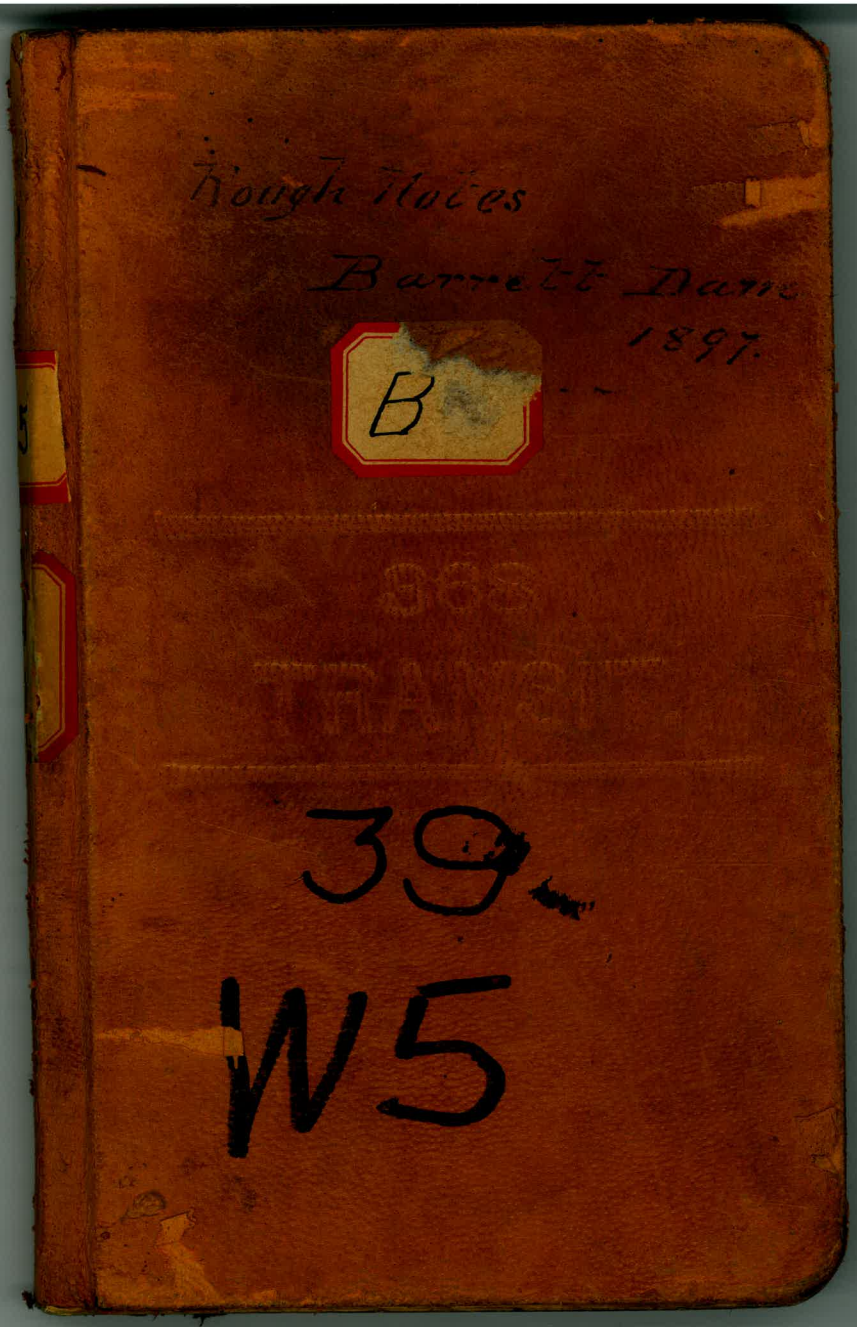

Rough Notes
Barrett Dam
1897.
B
39
W5

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes	Lks.	Minutes	Lks.	Minutes	Lks.
1	1⅓	21	49	41	95⅔
2	2⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. In Links	Angle	Cor. in Links
o		o		o		o	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1 24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

