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584

584

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

	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.

DRILLING GROUT HOLES BOOK No. 1

MICROFILMED

JAN 13 1965

A82

770	770
605	642
2165	29
82.5	

	Index.	Elev	Page
1-25		642.5	7, 11
2-25		604.9	1, 4
3-25		571.6	5, 10, 16
4-25		546.6	2
5-25	Hole lost	502.0	
6-25			
7-25			
8-25			
9-25			
10-25			
11-25			
12-25			
13-25	9+25	480.0	479.6 Lost
13-27	9+27		
14-25	9+25	513.0	XO
15-25	10+25	546.0	540.0
1-0	3+21	652.4	12
2-0	3+71	625.8	13
3-0	4+21	592.3	
4-0	4+71	559.0	17
5-0	5+21	527.2	14, 17
5-47	5+68	492.8	
7-0			
8-0			
9-0			

(over)

INDEX

Hole No.	Sta.	Dist. from Axis	Elev.	Page
10-0				
11-0				
12-0				
13-0				
14-0				
15-0				
16-0				
16-25	10+75		546.8	
17-0				
17-25	11+25		552.9	33
18-0				
18-25				

INDEX

Hole No.	Sta.	Dist. from Axis	Elev.	Page
19-0				
19-25	12+25		613.2	
20-0				
20-25	12+75		650.0	
3-38	4+59		544.4	32

Hole No. 2-25 Elev. Top 604.9 Date 2-27-42 clear

Inspector Vao Herr Foreman Betzger Crew No. 1

Time		Depth		Core
From	To	Hr.-M.	From To	Recov.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M.&S.U.	Hr.-M. Lost
--------------	-------------	-----------	---------	--------------	-------------

8:00 AM 11:40 AM 3-40 Trip to town For Lum
 11:40 do Noon 0-20
 Noon 12:30 P Lunch
 12:30 PM 2:45 P 2'-15 7'-0 12'-6 4'-10"
 2:45 PM 3:00 P 0'-15 Removing Core 1'-0 good core
 3:00 P 3:40 P 0'-40 12'-6 17'-6 4'-10 3/4
 3:40 P 3:50 P 0'-10 Removing Core 2' good, 6"
 3:50 P M 4:30 P M Trying to straighten hole For
 see Book 2 Page 3.

note
 3'-40
 0'-20
 5'-6 ✓
 3'-6" core split showing seam 0'-4" good core at bottom of run split fairly tight.
 5'-0 ✓
 split, 20 good.
 graft pipe 4-25 Elev 546.6

0.0 10.5 0.0 0.0

pl. Dist.

Hole No. 4-25 Eleva. Top 546.6 Date 2-28-42 Clear

Time From To Depth Hr.-M. From To Core Recov.

4:00 P (2-25-42) 4:30 P 0-30 0 2'-2 1/2"

8:30 A.M 9:30 A.M 1-0 Laying pipe for air

9:30 A.M 10:00 A.M 0-30 Moving & setting up

10:00 A.M 11:00 A.M 1-0" 2'-2 1/2" 7

11:00 A.M 11:15 A.M To shop for grease cup & new barrel

11:15 A.M 11:35 A.M 0-20 2'-2 1/2" 7'-2 1/2"

11:35 A.M Noon removing core 3'-11"

Noon 12:30 P.M Lunch & drilling

12:30 P.M 1:00 P.M 0-30" 7'-2 1/2" 12'-6"

1:00 P.M 1:10 P.M 0-10" removing core 3'-6"

1:10 P.M 3:00 P.M 1-50 12'-6" 22'-5"

3:00 P.M 3:10 P.M 0-10 Removed core 9'-11"

3:10 P.M 4:00 P.M 0:50' 22'-5" 24' 5"

4-00 P.M. 4-22 P.M. 0:22. 24' 5" 26' 11"

4-22 P.M. 4-55 P.M. 0:33 removing core 2'-2"

Notes Inspector Curry and Driller

Inspector Van Horn Foreman Paul Betzer Crew No. 27

Perc Dr. H Core Dr. H Re-Dr. W-O. H Hr.-M. Time M.&S.U. Lost

2'-2 1/2"

Live to Hole 4-25-Elev 546.6 1-0 0-30

5'-0

good top of run, rest shattered. 0-15"

5'-3 1/2"

2-9" good core top run, 9" good core bottom of run, rest shattered. Lost water at 20' ran out seam at Sta 5+16-36 50. of

2' 0" 5-3" good to small seam, then 3'-0" to big seam then 1-8" good core to 22'-5"

2' 6" First 3" good next 6" shattered next 10" good next 10" shattered next 1'-2" good rest shattered.

Dan McKenzie came on duty at 4 P.M.

2.2 24.7 0.0 0.0

al. DWL

Hole No. 5-25 Elev. 502.0 Date 2-28-42 - Clear.

Inspector Curry Foreman McKenzie Crew No. 3
2

Time		Hr.-M.	Depth		Core Recov.	
From	To		From	To		
3:00 P	4:00 P	1-00	0	2'-0"		
4-55 P.M.	6-25 P.M.	Moving and Setting up. for				
6-25 P.M.	7-05 P.M.	1-30	2'-0"	7'-0"		
7-05 P.M.	7-20 P.M.	0-15	removing core			
7-20 P.M.	7-55 P.M.	0-35	7'-0"	11'-0"	anchor	
7-55 P.M.	8-00 P.M.	0-05	Took machine down.			
8-00 P.M.	8-30 P.M.	0-30	Lunch.			
8-30 P.M.	12-M.N.	3-30	Drilled new anch or pipe hole and set another pipe			

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & S.U.	Hr.-M. Lost
2'-0"					
(Feb. 27, 1942, Van Horn)					
Hole No 5-25;				1-30'	
shattered, anchor pipe loose and vibrating.					
pipe pulled out.					
core remained in hole					
this new hole was moved 2'-9" N, 2'-2" West Ele 502.5					
as he used slow setting cement he could not do any more drilling					

See Book 2 Page 5

Hole 5-25
 Lost

Hole No. 2-25 Elev. Top 604.9 Date 3-3-42

Time		Depth		Core
From	To	Hr.-M.	From To	Recov.

8:00A.M. 9:00A.M. 1-0 Repairs to shift level

9:00A.M. 10:00A.M. 1-0 37'-8" 47'-8"

10:00A.M. 10:15A.M. 0-15" removing core 9'-8"

10:15A.M. Moved to Grout hole 3-25 Elev. 571.6

Mar. 3, 1942

0

47.7

Inspector Van Horn Foreman P. Betzer Crew No. 4

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M. & S. U.	Hr.-M. Lost
--------------	-------------	-----------	----------	-----------------	-------------

Memo: - This hole was not grouted as 1'-0" Water pressure stood up.

10'-0"

Hole ran water at all times during the run.
 0.3' of core good, 0-1/2" indicates seam, 2'-6" of core good, 0.5" indicates seam
 2'-0" of core good, 0-1/2" indicates seam, 3'-9" of core good, 0-1" indicates seam, 0-3' of core good. Change of color noted to last 0-3" of run

(Book 603, pg 2)

47.7

0.0

10.0

0.0

47.7

pl. sent

Hole No. 3-25 Elev. Top 571.6 Date 3-3-42

Time		Depth		Core
From	To	From	To	Recov.

10:15 A.M.	10:45 A.M.	0-30"		
10:45 A.M.	Noon	1-15"	25'-0"	35'-3"
Noon	12:30 P.M.	0-30"	Lunch	
12:30 P.M.	12:40 P.M.	0-10"	Removing Core	9'-11 1/2"
12:40 P.M.	2:10 P.M.	1-30"	35'-3"	45'-2"
2:10 P.M.	2:30 P.M.	0-20"	Removing Core	9'-10"
2:30 P.M.	3:10 P.M.	0-40"	45'-2"	50'-1"
3:10 P.M.	3:20 P.M.	0-10"	removing Core	4'-10"
3:20 P.M.	Moved to 4-25. Elev 546.6 to drill			

Inspector Van Horn Foreman P. Betzer Crew No. 5

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M.&S.U.	Hr.-M. Lost
--------------	-------------	-----------	---------	--------------	-------------

Memo: This hole was not grouted as the water pressure stood up.

	10'-3" ✓			0-30"	0-30"
0'-3" of core good	0'-0 1/2" indicates small seam			9'-8" of core good.	
	9'-11" ✓				
all of core good.					
	4'-11" ✓				
1'-10" core good. 0.4" indicates seam 2'-8" good.					
This hole ran better at all times.					
not grout. Hole ran water at all times.					

0.0 25.1 0.0 0.0

P. Betzer

Hole No. 4-25 Elev. Top 546.6 Date 3-3-42

Inspector

Van Hoo

Foreman

Betzer

Crew No. 61

Time		Depth		Core
From	To	Hr.-M.	From To	Recov.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M.&S.U.	Hr.-M. Lost
--------------	-------------	-----------	----------	--------------	-------------

3:20PM End of shift Moving & setting up.

New crew. 4-40PM 1-20' Mar. 3-42 Swing Moving & setting up.
 4-40PM 6-10PM 1-30' 2.67 26.91
 6-10PM 6-43PM 0-33' Pulled rods and
 6-43PM 8-15PM 1-32 26.91 37.16
 8-15PM 8-42PM 0-27 Removing core 7.25
 8-42PM 11-05PM 2-23 37.16 47.16
 11-05PM 11-25PM 0-20 Removing core 10.00
 11-25PM 12-M.N. 0-35 Did not drill as he did not have time.

