

W359

434

359

Tables for Excavations and Embankments.
Distances from Centre of Roadway for Cross Sectioning.
Roadway 22 feet wide, Side Slopes 1 to 1.
For Single Track Excavation.

MICROFILMED

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	0
1	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	1
2	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	2
3	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	3
4	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	4
5	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	5
6	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	6
7	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	7
8	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	8
9	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	9
10	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	10
11	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	11
12	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	12
13	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	13
14	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	14
15	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	15
16	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	16
17	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	17
18	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	18
19	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	19
20	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	20
21	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	21
22	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	22
23	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	23
24	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	24
25	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	25
26	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	26
27	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	27
28	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	28
29	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	29
30	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	30
31	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	31
32	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	32
33	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	33
34	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	34
35	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	35
36	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	36
37	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	37
38	49.0	49.1	49.2	49.3	49.4	49.5	49.6	49.7	49.8	49.9	38
39	50.0	50.1	50.2	50.3	50.4	50.5	50.6	50.7	50.8	50.9	39
40	51.0	51.1	51.2	51.3	51.4	51.5	51.6	51.7	51.8	51.9	40

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
- No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

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No. 382 FIELD BOOK: Left Hand Page as in this book,
Right Hand Page text to the
text, Center Line text.
No. 384 MINING TRANSIT BOOK: Left Hand Page
as in this book, Right Hand Page
text to the text, Center Line text.
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a practical text to the text,
Center Line text.

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Order

Book Taken by H. Newcomb

Base of Dam Pages 1-16 measured
by Rule

Spillway above Surface 17-49 1/2 "

" Excavation Pg 50-69 Trucked out.

Puddle Core Section of Base

South of N 3600 to N 3400.

E1. 540-555

7/8/32

Newcomb M. W.
Albert Dr

	Cuft	Cu yds
1	8x5x4	160 ✓
2	7x4x2	56 ✓
3	4x5x5	100 ✓
4	4x3x2½	30 ✓
5	3x3x3	27 ✓
6	4x4x4	64 ✓
7	4x2x3½	28 ✓
8	4x4x2	32 ✓
9	3x3x4	36 ✓
10	4x3x4	48 ✓
11	4x3½x4	56 ✓
12	3x3x4	36 ✓
13	4x5x4	80 ✓
14	4x3x2¼	27 ✓
15	4x3x4	48 ✓
16	6x6x5	180 ✓
17	3x3x3	27 ✓
18	3x3x3	27 ✓
19	5x2x3	30 ✓
20	3x3x3	27 ✓
21	5x5x3½	87 ✓
22	3x3x8	72 ✓
23	3x4x3	36 ✓
24	5x6x4	120 ✓
25	3x3x3	27 ✓

1461 ✓

Allowed in Estimate 86.3 of July 1932.
 Newcomb

5x7x2 E1. 545±

7/11/32 Newcomb M. W.
Albert Dr

Puddle Core Section of Base
 South of N. 3600. to N 3450

		Total cu ft
26	3x3x3	27 ✓
27	4x5x5	100 ✓
28	5x5x4	100 ✓
29	4x3x3	36 ✓
30	3x3x3	27 ✓
31	3x4x3	36 ✓
32	4x3x3	36 ✓
33	3x3x3	27 ✓
34	4x4x4	64 ✓
35	4x3x4	48 ✓
36	4x6x4	96 ✓
37	3x4x2 $\frac{1}{2}$	27 ✓
38	3x3x3	27 ✓
39	3x3x3	27 ✓
40	4x3x4	48 ✓
41	3x3x3	27 ✓
42	4x4x4	64 ✓
43	3x3x3	27 ✓
44	5x4x5	100 ✓
45	5x4x2	40 ✓
46	3x3x3	27 ✓
47	4x3x3	36 ✓
48	3x4x3	36 ✓
49	4x3x2 $\frac{1}{4}$	27 ✓
50	4x4x2	32 ✓
		1142 ✓

Allowed in Estimate No 3
 of July 1932
 377 Newcomb
 Alberta

577 Core Sec Bl. 545

Puddle Core Section of Base
South of N 3600

		Total cu ft
51	3x3x3	27 ✓
52	3x3x3	27 ✓
53	3x4x2½	30 ✓
54	4x4x4	64 ✓
55	3x3x4	36 ✓
56	4x4x4	64 ✓
57	5x4x3	60 ✓
58	5x3x3	45 ✓
59	4x3x3	36 ✓
60	6x4x2	48 ✓
61	4x4x2	32 ✓
62	6x4x1½	36 ✓
63	12x3x3	108 ✓
64	6x3x2	36 ✓
65	5x6x3	90 ✓
66	3x3x3	27 ✓
67	3x3x3	27 ✓
68	3x4x3	36 ✓
69	3x4x3	36 ✓
70	5x5x4	100 ✓
71	3x4x2½	30 ✓
72	4x3x3	36 ✓
73	4x3x3	36 ✓
74	6x5x4	120 ✓
75	5x3x2	30 ✓
		1217 ✓

Allowed in Estimate No 3

of July 1932

777 Newcomb

7/12/32
Newcomb
Albert.

7/14/32
Newcomb
Albert

Riddle Core Section of Base

South of N 3600

Total
surf

76	4x3x3	36 ✓
77	6x3x2	36 ✓
78	8x6x $\frac{1}{2}$	120 ✓
79	5x4x2	40 ✓
80	5x4x $\frac{1}{2}$	30 ✓
81	3x3x4	36 ✓
82	3x3x3	27 ✓
83	3x3x4	36 ✓
84	4x4x5	80 ✓
85	3x3x4	36 ✓
86	3x3x4	36 ✓
87	4x6x4	96 ✓
88	4x4x4	64 ✓
89	3x4x4	48 ✓
90	3x3x3	27 ✓
91	3x4x3	36 ✓
92	3x3x3	27 ✓
93	4x4x3	48 ✓
94	5x3x3	45 ✓
95	8x2x3	48 ✓
96	3x4x2 $\frac{1}{2}$	30 ✓
97	3x4x3	36 ✓
98	3x3x3	27 ✓
99	3x4x2 $\frac{1}{2}$	30 ✓
1.00	3x4x2 $\frac{1}{2}$	30 ✓

1105 ✓

SE Cor. of Ex
15 River Bed.

7/15/82
Stewart
Alberta

1932
No 5
Estimated
allowed

of July
1932

Puddle Core Section
South of N 3600

of Base

		Total cu ft	
101	5x5x2	50 ✓	
102	6x5x4	120 ✓	
103	3x3x3	27 ✓	
104	3x3x4	36 ✓	
105	3x3x3	27 ✓	
106	9x4x2	72 ✓	
107	3x4x2 ^{1/2}	30 ✓	
108	4x3x3	36 ✓	
109	3x4x3	36 ✓	
110	3x3x3	27 ✓	
111	8x4x2 ^{1/2}	80 ✓	
112	4x3x3	36 ✓	
113	4x6x2	48 ✓	
114	6x3x3	54 ✓	
115	6x6x5	180 ✓	
116	4x4x5	80 ✓	
117	3x4x2 ^{1/2}	30 ✓	
118	3x3x3	27 ✓	
119	5x3x3	45 ✓	
120	3x4x2 ^{1/2}	30 ✓	
121	3x4x3	36 ✓	
122	5x4x3	60 ✓	
123	6x3x3	54 ✓	
124	3x3x3	27 ✓	
125	4x3x2 ^{1/2}	30 ✓	
		1278 ✓	

Allowed in Estimate No 3 of
July 1932.

Newcomb

7/15/32
Newcomb
+ 1 bent.

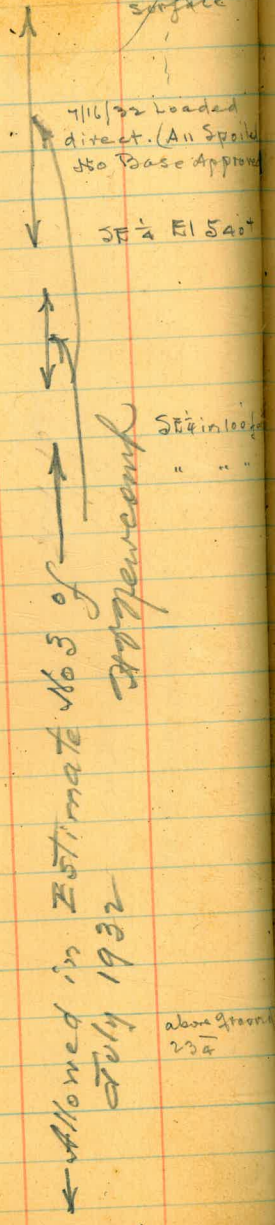
SEA bot of Slope
Near 2" Pipe El 54
51.515+ Below Surface

SEA in SE
Cool Slope Under Pipe

Puddle Core Section of Base
South of N 3600.

		Total cuft
126	4x3x3	36 ✓
127	4x5x2 ^{1/2}	50 ✓
128	3x3x3	27 ✓
129	3x4x2 ^{1/2}	30 ✓
130	3x3x3	27 ✓
131	not shot 3x3x3	27 ✓
132	6x6x4	144 ✓
133	5x4x3	60 ✓
134	not shot 3x4x3	36 ✓
135	" 3x3x3	27 ✓
136	3x4x2 ^{1/2}	30 ✓
137	4x8x5	160 ✓
138	3x3x3	27 ✓
139	6x4x5	120 ✓
140	3x9x3	81 ✓
141	3x3x3	27 ✓
142	3x6x3	54 ✓
143	3x4x4	48 ✓
144	3x6x3	54 ✓
145	5x3x3	45 ✓
146	3x3x3	27 ✓
147	6x6x6 ^{1/2}	234 ✓
148	6x4x4	96 ✓
149	3x4x2 ^{1/2}	30 ✓
150	3x3x3	27 ✓

1524 ✓



~~also above surface~~

Steel rods

above ground 234

Puddle Core Section of Base

South of N 3600

Above
surface
Cufft

		Total cu ft		
151	6x3x3	54 ✓	↑ of July 1932. at Newcomb	
152	4x4x3	48 ✓		48
153	4x3x3	36 ✓		$\frac{1}{2} = 12$
154	6x8x6	288 ✓		$4 \times 8 = 108$
155	3x3x3	27 ✓		$\frac{1}{2} = 9$
156	5x4x3	50 ✓		
157	4x4x3	48 ✓		
158	4x4x4	64 ✓		$2 \times 4 = 14$
159	4x4x4	64 ✓		$4 \times 4 = 27$
160	4x6x6	144 ✓		
161	3x3x4	36 ✓		$4 \times 3 = 27$
162	6x8x6	288 ✓		
163	3x4x2 $\frac{1}{2}$	30 ✓		
164	3x3x3	27 ✓		
165	3x4x3	36 ✓		
166	6x8x6	288 ✓		
167	4x4x5	80 ✓		48
168	6x3x3	63 ✓		
169	4x3x3	36 ✓	$\frac{1}{2} = 18$	
170	5x3x2 $\frac{1}{2}$	37 ✓		
171	2x5x3	30 ✓		
172	3x4x2 $\frac{1}{2}$	27 ✓	$\frac{1}{2} = 13$	
173	2x3x5	30 ✓		
174	nd 1/28/32 3x4x4	48 ✓	out 39.5" $\frac{1}{2} = 24$ Ell	
175	✓ " 5x3x4	60 ✓	$\frac{1}{2} = 30$	

19 39 ✓

Allowed in Estimate No 3



8

(Trans to Vol 347)
277

8

Puddle Core Section of Base

North of N 3600 El. 550-570
 North 3600 to N 3800 + E of E 5000

7/9/32
 Newcomb, N.Y.
 Albert, D.N.

		cu. ft.		
1	5x7x5	175 ✓	↑ No 33 of July 1932 in Newcomb Allowed in Estimate ↓	At N 3785 E 5105
2	7x9x5	315 ✓		Old No 42 NE
3	3x4x5	60 ✓		At N 3787 E 5105
4	5x7x3	105 ✓		Old No 43 NE
5	5x3x5	75 ✓		
6	5x10x4	200 ✓		Old No 123 NE
7	3x3x3	27 ✓		" " 120 "
8	5x4x3	60 ✓		
9	5x4x4	80 ✓		" " 126 "
10	3x3x3	27 ✓		
11	3x3x3	27 ✓		
12	6x6x4	144 ✓		" " 116 "
13	5x5x3	75 ✓		
14	5x3x2	30 ✓		
15	4x3x2½	27 ✓		
16	3x4x5	60 ✓		
17	5x4x4	80 ✓		" " 40 "
18	5x3x3	45 ✓		
19	4x3x3	36 ✓		
20	5x4x4	80 ✓		
21	3x4x2½	27 ✓		
22	3x3x3	27 ✓		
23	4x5x4	80 ✓		
24	4x8x4	128 ✓		
25	6x4x4	96 ✓		" " 40 "
		2086 ✓		

Puddle Core Section of Base

W of N 3600 + E of F 5000.

N 3600 to N 3800 Elev. 550-570

		Cu ft.		
26	5x10x5	250 ✓	Allowed in Estimate No 3 of July 1932. (New count)	
27	4x4x3	48 ✓		
28	5x3x4	60 ✓		
29	4x3x5	60 ✓		
30	3x3x4	36 ✓		
31	8x4x5	160 ✓		
32	8x5x5	200 ✓		
33	4x3x3	36 ✓		
34	3x4x2½	27 ✓		
35	4x4x5	80 ✓		
36	4x3x3	36 ✓		
37	3x4x2½	30 ✓		
38	3x3x3	27 ✓		
39	4x3x3	36 ✓		
40	4x3x3	36 ✓		
41	4x4x4	64 ✓		
42	3x3x3	27 ✓		
43	8x5x4	160 ✓		
44	4x3x3	36 ✓		
45	3x3x3	27 ✓		
46	6x7x4	168 ✓		
47	3x3x3	27 ✓		
48	3x3x3	27 ✓		
49	3x3x6	54 ✓		
50	9x12x16	1728 ✓		
		3440 ✓		Old No 46 ✓

A+ N 3760
B 5040

Old No 83 NE 1/4

Puddle Core Section of Base
 W. of W 3600 + E of E 5000.
 W 3600 to W 3800. Elev. 550-570

51	4x7x3	84 ✓	↑ July 1932 377 new count	Old No. 81
52	4x3x3	36 ✓		
53	3x3x3	27 ✓		
54	3x3x3	27 ✓		
55	4x3x2½	27 ✓		
56	3x3x3	27 ✓		
57	3x4x3	36 ✓		
58	4x3x3	36 ✓		
59	6x3x3	54 ✓		
60	4x3x2½	27 ✓		
61	4x3x3	36 ✓	Allowed in Estimate No 3	
62	3x3x3	27 ✓		
63	3x3x3	27 ✓		
64	4x8x4	128 ✓		Old No. 56
65	3x5x4	60 ✓		
66	4x3x3	36 ✓		
67	3x3x3	27 ✓		
68	3x3x3	27 ✓		Old No. 50
69	4x3x3	36 ✓		
70	4x4x4	64 ✓		Old No. 47
71	4x4x3	48 ✓	" " 48	
72	8x8x6	384 ✓	" " 49	
73	4x3x3	36 ✓		
74	4x3x3	36 ✓		
75	4x8x4	128 ✓	↓	" " 51
		1481 ✓		

Puddle Core Section of Base.
 N. of N 3600 + E of E. 5000.
 N 3600 to N 3800 Elev. 550-570.

76	3x3x3	27 ✓
77	4x6x4	96 ✓
78	4x3x3	36 ✓
79	5x3x3	45 ✓
80	3x4x3	36 ✓
81	4x4x4	64 ✓
82	6x3x4	72 ✓
83	3x6x4	72 ✓
84	4x3x5	60 ✓
85	6x6x6	216 ✓
86	3x3x3	27 ✓
87	3x4x2½	30 ✓
88	3x4x4	48 ✓
89	4x6x3	72 ✓
90	4x3x3	36 ✓
91	6x8x5	240 ✓
92	3x3x3	27 ✓
93	4x7x3	84 ✓
94	4x4x5	80 ✓
95	4x5x2½	50 ✓
96	4x6x3	72 ✓
97	3x3x3	27 ✓
98	4x3x6	72 ✓
99	5x3x4	60 ✓
100	3x5x3	45 ✓
		1694 ✓

Allowed in Estimate No 3 of July 1932.
 New core

old No. 54
 N 3770
 E 5005

Puddle Core Section of Base
 North of N 3600 + E of E 5000
 N 3600 to N 3800 Elev. 550-570

13

101	3x3x3	27 ✓
102	3x4x2 $\frac{1}{4}$	27 ✓
103	3x4x2 $\frac{1}{2}$	30 ✓
104	5x6x4	120 ✓
105	4x3x2 $\frac{1}{4}$	27 ✓
106	3x8x4 $\frac{1}{2}$	108 ✓
107	3x8x4	96 ✓
108	4x4x4	64 ✓
109	4x3x3	36 ✓
110	4x3x2 $\frac{1}{2}$	30 ✓
111	3x4x3	36 ✓
112	4x6x4	96 ✓
113	5x4x2 $\frac{1}{2}$	50 ✓
114	6x8x5	240 ✓
115	3x3x7	63 ✓
116	3x3x3	27 ✓
117	4x3x3	36 ✓
118	3x3x3	27 ✓
119	6x4x4	96 ✓
120	3x3x3	27 ✓
121	4x4x4	64 ✓
122	4x4x4	64 ✓
123	4x12x5	240 ✓
124	4x5x6	120 ✓
125	3x4x2 $\frac{1}{4}$	27 ✓
		1778 ✓

3 of July 1932

Newcomb

allowed in Estimate # 3

West of E 5000

7/12/32
 Newcomb, TX
 Albert D.W.

