

APPENDIX O
AQUIFER TEST DATA

ESTIMATED WELL YIELD

Castex Development, LLC v. Anadarko Petroleum Corp., et al
Jefferson Davis Parish, LA

SHALLOW WATER BEARING ZONES

$$Q = \frac{60 h_c K b}{9.3 + \log (K b)}$$

Value

Q

well yield (gpm)

h_c

confining head above the upper stratigraphic boundary of water bearing unit (feet)

K

hydraulic conductivity of water bearing unit (cm/sec)

b

saturated thickness of water bearing unit (feet)

Well ID	K (ft/day)	K (cm/sec)	h_c (ft) ¹	b (ft) ²		Estimated Yield (gpm)	Estimated Yield (gpd)	Test Date	Screen Interval (ft)
A - ZONE WELLS									
CD-2A (33-43')	0.31	0.0001094	15.77	6.5	=	0.109	158	6/28/2022	33-43'
CD-3A (27-42')	0.23	0.0000800	11.80	11.5	=	0.104	150	6/28/2022	27-42'
CD-4A (27-42')	0.30	0.0001059	8.38	13.0	=	0.108	155	6/29/2022	27-42'
CD-10A (30-40')	0.21	0.0000753	15.36	12.5	=	0.138	199	6/29/2022	30-40'
ARITHMETIC MEAN	0.26	0.0000927	12.83	10.9	=	0.123	177		
GEOMETRIC MEAN	0.26	0.0000914	12.44	10.5	=	0.114	164		

Well ID	K (ft/day)	K (cm/sec)	h_c (ft) ¹	b (ft) ²		Estimated Yield (gpm)	Estimated Yield (gpd)	Test Date	Screen Interval (ft)
B - ZONE WELLS									
CD-1C (48-58')	0.39	0.0001388	10.88	5.0	=	0.074	106	7/3/2024	48-58'
CD-5B (65-70')	0.20	0.0000688	5.83	2.0	=	0.009	13	4/30/2025	65-70'
CD-2B Average of Slug and Pumping	0.32	0.0001138	30.97	9.50	=	0.317	457	7/3/2024	58-68'
CD-2B (58-68') Slug Test	0.23	0.0000824	30.97	9.0	=	0.223	321	7/3/2024	58-68'
CD-2B (58-68') Pumping ³	0.41	0.0001452	30.97	10.0	=	0.418	601	6/28/2022	58-68'
CD-6B (56-66') Pumping ³	0.09	0.0000323	35.44	11.0	=	0.129	186	6/29/2022	56-66'
CD-9B (58-68') Pumping ³	1.15	0.0004061	29.41	10.0	=	1.037	1494	6/29/2022	58-68'
ARITHMETIC MEAN	0.40	0.0001411	24.92	8.07	=	0.268	386		
GEOMETRIC MEAN	0.31	0.0001079	21.26	7.13	=	0.159	229		

1ft/day = 3.53e-4 cm/sec

gpd (gallons per day) = 60 minutes multiplied by 24 hours

Yield From: LDEQ RECAP 2003, Appendix F, Figure 3, Confined Aquifer

K from the arithmetic mean of Bouwer-Rice (1976)

¹ h_c based on DTW measurements prior to each test

² b based on lithology from HET or ERM boring logs

³ K values from ICON's Expert Report, Table 6

HYDRAULIC CONDUCTIVITY (K)

Castex Development, LLC v. Anadarko Petroleum Corp., et al
Jefferson Davis Parish, LA

A-Zone Wells

Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-2A	6/28/2022	33-43'	Bouwer-Rice	Falling Head Test 1	0.31
			Bouwer-Rice	Falling Head Test 2	0.31
			Bouwer-Rice	Falling Head Test 3	0.31
			ARITHMETIC MEAN:		0.31
Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-3A	6/28/2022	27-42'	Bouwer-Rice	Falling Head Test 1	0.22
			Bouwer-Rice	Falling Head Test 2	0.23
			Bouwer-Rice	Falling Head Test 3	0.23
			ARITHMETIC MEAN:		0.23
Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-4A	6/29/2022	27-42'	Bouwer-Rice	Falling Head Test 1	0.30
			Bouwer-Rice	Falling Head Test 2	0.30
			Bouwer-Rice	Falling Head Test 3	0.30
			ARITHMETIC MEAN:		0.30
Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-10A	6/29/2022	30-40'	Bouwer-Rice	Falling Head Test 1	0.21
			Bouwer-Rice	Falling Head Test 2	0.21
			Bouwer-Rice	Falling Head Test 3	0.22
			ARITHMETIC MEAN:		0.21

References:

Bouwer, H., 1989. The Bouwer and Rice slug test--an update, Ground Water, vol. 27, no. 3, pp. 304-309.

Bouwer, H. and R.C. Rice, 1976. A slug test method for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells, Water Resources Research, vol. 12, no. 3, pp. 423-428.

Zlotnik, V., 1994. Interpretation of slug and packer tests in anisotropic aquifers, Ground Water, vol. 32, no. 5, pp. 761-766.

HYDRAULIC CONDUCTIVITY (K)

Castex Development, LLC v. Anadarko Petroleum Corp., et al
Jefferson Davis Parish, LA

B-Zone Wells

Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-5B	4/30/2025	65-70'	Bouwer-Rice	Falling Head Test 1	0.25
			Bouwer-Rice	Rising Head Test 1	0.13
			Bouwer-Rice	Falling Head Test 2	0.25
			Bouwer-Rice	Rising Head Test 2	0.13
			Bouwer-Rice	Falling Head Test 3	0.24
			Bouwer-Rice	Rising Head Test 3	0.17
			ARITHMETIC MEAN:		

Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-1C	7/3/2024	48-58'	Bouwer-Rice	Falling Head Test 1	0.40
			Bouwer-Rice	Falling Head Test 2	0.40
			Bouwer-Rice	Falling Head Test 3	0.38
			ARITHMETIC MEAN:		

Well ID	Test Date	Screen Interval (ft)	Solution	Test	K (ft/day)
CD-2B	7/3/2024	58-68'	Bouwer-Rice	Falling Head Test 1	0.24
			Bouwer-Rice	Falling Head Test 2	0.22
			Bouwer-Rice	Falling Head Test 3	0.24
			ARITHMETIC MEAN:		

References:

Bouwer, H., 1989. The Bouwer and Rice slug test--an update, Ground Water, vol. 27, no. 3, pp. 304-309.

