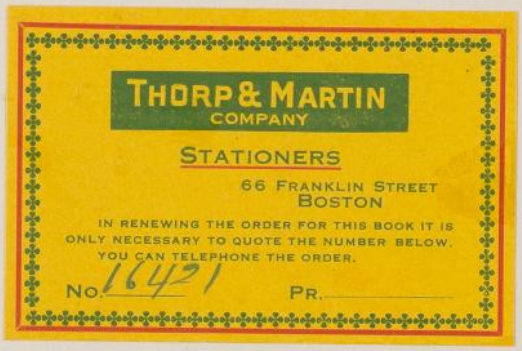
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J. Maulbetsch

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Spectrophotometry –

Schilt measures –

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2

Feb 26, 32

I 50 580

69	572					4.2
	6.0	6.9	1.8	2.7	66.6	1.824
	5.9		1.7		63.0	1.800
	6.0		1.8		66.6	1.824
	6.1	6.9	1.9		70.4	1.848
69	510					4.2
6.9	5.1		.9	2.6	34.6	1.540
	5.1		.9		34.6	1.540
	5.4		1.2		46.2	1.665
6.7	5.5		1.3		50.0	1.699
69	509					4.0
	4.7	6.65	.7	2.65	26.4	1.422
	4.8		.8		30.2	1.480
	5.0		1.0		37.7	1.576
	4.9	6.60	.9		34.0	1.522
69	508					4.1
6.60	5.1		1.0	2.55	39.2	1.594
	5.0		.9		35.3	1.548
	5.2		1.1		43.2	1.635
6.70	5.4		1.9		51.0	1.708
69	506					4.1
	5.3	6.8	1.2	2.75	43.7	1.641
	5.3		1.2		43.7	1.641
	5.4		1.3		47.2	1.674
	5.9	6.9	1.8		65.5	1.816

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Feb 27'32

I 50560 67 564 h f. 3.3

5.0	6.1	1.7	2.9	58.6	1.768
4.9		1.6		55.2	1.742
5.2		1.9		65.5⁻	1.816
5.3	6.3	2.0		69.0	1.838

67 560 ✓ b 3.6

3.9	6.3	.3	2.7	11.1	1.045⁻
3.9		.3		11.1	
3.9		.3			
3.9	6.3	.3			

67 559 ff 3.7

5.2	6.6	1.5⁻	2.95	55.6	1.745⁻
5.2		1.5		55.6	1.745
5.4		1.7		57.6	1.760
5.5⁻	6.7	1.8		61.0	1.785⁻

67 549 ✓ 3.7

4.5	6.7	.8	3.0	26.7	1.426
4.5⁻		.8		26.7	1.426
4.7		1.0		33.4	1.524
4.8	6.7	1.1		36.7	1.564

67 545 h 3.9

6.6	4.0	.1	
	4.2	.3	
	4.1	.2	
6.4⁻	4.2		

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67 S44 ✓ 3.9

4.9	6.6	1.0	2.65	37.8	1.577
4.8		.9		34.0	1.531
5.2		1.3		49.0	1.690
5.4	6.5⁻	1.5		56.6	1.753

67 S42 ✓ 3.9

4.6	6.6	.7	2.7	25.9	1.413
4.4		.5		18.5	1.267
4.7		.8		29.6	1.471
5.0	6.6	1.1		40.7	1.610

67 S38 ✓ 3.9

4.5⁻	6.65⁻	.6	2.8	21.4	1.330
4.55⁻		.65⁻		23.2	1.366
4.90		1.0		35.7	1.552
5.00	6.75⁻	1.1		39.3	1.594

67 S30 -H- 3.95—

5.5⁻	6.80	1.55	2.85	54.4	1.736
5.45⁻		1.50		52.6	1.721
5.90		1.95		68.5⁻	1.836
5.90	6.85⁻	1.95		68.5	1.836

67 S34 ✓ 4.1

4.8	6.7	.7	2.6	26.9	1.430
4.7		.6		23.1	1.364
5.3		1.2		46.2	1.664
5.4	6.7	1.3		50.0	1.699

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✓ 67 S57 4.0

4.7	6.7	.7	2.7	25.9	1.413
4.7		.7			
4.7		.7			
4.7	6.7	.7			

68 S~~3~~4 4.0

5.4	6.7	1.4	2.7	51.9	1.715
5.4		1.4			
5.6		1.6		59.3	1.773
5.7	6.7	1.7		63.0	1.799

68 S34 ✓ 4.1

5.2	6.9	1.2	2.8	42.8	1.632
5.4		1.3		46.5	1.668
5.5		1.4		50.0	1.699
5.6	6.9	1.5		53.6	1.729

68 S33 ✓ 4.1

4.9	6.8	.8	2.7	29.6	1.471
4.7		.6		22.2	1.346
4.8		.7		25.9	1.413
4.9	6.8	.8		29.6	1.471

68 S32 ~~mj~~ 4.1

5.1	6.8	1.0	2.7	37.1	1.569
5.2		1.1		40.7	1.610
5.2		1.1			1.610
5.2	6.8	1.1			1.610

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69 514 ✓ 8.9

5.2	6.7	1.3	2.85	45.6	1.658
5.4		1.5		52.7	1.722
5.7		1.8		63.2	1.801
5.8	6.8	1.9		66.6	1.824

69 510 ✓ 3.8

5.0	6.7	1.2	2.85	42.2	1.624
5.1		1.3		45.6	1.659
5.2		1.4		49.2	1.692
5.3	6.6	1.5		52.6	1.721

69 509 ✓ 4.0

4.9	6.7	.9	2.65	34.0	1.532
4.8		.8		30.2	1.480
4.8		.8			
4.8	6.6	.8			

69 508 ✓ 4.0

6.6	5.0	1.0	2.6	38.5	1.586
	5.0	1.0			1.586
	5.2	1.2		46.2	1.664
6.6	5.6	1.6		61.5	1.788

69 506 ✓ 4.0

5.0	6.7	1.0	2.7	37.0	1.568
5.1		1.1		40.7	1.609
5.3		1.3		48.2	1.682
5.5	6.7	1.5		55.5	1.744

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SD 5320

69 499 ✓ 3.7

5:0	6.2	1.3	2.7	48.2	1.682
4.8		1.1		40.7	1.610
5.4		1.7		63.0	1.800
5:5	6.6	1.8		66.7	1.824

69 494 ✓ used as standard 8.9 A3 0.9

5:4	6.4	1.5	2.5	60.0	1.778
5:5		1.6		64.0	1.806
5:5⁻		1.6		64.0	1.806
5:5⁻		1.6		64.0	1.806

69 490 ✓ 4.1

5:4	6.7	1.3	2.7	48.2	1.683
5:4		1.3		48.2	1.683
5:8		1.7		63.0	1.800
6.9	6.1	2.0		74.1	1.870

69 480 ✓ 4.4

5:6	6.8	1.2	2.45	49.0	1.690
5:6		1.2		49.0	1.690
5.5⁻		1.1		45.0	1.654
6.9	5:9	1.5		61.2	1.786

69 478 ✓ 4.4

5:8	7.2	1.4	2.85	49.2	1.692
6.0		1.6		52.1	1.750
6.0		1.6		52.1	1.750
6.1	7.3	1.7		59.7	1.776

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69 472 ✓ 4.5

5.3	7.20	.8	2.6	30.8	1.490
5.2		.7		26.9	1.430
5.3		.8		30.8	1.489
5.6	7.0	1.1		42.3	1.626

69 467 ✓ 4.6

5.6	7.3	1.0	2.6	48.5	1.686	C
5.5		.9		34.6	1.539	
5.7		1.1		42.3	1.626	
5.8	7.1	1.2		46.2	1.664	

69 464 ✓ 4.4

5.4	7.2	1.0	2.85	35.2	1.547
5.3		.9		31.6	1.500
5.3		.9			
5.3	7.3	.9			

69 463 ✓ 4.7

6.1	7.3	1.4	2.65	52.8	1.723
6.0		1.3		49.0	1.690
6.3		1.6		60.4	1.781
6.5	7.4	1.8		68.0	1.833

69 462 ✓ 4.7

5.6	7.4	.9	2.7	33.3	1.522
5.7		1.0		37.1	1.570
5.7		1.0		37.1	1.570
6.1	7.4	1.4		51.8	1.715

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70 537✓ 5.0

5.5	7.5	.5	2.3	21.7	1.336
5.4		.4		17.4	1.240
5.5		.5		21.7	1.336
5.7	7.1	.7		30.4	1.483

70 541✓ Aug. 2 4.9

5.9	7.5	1.0	2.5	40.0	1.602
6.00		1.1		44.0	1.644
6.10		1.2		48.0	1.682
6.30	7.3	1.4		56.0	1.748

70 538✓ 4.6

6.0	7.4	1.4	2.75	51.0	1.708
6.1		1.5		54.5	1.736
6.3		1.7		61.8	1.791
6.4	7.3	1.8		65.5	1.816

70 536✓ 4.7

5.9	7.3	1.2	2.75	43.6	1.640
5.9		1.2		43.6	1.640
6.3		1.6		58.2	1.765
6.6	7.6	1.9		69.1	1.840

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I 50 526 70 528✓ 4.0

5.7	6.95	1.1	2.95	37.3	1.57
5.05		1.0		33.9	1.53
5.10		1.1		37.3	1.57
5.40		1.4		47.5	1.68
5.70	6.9	1.7		57.6	1.76

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70 5-23↓ 4.2

5.1	6.8	.9	2.65	34.0	1.532
4.9		.7		26.4	1.422
5.0		.8		30.2	1.480
5.4	6.9	1.2		45.3	1.656

70 5-22↓ 4.2

6.7	5.2	1.0	2.6	38.5	1.586
	5.2	1.0		38.5	1.586
	5.4	1.2		46.2	1.664
6.9	5.5	1.3		50.0	1.699

70 5-21↓ 4.3

7.1	5.4	1.1	2.75	40.0	1.602
	5.5	1.2		43.7	1.640
	5.7	1.4		51.0	1.708
7.0	5.7	1.4		57.0	1.708

70 5-18↓ 4.4

5.7	7.1	1.3	2.7	48.2	1.683
5.7		1.3		48.2	1.683
5.8		1.4		51.8	1.714
5.9	7.1	1.5		55.5	1.744

71484↓ 4.4

5.4	7.1	1.0	2.75	36.4	1.561
5.3		.9		32.8	1.516
5.4		1.0		36.4	1.561
5.7	7.2	1.3		47.3	1.675

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Mar 1 '32

5060S

1

66 594 not found

66 548	8.65					3.7
~~5.8~~	4.7	6.3	1.0	2.65	37.8	1.578
	4.9		1.2		45.3	1.656
	5.0		1.3		49.1	1.692
	5.0	6.4	1.3		49.1	1.692

66 583	9.35				4.2
6.5	5.7	1.5	2.45	61.2	1.786
	5.9	1.7		69.5	1.842
	6.0	1.8		73.5	1.866
6.8	5.9	1.7		69.5	1.842

68 553	8.42				4.5
6.7	5.4	.9	2.4	37.5	1.574
	5.5	1.0		41.7	1.620
	5.7	1.2		50.0	1.699
7.2	5.8	1.3		54.2	1.734

69 503	8.69				4.7
5.8	7.1	1.1	2.4	45.8	1.667
5.6		.9		37.5	1.574
5.9		1.2		50.0	1.699
6.0	7.1	1.3		54.2	1.734

69 470	7.05				4.8
7.2	5.2	.4	2.5	16.0	1.204
	5.1	.3		12.0	1.079
	5.4	.6		24.0	1.380
7.3	5.4	.6		24.0	1.380

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66 589 pt 7 4.7

5.1	7.4	.4	2.75	14.5	1.162
5.1		.4		14.5	1.162
5.2		.5		18.2	1.260
5.3	7.5	.6		21.8	1.338

66 587 ✓ 4.8

7.7	5.7	.9	2.95	30.5	1.484
	5.9	1.1		37.3	1.572
	6.3	1.5		50.8	1.706
7.8	6.5	1.7		57.6	1.761

66 575 ✓ 5.0

5.5	7.5	.5	2.4	20.8	1.318
5.4		.4		16.7	1.222
5.7		.7		29.2	1.466
6.0	7.3	1.0		41.7	1.620

66 561 ✓ 8.5 4.8

5.9	7.4	1.1	2.65	41.5	1.618
6.0		1.2		45.3	1.656
6.1		1.3		49.0	1.690
6.7	7.5	1.9		71.7	1.856

66 552 ✓ 4.8

6.1	7.5	1.3	2.7	48.2	1.683
6.2		1.4		51.8	1.714
6.6		1.8		66.7	1.824
7.5-6.6		1.8		66.7	1.824

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66 530 ✓ 4.8

6.5	7.5⁻	1.7	2.75	61.8	1.792
6.4		1.6		58.2	1.765⁻
6.8		2.0		72.7	1.862
7.0	7.6	2.3		83.6	1.922

67 579 Au 9.2 nt.* 4.9

6.4	7.6	1.5	2.65	56.6	1.753
6.5⁻		1.6		60.4	1.781
6.7		1.8		68.0	1.832
6.6	7.5⁻	1.7		64.1	1.807

70 541 9.3 Au of * 4.9

7.3	6.3	1.4	2.4	58.3	1.766
	6.3	1.4		58.3	1.766
	6.5⁻	1.6		66.7	1.824
7.3	6.6	1.7		70.8	1.850

~~66~~ 545⁻ ✓ 4.9

7.7	5.9	1.0	2.8	35.7	1.563
	6.1	1.2		42.8	1.632
	6.3	1.4		50.0	1.699
7.7	6.6	1.7		60.7	1.783

67 582 ✓ 4.9

6.4	7.5⁻	1.5	2.65	56.6	1.754
6.4		1.5		56.6	1.754
6.5		1.6		60.4	1.781
6.7	7.6	1.8		68.0	1.832

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67 581 ✓ 4.8

5.3	7.5⁻	.5	2.65	18.9	1.276
5.2		.4		15.1	1.179
5.4		.6		22.6	1.360
5.4	7.4	.6		22.6	1.360

67 576 ✓ 4.8

7.5⁻	5.7	.9	2.6	34.6	1.539
	5.7	.9		34.6	1.539
	5.9	1.1		42.3	1.626
7.3	6.2	1.4		53.8	1.731

67 569 ✓ 4.6

6.0	7.2	1.4	2.65	52.8	1.722
6.1		1.5		56.6	1.754
6.4		1.8		68.0	1.832
6.4	7.3	1.8		68.0	1.832

67 567 ✓ 4.7

7.3	6.1	1.4	2.6	53.8	1.732
	6.15⁻	1.45⁻		55.8	1.747
	6.15⁻	1.45		55.8	1.747
7.3⁻	6.40	1.70		65.4	1.816

67 560 N 4.7

4.8	7.3	.1	2.5	4.0	0.602
4.8		.1			
4.8		.1			
4.8	7.1	.1			

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67 539 ✓ 4.6

7.0	5.8	1.2	2.4	50.0	1.699
	5.9	1.3		54.2	1.734
	6.3	1.7		70.8	1.850
7.0	6.5	1.9		79.2	1.899

67 549 ✓ 4.5

5.1	7.0	.6	2.45	24.5	1.389
5.2		.7		28.6	1.456
5.6		1.1		45.0	1.654
5.7	6.9	1.2		49.0	1.690

67 545 ✓ 4.4

4.9	7.0	.5	2.6	19.2	1.284
4.8		.4		15.4	1.188
4.8		.4		15.4	1.188
5.1	7.0	.7		269	1.430

67 544 ✓ 4.7

6.2	7.2	1.5	2.5	60.0	1.778
6.4		1.7		68.0	1.832
6.7		2.0		80.0	1.904
6.7	7.2	2.0		80.0	1.904

67 542 ✓ 4.7

5.6	7.2	.9	2.6	34.6	1.539
5.5		.8		30.8	1.488
6.0		1.3		50.0	1.699
6.84	7.4	1.7		65.4	1.816

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67 S38 ✓ 4.7

5.4	7.2	.7	2.6	26.9	1.430
5.5		.8		30.8	1.488
6.0		1.3		50.0	1.699
6.3	7.4	1.6		61.5	1.789

67 S34 ✓ 4.7

5.5	7.3	.8	2.5	32.0	1.505
5.6		.9		36.0	1.556
6.2		1.5		60.0	1.778
6.5	7.1	1.8		72.0	1.858

68 S87 ✓ 4.4

5.3	7.0	.9	2.7	33.3	1.522
5.2		.8		29.6	1.472
5.3		.9		33.4	1.524
5.7	7.2	1.3		48.2	1.683

68 S35 ✓ 4.6

6.1	7.1	1.5	2.45	61.2	1.786
6.2		1.6		65.3	1.815
6.2		1.6		65.3	1.815
6.4	7.0	1.8		73.5	1.866

68 S34 ✓ 4.7

6.1	7.1	1.4	2.35	59.5	1.774
6.1		1.4			
6.1		1.4			
6.3	7.0	1.6		68.2	1.834

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1932phae.proj.127M

68 S33 ✓ 4.6

5.5⁻	6.9	.9	2.35⁻	38.2	1.582
5.6		1.0		42.5⁻	1.628
5.5		.9		38.2	1.582
5.7	7.0	1.1		46.8	1.671

68 S32 ✓ 4.6

7.0	5.7	1.1	2.35	46.8	1.671
	5.8	1.2		51.0	1.708
	6.0	1.3		55.4	1.744
6.9	6.1	1.5⁻		63.8	1.805⁻

69 S18[4] ✓ 4.5⁻

6.1	7.0	1.6	2.6	61.5⁻	1.789
6.1		1.6		61.5⁻	1.789
6.3		1.8		69.3	1.840
6.7	7.2	2.2		84.6	1.928

69 S10 ✓ 4.5⁻

5.5⁻	7.2	1.0	2.7	37.0	1.568
5.7		1.2		44.5⁻	1.648
6.1		1.6		59.3	1.774
6.3	7.2	1.8		66.6	1.824

69 S09 ✓ 4.5⁻

5.2	7.1	.7	2.6	26.9	1.420
5.4		.9		34.6	1.539
5.5⁻		1.0		38.5⁻	1.586
5.5	7.1	1.0		38.5⁻	1.586

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1932phae.proj.1227M

Mar 2, 1932

I s0603

66 597						3.6
	5.3	6.5	1.7	3.0	56.6	1.753
	5.4		1.8		60.0	1.778
	5.4		1.8		60.0	1.778
6.7	5.6		2.0		66.7	1.824
66 571						3.9
	5.4	6.6	1.5	2.75	54.5	1.737
	5.5		1.6		58.2	1.765
	5.8		1.9		69.1	1.840
	6.3	6.7	2.4		87.4	1.942
66 567						3.9
6.7	5.6		1.7	2.95	57.6	1.760
	5.6		1.7		57.6	1.760
	5.9		2.0		67.8	1.832
7.0	6.0		2.1		71.2	1.853
69 508						4.2
	5.4	6.7	1.2	2.5	48.0	1.682
	5.6		1.4		56.0	1.748
	5.9		1.7		68.0	1.833
	6.0	6.7	1.8		72.0	1.858
69 506						4.2
6.7	5.3		1.1	2.5	44.0	1.644
	5.2		1.0		40.0	1.602
	5.6		1.4		56.0	1.748
6.7	6.1		1.9		76.0	1.882

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1932phae.proj.127M

69 499 ✓ 4.2

6.6	5.5⁻	1.3	2.45	53.1	1.726
	5.5	1.3		53.1	1.726
	5.8	1.6		65.4	1.816
6.7	6.0	1.8		73.5⁻	1.866

69 494 ✓ 8.9 A3 4.2

5.4	6.6	1.2	2.4	50.0	1.700
5.4		1.2		50.0	1.700
5.6		1.4		58.4	1.766
5.8	6.6	1.6		66.6	1.824

69 490 ✓ 4.1

6.6	5.5⁻	1.4	2.45	57.2	1.758
	5.5⁻	1.4		57.2	1.758
	5.7	1.6		65.2	1.815⁻
6.5⁻	5.9	1.8		73.5	1.866

69 480 ✓ 4.1

6.5⁻	5.0	1.2	2.4	50.0	1.700
	5.25⁻	1.15		48.0	1.682
	5.5⁻	1.4		58.2	1.766
6.5⁻	5.6	1.5		62.5	1.796

69 478 ✓ 4.1

6.4	5.1	1.0	2.3	43.5	1.638
	5.2	1.1		47.8	1.680
	5.6	1.5		65.2	1.814
6.4	5.8	1.7		74.0	1.870

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1932phae.proj.1227M

69 472 ✓ 4.0

4.7	6.5⁻	.7	2.4 5	28.6	1.457
4.5⁻		.5⁻		20.4	1.310
5.1		1.1		44.8	1.652
5.7	6.4	1.7		69.5	1.842

69 467 ✓ 3.9

6.4	5.2	1.3	2.5 5	51.0	1.708
	5⁻.3	1.3		51.0	1.708
	5.5	1.6		62.8	1.798
6.5⁻	5.7	1.8		70.5	1.849

69 464 ✓ 4.0

6.3	4.7	.7	2.3 5⁻	29.8	1.474
	4.7	.7		29.8	1.474
	4.8	.8		33.0	1.519
6.4	4.8	.8		33.0	1.519

69 463 ✓ 4.0

6.4	5.6	1.6	2.4	66.6	1.824
	5.5⁻	1.5		62.5⁻	1.796
	6.0	2.0		83.4	1.921
6.4	6.1	2.1		87.5	1.942

69 462 ✓ 4.0

6.5⁻	5.1	1.1	2.5⁻	44.0	1.644
	5.1	1.1			
	5⁻.1	1.1			
	5⁻.3	1.3		52.0	1.716

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1932phae.proj.122PM

70 S57 ✓ 3.8

6.5	4.7	.9	2.7	33.3	1.522
	4.8	1.0		37.0	1.568
	5.0	1.2		44.5	1.648
6.5	5.1	1.3		48.2	1.683

70 S38 ✓ 3.9

6.2	5.2	1.3	2.25	57.8	1.762
	5.3	1.4		62.2	1.794
	5.50	1.6		71.1	1.852
6.1	5.6	1.7		75.6	1.879

70 S36 ✓ 3.8

4.7	6.1	.9	2.3	39.2	1.594
4.8		1.0		43.5	1.638
5.1		1.3		56.5	1.752
5.5	6.1	1.7		74.0	1.870

70 S28 ✓ 3.9

6.2	4.7	.8	2.2	36.4	1.562
	4.7	.8		36.4	1.562
	5.1	1.2		54.5	1.737
6.0	5.2	1.3		59.1	1.772

70 S23 ✓ 3.8

4.6	6.2	.8	2.45	32.6	1.514
4.7		.9		36.7	1.565
4.8		1.0		40.8	1.612
5.1	6.3	1.3		53.1	1.726

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70 522 ✓ 4.0

63	5.0	1.0	2.35	42.5	1.628
	5.05⁻	1.05⁻		44.7	1.650
	5⁻.30	1.3		53.4	1.744
6.4	5.50	1.5⁻		64.0	1.806

70 521 ✓ 4.2

5.1⁻	6.4	.9	2.2	40.9	1.612
5.2		1.0		45.5⁻	1.658
5.5⁻		1.3		59.1	1.772
5⁻.6	6.4	1.4		63.6	1.804

70 518 J 4.1

5⁻.3	6.4	1.2	2.15⁻	53⁻.8	1.747
5.3		1.2		53⁻.8	1.747
5.4		1.3		60.5⁻	1.782
5⁻.4	6.1	1.3		60.5⁻	1.782

7 484 ✓ 8.9

4.6	6.1	.7	2.2	31.8	1.502
4.6		.7		31.8	1.502
5⁻.1		1.2		54.6	1.738
5.2	6.1	1.3		59.1	1.772

67 574 67572

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1932phae.proj.1227M

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I 22763 (R. 10)

76 348 8.22 3.9

4.9	8.3	1.0	4.5	22.2	1.35⁻
4.8		.9		20.0	1.30
5.0		1.1		24.5	1.39
5.1	8.5⁻	1.2		26.7	1.43

74 437 8.32 4.4

5.6	9.0	1.2	4.7	25.5⁻	1.41
5.6		1.2		25.5⁻	1.41
5.6		1.2		25.5⁻	1.41
5.7	9.2	1.3		27.7	1.44

79 294 7.80 4.6

5.1	9.15	.5	4.58	10.9	1.04
5.18		.58		12.7	1.11
5.12		.52		11.3	1.05⁻
5.25⁻	9.20	.65		14.2	1.15⁻

79 328 6.94 4.7

4.7	8.7
4.7	
4.7	
4.65⁻	8.5⁻

78 227 8.96 4.4

5.7	8.2	1.3	3.75	34.6	1.539
5.6		1.2		32.0	1.506
5.7		1.3		34.6	1.54
5.8	8.1	1.4		37.4	1.573

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1932phae.proj.1227m

77 405 8.44 4.4

5.2	8.2	.8	3.8	21.0	1.322
5.2		.8		21.0	1.32
5.3		.9		23.7	1.375
5.4	8.2	1.0		26.3	1.420

77 406 8.24 4.4

5.0	8.1	.6	3.7	16.2	1.210
4.9		.5		13.5	1.130
4.9		.5		13.5	1.130
5.0	8.1	.6		16.2	1.218

end of Ao *

79 300 B3 4.4

4.9	8.6	.5	4.05	12.3	1.090
4.8		.4		9.88	0.986
4.6		.2		4.94	0.694
4.7	8.3	.3		7.41	0.870

79 303 lower 4.3

4.9	8.1	.6	3.85	15.6	1.193
4.8		.5		13.0	1.114
5.0		.7		18.2	1.260
5.0	8.2	.7		18.2	1.260

79 ~~A~~ 16 J 4.3

4.8	8.1	.5	3.7	13.5	1.130
4.6		.3		8.1	0.908
4.8		.5		13.5	1.130
5.05	7.9	.75		20.2	1.306

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1932phae.proj.1227M

79 329 ✓ 4.2

4.62	8.0	.42	3.7	11.4	1.057
4.70		.50		13.5	1.120
4.72		.52		14.0	1.146
4.70	7.8	.50		13.5	1.120

79 330 ✓ 4.2

4.6	7.6	.4	3.95	11.9	1.076
4.6		.4		11.9	1.076
5.0		.8		23.8	1.377
5.3	7.5	1.1		32.8	1.516

79 348 4.2

7.75	4.6	.4	3.45	11.6	1.065
	4.7	.5		14.5	1.162
	4.9	.7		20.2	1.305
7.55	5.0	.8		23.2	1.366

79 352 ✓ 4.2

573	7.6	1.1	3.25	33.8	1.529
5.3		1.1		33.8	1.529
5.8		1.6		49.3	1.694
5.9	7.3	1.7		52.4	1.720

79 356 4.2

4.5	7.6	.3	3.4	88.4	1.946
4.4		.2		58.8	1.770
4.9		.7		20.6	1.314
5.2	7.6	1.0		29.4	1.468

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1932phae.proj.1277M

78 303 4.2

5.0	7.8	.8	3.5⁻	22.8	1.358
5.1		.9		25.8	1.412
5.3		1.1		31.4	1.497
5.5⁻	7.6	1.3		37.2	1.570

78 310 4.2

5.2	7.5	1.0	3.1	32.2	1.508
5.0		.8		25.8	1.412
5.4		1.2		38.8	1.589
5.6	7.1	1.4		45.2	1.655

78 312 4.1

5.4	7.1	1.3	3.0	43.3	1.636
5.3		1.2		40.0	1.602
5.2		1.1		36.7	1.565
5.4	7.1	1.3		43.4	1.638

78 315⁻ 4.2

5.1	6.9	.9	2.7	33.3	1.523
5.0		.8		29.6	1.472
5.0		.8		29.6	1.472
5.3	6.9	1.1		40.7	1.610

78 321 4.1

5.5⁻	7.0	1.1	2.9	38.0	1.581
5.5⁻		1.1		38.0	1.581
5.6		1.5		51.8	1.715
5.7	7.0	1.6		55.2	1.742

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1932phae.proj.1227M

Mar 4'32

I 50560 (R R)

66 587 ✓ 4.3

5.0	7.0	.7	2.85	24.6	1.381
5.0		.7		24.6	1.381
5.3		1.0		35.1	1.546
5.6	7.3	1.3		45.7	1.660

66 550 ✓ 4.7

7.4	5.9	1.2	2.85	42.2	1.626
	5.9	1.2		42.2	1.626
	6.4	1.7		59.6	1.776
7.7	6.5⁻	1.8		63.2	1.801

67 559 ✓ 5.0

6.2	7.75⁻	1.2	2.75	43.6	1.640
6.25⁻		1.25		45.5⁻	1.658
6.50		1.50		54.5⁻	1.737
6.60	7.70	1.60		58.2	1.765⁻

67 549 ✓ 5.05⁻

5.7	7.80	.65	2.80	23.2	1.366
5.7		.65⁻		23.2	1.366
5.9		.85		30.3	1.482
6.1	7.90	1.05		37.5⁻	1.574

67 544 ✓ 5.2

6.25⁻	7.80	1.05	2.60	40.4	1.607
6.20		1.00		38.5⁻	1.586
6.60		1.40		53.8	1.731
6.80	7.80	1.60		61.6	1.790

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67 534 ↓ 5.2

5.9	7.8	.7	2.65	26.4	1.422
5.8		.6		22.6	1.354
6.1		.9		33.9	1.530
6.5	7.9	1.3		49.1	1.692

68 508 ↓ 5.3

6.4	7.5	1.1	2.35	46.8	1.670
6.5		1.2		51.1	1.708
6.7		1.4		59.6	1.776
6.80	7.80	1.6		68.2	1.834

68 532 ✓ 5.3

6.3	7.9	1.0	2.6	38.5	1.586
6.3		1.0		38.5	1.586
6.4		1.1		42.3	1.627
6.7	7.9	1.4		53.8	1.731

69 510 ↓ 5.3

6.4	7.9	1.1	2.6	42.3	1.627
6.4		1.1		42.3	1.627
6.5		1.2		46.2	1.664
6.7	7.9	1.4		53.8	1.731