Rough Notes of
Work around Barrett
Dam

1897--

Index

1. Levels Taken up Cattin wood Co. from Dam Site to find Requisite Fall for Hydraulic Ram

March 11. 1897

Sta	B.S.	Int	F.S.	H.I.	Elev.	
0.0 =	1.29			34.96	33.67	exp for end of Timb. B.M. established by H. Edwards last fall from Original B.M.
Peg in Stone			11.26		23.70	
	1.30			25.00		
4+50		12.35			12.65	Water Level in Reservoir Below Blacksmith Shop.
			2.59		22.41	
	2.47			24.88		
6+75 –			3.05 –		21.83	on Big Rock foot of island
	6.95 –			28.78		
9+25 –		9.15			19.63	Water Elev. on flat Rock below sand pile
peg 12+25			0.58		28.20	on peg. near Sand pile 24.8
	5.89			34.09		
peg 14+85 –			2.02		32.07	peg in Stone near Cook house
	7.43			39.50		
~~18~~+60			4.00		35.50	Near Powder house
	4.75 –			40.25		
20+50		12.40			27.85	on Rock 0.30 above water Opposite powder House
24+70			0.96		39.29	on Iron bar in point of Rock west of Chenny House
	6.18			45.47		
~~28+20~~		12.20			33.27	
		1.12	~~1.12~~		44.35	✓ B.M. on Oak stump near Mr Channings.
		10.60			34.87	Elev. of water where Beeches extend into Stream
28+20		12.30				point on Rock edge of water – Water 1ft below
	0.40		1.12	44.75	44.35	
29+60			12.10		32.65	✓ peg in water edge opposite Channings front door
	36.68		37.68			

Contours Right & Left from proposed new axis at Barrett Dam. East Side

April 9th 1897

Right = Down Stream
Left = Up "

			− 20' Contour		
		12.2	1592.2		1580.0
1	R			12.2	1580.0
2				"	"
3				"	"
4	R			"	"
			− 10' Contour		
		12.2	1602.2		1590.0
1	R			12.2	1590.0
2				"	"
3				"	"
4				"	"
5	R			"	"
1	L			"	"
2				"	"
3	L			4.4	1597.8 =
			0 Contour		
					1610.0
		1.8	1611.8		
1	L			11.8	1600.0
2					
3					
4	L				
1	R				
2					
3	R				

Up Stream toe of Slope east side = − 2' Contour

3

10' Contour

		2.0	1622.0	1620.0
1	R		12.0	1610.0
2			"	"
3			"	"
4	R		"	"
1	L		"	"
2			"	"
3			"	"
4	L		"	"

20' Contour

				1630.0
		1.8	1631.8	
1	L		11.8	1620.0
2			"	"
3	L		"	"
0			"	"
1	R		"	"
2			"	"
3			"	"
4	R		"	"

30' Contour

				1630.0
		12.3	1642.3	
1	R		12.3	1630.0
2			"	"
3			"	"
4			"	"
5	R		"	"
0			"	"
1			"	"
2			"	"
3			"	"
4	R		"	"

40' Contour

		2.4	1652.4		1650.0
1	L			12.4	1640.0
2				"	"
3				"	"
4	L			"	"
0				"	"
1	R			"	"
2				"	"
3				"	"
4				"	"
5	R			"	"

50' Contour

		11.0	1661.0		1650.0
1	R			11.0	1650.0
2				"	"
3				"	"
4				"	"
5				"	"
6	R			"	"
0				"	"
1	L			"	"
2				"	"
3				"	"
4				"	"
5	L			"	"

60' Contour

		10.0	1670.0		1660.0
1	L			10.0	1660.0
2				"	"
3				"	"
4				"	"
5	L			"	"
0				"	"
1	R			"	"
2				"	"
3				"	"
4				"	"
5	R			"	"

70' Contour

		10.7	1680.7		1670.0
1	R			10.7	1670.0
2					
3				"	"
4					
5	R			"	"
0					
1	L			"	"
2					
3				"	"
4					
5	L			"	"

80' Contour

		0.3	1690.3		1690.0
1	L			10.3	1680.0
2					
3				"	"
4					
5	L			"	"
0					
1	R			"	"
2					
3				"	"
4					
5				"	"

90' Contour

		2.2	1702.2		1700.0
1	R			12.2	1690.0
2					
3				"	"
4					
5				"	"
6	R				
0				"	"
1	L				
2				"	"
3					
4	L			"	"

			100' Contour		
		12.4	1712.4		1700.0
1	L			12.4	1700.0
2					
3				"	"
4					
5	L			"	"
0					
1	R			"	"
2					
3				"	"
4					
5				"	"
6	R			"	"
			110' Contour		
		12.4	1722.4		1710.0
1	R			12.4	1710.0
2					
3				"	"
4					
5				"	"
6	R				
0				"	"
1	L				
2				"	"
3					
4	L			"	"
			120' Contour		
		2.4	1732.4		1730.0
1	L			12.4	1720.0
2					
3				"	"
4	L				
0				"	"
1	R				
2				"	"
3					
4				"	"
5	R			"	"

April 10th 1897.