Diddle Core Section of Base
N of N 3600 Eler. 550-575

N 3600 to N 3800 + West of E 5000

		cu ft			
126	5x5x4	100 ✓	↑ Allowed in Estimate No. 3 of July 1932 By J. J. Newcomb	old No 9 NW 1/4	
127	4x4x5	80 ✓			
128	3x3x3	27 ✓			
129	3x3x5	45 ✓			
130	12x6x6	432 ✓			old No 7 NW 1/4
131	3x3x4	36 ✓			
132	3x3x3	27 ✓			
133	3x3x3	27 ✓			
134	9x5x5	225 ✓			
135	3x4x3	36 ✓			
136	3x3x4	36 ✓			
137	4x3x2 1/2	27 ✓			
138	9x9x8	648 ✓			E 4960
139	6x4x3	72 ✓			
140	3x3x3	27 ✓			
141	3x4x4	48 ✓			
142	3x3x3	27 ✓			
143	7x9x6	378 ✓		old No 8 E 4935 N 3755	
144	5x5x3	75 ✓		E 4940 N 3760 E 1560	
145	4x3x3	36 ✓			
146	4x6x3	72 ✓			
147	6x6x5	180 ✓		old No 3 NW 1/4	
148	7x17x8	952 ✓	(N. of Willow)	" " 2 "	
149	5x5x3	75 ✓			
150	10x4x5	200 ✓	↓	old No 1 NW 1/4	
		3888 ✓			

Puddle Core Section of Base
 N of N. 3600 E. 550-575

N 3600 to N 3800 + West of E 5000

151	3x4x2 ¹ / ₂	27 ✓	Allowed in Estimate No 3 of July 1933 J. J. Newcomb	N 3750
152	3x3x3	27 ✓		
153	3x7x4	84 ✓		
154	5x3x3	45 ✓		
155	3x3x3	27 ✓		
156	4x3x3	36 ✓		
157	to stare 4x3x3	54 ✓		
158	3x3x3	27 ✓		
159	4x3x2 ¹ / ₂	30 ✓		
160	3x4x2 ¹ / ₂	30 ✓		
161	4x4x2	32 ✓		
162	5x3x2	30 ✓		
163	5x3x3	45 ✓		
164	4x2 ¹ / ₂ x3	30 ✓		
165	4x3x3	36 ✓		
166	5x4x2	40 ✓		
167	4x4x2	32 ✓		
168	3x3x3	27 ✓		
169	4x4x2	32 ✓		
170	4x6x4	96 ✓		
171	3x4x3	36 ✓		
172	3x3x3	27 ✓		
173	3x3x3	27 ✓		
174	3x4x4	48 ✓		
175	3x4x2 ¹ / ₂	30 ✓		
		955 ✓		

T/14132
 Newcomb
 Albert

T/15132 Loaded Direct
 Newcomb
 Wood
 Albert

Puddle Core Section of Base ^{7/15/32}

500 of N 3600

N 3600 to N 3800 + rest of E 5000.

Warriornb
Tread
Albert

176	3x3x4	36	✓	
177	7x4x4	112	✓	
178	6x4x3	72	✓	
179	3x3x3	27	✓	
180	3x3x3	27	✓	
181	6x3x3	54	✓	
182	6x3x2½	45	✓	
183	3x3x3	27	✓	
184	6x3x2	36	✓	
185	3x3x3	27	✓	
186	3x4x2½	30	✓	
187	3x3x3	27	✓	
188	6x6x4	162	✓	E 5000 N 3658
189	3x9x3	81	✓	SE ¼
190	12x5x6	360	✓	"
		1123	✓	

Allowed in Estimate No. 30 of July 1932

Note Rock 1 to 157 incl. Placed
" 188 to 190 " in Rock
Balance Spoiled No Base Embankment

Prepared
Station

7/16/32
Albert

7/25/32
Warriornb
Albert

Loaded Direct

16

above surface Spilling
59 Pp 17 & 49
checked 4/29/35

Total 1123

Spilling
7-49
17-49
18-49
19-49
20-49
21-49
22-49
23-49
24-49
25-49
26-49
27-49
28-49
29-49
30-49
31-49
32-49
33-49
34-49
35-49
36-49
37-49
38-49
39-49
40-49
41-49
42-49
43-49
44-49
45-49
46-49
47-49
48-49
49-49
50-49

Riddle Core Section of Base ^{7/15/32}

No of # 3600

3600 to # 3800 + Rest of # 5000

176	3x3x4	36 ✓
177	7x4x4	112 ✓
178	6x4x3	72 ✓
179	3x3x3	27 ✓
180	3x3x3	27 ✓
181	6x3x3	54 ✓
182	6x3x2½	45 ✓
183	3x3x3	27 ✓
184	6x3x2	36 ✓
185	3x3x3	27 ✓
186	3x4x2½	30 ✓
187	3x3x3	27 ✓
188	6x6x4	162 ✓
189	3x9x3	81 ✓
190	12x5x6	360 ✓
		<hr/> 1123 ✓

Allowed in Estimate No. 30 of July 1932

Note Rock 1 to 157 incl. placed in Rock Embankment
 " 188 to 190 " " "

Balance Spoiled No Base Prepared
 7/16/32 Albert
 7/25/32 Harzomb Albert

Loaded Directly

Spillway

2/18/33
J. Newcomb

Station 9+60 Toe N Slope Kog Gulch

Rock #	Size	above Surface cu ft	Station
1	6x5x2	60	9+60
2 L		54	
3	6x4x4	96	
4	7x8x4	224	
5	6x4x3	72	
6	6x4x2	48	
7	6x4x5	120	
8	3x3x3	27	
9	6x4x5	120	
10	6x4x3	72	
11	5x6x6	180	
12	6x12x6	432	
13 L		54	
14	6x4x5	120	
15	3x3x3	27	
16	4x4x2 1/2	40	
17	4x3x4	48	
18	6x8x6	288	
19	3x3x3	27	
20	5x5x3	75	
21	5x3x3	45	
22	4x4x2	32	
23 L		54	
24	4x4x2	32	
25	3x3x3	27	
		2374	

Feb 1933
J. Newcomb

Station 9 to 9+60
N Slope to Gulch

Station 8+50 to 8+00

Allowed Estimate #10

Spillway Rock above Surface 175

3/21/33
J. Newcomb

#	Size	Cu ft.
1001 L		54
1002	6x6x4	144
1003 L	4x3x4	48
4	10x4x4	160
5	6x5x1	30
6	6x5x3	90
7	6x4x3 1/2	84
8 L	3x4x4	48
9	22x5 1/2 x 4	484
10	3x3x3	27
11 L		54
12	6x4x3	72
13	6x6x2	72
14	8x5x8	320
15	7x4x2	56
16	5x4x1 1/2	30
17 L		54
18	4x3x3	36
19	4x4x4	64
20 L		27
21	6x3x1 1/2	27
22	5x6x1	30
23	6x4x1 1/2	30
24	3x3x3	27
1025	8x6x3	144
		2212

E to W Gulch
cut part Ext.
cut Rock.

Split
N 4280
E 5125

Spillway
Rock above Surface2/18/33
XTW

	Rock	cu ft
26	4x4x3	48 ✓
27	4x5x3	60 ✓
28	3x3x3	27 ✓
29	6x4x3	72 ✓
30	4x4x2	32 ✓
31	5x3x2	30 ✓
32	5x4x4	80 ✓
33	4x3x3	36 ✓
34	4x3x3	36 ✓
35	4x4x2	32 ✓
36 L		81 ✓
37 x	6x3x2 1/2	45 ✓
38	6x4x2	48 ✓
39	6x4x2	48 ✓
40	6x4x3	72 ✓
41	6x10x4	240 ✓
42	6x4x2	48 ✓
43	6x3x3	54 ✓
44	12x6x3	216 ✓
45	5x3x3	45 ✓
46	6x9x2	108 ✓
47	6x3x2	36 ✓
48	6x4x8	192 ✓
49	10x6x2	120 ✓
50	4x3x2 1/2	30 ✓
		1836 ✓

No 10 Feb 1933

New camp

Allowed Estimate

Sta 8 to +50 (near 4) + South
to South Slope

Spillway Rack Above Surface. 18 1/2

2/11/33 XTW

	Spillway Rack	cu ft
1020	4x5x2 1/2	50 ✓
1021	5x3x2	30 ✓
1028	6x5x1 1/2	45 ✓
1029 L	3x4x4	48 ✓
1030	4x3x2 1/2	27 ✓
1031	9x7x5	315 ✓
1032 L	4x4x2	32 ✓
1033	5x4x2 1/2	50 ✓
1034	6x4x1 1/2	30 ✓
1035 L	3x3x3	27 ✓
1036 L	6x4x1 1/2	30 ✓
1037	6x3x2	36 ✓
1038	10x4x2	80 ✓
1039 L		54 ✓
1040	5x4x3	60 ✓
1041	6x9x2	108 ✓
1042	7x4x2	56 ✓
1043	4x3x2 1/2	27 ✓
1044	6x4x3	72 ✓
1045	4x7x3	84 ✓
1046	4x4x2	32 ✓
1047	4x3x3	36 ✓
1048	6x4x3	72 ✓
1049	3x3x3	27 ✓
1050	6x6x3	108 ✓
		1536 ✓

To Top of Bridge E of Gulch N. of Spillway
Exploration Tunnel

Spillway
Rock above Surface

2/18/33
JTN

		cu. ft.
51	5x3x2	30 ✓
52	4x3x2 $\frac{1}{4}$	27 ✓
53	6x3x2	36 ✓
54	5x4x2	40 ✓
55	6x8x5	240 ✓
56	6x6x4	144 ✓
57	6x4x1 $\frac{1}{2}$	36 ✓
58	6x4x1 $\frac{1}{4}$	30 ✓
59	4x4x2	32 ✓
60	3x3x3	27 ✓
61	3x4x3	36 ✓
62	4x3x2 $\frac{1}{2}$	27 ✓
63	5x3x3	45 ✓
64	6x6x3	108 ✓
65	4x3x3	36 ✓
66	5x5x2	50 ✓
67	4x3x2 $\frac{1}{4}$	27 ✓
68	4x3x2 $\frac{1}{4}$	27 ✓
69	6x6x5	180 ✓
70	6x4x5	120 ✓
71	5x11x2	110 ✓
72	12x6x7	504 ✓
73	7x3x2	42 ✓
74	7x4x2	56 ✓
75	12x4x5	240 ✓

2250 ✓

Allowed Estimate No. 10. Feb 1933
JTN

To Station 9 on S. Side

Sta. 8 to 8+50
South of Gulch
South Slope

Spillway Rock Above Surface

3/21/33

19 $\frac{1}{2}$

		cu. ft.
1051	4x3x3	36 ✓
1052	4x3x3	36 ✓
1053	3x3x3	27 ✓
1054	6x3x2	36 ✓
1055		27 ✓
1056	4x4x2	32 ✓
1057	5x4x2	40 ✓
1058	8x5x5	200 ✓
1059	7x4x3	84 ✓
1060	6x2x2 $\frac{1}{4}$	27 ✓
1061	5x4x1 $\frac{1}{2}$	30 ✓
1062	9x4x4	144 ✓
1063	8x4x2	64 ✓
1064	4x4x2	32 ✓
1065	5x4x1 $\frac{1}{2}$	30 ✓
1066		54 ✓
1067	5x4x3	60 ✓
1068	4x4x2	32 ✓
1069	3x3x3	27 ✓
1070	8x4x2 $\frac{1}{2}$	80 ✓
1071	6x3x2	36 ✓
1072	3x3x3	27 ✓
1073	3x3x3	27 ✓
1074		27 ✓
1075	7x8x4	224 ✓

1439 ✓

ES 75 H 4360
At head of branch
Gulch - Spillway

Spillway
Rock above Surface 2/18/33
XYN

		cu ft
76	6x9x3	162 ✓
77	6x3x3	54 ✓
78	4x3x2 $\frac{1}{2}$	27 ✓
79	8x5x3	120 ✓
80	8x8x3	192 ✓
81	6x4x2	48 ✓
82	5x3x2	30 ✓
83	6x5x2	60 ✓
84	3x4x2 $\frac{1}{2}$	30 ✓
85	5x3x2	30 ✓
86	4x3x3	36 ✓
87	5x3x4	60 ✓
88	5x5x4	100 ✓
89	5x5x3	75 ✓
90	4x3x3	36 ✓
91	9x15x7	945 ✓
92	3x3x3	27 ✓
93	8x6x5	240 ✓
94	5x5x2	50 ✓
95	6x4x2	48 ✓
96	4x3x7	84 ✓
97	10x4x3	120 ✓
98	6x4x1 $\frac{1}{2}$	36 ✓
99	8x14x3	336 ✓
100	6x6x4	144 ✓
		3090 ✓

Allowed Estimate No 10 Feb 1933
for Newbank

Feb 9 to 9/30
Total \$1,625

Feb 8 to 7/50 + 700
or \$1,500

Feb. 20, 33 XYN

Spillway Rock Above Surface

		cu ft
1076	11x5x7	385 ✓
1077	4x3x3	36 ✓
1078	4x3x3	36 ✓
1079	4x4x6	96 ✓
1080	4x4x2 $\frac{1}{2}$	40 ✓
1081	6x10x5	300 ✓
1082	8x5x5	200 ✓
1083	5x10x3	150 ✓
1084	6x4x2	48 ✓
1085	4x3x3	36 ✓
1086	5x4x2	40 ✓
1087	8x5x4	160 ✓
1088	6x4x3	72 ✓
1089	8x8x3	192 ✓
1090	16x11x5	880 ✓
1091	6x5x2	60 ✓
1092	6x3x2	36 ✓
1093	7x6x15	630 ✓
1094	6x6x3 $\frac{1}{2}$	146 ✓
1095	6x3x1 $\frac{1}{2}$	27 ✓
1096	3x3x3	27 ✓
1097	6x3x1 $\frac{1}{2}$	27 ✓
1098	.	54 ✓
1099	4x4x3	48 ✓
1100	8x3x2	48 ✓
		3754 ✓

3/21/33
XYN

3/24/33
on Ridge N 250

E 5197
N 4378

Spillway
Rock above Surface

2/20/33 XRM

		cu ft
101	4x3x3	36 ✓
102	7x2x2	28 ✓
103	5x6x2	60 ✓
104	6x6x4	144 ✓
105	4x3x2½	27 ✓
106	6x10x2	120 ✓
107	5x10x4	200 ✓
108	10x6x5	300 ✓
109	6x3x2	36 ✓
110	6x5x3	90 ✓
111	8x6x5	240 ✓
112	10x4x8	320 ✓
113	6x4x1½	36 ✓
114	5x7x4	140 ✓
115	6x5x3	90 ✓
116	8x8x2½	160 ✓
117L	10x4x2	80 ✓
118	12x4x2	96 ✓
119	4x4x3	48 ✓
120	6x4x2	48 ✓
121	6x12x3	216 ✓
122	8x4x2	64 ✓
123	5x3x2	30 ✓
124	6x8x1½	72 ✓
125	8x4x2	64 ✓

2745 ✓

Allowed Estimate No 10 to Feb 1933
at new camp

Spillway Rock above Surface

21½
3/24/33 XRM

		cu ft
1101	6x6x3	108 ✓
1102	4x3x2½	30 ✓
1103	6x8x1½	72 ✓
1104	4x4x3	48 ✓
1105	6x4x1½	36 ✓

To Page 48

Spillway Rock Above Surface

3/24/33
XRMNo of 3+25, 5 Toe, on Ridge
From Page 49½

1200L		54 ✓
1201	5x6x2	60 ✓
1202	3x3x3	27 ✓
1203	7x12x4½	378 ✓
1204	5x11x2	110 ✓
1205	5x5x2	50 ✓

On Point of Spillway Above Elev. 770
(Outside Spillway Proper)

3/25/33 XRM

1206	6x4x2	48 ✓
1207	4x4x3	48 ✓
1208	5x3x2	30 ✓
1209	8x7x4	224 ✓
1210L	3x3x3	27 ✓
1211	3x3x3	27 ✓
1212	6x3x3½	63 ✓
1213L	4x3x3	36 ✓
1214	6x5x3	90 ✓

593 ✓
1566 ✓ Page Total

Spillway
Rock above surface
2/2/33 XTR

126	8x10x4	320 ✓
127	3x4x2 $\frac{1}{4}$	27 ✓
128	4x4x2	32 ✓
129	6x6x3	108 ✓
130	6x5x3	90 ✓
131	6x5x3	90 ✓
132	3x4x12	144 ✓
133	5x4x2	40 ✓
134	6x12x3	216 ✓
135	8x4x3	96 ✓
136	6x3x3	54 ✓
137	6x3x3	54 ✓
138	4x6x10	240 ✓
139	5x4x2	40 ✓
140	10x12x6	720 ✓
141	5x4x2	40 ✓
142	5x6x2	60 ✓
143	6x6x2 $\frac{1}{2}$	90 ✓
144L	3x3x3	27 ✓
145	3(4x3x2)	72 ✓
146	6x8x4	192 ✓
147L	4x4x3	48 ✓
148	6x3x2	36 ✓
149	6x3x2	36 ✓
150	4x4x2	32 ✓

2904 ✓

Allowed Estimate No 10 Feb. 1933.
Hydraulic camp

Outside Spillway on S Point 22
Above Elev. 770 Const
3/25/33 XTR

		cuft
1215	6x5x2	60 ✓
1216	6x4x4	96 ✓
1217	6x3x2	36 ✓
1218	6 $\frac{1}{2}$ x14x5	455 ✓
1219	6x3x2	36 ✓
1220	5x5x3 $\frac{1}{2}$	87 ✓
1221	4x4x2	32 ✓
1222	5x5x4	100 ✓
1223	6x6x4	144 ✓
1224	6x4x4	96 ✓
1225	5x5x3	75 ✓
1226	6x3x2	36 ✓
1227	7x6x4	168 ✓
1228	4x6x2	48 ✓
1229	5x6x2	60 ✓
1230	6x4x3	72 ✓
1231	4x3x2 $\frac{1}{4}$	27 ✓
1232	6x5x4	120 ✓
1233	6x3x3	54 ✓
1234	6x4x3 $\frac{1}{2}$	84 ✓
1235	6x6x3	108 ✓
1236	6x3x4	72 ✓
1237	6x3x2	36 ✓
1238L		54 ✓
1239	6x3x2	36 ✓

2192 ✓

Spillway
Rock above Surface.

