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KEUFFEL & ESSER CO.

DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.
NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCE FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

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	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

SPILLWAY, Stripping + Core-Tr Ex
+ ROCK EXCAVATION + Est by Trucks

F. E. BRACHMANN

SEE BOOK No 437

LOADS	ROCK CU. YDS	TRUCK	TIME
1	4.0	3	4 ⁴³
2	3.5	1	4 ⁵¹
3	4.0	1	5 ²⁰
4	4.0	1	5 ⁴³
5	4.0	1	6 ⁰⁵
6	3.5	3	6 ¹⁰
7	3.5	1	6 ¹⁸
8	3.5	3	6 ²⁴
9	4.0	1	6 ³²
10	4.0	3	6 ³⁷
11	3.5	3	6 ⁵⁶
12	3.5	1	7 ⁰⁶
13	4.0	3	7 ²⁰
14	3.5	3	7 ³⁰
15	4.0	1	7 ³⁴
16	3.5	3	7 ⁴²
	<u>60.0</u>		

LOADS	ROCK CU. YDS	TRUCK	TIME
17	4.0	1	7 ⁴⁶
18	3.5	3	7 ⁵³
19	4.5	1	8 ⁰²
20	4.0	3	9 ⁰⁷
21	4.0	1	9 ²¹
22	4.0	3	9 ²⁶
23	4.0	1	9 ³⁴
24	3.5	3	9 ³⁹
25	3.5	1	9 ⁴⁵
26	4.0	3	9 ⁵²
27	2.5	1	9 ⁵⁶
28	4.0	3	10 ⁰³
29	3.0	2	10 ¹⁰
30	4.0	1	10 ¹²
31	3.5	3	10 ¹⁵
32	4.0	1	10 ²⁴
	<u>62.0</u>		

SHIFT NO 2 SEPT. - 23RD 1933 F.E. BRACHMANN

SHOVELS NO 67 - 10 DRAGLINE

2 AIR-COMPRESSORS

2 TRUCKS - NO 20

1 CAT

3 MEN DRILLING + BLASTING

9 MEN EXCAVATING - IN SPILLWAY

1 LABORER ON DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
33	3.5	3	10 ²⁶
34	3.0	1	10 ³⁸
35	3.5	3	10 ⁴¹
36	3.5	3	10 ³⁸
37	4.0	1	11 ⁰⁰
38	3.5	3	11 ⁰⁶
39	3.5	1	11 ¹⁵
40	3.5	3	11 ¹⁷
41	4.0	3	11 ³⁰
42	3.5	3	11 ⁴⁵
43	3.5	1	11 ⁴⁷
44	3.5	3	11 ⁵⁵
45	3.5	1	12 ⁰⁰
46	4.0	3	12 ⁰⁰
47	3.5	1	12 ¹²
48	3.0	3	12 ²⁰
	57.0		

284 LOADS DIG TO UP STREAM DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
49	3.0	1	12 ²⁷
50	4.0	1	5 ³⁸
	10.0		
	60.0		
	62.0		
	57.0		
	189.0		
	TOTAL		
	UP-STREAM		
	reported		

LOADS	ROCK CU. YDS	TRUCK	TIME
16	52.0		
67	2.0	3	5:33
68	3.0	2	5:35
69	3.5	39	5:42
70	3.5	2	5:46
71	4.0	3	5:51
72	4.0	1	5:55
73	3.5	39	5:59
74	4.0	3	6:05
75	3.5	39	6:15
76	3.0	3	6:18
77	4.0	1	6:23
78	4.0	3	6:50
79	3.0	39	7:07
80	3.5	3	7:14
81	3.5	39	7:21
			102.0

SHIFT NO 2 SEPT. 20-TH 1933 F.E. BRACHMANN
 SHOVELS NO 6-7 #100 DRAGLINE
 TRUCKS NO 7
 1-AIR COMPRESSORS

14-MEN EXCAVATING IN SPILLWAY
 2-MEN DRILLING + BLAGGING
 1-LABORER UNLOADING

LOADS	ROCK CU. YDS	TRUCK	TIME
82	4.0	3	7:26
83	3.5	39	7:34
84	4.0	1	7:46
85	4.0	1	8:00
86	3.5	1	9:26
87	3.5	3	9:30
88	3.5	39	9:35
89	4.0	3	9:50
90	4.5	1	9:58
91	5.0	3	10:12
92	4.5	1	10:22
93	4.0	3	10:30
94	4.5	1	10:36
95	4.0	3	10:44
96	5.0	1	10:48
97	4.0	3	11:52
			60.5

LOADS	ROCK CU.YDS	TRUCK	TIME
98	4.5	3	11 ¹²
99	4.5	10	11 ²⁵
100	3.5	3	11 ²⁶
1	5.5	10	11 ³²
2	4.5	3	11 ⁴¹
3	3.5	40	11 ⁴⁵
4	4.5	10	11 ⁵²
5	3.5	40	12 ⁰²
6	3.5	40	12 ¹⁵
7	4.5	3	12 ²⁶
8	3.5	40	12 ³⁸
9	4.0	5	12 ⁵⁰
	<u>49.5</u>		
	102.0		
	<u>60.5</u>		
	217.0		

reported

150 LOADS D.G. TO UP STREAM DUMP

LOADS	ROCK CU.YDS	TRUCK	TIME
110	5.0	13	4 ²⁰
11	4.0	3	4 ¹⁹
12	3.5	3	5 ³⁵
13	4.0	2	6 ⁰²
14	4.0	3	6 ⁰⁸
15	4.0	3	6 ¹²
16	4.0	3	6 ³⁰
17	3.5	3	6 ⁴²
18	4.0	18	6 ⁴⁶
19	4.0	26	7 ²⁰
20	3.5	3	7 ²⁴
21	4.0	3	7 ³⁸
23	4.5	3	7 ⁴⁶
24	4.0	26	7 ⁵⁵
25	4.0	3	8 ⁰⁵
26	4.5	3	9 ¹⁵
	<u>64.5</u>		

SHIFT NO. 2 - SEPT - 26 TH 1935 - F. E. BRACHMANN
SHOVELING, 7-10 WITH SKIP
TRUCKS 25
3 - AIR COMPRESSORS
1 - CATERPILLAR

3 - MEN - DRILLING & BLASTING
1 - LABORER ON DUMP
2 - MEN - DRILLING IN SPILLWAY
1 - MEN - EXCAVATING
1 - FOREMAN
5 - CARPENTERS
1 - FOREMAN
WORKING 1-HOUR

LOADS	ROCK CU. YDS	TRUCK	TIME
127	3.5	3	9 ²⁰
28	3.5	3	9 ²⁸
29	4.0	3	9 ³²
30	5.0	3	9 ⁴³
31	3.0	26	9 ⁴⁵
32	4.0	3	10 ⁰⁰
33	3.0	9	10 ⁰³
34	4.0	3	10 ¹²
35	4.0	3	10 ¹⁶
36	4.5	3	10 ³⁰
37	3.5	15	10 ³⁶
38	4.0	3	10 ³⁸
39	3.5	3	10 ⁴⁸
40	3.5	3	10 ⁵⁵
41	4.5	3	11 ⁰³
42	3.5	20	11 ⁰⁶
	61.0		

LOADS	ROCK CU. YDS	TRUCK	TIME
148	5.0	13	11 ¹¹
44	4.0	3	11 ²⁰
45	4.5	3	11 ²⁴
46	3.0	9	11 ³⁰
47	4.5	3	11 ³⁵
48	3.5	3	11 ⁴⁵
49	4.0	3	12 ⁰²
50	3.5	3	12 ²³
51	3.5	3	12 ²²
	35.5		
	61.5		
	64.5		
	161.0		

reported

202-LOADS-DIG. TO DOWN ST. REAM DUMP

LOADS	Rock CU. YDS	TRUCK	TIME
102	3.0	26	4 ⁰²
3	5.0	15	4 ⁰⁴
4	3.5	26	4 ¹²
5	2.5	15	4 ²⁷
6	3.0	15	4 ³²
7	2.5	15	5 ²⁶
8	3.5	12	5 ⁴⁸
9	3.0	33	5 ⁵⁸
160	6.0	26	10 ³⁰
	<u>32.0</u>		

reported

SHIFT NO. 2 SEPT. 27 TH 1933 F. EBRACHMANN
 SHOVEL NO. 7 - 10 DRAGLINE
 TRUCKS NO. 9
 4 - AIR COMPRESSORS
 1 - CATERPILLAR

324 LOADS D.G. TO DOWN ST. DUMP
 30 LOADS D.G. UP STREAM
 4 - MEN - DRILLING GROUT - HOLES
 4 - MEN - DRILLING & BLASTING
 9 - MEN - EXCAVATING IN UPPER END SILLWAY
 1 - FOREMAN

LOADS	Rock CU. YDS	TRUCK	TIME
161	4.0	5	4 ¹⁰
2	3.5	17	4 ²⁶
3	4.5	17	4 ³⁵
4	4.0	17	4 ³⁸
5	4.5	17	5 ⁰⁸
6	4.0	2	5 ²⁰
7	5.0	17	5 ²⁶
8	3.5	2	5 ³⁵
9	4.0	17	5 ⁵⁰
170	3.5	17	6 ⁰⁰
1	3.5	17	6 ¹⁰
2	5.0	17	6 ³²
3	3.5	17	7 ⁰²
4	2.5	17	7 ²⁰
5	4.5	5	12 ¹⁶
6	59.5		

reported

SHIFT NO. 2 SEPT. 28 TH 1933 F. EBRACHMANN
 SHOVEL NO. 7, 10 DRAGLINE
 TRUCKS NO. 9
 4 - AIR COMPRESSORS
 1 - CATERPILLAR
 4 - MEN DRILLING GROUT HOLES
 1 - CARPENTER - 4 HRS
 8 - MEN EXCAVATING
 3 - MEN DRILLING & BLASTING
 1 - FOREMAN
 1 - LABORER ON DUMP

752 PREMATURE EXPLOSION
 2 - MEN INJURED

297 - LOADS D.G. TO DOWN ST. DUMP
 20 - " " " " " " " " " " " "

LOADS	ROCK CU.YDS	TRUCK	TIME
176	4.5	12	5 ³⁶
7	4.5	13	6 ¹²
8	5.0	12	6 ²¹
9	5.0	13	6 ²⁹
180	4.0	12	6 ⁵²
1	4.0	12	7 ⁰⁵
2	3.0	30	7 ¹¹
3	4.0	17	7 ²⁰
4	3.5	13	7 ²¹
5	5.0	17	7 ³³
6	4.0	17	7 ⁵⁶
7	3.0	2	8 ⁰⁰
8	3.0	1	8 ⁰⁴
9	3.0	13	9 ⁰⁰
190	3.5	17	9 ⁰⁸
1	3.5	30	
			62.5

SHIFT NO 22-SEPT-29 TH 1933-F.F. BRACHMANN
 SHOVEL NO 67, 7, 10 OR AGLINE
 TRUCKS NO 7, 10 OR AGLINE
 2-AIR COMPRESSORS.
 1-CATERPILLAR

4-MEN DRILLING + BLASTING
 12-MEN EXCAVATING
 1-LABORER ON DUMP

LOADS	ROCK CU.YDS	TRUCK	TIME
192	2.0	12	9 ²⁰
3	4.0	17	9 ²³
4	5.0	12	9 ³⁰
5	5.5	17	9 ⁴⁹
6	4.5	17	11 ⁵⁸
7	5.0	17	12 ¹⁰
8	4.0	17	12 ²³
			32.0
9	62.5		92.5

reported

231 LOADS D.G. TO DOWNSTREAM DUMP
 100 LOADS D.G. TO UPSTREAM DUMP

LOADS ROCK CU.YDS TRUCK TIME

200	4.0	12	4 ¹⁷
1	5.0	1	4 ³⁰
2	4.0	17	4 ³⁵
3	4.5	3	4 ³⁶
4	4.0	3	4 ⁴⁰
5	4.0	12	4 ⁴²
6	4.0	1	4 ⁴⁴
7	4.0	12	4 ⁵⁰
8	4.0	3	5 ⁰²
9	3.5	3	5 ¹³
210	3.0	1	5 ³²
11	2.0	17	5 ³⁵
12	3.0	33	5 ⁴⁴
13	4.0	17	5 ⁴⁷
14	4.5	12	5 ⁵⁰
15	3.0	33	5 ⁵⁵
	60.5		

SHIFT NO 2 - SEPT. 1933. F.E. BRACHMANN

SHOVEL NO 6, 7 + 10 DRAGLINE

TRUCKS NO 7

3 - AIR-COMPRESSORS

2 - CATERPILLAR

12 - MEN EXCAVATING

4 - MEN DRILLING + BLASTING

1 - LABORER ON DUMP.

86-SACKS-RIVERBIDE-CEMENT
DELIVERED ABOUT 3:20 P.M.
BETWEEN SHIFTS 1-1-2

ROCK
LOADS CU.YDS TRUCK TIME

216	4.0	12	6 ⁰⁰
17	3.0	33	6 ⁰⁴
18	4.5	17	6 ⁰⁵
19	4.0	12	6 ⁰⁹
20	3.5	12	6 ¹⁸
21	3.0	17	6 ²²
22	4.0	12	6 ²⁶
23	4.0	17	6 ³²
24	3.0	33	6 ³⁴
25	4.5	12	6 ⁴²
26	4.5	17	6 ⁴⁴
27	3.5	12	6 ⁵⁸
28	3.5	17	7 ⁰⁰
29	4.0	3	7 ⁰²
30	4.0	17	7 ¹¹
31	3.0	12	7 ²⁰
	60.0		

LOADS	ROCK CU.YDS	TRUCK	TIME
232	4.0	17	7 ²⁵
3	4.0	12	7 ²⁷
4	4.0	1	7 ³⁰
5	3.5	33	7 ³²
6	3.5	12	7 ⁵⁰
7	4.5	12	7 ⁵⁸
8	4.0	1	8 ⁰⁵
9	3.0	12	9 ¹⁵
940	4.5	13	9 ²²
1	3.0	33	9 ²⁵
2	3.0	12	9 ³⁰
3	4.5	13	9 ⁴⁵
4	5.5	12	9 ⁴⁶
5	3.0	33	9 ⁵⁰
6	3.5	3	9 ⁰⁷
48 247	3.5	12	10 ⁰⁰
	61.0		

LOADS	ROCK CU.YDS	TRUCK	TIME
248	3.5	33	10 ⁰⁶
49	4.5	12	10 ¹³
250	4.5	12	10 ²⁵
1	6.0	13	10 ²⁵
2	4.0	33	10 ³¹
3	4.0	3	10 ³⁴
4	5.0	12	10 ⁴³
5	3.0	33	10 ⁴⁸
6	4.0	13	11 ⁰³
7	4.5	13	11 ³⁶
8	4.0	13	11 ⁵⁵
9	47.0		
	61.0		
260	60.0		
	60.5		
1	228.5		
2			
263			

reported

8 LOADS DIG TO UP STREAM DUMP
248 LOADS DIG TO DOWN STREAM DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
259	4.0	1	5 ²⁴
60	4.0	17	5 ¹²
61	4.0	1	5 ¹⁶
62	4.5	17	5 ²⁵
63	3.5	6	5 ²⁷
64	4.0	1	5 ³³
65	3.5	3	5 ³²
66	3.0	6	5 ⁴²
67	4.0	17	5 ⁴⁷
68	4.0	6	5 ⁴⁸
69	3.5	3	5 ⁵³
70	4.0	1	6 ⁰⁴
71	4.5	17	6 ²⁸
72	3.0	3	6 ³⁷
73	4.0	17	6 ⁴⁰
74	3.5	6	6 ⁴⁵
			<u>61.0</u>

