

CITY OF SAN DIEGO

PRELIMINARY SURVEYS

LOWER OTAY DAM

1917
Time *
Book *
MONTHLY

W87

Index

Month of _____ 19

14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.	
																				Profile Creek Bottom at Dam Site	1-6
																				Check Levels	8-9
																				Topog. for New Camp Site	10-
																				X-sections for Yardage Estimate	
																				Dam Site	46-50
																				Levels for T.B.M's in Bottom	
																				of Canyon	51-52
																				Sketch for Location of Soundings	53
																				Bench Marks - lower stay	54

TIME BOOK

Month of _____ *19*

NAMES

1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total
Time.

Rate
per
Day

Amount.

June-9-1917

Bub - Level TIME BOOK

Weather - Fair - Warm

Groves - Rod

NAMES

	1	2	3	4	5	6	7	8	9	10	11	12	13
5/01										5/10			
-1+25					0.40					200.00			
-1+00						6.3				194.1			
0+00						4.0				196.4			
0+00						6.6				193.8			
1+00						4.4				196.0			
1+00						6.9				193.5			
2+00						4.8				195.6			
2+00						7.2				193.2			
FP.					1.10	197.86	3.64			196.76			
3+00						2.7				195.2			
3+00						4.8				193.1			
4+00						3.0				194.9			
4+00						5.0				192.9			
5+00						3.9				194.0			
5+00						5.3				192.6			
6+00						3.6				194.3			
6+00						5.5				192.4			
7+00						3.6				194.3			
7+00						5.6				192.3			
FP.					3.48	198.05	3.29			194.57			

Month of _____ 19

2

14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.

Assumed E/c 200.00 = Working E/c 25.93
 102 Nail on 6x6 Center Spillway Div Dam

Water Level Creek

Water Level Creek

W. Level

W. Level

Rock on Line 2+50 See Page = 22.69

196.76
 22.69
 174.07

W.L.

W.L.

W.L.

W.L.

W.L.

Top Sta 7

Profile Plotted
 June 9 1917
 H.R. Bub

TIME BOOK

Month of _____ 19

NAMES																											Total Time.	Rate per Day	Amount.								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				27	28	29	30	31			
5/1					-																																
8+00																																					
8+00																																					
8+60																																					
8+60																																					
9+00																																					
9+00																																					
10+00																																					
10+00																																					
11+00																																					
11+00																																					
11	3.01																																				
12+00																																					
12+00																																					
13+00																																					
13+00																																					
14+00																																					
14+00																																					
15+00																																					
15+00																																					

June 9

TIME BOOK

Month of _____ 19

4

NAMES																											Total Time.	Rate per Day	Amount.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				27	28	29	30	31
Sta + A1																																		
16+00																																		
16+00																																		
17+00																																		
17+00																																		
P. 282																																		
18+00																																		
18+00																																		
18+00																																		
19+00																																		
19+00																																		
19+00																																		
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20+00																																		
21+00																																		
21+00																																		
21+00																																		
21+00																																		
22+00																																		
P. 121																																		
22+00																																		
22+00																																		

June 9.

6

TIME BOOK

Month of _____ 19

NAMES																											Total Time.	Rate Per Day	Amount.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				27	28	29	30	31
Sta + H.I.				-					RT																									
31				4.5					164.5																									
3v				4.8					164.2																									
H. 193				4.20					164.81					Rock																				
33				3.8					162.9																									
34				6.3					160.4																									
35 ✓				8.2					158.5																									

Loc. Test Pits for Sand.

#1-375.86. TIME BOOK

BM. 371.30

Month of _____ 19

7/19/17
Dacey - Inst. 7

NAMES														Total Time.	Rate per Day	Amount.																		
	1	2	3	4	5	6	7	8	9	10	11	12	13				14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Dist. Horiz. Vert. Recd. D. R. etc etc																																		
Occur B.M.																																		
Sight #1. Az. Rt.																																		# 11
#1-630 - 8°47' 00																																		7.2 368.66
#2-455 - 4°48' 00																																		7.6 368.26
#3-360 - 359°33' 00																																		7.2 368.66
#4-225 - 9°27' 00																																		6.6 367.26
#5-																																		
#6-455 - 16°50' 00																																		7.7 368.16

June 12 1917.
H.R. Bub - Inst.
Chewing Road

Levels to Reservoir
above Camp
Site

TIME BOOK

Month of _____ 19

8

NAMES																									Total Time.	Rate per Day	Amount.			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27
B.M. 923	156.94											147.71	→ Working Elev = 494.879																	
P. 820	165.01	0.13									156.81	Rock NW Cor Concrete Basis of Tool House																		
P. 965	174.31	0.35									164.66	Peg																		
P. 972	184.03	0.00									174.31	Rock E Side Road																		
P. 977	193.23	0.57									183.46	Peg E " "																		
P. 967	202.70	0.20									193.03	" Base of Sycamore																		
P. 925	211.82	0.13									202.57	Peg																		
P. 975	221.55	0.02									211.80	Peg																		
P.		0.38									221.17	Rock at Water Tank																		
		1.59									2199.6	Bottom gauge Water Tank																		
871	229.88										221.17	Rock																		
B.M. ✓		577									224.11	Sea Level Elev = 571.28'																		
		0.31									229.57	Bolt in Sycamore Tree at Water Tank.																		
P. 005	222.08	7.85									222.03	Peg under Fence																		
P. 024	212.54	9.78									2133.0	Rock																		
P. 017	203.55	9.16									2033.8	Peg on bank																		
P. 046	195.04	8.97									194.58	Peg at Gate																		
B.M.		349									191.55	Sea Level Elev = 538.72'																		
P. 250	190.23	7.31									187.73	Bolt in Syc Tree West Side Gate to Barn																		
P. 119	181.62	9.80									180.43	Rock E Side Road																		
P. 018	172.20	9.60									172.03	Peg - Witness below turn in Road																		
P. 361	166.85	8.96									163.24	Rock																		

TIME BOOK

Month of _____ 19

9

NAMES																											Total Time.	Rate per Day	Amount.						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				27	28	29	30	31	
Sta +					-																														
B.M.					3.48																														

2/1
166.85

File

✓

Nail NW Cor Barn Cor File - 510.69
163.52

June 12 Topog for Camp site
 Bub Inst.
 Channing Rod

TIME BOOK

Month of _____ 19

STATION	DIST	AZ	VERT	COR	DIST	Elev	COR	DIST	Elev	Month of _____ 19												Total Time.	Rate per Day	Amount.						
										1	2	3	4	5	6	7	8	9	10	11	12				13	14	15	16	17	18
Sta	Dist	AZ	Vert	L	Rod	Cor Dist	Elev	Cor	Dist	Elev															Diff Elev					
H.S. = 45	(546.40) (497.23)				At SW. Cor New Cook H.	541.90																								
					Sight Water T for 0.92 Pt.																									
150	43° 05'	+4°			45	149	552.3	Face Cor	+ Power Line Pole																+ 10.4					
63	53° 0'	00			60	63	540.4	F Cor	at Gate																					
65	73° 0'	00			93	65	5371	F Cor	" "																					
20	61° 15'	00			54	20	541.0	F Cor	NE Chicken Yard																					
85	163° 30'	-5° 0'			45	84	5375	F Cor																	- 7.4					
75	173° 05'	-5° 0'			45	74	5354	NE Cor	84 x 44 Gas Gen Bldg.																- 6.5					
90	179° 20'	-4° 0'			45	89	5356	F Cor	+ NE Cor Toilet 5 x 44																- 6.3					
170	179° 50'	-2° 15'			45	170	5352	F Cor																	- 6.7					
211	185°	-1° 30'			45	215	5363	SE Cor	office Bldg.																- 5.6					
142	187° 20'	-2° 30'			45	142	5357	SE Cor	Crawalls Cottage 16 x 36 + 10' porch																- 6.2					
83	199° 0'	-3° 30'			45	83	5368	" "	Green House 12' x 20' - 20' facing line																- 5.1					
120	208° 25'	-3° 5'			45	120	5346	SW "	Tant House 12 x 14 joining 14.6 x 10 - 12' facing																- 7.3					
70	223°	00			74	70	539.0	SE Cor	Store House 12.6 face x 29.6																					
75	196° 50'	00			73	75	537.1		Pepper Tree																					
194	250° 10'	-5° 30'			45	192	523.4	" "	9 foot between																- 18.5					
72	115° 15'	-9° 0'			45	70	530.8	W. Cor	House 6 x 8.6 - 6' face, also Cor F. Path Ways																- 11.1					
89	107° 0'	-9° 30'			45	87	527.4	NE Cor	Hen H. 12 x 12																- 14.5					
105	118° 30'	-8° 15'			45	102	527.0	NE Cor	" 4 6 x 7.4 - 7.6 face																- 14.9					
130	78° 05'	-5° 05'			45	128	529.3	SE Cor	Chicken Yard F. Cor																- 12.6					