69 508 ↓ 5.3

6.4	8.0	1.1	2.65	41.5	1.618
6.3		1.0		37.8	1.578
6.55		1.25		47.2	1.674
6.80	7.9	1.50		56.6	1.753

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69 506 ✓						5.2
6.3	7.9	1.0	2.55	39.2	1.594	
6.3		1.0		39.2	1.594	
6.4		1.1		43.2	1.636	
66	7.8	1.3		51.0	1.708	
69 499 ✓						5.2
6.15	7.8	.95	2.6	36.6	1.564	
6.25		1.05		40.4	1.606	
6.50		1.30		50.0	1.700	
6.70	7.8	1.50		57.7	1.762	
69 478 ✓						5.15
6.2	7.7	1.05	2.55	41.3	1.616	
6.1		.95		37.2	1.571	
6.2		1.05		41.2	1.615	
6.5	7.7	1.35		53.0	1.724	
69 472 ✓						5.1
7.4	5.7	.6	2.25	26.7	1.426	
	5.5	.4		17.8	1.250	
	5.6	.5		22.2	1.346	
7.3	5.7	.6		26.6	1.426	
70 557						4.9
7.2	5.6	.7	2.2	31.8	1.502	
	5.6	.7		31.8	1.502	
	5.6	.7		31.8	1.502	
7.0	5.7	.8		36.4	1.562	

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1932phae.proj:1227M

70 586 ✓ 4.8

5.5	7.3	.7	2.45	28.6	1.456
5.7		.9		36.7	1.565
6.0		1.2		49.0	1.690
6.3	7.2	1.5		61.3	1.788

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I 50 560

70 528 ✓ 3.50

4.5	5.8	.95	2.35	40.4	1.606
4.4		.85		36.2	1.559
4.6		1.05		44.6	1.650
4.9	6.0	1.35		57.5	1.720

70 523 ✓ 3.9

4.8	6.1	.9	2.1	42.8	1.632
4.7		.8		38.1	1.581
4.7		.8			
4.7	5.9	.8			

70 521 ✓ 3.9

5.8	4.8	.9	1.95	46.2	1.664
	4.8	.9		46.2	
	4.9	1.0		51.3	1.710
5.9	4.9	1.0		51.3	

71 484 ✓ 4.1

4.8	6.0	.7	1.9	36.8	1.576
4.7		.6		31.6	1.500
4.9		.8		42.2	1.625
5.0	6.0	.9		47.4	1.676

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1932phae.proj.127M

Mar 5-'32

5060 5⁻	66 s61✓					4.1
6.05⁻	5.0	.9	1.90	47.4	1.676	
	5.0	.9		47.4	1.676	
	5.5	1.05⁻		55.2	1.742	
6.90	5.40	1.30		68.5⁻	1.836	
	67 s67✓					4.1
6.0	5.2	1.1	1.85	59.5⁻	1.775⁻	
	5.3	1.2		64.8	1.812	
	5.3	1.2		64.8	1.812	
5.9	5.4	1.3		70.3	1.847	
	67 s42✓					4.1
6.0	4.7	.6	1.9	31.6	1.50	
	4.8	.7		36.8	1.566	
	5.2	1.1		58.0	1.764	
6.0	5.2	1.1		58.0	1.764	
	67 s38✓					4.1
4.7	6.1	.6	1.9	31.6	1.50	
4.85⁻		.75		39.4	1.596	
5.2		1.1		57.8	1.762	
5.3	5.9	1.2		63.2	1.80	
	68 s33✓					4.1
4.8	5.8	.7	1.7	41.2	1.615⁻	
4.8		.7		41.2	1.615⁻	
4.9		.8		47.0	1.670	
5.0	5.8	.9		53.0	1.724	

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1932phae.proj.127M

69 490 ↓ 4.1

5.80	5.1	1.0	1.7	58.8	1.77
	5.1	1.0		58.8	1.77
s	5.4	1.3		76.5	1.88
5.80	5.5	1.4		82.4	1.92

69 472 ↓ 4.1

5.7	4.6	.5	1.6	31.2	1.51
	4.5	.4		25.0	1.40
	4.8	.7		43.8	1.64
5.7	5.0	.9		56.2	1.75

69 462 ↓ 4.1

5.8	4.9	.8	1.7	47.0	1.67
	4.9	.8		47.0	1.67
	5.0	.9		53.0	1.72
5.8	5.1	1.0		58.8	1.77

70 536 ↓ 4.1

4.8	5.6	.7	1.55	45.2	1.65
4.8		.7		45.2	1.65
5.1		1.0		64.5	1.81
5.2	5.7	1.1		71.0	1.85

70 523 ↓ 4.1

4.6	5.7	.5	116	31.2	1.49
4.6		.5		31.2	1.49
4.9		.8		50.0	1.70
4.9	5.7	.8		50.0	1.70

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70 518 ✓ 4.1

4.9	5.7	.8	1.55	51.6	1.71
5.0		.9		58.0	1.76
5.0		.9		58.0	1.76
5.1	5.6	1.0		64.5	1.81

67 534 ✓ 4.05

4.8	5.7	.75	1.70	44.2	1.65
4.7		.65		38.2	1.58
5.1		.95		55.8	1.75
5.3	5.8	1.25		73.5	1.87

69 510 ✓ 4.0

4.90	5.7	.9	1.75	51.4	1.71
4.90		.9		51.4	1.71
5.20		1.2		68.5	1.84
5.70	5.8	1.7		97.1	1.99

69 508 ✓ 4.0

4.9	5.7	.9	1.7	52.9	1.72
4.9		.9		52.9	1.72
5.1		1.1		64.8	1.81
5.2	5.7	1.2		70.6	1.85

69 506 ✓ 4.0

4.7	5.7	.7	1.7	41.2	1.61
4.8.5		.85		50.0	1.70
5.00		1.00		58.8	1.77
5.20	5.7	1.20		70.5	1.85

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I 50 560

67 538

					4.0
4.9	7.0	.9	3.05⁻	29.5⁻	1.470
5.0		1.0		32.8	1.516
5.2		1.2		39.4	1.596
5.4	7.1	1.4		45.9	1.662

69 506

					4.2
5.4	7.1	1.2	3.0	40.0	1.602
5.6		1.4		46.7	1.670
5.7		1.5		50.0	1.699
6.3	7.3	2.1		70.0	1.845

I 50 605

69 499

					4.5⁻
7.1	6.0	1.5	2.6	57.7	1.762
	6.1	1.6		61.5	1.788
	6.4	1.9		73.0	1.864
7.1	6.5⁻	2.0		77.0	1.886

69 478

					4.5⁻
7.1	5.9	1.4	2.65	52.8	1.722
	5.9	1.4		52.8	1.722
	6.4	1.9		71.8	1.856
7.2	6.5⁻	2.0		75.5	1.878

70 528

					4.7
7.2	5.70	1.0	2.45	40.8	1.612
	5.70	1.0		40.8	1.612
	6.10	1.4		57.2	1.758
7.1	6.20	1.5		61.3	1.788

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70 521 4.7

5.9	7.2	1.2	2.45	49.0	1.690
6.1		1.4		57.2	1.758
6.2		1.5		61.2	1.787
6.4	7.1	1.7		69.4	1.842

69 4621 ✓ 4.7

7.0	6.0	1.3	2.6	50.0	1.699
	6.10	1.4		53.8	1.732
	6.30	1.6		61.5⁻	1.789
7.0	6.40	1.7		65.4	1.816

50 605⁻ 69 506 ✓ 4.1

6.6	5⁻.5⁻	1.4	2.55⁻	5⁻4.8	1.738
	5.4	1.3		51.0	1.708
	5.6	1.5⁻		58.8	1.77
6.7	6.0	1.9		74.5⁻	1.872

69 478 ✓ 4.1

6.7	5.6	1.5	2.65	56.6	1.753
	5.9	1.8		68.0	1.832
	5.95⁻	1.85		69.8	1.844
6.8	6.00	1.90		71.7	1.85⁵⁻

50 520 69 506 ✓ 4.1

5.5	7.0	1.4	2.9	48.3	1.684
5.4		1.3		44.8	1.65⁻2
5.6		1.5		51.8	1.714
6.0	7.0	1.9		65.6	1.817

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~~69~~ 478 -

7.0	5.5		1.3	2.8	46.4	1.666
	5.5 5		1.3 5		48.2	1.683
	5.70		1.5		53.6	1.729
7.00	5.80		1.6		57.2	1.756

4.2

Mar 8, 1932.

I 50 606

R. A. -

66 642 Ar 8.7 3.8

8.4	5.7		1.9	4.6	41.4	1.617
	5.7		1.9		41.4	1.617
	5.9		2.1		45.7	1.660
	6.~~2~~	8.4	2.4		52.2	1.718

66 604 Ar 9.2 4.0

6.0	8.4	2.0	4.4	45.5	1.658
6.1		2.1		47.7	1.678
6.4		2.4		54.5	1.736
6.6	8.4	2.6		59.1	1.772

66 602 Ar 8.7 4.2

5.9	8.4	1.7	4.2	40.5	1.608
5.9		1.7		40.5	1.608
6.1		1.9		45.3	1.656
6.6	8.4	2.4		57.2	1.758

67 608 Ar 8.7 4.3

8.4	5.2	.9	4.1	21.9	1.340
	5.3	1.0		24.4	1.388
	5.6	1.3		31.7	1.502
8.4	6.0	1.7		41.5	1.618

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67	5719	A2	9.2			4.3
	6.5	8.5-	2.2	4.2	52.4	1.72
	6.3		2.0		47.7	1.678
	7.0		2.7		64.3	1.808
	7.1	8.5-	2.8		66.7	1.824
68	5712	A2				4.2
8.3	5.2		1.0	4.1	24.4	1.388
	5.0		0.8		19.5-	1.290
	5.4		1.2		29.2	1.466
8.3	5.3		1.1		26.8	1.428
68	5053	A0	8.4			4.4
	5.7	8.7	1.3	4.25	30.6	1.486
	6.2		1.8		42.3	1.626
	6.1		1.7		40.0	1.602
	6.2	8.6	1.8		42.4	1.627
69	5003	A0	8.6			4.5-
	6.2	8.6	1.7	4.1	41.5-	1.618
	6.2		1.7		41.5-	1.618
	6.3		1.8		44.0	1.644
end of pl. *	6.6	8.6	2.1		51.3	1.710
66	6507					4.5-
	6.3	9.2	1.8	4.7	38.4	1.584
	6.2		1.7		36.2	1.558
	7.5-		3.0		63.9	1.805
	8.0	9.2	3.5-		74.5-	1.872

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66 648 ✓ 4.5

5.9	9.1	1.4	4.65	30.2	1.480
6.0		1.5		32.2	1.508
6.4		1.9		40.8	1.612
6.5	9.2	2.0		43.0	1.634

66 644 ✓ 4.7

6.8	9.2	2.1	4.45	47.2	1.674
7.0		2.3		51.7	1.714
7.63		2.6		58.4	1.766
7.9	9.1	2.8		63.0	1.800

66 640 ✓ 4.7

9.0	6.9	2.2	4.4	50.0	1.70
	6.9	2.2		50.0	1.70
	7.6	2.9		66.0	1.821
9.2	7.7	3.0		68.3	1.834

66 637 ✓. 64 4.7

9.6	4.85	.15	4.75	3.16	0.50
	4.90	.20		4.22	0.624
	4.90	.20		4.22	0.624
9.3	5.0	0.30		6.31	0.80

66 636 ✓. 4.6

7.2	9.2	2.6	4.75	54.8	1.739
7.3		2.7		56.8	1.755
7.8		3.2		67.4	1.828
8.2	9.4	3.6		75.8	1.880

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66 635 Hf. 4.8

9.3	7.4	2.6	4.5	57.8	1.762
	7.4	2.6		57.8	1.762
	7.6	2.8		62.3	1.794
9.3	7.9	3.1		69.0	1.839

66 630 ✓ 4.7

9.3	5.7	1.0	4.55	22.0	1.342
	5.6	.9		19.8	1.294
	6.2	1.5		33.0	1.518
9.2	7.3	2.6		57.2	1.758

66 623 ✓ 4.8

6.0	9.1	1.2	4.85	27.6	1.441
5.9		1.1		25.3	1.403
6.6		1.8		41.4	1.617
7.5	9.2	2.7		62.0	1.792

66 600 ✓ 4.6

5.5	8.8	.9	4.2	21.4	1.33
5.5		.9		21.4	1.33
5.6		1.0		23.8	1.376
5.85	8.8	1.25		29.8	1.474

66 599 ✓ 4.6

5.4	9.0	.9	4.4	20.4	1.31
5.6		1.0		22.8	1.358
5.7		1.1		25.0	1.398
5.9	9.0	1.3		29.6	1.472

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66 597 ✓ 4.7

9.2	6.5	1.8	4.5	40.0	1.602
	6.8	2.1		46.7	1.670
	6.8	2.1		46.7	1.670
9.2	7.2	2.5		55.6	1.746

6[illegible]7 635 ✓ 4.8

6.0	9.3	1.2	4.5	26.6	1.425
6.1		1.3		28.9	1.461
6.5		1.7		37.8	1.578
6.55	9.3	1.75		38.9	1.590

67 632 ✓ 4.8

5.5	9.1	.7	4.2	16.7	1.223
5.6		.8		19.0	1.279
5.9		1.1		26.2	1.418
6.3	8.9	1.5		35.7	1.553

67 634 ✓ 4.8

9.0	6.3	1.5	4.2	35.7	1.553
	6.7	1.9		45.3	1.656
	7.6	2.8		66.6	1.824
9.0	8.2	3.4		81.0	1.908

67 633 ✓ 4.8

6.1	9.3	1.3	4.65	28.0	1.447
6.0		1.2		25.8	1.412
6.7		1.9		40.8	1.611
7.4	9.4	2.6		56.0	1.748

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67 625✓ 4.8

6.5	9.2	1.7	4.5	37.8	1.578
6.7		1.9		42.2	1.625⁻
7.6		2.8		62.3	1.798
8.2	9.4	3.4		75.6	1.879

67 624✓ 4.8

7.1	9.3	2.3	4.4	52.3	1.718
7.05⁻		2.25		51.2	1.709
7.9		3.1		70.5⁻	1.848
8.6	9.1	3.8		86.4	1.936

67 621✓ 4.8

6.2	9.2	1.4	4.4	31.8	1.502
6.4		1.6		36.4	1.562
7.1		2.3		52.3	1.719
7.5⁻	9.2	2.7		61.4	1.788

67 617✓ 4.8

9.2	5.5⁻	.7	4.45	15.7	1.196
	5.5⁻	.7		15.7	1.196
	5.8	1.0		22.5⁻	1.352
9.3	6.1	1.3		29.2	1.466

67 611✓ 4.8

6.4	8.9	1.6	4.2	38.1	1.581
6.5⁻		1.7		40.5⁻	1.608
6.8		2.0		47.6	1.678
7.0	9.1	2.2		52.4	1.720

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I 10606

67 610↓ 4.0

5.5⁻	8.1	1.5	4.2	35.8	1.554
5.8		1.8		42.8	1.632
6.0		2.0		47.6	1.678
6.3	8.3	2.3		54.8	1.739

67 602↓ dh 4.3

4.6	8.1	.3	3.9	7.7	0.887
4.6		.3		7.7	0.887
5.1		.8		12.05	1.082
5.5⁻	8.3	1.2		30.80	1.488

67 597↓ 4.3

4.9	8.2	.6	3.95	15.2	1.182
4.9		.6		15.2	1.182
4.9		.6		15.2	1.182
5.85⁻	8.3	.85		21.5	1.332

67 594↓ 4.2

8.2	5.2	1.0	4.05	24.7	1.393
	5.1	.9		22.2	1.346
	5.2	1.0		24.7	1.393
8.3	5.6	1.4		34.6	1.540

67 592↓ 4.2

8.3	5.3	1.1	4.15	26.5	1.424
	5.9	1.7		41.0	1.613
	6.6	2.4		57.8	1.762
8.4	6.9	2.7		65.0	1.813

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67 584 ✓ 4.2

8.3	5.2	1.0	4.1	24.4	1.388
	5.3	1.1		26.8	1.428
	5.6	1.4		34.2	1.534
8.25	5.9	1.7		41.5	1.618

67 582 ✓ 4.2

8.2	5.9	1.7	3.9	43.6	1.640
	5.8	1.6		41.0	1.613
	6.1	1.9		48.8	1.688
8.0	6.5	2.3		59.0	1.771

67 581 ✓ Fn. 4.2

7.9	4.6	.4	3.65	10.9	1.038
	4.6	.4		10.9	1.038
	4.6	.4		10.9	1.038
	4.8	7.8 .6		16.4	1.215

67 576 ✓ 4.3

7.9	5.2	.9	3.45	26.0	1.416
	5.2	.9		26.0	1.416
	5.4	1.1		31.9	1.504
7.6	5.6	1.3		37.7	1.576

67 572 ✓ 4.3

7.85	5.9	1.6	3.55	45.0	1.653
	5.9	1.6		45.0	1.653
	6.2	1.9		53.5	1.728
7.80	6.4	2.1		59.2	1.772

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68 590 ↓ 4,4

5.8	8.0	1.4	3.55	39.50	1.597
5.9		1.5		42.30	1.626
6.0		1.6		45.20	1.656
6.2	7.9	1.8		50.70	1.705

68 537 ↓ fh. 4.4

7.7	4.9	.5	3.3	15.2	1.182
	5.0	.6		18.2	1.260
	5.2	.8		24.2	1.384
7.7	5.4	1.0		30.3	1.482

69 569 ↓ 4,4

7.9	5.15	.75	3.45	21.8	1.338
	5.20	.8		23.2	1.366
	5.65	1.25		36.2	1.558
7.8	6.10	1.70		49.3	1.693

69 567 ↓ 4.4

8.0	5.4	1.0	3.5	28.6	1.456
	5.7	1.3		37.2	1.570
	6.1	1.7		48.6	1.686
7.8	6.4	2.0		57.2	1.757

69 532 ↓ 4,4

5.7	7.9	1.3	3.45	37.7	1.576
6.0		1.6		46.4	1.667
6.1		1.7		49.3	1.693
6.3	7.8	1.9		55.0	1.740

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69 561 ✓ 4.5⁻

4.9	7.9	.4	3.35	11.9	1.076
5.0		.5		14.9	1.173
5.4		.9		26.8	1.428
7.8	5.7	1.2		35.8	1.554

69 588 ✓ 4.8

6.30	7.9	1.5⁻	3.1	48.5	1.686
—		—		~~56.5~~	—
6.55⁻		1.75⁻		56.5	1.752
7.9	6.60	1.80		58.0	1.764

69 559 ✓ 4.5⁻

6.0	7.9	1.5⁻	3.35	44.8	1.652
6.1		1.6		47.8	1.680
6.4		1.9		56.7	1.754
6.5⁻	7.80	2.0		59.8	1.777

69 552 ✓ 4.5⁻

5.0	7.40	.5⁻	2.9	17.2	1.236
5.1		.6		20.7	1.316
5.2		.8		27.6	1.441
5.5⁻	7.40	1.0		34.5	1.538

69 551 ✓ 4.5⁻

7.5	5.40	.9	2.95	30.5	1.484
	5.50	1.0		33.9	1.530
	6.10	1.6		54.2	1.734
7.4	6.30	1.8		61.0	1.785

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69 S30 ✓ 4.4

7.4	5.2	.8	2.9	27.6	1.441
	5.0	.6		20.7	1.316
	5.2	.8		27.6	1.441
7.2	5.3	.9		31.0	1.492

69 S45 ✓ 4.4

7.3	5.2	.8	2.95	27.1	1.433
	5.0	.6		20.4	1.310
	5.6	1.2		40.7	1.610
7.4	5.9	1.5		50.8	1.706

69 S42 ✓ 4.4

7.3	5.3	.9	2.8	32.2	1.508
	5.3	.9		32.1	1.507
	5.5	1.1		39.2	1.594
7.1	5.6	1.2		42.8	1.632

69 S30 ✓ 4.4

6.9	5.5	1.1	2.55	43.1	1.635
	5.6	1.2		47.1	1.673
	5.9	1.5		58.8	1.770
7.0	6.1	1.7		66.6	1.824

69 S26 ✓ 4.4

7.0	5.0	.5	2.6	19.2	1.284
	5.0	.5		19.2	1.284
	5.2	.8		30.8	1.488
7.0	5.4	1.0		38.4	1.584

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69 S18 ✓ 4.4

	5.0	6.8	.6	2.4	25.0	1.398
	5.3		.9		37.5⁻	1.574
	5.6		1.2		50.0	1.699
6.8	5.9		1.5		62.5⁻	1.796

69 S17 ✓ 4.5⁻

4.9	6.8	.4	2.3	17.4	1.240
5.0		.5⁻		21.7	1.336
5.6		1.1		47.8	1.680
6.0	6.8	1.5		65.3	1.815⁻

69 S14 ✓ 4.5⁻

6.9	5.5⁻	1.0	2.4	41.7	1.620
	5.7	1.2		50.0	1.699
	6.0	1.5		62.5	1.796
6.9	6.2	1.7		71.0	1.852

69 S10 ✓ 4.5⁻

6.9	5.2	.7	2.35	29.8	1.474
	5.2	.7		29.8	1.474
	5.4	.9		38.3	1.583
6.8	5.8	1.3		55.3	1.743

69 S09 ✓ 8.2 4.4

4.9	6.7	.5⁻	2.35	21.3	1.328
5.0		.6		25.5	1.407
5.15⁻		.75		31.9	1.504
5⁻,15	6.8	.75		31.9	1.504

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69 508 ✓ 44

5.2	6.8	.8	2.4	33.3	1.522
5.2		.8		33.3	1.522
5.7		1.3		54.2	1.734
5.8	6.8	1.4		58.4	1.766

Mar 11 '32
On R.R. 1605

70 518 ✓ 3.5

5.0	6.2	1.5	2.8	53.6	1.730
5.0		1.5		53.6	1.730
5.2		1.7		60.7	1.784
5.3	6.4	1.8		64.3	1.808

1560 70 518 ✓ 4.0

5.9	4.8	.8	1.95	41.0	1.614
	4.9	.9		46.2	1.664
	5.0	1.0		51.3	1.710
6.0	5.2	1.2		61.5	1.790

1605 70 521 ✓ 3.9

4.9	6.3	1.0	2.45	40.8	1.612
5.0		1.1		45.0	1.654
5.2		1.3		53.1	1.726
5.4	6.4	1.5		61.3	1.788

1560 70 521 ✓ 3.9

4.1	5.9	.2	1.95	10.30	1.014
4.6		.7		35.90	1.558
4.7		.8		41.00	1.613
4.8	5.8	.9		46.20	1.665

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60S	70	536✓				3.9
	4.9	6.3	1.0	2.45	40.8	1.612
	4.8		.9		36.7	1.565
	5.0		1.1		45.0	1.654
	5.5	6.4	1.6		65.3	1.815
S60	70	536✓				3.9
	4.7	5.8	.8	2.95	27.1	1.433
	4.6		.7		23.7	1.375
	4.75		.85		28.8	1.460
	5.00	5.9	1.10		37.3	1.572
60S	67	534✓				4.0
	4.7	6.6	.7	2.55	27.4	1.438
	4.8		.8		31.4	1.498
	5.2		1.2		47.1	1.674
	5.7	6.5	1.7		66.7	1.824
S60	67	534✓				3.9
	4.3	5.9	.4	1.95	20.5	1.312
	4.4		.5		25.6	1.408
	4.7		.8		41.0	1.614
	4.8	5.8	.9		46.2	1.664
60S	69	506✓				4.1
	6.2	5.0	6.6	.9	1.9	47.4	1.676
		5.0		.9		47.4	1.676
		5.4		1.3		68.5	1.836
	5.8	5.4		1.3		68.5	1.836

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560	69 506 ✓						3.9
	4.7	5.9	.8	2.0	40.0	1.602	
	4.6		.7		35.0	1.544	
	4.8		.9		45.0	1.654	
	5.0	5.9	1.1		55.0	1.741	
605	67 549 ✓						4.0
	4.40	6.0	.4	2.0	20.0	1.302	
	4.42		.42		21.0	1.323	
	4.70		.70		35.0	1.544	
	4.90	6.0	.90		45.0	1.654	
560	67 549 ✓						3,9
	4.3	5.9	.4	1.9	21.0	1.323	
	4.3		.4		21.0	1.323	
	4.4		.5		26.3	1.420	
	4.4	5.7	.5		26.3	1.420	
605	70 528 ✓						4.0
	5.9	4.5	.5	1.8	27.8	1.444	
		4.5	.5		27.8	1.444	
		4.7	.7		38.8	1.59	
	5.7	4.9	.9		50.0	1.70	
520	70 528 ✓						
	4.5	5.9	.6	1.1	54.5	1.737	3.9
	4.6		.7		63.6	1.804	
	4.8		.9		81.9	1.914	
	5.0	6.1	1.1		100.0	2.000	

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60 S 70 S 23 ✓ 4.0

4.4	5.9	.4	1.88	21.1	1.325
4.2		.3		15.9	1.202
4.7		.7		37.2	1.570
4.7	5.8	.7		37.2	1.570

820 70 S 23 ✓ 4.2

4.6	6.0	.4	1.8	22.2	1.347
4.5		.3		16.6	1.220
4.7		.5		27.8	1.444
4.8	6.0	.6		33.4	1.524

1 S 0 606 69 S 606 ✓ 4.2

5.4	7.2	1.2	3.0	40.0	1.602
5.2		1.0		33.3	1.523
5.7		1.5		50.0	1.700
6.2	7.2	1.9		63.4	1.810

69 504 h. 4.4

4.9	7.1	.5	2.85	17.5	1.243
5.0		.6		21.0	1.322
4.9		.5		17.5	1.244
5.0	7.4	.6		21.0	1.322

69 499 ✓ 4.6

5.6	7.6	1.0	3.0	33.4	1.524
5.7		1.1		36.7	1.565
6.3		1.7		52.7	1.754
6.5	7.6	1.9		63.4	1.802

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70 603 ✓						4.6
7.9	5.7	1.1	3.3	33.4	1.524	
	5.7	1.1		33.4	1.524	
	5.8	1.2		36.4	1.562	
7.9	6.1	1.5		45.5	1.658	
70 598 ✓						4.6
7.8	5.4	.8	3.3	24.2	1.384	
	5.4	.8		24.2	1.384	
	5.5	.9		27.2	1.435	
8.0	5.8	1.2		36.4	1.562	
70 596 ✓						4.7
6.0	8.2	1.3	3.45	37.7	1.577	
6.2		1.5		43.5	1.639	
6.2		1.5		43.5	1.639	
6.4	8.1	1.7		49.3	1.694	
70 593 ✓						4.6
8.1	5.6	1.0	3.5	28.6	1.457	
	5.7	1.1		31.4	1.497	
	5.8	1.2		34.3	1.536	
8.1	5.9	1.3		37.2	1.571	
70 588 ✓						4.6
5.85	7.9	1.25	3.25	38.5	1.586	
5.75		1.15		35.4	1.550	
6.05		1.45		44.6	1.650	
6.40	7.8	1.80		55.4	1.744	

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70 584 ✓ 4.5

5.6	8.0	1.1	3.45	31.9	1.584
5.5		1.0		29.0	1.462
5.9		1.4		40.6	1.608
6.4	7.9	1.9		55.1	1.742

70 582 ✓ 4.4

5.6	7.8	1.2	3.35	35.8	1.554
5.5		1.1		32.8	1.516
5.7		1.3		38.8	1.589
5.9	7.7	1.5		44.8	1.65

70 575 ✓ 4.2

5.4	7.6	1.1	3.3	33.3	1.522
5.55		1.25		37.9	1.58
6.30		2.0		60.6	1.78
6.80	7.6	2.5		75.8	1.88

70 559 ✓ 9.7 Az 4.3

6.1	7.5	1.8	3.0	60.0	1.78
6.1		1.8		60.0	1.78
6.2		1.9		63.4	1.80
6.4	7.1	2.1		70.0	1.85

70 540 ✓ 9.6 Az 4.2

5.9	7.7	1.6	3.35	47.8	1.68
6.0		1.7		50.7	1.71
6.2		1.9		56.7	1.75
6.4	7.6	2.1		62.7	1.80

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70 571 J 4.4

9.2	7.0	2.6	4.9	53.1	1.726
	7.1	2.7		55.2	1.742
	7.5⁻	3.1		63.3	1.809
9.2	7.87	3.3		67.4	1.828

70 570 J 4.7

9.1	7.0	2.3	4.45	51.7	1.714
	7.1	2.4		54.0	1.733
	7.4	2.7		60.6	1.783
9.2	7.65⁻	2.95		66.3	1.822

70 568 J 4.8

9.1	5.5⁻	.7	4.3	16.3	1.212
	5.5⁻	.7		16.3	1.212
	5.6	.8		18.6	1.270
9.1	5.7	.9		20.9	1.320

70 567 V 4.7

5.45⁻	9.0	.75	4.35	17.2	1.236
5.50		.80		18.4	1.265⁻
5.60		.90		20.7	1.316
5.60	9.1	0.90		20.7	1.316

70 564 J 4.8

6.3	9.2	1.5	4.3	35.0	1.544
6.3		1.5		35.0	1.544
6.6		1.8		41.8	1.622
6.9	9.0	2.1		48.8	1.688

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70 563 ✓ 4.8

6.9	9.2	2.1	4.3	48.8	1.689
7.05⁻		2.25		52.4	1.720
7.30		2.50		58.1	1.764
7.60	9.0	2.80		65.1	1.814

70 581 ✓ 4.7

5.6	9.0	.9	4.2	21.4	1.330
5.7		1.0		23.8	1.377
6.3		1.6		38.1	1.581
6.4	8.8	1.7		40.5	1.607

70 537 ✓ 4.6

8.8	5.5⁻	.9	4.2	21.4	1.330
	5.4	.8		19.0	1.279
	5.8	1.2		28.6	1.456
8.8	6.1	1.5		35.8	1.554

