

BARRETT DAM

~~No 2~~

Construction Notes

412

397

TRANSIT

20

W9

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

M
60

MICROFILMED

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
	0	99.98	1.75	100.00	0.44	100.00	0.87	99.99	
1	99.94	3.49	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.86	5.23	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.76	6.98	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.62	8.72	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.45	10.45	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.25	12.19	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.03	13.92	99.20	12.62	99.14	13.05	99.09	13.49	82
8	98.77	15.64	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.48	17.36	98.70	16.07	98.63	16.50	98.56	16.93	80
10			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.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		

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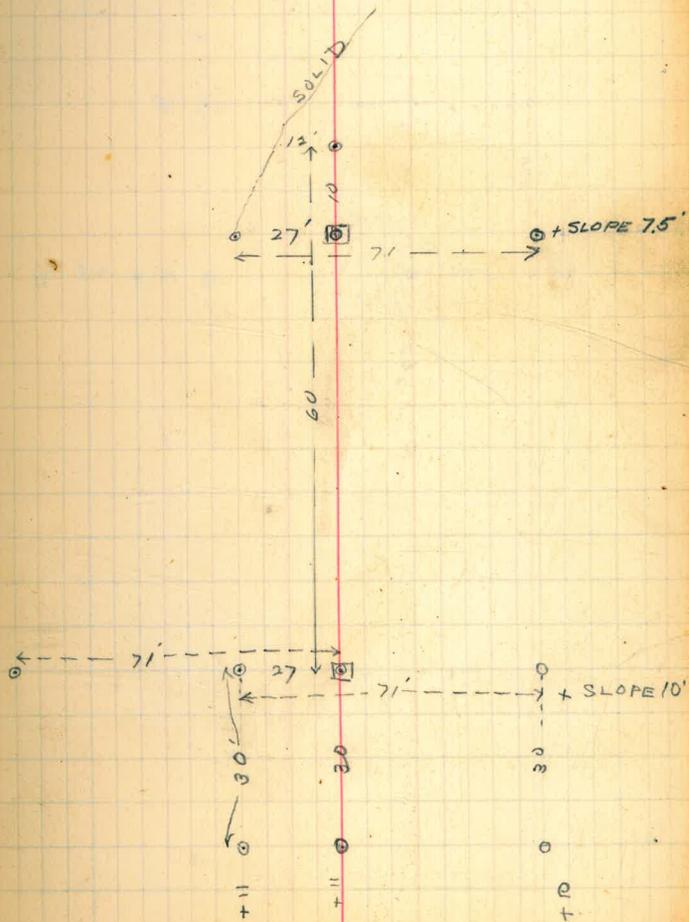
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July 1904



Bench for Head Tower

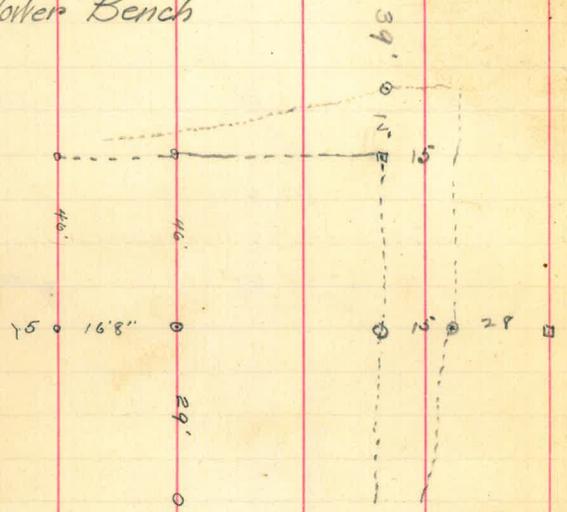


Oct 9. 1902

Tail Tower Bench

Ref. Pt. ○

Oct 19



Levels from Fitzginnons towards Barrett Dam

Nov 18th 1902

U.S.G.S. B.M. near cor of fence. Fitzginnons ranch

2110.00 =

0.09 2110.09

11.60 2104.49

0.20 2104.69

11.87 2092.82

0.61 2093.46

11.46 2082.00

0.40 2082.40

11.73 2070.67

0.69 2071.36

11.95 2059.41

0.79 2060.20

11.90 2048.30

0.97 2048.37

11.88 2036.49

0.13 2036.62

11.96 2024.66

0.24 2024.90

12.28 2012.62

0.19 2012.81

11.37 2001.44

0.86 2002.30

11.98 1990.32

0.04 1990.36

Abandoned
See Book of Page 19

	1990.36		
0		11.48	1978.88
	1.46 1980.34		
0		11.68	1968.66
	1.05 1972.71		
0		11.57	1961.14
	0.58 1961.52		
0		11.94	1949.58
	0.16 1949.74		
0		12.34	1937.40
	0.23 1937.63		
0		12.30	1925.33
	0.18 1925.51		
0		11.32	1914.19
	0.77 1914.96		
0		11.42	1903.54
	1.13 1904.67		
0		11.56	1893.11
	0.64 1993.75		
0		11.25	1882.50
	1.55 1884.05		
0		12.84	1871.71
	1.06 1875.77		
check		3.79	1871.98 =