D.R. Curry

McKenzie

Crew No 2

1-20'

24.24

bit, cleaned grout from core tube.

10.25
 First 0.75 shattered 4.25 good 2.25 shattered
 last 3.00 good.

10.00

core was all good Drilled very hard.
 could not see any loss of water. 0.35

0.0

20.3

24.2

0.0

pl. sent.

Hole No	Elev. Top	Date	Inspector	Foreman	Crew No.
1-25	642.5	3-5-42	Van Horn	P. Betzer	1

Time	Depth	Core	Perc.	Core	Re-Dr.	W-O.	Time	Hr. M.
							From	To

8:00 A.M.	8:30 A.M.	0:30	Greasing & getting ready					
8:30 A.M.	10:00 A.M.	1:30	13.58	24.0				
10:00 A.M.								
	11:45 A.M.	1:45	24.00	37.30				
11:45 A.M.	Noon	0:15	removing Core		9.63			
Noon	12:30 P.M.	0:30	Lunch					
12:30 P.M.	1:40 P.M.	1:10	37.30	42:00				
1:40 P.M.	1:50 P.M.	0:10	Removing Core		3.5			
1:50 P.M.	3:20 P.M.	2:30	42.00	52:40				
3:20 P.M.	3:45 P.M.	0:25	Removing Core		8.92			
3:45 P.M.	Moving to 2-25 Elev. 604.9							

								0 ^{hr} -30
						10.42		
			hit soft streak at 35.25 Lost 5% of the water Reappear ed at sta 3+90 of the axis 7.50. of axis. Water drips 13:30 From seam 16'30. of axis sta 3+95					
			4.83. of core good then 0.25 with split then 2% of core good then 2.05 of core showing soft granite almost decomposed at bottom of run.					0hr. 30"
						4.70		
			1.25 to small split then 0.25 to small split then 1.00 indicating softer granite with last 0.50 of good core					
						10.40		
			Lost all the water moved to hole 2-25 Elev. 604.9 seam extends from depth 52.1 to 52.4					
			1.8 core tight to small split 0.10 to another split 4.0 to another split 1.0 tight to split 0.5 showing split of soft granite, 1.52 of core Fair but broken to seam					

Mar. 7, 1942

1:30 P	3:00 P	1-30	0.0	52.4				
(see book 603, page 8)								

0.0	28.4	10.4	52.4
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rd. Dist

Hole No. 2-25 Elev. Top 604.9 Date 3-5-42

Inspector D.R. Curry

Foreman Dan McKenzie

Crew No. 2

Time		Depth		Core
From	To	From	To	Recov.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M. & S. U.	Hr.-M. Lost
--------------	-------------	-----------	----------	-----------------	-------------

3-45 P.M.	4-55 P.M.	1-10'		Moving & Setting up.	
4-55 P.M.	6-50 P.M.	1-55'	47.67	57.67	
6-50 P.M.	7-20 P.M.	0-30'		removing core	7.00
7-20 P.M.	8-30 P.M.	1-10'	57.67	66.17	
8-30 P.M.	9-10 P.M.	0-40'		removing core	9.83
9-10 P.M.	11-10 P.M.	2-00	66.17	76.25	
11-10 P.M.	11-40 P.M.	0-30		Pulling core	0.0
11-40 P.M.	12-M.N.	0-20		Taking care of Tools.	

				1-10'	
	10.00				
Three ft of core remained in hole as it did not block off Bottom 3ft remained fast.					
	8.50				
Recovered 1.33 ft more core than was drilled this pull. 7.67 ft ground up and washed out.					
	10.08				
The core all stayed in hole as it did not block off. This core should be recovered later as the operator does not have time this shift.					

Note: The drill cut very fast at 64.00 to 66.00 this may be the section the core was lost.

I could not notice any loss of water.

0.0 28.6 0.0 0.0

vr
Jwb

Hole No. 4-25 Elev. Top 5466 Date 3-7-42

Time		Depth		Core	
From	To	Hr.-M.	From	To	Recov.
8:00 A.M.	10:30 A.M.	2-30	53.0	64.05	
10:30 A.M.	11:00 A.M.	0-30			5 1/2 Ft.
11:00 A.M.	Noon	1-00			
Noon	12:30 P.M.	0-30	Lunch		
12:30 P.M.	1:00 P.M.	0-30	64.05	74.05	
1:00 P.M.	1:15 P.M.	0-15	removing Core		9.90
1:15 P.M.	1:30 P.M.	0-15	Water pressure test		
1:30 P.M.	1:45 P.M.	0-15	Resetting up		
1:45 P.M.	3:00 P.M.	1-15	74.05	84.00	
3:00 P.M.	3:15 P.M.	0-15	Removing Core		9.90
3:15 P.M.	3:30 P.M.	0-15	Greasing Drill		
3:30 P.M.					
			Date 3-7-42		
	4:15 P.M.	0-45	84.00	88.50	
4:15 P.M.	5:25 P.M.	1-10'	removing core		4.20
5:25 P.M.	6:25 P.M.	1-00	88.50	93.25	
6:25 P.M.	6:50 P.M.	0-25	removing core		3.75
6:50 P.M.			Moving to Hole No 3-25		

Inspector Van Horn Foreman P. Betzer Crew No. 9

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M.&S.U.	Hr.-M. Lost
	11.05 ✓				
	all good core. Because of replacement of dull bit by new bit lost 1.4 Ft. of core which destroyed 4.1 more by grinding.				
	10.00 ✓				0-30
	all of core good granite. Hole tested 2/3 cu. Ft. lost at 125/85 in 3 min.				
	9.95 ✓				0-15
	1.50 Ft. of core good granite 1/2 Ft. split showing seam, 3/4 Ft. Fair with indications of seam, and 1/4 Hole ran water at all times 7.15 good granite				
					0-15
	D.P. Curry	M. Kenzie			No 2
	4.50 ✓				
	Core all good Bit broke and blocked the hole was the reason for pulling at 4.5				
	4.75 ✓				
	Core all good - 1 ft remaining in hole				
0.0	40.3	0.0	0.0		

PC [initials]

H Hole No. 3-25 Elev. Top 571.6 Date 3-7-42 Inspector D.R. Curry Foreman Dan McKenzie Crew No. 10
2

Time		Depth		Core	Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & S.U.	Hr. - M. Lost
From	To	Hr. - M.	From	To	Recov.					
6:50 P.M.	8:00 P.M.	1-10	Moving & setting up						1-10	
8:00 P.M.	8:15 P.M.	0-15	bunch							0-15
8:15 P.M.	10:15 P.M.	2-00	73.50	83.50		10.00				
10:15 P.M.	10:45 P.M.	0-30	removing core	10.00						
10:45 P.M.	12:00 A.M.	1-15								

This core was all good, did not have time for another run.

0.0 10.0 0.0 0.0
 no lost

Hole No.	Elev. Top	Date	Inspector	Foreman	Crew No. 11.						
1-25	642.5	3-10-42	Van Horn	P. Betzer	1						
Time		Depth		Core	Perc.	Core	Re-Dr.	W-O.	Time	Hr. M.	
From	To	Hr. - M.	From	To	Recov.	Dr. H.	Dr. H.	H.	H.	M&SU.	Lost
8:00 A.M.	10:30 A.M.	2-30	Moving From	3-25							
10:30 A.M.	11:00 A.M.	0-30	Cleaning hole								
11:00 A.M.	Noon	1-00									
Noon	12:30 P.M.	0-30	Lunch								0-30
12:30 P.M.	1:00 P.M.	0-30	52.40	60.20	6.0		7.80				
1:00 P.M.	1:20 P.M.	0-20	Removing Core		6.0	2.9	core good, 0.42 indicates seam 2 1/2' good granite			0.20	
1:20 P.M.	2:00 P.M.	0-40	60.20	65.00			split core, indicating seam, 6.88 good.				
2:00 P.M.	2:15 P.M.	0-15	Removing Core		3.75	1	4.80				
2:15 P.M.	Moved to	1-0 elev	?		see p. 12	2.9	good granite, then indication of sand with shattered core, 0.85 of core good granite				
						0.0	12.6	0.0	0.0		

PK
10/2/42

Hole No. 1-0 Elev. Top 652.4 Date 3-10-42

Time		Hr.-M.	Depth		Core Recov.
From	To		From	To	
			0	2.0	
2:15 P.M.	2:45 P.M.	0-30	moving & setting up		
2:45 P.M.	3:00 P.M.	0-15	2	3.25	
3:00 P.M.	3:45 P.M.	0-45	3.25	7.00	
3:45 P.M.			Remaining Core		

Hole No. 1-0 Elev. Top 652.4 Date 3-10-42

4:25 P.M.	0-40	removing core	2.75	
4:25 P.M.	4:50 P.M.	0-25	7.00	12.00
4:50 P.M.	5:15 P.M.	0-25	removing core	2.25
5:15 P.M.	6:00 P.M.	0-45	12.00	18.50
6:00 P.M.	6:20 P.M.	0-20	removing core	5.50
6:20 P.M.	7:40 P.M.	1-20	18.50	28.83
7:40 P.M.	8:00 P.M.	0-20	removing core	10.00
8:00 P.M.	8:30 P.M.	0-30	lunch	
8:30 P.M.			Moring to hole No 2	
			see page 13	