70 548 ✓ 4.5⁻

8.9	6.8	2.3	4.4	52.3	1.719
	7.0	2.5		56.8	1.755
	7.6	3.1		70.5	1.848
8.9	7.8	3.3		75.0	1.876

71 530 ✓ 4.5⁻

6.9	9.1	2.4	4.65	51.6	1.713
7.2		2.7		58.0	1.764
7.25⁻		2.75		59.0	1.772
7.50	9.2	3.0		64.5	1.810

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71 529 ↓ 4.5

9.1	5.5	1.0	3.5	28.6	1.457
	5.8	1.3		37.2	1.570
	6.3	1.8		51.4	1.712
8.9	6.5	2.0		57.1	1.757

71 525 ↓ 4.4

8.9	6.1	1.6	4.4	36.4	1.562
	6.2	1.7		38.6	1.587
	6.5	2.0		45.5	1.658
8.9	6.8	2.3		52.3	1.719

71 524 ↓ 4.4

8.7	5.9	1.5	4.3	34.9	1.543
	6.1	1.7		39.5	1.597
	6.8	2.4		55.8	1.747
8.7	7.2	2.8		65.1	1.814

71 522 ↓ 4.4

6.6	8.7	2.2	4.25	51.8	1.715
6.6		2.2		51.8	1.715
6.9		2.5		58.8	1.770
7.2	8.6	2.8		65.8	1.818

71 520 ↓ 4.4

8.5	6.6	2.2	4.1	53.6	1.730
	6.7	2.5		61.0	1.785
	6.9	2.5		61.0	1.785
8.5	7.2	2.8		68.3	1.834

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71 518 ↓ 4.4

8.5⁻	5.9	1.5	4.15	36.2	1.559
	6.15	1.75		42.2	1.625
	6.6	2.2		53.0	1.724
8.6	6.9	2.5		60.3	1.780

Mar 14 '32 71 514 ↓ 4.9

9.6	7.2	2.3	4.65⁻	49.5⁻	1.695
	7.3	2.4		51.6	1.713
	7.8	2.9		62.4	1.795⁻
9.5⁻	8.4	3.5		75.3	1.877

71. 509 ↓ 5.0

9.4	6.6	1.6	4.55	35.2	1.547
	6.6	1.6		35.2	1.547
	6.9	1.9		41.8	1.621
9.7	7.2	2.2		48.4	1.685⁻

71 507 ↓ 5.3

9.6	7.7	2.34	4.4	54.5⁻	1.736
	7.6	2.3		52.3	1.718
	8.1	2.8		63.6	1.804
9.8	8.3	3.0		68.2	1.834

71 504 ↓ 5.3

9.8	6.5⁻	1.2	4.45	27.0	1.431
	6.4	1.1		24.7	1.393
	7.2	1.9		42.7	1.630
9.7	7.6	2.3		51.7	1.714

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71 503 ✓ 5.2

9.6	7.3	2.1	4.4	47.7	1.678
	7.4	2.2		50.0	1.699
	7.9	2.7		61.4	1.788
9.6	8.2	3.0		68.2	1.834

71 499 ✓ 4.5

6.7	9.0	2.2	4.55	48.4	1.685
7.0		2.5		55.0	1.740
7.2		2.6		57.1	1.757
7.6	9.1	3.1		68.1	1.834

71 497 ✓ 4.1

9.0	7.0	2.9	4.9	59.2	1.772
	7.2	3.1		63.2	1.801
	7.5	3.4		69.5	1.842
9.0	7.7	3.6		73.5	1.866

71 489 ✓ 4.6

6.7	8.9	2.1	4.25	49.4	1.694
6.8		2.2		51.8	1.714
7.2		2.6		61.2	1.786
7.3	8.8	2.7		63.5	1.802

71 487 ✓ 4.5

6.7	9.0	2.2	4.35	50.6	1.704
6.6		2.1		48.2	1.684
6.8		2.3		52.8	1.723
7.3	8.7	2.8		64.4	1.808

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71 486✓ 4.5

5.1	8.7	.6	4.25	14.1	1.15⁻
5.3		.7		16.5	1.218
5.5		1.0		23.5	1.371
5.6	8.8	1.1		25.9	1.414

71 484✓ 4.6

8.8	5.8	1.2	4.15	28.9	1.462
	5.6	1.0		24.1	1.382
	6.25⁻	1.65⁻		39.8	1.600
8.7	6.70	2.10		50.6	1.704

71 482✓ 4.7

8.8	6.6	1.9	4.1	46.3	1.666
	6.3	1.6		39.0	1.592
	7.2	2.5		61.0	1.786
8.8	7.6	2.9		70.8	1.850

72 474✓ 4.6

6.9	9.1	2.3	4.4	52.3	1.718
6.9		2.3		52.3	1.750
7.1		2.5		56.8	1.755
7.4	8.9	2.8		63.6	1.804

72 473 7.6 A0 4.6

5.3	8.9	.7	4.3	16.3	1.215⁻
5.3		.7		16.3	1.215⁻
5.4		.8		18.6	1.270
5.8	8.9	1.2		27.9	1.446

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7 2	469					4.5
8.8	6.2		1.7	4.25	40.0	1.602
	6.5		2.0		47.0	1.672
	7.3		2.8		66.0	1.820
8.7	7.6		3.1		73.0	1.864
72	465					4.5
8.7	5.5		1.0	4.25	23.5	1.372
	5.3		.8		18.8	1.274
	5.5		1.0		23.5	1.371
8.8	6.0		1.5		35.3	1.548
72	460					4.5
8.8	6.6		2.1	4.35	48.3	1.684
	7.0		2.5		57.5	1.760
	7.2		2.7		62.0	1.792
8.9	7.5		3.0		69.0	1.840
I 50 521	66	642	8.7			4.4
7.5	5.2		.8	3.15	25.4	1.405
	5.2		.8		25.4	1.405
	5.4		1.0		31.8	1.502
7.6	5.8		1.4		44.5	1.648
66	604		9.2			4.5
7.4	5.4		.9	2.8	32.2	1.508
	5.5		1.0		35.7	1.553
	5.6		1.1		39.3	1.594
7.2	5.7		1.2		42.8	1.632

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66	602	8.7				4.4
	5.2	7.35⁻	.8	2.90	27.6	1.441
	5.2		.8		27.6	1.441
	5.4		1.0		34.5⁻	1.538
	5.5⁻	7.20	1.1		38.0	1.580
67	608	8.3				4.7
7.30	5.0		.3	2.6	11.5⁻	1.061
	5.1		.4		15.4	1.188
	5.2		.5⁻		19.2	1.283
7.30	5.2		.5		19.2	1.283
67	579	A2 9.2				4.6
7.2	5.4		.8	2.55	31.4	1.497
	5.5⁻		.9		35.2	1.547
	5.7		1.1		42.2	1.635⁻
7.1	5.8		1.2		47.0	1.672
68	523	8.4				4.5
7.3	5.1		.6	2.8	21.4	1.330
	4.9		.4		14.3	1.156
	5.1		.6		21.4	1.330
7.3	5.2		.7		25.0	1.398
69	503	8.6				4.5⁻
	5.2	7.3	.7	2.8	25.0	1.398
	5.3		.8		28.6	1.457
	5.5		1.0		35.7	1.552
End of A*	5.55⁻	7.25⁻	1.05		37.5⁻	1.574

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66 650↓ 4.5

5.2	7.4	.7	2.95	23.7	1.375
5.1		.6		20.4	1.310
5.7		1.2		40.7	1.610
6.2	7.5	1.7		57.5	1.760

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66 648↓ 4.0

4.6	6.6	.6	2.6	23.1	1.364
4.9		.9		34.6	1.538
5.0		1.0		38.6	1.586
5.2	6.6	1.2		46.2	1.664

66 64↑4↓ 4.5

5.3	7.0	.8	2.5	32.0	1.505
5.4		.9		36.0	1.556
5.6		1.1		44.0	1.643
5.8	7.0	1.3		52.0	1.716

66 640↓ 4.6

5.4	6.9	.8	2.4	33.3	1.522
5.5		.9		37.5	1.574
5.7		1.1		45.8	1.660
5.9	7.1	1.3		54.2	1.734

66 630↓ 4.6

7.0	5.0	.4	2.4	16.7	1.229
	5.0	.4		16.7	1.229
	5.35	.75		31.2	1.494
7.0	5.90	1.3		54.3	1.734

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66 623 ✓ 4.6

5.1	7.0	.5	2.35	21.3	1.328
5.2		.6		25.5	1.406
5.8		1.2		51.0	1.707
5.9	6.9	1.3		57.4	1.743

66 600 ✓ 4.6

4.9	6.9	.3	2.3	13.0	1.114
4.9		.3		13.0	1.114
5.0		.4		17.4	1.240
5.1	6.9	.5		21.7	1.336

66 599 ✓ 4.6

6.8	4.9	.3	2.25	13.3	1.124
	4.9	.3		13.3	1.124
	5.0	.4		17.8	1.250
6.9	5.0	.4		17.8	1.250

66 597 ✓ 4.6

7.0	5.4	.8	2.4	33.3	1.522
	5.5	.9		37.5	1.572
	5.6	1.0		41.7	1.620
7.0	5.7	1.1		45.8	1.660

67 635 ✓ 4.6

7.0	5.1	.5	2.4	20.8	1.318
	5.1	.5		20.8	1.318
	5.4	.8		33.3	1.522
7.0	5.4	.8		33.3	1.522

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1932phae.proj.1227M

67 635 ↓ 4.6

7.0	4.9	.3	2.4	12.5	1.096
	5.0	.4		16.6	1.220
	5.2	.6		25.0	1.398
7.0	5.4	.8		33.3	1.522

67 632 ↓ 4.6

7.0	4.8	.2	2.4	8.3.4	0.920
	4.9	.3		12.5	1.097
	5.2	.6		25.0	1.398
7.0	5.4	.8		33.3	1.522

67 634 ↓ ~~X~~ 9. 4.7

7.0	5.5	.8	2.3	34.8	1.542
	5.4	.7		30.4	1.483
	5.8	1.1		47.8	1.679
7.0	6.3	1.6		69.5	1.842

67 633 ↓ 4.7

5.2	7.0	.6	2.3	26.1	1.416
5.2		.5		21.7	1.336
5.6		.9		39.1	1.592
5.8	7.0	1.1		47.8	1.680

67 625 ↓ ~~X~~ 4.6

7.0	5.5	.9	2.4	37.5	1.574
	5.6	1.0		41.7	1.620
	6.0	1.4		58.3	1.765
7.0	6.3	1.7		70.8	1.850

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67 621 ✓ 4.7

6.9	5.3	.6	2.25	26.7	1.426
	5.6	.9		40.0	1.602
	5.7	1.0		44.5	1.648
7.0	5.9	1.2		53.4	1.727

67 617 ✓ 4.7

7.0	5.0	.3	2.3	13.0	1.114
	5.0	.3		13.0	1.114
	5.1	.4		17.4	1.240
7.0	5.3	.6		26.1	1.416

67 611 ✓ 4.7

7.0	5.5	.8	2.3	34.8	1.542
	5.5	.8		34.8	1.542
	5.7	1.0		43.5	1.638
7.0	5.8	1.1		47.8	1.680

67 610 ✓ 4.8

7.1	5.2	.4	2.25	17.8	1.250
	5.2	.4		17.8	1.250
	5.5	.7		31.1	1.492
7.0	5.7	.9		40.0	1.602

67 597 4.7

7.0	5.0	.3	2.25	13.3	1.124
	5.0	.3		13.3	1.124
	5.0	.3		13.3	1.124
6.9	5.1	.4		17.8	1.250

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67	S94 ✓					4.6
7.1	5.15		.55	2.45	22.4	1.350
	5.10		.50		20.4	1.310
	5.10		.50		20.4	1.310
7.9	5.3		.7		28.6	1.456
67	S92 ✓					4.6
	5.3	7.0	.7	2.45	28.6	1.456
	5.3		.7		28.6	1.456
	6.0		1.4		57.1	1.757
	6.9	7.1	1.5		61.2	1.786
67	S84 ✓					4.8
7.2	5.3		.5	2.35	21.3	1.328
	5.3		.5		21.3	1.328
	5.5		.5		21.3	1.328
7.1	5.6		.8		34.0	1.532
67	S82 ✓					4.9
7.3	5.8		.9	2.55	35.2	1.546
	5.8		.9		35.2	1.546
	6.2		1.3		51.0	1.708
7.6	6.3		1.4		55.0	1.740
67	S76 ✓					5.2
7.6	5.5		.3	2.40	12.5	1.096
	5.6		.4		16.7	1.222
	5.6		.4		16.7	1.222
7.6	5.9		.7		29.2	1.465

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67 572 ✗ 5.1

7.6	5.9	.8	2.5	32.0	1.505
	6.0	.9		39.6	1.597
	6.1	1.0		40.0	1.602
7.6	6.4	1.3		52.0	1.716

68 590 ✗ 5.1

6.0	7.6	.9	2.5	36.0	1.556
6.1		1.0		40.0	1.602
6.1		1.0		40.0	1.602
6.3	7.6	1.2		48.0	1.681

69 562 ✗ 5.1

6.0	7.4	.9	2.4	37.5	1.574
6.0		.9		37.5	1.574
6.2		1.1		45.8	1.660
6.6	7.6	1.5		62.5	1.786

69 561 ✓ 5.1

5.5	7.7	.4	2.55	15.7	1.196
5.5		.4		15.7	1.196
5.8		.7		27.4	1.438
5.9	7.6	.8		31.3	1.495

69 538 ✗ 5.1

7.7	6.1	1.0	2.6	38.5	1.585
	6.3	1.2		46.2	1.665
	6.6	1.5		57.7	1.760
7.7	6.7	1.6		61.5	1.788

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69 SJ9 J 17 5.1

6.2	7.6	1.1	2.5	44.0	1.644
6.3		1.2		48.0	1.682
6.4		1.3		52.0	1.716
6.5	7.6	1.4		56.0	1.748

69 S52 5.2

5.7	7.7	.5	2.5	20.0	1.30
5.7		.5		20.0	1.30
5.75		.55		22.0	1.342
5.90	7.7	.7		28.0	1.447

69 SJ1 J 17 5.2

7.7	6.0	.8	2.5	32.0	1.505
	6.0	.8		32.0	1.505
	6.3	1.1		44.0	1.644
7.7	6.7	1.5		60.0	1.778

69 S50 J 5.2

7.6	5.6	.4	2.4	16.7	1.222
	5.7	.5		20.8	1.318
	5.8	.6		25.0	1.398
7.6	5.9	.7		29.2	1.465

69 S43 J 5.1

7.7	5.6	.5	2.55	19.6	1.292
	5.7	.6		23.5	1.371
	6.1	1.0		39.2	1.593
7.6	6.4	1.3		51.0	1.707

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50561

69 542 ✓ 4.5

6.6	5.2	.7	2.2	31.8	1.502
	5.2	.7		31.8	1.502
	5.3	.8		36.4	1.56
6.8	5.6	1.1		50.0	1.698

69 526 ✓ 4.9

~~7.3~~ 6.9	5.5⁻	.6	2.0	30.0	1.48
	5.5⁻	.6		30.0	1.48
	5.8	.9	2.4	37.5⁻	1.57
7.3	5.8	.9		37.5⁻	1.57

69 518 ✓ 5.3

7.4	5.9	.6	2.2	27.2	1.43
	6.05⁻	.75⁻		34.1	1.53
	6.30	1.0		45.5⁻	1.66
7.6	6.60	1.2		54.5⁻	1.74

69 517 ✓ 5.6

6.2	7.7	.6	2.2	27.3	1.43
6.2		.6		27.3	1.43
6.4		.8		36.3	1.56
6.9	7.9	1.10		50.0	1.~~77~~ 698

69 510 ✓ 5.9

6.7	8.3	.8	2.4	33.3	1.52	
6.8		9		37.5⁻	1.57	
7.2		1.31		45.8	1.66	
7.3	8.7	1.42	2.6	46.2	1.66	6.1

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69 S09 ↓ Ark 8.2 5.8

6.3	8.0⁻	.5⁻	2.5	20.0	1.30
6.3		.5⁻		20.0	1.30
6.4		.6		24.0	1.38
6.4	8.2	.6		24.0	1.38

69 S08 5.6

6.3	7.9	.7	2.25	31.1	1.49
6.2		.5⁻		22.2	1.35
6.7		1.1		49.0	1.69
7.8	6.8	1.2		63.3	1.73

69 S06 5.4

6.1	7.6	.7	2.1	33.3	1.52
6.0		.6		28.6	1.46
6.4		1.0		47.6	1.68
6.6	7.4	1.2		57.2	1.76

69 S05 8.6 A0 5.2

7.2	5.7	.5⁻	1.95⁻	25.6	1.41
	5.7	.5		25.6	1.41
	5.8	.6		30.8	1.49
7.1	5.9	.7		35.8	1.55⁻

70 S98 ↓ a97 4.9

5.4	6.9	.5	2.0	25.0	1.40
5.4		.5⁻		25.0	1.40
5.4		.5⁻		25.0	1.40
5.5	6.9	.6		30.0	1.48

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70 S96 ✓ 4.9

6.9	5.6	.7	2.0	35.0	1.54
	5.7	.8		40.0	1.60
	5.8	.9		45.0	1.65
6.9	6.0	1.1		55.0	1.74

70 S93 ✓ 4.8

5.3	6.9	.5	2.1	23.8	1.38
5.4		.6		28.6	1.46
5.5		.7		33.4	1.52
5.7	6.9	.9		42.8	1.63

70 S88 ✓ 4.8

5.6	7.2	.8	2.35	34.0	1.53
5.6		.8		34.0	1.53
5.9		1.1		46.8	1.67
5.9	7.1	1.1		46.8	1.67

70 S84 ✓ 4.8

6.8	5.3	.5	2.0	25.0	1.40
	5.4	.6		30.0	1.48
	5.6	.8		40.0	1.60
6.8	5.9	1.1		55.0	1.74

70 S82 ✓ 4.7

6.9	5.4	.7	2.2	31.8	1.50
	5.3	.6		27.2	1.42
	5.6	.9		41.0	1.61
6.9	5.6	.9		41.0	1.61

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70 567 ↓ 4.8

5.4	6.7	.6	1.95	30.8	1.49
5.4		.6		30.8	1.49
5.4		.6		30.8	1.49
5.6	6.8	.8		41.0	1.61

70 563 97 Rot 4.7

5.8	6.9	1.1	2.25	49.0	1.69
5.8		1.1		49.0	1.69
5.9		1.2		53.4	1.73
6.0	7.0	1.3		57.8	1.76

70 531 ↓ 4.8

5.3	6.9	.5	2.15	23.2	1.37
5.2		.4		18.6	1.27
5.5		.7		32.5	1.51
5.7	7.0	.9		41.8	1.62

70 657 ↓ 4.8

6.8	5.2	.4	2.05	19.5	1.29
	5.1	.3		14.6	1.16
	5.4	.6		29.2	1.46
6.9	5.5	.7		34.2	1.53

71 529 ↓ c1.7

6.8	5.2	.5	2.05	24.4	1.39
	5.2	.5		24.4	1.39
	5.4	.7		34.2	1.53
6.7	5.65	.95		46.2	1.67

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1932phae.proj.1227M

71 525 ✓ 4.7

6.85⁻	5⁻.3	.6	2.1	28.6	1.46
	5⁻.5⁻	.8		38.0	1.5⁻8
	5⁻.6	.9		42.8	1.63
6.8	5⁻.7	1.0		47.6	1.68

71 .524 ✓ 4.7

6.8	5⁻.6	.9	2.15	41.9	1.62
	5⁻.5⁻	.8		37.21	1.57
	5⁻.7	1.0		46.5⁻	1.67
6.9	6.0	1.3		60.5⁻	1.78

71 578 ✓ 4.7

6.9	5⁻.4	.7	2.15⁻	32.6	1.5⁻1
	5⁻.5⁻	.8		37.21	1.5⁻7
	5⁻.7	1.0		46.5⁻	1.67
6.8	6.0	1.3		60.5⁻	1.78

71 509 ✓ 4.6

5⁻.2	6.9	.6	2.25	26.7	1.43
5⁻.2	6⁻	.6		26.7	1.43
5⁻.4		.8		3 5⁻.5⁻	1.5⁻5⁻
5⁻.5⁻	6.8	.9		40.0	1.60

71 504 ✓ 4.7

5⁻.2	7.0	.5	2.25	22.2	1.47
5⁻.3		.6		26.7	1.43
5⁻.4		.7		31.1	1.49
5⁻.7	6.9	1.0		44.5⁻	1.65⁻

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71	484					4.7
	5.3	6.9	.6	2.2	27.2	1.43
	5.2		.5		22.7	1.35
	5.4		.7		31.8	1.50
	5.7	6.9	1.0		45.5	1.66
71	482					4.7
	5.7	6.9	1.0	2.2	45.5	1.66
	5.5		.8		36.3	1.56
	5.95		1.25		52.7	1.75
	6.20	6.9	1.5		68.1	1.83

5D606	5D521
66 623	66 600
66 600	66 599
66 599	67 635
67 635	67 632
67 632	67 633
67 633	67 617
67 621	67 594
67 617	67 584
67 610	67 576
67 594	68 590
67 592	69 569 not on plate
67 582	69 561
67 576	69 552
67 572	69 551
68 590	69 550
69 569	69 542
69 567	69 526 ~~not on plate~~
69 550	69 517

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1932phae.proj.1227M

SD 606 SD 561

69 542 69 510

69 526

69 510

Mar 17 '32

50606 66 623 ✓ 4.4

8.3	5.6	1.2	3.85	31.2	1.494
	5.9	1.5		39.0	1.591
	6.8	1.9		49.4	1.694
8.2	7.0	2.6		67.5	1.83

66 600 ✓ 4.3

5.1	8.1	.8	3.85	20.8	1.32
5.0		.7		18.2	1.26
5.2		.9		23.4	1.37
5.4	8.2	1.1		28.6	1.46

66 599 ✓ 4.5

5.2	8.2	.7	3.65	19.2	1.28
5.4		.9		24.6	1.39
5.4		.9		24.6	1.39
5.5	8.1	1.0		27.4	1.44

67 635 ✓ 4.4

8.6	5.6	1.2	4.15	28.9	1.46
	5.6	1.2		28.9	1.46
	6.3	1.9		45.7	1.66
8.5	6.5	2.1		50.6	1.70

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67 632 ✓ 4.6

5.5	8.5	.9	3.95	22.8	1.36
5.5		.9		22.8	1.36
6.1		1.5		38.0	1.58
6.3	8.6	1.7		43.1	1.63

67 633 ✓ 4.7

8.8	5.95	1.25	3.6	34.8	1.54
	6.05	1.35		37.5	1.57
	6.7	2.0		55.6	1.75
8.4	7.0	2.3		64.0	1.81

67 621 ✓ 4.8

5.9	8.1	1.1	3.35	32.8	1.52
6.3		1.5		44.7	1.65
6.7		1.9		56.7	1.75
7.0	8.2	2.2		65.7	1.82

67 617 ✓ 4.8

8.2	5.6	.8	3.6	22.2	1.35
	5.8	1.0		27.8	1.44
	5.9	1.1		30.6	1.49
8.5	6.2	1.4		38.9	1.59

67 610 ✓ 5.2

6.5	8.7	1.3	3.7	35.2	1.55
6.9		1.7		46.0	1.66
7.1		1.9		51.4	1.71
7.4	9.1	2.2		59.5	1.77

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67 594 ✓ 5.0

8.9	6.2	1.2	4.0	30.0	1.48
	6.1	1.1		27.5⁻	1.44
	6.5⁻	1.5⁻		37.5⁻	1.57
9.1	6.6	1.6		40.0	1.60

67 592 ✓ 5.2

9.0	6.4	1.2	3.7	32.4	1.51
	6.7	1.5⁻		40.5⁻	1.61
	7.2	2.0		54.0	1.73
8.8	7.5⁻	2.3		62.2	1.79

67 582 ✓ 5.1

8.65⁻	6.75⁻	1.65⁻	3.5⁻	47.2	1.67
	6.60	1.5		42.8	1.63
	7.10	2.0		57.0	1.76
8.6	7.40	2.3		65.7	1.82

67 576 ✓ 5.0

8.3	6.0	1.0	3.25	30.8	1.49
	6.1	1.1		33.9	1.53
	6.2	1.2		36.9	1.57
8.2	6.4	1.4		43.1	1.63

67 572 ✓ 5.0

8.2	6.6	1.6	3.1	51.6	1.71
	6.6	1.6		52.6	1.71
	6.8	1.8		58.0	1.76
8.0	7.0	2.0		64.5⁻	1.81

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68	590 ✓					4.9
	6.1	8.0	1.2	3.15	38.1	1.58
	6.4		1.5		47.6	1.68
	6.5		1.6		50.8	1.71
	6.7	8.1	1.8		57.1	1.76
69	589 ✓					4.9
8.1	5.8		.9	3.3	27.3	1.44
	6.0		1.1		33.4	1.52
	6.6		1.7		51.5	1.71
8.9	6.9		2.0		60.6	1.78
69	587 ✓					4.9
8.2	6.1		1.2	3.6	33.4	1.52
	6.4		1.5		41.7	1.62
	6.8		1.9		52.8	1.72
8.8	7.4		2.5		69.5	1.84
69	550 ✓					4.9
	5.9	8.5	1.0	3.75	26.7	1.43
	6.1		1.2		32.0	1.51
	—		—		—	—
	6.5	8.8	1.6		42.7	1.63
69	542 ✓					4.9
8.8	6.1		1.4	3.85	36.4	1.56
	6.4		1.5		39.0	1.59
	6.5		1.6		41.6	1.62
8.7	6.8		1.9		49.4	1.69

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69 5 26 ✓ 4.9

8.4	5.9	1.0	3.6	27.8	1.44
	6.1	1.2		33.3	1.52
	6.2	1.3		36.1	1.56
8.6	6.5⁻	1.6		44.5⁻	1.65⁻

69 5 10 ✓ 4.9

8.4	6.1	1.2	3.5	34.3	1.54
	6.2	1.3		37.2	1.57
	6.4	1.5⁻		43.0	1.63
	8.6	1.7		48.6	1.69

50 56 1 66 600 ✓ dwc 4.7

5.05	7.1	.35	2.4	14.6	1.16
5.00		.3		12.5⁻	1.10
5.10		.4		16.7	1.22
5.25⁻	7.1	.5⁵⁻		22.9	1.36

66 599 ✓ 4.7

7.2	5.0	.3	2.45	12.2	1.086
	5.1	.4		16.3	1.21
	5⁻.1	.4		16.3	1.21
7.1	5⁻.2	.5		20.4	1.31

67 635 ✓ 4.8

7.1	5⁻.2	.4	2.3	17.4	1.24
	5⁻.3	.5⁻		21.7	1.34
	5⁻.4	.6		26.0	1.42
7.1	5⁻.6	.8		34.8	1.54

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1932phae.proj.1227M

67	632✓					4.7
7.2	5.1	.4	2.5	16.0	1.20	
	5.1	.4		16.0	1.20	
	5.4	.7		28.0	1.45	
7.2	5.6	.9		36.0	1.56	
67	633✓					4.7
7.3	5.5-	.8	2.6	30.8	1.49	
	5.5	.8		30.8	1.49	
	5.8	1.1		42.3	1.63	
7.3	6.2✓	1.5		57.7	1.76	
67	617✓					4.9
7.2	5.3	.4	2.3	17.4	1.24	
	5.2	.3		13.0	1.11	
	5.3	.4		17.4	1.24	
7.2	5.4	.5		21.8	1.34	
67	594✓					4.8
7.2	5.2	.4	2.3	17.4	1.24	
	5.3	.5		21.7	1.34	
	5.4	.6		26.1	1.42	
7.0	5.5	.7		30.4	1.48	
67	584✓					5.0
7.2	5.4	.4	2.2	18.2	1.26	
	5.5	.5		22.7	1.36	
	5.65	.65		29.5	1.47	
7.2	5.8	.8		36.4	1.56	

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67 576 ✓						4.9
7.2	5.5⁻	.6	2.3	26.1	1.42	
	5.4	.5⁻		21.8	1.34	
	5.5	.6		26.0	1.42	
7.2	5.6	.7		30.4	1.48	
68 590 ✓						4.8
59	7.4	1.1	2.55⁻	43.2	1.64	
5.8		1.0		39.2	1.59	
5.9		1.1		43.2	1.64	
6.2 ✓	7.3	1.4		54.8	1.74	
69 561 ✓						4.8
5.2	7.4	.4	2.5	16.0	1.20	
5.2		.4		16.0	1.20	
5.5⁻		.7		28.0	1.45⁻	
5.7	7.2	.9		36.0	1.56	
69 √5-2 ✓						4.8
5.4	7.2	.6	2.45	24.5⁻	1.39	
5.35⁻		.55		22.4	1.35⁻	
5.35⁻		.55		22.4	1.35⁻	
5.50	7.3	.70		28.6	1.46	
69 551 ✓						4.8
5.6	7.2	.8	2.45	32.6	1.51	
5.7		.9		36.7	1.57	
6.1		1.3		53.0	1.72	
6.4	7.3	1.6		65.3	1.81	

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69	530					4.7
7.2	5.3	.6	2.5	24.0	1.38	
	5.3	.6		24.0	1.38	
	5.3	.6		24.0	1.38	
7.2	5.6	.9		35.9	1.55	
69	542					4.8
7.0	5.4	.6	2.25	26.6	1.43	
	5.5	.7		31.2	1.49	
	5.6	.8		35.6	1.55	
7.1	5.9	1.1		49.0	1.69	
69	526					4.7
7.0	5.4	.7	2.3	30.4	1.48	
	5.4	.7		30.4	1.48	
	5.5	.8		34.8	1.54	
7.0	5.6	.9		39.2	1.59	
69	517					4.7
7.1	5.3	.6	2.35	25.5	1.41	
	5.5	.8		34.0	1.53	
	5.9	1.2		51.0	1.71	
7.0	6.2	1.5		64.0	1.81	
69	510					4.7
5.5	7.1	.8	2.4	33.3	1.52	
5.5		.8		33.3	1.52	
5.7		1.0		41.7	1.62	
5.9	7.1	1.2		50.0	1.70	