	Rock	cu ft	
151	6x3x2	36 ✓	Allowed Estimate No 10 Feb. 1933 AT Newcomb
152	4x4x2	32 ✓	
153 _L	5x6x2	60 ✓	
154	4x5x2	40 ✓	
155	6x3x2	36 ✓	
156	4x3x3	36 ✓	
157	4x4x2	32 ✓	
158	4x4x2½	40 ✓	
159	4x4x2	32 ✓	
160 _L		27 ✓	
161	4x5x1½	30 ✓	
162	4x3x4	48 ✓	
163	6x5x3	90 ✓	
164	6x4x2	48 ✓	
165	6x3x3	54 ✓	
166	6x6x1½	54 ✓	
167	5x5x3	75 ✓	
168	6x4x2	48 ✓	
169	5x4x2½	50 ✓	
170	6x3x2	36 ✓	
171	5x3x2	30 ✓	
172	6x3x1½	27 ✓	
173	6x4x1½	36 ✓	
174	5x4x2	60 ✓	
175	8x9x3½	252 ✓	
		1309 ✓	

Sta 8 to 7+50 on S

Side - Sta 7 on N

2/24/33 HAN

to Sta 7 on S - Side

Outside Spillway on S Point
Above Elev. 770. Contd.

3/25/35 HAN

	Rock	cu ft
1240	6x5x4	120 ✓
1241	5x3x4	60 ✓
1242	5x4x2½	50 ✓
1243	3x3x3	27 ✓
1244	6x3x3	54 ✓
1245	15x3x2½	113 ✓
1246 _L		27 ✓
1247	6x3x3	54 ✓
1248	5x5x3	90 ✓
1249	4x3x3	36 ✓
1250	7x6x4½	189 ✓
1251	3x3x3	27 ✓
1252	8x5x2	80 ✓
1253	8x20x3½	560 ✓
1254	5x6x8	240 ✓
1255	3x3x3	27 ✓
1256	5x3x2	30 ✓
1257	4x5x1½	30 ✓
1258	7x5x2	70 ✓
1259	4x5x2½	50 ✓
1260	6x4x1½	30 ✓
1261	4x20x8	640 ✓
1262	6x4x2	48 ✓
1263	6x25x4	600 ✓
1264	5x3x2	30 ✓
1265	3x3x3	27 ✓
		3309 ✓

Spillway
Rock above Surface

		cu. ft.
176	5x8x4	160 ✓
177	5x3x2	30 ✓
178	5x6x2½	75 ✓
179	8x6x2½	120 ✓
180	4x6x3	72 ✓
181	6x10x2	120 ✓
182	5x3x2	30 ✓
183	3x3x3	27 ✓
184	7x8x3	168 ✓
185	4x3x2½	27 ✓
186	7x4x4	112 ✓
187	5x5x2	50 ✓
188	4x12x1½	72 ✓
189	6x5x1	30 ✓
190	7x8x1½	84 ✓
191	8x4x5	160 ✓
192	5x4x1½	30 ✓
193	6x5x2½	75 ✓
194	5x8x2	80 ✓
195	5x5x3	75 ✓
196	6x4x3	72 ✓
197	7x3x3	63 ✓
198	6x8x1½	72 ✓
199	8x8x2	128 ✓
200	6x4x8	192 ✓

2124 ✓

Allowed Estimate No. 10 Feb 6 1933.
 277 yencamp

2/24/33. 277.

Outside Spillway on South Point
Above Elev. 770 Cont'd3/25/33 24½
277.

1266	6x5x3	90 ✓
1267	4x6x3	72 ✓
1269	6x3x2	36 ✓
1270	6x6x1	36 ✓
1271	4x3x2½	27 ✓
1272	6x3x1½	27 ✓
1273	6x4x2	48 ✓
1274	12x4x2	96 ✓
1275	6x3x2	36 ✓
1276	6x4x3	72 ✓
1277	5x12x5	300 ✓
1278	4x4x2	32 ✓
1279	8x12x4	384 ✓
1280	6x12x6	432 ✓
1281	5x3x2	30 ✓
1282	8x16x4½	576 ✓
1283	9x18x5	810 ✓
1284	3x3x3	27 ✓
1285	6x3x2½	45 ✓
1286	12x7x8	672 ✓
1287	10x12x9	1080 ✓
1288	12x14x5½	924 ✓
1289	4x3x3	36 ✓
1290	3x4x3	36 ✓
1291	6x6x2	72 ✓
1292	4x3x2½	27 ✓

6023 ✓

Just outside
slope on 770
Elev.

Below 770^{ft.}
near n.w. slope

SPILLWAY

Rock above Surface

		cu ft
201	4x4x2	32 ✓
202	8x12x6	576 ✓
203	10x14x12	1680 ✓
204	7x8x8	448 ✓
205	5x5x4	100 ✓
206	6x15x7	630 ✓
207	10x5x12	600 ✓
208	6x3x2½	45 ✓
209	6x4x1¼	30 ✓
210	6x3x2	36 ✓
211	6x5x3	90 ✓
212	6x3x1½	27 ✓
213	5x8x3	120 ✓
21A	6x5x1½	27 ✓
215	6x4x1½	36 ✓
216	10x9x5	450 ✓
217	9x6x3	162 ✓
218	5x3x2	30 ✓
219	5x5x2	50 ✓
220	3x3x3	27 ✓
221	4x3x2½	27 ✓
222	5x4x3	60 ✓
223	7x8x4	224 ✓
224	9x16x2	288 ✓
225	6x4x3	72 ✓
		<u>5867</u> ✓

Allowed Estimate No 10 Feb 1933
 JH Pencomb

2/25/33 JH

Near E at 6+40

N Slope 6+50

2/29/33
JH
 Outside Spillway on South Point
 Above Elev. 770 Contd.

		cu ft.
1293 L	9x3x1	27 ✓
1294	10x5x4	200 ✓
1295	6x9x3	162 ✓
1296	6x12x4	288 ✓
1297	4x11x3	132 ✓
1298	6x7x2½	105 ✓
1299	13x20x15	3900 ✓
1300	9x6x5	270 ✓
1301	5x9x6	270 ✓

5 yds below 770

 (in pit to N) E1
 17' & below 770

Spillway Rock above Surface

 N.E. below Trail About Elev. 850± from Pt. N 4400.
 to N. Top Slope N. of 2nd Gulch from E. end. 3/27/33 JH

1302	6x4x1½	36 ✓
1303	5x6x1½	45 ✓
1304	6x3x1½	27 ✓
1305	8x5x8	320 ✓
1306	6x6x2	72 ✓
1307	7x4x2	56 ✓
1308	12x6x3	216 ✓
1309	6x3x2	36 ✓
1310	6x4x1¼	30 ✓
1311 L		(54) ✓
1312	6x4x1¼	30 ✓
1313	6x4x2	48 ✓
1314	9x7x4	252 ✓
1315	6x4x1¼	30 ✓

Belows to Toe at Sta 3.

at 2+75 N. Toe

Total

 1252
 6606. ✓

26

Spillway
Rock above Surface

		cu. ft
226	6x3x2	36 ✓
227	6x3x1½	27 ✓
228	4x4x3	48 ✓
229	5x4x1½	30 ✓
230	3x3x3	27 ✓
231	5x3x2	30 ✓
232	5x4x2	40 ✓
233	4x4x2	32 ✓
234	4x3x2½	27 ✓
235	5x6x3½	105 ✓
236	6x3x2	36 ✓
237	6x8x3½	168 ✓
238	8x4x3	96 ✓
239	6x5x2	36 ✓
240	6x4x3	72 ✓
241	6x5x1½	45 ✓
242	6x4x1½	36 ✓
243	6x5x2	60 ✓
244	8x5x3	120 ✓
245	7x4x1½	42 ✓
246	6x3x2	36 ✓
247	6x6x4	144 ✓
248	6x4x3	72 ✓
249	3x3x3	27 ✓
250	5x5x3	75 ✓
		1467 ✓

2/25/33
2772

Spillway Rock above Surface 267

		cu. ft	
1316	6x4x1½	36 ✓	
1317	8x4x3	96 ✓	Sur. N Toe 2+75 E1 850± 8'50f.
1318L	4x5x1½	30 ✓	
1319	6x5x3½	105 ✓	10' H of
1320	8x3x2	48 ✓	
1321L		27 ✓	
1322	5x3x2	30 ✓	
1323	4x10x2	80 ✓	
1324	10x9x5½	495 ✓	
1325	5x4x2	40 ✓	
1326L	6x2x2½	30 ✓	
1327	5x5x3	75 ✓	Below N Toe at 1175
1328	5x6x1½	45 ✓	E 5320 N 4440
1329	6x7x15	630 ✓	Below N Toe at at top
1330	12x20x6	1440 ✓	½ above Top of N Toe Slope Line
1331L	6x2x2½	30 ✓	
1332	6x6x4	144 ✓	
1333	3x3x3	27 ✓	
1334	9x6x3	162 ✓	
1335	9x5x2½	112 ✓	at 1+50 N Top
1336L		27 ✓	
1337	5x6x1	30 ✓	outside, overhanging
1338	6x4x3	72 ✓	2/30/33 4+15 Toe Slope
1339	5x6x3	90 ✓	4+00 N Toe Slope
1340L		27 ✓	
		3928 ✓	

27 Spillway Rock

Above
Surface cu ft

7/27/33 RTN

251	6x5x3	90	✓
252	6x3x2	36	✓
253	5x4x2½	50	✓
254	7x7x4	196	✓
255	4x3x3	36	✓
256	6x3x2	36	✓
257	5x8x2½	225	✓
258	7x7x3½	172	✓
259	4x5x1½	25	✓
260	6x12x4½	324	✓
261	6x3x2	36	✓
262	7x4x2½	70	✓
263	6x7x8	336	✓
264	6x11x2	132	✓
265	3x10x5	150	✓
266	5x6x3½	105	✓
267	4x5x8	160	✓
268	6x10x5	300	✓
269	8x15x7	840	✓
270	5x7x3	105	✓
271	4x7x10	280	✓
272	7x12x5	420	✓
273	8x10x2	160	✓
274	6x4x2	48	✓
275	4x4x2½	40	✓
		4372	✓

{ 6 cu yds of this rock
overhangs outside slope
on S. at Sta 6+60.

← outside Slope Overhang
(not embedded)

Sta 6+33²⁸ POT S. Toe Slope

6+23 (Flat)

Spillway Rock above Surface

3/30/33 RTN 27½

E from N Toe Sta 4 to Sta 3.

1341	8x6x3	144	✓
1342	4x5x2½	50	✓
1343	4x3x2½	30	✓
1344L	4x3x2¼	27	✓
1345	9x5x2½	113	✓
1346	6x5x2½	75	✓
1347	10x6x4½	270	✓
1348	6x5x1	30	✓
1349	6x9x2½	135	✓
1350	7x18x3½	441	✓
1351	4x5x2	40	✓
1352	4x4x2½	40	✓
1353	6x8x7	336	✓
1354	12x6x5	360	✓
1355	6x5x2½	75	✓
1356L		27	✓
1357	6x4x2	48	✓
1358	6x6x2	72	✓
1359	6x4x3	72	✓
1360	6x4x2	48	✓
1361L		27	✓
1362	8x6x2	96	✓
1363	6x5x3	90	✓
1364	6x4x2½	60	✓
1365	9x3x1	27	✓
		492	✓

at N Toe 3+75

" " " 3+68

split rocks " " "

10'5 N Toe 3+50

20'5 " " " " "

3+00 N Toe

41/33 RTN
N toe

27 33 ✓ page Total

Spillway
Rock above Surface

		cu ft
276	6x5x1	30 ✓
277	7x12x4	336 ✓
278	8x3x2	48 ✓
279	4x4x2	32 ✓
280	5x4x2	40 ✓
281	5x3x2	30 ✓
282	5x4x1½	30 ✓
283	7x9x5	315 ✓
284	5x5x2	50 ✓
285	8x12x6	576 ✓
286	6x5x1½	45 ✓
287	6x3x2½	45 ✓
288	6x5x2	60 ✓
289	8x4x4	128 ✓
290	6x12x3½	252 ✓
291	12x15x12	2160 ✓
292	6x8x5	240 ✓
293	4x6x3	72 ✓
294	6x5x2	60 ✓
295	5x5x2	50 ✓
296	6x6x3	108 ✓
297	6x4x3	72 ✓
298	6x3x3	54 ✓
299	5x8x6	240 ✓
300	4x4x2½	40 ✓

5112 ✓

2/25/33
ATW

Spillway Rock Above Surface

1366L		27 ✓
1367L		27 ✓
1368	6x12x2½	180 ✓
1369	4x5x1½	30 ✓
1370	8x6x2	96 ✓
1371L		27 ✓
1372	6x6x3	108 ✓
1373	6x4x2½	60 ✓
1374	6x8x3	144 ✓
1375	7x6x3	126 ✓
1376	8x5x1½	60 ✓
1377	5x4x1½	30 ✓
1378	9x6x2½	135 ✓
1379	3x3x3	27 ✓
1380	6x10x2½	150 ✓
1381	6x5x1	30 ✓
1382	6x4x3	72 ✓
1383	18x5x2½	225 ✓
1384L	4x4x2	32 ✓
1385L	4x4x3	48 ✓
1386L	6x3x2	36 ✓
1387	6x5x1	30 ✓
1388	5x6x1	30 ✓
1389	5x3x2	30 ✓
1390	7x5x2	70 ✓
1391	8x5x1½	60 ✓

1890 ✓

at 200' ^{top} station

1. slope 2 to 5

near drain pipe

N of "

29

Spillway
Rock above Surface
Co. ft.XTN
-1/25/33

301	5x3x2	30 ✓	
302	3x3x3	27 ✓	
303	12x12x4	576 ✓	5+33 ³¹ Top N Slope Outside Slope
304	3x3x3	27 ✓	
305	3x3x3	27 ✓	
306	6x3x2½	45 ✓	5+93 E.C. N Slope
307	8x3x1½	36 ✓	
308	9x12x6	648 ✓	
309	6x3x5	90 ✓	
310	6x4x3	72 ✓	
311	6x9x10	540 ✓	
312	6x4x2	48 ✓	
313	4x6x3	72 ✓	
314	5x6x12	360 ✓	
315	6x6x1	36 ✓	
316	5x4x2	40 ✓	
			March 1 st 1933 XTN
317	10x10x3	300 ✓	
318	4x3x3	36 ✓	
319	6x4x2	48 ✓	
320	6x8x12	576 ✓	
321	8x12x4	384 ✓	
322	5x8x4	160 ✓	
323	5x4x2	30 ✓	
324 L	6x3x3	54 ✓	
325	1x12x8	384 ✓	
		4646 ✓	

Spillway Rock Above Surface
29½

1392	4x12x4	192 ✓	
1393 L	6x3x1½	27 ✓	
1394	8x9x3½	252 ✓	
1395	6x8x2	96 ✓	
1396 L	9x12x4	432 ✓	
1397	10x12x3	360 ✓	
1398 L		54 ✓	4+50-4+5 4/4/33 Near N Top Slope XTN
1399	4x3x3	36 ✓	
1400	6x9x3	162 ✓	Top N Slope Sta 4+00
1401	7x8x3½	196 ✓	
1402	6x5x1½	45 ✓	
1403	4x6x3	72 ✓	
1404 L	3x6x2	36 ✓	
1405 L	3x3x3	27 ✓	
1406	5x4x1½	30 ✓	
1407	6x3x1½	27 ✓	
1408	8x6x3	144 ✓	
1409	6x5x1	30 ✓	N of E Goltz El 800+ 4/4/33 XTN
1410	12x5x2	120 ✓	
1411 L	3x3x3	27 ✓	
1412 L	3x5x2	30 ✓	Top Slope 0+15
1413	4x4x3	48 ✓	" " 0+30
1414	4x3x2½	30 ✓	
1415 L	3x3x3	27 ✓	
1416	6x3x3	54 ✓	
1417 L		27 ✓	
		2581 ✓	

⇒ pill way

Rock above Surface

		cu. ft.	
326	3x3x3	27	✓
327	6x6x2	72	✓
328	4x10x3	120	✓
329	5x5x10	250	✓
330	7x4x5	140	✓
331	4x4x2	32	✓
332	6x3x3	54	✓
333	5x3x2	30	✓
334	4x8x2	64	✓
335	7x6x1 $\frac{1}{2}$	63	✓
336	4x10x2 $\frac{1}{2}$	100	✓
337	6x6x1	36	✓
338	10x4x2 $\frac{1}{2}$	100	✓
339	6x8x1	48	✓
340	4x4x2	32	✓
341	4x5x3	60	✓
342	9x6x3	162	✓
343	6x10x5	300	✓
344	4x3x2 $\frac{1}{2}$	27	✓
345	5x6x2	60	✓
346	6x3x2	36	✓
347	4x4x2	32	✓
348	6x4x4	96	✓
349	10x5x4	200	✓
350	8x8x3	192	✓
		<u>2333</u>	✓

15' S of H. Slope 500

3/1/33
272

Spillway Rock above Surface

1418	4x4x2	32	✓	5 of 50 + 25 near top 3 + 5
1419	3x3x3	27	✓	
1420L		27	✓	
1421	6x3x2 $\frac{1}{2}$	45	✓	
1422	4x6x2 $\frac{1}{2}$	60	✓	
1423L		27	✓	
1424	6x3x1 $\frac{1}{2}$	27	✓	
1425	4x4x2	32	✓	
1426	4x4x3	48	✓	
1427L	4x3x3	36	✓	
1428	4x3x2 $\frac{1}{2}$	30	✓	
1429	5x4x3	60	✓	
1430	5x3x2 $\frac{1}{2}$	38	✓	
1431L		27	✓	
1432L		27	✓	
1433	6x6x2	72	✓	
1434L		27	✓	
1435	3x3x3	27	✓	
1436L		27	✓	
1437	4x4x3	48	✓	
1438	4x4x3	48	✓	
1439L		27	✓	
1440				
1441	6x5x2	60	✓	
1442L		27	✓	
		<u>906</u>	✓	

Spillway

3/1/33
JHNRock above Surface
cut

351 L		54 ✓	
352	8x3x2	48 ✓	
353	6x3x2	36 ✓	
354	7x6x2	84 ✓	
355	4x3x2	42 ✓	
356	6x4x1½	36 ✓	
357 L		54 ✓	
358	3x3x3	27 ✓	
359	4x10x3	120 ✓	
360	6x4½x3	81 ✓	
361	6x6x3½	126 ✓	
362	6x4x2	48 ✓	
363	8x16x15	1920 ✓	Large rock on Top Ridge
364	5x10x12	600 ✓	
365	6x5x2½	75 ✓	
366	6x3x3	54 ✓	
367	6x3x2½	45 ✓	
368	3x3x3	27 ✓	
369	7x3x3	63 ✓	at of light on S Side at Top Hill
370	5x4x3½	70 ✓	
371	8x4x3	96 ✓	
372	8x3x1½	36 ✓	
373	4x5x2½	50 ✓	
374	4x4x2	32 ✓	
375	6x8x4	192 ✓	on line Top Slope S Side Sta 6+20 Top Hill
		4016 ✓	

Spillway Rock above Surface.

