

BARNETTS DAM  
CONTOURS

New Dam 21

368

TRANSIT.

15

W3



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

Minutes.	Links.	Minutes.	Links.	Minutes.	Links.
1	2	21	49	41	95 $\frac{2}{3}$
2	4	22	51 $\frac{1}{2}$	42	98
3	6	23	53 $\frac{1}{2}$	43	100 $\frac{1}{2}$
4	8	24	56	44	102 $\frac{1}{2}$
5	11	25	58 $\frac{1}{2}$	45	105
6	14	26	60 $\frac{1}{2}$	46	107 $\frac{1}{2}$
7	16 $\frac{1}{2}$	27	63	47	109 $\frac{1}{2}$
8	18 $\frac{1}{2}$	28	65 $\frac{1}{2}$	48	112
9	21	29	67 $\frac{1}{2}$	49	114 $\frac{1}{2}$
10	23 $\frac{1}{2}$	30	70	50	116 $\frac{1}{2}$
11	25 $\frac{1}{2}$	31	72 $\frac{1}{2}$	51	119
12	28	32	74 $\frac{1}{2}$	52	121 $\frac{1}{2}$
13	30 $\frac{1}{2}$	33	77	53	123 $\frac{1}{2}$
14	32 $\frac{1}{2}$	34	79 $\frac{1}{2}$	54	126
15	35	35	81 $\frac{1}{2}$	55	128 $\frac{1}{2}$
16	37 $\frac{1}{2}$	36	84	56	130 $\frac{1}{2}$
17	39 $\frac{1}{2}$	37	86 $\frac{1}{2}$	57	133
18	42	38	88 $\frac{1}{2}$	58	135 $\frac{1}{2}$
19	44 $\frac{1}{2}$	39	91	59	137 $\frac{1}{2}$
20	46 $\frac{2}{3}$	40	93 $\frac{1}{2}$	60	140

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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.
°		°		°		°	
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

Contours of Barretts  
Dam

New Dam site about 600 feet  
down stream from original site

Contours on West Side

Pages 1-23

Contours on East Side

Pages 24-38

Connection betw. Old Axis  
& Proposed Site of New Axis

Page 39



New Dam <sup>140</sup> silt Contours West Side

			Rod	Vert	dist
1	29° 50'	R	6.00	1.30	601
2	22° 02'	R	5.20	"	521
3	14° 45'	R	4.57	"	458
0			4.28	"	429
1	8° 18'	L	4.37	"	438
2	19° 50'	L	4.60	"	461
3	27° 50'	L	4.97	"	498
4	32° 26'	L	5.56	"	557
5	38° 45'	L	6.10	"	611
6	45° 55'	L	6.96	"	697
7	46° 43'	L	7.35	"	736

130-140 =

Inset at 130' Contour E.S. + F.S. on W.S.

on Sloping Rock

just above perp. Rock  
point 10' toward axis, just out about 4' -

on face of steep R.

just up steep sloping Rock

sloping Rock meets boulder or

boulders + decomp. R.

" "

504

465



150 Contour West side  
New Dam Site

140-150 =

Sta	Dy		Rod		dist
1	42°30'	L	7.86		787
2	40°45'	L	7.36		737
3	31°40'	L	6.46		647
4	23°45'	L	5.60		561
5	19°20'	L	5.35		536
6	7°32'	L	5.00		501
0	-----		4.90		491.

Instr set at 150' E.S. + F.S. on W.S.

Boulders + decomp. R	4.14
"	4.64
"	5.54
at foot of sloping Rock.	
on sloping Rock	
"	
"	

Notes	dist		Rod		dist
1	25°48'	R.	6.92	0.40	693
2	21°25'	R.	6.37	"	638
3	17°28'	R.	6.04	"	605
4	13°30'	R.	5.72	"	573
5	7°50'	R.	5.20	"	521

Instr at 160' Contour for R Side

all Ledge Rock	508
"	563
"	
"	628
face of cliff	

7 late  
Plot from 160' contour

## 160' Contour

New dam site


Sta	Stk-	Rod	dist
0		5.35	536.
1	8° 40' R.	5.35	536
2	11.00 R	5.78	579
3	15.06 R	5.90	591
4	18° 45' R	6.24	625
5	21.50 R.	6.55	656
6	25° 10' R.	7.02	703
1	12° 56' L	5.40	541
2	14.35 L	5.52	553
3	21.15 L	6.10	611
4	25.52 L	6.50	651
5	31.55 L	6.95	696
6	39° 15' L	7.86	787
7	40.6 L	8.09	810

150-160 =

Inst set 160' contour E.S. + F.S. on W.S.

✓

nearly perp. R  
point of Rock  
Ledge R



622


576

545

on face of Ledge

" " "

beyond point of Ridge  
boulders + decomp. R



4.14

391



170 Contours  
New dam site

Sta	Def	Rise	dist
1	37°.45 L	8.27	828
2	34°.50 L	7.72	773
3	30.00 L	7.30	731
4	24°.30 L	6.89	690
4	20°.00 L	6.42	643
5	12°.50 L	5.80	581
6	7°.45 L	5.80	581
0	-	5.60	561
1	9°.02 R	5.68	569
2	13°.06 R	6.12	613
3	17.30 R	6.54	658
4	20.41 R	6.89	690
5	23°.02 R	7.17	718

160-170 =

3

Just at 170' Contours E.S. + F.S. on W.S.

boulders + decomposed R	373
" "	428
" "	470
" "	511
Solid R.	558
"	620
"	620
just beyond front of R.	
	546
	511
	483

180

Sta	Def	Rod
1	0° 47' R	5.92
1	2° 22' L	5.95
2	8° 40' L	6.10
3	13° 20' L	6.20
4	18° 00' L	6.63
5	23° 00' L	7.29
6	29° 04' L	7.68
7	34° 00' L	8.27
8	35° 30' L	8.52
9	38° 55' L	9.60
190'		
1	37° 45' L	9.94
2	32° 35' L	8.64
3	27° 47' L	8.02
4	22° 12' L	7.67
5	17° 48' L	7.20
6	9° 00' L	6.40

170-180 = 22.1

ψ

Inst 180' Center E.S.

593	on face of steep cliff	
590.	perpendicular cliff could not get point	
596	on face of steep cliff	6.05
611	" " "	
621	" " "	
664	around foot of cliff	5.37
730	slope of Boulder + decomp. R	4.71
769	" " "	4.32
828	" " "	3.73
853	little fully rotia R + boulder	4.26 7.74
961	boulders + decomp. R	2.40

Inst 190' E.S.

	boulders + decomp. R	2.06
	" " "	3.36
	" " "	3.98
	" " "	4.33
	" " "	4.86
	on face of cliff	



200

Sta	def	R.O.D.	dist
0	—	—	—
1	8° 50' L	6.75	676
2	13° 34' L	7.01	702
3	17° 37' L	7.47	768
4	25° 09' L	8.35	836
5	30° 24' L	8.92	892
6	31° 00' L	9.36	936
7	35° 15' L	10.20	1021

210

1	34° 34' L	10.50	1051
2	30° 02' L	9.46	947
3	28° 39' L	8.99	900
4	24° 22' L	8.53	854
5	17° 52' L	8.15	816
6	13° 54' L	7.94	785
7	11° 45' L	7.18	719
0	—	—	—

5

Dist at 200' Contour E.S. April 5<sup>th</sup> 1897

Sta on face of inaccessible cliff (not set).

ft of cliff	525
" " "	499
Boulders and decomposed rock	433
" " "	365
" " "	308
" " "	264
" " "	150

Dist at 210' Contour E.S.