SHIPT NO 2 OCT. 2ND 1933 F. E. BRACHMANN
 SHOVEL NO 67 + 10 DRAGLINE
 TRUCK NO 7

1 - AIR COMPRESSOR
 1 - CAT

12 - MEN EXCAVATING
 3 - MEN DRILLING + BLASTING
 1 - FOREMAN
 1 - LABORER

OCT. 2ND
 37 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
275	3.5	3	6 ⁵²
76	4.0	17	7 ⁰⁵
77	4.5	17	7 ²⁰
78	4.0	17	7 ³²
			<u>4.0</u>
			17
			7 ⁴⁸
			20.0
			61.0
			295
			16 LOADS =
			164.0
			145.0
			TOTAL

reported

243 LOADS D.G. TO DOWN STREAM DUMP
 20 " " UP STREAM DUMP

37 LOADS

ROCK
LOADS CU.YDS TRUCK TIME

296 3.0⁻ 3 4¹⁰

7 3.0 17 5¹⁵

8 3.0 7 5²⁵

9 3.0 3 5³⁵

300 3.0 3 5⁴⁶

1 4.0 12 10²⁰

2 2.0 12 10³²

3 3.5⁻ 12 10⁵⁰

4 3.5⁻ 9 10⁵⁸

5 2.0 9 11¹⁷

6 3.0 12 11³²

7 3.5⁻ 9 12⁴¹

8 6.0 9 12¹

9 4.0 12 13²

OCT. 3RD
14 LOADS

47.0

34

132

57 LOADS

reported

SHIFT NO 2 OCTOBER 3-1933 F.E. BRACHMANN

SHOVEL NO 67-10 PRAGLINE

TRUCK NO 7

3-AIR COMPRESSORS

1-CATERPILLAR

9-MEN-EXCAVATING

3-MEN-DRILLING + BLASTING

1-FOREMAN

1-LABORER ON DUMP

ROCK
LOADS CU.YDS TRUCK TIME

312 2.5⁻ 34 5¹⁸

13 2.5⁻ 33 5²¹

14 3.5⁻ 17 5²⁶

15 4.5⁻ 17 5³⁰

16 3.0 5 6⁰⁷

17 3.5 17 6⁰⁹

18 3.0 17 6⁴²

19 3.5⁻ 12 6⁵³

320 4.5 5 8⁰⁵

21 3.5⁻ 12 8³⁹

22 4.0 5 8⁵⁴

23 3.5⁻ 17 10⁰⁵

24 4.0 5 10²²

25 4.0 5 10³²

26 4.0 1.2 11⁰⁴

16 27 4.0 11²²

57.5⁻

SHIFT NO 2 OCTOBER 4TH 1933 - F.E. BRACHMANN

SHOVEL NO 678-10 PRAGLINE

TRUCK NO 7

3-AIR COMPRESSORS

1-CATERPILLAR

3-MEN-DRILLING + BLASTING

12-MEN-EXCAVATING

1-CEMENT FINISHER

1-FOREMAN

1-LABORER ON DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
328	4.0	17	11 ²⁵
29	3.5	5	11 ⁴²
30	3.0	17	11 ⁵³
31	4.5	5	12 ¹⁶
32	4.5	17	12 ²¹
33	4.0	5	12 ³²
34	4.5	17	12 ³⁶
35	4.5	5	12 ⁴⁹
36	5.0	17	12 ⁵⁰
37	4.0	5	1 ¹²
38	2.5	33	1 ¹⁸
39	4.0	5	1 ⁵⁰
40	2.0	5	2 ⁰⁰

OCT-4TH

50.0
57.5

29 LOADS 107.5

12 LOADS 46.0
TAKEN FROM
DAM AREA

reported

LOADS	ROCK CU. YDS	TRUCK	TIME
341	3.0	34	5 ²³
2	3.0	5	5 ²⁵
3	3.5	5	5 ³⁸
	10.0		

reported

SHIFT NO 2 - OCTOBER - 5 TH 1933 - F. E. BRACHMANN

SHOVEL NO 6, 7, 8

TRUCK NO 7

2 - AIR-COMPRESSOR

CATERPILLAR

4 - MEN DRILLING & BLASTING

12 - MEN EXCAVATING

1 - FOREMAN

1 - LABORER ON DUMP

LOADS ^{ROCK} CU.YDS TRUCK TIME

reported

SHIFT NO 2-OCTOBER-6TH 1933. F.E. BRACHMANN
SHOVEL NO 6, 7, 8 + 10 DRAGLINE
TRUCK NO 7
3- AIR-COMPRESSOR
CATERPILLAR

10 MEN-EXCAVATING
5 MEN-DRILLING + BLASTING
1 FOREMAN
1- LA BOKER-ON-DUMP

SHIFT NO 2-OCTOBER-7TH 1933. F.E. BRACHMANN
SHOVEL NO 6, 7, 8.
TRUCKS NO 7
3- AIR-COMPRESSORS
CATERPILLARS
5 MEN DRILLING + BLASTING
10 MEN EXCAVATING

reported

LOADS	ROCK CU. YDS	TRUCK	TIME
344	5.0	20	5 ⁰⁹
5	5.5	17	5 ¹⁰
6	4.0	15	5 ¹²
7	4.5	24	5 ¹⁵
8	4.0	23	5 ²⁰
9	6.0	26	5 ²⁵
350	4.5	20	5 ³⁰
1	2.5	17	5 ³⁸
2	4.5	15	5 ⁴⁴
3	5.5	23	5 ⁵⁰
4	4.5	26	5 ⁵³
5	4.5	15	6 ⁰²
6	4.0	23	6 ¹⁰
7	4.0	26	6 ¹³
8	4.5	17	6 ¹⁷
9	4.0	15	6 ²⁰
71.5			

SHIFT NO 2 - OCTOBER 9TH 1933 - F.E. BRACHMANN

SHOVE-678 - 10 DRAGLINE

TRUCKS NO 15

3 - AIR COMPRESSOR

1 - CATERPILLAR

5 - MEN - DRILLING + BLASTING

10 - MEN - EXCAVATING + REMOVING FORMS

1 - FOREMAN

LOADS	ROCK CU. YDS	TRUCK	TIME
360	4.0	23	6 ²⁶
1	6.0	26	6 ²⁴
2	5.0	15	6 ⁴²
3	4.5	23	6 ⁴⁶
4	5.0	24	7 ⁰⁹
5	5.0	15	7 ¹⁵
6	3.5	23	7 ³⁰
7	3.5	26	7 ³³
8	3.5	15	7 ³⁸
9	4.0	23	7 ⁵⁰
370	3.0	26	7 ⁵⁵
1	3.5	15	8 ⁰⁰
2	4.0	23	8 ¹²
3	4.0	26	8 ¹⁸
4	4.5	15	8 ²⁵
5	3.5	25	8 ³¹
66.5			

LOADS	ROCK CU.YDS	TRUCK	TIME
376	4.0	23	8 ³⁶
7	4.5	26	8 ⁴⁰
8	4.5	25	8 ⁵²
9	3.5	20	8 ⁵⁷
380	4.0	23	8 ⁵⁸
1	4.0	26	9 ⁰²
2	4.0	15	10 ⁰⁸
3	4.0	25	10 ¹⁸
4	4.0	23	10 ²⁹
5	5.0	26	10 ³⁵
6	3.0	1	10 ³⁷
7	4.5	15	10 ³⁹
8	5.0	25	10 ⁴²
9	4.5	23	10 ⁵⁵
390	3.5	26	11 ⁰⁰
1	3.5	15	11 ⁰⁴
	<u>65.0</u>		

48 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
392	4.5	25	11 ¹⁰
3	4.0	23	11 ¹⁵
4	5.0	26	11 ²⁰
5	4.0	15	11 ²⁵
6	5.0	25	11 ³¹
7	4.5	23	11 ³⁶
8	4.0	26	11 ⁴²
9	4.5	15	11 ⁴⁸
400	4.0	25	11 ⁵³
1	3.0	23	11 ⁵⁷
2	4.5	26	12 ⁰¹
3	3.5	15	12 ⁰⁶
4	4.5	25	12 ¹¹
5	4.5	23	12 ²²
6	3.5	26	12 ³¹
7	4.0	15	12 ³⁶
	<u>67.0</u>		

64 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
408	4.0	25	12 ⁴⁵
9	5.0	18	12 ⁴⁷
410	3.5	24	12 ⁵⁰
11	4.0	23	12 ⁵⁵
12	4.5	26	1 ⁰⁰
13	4.0	15	1 ⁰⁷
14	5.0	25	1 ¹²
15	4.0	20	1 ¹⁷
16	4.0	23	1 ²⁰
17	3.5	26	1 ²⁵
18	4.0	15	1 ³²
19	3.5	24	1 ³³
20	4.0	25	1 ³⁶
21	5.0	23	1 ⁴³
22	4.5	15	1 ⁵⁰
23	4.0	18	1 ⁵²
			66.5
80 LOADS			

16

LOADS	ROCK CU. YDS	TRUCK	TIME
24	5.0	26	1 ⁵³
425	5.0	25	1 ⁵⁶
			10.0
			71.5
			66.5
			65.5
			67.
			66.5
			347.0

reported

82 LOADS

LOADS	Rock CU.YDS	TRUCK	TIME
		1	6 ⁴⁵
		2	7 ⁰⁵

① LOADS 40.0

436

reported

SHIFT NO 22 OCTOBER-10TH 1933 F. E. BRACHMANN
 SHOVELS NO 6, 7, 8, 11 DRAGLINE
 TRUCKS NO 10
 3 AIR COMPRESSORS
 CATERPILLARS
 5- MEN DRILLING + BLASTING
 8- MEN EXCAVATING - REMOVING FORMS + CLEANING UP
 1- FOREMAN

LOADS	ROCK CU.YDS	TRUCK	TIME
437	3.5	2	5 ⁰⁶
38	3.0	1	5 ¹⁸
39	3.5	2	5 ²⁰
40	4.0	23	5 ²⁷
41	3.0	1	5 ³⁰
42	4.0	2	5 ³⁶
43	3.5	3	5 ³⁹
44	3.0	23	5 ⁴⁰
45	2.0	2	5 ⁵²
46	3.0	33	5 ⁵⁹
47	3.5	3	6 ⁰³
48	4.0	2	6 ⁰⁵
49	4.0	23	6 ¹⁰
50	4.0	3	6 ¹⁴
51	3.5	23	6 ²⁴
52	4.0	2	6 ²⁶
			53 ⁵⁵

SHIFT NO 2 - OCTOBER-11TH 1933 - F. E. BRACHMANN
 SHOVELS NO 6, 7, 8 - 10 DRAGLINE
 TRUCKS NO 11
 3- AIR COMPRESSORS
 CATERPILLARS
 5- MEN DRILLING + BLASTING
 14- MEN EXCAVATING
 1- FOREMAN
 1- LABORER ON DUMP

LOADS	ROCK CU, YDS	TRUCK	TIME
453	4.0	1	6 ³⁰
4	3.5	2	6 ⁴⁰
5	5.0	23	6 ⁴⁸
6	4.0	33	6 ⁵³
7	3.5	2	6 ⁵⁵
8	3.5	1	6 ⁵⁸
9	3.5	2	7 ⁰⁸
460	3.5	23	7 ¹²
1	4.0	16	7 ¹⁵
2	3.5	1	7 ²⁵
3	4.0	1	7 ²⁷
4	3.5	33	7 ³¹
5	4.0	23	7 ³⁴
6	4.0	23	7 ⁵⁰
7	4.0	33	8 ⁰²
8	4.0	23	8 ¹⁰
	62.0		

18

LOADS	ROCK CU, YDS	TRUCK	TIME
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469	3.5	33	8 ²⁶
70	3.0	33	8 ⁵²
71	4.0	3	1 ³⁶
72	3.0	33	1 ⁴⁴

13.5

62.0

75.5

20.0

55.5

DOWN STREAM

11 P

11

reported

LOADS	ROCK CU.YDS	TRUCK	TIME
473	3.0	1	5:18
4	3.5	2	5:22
5	3.0	2	5:58
6	3.5	2	6:20
7	3.5	2	8:10
8	2.5	1	8:15
9	4.0	3	8:25
480	3.5	2	8:30
1	3.5	1	8:34
2	3.5	3	8:39
3	3.5	2	8:42
4	3.0	3	8:53
5	3.5	1	10:06
6	4.0	2	10:22
7	4.0	3	10:30
488	4.0	1	10:40
	55.5		

SHIFT NO 2 OCTOBER - 12TH 1933 - F.F. BRACHMANN
 SHOVELING - 67-94
 TRUCKS NO. 8
 3 - AIR COMPRESSOR
 CATERPILLARS
 6 - MEN - EXCAVATING + DRILLING GROUT HOLES
 4 - MEN - DRILLING + BLASTING
 1 - FOREMAN
 1 - LOG BOMBER
 (SLIDE - IN SLOPE - NORTH OF SPLWAY)
 442 PM - ABOUT 80 YDS.
 100 FEET FROM TOP ABOUT 4

LOADS	ROCK CU.YDS	TRUCK	TIME
489	4.0	1	10:58
90	4.0	2	11:12
91	4.0	3	11:04
92	4.0	2	11:52
93	4.0	3	12:02
94	3.0	2	12:20
95	4.0	1	12:22
96	4.0	3	12:24
97	3.0	1	12:32
98	4.0	3	12:40
99	3.5	3	12:55
500	3.5	2	10:5
1	3.5	3	1:12
2	4.0	1	1:21
3	3.0	3	1:33
	55.5		
	55.0		
	110.0		

31 LOADS

reported

LOADS	ROCK CU.YDS	TRUCK	TIME
536	3.5	26	11 ⁵⁸
37	3.5	23	12 ²⁰
38	4.0	26	12 ⁵⁹
39	4.5	23	12 ⁵⁶
40	5.0	31	1 ⁰²
37 loads			
18.5			
58.5			
59.0			
136.0			

reported

LOADS	ROCK CU.YDS	TRUCK	TIME
537			
17 loads	60.		
	UP. STR.		

reported

SHIFT NO. 2 - OCTOBER - 14TH 1933 - F. E. BRACHMANN

- SHOVEL NO. 8
- TRUCK COMPRESSORS
- 3 - CARTER PILLARS
- 5 - MEN - DRILLING + BLASTING
- 3 - MEN - DRILLING GROUT HOLES
- 1 - FOREMAN
- 1 - LABORER ON DUMP

LOADS	ROCK CU. YDS U.S. D.S.	TRUCK	TIME
558	3.0	1	5 ¹⁸
59	3.5	33	5 ⁴²
60	3.0	3	5 ⁴⁴
61	4.0	2	5 ⁴⁹
62	3.5	33	5 ⁵¹
63	3.5	3	5 ⁵⁶
64	5.0	10	6 ⁰⁰
65	3.5	33	6 ⁰⁶
66	3.0	10	6 ²⁴
67	4.0	2	6 ²⁷
68	3.0	33	6 ³¹
69	6.0	10	6 ³⁵
70	3.0	1	6 ³⁶
71	3.5	33	6 ⁴¹
72	5.0	2	6 ⁴⁴
73	4.0	10	6 ⁵¹
	60.5		
	7.0		
	03.5	U.S. D.S.	

SHIFT NO. 2 - OCTOBER 16TH 1933 - F. E. BRACHMANN

SHOVEL NO. 8, 10, 7.

TRUCKS NO. 6

2 - AIR COMPRESSORS

1 - CATERPILLARS

5 - MEN - DRILLING & BLASTING

8 - MEN - EXCAVATING

1 - FOREMAN

1 - LABORER IN DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
574	4.0	3	7 ⁰⁵
75	4.0	1	7 ⁰⁷
76	5.0	18	7 ¹²
77	3.5	1	7 ¹⁷
78	5.0	18	7 ²²
79	5.0	18	7 ³⁷
80	3.5	2	7 ⁴²
81	5.0	18	7 ⁴⁶
82	5.0	18	8 ⁰³
83	3.5	2	8 ⁰⁴
84	4.0	18	8 ¹²
85	3.5	3	8 ¹⁵
86	5.0	18	8 ²²
87	4.0	18	8 ³³
88	3.5	3	8 ⁴⁰
89	4.0	18	8 ⁴⁰
	67.5		
	D.S.		

32 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
590	4.5	18	8 ⁵⁷
1	4.0	3	8 ⁵⁹
2	3.5	1	5 ⁴⁰
3	3.5	1	6 ¹⁵
4	3.0	18	10 ⁰⁵
5	3.0	(33)	10 ¹³
6	3.5	1	10 ¹⁶
7	3.5	(33)	10 ²³
8	4.0	2	10 ²⁶
9	5.5	9	10 ³⁵
600	4.5	24	10 ⁴³
1	3.5	2	10 ⁵⁰
2	5.0	24	10 ⁵⁵
3	4.0	24	11 ⁰²
4	2.5	33	11 ⁰⁶
5	4.5	24	11 ¹⁰
	62.0		
	D.S.		

48 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
606	3.5	2	11 ¹⁴
7	3.0	33	11 ¹⁸
8	3.5	24	11 ²⁰
9	3.5	2	11 ²⁶
10	3.5	33	11 ³¹
11	4.5	24	11 ³²
12	3.5	2	11 ³⁶
13	3.0	33	11 ³⁹
14	4.5	24	11 ⁴⁴
15	4.5	6	11 ⁴⁸
16	3.5	2	11 ⁵⁰
17	4.5	24	11 ⁵⁴
18	4.5	6	12 ⁰⁰
19	4.0	2	12 ⁰¹
20	4.0	24	12 ⁰⁵
21	3.5	33	12 ⁰⁷
	61.0		
	D. STREAM		

64 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
622	2.5	33	12 ¹⁷
23	4.0	24	12 ²⁰
24	3.5	2	12 ²⁴
25	4.0	3	12 ²⁰
26	5.0	24	12 ²⁸
27	3.5	33	12 ³⁴
28	4.0	24	12 ³⁷
29	4.0	2	12 ⁴¹
30	4.0	3	12 ⁴²
31	4.5	24	12 ⁴⁶
32	3.0	33	12 ⁴⁷
33	4.5	24	12 ⁵⁴
34	3.5	2	12 ⁵⁶
35	3.5	33	1 ⁰²
36	4.0	(7)	1 ⁰³
37	4.0	2	1 ⁰⁷
<u>61.5</u> D.S.			