		130' Contour			
	1.8	1741.8		1740.0	
1 R			11.8	1730.0	
2					
3			"	"	
4					
5 R			"	"	
0					
1 L			"	"	
2					
3			"	"	
4 L			"	"	
		140' Contour			
	2.1	1752.1		1750.0	
1 L			12.1	1740.0	
2					
3			"	"	
4 L					
0			"	"	
1 R					
2			"	"	
3					
4 R			"	"	
		150' Contour			
	2.0	1762.0		1760.0	
1 R			12.0	1750.0	
2					
3			"	"	
4					
5 R			"	"	
0					
1 L			"	"	
2					
3			"	"	
4					
5 L			"	"	

		160' Contour			
		2.0	1772.0		1770.0
1	L			12.0	1760.0
2					
3				"	"
4	L				
0				"	"
1	R				
2				"	"
3					
4				"	"
5	R			"	"
		170' Contour			
		1.9	1781.9		1780.0
1	R			11.9	1770.0
2					
3				"	"
4					
5	R			"	"
0					
1	L			"	"
2					
3				"	"
4	L			"	"
		180' Contour			
		2.1	1792.1		1790.0
1	R			12.1	1780.0
2					
3				"	"
4					
5	R			"	"

		190' Contour		
	2.0	1802.0		1800.0
1 R			12.0	1790.0
2			"	"
3			"	"
4			"	"
5 R			"	"
		200' Contour		
	2.0	1812.0		1810.0
1 R			12.0	1800.0
2			"	"
3 R			"	"
		210' Contour		
	2.1	1822.1		1820.0
1 R			12.1	1810.0
2			"	"
3			"	"
4 R			"	"
		220' Contour		
	1.8	1831.8		1830.0
1 R			11.8	1820.0
2			"	"
3 R			"	"

		230'	Contour	
	1.9	1841.9		1840.0
1 R			11.9	1830.0
2 R			"	"
		240'	Contours	
				1850.0
	2.0	1852.0		
1 R			12.0	1840.0
2 R			"	"
		250'	Contour	
	2.1	1862.1		1860.0
1 R			12.1	1850.0
2 R			"	"
		260'	Contours	
	2.0	1872.0		1870.0
1 R			12.0	1860.0
2 R			"	"

		350'	Contour	
	2.0	1962.0		1960.0
1 R			12.0	1950.0
2				
3 R			"	"
0				
1 L			"	"
2				
3			"	"
4 L			"	"
		360'	Contour	
	1.8	1971.8		1970.0
1 L			11.8	1960.0
2				
3			"	"
4 L				
0			"	"
1 R				
2 R			"	"
		380'	Contour	1990.0
	2.0	1992.0		
1 R			12.0	1980.0
2 R				
0			"	"
1 L				
2			"	"
3 L			"	"

			400' Contour		
		2.0	2012.0		2010.0
1	L			12.0	2000.0
2					
3	L			"	"
0					
1	R			"	"
2	R			"	"
			420' Contour		
		2.2	2032.2		2030.0
1	R			12.2	2020.0
2	R				
0				"	"
1	L				
2	L			"	"
			440' Contour		(2' below grade)
					2050.0
		2.0	2052.0		
1	L			12.0	2040.0
2	L				
0				"	"
1	R				
2				"	"
3	R			"	"

Connection of Circle from "I" Line with Contours on Barrett Townsite. April 10th 1899

				100.00	=	On "I" B.M. № 37 (assumed elv)
	2.45	102.45				
			2.51	99.94	=	{On 100' Contour of Proposed new axis of dam these contours conform with original contours}

14

	0.10			50.60	50.52		
			12.3		38.3		24.0 4.4 2.0
	0.0			38.3			
			12.2		26.1		
	0.1			26.2			17. 12.6 4.4
			9.2		17.0		

15 Levels at Barrett Dam for Contours of Camp Ground
near Pyles House –

	1.20			181.20	180.
			11.87		169.33
	0.80			170.13	
			12.03		158.10
	1.50			159.60	
			11.24		148.36
	1.04			149.40	
			11.54		137.86
	1.72			139.58	
			11.96		127.62
	1.10			128.72	
		8.7	5		120.0
			11.22		117.50
	1.98			119.48	
			12.20		107.28
	0.50.			107.78	
	0.40.		7.78	100.40	100.
		10.4			90.
	0.52		12.06	88.86	88.34
		8.86			80.
	0.82		11.94	77.74	76.92
		7.74	7		70.
	0.67		11.52	66.89	66.22
		6.89			60.

