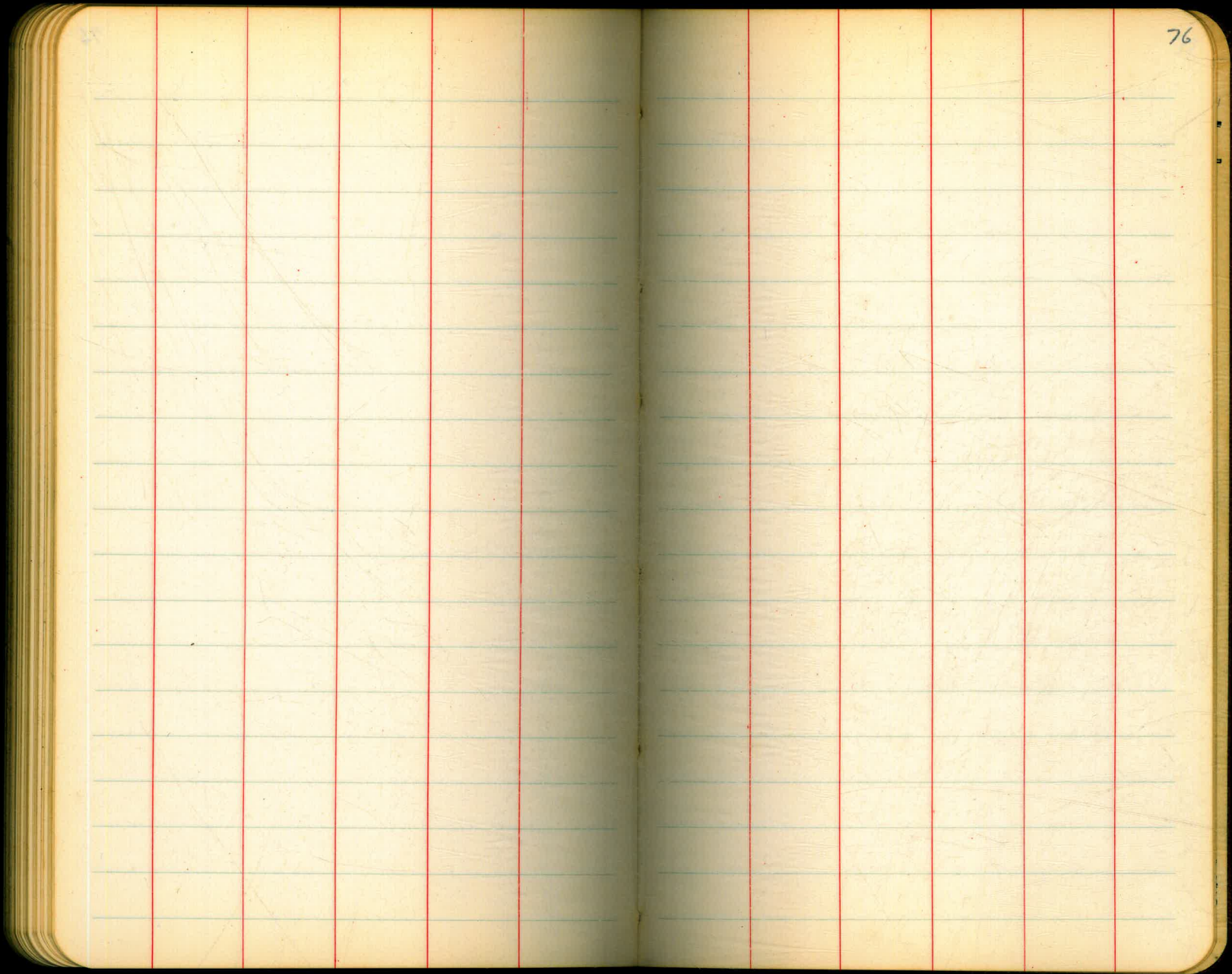


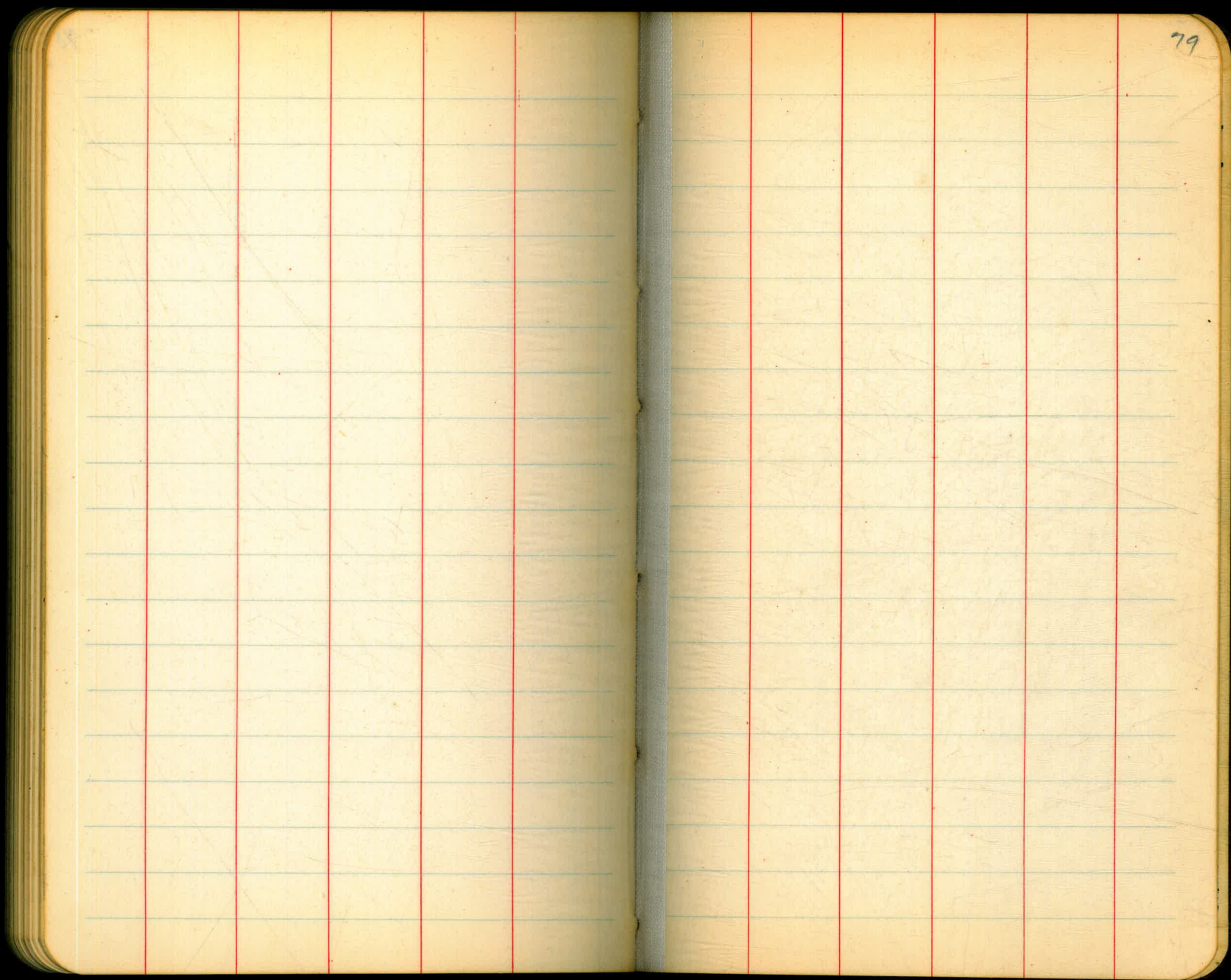






The image shows an open notebook with two facing pages. Both pages are cream-colored and feature light blue horizontal ruling. Each page is divided into two columns by a vertical red margin line. The right page has the number '72' written in the top right corner. The notebook is bound in the center, and the pages appear slightly aged with some minor discoloration and faint smudges.





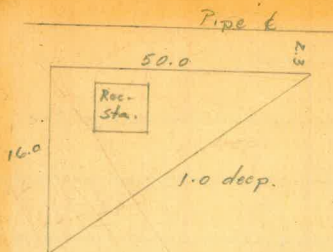
79

11-17-36
 Backfill
 From 103+54
 To 256+00 IAW
 EML

| | | | | | | |
|---|---|---|---|---|---|--|
| | 9 | 1 | 9 | 4 | 4 | |
| 1 | 0 | 7 | 8 | 0 | 8 | |
| 1 | 3 | 2 | 7 | 0 | 9 | |
| 1 | 3 | 0 | 4 | 3 | 8 | |
| | 7 | 9 | 8 | 5 | 5 | |
| 1 | 0 | 5 | 4 | 9 | 6 | |
| 1 | 1 | 2 | 6 | 8 | 7 | |
| 1 | 9 | 7 | 9 | 6 | 4 | |
| 1 | 6 | 9 | 6 | 8 | 4 | |
| 1 | 4 | 6 | 7 | 5 | 9 | |
| 1 | 2 | 7 | 8 | 5 | 5 | |
| 1 | 3 | 8 | 0 | 0 | 0 | |
| | | 6 | 8 | 6 | 9 | |
| | | 7 | 5 | 9 | 4 | |