TIME BOOK

Month of _____ 19

11

NAMES		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.
5 1/2	Dist AZ	Vert																																	
	(546.40)																																		
41.45	(14443)	At SW. Cor. N. Carth.																																	
42'	142°15'	-9°45'	4.5	41	534.9	-70	E. Cor. Div. of Chicken yard.																												
90'	146°50'	-6°45'	4.5	89	531.4	-105	Euc. Tree																												
62'	105°	-7°15'	4.5	60	532.1	-98	" "																												
60'	80°5'	-8.0	4.5	59	533.3	-86	" "																												
62'	68°10'	-3°20'	4.5	62	538.3	-36	" "																												
75'	50°30'	00	3.0	75	543.4		" "																				✓								
88'	44°0'	00	0.0	88	546.4		" "																				✓								
95'	33°0'	+5.0	4.5	94	550.1	+82	" "																				✓								
92'	27°10'	+6.0	4.5	91	551.4	+9.5	" "																				✓								
75'	22°35'	+7°15'	4.5	74	551.3	+9.4	" "																				✓								
79'	17°10'	+7°30'	4.5	78	552.1	+10.8	" "																				✓								
63'	353°15'	+8°30'	4.5	62	551.1	+9.1	" "																				✓								
63'	343°30'	+7°45'	4.5	62	550.3	+8.4	" "																				✓								
63'	333°0'	+7°0'	4.5	62	549.5	+7.6	" "																				✓								
85'	295°30'	00	5.5	85	540.9	-	" "																				✓								
103'	289°0'	00	2.7	103	538.7	-	" "																				✓								
150'	294°0'	-3°0'	4.5	150	534.1	-7.8	" "																				✓								
142'	358°10'	+9°50'	4.5	138	565.7	+23.8	Water Tank Center 8' Dia																												
165'	1°45'	+10°15'	4.5	160	574.1	+32.2	Euc. Tree																				✓								
120'	6°20'	+9°30'	4.5	117	561.4	+19.5	Pepper Tree																				✓								
100'	10°10'	+8°25'	4.5	98	556.3	+14.4	Euc. Tree																				✓								

Dist

Dist

Planted here

June 17 1917

June 18-1917
 Sub-Instr
 Chewing - Rod

Topog for. Map # 2

TIME BOOK

196.58 = 541.75
 4.65
 197.23 546.40 12

Month of _____ 19

NAMES																Total Time.	Rate per Day	Amount.												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				16	17	18	19	20	21	22	23	24	25	26	27
Sta Dist Co Dist Az Vert L R Diff Elev																														
H. 4.5 (546.4) Occupy SW Cor New Cook House																541.9														
#1 48 48 180° 00 85																537.9		Hub - 2nd spike = 1												
A 62 61 00 +7° 55' 45 + 84																550.3		Hub A												
B 275 265 00 +11° 00' 45 + 514																593.3		Hub B												
C 272 272 180° 00 98																536.6		Hub at E. Cor. =												
H. 48 542.7 Occupy Nail # 1 Sight C																537.9														
#2 39 39 278° 00 285																539.8		Nail # 2 Road												
H. 47 544.5 Occupy Nail # 2 Sight # 1																539.8														
60 60 190° 30 00 95																535.0		Junction Road												
125 123 175° 0' - 6° 15' 47 - 135																526.3		Road												
170 168 167° 10' - 6° 11' 47 - 182																521.6		"												
215 212 167° 20' - 6° 44' 47 - 250																514.8		Lower Road Junction 60' to left												
170 169 197° 0' - 5° 15' 47 - 154																524.4		Road												
270 267 194° 30' - 5° 43' 47 - 267																513.1		Junction Road												
440 437 194° 30' - 4° 55' 47 - 375																502.8		Road												
#3 617 612 194° 31' - 4° 0' 47 - 429																496.9		# 3												

Placed June 18 1917

TIME BOOK

Month of _____ 19

NAMES																									Total Time.	Rate per Day	Amount.		
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	24	25				26	27
H1 = 4.7 (H1 501.66) ^(P) Sight 2 for OAZ RT occupy Nail #3																									496.96				
363' 360' 4°45' +1°53'	4.7												41.9												508.9			Fence Cor.	
250' 250' 6°50' +2°	4.7												48.7												505.7			Tele. Pole	
170' 170' 13°0' +2°	4.7												45.9												502.9			Power Pole	
51' 51' 40°30' 00	4.8																								496.9			NAB Cor 12'x14'	
55' 55' 64°05' 00	6.1																								495.6			Fence Cor.	
140' 140' 230°25' 00	7.4																								497.3			Road	
#4 345' 345' 231°22' -2°25'	4.7												14.5												482.5			Nail = 44 at 211A Dam.	
41' 41' 176°10' 00	6.78																								494.88			3M NW End Core Basin 40x30. Elev 494.877	
47' 47' 346°15' 00	4.4																								497.3			Edge Road	
107' 106' 326°30' +6°45'	4.7												42.5												509.5			Bottom Bank	
128' 122' 322°10' +12°	4.7												26.0												523.0			Tele. Pole	
240' 223' 317°40' +15°20'	4.7												6.0												558.0				
415' 385' 312°35' +15°20'	4.7												106.9												603.0				
310' 306' 352°5' +6°40'	4.7												35.6												532.6			Top Bank	
300' 300' 358° +2°30'	4.7												13.0												510.0			Bot. Bank. Fake Pol	
250' 246' 105°30' -7°44'	4.7												31.7												465.8			Power Pole	
H1 = 4.8 (487.3) ^(P) Sight #3 for OAZ RT occupy #4																									482.5				
A00 @ 113' 111' 328°0' +7°30'	4.8												14.6												497.1			A' on Core Wall	
92' 92' 343° 00 00	0.0												0.0												487.3			Road	

210' Total
June 1917

TIME BOOK

Month of _____ 19

14

NAMES													Total Time.	Rate per Day	Amount.	
	1	2	3	4	5	6	7	8	9	10	11	12				
H.I. = 48 (487.3)	Sight # 3 for 0 Az RT.															
	occupy # 4												482.5			
20' 20'	278° 45' 00' 48												482.5		Latitude Line	
H.I. = 44	Sight # 4 for Zero Az RT															
	occupy A on Axis															
	359° 37'														A' East End Dam - Tie	
H.I. = 45 (597.8)	Sight S.V. Cor Cook House A.O.															
	occupy Hub B												593.3			
47' 47'	00° -10° 45' 45' -10.3												583.0		Fence	
40' 40'	36° 00' -12.0												584.8		1st Power Line	
125' 123'	61° 5' -7° 45' -15.1												598.4			
212' 209'	65° 35' -5.32												100 -25.8	567.6		Power Pole
170' 170'	84° 00' 13.0												584.8			
170' 170'	113° +2° 47' 45' +2.1												601.4			
203' 203'	140° 30' +2° 48' 10.0												597.4			
155' 151'	171° 5' +7° 25' 45' +2.5												618.3			
83' 80'	171° 30' +10° 45' 45' +15.2												608.5			
205' 202'	222° +7° 43' 45' +27.2												622.5			
200' 200'	248° -1° 40' 45' +5.8												599.1			
242' 241'	272° 30' -3° 40' 45' -15.4												577.9			
H.D. 271' 277'	267° 45' -3° 15' 45' -15.8												577.5			