Boulders and decomposed rock	150
" " "	254
" " "	301
" " "	347
" " "	385
ft of Mill Rock Cliff	422
on face " " "	492
" " " (not set)	

220'

Sta	def.	ROD	
0	—	—	
1	10° 45' L	748	749
2	12° 50' L	774	775
3	17° 13' L	853	854
4	22° 50' L	889	890
5	27° 32' L	944	945
6	28° 40' L	989	990
7	33° 08' L	1085	1086
8	36° 47' L	1130	1131

230'

1	35° 28' L	1149	1170
2	33° 00' L	1132	1133
3	31° 03' L	1115	1116
4	27° 45' L	1033	1034
5	26° 15' L	982	983
6	21° 33' L	931	932
7	16° 15' L	898	899
8	12° 20' L	868	869
9	11° 28' L	807	808
10	9° 57' L	789	790
0	—	—	

6

Start at 220' Contour E.S.

On face of Shid. Arch Cliff (not set)	
" " "	452
at foot " "	426
Builder and decomposed rock	347
" "	311
" "	286
" "	211
" "	115
" "	070

Start at 230' Contour E.S.

Builder and decomposed rock	031
" "	068
" "	085
" "	147
" "	218
" "	269
" "	302
at of Shid. Arch Cliff	332
" "	393
On face " "	411
(not set)	



240

Sta	def	ROD	dist
0	—	—	—
1	7° 12' L	8.28	829
2	10° 37' L	8.52	853
3	11° 43' L	9.19	910
4	19° 10' L	9.75	976
5	21° 24' L	9.68	969
6	25° 00' L	10.20	1021
7	37° 05' L	10.84	1085
8	29° 32' L	11.21	1162
9	33° 37' L	11.78	1179

Sint at 244' Contour E.S.

On face of inaccessible rock cliff (not set)

"	"	"	372
"	"	"	345
"	"	"	2.81
"	"	"	2.25
"	"	"	2.32
"	"	"	1.50
"	"	"	1.16
"	"	"	0.39
"	"	"	0.22

250

1	33° 04' L	12.64	1265
2	30° 35' L	14.22	1423
3	28° 22' L	11.93	1194
4	24° 45' L	11.06	1107
5	23° 38' L	10.60	1061
6	19° 10' L	10.28	1028
7	12° 15' L	9.75	976
8	8° 38' L	8.78	879
9	2° 03' L	7.43	944
0	—	—	—

Sint at 250' Contour E.S.

Boulders and decomposed rock

"	"	"	6.32	528
"	"	"	7.11	489
"	"	"	"	0.07
"	"	"	"	0.94
"	"	"	"	1.40
"	"	"	"	1.72
"	"	"	"	2.27
"	"	"	"	3.22
"	"	"	"	2.97
"	"	"	"	(not set)

(not set)

260'

Sta	dip	R.O.D.
0	—	9.00
1	2° 35' L	8.82
2	6° 46' L	8.75
3	8° 20' L	9.27
4	10° 15' L	10.26
5	18° 25' L	10.55
6	22° 14' L	10.97
7	24° 18' L	11.55
8	27° 18' L	12.40
9	29° 58' L	12.50
10	31° 54' L	13.00

270'

1	30° 48' L	13.40	1341
2	28° 46' L	12.96	1297
3	25° 20' L	12.46	1247
4	23° 32' L	12.00	1201
5	21° 20' L	11.46	1141
6	17° 57' L	11.00	1101
7	14° 03' L	10.60	1061
8	9° 18' L	10.54	1055
9	7° 56' L	9.68	969
10	6° 33' L	9.42	943
11	2° 48' L	9.32	933
0	—	9.27	928

8

cut at 260' Centre E.S.

E.S. or W.S.

901	top of Skid Rock Cliff	3.00
883	face " "	3.18
896	" " "	3.05
928	" " "	2.73
1027	} along foot " "	1.74
1056		1.45
1098	Boulders by Decomposed Rock	1.03
1156	" " "	0.45
1241	" " "	6.20 5.80
1251	" " "	6.25 5.75
1301	" " "	6.50 5.50

cut at 270' E.S.

along face of Skid Rock Cliff

670	5.30
6.48	5.82
6.23	5.77
6.00	6.00
	0.60
	1.00
	1.40
	1.46
	2.32
	2.58
	2.68
	2.63



280'

Sta	def.	R.O.D.	dist
0	—	980	981
1	2° 24' L	962	963
2	6° 45' L	980	981
3	7° 14' L	1000	1001
4	8° 46' L	1078	1079
5	12° 32' L	1092	1093
6	17° 22' L	1125	1136
7	20° 30' L	1174	1174
8	23° 13' L	1230	1231
9	25° 55' L	1304	1305
10	28° 57'	1346	1347

290'

1	21° 06' L	1364	1365
2	25° 39' L	1352	1352
3	22° 42' L	1260	1261
4	19° 51' L	1190	1191
5	17° 14' L	1175	1176
6	12° 22' L	1116	1116
7	8° 09' L	1102	1103
8	6° 35' L	1084	1085
9	6° 18' L	1010	1041
10	5° 40' L	996	997
0	—	1001	1002

a

Sunt at 280' Contour E.S.

E.S. on W.S. April 6<sup>th</sup> 1897

(no hub set)	220	
} On face of Solid Rock Cliff.	298	
	220	
} along foot of " " "	200	
	122	
	108	
} Boulder and Decomposed Rock	0.65	
	0.26	
	6.15	5.75
	6.52	5.49
	6.73	5.27

Sunt at 290' Contour E.S.

Boulder and Decomposed Rock

6.82	5.18
6.76	5.24
6.30	5.70
5.95	6.05
	0.28
along foot of Solid Rock Cliff	0.84
" "	0.78
On face " "	1.16
" "	1.20
" "	2.04
(no hub set)	1.77

300

Sta def

R.O.D.

0	—	10.41	1042
1	5° 05' L	10.43	1044
2	4° 57' L	10.45	1046
3	5° 52' L	10.95	1096
4	7° 30' L	11.30	1131
5	11° 45' L	11.45	1146
6	14° 58' L	11.66	1167
7	19° 24' L	12.24	1225
8	22° 03' L	12.96	1297
9	26° 22' L	14.00	1401
10	28° 16' L	14.36	1437

310

1	27° 35' L	14.64	1465
2	25° 56' L	14.36	1437
3	20° 42' L	13.02	1303
4	18° 40' L	12.56	1257
5	14° 19' L	12.00	1201
6	6° 42' L	11.50	1151
7	3° 45' L	10.84	1085
A 0	—	10.77	1080

10

Set at 300' Center E.S. F.S. on W.S.

On top of Solid Rock Cliff	(no bank set)	1.59
"	"	1.57
"	"	1.55
Along face	"	1.05
"	"	0.70
"	"	0.55
"	"	0.31
Balding and Decomposed rock	6.12	5.88
"	6.48	5.52
"	7.00	5.00
"	7.18	4.82

"	7.32	4.68
"	7.18	4.82
"	6.51	5.49
"	6.28	5.72
Along face of Solid Rock Cliff	6.	2.00
"	"	0.50
On top	"	1.16
"	"	1.21

on W.S.



320'

Sta	def.	R.O.D.	dist
Δ 0	—	11.22	1123
1	2° 50' L	11.23	1124
2	6° 07' L	11.71	1172
3	13° 28' L	12.20	1221
4	17° 48' L	12.74	1275
5	20° 00' L	13.42	1343
6	22° 00' L	13.90	1391
7	25° 27' L	14.40	1441
8	27° 16' L	14.96	1497

dist at 320' Center E.S. F.S. on N.S.