80 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
638	3.5	24	1 ⁰⁵
39	3.0	33	1 ¹⁶
40	3.5	2	1 ²⁰
41	4.0	(7)	1 ²⁶
42	4.5	24	1 ²⁸
43	4.5	24	1 ³⁶
44	4.5	(7)	1 ⁴³
45	4.0	24	1 ⁴⁴
46	4.0	33	1 ⁴⁶
47	3.5	2	1 ⁰¹
48	3.5	24	1 ⁰²
49	4.0	7	1 ⁰⁶
50	4.5	24	2 ⁰¹
51	4.0	2	2 ⁰⁴
			<u>55.0</u>

reported

94 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
652	4.0	1	5 ⁰⁸
53	3.5	3	5 ¹⁰
54	3.0	31	5 ¹⁹
55	3.0	26	5 ²⁴
56	3.0	33	5 ³⁶
57	3.0	31	5 ⁴⁴
58	4.5	33	5 ⁵⁶
59	4.0	31	6 ⁰³
60	4.0	2	6 ¹³
61	3.5	33	6 ¹⁵
62	4.5	26	6 ²⁰
63	3.5	31	6 ⁴⁰
64	4.0	3	6 ⁴⁵
65	3.0	31	6 ⁵⁰
66	3.0	26	6 ⁵⁴
67	2.5	31	7 ⁰⁴
	<u>56.0</u>		

SHIFT NO. 2 - OCTOBER - 17 TH 1933 - F. E. BRACHMANN

SHOVELS 6, 7, 8

TRUCKS 28

2 AIR COMPRESSORS

1 CATERPILLARS

5 MEN DRILLING + BLASTING

2 MEN EXCAVATING

1 FOREMAN

1 LA BORER

LOADS	ROCK CU. YDS	TRUCK	TIME
668	3.5	26	7 ¹²
69	3.0	3	7 ¹⁵
70	4.0	2	7 ²²
71	3.5	3	7 ³⁰
72	4.0	26	7 ³⁸
73	3.0	3	7 ⁴⁶
74	4.0	26	7 ⁴⁸
75	3.5	31	7 ⁵³
76	3.5	3	7 ⁵⁸
77	4.0	1	8 ⁰²
78	4.0	26	8 ⁰⁵
79	3.0	31	8 ¹⁴
80	4.0	24	8 ¹⁷
81	4.5	24	8 ²⁵
82	4.0	3	8 ²⁸
83	3.5	31	8 ⁵²
	<u>59.0</u>		

LOADS	ROCK CU.YDS	TRUCK	TIME
684	5.0	24	8 ³²
85	3.5	1	8 ²³
86	3.5	1	8 ³⁹
87	4.0	3	8 ⁴²
88	3.5	33	8 ⁴⁴
89	3.5	31	8 ⁵²
90	4.0	24	8 ⁵⁶
91	3.5	33	8 ⁵⁸
92	4.0	1	8 ⁵⁸
93	3.5	2	9 ⁰²
94	4.0	3	10 ⁰⁷
95	3.5	31	10 ¹²
96	4.0	2	10 ¹²
97	4.0	4	10 ²⁵
98	4.0	1	10 ²⁶
99	3.5	24	10 ³⁰
			64 loads
<u>64.0</u>			

LOADS	ROCK CU.YDS	TRUCK	TIME
700	3.5	33	10 ³²
1	4.0	31	10 ³⁵
2	5.0	24	10 ⁴⁰
3	3.5	33	10 ⁴⁴
4	3.5	2	10 ⁴⁵
5	4.5	3	10 ⁴⁷
6	4.0	31	10 ⁴⁸
7	4.5	24	10 ⁵³
8	3.5	4.5 33	10 ⁵⁶
9	3.5	E.S. 3	11 ⁰⁵
10	4.0	4.5, 2	11 ¹⁰
11	4.0	4.5, 31	11 ¹⁵
12	4.0	24	11 ²²
13	3.0	3	11 ³⁰
14	4.0	33	11 ³⁸
15	5.0	24	11 ³⁵
<u>63.5</u>			

64 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
716	3.5	3	11 ³⁹
17	3.5	3	11 ⁵²
18	3.5	31	11 ⁵⁷
19	3.5	33	12 ⁰⁰
20	4.5	24	12 ⁰¹
21	4.0	3	12 ⁰¹
22	4.0	31	12 ⁰⁷
23	3.5	7	12 ¹¹
24	4.0	33	12 ¹⁵
25	4.0	24	12 ²⁰
26	4.0	33	12 ³⁰
27	4.0	24	12 ³⁷
28	3.5	31	12 ³⁸
29	4.0	33	12 ⁴⁰
30	4.0	31	12 ⁴²
31	5.0	24	12 ⁵⁰
			<u>62.9</u>

8020A DS

LOADS	ROCK CU.YDS	TRUCK	TIME
732	U.S. 4.5	24	1 ⁰²
33	3.5	33	1 ²³
34	U.S. 3.5	2	1 ²⁶
35	U.S. 3.5	3	1 ²⁷
36	U.S. 4.5	25	
37	U.S. 4.0	25	
38	U.S. 4.0	25	
39	U.S. 4.5	25	
40	U.S. 4.0	25	
41	U.S. 3.5	25	
42	4.0	24	1 ²⁰
43	U.S. 3.5	33	1 ³⁴
44	3.5	31	1 ³⁵
45	U.S. 4.0	24	1 ⁴²
46	U.S. 4.0	2	1 ⁴⁵
47	U.S. 3.5	3	1 ⁴⁵
748	62.0 3.5	31	1 ⁵¹

96

97

reported

LOADS	ROCK CUB YDS U.S.	TRUCK	TIME
749	3.5	32	5-02
	D.S.		
50	3.5	25	5-14
	D.S.		
51	3.5	33	5-15
	U.S.		
52	3.0	1	5-19
	D.S.		
53	3.5	25	5-23
	U.S.		
54	3.0	32	5-20
	D.S.		
55	4.0	25	5-33
	U.S.		
56	4.0	1	5-39
	D.S.		
57	4.0	32	5-49
	D.S.		
58	4.0	33	5-54
	U.S.		
59	4.0	25	5-57
	U.S.		
60	4.0	1	6-00
	U.S.		
61	4.0	32	6-09
	D.S.		
62	3.5	33	6-15
	D.S.		
63	4.5	24	6-23
	D.S.		
64	3.5	32	6-27

56.5
31.0 D.S.
20.5 U.S.

SHIFT No 2 - OCTOBER 18 1933 - F.E. BRACHMANN
SHOVEL NO 6-7-8
TRUCK NO 2

- 2 - AIR COMPRESSORS
- 1 - CATERPILLARS
- 5 - MENDING DRILLING & BLASTING
- 1 - MENEY EXCAVATING
- 1 - MAN ON PUMP

LOADS	ROCK CUB YDS D.S.	TRUCK	TIME
765	4.0	24	6-30
	U.S.		
66	4.5	32	6-36
	D.S.		
67	4.0	1	6-44
	U.S.		
68	4.0	25	6-45
	D.S.		
69	4.0	32	6-58
	D.S.		
70	4.0	24	7-02
	U.S.		
71	3.5	32	7-09
	U.S.		
72	4.5	32	7-27
	D.S.		
73	4.0	24	7-42
	U.S.		
74	4.5	32	7-44
	U.S.		
75	3.5	33	7-53
	D.S.		
76	4.5	1	7-59
	U.S.		
77	4.0	32	8-08
	D.S.		
78	4.5	24	8-15
	U.S.		
79	3.0	3	8-21
	D.S.		
80	4.0	32	8-36

64.5
31.5 U.S.
33.0 D.S.

LOADS	ROCK CU.YDS	TRUCK	TIME
781	D.S. 4.5	24	8 ³²
82	D.S. 4.0	3	8 ⁴⁵
83	D.S. 4.5	24	8 ⁵³
84	D.S. 4.0	24	9 ⁰⁰
85	U.S. 4.0	24	10 ¹³
86	D.S. 3.5	2	10 ¹⁹
87	D.S. 4.5	32	10 ²²
88	D.S. 3.5	3	10 ²⁷
89	U.S. 4.5	24	10 ³²
90	D.S. 4.0	1	10 ³⁹
91	D.S. 4.0	1	10 ⁴⁰
92	U.S. 3.5	32	10 ⁴⁵
93	D.S. 4.0	1	10 ⁴⁸
94	U.S. 5.0	24	10 ⁵⁰
95	D.S. 4.0	1	10 ⁵⁴
96	D.S. 3.0	1	10 ⁵⁸
	64.5		
	17.5 U.S.		
	47.0 D.S.		

29

LOADS	ROCK CU.YDS	TRUCK	TIME
797	U.S. 5.0	32	11 ⁰⁰
	U.S. 3.0	3	11 ⁰⁴
	D.S. 4.0	2	11 ⁰⁷
800	D.S. 4.5	24	11 ⁰⁹
1	D.S. 5.0	24	11 ²¹
2	U.S. 3.0	9	11 ²²
3	U.S. 4.0	32	11 ²⁴
4	D.S. 3.5	2	11 ³²
5	U.S. 5.0	32	11 ⁴⁰
6	U.S. 3.5	33	11 ⁴¹
7	D.S. 4.0	2	11 ⁴⁴
8	D.S. 4.0	1	11 ⁵⁰
9	U.S. 3.5	3	11 ⁵⁴
10	D.S. 3.5	1	11 ⁵⁵
11	D.S. 4.0	24	12 ⁰⁰
12	D.S. 4.0	2	12 ⁰⁹
	64.0		
	27.5 U.S.		
	36.5 D.S.		

LOADS	ROCK CU.YDS	TRUCK	TIME
813	U.S. 4.0 D.S.	32	12 ²⁵
14	4.0 D.S.	1	12 ²⁶
15	8.5 U.S.	2	12 ²⁸
16	3.5 D.S.	33	12 ³⁰
17	4.0 D.S.	1	12 ³⁶
18	4.0 U.S.	24	12 ⁴³
19	4.0 D.S.	32	12 ⁴³
20	4.0 D.S.	2	12 ⁴⁶
21	4.0 D.S.	1	12 ⁴⁹
22	4.0 D.S.	3	12 ⁵⁰
23	4.0 D.S.	2	12 ⁵²
24	4.0 D.S.	33	1 ⁰⁰
25	5.0 D.S.	32	1 ¹⁰
26	3.5 D.S.	1	1 ¹⁵
27	4.0 U.S.	2	1 ¹⁷
28	5.0 D.S.	32	1 ²¹
64.5			
16.5 U.S.			
48.0 D.S.			

LOADS	ROCK CU.YDS	TRUCK	TIME
829	D.S. 4.0 D.S.	1	1 ²⁶
30	3.5 D.S.	3	1 ³⁰
31	4.0 D.S.	2	1 ³⁴
32	3.0 D.S.	33	1 ³⁷
33	3.0 D.S.	3	1 ⁴¹
34	4.0 U.S.	2	1 ⁴⁶
35	4.0 D.S.	24	1 ⁵⁰
36	3.5 D.S.	3	1 ⁵⁴
37	4.0 D.S.	1	1 ⁵⁴
38	3.5 D.S.	33	1 ⁵⁸
36.5			
4.0 U.S.			
32.5 D.S.			

90 loads.

122.5 UPSTREAM

228.0 DOWNSTREAM

reported

LOADS	ROCK CU. YDS D.S.	TRUCK	TIME
839	4.0	17	5 ⁰²
40	3.0	25	5 ¹³
41	3.5	25	5 ³¹
42	4.0	24	5 ⁴²
43	4.0	18	5 ⁵³
44	3.5	17	6 ⁰²
45	3.5	23	6 ¹⁵
46	3.5	26	6 ¹⁷
47	3.5	18	6 ²⁵
48	4.0	23	6 ³²
49	4.0	18	6 ³⁹
50	3.5	23	7 ⁰⁷
51	4.0	26	7 ¹¹
52	4.5	24	7 ³⁶
53	5.0	18	7 ⁴⁵
54	4.5	23	7 ⁵⁴
62.0 D.S.			

SHIFT NO. 2 - OCTOBER - 19 TH 1933 - FIEBRACHMANN

SHOVELING 6-7-8

TRUCKS 19

3-AIR-COMPRESSORS

CATERPILLARS

4-MEN DRILLING & BLASTING

3-MEN EXCAVATING

1-FOREMAN

LOADS	ROCK CU. YDS	TRUCK	TIME
838	4.0	5	8 ⁰⁰
56	4.0	18	8 ⁰²
57	4.5	6	8 ⁰⁴
58	4.0	23	8 ⁰⁹
59	4.0	18	8 ¹³
60	4.5	5	8 ¹³
61	4.5	17	8 ²⁷
62	4.5	23	8 ³²
63	4.0	18	8 ³⁵
64	4.0	23	8 ⁴⁵
65	4.0	18	8 ⁵⁰
66	4.0	17	8 ⁵⁴
67	4.0	23	8 ⁵⁶
68	4.0	18	8 ⁵⁹
69	4.0	24	10 ¹¹
70	4.0	25	10 ¹⁶
66.0 D.S.			

ROCK
LOADS CU. YDS TRUCK TIME

877	4.0	18	10 ¹⁹
2	4.0	6	8 ³²
3	4.0	5	10 ¹⁴
4	4.0	118	8 ²¹
5	4.0	17	8 ⁴⁴
6	4.5	26	10 ³⁰
7	3.5	5	10 ⁴²
8	3.5	18	10 ⁵³
9	33.5 42.0 66.0		
880	161.5		
1	DOWN STREAM		
2	reported.		
3	40 loads		
4			
5			
886			

ROCK
LOADS CU. YDS TRUCK TIME

879	3.5	26	5 ²¹
80	4.0	25	5 ²⁶
81	4.0	26	5 ³⁰
82	4.0	25	5 ⁴⁴
83	3.5	24	5 ⁵⁷
84	4.0	15	6 ⁰⁴
85	4.0	25	6 ⁴⁵
86	3.5	26	6 ⁵³
87	3.5	26	7 ⁰⁶
88	3.5	25	7 ¹⁵
89	4.0	15	7 ²³
90	4.0	25	7 ²⁷
91	4.5	26	7 ⁴⁰
92	3.5	15	8 ⁰⁰
93	4.0	26	8 ⁰⁶
94	4.0	15	8 ¹¹
	61.5		

SHIFT NO 2 - OCTOBER - 20TH 1933 F. E. BRACHMANN

SHOVEL NO 7-8

TRUCK NO 6

2 - AIR COMPRESSOR

1 - EXTERIOR PUMP

5 - MEN - DRILLING & BLASTING

5 - MEN - CLEANING UP

1 - FOREMAN

LOADS ROCK CUB.YDS TRUCK TIME

895 4.0 26 821

96 4.0 25 834

97 3.5 26 837

98 4.0 25 850

99 4.0 26 902

900 3.5 25 1005

1 3.5 23 1009

2 4.0 25 1012

3 4.0 26 1018

4 3.5 25 1021

5 3.0 26 1030

6 4.0 25 1034

7 3.5 24 1041

8 3.5 23 1050

9 4.0 26 1056

10 3.5 23 1100

59.5

32 LOADS

LOADS ROCK CUB.YDS TRUCK TIME

911 4.0 23 1108

12 3.5 23 1119

13 3.5 23 1124

14 3.5 23 1131

15 4.0 26 ~~1137~~

16 3.5 23 1142

17 3.5 24 1150

18 3.5 23 1153

19 3.5 24 1200

20 3.5 23 1206

21 4.0 26 1212

22 4.0 23 1220

23 3.5 24 1225

24 3.5 23 1232

25 4.0 26 1239

26 4.5 24 1250

59.5

48 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
927	5.0	26	100
28	4.0	23	100
29	3.5	23	115
30	4.0	23	122
31	3.5	26	126
32	4.0	26	136
33	4.0	26	142
34	3.0	23	152
			<hr/>
			31.0
			61.0
			59.5
			59.5
			<hr/>
			211.5

reported

56 loads

LOADS	ROCK CU.YDS	TRUCK	TIME
935	3.5	15	528
36	4.0	23	527
37	3.0	26	531
38	4.0	25	536
39	3.5	23	540
40	4.0	25	646
41	4.0	23	555
42	3.5	25	633
43	3.5	24	638
44	4.0	23	647
45	3.5	26	656
46	4.0	23	708
47	5.0	26	712
48	3.0	23	723
49	5.0	17	724
50	3.5	25	722
			<hr/>
			61.0

SHIFT NO 2 OCTOBER 21ST 1933. F.E. BRACHMANN

- SHOVEL NO 7-8
- TRUCKS NO 7
- 2-AIR COMPRESSOR
- 1-CAT REPELLARS
- 5-MEN DRILLING & BLASTING
- 7-MEN EXCAVATING & CLEANING UP
- 1-FOREMAN
- 1-LABORER ON DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
901	3.5	23	740
12	3.5	25	744
53	4.0	23	750
54	4.0	25	758
55	3.5	23	802
56	4.0	24	803
57	3.5	25	810
58	3.5	17	810
59	3.5	23	815
60	4.0	25	818
61	3.0	23	822
62	3.5	25	828
63	3.5	23	834
64	4.0	25	840
65	3.5	25	856
66	3.0	23	1015
	57.5		39 loads

LOADS	ROCK CU. YDS	TRUCK	TIME
967	3.5	23	1024
68	3.5	15	1030
69	4.0	25	1036
70	3.5	15	1040
71	3.5	23	1049
72	4.0	25	1045
73	3.0	15	1050
74	4.0	23	1052
75	3.5	23	1131
76	3.5	15	1137
77	4.0	25	1208
78	4.0	23	1211
79	3.5	15	1214
80	4.5	25	1218
81	3.5	15	1226
82	4.0	24	1240
	59.5		48 LOADS.