Plotted

TIME BOOK

Month of _____ 19

15

NAMES																							Total Time.	Rate per Day	Amount.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	24	25	26	27
H. = 47 (582.2)	Sight "B" for 0 Az. Pt.																													
	Occupy "D"																						577.5							
90	90	330°	00	72												525.0														
142	138	296°20'	-9°35'	47	-23.3												554.2		Fence Line											
105	100	260°	-12°20'	47	-22.0												553.5		" "											
130	123	216°30'	-13°45'	47	-30.0												547.5		" "											
175	165	199°10'	-13°30'	47	-39.7												537.8		" Corner											
235	223	186°	-12°35'	47	-49.5												528.3		" Line											
145	141	164°45'	-9°47'	47	-24.2												553.3													
135	135	137°	-2°	47	-4.7												572.8													
142	141	112°15'	+4°30'	47	+11.1												588.6													
180	179	84°10'	+11°35'	47	+35.5												612.0													
B E	265	251	250°27'	-13°20'	47	-59.3												518.2		Sub E										
H. H. (5223)	Sight D for zero Az. Pt.																						518.4							
	Occupy E																													
65	61	00	+13°30'	45	+14.7												532.9		Road											
140	138	308°	+6°45'	41	+16.3												534.5		"											
194	193	300°10'	+4°38'	41	+15.6												533.8		"											
250	250	294°10'	+2°50'	41	+16.6												534.8		"											
245	245	274°45'	00	21												520.2		Chicken Fence												
220	220	274	00	65												515.8														
175	174	273°30'	-4°35'	41	-13.9												504.3		Sancho Draw											
190	190	283°	00	10.5												511.8		Both Draw												

Plotted

TIME BOOK

Month of _____ 19

16

NAMES																									Total Time.	Rate per Day	Amount.		
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	24	25				26	27
H.I. = 41 (527.3)	Sight D. OCCUPY E												518.7																
158 154	250°15'		-9°		41		-24.4		493.8		Power Pole																		
148 142	249°15'		-11°45'		41		-29.5		488.5		Bot Draw																		
128 143	229°30'		-11°55'		41		-25.8		492.4		" "																		
125 111	204°		-19°30'		100		-45.7		473.0		" "																		
150 134	183°		-20°20'		100		-54.8		463.4		" "																		
170 148	171°		-21°04'		41		-57.0		461.2		" "																		
220 184	161°30'		-20°		41		-70.5		447.1		" "																		
257 230	161°05'		-18°40'		41		-77.8		440.4		Junction of Draws																		
315 290	160°30'		-16°30'		41		-85.8		432.4		Bot Draw																		
190 167	154°30'		-20°55'		41		-61.2		457.0																				
150 139	140°50'		-15°46'		100		-44.9		473.3																				
110 104	134°		-15°35'		100		-34.4		483.8																				
75 94	117°20'		-10°50'		41		-13.5		504.4																				
54 54	73°		+3°5'		41		+22.9		521.1																				
90 89	57°5'		+5°40'		41		+8.8		527.0																				
DF 78 78	84°42'		00		663		(515.7)		67.516.3		Correct Elev 527.6 Turning Point on Check L. line 527.60																		
53 46	206°5'		-21°30'		41		-18.1		500.1																				
87 84	281°30'		00		54				516.9																				

Staked

June - 21 - 1917
 Bub - Inst.
 Groves - Rod
 Chewing - "

TIME BOOK

Be on 447. Contour - 517 am
 1917 North of San. draw A. 17
 Month of _____ 19

NAMES																							Total Time.	Rate per Day	Amount.				
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23				24	25	26	27
H1 = 49.1501.71	Sight Nail # 2																												
	Occupy # Nail # 3																						49.69						
170 170	242° 45'			+2° 10'			48	+6.4			5033																		
160 158	264°			+9°			48	+24.7			5216																		
200 191	254°			+11° 53'			48	+40.4			5373																		
#5 380 355	302° 16'			+14° 55'			48	+94.3			5912																		
H1 = 4.4	Sight Nail # 5																												
595.6	Occupy # 5 hub																						5912						
100 95	184° 40'			+12° 22'				+21.0			6125																		
80	123° 20'			00			55				5901																		
95 93	92° 45'			-8° 30'			44	-13.9			5773																		
125 119	74° 30'			-12° 42'			44	-28.9			5643																		
168 158	67° 40'			-12° 25'			100	-40.4			5400																		
164 159	88° 30'			-9° 0'			100	-36.9			5603																		
130 130	108° 15'			-3° 49'			100	-14.4			5770																		
140 140	132° 10'			+1° 57'			100	-0.9			5903																		
160 155	159° 0'			+9° 10'			130	+16.6			6078																		
295 288	157° 15'			+8° 35'			44	+43.5			6247																		
285 285	139° 30'			+5° 44'			44	+28.4			6124																		
283 283	126° 45'			+1° 37'			44	+8.1			5903																		
235 235	112° 20'			-3°			44	-12.3			5789																		
228 226	101° 15'			-5° 30'			44	-21.7			5675																		
250 242	88° 45'			-9° 55'			44	-42.4			5468																		

17 = 5

Red
 10

Draw

Red
 "

Plotted
 June 22. 1917

H.I. = 44 (5956)

Sight # 3

5912

18

TIME BOOK

Month of _____ 19

NAMES																							Total Time.	Rate per Day	Amount.																
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23				24	25	26	27	28	29	30	31								
#6 215' 13/105° 30'	-4° 4'	44						-55.2	5760																																
(5804) Sight # 5 H.I. = 44 Occupy # 6									5760																																
192' 18/50° 30'	-11°	44	-35.9						5401																																
248' 23/60° 10'	-12° 04'	44	-50.8						5252																																
305' 28/70° 35'	-13° 50'	44	-71.9						5850																															Tele Pole	
265' 23/82° 35'	-18° 18'	44	-79.0						4970																															Draw	
180' 16/88°	-19° 30'	44	-56.6						5194																															"	
110' 9/67°	-18° 25'	44	-32.8						5430																															"	
90' 7/124° 20'	-20° 54'	44	+30.9						5460																															Ridge	
165' 14/124° 05'	-19° 28'	44	-51.5						5245																															Edge of Cliff	
#7 213' 2/209° 14'	00	46							575.8																															H	
(5803) H.I. = 45																																									
Occupy # 7 Sight # 6									5758																																
110' 0/300° 45'	+18° 10'	45	+32.5						6083																																
70' 00	00	42							5761																																
102' 9/390° 45'	-14°	44	-23.9						5519																																
133' 11/59° 30'	-19° 23'	45	-41.5						5843																															Edge cliff	
95' 7/114° 45'	-29° 08'	45	-40.4						5854																															"	
25' 2/189°	00	45							5758																																

~~2/21/00~~

(580.3)

occupy #7 Sght #6

TIME BOOK

5758

Month of

19

19

H.I. = 45

NAMES

1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total Time.

Rate per Day

Amount.

128' 12 1/2	232° 30'	+10° 30'	45	+22.9	5987
115'	197° 30'	00	109		570.3
135' 12 1/2	177° 45'	-13° 38'	45	-38.5	545.3
210' 18 1/2	169°	-18° 12'	70	-67.5	588.3
198' 19 1/2	180° 45'	-7° 35'	10	-31.3	544.5

~~Plotted June 22, 17~~

Sght 6 for 0 A2 Pt.

H.I. 45 (520.81)	occupy R.F.				516.3
72' 6 1/2	104°	+12° 5'	45	+48	531.1
28' 28	158° 45'	00	49		515.9
70' 6 1/2	214° 30'	-20° 20'	45	-22.7	493.6
148' 13 1/2	215° 10'	-19°	45	-45.5	470.5
158' 13 1/2	240° 30'	-20° 43'	45	-52.2	464
110' 10 1/2	172° 10'	-10°	45	-18.8	497.5
155' 15 1/2	185° 40'	+3° 45'	45	+10.1	526.4
325' 32 1/2	140° 20'	+2°	45	+11.3	527.3
282' 28 1/2	152° 10'	00	45		516.3
240' 23 1/2	178° 5'	-38'	45	-13.2	503.1
263' 24 1/2	281° 45'	-15° 10'	45	-16.2	450.1
300' 29 1/2	290°	-9° 30'	45	-48.7	467.6
325' 32 1/2	299° 22'	-6° 47'	45	-38.5	477.8

Road

Junction Br 45

Bot Drain

" "

Road

Fence Cor.