On Solid Rock Cliff, with shallow covering of earth, N.W.S.	0.78
" " "	0.77
" " "	0.39
" " "	6.10 5.90
Boulders of Decomposed Rock	6.37 5.68
" " "	6.71 5.29
" " "	6.95 5.05
" " "	7.20 4.80
" " "	7.48 4.52

330'

1	26° 47' L	15.10	1511
2	25° 00' L	14.48	1449
3	23° 23' L	14.26	1427
4	20° 53' L	14.00	1401
5	18° 54' L	13.50	1351
6	16° 12' L	13.10	1311
7	13° 16' L	12.66	1267
8	12° 00' L	12.20	1221
9	5° 39' L	12.00	1200
10	2° 30' L	11.66	1167
0	—	11.62	1163

On face of Solid Rock Cliff

" " "	7.55 4.45
" " "	7.24 4.76
" " "	7.13 4.87
" " "	7.00 5.00
" " "	6.75 5.25
" " "	6.55 5.65
" " "	6.33 5.47
On face of Solid Rock Cliff	6.10 5.90
" " "	6.00 6.00
On top of " " with shallow earth covering.	0.34
" " " " " (no rock out)	0.38

340'

Sta	def	ROD	Dist
0	—	1204	1205
1	2° 30' L	1200	1201
2	5° 26' L	1226	1227
3	8° 14' L	1242	1243
4	10° 33' L	1240	1241
5	12° 24' L	1272	1273
6	15° 40' L	1320	1321
7	17° 34' L	1354	1355
8	20° 30' L	1448	1449
9	22° 54' L	1466	1467
10	23° 55' L	1500	1501
11	26° 00' L	1544	1545

12

Dist at 340' Center E.S. F.S. on N.S.

Dist	602	
on W. side		
Top of Sand Rock Cliff with shallow earth covering	598	
" " " "	600	600
" " " "	613	587
On face " " "	621	577
" " " "	620	580
Buildup and Decomposed Rock	636	564
" " " "	660	540
" " " "	677	523
" " " "	724	476
" " " "	733	467
" " " "	750	450
" " " "	772	428



Sta	def.	ROD	dist
1	35° 16' L	1570	1571
2	23° 13' L	1542	1573
3	19° 25' L	1444	1445
4	16° 53' L	1380	1381
5	14° 40' L	1334	1334
6	11° 35' L	1304	1305
7	9° 47' L	1262	1263
8	7° 08' L	1272	1273
9	4° 30' L	1248	1249
10	2° 02' L	1218	1219
40	—	1218	1219
1	2° 35' R	1240	1241
2	5° 25' R	1258	1259
3	12° 06' R	1388	1389
4	17° 30' R	1408	1409
5	20° 07' R	1416	1417

April  
7, 1897

Set at 350' Contour E.S. - F.S. on W.S.

Boulders of Decomposed Rock	7.85	4.15
" " "	7.71	4.29
" " "	7.22	4.78
" " "	6.90	5.10
" " "	6.67	5.33
" " "	6.52	5.48
face of Solid Rock ledge	6.31	5.69
along " " with shallow earth covering	6.36	5.64
" " " " " "	6.24	5.76
" " " " " "	6.09	5.91
" " " " " "	on W.S. 6.09	5.91
" " " " " "	6.20	5.80
" " " " " "	6.29	5.71
" " " " " "	6.94	5.06
" " " " " "	7.04	4.96
" " " " " "	7.08	4.92

April 7, 1897

14

Sta	Sp		Rod	Dist	Instr set 360 E.S. + F.S. on N.S.		
1	20.27	R	1488	1489	all solid Rock ledge	watermark - Rock	7.44 4.56
2	18.25	R	1436	1437	"	"	7.18 4.82
3	11.52	R	1420	1421	"	"	7.10 4.90
4	7.12	R	1334	1335	"	"	6.67 5.33
5	4.22	R	1282	1283	"	"	6.41 5.59
Δ	0		1260	1260	Not at west side	shallow earth covering	6.30 5.70
1	2.12	L	1268	1269	all solid	"	6.34 5.66
2	6.39	L	13.00	1301	"	"	6.50 5.50
3	8.48	L	12.90	1291	"	"	6.45 5.55
4	10.45	L	13.38	1339	"	"	6.69 5.31
5	16.00	L	14.10	1411	"	"	7.05 4.95
6	19.18	L	14.90	1491	"	"	7.45 4.55
7	21.48	L	15.32	1533	boulders + decomp.	R.	7.66 4.34
8	23.56	L	15.88	1589	"	"	7.94 4.06



Sta	def	Red.	Vert.	
1	23°20' L	16.00	0.25	1601
2	21°16' L	15.44	"	1545
3	19°08' L	15.08	"	1509
4	17°04' L	14.52	"	1453
5	12°20' L	13.50	"	1351
6	9°55' L	13.38	"	1339
7	8°13' L	13.06	"	1307
8	6°28' L	13.00	"	1301
9	2°13' L	12.84	"	1285
0	- - -	12.86	"	1287
1	3°20' R	13.06	"	1307
2	6°25' R	13.40	"	1341
3	11°18' R	14.20	"	1421
4	14°02' R	14.48	"	1449
5	18°08' R	14.48	"	1448
6	20°11' R	15.00	"	1501
7	23°43' R	15.52	"	1553

15

Inset at 360 Contour + 7.5 m WS.

boulders + decomp. R.	8.00	4.00
"	7.72	4.28
boulders and solid R.	7.54	4.46
"	7.26	4.74
Solid Ridge	6.75	5.25
"	6.69	5.31
"	6.53	5.47
" small stepping of crest	6.50	5.50
" shallow crest comp	6.42	5.58
" shallow earth covering	6.43	5.57
"	6.53	5.47
"	6.70	5.30
"	7.10	4.90
"	7.24	4.76
" shallow covering of E.	7.24	4.76
boulders + decomp. R above SR	7.50	4.50
"	7.76	4.24

Sta	dip		Red	Vert.	
1	25.53	R	1590	0.40	1591
2	20.23	R	1534	"	1535
3	18.55	R	1510	"	1511
4	17.50	R	1474	"	1475
5	14.38	R	1464	"	1465
6	11.30	R	1460	"	1461
7	10.20	R	1414	"	1415
8	5.04	R	1344	"	1345
9	3.17	R	1328	"	1329
0	-	-	1296	"	1297
1	1.54	L	1294	"	1295
2	5.40	L	1330	"	1331
3	7.50	L	1320	"	1321
4	12.08	L	1360	"	1361
5	15.12	L	1436	"	1437
6	18.50	L	1516	"	1517
7	20.34	L	1542	"	1543

## Insect 360 Contour ES. + FS. in W.S.

boulders + decomp. R.	7.95	4.05
shallow coning of East about S.R. (in place)	7.67	4.37
solid Rock ledge	7.55	4.45
"	7.37	4.63
"	7.32	4.68
"	7.30	4.70
"	7.07	4.93
"	6.72	5.28
"	6.64	5.36
on Rocks no Hubs	6.48	5.52
solid Rock	6.47	5.53
"	6.65	5.35
"	6.60	5.40
"	6.80	5.20
"	7.18	4.82
"	7.58	4.42
boulders etc	7.71	4.29



## 400 Contour

Sta	alt		Rdn	dist
1	19.08	L	16.52	1653
2	17.05	L	15.74	1575
3	14.00	L	15.32	1533
4	11.52	L	14.68	1469
5	5.30	L	14.60	1461
6	2.03	L	14.00	1401
<u>A 0</u>	---		14.18	1419
1	2.08	R	14.34	1436
2	5.55	R	14.80	1481
3	8.53	R	15.08	1509
4	10.02	R	15.48	1549
5	15.16	R	15.88	1589
6	17.22	R	16.48	1649
7	18.35	R	16.30	1631

17

## Dist bet at 400 Contour ES, + FS, on W.S.

boulders etc	8.26	3.74
boulders + solid Rock	7.87	4.18
"	7.66	4.34
Solid Ledge	7.34	4.66
"	7.30	4.70
"	7.00	5.00
"	7.09	4.91
"	7.17	4.83
"	7.40	4.60
{ Posing rocks put out between these two Solid Ledge	7.54	4.46
"	7.74	4.26
"	7.94	4.06
some earth + boulders in gulley	8.24	3.76
boulders + decomp. R	8.15	3.85