LOADS	ROCK CUNYDS	TRUCK	TIME
983	4.0	23	12 ⁴⁵
84	3.5	17	12 ⁴⁶
85	3.5	17	12 ⁵⁸
	<u>11.0</u>		
	<u>61.0</u>		
	<u>57.5</u>		
	<u>59.5</u>		
	<u>189.0</u>		

57 LOADS

reported

LOADS	ROCK CUNYDS	TRUCK	TIME
986	4.0	24	5 ⁰⁶
87	4.0	24	5 ²⁰
88	5.0	24	5 ⁴⁵
89	5.0	25	6 ⁴⁵
90	4.0	24	6 ⁵⁸
91	4.0	25	10 ⁰⁷
92	4.0	23	10 ¹⁶
93	4.0	15	10 ²⁴
94	3.5	24	10 ²⁵
95	3.5	17	10 ²⁹
96	4.0	15	10 ³⁴
97	4.0	25	10 ³⁹
98	4.0	23	10 ⁴⁰
99	3.5	15	11 ⁰⁶
1000	3.5	15	11 ¹⁸
1	4.5	24	11 ¹⁹
	<u>64.5</u>		

SHIFT NO 2 OCTOBER - 23 30 1933 F. BRACHMANN

SHOVELS NO 7 & 8
TRUCKS NO 5
AIR COMPRESSORS

4- MEN DRILLING + BLASTING
5- MEN EXCAVATING
1- LABORER ON DUMP

LOADS	ROCK CU.YDS	TRUCK	TIME
1002	3.0	4	11 ¹²
3	5.0	23	11 ²¹
4	5.0	25	11 ²⁹
5	5.0	23	11 ⁴⁰
6	4.5	24	12 ¹⁰
7	4.5	25	12 ³⁰
	27.0		
	64.5		
	91.5		

22 loads

reported

LOADS	ROCK CU.YDS	TRUCK	TIME
1008	3.5	15	5 ⁰⁶
9	4.5	26	5 ¹⁰
10	4.0	24	5 ¹⁴
11	4.0	15	5 ¹⁹
12	3.5	20	5 ²¹
13	4.0	24	5 ²⁵
14	3.5	15	5 ²⁹
15	4.5	26	5 ⁵⁰
16	4.0	23	6 ³²
17	4.0	23	7 ⁵⁴
18	3.5	15	8 ¹³
19	4.0	23	10 ³⁰
20	4.0	24	10 ⁴⁸
21	3.5	24	10 ⁵⁸
22	4.0	26	11 ⁰²
23	4.0	24	11 ⁰⁷
	62.5		

SHIFT NO 2 - OCTOBER 24 TO 1933. F. E. BRACHMANN.

SHOVEL NO 7-8 + 10 PRAGLINE

TRUCKS NO 4

3 - AIR COMPRESSORS

1 - CATERPILLARS

4 - MEN DRILLING + BLASTING

5 - MEN - EXCAVATING

1 - LABORER ON DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
1024	4.0	24	11 ²⁰
25	4.5	26	11 ²⁶
26	4.5	15	11 ⁴²
27	3.5	26	11 ⁵⁰
28	4.0	24	11 ⁵⁸
29	3.5	15	12 ¹⁰
30	4.0	15	12 ²²
31	3.5	24	12 ²⁵
32	5.0	15	12 ³³
33	3.5	24	12 ³⁸
34	3.5	24	12 ⁴⁷
35	4.5	24	12 ⁵⁶
36	5.0	15	1 ⁰⁰
37	3.5	20	1 ⁰⁴
38	4.0	24	1 ⁰⁵
39	3.5	20	1 ¹⁴
			64.0

32 LOADS

LOADS	ROCK CU. YDS	TRUCK	TIME
1040	4.5	15	1 ¹⁹
41	5.0	15	1 ³⁰
42	4.5	24	1 ³⁵
43	3.5	15	1 ⁴²
44	3.5	24	1 ⁵²
1045	3.5	15	1 ⁵⁷
1046	4.0	24	2 ⁰⁰

39 LOADS

28.5
62.5
64.0
155.0

reported

LOADS	ROCK CU. YDS	TRUCK	TIME
1047	3.5	6	5 ⁰¹
48	4.0	2	5 ⁰⁷
49	4.0	23	5 ²¹
50	3.5	15	5 ⁴⁴
51	4.5	2	5 ⁵⁰
52	4.0	15	5 ⁵⁵
53	4.0	15	6 ¹⁰
54	4.0	6	6 ³²
55	4.0	6	6 ⁵²
56	3.5	23	7 ⁰²
57	4.5	23	7 ⁴⁰
58	4.0	20	7 ⁴²
59	4.0	6	7 ⁴⁵
60	4.0	15	8 ⁰⁸
61	4.0	6	8 ³⁵
62	3.5	15	8 ³⁹
			63.0

SHIFT NO 2 OCTOBER 25 1933 FEIBRACHMANN
 SHOVEL NO 7-8-10 DRAGLINE
 TRUCKS NO 6

2- AIR COMPRESSORS
 1- CATERPILLAR

4- MEN DRILLING + BLASTING
 5- MEN EXCAVATING

1- LABORER ON DUMP

LOADS	ROCK CU. YDS	TRUCK	TIME
1063	3.5	20	8 ³⁸
64	3.5	6	8 ⁴⁵
65	3.5	15	8 ⁵⁰
66	3.5	23	8 ⁵⁵
67	3.5	6	8 ⁵⁵
68	4.0	15	8 ⁵⁸
69	4.0	23	9 ⁰⁰
70	4.0	6	10 ¹⁰
71	3.5	15	10 ¹⁵
72	3.5	6	10 ²²
73	4.0	6	10 ⁴¹
74	4.5	15	10 ⁴⁷
75	4.5	20	10 ⁵⁰
76	3.5	6	10 ⁵⁵
77	4.0	6	11 ⁰⁵
78	3.0	20	11 ¹⁴
			60.0

32 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
1079	3.0	15	11 ¹⁵
80	4.5	2	11 ²⁰
81	4.5	23	11 ²¹
82	4.0	20	11 ²⁶
83	4.0	6	11 ³⁰
84	5.0	2	11 ³¹
85	4.5	23	11 ³⁶
86	5.0	20	11 ⁴²
87	5.0	23	11 ⁵⁰
88	3.5	6	11 ⁵²
89	4.0	20	12 ⁰⁰
90	4.0	23	12 ⁰⁴
91	4.0	2	12 ¹⁴
92	4.0	20	12 ¹⁶
93	3.5	23	12 ²⁶
94	3.5	15	12 ⁴⁷
			48 LOADS
			66.0

LOADS	ROCK CU.YDS	TRUCK	TIME
1095	3.5	23	12 ⁰⁰
96	5.0	15	11 ¹⁵
97	5.0	23	11 ¹⁷
98	4.5	23	11 ³⁶
99	4.0	6	11 ³⁰
1100	4.0	23	11 ³⁵
			26.0
			63.0
			60.0
			66.0
			215.0

54 LOADS

reported

LOADS	ROCK CU.YDS	TRUCK	TIME
1101	4.0	20	5 ³⁵
2	3.0	6	5 ⁵⁰
3	4.0	2	5 ⁵⁵
4	3.5	20	5 ⁵⁷
5	3.5	2	6 ⁰⁸
6	4.0	6	6 ¹²
7	4.5	15	6 ²⁰
8	4.0	6	6 ²⁷
9	4.0	20	6 ⁴³
10	3.5	23	6 ⁴⁹
11	3.5	2	6 ⁵²
12	3.0	6	6 ⁵⁴
13	4.5	20	6 ⁵⁷
14	4.0	23	7 ⁰²
15	4.0	2	7 ¹²
16	4.5	23	7 ¹⁷
	61.5		

SHIFT NO 2 OCTOBER 26 TH 1933. F.E. BRACHMANN
 SHOVEL NO 7-8-10 DRAGLINE - 4 HRS.
 5-TRUCKS NO 2
 9-AIR-COMPRESSORS
 1-CATERPILLARS
 4-MEN DRILLING + BLASTING
 4-MEN EXCAVATING
 1-LABORER ON DUMP

LOADS	ROCK CU.YDS	TRUCK	TIME
1117	4.0	15	7 ²⁴
18	4.0	15	7 ⁴³
19	4.0	2	7 ⁴⁸
20	3.5	2	8 ⁰²
21	3.5	15	8 ⁰⁶
22	3.0	15	8 ³¹
23	3.5	23	8 ⁴⁴
24	4.0	20	8 ⁴⁵
25	4.0	2	8 ⁴⁶
26	3.5	15	8 ⁴⁸
27	4.0	2	8 ⁵⁷
28	4.0	15	9 ⁰⁰
29	3.5	2	10 ¹⁶
30	4.0	2	10 ³⁴
31	4.0	6	10 ⁴³
32	4.5	23	10 ⁵³
	61.0		

32 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
1133	4.0	2	11 ⁰⁰
34	4.0	2	11 ¹²
35	3.5	15	11 ⁵⁰
36	3.5	6	11 ⁵⁵
37	3.5	15	12 ¹⁵
38	3.5	23	12 ³⁶
39	4.0	23	12 ⁵⁵
40	4.0	15	1 ⁰²
41	3.5	6	1 ²¹
42	3.5	15	1 ³¹
	4.0	2	2 ⁰⁰

41.0
61.5
61.0
163.5

reported

43 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
1143	4.0	23	7 ⁰⁰
44	3.5	17	7 ⁰³
45	4.0	15	7 ⁰⁶
46	4.0	23	7 ¹¹
47	4.0	20	7 ²⁰
48	3.5	17	7 ³⁰
49	3.5	15	7 ³²
50	3.5	23	7 ⁴⁰
51	3.5	6	7 ⁴¹
52	3.5	15	7 ⁴²
53	4.0	20	7 ⁵⁰
54	3.5	23	7 ⁵⁰
55	4.0	20	7 ⁵⁴
56	3.5	10	8 ⁰⁰
57	4.5	6	7 ⁵⁹
58	4.0	17	8 ⁰⁴
	60.5		

SHIFT NO. 2 OCTOBER 27 1933 F. E. BRACHMANN

SHOVEL NO. 6-7
TRUCKS NO. 5
1-AIR-COMPRESSORS
1-CATERPILLARS

2-MEN-DRILLING+BLASTING

1-MEN-EXCAVATING

1-LOBBORER ON DUMP

LOADS	ROCK C.W.YDS	TRUCK	TIME
1159	4.0	6	8 ¹⁴
60	4.0	20	8 ¹⁵
61	3.5	20	8 ³⁰
62	4.0	20	8 ⁴⁵
63	3.0	17	8 ⁵⁰
64	3.5	6	8 ⁵²
65	3.5	15	8 ⁵⁷
66	3.5	23	10 ⁰⁰
67	4.0	6	10 ⁰²
68	3.0	17	10 ⁰⁵
69	4.0	23	10 ¹⁰
70	3.0	17	10 ¹⁹
71	3.5	23	10 ²²
72	3.5	20	10 ²⁴
73	3.5	6	10 ²⁶
1174	4.0	23	10 ³²
	<u>57.5</u>		

32

LOADS	ROCK C.W.YDS	TRUCK	TIME
1175	4.0	15	10 ³⁸
76	3.5	17	10 ⁴⁴
77	3.5	23	10 ⁴⁶
78	3.5	15	10 ⁴⁹
79	4.0	20	10 ⁵⁰
80	3.0	17	10 ⁵³
81	4.0	6	11 ⁰³
82	4.0	17	11 ¹⁰
83	4.0	15	11 ¹⁶
84	3.5	20	11 ²⁵
85	4.0	15	11 ³¹
86	3.5	6	11 ³²
87	3.5	25	11 ⁴⁹
88	3.5	23	11 ⁵²
89	4.0	17	11 ⁵⁸
1190	3.5	15	12 ⁰⁰
	<u>59.0</u>		

48 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
1191	3.0	15	12 ³⁰
92	4.0	15	12 ⁵⁰
93	4.0	15	1 ¹¹
94	4.0	23	1 ¹⁰
95	3.5	23	1 ¹⁷
96	4.0	15	1 ²²
97	3.5	17	1 ²⁵
98	4.0	15	1 ³⁴
99	3.5	17	1 ³⁸
1200	4.0	23	1 ⁴⁴
1	3.5	17	2 ⁰⁰

41.0
60.5
57.5
59.0
218.0

59 LOADS

reported

LOADS	ROCK CU.YDS	TRUCK	TIME
1202	3.5	17	5 ⁰⁰
3	3.5	23	5 ⁰⁵
4	3.0	17	6 ⁰⁰
5	4.0	23	6 ⁰²
6	3.5	15	6 ²³
7	3.5	17	6 ²⁵
8	4.0	15	6 ²²
9	3.5	17	6 ²⁸
10	4.0	15	6 ⁴¹
11	3.5	23	6 ⁴⁸
12	3.5	15	7 ¹⁰
13	4.0	23	7 ²²
14	4.0	15	7 ⁴⁴
15	5.0	23	8 ⁰⁵
16	4.0	15	8 ¹⁵
17	3.5	6	8 ¹⁵
	60.0		

SHIFT NO 2 OCTOBER 28TH 1933 - F.E. BRACHMANN
SHOVELS NO 6-8-10 PRAGLINE
TRUCKS NO 6

3-AIR-COMPRESSORS
1-CATERPILLARS

4-MEN DRILLING & BLASTING
4-MEN EXCAVATING & CLEANING UP
1-MAN ON DUMP

LOADS	Rock CU.YDS	TRUCK	TIME	
1218	4.0	17	8 ¹⁶	
19	4.0	23	8 ²¹	
20	4.0	17	8 ³²	
21	4.5	15	8 ³⁹	
22	4.0	23	8 ⁴²	
23	4.5	17	8 ⁴⁷	
24	4.5	15	8 ⁵⁵	
25	4.0	23	8 ⁵⁷	
26	3.5	15	10 ⁰⁰	
27	3.0	17	10 ⁰²	
28	4.0	23	10 ¹²	
29	3.5	15	10 ¹³	
30	4.0	17	10 ¹⁷	
31	3.5	23	10 ²¹	
32	4.0	15	10 ²⁵	
33	3.5	23	10 ³⁴	32 LOADS
	<u>62.5</u>			

LOADS	Rock CU.YDS	TRUCK	TIME	
1234	4.0	15	10 ⁴¹	
35	3.5	23	10 ⁴⁵	
36	4.0	15	10 ⁵²	
37	3.5	23	10 ⁵⁶	
38	3.5	15	11 ⁰³	
39	4.5	23	11 ⁰⁷	
40	4.5	15	11 ¹⁶	
41	4.0	23	11 ²¹	
42	3.5	15	11 ²⁴	
43	4.5	23	11 ³²	
44	3.5	6	11 ⁴⁸	
45	4.0	23	11 ⁵⁰	
46	3.5	6	12 ⁰³	
47	3.5	23	12 ³⁷	
48	3.5	15	12 ⁴⁸	
49	4.0	15	12 ⁵⁴	48 LOADS.
	<u>61.5</u>			

LOADS	ROCK CU. YDS	TRUCK	TIME
1250	4.0	20	146
	60.		
	62.5		
	61.0		
	188.0		

49 loads

reported

LOADS	ROCK CU. YDS	TRUCK	TIME
1251	8.5	23	5-17
2	4.0	23	5-42
3	3.5	23	6-00
4	3.5	23	6-12
5	4.0	17	6-17
6	4.0	15	6-24
7	4.0	20	6-29
8	4.0	23	6-39
9	4.5	15	6-44
1260	4.0	20	6-54
11	4.0	17	7-01
12	4.0	33	7-05
13	5.0	15	7-06
14	4.0	20	7-10
15	4.0	17	7-15
16	4.0	15	7-21
	64.0		

SHIFT NO 2 OCTOBER - 30TH 1933 - F. E. BRACHMANN

SHOVEL NO 7 - 9 - 10 DRAGLINE

TRUCKS NO 7

3 - AIR COMPRESSORS

1 - CATERPILLAR

4 - MEN DRILLING + BLASTING

4 - MEN EXCAVATING

1 - MAN ON DUMP

LOADS	ROCK CU.YDS	TRUCK	TIME
1267	4.0	20	7 ²⁶
68	4.5	15	7 ³⁴
69	5.0	2	7 ³⁸
70	3.5	20	7 ⁴²
71	4.0	2	7 ⁵³
72	4.5	15	7 ⁵⁸
73	4.5	15	8 ²⁰
74	4.0	2	8 ²⁴
75	4.0	20	8 ³⁶
76	4.0	20	8 ⁵²
77	3.0	33	10 ⁰⁰
78	4.0	15	10 ⁰⁵
79	4.5	20	10 ²⁰
80	3.5	39	10 ²⁶
81	4.5	2	10 ³⁰
82	3.5	33	10 ³¹
			<u>65.0</u>