Road Drain

River Side

~~Q 10 100~~

TIME BOOK

Month of _____ 19

20

NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.
Sight A E H.I. = 45 (5208) Occupy A E																																		
340 337 310°10' -5°15'					45		-31.9																											
390 399 324°20' 00					8.7																													
350 350 341° 00					44																													
179. 537' 537' 313°9' -1°10'					45		-10.9																											
Sight A G H.I. = 46 5100 Occupy A G																																		
120 130 329°15' +3°43'					46		+7.8																											
170 167 272°30' +7°30'					46		+7.0																											
155 148 89°35' -12°10'					46		-3.0																											
365 352 80° -11°11'					46		-6.6																											
365 348 108°15' -12°12'					46		-7.5																											
320 306 129°25' -12°05'					46		-6.5																											
235 227 148°40' -11°40'					46		-4.6																											
212 206 162°05' -9°22'					46		-3.4																											
171 171 183°57' -3°58'					46		-4.9																											
90 90 182°10' 00					10																													
(4981) Sight S H.I. = 46 Occupy A H																																		
73 73 202°5' 00					8.5																													
245 231 132°40' -14°					46		-5.4																											

F. Cor Rents S.W. cor Chicken Yard
A-G

F. Cor.

Power Pole
Board
Point Ridge
Road

A H
F. Cor.

F. Cor.

Plotted

41 = 46
 (498.1) *Occupy H Sight G.*
TIME BOOK

493.5

Month of _____ 19

21

NAMES																									Total Time.	Rate per Day	Amount.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27	28	29	30	31
220' 21 ^v 144° 50'																																		
208' 20 ^s 163°																																		
197' 19 ^s 178° 30'																																		
220' 22 ^o 196° 40'																																		
210' 21 ^o 208° 25'																																		
280' 28 ^o 212° 51'																																		
420' 41 ^o 191° 30'																																		
382' 38 ^v 183° 45'																																		
355' 35 ^s 174° 30'																																		
350' 35 ^o 162° 40'																																		
355' 35 ^v 148° 55'																																		
432' 42 ^v 141°																																		
460' 43 ^o 105° 20'																																		
115' 11 ^v 294°																																		
178' 17 ^v 240°																																		
257' 25 ^v 260° 55'																																		
① 463' 46 ^v 220° 24'																																		
4145 (5260) Sight H, Occupy Hub I																																		
250' 24 ^v 26° 50'																																		

F CN
 Center Road at Gate
 Fence Line

Fence Line
 SE Cor Filter Plant

Telo Pole

Hub I

3x3 Post Marked 500

Planted

H1=45

Occupancy I

22

TIME BOOK

Month of _____ 19

(5260)

5215

NAMES													Total Time.	Rate per Day	Amount.
	1	2	3	4	5	6	7	8	9	10	11	12			
52' 57 25°45'	00			6.4									519.6		
97' 96 94°30'			46°10'	4.5		10.4							531.9		
175' 127 110°15'			46°48'	4.5		12.0							542.1		
250' 247 116°00'			46°30'	4.5		12.78							549.3	SE Cor 1st House on South	
310' 306 137°00'			46°00'	10.0		12.67							548.2	SE " Mess "	
203' 202 159°00'			43°54'	4.5		13.8							535.3	Tala Pole - Line to Office	
330' 330 174°30'			41°47'	4.5		10.3							531.8	Road	
375' 375 185°40'			41°10'	10.0		12.1							523.6		
308' 308 199°27'			-1°30'	4.5		-8.2							513.3	Tala Pole Tie to Office	
76' 74 282°25'			-9°50'	4.5		-12.8							508.7	Fence Corner	
70' 68 285°47'			-8°40'	4.5		-10.4							511.1	Lin-Tala Line	
92' 90 312°00'			-7°30'	4.5		-11.9							509.6	Junction Main Road + Lower Road	
140' 138 303°00'			-5°15'	4.5		-17.7							508.8	S.W. Cor Stone House 25 x 40	
260' 260 297°15'			-1°15'	10.0		-11.2							510.3	F. Cr.	
463' 463 294°42'			-0°10'	4.5		-3.4							518.1	F. Cr.	
400' 400 297°10'			00	6.3									519.7	Good Road	
310' 310 301°45'			00	7.7									518.3	" "	
350' 350 322°35'			41°33'	4.5		11.5							531.0	Tala Pole	
300' 300 315°00'			00	2.6									523.4		
194' 194 315°50'			-2°30'	4.5		-8.4							513.1	Tala Pole	
360' 358 88°25'			+3°45'	16.0		11.5							533.0	F. Cr. 100' At 91.12' Higher = Crown Hill	
													546.0		

June 23 '17

23

Bob Inst.
Chewing Rod

TIME BOOK

Month of _____ 19

NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.
(501.6) Sight Nail #2																																		
H.I. - 47 Occupy Nail #3																																		4969
330 375 100° 47' - 7° 43'																																		4532
(457.6) Sight Nail #3																																		
H.I. - 44 Occupy Nail #8																																		4532
437' 435) 224° - 3° 32'																																		4277
BM. 263 263 233° 10' - 2° 45'																																		4106
312 310 222° 50' - 3° 15'																																		4356
347 345 216° 45' - 4° 0'																																		4200
378 375 211° - 5° 15'																																		4187
440' 434 203° 30' - 7° 30'																																		3964
470' 460 201° 30' - 8° 0'																																		3884
430' 420 186° 15' - 8° 10'																																		3930
343' 334 190° 30' - 9° 0'																																		4002
272' 265 194° 5' - 9° 35'																																		4002
175' 171 207° - 8° 47'																																		4268
110 251° 00																																		4476
60' 59 511° + 5° 50'																																		4600
135' 130 185° 20' - 10° 42'																																		4285
200 192 181° 45' - 11° 15'																																		4150
275' 267 181° 35' - 9° 50'																																		4075
380 370 180° - 9° 53'																																		3892

N # 8.

N Point in Rock #9

B.M. Nail in Taka Pole

Point

Point Ridge

Road

Bottom Draw

"

"

Road

"

"

Point Ridge

"

"

Point Ridge

2/10/10
June 25 '17

Sight No. 1 = 3
Occupy Hub #8

24

41=44 (4576)

TIME BOOK

453 ✓

Month of _____ 19

NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.		
435' 475' 175° -8°0'	✓	✓	✓	✓		✓	-600	3935																												
368' 360' 173° 30' -8° 40'	✓	✓	✓	✓		✓	-549	3983																												
325' 316' 173° 10' -9° 40'	✓	✓	✓	✓		✓	-538	3994																												
235' 227' 161° 0' -11° 0'	✓	✓	✓	✓		✓	-440	4092																												
130' 122' 157° 10' -13° 30'	✓	✓	✓	✓		✓	-295	4237																												
80' 76' 99° 20' -14° 0'	✓	✓	✓	✓		✓	-188	4334																												
140' 139' 63° 30' -3° 35'	✓	✓	✓	✓		✓	-88	4434																												
228' 228' 42° 10' +12° 40'	✓	✓	✓	✓		✓	+66	4598																												
310' 309' 40° 15' +3° 35'	✓	✓	✓	✓		✓	+93	4725																												
310' 308' 2° 35' +4° 20'	✓	✓	✓	✓		✓	+234	4766																												
250' 250' 83° 30' +10° 30'	✓	✓	✓	✓		✓	+65	4597																												
185' 185' 96° 30' 00	✓	✓	✓	✓		✓	73	4503																												
195' 194' 112° 16' -3° 35'	✓	✓	✓	✓		✓	-122	4410																												
230' 227' 137° 15' -7° 10'	✓	✓	✓	✓		✓	-284	4248																												
260' 255' 148° 50' -8° 5'	✓	✓	✓	✓		✓	-367	4170																												
315' 310' 154° 3' -7° 40'	✓	✓	✓	✓		✓	-415	4117																												
335' 330' 164° 15' -7° 45'	✓	✓	✓	✓		✓	-447	4085																												
410' 404' 161° 05' -7° 40'	✓	✓	✓	✓		✓	-597	3935																												
400' 394' 147° -7° 10'	✓	✓	✓	✓		✓	-575	3957																												
322' 317' 141° 40' -7°	✓	✓	✓	✓		✓	-388	4144																												
295' 283' 127° 40' -6°	✓	✓	✓	✓		✓	-296	4236																												