## 420' Contour

Sta	dip		Rod	Verb.	dist
1	19° 27'	R	16.98	0.40	1699
2	17° 34'	R.	16.58	"	1659
3	16° 08'	R.	16.92	"	1693
4	14° 35'	R.	16.20	"	1621
5	12° 26'	R.	15.92	"	1593
6	9° 21'	R.	15.56	"	1557
7	5° 20'	R.	15.28	"	1529
8	2° 22'	R.	14.60	"	1461
0	---		14.36	"	1437
1	8° 33'	L	14.80	"	1481
2	12° 12'	L	15.20	"	1521
3	14° 20'	L	15.50	"	1551
4	18° 00'	L	16.90	"	1691

18

## Subset at 400' Contour E.S. + F.S. in W.S.

boulders + decomp. R.	8.49	3.51
" " on point	8.29	3.71
" " in gulley	8.46	3.54
solid Rocc	8.10	3.90
" "	7.96	4.04
" "	7.78	4.22
" "	7.64	4.36
" "	7.30	4.70
" "	(7.30)	4.70
Rocc bluffs in crevice	7.40	4.60
" " "	7.60	4.40
" " "	7.75	4.25
" " "	8.45	3.55



Sta	def	Rod		
1	17° 15' L	1698	1° 30'	1698
2	13° 30' L	1584	"	1584
3	11° 50' L	1564	"	1564
4	9° 08' L	1480	"	1480
5	6° 04' L	1488	"	1488
6	0° 15' L	1452	"	1450
1	2° 57' R	1468	"	1468
2	5° 35' R	1548	"	1548
3	9° 43' R	1608	"	1608
4	13° 12' R	1630	"	1630
5	15° 25' R	1780	"	1780
6	18° 15' R	1700	"	1700

32° 40' R

Inst at 400' Contour E.S. + F.S. + WS.

Solid Rock	8.49	3.51
in crevasse of Solid R.	7.92	4.08
"	7.82	4.18
" x "	7.40	4.60
"	7.44	4.56
this taken for O. as center was very } hard to get at for bush etc. }	(7.20)	4.80
" small crevasse	7.34	4.66
shallow covering of earth on S.R.	7.74	4.26
"	8.04	3.96
"	8.15	3.85
"	8.90	3.10
earth & decomp. R.	8.50	3.50

Angle to brow of hill off 340 m old axis

Sta	def	Road	Vert.	dist
1	18.00 R	1814		1815
2	13.40 R	1860		1861
3	11.24 R	1722		1723
4	7.15 R	1660		1661
5	3.40 R	16.08		1609
6	2.15 R	15.80		1581
0	- - -	15.44		1545
1	2.08 L	1530		1531
2	5.37 L	1580		1581
3	8.20 L	1584		1585
4	10.10 L	1626		1627
5	14.05 L	17.00		1701

Inst at 460

480 Contain

Incl =

1	13.14 L	17.14	0.40	1715
2	9.05 L	1644	0.40	1645
3	7.55 L	1606	"	1607
4	3.08 L	1610	"	1611
0	- - -	1592	"	1593
1	1.50 R	1616	"	1617
2	5.15 R	1676	"	1677
3	8.04 R	1728	"	1729
4	10.10 R	1760	"	1761
5	11.51 R	1884	"	1885

angle R to line of this 44.340 of old axis = 29.2

Inst set at 460 Contain E.S. + S.S. WS.

East + decomp. R.	9.07	2.93
boulders + S.R. in fully	9.30	2.70
Solid ledge	8.61	3.39
" " in crevace	8.30	3.70
" " with shallow earth covering	8.04	3.96
" " " "	7.90	4.10
Hub set - " " "	7.72	4.28
" " " "	7.65	4.35
" " in small fully	7.90	4.10
" " " "	7.92	4.08
in side of cliff by no gully	8.13	3.87
big boulders + S.R.	8.50	3.50

Inst set 460' Contain

big boulders + S.R.	8.57	3.43
shallow covering of above R.	8.22	3.78
" " " "	8.03	3.97
Solid Rock	8.05	3.95
No Hub set.	7.94	4.06
" " " "	8.08	3.92
shallow earth covering over S.R.	8.38	3.62
" " " "	8.64	3.36
" " " "	8.80	3.20
" " in fully	9.42	2.58

28.30 to opp. 340 of old axis



## 500 Contour

Not reliable, distance  
Stadia and level readings  
too great for  
survey

Sta	def	Rod	Vert
1	10.35 R	1874	1.20 1874
2	8.13 R	1776	" 1776
3	6.15 R	1770	" 1770
4	3.55 R	1680	" 1680
0	---	1642	" 1642
1	2.10 L	1624	" 1624
	4.30 L		
	6.47 L		
2	8.00 L	16.66	" 1666
3	10.57 L	17.24	" 1724
4	14.22 L	18.20	" 1820

## 520 Contour

1	13.20 L	18.70	2.00 1869
2	9.30 L	1686	" 1685
3	7.03 L	1690	" 1689
4	4.30 L	1642	" 1641
5	1.35 L	1634	" 1633
0	---	16.66	" 1665
1	2.34 R	16.80	" 1679
2	4.55 R		
2	5.52 R	1828	1827
3	7.25 R	1834	1833

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Inst at 460' ES, + F.S. on WS.

all solid R.

8.937	2.63
8.88	3.12
8.85	3.15
8.40	3.60
8.25	3.75
8.12	3.88

Rock point pit

all solid R.

8.33	3.67
8.62	3.38
9.10	2.90

Inst at 460' ES, + F.S. on WS.

on Rock point

at head of gully

on face of cliff -

9.35	2.65
8.43	3.67
8.45	3.55
8.21	3.79
8.17	3.83

No hole

8.30

8.40

Rock basin

9.14

solid R.

9.17

Not reliable distances too great  
for Stadia & level readings

5-40' Contour

Sta	dist	Rod.	Vert.	
1	7 <sup>o</sup> 14'	R.	19.00	2 <sup>o</sup> 20' 1898
2	4.30	R.	1920	" 1918
2	2 <sup>o</sup> 30'	R.	1750	" 1748
0	-	-	1688	" 1687
1	2 <sup>o</sup> 16'	L	1670	" 1668
2	4.20	L		
2	5 <sup>o</sup> 30'	L	1680	" 1678
3	8 <sup>o</sup> 33'	L	1726	1724
4	10 <sup>o</sup> 43'	L	1820	" 1818

5-60' Contour

1	10 <sup>o</sup> 10'	L	1840	3.0 1836
2	7 <sup>o</sup> 07'	L	1756	" 1752
3	4 <sup>o</sup> 28'	L	1704	" 1700
4	2 <sup>o</sup> 00'	L	1724	" 1720
0	-	-	1724	" 1720
1	1 <sup>o</sup> 33'	R	1770	" 1766
2	4 <sup>o</sup> 20'	R	1924	" 1920
-	6.30	R	1910	" 1906

Inset at 460' Contour -

all solid R	9.10	2.50
depression in Hill	9.60	2.40
all solid R	8.75	3.25
"	8.60	3.40
"	8.35	3.65
" pond by R. put out		
"	8.40	3.60
"	8.63	3.37
"	9.10	2.90

Inset at 460' Contour

all solid R	9.20	2.80
"	8.78	3.22
"	8.52	3.48
"	8.62	3.38
"	8.60	3.40
"	8.85	3.15
"	9.62	2.38
"	9.55	2.45



580' Contour West Side

✓3

Notable distances to peak  
 for station & level readings

Sta	dist		Rod.	Yuk	
-	7.00		2100	3,40	2093
1	5.05	R	1980	"	1973
2	2.33	R	1926	"	1920
0	-		1780	"	1773
1	4.00	L	1740	"	1733
2	7.10	L	1872	"	1865
3	9.50	L	1908	"	1901

600' Contour

1	10.00	L	1944	4.00	1935
2	7.25	L	1920	"	1911
3	3.40	L	1790	"	1781
4	0.50	L	1846	"	1837
1	1.02	R	1908	"	1901
2	2.55	R	1984	"	1975
3	5.41	R	2060	"	2051