32 LOADS

LOADS	ROCK CU.YDS	TRUCK	TIME
1283	4.0	20	10 ³⁵
84	4.0	15	10 ⁴⁸
85	4.0	2	11 ⁰⁰
86	4.0	15	11 ⁰⁹
87	3.5	15	11 ²⁰
88	4.0	2	11 ³⁴
89	4.0	20	11 ⁴⁰
90	5.5	2	11 ⁵⁴
91	3.5	15	12 ⁰²
92	4.0	20	12 ¹⁵
93	4.0	2	12 ²⁵
94	3.5	20	12 ³⁶
95	4.0	15	12 ⁴³
96	4.0	2	12 ⁴⁷
97	4.5	15	1 ¹⁰
1298	3.5	20	1 ¹⁴
			<u>64.0</u>

48 LOADS

LOADS	Rock CU. YDS	TRUCK	TIME
1299	4.0	2	120
1300	3.5	39	140
1	3.5	15	145
	10.0		
	64.0		
	65.0		
	64.0		
	203.0		

57 LOADS

reported

SHIFT NO 2 OCTOBER 31ST 1933 - F. E. BRACHMANN
 SHOVELS NO 10 - DRAGLINE
 TRUCKS NO 3
 3 - AIR COMPRESSORS
 2 - CATERPILLARS
 4 - MEN - DRILLING & BLASTING
 3 - MEN - EXCAVATING
 2 - MEN - DRILLING ANCHOR PILES
 1 - FORK LIFT
 1 - CAT OPERATOR

LOADS	ROCK CU. YDS	TRUCK	TIME
1302	4.0	23	5 ⁰⁷
3	3.5	15	5 ¹²
4	4.0	23	5 ¹⁹
5	4.0	15	5 ²³
6	5.0	23	5 ⁴⁸
7	4.5	15	5 ⁵⁴
8	4.5	23	5 ⁵⁸
9	5.0	15	6 ¹⁰
10	4.5	23	6 ¹³
11	4.0	23	6 ³²
12	4.5	15	6 ³⁷
13	4.5	15	6 ⁴⁹
14	3.5	17	7 ³³
15	4.0	15	7 ⁵⁰
16	5.0	15	8 ⁴⁰
17	4.0	23	10 ¹⁵
			68.5

SHIFT NO 2 NOVEMBER 1ST 1933 - F. E. BRACHMANN

SHOVEL NO 6-8-10 DRAGLINE

3 - AIR COMPRESSORS

1 - CATERPILLAR

4 - MEN DRILLING & BLASTING

4 - MEN EXCAVATING

2 - MEN DRILLING ANCHOR HOLES

1 - FOREMAN

LOADS	ROCK CU. YDS	TRUCK	TIME
1318	4.5	17	10 ²³
19	4.0	23	10 ⁴⁹
20	4.5	23	11 ⁰⁶
21	4.0	23	11 ¹⁴
22	4.5	23	11 ²⁴
23	3.5	15	11 ³⁵
24	3.5	15	12 ⁰⁴
25	3.5	15	12 ¹⁵
26	4.0	23	12 ³¹
27	4.0	15	12 ³⁷
28	3.5	23	1 ⁰³
29	3.0	23	1 ³²
30	5.0	15	1 ³⁶
			51.5
			68.5
			120.0

79 loads

reported

LOADS	ROCK CU. YDS	TRUCK	TIME
1331	4.5	17	5 ⁰⁶
2	4.5	23	5 ¹⁰
3	4.0	15	5 ¹⁴
4	4.0	17	5 ²⁰
5	5.0	23	5 ²⁶
6	3.5	15	5 ³⁰
7	5.0	17	5 ³⁴
8	4.5	23	5 ³⁹
9	5.0	15	5 ⁴⁴
1340	4.0	17	6 ²³
1	4.0	23	6 ³⁹
2	4.0	17	6 ⁴⁰
3	4.0	15	6 ⁵⁶
4	4.5	15	7 ²⁰
5	5.0	17	7 ³⁰
1346	3.5	17	7 ⁵⁶
	69.0		

SHIFT NO 2 - NOVEMBER 2ND - 1933 - F. EIBRACH MANN
 SHOVELS NO 6 - 10 DRAGLINE
 TRUCKS NO 4
 3 - AIR COMPRESSORS
 4 - MEN - DRILLING + BLASTING
 4 - MEN - EXCAVATING
 2 - MEN - DRILLING - ANCHOR HOLES
 1 - FOREMAN

LOADS	ROCK CU. YDS	TRUCK	TIME
1347	4.0	15	8 ⁰⁰
48	4.0	17	8 ¹⁵
49	3.5	23	8 ²⁸
50	4.5	15	8 ⁴⁰
51	3.5	23	8 ⁵⁶
52	4.0	17	9 ⁰⁰
53	4.5	17	10 ⁰³
54	4.5	15	10 ⁰⁷
55	4.0	17	10 ¹⁶
56	4.5	15	10 ²⁴
57	4.5	17	10 ³⁵
58	4.5	23	10 ⁴⁵
59	4.5	15	10 ⁵⁰
60	4.5	23	11 ⁰⁴
61	3.5	15	11 ¹⁶
62	62.5		
	69.0		
	131.5		

31 LOADS

reported

LOADS Rock
CU. YDS TRUCK TIME

1363

SHIFT NO 2 NOVEMBER - 3RD 1933 - F. E. BRACHMANN

SHOVEL NO 8 - 100 RAGLINE

TRUCKS NO 4

3 - AIR COMPRESSORS

1 - CATERPILLARS

4 - MEN DRILLING + BLASTING

8 - MEN EXCAVATING

2 - MEN DRILLING ANCHOR HOLES

1 - FOREMAN

LOADS Rock
CU. YDS TRUCK TIME

1363 3.5 33 7-18 UP STREAM

64 4.5 17 6-05

65 5.0 29 6-15

66 5.0 17 10-22

67 4.5 23 10-38

68 4.5 23 11-01

69 3.5 17 11-12

70 4.0 17 11-56

1371 5.0 28 12-10

39.0

reported

SHIFT NO 2 NOVEMBER - 4TH 1933 - F. E. BRACHMANN

SHOVEL NO 8

TRUCKS NO 3

3 - AIR COMPRESSORS

1 - CATERPILLARS

3 - MEN DRILLING + BLASTING

4 - MEN EXCAVATING

1 - MEN DRILLING ANCHOR HOLES

1 - FOREMAN

SHIFT NO 2 NOV. 6TH 1933 F.E. BRACHMANN
NO DRAGLINE

1 - TRUCK

REMOVING ROCK FROM NORTH ABUTMENT
BETWEEN ELEVATIONS 685 - 710

" STATIONS 400 - 4060 NORTH
" CORE WALL + GO' EAST

SHIFT NO 2 NOVEMBER 7TH 1933 - F.E. BRACHMANN
NO WORK - IN SPILLWAY - DAM - OR QUARRY
NO EQUIPMENT

5:00 P.M.
TO
8:00

SHIFT NO 2 NOV. 8TH 1933 F.E. BRACHMANN
CONCRETING ON SPILLWAY - LIP. 5 MEN

3 TRUCKS

NO WORK - AT CRUSHER - ON - SHIFT - NO 2 NOVEMBER

AT CONCRETES - MIXER 5 MEN - 2 TRUCK + DRIVERS

73 BATCHES TOTAL - 169

438 SACKS

1014

SHIFT NO 2 NOVEMBER 9TH 1933. F.E. BRACHMANN
NO WORK - ON - SPILLWAY - DAM - Quarry - CRUSHER WORKING -

SHIFT NO 2 NOV - 10TH 1933 - F.E. BRACHMANN
NO WORK - ON - DAM - SPILLWAY - QUARRY

SHIFT NO 2 NOV. 13TH 1933 - F.E. BRACHMANN

1 - FOREMAN - EXCAVATING - IN SPILLWAY
2 - SHOVEL NO 6 - 10 - 3 MEN ON SHOVELS
- TRUCKS NO 3

NO 3 AIR - COMPRESSOR } 2 - HRS
1 - CAT

SHIFT NO 2 NOV - 14TH - 1933 - F.E. BRACHMANN

2 - SHOVELS - 4 - 10
3 - TRUCKS
1 - AIR - COMPRESSOR
1 - CAT

1 - FOREMAN
4 - MEN
ABUTMENT
BETWEEN 710 - 760

SHIFT NO 2 - NOV - 15TH 1933 - F.E. BRACHMANN
SHOVELS NO 6-10 } 6-MEN EXCAVATING
TRUCKS NO 3 } 1-FOREMAN
1-AIR-COMPRESSORS } STATION NORTH
1-CATS. } ABOUT MENT-BE TEL-698-710

SHIFT NO 2 - NOV. 16TH 1933 F.E. BRACHMANN
SHOVELS NO 6 } 9-MEN EXCAVATING
TRUCKS NO 1 } 1-FOREMAN
AIR-COMPRESSORS 1

SHIFT NO 2 - NOV. 17TH 1933 - F.E. BRACHMANN
SHOVELS NO 6 } 10-MEN EXCAVATING
TRUCKS NO 1 } 1-FOREMAN
2-AIR-COMPRESSORS

SHIFT NO 2 - NOV - 18TH 1933 - F.E. BRACHMANN
SHOVELS NO - 10 } 9-MEN EXCAVATING
TRUCKS NO 1 } 1-FOREMAN
AIR-COMPRESSORS
CATERPILLAR

SHIFT NO 2 NOV - 20TH 1933 - F.E. BRACHMANN
SHOVELS NO 6 - 2 MEN } 9-MEN EXCAVATING
TRUCKS NO 1 } 1-FOREMAN
AIR-COMPRESSORS

SHIFT NO 2 - NOV. 21ST 1933 - F.E. BRACHMANN } #9 SHOVEL MOVED
SHOVELS NO 6 } 10-MEN EXCAVATING } TO QUARRY
TRUCKS NO 1 } 1-FOREMAN } 6-6 20 02 70

SHIFT NO 2 NOV. 22 ND - 1933 - F.E. BRACHMANN 410 - NORTH
SHOVEL NO - } 2-MEN EXCAVATING - CORE WALL
TRUCK NO - } 2-MEN - REMOVING FORMS FROM
1-AIR-COMPRESSOR } 1-FOREMAN } AIR-SPILLWAY
1-CAT. } 1-MAN-IN-SHOP

SHIFT NO 2 - NOV. 23RD. 1933 - F.E. BRACHMANN } 2-MEN-IN-SHOP
SHOVEL NO 8 } 9-MEN EXCAVATING
TRUCKS NO 2 } 1-FOREMAN } CORE-WALL
AIR-COMPRESSORS - 1 } 33-LOAD-DIG. FROM-SLIDE = 100 YDS.
CATERPILLAR - 1 } NORTH SLOPE SPILLWAY

SHIFT - NO 2 - NOV. 24TH 1933 - F.E. BRACHMANN
SHOVEL NO 6 } 10-MEN EXCAVATING - CORE WALL
TRUCKS NO 1 } 1-FOREMAN } LOADS ROCK-7 YDS.
AIR-COMPRESSOR 1 }
CATERPILLAR 1 }

SHIFT NO 2 - NOV - 25TH 1933 - F.E. BRACHMANN
SHOVELS NO 6 } 10-MEN EXCAVATING - CORE WALL
TRUCKS NO 1 }
AIR-COMPRESSOR - 1 }
CATERPILLAR }

SHIFT NO 2 NOVEMBER - 27TH F.E. BRACHMANN
SHOVELS NO 6 } 9-MEN EXCAVATING - ON-CORE WALL
TRUCKS NO 1 }
AIR-COMPRESSOR - 2 }

SHIFT NO 2 NOVEMBER - 28TH 1933 - F.E. BRACHMANN
SHOVELS NO
TRUCKS NO
AIR-COMPRESSOR
NO. WORK

Run
SHIFT NO 2 NOVEMBER-29 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSORS - 4 MEN
CATERPILLARS - 1 TO REMAIN 1 SHOP

SHIFT NO 2 - DECEMBER-1 ST 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSOR - 3 MEN - EXCAVATING CORE WALL
3 MEN - IN-SHOP

SHIFT - NO 2 DECEMBER-2 NO. 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSOR - 4 MEN EXCAVATING CORE WALL
3 MEN - IN-SHOP

SHIFT - NO 2 - DECEMBER-4 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSOR - 4 MEN - EXCAVATING CORE WALL
3 MEN - IN-SHOP

SHIFT - NO 2 DEC-5 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSOR - 5 MEN - EXCAVATING CORE WALL

SHIFT NO 2 - DECEMBER-6 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSORS - 6 MEN - EXCAVATING FOR CORE WALL
(2 1/2 HRS.)
2 MEN - FINISHING ON-DIG SECTION - 1 HR.
1 HOIST-MAN - 2 FINISHERS IN SHOP

SHIFT NO 2 - DEC. 7 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPRESSOR - 6 MEN - EXCAVATING FOR CORE WALL
1 MAN - IN-SHOP

SHIFT - NO 2 - DEC. 8 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCK NO 1
AIR-COMPRESSOR - 6 MEN - EXCAVATING FOR CORE WALL

SHIFT NO 2 - DECEMBER 9 TH 1933 - F.E. BRACHMANN
SHOVEL NO 6
TRUCK NO 1
AIR-COMPRESSOR - 7 MEN - EXCAVATING FOR CORE WALL
1 MAN - IN SHOP

SHIFT - NO 2 - DEC - 11 TH 1933 - F.E. BRACHMANN
SHOVEL NO 10
TRUCKS NO 1
AIR-COMPRESSOR - 6 MEN EXCAVATING FOR CORE WALL

SHIFT NO 2 - DECEMBER - 12 TH 1933 - F.E. BRACHMANN
SHOVEL NO 10
TRUCK NO 1
AIR-COMPRESSOR - 6 MEN - EXCAVATING FOR CORE WALL
1 MAN - IN-SHIP

SHIFT - NO 2 DEC. 13 TH 1933 - F.E. BRACHMANN
NO WORK - (RAIN - 14)

SHIFT-NO 2-DECEMBER-14TH 1933-F.E. BRACHMANN
 SHOVEL NO 10
 TRUCKS NO 1
 AIR-COMPRESSOR-1
 10 45

QUIT-RAIN-6-HRS.

SHIFT-NO 2-DECEMBER-15TH 1933-F.E. BRACHMANN
 SHOVEL NO 10
 TRUCKS NO 1
 AIR-COMPRESSOR-1
 3-MEN-EXCAVATING-FOR-CORE-WALL.

SHIFT NO 2 DEC. 16TH 1933-F.E. BRACHMANN
 SHOVEL NO 10
 TRUCKS NO 1
 AIR-COMPRESSOR-1
 4-MEN-EXCAVATING-CORE-WALL
 1-MAN-IN-SHOP

SHIFT-NO 2-DEC. 18TH 1933-F.E. BRACHMANN
 SHOVELS NO 7-B
 TRUCKS NO 4
 AIR-COMPRESSORS-2
 4-MEN-DRILLING+BLASTING
 1-FOREMAN
 1-MAN-IN-SHOP

LOADS	ROCK CILYOS	TRUCK	TIME
1372	4.5	24	5 ⁰⁰
3	4.0	17	5 ⁰⁷
4	3.5	18	5 ¹⁶
5	4.0	17	5 ²³
6	5.0	24	5 ³⁵
7	3.0	17	6 ³³
8	4.0	24	7 ⁰⁵
9	4.0	17	7 ¹⁵
1380	4.5	18	7 ²²
1	5.0	18	7 ⁵⁰
2	4.0	18	8 ⁰⁵
3	4.0	24	8 ¹⁰
4	4.0	17	8 ³⁰
5	3.5	24	8 ³⁰
6	4.0	18	8 ⁴⁰
1387	3.5	24	8 ⁵⁸
	64.5		

SHIFT-NO 2-DEC. 19TH 1933-F.E. BRACHMANN
 SHOVEL NO 7-8
 AIR-COMPRESSOR-1
 BULL-DOZER-1
 7-TRUCKS
 2-MEN-EXCAVATING-BY-HAND
 1-FOREMAN
 1-MAN-ON-DUMP.
 2-MEN-IN-SHOP.
 3-MEN-DRILLING-GROUT-HOLES
 1-IN-CORE-WALL.
 12 PM TO 7-AM

LOADS	Rock cu.yds	TRUCK	TIME
1388	3.0	17	10 ⁰⁸
89	4.5	24	10 ²⁰
90	2.5	17	10 ³³
91	4.0	18	12 ⁰⁰
92	4.0	17	12 ²⁰
93	4.5	18	1 ¹⁵
	22.5		
	64.5		
	87.0		
TOTAL			

22 loads

LOADS	Rock cu.yds	TRUCK	TIME
1394			
5			
6			
7			
8			
9			
1400			

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

SHIFT NO 2 - DEC. 20 TH - 1933 - F.E. BRACHMANN
 SHOVEL - 7-8
 TRUCKS 4
 AIR-COMPRESSOR -

SHIFT NO 2 - DEC. 21 ST 1933 - F.E. BRACHMANN
 SHOVEL - 7-8
 TRUCKS 5
 2 - MEN - ON - DUMP
 2 - MEN - EXCAVATING
 1 - FOREMAN SHOP
 2 -

2 - MEN - EXCAVATING - BY - HAND
 2 - MEN - IN SHOP

SHIFT NO 2 - DEC. 22 NO 1933 - F.E. BRACHMANN
SHOVELS NO 4 - 7
TRUCKS NO 4 - 4
AIR-COMPR 1

SHIFT NO 2 - JANUARY - 2ND 1934 - F.E. BRACHMANN 1934

SHOVEL NO 8
TRUCKS NO 2
1-MAN ON DUMP, 1-FOREMAN

SHIFT NO 2 - JAN - 3RD 1934 - F.E. BRACHMANN

SHOVEL NO 7-8
TRUCKS NO 7-8
9-LOADS - ROCK - 40 YDS - TO UP-STREAM - EMB.