check on Govt B.M. nail in Oak tree near Assmanns, etc
 of same 1872.00 Def 0.02

	1875.77		
0		12.01	1863.76
0.02	1863.78		
0		11.23	1857.15
1.27	1853.42		
0		0.76	1852.66
1.50	1857.16		
0		11.36	1846.80
0.50	1846.30		
0		12.29	1834.01
0.73	1834.74		
0		11.91	1822.83
0.21	1823.04		
0		12.25	1810.79
0.01	1810.80		
0		12.29	1798.51
1.32	1798.83		
0		11.96	1786.87
0.36	1787.23		
0		11.99	1775.24
0.12	1775.36		
B.M.		10.59	1764.77
0.71	1765.48		

B.M. On post about 100' South of main road to Barrett
on old road into Wilson creek

~~1765.48~~

~~11.94 1753.54~~

~~0.79 1754.33~~

~~11.35 1742.98~~

~~1.54 1744.52~~

~~3.38 1741.14~~

check

1741.712

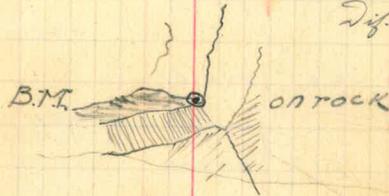
Corrected elev. N. S. G. Survey =
See 4 Page 21

↑ Elevation

check on B.M. on rock on east side Nelson creek 1895.55

1741.14

Dif. = 154.41



Levels to establish 200' contour for new road up Wilson creek

April 17th 1905

	12.50	162.50	150.00
o			0.65 161.85
	12.90	174.75	
o			0.72 174.03
	12.91	186.94	
o			0.70 186.24
	12.90	199.14	
			0.70 198.44
	12.07	210.51	
B.M.			210.51 200.00
	9.19	209.19	
B.M.			9.19 200.00
	7.63	207.63	
B.M.			7.63 200.00
	12.41	212.41	
o			0.05 212.36
	12.65	225.01	
o			0.15 224.86
	12.96	237.82	
o			0.58 237.24
	9.58	246.82	
			2.82 244.00
o			2.05 244.77
	8.38	253.15	
B.M.			1.35 251.80

B.M. on knob east side dam

B.M. on knob east side dam

B.M. on knob on ridge bet dam and camp, west side

B.M. on knob on first ridge north of camp, west side
 and south side mouth Wilson creek

Set grade stake

B.M. on rock on first ridge north of camp, west side

Grade levels down Wilson creek for new road

April 18th 1905

			295.55
	12.99	308.54	
0			0.04 308.50
	12.36	320.86	
0			0.72 320.14
	4.15	324.29	
B.M.			0.71 323.58
0			1.3 323.0
+50			11.3 313.0
1			8.5 315.8
+50			6.5 317.8
0			4.15 320.14
	7.11	327.25	
2			5.5 321.7
+25			4.0 323.2
+50			7.1 318.1
0			12.62 314.63
	0.53	315.16	
B.M.			6.03 309.13
0			11.67 303.49
	0.17	303.66	
3			2.0 301.7
0			11.15 292.51
	6.14	298.65	

B.M. on rock near bed of Wilson creek below Boardman

B.M. On oak tree 30' L Sta 0. near junction of new
and old roads

GR.	CUT	FILL
323.0	00	
319.3		1.3
315.5		0.3
311.8	6.0	

B.M. On boulder 45' R. 2+50

Grade levels Wilson Creek road

	298.65	
3+50	6.4	292.2
4	9.5	89.1
+25	16.0	82.6
+50	6.3	92.3
B.M.	12.4	297.41
0	6.46	292.19

			GR	CUT	FILL
	320.14				
	6.33	326.47			
2	11.1	315.4	308.0	7.4	
+50	11.5	315.0	304.3	10.7	
0	12.90	313.57			
	0.15	313.72			
3	6.7	307.0	300.5	6.5	
0	12.96	300.76			
	0.17	300.93			
+50	7.8	293.1	296.8	3.7	
4	10.9	290.0	293.0	3.0	
+20	11.9	289.0	293.0	4.0	
+45	18.5	282.4	293.0	10.6	
+70	8.7	292.2	293.0	0.8	
B.M.	3.50	297.43			
	0.44	297.87			
5	4.9	293.0	293.0	0.0	