~~Plotted~~
June 28, 1917

June 23 '17

Occupy Hub #8

H=44 4576

TIME BOOK

453.2

Month of _____ 19

25

NAMES																									Total Time.	Rate per Day	Amount.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27	28	29	30	31
385' 38' 130° 40' - 6° 30'						44																												
433' 430' 129° 5' - 4° 58'						44																												
377' 374' 114° 45' - 5° 0'						44																												
374' 374' 102° 10' - 2° 5'						44																												
355' 355' 86° 10' + 30'						44																												
390' 390' 76° 15' + 3° 0'						44																												
430' 418' 69° 20' + 4° 37'						44																												
550' 440' 164° 45' - 4° 5'						44																												

Draw

Stand Pipe 18' to Bottom

Draw

"

"

"

"

5 #10

Partial of June 25-17.

5967 23
Occupy Nail #4

27

H1=48 (487.3) TIME BOOK

4825

Month of _____ 19

NAMES													Total Time.	Rate per Day	Amount.	
	1	2	3	4	5	6	7	8	9	10	11	12				
578' 490	93° 15'	-13° 45'	48	-120' 30"												
450' 415	100° 40'	-16° 5'	48	-119' 50"	Top Slope											
410' 372	110° 40'	-17° 40'	48	-118' 50"	" " East End Sheet Piling											
400' 359	117° 35'	-18° 40±	48	-121' 30"	" " West side Draw											
517' 512	139° 26'	-5° 0'	48	-447' 4378	" " East " "											
					— # 11 —											
H1=48 (496) Occupy Nail # 11																
125' 84	87°	-34° 50'	48	-58' 51" 113	West side Bot. Draw											
135' 108	139° 45'	-26° 40'	48	-51' 38" 88	Top Slope v.v.s Bot. Draw											
183' 168	158° 30'	-16° 35'	48	-56' 38" 88	" " " "											
245' 237	159° 10'	-10° 30'	48	-43' 39" 80	" " " "											
308' 302	168° 40'	-7° 50'	48	-41' 6" 39 2	" " " "											
383' 380	167° 10'	-5° 45'	48	-38' 2" 49 6	" " " "											
460' 458	162° 10'	-3° 40'	48	-29' 4" 60 8	PT Ridge											
330' 328	161° 18'	-3° 0'	48	-19' 2" 62 6	PT Ridge											
355' 355	155° 45'	00	12	414	" "											
377' 377	151° 45'	+2° 85'	48	+17' 45" 43	" "											
220' 219	132° 30'	+3° 12'	48	+12' 3" 45 1	Draw											
220' 220	139° 40'	00	45	436 1	" "											
215' 213	146° 35'	-5° 13'	48	-19' 4" 41 8	" "											

Plotted
June 26 1917

Occupy # 11

H1=48 (44+6)

TIME BOOK

437.8

Month of _____ 19

NAMES																									Total Time.	Rate per Day	Amount.											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27	28	29	30	31				
142' 140' 127° 25' - 6° 30'																																48	-13.9	4219	Pt Ridge			
155' 154' 124° 0' - 3° 50'																																48	-10.4	4274	" "			
170' 170' 120° 50' + 2° 30'																																48	+7.4	4434	" "			
245' 245' 82° - 2° 48'																																48	-3.4	4384	" "			
245' 242' 66° 10' - 6° 37'																																48	-2.8	4098	" "			
263' 254' 55° 55' - 10° 27'																																48	-46.8	3910	Pt Ridge			
275' 262' 49° 15' - 12° 33'																																48	-58.5	3793	" "			
398' 385' 31° 26' - 10° 0'																																48	-68.0	3881	BM (2422)	=	371.30	
452' 440' 37° 11' - 9° 33'																																48	-71.0	3668	Top Slope West End Sheet Piling			
900' 900' 74° 01' - 2° 30'																																48	-36.5	401.3	# 12			
Sight # 11																																						
H1=46 3760	Occupy BM																																					
180' 178' 311° 30' + 6° 0'																																46	+18.7	3901	Ridge			
205' 196' 313° 15' + 7° 4'																																46	+2.5	3964	" "			
283' 270' 316° 50' + 12° 31'																																46	+6.0	4314	" "			
285' 273' 307° 25' + 11° 37'																																46	+5.6	4274	" "			
208' 206' 306° + 6° 18'																																46	+22.7	3941	Draw			
205' 204' 300° 10' + 3° 31'																																46	+12.6	3840	" "			
250' 228' 288° + 4° 12'																																46	+16.8	3884	Pt Ridge			
285' 277' 296° + 9° 18'																																46	+45.2	4168	" "			
335' 321' 300° 45' + 10° 56'																																46	+67.8	4392	" "			

Plotted June 1917

Sight # 11

Occupy B.M.

Hl = 46 (376.0)

TIME BOOK

3714

Month of _____

19

29

NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount
360' 346 293°15' +10°30'						46	+62.3																											
287' 283 290°15' +7°20'						46	+36.5																											
270' 268 283°10' +4°0'						46	+18.8																											
300' 292 270°55' +5°0'						46	+26																											
367' 257 285°10' +9°20'						46	+58.6																											
415' 402 289°20' +10°10'						46	+72																											
Hl = 43 (405.6) Sight # 11 Occupy # 12																																		
365' 262 301°15' -5°20'						43	-35.7																											
395' 395 355°10' -15'						43	-1.7																											
420' 418 350° +3°15'						43	+23.7																											
460' 456 343°45' +5°30'						43	+44																											
420' 417 337°45' +5°30'						43	+10																											
395' 383 342°40' +3°53'						43	+26																											
368' 368 347°15' +2°25'						43	+15.5																											
350' 350 350°30' +1°0'						43	+6.1																											
350' 350 354°20' -1°25'						43	-8.7																											
320' 316 358°30' -6°0'						43	-33.2																											
290' 287 347°5' -6°35'						43	-33																											
315' 315 343°30' -2°0'						43	-11																											
262' 258 334°40' -7°20'						43	-33.2																											

Draw

"

"

Rd Ridge

" "

" "

Too Slope Draw

Draw

"

"

Rdg

"

"

Rd

"

Too Slope

" " Draw

S. No Hill

Too Slope Rd

Plotted June 26 1917

Sight #1
Occur #12

30

41-43 (4056)

TIME BOOK

4013

Month of _____ 19

NAMES																									Total Time.	Rate per Day	Amount.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27	28	29	30	31
305' 305 337° -1°5'																																		
355' 353 330° +3°30'																																		
405' 402 330°10 +5°47'																																		
438' 435 317°35' +5°40'																																		
435' 433 340°50 +4°25'																																		
415' 415 308° +2°35'																																		
390' 390 301°5' +0°10'																																		
363' 363 292°15' -1°55'																																		
355' 355 279°45' -2°50'																																		
252' 249 267°25' -5°40'																																		
350' 347 236°10' -5°																																		
210' 207 289°30' -6°																																		
185' 179 290° -10°45'																																		
183' 176 16°45' -10°50'																																		
120' 110 8° -16°30'																																		
88' 15 336°15' -23°																																		
85' 69 310° -25°30'																																		
55' 47 318°20' -28°15'																																		
70' 64 242°50 -16°30'																																		
30 30 277°45 00 3'																																		
25' 272°30' 00 84																																		
10 00 00 6.0																																		

E End Dams
Edge Creek
Top ledge
Toe Slope
" "
" "
" "
" "
R.M.
W END DAMS
Top Vert. Cliff
1 Steps

Plotted
June 26 1917

Etc - 377.67

Sight #11
Occupy #12
TIME BOOK

H1 = 43 (405.6)