Bouwer, H. and R.C. Rice, 1976. A slug test method for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells, Water Resources Research, vol. 12, no. 3, pp. 423-428.

Zlotnik, V., 1994. Interpretation of slug and packer tests in anisotropic aquifers, Ground Water, vol. 32, no. 5, pp. 761-766.

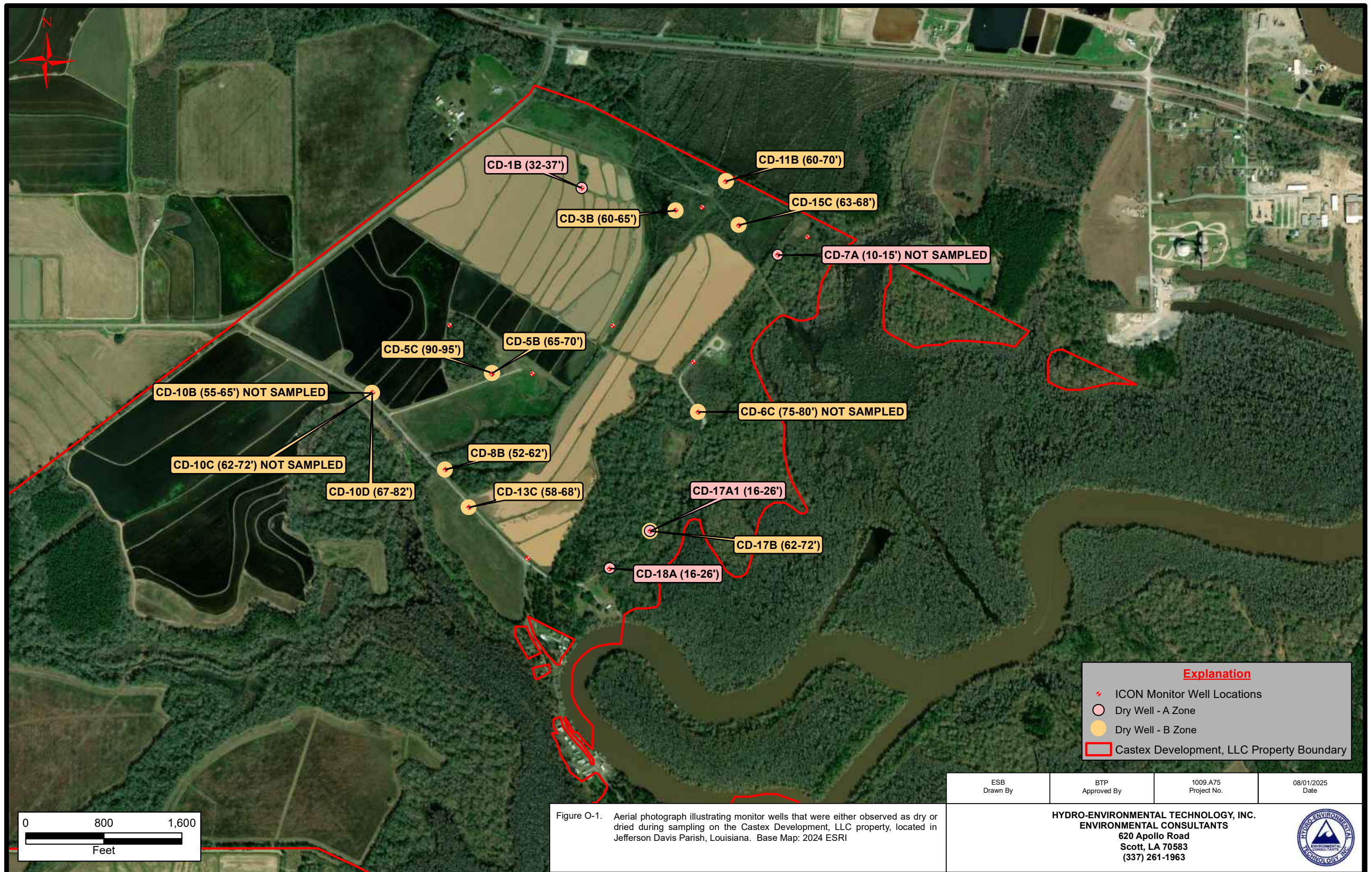


Figure O-1. Aerial photograph illustrating monitor wells that were either observed as dry or dried during sampling on the Castex Development, LLC property, located in Jefferson Davis Parish, Louisiana. Base Map: 2024 ESRI

ESB Drawn By	BTP Approved By	1009.A75 Project No.	08/01/2025 Date
HYDRO-ENVIRONMENTAL TECHNOLOGY, INC. ENVIRONMENTAL CONSULTANTS 620 Apollo Road Scott, LA 70583 (337) 261-1963			



WELL ID: CD-10A (30-40')

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	12.64 Feet
top of screen (TOS)	30 Feet
Base of Aquifer (DTB)	41 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

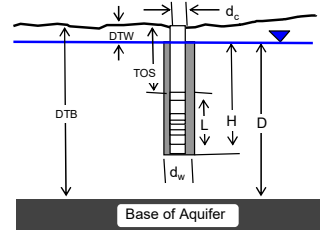
COMPUTED

L_{wetted}	10 Feet
D =	28.36 Feet
H =	27.36 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	2.10 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Partial penetrate A =	4.632
B =	0.791
$\ln(Re/r_w)$	3.925
Re =	4.75 Feet
Slope =	0.005576 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	179 sec