Just @ 460' Contour ES. + FS

all solid R.	1050		(1.50)
"	990		2.10
"	963		2.87
"	(9.)		3.00
"	870		3.30
"	936		2.64
"	954		2.46

all solid Rock

972	2.28
960	2.40
895	3.05
923	2.77
954	2.46
992	2.08
1030	1.70

Contours on East Side  
- 20 Contour - 54 + 5 ft

Sta	def	Rod	Verb		
1	58° 00 R	1.30	-2° 00	131	
2	64° 00 R	1.68	-1° 30	169	
etc. {	3	71° 45 R	2.68	-1° 00	269
	4	70° 00 R	3.30	-1° 00	331

- 10 Contour East Side

1	66° 00 R	3.60		361
2	65° 00 R	2.60		261
3	61° 00 R	1.90		191
4	58° 00 R	1.38		138
5	23° 45 R	0.58		59
1	64° 14 L	1.08		109
2	78° 45 L	1.72		173
3	82° 00 L	2.35		236

Proposed Line of slope

R = down stream

L = up " "

New dam site April 9<sup>th</sup> 1897

Hub is 7' east of -10 contour in center  
Just set at Hub in bottom on W.S. + F.S. - ES

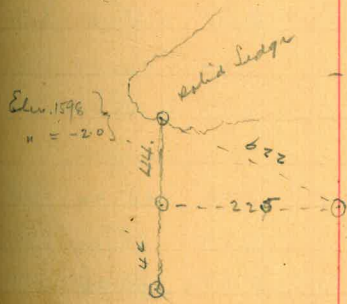
all solid R + boulders

The -20 contour for some distance  
below this bed of stream is filled with boulders above

Just set in Hub in bottom Hub is 7' E from -10 Contour

all solid R + boulders

prop. cliff at center line





○○○ Contour East Side

Sta	def	Rod	Verb.	
	1 79° 00 L	3.70	+ 2.00	371
OK {	2 76° 43 L	2.40	2.30	241
	3 79° 00 L	2.07	2.00	207
	4 64° 20 L	1.25	4.00	125
	1 11° 30 R	0.60	8° 00	58.
	2 51° 10 R.	1.35	5.00	135.
	3 62° 20 R	1.95	3.00	195
	4 63° R			350

10' Contour E. Side

OK {	1 47° 04 R	4.05	- 5° 0	403
	2 49° 05 R	3.28	- 7° 0	324
	3 40° 35 R	2.55	- 9° 0	250
	4 26° 40 R	1.97	- 10° 40	191
	5 5° 35 R	1.52	- 15° 30	142.
	1 31° 41 L	1.58	- 15° 00	149
	2 43° 25 L	2.00	11° 00	192.
	3 53° 13 L	2.28	10° 00	222.
	4 65° 30 L	4.15	6°	411.

R = down stream  
L = up "

25

Instr set at Hub in bottom 7.0 from ~~3.00~~<sup>-10.</sup> Contour

all solid Rock

perpendicular Rock across Contour

\* 10' base from face of bank

Instr set on Hub 4.5 below 50' Contour H.S.

boulders + decomp. R

solid ledge



\* face of R is 6.9 in front of Reading

perpendicular R

solid R

boulders +

20' Contour E Side

Sta	dip		Red.		
1	52°43'	L	2.82	-5°40'	280
2	45°55'	L	2.18	-7°30'	215
3	29°28'	L	1.61	-10°00'	157
0	---		1.48	-11°30'	143
1	14°40'	R.	1.67	-10°00'	163
2	29°33'	R.	2.12	-7°20'	209
3	46°10'	R.	3.21	-5°20'	319
4	45°50'	R.	4.23	-3°30'	422

30' Contour

1	47°18'	R	4.70	-2°00'	470
2	41°08'	R	3.75	-2°20'	375
3	42°14'	R	3.08	-3°00'	308
4	30°45'	R	2.32	-4°00'	232
5	18°20'	R	1.83	-5°00'	183
0	---		1.52	-6°30'	151
1	26°45'	L	1.66	-6°30'	165
2	42°30'	L	2.04	-4°40'	204
3	44°08'	L	2.70	-3°30'	270
4	57°45'	L	3.00	-3°00'	300

26

Just at Hut 4.5 below 50' Contour W.S.

Amongst broken Rocks point of sharp solid ledge

" "

about 6' base for perp. face

Rocks juts out on each side

shallow earth cover over Solid R.

on point of S.R.

boulders & decomp. R.



Just on Hut 4.5 below 50' Contour

boulders & decomp. R.

730

820

Solid Rock point

shallow earth + decomp. R. on top of S.R.

on S.R.

Some earth on S.R.

S.R.

Rock point

in gulley




40' Contour E.S.

Sta	def.		Rad	Vert.	
1	50.18	L	2.98	-1.00	299
2	41.10	V	2.88	-1.20	289
3	37.30	L	2.18	-2.00	219
4	17.18	L	1.64	-2.20	165
0	-		1.66	-2.30	167
1	15.00	R	1.90	-2.0	191
2	25.40	R	2.34	-1.40	235
3	39.05	R	3.06	-1.50	306
4	37.45	R	3.74	-0.40	375
5	45.40	R	4.72	-0.40	473

50' Contour E.S.

1	44.15	R	4.85	-	486
2	37.26	R	3.96		397
3	32.40	R	3.48		349
4	36.20	R	2.95		296
5	27.43	R	2.56		257
6	14.20	R	2.04		205
0	-		1.83		184
1	14.30	L	1.80		181
2	30.45	L	2.08		209
3	35.55	L	2.50		251
4	37.45	L	2.98		299
5	46.43	L	3.00		301

Inst at Hub 4.5 below 50' Contour

Rock point  
 some earth & in pulley  
 some earth + decomp. R on surface  
 " " "  
 " " "  
 " " "  
 " " "  
 point of Rock  
 earth, boulders & 

Inst set on Hub 4.5 below 50' Contour

earth + boulders  
 "  
 "  
 Rock point  
 some earth + decomp. R on top  
 S.R. crops up  
 some earth + decomp R on top  
 "  
 "  
 "  
 "  
 in pulley  
 on Rock point



## 60' Contour E.S.

Sta	def.	Roa	Verh.	
1	43°20' L	3.16	+ 2°00'	317
2	34°16' L	3.20	3°00'	320
3	32°12' L	2.60	3.20	260
4	25°10' L	2.17	4.00	217
5	13.25 L	1.97	4.10	197
0	---	1.98	4.10	198
1	14.20 R	2.22	3.40	222
2	28.04 R	2.82	3.00	282
3	28.00 R	3.50	2.30	350
4	34°35' R.	3.85	2.20	385
5	41.45 R.	4.80	1.40	480

## 70' Contour E.S.

1	40°38' R	4.87	2.50	487
2	36°06' R	4.24	3.00	424
3	26.40 R	3.65	3.20	365
4	21.30 R.	2.78	4.30	278
5	13.04 R	2.44	"	244
0	---	2.19	5.00	219
1	14.00 L	2.20	"	220
2	25.30 L	2.51	"	250
3	28.30 L	3.05	4.30	305
4	28.40 L	3.65	4.00	365
5	36.50 L	3.55	4.00	355

28

Just on Hub 4.5 below 50' Contour W.S.

point of Rock

in gully  
earth + decomposed R."