1-FOREMAN - 2 MEN ON DUMP - 1 MAN IN SHOP

SHIFT NO 2 - JAN - 4TH 1934 - F.E. BRACHMANN

SHOVELS NO 6-7-8
TRUCKS NO 6-8
AIR-COMPRESSOR - 1
1-FOREMAN - ON DUMP
1-FOREMAN - IN SHOP

SHIFT NO 2 - JAN - 5TH 1934 - F.E. BRACHMANN

SHOVEL NO 6
TRUCKS NO 6
AIR-COMPRESSOR - 1
6-MEN EXCAVATING - FOR CORE-WALL
1-FOREMAN
1-MAN IN SHOP

SHIFT NO 2 - JAN - 6TH 1934 - F.E. BRACHMANN

SHOVEL NO 8 - 5 HRS - 6 MEN - HYDRAULIC - ON-DAM-DOWN-S TIREAM
TRUCKS NO 1
AIR-COMPRESSORS - 2
1-FOREMAN
3-MEN EXCAVATING - CORE-WALL
9⁴⁵ FINISH - 1M4
HYDRAULIC - 1-5

SHIFT NO 2 - JAN - 8TH 1934 - F.E. BRACHMANN

SHOVEL NO 6-8
TRUCKS NO 6-8
AIR-COMPR NO 2
3-MEN EXCAVATING - CORE-WALL
3-MEN " " SPILLWAY, O.G.

SHIFT NO 2 - JAN - 9TH 1934 - F.E. BRACHMANN

SHOVEL NO 6 - 1 OPERATOR - 3 MEN EXCAVATING - CORE WALL
TRUCKS NO 6-8
AIR-COMPR - 2
3-MEN EXCAVATING - SPILLWAY

SHIFT NO 2 - JAN - 10TH 1934 - F.E. BRACHMANN

SHOVEL NO 6
TRUCKS NO 6
AIR-COMPR 1
7-MEN EXCAVATING - CORE WALL
7-MEN EXCAVATING - SPILLWAY

SHIFT NO 2 - JAN - 11TH 1934 - F.E. BRACHMANN

SHOVEL NO 6
AIR-COMPRESSOR - 1
7-MEN EXCAVATING - SPILLWAY

SHIFT NO 2 - JAN. 12TH 1934 - F.E. BRACHMANN

SHOVEL NO 6
AIR-COMPR 1
7-MEN EXCAVATING - IN SPILLWAY
2- " FINISHING - CONCRETE 3.0 HRS.

SHIFT NO 2 - JAN - 13TH 1934 F.E. BRACHMANN

SHOVEL NO 6
AIR-COMPR 1
TRUCKS NO 1
6-MEN EXCAVATING - SPILLWAY
3.6 HRS - ON SPILLWAY
4.5 " " CORE-WALL - 57

SHIFT-NO 2
SHOVEL NO 6
TRUCKS NO 1
AIR-COMPR-1

15TH 1934. F. E. BRACHMANN
6-MEN-EXCAVATING-CORE WALL-7 HRS.
1- " FINISHING-CEMENT-3 HRS.

SHIFT-NO 2
SHOVEL NO 6
TRUCK NO 1
AIR-COMPR.-1

16TH 1934 F. E. BRACHMANN
6-MEN-EXCAVATING-CORE-WALL
1-MAN-IN-SHOP

SHIFT-NO 2
SHOVEL NO
TRUCKS NO
AIR-COMPR

17TH 1934. F. E. BRACHMANN
MEN EXCAVATING-CORE-WALL
2-MAN-IN-SHOP. NO WORK

SHIFT-NO 2
NO WORK

18TH 1934-F. E. BRACHMANN
2-MEN-IN-SHOP

SHIFT-NO 2
AIR-COMPRESSOR-1

19TH F. E. BRACHMANN
5-MEN-EXCAVATING-SPILLWAY-FLOOR
1-FOREMAN
1-MAN-IN-SHOP.

SHIFT-NO 2
AIR-COMPRESSOR-1

20TH 1934-F. E. BRACHMANN
4-MEN-EXCAVATING-SPILLWAY-FLOOR
1-MAN-IN-SHOP

SHIFT-NO 2
NO WORK

22ND 1934-F. E. BRACHMANN
NO WORK-ON-SPILLWAY FOR CORE-WALL.

SHIFT-NO 2
1-BULLDOZER

23RD 1934. F. E. BRACHMANN
1-FOREMAN
4-MEN-EXCAVATING-SPILLWAY

SHIFT-NO 2
1-AIR-COMPRESSOR
1-BULLDOZER

24TH 1934-F. E. BRACHMANN
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY

SHIFT-NO 2
1-AIR-COMPRESSOR
1-BULLDOZER

25TH 1934-F. E. BRACHMANN
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY-FLOOR

SHIFT-NO 2
AIR-COMPRESSORS-1
BULLDOZER-1

26TH 1934-F. E. BRACHMANN
6-MEN-EXCAVATING-SPILLWAY
1-FOREMAN
1-MAN-IN-SHOP

SHIFT-NO 2
AIR-COMPRESSORS-2
BULLDOZER-1

27TH 1934-F. E. BRACHMANN
6-MEN-EXCAVATING-SPILLWAY
1-FOREMAN
1-BULLDOZER-OPERATOR

SHIFT NO 2 - JAN - 29 TH 1934 - F.E. BRACHMANN
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY
2-CEMENT-FINISHERS - 2 HRS

SHIFT - NO 2 - JAN - 30 TH 1934 - F.E. BRACHMANN
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY
2-CEMENT-FINISHERS -

SHIFT - NO 2 - JAN - 31 ST 1934 - F.E. BRACHMANN
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY

SHIFT - NO 1 - FEB. 2 ND 1934 - F.E. BRACHMANN
1-FOREMAN
4-MEN-EXCAVATING-SPILLWAY - 5-MAN - 6-HRS
1-CAT - 5-8 HRS - 1 TRUCK 6 HRS
3-AIR-COMPRESSORS
1-MAN ON DUMP - 8
3-MEN ON AT - 9.0 AM - 4 2 P.M. 4 HRS.

SHIFT - NO 1 - FEB. 3 RD 1934 - F.E. BRACHMANN
OPERATOR - 1-MAN
6-MEN-EXCAVATING-SPILLWAY - STA 7 - 7 + 40
REPAIRING SHOVEL NO 7 1-FOREMAN
2-AIR-COMPRESSORS

SHIFT - NO 1 - FEB. 5 TH 1934 - F.E. BRACHMANN - SPILLWAY-EXCAVATION
1-SHOVEL NO 7
2-TRUCKS
2-AIR-COMPRESSORS
1-MAN ON WASTE DUMP

SHIFT - NO 1 - FEB. 6 TH 1934 - F.E. BRACHMANN
1-SHOVEL NO 7
2-TRUCKS
2-AIR-COMPRESSORS
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY 8 HRS
3-MEN-EXCAVATING-SPILLWAY 8 HRS
1-MAN ON WASTE DUMP

SHIFT - NO 1 - FEB. 7 TH 1934 - F.E. BRACHMANN
1-SHOVEL NO 7
2-TRUCKS
2-AIR-COMPRESSORS
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY
1-MAN ON DUMP - 4 1/2 HRS.

SHIFT - NO 1 - FEB. 8 TH 1934 - F.E. BRACHMANN
1-BULLDOZER - 4 HRS
2-AIR-COMPRESSORS
1-SHOVEL NO 7 - 2-8
2-TRUCKS - 2-8 HRS

SHIFT - NO 1 - FEB. 9 TH 1934 - F.E. BRACHMANN
1-AIR-COMPRESSORS
1-CAT & Mc MILLAN - 4 1/2
1-BULLDOZER - 3-5
2-TRUCKS - 3-5

SHIFT - NO 1 - FEB. 10 - 1934 - F.E. BRACHMANN
1-CAT & Mc MILLAN - 4 HRS
1-AIR-COMPRESSORS
1-SHOVEL NO 7 - 4 HRS - NO OILER
2-TRUCKS - 4 HRS

SHIFT - NO 1 - FEB. 12 - 1934 - F.E. BRACHMANN
1-AIR-COMPRESSOR
1-CAT & Mc MILLAN - 8
1-MEN-EXCAVATING-SPILLWAY
1-MEN-EXCAVATING-SPILLWAY
1-FOREMAN 5 1/2 HRS

SHIFT-NO 1 - FEB. 13 TH 1934 - F. E. BRACHMANN
1-SHOVEL-NO 7 - 4 HRS
1 1/2-AIR-COMPRESSOR - 8 HRS
1-TYRUCK - 4 HRS
1-CAT & Mc MILLAN - 3.5

1-FOREMAN
4-MEN-EXCAVATING-SPILLWAY
1-MAN-4 HRS

SHIFT-NO 1 - FEB - 14 TH 1934 - F. E. BRACHMANN
1-CAT & Mc MILLAN - 8
2-AIR-COMPRESSORS - 8

1-FOREMAN
7-MEN-EXCAVATING-SPILLWAY - 8
1-MAN - 6 HRS

SHIFT-NO 1 - FEB. 15 TH - 1934 - F. E. BRACHMANN
1-CAT & Mc MILLAN - 8
1 1/2-AIR-COMPRESSORS

1-FOREMAN
9-MEN-EXCAVATING-SPILLWAY

SHIFT-NO 1 - FEB - 16 TH 1934 - F. E. BRACHMANN
1.5 AIR-COMPRESSORS - 8
1-CAT & Mc MILLAN - 8

1-FOREMAN
9-MEN-EXCAVATING-SPILLWAY
1-MAN - 2 HRS

SHIFT-NO 1 - FEB. 17 TH 1934 - F. E. BRACHMANN
1-AIR-COMPRESSORS 2-STEELMEN
1-CAT & Mc MILLAN

1-FOREMAN
8-MEN-EXCAVATING-SPILLWAY

Spillway floor, Shift No 1 Feb 19, 1934 from 6:45 pm O.S.S.
1-Compressor
2- Jack hammers.
1-Cat & Mc Millan

1-Foreman 1-Cat Operator
4-Muckers 20 to 80 S-Muckers 800 to 300
2-Drillers 5-MEN-8 HRS-1 MAN-4 HRS

SHIFT-NO 1 - FEB - 20 - NO WORK - RAIN

SHIFT NO 1 - FEB - 21 ST - F. E. BRACHMANN
2-MEN-DRILLING-BOULDERSON-DAM-UP-STR
1-AIR-COMP 1-HOUR - RAIN.

SHIFT-NO 1 - FEB - 22 NO. 1934 - F. E. BRACHMANN
NO WORK - RAIN.

SHIFT-NO 1 - FEB - 23 RD - 1934 - F. E. B.
NO WORK - RAIN

SHIFT-NO 1 - FEB. 24 TH - 1934 - F. E. B.
NO WORK - RAIN.

SHIFT-NO 1 - FEB 13 - 26 IN 1934 - F.E. BRACHMANN

1-AIR-COMPRESSOR
1-CRANE, NO 4
3-TRUCKS

1-FOREMAN
5-MEN-EXCAVATING-SPILLWAY
2-MEN-EXCAVATING-SPILLWAY
3-MEN-EXCAVATING-SPILLWAY
4-UP-STR-EMBANKMENT-2-HRS

1-BULLDOZER-FIXING-ROAD-TO-UP-STR-EMBANKMENT-2-HRS
SHIFT-NO 1 - FEB 27 TH 1934 - F.E. BRACHMANN

1-AIR-COMPRESSOR-SPILLWAY
1-CAT & McMILLAN - 2-HRS

1-FOREMAN
4-MEN-EXCAVATING

1-COMPRESSOR-ON-DAM

SHIFT-NO 1 - FEB 28 TH 1934 - F.E. BRACHMANN

1-AIR-COMPRESSOR
1-CAT & McMILLAN - 4

2-MEN-DRILLING-BOULDER-UP-STR-EMBANK
5-MEN-EXCAVATING-SPILLWAY

1-AIR-COMPRESSOR
1-MAN-DRILLING-BOULDER-FOR-CONTRACTOR-8

1-FOREMAN
1-MAN-2-HRS
4-HRS

SHIFT-NO 1 - MARCH 1 - ST 1934 - F.E. BRACHMANN

1-CAT & McMILLAN - 2-HRS
1-AIR-COMPRESSOR

4-MEN-EXCAVATING-SPILLWAY
1-FOREMAN
1-MAN-6-HRS

1-AIR-COMPRESSOR

SHIFT-NO 1 - MARCH 2 ND 1934 - F.E. BRACHMANN

1-CAT & McMILLAN
1-AIR-COMPRESSOR

2-MEN-DRILLING-BOULDER-ON-DAM-UP-STR-FOR-Co.
1-FOREMAN
6-MEN-EXCAVATING-SPILLWAY

1-AIR-COMPRESSOR

SHIFT-NO 1 - MARCH 3 TH 1934 - F.E. BRACHMANN

1-AIR-COMPRESSOR-CORE-WALL-8
1-SHOVEL-NO 7
3-TRUCKS

1-MAN-EXCAVATING-CORE-WALL-NORTH-8-HRS
1-MAN-EXCAVATING-CORE-WALL-8
3-MEN-EXCAVATING-CORE-WALL-8
1-MAN-ON-WASTE-DUMP-8
1-FOREMAN-UNCOVERING-VEHICLES-8-HRS

1-AIR-COMPRESSOR-SPILLWAY-2-HRS
1-SHOVEL-NO 6-CORE-WALL-8-HRS

SHIFT-NO 1 - MARCH 5 TH 1934 - F.E. BRACHMANN

1-TRUCK
1-AIR-COMPRESSOR

1-FOREMAN
2-MEN-ON-CORE-WALL-EXCAVATING-MAN-4-HRS
1-MEN-ON-Road-TO-SOUTH-CORE-WALL-8
1-MEN-ON-NORTH-SPILLWAY-STOP-2-HRS
1-MEN-CLEANING-UP-ON-DAM-2-HRS

1-AIR-COMPRESSOR-ROAD-SOUTH-ABOUT

SHIFT-NO 1 - MARCH 6 TH 1934 - F.E. BRACHMANN

1-COMPRESSOR-ROAD-SOUTH-ABOUT
1-SHOVEL-NO 6

1-MAN-PUTTING-BRUSH-SOUTH-ABOUT-8-HRS
3-MEN-ON-NORTH-CORE-WALL
1-FOREMAN
1-CARPENTER-HELPER-ON-NORTH-CORE-WALL-2-H
1-MAN-NORTH-CORE-WALL-3-HRS

SHIFT-NO 1 - MARCH 7 TH 1934 - F.E. BRACHMANN

1-SHOVEL-NO 6-NORTH-CORE-WALL
1-AIR-COMPRESSOR

1-FOREMAN
3-MEN-EXCAVATING-NORTH-CORE-WALL
1-MEN-EXCAVATING-NORTH-CORE-WALL-4-HRS

SHIFT-NO 1 - MARCH 8 TH 1934 - F.E. BRACHMANN

1-SHOVEL-NO 6 - 7-HRS
1-AIR-COMPRESSOR

1-FOREMAN
3-MEN-EXCAVATING
2-MEN-EXCAVATING

SHIFT-NO 1 - MARCH 9 TH 1934 - F.E. BRACHMANN

1-SHOVEL-NO 6 - 7-HRS
1-AIR-COMPRESSOR

1-FOREMAN
4-MEN-EXCAVATING-NORTH-CORE-WALL-8-HRS
1-MEN-EXCAVATING-NORTH-CORE-WALL-8-HRS

SHIFT-NO 1 - MARCH 10 TH 1934 - F.E. BRACHMANN

1-SHOVEL-NO 6
1-AIR-COMPRESSOR

3-MEN-EXCAVATING-NORTH-CORE-WALL
1-FOREMAN
FOREMAN-LOADING-BLASTING-ON-SOUTH-ABST-Road

NORTH END

CORE-WALL-EXCAVATION F.E. BRACHMANN

SHIFT-NO 1 - MARCH-12TH 1934

1-FOREMAN

5-MEN-EXCAVATING

1-SHOVEL-NO 6 -

EQUIPMENT 1-AIR-COMPRESSOR
1-OPERATOR -

1-SHOVEL-NO 7-ON-ROAD-TO-SOUTH-CORE-WALL

1-OPERATOR-1-OILER

NOTE - SUNDAY-MARCH-11TH 1934 SHIFT-NO 1

ROAD-TO-SOUTH-CORE-WALL

1-SHOVEL-NO 7-

1-OPERATOR-1-OILER

SHIFT-NO 1-MARCH-13TH 1934

NORTH-END-CORE-WALL

1-SHOVEL-NO 6

1-AIR-COMPRESSOR { 1-FOREMAN
4-MEN-EXCAVATING-
1-MAN- " " " "

SOUTH-ABUTMENT-ROAD-UP-STREAM

1-AIR-COMPRESSOR-1-MAN-DRILLING

5 HRS

SHIFT-NO 1-MARCH-14TH 1934

F.E. BRACHMANN

NORTH-CORE-WALL-EXCAVATION

EQUIPMENT-1-AIR-COMPRESSOR

" 1-SHOVEL-NO 6.-1-OPERATOR

SOUTH-ABUTMENT-ROAD-UP-STREAM

" " SHOVEL-NO 7-OPERATOR OILER-6.5 HRS

" " TRUCK-8³⁰ TO 4⁰⁰ PM 5-HRS

" " BULLDOZER-9²⁵ & 11³⁰ 9-HRS

LABOR-1-FOREMAN

" 5-MEN-EXCAVATING

SHIFT-NO 1-MARCH-15TH 1934

F.E. BRACHMANN

NORTH-CORE-WALL-EXCAVATION

EQUIPMENT-1-SHOVEL-NO 6

1-AIR-COMPRESSOR

LABOR-1-FOREMAN

5-MEN-EXCAVATING

F.E. BRACHMANN

SHIFT-NO 1-MARCH-16TH 1934

NORTH-CORE-WALL-EXCAVATION.