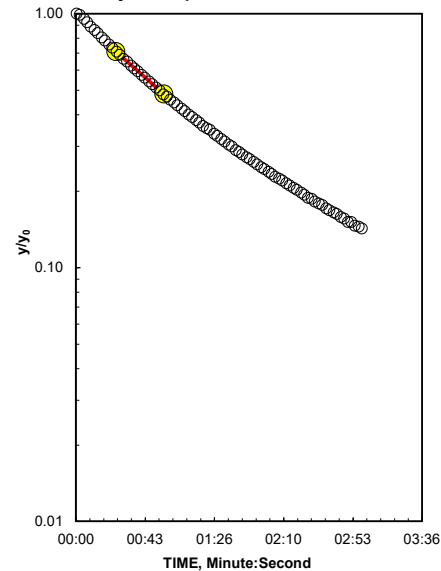
Input is consistent.

K = 0.21 Feet/Day

HET Job #: 1009.A75
 Date: 6/29/2022
 Time: 10:34



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	10:34:17.9	10.55
2	10:34:19.9	10.57
3	10:34:22.5	10.65
4	10:34:24.5	10.71
5	10:34:26.6	10.78
6	10:34:29.0	10.84
7	10:34:31.0	10.89
8	10:34:33.6	10.95
9	10:34:35.6	11.00
10	10:34:38.2	11.06
11	10:34:40.2	11.10
12	10:34:42.8	11.16
13	10:34:44.8	11.20
14	10:34:47.1	11.25
15	10:34:49.3	11.29
16	10:34:51.9	11.33
17	10:34:53.9	11.37
18	10:34:55.9	11.40
19	10:34:58.5	11.44
20	10:35:00.5	11.47
21	10:35:03.1	11.51
22	10:35:05.1	11.54
23	10:35:07.7	11.57
24	10:35:09.6	11.60
25	10:35:12.0	11.63
26	10:35:14.2	11.65
27	10:35:16.2	11.68
28	10:35:18.8	11.71
29	10:35:20.8	11.73
30	10:35:23.4	11.76
31	10:35:25.4	11.78
32	10:35:28.0	11.80
33	10:35:29.9	11.82
34	10:35:32.6	11.84
35	10:35:34.5	11.86
36	10:35:36.7	11.88
37	10:35:39.1	11.90
38	10:35:41.1	11.91
39	10:35:43.7	11.94
40	10:35:45.7	11.95
41	10:35:48.2	11.97
42	10:35:50.2	11.98
43	10:35:52.8	12.00
44	10:35:54.8	12.01
45	10:35:57.2	12.03

WELL ID: CD-10A (30-40')

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	12.64 Feet
top of screen (TOS)	30 Feet
Base of Aquifer (DTB)	41 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

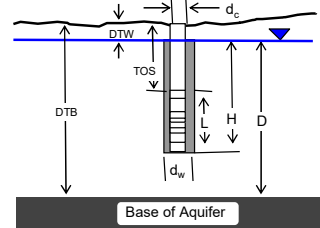
COMPUTED

L_{wetted}	10 Feet
D =	28.36 Feet
H =	27.36 Feet
L/r_w =	106.67
Y_0 -DISPLACEMENT =	1.84 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Partial penetrate A =	4.632
B =	0.791
$\ln(Re/r_w)$ =	3.925
Re =	4.75 Feet
Slope =	0.005576 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	179 sec

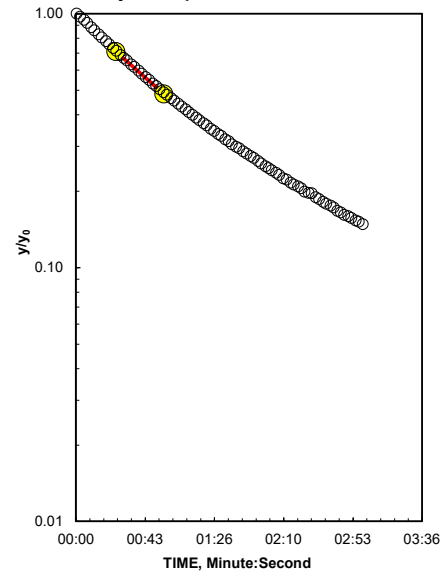
Input is consistent.

K = 0.21 Feet/Day

HET Job #: 1009.A75
 Date: 6/29/2022
 Time: 10:53



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	10:53:46.2	10.80
2	10:53:48.4	10.85
3	10:53:50.8	10.90
4	10:53:52.8	10.95
5	10:53:55.4	11.01
6	10:53:57.3	11.06
7	10:53:59.9	11.11
8	10:54:01.9	11.15
9	10:54:04.5	11.21
10	10:54:06.5	11.24
11	10:54:09.1	11.29
12	10:54:11.1	11.33
13	10:54:13.7	11.37
14	10:54:15.6	11.41
15	10:54:17.6	11.44
16	10:54:20.2	11.48
17	10:54:22.2	11.50
18	10:54:24.8	11.54
19	10:54:26.8	11.57
20	10:54:29.4	11.61
21	10:54:31.4	11.63
22	10:54:33.8	11.66
23	10:54:36.0	11.68
24	10:54:38.0	11.71
25	10:54:40.5	11.74
26	10:54:42.5	11.76
27	10:54:45.1	11.78
28	10:54:47.1	11.80
29	10:54:49.7	11.83
30	10:54:51.7	11.85
31	10:54:54.3	11.87
32	10:54:56.3	11.89
33	10:54:58.5	11.91
34	10:55:00.8	11.92
35	10:55:02.8	11.94
36	10:55:05.4	11.96
37	10:55:07.4	11.97
38	10:55:10.0	11.99
39	10:55:12.0	12.01
40	10:55:14.6	12.02
41	10:55:16.6	12.03
42	10:55:18.9	12.05
43	10:55:21.1	12.06
44	10:55:23.1	12.08
45	10:55:25.7	12.09