Inspector Van Horn Foreman P. Betzer Crew No. 12

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time	Hr.-M.
				M.&S.U.	Lost
2.0					
				Mar. 5, 1942 - Van Horn	
	1.25			0-30	
Note: lost all the water at depth 3.25' re-appeared in old drill hole 3rd 3+24.5' & 3/8" of the axis. As this seam was a surface seam due to blasting drilling was continued.					
	3.75				
D.R. Curry		Dan McKenzie		Crew No 2.	
Top 2.75 good		Bottom 2.25 shattered.			
	5.00				
First 1.75 good		next 1.25 shattered		Next 0.5 good	
	6.50			Next 1.50 shattered.	
First 5.5 good		next 1.0 Shattered.			
	10.33				
all core very good		Top 5.5 one piece.			
Water still coming out of old 0-30 drill hole as described above.					
2.0	26.8	0.0			

pl lost

Hole No. 2-0 Elev. Top 625.8 Date 3-10-42

Inspector D.R. Curry Foreman Dan McKenzie Crew No. 2 ¹³

Time		Depth		Core Recov.
From	To	From	To	
		0	1.7	
8:30 P.M.	9:10 P.M.	0-40		Moving from hole
9:10 P.M.	9:50 P.M.	0-40	1.67	5.67
9:50 P.M.	10:25 P.M.	0-35		Machine out of order
10:25 P.M.	10:40 P.M.	0-15	5.67	6.67
10:40 P.M.	10:55 P.M.	0-15		removing core 5.00
10:55 P.M.	11:00 P.M.	0-05	6.67	7.33
11:00 P.M.	11:10 P.M.	0-10		removing core 0.66
11:10 P.M.	11:55 P.M.	0-45	7.33	12.50
11:55 P.M.	12:05 A.M.	0-10		removing core 2.0

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M.&S.U.	Hr.-M. Lost
1.7 ✓					
(Mar. 5, 1942 - Van Horn)					
No. 1-0	2.50			0-40	
4.00 ✓					
lost water at 2.0 water coming out of crack 3' North of 2.0' lower elev. than collar of hole.					
1-0 ✓					
This core was good					
	0.66 ✓				
Core good Changed bit reason for short run.					
	5.17 ✓				
3.17 core remaining in hole as anchor Pipe pulled out.					

1.7 10.8 0.0 0.0 *pl out*

Hole No.

Elek Top

Date

Inspector

Foreman

Crew No.

Page 14

5-0

527.2

3-12-42

Van Horn

P. Betzer

1

Time		Depth		Core
From	To	From	To	Recov

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & SU.	Hr.-M. Lost
--------------	-------------	-----------	---------	---------------	-------------

0 2.0

2.0 (Mar 9, 1942 - Van Horn)

8:00 A.M. 10:15 A.M. 2:15 Trying to recover Core

from 4-25 & moving to 5-0

2:15

10:15 A.M. 10:30 A.M. 0:15 2.0 3.25

1.25 ✓

10:30 A.M. 10:40 A.M. 0:10 removing core 1.17

all good

10:40 A.M. 11:20 A.M. 0:40 3.25 8.50

3.25 ✓

11:20 A.M. 11:30 A.M. 0-10 removing Core 4.75

3.75 to small split, 1.2 good. All of core good granite

11:30 A.M. Noon 0-30 drilling

0-30

Noon 12:30 P.M. 0-30 lunch

12:30 P.M. 1:20 P.M. 0-50 8.50 17.60

9.10 ✓

1:20 P.M. 1:30 P.M. 0-10 removing Core 9.0

1.0 broken indicates small seam, 8" all good granite

1:30 P.M. 3:15 P.M. 1-45 17.60 27.3

9.75 ✓

3:15 P.M. 3:30 P.M. 0.15 removing Core 9.6

6.9 of core good granite and split & indicating small seam, 3.5 all good.

3:30 P.M. Moving to 5-25, Elev. 502.0 See p 15

2.0

25.3

0.0

0.0

P. Betzer

Hole No. 5-23 Elev. Top 502.9 Date 3-12-42

Inspector D.R. Curry

Foreman Jan McKenzie

Crew No. 2 Page 15

Time		Depth		Core
From	To	From	To	Recov.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & S. U.	Hr. - M. Lost
--------------	-------------	-----------	---------	-----------------	---------------

3:30 P.M.	4:45 P.M.	1-15	Moving & setting up	
4:45 P.M.	5:15 P.M.	0-30	79.5 80.75	
5:15 P.M.	5:55 P.M.	0-40	removing core	1.25
5:55 P.M.	6:10 P.M.	0-15	80.75 82.00	
6:10 P.M.	6:50 P.M.	0-40	removing core	1.25
6:50 P.M.	7:50 P.M.	1-00	Operator tried to	
7:50 P.M.	8:00 P.M.	0-10	82.00	
8:00 P.M.	8:30 P.M.	0-30	lunch	
8:30 P.M.	9:00 P.M.	0-30	87.00	
9:00 P.M.	9:30 P.M.	0-30	removing core	4.38
9:30 P.M.	11:00 P.M.	1-30	87.00 92.59	
11:00 P.M.	11:40 P.M.	0-40	removing core	0.75

				1-15	
	1.25				
	Core good				
	1.25				
	Core good		Core tube has a dent		
			in it and blocks with 1.25 of core.		
			Repair tube (could not.)		1-00
			Will use 5.00 tube.		
	5.00				
	Core good				
	5.59				
			Top 0.75 good all the rest fractured.		
			This core seemed good but ground up		
			in tube by going too far to block.		

0.0 13.1 0.0 0.0

1.25

Hole No. Elev. Top Date

4-25

546.6

3-14-42

Inspector

Van Horn

Foreman

P. Betzec

Crew No.

Page 16

Time		Depth		Core
From	To	Hr.-M.	From To	Recov.

8:00 A.M. 8:30 A.M. 0-30 Greasing & setting up

8:30 A.M. 9:30 A.M. 1-0 109.75 113.67

9:30 A.M. 9:45 A.M. 0-15 Removing Core

9:45 A.M. moved to 4-0 elev see p. 17

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & SU.	Hr.-M. Lost
--------------	-------------	-----------	---------	---------------	-------------

Due to bad seam at the 97 Foot depth it was deemed advisable to continued drilling beyond the final depth of 114.7 to depth.

~~3.92~~

3.8

0.0

3.8

0.0

al
Det.

Hole No.

Elev. Top

Date

Inspector

Foreman

Crew No.

Page 17

5-2

527.2

3-14-42

Van Ness

P. B. [unclear]

Time		Hr.-M.	Depth		Core Recov.
From	To		From	To	
			0	27.3	
9:45 A.M.	10:30 A.M.	0-45	moving & setting up		
10:30 A.M.	11:30 A.M.	1-0	27.3	36.5	
11:30 A.M.	11:45 A.M.	0-15	removing Core		5.10
11:45 A.M.	Noon	0-15	drilling		
Noon	12:30 P.M.	0-30	lunch		
12:30 P.M.	1:15 P.M.	0-45	36.50	41.25	
1:15 P.M.	1:30 P.M.	0-15	removing Core		4.92
1:30 P.M.	2:45 P.M.	1-15	41.25	46.25	
2:45 P.M.	3:00 P.M.	0-15	removing Core		3.75
3:00 P.M.	4:20 P.M.	1-20			

Hole No. 5-0

Elev. 577.7

Date 3-14-42

Inspector

Foreman

2

	4:20 P.M.	1-20	46.25	51.17	
	4:20 P.M.	4:50 P.M.	0-30	removing core	2.00
				Driller went home	

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time	
				M.&S.U.	Hr.-M. Lost
Washed out by Allen See book 603, pg. 12				27.3	
Note: This gravel hole caved at depth 15' & 24'. Had to drill some to get barrel to bottom 27.30				0-45	
1.17 stuck in barrel, 5.10 good granite rest shattered					
Hole ran water at all times					0-30
4.75					
2.40 good granite to 3' from seam last bit good					
5.0					
core recovered was good rest slightly shattered.					

0.0 23.9 0.0 27.3

No
lost

Hole No.
5-23Elev. Top
502.9Date
3-17-42Inspector
J.R. CurryForeman
Paul BetzerCrew No.
2 Page 18

Time		Depth		Core	Perc.	Core	Re-Dr.	W-O.	Time	Hr.-M.
From	To	Hr.-M.	From	To	Dr. H.	Dr. H.	H.	H.	M. & SU.	Lost
8:00 a.m.	8:25 a.m.	0-25	(left from 3-16-42) 106.91	111.91		5.00				
8:25 a.m.	9:05 a.m.	0-30	removing core							
9:05 a.m.	10:35 a.m.	1-30	111.91	117.00		5.09				
10:35 a.m.	11:05 a.m.	0-30	removing core							
11:05 a.m.	11:45 a.m.	0-40	117.00	122.00		5.0				
11:45 a.m.	12: N	0-15	removing core							
12: N	12:30 PM	0-30	lunch							
12:30 PM	12:40 PM	0-10	removing core			5.00				
12:40 PM.			moving to hole 5-47 see page 21.							
					0.0	15.1	0.0	0.0		plv

Hole No.	Elev. Top	Date
1-0	652.4	3-17-42
Time	Depth	Core
From	To	Recov.

Inspector	Foreman	Crew No.
J.R. Curry	Paul Betzer	I
Perc. Dr. H.	Core Dr. H.	Re-Dr. H.
W-O. H.	Time M. & S.U.	Hr.-M. Lost

8:00 a.m.	9:15 a.m.	1-15	38.8	41.00	
9:15 a.m.	9:50 a.m.	0-35	removing core		2.20
9:50 a.m.			Moving to hole 4-0		
			see page 20.		