On Contour 180. –

Stake Set. 25

Point Thrown across stream –
Set stake –

Set stake

Set stake

60' Contour for Camp

Sta		Angle	Rod.	
D		52°.56 R.		
	1	38°, 0' R.	6.8	630
	2	30°.20 R.	5.2	520
	3	23°.03 R	4.90	
	4	15°.0 R	4.90	
	5	2°.40 L	3.15	
	6	11°.50' L	3.76	
	7	22°.50' L	4.70	
	8	28°.00 L	5.90	
	9	32°. L	6.40	
No	1	28°.30 L	7.00	
	2	24.40 L	6.35	
	3	20, 30 L	5.60	
	4	19. 0 L	4.00	
	5	1° 0 L	3.75	
	6	5°.40 R	4.00	
	7	19°.20 R.	5.20	
	8	28°.10 R	5.80	
	9	33. 30 R.	7.50	
	1		7.95	

Just East of 60' Contour
East Side
S. 64° W.

Just East of 70' Contour
East Side
S. 64° W.

70' Contour

65
2.2
63.

60-70 = 25'
70-80 = 26
80-90 = 24
90-100 = 22
97

B.S. on Telephone Pole } Smoke Stack of Kitchen Cook house Roof = 60' Contour

63' Contour Powder house —

on point of Rock above bee hives —

Bare Rocks Contour existed in below 304 —

in gully —

on point of Rock opp. Telephone pole

above Wagon Road

On Wagon Road

on point of R. below Road

on Wagon Road

Just above Road Camp

East of Rock point

On Point of R. Rattle snake

below 6 & 7' Contour runs in }

Stake back of powder house on Rocks

17

80' Contour for Camp.

Sta	Angle	Rod	
△	50° 46'		Foresight on Telephone pole S. 64° W.
			stake back of power house
1	32° 0' R	7.95	
2	26° 30 R	6.85	Solid Rock
3	20° 05 R.	5.90	
4	11° 00 R	5.65	
5	1° 40 L	4.40	on Point of Rock Opp. telephone pole
6	9° 10 L	5.40	
7	19° 22 L	6.30	
8	16° 20 L	7.75	on Wagon Road —
	90' Contour		
1	23° 50' L	8.40	on Wagon Road
2	22° 25' L	7.40	
3	17° 50' L	6.90	
4	8° 45' L	5.90	on Rock
5	2° 30' L	5.12	
6	10° 15' R	6.20	
7	16° 20' R	6.60	
X 8	22° 00 R	6.66	
9	25° 15 R	8.25	

Lined out 80' Contour Explanation

100 Centers for Camp.

Sta	Angle		Rod	
Δ	(49°.05 R to Chimney)			Inst set at 100' East Side foresight to Pole above Powder house & Rocks
1	27°.50	R	R. 9.30	
2	22.20	R	8.20	earth on top
3	14.30	R	7.30	around point of R
4	5.25	R	6.35	Rock surface
5	1.12	L	6.05	Rockface below telephone pole
6	8°.00	L	6.30	Rockface
7	15°.20	L	7.15	Heavy brush
8	18°.17	L	7.55	
9	21°.15	L	8.05	on point 395

Grades for Road from 114 Contour above old dam site towards New Site —

0 = 2' Cut at start
+50 = " grade 1.00 grade 1.50 grade
200 grade 250 = 5' fill — 300 grade

Measurements from 110 Contour down Wilson Creek

0 = 110 Contour good Rock
275 = 97 " " "
480 = 87 " in amongst big boulders
570 = 75 " on big Rock
700 = 64 " on big R 10' high —
1250 = distance to wagon Road
3150 = " " Powder House

275

No 1

Flume line at Barretts dam and running from old dam site to

Commencing at Cement wall below new dam site

Grade 0.50 per 100 ft.

	0.0	8.03			28.03	20.00	Mark on Rock at starting
	+20		8.13			19.90	19.9 Chalk Mark on R
	+50		8.28			19.75	19.75 " " "
	+60		8.33			19.70	19.70 " " "
	+75		8.45			19.58	19.58 " " "
	1.00		8.53			19.50	19.50 " " "
	1+20		8.63			19.40	19.40 " " "
	1.30		8.68	6.68		21.35	19.35 " " " 2' above
				7.12		20.91	
		4.60			25.51		
	1.50						19.25
	2.00		8.07			17.44	19.00 - -1.56 = -1.6 3/4
	+20		6.61			18.90	18.9 Mark on Rock.
	+30		6.66	6.82			18.85 - 0.16 = -0' 2"
	270			10.48		1503	18.65 - 3.62 = -3.7 1/2
	280	3.85		3.57		22.00	18.60 + 3.40 = 3.4 3/4
		3.85			25.85		
	3.00		7.35			18.50	18.50. Mark on Rock
Void	3+50		8.02			17.83	18.25 - 0.42 - 0.5" Void
	3+60		8.02			17.83	18.20 - 0.4 1/2 on top of big Rock
	3+90		7.80			18.05	18.05 Mark on face of Rock
	4+20		7.95			17.90	17.90 " on Rock.
	4+40		8.05			17.80	17.80 Mark on Rock