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S0606	S0581
70 582	70 575⁻
70 564 sup.²	70 564 sup.²
70 561	70 561
70 557	70 557
71 525⁻	71 529
71 524	71 524⁻
71 518	71 518
71 509	71 509
71 504	71 504
71 487	71 489
71 484	71 487
72 465⁻	71 486 not for.
	71 484
	71 482
	72 465⁻ not on plate
	67 592
	69 526 sup.²
	69 ~~530~~

S0606 70 582✓ 4✓

7.5⁻	5.8	1.5	3.85	46.2	1.665⁻
	5.7	1.4		43.0	1.634
	6.0	1.7		52.3	1.718
7.6	6.2	1.9		58.5	1.768

70 564✓ 4.7

7.6	5.9	1.2	2.85	42.2	1.63
	5.9	1.2		42.2	1.63
	6.1	1.4		49.2	1.69
	6.4	7.5⁻ 1.7		59.6	1.78

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70 561 ✓ 4.8

7.6	5.7	.9	2.8	32.1	1.51
	5.6	.8		28.6	1.46
	6.0	1.2		42.8	1.63
7.6	6.2	1.4		50.0	1.70

70 557 ✓ 4.85-

7.5	5.5	.65	2.75	23.6	1.37
	5.6	.75		27.2	1.43
	6.0	1.15		41.8	1.62
7.7	6.1	1.25		45.5	1.66

71 525 ✓ 4.8

7.8	6.1	1.3	3.0	43.3	1.64
	6.2	1.4		46.7	1.67
	6,5	1.7		56.6	1.75
7.8	6.5	1.7		56.6	1.75

71 524 ✓ 4.8

7.7	6.0	1.2	2.95	40.7	1.61
	6.35	1.55		52.5	1.72
	6.8	2.0		67.8	1.83
7.8	6.9	2.1		71.2	1.85

71 518 ✓ 4.8

7.8	6.1	1.3	2.95	44.1	1.64
	6.1	1.3		44.1	1.64
	6.65	1.85		62.8	1.80
7.7	6.8	2.0		67.8	1.83

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71 509 ✓ 4.8

7.7	5.7	.9	2.85	31.6	1.50
	5.8	1.0		35.1	1.55
	6.1	1.3		45.6	1.66
7.6	6.2	1.4		49.2	1.69

71 504 ✓ 4.8

5.5	7.7	.7	2.9	24.1	1.38
5.6		.8		27.6	1.44
6.0		1.2		41.4	1.62
6.3	7.65	1.5		51.8	1.71

71 487 ✓ 4.8

6.3	7.8	1.5	2.95	50.8	1.706
6.6		1.8		61.0	1.78
6.8		2.0		67.8	1.82
7.7	7.0	2.2		74.5	1.87

71 484 ✓ 4.7

7.8	5.4	.7	3.05	23.0	1.36
	5.5	.8		26.2	1.42
	6.0	1.3		42.6	1.63
7.7	6.45	1.75		57.4	1.76

72 465 ✓ 4.7

7.6	5.6	.9	2.75	32.8	1.52
	5.6	.9		32.8	1.52
	5.6	.9		32.8	1.52
7.3	5.7	1.1		40.0	1.60

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~~60 561~~

70 575+ 4.7

5.5⁻	6.6	.8	2.0	40.0	1.60
5.4		.7		35.0	1.54
5.6		.9		45.0	1.65⁻
5.9	6.75⁻	1.2		60.0	1.78

70 564↓ 4.8

6.5⁻	5.4	.6	1.75	34.3	1.54
	5.~~50~~	.7		40.0	1.60
	5.55	.75		42.8	1.63
6.6	5.70	.9		51.4	1.71

70 568↓ 4.8

5.35⁻	6.75⁻	.55	1.95	28.2	1.45⁻
5.30		.50		25.6	1.41
5.50		.7		35.8	1.55⁻
5.65	6.75⁻	.85		43.6	1.64

70 577↓ 4.8

5.3	6.80	.5	2.0	25.0	1.40
5.4		.6		30.0	1.48
5.4		.6		30.0	1.48
5.6	6.8	.8		40.0	1.60

71 529↓ 4.8

6.7	5.3	.5	1.9	26.3	1.42
	5.3	.5		26.3	1.42
	5.5⁻	.7		36.8	1.57
6.7	5.6	.8		42.1	1.62

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71 524 V 4.8

6.8	5.4	.6	1.95	30.8	1.50
	5.6	.8		41.0	1.61
	5.8	1.0		57.3	1.71
6.7	5.9	1.1		56.5	1.75

71 518 V 4.7

5.6	6.8	.9	2.1	42.8	1.62
5.55		.85		40.4	1.61
5.85		1.15		54.8	1.74
6.0	6.8	1.3		62.0	1.79

71 509 V 4.8

5.5	6.8	.7	1.95	35.9	1.55
5.4		.6		30.8	1.49
5.5		.7		35.9	1.55
5.6	6.7	.8		41.0	1.61

71 489 Hf. 4.8

5.60	6.6	.8	1.85	43.3	1.64
5.70		.9		48.6	1.69
5.70		.9		48.6	1.69
5.90	6.7	1.1		59.5	1.77

71 487 Hf V 4.8

6.8	5.7	.9	2.05	43.8	1.64
	5.9	1.1		53.6	1.73
	6.0	1.2		58.5	1.77
6.9	6.0 ⊙	1.2		58.5	1.77

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71 484 ✓ 4.9

5.4	6.9	.5	2.0	25.0	1.40
5.4		.5		25.0	1.40
5.7		.8		40.0	1.60
5.9	6.9	1.0		50.0	1.70

71 482 ✓ 4.9

5.7	6.9	.8	2.0	40.0	1.60
5.7		.8		40.0	1.60
6.1		1.2		60.0	1.78
6.3	6.9	1.4		70.0	1.85

67 592 ✓ 4.9

5.4	6.7	.5	1.8	27.8	1.44
5.3		.4		22.2	1.35
5.5		.6		33.3	1.52
5.9	6.7	1.0		55.5	1.74

69 526 ✓ 4.8

6.7	5.4	.6	1.95	30.8	1.49
	5.4	.6		30.8	1.49
	5.5	.7		35.9	1.55
6.8	5.5	.7		35.9	1.55

69 530 ✓ 4.9

6.7	5.7	.8	1.80	44.4	1.65
	5.75	.85		47.2	1.67
	5.9	1.0		55.5	1.74
6.75	6.10	1.2		66.6	1.82

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[50609 71 557 8,4 3.9

4.7	7.1	.8	3.25	24.6	1.39
4.7		.8		24.6	1.39
4.9		1.0		30.8	1.49
4.9.5⁻	7.2	1.05⁻		32.3	1.51

70 573 8.6 4.2

5.1	7.3	.9	3.15	28.6	1.46
5.12		.92		29.2	1.47
5.2		1.0		30.8	1.49
5.4	7.4	1.2		38.2	1.58

69 602 6.5⁻ 4.2

4.3	6.7	.1	2.5⁻	4.0	0.60
4.2		.0		0	
4.2		.0			
4.2	6.7	.0			

68 626 9.8 4.2

5.8	6.85⁻	1.6	2.65	60.4	1.78
5.9		1.7		64.2	1.81
5.9		1.7		64.2	1.81
6.1	6.8	1.9		71.8	1.86

68 628 9,6 4.4

7.0	5.9	1.5⁻	2.6	57.8	1.76
	5.7	1.3		50.0	1.70
	5.85⁻	1.45		55.7	1.75⁻
7.0	6.1	1.7		65.4	1.82

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67 66Φ 9.8 4.5

5.8	6.8	1.3	2.3	56.5	1.75
5.8		1.3		56.5	1.75
5.9		1.4		61.0	1.79
6.2	6.8	1.7		73.8	1.87

67 671 8.7 4.4

6.8	5.15	.75	2.5	30.0	1.48
	5.10	.70		28.0	1.45
	5.20	.8		32.0	1.51
7.0	5.30	.9		36.0	1.56

66 664 5.0 4.4

6.65	4.4	.0
	4.4	.0
	4.5	
6.1	4.5	

66 675 8.6 4.3

7.05	5.3	1.0	2.75	36.4	1.56
	5.35	1.05		38.2	1.58
7.05	5.4	1.1		40.0	1.60

end of A *

71 524 4.5

5.3	7.15	.8	2.75	29.0	1.46
5.3		.8		29.0	1.46
5.9		1.4		51.0	1.71
6.1	7.4	1.6		58.2	1.77

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71	525√					4.5
	5.3	7.5	.8	2.9	27.6	1.44
	5.4		.9		31.0	1.49
	5.7		1.2		41.4	1.62
	5.9	7.3	1.4		48.3	1.68
71	529 tb					4.6
7.5	5.1		.5	2.85	17.5	1.24
	5.0		.4		14.0	1.15
	5.4		.8		28.0	1.45
7.4	5.6		1.0		35.1	1.57
71	542√					4.6
7.3	5.6		1.0	2.7	37.1	1.57
	5.7		1.1		40.7	1.61
	5.8		1.2		44.4	1.65
7.3	6.1		1.5		50.5	1.74
71	552√					4.65
	5.6	7.6	.95	2.70	35.2	1.55
	5.8		1.15		42.6	1.63
	5.9		1.25		46.4	1.67
	6.0	7.1	1.35		50.0	1.70
71	554√					4.65
7.3	5.85		1.20	2.60	46.2	1.66
	5.95		1.30		50.0	1.70
	6.1		1.45		55.8	1.75
7.2	6.2		1.55		59.7	1.78

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1932phae.proj.127M

7: 5 58 ✓ 4.6

5.7	7.3	1.1	2.9	37.9	1.58
5.9		1.3		44.8	1.65
6.0		1.4		48.3	1.68
6.4	7.7	1.8		62.0	1.79

7: 568 ✓ 4.7

5.55	7.9	.85	3.25	26.2	1.42
5.80		.80		24.6	1.39
5.95		1.25		38.4	1.58
6.3	8.0	1.6		49.3	1.69

70 588 ✓ 4.7

5.7	8.0	1.0	3.25	30.8	1.49
5.9		1.2		36.9	1.52
6.2		1.5		46.2	1.66
6.45	7.9	1.75		53.8	1.73

70 596 ✓ 4.8

5.8	7.9	1.0	3.2	31.2	1.59
5.8		1.0		31.2	1.59
6.0		1.2		37.5	1.57
6.4	8.1	1.6		50.0	1.70

70 ~~598~~ 600 ✓ 4.7

6.7	8.0	2.0	3.3	60.6	1.78
7.0		2.3		69.6	1.84
7.1		2.4		72.8	1.86
7.3	8.0	2.6		79.0	1.90

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50609 70 603 ✓ 3.9

4.8 7.2
5.0
5.3
5.7 7.1

5.4	7.2	.5	2.55	21.3	1.328	4.9
5.55		.65		27.6	1.44	
5.8		.9		38.3	1.58	
5.9	7.3	1.0		42.5	1.62	

70 612 ✓ 4.9

7.6	6.1	1.2	2.70	44.5	1.65
	6.3	1.4		51.8	1.71
	6.3	1.4		57.8	1.71
7.6	6.5	1.6		59.3	1.77

70 620 +6. 5.0

7.6	5.5	.5	2.6	19.2	1.28
	5.5	.5		19.2	1.28
	5.7	.7		26.9	1.43
7.6	5.8	.8		30.8	1.49

70 627 ✓ 5.1

7.6	5.8	.7	2.55	27.4	1.44
	5.9	.8		31.4	1.50
	6.0	.9		35.2	1.55
7.7	6.25	1.15		45.1	1.65

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70 630↓ 5.0

6.0	7.6	1.0	2.6	38.5	1.59
6.2		1.2		46.2	1.66
6.6		1.6		61.5	1.79
6.7	7.6	1.7		65.5	1.82

70 631↓ 5.0

7.6	5.8	0.8	2.65	30.2	1.48
	6.0	1.0		37.8	1.58
	6.35	1.35		51.0	1.71
7.7	6.40	1.40		52.8	1.72

70 637↓ 5.0

7.7	6.1	1.1	2.7	40.8	1.61
	6.0	1.0		37.0	1.57
	6.4	1.4		57.8	1.71
7.7	6.55	1.55		57.5	1.76

70 638↓ 5.0

7.6	5.7	.7	2.5	28.0	1.45
	5.8	.8		32.0	1.51
	5.9	.9		36.0	1.56
7.4	6.1	1.1		44.0	1.64

70 640 ** 4.9

7.3	5.4	.5	2.45	20.4	1.31
	5.3	.4		16.3	1.21
	5.4	.5		20.4	1.31
7.4	5.6	.7		28.6	1.46

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70 641 ✓ 4.9

5.2	7.35⁻	.3	2.35	12.8	1.11
	5.35⁻	.45⁻		19.2	1.28
	5.7	.8		34.0	1.53
	6.15⁻	7.2	1.25⁻	53.2	1.73

70 643 ✓ 4.9

7.2	5.65⁻	.75	2.3	32.6	1.51
	5.80	0.90		39.2	1.59
	6.10	1.20		52.3	1.72
7.25⁻	6.3	1.4		61.0	1.79

70 645 ✓ 4.9

5.0	7.3	.1	2.3	4.3.5⁻	0.64
5.1		.2		8.70	0.94
5.3		.4		17.4	1.24
5.5	7.1	.6		26.1	1.42

70 647 ✓ 4.8

5.9	7.1	1.1	2.35	46.8	1.67
6.0		1.2		51.0	1.71
6.2		1.4		59.5	1.72
6.35⁻	7.2	1.55⁻		66.0	1.82

70 651 ✓ 4.9

7.2	5.5⁻	.6	2.25	26.7	1.43
	5.6	.7		31.1	1.49
	5.8	.9		40.0	1.60
7.1	6.0	1.1		49.0	1.69

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70 654 ✓ 4.8

5.45⁻	7.3	.65⁻	2.45	26.5⁻	1.42
5.55⁻		.75⁻		30.6	1.49
5.65⁻		.85⁻		34.7	1.57
5.80	7.2	1.00		40.8	1.61

69 542 ✓ 4.9

5.6⁻	7.1	.7⁻	2.15⁻	32.6	1.51
5.6⁻		.7⁻		32.6	1.51
5.7⁻		.8⁻		37.2⁻	1.57
5.9⁻	7.0	1.0⁻		46.5⁻	1.67

69 548 5⁻ t/s 4.9

7.3	5.35⁻	.45⁻	2.35⁻	19.2	1.28
	5.4⁻	.5⁻		21.2⁻	1.33
	5.8⁻	.9⁻		38.2	1.58
7.2⁻	5.95⁻	1.05⁻		44.7	1.65⁻

69 551 ✓ 4.9

7.2⁻	5.5⁻	.6⁻	2.9	26.1	1.42
	5.5⁻	.6⁻		26.1	1.42
	6.0	1.1		47.8	1.68
7.2	6.4	1.5		65.2	1.81

69 552 t/s 4.8

7.0	5.3	.5⁻	2.85⁻	21.2⁻	1.33
	5.2	.4		17.0	1.23
	5.4⁻	.6⁻		25.6	1.41
7.3	5.6	.8		34.0	1.53

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69 SJ8 ✓ 4.8

7.2	5.7	.9	2.25	40.0	1.60
	5.95	1.15		57.2	1.71
	6.15	1.25		55.5	1.74
7.1	6.3	1.5		66.6	1.82

69 S59 ✓ 4.85

7.0	5.8	.95	2.20	43.2	1.63
	5.9	1.05		47.8	1.68
	6.0	1.15		52.3	1.72
7.1	6.1	1.25		56.8	1.75

69 S61 th. 4.9

7.2	5.2	.3	2.3	13.0	1.11
	5.3	.4		17.4	1.24
	5.5	.6		26.1	1.42
7.2	5.7	.8		34.8	1.54
	~~7.2~~				

69 S62 ✓ 4.9

7.2	5.6	.7	2.35	29.8	1.47
	5.7	.8		34.0	1.53
	5.9	1.0		42.5	1.63
7.3	6.1	1.2		51.1	1.71

69 S67 th 4.9

7.4	5.35	.45	2.5	18.0	1.25
	5.45	.55		22.0	1.34
	5.75	.85		34.0	1.53
7.4	6.0	1.10		44.0	1.64

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69 529 Hb 4.9

7.2	5.3	.4	2.3	17.4	1.24
	5.3	.4		17.4	1.24
	5.75	.85		37.0	1.57
7.2	6.0	1.1		47.8	1.68

69 576 Hb 4.9

7.2	5.3	.4	2.25	17.8	1.25
	5.3	.4		17.8	1.25
	5.4	.5		22.2	1.35
7.1	5.5	.6		26.6	1.42

P.M. 69 577 4.1

7.0	4.8	.7	3.1	22.6	1.35.4
	4.9	.8		25.8	1.41.2
	5.5	1.4		45.2	1.65.6
7.4	5.95	1.85		59.7	1.78

69 579 4.3

7.4	5.1	.8	3.25	24.6	1.39
	5.25	.95		29.2	1.47
	5.75	1.45		44.6	1.65
7.7	6.10	1.8		55.4	1.74

69 583 Hb 4.5

7.4	4.6	.1	2.95	9.4	1.53
	4.6	.1		9.4	1.53
	4.9	.4		13.6	1.13
7.5	5.0	.5		17.0	1.23

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69 584 th 4.5

5.1	7.7	.6	3.25	18.4	1.265
5.15		.65		20.0	1.30
5.35		.85		26.2	1.42
5.50	7.8	1.0		30.8	1.49

69 592 ✓ 4.6

6.0	7.9	1.4	3.25	43.1	1.64
6.1		1.5		46.2	1.66
6.2		1.6		49.3	1.69
6.3	7.8	1.7		52.4	1.72

69 597 ✓ 4.6

5.6	7.9	1.0	3.3	30.3	1.48
5.65		1.05		31.8	1.50
5.85		1.25		37.9	1.58
6.10	7.9	1.50		45.5	1.66

69 603 ✓ 4.6

5.5	7.9	.9	3.4	26.4	1.42
5.65		1.05		30.9	1.49
5.85		1.25		36.8	1.57
6.05	8.1	1.45		42.7	1.63

68 587 ✓ 4.7

6.0	8.0	1.3	3.3	39.4	1.60
6.0		1.3		39.4	1.60
6.5		1.8		54.5	1.74
6.8	8.0	2.1		63.6	1.80

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68 590 ↓ 4.7

8.0	5.7	1.0	3.3	30.4	1.48
	5.8	1.1		33.4	1.52
	6.1	1.4		42.5	1.63
8.0	6.3	1.6		48.5	1.69

68 605-th. 4.7

7.65	5.2	.5	2.9	17.3	1.24
	5.35	.65		22.4	1.35
	5.65	.95		32.8	1.54
7.55	5.9	1.2		41.5	1.62

68 606 ↓ 4.5-5-

7.6	5.7	1.15	2.05	52.1	1.75
	5.8	1.25		61.0	1.79
	6.1	1.55		75.5	1.88
7.6	6.3	1.75		85.5	1.93

68 609 ↓ 4.6

7.7	5.55-	.95	3.1	30.6	1.49
	5.60	1.00		32.3	1.51
	5.80	1.20		38.8	1.59
7.7	6.10	1.5		48.4	1.69

68 611 ↓ 4.6

7.6	5.3	.7	3.0	23.4	1.37
	5.4	.8		26.6	1.43
	5.5-	.9		30.0	1.48
7.6	5.7	1.1		36.7	1.56

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1932phae.proj.1227M

68 612 ✓ 4.65

7.65	6.1	1.45	3.00	48.4	1.68
	6.1	1.45		48.4	1.68
	6.20	1.55		51.7	1.71
7.7	6.45	1.80		60.0	1.78

68 618 ✓ 4.6

6.0	7.8	1.4	3.1	45.2	1.66
6.25		1.65		53.2	1.73
6.40		1.8		58.0	1.76
6.60	7.6	2.0		64.5	1.81

68 634 ✓ 4.6

5.7	7.7	1.1	3.2	34.4	1.54
6.3		1.7		53.1	1.73
6.7		2.1		65.6	1.82
6.9	7.9	2.3		72.0	1.86

68 639 ✓ 4.55

7.85	5.4	.85	3.30	25.8	1.41
	5.6	1.05		31.8	1.50
	5.8	1.25		37.9	1.58
7.9	6.0	1.45		44.0	1.64

68 631 ✓ 4.5

7.6	6.0	1.5	3.15	47.6	1.68
	6.2	1.6		50.8	1.71
	6.25	1.75		55.5	1.74
7.7	6.50	2.00		63.5	1.80

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1932phae.proj.1227M

67 6321 Eh 4.5

7.6	4.9	.4	3.05	13.1	1.18
	5.10	.6		19.7	1.29
	5.40	.9		29.5	1.47
7.5	5.60	1.1		36.1	1.56

67 6334 4.5

7.7	5.8	1.3	3.2	40.7	1.61
	5.6	1.1		34.4	1.54
	6.4	1.9		59.5	1.77
7.7	6.9	2.4		75.0	1.87

67 6355 4.5

7.6	5.2	.7	3.15	22.2	1.35
	5.3	.8		25.4	1.41
	5.5	1.0		31.8	1.50
7.7	5.7	1.2		38.1	1.58

67 6371 4.6

7.7	5.7	1.1	3.0	36.7	1.57
	5.8	1.2		40.0	1.60
	6.3	1.7		56.7	1.75
7.5	6.6	2.0		66.7	1.82

67 6511 4.6

5.7	7.5	1.1	2.95	37.4	1.57
5.9		1.3		44.1	1.65
6.1		1.5		50.9	1.71
6.3	7.6	1.7		57.6	1.76

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67 653 ✓ 4.5⁻

5.3	7.5⁻	.8	2.9	27.6	1.44
5.5⁻		1.0		34.5	1.54
6.0		1.5		51.7	1.71
6.75⁻	7.3	1.65		56.8	1.75⁻

67 670 ✓ 4.6

6.2	7.75⁻	1.6	3.1	51.5⁻	1.71
6.25⁻		1.65		53.2	1.73
6.40		1.8		58.0	1.76
6.60	7.70	2.0		64.5⁻	1.81

67 673 ✓ 4.6

6.1	7.8	1.5	3.15	47.6	1.68
6.2⁻		1.6		50.8	1.71
6.3		1.7		54.0	1.73
6.5⁻	7.7	1.9		60.3	1.78

67 676 ✓ 4.6

7.8	5.9	1.3	3.2	40.7	1.61
	6.1	1.5		46.8	1.67
	6.25	1.65		51.6	1.71
7.8	6.40	1.8		56.3	1.75

67 677 ✓ 4.6

7.8	5.3	.7	3.2	21.9	1.34
	5.4	.8		25.0	1.40
	5.8	1.2		37.5	1.57
7.8	6.15⁻	1.55		48.5⁻	1.69

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Mar 24 '32.

50 609

67	684↓					5.2
9.1	6.4	1.2	4.0	30.0	1.48	
	6.55	1.35		33.8	1.53	
	6.60	1.4		35.0	1.54	
9.3	6.80	1.6		40.0	1.60	
67	685↓					5.8
9.3	6.6	.8	3.5	22.8	1.36	
	6.7	.9		25.7	1.41	
	7.35	1.55		44.3	1.65	
9.3	7.8	2.0		57.2	1.76	
67	686↓					5.8
9.35	6.6	.8	3.5	22.9	1.36	
	6.7	.9		25.7	1.41	
	6.8	1.0		28.6	1.46	
9.20	7.05	1.25		35.7	1.55	
66	648↓					5.6
9.0	6.3	.7	3.3	21.2	1.33	
	6.4	.8		24.2	1.38	
	6.45	.85		25.8	1.41	
8.8	6.75	1.15		34.9	1.54	
66	650↓					5.4
8.8	6.3	.9	3.2	28.1	1.45	
	6.3	.9		28.1	1.45	
	6.90	1.5		46.9	1.67	
8.55	7.25	1.85		57.8	1.76	

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1932phae.proj.127M

66 665

5.8	7.5	.5	2.25	22.2	1.35
6.1		.8		35.6	1.55
6.3		1.0		44.5	1.65
6.6	7.5	1.3		57.8	1.76

5.3

66 672

7.5	6.0	.8	2.3	34.8	1.54
	6.0	.8		34.8	1.54
	6.4	1.2		52.0	1.72
7.5	6.6	1.4		60.9	1.78

5.2

66 679

7.4	5.7	.6	2.4	25.0	1.40
	5.8	.7		29.2	1.47
	6.1	1.0		41.7	1.62
7.6	6.1	1.0		41.7	1.62

5.1

66 581 Hh

7.4	5.4	.4	2.8	14.3	1.16
	5.5	.5		17.9	1.25
	6.2	1.2		42.8	1.63
8.2	6.6	1.6		57.1	1.76

5.0

66 582 Hh

8.2	5.4	.4	3.2	12.5	1.35
	5.5	.5		15.6	1.19
	5.8	.8		25.0	1.40
8.2	6.1	1.1		34.4	1.54

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1932phae.proj.1227M

66 683↓ 4.9

6.1	8.5⁻	1.2	3.55	33.8	1.53
6.2		1.3		36.6	1.56
6.4		1.5		42.3	1.63
6.6	8.4	1.7		48.0	1.68

66 687↓ 5.0

6.4	8.2	1.4	3.3	42.5	1.63
6.5⁻		1.5		45.5	1.66
6.65⁻		1.65		50.0	1.70
7.10	8.4	2.1		63.7	1.80

66 689↓ 4.9

8.4	6.2	1.3	3.55	36.6	1.56
	6.3	1.4		39.4	1.60
	6.6	1.7		47.8	1.68
8.5⁻	6.8	1.9		53.5	1.73

66 690↓ 5.0

8.5⁻	6.6	1.6	3.55	45.0	1.65
	6.6	1.6		45.0	1.65
	7.3	2.3		64.8	1.81
8.6	7.5⁻	2.5		70.5	1.85

66 691↓ 5.0

8.6	6.2	1.2	3.6	33.3	1.52
	6.4	1.4		38.9	1.59
	6.7	1.7		47.3	1.68
8.6	7.0	2.0		55.5	1.74

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66 696√ 5.0

8.5⁻	6.5	1.5⁻	3.5⁻	42.8	1.63
	6.6	1.6		45.7	1.66
	7.1	2.1		60.0	1.78
8.5⁻	7.2	2.2		62.8	1.80

66 697 5.0

8.6	5.8	.8	3.6	22.2	1.35⁻
	6.0	1.0		27.8	1.44
	6.5⁻	1.5⁻		41.7	1.62
8.6	6.6	1.6		44.5⁻	1.65⁻

50 561

69 520 – 69 526 – 71 504 – 70 557

50606

70557 – 71 482 – 71 514 – 70 570 – 70 57J⁻

Mar 26 '32

30606 70 557 √ 4.5

7.7	5.3	.8	3.25	24.6	1.392
	5.4	.9		27.7	1.44
	5.6	1.1		33.9	1.53
7.8	5.9	1.4		43.1	1.63

71 514 4.7

8.1	6.4	1.7	3.5	48.6	1.69
	6.7	2.0		57.2	1.76
	6.95⁻	2.25		64.3	1.81
8.0	7.4	2.7		77.2	1.89

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70 570 4.9

8.1:5	6.6	1.7	3.3	51.5:	1.71
	6.7	1.8		54.5	1.74
	7.0	2.1		63.6	1.80
8.2	7.1:6	2.2		66.6	1.82

70 575 4.8

6.0	8.1	1.2	3.25	36.9	1.57
6.3		1.5		46.2	1.66
6.9		2.1		64.5	1.81
7.2	8.0	2.4		73.8	1.87

I 50561 69 530 4.8

6.8	5.7	.9	2.05	43.8	1.64
	5.8	1.0		48.9	1.69
	5.9:5:	1.15		56.1	1.75:
6.9	6.1	1.3		63.5:	1.81

69 526 4.9

7.0	5.5:5:	.65	2.0	32.5	1.51
	5.5:	.6		30.0	1.48
	5.6	.7		35.0	1.54
6.8	5.7	.8		40.0	1.60

71 504 4.9

5.4	7.0	.5	2.1	23.8	1.38
5.5		.6		28.6	1.46
5.7		.8		38.0	1.58
5.8:5:	7.0	.95		45.3	1.66

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70 5-57 ✓ 4.9

6.9	5.2	.3	2.05	14.6	1.16
	5.3	.4		19.5	1.29
	5.6	.7		34.1	1.53
7.0	5.7	.8		39.0	1.59

50607 71 5-57 8.4 4.9

#*4. 5.45	7.95	.55	3.0	18.3	1.26
5.5		.6		30.0	1.30
5.55		.65		21.6	1.32
5.65	7.90	.75		25.0	1.40

70 593 8.6 4.9

5.9	7.9	1.0	3.0	33.4	1.52
5.9		1.0		33.4	1.52
6.1		1.2		40.0	1.60
6.2	7.9	1.3		43.4	1.64

70 640 8.3 5.0

5.3	7.9	.3	2.85	10.5	1.02
5.3		.3		10.5	1.02
5.35		.35		12.3	1.09
5.50	7.8	.50		17.5	1.24