	2.20				
			Core good	Lost all water at 40.5'	
			Water does not reappear	on Face	
			of Key Way.		

0.0	2.3	0.0	0.0		
-----	-----	-----	-----	--	--

✓

Hole No. 40 Elev. Top 559.0 Date 3-17-42

Inspector D.R. Curry Foreman Paul Betzer Crew No. 1 Page 20

Time		Depth		Core
From	To	From	To	Recor.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & S.U.	Hr.-M. Lost
--------------	-------------	-----------	---------	----------------	-------------

9:50 AM	11:20 AM	1-30	Moving & Setting up		
11:20 AM	12:00 N	0-40	0.0		
12:00 N	12:30 PM	0-30	Lunch		
12:30 PM	1:30 PM	1-00			
1:30 PM	2:10 PM	0-40	Dozer brake		
2:10 PM	2:25 PM	0-15	15.33		
2:25 PM	3:40 PM	1-15	15.33	24.50	
3:40 PM	3:55 PM	0-15	removing core 10.00		
3:55 PM			24.50		
3:55 PM	4:42 PM	0-47	24.50	31.2	6.5
Note at 27' very red looking tailings coming out of hole for a couple of tenths.					
P.M.	P.M.				
4:42	4:55	0-13	Removing core		
4:55	5:55	1-0	31.2	41.5	10.0
5:55	6:10	0-15	Removing core		
6:10	7:17	1-07	41.5	52.1	10.0
7:17	7:30	0-13	Removing core		

				1-30	
					0-30
			main air line		0-40
			15.33 ✓		
			9.17 ✓		
			core good some core left in hole from last drilling		
			6.7 ✓	core good except at 27' it looks a little softer.	
			Adolph Beck Inspector 4 P.M. to 8 P.M.		
			10.3 ✓	Core good tight seams at 32' and 36.2	
			10.6 ✓	good core No water lost	

0.0 36.8 15.3 0.0

28/

Hole No. 5-47 Elev. Top 492.8 Date 3-17-42

From	To	Hr.-M.	Depth	Core	
From	To	Hr.-M.	From	To	Recov.

12:40 P.M.	1:10 P.M.	0-30	Moving & setting up	
1:10 P.M.	1:30 P.M.	0-20	9.00	
1:30 P.M.	2:10 P.M.	0-40	Hozer broke	
2:10 P.M.	3:10 P.M.	1-00		22.75
3:10 P.M.	3:30 P.M.	0-20	removing core	0.75
3:30 P.M.	4:00 P.M.	0-30		22.75 24.75

Inspector J.R. Curtis Foreman Paul Betzer Crew No. 2 Page 21

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M.&S.U.	Hr.-M. Lost
--------------	-------------	-----------	----------	--------------	-------------

				0-30	0-30

Main air line ✓
 This core was left in hole previously.
 13.75
 2.00

0.0	0.0	15.8	0.0	/	21
-----	-----	------	-----	---	----

Hole No

Elek Top

Date

Inspector

Foreman

Crew No

3-0

3-17-92

Adolph Beck

Richardson

2

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Time		Depth		Core
From	To	From	To	Recol.
^{P.m} 9:30	^{P.m} 9:55	0-25	0	25.9

Perc.	Core	Re-Dr.	W. O.	Time	Hr.-M.
Dr. H.	Dr. H.	H.	H.	M.&S.U.	Last
			25.9		

0.0

0.0

0.0

25.9

pl

Hole No. Elev. Top Date

3-0 527.2 3-19-92

Inspector: U.P. Curry Foreman: Paul Betzer Crew No. I Page 24

Time		Depth		Core
From	To	From	To	Recd.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.O. H.	Time M. & S. U.	Hr.-M. Lost
--------------	-------------	-----------	---------	-----------------	-------------

8:00 a.m. 10:20 a.m. 2-20 96.5 106.66
 10:20 a.m. 10:50 a.m. 0-30 removing core 10.10
 10:50 a.m. 11:15 a.m. 0-25 waiting for test on hole.
 10:15 a.m. 12:00 N. 1-45 106.66
 12:00 N 12:30 P.M. 0-30 lunch
 12:30 P.M. 2:30 P.M. 2:-00 116.66
 2:30 P.M. 3:05 P.M. 0-35 removing core 10.00
 3:05 P.M. 3:45 P.M. 0-40 116.66 121.83
 3:45 P.M. 4:10 P.M. 0-25 removing core 5.10
 4:10 P.M. moving to hole 4-0

10.16
 core all good.
 121.83
 16.66
 5.17
 10.00
 core all good.
 5.17
 core all in one piece except that in bit.

0.0 25.3 0.0 0.0

Hole No	Elev. Top	Date	Depth	Core	
From	To	Hr.-M.	From	To	Recon.
2-0	---	3-19-42			

Inspector	Foreman	Crew No
I.R. Curry	Paul Betzer	2

Page 25

8:00am	9:15am	1-15	43.00	50.50	
9:15am	9:40am	0-25	removing core		7.25
9:40am	moving to hole 1-0				
see page 26.					

Perc.	Core	Re-Dr.	W.O.	Time	Hr.-M.
Dr. H.	Dr. H.	H.	H.	M. & S.U.	Lost
	7.50				
	Core good.				

0.0 7.5 0.0 0.0

Hole No

Elev. Top

Date

Inspector

Foreman

Crew No Page 26

1-0

3-19-42

L.R. Curry

Paul Betzer

2

Time		Depth		Core
From	To	From	To	Recor.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.O. H.	Time M. & SU.	Hr.-M. Lost
--------------	-------------	-----------	---------	---------------	-------------

9:40 a.m. 10:10 a.m. 0-30 Moving & Setting up.

10:10 a.m. 11:40 a.m. 1-30 41.00 51.00

11:40 a.m. 12:00 N 0-20 removing core 6.33

12:00 N 12:30 P.M. 0-30 lunch.

12:30 P.M. 12:55 P.M. 0-25 51.00

12:55 P.M. 1:30 P.M. 0-35 shut down for

1:30 P.M. 2:10 P.M. 0-40 51.00 56.00

2:10 P.M. 2:30 P.M. 0-20 removing core 4.50

2:30 P.M. 3:15 P.M. 0-45 56.00 57.5

3:15 P.M. 3:40 P.M. 0-25 removing core 1.5

3:40 P.M. 4:00 P.M. 0-20 did not have a

10.00 ✓

this section was full of seams.

lack of water.

5.00 ✓

core badly broken.

1.50 ✓

core good.

hole ready to move too.

0-30

0.30

0-35

0-20

0.0

16.5

0.0

0.0

Hole No 4.0 Elev. Top 559.0 Date 3-19-42

Inspector Adolph Beck Foreman Richardson Crew No 2 Page 27

Table with columns: Time (From, To), Hr.-M., Depth (From, To), Core (Recol.). Rows include drilling times and depths, with notes like 'Remove core', 'Drilling', 'Lunch', and 'Moving'.

Table with columns: Perc. Dr. H., Core Dr. H., Re-Dr H., W.O. H., Time M. & S.U., Hr.-M. Lost. Rows include notes like 'Moving', 'Setting up', 'core very good', 'lost in previous pull', and 'very good core'.

0.0 27.0 0.0 52.1

Hole No

3-0

Elev. Top

Date

3-19-42

Inspector

Adolph Back

Foreman

Crew No

Page 28

Time		Depth		Core	
From	To	Hr.-M.	From	To	Recol.
^{P.M.} 11:00	^{P.M.} 11:30	0-30	0	50.5	

Perc.	Core	Re-Dr.	W.O.	Time	Hr.-M.
Dr. H.	Dr. H.	H.	H.	M. & S.U.	Lost
			50.5		

0.0

0.0

0.0

50.5

Hole No 3-0 Elev. Top 592.3 Date 3-21-42

Inspector D.P. Curry Foreman Paul Betzer Crew No I (Betzer) Page 31

Time		Depth		Core
From	To	From	To	Recor.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M. & S.U.	Hr.-M. Lost
--------------	-------------	-----------	----------	----------------	-------------

9:55 a.m.	11:00 a.m.	1-05	Moving & Setting up.	
11:00 a.m.	12:00 N	1-00	78.6	
12:00 N	12:30 P.M.	0-30	Lunch	
12:30 P.M.	1:05 P.M.	0-35	89.17	
1:05 P.M.	1:35 P.M.	0-30	removing core	10.13
1:35 P.M.	Moving to hole	3-38		

				1-05	
					0-30
	10.6				
	11.7				
core was all very good some ground up and washed out.					

0.0	10.6	0.0	0.0		
-----	------	-----	-----	--	--

P.H.

Hole No 3-38 Elev. Top 556.4 ? Date 3-21-41

Inspector D.P. Curry Foreman Paul Betzer Crew No I (Betzer) Page 32

Time		Hr.-M.	Depth		Core Recor.
From	To		From	To	
			0	2.0	
1:35 P.M.	2:10 P.M.	0-35	Moving & setting up.		
2:10 P.M.	2:50 P.M.	0-40	2.0	7.25	
2:50 P.M.	3:00 P.M.	6-10	removing core 5.0		
3:00 P.M.	3:40 P.M.	0-40	7.25	12.3	
3:40 P.M.	3:50	0-10	Remove core 4.9		
3:50 P.M.	4:53	1-03	12.3	23.0, 10.0	
4:53 P.M.	5:13	0-20	Remove core		

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & S.U.	Hr.-M. Lost
2.0	(Mar. 20, 1942 - Curry)				
	3 ✓ 5.25			0-35	
	core very good.				
	5.0 ✓				
	10.7 ✓		very good core		
			very good core		

Adolph Beck, Insp. Richardson, Fore.
4:00 P.M. to 12 P.M.