1443	4x3x3	36 ✓	
1444 L		54 ✓	
1445	3x4x3	36 ✓	
1446	6x4x2	48 ✓	1+00 Toe N Slope
1447	7x8x2	112 ✓	
1448	5x5x2	50 ✓	
1449	8x5x3	120 ✓	
1450	6x5x3	90 ✓	
1451	6x3x2	36 ✓	
1452 L		27 ✓	
1453	4x3x2½	30 ✓	
1454 L		54 ✓	
1455	6x5x4	120 ✓	
1456	3x3x3	27 ✓	
1457 L		27 ✓	
1458	5x3x3	45 ✓	
1459	4x3x2½	30 ✓	
1460	6x3x1½	27 ✓	
1461	6x4x1½	36 ✓	
1462 L		27 ✓	5 1/2 N Toe 0+50 JHN
1463	10x6x4	240 ✓	
1464	5x5x2	30 ✓	
1465	4x5x3	60 ✓	
1466	6x5x3½	105 ✓	
1467	4x3x3	36 ✓	
1468	6x5x2½	75 ✓	
		1578 ✓	

32

Spillway

Rock above Surface -
Cu ft

376	6x7x3	126 ✓	
377	3x3x3	27 ✓	
378	6x3x3	54 ✓	$\frac{1}{2}$ Above 950 on S side outside Slope
379	4x4x3	48 ✓	$\frac{1}{2}$ " Same
380	5x6x7	210 ✓	$\frac{3}{5}$ 3/33 x 777 At El. 625 Stone Soft
381	10x6x3	180 ✓	"
382 ✓	5x4x2	40 ✓	$\frac{3}{5}$ 3/33 x 777 Top Hill
383 ✓	5x3x2	30 ✓	
384 ✓	6x4x2	60 ✓	
385 ✓	6x4x3	72 ✓	
386 ✓	9x3x6	162 ✓	
387 ✓	6x5x2	60 ✓	
388 ✓	5x4x2	40 ✓	
389 ✓	6x3x2	36 ✓	
390 ✓	6x4x4	96 ✓	
391 ✓	6x4x2	48 ✓	
392 ✓	4x3x2 $\frac{1}{4}$	27 ✓	
393 ✓	6x5x3	90 ✓	
394	3x3x3	27 ✓	
395	6x3x2	36 ✓	3 of High flag St 5+48 Stone
396 ✓	6x10x3	180 ✓	
397 ✓	6x5x2	60 ✓	
398 ✓	5x3x2	30 ✓	
399 ✓	3x10x4	120 ✓	
400	8x10x5	400 ✓	N. side 15 N.E. of N Toe 5+01.75

2259 ✓

3/1/33
x 777Spillway Rock above Surface 32 $\frac{1}{2}$

1469 L		27 ✓	
1470	6x4x4	96 ✓	
1471	6x5x1 $\frac{1}{2}$	45 ✓	
1472	3x3x3	27 ✓	
1473 L			
1474 ✓	4x4x2	32 ✓	
1475 ✓	3x3x3	27 ✓	
1476	5x3x3	45 ✓	
1477	6x3x1 $\frac{1}{2}$	27 ✓	
1478 L		54 ✓	0+50 20 Soft Top Slope
1479 L	5x3x3	45 ✓	
1480	3x3x3	27 ✓	
1481 L		27 ✓	
1482	3x3x3	27 ✓	
1483 L	4x3x2 $\frac{1}{2}$	30 ✓	top of N Slope 0+75
1484 L		27 ✓	
1485	3x3x3	27 ✓	
1486	6x3x1 $\frac{1}{2}$	27 ✓	
1487	4x3x2 $\frac{1}{4}$	27 ✓	
1488 L	5x3x2	30 ✓	
1489 L	5x3x3	45 ✓	
1490	6x3x2	36 ✓	
1491 L	3x3x3	27 ✓	
1492	6x4x2 $\frac{1}{2}$	60 ✓	
1493	5x3x2	30 ✓	
1494	5x4x3	60 ✓	

932 ✓

33

Spillway

Rock above Surface

401	4x3x3	36 ✓	
402	4x3x3	36 ✓	
403	8x3x2 $\frac{1}{2}$	60 ✓	
404	12x6x7	504 ✓	
405	6x5x2	60 ✓	
406	9x12x5	540 ✓	
407	6x5x2	60 ✓	
408	5x4x3	60 ✓	
409	16x9x3	432 ✓	
410	5x6x10	300 ✓	Along Top N+S Ridge
411	6x5x12	360 ✓	
412	6x6x12	432 ✓	
413	6x11x4 $\frac{1}{2}$	297 ✓	
414	6x3x1 $\frac{1}{2}$	27 ✓	
415 L		54 ✓	
416	6x6x3 $\frac{1}{2}$	126 ✓	SSW of Big Rock by Tree on Top Ridge
417	12x14x3	504 ✓	Lg flat Rock 8' W of Tree on Top Ridge.
418 L		54 ✓	
419	9x10x4	360 ✓	
420	6x6x3 $\frac{1}{2}$	126 ✓	
421	7x12x6	504 ✓	Split Rock
422	6x4x4	96 ✓	
423 L		27 ✓	
424	8x7x4	224 ✓	
425	4x3x3	36 ✓	

5315 ✓

3/13/33

ATW

Spillway Rock above Surface 33

1495	6x3x2	36 ✓	
1496	3x4x2 $\frac{1}{4}$	27 ✓	
1497	6x4x1 $\frac{1}{2}$	36 ✓	
1498	6x12x3 $\frac{1}{2}$	252 ✓	
1499	6x4x2 $\frac{1}{2}$	60 ✓	
1500	6x9x3 $\frac{1}{2}$	189 ✓	N of N Toe STA 1 top
1501	4x7x12	336 ✓	Just W of 1499 S of N Toe 1m 2 nd Gulch 1+25
1502	4x3x3	36 ✓	
1503	6x3x2	36 ✓	
1504	12x12x7	1008 ✓	1+25 N Toe
1505	4x3x3	36 ✓	
1506	4x4x2	32 ✓	
1507 L		81 ✓	in gulch W side "
1508	8x10x3	240 ✓	
1509	4x3x3	36 ✓	
1510 L	3x3x3	27 ✓	
1511	4x3x2 $\frac{1}{4}$	27 ✓	
1512	4x5x3 $\frac{1}{2}$	70 ✓	
1513	6x6x3	108 ✓	1+00 N Toe
1514	3x4x3	36 ✓	
1515	5x5x3	75 ✓	
1516	3x3x3	27 ✓	
1517	5x4x2	40 ✓	
1518	9x3x4	108 ✓	
1519	4x3x3	36 ✓	
1520	4x3x2 $\frac{1}{4}$	27 ✓	

3022 ✓

34

Spillway
Rock above Surface3/16/33
XTM

426	5x5x2 $\frac{1}{2}$	62 \checkmark	Note:
427	4x4x3 $\frac{1}{2}$	56 \checkmark	West of Dam Axis, Took
428	6x3x2 $\frac{1}{2}$	45 \checkmark	up to Slope Line only.
429	4x4x3	48 \checkmark	East of Dam Axis Took
430	4x5x1 $\frac{1}{2}$	30 \checkmark	up to bottom of 1:10 Slope
431	4x3x2 $\frac{1}{2}$	30 \checkmark	
432	3x3x3	27 \checkmark	
433	4x4x3	48 \checkmark	
434	3x4x2 $\frac{1}{2}$	30 \checkmark	
435	4x3x2 $\frac{1}{2}$	30 \checkmark	
436L		54 \checkmark	
437	6x4x3 $\frac{1}{2}$	84 \checkmark	
438	5x4x3	60 \checkmark	
439	4x3x3	36 \checkmark	
440	6x7x2 $\frac{1}{2}$	105 \checkmark	
441	4x4x2	32 \checkmark	
442	6x2x2 $\frac{1}{4}$	27 \checkmark	
443	6x4x4	96 \checkmark	E of Top Ridge at 5+40 + SE
444	4x3x2 $\frac{1}{4}$	27 \checkmark	3/10/33 XTM
445L		54 \checkmark	
446	4x3x2 $\frac{1}{4}$	27 \checkmark	
447	5x4x1 $\frac{1}{2}$	30 \checkmark	
448	6x4x1 $\frac{1}{2}$	36 \checkmark	
449	5x4x3	60 \checkmark	
450	5x4x2	40 \checkmark	

1174 \checkmark Spillway Rock above Surface 34 $\frac{1}{2}$

1521L		27 \checkmark	
2	6x3x1 $\frac{1}{2}$	27 \checkmark	
3L		54 \checkmark	
4L		27 \checkmark	
5	5x6x1 $\frac{1}{2}$	45 \checkmark	
6	7x3x2	42 \checkmark	
7	4x3x3	36 \checkmark	
8		27 \checkmark	
9	3x4x3	36 \checkmark	
1530	5x4x3	60 \checkmark	
1L		27 \checkmark	
2	4x4x2	32 \checkmark	
3	3x3x3	27 \checkmark	
4	7x6x4	168 \checkmark	
5	5x7x6	210 \checkmark	
6	6x5x3	90 \checkmark	
7	6x3x3	54 \checkmark	
8	3x3x3	27 \checkmark	
9	4x3x3	36 \checkmark	1+00 to side
1540		27 \checkmark	
1	6x5x3	90 \checkmark	Bottom gulch
2	3x3x3	27 \checkmark	
3	4x4x2 $\frac{1}{2}$	40 \checkmark	
4	3x6x4	72 \checkmark	
5	7x6x6	252 \checkmark	
6	6x5x1	30 \checkmark	
7	5x6x5	150 \checkmark	

1740 \checkmark 2nd
w gulch top in slope
n of slope in gulch

35 Spillway
Rock above Surface

3/20/33
XRM

451	8x4x4	128 ^{cut}	Near E Slope at 4+53 Daylight Sec.
452	4x4x2	32 [✓]	
453	5x5x3	75 [✓]	
454	10x4x2	80 [✓]	
455	4x3x2 $\frac{1}{4}$	27 [✓]	
456	8x4x2	64 [✓]	Sta 4+75 on S side at 0+00 ^{cut}
457	7x4x3	84 [✓]	E to 4+25 N of Portal to S.M. Ex Tunnel
458	5x5x2	50 [✓]	
459	6x4x2	48 [✓]	
460	4x3x2 $\frac{1}{4}$	27 [✓]	
461	6x5x1	30 [✓]	
462	8x5x2	80 [✓]	Broken as if old shot
463	8x4x3	96 [✓]	
464	L	54 [✓]	
465	7x5x3	105 [✓]	
466	4x3x2 $\frac{1}{4}$	27 [✓]	
467	7x5x3	105 [✓]	
468	6x5x3	90 [✓]	
469	6x4x2	48 [✓]	20' SW of 4+75 Toe SKEV
470	4x3x2 $\frac{1}{4}$	27 [✓]	
471	6x3x1 $\frac{1}{2}$	27 [✓]	
472	L	54 [✓]	
473	5x3x2	30 [✓]	
474	3x4x4	48 [✓]	S of S at 5+10 Toe Bottom ^{ms. 1/2}
475	5x3x2	30 [✓]	
		1466 [✓]	

Spillway Rock above Surface
Sta 4+00 East along N Slope on High Point

351

4/5/33
XRM

1548	6x5x1	30 [✓]	Part of Rock
1549	5x4x1 $\frac{1}{2}$	30 [✓]	
1550	6x5x3	90 [✓]	
1551	5x3x2	30 [✓]	
1552	8x9x4	288 [✓]	
1553	8x3x3	72 [✓]	
1554	4x7x7	196 [✓]	
1555	17x5x2	170 [✓]	
1556	6x5x1	30 [✓]	
1557	L	54 [✓]	
1558	4x3x3 $\frac{1}{2}$	42 [✓]	
1559	6x5x1	30 [✓]	
1560	15x4x4	240 [✓]	
1561	8x4x2 $\frac{1}{2}$	80 [✓]	
1562	8x3x2	48 [✓]	
1563	6x12x2	144 [✓]	
1564	8x3x2	48 [✓]	
1565	6x4x3	72 [✓]	
1566	12x12x3	432 [✓]	
1567	6x5x2	60 [✓]	
1568	4x3x2 $\frac{1}{4}$	27 [✓]	
1569	5x10x2	100 [✓]	
1570	10x3x2 $\frac{1}{2}$	75 [✓]	
1571	9x6x2	108 [✓]	
1572	6x3x8	144 [✓]	
1573	6x5x4	60 [✓]	
		2700 [✓]	

to above slope
N slope 3+50 on side
4/7/33 XRM
Top N slope 2+25 West

36

Spillway

Rock above Surface

476	7x3x2	42 ^{cut} ✓
477	8x6x8	384✓
478	8x5x2	80✓
479	2x8x10	160✓
480	5x4x2	40✓
481	6x3x1 $\frac{1}{2}$	27✓
482	6x8x2	96✓
483	6x6x2	72✓
484	6x5x2	60✓
485	3x3x3	27✓
486	4x3x2 $\frac{1}{2}$	27✓
487	5x4x2	40✓
488	18x10x8	1440✓
489	3x3x3	27✓
490	6x8x10	480✓
491	5x10x3	150✓
492	6x5x8	240✓
493	5x4x3	60✓
494	4x4x5	80✓
495	7x4x2 $\frac{1}{2}$	70✓
496	6x3x3	54✓
497	6x9x6	324✓
498	8x8x2 $\frac{1}{2}$	160✓
499	5x5x3	75✓
500	5x5x2	50✓

4265✓

3/20/33
JRNTop Rock { N 4244.70
E 5000.00Table Rock 3+35
190 almost m. d. r.

1601-10x12x6 = 720

Spillway Rock above Surface.

1574	6x16x3	288✓	1602	4x3x2 $\frac{1}{2}$	30✓	361
1575	6x10x3	180✓	1603	8x4x2	64✓	2
1576	10x6x2	120✓	1604	4x3x2 $\frac{1}{2}$	27✓	
1577	6x6x3	108✓	1605	6x4x1 $\frac{1}{2}$	30✓	
1578	6x9x2	108✓	1606	7x7x2 $\frac{1}{2}$	127 $\frac{1}{2}$	E1918.58
1579	4x5x1 $\frac{1}{2}$	30✓	1607	7x8x3	168✓	
1580	6x4x1 $\frac{1}{2}$	30✓	1608	6x3x2	36✓	
1581	3x4x2 $\frac{1}{2}$	30✓	1609	8x5x3	120✓	
1582	4x5x2	40✓			2469✓	
1583	5x6x1	30✓				
1584	7x5x6	210✓				
1585	6x4x4	96✓				
1586	10x5x1 $\frac{1}{2}$	75✓				
1587	4x9x10	280✓				
1588	4x4x2	32✓				
1589	6x3x3	54✓				
1590	6x3x3	54✓				
1591	6x12x4	288✓				
1592	8x4x1	32✓				
1593	7x3x2	42✓				
1594	6x5x2 $\frac{1}{2}$	75✓				
1595	6x16x3	288✓				
1596	6x12x1	72✓				
1597	5x4x3	60✓				
1598	6x10x2	120✓				
1599	3x8x2	48✓				
1600	3x3x3	27✓				

to outside slope

2817✓

37	Spillway East	Rock Above Ground. Sur face 3/15/33 A.M.	End Cuft.
501	5x5x3	75✓	
502 L	3x3x4	36✓	
503	4x4x2	32✓	
504	4x3x3	36✓	
505	3x3x3	27✓	
506	5x4x3	60✓	
507	6x4x2	48✓	
508 ⁴		27✓	
509	3x3x3	27✓	
510	4x3x2 ¹ / ₄	27✓	
511	3x3x3	27✓	
512	4x4x2 ¹ / ₂	40✓	
513	4x3x2 ¹ / ₄	27✓	
514	6x4x3	72✓	
515	3x3x3	27✓	
516 ³ L	3x3x3	27✓	
517 ² L	3x3x3	27✓	
518	7x4x3	84✓	
519	6x4x3	72✓	
520	6x3x4 ¹ / ₂	81✓	
521 ⁵ L	3(3x3x3)	81✓	
522	6x6x2	72✓	
523 ² L	2(3x3x3)	54✓	
524	3x4x2 ¹ / ₄	27✓	
525 ⁸ L		81✓	
		<u>1194</u> ✓	

Rock above Surface
Revised E Slope of Spillway

8/31/33
H. Newcomb 37 1/2

1610	4x3x1	12
1611	3x3x1	9
1612	4x3x2 ¹ / ₂	30
1613	4x4x2	32
1614	5x2x2	20
1615	4x4x2	32
1617	4x4x2	32
1618	3x5x2	30
1619	7x4x2 ¹ / ₂	70
1620	6x3x1	18
1621	5x4x2 ¹ / ₂	50
1622	6x4x1 ¹ / ₂	36
1623	4x4x1 ¹ / ₂	24
1624	3x4x2	24
1625	6x3x1 ¹ / ₂	27
1626	3x3x2	18
1627	9x5x3 ¹ / ₂	157.5
1628	6x10x1 ¹ / ₂	90
1629	3x3x2 ¹ / ₂	22
1630	6x5x2	60
1631	6x4x2 ¹ / ₂	60
1632	6x6x4	144
1633	8x4x2 ¹ / ₂	80
1634E	3x3x3	27
1635	10x5x2	100
1636	3x4x2 ¹ / ₂	30
1637	4x3x2	24

1258✓

with Slide.
Rock Came in from Outside Spillway Dec. on N. Side.
#1638 - 10x4x3 (2 yds above Surface)

50
1312 48.6 cu yds above Sur.