69 602 6.5 5.0

8.2	5.1	.1	3.2	3.44	0.54
	5.1	.1			
	5.1	.1			
8.2	5.0	0			

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68 626	9.8					5.0
6.9	8.4	1.9	3.6	52.8	1.72	
6.9		1.9		52.8	1.72	
7.1		2.1		58.4	1.77	
7.25	8.8	2.25		62.5	1.80	
68 628	9.6					5.1
6.8	8.6	1.7	3.6	47.2	1.67	
6.85		1.75		48.7	1.69	
6.9		1.8		50.0	1.70	
7.0	8.8	1.9		52.8	1.72	
67 666	9.8					5.1
6.8	8.8	1.7	3.7	46.0	1.66	
6.9		1.8		48.6	1.69	
7.1		2.0		54.0	1.73	
7.3	8.8	2.2		59.5	1.77	
67 671	8.7					5.1
5.9	8.9	.8	3.8	21.0	1.32	
5.9		.8		21.0	1.32	
6.2		1.1		28.9	1.46	
6.2	8.9	1.1		28.9	1.46	
66 675	8.6					5.1
6.0	8.7	.9	3.65	24.6	1.39	
6.1		1.0		27.4	1.44	
6.35		1.25		34.2	1.53	
6.5	8.8	1.4		38.4	1.58	

end of AX

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1932phae.proj.127M

71 S24 ✓ S:1

6.2	8.2S	1.1	3.2	34.4	1.S4
6.2		1.1		34.4	1.S4
6.6S		1.S5		48.S	1.69
7.00	8.3	1.9		59.4	1.77

71 S25S ✓ S:0

8.4	6.4	1.4	3.3S	41.8	1.62
	6.S	1.S		44.8	1.6S
	6.6	1.6		47.7	1.68
8.3	6.7	1.7		S0.7	1.71

71 S29 S:1

S.8	8.4	.7	3.2S	21.6	1.33
S.9		.8		24.6	1.39
6.2		1.1		33.8	1.S3
6.4	8.3	1.3		40.0	1.60

71 S42 ✓ S:0

6.3S	8.2	1.3S	3.3	41.0	1.61
6.40		1.4		42.S	1.63
6.70		1.7		S1.S	1.71
6.80	8.4	1.8		S4.S	1.74

71 S52 ✓ S:1S

6.4	8.S	1.2S	3.2S	38.S	1.S9
6.4S		1.30		40.0	1.60
6.7		1.SS		47.6	1.68
7.0	8.3	1.8S		S6.8	1.7S

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1932phae.proj.127M

50 609 blr. 70 598 4.8

	5.2	7.5⁻	.4	2.6	15.4	1.187
S4	5.3		.5		19.2	1.28
	5.4		.6		23.1	1.36
	5.65	7.35⁻	.85		32.6	1.51

	5.2	7.6	.6	2.95	20.3	1.31
S7	5.2		.6		20.3	1.31
	5.4		.8		27.1	1.43
	5.5	7.5⁻	.9		30.5	1.48

71 554 ✓ 4.8

6.3	8.1	1.5	3.3	45.5⁻	1.66
6.74		1.6		48.5	1.69
6.6		1.8		54.5⁻	1.74
7.1		2.3		69.7	1.84

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J 50 560 69 499 ✓ 6.1

9.2	7.6	1.5	3.2	46.8	1.670
	7.7	1.6		50.0	1.699
	8.0	1.9		59.4	1.77
9.4	8.2	2.1		65.6	1.82

I 50 561 70 596 ✓ a nuisfit 6.8

9.55⁻	7.9	1.1	2.75	40.0	1.60
	7.7	.9		32.8	1.52
	8.1	1.3		47.3	1.68
9.55⁻	8.3	1.5		54.5	1.74

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50606

69 526 ✓ 6.8

11.4	8.2	1.4	4.8	29.2	1.47
	8.4	1.6		33.3	1.52
	8.6	1.8		37.5	1.57
11.8	9.1	2.3		48.0	1.68

69 530 ✓ 7.1

11.7	9.5	2.4	4.65	51.6	1.71
	9.7	2.6		55.8	1.75
	9.9	2.8		60.2	1.78
11.8	10.2	3.1		66.7	1.82

71 482 ✓ 7.3

12.4	9.7	2.4	4.95	48.5	1.69
	9.6	2.3		46.5	1.67
	10.2	2.9		58.6	1.77
12.1	11.1	3.8		76.8	1.89

69 514 ✓ 7.2

12.0	9.5	2.3	4.8	48.0	1.68
	9.8	2.6		54.3	1.73
	10.4	3.2		66.7	1.82
12.0	10.8	3.6		75.0	1.87

67 625 ✓ 7.2

12.6	9.7	2.5	5.55	45.0	1.65
	10.05	2.85		51.4	1.71
	10.90	3.7		66.6	1.82
12.9	11.30	4.1		74.0	1.87

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72 469 ✓ 7.4 ∫50

12.4	9.65	2.25	4.9	46.0	1.66
	9.90	2.50		51.1	1.71
	10.45	3.05		62.3	1.79
12.2	11.05	3.65		74.5	1.87

71 489 ✓ 7.2

12.2	9.9	2.7	5.0	54.0	1.73
	9.8	2.6		52.0	1.72
	10.2	3.0		60.0	1.78
12.2	10.5	3.3		66.6	1.82

72 465 ✓ 7.2

12.2	8.4	1.2	5.05	23.8	1.38
	8.3	1.1		21.8	1.34
	8.8	1.6		31.7	1.50
12.3	9.3	2.1		41.7	1.62

70 575 ✓ 7.4

9.0	12.2	1.6	4.75	33.7	1.53
9.5		2.1		44.2	1.65
10.5		3.1		65.3	1.82
11.1	12.1	3.7		78.0	1.89

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1932phae.proj.1227M

50607

71 558 ✓ 7.2

9.1	12.1	1.9	4.85	39.2	1.59
9.3		2.1		43.4	1.64
9.45		2.25		46.4	1.67
9.7	12.0	2.5		51.6	1.71

71 568 ✓ 7.3

8.80	12.45	1.5	5.15	29.2	1.47
9.20		1.9		36.9	1.57
9.60		2.3		44.7	1.65
10.20		2.9		56.4	1.75

70 584 ✓ 7.3

11.9	8.8	1.5	4.3	34.9	1.54
	9.0	1.7		39.5	1.60
	9.8	2.5		58.1	1.76
11.3	10.4	3.1		72.1	1.86

70 588 ✓ 7.25

11.7	9.0	1.75	4.40	39.8	1.60
	9.2	1.95		44.4	1.65
	9.6	2.35		53.4	1.73
11.65	9.7	2.45		55.6	1.75

70 596 ✓ 7.2

11.9	8.8	1.6	4.7	34.0	1.53
	9.2	2.0		42.5	1.63
	9.35	2.15		45.7	1.66
11.9	9.7	2.5		53.2	1.73

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1932phae.proj.1227M

70 598↓ 7.2

8.0	11.35⁻	.8	4.15	19.3	1.281
7.95⁻		.75		18.1	1.258
8.20		1.00		24.1	1.38
8.60	11.35⁻	1.4		33.8	1.53

70 603↓ 7.2

11.9	8.65⁻	1.45	4.6	31.5⁻	1.50
	8.70	1.5		32.6	1.51
	8.70	1.5		32.6	1.51
11.7	9.10	1.9		41.4	1.62

70 612↓ 7.1

11.6	8.9	1.8	4.4	41.0	1.61
	9.2	2.1		47.8	1.68
	9.25⁻	2.15		49.0	1.69
11.4	9.70	2.6		59.1	1.77

70 620↓ 6.9

7.9	11.4	1.0	4.45	22.5	1.35
7.8		.9		20.2	1.31
8.0		1.1		24.7	1.39
8.35⁻	11.25⁻	1.45		32.6	1.51

70 625↓ 6.8

11.35⁻	8.7	1.9	4.5⁻	42.2	1.63
	9.1	2.3		51.2	1.71
	10.1	3.3		73.4	1.87
11.3	10.25⁻	3.45		76.7	1.88

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1932phae.proj.1227M

70 627 ✓ 6.8

11.1	8.1	1.3	4.25	30.6	1.49
	8.2	1.4		33.0	1.52
	8.5	1.7		40.0	1.60
11.0	9.0	2.2		51.8	1.72

70 630 ✓ 6.6

11.1	8.1	1.5	3.7	40.6	1.61
	8.6	2.0		54.0	1.73
	9.2	2.6		70.4	1.85
10.5	9.5	2.9		78.5	1.89

70 633 ✓ 6.6

11.0	8.0	1.4	4.2	33.4	1.52
	8.3	1.7		40.5	1.61
	8.4	1.8		42.8	1.63
10.6	8.8	2.2		52.4	1.72

70 637 ✓ 6.5

10.7	8.2	1.7	4.1	41.6	1.62
	8.5	2.0		48.7	1.69
	8.6	2.1		51.3	1.71
10.5	8.9	2.4		58.5	1.77

70 638 ✓ 6.4

10.5	7.4	1.0	4.05	24.7	1.39
	7.5	1.1		27.2	1.43
	7.6	1.2		29.6	1.47
10.4	8.0	1.6		39.5	1.60

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1932phae.proj.1227M

70 641 ↓ 6.4

10.5	7.2	.8	4.1	19.5	1.29
	7.4	1.0		24.4	1.39
	8.4	2.0		48.8	1.69
10.5	8.7	2.3		56.1	1.75

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70 643 ↓ 6.5

8.5	12.4	2.2	6.1	36.1	1.56
8.8		2.5		41.0	1.61
9.8		3.5		57.4	1.76
10.2	12.4	3.9		64.0	1.81

70 645 ↓ 6.7

12.1	7.4	.7	5.55	12.6	1.10
	7.2	.5		9.0	0.95
	7.8	1.1		19.8	1.30
12.4	8.25	1.55		28.0	1.45

70 646 ↓ 6.6

12.4	9.9	3.3	5.9	56.0	1.75
	9.7	3.1		52.5	1.72
	10.5	3.9		66.1	1.82
12.6	11.3	4.7		79.6	1.90

70 647 ↓ 6.8

12.4	9.4	2.6	5.7	45.6	1.66
	9.5	2.7		47.4	1.68
	10.2	3.4		59.6	1.78
12.6	10.4	3.6		63.2	1.80

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1932phae.proj.1227M

70 657✓ 7.0

8.7	12.7	1.7	5.5	30.9	1.49
8.8		1.8		32.7	1.51
9.2		2.2		40.0	1.60
9.8	12.3	2.8		51.0	1.71

70 654✓ ~~12.5~~ 6.6

8.5	12.5	1.9	6.05	31.4	1.50
8.3		1.7		28.1	1.45
9.0		2.4		39.7	1.60
9.2	12.8	2.6		43.0	1.63

69 542✓ 6.9

8.8	12.1	1.9	5.3	35.8	1.55
8.6		1.7		32.1	1.51
8.7		1.8		34.0	1.53
9.2	12.2	2.3		43.4	1.64

69 545✓ 6.9

8.2	12.5	1.3	5.45	23.9	1.38
9.0		2.1		38.6	1.59
9.2		2.3		42.2	1.62
9.9	12.2	3.0		67.5	1.83

69 550✓ 6.9

8.5	12.3	1.6	5.55	28.8	1.46
8.2		1.3		23.4	1.37
8.5		1.6		28.8	1.46
9.0	12.6	2.4		43.3	1.64

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1932phae.proj.1227M

69 551 ↓ 7.0

12.6	9.0	2.0	5.45	36.7	1.56
	9.1	2.1		38.5	1.59
	9.8	2.8		51.4	1.71
12.3	10.3	3.3		60.5	1.78

69 552 ↓ 6.8

12.7	8.4	1.6	5.85	27.4	1.44
	8.4	1.6		27.4	1.44
	8.8	2.0		34.2	1.53
12.6	9.1	2.3		39.3	1.59

69 558 ↓ 7.0

9.1	12.5	2.1	5.4	38.9	1.59
9.6		2.6		48.2	1.68
10.1		3.1		57.4	1.76
10.5	12.3	3.5		64.8	1.81

69 56N 6.9

7.6	12.3	.7	5.55	12.6	1.10
8.0		1.1		19.8	1.30
8.3		1.4		25.2	1.40
8.8	12.6	1.9		34.2	1.53

69 562 ↓ 7.0

12.8	9.2	2.2	5.8	37.8	1.58
	9.5	2.5		43.1	1.63
	9.7	2.7		46.5	1.67
12.8	x9.9	2.9		50.0	1.70

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1932phae.proj.1247M

69 567✓ 7.1

12.5⁻	8.6	1.5	5.45⁻	27.5⁻	1.44
	8.7	1.6		29.4	1.47
	9.3	2.2		40.4	1.61
12.6	9.9	2.8		51.4	1.71

69 569✓ 7.1

8.1	12.5⁻	1.0	5.4	18.5⁻	1.27
8.2		1.1		20.4	1.31
9.2		2.1		38.9	1.59
9.3	12.5⁻	2.2		40.7	1.61

April 11, 1932

50607 69 576✓ 5.5⁻

6.3	8.7	.8	3.35	23.9	1.38
6.40		.9		26.9	1.42
6.40		.9		26.9	1.43
6.60	9.0	1.1		32.8	1.52

69 577✓ 5.9

6.65	9.2	.75	3.5	21.4	1.33
6.9		1.0		28.6	1.46
7.65⁻		1.75		50.0	1.70
8.00	9.6	2.10		60.0	1.78

69 579✓ 6.4

7.1	9.7	.7	3.25	21.5	1.33
7.1		.7		21.5	1.33
7.9		1.5		46.2	1.66
8.0	9.6	1.6		49.3	1.69

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1932phae.proj.1227M

69 584 ✓ 6.2

6.7	9.6	.5	3.45	14.5	1.16
6.9		.7		20.3	1.31
7.1		.9		26.1	1.42
7.2	9.7	1.0		29.0	1.46

69 592 ✓ 6.1

9.7	7.5⁻	1.4	3.5⁵	39.4	1.60
	7.4	1.3		36.6	1.56
	7.8	1.7		47.8	1.68
9.6	8.2	2.1		59.1	1.77

69 597 ✓ 6.1

7.0	9.4	.9	3.35	26.9	1.43
7.3		1.2		35.8	1.55
7.4		1.3		38.8	1.59
7.7	9.5⁻	1.6		47.8	1.68

69 600 ✓ 6.2

7.5⁻	9.7	1.3	3.5⁻	37.2	1.57
7.75		1.55		44.3	1.65
8.30		2.1		60.0	1.78
8.60	9.7	2.4		68.6	1.84

69 603 ✓ 6.3

9.5⁻	7.1	.8	3.3	24.2	1.38
	7.3	1.0		30.3	1.48
	7.5⁻	1.2		36.4	1.56
9.7	7.7	1.4		42.4	1.63

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1992phae.proj.1227M

68 587 ✓ 6.2

9.6	7.4	1.2	3.4	35.4	1.55
	7.65	1.45		42.7	1.63
	8.0	1.8		53.0	1.72
9.2	8.4	2.2		64.7	1.81

68 588 ✓ 6.3

9.4	8.25	1.95	3.3	59.1	1.77
	8.45	2.15		65.2	1.81
	9.1	2.8		85.0	1.93
9.8	9.35	3.05		92.5	1.97

68 590 ✓ 6.55

7.9	10.5	1.35	3.90	34.6	1.54
8.2		1.65		42.4	1.63
8.2		1.65		42.4	1.63
8.5	10.4	1.95		50.0	1.70

68 605 ✓ 6.5

7.4	10.3	.6	3.9	15.4	1.19
7.4		.6		15.4	1.19
7.5		1.0		25.6	1.41
8.1	10.5	1.6		41.0	1.61

68 606 ✓ 6.6

8.0	10.6	1.4	3.8	36.8	1.57
8.0		1.4		36.8	1.57
8.4		1.8		47.4	1.68
8.6	10.2	2.0		52.7	1.72

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68 609 ✓ 6.45

7.45	10.4	1.00	3.78	26.5	1.42
7.70		1.25		33.1	1.52
7.90		1.45		38.4	1.58
8.10	10.05	1.65		43.7	1.64

68 611 ✓ 6.4

7.2	9.9	.8	3.8	21.0	1.32
7.2		.8		21.0	1.32
7.4		1.0		26.4	1.42
7.5	9.7	1.1		29.0	1.46

68 612 ✓ 6.4

7.6 8.2	9.6	1.2	3.15	38.1	1.58
7.87		1.8		41.4	1.62
7.9		1.5		47.6	1.68
8.4	9.5	1.8		57.1	1.76

68 618 ✓ 6.2

9.25	7.3	1.1	2.97	37.0	1.57
	7.3	1.1		37.0	1.57
	7.7	1.5		50.5	1.70
9.10	7.9	1.7		57.3	1.76

68 634 ✓ 6.1

9.2	7.1	1.0	3.05	32.8	1.52
	7.55	1.45		47.6	1.68
	8.1	2.0		65.6	1.82
9.1	8.2	2.1		69.0	1.84

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1932phae.proj.1227M

50607 68 634 ✓ 5,5

7.0	9.3	1.5	3.85	39.0	1.592
7.1		1.6		41.6	1.62
7.7		2.2		57.2	1.78
8.1	9.4	2.6		67.5	1.83

68 635 Th. 6.0

6.2	9.5	.2	3.7	5.4.0	0.73
6.25		.25		6.7.6	0.83
6.72		.72		19.4	1.29
6.90	9.9	.90		24.3	1.39

68 639 ✓ 6.2

7.25	10.1	1.05	4.15	25.3	1.40
7.20		1.0		24.1	1.38
7.70		1.5		36.2	1.56
7.85	10.6	1.65		39.8	1.60

67 631 ✓ 6.6

8.6	10.9	2.0	4.7	42.6	1.63
8.8		2.2		46.8	1.67
9.1		2.5		53.2	1.73
9.5	11.3	2.9		61.7	1.80

67 632 6.6

7.5	11.3	.9	4.65	19.3	1.29
7.7		1.1		23.7	1.36
7.9		1.3		28.0	1.45
8.2	11.2	1.6		34.4	1.54

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1932phae.proj.127M

67 633J 6.8

8.0	11.43	1.2	4.65-	25.8	1.41
8.3		1.5		32.2	1.51
8.85		2.05		44.1	1.64
9.33	11.48	2.59		54.4	1.74

67 634 7.0

8.7	11.7	1.7	4.7	36.2	1.56
9.08		2.08		44.3	1.65
10.20		3.20		68.1	1.83
10.65-	11.7	3.65		77.8	1.89

67 635J 7.1

11.65-	8.0	.9	4.5	20.0	1.30
	8.05-	.95		21.1	1.32
	8.35-	1.25		27.8	1.44
11.6	8.7	1.6		35.6	1.56

67 637J 7.1

8.90	11.7	1.8	4.65	38.7	1.59
8.9		1.8		38.7	1.59
9.7		2.6		55.8	1.75-
10.3	11.85-	3.3		71.0	1.85-

67 651J 7.2

8.8	11.9	1.6	4.65-	34.4	1.54
8.8		1.8		38.7	1.59
9.2		2.0		43.0	1.63
9.7	11.8	2.5		53.8	1.73

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1932phae.proj.1227M

67 653 ↓ 7.4

8.3	12.0	.9	4.65	19.4	1.29
8.4		1.0		21.5	1.33
9.2		1.8		38.7	1.59
9.6	12.1	2.2		47.4	1.68

67 658 Tb - 7.4

7.7	12.0	.3	4.55	6.60	0.82
7.7		.3		6.6	0.82
7.9		.5		11.0	1.04
8.0	11.92	.6		12.2	1.12

67 670 ↓ 7.4

9.62	12.2	2.22	4.7	47.3	1.67
9.7		2.3		49.0	1.69
9.8		2.4		51.0	1.71
10.1	12.0	2.7		57.5	1.76

67 673 ↓ 7.2

9.25	11.9	2.05	4.7	43.6	1.64
9.45		2.25		47.8	1.68
9.65		2.45		52.2	1.72
9.90		2.70		57.5	1.76

67 676 ↓ 7.3

9.1	12.0	1.8	4.65	38.7	1.59
9.2	"	1.9		40.8	1.61
9.5		2.2		47.4	1.68
9.7	11.9	2.4		51.6	1.71

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1932phae.proj.1227M

67 677 ✓ 7.15⁻

8.1	12.12	.95	4.85	19.6	1.29
8.1		.95		19.6	1.29
8.5		1.35		27.8	1.44
9.35⁻	11.9	2.20		45.4	1.66

67 684 ✓ 7.2

7.9	11.85⁻	.7	4.6	15.2	1.18
8.08		.88		19.1	1.28
8.3		1.1		23.9	1.38
8.5⁻	11.80	1.3		28.3	1.45⁻

67 685 ✓ 7.15⁻

8.0	11.9	.85	4.65	18.3	1.26
8.25⁻		1.20		25.8	1.41
9.00		1.85		39.8	1.60
9.45⁻	11.75⁻	2.30		49.5⁻	1.69

67 686 ✓ 7.15⁻

8.15⁻	11.8	1.00	4.60	21.7	1.34
8.20		1.05		22.8	1.36
8.50		1.35		29.4	1.47
8.80	11.7	1.65		35.9	1.56

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66 648 ✓ 6.3

12.3	7.5 ~~6.3~~	1.2	6.05	19.9	1.298
	7.8	1.5		24.8	1.394
	8.1	1.8		29.8	1.474
12.4	8.7	2.4		39.6	1.60

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1932phae.proj.1227M

66 650 ✓ 6.6

8.1	12.2	1.5	5.65	26.6	1.42
8.3		1.7		30.2	1.48
9.8		3.2		56.6	1.75
10.5	12.3	3.9		69.0	1.84

66 665 ✓ 6.8

12.5	8.2 ~~12.5~~	1.4	5.7	24.6	1.39
	8.45	1.65		29.0	1.46
	9.2	2.4		42.2	1.63
12.55	9.6	2.8		49.2	1.69

66 672 ✓ 7.1

9.1	12.7	2.0	5.6	35.7	1.55
9.25		2.15		38.4	1.58
10.30		3.2		57.2	1.76
10.70	12.7	3.6		64.3	1.81

66 679 ✓ 7.1

8.7	12.6	1.6	5.5	29.1	1.46
8.7		1.6		29.1	1.46
9.2		2.1		38.2	1.58
9.5	12.6	2.4		43.6	1.64

66 681 ✓ 7.1

7.8	12.6	.7	5.35	13.1	1.12
8.02		.92		17.2	1.23
9.3		2.2		41.1	1.61
9.8	12.3	2.7		50.5	1.70

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1932phae.proj.1227M

66 682 ↓ 6.8

7.4	12.0	.6	5.1	11.8	1.070
7.4		.6		11.8	1.070
7.7		.9		17.7	1.250
8.0	11.8	1.2		23.6	1.370

66 683 ↓ 6.6

8.2	11.8	1.6	5.2	30.8	1.49
8.6		2.0		38.5	1.58
8.8		2.2		42.3	1.63
9.0	11.8	2.4		46.2	1.66

66 687 ↓ 6.8

8.6	12.05	1.8	4.95	36.4	1.56
8.78		2.18		44.0	1.64
9.05		2.25		45.5	1.66
9.30	11.45	2.50		50.5	1.70

66 689 ↓ 6.7

8.3	11.35	1.6	4.7	34.1	1.53
8.15		1.45		30.9	1.49
8.80		2.1		44.7	1.65
9.00	11.50	2.3		49.0	1.69

66 690 ↓ 6.75

8.5	11.2	1.75	4.50	38.9	1.59
8.6		1.85		41.2	1.61
9.45		2.70		60.0	1.78
9.9	11.35	3.15		70.0	1.85

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1932phae.proj.1227M

66 691 ✓ 6.7

8.0	11.5	1.3	4.7	27.7	1.44
8.1		1.4		29.8	1.47
8.65		1.95		41.5	1.62
9.10	11.3	2.4		51.0	1.71

66 697 ✓ 6.65

11.2	7.4	.75	4.50	16.7	1.22
	7.7	1.05		23.4	1.37
	8.2	1.55		34.4	1.54
11.1	8.4	1.75		38.9	1.59

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50609 71 524 ✓ 6.2

9.7	7.85	1.65	3.6	45.8	1.662
	7.9	1.7		47.3	1.68
	8.1	1.9		52.8	1.72
9.9	8.6	2.4		66.7	1.82

70 584 ✓ 6.9

8.0	10.2	1.1	3.5	31.4	1.50
8.2		1.3		37.2	1.57
8.75		1.85		52.8	1.72
9.15	10.6	2.25		64.3	1.81

70 588 ✓ 7.2

10.4	8.2	1.0	3.4	29.4	1.47
	8.4	1.2		35.3	1.55
	9.0	1.8		53.0	1.72
10.8	9.7	2.5		73.5	1.87

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1932phae.proj.1227M

70 620 Th. 7.3

10.3	7.7	.4	8.05	13.1	1.12
	7.6	.3		10.0	1.00
	7.9	.6		19.7	1.29
10.4	8.1	.8		26.2	1.42

70 638 J 7.4

10.5	7.80	.4	2.9	13.8	1.14
	7.9	.5		17.2	1.24
	8.1	.7		24.1	1.38
10.1	8.45	1.05		36.2	1.56

70 64N 7.2

7.8	10.6	.6	3.3	18.2	1.26
8.1		.9		27.2	1.43
8.4		1.2		36.4	1.56
8.9	10.45	1.7		51.5	1.71

70 647 J 7.3

10.5	8.3	1.0	3.25	30.8	1.49
	8.7	1.4		43.1	1.63
	9.10	1.8		55.4	1.74
10.6	9.55	2.25		69.3	1.84

69 561 Th. 7.2

7.7	10.4	.4	3.07	13.0	1.11
7.7		.4		13.0	1.11
7.9		.6		19.5	1.29
8.1	10.35	.8		26.0	1.42

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1932phae.proj.1227M

69 562 ✓ 7.3

10.3	8.2	.9	8.05	29.5	1.47
	8.3	1.0		32.8	1.52
	8.5	1.2		39.3	1.60
10.4	8.7	1.4		46.0	1.66

69 567 Ph 7.4

10.35	7.9	.5	2.97	16.8	1.23
	8.1	.7		23.6	1.37
	8.6	1.2		40.5	1.61
10.40	8.8	1.4		47.1	1.67

69 569 Ph. 7.4

10.2	7.8	.4	2.85	14.0	1.15
	7.9	.5		17.5	1.24
	8.25	.85		29.8	1.47
10.3	8.4	1.0		35.1	1.55

69 576 ✓ 7.4

10.35	8.05	.65	2.97	21.9	1.34
	8.00	0.60		20.2	1.31
	8.1	.7		23.6	1.37
10.4	8.3	.9		30.3	1.48

69 584 Ph. 7.5

7.9	10.4	.4	2.95	13.5	1.13
7.9		.4		13.5	1.13
8.1		.6		20.4	1.31
8.3	10.5	.8		27.1	1.43

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1932phae.proj.1227M

69 592↓ 7.4

10.6	8.6	1.2	3.15	38.1	1.58
	8.7	1.3		41.3	1.62
	9.1	1.7		54.0	1.73
10.5	9.2	1.8		57.1	1.76

69 600↓ 7.2

8.55	10.7	1.25	3.3	37.9	1.58
8.80		1.5		45.5	1.66
9.55		2.25		68.2	1.89
9.80	10.55	2.5		75.8	1.88

69 603↓ 7.3

8.2	10.5	.9	3.25	27.7	1.44
8.3		1.0		30.8	1.49
8.5		1.2		36.9	1.57
8.8	10.6	1.5		46.2	1.66

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68 605↑ 5.8

7.3	9.6	1.5	3.85	39.0	1.591
7.4		1.6		41.6	1.62
7.7		1.9		49.4	1.69
8.1	9.7	2.3		59.8	1.78

68 609↓ 7.0

9.9	8.0	1.0	2.9	34.5	1.54
	8.1	1.1		38.0	1.58
	8.2	1.2		41.4	1.62
9.9	8.3	1.3		44.8	1.65

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1932phae.proj.122M

68 639 ✓ 7.2

7.9	10.2	.7	3.0	23.3	1.37
8.0		.8		26.6	1.42
8.2		.9		30.0	1.48
8.3	10.3	1.1		36.7	1.56

67 673 ✓ 7.1

8.6	10.2	1.5	3.15	47.6	1.68
8.9		1.8		57.2	1.76
9.0		1.9		60.4	1.78
9.3	10.3	2.2		69.8	1.84

66 681 Th 7.3

10.2	7.7	.4	3.0	13.3	1.12
	7.9	.6		20.0	1.20
	8.6	1.3		43.4	1.64
10.4	8.8	1.5		50.0	1.70

66 682 ✓ 7.3

10.2	~~7.9~~				
	7.8	.5	2.9	17.3	1.24
	7.9	.6		20.7	1.32
	8.05	.75		25.8	1.41
10.2	8.20	.9		31.0	1.49

70 588 ✓ 7.3

8.2	10.4	.9	3.15	28.6	1.46
8.35		1.05		33.4	1.52
8.7		1.4		44.5	1.65
8.9	10.5	1.6		50.8	1.71

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1932phae.proj.1227M

69 582 ✓ 7.2

10.1	8.2	.9	2.8	32.2	1.51
	8.1	.8		28.6	1.46
	8.2	.9		32.2	1.51
10.1	8.45	1.15		41.1	1.61

50 609 ✓ 71 525t 7.1

10.4	8.2	1.1	3.35	32.5	1.51
	8.3	1.2		35.8	1.55
	8,6	1.5		44.8	1.65
10.5	8.7	1.6		47.8	1.68

71 558 ✓ 7.2

8.65	10.6	1.35	3.3	41.0	1.61
8.60		1.3		39.4	1.60
8.90		1,6		48.5	1.69
9.30	10.6	2.0		60.6	1.78

70 588 ✓ 7.2

10.5	8.4	1.1	3.2	34.4	1.54
	8.7	1.4		43.8	1.64
	8.8	1.5		47.0	1.67
10.5	9.1	1.8		56.3	1.75

70 603 ✓ 7.2

10.4	8.2	.9	3.07	29.3	1.47
	8.0	.7		22.8	1.36
	8.2	.9		29.3	1.47
10.35	8.45	1.15		37.5	1.57

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1932phae.proj.127M

70 620 ✓ 7.2

7.7	10.2	.5	3.0	16.7	1.22
7.8		.6		20.0	1.30
8.0		.8		26.6	1.42
8.2	10.2	1.0		33.3	1.52

70 630 ✓ 7.3

10.4	8.3	1.0	2.95	33.9	1.53
	8.5	1.2		40.7	1.61
	8.8	1.5		50.8	1.71
10.1	9.1	1.8		61.0	1.79