2.0 21.0 0.0 0.0

pl. 44

Hole No 17-25 Elev. Top 552.9 Date 3-21-42

Inspector D.P. Curry Foreman Paul Betzer Crew No 2 (McKenzie) Page 33

Time		Depth		Core
From	To	Hr.-M.	From To	Recov.
			0 1.5	
1:25 P.M.	1:40 P.M.	0-15	Moving & Selling up.	
1:40 P.M.	2:00 P.M.	0-20	1.5 2.5	
2:00 P.M.	2:10 P.M.	0-10	removing core	1.0
2:10 P.M.	2:50 P.M.	0-40	2.5 8.5	
2:50 P.M.	3:00 P.M.	0-10	removing core	1.33
3:00 P.M.	3:40 P.M.	0-40	8.5 17.5	
3:40 P.M.	3:55 P.M.	0-15	removing core	2.0
3:55 P.M.	4:25	0-30	17.5 20.0	0.9
4:25 P.M.	4:40	0-15	Remove core	
4:40	6:13	1-33	20.0 26.5	1.8
6:13	6:30	0-17	Remove core	
moving to Hole # 13-25				

Perc. Dr. H.	Core Dr. H.	Re. Dr. H.	W.-O. H.	Time M. & S.U.	Hr.-M. Lost
1.5					
	1.0			0-15	
	Core good				
	6.0				
	core very broken most of it gone				
	9.0				
	hit an open seam carrying water at 14.0				
	Broken up very small.				
	Adolph Book Insp. Richardson Fore.				
	4:00 P.M. to 12:00 P.M.				
	2.5				
	Broken up small				
	6.5				
	1 piece 0.5 long rest rest broken up.				
1.5	25.0	0.0	0.0		

P.L. H.

Hole No 4.0 Elev. Top 559.0 Date 3-21-42

Inspector Adolph Beck Foreman Richardson Crew No 2 Page 34

Time		Depth		Core
From	To	Hr.-M.	From To	Recor.
5-13 PM	6:00	0-47		
6:00 PM	8:00	2-00		Redrilling
8:00	8:30	0-30		Lunch
8:30	9:00	0-30	0	79.1
9:00	11:05	2-05	79.1	89.1 98
11:05	11-20			Remove core

As they would not have time to make another run before 12: P.M., as they did not want to leave the drill in the hole over Sunday.

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M. & S.U.	Hr.-M. Lost
				0-47	
	109	79.1			
					very good core
0.0	10.0	79.1	0.0		

R. A.

Hole No 13-25 Elev. Top 479.6 Date 3-21-42

Inspector H. Ralph Beck Foreman Richardson Crew No 2 Page 35

Time		Depth		Core	Perc.	Core	Re.-Dr.	W.-O.	Time	Hr.-M.
From	To	Hr.-M.	From	To	Dr. H.	Dr. H.	H.	H.	M. & SU	Lost
6:30	7:07	0-37	0	2.0	2.0				0.37	
7:07	7:30	0-23	2	4 ³		2 ³				
7:30	7:40		Remove core							

The pipe nipple came loose after reaching a depth of 6.5 and as the top was badly shattered they were unable to hold it in place so this hole was abandoned.

A new jack hammer hole was drilled and the pipe set at 13-27.

0.0 0.0 0.0 0.0

pc. H.

Hole No 3-38 Elev. Top 556.4 Date 3-24-42

Inspector W.R. Curry Foreman Paul Betzer Crew No page 37 I (Betzer)

Time		Depth		Core	Perc.	Core	Re-Dr.	W-O.	Time	Hr.-M.
From	To	Hr.-M.	From	To	Dr. H.	Dr. H.	H.	H.	M. & S.U.	Lost
11:00 am	12:00 PM	1-0	Moving & setting up							1-0
12:00 PM	12:30 PM	0-3	Lunch							
12:30 PM	3:00 PM	2-30	40.6 50.6		10.0 ✓		Driller had trouble getting drill in hole.			
3:00 PM	3:20 PM	0-20	removing core	10.0	Core good					
3:20 PM	4:30	1-10	50.6 60.6	10.0	10.0 ✓		Adolph Bock Insp. 4:00 PM			
4:30 PM	5:00	0-30	Remove core				very good core			
5:00 PM	6:15	1-15	60.6 70.6	9.9	10.0 ✓		very good core			
6:15 PM	7:45	1-30	70.6 81.0	9.9	10.4 ✓		very good core			
7:45 PM	8:00	0-15	Remove core							
8:00	8:30	0-30	Lunch							0-30
			Moving to hole 2-39							
					0.0	40.4	0.0	0.0		

Hole No 20-25 Elev. Top 650.0 Date 3-24-42

Inspector Dr. R. Curry Foreman Paul Betzer Crew No 2 (McKenzie) Page 38

Time		Depth		Core
From	To	Hr.-M.	From To	Recor.
			0 1.3	
12:30 P.M.	1:00 P.M.	0-30	Moving & Setting up	
1:00 P.M.	1:15 P.M.	0-15	1.3 2.5	
1:15 P.M.	1:25 P.M.	0-10	removing core 1.1	
1:25 P.M.	2:30 P.M.	1-05	2.5 7.5	
2:30 P.M.	2:45 P.M.	0-15	removing core 4.25	
2:45 P.M.	3:10 P.M.	0-25	7.5 13	
3:10 P.M.	3:20 P.M.	0-10	removing core 4.0	
3:20 P.M.	3:45 P.M.	0-25	13.0 17.5	
3:45 P.M.	4:00 P.M.	0-15	removing core 1.25	
4:00 P.M.	5:00 P.M.	1-00	17.5 22.5 59	
5:00 P.M.	5:15	0:15	Remove core	
5:15 P.M.	6:15	1:00	22.5 27.5 49	
6:15 P.M.	6:30	0:15	Remove core	
			Moving to hole # 11-25	

Perce	Core	Re-Dr.	W.-O.	Time	Hr.-M.
Dr. H.	Dr. H.	H.	H.	M.&S.U.	Lost
1.3					
				(Mar. 23, 1942 - Curry)	
				0-30	
	1.2 ✓				
	core good				
	5.0 ✓				
	5.5 ✓				
	core very broken				
	4.5 ✓				
	Very poor core				
	59 ✓			good core	
	5.0 ✓			good core	

1.3 26.2 0.0 0.0

Hole No.

11-25

Elev. Top

Date

3-24-42

Inspector

Adolph Beck

Foreman

Richardson

Crew No. Page 39

2

Time		Depth		Core Recor.	Perc. Dr. H.	Core Dr. H.	Re. Dr. H.	W. O. H.	Time	Hr.-M.
From	To	From	To						M&S.U.	Lost

6:30 8:00 1-30

8:00 8:30 0-30

8:30 10:00 1-30

moving

Lunch

1-30

0-30

1-30

set pipe for drilling
but the grout was not
hard enough to start
so the operator left
at 10 P.M.

0.0

0.0

0.0

0.0

Hole No.
2-39

Elev. Top
596.5

Date
3-24

Inspector
Adolph Beck

Foreman
Richardson

Crew No. Page 40
2

Time		Depth		Core	
From	To	Hr.-M.	From	To	Recol.

8:30	10:00	1-30	0	2.0	
10:00	10:30	0-30	2 ✓	4 ✓	12

The pipe nipple
be reset so no

10:30	11:00	0-30	Reset nipple		
-------	-------	------	--------------	--	--

Perc.	Core	Re-Dr.	W-O.	Time	Hr.-M.
Dr. H.	Dr. H.	H.	H.	M.&S.U.	Lost

2.0	(Mar. 24, 1942 - Curry)			1:30	
	2 ✓				

came loose and had to
further drilling was done

2.0

2.0

0.0

0.0

Hole No.

3-38

Elev Top

564.4

Date

3-24-42

Inspector

Allen

Foreman

Crew No. Page 41

Time		Depth		Core	Perc.	Core	Re.-Dr.	W.-O.	Time	Hr.-M
From	To	Hr.-M.	From	To	Dr. H.	Dr. H.	H.	H	M. & S.U.	Lost
8:20AM	9:00AM	0:40	0	40.6					40.6'	
See book 602 pg. 20										

0.0

0.0

0.0

40.6

Hole No.
10-2325Elev. Top
442.4Date
3-26-42Inspector
D.P. CurryForeman
Paul BetzerCrew No. Page 42
2. (McKenzie)

Time		Depth		Core	Perc.	Core	Re-Dr.	W-O.	Time	Hr. - M.
From	To	Hr. - M.	From	To	Dr. H.	Dr. H.	H.	H.	M. & S.U.	Lost
			0	1.3	1.3					
8:00 a.m.	8:45 a.m.	0-45	1.33	2.5						
8:45 a.m.	8:55 a.m.	0-10	removing core	1.1						
8:55 a.m.	9:50 a.m.	0-55	2.5	11.5						
9:50 a.m.	10:05 a.m.	0-15	removing core	5.0						
10:05 a.m.	10:50 a.m.	0-45	11.5	19.0						
10:50 a.m.	11:00 a.m.	0-10	removing core	6.33						
11:00 a.m.	11:30 a.m.	0-30	19.0	23.0						
11:30 a.m.	11:40 a.m.	0-10	removing core	4.0						
11:40 a.m.	Driller does not have a hole to set up on.									
					1.3	21.7	0.0	0.0		

Inspector
D.P. CurryForeman
Paul BetzerCrew No. Page 42
2. (McKenzie)Perc.
Dr. H.Core
Dr. H.Re-Dr.
H.W-O.
H.Time
M. & S.U.Hr. - M.
Lost

1.3

1.17 ✓

Core good

9.0 ✓

A of core gone Rest good with a few seams.