4013

Month of _____ 19

31

NAMES																									Total Time.	Rate per Day	Amount.							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27	28	29	30	31
50' 54 54° 00'																																4034		Top Slope
100' 100 49° 30' 00'																																4034		"
180' 160 35° 00'																																4054		Point Ridge
135' 134 30° 20' -40'																																3914		Draw
65' 61 27° -14° 30'																																3855		"
55' 55 110° 15' +5° 45'																																4365		Flat
Sight #8 Ar 092 RA																																		
H1 = 48 (4325) Occupy #9 4277																																		
95' 91 204° 30' -6° 10'																																4173		Top Slope
48' 47 206° 45' -9° 37'																																4198		Power Pole
35' 33 145° 30' -14° 05'																																4194		Top Slope
60' 60 54° -4°																																4225		" "
B.M. 180' 346° 25' +4° 05'																																4405		B.M. Nail in Tele Pole 44081
135' 126 92° 30' -15°																																3939		Road
170' 136 92° 45' -15° 30'																																3840		B.H. Crk
155' 136 135° 15' -20°																																3780		" "
112' 97 135° -21° 20'																																3897		Road
133' 117 166° -20° 7'																																3847		"
170' 157 163° -19°																																3755		B.H. Crk
250' 237 192° 50' -13° 51'																																3727		Road
230' 215 182° 20' -14° 40'																																3719		B.H. Crk

Plotted
June 26 1917

Sight #f.
Occupancy #9
TIME BOOK

H1-48 (4325)

4277

Month of _____ 19

32

NAMES																							Total Time.	Rate per Day	Amount.								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	24	25	26	27	28	29	30
180' 172 146°45' -12°0'																																	
210' 205 142° -8°0'																																	
205' 198 104°45' -10°30'																																	
#13 360' 135°35' -2°15'																																	
450' AAA 108°15' -3°0'																																	
403' 403 110°30' -3°5'																																	
365' 363 110°30' -3°0'																																	
335' 336 121°15' -2°12'																																	
340' 340 129°30' -2°0'																																	
320' 320 136°50' -2°30'																																	
305' 304 146°0' -3°0'																																	
300' 298 155°10' -3°50'																																	
310' 307 163°30' -5°15'																																	
335' 330 171°30' -6°47'																																	
355' 347 179°30' -8°32'																																	
355' 344 181°30' -9°47'																																	
242' 235 171°35' -10°0'																																	

At Rd 90

Head Wash

#13

Saddle

Ridge

"

"

"

"

"

"

"

"

"

"

"

Bottom Creek Toe Slope

At Rd 90

2/10/01
June

June 25 1917

Sight # 49

Occupy # 13

TIME BOOK

H1=45 (4180)

4/35

Month of _____ 19

33

NAMES																							Total Time.	Rate per Day	Amount.														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				23	24	25	26	27	28	29	30	31					
50 113° 30'	00			6.4						411.6																													
20' 186° 30'	00			7.8						408.2																													
35' 257° 15'	00			4.0						107.0																													
80' 79 292° 10' -6° 30'				4.5	-9					404.5																													
140' 38 286° 30' -7° 0'				4.5	-16.9					396.6																													
165' 59 275° 45' -10° 35'				4.5	-29.7					383.8																													
185' 174 269° 10' -14° 37'				4.5	-45.7					367.8																													
140' 127 245° 45' -17° 35'				10.0	-45.8					367.7																													
170' 108 206° 45' -18° 25'				10.0	-40.3					373.7																													
120' 46 149° 0' -11° 0'				4.5	-22.5					391.0																													
170' 165 152° 0' -9° 30'				4.5	-27.6					385.9																													
210' 203 72° 0' -11° 18'				4.5	-40.2					373.8																													
225' 223 150° 30' -5° 55'				4.5	-25.1					390.4																													
275' 274 150° 30' -3° 08'				4.5	-15.1					398.4																													
350' 350 149° 0' 15' -0° 12'				4.5	-1.2					402.3																													
480' 478 147° 35' +4° 0'				4.5	+33.4					446.9																													
450' 448 123° 35' +4° 20'				4.5	+33.8					447.3																													
365' 365 118° 35' +1° 58'				4.5	+12.1					425.5																													
290' -111° 50'	00			-6.0						412.0																													

Wanted
June 26 1917

Sight # 8. for 092 Rt
Occupancy # 10

34

TIME BOOK

Month of _____ 19

H.I. = 4.7 (4.8)

4.44

NAMES														Total Time.	Rate per Day	Amount.																					
	1	2	3	4	5	6	7	8	9	10	11	12	13				14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
125'122 334°30' -8°	4.2									17.2	3970																									Draw	
155'152 298°10' -7°5'	4.2									18.9	39.53																									"	
155'154 255°20' -5°14'	4.2									14.	4004																									"	
170'169 223°15' -3°15'	4.2									9.6	4044																									"	
200'200 179°30' +0°40'	4.2									72.3	4169																									"	
310'309 163°10' +3°40'	4.2									178	4349																									"	
425'420 161°10' +5°50'	4.2									43.	4574																									"	
290'284 137°50' +8°35'	4.2									42.8	4579																									Pidge	
180'178 135°30' +5°15'	4.2									16.4	4306																									"	
100'99 135°25' +4°30'	4.2									7.8	4329																									"	
95' - 173°35' 00'	0.0										4184																									Break	
70' - 281° 00'	7.3										4111																									"	
87'86 295°45' -6°05'	4.2									9.2	4380																									"	
75'74 331° -6°50'	4.2									8.9	4053																									"	
110'109 14°30' -4°0'	4.2									7.7	4065																									"	
163'163 41°35' -1°0'	4.2									2.8	4114																									"	
222'222 58°35' +0°35'	4.2									2.2	4164																									"	
100' 69° 00'	0.0										4184																									Kiosk	
230'229 79° +3°15'	4.2									13.	4272																									"	
265'264 90°45' +5°10'	4.2									23.7	4379																									"	
310'305 101°45' +7°42'	4.2									41.	4553																									"	

~~Plotted~~
June 26, 1917

Sight #8 for zero #2 Rt

Occupancy #10

TIME BOOK

Month of _____ 19__

41-42 418^d

414.2

NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.																																
530' 52.5' 80° + 6° 12'	42																															+57.	471.2																																	
470' 46.7' 76° 45' + 5° 15'	42																															+42.7	456.1																																	
425' 42.3' 72° 15' + 4° 11'	42																															+30.8	465.0																																	
380' 37.9' 63° 15' + 2° 35'	42																															+17.1	431.3																																	
355' 35.5' 51° 15' + 0° 45'	47																															+4.6	418.8																																Draw	
405' 40.5' 60° 30' + 2° 20'	42																															+16.5	430.7																																"	
460' 45.8' 65° 45' + 3° 40'	42																															+29.5	443.7																															"		
510' 50.8' 68° 50' + 4° 37'	42																															+40.8	455.0																															"		
565' 56.0' 70° 50' + 5° 15'	42																															+50.8	465.0																															"		
685' 58.0' 55° 40' + 5° 37'	42																															+57.	471.2																															Rdg		
540' 53.6' 55° 30' + 4° 58'	42																															+46.5	460.7																																	
495' 49.3' 55° 30' + 3° 38'	42																															+31.4	445.6																																	
430' 42.9' 55° 10' + 2° 20'	42																															+17.5	431.7																																	
425' 42.5' 50° 15' + 1° 45'	42																															+13.	427.2																																	
485' 48.4' 42° 15' + 2° 45'	42																															+23.3	437.5																																	
545' 54.3' 44° 30' + 3° 47'	42																															+36.	453.2																																	
505' 50.3' 33° 10' + 3° 00'	42																															+26.5	442.7																															Q.M. Nail in Tale R/c 448.1		

~~Plotted June 26 1917~~

June 27 1917 Sight # 3 to. 0 Az Pt.
 Bob Inst. Occupy # 4
 Dilley - Red
 Weather Fair