70 633 ✓ 7.4

10.4	8.25	.85	3.0	28.3	1.45
	8.35	.95		31.6	1.50
	8.75	1.35		45.0	1.65
10.4	9.00	1.6		53.3	1.73

70 637 ✓ 7.3

10.5	8.7	1.4	3.25	43.0	1.63
	8.7	1.4		43.0	1.63
	9.1	1.8		55.4	1.74
10.6	9.2	1.9		58.5	1.77

70 638 ✓ 7.4

10.5	8.2	.9	3.1	29.0	1.46
	8.1	.7		22.6	1.35
	8.3	.9		29.0	1.46
10.5	8.5	1.1		35.5	1.55

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1932phae.proj.1227M

69 576 ✓ 7.7

7.8	10.4	.5	3.1	16.1	1.21
7.8		.5		16.1	1.21
8.05		.75		24.2	1.38
8.20	10.45	.9		29.0	1.46

68 611 ✓ 7.14

8.0	10.5	.6	3.05	19.7	1.29
8.1		.7		23.0	1.36
8.5		1.1		36.0	1.56
8.50	10.4	1.1		36.0	1.56

67 631 ✓ 7.4

8.9	10.9	1.5	3.4	44.1	1.64
9.0		1.6		47.0	1.67
9.2		1.8		53.0	1.72
9.6	10.7	2.2		64.7	1.81

67 633 ✓ 7.4

8.21	10.7	.8	3.35	23.9	1.38
8.4		1.0		29.8	1.47
9.0		1.6		47.8	1.68
9.3	10.8	1.9		56.7	1.75

67 677 ✓ 7.4

8.0	10.9	.6	3.4	17.6	1.25
8.0		.6		17.6	1.25
8.6		1.2		35.4	1.55
9.0	10.6 7.0	1.6		47.1	1.67

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67 685 √ 7.3

7.7	10.7	.4	3.3	12.1	1.08
8.0		.7		21.1	1.32
8.45⁻		1.15		34.8	1.54
8.7	10.5⁻	1.4		42.5	1.63

66 650 √ wf 7.1

7.9	10.6	.8	3.6	22.2	1.35⁻
8.1		1.0		27.8	1.44
8.6		1.5		41.7	1.62
9.6	10.8	2.5		69.5	1.84

6.6 665 √ 7.3

7.7	10.7	.4	3.4	11.8	1.07
7.7		.4		11.8	1.07
8.6		1.3		38.2	1.58
8.8	10.7	1.5		44.1	1.64

66 679 √ 7.3

8.3	10.6	1.0	3.25	30.8	1.49
8.3		1.0		30.8	1.49
8.5⁻		1.2		36.9	1.57
8.7	10.5⁻	1.4		43.0	1.63

44 683 √ 7.3

8.3	10.7	1.0	3.4	29.4	1.47
8.2		.9		26.5⁻	1.42
8.45⁻		1.15		33.8	1.53
8.80	10.7	1.5		44.2	1.65

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1932phae.proj.1227M

66 696 ofpr. 7.3

8.95	10.8	1.65	4.05	40.7	1.61
9.0		1.7		42.0	1.62
9.6		2.3		52.8	1.75
9.9	11.4	2.6		64.2	1.81

66 697 ↓ 7.4

8.1	11.35	.7	3.85	18.2	1.26
8.25		.85		22.1	1.34
8.50		1.1		28.6	1.46
8.90	11.20	1.5		39.0	1.59

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Region 4 —

71 557 8.4 6.6

7.3	10.12	.7	3.65	19.2	1.28
7.4		.8		21.9	1.34
7.6		1.0		27.4	1.44
7.8	10.4	1.2		32.9	1.52

71 598 6.9 6.9

10.7	7.3	.4	3.8	10.5	1.02
	7.3	.4		10.5	1.02
	7.3	.4		10.5	1.02
10.7	7.4	.5		13.2	1.12

70 640 8.3 7.1

11.2	7.8	.7	4.3	16.3	1.21
	7.7	.6		13.9	1.14
	8.0	.9		20.9	1.32
11.6	8.3	1.2		28.0	1.45

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70 674	7.8					7.4
8.0	11.1	.6	8.6	16.7	1.22	
7.8		.4		11.1	1.04	
7.9		.5		13.9	1.14	
8.1	10.9	.7		19.4	1.29	
69 608	8.4					7.2
10.7	7.9	.7	3.55	19.7	1.29	
	8.1	.9		25.4	1.41	
	8.1	.9		25.4	1.41	
10.8	8.3	1.1		31.0	1.49	
69 628	7.3					7.2
10.7	7.6	.4	3.55	11.3	1.05	
	7.5	.3		8.5	0.93	
	7.5	.3		8.5	0.93	
10.8	7.65	.45		12.7	1.10	
68 626	9.8					7.15
11.2	9.2	2.05	4.10	50.0	1.70	
	9.3	2.15		52.5	1.72	
	9.5	2.35		57.4	1.76	
11.25	9.8	2.65		64.6	1.81	
68 628	9.6					7.4
11.2	9.2	1.8	3.8	47.4	1.68	
	9.4	2.0		52.7	1.72	
	9.4	2.0		52.7	1.72	
11.2	9.6	2.2		58.0	1.76	

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1932phae.proj.1227M

,8 Book

68 645 8.1 7.3

7.9	10.9	.6	3.55	16.9	1.23
7.9		.6		16.9	1.23
8.1		.8		22.6	1.35
8.2	10,8	.9		25.4	1.40

68 649 9.3 7.1

8.6	10,8	1.5	3.65	41.2	1.61
8.7		1.6		43.8	1,64
8,8		1.7		46.6	1,67
9.1	10.7	2.0		55.0	1.74

68 660 9.1 7.0

8.32	10.6	1.32	3.55	38.3	1.58
8.30		1.3		36.6	1.56
8.55		1.55		43.7	1.64
8.75	10.5	1.75		49.3	1.69

68 664 8.9 7.0

8.1	10,7	1,1	3.65	30.2	1.48
8.1		1,1		30.2	1.48
8.35		1.35		37.0	1.57
8.5	10,6	1.50		41.2	1.61

67 713 8.4 6.8

7.7	10.35	.9	3.55	25.4	1.41
7.75		.95		26.8	1.43
7.9		1.1		31.0	1.49
8.2	10.35	1.3		36.6	1.52

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1992phae.proj.1227M

67 725⁻ 8.6 6.7

10.4	7.9	1.2	3.75	32.0	1.51
	8.0	1.3		34.6	1.54
	8.0	1.3		34.6	1.54
10.5⁻	8.2	1.5		40.0	1.60

66 711 9.3 6.7

10.5⁻	8.6	1.9	3.75	50.7	1.71
	8.6	1.9		50.7	1.71
	8.7	2.0		53.4	1.73
End of Ao 10.45⁻	8.9	2.2		58.7	1.77

71 538 ✓ 6.5

10.5⁻	7.8	1.3	3.9	33.4	1.52
	8.05⁻	1.55		39.8	1.60
	8.3	1.8		46.2	1.66
10.3	8.6	2.1		53.8	1.72

71 536 ✓ 6.5

8.2	10.0	1.7	3.55	47.8	1.68
8.38		1.88		53.0	1.72
8.60		2.1		58.2	1.77
8.70	10.1	2.2		62.0	1.79

71 568 ✓ 6.6

7.4	10.1	.8	3.45	23.2	1.37
7.4		.8		23.2	1.37
7.9		1.3		37.6	1.58
8.2	10.0	1.6		46.4	1.67

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1932phae.proj.1227M

71 578 2+ 6.5

8.2	9.7	1.7	3.2	53.1	1.73
8.52		2.02		63.1	1.80
8.7		2.2		68.8	1.84
8.8	9.7	2.3		72.0	1.86

71 576 ↓ 6.3-

9.7	7.4	1.05	3.45	30.4	1.48
	7.6	1.25		36.2	1.56
	7.85	1.50		43.5	1.64
9.9	8.10	1.75		50.7	1.71

71 581 ↓ 6.5

8.0	9.75	1.5	3.27	45.9	1.66
8.3		1.8		55.0	1.74
8.4		1.9		58.1	1.76
8.7	9.8	2.2		67.3	1.83

71 582 2+ 6.5

8.0	9.7	1.5	3.25	46.2	1.66
8.45		1.95		60.0	1.78
8.80		2.3		70.8	1.85
9.00	9.8	2.5		77.0	1.89

71 583 ↓ 6.6

9.7	8.0	1.4	3.1	45.2	1.65
	8.1	1.5		48.4	1.68
	8.4	1.8		58.0	1.76
9.7	8.6	2.0		64.5	1.81

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1992phae.proj.1227M

April 18, 32

30610 71 588 √ 5.7

7.2	9.2	1.5	3.5	42.8	1.632
7.3		1.6		45.7	1.66
7.7		2.0		57.2	1.76
8.0	9.2	2.3		65.7	1.82

71 591 √ 6.0

7.68	9.2	1.68	3.2	52.5	1.72
7.70		1.70		53.1	1.73
8.25		2.25		70.4	1.84
8.60	9.2	2.60		81.2	1.91

71 594 √ 6.15

7.05	9.3	.90	3.10	29.0	1.46
7.20		1.05		35.0	1.54
7.40		1.25		40.3	1.61
7.60	9.2	1.45		46.8	1.67

71 599 √ 6.2

9.35	6.72	.52	3.2	16.2	1.21
	6.80	.6		18.7	1.27
	7.20	1.0		31.2	1.49
9.40	7.45	1.25		39.1	1.59

71 601 √ 6.3

9.5	7.5	1.2	3.15	38.1	1.58
	7.6	1.3		41.4	1.62
	7.75	1.45		46.0	1.66
9.4	8.00	1.7		54.0	1.73

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1932phae.proj.1227M

70 627↓ 6.2

7.18	9.45	.98	3.3	29.7	1.47
7.4		1.2		36.4	1.56
7.6		1.4		42.5	1.63
7.85	9.50	1.65		50.0	1.70

70 633↓ 6.2

9.6	7.25	1.05	3.4	30.9	1.49
	7.40	1.2		35.3	1.55
	7.75	1.55		45.6	1.66
9.6	7.90	1.7		50.0	1.70

70 634 6.

6.4	9.5	.1	3.2	31.1	
6.5		.2			
6.6		.3			
6.65	9.5	.35			

70 637↓ 6.4

9.6	7.6	1.2	3.2	37.5	1.57
	7.7	1.3		40.7	1.61
	8.0	1.6		50.0	1.70
9.6	8.25	1.85		57.8	1.76

70 638↓ 6.4

9.4	7.35	.95	3.15	30.2	1.48
	7.30	.90		28.6	1.46
	7.60	1.2		38.1	1.58
9.75	7.80	1.4		44.5	1.65

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1932phec.proj.1227M

70 641 ↓ 6.4

9.6	6.8	.4	3.2	12.5	1.10
	6.9	.5		15.6	1.19
	7.4	1.0		31.3	1.50
9.6	7.9	1.5		46.8	1.67

70 643 ↓ 6.4

9.6	7.35	.95	3.2	29.7	1.47
	7.40	1.0		31.2	1.49
	7.90	1.5		46.8	1.67
9.6	8.30	1.9		59.4	1.77

70 645- Hb. 6.4

9.55-	6.60	.2	3.17	6.3.1	0.80
	6.75	.35		11.05-	1.04
	6.95-	.55		17.3	1.24
9.60	7.15-	.75		23.6	1.37

70 646 H. 6.6

9.5-	7.8	1.2	2.95	40.7	1.61
	7.9	1.3		44.1	1.64
	8.5-	1.9		64.5-	1.81
9.65-	8.8	2.2		74.5-	1.87

70 647 ↓ 6.5

9.4	7.6	1.1	2.9	38.0	1.58
	7.6	1.1		38.0	1.58
	8.05-	1.55		53.5-	1.73
9.4	8.3	1.8		62.0	1.79

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1932phae.proj.1227M

70 651 V 6.4

9.25	7.2	.8	2.95	27.2	1.43
	7.4	1.0		33.9	1.53
	7.60	1.2		40.7	1.61
9.45	7.80	1.4		47.5	1.68

70 654 J 6.5-

9.4	7.2	.7	2.9	24.2	1.38
	7.3	.8		27.6	1.44
	7.55	1.05		36.2	1.56
9.4	7.6	1.1		38.0	1.58

70 661 V 6.5-

9.4	7.4	.9	2.87	31.4	1.51
	7.4	.9		31.4	1.51
	7.55	1.05		36.6	1.56
9.35	7.80	1.3		45.3	1.66

70 665 J 6.5-

9.3	7.2	.7	2.8	25.0	1.40
	7.1	.6		21.4	1.33
	7.3	.8		28.6	1.46
9.3	7.5	1.0		35.9	1.53-

70 669 J 6.5

9.3	7.1	.6	2.75	21.8	1.34
	7.1	.6		21.8	1.34
	7.35-	.85		30.9	1.49
9.2V	7.60	1.1		40.0	1.60

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1932phee.proj.122M

April 19, 1932

I 50609 70 60 ✓ 6.0

6.85	10.1	.85⁻	4.15	20.5⁻	1.312
7.10		1.10		26.5⁻	1.42
7.30		1.30		31.4	1.50
7.65⁻	10.2	1.65⁻		39.8	1.60

67 632 ✓ 6.1

10.4	7.4	1.3	4.3	30.2	1.48
	7.5⁻	1.4		32.6	1.51
	8.1	2.0		46.5⁻	1.67
10.4	8.4	2.3		53.5⁻	1.73

66 679 ✓ 6.1

10.25⁻	7.3	1.2	4.2	28.6	1.46
	7.5	1.4		33.4	1.52
	7.8	1.7		40.5	1.61
10.35⁻	8.1	2.0		47.6	1.68

68 570 ✓ 6.0

7.4	9.95	1.4	4.0	35.0	1.54
7.6		1.6		40.0	1.60
7.8		1.8		45.0	1.65⁻
8.2	10.10	2.2		55.0	1.74

I 50607 71 525⁻ ✓ 27² 5.85⁻

10.3	7.0	1.15	4.40	26.2	1.42
	7.6	1.75		39.8	1.60
	7.7	1.85		42.0	1.62
10.2	7.7	1.85		42.0	1.62

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1932phae.proj.1227M

68 590 ↓ 5.6

7.05	10.7	1.45	4.0	36.2	1.56
7.80		1.70		42.5	1.63
7.85		2.25		56.2	1.75
8.10	10.5	2.50		62.5	1.80

66 682 ↓ 5.6

6.3	10.6	.7	5.0	14.0	1.15
6.3		.7		14.0	1.15
6.6		1.0		20.0	1.30
6.9	10.6	1.3		26.0	1.41

April 20, 1932
I 50610

70 675 ↓ 5.6

7.55	9.0	1.95	3.6	54.2	1.73
7.65		2.05		57.0	1.76
7.90		2.30		64.0	1.81
8.05	9.45	2.45		68.0	1.83

70 677 ↓ 6.0

7.7	9.45	1.7	3.4	50.0	1.70
7.7		1.7		50.0	1.70
8.35		2.35		69.1	1.84
8.20	9.35	2.20		64.7	1.81

70 679 ↓ 6.0

7.3	9.5	1.3	3.45	37.7	1.58
7.6		1.6		46.4	1.67
7.95		1.95		56.5	1.75
8.20	9.4	2.20		63.8	1.80

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1932phae.proj.1227M

70 680 ✓ 6.0

7.35	9.25⁻	1.35⁻	3.37	40.0	1.60
7.60		1.60		47.5⁻	1.68
7.70		1.70		50.5⁻	1.70
8.08	9.50	2.08		61.7	1.79

70 681 ✓ 6.1

9.60	7.4	1.3	3.5	37.2	1.57
	7.68	1.58		45.2	1.66
	7.80	1.8		51.5⁻	1.71
9.6	8.00	1.9		54.3	1.73

70 684 ✓f 6.25

8.02	9.6	1.77	3.40	52.0	1.72
8.15		1.90		56.0	1.75
8.40		2.15		63.3	1.80
8.70	9.7	2.45		72.0	1.86

70 685⁻ ✓f 6.3

8.10	9.65⁻	1.8	3.3	54.5	1.74
8.2		1.9		57.6	1.76
8.5⁻		2.2		66.6	1.82
8.35⁻	9.6	2.05		62.0	1.79

70 686 ✓ 6.35

9.5	7.5⁻	1.15	3.20	36.0	1.56
	7.8	1.45		45.3	1.66
	8.4	2.05		64.0	1.81
9.6	8.6	2.25		70.4	1.85

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1932phae.proj.1227M

69 592 ↓ 6.3

9.5⁻	7.5	1.2	3.3	36.4	1.56
	7.7	1.4		42.5	1.63
	7.9	1.6		48.5	1.69
9.7	8.2	1.9		57.6	1.76

69 593 +/+ 6.4

8.3	9.9	1.9	3.4	55.8	1.75
8.21		1.81		53.2	1.73
8.65		2.25		66.2	1.82
8.70	9.7	2.3		67.6	1.83

69 597 ↓ 6.4

7.3	10.0	.9	3.6	25.0	1.40
7.35		.95		26.4	1.42
7.60		1.2		33.4	1.52
7.80	10.0	1.4		38.9	1.59

69 600 ↓ 6.5

9.85	7.55⁻	1.05⁻	3.35	31.0	1.50
	7.6	1.1		32.8	1.52
	8.43	1.93		57.6	1.76
9.85	8.75⁻	2.25		67.2	1.83

69 603 ↓ 6.5

9.85⁻	7.2	.7	3.37	20.8	1.32
	7.2	.7		20.8	1.32
	7.4	.9		26.7	1.43
9.9	7.7	1.2		35.6	1.55⁻

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1932phae.proj - 1227M

69 6064 6.5-

8.3	9.90	1.8	3.4	53.0	1.72
8.3		1.8		53.0	1.72
8.6		2.1		61.8	1.80
8.8	9.90	2.3		67.6	1.83

69 6071 6.5-

7.7	9.8	1.2	3.3	36.4	1.56
7.88		1.38		41.8	1.62
7.90		1.4		42.5	1.63
8.20	9.8	1.7		51.5	1.71

69 6111 6.6

7.7	9.7	1.1	3.1	35.5	1.55
7.75		1.15		37.1	1.57
8.10		1.5		48.4	1.68
8.40	9.7	1.8		58.0	1.76

69 6124 6.5

9.8	8.3	1.8	3.3	54.5	1.74
	8.3	1.8		54.5	1.74
	8.6	2.1		63.6	1.80
9.8	8.7	2.2		66.6	1.82

69 6131 6.5-

9.65	7.6	1.1	3.1	34.7	1.54
	7.6	1.1		34.7	1.54
	8.1	1.6		50.5	1.70
9.70	8.2	1.7		53.6	1.73

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1932phae.proj.1227M

69 615J 6.5J

7.6	9.6	1.05	3.12	33.7	1.53
7.8		1.25		40.0	1.60
8.3		1.85		59.3	1.77
8.5	9.75	1.95		62.5	1.80

69 618J 6.5

9.60	7.2	.7	3.1	22.6	1.35
	7.15	.65		21.0	1.32
	7.50	1.0		32.2	1.51
	7.65	1.15		37.1	1.57

69 620J 6.5

9.70	7.55	1.05	3.15	33.4	1.52
	7.60	1.1		35.0	1.54
	7.95	1.45		46.0	1.66
9.60	8.10	1.6		50.8	1.71

69 621J 6.5

7.9	9.7	1.4	3.15	44.5	1.65
8.0		1.5		47.6	1.68
8.45		1.95		62.0	1.79
8.70	9.6	2.2		70.0	1.84

69 622J 6.5

7.5	9.5J	1.0	3.1	32.3	1.51
7.4		.9		29.0	1.46
7.8		1.3		42.0	1.62
8.0	9.65	1.5		48.5	1.69

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1932phae.proj - 1227M

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5061.0	69 625 Af					4.7
	8.5⁻	6.45⁻	1.75⁻	4.0	43.8	1.64
		6.40	1.7		42.5⁻	1.63
		7.10	2.4		60.0	1.78
	8.9	7.70	3.0		75.0	1.87
	69 629 ✓					5.2
	8.8	7.1	1.9	3.75	50.6	1.70
		7.1	1.9		50.6	1.70
		7.4	2.2		58.7	1.77
	9.1	7.6	2.4		64.0	1.81
	69 633 Af					5.4
	9.0	7.3	1.9	3.65	52.0	1.72
		7.4	2.0		54.8	1.74
		7.88	2.48		68.0	1.83
	9.1	8.01	2.61		71.5⁻	1.85⁻
	69 636 ✓					5.5
	8.8	6.0	.5	3.2	15.6	1.19
		6.05⁻	.55		17.2	1.24
		6.1	.6		18.7	1.27
	8.6	6.3	.8		25.0	1.40
	69 638 ✓					5.6
	6.2	8.7	.6	3.1	19.3	1.29
	6.3		.7		22.6	1.35⁻
	6.7		1.1		35.5⁻	1.55⁻
	7.0	8.7	1.4		45.2	1.65⁻

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1932phae.proj.1227M

69 639 5.85

8.7	6.7	1.05	3.10	33.9	1.53
	6.6	.95		30.6	1.49
	6.9	1.25		40.4	1.61
8.8	7.2	1.55		50.0	1.70

69 645 5.7

8.8	6.5	.8	3.2	25.0	1.40
	6.6	.9		28.1	1.45
	6.8	1.1		34.4	1.54
9.0	7.1	1.4		43.8	1.64

69 647 5.8

8.9	7.15	.35	3.15	11.1	1.05
	7.20	.40		12.7	1.10
	7.35	.55		17.4	1.24
9.0	7.60	.8		25.4	1.40

69 648 5.9

9.0	7.08	1.18	3.1	38.1	1.58
	7.10	1.20		38.7	1.59
	7.10	1.2		38.7	1.59
9.0	7.25	1.35		43.5	1.64

69 649 5.9

9.0	7.1	1.2	3.15	38.1	1.58
	7.22	1.32		42.0	1.62
	7.40	1.50		47.6	1.68
9.1	7.55	1.65		52.5	1.72

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1932phae.proj.127M

68 624 ✓ 5.85-

9.15	7.5	1.65	3.38	48.8	1.69
	7.7	1.85		54.6	1.74
	8.3	2.55		75.5	1.88
9.3	8.45	2.60		77.7	1.89

68 627 ✓ 6.0

9.2	7.7	1.7	3.2	53.2	1.73
	7.7	1.7		53.2	1.73
	7.95	1.95		61.0	1.79
9.2	8.20	2.20		68.8	1.84

68 634 ✓ 5.9

9.0	7.0	1.1	3.1	35.5	1.55
	7.05	1.15		37.1	1.57
	7.50	1.60		51.6	1.71
9.0	7.80	1.90		61.4	1.79

68 635 6.0

9.1	6.25	.25	3.1	8.2	
	6.25	.25			
	6.40	.40			
	6.50	.50			

68 639 ✓ 6.0

9.1	6.6	.6	3.0	20.0	1.30
	6.6	.6		20.0	1.30
	6.8	.8		26.6	1.42
8.9	7.0	1.0		33.3	1.52

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1932phae.proj.1227M

68 6421					6.0
9.3	7.2	1.2	3.15	38.1	1.58
	7.28	1.28		40.7	1.61
	7.50	1.50		47.6	1.68
9.0	7.70	1.70		54.0	1.73
68 6447					6.05
9.1	6.5	.45	3.05	14.7	1.17
	6.6	.55		18.0	1.26
	7.05	1.00		32.8	1.52
9.1	7.25	1.20		39.4	1.60
68 6501					6.1
9.0	6.6	.5	2.9	17.2	1.24
	6.7	.6		20.7	1.32
	6.7	.6		20.7	1.32
9.0	7.0	.9		31.0	1.49
68 6523					6.1
7.2	9.0	1.1	2.95	37.2	1.57
7.3		1.2		40.6	1.61
7.6		1.5		50.8	1.71
7.75	9.1	1.65		56.0	1.75
68 6547					6.1
9.0	7.2	1.1	2.9	38.0	1.58
	7.5	1.4		48.3	1.68
	7.8	1.7		58.7	1.77
9.0	8.1	2.0		69.0	1.84

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1932phae.proj.122.2M

68 656 ↓ 6.1

6.8	9.0	.7	2.95	23.7	1.37
6.7		.6		20.2	1.31
6.9		.8		27.2	1.43
7.0	9.1	.9		30.5	1.48

68 658 ↓ 6.1

7.35	9.0	1.25	2.95	42.4	1.63
7.40		1.3		44.0	1.64
7.70		1.6		54.2	1.72
8.00	9.1	1.9		64.5	1.81

68 659 ↓ 6.2

9.05	7.5	1.3	2.85	45.6	1.66
	7.5	1.3		45.6	1.66
	7.9	1.7		59.6	1.77
9.05	8.05	1.85		65.0	1.81

68 661 ↓ 6.2

9.1	7.4	1.2	2.85	42.0	1.62
	7.7	1.5		52.5	1.72
	8.1	1.9		66.6	1.82
9.0	8.2	2.0		70.2	1.85

68 662 ↓ 6.25

9.1	6.6	.35	2.85	12.3	1.09
	6.6	.35		12.3	1.09
	6.7	.45		15.8	1.20
9.1	6.7	.45		15.8	1.20

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68 666 Hs 6.2

6.5	9.1	.3	2.9	10.3	1.01
6.6		.4		13.8	1.14
6.6		.4		13.8	1.14
6.7	9.1	.5		17.2	1.24

68 667 ↓ 6.1

6.5	9.1	.4	3.0	13.3	1.12
6.6		.5		16.7	1.22
7.0		.9		30.0	1.48
7.1	9.1	1.0		33.4	1.52

67 676 ↓ 6.1

9.2	7.3	1.2	3.05	39.4	1.60
	7.5	1.4		46.0	1.66
	7.6	1.5		49.2	1.69
9.1	7.85	1.75		57.4	1.76

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150 610

67 677 ↓ 5.5

6.5	9.1	1.0	3.57	28.0	1.447
6.7		1.2		32.8	1.52
7.1		1.6		44.8	1.65
7.4	9.05	1.9		53.2	1.73

67 677 ↓ 6.45

7.6	9.30	1.15	2.95	39.0	1.59
7.6		1.15		39.0	1.59
7.9		1.45		49.1	1.69
8.1	9.50	1.65		56.0	1.75

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1932phae.proj.1227M

67 679 Hf 6.7

9.5	8.1	1.4	2.75	51.0	1.71
	8.1	1.4		51.0	1.71
	8.4	1.7		61.8	1.79
9.4	8.6	1.9		69.1	1.84

67 682 Hf 6.8

9.3	8.1	1.3	2.50	52.0	1.72
	8.1	1.3		52.0	1.72
	8.15-	1.7		68.0	1.83
9.35-	8.55-	1.75		70.0	1.84

67 684 V 6.7

9.2	7.1	.4	2.5	16.0	1.20
	7.3	.6		24.0	1.38
	7.3	.6		24.0	1.38
9.2	7.6	.9		36.0	1.56

67 685 V 6.7

9.25-	7.15-	.45	2.53	17.8	1.25
	7.15	.45		17.8	1.25
	7.50	.80		31.6	1.50
9.2	7.90	1.2		47.5	1.68

67 686 V 6.7

9.3	7.3	.6	2.55	23.5	1.37
	7.3	.6		23.5	1.37
	7.4	.7		27.4	1.44
9.2	7.6	.9		35.2	1.55

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1932phae.proj.1227M

67 688 ↓ 6.7

9.2	7.75	1.05	2.5	42.0	1.62
	7.80	1.1		44.0	1.64
	7.90	1.2		48.0	1.68
9.2	8.15	1.45		58.0	1.76

67 694 ↓ 6.7

9.4	7.8	1.1	2.75	40.0	1.60
	8.2	1.5		54.5	1.74
	8.3	1.6		58.2	1.76
9.5	8.3	1.6		58.2	1.76

67 696 ↓ 6.8

9.4	7.7	.9	2.5	36.0	1.56
	7.9	1.1		44.0	1.64
	8.3	1.5		60.0	1.78
9.2	8.45	1.65		66.0	1.82

67 69.8 ↓ 6.3

8.8	6.5	.2	2.5	8.0	0.90
	6.75	.45		18.0	1.25
	7.15	.85		34.0	1.53
6.8	7.50	1.20		48.0	1.68

67 699 ↓ 6.5

8.8	6.9	.4	2.35	17.0	1.23
	6.8	.3		12.8	1.11
	7.0	.5		21.3	1.33
8.9	7.2	.7		29.8	1.47

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1932phae.proj.1227M

67 703 J 6.4

8.8	7.0	.6	2.6	23.1	1.36
	7.1	.7		26.9	1.43
	7.7	1.3		50.0	1.70
9.2	7.9	1.5		57.7	1.75

67 704 W 6.7

9.1	7.7	1.0	2.45	40.8	1.61
	7.8	1.1		45.0	1.65
	8.0	1.3		53.1	1.73
9.2	8.4	1.7		69.4	1.84

67 707 J 6.8

9.2	7.8	1.0	2.4	41.7	1.62
	7.8	1.0		41.7	1.62
	8.1	1.3		54.2	1.73
9.2	8.2	1.4		58.4	1.77

67 708 J: 6.8

9.2	7.4	.6	2.3	26.1	1.42
	7.6	.8		34.8	1.54
	7.75	.95		41.3	1.62
9.0	8.30	1.50		65.2	1.81

67 709 J 6.6

9.0	7.0	.4	2.45	16.3	1.21
	7.1	.5		20.4	1.31
	7.3	.7		28.6	1.46
9.1	7.3	.7		28.6	1.46