7.5 ✓

a few seams & some core gone.

4.0 ✓

Core good with one seam.

lost some water at this depth.

1.3

21.7

0.0

0.0

Hole No. 10-23²⁵ Elev. Top 442.4 Date 3-28-42

Inspector H.R. Curry Foreman Paul Betzer Crew No. I. (Betzer)

Time		Hr.-M.	Depth		Core Recor.
From	To		From	To	
12:30 PM	2:10 PM	1-40	50.6	61.4	
2:10 PM	2:35 PM	0-25	removing core		8.5
2:35 PM	5:10 PM	2-35	61.4	71.2	8.5
5:10 PM	5:30 PM	0-20	Remove Core		
5:30 PM	7:20	1-50	71.2	82.6	10.7
7:20	7:35	0-15	Remove Core		
7:35	7:45	0-10	Water test		
7:45	9:30	1:45	82.6	93.5	10.2
9:30	10:00	0:30	Remove Core		
10:00	11:30	1:30	93.5	104.5	10.7
11:30	12:00		Remove Core		

Perc. Dr. H.	Core Dr. H.	Re-Dr. W.-O.		Time	
		H.	H.	M. & S.U.	Hr.-M. Lost
	11.4				
core	good	some	gone		
	9.8	core	recovered	is	very good.
		Add'l ph Back Insp 4:00 PM to 12:00 PM			
	11.4	very	good	core	
		9" in one piece			
		on this hole only lost			
		3 cu. ft at 125 lbs so am			
		going on down to 100 ft.			
	10.9	6'	very	good	core
		balance broken up.			
	11.9	very	good	core	
		95' in one piece			

0.0 54.5 0.0 0.0

Hole No.	Elev. Top	Date
9-23 ²⁵	442.0	3-28-42
Time	Depth	Core
From To Hr.-M.	From To	Recon.

8:00 a.m.	8:50 a.m.	0-50	3.5	8.5	
8:50 a.m.	9:00 a.m.	0-10	removing core		
9:00 a.m.	10:00 a.m.	1-00	8.5	13.5	
10:00 a.m.	10:15 a.m.	0-15	removing core		
10:15 a.m.	11:00 a.m.	0-45	13.5	18.5	
11:00 a.m.	11:15 a.m.	0-15	removing core		
11:15 a.m.	12:00 a.m.	0-45	18.5		
12:00 N	12:30 P.M.	0-30	Lunch		
12:30 P.M.	1:00 P.M.	0-30		29.5	
1:00 P.M.	1:15 P.M.	0-15	removing core		
1:15 P.M.	moving to hole 8-23 ²⁵				

Inspector		Foreman		Crew No. Page 44	
D.R. Curry		Paul Betzer		2-McKenzie	
Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W-O. H.	Time M. & S. U.	Hr.-M. Lost
	5.0 ✓				
	5.0 ✓				
	5.0 ✓				
	11.0 ✓				0-30
0.0	26.0	0.0	0.0		

Hole No.

8-23²⁵

Elev. Top

Date

3-28-42

Inspector

W.R. Curry

Foreman

Paul Betzer

Crew No.

2 (McKenzie)

Page 45

Time		Depth		Core
From	To	From	To	Recor.
		0	1.0	
1:15 P.M.	1:35 P.M.	0-20	Moving & Set up.	
1:35 P.M.	2:00 P.M.	0-25	1.0 3.5	
2:00 P.M.	2:10 P.M.	0-10	removing core	1.9
2:10 P.M.	3:00 P.M.	0-50	3.5 11.5	
3:00 P.M.	3:15 P.M.	0-15	removing core	5.0
3:15 P.M.	4:00 P.M.	0-45	11.5 21.5	
4:00 P.M.	4:10 P.M.	0-10	removing core	10.0

Perc. Dr. H.	Core Dr. H.	Re-Dr. H.	W.-O. H.	Time M. & S.U.	Hr.-M. Lost.
	1.0				
	2.5 ✓				
	core good				
	8.0 ✓				
	core good				with some missing
	10.0 ✓				
	core very good				
1.0	20.5	0.0	0.0		

Hole No.

14-25

Top Elev.

513.0

Date

3-28-42

Inspector

Adolph Book

Foreman

Richardson

Crew No.

2

Page 46

Time		Hr.-Min.	Depth		Core Recor.	Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time (Hr.-Min.)	
From	To		From	To						M.&S.U.	Lost
4:00	5:00	1-00								1:00	
5:00	7:30	2-30	0	26.5				26.5			
7:30	8:15	0-45	26.5	30 ⁰	19		35		Core recovered in short pieces		
8:15	8:25	0-10			Remove Core						
8:25	9:45	1-20	30 ⁰	41 ⁰	8 ³		11 ⁰		Core recovered in short pieces		
9:45	10:00	0-15			Remove Core						
10:00	11:30	1-30	41 ⁰	47 ⁰	4 ⁰		6 ⁰		Core recovered in short pieces		
11:30	11:45	0-15			Remove Core				This hole lost some water at 40'		

0.0

20.5

26.5

0.0

Hole No.
9-23²⁵Top Elev.
442.0Date
3-31-42Inspector
D.R. CurryForeman
Paul BetzerCrew No. Page 47
I (Betzer)

Time		Depth		Core	Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time	(Hr.-Min.)
From	To	Hr.-Min.	From	To					Recov.	M.&S.U.
8:00 a.m.	8:45 a.m.	0-45	moving & Set up.						0:45	
8:45	12:00 N	3-15	0.0	29.5			29.5			
12:00 N	12:30 P.M.	0-30	lunch.							0-30
12:30 P.M.	2:30 P.M.	2-00	29.5	35.5		6.0				
2:30 P.M.	2:50 P.M.	0-26	removing core 1.75							
2:50 P.M.			crew working							
					0.0	6.0	29.5	0.0		

0.0

6.0

29.5

0.0

Hole No.		Top Elev.		Date		Inspector		Foreman		Crew No.	
8-2325		442.3		3-31-42		D.R. Curry		Paul Betzer		21 Simmons	
Time		Depth		Core		Perc.	Core	Re-Dr.	W.O.	Time	Hr-Min
From	To	Hr.-Min.	From	To	Recov.	Dr. ft.	Dr. ft.	ft.	ft.	M&S.U.	Last
8:00 a.m.	8:30 a.m.	0-30	Moving & Setup.							0-30	
8:30 a.m.	11:30 a.m.	3-00	0.0	21.5				21.5 ✓			
11:30 a.m.	12:00 N	0-30	21.5								
12:00 N	12:30 P.M.	0-30	Lunch								
12:30 P.M.	1:10 P.M.	0-40		25.5			4.0 ✓				
1:10 P.M.	1:30 P.M.	0-20	removing core	4.0				good core			
1:30 P.M.	2:50 P.M.	1-20	25.5	33.0			7.5 ✓				
2:50 P.M.	3:10 P.M.	0-20	removing core	5.75				core broken very short.			
3:10			crew working on					recovering tools in hole 5-47			
<p>Note: Redrilling from 0 to 20.0 shown in book 584, Mar 30, 1942</p>											
						0.0	11.5	21.5	0.0		

Hole No.
10:23²⁵

Top Elev.

Date

3-31-42

Inspector

Adolph Back

Foreman

Crew No.

Page 49

Time		Hr.-Min.	Depth		Core Recov.	Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time	Hr.-Min.
From	To		From	To						M&SU.	Last

6:30 ^{PM}	7:20	0-50	0	114.5					114.5		
--------------------	------	------	---	-------	--	--	--	--	-------	--	--

0.0 0.0 0.0 114.5

Hole No.

Top Elev.

Date

Inspector

Foreman

Crew No.

Page 50

11-0

3-31-42

Adolph Bock

Time		Hr.-Min.	Depth		Core Recov.
From	To		From	To	

7:25 PM	7:40	0-15	0	25.6	
---------	------	------	---	------	--

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&SU.	Hr.-Min. Lost
---------------	--------------	------------	----------	-------------	---------------

			25.6		
--	--	--	------	--	--

0.0

0.0

0.0

25.6

Hole No.

11-23²⁵

Top Elev.

Date

3-31-42

Inspector

Adolph Bock

Foreman

Crew No.

Page 51

Time			Depth		Core
From	To	Hr.-Min	From	To	Recov.

7:45 8-00 0-15

8:00 8-30 0-30

8:30 9-10 0-40

0 52

Perc. Dr.ft.	Core Dr.ft.	Re-Dr. ft.	W.O. ft.	Time M&SU.	Hr.-Min. Last
--------------	-------------	------------	----------	------------	---------------

52

0-30

Balance of this hole
will have to be redrilled
as it is too hard to wash
out.