38 Spillway Rack above Surface ¹¹⁷⁷⁰
 3/15/33

		Coft
526 L		54 ✓
527	7x4x2	56 ✓
528	3x3x3	27 ✓
529	7x4x2 1/2	70 ✓
530	3x3x3	27 ✓
531	4x3x3	36 ✓
532	3x3x3	27 ✓
533	4x3x3	36 ✓
534	5x3x3	45 ✓
535	4x4x2 1/2	40 ✓
536	3x3x3	27 ✓
537	5x4x3	60 ✓
538	3x4x3	36 ✓
539	6x7x4	168 ✓
540	4x3x6	72 ✓
541	3x3x4	36 ✓
542	5x3x4	60 ✓
543	4x3x2 1/2	30 ✓
544	6x4x2	48 ✓
545	5x6x3	90 ✓
546	5x4x2	40 ✓
547	6x8x3	144 ✓
548	4x3x2 1/2	30 ✓
549	5x4x3	60 ✓
550	7x5x3	105 ✓
		<hr/> 1424 ✓

Too small sight on
 in Gulch N of S. slope Sta 0+25

39

Pillbox

Rock above Surface.

3/15/88
xxv

month to 0401.88

e 41.0 53.2
205 out 266 out 39 1/2

551	6x4x3	72 ✓
552 L		54 ✓
553 L		81 ✓
554	6x3x2 1/2	45 ✓
555	6x3x2	36 ✓
556	3x3x3	27 ✓
557	7x6x2 1/2	105 ✓
558	6x4x3	72 ✓
559	6x4x2	48 ✓
560	4x4x2 1/2	40 ✓
561	4x4x3	48 ✓
562	5x4x3	60 ✓
563	6x3x3	54 ✓
564	6x5x9	270 ✓
565	6x18x4 1/2	486 ✓
566	6x4x4	96 ✓
567	6x3x10	180 ✓
568	6x6x2	72 ✓
569	4x4x4	32 ✓
570	6x3x3	54 ✓
571	5x4x1 1/2	30 ✓
572	6x3x2	36 ✓
573	3x4x2 1/2	30 ✓
574	8x3x3	72 ✓
575	5x5x2 1/2	62 ✓
576	3x3x3	27 ✓
		<hr/> 2189 ✓

5 of 8 Switch
above 0401.88
on slope
at stake for air

2 of 6 Switch
below Pipe

40 Spillway Rack above Surface

		cu ft	3/15/33 XTN
577	3x3x3	27 ✓	
578	4x3x2 $\frac{1}{4}$	27 ✓	
579	7x5x4	140 ✓	
580	6x3x4	72 ✓	3/18/33 XTN
581	6x6x2 $\frac{1}{2}$	90 ✓	
582	3x3x3	27 ✓	
583	3x3x3	27 ✓	
584	3x3x3	27 ✓	
585	6x12x3 $\frac{1}{2}$	252 ✓	10' NE of 1+50 slope 5' away edge
586	6x3x1 $\frac{1}{2}$	27 ✓	
587		54 ✓	
588	4x3x2 $\frac{1}{4}$	27 ✓	
589	4x4x2 $\frac{1}{2}$	40 ✓	
590	6x3x1 $\frac{1}{2}$	27 ✓	
591	5x4x2 $\frac{1}{2}$	50 ✓	
592	6x3x3	54 ✓	
593	4x4x2 $\frac{1}{2}$	40 ✓	
594	5x5x1 $\frac{1}{2}$	37 ✓	
595	4x4x4	64 ✓	
596	8x8x8	512 ✓	5x8x15 Double rock
597	7x3x2	42 ✓	
598	6x4x2	48 ✓	
599	6x3x2	36 ✓	
600	6x5x3	90 ✓	
601	4x3x4	48 ✓	
602	6x6x4	144 ✓	
		<u>2029 ✓</u>	

Spillway Rack above Surface

		cu ft	XTN 40 $\frac{1}{2}$ 3/18/33
603	7x6x2	84 ✓	
604	6x6x2	72 ✓	
605	6x8x2	96 ✓	
606	3x3x3	27 ✓	
607	5x4x3	60 ✓	
608	5x4x3	60 ✓	
609	6x4x2 $\frac{1}{2}$	60 ✓	
610	6x3x3	54 ✓	
611	3x3x3	27 ✓	
612	3x3x3	27 ✓	
613	6x3x3	54 ✓	
614	3x4x3	36 ✓	
615	7x5x4	140 ✓	
616	6x3x3	54 ✓	
617	4x3x3	36 ✓	
618		54 ✓	to pipe lime
619		54 ✓	
620	5x3x3	45 ✓	
621	6x3x3	54 ✓	
622	6x5x5	150 ✓	
623	6x3x3	54 ✓	
624		270 ✓	to Pipe + 11 lead pipe
625	6x5x3	90 ✓	
626	4x4x3	48 ✓	
627	5x5x2	50 ✓	
628	6x8x4	192 ✓	
		<u>1948 ✓</u>	

Spillway Rock above Surface

3/18/33
JMN

		cu ft	
629	6x6x2	72✓	
630	6x4x3	72✓	
631	5x4x4	80✓	
632L		54✓	
633	5x4x3	60✓	
634	8x8x7	448✓	Splitting Boulder on W Side E Gulch 3/20/33 JMN
635L	3x4x3	36✓	
636	6x5x3	90✓	
637	5x5x3	75✓	
638	4x4x3	48✓	
639	6x6x5	180✓	
640L	6x6x3	108✓	
641L		54✓	
642	5x3x3	45✓	
643	3x3x3	27✓	
644L	3x4x3	36✓	
645	6x6x6	216✓	
646	3x4x3	36✓	
647	4x4x3	48✓	
648	4x3x3	36✓	
649	4x3x3½	42✓	
650	4x3x3	36✓	
651L		54✓	
652	8x5x5	200✓	"
653	3x3x3	27✓	
		2180✓	

Spillway Rock above Surface

3/20/33 JMN

		cu ft	
654	3x3x4	36✓	
655	3x3x3	27✓	
656	3x3x3	27✓	
657	5x5x4	100✓	
658	3x3x3	27✓	
659	3x5x4	60✓	
660	3x3x3	27✓	
661L		54✓	
662✓	4x7x8	224✓	
663✓	3x4x3	36✓	
664✓	8x5x3	120✓	
665L✓	3x3x3	27✓	
666	3x4x3	36✓	
667✓	3x3x3	27✓	
668L✓	4x4x2½	40✓	
669✓	9x6x3	same as 567	
670✓	5x4x2	40✓	
671✓	6x4x4	96✓	
672✓	6x3x2	36✓	
673L✓	3x3x3	27✓	
674x✓	4x4x4	32✓	
675✓	4x4x2	32✓	
676✓	3x4x3	36✓	
677✓	4x4x3	48✓	
678✓	6x10x4	240✓	
		1458✓	

4463
E5500

Spillway		Rock above Surface	cu ft	3/20/33 XRN
679	✓	3x4x3	36✓	
680	✓	6x4x3	72✓	
681	✓	4x3x3	36✓	
682	✓	3x3x3	27✓	
684	✓	6x5x3 ^{1/2}	108✓	
685	✓	5x5x6	150✓	
686	✓	5x5x3	75✓	
687	✓	5x4x4	80✓	
688	✓	3x3x3	27✓	
689	L X		54	Top E Slope at end x outside dug trench
690	L X		27	x " " "
691	X	4x4x2	outside	" " " " 27.5 10' SW of otoo
692	L X	3x3x3		x outside dug trench
693	✓	6x6x2	72✓	x inside flaps
694	X	6x3x3		x
695		6x5x2	60✓	in gulch at Top Slope otoo's 287.8/43.9
696	X	6x3x2		x in gulch above
697	X	4x3x3		x Slope will Come in
698	X	4x3x3		x
699		6x6x2	72	x 6x4x2 edge gulch & outside at NE of on Top Slope line
700	X	3x3x3		x
701	X	6x4x3		x
702		7x3x4	84✓	✓ Snail
703	X	7x3x2		x
704		3x6x10	180	in gulch Slope Stake on N (H.A. 80) Side otoo @ 107°
705	X	5x5x2		x
			1076✓	

Spillway		Rock above Surface	cu ft	42.2
706		5x5x3		3/20/33 XRN
707		6x4x3		All outside
708		3x3x3		Slope up
709		4x3x3		E gulch
710		10x5x3		will Come in
711		6x4x3		split off
712		6x7x2		mineral
713		6x7x4		Note 3/20/33 XRN
714		6x5x4		Rock marked
715		4x3x3		cut are outside
716		4(3x3x3)		E. Top Slope & will
717		6x4x4		be handled on
718		6x4x3		force etc.
719		5x4x4		Converse Numbered
720		3x3x3		1 Field crew measured
721		6x7x4		on " "
722		5x4x3		
723		3x2x2		
724		6x4x2	48✓	3/20/33 XRN
725		6x3x2	36✓	
726		6x4x3	72✓	
727		5x3x2	30✓	
728		4x4x2	32✓	
729		5x3x2	30✓	
730		5x3x2	30✓	
731		5x4x3	60✓	
			338✓	

43 Spillway Rock Above Surface

		cu ft	
732	4x3x2 $\frac{1}{2}$	30 ✓	3/20/33 372
733	4x4x2	32 ✓	
734	5x3x2	30 ✓	
735	3x4x2 $\frac{1}{4}$	27 ✓	
736		54 ✓	
737	5x4x4	80 ✓	
738	5x3x3	45 ✓	
739	6x6x3	108 ✓	
740	4x3x3	36 ✓	
741	6x4x3	72 ✓	
742	5x3x3	45 ✓	
743	5x4x3	60 ✓	
744	5x4x3	60 ✓	
745	4x12x8	384 ✓	
746	3x4x3	36 ✓	
747	6x4x3	72 ✓	
748	6x9x5	270 ✓	
749	6x4x4	96 ✓	
750	6x6x3 $\frac{1}{2}$	126 ✓	
751	6x4x2	48 ✓	
752	6x5x1	30 ✓	
753	4x4x2	32 ✓	
754	6x4x2	48 ✓	
755	10x3x15	450 ✓	
756	4x3x3	36 ✓	
757	6x4x4	96 ✓	
		<u>2403</u> ✓	

bottom
" E "

Spillway Rock above Surface 43 $\frac{1}{2}$

		cu ft	
758	4x4x3	48 ✓	3/20/33 372
759	4x3x4	48 ✓	
760	3x20x9	540 ✓	
761	3x5x4	60 ✓	
762		54 ✓	
763	4x3x3	36 ✓	
764	3x4x3	36 ✓	
765	5x3x2	30 ✓	
766	6x4x2	48 ✓	
767	6x6x4	144 ✓	
768	6x4x3	72 ✓	
769	4x12x7	336 ✓	stone top x5440 E 5500
770	4x4x2	32 ✓	
771	6x4x5	120 ✓	
772	6x3x2	36 ✓	
773	6x6x2	72 ✓	
774	5x3x2	30 ✓	
775	5x3x2 $\frac{1}{2}$	37 ✓	
776	5x3x2	30 ✓	
777	5x4x4	80 ✓	
778	5x3x3	45 ✓	
779	3x3x3	27 ✓	
780	6x3x3	54 ✓	
781	3x3x3	27 ✓	
782	3x3x3	27 ✓	
783	6x4x1 $\frac{1}{2}$	30 ✓	
		<u>2099</u> ✓	

44 Spillway Rock above Surface

	cu ft		3/21/33
784	10x10x12	1200	(Up 2nd Gulch ← from E. end.)
785	5x5x3	75	↳ E. Side Gulch
786	6x5x3	72	
787	3x3x3	27	
788	4x3x2½	27	
789	6x4x2½	60	
790	6x4x3	72	
791	8x3x2½	60	
792	4x4x2½	40	
793	3x3x3	27	
794	5x4x2½	50	
795	5x4x4	80	
796	3x3x3	27	
797	3x3x3	27	
798	4x4x3	48	
799	3x3x3	27	
800	3x4x3	36	
801	4x4x2	32	
802	6x4x4	96	
803	5x4x3	60	
804	3x3x3	27	
805	12x5x3	180	
806	4x5x2½	50	
807	4x3x3	36	
808	4x4x2	32	
809	5x3x2	30	
		2498	

Spillway Rock above Surface

	cu ft
810	6x6x2
811	5x3x2
812	6x2x4
813	3x4x3
814	4x3x3
815	5x3x2
816	4x4x3
817	6x4x3
818	6x3x4
819	8x6x3
820	4x3x2½
821	6x2x2½
822	3x4x2½
823	3x4x3
824	4x4x2
825	4x5x2½
826	4x4x2½
827	3x3x3
828	4x3x2½
829	3x3x3
830	3x4x3
831	4x4x3
832	5x5x4
833	6x4x3
834	7x5x2
835	4x4x2
	1275

44½
3/21/33
JTW

45 Spillway Rock above Surface

		cu ft	
836	6x4x4	96 ✓	
837	4x8x4	128 ✓	
838	7x10x4	280 ✓	
839	12x14x5	840 ✓	The Part above Br. Bottom of Cut in Gulch
840	3x3x3	27 ✓	
841	6x5x3	90 ✓	
842	4x3x3	36 ✓	
843	6x5x2	60 ✓	
844	4x5x4	80 ✓	
845	3x3x3	27 ✓	
846	4x4x3	48 ✓	
847	4x3x3	36 ✓	
848	3x3x3	27 ✓	
849	5x4x3	60 ✓	
850	6x6x2	72 ✓	
851	3x3x3	27 ✓	
852	3x3x3	27 ✓	
853	4x4x3	48 ✓	
854	8x8x3	192 ✓	
855	12x4x3	144 ✓	
856	7x9x3	189 ✓	
857	4x4x2	32 ✓	
858	4x4x3	48 ✓	under 856
859	4x4x2	32 ✓	
860	6x4x3	72 ✓	
861	6x3x3	54 ✓	
		<u>2712</u> ✓	

3/21/33
J.M.

Spillway Rock above Surface

		cu. ft.	
862	5x3x2	30 ✓	
863	6x4x3	72 ✓	bottom gulch
864	5x4x3	60 ✓	Split
865	6x3x2	36 ✓	
866	4x3x3	36 ✓	
867	5x4x2	40 ✓	
868	3x3x3	27 ✓	
869	12x6x2	144 ✓	
870		81 ✓	in gulch
871	5x3x2	30 ✓	
872	4x5x3	60 ✓	
873	3x4x3	36 ✓	10
874	3x3x3	27 ✓	
875	3x3x3	27 ✓	
876	4x7x3	84 ✓	
877	4x4x3	48 ✓	
878	5x3x3	45 ✓	
879	3x3x3	27 ✓	
880	5x4x4	80 ✓	
881	8x3x3	72 ✓	
882	4x3x2 $\frac{1}{4}$	27 ✓	
883	3x3x3	27 ✓	
884	4x4x4	64 ✓	in gulch
885	4x4x3	48 ✓	
886	4x3x2 $\frac{1}{4}$	27 ✓	
887	6x4x2 $\frac{1}{2}$	60 ✓	
		<u>1315</u> ✓	

45 $\frac{1}{2}$ 3/21/33
J.M.