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

boulders point of Rock

ledge of Rock

Just set at Hub 4.5 below 50' Contour W.S.

ledge of Rock

"

earth + decomp. in gully

on point Earth + decomposed R

earth + decomposed R on top

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"

"



## 80 Contour

Sta	dist		Rod	Vert.	
1	34°14	L	3.87	5.15	385
2	26°20	L	3.95	5.65	393
3	23°50	L	2.96	6.45	293
4	16°55	L	2.52	8.00	248
5	10°22	L	2.43	"	239
0	---	±	2.40	"	236
1	10°30	R	2.58	7.30	255
2	18°45	R.	3.07	6.30	304
3	23.30	R.	3.78	5.15	376
4	35.16	R.	4.32	4.30	430
5	39°35	R.	4.90	4.00	488

## 90' Contour

1	35°30	R.	5.40	-0.40	541
2	32°40	R.	4.90	-0.50	491
3	26.10	R.	4.50	-	451
4	16.13	R.	4.36	"	437
5	12.43	R.	3.52	-1.00	353
X 6	10.35	R.	3.17	-1.10	318
0	---		3.00	-1.10	301
1	9°30	L	3.05	"	306
2	15°04	L	3.23	1.00	324
3	20°28	L	4.54	"	455
4	28°15	L	4.40	"	441

Just set in Hub 4.5 below 50' Contour N.S.

on point earth + decomposed R.

in valley

Earth + decomposed R.

"

"

"

"

"

this side fully

beyond "

on slope of Rock Ridge

"

Just set on Hub below 100' Contour

on slope of Rock Ridge

on Rock slope

earth and decomposed R.

"

"

"

"

"

"

"

## 100 Contour E. Side

S/a	df.		Rod	
1	26.41	L	4.67	468
2	19.14	L	4.73	474
3	11.05	L	3.42	343
4	5.55	L	3.21	322
0			3.20	321
1	7.25	R.	3.45	346
2	11.25	R.	3.80	381
3	14.38	R.	4.50	451
4	24.06	R.	4.60	461
5	31.28	R.	4.95	496
6	34.12	R.	5.42	543

## 110 Contour

1	33.15	R	5.60	1.20	561
2	30.24	R	5.13	1.30	513
3	22.28	R.	4.70	1.40	471
4	13.20	R.	4.67	1.40	467
5	9.04	R.	3.88	2.00	388
6	5.20	R.	3.57	2.15	357
0			3.43	"	343
1	5.20	L	3.47	"	347
2	9.33	L	3.80	2.10	380
3	17.47	L	4.88	1.40	488
4	24.08	L	4.88	"	488

230

Just set on Hub 2.5 below 100 Contour W.S.

Earth + decomp R

" " in gully - at foot of S.R. point

" "

" "

" "

" "

" "

" "

" "

on Rock slope

" "

on Rock slope

" "

earth + decomposed R.

" "

" "

" "

" "

" "

" "

" "

" "

in gully

in gully





## 120' Contour E.S.

Sta	def.		Rod		
1	23.35	L	5.27	2.40	527
2	18.20	L	5.13	2.40	513
3	11.20	L	4.52	3.00	452
4	7.00	L	3.90	3.40	390
0	---		3.64	3.40	364
1	5.42	R.	3.88	3.40	388
2	12.40	R.	4.80	2.50	480
3	21.45	R.	4.88	"	488
4	28.15	R.	5.08	2.40	508
5	32.30	R.	5.68	2.30	568

## 130' Contour E.S.

1	30.30	R.	5.80	3.20	579
2	26.50	R.	5.30	3.30	529
3	20.45	R.	5.05	3.40	504
4	12.08	R.	4.97	3.50	496
5	3.30	R.	4.03	4.40	402
0	---		3.93	5.00	491
1	5.35	L	4.20	"	418
2	8.47	L	4.57	4.20	455
3	15.20	L	5.30	3.45	528
4	20.50	L	5.38	"	536

B1

Just set on Hill below 100' Contour W.S.

Earth decomposed R

is fully

just below Road

Just set on Hill below 100' Contour W.S.

above Road

E + d

on upper side of Road

on lower "

below

solid Rock puts up

140' Contour

Sta	dip		Red	Vert	
1	14.52	L	802	12.35	765
2	10.20	L	815	12.35	777
3	6.38	L	7.47	13.40	706
4	2.05	L	6.87	14.45	643
0	---		6.82	14.40	640
1	3.27	R	7.06	14.20	664
	7.15	R			
2	14.40	R	7.74	12.35	732
3	18.35	R	7.80	13.00	741
4	21.30	R	8.16	12.15	780

150' Contour ES

1	20.45	R	8.33	11.20	801
2	18.20	R	7.98	12.00	765
3	13.33	R	7.70	12.10	737
4	8.08	R	7.73	12.15	740
5	2.50	R	7.07	13.20	670
0	---		7.08	13.20	671
1	4.25	L	7.50	12.45	714
2	8.08	L	7.86	12.00	753
3	11.30	L	8.36	11.20	804
4	14.00	L	8.28	11.50	794

April 10, 1897

37

Just set on Hut 310' Contour W.S.

Decomposed Rock point	8.02	398
Earth + decomposed R	8.15	385
"		4.53
"		5.13
" just above Road		5.18
"		4.94
" in gully. could not get right R.		
Earth + decomposed R.		4.26
Rocks pits up		4.28
Rock point		3.84

Just set on Hut 310' Contour W.S.

Rock point		3.67
Earth + decomposed R		4.02
"		4.30
"		4.27
"		4.93
"		4.92
"		4.50
"		4.14
" in gully N 82° W		3.64
Rock point		3.72





## 160' Contour E.S.

Sta	def.	Rod	Vert.	
1	14.15 L	8.22	10.45	793.
2	11.53 L	8.64	10.20	837.
3	8.30 L	8.30	10.40	802.
4	4.32 L	7.64	11.40	733.
0	---	7.26	12.15	694
1	3.16 R	7.36	12.00	705
2	7.55 R	7.87	11.20	757.
3	13.50 R	7.87	"	757.
4	17.25 R	8.01	11.05	772
5	19.40 R	8.38	10.35	810

## 170' Contour E.S.

1	19.20 R	8.52	9.45	828
2	17.00 R	8.20	10.10	797.
3	14.07 R.	8.00	10.20	776.
4	8.50 R.	7.92	10.25	767.
5	3.15 R	7.60	10.50	735.
0	---	7.44	11.05	717.
1	2.47 L	7.70	10.45	744.
2	7.20 L	8.40	9.50	817.
3	10.35 L	9.00	9.15	878.
4	13.47 L	8.48	9.35	825

33

## Just set on Hub 310' Contour W.S. + F.S. or E.S.

on decomposed Rock point	3.78
W.S. of gully	3.36
boulders so. S.S. of gully	3.70
Earth + decomposed R	4.36
" "	4.74
" "	4.64
" "	4.13
" "	4.13
" "	3.99
on Rock point	3.62

Rock point	3.48
Earth and decomposed R	3.80
" "	4.00
" "	4.08
" "	4.40
" "	4.56
" "	4.30
" "	3.60
" "	3.00
" "	3.52

180' Contour E.S.

extending Southward 24

Sta	dip	Rod	Vert.	
0	---	7.67	9.50	745
1	3°.20 R.	7.70	9.50	748
2	8°.38 R.	8.18	9.30	797
3	12°.55 R.	8.13	9.25	792
4	16°.05 R.	8.20	9.15	800
5	18°.50 R.	8.65	8.45	845
-	20.30 R			

190' Contour

1	17°.40 R.	8.72	8.00	856
2	15°.30 R.	8.35	8.20	818
3	11°.33 R.	8.23	8.30	806
4	8°.10 R.	8.15	8.35	798
5	3.15 R	7.82	8.50	764

200'

0	---	8.08	8.00	793
1	8°.28 R	8.25	7.40	810
2	12°.55 R.	8.35	"	820
3	16.03 R.	8.60	7.30	846

Incl. set on Hut 310 Contour W.S.