North bank Wilson creek
 Bed " "
 Smith " " "
 B.M. on oak tree 30' R. 4+70

Grade levels Wilson Creek road

April 19th 1905

				GR	OUT	FILL
	297.87					
5+50		7.9	290.0	290.0	00	
6		10.9	287.0	287.0	00	
0		12.82	285.05			
	4.01		289.06			
+50		5.1	284.0	284.0	00	
7		8.1	281.0	281.0	00	
+50		8.1	281.0	281.0	00	
B.M.		38.6	285.20			
	4.46		289.66			
8		8.7	281.0	281.0	00	
+50		8.7	281.0	281.0	00	
9		8.7	281.0	281.0	00	
0		11.00	279.66			
	12.69		291.35			
+50		10.3	281.0	281.0	00	
10		10.3	281.0	281.0	00	
+50		10.3	281.0	281.0	00	
11		10.3	281.0	281.0	00	
0		11.04	280.31			
	5.28		285.59			
+50		4.6	281.0	281.0	00	
12		4.6	281.0	281.0	00	
+50		4.6	281.0	281.0	00	
13		4.6	281.0	281.0	00	

5.0
 15.0
 LEVEL
 5.0

B.M. on oak tree 15' R 7+65

B.M. on oak tree 15' R 7+65

Grade Levels Wilson Creek road

				GR	CUT	FILL
	285.59					
13+50		4.6	281.0	281.0	00	
14		4.6	281.0	281.0	00	
+50		4.6	281.0	281.0	00	
0		305	282.54			
	7.49		290.03			
15		9.0	281.0	281.0	00	
+50		9.0	281.0	281.0	00	
16		9.0	281.0	281.0	00	
+50		9.0	281.0	281.0	00	
17		9.0	281.0	281.0	00	
B.M.		2.17	287.86			
+50		9.0	281.0	281.0	00	
18		9.0	281.0	281.0	00	
0		8.97	281.06			
	9.18		290.24			
+50		9.2	281.0	281.0	00	
19		9.2	281.0	281.0	00	
+50		9.2	281.0	281.0	00	
20		9.2	281.0	281.0	00	
0		9.81	280.45			
	0.14		280.57			
+50		2.1	278.5	278.5	00	
21		4.6	276.0	276.0	00	
+50		7.1	273.5	273.5	00	

LEVEL

B.M. in building 5' L 17+20

LEVEL

for change of line see Page 14

Grade Levels Wilam Gushard

				GR	CUT	FILL
	250.57					
22		9.6	271.0	271.0	00	
+50		12.1	268.5	268.5	00	
0		11.97	268.60			
	159	270.19				
23		4.2	266.0	266.0	00	
+50		4.7	263.5	263.5	00	
24		9.2	261.0	261.0	00	
+50		11.7	258.5	258.5	00	
B.M.		1.88	268.31			
0		12.64	257.55			
	247	264.02				
25		8.0	256.0	256.0	00	
28		8.0	256.0	256.0	00	
0		9.53	254.49			
	10.83	265.32				
+50		9.3	256.0	256.0	00	
29		9.3	259.3	256.0	00	
+20		4.6	260.7	256.0	4.6	
+60		13.4	251.7	256.0	4.3	
+75		9.3	256.0	256.0	00	
30		6.3	259.0	256.0	3.0	
+50		9.3	259.0	256.0	00	
0		9.81	255.51			
	1176	267.27				

April 20th 1905

B.M. on hub 20' R 24+50

↑
5.0
↓
LEVEL
↓

Grade levels Wilson Creek road

				GR	CUT	FILL	
	254.28						
40		10.3	244.0	244.0	0.0		↑
+25		6.7	247.6	244.0	3.6		
+50		10.3	241.0	244.0	0.0		
+80		15.7	238.6	244.0	4.6		
41		10.3	244.0	244.0	0.0		
0		12.24	242.04				
	11.06 253.10						
42		9.1	244.0	244.0	0.0		
+25		6.1	247.0	244.0	3.0		
+75		9.1	244.0	244.0	0.0		
+85		14.1	239.0	244.0	5.0		
43		9.1	244.0	244.0	0.0		
0		2.96	250.14				
	4.63 254.77						
+90		10.8	244.0	244.0	0.0		
44+10		5.8	249.0	244.0	5.0		
+50		10.8	244.0	244.0	0.0		
B.M.		0.16	254.61				
+65		16.0	238.8	244.0	5.2		
45		10.8	244.0	244.0	0.0		
+50		10.8	244.0	244.0	0.0		
0		11.49	243.28				
	4.78 248.06						

Small rising stream at
Sta 43 April 20th 1905

April 21st 1905

B.M. on curb 50' R 44+50

Grade levels Wilson creek road

			GR	CUT	FILL	
	248.06					
46		4.1	244.0	244.0	0.0	↑
48		4.1	244.0	244.0	0.0	
0		388	244.18			
	8.14	252.32				↓
+50		8.3	244.0	244.0	0.0	
49+25		8.3	244.0	244.0	0.0	
+45		17.0	235.3	244.0	8.7	
+65		8.3	244.0	244.0	0.0	
0		10.64	241.68			
	7.27	248.95				
50+50		5.0	244.0	244.0	0.0	
0		4.39	244.56			
	8.42	252.98				LEVEL
52+10		9.0	244.0	244.0	0.0	
+30		12.8	241.2	244.0	2.8	
+50		9.0	244.0	244.0	0.0	
+85		5.0	248.0	244.0	4.0	
53+25		9.0	244.0	244.0	0.0	
+45		17.0	236.0	244.0	8.0	
+60		9.0	244.0	244.0	0.0	
0		10.05	242.93			↓
	6.32	549.25				
55		5.3	244.0	244.0	0.0	
0		5.43	243.82			