46 Spillway Rock above Surface

		cu ft	
888	5x3x2	30 ✓	
889	8x4x2 1/2	80 ✓	
890	8x4x3 1/2	140 ✓	
891	4x3x3	36 ✓	
892	3x3x3	27 ✓	
893	3x3x3	27 ✓	
894	3x4x3	36 ✓	
895	8x6x3	144 ✓	Bottom under 893
896	6x4x3	72 ✓	
897	4x3x2 1/2	30 ✓	
898	4x5x4	80 ✓	
899	4x3x2 1/4	27 ✓	
900	5x3x2	30 ✓	
901	5x4x2	40 ✓	
902	6x4x3	72 ✓	
903	3x3x3	27 ✓	
904	6x3x2	36 ✓	
905 L	4x3x2 1/4	27 ✓	3 1/2 x 1 1/2 x 3/4 to 15' N of Pipe Line E of Gulch
906 L	4x4x2	32 ✓	
907	4x4x2	32 ✓	
908	4x7x1	28 ✓	
909	5x3x2	30 ✓	S of 2+25
910	3x4x10	120 ✓	
911	6x4x2	48 ✓	
912	5x3x2	30 ✓	
913	6x4x3	72 ✓	
		1353 ✓	

Spillway Rock above Surface

		cu ft	
914	3x3x3	27 ✓	
915	5x3x2	30 ✓	
916	4x10x2 1/2	100 ✓	E of 2+25 Rock not taken 3+20
917	4x5x2 1/2	50 ✓	
918	5x3x2	30 ✓	
919	4x3x2 1/4	27 ✓	
920	9x4x2	72 ✓	
921	4x3x3	36 ✓	
922 L [ⓐ]		54 ✓	
923	6x4x2	48 ✓	
924	5x8x3	120 ✓	Sta 2+75 S side
925	6x4x1 1/2	36 ✓	
926	4x4x2	32 ✓	
927	6x2x2 1/2	30 ✓	
928	5x4x2	40 ✓	
929 L	3x3x3	27 ✓	
930	6x6x2	72 ✓	
931 L	3x3x3	27 ✓	
932 L	3x3x3	27 ✓	
933 L	3x4x3	36 ✓	
934 L ^{split}	3x4x3	36 ✓	
935 L	3x3x3	27 ✓	98
936	5x4x2	40 ✓	
937 L	3x3x3	27 ✓	
938	6x3x1 1/2	27 ✓	
939	5x4x2	40 ✓	
		1118 ✓	

47 Spillway Rock above Surface

		cu ft	3/22/33 XTN
940	8x3x1½	36 ✓	
941	4x3x2¼	27 ✓	
942 L	3x3x3	27 ✓	
943	6x4x1½	36 ✓	
944	6x4x2	48 ✓	
945	7x4x1	28 ✓	
946	5x3x2	30 ✓	
947	4x4x2	32 ✓	
948	4x3x3	36 ✓	
949 L	3x3x3	27 ✓	
950	4x3x2½	30 ✓	
951	5x4x3	60 ✓	
952	6x3x1½	27 ✓	
953	6x6x4	144 ✓	
954	5x4x1½	30 ✓	
955	4x3x2¼	27 ✓	
956	7x9x3	189 ✓	
957	3x4x2¼	27 ✓	
958	6x3x1½	27 ✓	
959	6x5x2	60 ✓	
960	8x2x3	48 ✓	
961 L	3x3x3	27 ✓	↳ to Path E to Gulch
962	3x4x3	36 ✓	
963	3x3x3	27 ✓	
964	5x4x1½	30 ✓	
965	4x4x2	32 ✓	
		1148 ✓	

Spillway Rock Above Surface 47½

		cu ft	3/22/33 XTN
966 L	3x3x3	27 ✓	
967	5x6x1½	45 ✓	W of E gulch
968	6x6x2½	90 ✓	" "
969	4x5x2	40 ✓	" "
970	5x3x2	30 ✓	" "
971	4x4x2	32 ✓	on Ridge E of E gulch
972 L		27 ✓	
973	4x3x2¼	27 ✓	
974	6x3x1½	27 ✓	
975	6x3x2	36 ✓	
976	6x5x1½	45 ✓	
977	3x4x2¼	27 ✓	
978	4x4x2	32 ✓	
979 L	3x3x3	27 ✓	
980	6x3x2	36 ✓	
981	3x4x6	72 ✓	3/23/33 XTN } In E gulch
982	7x9x3½	220 ✓	
983	6x8x4	192 ✓	
984	3x3x3	27 ✓	
985 L		27 ✓	
986	6x4x2½	60 ✓	
987	6x5x4	120 ✓	
988	5x7x4	140 ✓	
989	6x3x2	36 ✓	
990		27 ✓	
991	4x3x2¼	27 ✓	
		1496 ✓	

48 Spillway Rock above Surface

		cu ft	3/23/33 XTM
992	3x3x3	27 ✓	
993	3x3x3	27 ✓	
994	6x10x3½	210 ✓	W side of gulch
995 L		54 ✓	
996	3x4x3	36 ✓	
997	3x3x3	27 ✓	
998	3x9x4½	121 ✓	
999	6x11x4½	297 ✓	
1000	6x4x3	72 ✓	
1001	4x8x5	160 ✓	
1002	3x3x3	27 ✓	under 999 in gulch E
1003	4x4x3	48 ✓	" "
1004	4x4x4	64 ✓	" "
1005	6x6x3	108 ✓	" "

2 Numbers Same
different Rock
See Page 17

Up 2nd Gulch from E end 3/23/33
XTM

Topage 17

1006 ✓	6x5x1½	45 ✓	
1007 ✓	5x4x2½	50 ✓	
1008 L	5A	54 ✓	
1009	4x4x3	48 ✓	
1000 ✓	7x5x3	105 ✓	
1011 ✓	4x3x3	36 ✓	
1012 L	5A	54 ✓	
1013	4x3x3	36 ✓	
1014 ✓	6x5x3	90 ✓	
1015 ✓	3x4x2½	27 ✓	
1016 ✓	6x5x3	90 ✓	
		1913 ✓	

Spillway Rock above Surface

		cu ft	3/23/33 XTM	48
1017 ✓	6x4x2	48 ✓		
1018 ✓	3x3x3	27 ✓		
1019 ✓	7x5x4	140 ✓		
Sta 3+25 ⁺ Between Gulch W of Ex Turn. & Gulch to E X from S edge				
1020 ✓	7x8x12	672 ✓		3+25 on N side
1021 ✓	4x4x3	48 ✓		
1022 ✓	6x3½x2	42 ✓		
1023 ✓	6x3x1½	27 ✓		
1024 ✓	6x6x5½	90 ✓		S side 3+50
1025 ✓	6x4x3	72 ✓		S edge Daylight Slope 3+65
1026 ✓	6x6x2	72 ✓		
1027 ✓	6x9x6	324 ✓		RM 757.075 on top
1028 L ✓	3x3x3	27 ✓		
1029 L ✓	3x4x3	36 ✓		
1030 ✓	6x5x5	150 ✓		3+70
1031 ✓	4x3x3	36 ✓		
1032 ✓	4x3x2½	27 ✓		
1033 ✓	4x4x2	32 ✓		
1034 L	5x2x3	30 ✓		
1035 ✓	3x7x4	84 ✓		
1036 ✓	7x6x4	168 ✓		
1037 ✓	6x3x2	36 ✓		
1038 ✓	6x2½x4	60 ✓		
1039 ✓	8x5x2	80 ✓		W of 3+50
1040 L	3x3x3	27 ✓		
1041 L	3x3x3	27 ✓		
		2382 ✓		

Spillway Rock above Surface

		cu ft
1142 L	3x3x3	27 ✓
1143 L	3x3x3	27 ✓
1144 L	4x4x2 1/2	50 ✓
1145 L	4x4x2	32 ✓
1146	4x4x2	32 ✓
1147	6x6x5	180 ✓
1148 L	3x3x3	27 ✓
1149	3x3x3	27 ✓
1150	4x3x3	36 ✓
1151 L	5x3x3	45 ✓
1152	3x5x3	45 ✓
1153	6x4x3 1/2	84 ✓
1154	5x4x1 1/2	30 ✓
1155	3x8x2 1/2	60 ✓
1156	4x3x3	36 ✓
1157	3x4x2 1/2	30 ✓
1158	4x3x2 1/4	27 ✓
1159	4x6x7	168 ✓
1160	4x4x2	32 ✓
1161	4x3x3	36 ✓
1162	3x3x3	27 ✓
1163	4x4x2	32 ✓
1164	4x5x1 1/2	30 ✓
1165	6x6x5	180 ✓
1166	3x3x3	27 ✓
1167	4x3x2 1/4	27 ✓

1354 ✓

3/23/33
X772

Up 2nd gulch 3/24/33
from E. near 1159

under 1159

Spillway Rock above Surface

		cu ft
1168	3x3x3	27 ✓
1169	4x3x2 1/4	27 ✓
1170 L		54 ✓
1171	4x4x2	32 ✓
1172	5x4x2 1/2	50 ✓
1173	6x3x1 1/2	27 ✓
1174	5x3x2	30 ✓
1175	4x3x2 1/4	27 ✓
1176	4x3x2 1/4	27 ✓
1177 L		54 ✓
1178	4x4x3	48 ✓
1179	4x4x3	48 ✓
1180	6x6x5	180 ✓
1181	3x3x3	27 ✓
1182 L	3x3x3	27 ✓
1183	5x3x3	45 ✓
1184 L	6x5x1	30 ✓
1185	5x4x4	80 ✓
1186	6x8x6	288 ✓
1187	6x7x11	462 ✓
1188	4x3x3	36 ✓
1189		54 ✓
1190 L		54 ✓
1191	4x3x3	36 ✓
1192	6x3x2	36 ✓
1193	7x6x3	126 ✓
1194	3x3x3	27 ✓
1195	3x3x3	27 ✓
1196	6x3x1 1/2	27 ✓
1197 L	4x4x3	48 ✓

2061 ✓

To Page 21 1/2

on Ridge to 1st gulch
on E end

3/23/33
X772 49 1/2

Load No 50

Spillway Excavation

Rock to West Rock Emb. El. 600 - ^{2/20/33} ~~2/20~~

2/20/33 XYN.

1 L	2	net	
2 L	2	net	
3 L	2	"	
4 L	2	"	
5 L	1	"	
6 L	1 1/2	"	
7 L	2	"	
8 L	2	"	
9 ~	(5x4x3) 2	"	
10	(4x4x3) 2	"	
11 L	2 1/2	"	
12 L	5	"	
13 L	3 1/2	"	
14	2	"	3 1/2
15 L	Loose Measure 5		
16 L	5		
17 L	4 1/2		PM Dirty
18 L	4		
19	4 1/2		"
20 L	5		
21	5		"
22	5		T _r 2 1/2
23 L	4 1/2		" 1/2
24 L	4 1/2		"
25 L	5		5 1/2

#10
Included in Estimate 2/28/33
J. Newcomb

Notes: Rock above Surface measured with 6' Rule by J. Newcomb in this Vol 359 Pages 17 to 49 1/2. These Notes Page 50 - Show Rock as moved from Spillway either Net measure or loose Measure estimated from Trucks as hauled from Spillway to Rock Emb. Total of Spillway Rock moved less Vol above Surface of Spillway = Vol below Surface to deduct from Ex to get net DG. Ex.

2/20/33 Night R.A. Thurston

2/21/33 XYN. To E Rock Emb.

John Connolly
Sterling Truck to W. Rock Emb Estimate 5 1/2

Note Estimate Small = 40% or loose rock = 100% of Solid Mass

Spillway Excavation Placed in F

Rock Embankment El. 625-

Loose Measure

Cu Yds. Truck #

	Loose Measure Cu Yds.	Truck #
26L	5	*2
27L	5	*8
28L	4½	*3
29L	5	*2
30L	5	*13
31L	4½	*8
32L	5	*3
33L	4½	*13
34L	4½	*2
35L	4	
36L	5	*2
37L	5	*2
38L	5	*33
39L	5	
40L	5	
41L	5	
42L	5	
43L	4½	*13
44L	5	*31
45L	5½	*8
46L	5	*2
47L	4½	*13
48L	5	*31
49L	4	*2
50L	5	*3
51L	5	*8

Dirty

0.45 cu yds Cap.

125½

Included in Estimate #10 of 2/28/33
Spillway Embankment

Spillway Excavation Placed in B Rock

Embankment El. 625-

Loose Measure Cu Yds. Truck #

	Loose Measure Cu Yds.	Truck #
51L	(152 Net)	55 Loads
52L	4½	
53L	5	
54L	5	
55L	5	
56L	5	12
57L	4½	
58L	5	
59L	5	
60L	3	2
61L	(4½ net)	13
62L	(4½ net)	
63L	4½	
64L	3½	
65L	5½	
66L	5	15
67L	4½	13
68L	(5 net)	12
69L	2½	20
70L	5	13
71L	4	
72L	5½	8
73L	5	15
74L	5	2
75L	4½	2

Net 166. Gross 96½

Spoke to Stoves about
dirty Cond. of RockIncluded in Estimate #10 of 2/28/33
Spillway Embankment

	Loose Measure Cu Yds	Truck #
76L	4	15
77L	5	15
78L	4½	3
79L	5	8
80L	4	15
81L	4	15
82L	4½	
83L ^{rent} _{dirty}	(98 Net)	
84L	5	
85L	5	15
86L	4	3
87L	5	20
88L	5	24
89L	4	2
90L	4½	15
91L	4½	20
92L	4½	24
93L	5	2
94L	2	18
95L	5	15
96L	5	20
97L	5	2
98L	5	26
99L	5	-
100L	4	20

98 Net
108 ½ Gt. ✓

of 7/28/33
at New camp

275 Yds 2/22/33
Elev. Survey Book 905
RA7.
2/23/33 XTN

#10

Included in Estimate
in Report

↓

	Loose Measure Cu Yds	Truck #
101L	4½	2
102L	5	15
103L	5	24
104L	4	18
105L	4	25
106L	5	2
107L	2½	15
108L	3½	24
109L	5	25
110L	4½	20
111L	(4 Net)	2
112L	5	15
113L dirty	5½	18
114L	4½	24
115L	4½	18
116L	4½	-
117L	5	2
118L	4½	-
119L dirty	3½	2
120L	3½	11
121L	4	2
122L very dirty	4½	44
123L	4½	11
124L	4	2
125L	4½	4

4 Net
105 Gross. ✓

of 7/28/33
at New camp

Included in Estimate #10

↓

7M 23 XTN.
Mr. Savage on
job 245pm

7/25/33 XTN.

Spillway - Book to E.R. Emb.
 2/23/33 John Connelly Says Mr Robt Bullheaded
 was his fault & fill going faster than can dig down.
 Loose Rock Mass.
 Cords

53	Ys	
126L	(144 Net)	
126L	(261 " ")	Truck Est 524' below " # 202Y DRE + 59VRE
127L	4 1/2	43
128L	3 1/2	-
129L	4 1/2	2
130L	5	13
131L	5	43
132L	4 1/2	44
133L	5	11
134L	4	2
135L	5	11
136L	5	13
137L	4 1/2	11
138L	4 1/2	2
139L	4	13
140L	4 1/2	11
141L	4	2
142L	4 1/2	13
143L	4	11
144L	5	2
145L	4 1/2	13
146L	4 1/2	11
147L	5	2
148L	4	13
149L	4	13
150L	4	2
	Net 405'	
	Gross 107'	

Est 303' at this Point Surface
 Truck Est 524' below " # 202Y DRE + 59VRE
 2/23/33 Night RAT Book 405
 2/24/33 Night RAT Book 405
 2/25/33 Day RAT

Included in Estimate #10 of 2/28/33.
 Stoppage

Spillway Ex. Book to E.R. Emb.

	Cur 3/4s Loose Meas.	Truck #
151L	5	13
152L	5	11
153L	4 1/2	2
154L	4 1/2	13
155L	4	11
156L	3 1/2	2
157L	5	13
158L	4	11
159L	4	2
160L	4 1/2	13
161L	5	11
162L	4 1/2	2
163L	4 1/2	13
164L	4 1/2	-
165L	4 1/2	-
166L	4	-
167L	4 1/2	13
168L	4	2
169L	4 1/2	11
170L	3 1/2	2
171L	3 1/2	13
172L	3	11
173L	4 1/2	2
174L	4	13
175L	(2 1/2 Net)	11

2/28/33
 2/25/33
 740
 Finished in Estimate #10 of 2/28/33.
 Stoppage

2/25/33
 740
 Fight with Roll he attack me when I told him I was talking to him struck me on right side face
 Jim & I left me after I returned below to Roll left check.
 draw

2 1/2 Net
 102 1/2 Gross

54 Spillway - Rock to F.R. Emb.

Contract-217 to mand. est.	Loose Rock 35 Cu Yd (56 Net)	Truck * (30 Est. low surface)	Height at night	RAT 2/25/33 Book 405 2/27/33 XTW
176L				
177L	4 1/2	23		
178L	5	20		
179L	4 1/2	24		
180L	4 1/2	23		
181L	4	3		
182L	4 1/2	20		
183L	4 1/2	24		
184L	4 1/2	23		
185L	4	3		
186L	4	20		
187L	5	23		
188L	4 1/2	3		
189L	5	20		
190L	4 1/2	24		
191L	4 1/2	23		
192L	4	23		
193L	4 1/2	20		
194L	4 1/2	23		
195L	4 1/2	3		
196L	4 1/2	24		
197L	5	23		
198L	4 1/2	23		
199L	(56 Net)	(Est. 30 Cu Yd of this below surface) 23	Height at night 2/27/33 Book 405	RAT
200L	5 112 Net. 104 gross	20	2/28/33 XTW	

Included in Estimate #10 of 2/28/33. ~~300 new curb~~

Spillway Ex. Rock to F.R. Emb. Bl. 625-54 1/2

	Measured Loose Cu Yd	Truck * 24	
201L	4 1/2	24	
202L	5	20	
203L	4 1/2	25	
204L	4 1/2	24	
205L	5	25	
206L	4 1/2	24	
207L	4 1/2	24	
208L	4	20	
209L	5	25	
210L	4 1/2	20 950A	
211L	4 1/2	24 950A	
212L	4	25 1000A	
213L	4 1/2	24	
214L	4	25	
215L	4 1/2	-	
216L	4 1/2	-	
217L	4	-	
218L	4 1/2	-	
219L	4 1/2	4 - 1113	
220L	5	4 - 126	
221L	4 1/2	20 - 136	
222L	5	20 - 147	
223L	4 1/2	20 - 211	
224L	4 1/2	20 - 245	
225L	132. gross 240E gross.		