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1932phae.proj.1227M

67 7.7 ✓						6.7
7.7	9.0	1.0	2.3	43.5	1.64	
7.7		1.0		43.5	1.64	
8.1		1.4		61.0	1.79	
8.3	9.0	1.6		69.6	1.84	
67 7.18 ✓						6.6
7.5	8.9	.7	2.3	30.4	1.48	
7.7	"	1.1		47.8	1.68	
7.9		1.3		56.5	1.75	
8.0	8.9	1.4		61.0	1.79	
67 7.19 ✓						6.6
8.8	7.25	.55	2.3	23.9	1.38	
	7.20	.60		26.1	1.42	
	7.70	1.10		47.8	1.68	
9.0	8.10	1.5		65.3	1.81	
67 7.21 ✓						6.5
9.0	7.4	.9	2.5	36.0	1.56	
	7.7	1.2		48.0	1.68	
	8.1	1.6		64.0	1.81	
9.0	8.2	1.7		68.0	1.83	
67 7.27 ✓						6.5
9.2	8.0	1.5	2.6	57.7	1.76	
	8.1	1.6		61.5	1.79	
	8.1	1.6		61.5	1.79	
9.0	8.2	1.7		65.4	1.82	

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1932phae.proj.1227M

67 728 H

						6.5
8.9	7.8	1.3	2.4	54.1	1.73	
	7.9	1.4		58.4	1.77	
	8.2	1.7		71.0	1.85	
8.9	8.2	1.7		71.0	1.85	

67 730 J

						6.4
9.0	7.0	.6	2.55	23.5	1.37	
	7.0	.6		23.5	1.37	
	7.1	.7		27.4	1.44	
8.9	7.2	.8		31.4	1.50	

66 696 J

						6.3
8.8	7.2	.9	2.45	36.7	1.56	
	7.3	1.0		40.8	1.61	
	7.7	1.4		57.1	1.76	
8.7	7.7	1.4		57.1	1.76	

66 697 J

						6.3
8.7	6.6	.3	2.35	12.8	1.11	
	6.8	.5		21.2	1.33	
	6.95	.65		27.7	1.44	
8.6	7.20	0.90		38.2	1.58	

66 699 J

						6.2
8.6	7.2	1.0	2.4	41.6	1.62	
	7.1	.9		37.5	1.57	
	7.6	1.4		58.4	1.77	
8.6	7.8	1.6		66.7	1.82	

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1932phae.proj.1227M

66 703 ✓ 6.2

6.9	8.5	.4	2.3	30.4	1.48
7.2		1.0		43.5	1.64
7.5		1.3		56.5	1.75
7.7	8.5	1.5		65.2	1.82

66 704 ✓ 6.1

6.8	8.5	.7	2.3	30.4	1.48
6.8		.7		30.4	1.48
7.3		1.2		52.2	1.72
7.3	8.35	1.2		52.2	1.72

66 705 ✓ 6.1

8.6	6.9	.8	2.45	32.7	1.51
	7.0	.9		36.7	1.57
	7.6	1.5		61.3	1.79
8.5	8.0	1.9		77.5	1.89

66 706 ✓ 6.2

8.5	7.1	.9	2.35	38.3	1.58
	7.3	1.1		46.8	1.67
	7.5	1.3		55.4	1.74
8.6	7.7	1.5		63.8	1.81

66 708 ✓ 6.2

8.5	6.9	.7	2.35	29.8	1.47
	7.0	.8		34.0	1.53
	7.4	1.2		51.0	1.71
8.6	7.6	1.4		59.6	1.78

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1932phae.proj.1227M

66 730 ↓ 6.2

7.3	8.6	1.1	2.4	45.8	1.67
7.3		1.1		45.8	1.67
7.6		1.4		58.3	1.77
7.7	8.6	1.5		62.5	1.80

66 731 ↓ 6.2

7.2	8.5	1.0	2.3	43.5	1.64
7.2		1.0		43.5	1.64
7.5		1.3		56.5	1.75
7.6	8.5	1.4		61.0	1.79

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[505]5 71 55) 8.4 4.9

40 ✗

10.4	6.0	1.1	5.4	20.4	1.21
	5.92	1.02		18.7	1.27
	6.1	1.2		22.2	1.35
10.2	6.3	1.4		25.9	1.41

71 598 6.9 5.1

10.6	5.5	.4	5.55	7.21	0.86
	5.4	.3		5.40	0.73
	5.4	.3		5.40	0.73
10.7	5.4	.3		5.40	0.73

70 640 8.3 5.1

6.15	10.9	1.05	5.8	18.1	1.26
6.40		1.3		22.4	1.35
6.35		1.25		21.6	1.33
6.80	10.9	1.7		29.3	1.47

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1932phae.proj.1227M

70 674 7.8 5.2

5.75	10.6	.55	5.45	10.1	1.00
5.80		.60		11.0	1.04
5.85		.65		11.9	1.08
6.10	10.65	.90		16.5	1.22

69 608 8.4 must be wrong 5.15

7.4	10.8	2.25	5.70	39.5	1.60
7.55		2.40		42.2	1.62
7.90		2.75		48.3	1.68
8.20	10.9	3.05		53.5	1.73

69 628 7.3 5.2

5.6	10.7	.4	5.5	7.30	0.86
5.80		.6		10.90	1.04
5.70		.5		9.10	0.96
5.80	10.7	.6		10.90	1.04

68 626 9.8 5.2

8.3	11.05	3.1	5.8	53.40	1.73
8.4		3.2		55.20	1.74
8.8		3.6		62.00	1.79
8.9	11.0	3.7		63.80	1.80

68 628 9.6 5.2

8.4	11.1	3.2	5.8	55.20	1.74
8.2		3.0		51.80	1.71
8.3		3.1		53.50	1.73
8.7	10.9	3.5		60.40	1.78

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1932phae.proj.122M

68 645 8.1 5:5

10.8	6.3	1.0	5.45	18.4	1.26
	6.45	1.15		21.1	1.32
	6.60	1.3		23.9	1.38
10.7	6.80	1.5		27.5	1.44

68 649 .2

68 660 9.1 5:5

10.8	7.4	2.1	5.4	38.9	1.59
	7.4	2.1		38.9	1.59
	7.7	2.4		44.5	1.65
10.6	7.9	2.6		48.2	1.68

68 664 8.9 5:3

69	10.5	1.6	5.3	30.2	1.48
7.1		1.8		34.0	1.53
7.5		2.2		41.5	1.62
7.9	10.70	2.6		49.0	1.69

67 713 8.4 5:3

6.5	10.4	1.2	5.0	24.0	1.38
6.6		1.3		26.0	1.41
6.8		1.5		30.0	1.48
7.2	10.2	1.9		38.0	1.58

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I 50 575 67 725 8.6 5:5

6.9	11.3	1.4	5.75	24.4	1.39
7.0		1.5		26.1	1.42
7.3		1.8		31.3	1.50
7.7	11.2	2.2		38.2	1.58

end of A 0x

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1932phae.proj.1227M

71 558 ✓ 6.2

11.6	8.3	2.0	5.3	37.7	1.58
	8.55	2.25		42.5	1.63
	8.90	2.6		49.0	1.69
11.6	9.20	2.9		54.7	1.74

71 566 ✓ 6.5

9.1	11.7	2.6	5.2	50.0	1.70
9.2		2.7		52.0	1.72
9.7		3.2		61.5	1.79
9.9	11.70	3.4		65.4	1.81

71 568 ✓ 6.5

7.9	11.8	1.4	5.35	26.2	1.42
8.3		1.8		33.6	1.53
8.9		2.4		44.9	1.65
9.3	11.9	2.8		52.4	1.72

71 576 ✓ 6.6

8.4	11.9	1.8	5.2	34.6	1.54
8.7		2.1		40.4	1.61
9.0		2.4		46.2	1.66
9.0	11.7	2.7		52.0	1.72

71 581 ✓ 6.6

12.0	9.2	2.6	5.45	47.7	1.68
	9.4	2.8		51.4	1.71
	10.1	3.5		64.3	1.81
12.10	10.15	3.55		65.2	1.81

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1932phae.proj:1227M

71 588 ✓ 6.8

9.1	12.0	2.3	5.25	43.8	1.64
9.3		2.5		47.6	1.68
9.9		3.1		59.0	1.77
10.1	12.1	3.3		63.0	1.80

71 594 ✓ 6.8

8.1	12.1	1.3	5.2	25.0	1.40
8.4		1.6		30.8	1.49
8.5		1.7		32.7	1.51
8.8	11.9	2.0		38.5	1.58

71 599 ✓ 6.8

7.6	12.1	.8	5.2	15.4	1.19
7.65		.85		16.3	1.21
8.20		1.4		26.9	1.43
8.50	11.9	1.7		32.7	1.51

71 601 ✓ 6.8

12.2	8.7	1.9	5.45	34.9	1.54
	9.0	2.2		40.4	1.61
	9.2	2.4		44.0	1.64
12.3	9.6	2.8		51.4	1.71

70 627 ✓ 6.8

8.5	12.2	1.7	5.4	31.4	1.50
8.8		2.0		37.0	1.57
9.1		2.3		42.6	1.63
9.4	12.2	2.6		48.1	1.68

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1932phae.proj.1227M

70 633 ✓ 6.8

8.50	12.2	1.7	5.2	32.7	1.51
8.80		2.0		38.5	1.58
9.40		2.6		50.0	1.70
9.65	11.6	2.85		54.8	1.74

70 637 ✓ 6.8

9.1	12.25	2.3	5.35	43.0	1.63
9.1		2.3		43.0	1.63
9.6		2.8		52.4	1.72
9.85	12.10	3.05		57.0	1.76

70 638 ✓ 6.6

8.3	12.05	1.7	5.35	31.8	1.50
8.5		1.9		35.5	1.55
8.70		2.1		39.2	1.59
9.0	11.90	2.4		44.8	1.65

70 641 ✓ 6.8

7.6	12.0	.8	5.15	15.5	1.19
7.6		.8		15.5	1.19
8.5		1.7		33.0	1.52
9.0	11.90	2.5		48.5	1.69

70 643 ✓ 6.7

8.5	12.1	1.8	5.45	33.0	1.52
8.6		1.9		34.8	1.54
9.6		2.9		53.2	1.73
10.1	12.2	3.4		62.4	1.80

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1932phae.proj.12270

70 647 ✓ 6.9

9.0	11.7	2.1	4.95	42.4	1.63
9.1		2.2		44.5	1.65
9.7		2.8		56.5	1.75
9.8	12.0	2.9		58.5	1.77

70 651 v 6.8

8.3	11.9	1.5	5.25	28.6	1.46
8.5		1.7		32.4	1.51
8.9		2.1		40.0	1.60
9.2	12.2	2.5		47.6	1.68

70 654 v 6.9

11.9	8.0	1.1	5.10	21.6	1.33
	8.2	1.3		25.5	1.41
	8.6	1.7		33.3	1.52
12.1	9.05	2.15		42.2	1.62

70 661 v 7.0

8.6	12.3	1.6	5.15	31.1	1.49
8.9		1.9		36.9	1.57
8.9		1.9		36.9	1.57
9.30	12.0	2.3		44.7	1.65

70 669 v 6.9

7.8	12.0	.9	5.15	17.5	1.24
8.2		1.3		25.2	1.40
8.5		1.5		29.2	1.47
9.0	12.1	2.1		40.7	1.61

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1932phae.proj.1227M

70 679 ✓ 6.9

8.9	12.2	2.0	5.25	38.1	1.58
9.5		2.6		49.5	1.69
10.2		3.3		63.0	1.80
10.3	12.1	3.4		64.8	1.81

70 680 ✓ 7.0

9.1	12.0	2.1	5.1	41.2	1.61
9.3		2.3		45.1	1.65
9.5		2.5		49.0	1.69
10.0	12.2	3.0		58.8	1.77

70 681 ✓ 7.0

9.0	12.1	2.0	5.1	39.2	1.59
9.3		2.3		45.2	1.65
9.5		2.5		49.0	1.69
9.7	12.1	2.7		53.0	1.72

69 592 ✓ 6.8

9.1	12.2	2.3	5.4	42.6	1.63
9.5		2.7		50.0	1.70
9.6		2.8		51.8	1.71
10.0	12.2	3.2		59.3	1.77

69 597 ✓ 6.8

8.15	12.0	1.35	5.25	25.7	1.41
8.35		1.55		29.5	1.47
8.85		2.05		39.0	1.59
9.10	12.1	2.30		43.8	1.64

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1932phae.proj.1277M

69 602 ✓ 6.3

7.7	12.6	1.4	6.35	22.0	1.34
8.1		1.8		28.4	1.45
8.5		2.2		34.6	1.54
8.9	12.7	2.6		41.0	1.61

69 607 ✓ 6.3

8.7	12.5	2.4	6.15	39.0	1.59
8.9		2.6		42.3	1.62
9.10		2.8		45.5	1.66
9.60	12.4	3.3		53.6	1.73

69 611 ✓ 6.2

8.7	12.4	2.5	6.3	39.7	1.60
9.0		2.8		44.4	1.65
9.5		3.3		52.4	1.72
9.8	12.6	3.6		57.2	1.76

69 613 ✓ 6.4

8.5	12.6	2.1	6.2	33.9	1.53
9.0		2.6		42.0	1.62
9.6		3.2		51.6	1.71
10.1	12.6	3.7		59.7	1.78

69 615 .2

69 618 ✓ 6.5

7.85	13.0	1.35	5.5	24.6	1.39
8.10		1.60		29.1	1.46
8.40		1.90		34.6	1.54
8.70	13.0	2.20		40.0	1.60

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1932phae.proj.1227M

69 620 ✓ 6.6

8.9	13.1	2.3	6.3	36.5	1.56
9.2		2.6		41.3	1.62
9.6		3.0		47.7	1.68
10.0	12.8	3.4		54.0	1.73

69 622 ✓ 6.7

8.0	12.7	1.7	6.4	26.6	1.42
8.3		2.0		31.3	1.50
9.4		3.1		48.4	1.68
9.80	12.7	3.5		54.7	1.74

69 629 ✓ 6.2

9.3	12.4	3.1	6.3	49.3	1.69
9.4		3.2		50.8	1.71
9.7		3.5		55.5	1.74
10.4	12.7	4.2		66.6	1.82

69 638 J 6.2

7.1	12.5	.9	6.4	14.1	1.15
7.1		.9		14.1	1.15
8.1		1.9		29.7	1.47
8.7	12.7	2.5		39.0	1.59

69 639 ✓ 6.4

8.0	12.7	1.6	6.3	25.4	1.40
8.0		1.6		25.4	1.40
8.9		2.5		39.7	1.60
9.4	12.7	3.0		47.6	1.68

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1932phae.proj.1227M

69 645 ✓ 6.2

7.7	12.90	1.5	6.6	22.7	1.36
7.8		1.6		24.2	1.38
8.1		1.9		28.8	1.46
8.4	12.70	2.2		33.4	1.52

69 647 ✓ 6.2

8.50	12.90	2.2	6.6	33.4	1.52
9.10		2.8		42.5	1.63
9.40		3.1		47.0	1.67

69 648 ✓ 6.1

8.0	12.80	1.9	6.75	28.2	1.45
8.05		1.95		28.9	1.46
8.50		2.4		35.6	1.55
9.00	12.90	2.9		43.0	1.62

69 649 ✓ 6.2

8.4	12.9	2.1	6.6	31.8	1.50
8.6		2.3		34.9	1.54
8.9		2.6		39.4	1.60
9.3	12.90	3.0		45.5	1.66

April 27 '32 69 615 ✓ 5.1

7.2	10.5	2.1	5.4	38.9	1.59
7.65		2.55		47.2	1.67
8.20		3.1		57.4	1.76
8.70	10.5	3.6		66.7	1.82

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1932phae.proj.1227M

69 645 ✓ 6.0

7.1	10.7	1.1	4.75	23.2	1.37
7.1		1.1		23.2	1.37
7.4		1.4		29.5	1.47
7.7	10.8	1.7		35.8	1.55

68 634 ✓ 6.2

7.8	10.9	1.6	4.8	33.4	1.52
8.1		1.9		39.6	1.60
8.8		2.6		54.3	1.73
9.4	11.1	3.2		66.7	1.82

68 639 ✓ 6.4

7.5	11.35	1.1	4.9	22.5	1.35
7.65		1.25		25.6	1.41
8.05		1.65		33.6	1.53
8.40	11.30	2.00		40.8	1.61

68 642 ✓ 6.6

8.7	11.50	2.1	5.10	41.2	1.61
9.1		2.5		49.0	1.69
9.4		2.8		55.0	1.74
9.9	11.90	3.3		64.7	1.81

68 644 ✓ 6.7

7.8	11.90	1.1	5.25	21.0	1.32
7.9		1.2		22.9	1.36
8.55		1.85		35.2	1.55
9.00	12.00	2.3		43.8	1.64

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1932phae.proj.127M

68 650 ✓ 7.0

8.1	12.0	1.1	5.1	21.6	1.33
8.1		1.1		21.6	1.33
8.3		1.3		25.5	1.41
8.5	12.2	1.5		29.4	1.47

68 653 ✓ 7.2

9.4	12.5	2.2	5.5	40.0	1.60
9.8		2.6		47.3	1.67
10.25		3.05		55.5	1.74
10.60	12.9	3.4		62.0	1.79

68 654 bf. 7.4

9.65	12.8	2.25	5.6	40.2	1.60
10.20		2.8		50.0	1.70
11.00		3.6		64.3	1.81
11.40	13.2	4.0		71.5	1.85

68 656 ✓ 7.5

8.8	13.1	1.3	5.6	23.2	1.37
8.9		1.4		25.0	1.40
9.1		1.6		28.6	1.46
9.5	13.1	2.0		35.7	1.55

68 658 ✓ 7.5

9.9	13.3	2.4	5.75	41.8	1.62
10.5		3.0		52.2	1.72
10.9		3.4		59.2	1.77
11.2	13.2	3.7		64.5	1.81

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1932phae.proj.1227M

68 659 H/ 7.5

10.2	13.3	2.7	5.8	46.5	1.67
10.6		3.1		53.5	1.73
11.4		3.9		67.3	1.83
12.1		4.6		79.3	1.90

68 661 H/ 7.6

10.3	13.5	2.7	5.8	46.5	1.67
10.9		3.3		57.0	1.76
11.7		4.1		70.7	1.85
12.1	13.3	4.5		77.6	1.89

68 662 J 7.6

8.2	13.6	.4	6.0	6.66	0.82
8.3		.7		11.7	1.07
8.5		.9		15.0	1.18
8.8	13.6	1.2		20.0	1.30

68 667 J 7.5

8.2	13.6	.7	6.15	11.4	1.06
8.7		1.2		19.5	1.29
9.4		1.9		30.9	1.49
9.6	13.7	2.1		34.2	1.53

67 676 J 7.7

10.1	13.9	2.4	6.1	39.4	1.60
10.4		2.7		44.2	1.65
10.7		3.0		49.2	1.69
11.0	13.7	3.3		54.0	1.73

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1932phae.proj.127M

67 677 ✓ 7.5

8.9	13.7	1.4	6.25	22.4	1.35
9.1		1.6		25.6	1.41
9.8		2.3		36.8	1.57
10.6	13.8	3.1		49.6	1.70

67 679 ✓ 7.6

10.85	13.7	3.25	6.05	53.7	1.73
10.95		3.15		52.1	1.72
11.70		4.10		67.8	1.83
12.05	13.6	4.45		73.5	1.87

67 694 ✓ 7.5

13.90	10.40	2.9	6.4	45.3	1.66
	11.10	3.6		56.3	1.75
	11.70	4.2		65.6	1.82
13.90	11.70	4.2		65.6	1.82

67 684 ✓ 7.7

8.8	13.8	1.1	6.15	17.9	1.25
8.9		1.2		19.5	1.29
9.0		1.3		21.2	1.33
9.4	13.9	1.7		27.6	1.44

67 685 ✓ 7.7

8.9	13.9	1.2	6.1	19.7	1.29
9.1		1.4		23.0	1.36
10.1		2.4		39.4	1.60
10.7	13.7	3.0		49.3	1.69

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1932phae.proj.127M

67 686 ↓ 7.6

8.9	13.75	1.3	6.1	21.3	1.33
9.1		1.5		24.6	1.39
9.3		1.7		29.9	1.48
9.7	13.65	2.1		34.4	1.54

67 688 ↓ 7.4

13.7	10.4	3.0	6.3	47.7	1.68
	10.5	3.1		49.2	1.69
	10.9	3.5		55.6	1.75
13.7	11.4	4.0		63.5	1.80

67 696 ↓ 7.6

10.4	13.7	2.8	6.15	45.5	1.66
10.7		3.1		50.F	1.70
11.7		4.1		66.6	1.82
12.2	13.8	4.6		74.8	1.87

67 698 ↓ 7.7

9.1	13.7	1.4	6.05	23.1	1.36
9.3		1.6		26.4	1.42
10.2		2.5		41.3	1.62
10.75	13.8	3.05		50.4	1.70

67 699 ↓ 7.8

9.25	13.6	1.45	5.85	24.8	1.39
9.40		1.60		27.4	1.44
9.70		1.90		32.5	1.51
10.20	13.7	2.40		41.1	1.61

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1932phae.proj.127M

67 703 V 7.7

9.8	13.8	2.1	6.1	34.4	1.54
10.5		2.8		45.9	1.66
11.2		3.5		57.4	1.76
11.7	13.8	4.0		65.6	1.82

67 704 V 7.7

10.2	13.9	2.5	6.2	40.3	1.60
10.20		2.3		37.1	1.57
10.40		2.7		43.5	1.64
11.70		4.0		64.5	1.81

67 707 V 7.7

13.9	10.4	2.7	6.15	44.0	1.64
	10.8	3.1		50.5	1.70
	11.2	3.5		57.0	1.76
13.8	11.8	4.1		66.7	1.82

67.708 N 7.6

13.8	9.9	2.3	6.2	37.1	1.57
	10.2	2.6		42.0	1.62
	10.4	2.8		45.2	1.65
13.8	10.6	3.0		48.4	1.68

67 709 V 7.7

8.8	13.80	1.1	6.15	17.9	1.25
9.0		1.3		21.2	1.33
9.3		1.6		26.0	1.41
9.6	13.9	1.9		30.9	1.49

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1932phae.proj:1277M

67 718 J 7.8

10.7	14.1	2.9	6.3	46.1	1.66
11.1		3.3		52.5	1.72
11.5		3.7		58.8	1.77
11.9	14.1	4.1		65.1	1.81

67 719 J 7.8

9.5	13.9	1.7	6.0	28.4	1.45
9.4		1.6		26.7	1.43
10.4		2.6		43.4	1.64
11.4	13.7	3.6		60.0	1.78

67 721 J 7.8

10.25	14.2	2.45	6.3	39.0	1.59
10.60		2.80		44.5	1.65
11.50		3.7		58.8	1.77
12.00	14.0	4.2		66.8	1.82

67 730 J 7.7

9.0	13.85	1.3	6.2	21.0	1.32
9.3		1.6		25.8	1.41
9.6		1.9		30.7	1.49
9.9	14.00	2.2		35.5	1.55

66696 J 7.7

10.0	13.9	2.3	6.25	36.8	1.57
10.5		2.8		44.8	1.65
11.2		3.5		56.0	1.75
11.6	13.8	3.9		62.4	1.79

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1932phae.proj.123M

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50575

66 697√ 6.2

7.3	10.5	1.1	4.55	24.2	1.384
7.4		1.2		26.4	1.42
7.9		1.7		37.4	1.57
8.25	11.0	2.05		45.0	1.65

66 699√ 6.7

8.7	11.2	2.0	4.6	43.5	1.64
8.5		1.8		39.2	1.59
9.2		2.5		54.3	1.73
9.8	11.4	3.1		67.5	1.83

66 703√ 6.7

8.4	11.4	1.7	4.85	35.0	1.54
8.7		2.0		41.2	1.62
9.3		2.6		53.6	1.73
9.7	11.7	3.0		61.9	1.79

66 706√ 6.9

9.0	11.06	2.1	4.85	43.2	1.64
9.05		2.15		44.4	1.65
9.4		2.5		51.6	1.71
9.8	11.9	2.9		59.8	1.78

66 730√ 6.8

11.9	9.4	2.6	5.2	50.0	1.70
	9.4	2.6		50.0	1.70
	10.1	3.3		63.5	1.80
12.1	10.2	3.4		65.4	1.82

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1932phae.proj.1277M

70 637 ↓ 6.9

9.1	12.0	2.2	5.0	4.4	1.64
9.1		2.2		4.4	1.64
9.6		2.7		5.4	1.73
10.0	11.8	3.1		6.2	1.79

70 669 ↓ 7.1

8.0	11.9	.9	4.75	18.9	1.28
8.0		.9		18.9	1.28
8.4		1.3		27.4	1.44
8.70	11.8	1.6		33.7	1.53

70 680 ↓ 7.0

8.9	11.8	1.9	4.8	39.6	1.60
9.2		2.2		45.8	1.66
9.35		2.35		49.0	1.69
9.60	11.8	2.6		54.2	1.74

70 681 ↓ 7.0

8.9	11.9	1.9	4.95	38.4	1.58
9.1		2.1		42.5	1.63
9.3		2.3		46.5	1.67
9.9	12.0	2.9		58.6	1.77

69 592 ↓ 7.1

9.2	12.2	2.1	5.0	42.0	1.62
9.3		2.2		44.0	1.64
9.5		2.4		48.0	1.68
9.9	12.0	2.8		56.0	1.75

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1932phae.proj.1227M

69 622✓ 7.0

8.3	11.9	1.3	4.95	26.2	1.42
8.5		1.5		30.3	1.48
9.2✓		2.2		44.5	1.65
9.75	12.0	2.75		55.5	1.74

69 645✓ 7.1

8.1	11.8	1.0	4.8	20.8	1.32
8.2		1.1		22.9	1.36
8.6		1.5		31.2	1.49
8.8	12.0	1.7		35.4	1.55

68 642✓ 7.2

9.0	11.9	1.8	4.55	39.6	1.60
9.45		1.95		43.0	1.63
9.5		2.3		50.6	1.70
9.9	11.6	2.7		59.5	1.77

67 684✓ 7.0

8.0	12.0	1.0	4.95	20.2	1.30
8.0		1.0		20.2	1.30
8.25		1.25		25.2	1.40
8.60	11.9	1.60		32.3	1.51

67 704✓ 7.0

9.0	11.90	2.0	4.90	40.8	1.61
9.0		2.0		40.8	1.61
9.67		2.67		54.5	1.74
10.50	11.9	3.50		71.5	1.85

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1932phae.proj.1227M

67 708 ↓ 7.0

8.8	11.8	1.8	4.70	37.8	1.58
8.9		1.9		40.0	1.60
9.0		2.0		42.0	1.62
9.21	11.7	2.2		46.3	1.66

I 50610 71 588 ↓ 6.8

8.2	10.5	1.5	3.65	41.0	1.61
8.4		1.6		43.8	1.64
8.75		1.95		53.5	1.73
9.00	10.4	2.2		60.4	1.78

70 647 ↓ 6.6

10.3	8.2	1.6	3.8	42.0	1.62
	8.3	1.7		44.7	1.65
	8.7	2.1		55.2	1.74
10.5	9.1	2.5		65.8	1.82

70 669 ↓ 7.0

10.2	7.55	.55	3.25	16.9	1.23
	7.60	.60		18.5	1.27
	7.80	.80		24.6	1.39
10.2	8.20	1.20		37.0	1.57

69 597 ↓ 6.7

7.8	10.6	1.1	3.95	27.8	1.43
7.8		1.1		27.8	1.43
8.2		1.5		38.0	1.58
8.4	10.7	1.7		43.0	1.63

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1932phee.proj.1227M

69 603 ✓ 6.8

7.4	10.2	.6	3.45	17.4	1.24
7.6		.8		23.2	1.36
7.7		.9		26.1	1.42
8.0	10.2	1.2		84.8	1.54

69 615 ✓ 6.9

8.1	10.2	1.2	3.35	35.8	1.55
8.2		1.3		38.8	1.59
8.7		1.8		53.6	1.72
8.9	10.3	2.0		59.6	1.78

69 638 ✓ 6.9

7.3	10.4	.4	3.5	11.4	1.06
7.3		.4		11.4	1.06
7.7		.8		22.9	1.11
8.3	10.4	1.4		40.0	1.60

69 639 ✓ 6.7

7.7	10.2	1.0	3.55	28.2	1.45
7.85		1.15		32.4	1.51
8.2		1.5		42.3	1.63
8.5	10.3	1.8		50.8	1.71

68 652 ✓ 6.9

7.55	10.1	.65	3.3	19.7	1.29
7.70		.8		24.2	1.38
7.80		.9		27.3	1.44
8.05	10.3	1.15		34.8	1.54

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1932phae.proj.1227M

67 684 ↓ 6.9

7.5	10.4	.6	3.4	17.7	1.25
7.6		.7		20.6	1.31
7.7		.8		23.6	1.37
7.90	10.35	1.0		29.4	1.47

67 686 ↓ 6.9

7.50	10.3	.6	3.35	17.9	1.25
7.60		.7		20.9	1.32
7.70		.8		23.9	1.38
8.00	10.2	1.1		32.8	1.52

67 703 ↓ 6.9

7.9	10.1	1.0	3.25	30.8	1.49
8.1		1.2		37.0	1.57
8.5		1.6		49.3	1.69
8.8	10.2	1.9		58.5	1.77

67 708 ↓ 6.9

7.9	10.1	1.0	3.1	32.3	1.51
8.0		1.1		35.6	1.55
8.0		1.1		35.6	1.55
8.1	9.9	1.2		38.8	1.59

67 709 ↓ 6.7

7.25	9.8	.65	3.1	21.0	1.32
7.25		.55		17.7	1.25
7.40		.7		22.6	1.35
7.50	9.8	.80		25.8	1.41

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1932phec.proj.127M

67 718 ✓ 6.7

7.9	9.8	1.2	3.05	39.4	1.60
8.0		1.3		42.7	1.63
8.35		1.65		54.1	1.73
8.50	9.7	1.8		59.0	1.77

67 720 ✓ 6.7

7.4	10.0	.7	3.25	21.5	1.33
7.50		.8		24.6	1.39
7.70		1.0		30.8	1.49
7.85	9.9	1.15		35.4	1.55

66 696 ✓ 6.6

7.8	9.8	1.2	3.2	37.5	1.57
7.9		1.3		40.6	1.61
8.4		1.8		56.2	1.75
8.6	9.8	2.0		62.5	1.80