WELL ID: CD-10A (30-40')

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	12.64 Feet
top of screen (TOS)	30 Feet
Base of Aquifer (DTB)	41 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

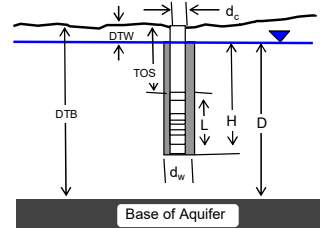
COMPUTED

L_{wetted}	10 Feet
D =	28.36 Feet
H =	27.36 Feet
L/r_w =	106.67
Y_0 -DISPLACEMENT =	1.92 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Partial penetrate A =	4.632
B =	0.791
$\ln(Re/r_w)$ =	3.925
Re =	4.75 Feet
Slope =	0.005669 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	176 sec

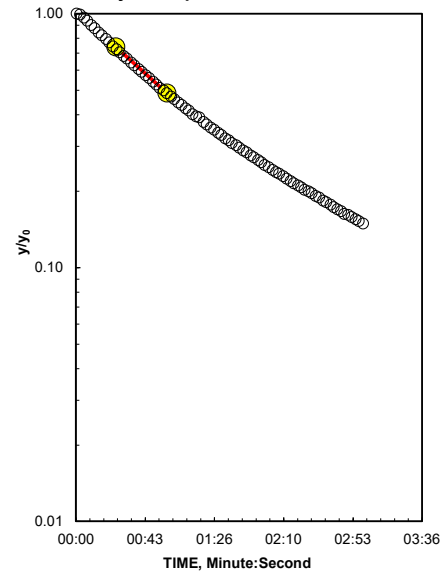
Input is consistent.

K = 0.22 Feet/Day

HET Job #: 1009.A75
 Date: 6/29/2022
 Time: 11:14



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	11:14:03.0	10.72
2	11:14:05.2	10.74
3	11:14:07.6	10.79
4	11:14:09.5	10.84
5	11:14:12.2	10.91
6	11:14:14.1	10.96
7	11:14:16.7	11.02
8	11:14:18.7	11.06
9	11:14:21.3	11.12
10	11:14:23.3	11.16
11	11:14:25.7	11.22
12	11:14:27.9	11.25
13	11:14:29.8	11.29
14	11:14:32.4	11.33
15	11:14:34.4	11.36
16	11:14:37.0	11.41
17	11:14:39.0	11.44
18	11:14:41.6	11.48
19	11:14:43.6	11.51
20	11:14:46.2	11.54
21	11:14:48.1	11.57
22	11:14:50.7	11.61
23	11:14:52.7	11.63
24	11:14:54.7	11.66
25	11:14:57.3	11.69
26	11:14:59.3	11.71
27	11:15:01.9	11.74
28	11:15:03.9	11.76
29	11:15:06.5	11.78
30	11:15:08.5	11.80
31	11:15:11.1	11.83
32	11:15:13.1	11.84
33	11:15:15.2	11.87
34	11:15:17.6	11.88
35	11:15:19.6	11.89
36	11:15:22.2	11.92
37	11:15:24.2	11.94
38	11:15:26.8	11.96
39	11:15:28.8	11.97
40	11:15:31.4	11.99
41	11:15:33.3	12.00
42	11:15:35.7	12.02
43	11:15:37.9	12.03
44	11:15:39.9	12.05
45	11:15:42.5	12.06

WELL ID: CD-1C (48-58')

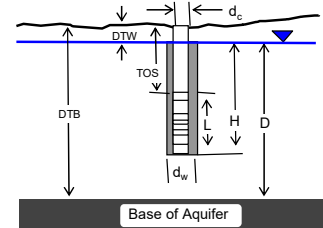
HET Job #: 1009.A75

Date: 7/3/2024

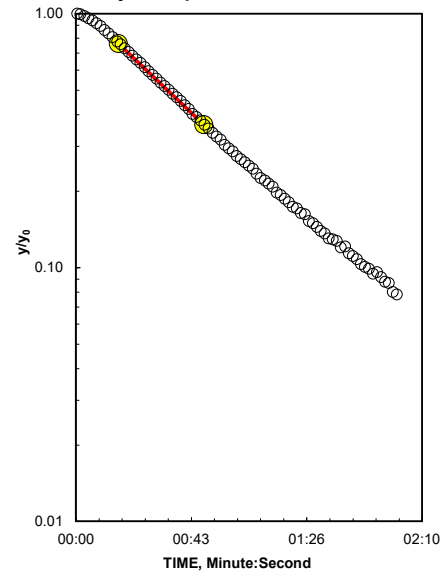
Time: 12:40

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	36.12 Feet
top of screen (TOS)	48 Feet
Base of Aquifer (DTB)	58 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	



Adjust slope of line to estimate K



COMPUTED

L_{wetted}	10 Feet
D =	21.88 Feet
H =	21.88 Feet
L/r_w	106.67
y_0 -DISPLACEMENT =	1.66 Feet
y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.092
Re =	5.61 Feet
Slope =	0.009989 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	100 sec
Input is consistent.	
K = 0.4 Feet/Day	