Included in Estimate #10 of 2/28/33. ~~300 new curb~~

Height 2/28/33 RAT Book 405
(Est. 85 Cu Yd below surface)

55 Spillway Rock to BR Emb. El. 625-

	Cu 300 Woods Meas.	Truck #	
226L	1 1/2	24	
227L	4 1/2	20	240 PM
228L	4 1/2	23	245
229L	4	20	
230L	4	23	
231L	4 1/2	20	
232L	4	23	
233L	3 1/2	20	
234L	4 1/2	23	
235L	4 1/2	20	
236L	3	23	
237L	4 1/2	20	
238L	4 1/2	23	353 PM
239L	5	20	
240L	4	13	842 AM
241L ³	(4 1/2 Net)	20	858
242L	(3 1/2 Net)	13	
243L	4 1/2	20	927
244L	(4 1/2 Net)	13	
245L	(4 Net)	20	933
246L	3 1/2	13	942
247L	(4 Net)	20	950
248L	4 1/2	13	1002
249L	4 1/2	20	1008
250L	4	13	1512 A

Net 20 1/2
Est. 25

Estimate #11 of 3/31/33

no net
Hubs

Allowed in

3/2/33
ATN
(L x A) +

Spillway Ex. Rock to E Rock Emb. El. 625-

	Cu 300 Woods Meas	Truck #	
251L	4 1/2	20	1017 AM
252L	4	13	1021
253L	4 1/2	20	1026
254L	4 1/2	13	1032
255L	4	20	1036
256L	4 1/2	13	1045
257L	4 1/2	20	1052
258L	4 1/2	13	1058
259L	4 1/2	20	1205
260L	4	24	1210
261L	4 1/2	13	1214
262L	4	20	1218
263L	3 1/2	24	1221
264L	4 1/2	13	1225
265L	4 1/2	20	1237
266L	137	20	1237
267L	2	42	710 PM
268L	1 1/2	"	726
269L	2	"	740
270L	1 1/2	"	757
271L	2	"	815
272L	2	"	825
273L	2 1/2	"	835
274L	2	"	846
275L	2	"	856

Est 65' below
surface

17 1/2

Estimate #8 of 3/31/33
ATN

Allowed in

Might 3/2/33
Reach 405 RMT.
3/3/33
ATN

249

56 Spillway Rock to E R Emb El. 625-

	Cu yds Loose Meas	Truck	
276L	2	42	905 A
277L	2 1/2	"	915
278L	2 1/2	"	930
279L	2 1/2	"	956
280L	(2 Net)	"	1005
281L	2 1/2	"	1022
282L	2 1/2	"	1035
283L	2 1/2	"	1047
284L	2 1/2	"	1111
285L	2	"	-
286L	2	"	140 PM
287L	2 1/2	"	144 "
288L	2 1/2	"	305
289L	3	"	315
290L	2 1/2	"	332
291L	2 1/2	"	353
292L	4	23	715
293L	4	25	725 Am
294L	4	23	812 Am
295L	4 1/2	25	818 "
296L	4	24	824 "
297L	(3 Net)	20	826
298L	3 1/2	23	831
299L	4	25	836
300L	4	24	845
301L	4 1/2	25	856

2/2/33
 Estimate No 11 of 3/31/33
 Allowed in
 3/4/33
 Net
 Gr 36
 Net 3
 Gr 36

Spillway Rock To E R Emb El. 625-

	Cu yds	Truck	
302L	3 1/2	20	
303L	4	23	
304L (4x4x5)+	(4 net)	24	
305L	4	20	
306L	4	23	
307L	4 1/2	23	
308L	(2 Net) 2	25	
309L	4		
310L	4	24	
311L	4 1/2	24	
312L	4	23	
313L	4 1/2	24	
314L	4	20	
315L	4	23	
316L	4 1/2	25	
317L	4 1/2	24	
318L	3 1/2	23	
319L	4	24	
320L	4	24	
321L	4 1/2	24	
322L	4 1/2	25	
323L	4 1/2	20	
324L	4	24	
325L	4 1/2	23	
326L	4	25	
327L	4 1/2	20	
328L	4	24	

3/4/33
 Allowed in Estimate No 11 of 3/31/33
 Net
 Gr 106

57 Spillway Ex Rock

(1x12x3 1/2 Truck 153) 265

Spillway Ex Rock	Cu Yds Loose Rock	To RR Emb Truel	Est. Bl. 625-3/6/33
329L	8	155	707 Am
330L	8	175	723 "
331L	8	265	739 Am
332L	7	265	758
333L	8	155	822
334L	10	155	845
335L	9	265	937
336L	5 1/2	185	943
337L	7	255	955
338L	5	18	1000
339L	5	18	1017
340L	4 1/2	18	1032
341L	4	18	1052
342L	4 1/2	18	1103
343L	4 1/2	18	1132
344L	4 1/2	18	1245
345L	4	18	107
346L	7	25 (M)	140
347L	5 1/2	18	142
348L	4 1/2	18	156 (M)
349L	7 1/2	25	210
350L	5	18	228
351L	5	18	248
352L	6 1/2	15	311
353L	5	18	320 (M)
354L	4 1/2	18	337
355L	6 1/2	25	345
	4	18	357

167 1/2

No 11 of 3/31/33
 Allowed in Estimate

3/1/33 ... road to ... 501 ... 57 1/2

Spillway Ex Rock To RR Emb. Cu Yds Loose R.	Truck #	Estimate
356L	7	25
357L	5	18
358L	7	15
359L	5	18
360L	6 1/2	15
361L	6	25
362L	4 1/2	18
363L	5	18
364L	5	18
365L	4 1/2	18
366L	4 1/2	18
367L	5	18
368L	5 (amended "longer haul")	25
369L	5	18
370L	4 1/2	18
371L	5	18
372L	5	18
373L	5	18
374L	5	18
375L	5	18
376L	6	15
377L	5 1/2	18
378L	6	15
379L	4 1/2 RR Emb.	-

126 1/2

No 11 of 3/31/33
 Allowed in Estimate

	Truck		
380L	4 1/2	18	740
381L	4 1/2	18	920
382L	5	18	933
383L	4 1/2	20	1029
384L	4 1/2	20	1041
385L	4	4	100 P.M.
386L	5	4	116
387L	5	20	123
388L	5	4	220
389L	5	3	355
390L from	(5 Net)	26	1009
391L	4 1/2	10	1031
392L	5	10	1107
393L	4 1/2	18	1250 P.M.
394L	5	10	1:05
395L	4 1/2	18	113
396L	5	15	126
397L	5 1/2	25	131
398L	5	18	142
399L	4 1/2	10	206
400L	4	14	226
401L	5	25	248
402L	4	18	255
403L	5	18	313
404L	4 1/2	18	335
405L	5	10	347

Below Sur. Shored El. 580. 4 Boulder.

Dirty D.C.

Talked to X.O. about dist.

5 Net 71 20.1

Allowed in Estimate No. 11 of 3/31/33

406L	4	18	1025 A.M.	1st Load
407L	4 1/2	20	1240 P.M.	# 8
408L	5	6	1:05	# 7
409L	4 1/2	18	107	# 8
410L	4 1/2	20	116	# 7
411L	4 1/2	6	1:25	7
412L	4 1/2	6	1:35	7
413L	3 1/2 X	20	8:28 A.M.	3/11/33 # 8
414L	1 1/2 Net	13	Ex Road S.W. to Dam	# 7
415L	4	13		
416L	4	13		
417L	4	13		
418L	4	13		
419L	4	13		
420L	3 1/2	13		
421L	1 Net	13		
422L	3	13	Strip with R.F.S. to RR	
423L	5 X	20	1:25 Spillway to RR	
424L	5 X	20	1:43 " " "	
425L	4 1/2 X	20	2:15 " " "	
426	10 Net *		* 1st Strip Road El. 620 to RR to direct	
427L	4 1/2 *		" " " " " " "	
428L	4 X	20	2:30 Spillway to RR	
429L	4 1/2 X	20	2:43 " " "	
430L	4 1/2 X	20	3:25 " " "	
431L	4 1/2 X	20	3:48 " " "	

See Fig 347 63

Spillway 35 1/2

Allowed in Estimate No. 11 of 3/31/33

3/13/33
No Rock

	cuyds Gross	Truck	
432 L	5	20	735 AM
433 L	5	20	755
434 L	(3 1/2 Net)	20	805
435 L	4 1/2	20	840
436 L	4 1/2	20	902
437 L	4 1/2	20	920
438 L	(4 Net)	18	928
439 L	3 1/2	18	10 08
440 L	5 1/2	18	10 48
441 L	4 1/2	20	10 53
442 L	4 1/2	18	11:03
443 L	4 1/2	20	11 10
444 L	4	20	11 20
445 L	5	18	12 40 pm
446 L	4 1/2	20	12:52
447 L	4 1/2	18	1 00
448 L	5	20	1 28
449 L	4 1/2	18	1:47
450 L	4 1/2	20	1:50
451 L	6	25	1 58
452 L	5	18	2 02
453 L	4 1/2	20	2 20
454 L	5	18	2 27
455 L	4 1/2	20	2 42
456 L	5	18	2 48
457 L	6 1/2	25	3 00

7 1/2 Net
11 1/2 Gross

3/14/33

3/31/33
Rock
Truck

Allowed in Estimate *
"

↓

Loose Measure

	Truck		Time
458 L	* 18	5 1/2	3 04 pm
459 L	20	5 1/2	3 08
460 L	25	6 1/2	3 18
461 L	18	5	3 22
462 L	18	4 1/2	3 26
463 L	18	4 1/2	3 48
464 L	20	4 1/2	3 56
465 L	18	4 1/2	7 45
466 L	18	4 1/2	8 20
467 L	2	4 1/2	8:33
468 L	20	5 1/2	8 41
469 L	2	4	8 50
470 L	2	4	9 00
471 L	20	4 1/2	9 15
472 L	2	4	9 25
473 L	20	4	12 45 pm
474 L	23	5	1 00
475 L	18	4 1/2	1 02
476 L	20	5	1 06
477 L	18	5	1 18
478 L	18	(4 1/2 Net)	1 30
479 L	18	4 1/2	1 53
480 L	20	5	1 56
481 L	18	5	2 35
482 L	18	4 1/2	2 51
483 L	18	4 1/2	3 08

3/15/33
of 3/31/33
Top of Measure

Allowed in Estimate *
"

↓

4 1/2 Net
8 1/2 Gross

60 Spillway Ex. Rock to R.R. Emb. El. 625-

Station	Excavation	Volume	Notes	Time
484L	4 1/2	20		3:12 PM
485L	5	18		3:25
486L	5	20		3:29
487L	5	18		3:44
488L	4 1/2	20		3:48
489L	4 1/2 ^{28 1/2}	18		4:03
490L	4	26		7:45 ^{3/4} ₂₀₀₀
491L	4 1/2	18		8:03
492U	5	26	Dirty	8:14
493L	5 1/2	18		8:18
494L	6 1/2	18		8:30
495L	5 1/2	26		8:40
496L	5	18		8:55
497L	5 1/2	18		9:41
498L	4	18		9:52
499L	4	26		10:10
500L ^s	4 1/2	26		10:19
501L	5	18		10:35
502L	5	18		11:07
503L	5 1/2	18		11:19
504L	4 1/2 ^{7x22} _{6x22} (Net)	18		1:01
505L	5	18		1:21
506L	5	26		1:30
507L	5	26		1:48
508L	5	23		1:58
509L	4 1/2 ^{9 1/2} _{4 1/2} (Net)	18		2:05

Allowed in Estimate No. 11

Spillway Ex. Rock to R.R. Emb. El. 625-

Station	Excavation	Volume	Notes	Time
510L	5	26		2:15 PM
511L	4 1/2	18		2:30 "
512L	4 1/2	23		3:00 "
513L	5	26		3:06 "
514L	6	25		3:22 "
515L	5	26		3:45 "
516L	4 1/2 ^{34 1/2}	26		4:02 "
517L	4 1/2	26		3:17/33 9:48 AM
518L	4	24		9:54
519L	4 1/2	18		9:58
520L	4 1/2	26		10:03
521L	5	24		10:08
522L	4	18		10:12
523L	4	26		10:19
524L	4 1/2	24		10:27
525L	4 1/2	18		10:31
526L	4 1/2	26		10:37
527L	4 1/2	24		10:41
528L	4	18		10:45
529L	4 1/2	26		10:49
530L	4	24		10:53
531L	4	18		10:58
532L	4	26		11:05
533L	4 1/2	24		11:10
534L	4 1/2	18		11:15
535L	4 1/2 ^{8 1/2}	26		11:21

Allowed in Estimate No. 11

61 Spillway Ex. Rock to RR Emb RI. 625-

536L	4 1/2	24	1125
537L	4 1/2	18	1128
538L	4 1/2	26	1132
539L	4 1/2	26 (79 stone)	1233
540L	4 1/2	24 (79 stone)	1237
541L	5	20 (79 stone)	1240
542L	4 1/2	18	1241
543L	4 1/2	26	1244
544L	4 1/2	24	1247
545L	4 1/2	18	1251
546L	6	25	1251
547L	5	20	1255
548L	4 1/2	18	105
549L	5	20	110
550L	4 1/2	24 very dirty	127
551L	5 1/2	20	130
552L	5	20 clean	147
553L	3	24 dirty	202
554L	4	24	216
555L	4 1/2	24	227
556L	5	20	229
557L	3	24	234
558L	2 1/2	26	242
559L	3	20	248
560L	5	24	302
561L	5	20	306

Allowed in Estimate No 11 of 3/31/33
 Allowed in Estimate No 11 of 3/31/33
 Allowed in Estimate No 11 of 3/31/33

26-13 27-0 25-4 20-10 345 18-11 2315 per drains 61 1/2

562L	4	14	310
563L	3	18	320
564L	3 1/2	18	330
565L	5 1/2	25	333
566L	4	18	-
567L	5	20	342
568L	4 1/2	14	344
569L	5	20	-
570L	5	25	-
571L	5	25	-
572L	5	20	355
573L	3 1/2	26	-
574L	4	26	-
575L	4	26	727
576L	4 1/2	20	730
577L	4	26	746
578L	3 1/2	2	756
579L	4 1/2	26	848
580L	5	2	914
581L	4	20	923
582L	4 1/2	26	926
583L	4	26	1015
584L	4 1/2	20	1019
585L	4	2	1022
586L	4 1/2	26	1027
587L	4 1/2	20	1032

Allowed in Estimate No 11 of 3/31/33
 Allowed in Estimate No 11 of 3/31/33
 Allowed in Estimate No 11 of 3/31/33

3/18/33 2772

	Coals Loose Meat	Truck #	
588 L	4	2	
589 L	4	13	
590 L	4 1/2	13	
591 L	4		
592 L	4 1/2	24	
593 L	4 1/2		
594 L	4	24	
595 L	4	11	
596 L	4 1/2	24	
597 L	4 1/2		
598 L	4	8	
599 L	4	13	
600 L	4	4	
601 L	5	4	
601 L	4 1/2	20	
601 L	4 1/2	13	
602 L	2 Hat	26	
603 L	3	20	
604 L	4	13	
605 L	3	26	
606 L	3	20	
607 L	3	20	
608 L	2	13	
609 L	3	26	
610 L	2 1/2	26	
611 L	3 1/2	20	

Estimate No 11 of 3/31/33
 Allowed in
 Am 3/19/33 - R. A. Thurston
 722 Orig. in 1411.

	Truck #		
612 L	2	13	847
613 L	3	13	856
614 L	4	13	903
615 L	3	26	909
616 L	4	13	913
617 L	4	20	919
618 L	3	26	922
619 L	3	20	930
620 L	2	26	950
621 L loads	31	24	
622 L loads	25	20	
623 L loads	19	26	
624 L loads	9	14	
625 L loads	6	23	
626 L loads	13	26	
627 L loads	21	11	
628 L loads	11	8	
629 L (not load trucking)	4 1/2	25	
630 L	5	7	
631 L	4 1/2	25	
632 L	5	7	
633 L	4	15	
634 L	5	7	
635 L	4 1/2	7	
636 L	4 1/2	7	
637 L	4 1/2	7	

Allowed in Estimate No 11 of 3/31/33

847
 856
 903
 909
 913
 919
 922
 930
 950
 3/20/33
 R. A. Thurston
 From vol 381
 3/21/33
 R. A. Thurston
 3/22/33
 R. A. Thurston
 W. Slope Spill
 to WR 5 m. b.