Earth + decomp. and R	4.30
" "	4.30
" "	3.82
" "	3.87
" "	3.80
on Rose point	3.35

angle into valley -

extension Southward -

Earth + decomp. and R	3.28
" "	3.65
" "	3.77
" "	3.85
" "	4.16
" "	4.18

Earth + decomp.	3.92
"	3.75
"	3.65
"	3.40



## 210 Contour E.S.

S/a	def	Red	Verb.	
1	16° 15' R	8.93	6.30	884
2	14° 50' R	8.65	6.45	856
3	12° 10' R	8.52	"	843
4	8° 08' R	8.48	6.50	839

## 220' Contour

1	12° 00' R	8.67	6.05	858
2	14° 30' R	8.80	6.00	873
3	15° 28' R	9.10	5.50	900

## 230' Contour

1	14° 15' R	9.14	5.15	908
2	13° 02' R	8.80	"	874

## 240' Contour

1	12° 12' R	9.00	4.30	895
2	13° 32' R	9.24	"	920

## 250' Contour

1	12° 38' R	9.30	3.45	927
2	12° 00' R	9.15		912

35

## Just set in Hub 310 Contour W.S.

Earth + decomposed R	3.07
"	3.35
"	3.48
"	3.52

## extension Southward

Earth + decomposed R	3.33
"	3.20
" " Boulder	2.90

## extension Southward

2.86  
3.20

## extension Southward

3.00  
2.76

## extension Southward

2.70  
2.85

260' Contour

Sta	def	Roa		
1	10°55' R	9.31	3.05	930
2	12°20' R.	9.80	3.0	979

270' contour	OK.	280' OK		
290	"	300	"	
310	"	320	"	
330	"	340	"	

350' Contour E.S.

1	7°30' R	11.10	2.00	1110
2	5°08' R.	10.92	"	1092
3	2°00' R.	11.24	"	1124
Q	~	11.58	"	1158
1	4°33' L	11.80	1.50	1180
2	6°25' L	12.40	1.45	1240
3	9°00' L	11.72	1.50	1172
4	12°04' L	11.60	1.50	1160

36

Inset set at Hub 310 Contour W.S.

2.69  
2.20

Inset set at Hub 310 Contour W.S.

5.46 6.54  
5.62 6.38  
5.79 6.21  
5.90 6.10  
6.20 5.80  
5.86 6.14  
5.80 6.20

boulders

in gully

Road point



360' Contour E.S.

S/a	def	Rod			
1	12.13 L	1170	2.20	1170	
2	10.0 L	1184	2.20	1184	
3	6.20 K	1250	2.10	1250	
4	4.00 L	1200	2.10	1200	
0	---	1174	2.15	1174	
1	2.36 A	1148	2.20	1148	
2	6.56 R	1130	"	1130	
3	9.35 R	1240		1240	

380.

1	6.15 R	1160	3.15	1158	
2	2.30 R	1170	"	1168	
0	---	1218		1216	
1	3.10 L	1232	3.10	1230	
2	6.30 L	1266	3.00	1264	
3	8.35 L	1234	3.05	1232	

400

1	9.25 L	1236	3.55	1232	
2	6.30 L	1310	3.45	1306	
3	3.12 L	1250	3.55	1246	
0	---	1264	3.50	1260	
1	3.20 R	1208	4.10	1203	
2	7.00 R.	1200			

37

Instr set on Hub 310' Contour W.S.

Rock point	5.85	6.15
Earth boulders +	5.92	6.08
boulders in gully	6.25	5.75
earth boulders + decomposed R		6.00
"	5.87	6.13
"	5.74	6.26
"	5.65	6.35
	6.20	5.80

Earth boulders +	5.50	6.20
"	5.85	6.15
"	6.09	5.91
"	6.16	5.84
boulders in gully	6.33	5.67
Rock point	6.17	5.83

point of R comes out 20'

boulders + R. n. & gully	6.18	5.52
	6.55	5.25
	6.25	5.75
earth + decomposed R	6.32	5.68
	6.04	5.96
		6.00

420.

Sta	dif	Rod	Verb.	
1	7 <sup>o</sup> .08 R	1232	4.50	1225
2	4 <sup>o</sup> .00 R	1234	"	1227
0				
1	2 <sup>o</sup> .10 L	1284	4.40	1277
2	5.30 L	1326	"	1319

440' Contour ES.

1	5.00 L	1360	5.10	1352
2	2.30 L	1316	5.20	1308
0		1314		1306
1	1 <sup>o</sup> .35 R	1310	5.30	1302
2	6.10 R	1270	"	1262
3	R	1262		1254

38

Just set		
Earth + boulders	6.16	5.84
"	6.17	5.83
top of purp. Rock.		
boulders + SR	6.42	5.58
" "	6.62	5.37
boulders + SR	6.50	5.20
"	6.58	5.42
top of purp. Rock	6.57	5.43
Earth + boulders	6.55	5.45
"	6.55	5.65
"	6.31	5.69



Notes of Connection  
proposed site of

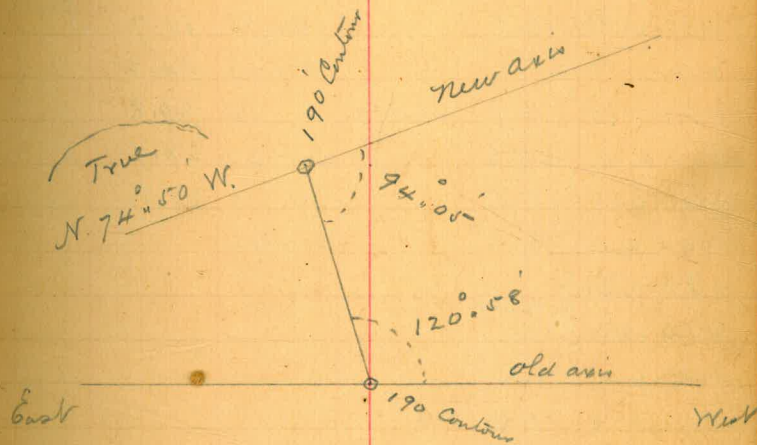
between old axis and  
New axis - Barrett's Dam 39

April 12, 1897

Sta 190 - 120.58' - L to <sup>Connect with</sup> new axis

on old axis turn 120.58' L to 190 Contour

190 94.05' L to New axis looking westward.



See Book 78  
p. 37.

190  
c

530-40	17.9	
20-30	17.2	
10-20	18.9	
500-10	16.9	Ant 500
490-500	18.8	
480-490	17.7	
470-480	25.7	
460-470	9.0	Htl 460
450-460	20.6	
440-450	15.5	
430-440	12.5	
420-430	} 12.00	
410-420		
400-410	16.2	
90-400	20.7	84.0
80-90	21.6	
370-380	21.4	
360-370	20.3	
350-60	20.3	177.4
40-50	19.1	104.3
330-340	18.8	
320-30	18.5	
310-20	19.7	
300-10	21.0	97.1
300	19.7	

290-300	19.7	216.4
280-90	20.2	
270-80	23.6	
70	26.5	
250-60	31.7	121.7
40-50	30.7	
30-40	34.2	
30	29.8	
210-20	28.7	
200-10	25.5	148.9
190-200		