TIME BOOK

4825

Month of _____ 19

H.L. = 4.7	NAMES	1 2 3 4 5 6 7 8 9 10 11 12 13											14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31											Total Time.	Rate per Day	Amount.
140	82° 208° 26' - 8° 01'																									
500	13° 06' 00																									
195	32° 40' 00																									
230	227 48° +7° 36'																									
300	292 50° 45' +8° 50'																									
347	335 51° 30' +10° 25'																									
390	385 31° 10' +5° 36'																									
375	369 62° +12°																									
283	257 76° 15' +17° 7'																									
240	223 70° 10' +15° 38'																									
210	200 64° +12° 37'																									
175	172 50° 30' +7° 47'																									
162	35° 00																									
110	49° 00																									
50	90° 45' 00																									
115	114 92° +60																									
140	153 92° 35' +12° 5'																									
220	201 91° 30' +17° 35'																									
250	225 92° 30' +18° 18'																									

Sta 16+00 # 14 cor. 365.4
 Sta 11+00 385.7
 Top Slope in Draw
 Top Natural Dam 10' deep 20' Pt
 Top Vert Cliff
 " " "
 Top Vert Break in Rock
 " Vert cliff to Bottom Draw
 Top Ridge
 " "
 " "
 " "
 Top Slope
 " "
 " "
 Break

Plotted: June 27 1917

6/27

Sight #4

Occup #14

H=44 3698

TIME BOOK

3654

Month of _____ 19

37

NAMES																							Total Time.	Rate per Day	Amount.								
	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23				24	25	26	27	28	29	30	31
505' 477' 61° 30'																																	
385' 339' 87° 10'																																	
335' 297' 85° 15'																																	
330' 294' 99° 20'																																	
155' 225° 00'																																	
183' 180' 237°																																	
213' 203' 242° 50'																																	
268' 243' 249° 05'																																	
343' 298' 249° 0'																																	
360' 319' 267° 10'																																	
280' 252' 265°																																	
250' 231' 265° 5'																																	
220' 210' 262° 45'																																	
175' 170' 260° 15'																																	
110' 258° 10'																																	
112' 281° 30'																																	
140' 138' 282° 40'																																	
152' 146' 284° 15'																																	
160' 148' 284° 15'																																	
235' 207' 282° 30'																																	
305' 263' 281°																																	

Top wall spillway S.E. Cor.

Ridge

"

"

T. Slope

Edge of Break

Draw

Edge Break

"

Toe Slope

"

Edge Breaks

Platted June 27 1917

6/27

Sight # 4
Occupy # 14

TIME BOOK

H1-44 (3698)

3654

Month of _____

19

39

NAMES																											Total Time.	Rate per Day	Amount.					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				27	28	29	30	31
260° 346° 5' 00				44																														
705° 337° 00				47																														
160° 320° 10' 00				55																														
135° 317° 00				62																														
H1-44 Sight A West End Dam Line Occupy A1 EAST END Dam Line																																		
420' 347° 55' 00				68																														
H1-46 (499.9) Sight A East End Dam Line Occupy B # 15																																		
B.M. 100' 99 220° 07' -5°				46																														
145' 351° 15' 00				78																														
180' 120' 70° 30' +0° 35'				46																														
236' 235' 77° 35' +1° 30'				46																														
285' 284' 27° 30' +3° 10'				46																														
335' 334' 29° +3° 30'				46																														
393' 391' 30° 50' +4° 30'				46																														
440' 434' 45° 45' +7° 30'				46																														
370' 365' 45° 40' +6° 30'				46																														
300' 296' 46° 10' +5° 37'				46																														
210' 208' 46° 10' +4° 15'				46																														
120' 119' 46° 10' +3° 30'				46																														
160' 76° 30' 00				00																														

15

Brass Plug in Large Rock No 486.569

Edge Spillway

Fence

Edge Spillway Fence

Plotted June 27 1917

6/28/17

Occupy Sta 54695

H1=42 - (371.00)

TIME BOOK

366.8

Month of _____ 19

44

NAMES																									Total Time.	Rate per Day	Amount.						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				25	26	27	28	29	30
35' 32																																	
63' 52																																	
100' 90																																	
128' 111																																	
170' 152																																	
198' 183																																	
190 MD																																	
100 100																																	
53' 53																																	

Draw:

Top Cliff.

Too Slope at Both Cliff.

" " at End Ledge

" " " " "

Sight Sta 11400 for OAZA

Occupy S Sta 4+00

400:

191° 07'

Sta 0+00

TIME BOOK

Month of _____ *19*

45

NAMES

1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total
Time.

Rate
per
Day

Amount.

June 13 1917
 Bob Inst.
 Chewing Rod

X sects for EXCAV.
 OTAY DAM
 TIME BOOK
 H LINE

46

Month of _____ 19

Sta	NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.		
431	H1																																				
- 5	H1																																				
0+00					0.8																																
0+21					2.0																																
0+21					7.4																																
0+29					7.4																																
0+333					9.0																																
0+384					9.4																																
0+432					9.7																																
0+484					9.6																																
0+532					9.8																																
0+588					10.2																																
0+640					10.2																																
0+688					10.2																																
0+740					10.2																																
0+784					10.3																																
0+836					10.3																																
0+890					10.3																																
0+938					10.1																																
0+982					8.8																																
1+040					8.6																																
1+090					8.5																																

Bolt in Rock Ledge below B.S. Shop

Plotted & Computed
 June 16 1917
 H Bub

Toe Slope Depth = 3.3 3 16.2

" 8.0 3 11.1

" 8.3 3 10.5

" 7.3 3 11.6

" 10.1 1 8.6

" 9.8 7 8.6

" 9-11 9 8.4

" 10-4 3 8.0

" 17-4 3 1.0

" 17-11 9 0.3

" 16-9 8 1.4

" 16-8 7 1.5

" 16.9 8 1.6

" 17.7 6 2.1

" 16.9 8 3.1

" 17.3 3 2.7

6/13

A Line

TIME BOOK

Month of _____ 19

47

Sta	NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.
	+																																		
1+14 ⁴					8.3					20.2																									
1+19 ⁶					8.3					20.2																									
1+23 ⁷					8.3					20.2																									
1+25 ⁴					8.4					20.1																									
1+30 ⁵					8.4					20.1																									
1+35 ⁸					8.5					20.0																									
1+40 ⁰					8.4					20.1																									
1+46 ⁰					8.6					19.9																									
1+50 ³					8.6					19.9																									
1+54 ⁰					1.2					27.3																									
1+77 ⁰	HL				-6.4					34.9																									

B Line

0+00	HL	-12.0								40.5																										
0+08					8.0					20.5																										
0+12					9.0					19.5																										
0+49					10.4					18.1																										
0+83					10.4					18.1																										
0+86					8.9					19.6																										
1+11					8.3					20.2																										

~~Platted~~

Toe Slope

W. Level

6/13

"B" LINE

48

TIME BOOK

Month of _____ 19

NAMES																																Total Time.	Rate per Day	Amount.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Sta. + H.L.			-							E I E																								
1+23 ⁸	2853		84							20.1																								
1+61			88							197																								
1+70			58							22.7																								
1+82			44							24.1																								
1+92	H.L.		-1.0							29.5																								
2+22	H.L.		-0.5							29.0																								
2+27			35							25.0																								
"C" Line																																		
0+00	H.L.		-3.6							32.1																								
0+10			48							23.7																								
0+18			64							22.1																								
0+21			10.3							18.2																								
0+58			10.2							18.3																								
0+84			84							20.1																								
0+97 ⁴			85							20.0																								
1+42			89							19.6																								
1+46			42							24.3																								
1+64	H.L.		-10.0							38.5																								

1 1/2 to 1 bank 40 ft

Plotted

Than 2 to 1 for 40'

6/13

"D" Line

49

TIME BOOK

Month of _____ 19

Sta	NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.	
	H1																																			
-15	H2																																			
0+00																																				
0+14																																				
0+16																																				
0+55																																				
0+80																																				
0+94.6																																				
1+37																																				
1+44	H1																																			
1+55	H1																																			
-35	H1 "E" Line																																			
-22	"																																			
-12	"																																			
0+00	"																																			
0+12																																				
0+25																																				
0+60																																				
0+95																																				
1+02.8																																				
1+40																																				

Top Slope

Creek WA.

TIE

Top Slope.