0.0

0.0

0.0

52.0

Hole No.	Top Elev.		Date		
11-0	---		4-2-42		
Time		Depth		Core	
From	To	Hr.-Min.	From	To	Recov.
4:00 PM	5:20 PM	1-20	45 ⁰	56 ⁶	4 ⁵
5:20 PM	5:40 PM	0-20			Remove Core
5:40 PM	6:45 PM	1-05	56 ⁶	67 ⁰	4 ⁴
6:45 PM	7:00 PM	0-15			Remove Core
7:00 PM	7:35 PM	0:35	67.0	73.0	2 ⁵
7:35 PM	7:50 PM	0-15			Remove Core
7:50 PM	8:00 PM	0-10			
8:00 PM	8:30	0-30			Lunch
8:30 PM	9:30	1:00	73 ⁰	81 ⁰	5 ⁵
9:30 PM	9:40	0-10			Remove core
9:40 PM	9:55	0-15	81 ⁰	82.5	1 ³
9:55 PM	10:15	0:20			Remove core
10:15 PM	11:20		82.5	94 ⁰	8 ⁰
11:20 PM	12:00				Remove core
12:10 AM	2:30 AM	2:20	94 ⁰	105 ⁰	10 ¹⁰
4 ⁰⁰ AM	5 ⁴⁵ AM	1:45	105	116.2	11 ⁰
7 ⁴⁵ AM					

Inspector		Foreman		Crew No	
Adolph Back		Richardson		2	
Page 52					
Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M&S.V.	Hr.-Min. Last
	11.5				core in short pieces.
	10.4				core recovered in short pieces.
	6.0				
Water tested at 73' to 125' lb and only lost 1 1/3 cu. ft in 3"					
	8 ⁰				4.0' good core rest broken. 0-30
	1.5				core broken
	11.5				
McCowan, Insp		Mckenzie			
	11.0				Water tested Hold tight.
	11.2				Bit lost & recovered.
0.0	71.2	0.0	0.0		

Hole No.

Top Elev.

Date

Inspector

Foreman

Crew No.

Page 54

7-23

4-2-42

Adolph Bock

Time		Depth		Core	
From	To	Hr.-Min.	From	To	Recon.

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&SU.	Hr.-Min. Lost
---------------	--------------	------------	----------	-------------	---------------

7100

7120

0-20

0

30

30

0.0

0.0

0.0

30.0

Hole No.	Top Elev.	Date	Depth		Core
From	To	Hr.-Min.	From	To	Recov.
11-0	448.6	9-3-42			

7:45 AM	9:45 AM	2-00	116.2	127.	
9:45	10:15	0-30	removing core	10.5	
10:15 AM	12: N	1-45	127.0		
12: N	12:30 PM	0-30	lunch		
12:30 PM	1:10 PM	0-40	136.0	136.0	
1:10 PM	1:50 PM	0-40	removing core	8.5	
1:50	3:20	2-50	136	146.5	
3:20	3:50	0-30	removing core	7.0	
3:50 PM	5:50 PM	2-0	146.5	156	8.8
5:50 PM	6:30 PM	0-40			Remove core
6:30 PM	7:20	0-50	156	161	3.3
7:20 PM	7:55	0-35			Remove core

moving hole # 10-23²⁵

This completes this hole

Inspector		Foreman		Crew No.	
D.R. Curry		Paul Betzer		(Betzer) Page 56	
Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&S.U.	Hr.-Min Last
	10.8				
	core very good				
	hole was water tested				
	at 127.0' and 136.0'				0-30
	9.0				
	core very good.				
	10.5				
	core recovered was very good.				
	Adolph Bock Inspector 4: AM				
	9.5				to 12 P.
	core very good				
	5.0				
	core recovered good.				
0.0	44.8	0.0	0.0		PL

Hole No. 10-23-25
 Top Elev. 442.4
 Date 4-3-42

Inspector Adolph Back
 Foreman Richardson
 Crew No. 2 Page 58

Time		Hr.-Min.	Depth		Core Recov.
From	To		From	To	
7:55	8:55	1-00			
8:55	9:55	1-00	139.0	150.9	10.1
9:55	10:45	0-50	155.1		Remove Core

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time	Hr.-Min.
				M.&SU.	Last
	11.9			1-00	
					Very good core

4-4-42 Graveyard
 150.9 162.0 10.2

McCown,
 11.1 Core broken 6" to 30" pieces

0.0 23.0 0.0 0.0 PL

Hole No. 9-0
 Top Elev. 440.8
 Date 4-3-42

Inspector Adolph Bock
 Foreman Richardson
 Crew No. 2
 Page 59

Time		Hr.-Min.	Depth		Core Recov.
From	To		From	To	
9-30 PM	9-50	0-20	0	2.0	
9-50	10:10	0-20	2	3.5	12
10-10	10:20	0-10			Remove CORE
10-20	10:55	0-35	3.5	9.2	5.0
10-55	11:00				Remove CORE

Perc. Drift	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time	Hr.-Min.
				M.&S.U.	Lost
				0-20	
20	(April 1, 1942-Curry)				
	15 ✓			good core	
	5.7 ✓			good core	

4-4-42 McCown Insp.
 12:15 1-20 9.5 19.5 10.0
 1:00 1:50 50 19.5 24.5 5.0

Foreman
 McKenzie Gys shift
 10.5³ Core broken 1" to 6"
 5.0 ✓ Core broken 1" to 42"

2.0 22.5 0.0 0.0

PL

Hole No.
8+23

Top Elev.
442.3

Date
4-4-42

Inspector
McCown

Foreman
McKenzie

Crew No.
Page 60

Time		Depth		Core
From	To	From	To	Recov.

2-35	4-50	2-15	55'	65'	
2-35	4-50	2-15	53'	65'	5.5'
4-50	7-45	2-55	65'	75'	6.7'

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&S.U.	Hr-Min. Lost
---------------	--------------	------------	----------	--------------	--------------

	10.0				core broken 1" to 6"
	10.0				Hole rips water core broken 1" to 6"

0.0	20.0	0.0	0.0		
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PR

Hole No. 9-22 Top Elev. 442.0 Date 4-4-42

Time		Depth		Core
From	To	From	To	Recov.

1:00 P.M.	2:00 P.M.	1-00	moving & set up.	
2:00	2:55	0-55	47.0	56.0
2:55	3:15	0-20	removing core 2.3	
3:15 P.M.	4:30 P.M.	1-15	56.0	67.4 8.8
4:30 P.M.	5:00 P.M.	0-30	Remove Core	
5:00 P.M.	9:45 P.M.	4:45	67.4	79.0 10.8
9:45 P.M.	10:10 P.M.	0-25	Remove Core	
10:10 P.M.	10:30 P.M.	0-20	Hole water tested	

and took 6 w. ft in 3"
This hole is flowing some water.

Inspector D.R. Curry Foreman Paul Betzer Crew No. 1 (Betzer) Page 61

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M&SU.	Hr.-Min Lost
---------------	--------------	------------	----------	------------	--------------

				Adolph Bock, Inspector	
				7:00 P.M. to 12 P.M.	
				1-00	
	6.0	3.0		see note below	
				First 23" good rest Broken	
	11.4			Core recovered is good	
				Core good	
	11.6			Had considerable trouble with the drill sticking.	

Note: This hole was washed out but evidently some of the grout must have been left in the bottom as they brought up 3' of cement core.

0.0	29.0	3.0	-3.0		
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Pl.

Hole No. 10-0 Top Elev. 442.4 Date 4-4-42

Inspector D.R. Curry Foreman Paul Betzer Crew No. 2131mm Page 62

Time		Depth		Core
From	To	From	To	Recov.
		0	48.5	
3:35 P.M.	4:15 P.M.	0-40		Moving & Set up.
4:15 P.M.	6:20 P.M.	2-05	48.5	54.1 3'
6:20 P.M.	6:30 P.M.	0-10		Remove core
6:30 P.M.	8:50 P.M.	2-20	54.1	64.1 9.9
8:50 P.M.	9:00 P.M.	0-10		Remove core
9:00 P.M.	10:40 P.M.	1-40	64.1	74.1 5.0
10:40 P.M.	11:00 P.M.			

Graveyard. 4-6-42

12:00	5:25 P.M.	5-25	80	74'	
5:25	6:00 P.M.	0-35	74.1	78.0	3'
6:00					

Hole was washed out at 3:30 P.M.

April 5, 1942 - Curry

0 74.1

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&S.U.	Hr.-Min. Lost
---------------	--------------	------------	----------	--------------	---------------

Adolph Back, Inspector
Hole washed out following grouting, but 48.5 no record kept! - D.W.L.

	5.6			0-40	
	✓				Core recovered is good
	10.0				Very good core
	✓				Core recovered in short pieces

McCown.

66' Drilled grout.
Pieces 1" - 30"
Drilling.