Grade book Wilson creek road

				GR.	CUT	FILL	
			243.82				
	8.08	51.90					
57			7.9 244.0	244.0	00		
0			9.11 242.79				
	10.24	253.63					
59			9.6 244.0	244.0	00		
60			9.6 244.0	244.0	00		
+50			2.6 251.0		7.0		
+20			21.6 232.0	244.0	12.0		
+40			9.6 244.0		00		
0			10.93 242.70				
	57.4	248.44					
63			4.4 244.0	244.0			
0			3.01 245.43				
	9.66	255.09					
65+50			11.1 244.0	244.0	00		
B.M.			0.82 254.27				
0			10.27 244.82				
	8.68	253.50					
69+50			9.5 244.0	244.0	00		
0			1.77 245.73				
	6.35	252.08					
73			8.1 244.0				
B.M.			0.58 251.50				
T.P.			7.92 244.16				

Continued on Page 26

GR. CUT FILL

LEVEL

B.M. about 20' R 68+75

B.M. on rock 25' R 72+50

T.P. on rock 72+20

244.0 00
 Check on B.M. on ridge South side
 Wilson creek, established from B.M.
 on 150' contour east side dam
 original elev = 251.80 } diff 0.30
 251.50

Such levels on east side of dam

		71.237
91.58	80.675	
0		1.405 79.290
11.515	90.805	
0		0.687 90.118
12.945	103.063	
0		0.417 102.446
12.763	115.209	
0		0.750 114.459
12.545	127.004	
0		0.670 126.334
12.088	138.422	
0		1.048 137.374
12.929	150.303	
0		1.413 148.890
12.657	161.542	
0		0.657 160.885
12.761	172.646	
0		0.727 172.919
12.841	185.760	
0		0.644 185.116
12.890	198.006	
0		1.100 196.906
12.903	209.809	
0		10.899 198.910

NOTE. this B.M. is marked wrong
it should be 71.937

April 22nd 1905

B.M. On large boulder near blacksmith's shop

on 80.000 B.M. on dam site	80.000
	79.290
	0.710 Dif

ABANDONED

Dif = 0.40

on 150.00 B.M.

150.000
148.890
1.110 Dif

1.110
1.090
0.020 Dif

set by Edwards

on 200.00 B.M.

200.000
198.910
1.090 Dif

19
Check levels on east side of Dam

	209.809		
o	12.904	222.068	0.645 209.124
o	12.968	234.284	0.752 221.310
o	12.905	246.489	0.700 233.584
T.P.	12.504	258.186	0.807 245.682
o	12.902	270.391	0.697 257.489
o	12.615	282.329	0.677 269.714
o	12.877	294.566	0.640 281.689
B.M.			1.006 293.560

~~F.P. Peg in front side~~

~~ABANDONED~~

~~Original elev = 294.720
B.M. with side head tower = 293.560~~

~~1.160 Diff~~

~~Diff bet head tower B.M.
and 150.0 B.M. = 0.02~~

Profile levels from Milan creek road.

April 24th 1905

			297.43
	0.22	297.65	
0			12.62 285.03
	390	288.93	
7			7.9 281.0
+40			11.3 77.6
8			7.9 81.0
0			8.43 280.50
	11.66	292.16	
+30			14.4 76.8
+50			11.7 81.0
0			12.50 279.66
	6.85	286.51	
15			5.5 281.0
+25			7.3 79.2
+50			5.5 81.0
0			7.25 279.26
	9.33	288.59	
17			7.6 81.0
+20			2.4 86.2
+35			10.4 78.2
+50			7.6 81.0
19			7.6 81.0
+15			3.2 85.4
+30			7.6 81.0

S.M. On oak tree 30' R 44.70

water way

water way

water way

Puffin Levels Wilson Creek road

	288.59		
0		11.46	277.13
	0.88	278.01	
22		7.0	71.0
+10		9.2	68.8
+25		7.0	71.0
+50		9.5	68.5
23+50		14.5	63.5
+75		12.3	65.7
24		17.0	61.0
0		11.83	266.18
	0.93	267.11	
0		10.09	257.02
	0.96	263.98	
29		8.0	56.0
+20		3.3	60.7
+50		8.0	56.0
+60		12.3	51.7
+75		8.0	56.0
30		5.0	59.0
		12.90	251.08
	11.76	262.84	
31		6.8	56.0
+50		4.6	58.2
+75		6.8	56.0

water way

water way

Profile levels Wilson Creek road

	262.84		
32 + 10		12.8	250.0
+ 25		6.8	56.0
+ 35		2.6	60.2
+ 50		6.8	56.0
0		13.02	249.82
	102	250.84	
0		11.86	238.98
	11.63	250.61	
37		6.6	44.0
+ 25		9.3	41.3
+ 50		6.6	44.0
40		6.6	44.0
+ 25		3.0	47.6
+ 50		6.6	44.0
0		8.37	242.24
	8.86	251.10	
40 + 50		7.1	44.0
+ 80		12.7	38.4
41		7.1	44.0
+ 25		9.1	42.0
+ 50		7.1	44.0
+ 70		4.7	46.4
42		7.1	44.0
+ 25		3.0	47.0

water way

Profile levels Wilson creek road

	251.10		
42+55		71	244.0
+75		71	44.0
+85		11.9	39.2
43		71	44.0
+25		71	44.0
+35		+0.9	52.0
+55		71	44.0
0		2.47	248.63