63 Spillway Ex. Rock to W. R. Emb.

Item	3	15	10:00 AM 2 AM	3/24/33
638 L	(3 Net)	7	10:55 "	
639 L	3	7	11:20 "	
640 L	4	11	12:40 " from lot Truck	
641 L	5	11	12:54	
642 L	4	11	1:05 "	
643 L	4 1/2	11	1:31 "	
644 L	5	15	1:41 "	
645 L	4 1/2	11	1:46 "	
646 L	5	7	1:51	
647 L	5	11	2:04	
648 L	5 1/2	7	2:07	
649 L	5 1/2	25	2:17	
650 L	4 1/2	11	2:28	
651 L	5	11	2:36	
652 L	5	7	2:47 Dirty	
653 L	5	11	2:52	
654 L	5 1/2	7	3:00 "	
655 L	5 1/2	11	3:06	
656 L	5 1/2	11	3:18 "	
657 L	4 1/2	7	3:23	
658 L	4 1/2	7	3:57	
659 L	4 1/2	11	4:02	
660 L	A 1/2	1	7:05 3/25/33	
661 L	A 1/2	11	11:25	
662 L	2	11	1:30	
663 L				

Allowed in Estimate No 11

3 Net
11.0

Item	4 36	4 37	# Truck	11:10 AM	3/24/33
664 L	4	5	5	11:25	
665 L	5	5	5	12:20 PM	(RMC)
666 L	4 1/2	5	5	1:05	
667 L	4 1/2	5	5	1:23	
668 L	4	5	5	1:43	
669 L	4	5	5	2:05	
670 L	5	6	6	2:11	
671 L	4	25	25	2:17	
672 L	5 1/2	5	5	2:25	
673 L	4 1/2	15	15	2:45	
674 L	6	6	6	2:47	
675 L	3 1/2	25	25	2:54	
676 L	5 1/2	5	5	2:57	
677 L	4	15	15	3:07	
678 L	5	6	6	3:09	3/25/33
679 L	4 1/2	5	5	14:55	XTN.
680 L	4	5	5	1:09	
681 L	4 1/2	5	5	1:22	
682 L	4 1/2	39	39	1:35	
683 L	4	5	5	1:40	
684 L	5	5	5	1:58	
685 L	4 1/2	5	5	2:10	
686 L	4 1/2	5	5	2:23	
687 L	4	5	5	1:30 ±	3/27/33
688 L	5	5	5	1:45 ±	
689 L	4 1/2	5	5		

Allowed in Estimate No 11

V. 11 " Book 4 36 Harper
Load 2 Box 4 37 Blackman

Spillway to E. R. Emb. by Co. of 1000 yds. Rock
3/24/33

35.0

Spillway Ex Rock from Unit #11 to E.R. Emb.

64	cu yds Loose Near	Truck*	Time	3/27/33 XTN
690L	5	5	913 AM	
691L	4	5	940 "	
692L	(3 1/2 Net)	5	1015 "	
E. of Spillway, Clean up along Road Rock to E. R. Emb. Emb. to 230 P.M. Rock not measured				
↓ Outside Spillway Area El. 730-740				
693L	4 1/2	5	233 PM from E. end Salt.	
694L	4	39	240 " " " "	
695L	4 1/2	5	250 " " " "	
696L	4	39	255 " " " "	
697L	5 1/2	5	302 " " " "	
698L	4	39	320 " " " "	
699L	5	5	327 " " " "	
700L	4	39	333 " " " "	
701L	(3 Net)	5	342 " " " "	
702L	3 1/2	39	346 " " " "	
703L	4 1/2	5	355 " " " "	
704L	(2 1/2 Net)	5	934 " " " "	
705L	3 1/2	39	940 " " " "	
706L	4	5	817 RMC.	
707L	(3 Net)	5	845 " " " "	
708L	3 1/2	39	831 RMC.	
709L	4 1/2	5	1013 " " " "	
710L	4 1/2	5	1054 " " " "	
711L	4 1/2	39	1248 RMC.	
712L	5	5	1255 " " " "	

Allowed in Estimate No 11 of 3/31/33
XTN

5 1/2 Net
39 1/2

Spillway Ex Rock from Unit #11 to E.R. Emb

64 1/2	cu yds Loose Rock	Truck	Time	3/28/33 XTN
713L	4	39	1258 PM	
714L	4	5	112 PM	
715L	4 1/2	5	148 "	
716L	5	5	213 "	
717L	4 1/2	39	222 "	
718L	5	5	233 "	
719L	5	5	320 "	
720L	4 1/2	5	1033 "	
721L	3 1/2	39	104 "	
722L	5 1/2	5	108 "	
723L	4	39	140 "	
724L	4 1/2	5	333 "	
725L	3 1/2	5	730 "	
726L	3 1/2	39	753 "	
727L	4 1/2	5	827 "	
728L	5 1/2	5	903 "	
729L	4 1/2	5	920 "	
730L	5	5	945 "	
731L	5	5	1005 "	
732L	4	39	1012 "	
733L	5 1/2	5	1021 "	
734L	4 1/2	39	1028 "	
735L	5	5	1035 "	
736L	4	39	1135 "	
737L	4	39	145 "	
738L	4 1/2	39	225 "	

Allowed in Estimate No 11 of 3/31/33
XTN

6 3/4 Net
39 1/2

65 Spillway Ex. Rock from Unit #11 Ex to B.R. Emb

	Cu yds Loose Measure	Truck No	Time	
739L	4.0	39	2:37 Pm	
740L	4.0	39	3:00 "	
741L	5.1/2	12	3:07 "	
742L	3 1/2	39	3:39 "	
743L	3 1/2	39	3:50 "	
744L	5 2 1/2	12	3:53 "	
745L	4 1/2	3	12:47	o.d.m. 3/31/33 1st Truck to Rev. 2pm
746L	4	39	12:49 "	
747L	4 1/2	10	12:54 "	
748L	5	3	1:06 "	
749L	3 1/2	39	1:09 "	
750L	5	10	1:11	
751L	4	3	1:18	
752L	4	39	1:23	
753L	4 1/2	10	1:27	
754L	5	3	1:33	
755L	4 1/2	39	1:39	
756L	5	10	1:42	
757L	5	3	1:54	
758L	3 1/2	39	1:57	
759L	5	10	2:01	
760L	4 1/2	3	2:05	
761L	4 1/2	39	2:10	
762L	5	3	2:19	
763L	4 1/2 5 1/2	39	2:24	

Allowed in Estimate No. 3 of 3/31/33
 at McCamp

Spillway Ex. Rock from Unit #11 to B.R. Emb 65 1/2

	Cu yds Loose Meas.			
764L	5	* 5		2:32 Pm
765L	4 1/2	" 3		2:36 "
766L	3 1/2	39		2:41
767L	4 1/2	5		2:49
768L	4 1/2	3		2:55
769L	5	5		3:03
770L	5 1/2	3		3:09
771L	4 1/2	5		3:18
772L	5 1/2	5		4:00
773L	4 1/2	3		3:35
774L	4 1/2	39		12:52 Pm 2pm
775L	5	5	doty	1:01
776L	4 1/2	3		1:10
777L	3	39		1:13
778L	4 1/2	5		1:19
779L	5	3		1:23
780L	4	39		1:26
781L	4	5		1:33
782L	4 1/2	3		1:41
783L	3 1/2	39		1:44
784L	4	5		1:49
785L	3 1/2	39		2:08
786L	4 1/2	5		2:14
787L	3 1/2	39		2:21
788L	4 1/2	5		2:29
789L	4 1/2	5		2:43
790L	4 1/2 5 1/2	39		2:48

Reported to F.D. Williams
 from 4/1/33 + let Converse for Estimate

Allowed in Estimate #11
 of 3/31/33 2pm

4/1/33

66 Spillway Ex. Rock from Unit #11 to E.R. Emb. El. 625. 4/1/33 XTR

791L	5	# 5	308 8m
792L	3 1/2	39	312
793L	5	5	324
794L	4 1/2	5	342
795L	4 1/2	39	346
796L	4	26 1/2	402
797L	4 1/2	24	710 E Am 4/2/33 XTR
798L	4 1/2	24	745
799L	4 1/2	24	758
800L	3 1/2	70	805
801L	4 1/2	24	810
802L	4	70	816
803L	5	24	822
804L	5	24	837
805L	3 1/2	39	905
806L	4 1/2	24	920 RMC. XTR on East
807L	4	39	924 "
808L	3	9	931 "
809L	4	39	944 "
810L	3	9	950 "
811L	4	8	956 "
812L	3 1/2	8	1010 "
813L	3 1/2	24	1016 "
814L	4	7	1022 "
815L	4 1/2	24	1034 "
816L	5	7	1040 "

Reported to EDW

Spillway Ex. Rock from Unit #11 to E Rock Emb. El. 625- 662

817L	2 1/2	14	1052
818L	4 1/2	8	1250
819L	4	14	100
820L	4	24	106
821L	3	8	111
822L	3 1/2	7	124
823L	4	14	145
824L	4	24	150 Reported
825L	4	24	205 Unit #11 Broken down
826L	4 1/2	26	348
827L	3 1/2	14	405
828L	5 4 1/2	# 26	705 Am 2/4/33 XTR
829L	9 loads 3/2/33	36	to E.R.E. ? 12 to 1250 RMC. in End 5m
830L	4	39	720 4/4/33 XTR
831L	4 1/2 x 5 Big Rock	6	24 733
832L	3	39	742
833L	2 1/2	39	802
834L	4 1/2	24	847
835L	4	39	853
836L	3	39	915
837L	4	24	933
838L	4	39	1004
839L	4 1/2	24	1017
840L	4	39	1034 Reported

43 1/2

Spillway Excavation Unit #11
 To E Rock Emb E1.625-
 414133 Cont'd

Estimate	Estimate	Truck	Time	
841L	4 1/2	24	1104 AM	
842L	5	39	1246 PM	Dirty
843L	5	24	1255	"
844L	4 1/2	34	1257	"
845L	4 1/2	39	1:03	"
846L	4 1/2	24	1:08	"
847L	4	34	1:15	"
848L	4 1/2	39	1:25	"
849L (1/2 Rocket)	5 1/2	24	1:37	Clean
850L	4 1/2	39	1:42	
851L	4 1/2	24	1:53	
852L	4	39	2:00	
853L	3 1/2	24	2:15	
854L	3 1/2	39	2:25	
855L	5	24	2:27	
856L	4 1/2	39	2:38	
857L	4 1/2	39	3:15	
858L	4	39	8:03	4/5/33
859L	4 1/2	39	8:15	
860L	5	24	9:28	
861L	4 1/2	24	10:45	
862L	4 1/2	26	11:00	
863L	5	26	12:43	
864L	4 1/2	24	1:05	
865L	4 1/2	26	1:26	
866L	4 1/2	24	1:37	

Reported

Spillway Ex Unit #11 To E Rock Emb E1.625
 415/33

Estimate	Truck	Time	
867L	5	26	1:45 PM
868L	5	24	1:50 "
869L	4 1/2	26	1:59 "
870L	4 1/2	24	2:08
871L	5	26	2:20
872L	5	24	2:24
873L	5 1/2	26	2:34
874L	4 1/2	24	2:45
875L	5	26	3:04
876L	4 1/2	24	3:20
877L	5	24	3:55
878L	4	23	7:10 TO ERE 4/6/33
879L	4 1/2	24	7:18 "
880L	3	24	11:03 To WRE
881L	4 1/2	24	12:50 PM
882L	5	26	1:03
883L	5	24	1:19
884L	4	26	1:26
885L	4 1/2	26	1:41
886L	4 1/2	24	1:50
887L	4 1/2	26	2:05
888L	5	26	2:20
889L	5	26	2:56
890L	5	26	3:27
891L	5	24	7:01 4/1/33
892L	5	24	8:05 To WRE

Reported

Spillway Rock To				Rock Emb El. 620				Spillway Rock to W 4/3/33	
* Truck	Cu Yds Loose Est	No. AM	Load	Truck	Loose Est Cu Yds	Time	Load*	Rock Emb El. 615	
8934	24	4 1/2	820	918	40	4 1/2	710	944	
894L	15	6	830	919	20	5	712	945	
895L	24	4 1/2	831	920	6	4 1/2	715	946	
896L	23	6	839	921	24	5	715	947	
897L	18	6	840	922	40	4 1/2	720	948	
898L	24	4	854	923	20	5	724	949	
899L	24	4 1/2	914	924	24	5 1/2	728	950	
900L	18	5 1/2	953	925	6	5	731	951	
901L	24	2 1/2	1003	926	40	5	738	952	
902L	24	5 1/2	1017	927	18	5 1/2	740	953	
903L	18	6 1/2	1018	928	24	5	745	954	
904L	18	5	1050	929	20	6	746	955	
905L	25	7	1107	930	6	4	750	956	
906L	24	4	1124	931	40	5	754	957	
907L	25	6 1/2	1235	932	18	5	800	958	
908L	24	5	1239	933	24	5	802	959	
909L	23	6	1245	934	20	5 1/2	805	960	
910L	18	5 1/2	1248	935	6	4 1/2	810	961	
911L	24	4	1253	936	40	5 1/2	811	962	
912L	24	4 1/2	107	937	18	6 1/2	819	963	
913L	24	4 1/2	131	938	24	5 1/2	819	964	
914L	18	6	142	939	20	6 1/2	826	965	
915L	20	5	145	940	40	5	827	966	
916L	24	4 1/2	146	941	39	5	832	967	
917L	18	5	157	942	24	4 1/2	836	968	
		128		943	6	5	836	969	

4/18/33 in Vol 138 by R.A.T.

5/1/33 Report

133 on Rept of 4/3/33

9/2/33 377 nearcaub
Red Jumpson

Rack Above Surface from E of P.C. Area
E. 1. 700± to West Side P.C. Area.

Above Sur Total Rock

- | 1 | 6x7x1 | 6x7x2½ |
|-------------------------|----------|--------|
| 2L | 3x3x3 | |
| 3 | 7x9x1½ | |
| 4 | 4x6x2½ | |
| 5 | 5x4x2 | |
| 6L | 2y | |
| 7 | 6x6x2 | |
| 8 | 4x4x2 | |
| 9 | 6x5x2½ | |
| 10 | 5x8x1½ | |
| 11 | 9x5x1½ | |
| 12 | 9x6x2 | |
| 13 | 10x4x3 | |
| Rock from
Spillway E | 6x3x3 | |
| | 6x3x3 | |
| | 3x3x3 | |
| | 4x3x2½ | |
| | 3x3x3 | |
| 1A | 10x12x6½ | |
| 15 | 8x8x2 | |
| 16 | 6x5x2 | |
| 17 | 6x10x4 | |
| 18 | 6x3x1½ | |

2/3 E of P.C.
Above Road

1/3 E of P.C.

2y W of PC

- | | |
|--------------------------------|-------------------|
| * 19 | - 6x4x2 |
| 20 | - 7x4x2½ |
| L ⁺ 24 ³ | - 2y ³ |
| 21 | - 12x4x2 |
| L ³ | 1y ³ |
| 22 | 9x4x3½ |
| 23 | - 12x3x1 |
| 24 | - 4x4x2 |
| L | 1y ³ |
| 25 | 4x8x4 |
| 26 | 6x4x5 |

W of P.C.

"

"

Out Let Tower

2/27/33
JRM.

Above 500

- 1 6x4x8
- 2 7x12x6
- 3 8x3x2
- 4 3x3x4
- 5 $\frac{15 \times 10 + 15 \times 4}{2} \times 3$
- 6 5x4x3
- 7 7x9x3

Raid included in party
Cross Sections per field
JRM.

3/20/33 ~~part of~~ remains in bank -
N.E. 1/4 Road from ~~Freeway~~ comes into ~~Dem Area~~
at ~~628~~ on P.E. Sec. Shot

- 1 6x5x5
- 1 4x3x3

7x12-8 ft 0
12 to 90

8x6x1 1/2 inside N. Side Tower & balance
on N edge
outside at NW
" 3' " South

2/25/33
 D.G. + Dirt from Spillway to E Hy Fill.
 Dumping on W of E Rock Emb at El 625 -
 against Orders tho no authority to stop same.
 Beginning at 8 AM.

Truck #	Cur #	Truck #	Cur #
2	4	43	5
43	4 1/2	11	5
13	4	2	4
44	5	13	5
11	5	44	5
43	5 1/2	43	5
2	4 1/2	11	5
13	5	2	5
44	4 1/2	13	5
43	5	44	4 1/2
11	5	43	5
2	5	11	5
13	4 1/2	2	5
44	5	13	5
43	5	44	5
11	5	43	4 1/2
8:30 AM Mr A		11	5
		2	4
		13	5
13	5 1/2	11	5
		2	4 1/2
44	5	13	5
		44	5
43	5	13	5
		43	5
11	5	2	5
		43	5
2	5	44	5
		43	5
13	4 1/2		
44	5		
	11 1/2		

2/25/33 Dirt from Spillway Ex to E Hy Fill
 Dumped on W. Slope E Emb. at El. 625

Trucks 12
 11
 25
 18
 20

3/2/33 W.
 1220 * 20 5

Table II - Minutes in Decimals of a Degree

Minutes	0	1	2	3	4	5	6	7	8	9
0	0.000	0.009	0.018	0.027	0.036	0.045	0.054	0.063	0.072	0.081
1	0.090	0.099	0.108	0.117	0.126	0.135	0.144	0.153	0.162	0.171
2	0.180	0.189	0.198	0.207	0.216	0.225	0.234	0.243	0.252	0.261
3	0.270	0.279	0.288	0.297	0.306	0.315	0.324	0.333	0.342	0.351
4	0.360	0.369	0.378	0.387	0.396	0.405	0.414	0.423	0.432	0.441
5	0.450	0.459	0.468	0.477	0.486	0.495	0.504	0.513	0.522	0.531
6	0.540	0.549	0.558	0.567	0.576	0.585	0.594	0.603	0.612	0.621
7	0.630	0.639	0.648	0.657	0.666	0.675	0.684	0.693	0.702	0.711
8	0.720	0.729	0.738	0.747	0.756	0.765	0.774	0.783	0.792	0.801
9	0.810	0.819	0.828	0.837	0.846	0.855	0.864	0.873	0.882	0.891
10	0.900	0.909	0.918	0.927	0.936	0.945	0.954	0.963	0.972	0.981

Table III - Inches in Decimals of a Foot

Inches	0	1	2	3	4	5	6	7	8	9
0	0.000	0.020	0.040	0.060	0.080	0.100	0.120	0.140	0.160	0.180
1	0.200	0.220	0.240	0.260	0.280	0.300	0.320	0.340	0.360	0.380
2	0.400	0.420	0.440	0.460	0.480	0.500	0.520	0.540	0.560	0.580
3	0.600	0.620	0.640	0.660	0.680	0.700	0.720	0.740	0.760	0.780
4	0.800	0.820	0.840	0.860	0.880	0.900	0.920	0.940	0.960	0.980