0.0	29.5	66.1	122.6		
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pl

Hole No.	Top Elev.		Date		
9-0	-----		4-8-42		
From	To	Hr.-Min.	From	To	Core Recor.
8:00	9:00	1-00	31.5	36.5	4.9
9:00	9:20	0-20	Remove core		
9:20	11:00	1-40	36.5	46.0	6.1
11:00	11:20	0-20	Remove Core.		
11:20	12:00	0-40	Drilling		
12:00	12:30	0-30	Lunch		
12:30	1:00	0-30	46.0	52.5	0.9
1:00	1:15	0-15	Remove Core		
1:15	1:30		Water test O.K.		
Hole No.	440.8				
9-0	440.8				
4:00 PM	6:50 PM	2-50	0.0	52.5	
6:50 PM	7:30 PM	0-40	52.5	57.5	
7:30	7:50 PM	0-20	removing core 5.0		
7:50 PM	8:00 PM	0-10	57.5		
8:00 PM	8:30 PM	0-30	Lunch.		
8:30 PM	9:00 PM	0-30	57.5	62.5	
9:00 PM	9:15 PM	0-15	removing core 3.0		
9:15 PM	10:15 PM	1-00	62.5	72.5	
10:15 PM	10:30 PM	0-15	removing core 5.1		
10:30 PM	11:30 PM	1-00	72.5	82.5	
11:30 PM	12:00 PM	0-30	removing core 10.0		

Inspector		Foreman		Crew No.	
Adolph Back		Betzer		1	
Page 63					
Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M&SU.	Hr.-Min. Lost
	5.0				
		good core			
		Note this hole reported by graveyard drilled to 33.0 but core had not been pulled.			
	9.5				
		core recovered is good			
					0-30
	6.5				
		core recovered is broken up. Balance was ground up.			
		A.R. Carry		McKenzie 1 (McKenzie)	
		Reaming hole as hole was undersize.			
	5.0				
		good core.			
					0-30
	5.0				
		Some of this very broken.			
	10.0				
		core broken very small.			
	10.0				
		core extra good. Moving to Hole 6-24.			
0.0	51.0	0.0	0.0		Pl

Hole No. 10-0
 Top Elev. ---
 Date 4-9-42

Inspector Adolph Bock
 Foreman Betzey
 Crew No. 2 Page 64

Time		Depth		Core
From	To	Hr.-Min.	From	To
8:00	12:00	4:00	50	121.5
12:00	12:30	0-30	Lunch	
Move to Hole # 8-0				

Perc. Dr.ft.	Core Dr.ft.	Re-Dr. ft.	W.O. ft.	Time M.&SU.	Hr.-Min. Lost
		71.5			
					0-30

0.0 0.0 71.5 0.0

Hole No 8-0 Top Elev. _____ Date 4-8-42

Time		Hr.-Min.	Depth		Core Recov.
From	To		From	To	
12:30 ^{pm}	1:30 ^{pm}	1-0			
1:30 ^{pm}	2:35 ^{pm}	1-05			
2:35 ^{pm}			1.5	3.0 36.9	

Hole No 8-0 Top Elev. 442.9 Date 4-8-42

4:00 ^{pm}	8:00 ^{pm}	4-00	3.0		
8:00 ^{pm}	8:30 ^{pm}	0-30	lunch		
8:30 ^{pm}	12:00 ^{pm}	3-36		45.5	

4-9-42 Gy. McCown.

12-0	2-15 AM	2-15	45.5	56.9	
2-15 AM	3-0 AM	45	56.9	61.0	2.0
3-0 AM	5-30 AM	2-30	61.0	66.0	3.0
5-30 AM	6-20 AM	50	66.0	70.0	2.4
6-20 AM	7-30 AM	1-10	70.	76.0	4.5

Inspectors Adolph Bock Foreman Betzer Crew No. 2 Page 65

Perc. Dr.-ft.	Core Dr.-ft.	Re-Dr. ft.	W.O. ft.	Time	Hr.-Min
				M.&S.U.	Last
				1-0	
				Repairing equipment	1-05
		1.5			
				Dr. Curry McKenzie 2 (Simmons)	
				This is cutting a new hole as drill left hole previously drilled.	0-30
		42.5			
				11.4 Redrilling.	
	4.1			Core badly broken	
	5.0			Core badly broken	
	4.0			Core badly broken.	
	6.0			Core broken 1" to 26"	
0.0	19.1	55.4	0.0		RC

Hole No.
6+23Top Elev.

Date

4-9-42

Inspector

McGown

Foreman

Crew No.

Page 66

Time		Hr-Min.	Depth		Core Recov.
From	To		From	To	
			0	1.5	
1:15 AM	3:15 AM	2-0	6.5	10.5	7.0
3:15 AM	4:0 AM	45	10.5	14.0	3.5
4:0 AM	6:30 AM	2-30	14.0	24.2	10.2

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time	Hr-Min
				M. & S.U.	Last
1.5	(Mar. 4, 1942 - Curry)				
	9.0 10.5			First Drilling this hole	
	3.5			Core broken 1" to 2"	
	10.2			Core broken 2" to 28"	
				Core broken 3" to 18"	
1.5	22.7	0.0	0.0		

Noted

Hole No. 6+25 Top Elev. --- Date 4-9-42

Inspector McCown Foreman --- Crew No. --- Page 67

Time		Depth		Core
From	To	From	To	Recov.

12:30				
6-50AM	8.00AM	1-10	2.0	11.0

Perc. Dr.ft.	Core Dr.ft.	Re-Dr. ft.	W.O. ft.	Time M.&S.U.	Hr-Min Lost.
--------------	-------------	------------	----------	--------------	--------------

Washed out top 2.0 ft of grout.
9.0 Drilling grout.

0.0 0.0 9.0 2.0

Hole No.

7+23

Top Elev.

Date

4-9-42

Inspector

McCown

Foreman

Crew No.

Page 68

Time		Depth		Core	
From	To	Hr.-Min.	From	To	Recov.

3.0 AM

0.0 3.0

4-11-42 Gy McCown

7-00 AM

103.0

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&SU.	Hr.-Min Lost
------------------	-----------------	---------------	-------------	----------------	-----------------

3.0

washed out
Grout.

0.0

0.0

0.0

3.0

Hole No. 8-0 Top Elev. --- Date 4-10-42

Time		Depth		Core
From	To	Hr-Min	From To	Recor.
8:00	8:30	0-30	8.8.0 22	
Balance to be redrilled.				

6:30 PM, 7:10 PM 0-40 moving & set up
 7:10 PM 8:00 PM 0-50 22.0
 8:00 PM 8:30 PM 0-30 Lunch
 8:30 PM 9:40 PM 1-10 22.0 86.0
 9:40 PM 11:20 PM 1-40 86.0 97.0
 11:20 12:00 PM 0-40 removing core 5.0

4-11-42 GY McCown

12-00	2-45 AM	2-45	97.0	106	7.5
2-45	5-45 AM	3-00	106.0	117.8	10.2

Inspector Adolph Beck Foreman Achorid Crew No. Page 69

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M.&S.U.	Hr-Min Last
			22 14.0		
				0-40	
					0-30
		64.0			
	11.0				
	Core	Broken in short pieces			
	9.0	Core broken	1" to 18"		
	11.8	Core broken	1" to 36"		
0.0	31.8	64.0	14.0		pl.

Hole No. 7-22 Top Elev. 441.4 Date 4-10-42

Inspector J. R. Curry Foreman Achord Crew No. Page 73

Time		Depth		Core
From	To	Hr.-Min.	From To	Recov.

3:45 PM	4:30 PM	0-45	0.0	103.0
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The grout in this hole was set up in some spots quite hard.

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M. & SU.	Hr.-Min Lost
---------------	--------------	------------	----------	---------------	--------------

103.0

0.0 0.0 0.0 103.0 ✓

Hole No. 6-25 Tap Elev. --- Date 4-10-42

Inspector H.R. Curry Foreman Beauchamp Crew No. --- Page 74

Time		Depth		Core	
From	To	Hr-Min.	From	To	Recov.

7:15 P.M.	7:55 P.M.	0-40	0.0	82.5	
-----------	-----------	------	-----	------	--

This hole was set up quite hard.

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M&SU.	Hr-Min. Lost
			82.5		
0.0	0.0	0.0	82.5		

Hole No. 6-23^E Top Elev. ----- Date 4-10-42

Inspector H.R. Curry Foreman Beauchamp Crew No. ----- Page 75

Time		Depth		Core	
From	To	Hr-Min.	From	To	Recok.

Perc Dr.ft.	Core Dr.ft.	Re-Dr. ft.	W.O. ft.	Time M.&SU.	Hr-Min. Last
-------------	-------------	------------	----------	-------------	--------------

7:55 PM 8:20 PM 0-25 0.0 54.8

The grout in this hole was quite hard.

0.0 0.0 0.0 54.8 ✓

Hole No.

Top Elev.

Date

Inspector

Foreman

Crew No.

Page 76

Time		Depth		Core
From	To	From	To	Recor.

Perc. Dr. ft.	Core Dr. ft.	Re-Dr. ft.	W.O. ft.	Time M&SU.	Hr-Min. Last
---------------	--------------	------------	----------	------------	--------------

4-3 15
 4-10
 4-6
 9-11
 8-3 12/7.00
 12) 99 (8-3
 96
 25-5 55-6
 3+86
 3+90
 120
 59
 48
 92
 40
 52
 60.5
 6.3
 60.5
 6.5
 54.2
 53.0
 54.0
 1.2
 65.5
 111.7
 64.04
 3.0
 111
 78
 25
 30
 33
 78
 110.6
 45
 105.1
 100.6
 38-40
 73
 33
 30
 59
 15
 104.87
 96.1
 100.6
 5
 4
 99.18
 58
 94-10
 116
 108
 80
 9.6
 104
 87
 96
 1.14
 18
 15.5
 1.75
 157.5
 40
 5
 770
 460
 370
 188
 65
 25.3
 715.6
 113
 109.75
 4.01
 915
 89
 826
 40
 9
 3
 71
 2
 1006
 1145
 67
 1048

1-0 Elev 652.4
 2-0 Elev 625.8

40-6 60 58 27
 5-3 59 22-6
 35.3 117 11
 108
 59
 48
 9.6
 73
 73
 4.5
 420
 27.30
 52.40
 7.80
 14
 3
 19

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	7.6	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.