864 157.27

43+90		13.3	44.0
44+10		8.3	49.0
+50		13.3	44.0
+65		18.6	38.7
45		13.3	44.0
0		12.89	244.38

3.52 247.90

0		3.36	244.84
	8.28		242.82
49+25		8.8	44.0
+45		17.8	35.0
+65		8.8	44.0
0		11.63	241.19

11.82 253.01

water way

Water way

water way

Profile along Wilson Creek road

	253.01		
51 + 50		9.0	244.0
+ 65		13.3	39.7
52 + 10		9.0	44.0
+ 30		13.0	40.0
+ 50		9.0	44.0
+ 85		5.0	48.0
53		9.0	44.0
+ 25		9.0	44.0
+ 45		16.5	36.5
+ 60		9.0	44.0
0		10.35	242.66
	9.40	252.00	
5		9.80	242.20
	10.86	253.00	
59		9.0	44.0
+ 20		5.5	47.5
+ 50		9.0	44.0
60		9.0	44.0
+ 50		2.0	51.0
61		9.0	44.0
+ 20		21.0	32.0
+ 40		9.0	44.0
63		9.0	44.0
+ 15		12.0	41.0

water way

water way

Profile along Wilson creek road

	253.06		
63+50		9.0	244.0
0		8.87	244.17
	8.55	252.72	
0		9.06	243.66
	11.02	254.68	
check		3.11	251.57
	2.58	254.15	
0		12.62	241.53
	2.57	244.12	
74+75		3.6	240.5
75		6.4	37.7
+20		2.6	41.5
+35		6.9	37.2
+50		1.7	42.4
+75		5.6	38.5
76		14.8	29.3
+25		6.6	37.5
+50		7.6	36.5
+75		1.1	43.0
77		8.1	36.0
79+50		13.1	31.0
+75		10.5	33.6
80		14.1	30.0

Continued on Page 30

check on B.M. on ridge mouth Wilson creek.

251.57

251.50

.07 diff.

April 27th 1905

water way

Grade Levels Wilson Creek road from Page 17

			244.16	
	2.41	242.57		
73+50			3.6	243.0
74			4.6	42.0
+50			5.6	41.0
+75			6.1	40.5
75			9.1	37.5
+50			7.6	39.0
0			7.49	239.05
	1.28	243.36		
+50			1.0	42.4
+75			4.9	38.5
76			14.1	29.0
+25			5.9	37.5
+50			6.9	32.5
+50			0.4	43.0
77			7.4	36.0
+50			8.4	35.0
78			9.4	34.0
+50			10.4	33.0
79			11.4	32.0
+50			12.4	31.0
0			12.98	230.43
	4.83	235.26		

April 25th 1905

GR CUT FILL T.P. Church 73+20

243.0	00
40.0	00
41.0	00
40.5	00
40.0	2.5
39.0	00
39.0	3.4
38.5	00
35.0	9.2
37.5	00
37.0	1.5
34.5	6.5
36.0	00
35.0	00
34.0	00
33.0	00
32.0	00
31.0	

↑

0

↓

Grade Levels Wilson creek road

	235.26		
79+75		1.6	233.7
80		5.3	30.0
+50		6.3	29.0
81		12.0	19.3
+50		8.3	27.0
82		9.3	26.0
+50		10.3	25.0
83		6.3	29.0
+50		12.3	20.0
84		13.3	22.0
0		12.30	222.96
	2.33		225.29
+50		4.3	21.0
0		11.85	213.44
	12.67		26.11
85		6.1	20.0
+50		6.1	20.0
86		6.1	20.0
+48		6.5	19.6
87		6.1	20.0
B.M.		13.13	212.98
	9.72		222.70
0		0.62	222.08
	4.83		226.91

GR CUT FILL

GR	CUT	FILL
280.5	3.2	
30.0	0.0	
29.0	0.0	
28.0	8.7	
27.0	0.0	
26.0	0.0	
25.0	0.0	
24.0	5.0	
23.0	0.0	
22.0	0.0	
21.0	0.0	
20.0	0.0	
20.0	0.0	
20.0	0.0	
20.0	0.0	