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:40:41.5	34.46
2	12:40:51.8	34.69
3	12:41:02.2	34.99
4	12:41:12.7	35.23
5	12:41:23.2	35.42
6	12:41:33.7	35.58
7	12:41:44.2	35.69
8	12:41:54.7	35.78
9	12:42:05.2	35.85
10	12:42:15.7	35.90
11	12:42:26.2	35.94
12	12:42:36.8	35.97
13	0:00:00.0	0.00
14	0:00:00.0	0.00
15	0:00:00.0	0.00
16	0:00:00.0	0.00
17	0:00:00.0	0.00
18	0:00:00.0	0.00
19	0:00:00.0	0.00
20	0:00:00.0	0.00
21	0:00:00.0	0.00
22	0:00:00.0	0.00
23	0:09:32.3	36.09
24	0:09:42.7	36.09
25	0:09:53.2	36.09
26	0:10:03.7	36.10
27	0:10:14.2	36.10
28	0:10:24.7	36.10
29	0:10:35.2	36.11
30	0:10:45.8	36.10
31	0:10:56.2	36.11
32	0:11:07.0	36.10
33	0:11:17.3	36.10
34	0:11:27.7	36.10
35	0:11:38.3	36.10
36	0:11:48.7	36.11
37	0:11:59.2	36.11
38	0:12:09.8	36.11
39	0:12:20.3	36.11
40	0:12:30.8	36.11
41	0:12:41.3	36.11
42	0:12:51.8	36.11
43	0:13:02.3	36.10
44	0:13:12.7	36.11
45	0:13:23.3	36.11

WELL ID: CD-1C (48-58')

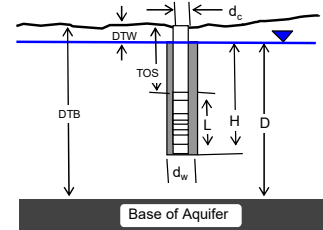
HET Job #: 1009.A75

Date: 7/3/2024

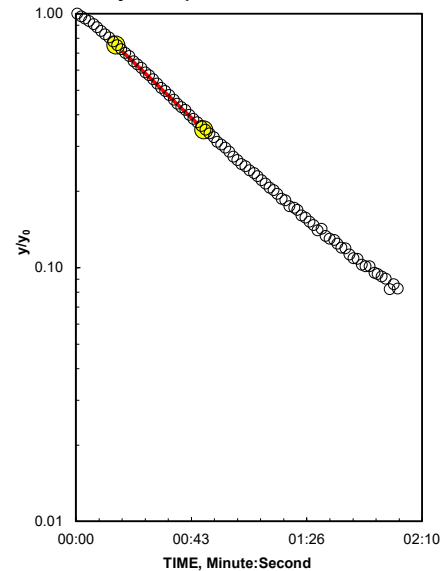
Time: 12:50

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	36.12 Feet
top of screen (TOS)	48 Feet
Base of Aquifer (DTB)	58 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	



Adjust slope of line to estimate K



COMPUTED

L_{wetted}	10 Feet
D =	21.88 Feet
H =	21.88 Feet
L/r_w	106.67
y_0 -DISPLACEMENT =	1.57 Feet
y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.092
Re =	5.61 Feet
Slope =	0.010123 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	99 sec
Input is consistent.	
K = 0.4 Feet/Day	

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:50:21.2	34.55
2	12:50:22.7	34.59
3	12:50:24.2	34.62
4	12:50:25.7	34.65
5	12:50:27.4	34.69
6	12:50:28.7	34.73
7	12:50:30.2	34.78
8	12:50:31.7	34.82
9	12:50:33.2	34.86
10	12:50:34.7	34.90
11	12:50:36.2	34.94
12	12:50:37.7	34.98
13	12:50:39.2	35.02
14	12:50:40.7	35.05
15	12:50:42.4	35.10
16	12:50:43.7	35.13
17	12:50:45.2	35.16
18	12:50:46.7	35.20
19	12:50:48.2	35.22
20	12:50:49.7	35.25
21	12:50:51.2	35.29
22	12:50:52.7	35.32
23	12:50:54.2	35.34
24	12:50:55.7	35.37
25	12:50:57.5	35.40
26	12:50:58.7	35.43
27	12:51:00.2	35.45
28	12:51:01.7	35.46
29	12:51:03.2	35.49
30	12:51:04.7	35.52
31	12:51:06.2	35.53
32	12:51:07.7	35.55
33	12:51:09.2	35.57
34	12:51:10.7	35.59
35	12:51:12.5	35.61
36	12:51:13.7	35.63
37	12:51:15.3	35.64
38	12:51:16.7	35.65
39	12:51:18.2	35.67
40	12:51:19.7	35.69
41	12:51:21.2	35.70
42	12:51:22.7	35.72
43	12:51:24.2	35.73
44	12:51:25.7	35.74
45	12:51:27.5	35.75

WELL ID: CD-1C (48-58')

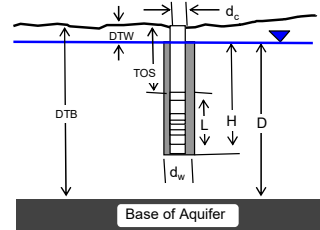
HET Job #: 1009.A75
 Date: 7/3/2024
 Time: 13:00

INPUT

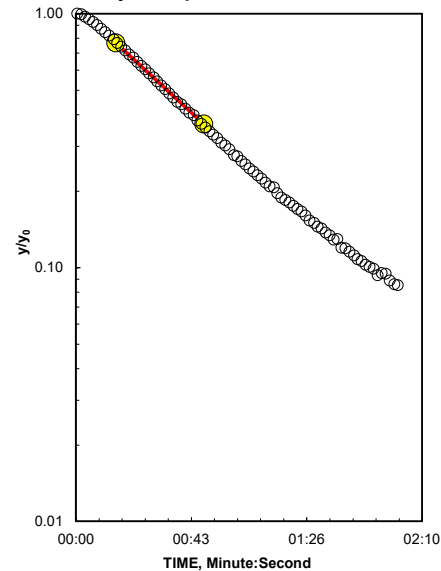
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	36.12 Feet
top of screen (TOS)	48 Feet
Base of Aquifer (DTB)	58 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material -- Fine sand and silt	

COMPUTED

L_{wetted}	10 Feet
D =	21.88 Feet
H =	21.88 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.63 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.092
Re =	5.61 Feet
Slope =	0.009667 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	103 sec
Input is consistent.	
K = 0.38 Feet/Day	