1-SHOVEL-NO 6 + 5-MEN-EXCAVATING

1-AIR-COMPRESSOR + 1-FOREMAN

1-SHOVEL-NO 7-12³⁰ TO 4 - 3.5 HRS

2-TRUCK - 12³⁰ TO 4 3.0 HRS

NORTH-CORE-WALL-EXCAVATION

SHIFT-NO 1-MARCH-17TH 1934
F.E. BRACHMANN

EQUIPMENT-2-SHOVELS-NO 6-7

1-AIR-COMPRESSOR

2-TRUCKS

LABOR 1-FOREMAN

4-MEN-EXCAVATING-8-HRS

1-MAN " 4-HRS

2-SHOVEL-OPERATORS.

1-OILER

2-TRUCK-DRIVERS-7^{am} to 10^{am}

NO 7-SHOVEL-NORTH-CORE-WALL 7-10^{am}

" " " EAST-END-O.G. SECTION-10^{am} to 12^{pm}

SHOVEL-NO 7 } BUILDING-ROAD-TO-DOWN

2-TRUCKS } STR-EMB-THRO-SPILLWAY 2-HRS

NORTH-CORE-WALL-EXCAVATION

SHIFT-NO 1-MARCH-19TH 1934 F.E.B.

DRILLING-GROUT-MOLES

EQUIPMENT-1-AIR-COMPRESSOR

SHOVEL-NO 7 } ROAD-THRO-SPILLWAY

2-TRUCKS } TO-SOUTH-EMBANK

1-BULLDOZER

LABOR 1-FOREMAN-5-MEN.

NO-10-DRAGLINE-REMOVING-SAND

2-TRUCKS-FROM-HOG-BOX

CORE-WALL-EXCAVATION

STA 4190 NORTH-TO-O.G. SECTION 29'-LONG

APPROVED-BY STATE-INSPECTOR

W.H. HOLMES

SHIFT NO 1-MARCH-20TH 1934

SHOVEL-NO 7-BUILDING-ROAD-ON-SPILLWAY
F.E. BRACHMANN

EQUIPMENT 2-TRUCKS.

1-BULLDOZER

LABOR 1-SHOVEL-OPERATOR

1-OILER

2-TRUCK-DRIVERS

1-OPERATOR-ON-BULLDOZER

SHIFT-NO 1-MARCH-21ST 1934-F.E. BRACHMANN

SOUTH-CORE-WALL-EXCAVATION

1-DRAGLINE-NO 10-5.5 HRS

2-TRUCKS-HOULING-TO-HOG-BOX-3.5 H

1-SHOVEL-NO 7-3.5 HRS.

2-TRUCKS-3.5 HRS.

1-BULLDOZER 3.5 HRS

LOADING-SAND-FROM-HOG-BOX-TO-ROAD-

IN-SPILLWAY-SOUTH-SIDE-DOWN-STREAM

SHIFT-NO 1-MARCH-22ND 1934 F.E.B.

SOUTH-ABUTMENT-STRIPPING

1-SHOVEL-NO 7-4 HRS.

1-DRAGLINE-NO 10 4 HRS

1-BULLDOZER-3.5

3-TRUCKS-8 HRS

15-LOADS-STRIPPING-TO-60 YDS.

HOG-BOX-FROM-SOUTH-ABUTMENT

SHIFT-NO 1-MARCH-23RD 1934 F.E. BRACHMANN
SOUTH-ABUTMENT-STRIPPING

1-SHOVEL-NO 7-1³⁰ P.M.
1-BULLDOZER-
2-TRUCKS 5.5 HRS.

SHIFT-NO 1-MARCH-24-1934

NO-WORK-RAIN.

SOUTH-ABUTMENT-STRIPPING F.E. BRACHMANN

SHIFT-NO 1-MARCH-26TH 1934

1-CRANE-NO 10 { 1-MAN-9¹⁵ 11, 2³⁰ 2 HRS
6-MEN-STRIPPING
1-OPERATOR.
1-TRUCK { 1-OILER
1-TRUCK-DRIVER
1-AIR-COMPR-1HR.

SHIFT-NO 1-MARCH-27TH 1934 F.E. BRACHMANN

SOUTH-ABUTMENT-CORE-WALL-EXCAVATION

7.5H 1-CRANE-NO-10 { 5-MEN-EXCAVATING
1-OPERATOR
1-TRUCK- { 1-OILER-6-HRS
1-TRUCK-DRIVER
1-AIR-COMPRESSOR

1-SHOVEL-OPERATOR-2-HRS
2-MEN-
MOVING-NO-11-CRANE-OFF-
DOWN-STREAM-BEACH-2-HRS.
SOUTH-END-TO-FRONT-OF-SPILLWAY.

SHIFT-NO 1-MARCH-28TH 1934
SOUTH-CORE-WALL-EXCAVATION

1-CRANE-NO 10 6 MEN-EXCAVATING
1-AIR-COMPR- 1-CRANE-OPERATOR
1-TRUCK 1-OILER
1-TRUCK-DRIVER

SOUTH-ABUTMENT-CORE-WALL-EXCAVATION

SHIFT-NO 1-MARCH-29TH 1934 F.E.B.

1-CRANE-NO 10 1-CRANE-OPERATOR
1-TRUCK- 1-OILER
1-AIR-COMPR. { 1-TRUCK-DRIVER
5-MEN-EXCAVATING
1-FOREMAN.

SOUTH-ABUTMENT-CORE-WALL-EXCAVATION

SHIFT-NO 1-MARCH-30TH 1934 F.E.B.

1-CRANE-NO 10 { 6-MEN-EXCAVATING
1-CRANE-OPERATOR
1-OILER
1-TRUCK. { 1-TRUCK-DRIVER
1-FOREMAN
1-AIR-COMPR.

SOUTH-ABUTMENT-CORE-WALL-EXCAVATION

SHIFT-NO 1-MARCH-31ST 1934 F.E. BRACHMANN

1-CRANE-NO 10 1-FOREMAN
1-OPERATOR
1-AIR-COMPR. 1-TRUCK-DRIVER
5-MEN-EXCAVATING
1-TRUCK

SHIFT-NO 1 - APRIL - 2ND 1934
FE, BRACHMAN
1-TRUCK - CLEANING UP -

5-MEN - " "
1-TRUCK-DRIVER

SHIFT-NO 1 - APRIL - 3RD 1934 - F.E.B.
CLEANING UP AROUND NORTH-CORE-WALL
4 MEN - 8 HRS.

2-MEN - SOUTH-ABUTMENT-ROAD-28
2-MEN - 1 FOREMAN
EXCAVATING - CUT-OFF - WALL
UP-STREAM-END-O.G.SEC - 3.5 HRS
1-AIR-COMPR -

SHIFT-NO 1 - APRIL - 4 - 1934 - F.E.B.
NO WORK - EXCAVATING CREW - LAID OFF
MEASUREMENTS - TAKEN - ON
NORTH-SPILLWAY - SLIDE.

SHIFT-NO 1 - APRIL - 5TH 1934 - F.E.B.
NO-EXCAVATION-CREW-LAID-OFF.

SHIFT-NO 1 - APRIL - 6TH 1934 - F.E.B.
EXCAVATING - EAST-OF-O.G-SECTION -
1-FOREMAN
2-MEN 1-AIR-COMPR - 3.5 HRS

SHIFT-NO 1 - APRIL - 7TH 1934 - F.E.B.
EXCAVATION - EAST-OF-O.G-SECTION

1-AIR-COMPR - 1 FOREMAN
- 3-DRILLERS

65
SHIFT-NO 1 - APRIL - 9TH 1934 - F.E.B.
1-AIR-COMPR - 1-FOREMAN
- 4-MEN

EXCAVATION - EAST-OF-O.G-SECTION

SOUTH-CORE-WALL-EXCAVATION
1-AIR-COMPR - 2 HRS 2-MEN - 9 a.m. - 6 HRS
1-SHOVEL-NO 7 - 2 HRS

2-TRUCKS - 2 HRS
SHOVEL-DOWN - 2 3/4 to 4

SHIFT-NO 1 - APRIL - 10TH 1934 - F.E.B.

EXCAVATION - EAST-OF-O.G-SECTION
1-SHOVEL-NO 7 { 1-FOREMAN
2-TRUCKS - { 2-DRILLERS
1-AIR-COMPR { 1-HELPER - 8-1-3.5 HRS
1-OPERATOR
1-OILER

SOUTH-CORE-WALL-EXCAVATION

1-AIR-COMPR - 2-MEN -

WORK-
ORDER } BLASTING BOULDERS ON-UP-STREAM

NO 27 } ROCK-EMBANKMENT - 2 MEN - 4.5 HRS.

SHIFT-NO 1 - APRIL - 11TH 1934 F.E.B

SOUTH-ABUTMENT-CORE-WALL-EXCAVATION
1-AIR-COMPR - 3-MEN -

EXCAVATION - EAST-OF-O.G-SECTION
1-SHOVEL-NO 7 - 2 HRS.
2-TRUCKS - 2 HRS.
1-AIR-COMPR - 1-FOREMAN

2-DRILLERS
1-HELPER 8 HRS.
1-HELPER - 4.5 HRS.
1-OPERATOR - 2 HRS
2-TRUCK-DRIVERS - 2 HRS

SHIFT-NO 1-APRIL-12TH-1934 F.E. BRACHMANN
 EXCAVATION-EAST-OF-O.G. SECTION
 1-SHOVEL-NO 7 5-MEN-EXCAVATING
 1-TRUCK 1-OPERATOR-6 HRS
 SHOVEL-NO 7-6 HRS 1-OILER-6 HRS
 1-TRUCK-6 HRS 1-TRUCK-DRIVER-6 HRS

SOUTH ABUTMENT-CORE-WALL
 EXCAVATION
 1-AIR-COMPRESSOR 3-MEN-6-HRS
 2-HRS

X HAND-PLACING-ROCK-DOWN-STREAM
 1-CRANE-NO 11 1-OPERATOR-ON-CRANE
 1-BULL-DOZER 1-OPERATOR-ON-BULL-DOZER
 6-TRUCKS-7-9³⁰ 1-OILER-6-MEN

LOADS	ROCK CU.YDS	TRUCK	TIME	TO UP-STREAM
1394	5.0	20	3 ⁰⁰	
95	4.0	18	3 ¹⁰	
96	4.5	20	3 ²⁰	
97	4.0	18	3 ²⁸	
98	4.0	20	3 ³⁴	
99	4.0	18	3 ⁴⁴	
1400	3.0	20	3 ⁵⁰	
1	4.5	18	3 ⁵⁴	
1402	4.0	20	3 ⁵⁸	
03	4.0	18	4 ⁰⁶	
	41.0	10.		

LOADS ROCK
 CU.YDS TRUCK TIME

1404	3.0	34	7 ⁰⁸
5	4.0	33	7 ¹²
6	4.0	34	7 ²⁰
7	4.0	34	7 ³⁰
8	4.0	33	7 ⁴⁰
9	3.5	33	7 ⁵⁵
1410	4.0	33	8 ¹⁰
11	3.5	34	8 ²⁰
12	4.0	33	8 ³⁰
13	4.0	34	8 ³⁷
14	4.0	34	8 ⁴⁵
15	4.0	33	8 ⁵⁰
16	4.0	34	8 ⁵⁶
17	3.0	33	9 ⁰⁰
18	4.0	34	9 ⁰⁷
19	4.0	33	9 ¹¹
	61.0		

LOADS CU.YDS

66
 O-UP-STREAM

SHIFT-NO 1-APRIL-13TH-1934 F.E. BRACHMANN
 SHOVEL-NO 7 5-MEN-EXCAVATING
 2-TRUCKS-1-OILER-OPERATOR

LOADS	ROCK CU.YDS	TRUCK	TIME	UP-STREAM
12 LOADS 1437	45.0			
32	4.0	33	10 ³⁰	
33	3.5	34	10 ³⁵	
34	4.0	34	10 ⁴⁴	
35	4.0	33	10 ⁴⁸	
36	4.0	34	10 ⁵²	
37	4.0	33	10 ⁵⁷	
38	4.0	34	11 ⁰⁴	
39	4.0	33	11 ¹⁰	
14 40	3.0	34	11 ¹⁵	
41	3.5	33	11 ¹⁹	
39	4.0	33	12 ³⁴	
43	3.0	34	12 ³⁹	
44	3.5	33	12 ⁴²	
45	4.0	34	12 ⁴⁸	
43	4.0	33	12 ⁰⁸	
LOADS	101.5			
	61.0			

LOADS	ROCK CU.YDS	TRUCK	TIME	UP-STREAM
1447	4.0	34	10 ⁰⁴	
48	3.5	33	10 ⁰⁷	
49	4.0	34	10 ¹⁴	
1450	3.5	33	10 ¹⁹	
1	4.0	33	10 ²⁵	
2	4.0	34	10 ³⁰	
3	5.0	33	10 ³⁵	
4	5.0	33	2 ¹⁵	
1455	4.0	33	2 ²⁸	
56	4.5	33	2 ⁴⁰	
57	5.0	5	2 ⁵⁰	
58	3.5	33	2 ⁵³	
59	5.0	5	3 ⁰¹	
1460	5.0	5	3 ²⁹	
58	4.5	5	3 ⁵³	
	64.5			
	101.5			
	61			
	226.0			

TRUCK-NG34-BFF-2 P.M.
UP-SET-
NP-5- ON-AT-2:50 P.M.

ROCK
LOADS CU.YDS TRUCK TIME

1462

SHIFT-16-17 APRIL-14 TH 1934 - F.E. BRACHMANN
 1-SHOVEL-N#7
 2-TRUCKS-
 1-AIR-COMPR-4-HRS.
 SHIFT-16-17 APRIL-16 TH 1934 - F.E. BRACHMANN
 1-AIR-COMPRESSOR
 5-MEN-EXCAVATING-ON-SLOPE
 EAST-OF-O.G. SECTION.

SHIFT-16-17 APRIL-17 TH 1934 - F.E. BRACHMANN
 EXCAVATION-ON-SLOPE-EAST-OF-O.G. SECTION
 1-SHOVEL-N#7
 2-TRUCKS
 1-AIR-COMPR.
 1-OPERATOR
 1-OILER
 2-TRUCK-DRIVERS
 5-MEN-EXCAVATING

ROCK
LOADS CU.YDS TRUCK TIME

1462

68

1462	4.0	5	722
63	3.0	33	730
64	4.0	5	740
65	4.0	33	750
66	4.5	5	800
67	5.0	5	810
68	3.5	33	820
69	5.0	5	824
1470	5.0	5	837
1	4.0	33	848
2	4.0	5	900
3	4.0	5	912
4	4.5	5	145
5	4.0	3	306
14	58.5		
LOADS	CU.YDS	TRUCK	TIME

UP, STREAM-EMPX.

LOADS	ROCK CU.YDS	TRUCK	TIME	UP-STREAM-
1476	3.0	33	7 ¹⁵	
7	4.0	34	2 ²⁵	
8	3.0	33	2 ⁴⁴	
	10.5			

1480

SHIFT NO. 1 - APRIL 18TH - 1934 - F. E. BRACHMANN
 2 - TRUCKS
 1 - SHOVEL NO. 7
 1 - AIR-COMPR SECTION
 ON-SLOPE EAST-OF-O.G.
 SHIFT NO. 1 - APRIL 19 - 1934 - F. E. BRACHMANN
 EXCAVATION - EAST-END - SPILLWAY
 1 - AIR-COMPRESSOR - 3 MEN - EXCAVATING
 1 - MAN - 1 HR.