↑

- 2.0

↓ LEVEL → X

north side camp cañon

top of boulder

south side " " 20' 4.87

B.M. on boulder 20' 4.87

Grade Coals Wilson Creek road

April 26th 1905

				GR	CUT	FILL	
	226.91						
87+50		69	220.0	2200	00		^
90		69	20.0	200	00		↓
+50		79	19.0	190	00		↓
91		89	18.0	180	00		↓
+50		99	17.0	170	00		↓
0		11.05	215.86				↓
	478 220.64						
92		4.6	216.0	2160	00		
+50		5.6	15.0	150	00		
93		6.6	14.0	140	00		
+50		7.6	13.0	130	00		
94		8.6	12.0	120	00		0
0		10.99	209.65				N
	231 212.96						
+50		20	211.0	2110	00		
95		3.0	10.0	100	00		
+50		4.0	09.0	090	00		
96		5.0	08.0	080	00		
97		7.0	06.0	060			
0		10.7	211.89				
	10.09 221.98						
0		12.49	209.49				
	1.65 211.14						
+50		6.1	205.0	2050	00		↓

Small mining stream April 26

Grade levels Wilson creek and

	211.14			
98		7.1	204.0	
150		8.1	203.0	
99		9.1	202.0	
150		10.1	201.0	
100		11.1	200.0	
1		11.1	200.0	
0		12.29	198.85	
	12.77	211.22		
101+47		11.6	200.0	
0		11.30	200.32	
	7.76	208.08		
0		8.57	199.51	
	10.00	209.51		
106		9.5	200.0	
110		9.5	200.0	
B.M.		9.89	199.62	
	12.87	212.49		
112		12.5	202.0	
0		12.79	199.70	
	12.88	212.58		
114+50		12.6	200.0	
0		1.43	206.15	
	5.47	211.62		
115		11.6	200.0	

GR CUT FILL

204.0 00

203.0 00

202.0 00

201.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

200.0 00

B.M. on hill thence across to west side of Cottonwood
on ridge between dam and camp from 200.00
B.M. on east side of dam. Sta 110+05

Continued on Page 47

Purple levels Wilson creek water from Page 25

	244.12		
0		13.00	231.12
	1.23		232.35
80 + 50		3.1	229.0
81		13.2	19.2
+ 30		5.1	27.3
+ 40		3.9	28.5
+ 50		5.4	27.0
82 + 50		7.4	25.0
83		3.0	29.4
+ 20		5.7	27.7
+ 35		+ 3.6	36.0
+ 50		9.4	23.0
0		11.24	221.11
	1.47		222.58
84 + 50		1.6	21.0
+ 75		+ 2.0	24.6
85		2.6	20.0
86		2.6	20.0
+ 25		14.4	08.2
+ 40		13.3	09.3
+ 48		3.0	19.6
+ 60		10.0	12.6
+ 85		9.8	14.8
57		2.6	20.0

April 27th 1905

Large boulder

Large boulder

} Camp cañon running water
 April 27th 1905 }

Top of boulder

Purple levels Wilson creek road

	222.58		
0		2.55	219.73
	4.49	224.22	
584.50		42	20.0
+ 15		4.4	24.6
59		42	20.0
0		12.08	212.14
	777	219.91	
0		9.91	210.00
	583	215.83	
0		10.34	205.49
	535	210.84	
0		10.45	200.39
	190	202.29	
104		23	200.0
+ 10		83	194.0
+ 50		23	200.0
0		8.75	193.54
	12.91	206.45	
109		15	200.0
+ 20		13.0	193.5
+ 50		6.5	200.0
110		6.5	200.0
check		6.70	199.69

solid rock ledge

water way

water way

check on B.M. Sta 110 + 05 elev = $\frac{199.69}{.07}$ diff

final check of Wilson creek road levels

		199.69 =
	950 209.19	
check	950	199.69

check levels from 150.00 B.M. east side dam to B.M. near Blacksmiths shop

B.M.		148.990
0.997	149.887	
0		12.979 136.912
0.756	137.668	
0		12.956 124.732
0.792	125.524	
0		12.947 112.577
1.023	113.200	
0		12.910 100.690
0.819	101.509	
		12.925 188.584
35.87	191.871	
check		12.571 199.300
2.164	181.464	
check		10.210 171.254
for corrected elev of this B.M. add		.683
		71.937

P.M. April 27th 1905

B.M. on ridge west side cottonwood bet. dam & camp Sta 110 + 05 Wilson creek road line

check on 200.00 contour B.M. east side dam
199.69
<u>0.31</u> dif-

B.M. 150' contour east side dam as made by the boards

ABANDONED

check on 89.00 B.M. east side dam. orig elev	179.300
	<u>179.290</u>
	dif- .010
" " B.M. near Blacksmiths shop. orig elev	171.254
	<u>171.237</u>
	dif- .017

Grade line for proposed change of road to
East trolley bench

			166.0	
	0.2	166.2		
0			0.2	166.0
+50			6.2	160.0
1			12.2	154.0
0			13.0	153.2
	0.1	153.3		
+50			5.3	148.0
2			11.3	142.0
0			13.0	140.3
	0.0	140.3		
+50			4.3	136.0
+75			1.0	139.3
3			8.3	132.0
0			13.0	127.3
	0.5	127.8		
+25			0.8	127.0
+50			14.3	113.5
+75			6.8	121.0
+125			12.8	115.0
			13.0	114.8
	0.3	115.1		
+275			6.1	109.0
5			9.1	106.0

May 1st 1905

accounted the Sta. P.