Adjust slope of line to estimate K



Entry	Time, Hr:Min:Sec	Water Level
1	13:00:34.7	34.49
2	13:00:36.2	34.50
3	13:00:37.7	34.53
4	13:00:39.2	34.57
5	13:00:40.7	34.61
6	13:00:42.2	34.65
7	13:00:43.7	34.70
8	13:00:45.2	34.74
9	13:00:46.7	34.79
10	13:00:48.4	34.83
11	13:00:49.7	34.87
12	13:00:51.2	34.91
13	13:00:52.7	34.95
14	13:00:54.2	34.99
15	13:00:55.7	35.03
16	13:00:57.2	35.07
17	13:00:58.7	35.11
18	13:01:00.2	35.14
19	13:01:01.7	35.17
20	13:01:03.4	35.21
21	13:01:04.7	35.24
22	13:01:06.2	35.27
23	13:01:07.7	35.30
24	13:01:09.2	35.33
25	13:01:10.7	35.36
26	13:01:12.2	35.39
27	13:01:13.7	35.41
28	13:01:15.2	35.43
29	13:01:16.7	35.46
30	13:01:18.4	35.47
31	13:01:19.7	35.50
32	13:01:21.2	35.52
33	13:01:22.7	35.54
34	13:01:24.2	35.56
35	13:01:25.7	35.58
36	13:01:27.2	35.59
37	13:01:28.7	35.62
38	13:01:30.2	35.63
39	13:01:31.7	35.64
40	13:01:33.4	35.67
41	13:01:34.7	35.67
42	13:01:36.2	35.69
43	13:01:37.7	35.71
44	13:01:39.2	35.72
45	13:01:40.7	35.73

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-2A (33-43')

HET Job #: 1009.A75
 Date: 6/28/2022
 Time: 12:16

INPUT

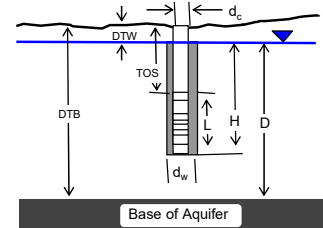
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	16.23 Feet
top of screen (TOS)	33 Feet
Base of Aquifer (DTB)	43 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

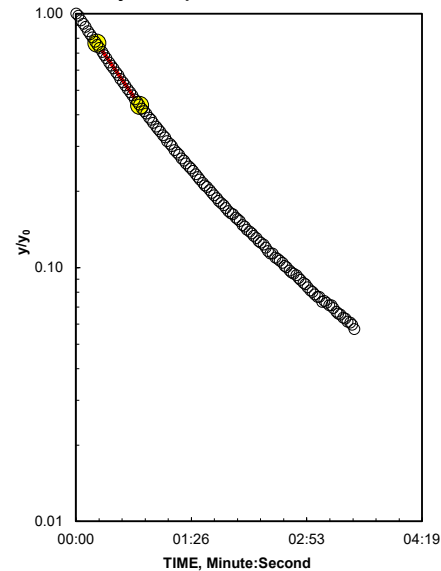
L_{wetted}	10 Feet
D =	26.77 Feet
H =	26.77 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.75 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.216
Re =	6.35 Feet
Slope =	0.007657 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	131 sec

Input is consistent.

K = 0.31 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:16:03.2	14.48
2	12:16:22.5	15.00
3	12:16:41.5	15.35
4	12:17:00.7	15.58
5	12:17:20.0	15.74
6	12:17:39.4	15.86
7	12:17:58.8	15.94
8	12:18:18.2	16.00
9	12:18:37.5	16.05
10	12:18:56.3	16.08
11	12:19:15.7	16.11
12	0:08:35.1	16.13
13	0:08:54.5	16.15
14	0:09:13.9	16.16
15	0:09:33.2	16.18
16	0:09:52.4	16.19
17	0:10:11.4	16.19
18	0:10:30.8	16.20
19	0:10:50.2	16.20
20	0:11:09.5	16.21
21	0:11:28.9	16.21
22	0:11:48.3	16.21
23	0:12:07.3	16.22
24	0:12:26.5	16.22
25	0:12:45.8	16.22
26	0:13:05.2	16.22
27	0:13:24.6	16.23
28	0:13:44.0	16.23
29	0:14:03.4	16.23
30	0:14:22.1	16.23
31	0:14:41.5	16.23
32	0:15:00.9	16.23
33	0:15:20.3	16.23
34	0:15:39.7	16.23
35	0:15:59.1	16.23
36	0:16:18.5	16.23
37	0:16:37.3	16.24
38	0:16:56.7	16.23
39	0:17:16.1	16.24
40	0:17:36.4	16.24
41	0:17:55.8	16.24
42	0:18:15.2	16.24
43	0:18:34.6	16.24
44	0:18:54.0	16.24
45	0:19:13.0	16.24

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-2A (33-43')

HET Job #: 1009.A75
 Date: 6/28/2022
 Time: 12:30

INPUT

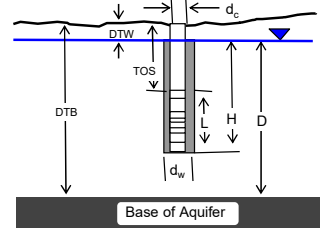
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	16.23 Feet
top of screen (TOS)	33 Feet
Base of Aquifer (DTB)	43 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

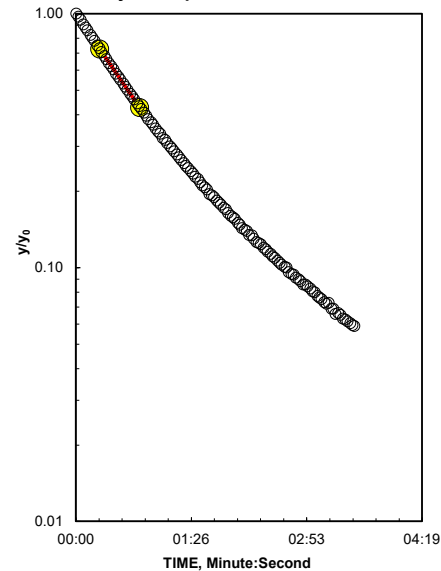
L_{wetted}	10 Feet
D =	26.77 Feet
H =	26.77 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.89 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.216
Re =	6.35 Feet
Slope =	0.007658 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	131 sec

Input is consistent.