1 5 5 3 6 6 0 T

| | | | | | | |
|---|-------|---|---|---|---|-------|
| | 9 | 1 | 9 | 4 | 4 | T |
| 1 | 0 | 7 | 8 | 0 | 8 | ✓ |
| 1 | 3 | 2 | 7 | 0 | 9 | ✓ |
| 1 | 3 | 0 | 4 | 3 | 8 | ✓ |
| | 7 | 9 | 8 | 5 | 5 | ✓ |
| 1 | 0 | 5 | 4 | 9 | 6 | ✓ |
| 1 | 1 | 2 | 6 | 8 | 7 | ✓ |
| 1 | 9 | 6 | 9 | 7 | 4 | ✓ .10 |
| | | 1 | 0 | 0 | 0 | ✓ |
| 1 | 6 | 9 | 6 | 8 | 4 | ✓ |
| 1 | 4 | 6 | 7 | 5 | 9 | ✓ |
| 1 | 2 | 7 | 8 | 5 | 5 | ✓ |
| 1 | 3 | 8 | 0 | 0 | 0 | ✓ |
| | | 6 | 8 | 6 | 9 | ✓ |
| | | 7 | 5 | 9 | 4 | ✓ |
| | 1 | 5 | 5 | 4 | 2 | 9 2 T |
| | | | | | | ✓ |
| | | | | | | 10 |
| | <hr/> | | | | | |
| | 1 | 5 | 5 | 2 | 6 | 60 ✓ |



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½

For Single Track Embankment.