166.0

160.0

154.0

148.0

142.0

136.0

130.0

127.0

121.0

121.0

115.0

109.0

106.0

Grade links for proposed change of road to East Valley bench

May 1st 1905

		115.1			
0			13.1	102.0	
	0.2	102.2			
5+50			6.2	96.0	100.0
6			8.2	94.0	94.0
0			13.2	89.0	
	0.8	89.8			
4+50			1.8	88.0	88.0
7			7.8	82.0	82.0
0			12.8	77.0	
	3.0	80.0			
4+50			1.4	78.6	76.0
4+75			7.0	73.0	73.0
8			24.0	66.0	
8+25			13.0	67.0	67.0
	0.3	67.3			
8+75			6.3	61.0	61.0
9+25			12.3	55.0	55.0
0			13.0	54.3	
	3.0	57.3			
9+50			5.3	52.0	52.0

Road on old Bennett road from junction of
Wilson creek road to Cottonwood

May 24th 1905

	7.47	331.05		323.58	=
0			8.0	323.0	
0			0.23	330.42	
	12.61	343.03			
1+50			12.0	31.0	
0			0.14	342.89	
	11.30	354.19			
3+50			5.2	19.0	
0			0.16	354.03	
	12.48	366.51			
4+50			11.5	55.0	
0			0.18	366.33	
	18.17	378.44			
6			7.4	71.0	
7			3.4	75.0	
0			0.06	378.06	
	12.88	391.26			
0			0.07	391.19	
	12.95	404.14			
8+50			10.1	94.0	
0			0.05	404.09	
	12.81	416.90			
10+25			5.9	11.0	
0			0.20	416.70	

B.M. Oak tree 30' L Sta 0 Wilson creek road

Old Barrett road

	12.37	429.07		416.70
13+50			10.1	17.0
0			0.14	428.93
	12.92	441.85		
0			0.79	441.06
	4.27	445.73		
19+75			0.7	45.0
0			12.82	432.91
	0.60	433.51		
21+50			5.5	28.0
0			12.90	420.61
	0.31	420.92		
23+50			7.9	13.0
0			12.99	407.93
	6.50	414.33		
26			14.3	400.0
30+25			8.3	06.0
32			9.3	05.0
0			0.79	413.54
	3.62	417.16		
35			0.2	17.0
0			12.91	404.25
	0.15	404.40		
40			14.4	390.0
42			14.4	390.0

37.

Old Barrett road

		104.40		
0			12.97	391.43
	0.20	392.03		
0			12.97	379.06
	1.40	380.46		
47			13.5	67.0
0			2.32	378.14
	7.35	385.49		
51			4.5	81.0
0			12.94	372.55
	0.32	372.87		
0			12.96	359.91
	0.25	360.16		
54			11.2	49.0
0			12.95	347.21
	0.75	347.96		
0			12.96	335.00
	0.80	335.80		
0			13.00	322.80
	0.32	323.12		
60			8.1	15.0
0			12.22	310.90
	0.58	311.48		
63			11.5	300.0
			12.96	298.52

Old Bennett road

	070	299.22		298.52
0			12.96	286.26
	0.69	286.95		
65			1.0	82.0
66			5.0	82.0
0			12.86	274.09
	0.65	274.74		
68+50			9.7	65.0
0			12.91	261.83
	0.05	261.88		
0			13.01	248.87
	0.16	249.03		
70+50	0		0.0	49.0
0			12.55	236.15
	0.10	236.25		
0			12.71	223.34
	0.35	223.69		
72+50			6.7	17.0
0			12.94	210.75
	0.57	211.32		
0			12.96	198.36
	0.40	198.76		
74+50			9.7	89.0
0			12.95	185.81

Old Barrett road

	0.40	156.21		185.81
0			12.94	173.27
	0.24	173.51		
0			12.99	160.52
	0.28	160.80		
76+50			11.8	49.0
0			12.98	147.82
	0.68	148.50		
0			13.00	135.50
	0.40	135.90		
77+50			3.9	33.0
0			12.79	123.11
	0.60	123.71		
78+50			0.7	23.0
450			11.7	12.0
0			12.97	110.74
	0.45	111.19		
0			12.98	98.21
	0.36	98.57		
79+50			5.6	93.0
80			12.6	86.0
0			12.96	85.61
	0.19	85.80		
0			12.00	73.14
	0.53	73.67		

Old Barnett road

	73.67		
		12.95	60.72
0.34	61.06		
83		9.1	52.0
0		12.96	48.10
2.61	50.71		
B.M.		2.19	48.22
86+50		11.7	39.0

Distance from junction of Barnett and
Wilson road via Barnett road to Bank house
= 9700 feet