K = 0.31 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:30:58.9	14.34
2	12:31:17.7	14.90
3	12:31:37.0	15.28
4	12:31:56.4	15.54
5	12:32:15.8	15.72
6	12:32:35.1	15.84
7	12:32:54.5	15.93
8	12:33:13.7	15.99
9	12:33:32.7	16.04
10	12:33:52.0	16.07
11	12:34:11.4	16.10
12	0:23:30.8	16.12
13	0:23:50.2	16.14
14	0:24:09.5	16.16
15	0:24:28.5	16.17
16	0:24:47.7	16.17
17	0:25:07.1	16.18
18	0:25:26.5	16.19
19	0:25:45.9	16.19
20	0:26:05.3	16.20
21	0:26:24.7	16.20
22	0:26:43.4	16.21
23	0:27:02.8	16.21
24	0:27:22.2	16.21
25	0:27:41.6	16.21
26	0:28:01.0	16.21
27	0:28:20.4	16.22
28	0:28:39.6	16.22
29	0:28:58.6	16.22
30	0:29:17.9	16.22
31	0:29:37.3	16.22
32	0:29:56.8	16.22
33	0:30:16.2	16.23
34	0:30:35.6	16.22
35	0:30:54.8	16.23
36	0:31:13.8	16.23
37	0:31:33.2	16.23
38	0:31:52.6	16.23
39	0:32:12.0	16.23
40	0:32:31.4	16.23
41	0:32:50.8	16.23
42	0:33:10.0	16.23
43	0:33:29.0	16.23
44	0:33:48.4	16.23
45	0:34:07.8	16.23

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-2A (33-43')

HET Job #: 1009.A75
 Date: 6/28/2022
 Time: 12:46

INPUT

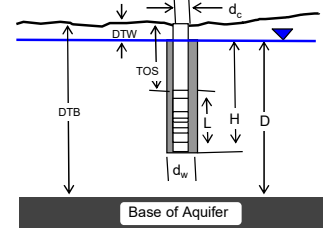
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	16.23 Feet
top of screen (TOS)	33 Feet
Base of Aquifer (DTB)	43 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

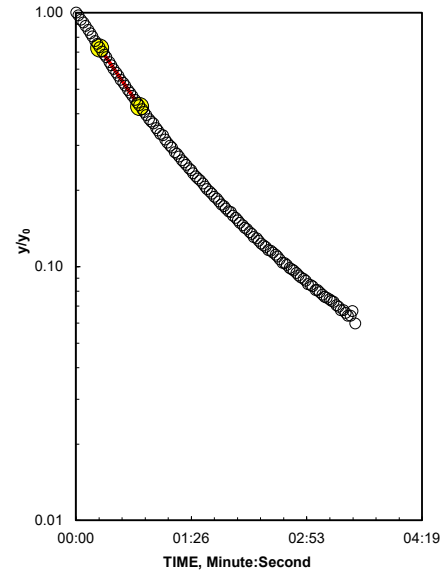
L_{wetted}	10 Feet
D =	26.77 Feet
H =	26.77 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.85 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.216
Re =	6.35 Feet
Slope =	0.007658 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	131 sec

Input is consistent.

K = 0.31 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:46:01.7	14.38
2	12:46:22.6	14.97
3	12:46:43.5	15.36
4	12:47:04.4	15.62
5	12:47:25.9	15.78
6	12:47:46.8	15.89
7	12:48:07.8	15.97
8	12:48:28.7	16.02
9	12:48:49.6	16.06
10	12:49:11.2	16.09
11	0:38:32.1	16.12
12	0:38:53.1	16.14
13	0:39:14.0	16.15
14	0:39:35.1	16.17
15	0:39:56.5	16.17
16	0:40:17.4	16.18
17	0:40:38.4	16.19
18	0:40:59.4	16.19
19	0:41:20.7	16.20
20	0:41:41.8	16.20
21	0:42:02.7	16.20
22	0:42:23.7	16.21
23	0:42:44.6	16.21
24	0:43:05.9	16.21
25	0:43:27.1	16.21
26	0:43:48.0	16.21
27	0:44:09.0	16.22
28	0:44:29.9	16.21
29	0:44:51.4	16.22
30	0:45:12.3	16.22
31	0:45:33.3	16.22
32	0:45:54.2	16.21
33	0:46:15.1	16.22
34	0:46:36.7	16.22
35	0:46:57.6	16.22
36	0:47:18.5	16.22
37	0:47:39.5	16.22
38	0:48:00.5	16.22
39	0:48:22.0	16.22
40	0:48:42.9	16.22
41	0:49:03.8	16.22
42	0:49:24.8	16.22
43	0:49:45.7	16.22
44	0:50:07.2	16.22
45	0:50:28.2	16.22

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-2B (58-68')

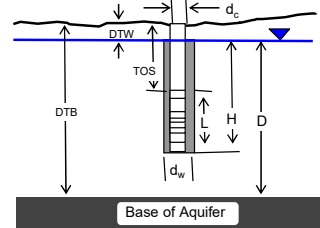
HET Job #: 1009.A75
 Date: 7/3/2024
 Time: 11:00

INPUT

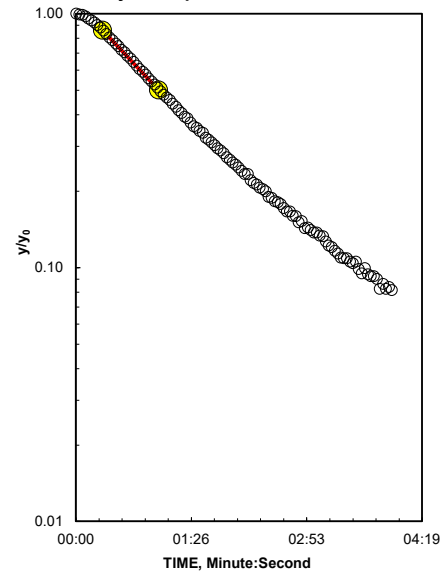
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	27.03 Feet
top of screen (TOS)	58 Feet
Base of Aquifer (DTB)	68 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