| H | 0 | .1 | .2 | .3 | .4 | .5 | .6 | .7 | .8 | .9 | H |
|----|------|------|------|------|------|------|------|------|------|------|----|
| 0 | 8.0 | 8.2 | 8.3 | 8.5 | 8.6 | 8.8 | 8.9 | 9.1 | 9.2 | 9.4 | 0 |
| 1 | 9.5 | 9.7 | 9.8 | 10.0 | 10.1 | 10.3 | 10.4 | 10.6 | 10.7 | 10.9 | 1 |
| 2 | 11.0 | 11.2 | 11.3 | 11.5 | 11.6 | 11.8 | 11.9 | 12.1 | 12.2 | 12.4 | 2 |
| 3 | 12.5 | 12.7 | 12.8 | 13.0 | 13.1 | 13.3 | 13.4 | 13.6 | 13.7 | 13.9 | 3 |
| 4 | 14.0 | 14.2 | 14.3 | 14.5 | 14.6 | 14.8 | 14.9 | 15.1 | 15.2 | 15.4 | 4 |
| 5 | 15.5 | 15.7 | 15.8 | 16.0 | 16.1 | 16.3 | 16.4 | 16.6 | 16.7 | 16.9 | 5 |
| 6 | 17.0 | 17.2 | 17.3 | 17.5 | 17.6 | 17.8 | 17.9 | 18.1 | 18.2 | 18.4 | 6 |
| 7 | 18.5 | 18.7 | 18.8 | 19.0 | 19.1 | 19.3 | 19.4 | 19.6 | 19.7 | 19.9 | 7 |
| 8 | 20.0 | 20.2 | 20.3 | 20.5 | 20.6 | 20.8 | 20.9 | 21.1 | 21.2 | 21.4 | 8 |
| 9 | 21.5 | 21.7 | 21.8 | 22.0 | 22.1 | 22.3 | 22.4 | 22.6 | 22.7 | 22.9 | 9 |
| 10 | 23.0 | 23.2 | 23.3 | 23.5 | 23.6 | 23.8 | 23.9 | 24.1 | 24.2 | 24.4 | 10 |
| 11 | 24.5 | 24.7 | 24.8 | 25.0 | 25.1 | 25.3 | 25.4 | 25.6 | 25.7 | 25.9 | 11 |
| 12 | 26.0 | 26.2 | 26.3 | 26.5 | 26.6 | 26.8 | 26.9 | 27.1 | 27.2 | 27.4 | 12 |
| 13 | 27.5 | 27.7 | 27.8 | 28.0 | 28.1 | 28.3 | 28.4 | 28.6 | 28.7 | 28.9 | 13 |
| 14 | 29.0 | 29.2 | 29.3 | 29.5 | 29.6 | 29.8 | 29.9 | 30.1 | 30.2 | 30.4 | 14 |
| 15 | 30.5 | 30.7 | 30.8 | 31.0 | 31.1 | 31.3 | 31.4 | 31.6 | 31.7 | 31.9 | 15 |
| 16 | 32.0 | 32.2 | 32.3 | 32.5 | 32.6 | 32.8 | 32.9 | 33.1 | 33.2 | 33.4 | 16 |
| 17 | 33.5 | 33.7 | 33.8 | 34.0 | 34.1 | 34.3 | 34.4 | 34.6 | 34.7 | 34.9 | 17 |
| 18 | 35.0 | 35.2 | 35.3 | 35.5 | 35.6 | 35.8 | 35.9 | 36.1 | 36.2 | 36.4 | 18 |
| 19 | 36.5 | 36.7 | 36.8 | 37.0 | 37.1 | 37.3 | 37.4 | 37.6 | 37.7 | 37.9 | 19 |
| 20 | 38.0 | 38.2 | 38.3 | 38.5 | 38.6 | 38.8 | 38.9 | 39.1 | 39.2 | 39.4 | 20 |
| 21 | 39.5 | 39.7 | 39.8 | 40.0 | 40.1 | 40.3 | 40.4 | 40.6 | 40.7 | 40.9 | 21 |
| 22 | 41.0 | 41.2 | 41.3 | 41.5 | 41.6 | 41.8 | 41.9 | 42.1 | 42.2 | 42.4 | 22 |
| 23 | 42.5 | 42.7 | 42.8 | 43.0 | 43.1 | 43.3 | 43.4 | 43.6 | 43.7 | 43.9 | 23 |
| 24 | 44.0 | 44.2 | 44.3 | 44.5 | 44.6 | 44.8 | 44.9 | 45.1 | 45.2 | 45.4 | 24 |
| 25 | 45.5 | 45.7 | 45.8 | 46.0 | 46.1 | 46.3 | 46.4 | 46.6 | 46.7 | 46.9 | 25 |
| 26 | 47.0 | 47.2 | 47.3 | 47.5 | 47.6 | 47.8 | 47.9 | 48.1 | 48.2 | 48.4 | 26 |
| 27 | 48.5 | 48.7 | 48.8 | 49.0 | 49.1 | 49.3 | 49.4 | 49.6 | 49.7 | 49.9 | 27 |
| 28 | 50.0 | 50.2 | 50.3 | 50.5 | 50.6 | 50.8 | 50.9 | 51.1 | 51.2 | 51.4 | 28 |
| 29 | 51.5 | 51.7 | 51.8 | 52.0 | 52.1 | 52.3 | 52.4 | 52.6 | 52.7 | 52.9 | 29 |
| 30 | 53.0 | 53.2 | 53.3 | 53.5 | 53.6 | 53.8 | 53.9 | 54.1 | 54.2 | 54.4 | 30 |
| 31 | 54.5 | 54.7 | 54.8 | 55.0 | 55.1 | 55.3 | 55.4 | 55.6 | 55.7 | 55.9 | 31 |
| 32 | 56.0 | 56.2 | 56.3 | 56.5 | 56.6 | 56.8 | 56.9 | 57.1 | 57.2 | 57.4 | 32 |
| 33 | 57.5 | 57.7 | 57.8 | 58.0 | 58.1 | 58.3 | 58.4 | 58.6 | 58.7 | 58.9 | 33 |
| 34 | 59.0 | 59.2 | 59.3 | 59.5 | 59.6 | 59.8 | 59.9 | 60.1 | 60.2 | 60.4 | 34 |
| 35 | 60.5 | 60.7 | 60.8 | 61.0 | 61.1 | 61.3 | 61.4 | 61.6 | 61.7 | 61.9 | 35 |
| 36 | 62.0 | 62.2 | 62.3 | 62.5 | 62.6 | 62.8 | 62.9 | 63.1 | 63.2 | 63.4 | 36 |
| 37 | 63.5 | 63.7 | 63.8 | 64.0 | 64.1 | 64.3 | 64.4 | 64.6 | 64.7 | 64.9 | 37 |
| 38 | 65.0 | 65.2 | 65.3 | 65.5 | 65.6 | 65.8 | 65.9 | 66.1 | 66.2 | 66.4 | 38 |
| 39 | 66.5 | 66.7 | 66.8 | 67.0 | 67.1 | 67.3 | 67.4 | 67.6 | 67.7 | 67.9 | 39 |
| 40 | 68.0 | 68.2 | 68.3 | 68.5 | 68.6 | 68.8 | 68.9 | 69.1 | 69.2 | 69.4 | 40 |

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be $41.9 + (20 - 16) \div 2$ or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.