8.03 - 2.5 = 5.28

20 - 1.35 = 18.65

20 - 1.50 = 18.50

7.35 - 2.5 = 7.60

7.80

4.50		8.10		25.85		17.75	Void
4.75		8.22			17.63	17.63	Mark on Rock grade
4.85		8.27			17.58	17.58	" " "
5+05		11.20			14.65	17.48	-2.83 = -2'.10"
5+40			8.53		17.32	17.30	
	8.13			25.45			
5+40		8.73			16.72	17.30	- 0.58 - 0.7" on Rock
			10.15		15.30		
	2.35			17.65			
5+60		0.45			17.20	17.20	- Mark on Rock.
6+20		4.20			13.45	16.90	- 3.45 - 3'.5 1/2" - on Big Rock
6+40		3.20			14.45	16.80	-2.35 - 2'.4 1/4" - " "
6+80		1.17			16.48	16.60	-0.12 - 0".1 1/2 on Rock
			4.64		13.01		
	8.17			21.18			
7+20		5.40			15.78	16.40	-0.62 - 0'.7 1/2" on Rock
7+80		5.08			16.10	16.10	Mark on Rock
8.00		5.18			16.00	16.00	" " "
8+30		8.93			12.25	15.85	-3.60 - 3'.7" on Rock
8+60		8.26			12.92	15.70	-2.78 2'.9 1/2" "
			4.37		16.81		
	4.93			21.74			
8+70		6.11			15.63	15.68	
9+05		6.24			15.50	15.50	Mark on face of R.
9+65		6.54				15.20	Grade on R. below axis

12

16.15
5.08
7+80

3.40
16.80
21.18
16.15
5.03
5

Grade

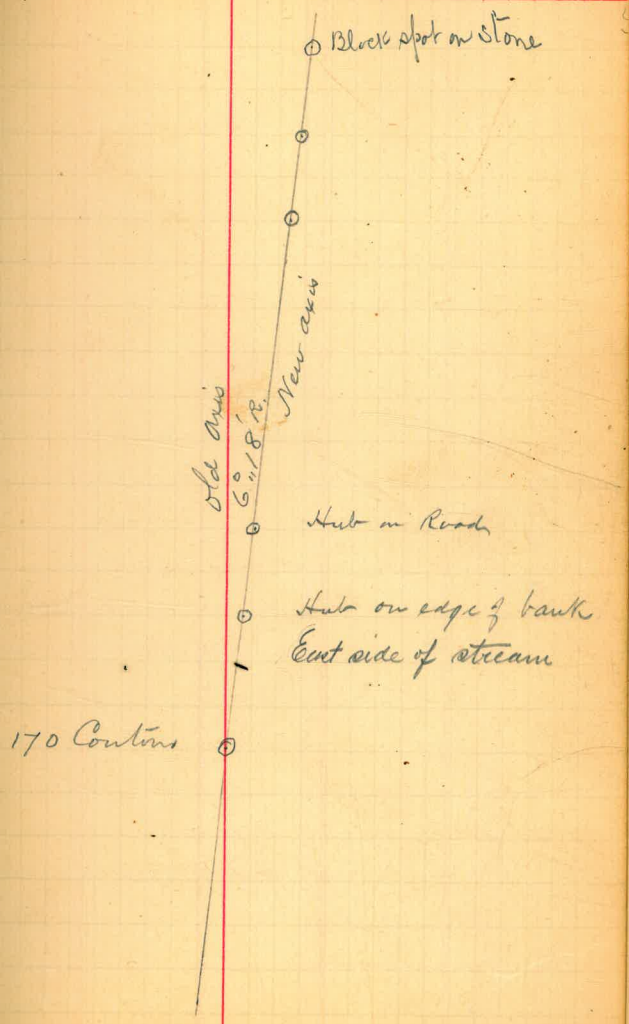
17.50
.20

21.74
15.24
6.10

22

10.20		6.94		21.74

14.80



TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10 45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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