200

= 10.0

190

257

100.00

0 3.7

103.7

120

39

1

5.3

2

7.1

3

9.7

94.0

11.8

91.9

3.95

95.85

4

2.9

93.0

5

4.9

91.0

6

9.7

86.1

9.75

86.10

4.50

90.60

7

6.8

8

9.0

9

8.4

10

11.6

11

10.4

12.10

88.50

3.70

92.20

12

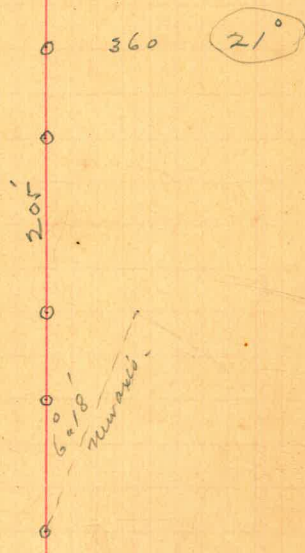
6.10

Rate 1/2 5.3

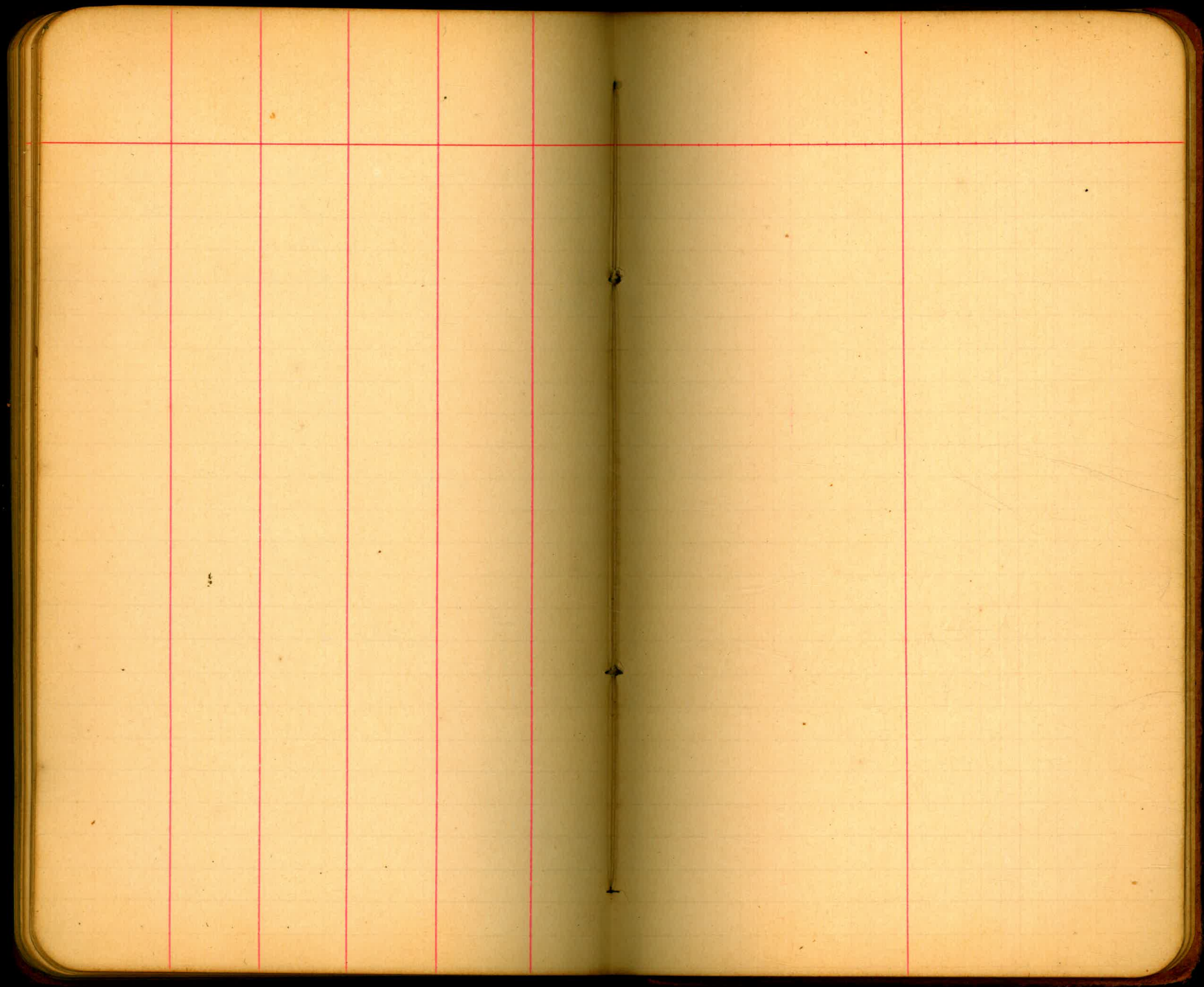
Rate 3 6.

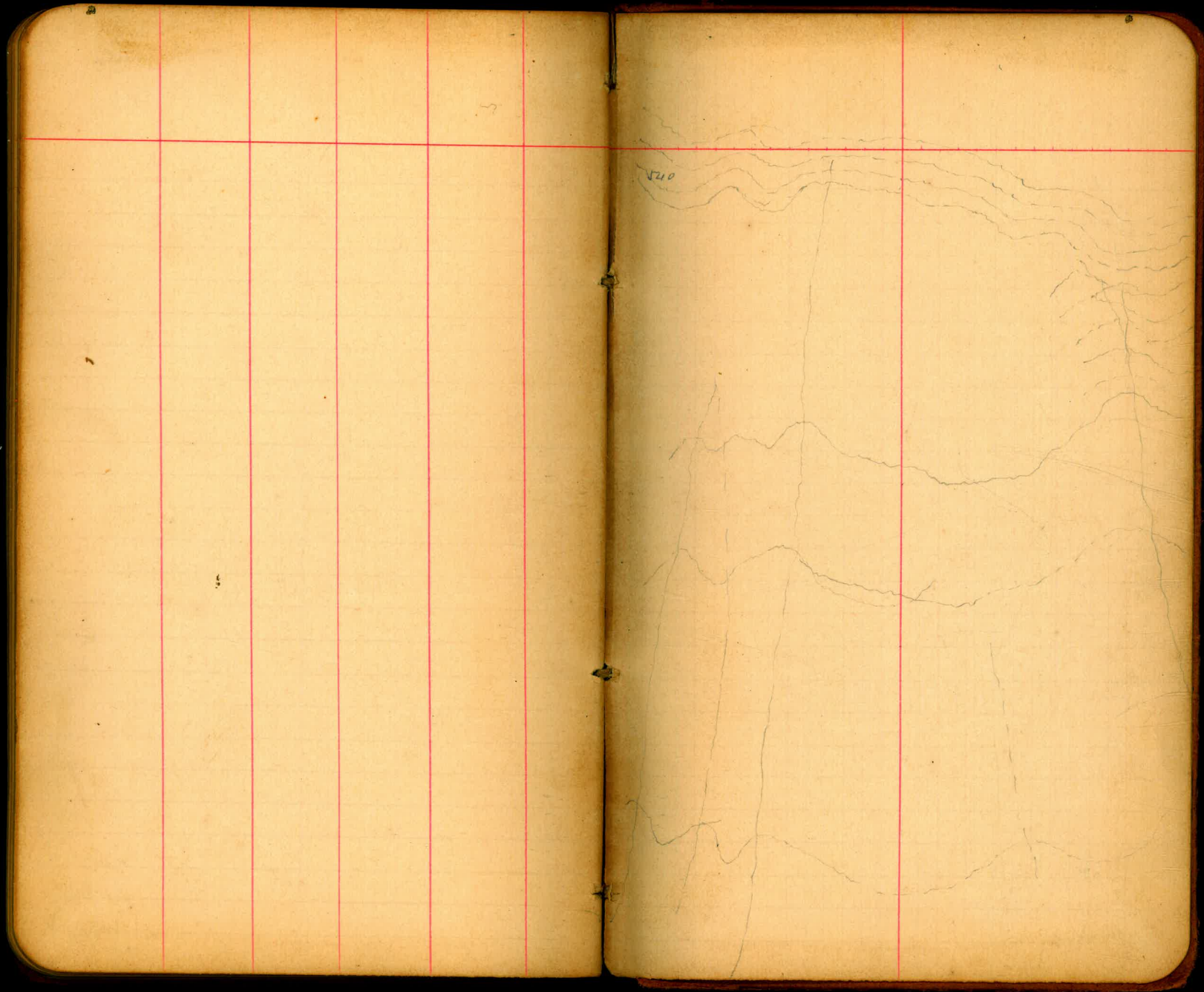
v 2 6.4

13.	8.60	92.20	83.60
14	12.3		79.9
15	10.		82.2
16	5.2		87.0
17		3.10	89.1











0-220 ft  
 220-270 ft  
 270-340 ft  
 340-540 ft

Handwritten calculations and notes on the left page, including numbers like 150, 220, 240, 120, and various small diagrams or sketches.

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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