Distance from junction of Barnett and
Wilson road via Wilson road to Bank house
= 11,000 feet

B.M. 10 penny wire nail in 6x6 gate post foot of Barnett grade
junction Wilson by Cottonwood creek

Boysaid launch and from 76 + 50 to 700 camp

	2.6	238.6	-	236.0	
0			16	37.0	↑
+50			6.1	32.5	
1			10.6	28.0	
0			12.9	225.7	
	0.3	226.0			
+50			2.5	23.5	
2			7.0	19.0	
+50			11.5	14.5	0
0			13.0	213.0	
	0.6	213.6			
3			3.6	10.0	
+50			8.1	05.5	
4			12.6	01.0	↑
0			13.0	200.6	
	0.1	200.7			
+50			5.7	195.0	
5			11.7	89.0	
0			13.9	187.7	
	0.3	288.0			
+50			5.0	83.0	
6			8.9	80.0	
+50			11.0	77.0	
0			13.0	175.0	
	1.0	176.0			

42

Barnet road

		174.0		
7			5.0	171.0
+50			11.0	160.0
0			13.0	147.0
	0.2	143.2		
8			4.2	139.0
+50			10.2	128.8
0			13.2	115.6
	0.2	150.2		
9			3.2	112.4
+50			9.2	103.2
0 10			15.2	88.0
	0.5	137.5		
+50			8.5	79.5
+75			11.5	68.0
0			13.0	55.0
	1.7	126.2		
11			3.2	51.8
+50			9.2	42.6
0 12			10.2	32.4
	0.8	113.8		
+50			8.8	23.6
13			14.8	9.8
	0.7	101.7		
+50			5.7	4.1

43

Branch road

	101.7		
14		14.7	87.0
0		13.2	88.5
	0.2	88.7	
750		7.7	81.0
15		13.7	75.0
0		13.2	75.5
	0.2	75.7	
750		7.7	68.0
16		12.7	63.0

120

Change of Wilson creek road line from Page 12

			287.86	
	2.31	290.17		
20	+50		5.2	282.0
21			7.2	83.0
	+50		6.2	84.0
0			4.15	286.02
	11.20	297.22		
22			12.2	85.0
	+25		18.9	79.2
	+50		11.2	86.0
23			10.2	87.0
	+50		9.2	88.0
	+80		2.7	94.5
24			8.2	89.0
	+30		12.4	84.8
	+50		11.2	86.0
0			12.57	284.65
	5.91	290.56		
25			7.5	83.0
	+50		10.5	80.0
26			13.5	77.0
0			11.81	278.75
	4.95	283.70		
	+50		6.7	77.0
27			6.7	77.0

LEVEL

May 8th 1905

B.M. On Boulder 5' L 17+20

water way

cut 6.0

water way

	283.70		
28450		67	277.0
0		7.4	274.50
	11.22	285.78	
29450		8.8	277.0
195		15.4	70.2
30410		8.8	77.0
31		8.8	77.0
0		10.90	274.82
	2.28	277.05	
430		3.0	274.0
32425		7.5	69.5
450		19.0	58.0
175		10.5	66.5
33		12.0	65.0
0		12.75	264.10
	12.90	277.00	
35450		12.0	65.0
0		11.78	265.25
	12.12	277.37	
42		65.0	12.4
		11.79	265.58
	12.73	278.31	
43		13.3	65.0
425		19.3	59.0

LEVEL

LEVEL

LEVEL

LEVEL

LEVEL

water way

mining water

mining water

	278.31		
43 + 50		13.3	265.0
44		13.3	265.0
		12.45	265.86
0	1.35		267.21
+ 50		4.2	263.0
45		2.2	261.0
+ 50		8.2	259.0
46		10.2	257.0
0		12.72	254.49
	0.95		255.44
+ 50		0.4	255.0
0		3.74	251.70
	1.08		252.78
0		9.49	243.29
	4.79		248.08
47		1.49	243.0
+ 50		1.29	241.0
0		4.80	243.28
	7.20		250.48
48		1.5	249.0
+ 50		3.5	247.0
49		5.5	245.0
+ 50		6.5	244.0

---> LEVEL

4.0

See Page 16

= 48 + 55 of first line

Grade level Wilson Creek road from Page 29

	211.62		
115+20		15.0	196.6
+ 50		11.6	200.0
+ 90		4.2	207.4
116+10		11.6	200.0
0		12.85	198.77
	1028	209.05	
117+80		9.0	200.0
118		13.4	196.6
+ 20		9.0	200.0
0		10.69	198.36
	12.30	210.66	
120		107	200.0
0		12.82	197.84
	10.68	208.52	
123		8.5	200.0
B.M.		97.6	198.76

May 10th 1905

water way

foot of rock ledge

West side of Dam
B.M. on rock ledge Sta 223

1695.55 } On Rich east side Wilson Creek
 1895.55 } res. levels

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	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 2/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	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						
0		0		0		0	
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