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I 5061.0 66 720 ✓ on I 5061.0 5.6

7.2	8.9	1.6	3.55	29.3	1.466
7.3		1.7		30.9	1.49
7.7		2.1		38.2	1.58
7.9	9.2	2.3		41.8	1.62

70 669 ✓ 6.0

9.0	6.7	.7	3.1	22.6	1.35
	6.75	.75		24.2	1.38
	7.00	1.00		32.2	1.51
9.2	7.30	1.30		42.0	1.62

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1932phae.proj:1227M

69 622↓ 6.2

7.2	9.3	1.0	3.1	32.3	1.51
7.3		1.1		35.5	1.55
7.6		1.4		45.2	1.66
7.8	9.3	1.6		51.6	1.71

67 709↓ 6.2

6.9	9.2	.7	3.0	23.4	1.37
6.8		.6		20.0	1.30
7.90		.8		26.7	1.43
7.20	9.2	1.0		33.3	1.52

66 696↓ 6.3

7.55	9.7	1.25	3.4	36.8	1.57
7.60		1.3		38.2	1.58
8.20		1.9		55.9	1.75
8.50	9.7	2.2		64.8	1.81

50575 68 632↓ 6.4

7.4	11.0	1.0	5.55	18.0	1.25
7.5		1.1		19.8	1.30
7.65		1.25		22.5	1.35
8.10	11.90	1.70		30.6	1.49

J50608 72 558 8.4 6.3
Ry 5
AOX

7.3	9.7	1.0	3.45	29.0	1.46
7.3		1.0		29.0	1.46
7.45		1.15		33.4	1.52
7.80	9.8	1.50		43.5	1.64

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1932phae.proj.127M

71	598	6.9				6.3
	6.65	9.7	.35	3.5	10.0	1.00
	6.70		.4		11.4	1.06
	6.8		.5		14.3	1.16
	7.0	9.9	.7		20.0	1.30
70	711	8.9				6.2
	7.5	9.9	1.2	3.6	33.4	1.52
	7.4		1.1		30.6	1.49
	7.8		1.5		41.7	1.62
	7.9	9.9	1.6		44.5	1.65
70	715	7.8				6.4
	7.0	10.0	.6	3.55	16.9	1.23
	6.9		.5		14.1	1.15
	7.0		.6		16.9	1.23
	7.1	9.9	.7		19.8	1.30
69	661	8.4				6.3
	7.3	9.8	1.0	3.5	28.6	1.46
	7.35		1.05		30.0	1.48
	7.40		1.1		31.4	1.50
	7.70	9.8	1.4		40.0	1.60
69	694	6.1				6.35
	10.0	6.5	.15	3.70	4.05	0.61
		6.5	.15			
		6.5	.15			
	10.1	6.5	.15			

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1932phae.proj.127M

68 664 89 6.4

~~7.6~~	10.0	7.0	.6	3.55	16.9	1.23
~~7.9~~		6.9	.5		14.1	1.15
~~7.7~~		7.1	.7		19.7	1.29
~~7.9~~	9.9	7.00	.6		16.9	1.23

68 701 9.1 6.4

10.2	7.85	1.45	3.7	39.2	1.59
	7.90	1.50		40.5	1.61
	8.10	1.7		46.0	1.66
10.0	8.50	2.1		56.8	1.75

68 722 8.9 6.4

7.7	10.2	1.3	3.85	33.8	1.53
8.1		1.7		44.2	1.65
8.0		1.6		46.6	1.67
8.40	10.3	2.0		52.0	1.72

67 725 8.6 6.4

7.50	10.1	1.1	3.7	29.7	1.47
7.70		1.3		35.1	1.55
7.60		1.2		32.4	1.51
8.10	10.1	1.7		46.0	1.66

End of Box

72 554 6.4

7.50	10.0	1.1	3.55	31.0	1.492
7.65		1.25		35.2	1.55
7.85		1.45		40.8	1.61
8.10	9.9	1.70		48.0	1.68

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1932phae.proj.127M

71 588 H 6.4

8.2	10.0	1.8	3.6	50.0	1.70
8.3		1.9		52.8	1.72
8.8		2.4		66.7	1.82
9.0	10.0	2.6		72.3	1.86

71 594 V 6.4

7.8	10.0	1.4	3.55	39.4	1.60
7.80		1.4		39.4	1.60
8.0		1.6		45.2	1.65
8.20	9.9	1.8		50.7	1.70

71 599 V 6.4

7.1	9.9	.7	3.5	20.0	1.30
7.4		1.0		28.6	1.46
7.8		1.4		40.0	1.60
8.0	9.9	1.6		45.7	1.66

71 601 V 6.5

8.0	9.9	1.5	3.45	43.5	1.64
8.2		1.7		49.3	1.70
8.3		1.8		52.2	1.72
8.65	10.0	2.15		62.3	1.79

71 607 H 6.5

8.1	9.8	1.6	3.25	49.24	1.69
8.3		1.8		55.14	1.74
8.7		2.2		67.8	1.83
8.9	9.7	2.4		74.0	1.87

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1932phae.proj.1277M

71	610					6.5
7.0	9.7	.5	3.2	15.6	1.19	
6.9		.4		12.5	1.10	
7.2		.7		21.9	1.34	
7.1	9.7	.6		18.8	1.27	
71	613					6.4
7.7	9.85	1.3	3.4	38.2	1.58	
8.0		1.6		47.1	1.67	
8.3		1.9		56.0	1.75	
8.55	9.8	2.15		63.4	1.80	
71	630					6.5
7.2	9.9	.7	3.4	20.6	1.31	
7.3		.8		23.6	1.37	
7.7		1.2		35.3	1.53	
8.15	9.9	1.65		48.5	1.69	
71	631					6.6
8.15	10.0	1.55	3.35	46.2	1.66	
8.60		2.0		59.7	1.78	
9.30		2.7		80.6	1.91	
9.40	9.9	2.8		83.6	1.92	
71	636					6.5
7.15	10.0	.65	3.55	18.3	1.26	
7.20		.7		19.7	1.29	
7.30		.8		22.6	1.35	
7.40	10.1	.9		25.4	1.40	

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1932phae.proj.127M

71 638 J 6.6

7.1	10.2	.5	3.5	14.1	1.15
7.1		.5		14.1	1.15
7.7		1.1		31.0	1.49
8.2	10.1	1.6		45.1	1.65

71 639 H 6.6

10.1	8.2	1.6	3.5	45.8	1.66
	8.4	1.8		51.5	1.71
	8.9	2.3		65.8	1.82
10.1	9.2	2.6		74.5	1.87

70 679 H 6.6

8.2	10.1	1.6	3.5	45.8	1.66
8.45		1.85		53.0	1.72
9.00		2.4		68.7	1.84
9.20	10.1	2.6		74.5	1.87

70 681 J 6.6

8.1	10.2	1.5	3.6	41.7	1.62
8.3		1.7		47.2	1.67
8.5		1.9		52.8	1.72
8.85	10.2	2.25		62.5	1.80

70 686 H 6.6

8.2	10.0	1.6	3.35	47.8	1.68
8.4		1.8		53.7	1.73
8.8		2.2		65.7	1.82
9.1	9.9	2.5		74.6	1.87

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1932phae.proj.1227M

70 690↓ 6.6

7.80	9.8	1.2	3.3	36.4	1.56
7.90		1.3		39.4	1.60
8.10		1.5		45.5	1.66
8.30	10.0	1.7		51.5	1.71

70 691↓ 6.6

7.65	9.8	1.05	3.25	32.4	1.51
7.95		1.35		41.5	1.62
8.40		1.8		55.5	1.74
8.80	9.9	2.2		67.7	1.83

70 695↓ 6.5

7.8	9.7	1.3	3.2	40.7	1.61
8.1		1.6		50.0	1.70
8.25		1.75		54.8	1.74
8.40	9.7	1.9		59.5	1.77

70 698↓ 6.5

7.7	9.9	1.2	3.4	35.3	1.53
7.8		1.3		38.2	1.58
8.0		1.5		44.1	1.64
8.3	9.9	1.8		53.0	1.72

70 699↓ 6.5

7.8	9.9	1.3	3.4	38.2	1.58
8.1		1.6		47.0	1.67
8.5		2.0		58.9	1.77
8.8	9.9	2.3		67.7	1.83

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1932phae.proj.1227M

70 707 ✓ 6.6

7.0	~~7.8~~ 7.2	.4	3.55	11.3	1.05
7.2		.6		16.9	1.23
7.5		.9		25.4	1.40
7 8	10.1	1.2		33.8	1.53

May 4 ~~Aug~~ 1932

50608 70 718 ✓ 4.7

8.8	6.3	1.6	4.3	37.2	1.57
	6.6	1.9		44.3	1.65
	6.7	2.0		46.5	1.67
9.2	7.2	2.5		58.2	1.76

70 719 ✓ 5.2

9.4	6.9	1.7	4.25	40.0	1.60
	7.0	1.8		42.4	1.63
	7.5	2.3		54.2	1.73
9.5	7.9	2.7		63.5	1.80

70 720 M. 5.5

7.6	9.6	2.1	4.1	51.3	1.71
7.6		2.1		51.3	1.71
8.3		2.8		68.4	1.83
8.4	9.6	2.9		70.9	1.85

70 722 ✓ 5.6

7.3	9.7	1.7	4.1	41.5	1.62
7.55		1.95		47.6	1.68
7.90		2.3		57.1	1.75
8.00	9.7	2.6		63.5	1.80

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1932phae.proj.1227M

70 724 ↓ 5.6

6.9	9.7	1.3	4.05	32.1	1.51
7.0		1.4		34.6	1.54
7.4		1.8		44.4	1.65
7.75	9.6	2.15		53.0	1.72

70 725 ↓ 5.5

7.4	9.65	1.9	4.2	45.2	1.65
7.6		2.1		50.0	1.70
8.12		2.62		62.4	1.79
8.50	9.70	3.0		71.4	1.85

70 726 ↓ 5.6

7.0	9.65	1.4	4.1	34.2	1.53
7.3		1.7		41.5	1.62
7.85		2.25		55.0	1.74
8.40	9.70	2.80		68.4	1.83

70 727 ↓ 5.4

7.3	9.5	1.9	4.15	45.7	1.66
7.6		2.2		53.0	1.72
7.8		2.4		57.8	1.76
8.15	9.6	2.75		66.2	1.82

70 728 ↓ 5.5

6.9	9.8	1.4	4.25	33.0	1.52
7.0		1.5		35.4	1.55
7.2		1.7		40.0	1.60
7.4	9.7	2.1		49.5	1.69

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1932phae.proj.1227M

70 726 N

	6.8	9.7	1.3	4.2	31.0	1.49
	7.3		1.8		43.0	1.63
	8.2		2.7		64.3	1.81
	8.7	9.7	3.2		76.1	1.88

5.5-

69 636 V

	6.1	9.6	.6	4.1	14.6	1.16
	6.4		.9		22.0	1.34
	6.25		.75		18.3	1.26
	6.40	9.55	.90		22.0	1.34

5.5-

69 638 V

	6.25-	9.5	.85	4.1	20.7	1.32
	6.50-		1.15		28.0	1.45-
	7.20		1.80		44.0	1.64
	7.60	9.5-	2.2		53.7	1.73

5.4

May 5, 1922 70 736 V

	6.9	9.9	1.65	3.85	43.0	1.634
	6.7		1.45-		37.7	1.58
	7.1		1.85		48.1	1.68
	7.2	10.3	1.95		50.7	1.71

5.25-

69 639 V

	7.35-	10.0	1.45	4.25	34.1	1.53
	7.70		1.8		42.4	1.63
	8.20		2.3		54.2	1.73
	8.55	10.3	2.65		62.5-	1.80

5.5

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1932phae.proj.1227M

69 647† 6.1

7.4	10.3	1.3	4.2	31.0	1.49
7.55		1.25		29.8	1.47
7.60		1.5		35.7	1.55
7.90	10.3	1.8		42.8	1.63

69 647↓ 6.3

7.9	10.0	1.6	3.7	43.2	1.63
8.0		1.7		45.8	1.66
8.3		2.0		54.0	1.73
8.5	10.0	2.2		59.4	1.77

69 648↓ 6.4

7.7	10.0	1.3	3.65	35.3	1.55
7.7		1.3		35.3	1.55
7.9		1.5		41.2	1.61
8.1	10.1	1.7		46.6	1.67

69 649↓ 6.5

8.0	10.4	1.5	3.85	39.0	1.59
8.1		1.6		41.6	1.62
8.2		1.7		44.2	1.65
8.5	10.3	2.0		52.0	1.72

69 657↓ 6.4

7.3	10.3	.9	3.85	23.4	1.37
7.4		1.0		26.0	1.41
7.7		1.3		33.8	1.53
7.8	10.2	1.4		36.4	1.56

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1932phae.proj.1227M

69 664 ↓ 6.4

10.1	7.6	1.2	3.75	32.0	1.51
	7.7	1.3		34.7	1.54
	7.9	1.5		40.0	1.60
10.2	8.1	1.7		45.4	1.66

69 666 do. 6.5

6.8	10.1	.3	3.55	8.46	0.9
6.8		.3		8.46	
7.0		.5		14.10	
7.3	10.0	.8		22.50	

69 669 ↓ 6.3

10.3	7.1	.8	4.0	20.0	1.30
	7.0	.7		17.5	1.24
	7.2	.9		22.5	1.35
10.3	7.5	1.2		30.0	1.48

69 671 ↓ 6.5

10.5	7.2	.7	3.95	17.7	1.25
	7.3	.8		20.2	1.31
	7.55	1.05		26.6	1.42
10.4	7.70	1.2		30.4	1.48

69 677 ↓ 6.5

10.6	7.2	.7	4.15	16.9	1.23
	7.2	.7		16.9	1.23
	7.6	1.1		26.5	1.42
10.7	8.0	1.5		36.2	1.56

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1932phae.proj.1227M

69 680↓ 6.6

7.1	10.8	.5	4.1	12.2	1.08
7.5		.9		22.0	1.34
8.3		1.7		41.5	1.62
8.1	10.6	1.5		36.6	1.56

69 681↓ 6.6

7.6	10.7	1.0	3.95	25.3	1.40
7.6		1.0		25.3	1.40
7.85		1.25		31.6	1.50
8.00	10.4	1.4		35.5	1.55

69 689↓ 6.5

10.6	8.3	1.8	4.2	42.8	1.63
	8.6	2.1		50.0	1.70
	9.0	2.5		59.5	1.77
10.8	9.2	2.7		64.3	1.81

69 692↓ 6.6

11.0	7.7	1.1	4.4	25.0	1.40
	8.0	1.4		31.8	1.50
	8.1	1.5		34.1	1.53
11.0	8.4	1.8		40.8	1.61

69 696↓ 6.6

7.1	11.0	.5	4.45	11.2	1.05
7.3		.7		15.7	1.20
7.7		1.1		24.8	1.40
8.3	11.1	1.7		38.2	1.58

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1932phae.proj.1227M

68 667✓ 6.7

7.10	11.1	.4	4.25	9.2	0.96
7.30		.6		13.8	1.14
7.70		1.0		23.0	1.36
8.10	10.8	1.4		32.2	1.51

68 683✓ 6.7

8.4	10.7	1.7	4.0	42.5	1.63
8.7		2.0		50.0	1.70
8.9		2.2		57.0	1.74
9.6	10.7	2.9		72.5	1.86

68 684 Vp 6.6

10.7	8.6	2.0	4.1	48.8	1.69
	8.9	2.3		56.1	1.75
	9.15	2.55		62.3	1.79
10.7	9.40	2.8		68.4	1.83

68 693✓ 6.7

7.5	10.8	.8	4.05	19.8	1.30
7.7		1.0		24.7	1.39
7.7		1.0		24.7	1.39
7.9	10.7	1.2		29.6	1.47

68 695 ✓ 6.5

7.9	10.8	1.4	4.25	33.0	1.52
8.3		1.8		42.4	1.63
9.0		2.5		58.8	1.77
9.4	10.7	2.9		67.2	1.83

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1932phae.proj.1227M

68 702↓						6.5
8.6	10.7	2.1	4.17	50.5	1.70	
8.8		2.3		55.2	1.74	
8.9		2.4		57.6	1.76	
9.0	10.65	2.5		60.0	1.78	
68 703↓						6.5
6.9	10.7	.4	4.3	9.3	0.97	
7.0		.5		11.7	1.07	
7.6		1.1		25.6	1.41	
8.1	10.9	1.6		57.2	1.57	
68 705↓						6.6
7.7	10.8	1.1	4.05	27.2	1.43	
7.8		1.2		29.6	1.47	
8.0		1.4		34.6	1.54	
8.3	10.5	1.7		42.0	1.62	
68 709↓						6.6
8.6	10.7	2.0	4.1	48.8	1.69	
8.25		1.65		40.3	1.61	
8.55		1.95		47.6	1.68	
8.90	10.7	2.30		56.1	1.75	
68 714↓						6.6
8.5	10.5	1.9	3.9	48.8	1.69	
8.6		2.0		51.4	1.71	
9.1		2.5		64.2	1.81	
9.4	10.5	2.8		72.0	1.86	

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1932phae.proj.1227M

68 717 ✓ 6.6

10.7	7.0	.3	3.85	7.8	0.89
	7.1	.5		13.0	1.11
	7.5⁻	.9		23.4	1.37
10.2	7.8	1.2		31.2	1.49

68 723 ✓ 6.6

10.3	7.0	.4	3.65	11.0	1.04
	7.4	.8		21.9	1.34
	7.8	1.2		32.9	1.52
10.2	8.2	1.6		43.8	1.64

67 727 ✓ 6.5⁻

10.4	8.6	2.1	3.85	54.6	1.74
	8.7	2.2		57.2	1.76
	8.9	2.4		62.5⁻	1.80
10.3	9.3	2.8		72.8	1.86

67 720 ✓ 6.5⁻

10.2	7.3	.8	3.7	21.6	1.33
	7.4	.9		24.3	1.39
	7.9	1.4		37.8	1.58
10.2	7.9	1.4		37.8	1.58

67 757- 6.6

10.0	8.0	1.4	3.35	41.7	1.62
	8.0	1.4		41.7	1.62
	8.25	1.65⁻		49.2	1.69
9.9	8.5	1.90		56.6	1.75

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66 751V 7.2

7.4	10.7	.2	3.4	5.88	0.77
7.4		.2		5.88	0.77
8.1		.9		36.40	1.42
8.4	10.5	1.2		35.30	1.55

66 752V 7.1

7.9	10.4	.8	3.25	24.6	1.39
8.1		1.0		30.7	1.49
8.2		1.2		36.8	1.57
8.5	10.3	1.4		43.0	1.63

66 754V 7.0

8.0	10.5	1.0	3.5	28.6	1.46
8.3		1.3		37.2	1.57
8.9		1.9		54.4	1.73
9.6	10.5	2.6		74.4	1.87

66 761V 7.0

7.8	10.4	.8	3.45	23.2	1.37
7.9		.9		26.1	1.42
8.0		1.0		29.0	1.46
8.2	10.5	1.2		34.8	1.54

66 768V 7.1

7.5	10.6	.4	3.4	11.8	1.07
7.6		.5		14.7	1.17
7.7		.6		17.7	1.25
8.0	10.4	.9		26.5	1.42

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67 767√ 5.9

7.2	9.2	1.3	4.5	28.8	1.46
7.5		1.6		35.6	1.55
7.8		1.9		42.2	1.62
8.1	9.6	2.2		48.8	1.69

67 771√ 6.9

8.1	9.9	1.7	3.6	47.3	1.67
8.2		1.8		50.0	1.70
8.5		2.1		58.4	1.77
8.75	10.1	2.35		65.4	1.82

66 742√ 6.8

7.3	10.4	.5	3.6	13.9	1.14
7.8		1.0		27.6	1.44
8.6		1.8		50.0	1.70
8.9	10.4	2.1		58.4	1.77

66 746√ 7.0

7.6	10.40	.6	3.4	17.7	1.25
7.8		.8		23.5	1.37
8.0		1.0		29.4	1.47
8.35	10.40	1.35		39.7	1.60

66 748√ 7.2

8.5	10.5	1.8	3.35	38.9	1.59
8.6		1.4		41.8	1.62
8.8		1.6		47.8	1.69
9.1	10.6	1.9		56.8	1.75

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72	558	8.4					7.0
	7.9	10.3	.9	3.25	27.7	1.44	
	8.1		1.1		33.9	1.53	
	8.25		1.25		38.5	1.59	
	8.40	10.2	1.40		43.2	1.63	
71	598	6.9	(6.60)				6.9
	7.4	10.0	.5	3.1	16.2	1.21	
	7.6		.7		22.6	1.35	
	7.7		.8		25.8	1.41	
	7.6	10.0	.7		22.6	1.35	
70	711	8.9					7.0
	7.85	9.8	.85	2.90	29.3	1.47	
	8.10		1.10		37.9	1.58	
	8.30		1.30		44.8	1.65	
	8.40	10.0	1.40		48.3	1.68	
70	715	7.8	(8.12)				6.9
	7.4	10.1	.5	3.25	15.4	1.19	
	7.7		.8		24.6	1.39	
	7.75		.85		26.2	1.42	
	7.90	10.2	1.0		30.8	1.49	
69	661	8.4					6.9
	7.65	10.3	.75	3.5	21.4	1.33	
	7.60		.70		20.0	1.30	
	7.90		1.00		28.6	1.46	
	8.20	10.5	1.30		37.2	1.57	

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69 694	6.1					6.9
7.0	10.6	.1	3.7	2.70	0.43	
7.0		.1				
7.0		.1				
7.0		.1				
68 664	8.9					6.7
8.3	10.6	1.6	3.95	40.6	1.61	
8.4		1.7		43.2	1.64	
8.7		2.0		50.7	1.71	
8.85	10.7	2.15		54.5	1.74	
68 701	9.1					6.7
8.4	10.65	1.7	3.97	42.8	1.63	
8.4		1.7		42.8	1.63	
8.7		2.0		50.4	1.70	
9.0	10.70	2.3		58.0	1.76	
68 722	8.9					6.7
8.4	10.9	1.7	4.2	40.5	1.61	
8.4		1.7		40.5	1.61	
8.3		1.6		38.1	1.58	
8.9	10.9	2.2		52.4	1.72	
67 725	8.6					6.6
7.9	10.75	1.3	4.17	31.2	1.49	
7.9		1.3		31.2	1.49	
8.3		1.7		40.8	1.61	
8.5	10.80	1.9		45.6	1.66	

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72 554↓ 6.4

7.8	10.6	1.6	4.95	36.8	1.57
7.8		1.6		36.8	1.57
8.1		1.9		43.7	1.64
8.3	10.5⁻	2.1		48.4	1.68

71 594↓ 6.5⁻

7.6	10.3	1.1	3.7	29.7	1.47
7.7		1.2		32.4	1.51
7.9		1.4		37.8	1.58
8.4	10.1	1.9		51.3	1.71

71 599↓ 6.4

10.3	7.2	.9	3.85	23.4	1.37
	7.2	.8		20.8	1.32
	7.6	1.2		31.2	1.49
10.2	8.0	1.6		41.6	1.62

71 601↓ 6.2

7.9	10.2	1.7	3.95	43.0	1.63
8.1		1.9		48.1	1.68
8.3		2.1		53.2	1.73
8.6	10.1	2.4		60.8	1.78

71 613↓ 6.1

7.9	10.0	1.8	3.9	46.1	1.66
8.0		1.9		48.7	1.69
8.1		2.0		51.2	1.71
8.4	10.0	2.3		59.0	1.77

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1932phae.proj.1277M

71 638 ✓ 6.2

6.9	10.1	.7	3.85	18.2	1.36
7.1		.9		23.4	1.37
7.7		1.5		39.0	1.59
8.00	10.0	1.8		46.8	1.67

71 636 ✓ my 6.1

7.0	10.0	.9	3.9	23.1	1.36
7.0		.9		23.1	1.36
7.0		.9		23.1	1.36
7.21	10.0	1.1		28.2	1.45

71 638 ✓ 6.1

7.1	10.1	1.0	3.95	22.8	1.36
7.0		.9		25.3	1.40
7.3		1.2		30.4	1.48
7.9	10.0	1.3		45.6	1.66

70 691 ✓ 6.1

7.35	9.9	1.25	3.85	32.5	1.51
7.70		1.6		41.6	1.62
8.30		2.2		57.2	1.76
8.55	10.0	2.45		63.6	1.80

70 681 ✓ 6.1

7.75	10.05	1.65	4.0	41.4	1.62
8.90		1.8		45.0	1.65
8.30		2.2		55.0	1.74
8.50	10.10	2.4		60.0	1.78

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1932phae.proj.1227M

70 690↓ 6.0

7.6	9.8	1.6	3.75	42.7	1.63
7.6		1.6		43.7	1.63
7.9		1.9		50.7	1.70
8.0	9.7	2.0		53.4	1.73

70 69=↓ 6.0

7.7	9.8	1.7	3.75	45.4	1.66
7.8		1.8		48.0	1.68
7.8		1.8		48.0	1.68
8.1	9.7	2.1		56.0	1.75

70 698↓ 6.0

7.0	9.8	1.0	3.7	27.0	1.43
7.5		1.5		40.5	1.61
7.6		1.6		43.3	1.64
8.0	9.6	2.0		54.0	1.73

70 699↓ 5.9

7.45	9.7	1.55	3.7	41.8	1.62
7.70		1.8		48.6	1.69
8.00		2.1		56.8	1.75
8.10	9.5	2.2		59.5	1.77

70 707↓ 5.9

6.8	9.6	.9	3.7	24.3	1.39
6.60		.7		18.9	1.28
7.30		1.4		37.8	1.58
7.30	9.6	1.4		37.8	1.58

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1932phae.proj.1227M

70 718 ✓ 5.9

7.3	9.8	1.4	3.8	36.9	1.57
7.6		1.7		44.8	1.65
7.7		1.8		47.4	1.67
7.75	9.6	1.85		48.8	1.69

70 719 ✓ 5.9

7.5	9.8	1.6	3.9	41.0	1.61
7.6		1.7		43.6	1.64
7.9		2.0		51.4	1.71
8.1	9.8	2.2		56.5	1.75

70 722 ✓ 6.0

7.6	9.9	1.6	3.85	41.6	1.62
7.7		1.7		44.2	1.65
7.85		1.85		48.2	1.68
8.10	9.8	2.10		54.6	1.74

70 724 ✓ 5.9

7.05	9.9	1.15	3.9	29.5	1.47
7.40		1.5		38.4	1.58
7.45		1.55		39.7	1.60
7.80	9.7	1.9		48.7	1.69

70 728 ✓ 5.8

7.2	9.8	1.4	4.0	35.0	1.54
7.3		1.5		37.5	1.57
7.9		2.1		52.5	1.72
8.5	9.8	2.7		67.5	1.83

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May 7 1932 72 534↓ 4.8

4.8	9.8	.0	4.35		
6.3		1.5		34.5	1.54
6.5		1.7		39.1	1.59
6.8	9.3	2.0		46.0	1.66

71 599↓ 5.2

6.4	9.3	1.2	4.2	28.6	1.46
6.2		1.0		23.8	1.38
7.05		1.85		44.0	1.64
7.20	9.5	2.0		47.6	1.68

71 613↓ 5.4

7.2	9.3	1.8	4.05	44.5	1.65
7.55		2.15		53.2	1.73
7.60		2.2		54.4	1.73
8.00	9.6	2.6		64.3	1.81

71 638↓ 5.7

6.4	9.8	.7	4.15	16.9	1.23
6.6		.9		21.7	1.34
7.2		1.5		36.1	1.56
7.9	9.9	2.2		53.0	1.72

70 690↓ 5.9

7.4	9.5	1.5	3.75	40.0	1.60
7.55		1.65		44.0	1.64
8.00		2.1		52.0	1.75
8.20	9.8	2.3		61.4	1.79

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1932phae.proj.1227M

70 736 ✓ 5.85

6.70	9.9	.85	4.05	21.0	1.32
6.75		.90		22.2	1.35
7.1		1.25		31.0	1.49
7.25		1.40		34.6	1.54

70 693 ✓ 6.0

9.9	8.1	2.1	3.95	53.1	1.73
	8.0	2.0		50.6	1.70
	8.1	2.1		53.2	1.73
10.0	8.4	2.4		60.8	1.78

70 707 ✓ 6.0

6.9	9.9	.9	3.8	24.7	1.39
7.3		1.3		34.2	1.53
7.4		1.4		36.8	1.57
7.7	9.75	1.7		44.8	1.65

70 718 ✓ 6.2

7.8	10.2	1.6	4.05	39.5	1.60
7.8	~~10.~~	1.6		39.5	1.60
8.1		1.9		46.9	1.67
8.3	10.3	2.1		51.8	1.71

70 724 ✓ 6.3

7.9	10.2	1.6	4.05	39.5	1.60
7.9		1.6		39.5	1.60
8.25		1.95		48.2	1.69
8.50	10.5	2.2		54.4	1.73

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70 722√ 6.5

8.6	10.6	2.1	4.1	51.3	1.71
8.6		2.1		51.3	1.71
8.9		2.4		58.6	1.77
9.1	10.6	2.6		43.5	1.80

70 719√ 6.6

8.35	10.7	1.75	4.05	43.3	1.64
8.45		1.85		45.7	1.66
8.80		2.20		54.4	1.73
9.20	10.6	2.60		64.3	1.81

70 726√ 6.7

8.2	10.7	1.5	4.0	37.5	1.57
8.4		1.7		42.5	1.63
9.345		2.75		68.8	1.84
9.50	10.75	2.80		70.0	1.84

69 638√ 6.6

7.7	10.7	1.1	4.1	26.8	1.43
7.65		1.05		25.6	1.41
8.10		1.50		36.6	1.56
8.70	10.7	2.10		51.3	1.71

69 629√ 6.7

8.0	10.8	1.3	4.05	32.1	1.51
8.3		1.6		39.5	1.60
8.7		2.0		49.4	1.69
8.9	10.7	2.2		54.4	1.74

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