SPILLWAY - EXCAVATION
 SHIFT NO. 1 - APRIL 20TH 1934 - F. E. BRACHMANN
 1 - AIR-COMPR - 3 MEN - EXCAVATING

LOADS	ROCK CU.YDS	TRUCK	TIME	UP-STREAM EMBANK
1479	4.0	33	2 ⁴²	
1480	3.0	33	3 ⁰⁹	
	7.5			
2-LOADS				

SHIFT NO. 2 - APRIL 21 - 1934 - F. E. BRACHMANN
 1 - SHOVEL NO. 7
 1 - AIR-COMPR
 2 - TRUCKS
 1 - OPERATOR
 1 - OILER
 2 - TRUCK-DRIVERS
 3 - MEN - EXCAVATING

69

LOADS	Rock CU.YDS	TRUCK	TIME	NP-ST	SLOPE BEAM
1481	3.5	5	7 ²⁶		
82	3.0	34	7 ⁴⁵		
83	5.0	5	8 ⁰⁰		
84	3.0	34	8 ¹⁴		
85	4.0	5	8 ⁴²		
86	4.0	34	8 ⁵²		
87	5.0	5	9 ⁰⁶		
88	4.0	34	9 ²³		
89	5.0	5	9 ³⁰		
1490	3.5	34	9 ⁴⁷		
1491	5.0	5	10 ⁰⁰		
92	4.0	5	10 ³⁰		
93	4.0	34	10 ⁵⁷		
94	4.0	5	11 ⁰⁹		
95	3.0	5	2 ²⁵		
96	5.0	5	3 ¹⁵		
16-LOADS	66.0				

SPILLWAY EXCAVATION - APRIL 23RD 1934 - F.E. BRACHMANN
 SHIFT NO. 1
 1-SHOVEL-N. 6.7
 2-TRUCKS
 1-AIR-COMPR.
 FRANK-LEE-AND-3-MEN-TAKING-SAMPLES-ON-SPILLWAY
 AT-STATIONS-0+25-0+50-1+80-2+00-3+30-4+00-4+30

LOADS	Rock CU.YDS	TRUCK	TIME
1497	4.0	5	7 ²⁰

SPILLWAY-SHIFT NO. 2 - APRIL 24-1934 - F.E. BRACHMANN
 1-SHOVEL-N. 7-4.0 HRS
 1-AIR-COMPR -
 2-TRUCKS-4.1 HRS
 1-AIR-COMPR-3.5 HRS
 FRANK-LEE-3 MEN-TAKING-SAMPLES-ON-SLOPE
 1-MAN-DRILLING
 1-OPERATOR
 1-OILER
 2-TRUCK-DRIVERS
 1-MAN-DRILLING-BOULDERS-ON-U.S. EMB K-3.5H
 SAMPLES-TAKEN-AT-EAST-SLOPE 2
 STATIONS-4+80-5+50+3+00
 2-MEN-PLACING-RICK-UP-STR-3.5 HRS

SOUTH-CORE-WALL-EXCAVATION-APRIL-25TH/1934
 SHIFT-NO. 1
 1-CRANE-NO. 10
 1-TRUCK
 7-SAMPLES-BROKE-TO-PIECES
 SOUTH-CORE-WALL-EXCAVATION-SHIFT-NO. 1-APRIL-26TH-1934-F.E.B.
 1-CRANE
 1-TRUCK
 1-MAN-NORTH-CRANE
 2-HRS
 (WORK-ORDER-27)
 FRANK-LEE 4-MEN-TAKING-SAMPLES-ON-SPILLWAY-SLOPE
 SOUTH-CORE-WALL-EXCAVATION-SHIFT-NO. 1-APRIL-27TH/1934
 1-CRANE-NO. 10
 1-TRUCK
 1-AIR-COMPR-4 HRS
 SOUTH-CORE-WALL-EXCAVATION-APRIL-27-1934
 PLACING-STEEL-STABLO 1-GEN-FORMAN
 2 PM-4 PM 2 HRS FL. 20-30-MEN-PLACING-STEEL
 1-TRUCK-HAULING-STEEL-2 HRS
 SOUTH-ABUTMENT-CORE-WALL-EXCAVATION-APRIL-28-1934
 SHIFT-NO. 1
 1-AIR-COMPR
 3-MEN

LOADS	ROCK CU.YDS	TRUCK	TIME
1498	3.5	24	7 ³⁰
99	3.0	26	7 ³²
1500	3.0	25	7 ³⁸
1	2.0	17	7 ⁴⁰
2	3.0	23	7 ⁴⁵
3	2.5	20	7 ⁴²
4	2.5	24	7 ⁴⁸
5	3.0	26	8 ⁰¹
6	3.0	17	8 ¹⁰
7	2.5	25	8 ¹⁵
8	3.0	23	8 ¹⁸
9	3.0	20	8 ²²
1510	3.0	24	8 ²⁶
11	3.5	26	8 ³²
12	3.0	17	8 ³⁷
13	3.0	25	8 ⁴¹
16	47.0		
LOADS	TOTAL CU.YDS		

SPILLWAY-SHIFT NO. 1-APRIL-28/1934-F.E.B.
 1-SHOVELING
 1-BULLDOZER
 6-TRUCKS-TO-UP-STREAM-EMANKMENT
 1-SHOVEL-OPERATOR
 1-OILER
 1-OPERATOR-ON-BULLDOZER
 1-TRUCK-DRIVERS
 3-MEN-ON-SOUTH-CORE-WALL-EXCAVATION

ROCK
LOADS CU.YDS TRUCK TIME

15 14 3.0 23 8⁴⁴

15 3.5 20 8⁵²

16 2.5 24 8⁵⁵

17 2.5 26 8⁵⁹

18 3.0 17 9⁰⁴

19 3.0 25 9⁰⁸

15-20 3.0 23 9¹³

1 3.0 20 9¹⁷

2 2.5 24 9²²

3 3.5 26 9²⁶

4 3.0 17 9³²

5 3.5 25 9³⁸

6 3.5 23 9⁴²

7 3.0 20 9⁵⁰

8 2.5 24 9⁵⁴

15-29 3.0 26 9⁵⁷

16
LOADS. 48.0
TOTAL
CU.YDS

SHIFT - NO. 1 APRIL 28TH - TO UP-STREAM - IN BANKMENT -

ROCK
LOADS CU.YDS TRUCK TIME

15 30 3.0 17 10⁰³

1 2.5 23 10⁰⁶

1 3.0 25 10¹²

1 2.5 20 10¹⁷

4 2.5 24 10²²

5 3.0 26 10²⁵

6 2.5 17 10³²

7 3.0 23 10³⁴

8 2.5 25 10⁴⁰

9 2.5 20 10⁴⁷

15-40 3.0 24 10⁵⁰

1 3.5 26 10⁵⁵

2 3.5 17 11⁰²

3 3.0 23 11⁰⁷

4 3.0 25 11¹⁵

15-45 2.5 24 12²⁰

16
LOADS 45.5
TOTAL
CU.YDS

UP-STREAM

ROCK
LOADS CU.YDS TRUCK TIME

15-46	2.5	26	12 ²⁰
7	3.0	17	12 ²⁷
8	3.5	23	12 ³⁰
9	4.0	20	12 ³³
15-50	3.0	15	12 ³⁶
1	3.0	24	12 ⁴⁰
2	2.5	26	12 ⁴²
3	3.0	17	12 ⁴⁶
4	3.0	20	1 ⁰⁰
5	3.5	15	1 ⁰⁴
6	2.5	24	1 ¹⁴
7	3.0	26	1 ¹⁹
8	2.5	17	1 ²¹
9	3.0	20	1 ²⁴
15-60	3.5	15	1 ²⁹
1	3.0	24	1 ³⁶

LOADS
64

48.5
TOTAL
CU.YDS

SHIFT-NO.1-APRIL-28TH 1934 - UP-STREAM-EMBANKMENT

ROCK
LOADS CU.YDS TRUCK TIME

15-62	3.0	26	1 ⁴⁰
3	3.5	17	1 ⁴⁶
4	3.0	20	1 ⁵²
5	3.0	15	1 ⁵⁵
6	3.0	24	1 ⁵⁹
7	3.5	26	2 ⁰³
8	3.0	23	2 ¹¹
9	3.0	20	2 ¹⁷
15-70	3.5	15	2 ²²
1	2.5	24	2 ²⁵
2	3.0	26	2 ³²
3	4.0	23	2 ³⁶
4	4.0	17	2 ⁴⁰
5	3.0	20	2 ⁴³
6	3.5	15	2 ⁴⁸
7	3.0	26	2 ⁵³

LOADS
80

57.5
TOTAL
CU.YDS

SHIFT-NO.1-APRIL-28TH 1934 - UP-STREAM-EMBANKMENT

LOADS Rock TRUCK TIME

1578	3.0	24	2 ⁵⁶
9	3.0	23	3 ⁰⁰
1580	3.0	17	3 ⁰⁹
1	2.5	20	3 ¹²
2	3.0	19	3 ¹⁵
3	3.0	26	3 ¹⁹
4	3.0	24	3 ²⁵
5	3.0	23	3 ²⁹
6	3.0	17	3 ³¹
7	3.0	20	3 ³⁵
8	3.0	15	3 ⁴⁰
9	3.0	26	3 ⁴⁵
1590	3.5	24	3 ⁴⁹

94 LOADS

1591	3.0	23	3 ⁵³
43.0 TOTAL CU.YDS			
43.0			
57.5			
48.5			
48.0			
47.0			
283.58 TOTAL			

94 LOADS =

SHIFT - NOV - APRIL - 28TH 1934 - UP-STREAM-EMBANKMENT
SHIFT - NOV 2 - APRIL - 28TH 1934 - SOUTH-CORE-WALL-EXCAVATION
1-CRANE
1-TRUCK
1-FOREMAN
1-OPERATOR

LOADS Rock TRUCK TIME

1592	3.0	24	7 ²⁵
3	3.0	26	7 ³⁰
4	3.0	15	7 ³²
5	3.0	23	7 ³⁸
6	3.0	20	7 ⁴⁶
7	3.0	17	7 ⁵⁷
8	2.5	24	7 ⁵⁶
9	2.5	26	8 ⁰¹
1600	2.5	15	8 ⁰⁵
1	2.5	23	8 ⁰⁷
2	3.0	20	8 ¹²
4	2.0	17	8 ¹⁶
5	3.0	24	8 ²²
6	2.5	26	8 ²⁹
7	3.0	15	8 ³⁴
LOADS	160.8	2.5	8 ³⁸
		44.5	

UP-STREAM
SOUTH-CORE-WALL
DRILLING-GROUT-HOLES
3-MEN
1-AIRCUMFR
SHIFT - NOV 1 - APRIL 30TH 1934
SPILLWAY-HAILING-ROCK
1-SHOVEL-OPERATOR
1-COLLER
6-TRUCK-DRIVERS
1-BULLDOZER
6-TRUCKS
1-BULLDOZER

LOADS	ROCK CU. YDS	TRUCK	TIME	UP-STREAM
1609	2.5	20	8 ⁴⁴	
10	2.0	17	8 ⁴²	
11	3.5	24	8 ⁵²	
12	2.0	26	8 ⁵⁴	
13	2.5	15	8 ⁵⁸	
14	2.5	23	9 ⁰²	
15	2.5	20	9 ⁰⁵	
16	2.5	17	9 ¹⁰	
17	3.0	26	9 ¹⁵	
18	2.5	24	9 ¹⁷	
19	2.5	15	9 ²²	
20	2.5	23	9 ²⁶	
21	2.5	20	9 ³¹	
22	1.5	17	9 ³⁵	
23	2.0	26	9 ⁴⁰	
1624	2.5	15	9 ⁴⁵	
16	39.0			
LOADS				

75

LOADS	ROCK CU. YDS	TRUCK	TIME	UP-STREAM
1625	2.5	23	9 ⁴⁸	
26	2.5	24	9 ⁵²	
27	3.0	20	9 ⁵⁶	
28	2.5	17	10 ⁰⁰	
29	2.5	26	10 ⁰⁴	
1630	2.0	15	10 ⁰⁷	
31	2.5	23	10 ¹¹	
32	2.5	24	10 ¹⁶	
33	3.0	20	10 ²²	
34	2.5	17	10 ²⁵	
35	2.5	26	10 ³⁰	
36	3.5	15	10 ³⁸	
37	3.0	23	10 ⁴⁴	
38	3.0	24	10 ⁴⁹	
39	3.0	20	11 ⁰⁰	
1640	2.5	17	11 ⁰⁷	
16	43.0			
LOADS				

LOADS	ROCK CU.YDS	TRUCK	TIME	UP-STREAM
1641	2.0	26	11 06	
42	3.0	15	11 05	
43	3.0	23	11 12	
44	3.0	24	11 18	
45	3.0	20	12 26	
46	2.5	17	12 29	
47	3.0	23	12 46	
48	2.5	26	12 42	
49	3.0	24	12 57	
1650	3.0	20	1 05	
51	2.0	17	1 10	
52	2.5	23	1 14	
53	2.5	26	1 16	
54	2.0	24	2 00	
55	3.5	20	2 06	
14 LOADS	56	3.5	17	
64-LOADS	44.0			

STORAGE
61-LOADS
14 LOADS
64-LOADS

SHIFT-NO 2 APRIL 30 IN 1934.
 DRILLING-CROUT-HOLE-S-SOUTH-CORE-WALL
 1-AIR-COMP
 1-AIR-HAMMER
 1-FOREMAN
 2-DRILLERS
 1-HELPER

79
EAST
SLOPE
SOUTH 10.0 G.

LOADS	ROCK CU.YDS	TRUCK	TIME	UP-STREAM
1657	3.5	23	2 14	
58	3.5	26	2 18	
59	3.0	24	2 22	
1660	2.5	20	2 25	
61	3.0	17	2 30	
62	3.0	23	2 34	
63	3.0	26	2 37	
64	4.0	20	2 48	
65	3.5	17	3 01	
66	3.5	23	3 06	
67	3.0	26	3 10	
68	2.5	20	3 13	
69	1.0	17	3 19	
1670	3.0	23	3 23	
	42.0			
	44.0			
	43.0			
	39.0			
	44.5			
	212.5			

WORK-ORDER 711.5 HRS - 1-MAN 1-COMP PR DRILLING-BOULDER

SHIFT-NO-1-MAY-1ST 1934-F.E.B

Rock
LOADS CU.YDS TRUCK TIME

SOUTH-CORE-WALL-

DRILLING-GROUT-HOLES.

1-AIR-COMPRESSOR-3-MEN

WORK

ORDER 27-DRILLING BOULDERS-UP-STREAM

6-HRS
1-AIR-COMPRESSOR-1-MAN 6-HRS

~~SHIFT-NO-1-MAY 8TH 1934~~

~~EXCAVATION
SPILLWAY-EXTENSION~~

~~1-75-CAT 1-OPERATOR~~

~~1-ROOTER~~

SHIFT-NO-2-JULY-18TH 1934⁷¹

Rock
LOADS CU.YDS TRUCK TIME

1671 4.0 20 5⁰⁷

2 4.0 20 5²⁹

3 3.5 20 5⁴⁷

4 3.5 20 6⁰⁶

5 3.0 20 6²⁷

6 4.0 20 6⁴³

7 4.0 20 6⁵⁶

8 4.0 20 7¹⁰

9 3.5 33 7⁴⁶

1680 3.5 33 8⁰⁰

1 3.5 20 8⁰⁶

2 3.5 20 8²²

3 4.0 20 8³⁹

4 4.0 20 8⁵⁵

5 4.0 20 9¹²

1686 4.0 20 9³⁰

60.0

16-LOADS CU.YDS.

SHIFT - No 2 - JULY 18TH 1934

LOADS	ROCK CU. YDS	TRUCK	TIME
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1687	4.0	20	9 ⁴⁵
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1688	4.0	20	10 ⁴⁵
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8.0			
CU. YDS			

60.0			
------	--	--	--

8.0			
-----	--	--	--

68.0			
CU. YDS			

SHIFT No 1 - JULY 19TH 1934

78

LOADS	ROCK CU. YDS	TRUCK	TIME
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1689	4.0	33	7 ²⁰
------	-----	----	-----------------

1690	3.0	33	7 ⁴²
------	-----	----	-----------------

1691	3.0	33	7 ⁵⁸
------	-----	----	-----------------

1692	4.0	33	8 ³²
------	-----	----	-----------------

1693	3.5	33	8 ⁵²
------	-----	----	-----------------

1694	4.0	33	9 ¹³
------	-----	----	-----------------

1695	4.0	30	9 ²²
------	-----	----	-----------------

1696	4.0	30	10 ⁰⁰
------	-----	----	------------------

30.0			
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CU. YDS			
---------	--	--	--

1. The first part of the
 paper is devoted to a
 description of the
 various kinds of
 paper used in the
 printing office.
 It is divided into
 three parts: the
 first part describes
 the various kinds
 of paper used in
 the printing office,
 the second part
 describes the
 various kinds of
 paper used in the
 printing office, and
 the third part
 describes the
 various kinds of
 paper used in the
 printing office.

The second part of the
 paper is devoted to a
 description of the
 various kinds of
 paper used in the
 printing office.
 It is divided into
 three parts: the
 first part describes
 the various kinds
 of paper used in
 the printing office,
 the second part
 describes the
 various kinds of
 paper used in the
 printing office, and
 the third part
 describes the
 various kinds of
 paper used in the
 printing office.

Fred A. Metapson.

GROUT-BOOK 381

5 CEMENT-35 GAL-WATER = 1 BATCH-GROUT

PRESSURE

= 7.004

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.8	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.