E/L 382. Top Slope = 437.0
Level of Prospect Tunnel

Platted

6/13

"E" Line

50

TIME BOOK

Month of _____ 19

Sta	NAMES													Total Time.	Rate per Day	Amount.																					
		1	2	3	4	5	6	7	8	9	10	11	12				13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	H.L.				-									15.6																							
														28.53																							
1+58						0.4							28.1																								
1+70	H.L.				-	10.0							38.5																								
"F"																																					
1+39 ^o						9.8							18.7																								
1+17 ³						9.1							19.4																								
0+98 ^o						9.7							18.8																								
0+59 ^o						10.9							17.6																								
0+36 ^o						10.2							18.3																								
0+24 ^o						9.2							19.3																								
0+00 = 139 ^o W. of End of Core Wall						9.1							19.4																								

END Core Wall E. Side

Toe Sloped

~~Platted~~

June 13 1917
 Bob Inst.
 Channing Rod.

Levels to Bottom of Dam
 Site

TIME BOOK

51

Month of _____ 19

	NAMES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Time.	Rate per Day	Amount.		
510	+	241																																494.89			
	172	149.42																																			
P	046	139.97		9.92																																	
P	159	131.67		9.89																																	
P	044	122.25		9.84																																	
P	063	113.76		9.12																																	
P	085	105.58		9.03																																	
P	042	96.98		9.02																																	
BM. ✓				3.34																													340.81				
P.	001	87.64		2.35																																	
P.	041	79.25		8.80																																	
P	013	69.85		9.53																																	
P.	023	61.72		8.36																																	
P.	041	52.22		9.91																																	
P.	083	44.00		9.05																																	
P.	021	34.57		9.64																																	
P. ✓	453	32.46		6.64																																	
BM. ✓				1.96																																	
P.	166	25.69		8.43																																	
	193	24.62		3.00																																	
T.P.M.				0.40																																	
P.	783 ✓	32.03		0.42																																	
																													Elev = 377.67		Dam						
																													Bolt in Pilot Ledge Rock W Side + 50' below Pi								
																													T.P. Rock								
																													5' level =								
																													Rock on line 24.50 Sea Page = 196.76								
																													Bolt in Point of Ledge below B.E. Shop Elev 377.39								
																													Rock below Rock								

NAMES																											Total Time.	Rate per Day	Amount.								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				27	28	29	30	31			
																																32.03		147.71			
P	957																															40.93	0.67	313.6	Rock		24.27
P	956																															50.09	0.40	405.3	Rock		23.49
P	922																															58.40	0.91	491.8	Rock		29.48
P	876																															65.04	2.12	562.8	Rock		37.39
P	846																															72.25	1.25	63.79	Rock		38.50
P	940																															81.48	0.17	72.08	Rock		123.59
P	966																															90.77	0.37	81.11	"		
P	955																															100.12	0.20	90.57	"		
B.M.	0. ✓																																6.46	93.66	Bolt in Power Pole		
P	915																															109.12	0.15	99.97	Rock		
P	901																															118.13	0.00	109.12	"		
P	998																															127.92	0.19	117.94	"		
P	937																															136.55	0.74	127.18	"		
P	938																															144.16	1.77	134.78	"		
P	806																															150.21	2.01	142.15	"		
P																																	2.49	147.72	Rock on Concrete	Cor. Eto 147.71	Benson at Pool House

TIME BOOK

NAMES

1 2 3 4 5 6 7 8 9 10 11 12 13

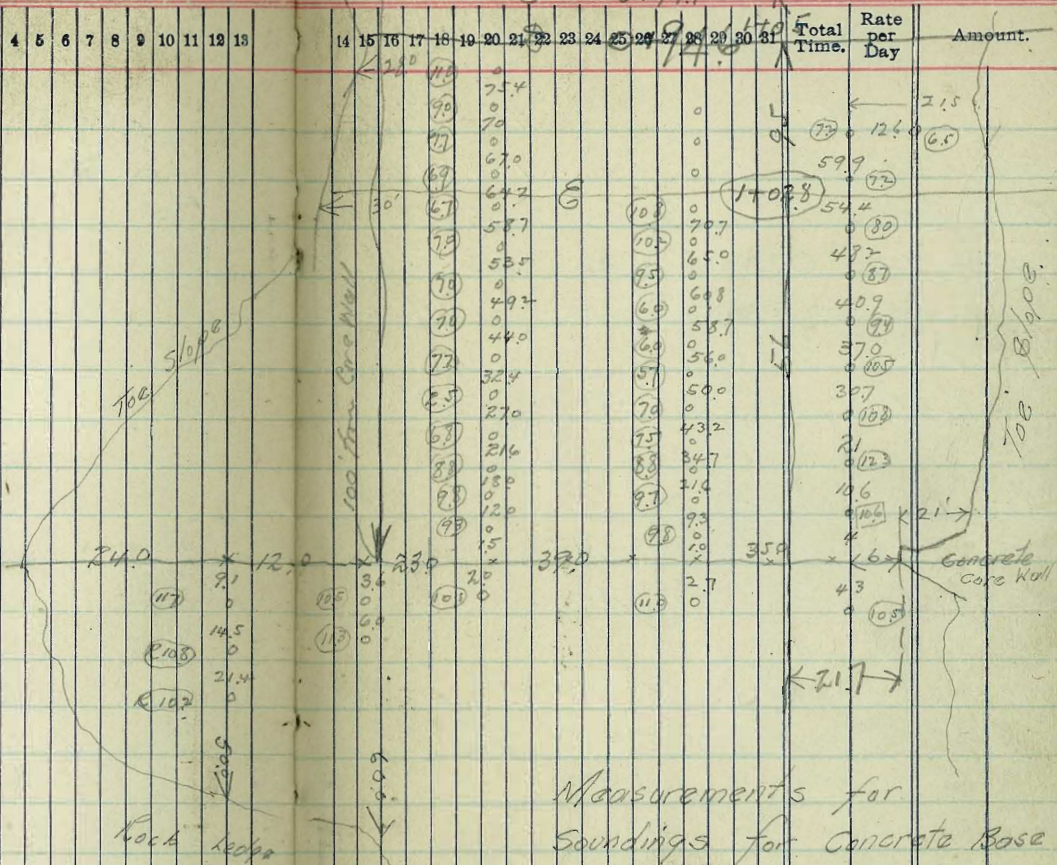
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total Time.

Rate per Day

Amount.

1+232
 June 11. 1917 53
 HRBub
 Month of 1+238
 01974 1+45 19



Measurements for
 Soundings for Concrete Base
 OTAX

Plotted June 12 1917

HRBub.

Sketch #2

Day	Rate per Day	Amount
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
Total		

Bench Marks

Lower stay.
TIME BOOK

54

Month of _____

19

NAMES														Total Time.	Rate per Day	Amount.		
	1	2	3	4	5	6	7	8	9	10	11	12	13					
U.S. Gov. B.M.																		
486.569 =																		
Edge old Concrete Res. at Tool House																		
147.71 =																		
DIY Water Tank																		
(224.80)																		
B.M. Nail on Barn																		
163.52 =																		
Bolt in Sycamore Tree at Water Tank =																		
224.11 =																		
Bolt in Power Pole on																		
Ledge of Rd to Dam Site																		
Elev = 936.4																		
Bolt in Flat Ledge of Rock																		
West side + 50ft below Diverting																		
Porn																		
Elev = 30.50																		
Bolt in Rock Point West Side 200' above old																		
Core Wall																		
Elev = 242.2																		

Working Elev 139.49
 " Elev 494.89 ~~494.79~~ (347.17)
 This B.M. is out.
 Sea Level Elev - 510.69
 " " " 571.28
 = 440.81 440.72
 = 377.67 377.59 = Cor. Elev
 = 371.39 371.30 Cor. Elev

TIME BOOK

NAMES

1 2 3 4 5 6 7 8 9 10 11 12 13

8.31

193.5
35
158.5

193.5 16685
1878 843
5.6 -16337

4.55

4.51 - C-00 SW cr

3.48 - cut 1.0 SE cr

8.28 - F 38 NE cr

9.55 + F 50 NW cr

9.

839.5

4.4

7 43

839.5

4.60

75.5

76.46

755
23

85.5
33

22411

10
545
455

10
615
315
L 300