L_{wetted}	10 Feet
D =	40.97 Feet
H =	40.97 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.29 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.472
Re =	8.21 Feet
Slope =	0.005584 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	179 sec
Input is consistent.	
K = 0.24 Feet/Day	



Adjust slope of line to estimate K



Entry	Time, Hr:Min:Sec	Water Level
1	11:00:45.5	25.74
2	11:01:10.2	25.99
3	11:01:35.2	26.27
4	11:02:00.0	26.48
5	11:02:24.5	26.62
6	11:02:49.2	26.72
7	11:03:14.0	26.80
8	11:03:38.7	26.85
9	11:04:03.5	26.89
10	11:04:28.2	26.91
11	0:08:53.0	26.93
12	0:09:17.8	26.95
13	0:09:42.5	26.97
14	0:10:07.2	26.97
15	0:10:32.0	26.98
16	0:10:56.7	26.99
17	0:11:21.5	27.00
18	0:11:46.2	26.99
19	0:12:11.0	27.00
20	0:12:35.8	27.00
21	0:13:00.7	27.00
22	0:13:25.3	27.01
23	0:13:50.0	27.01
24	0:14:14.8	27.01
25	0:14:39.5	27.01
26	0:15:04.3	27.02
27	0:15:29.0	27.02
28	0:15:53.7	27.02
29	0:16:18.5	27.01
30	0:16:43.3	27.02
31	0:17:08.0	27.02
32	0:17:32.7	27.02
33	0:17:57.5	27.02
34	0:18:22.2	27.02
35	0:18:47.0	27.03
36	0:19:11.7	27.02
37	0:19:36.6	27.02
38	0:20:01.5	27.03
39	0:20:26.0	27.03
40	0:20:50.8	27.02
41	0:21:15.5	27.03
42	0:21:40.3	27.03
43	0:22:05.0	27.02
44	0:22:29.7	27.03
45	0:22:54.5	27.03

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-2B (58-68')

HET Job #: 1009.A75
 Date: 7/3/2024
 Time: 11:19

INPUT

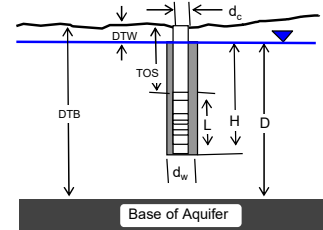
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	27.03 Feet
top of screen (TOS)	58 Feet
Base of Aquifer (DTB)	68 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

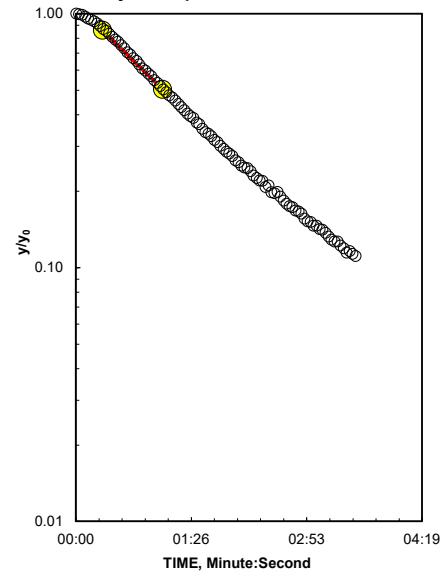
L_{wetted}	10 Feet
D =	40.97 Feet
H =	40.97 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.34 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.472
Re =	8.21 Feet
Slope =	0.005173 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	193 sec

Input is consistent.

K = 0.22 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	11:19:31.9	25.69
2	11:19:58.7	25.95
3	11:20:25.7	26.26
4	11:20:52.7	26.47
5	11:21:19.7	26.63
6	11:21:47.1	26.73
7	11:22:13.7	26.80
8	11:22:40.7	26.85
9	0:27:07.8	26.89
10	0:27:34.7	26.92
11	0:28:01.7	26.94
12	0:28:28.7	26.95
13	0:28:55.7	26.96
14	0:29:22.7	26.97
15	0:29:49.7	26.98
16	0:30:16.7	26.99
17	0:30:43.8	26.99
18	0:31:10.8	26.99
19	0:31:37.8	27.01
20	0:32:04.7	27.00
21	0:32:31.8	27.00
22	0:32:58.7	27.01
23	0:33:25.7	27.01
24	0:33:52.9	27.01
25	0:34:19.7	27.01
26	0:34:46.8	27.02
27	0:35:13.7	27.02
28	0:35:40.7	27.01
29	0:36:08.0	27.01
30	0:36:34.7	27.02
31	0:37:01.8	27.01
32	0:37:28.8	27.02
33	0:37:55.7	27.02
34	0:38:22.7	27.02
35	0:38:49.7	27.02
36	0:39:16.7	27.03
37	0:39:43.7	27.02
38	0:40:10.7	27.03
39	0:40:37.8	27.03
40	0:41:04.7	27.02
41	0:41:31.7	27.03
42	0:41:58.7	27.02
43	0:42:25.8	27.02
44	0:42:52.8	27.02
45	0:43:19.7	27.03

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-2B (58-68')

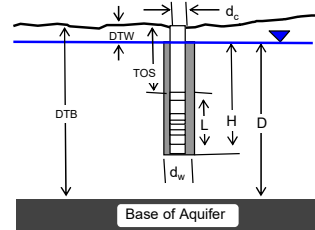
HET Job #: 1009.A75
 Date: 7/3/2024
 Time: 11:40

INPUT

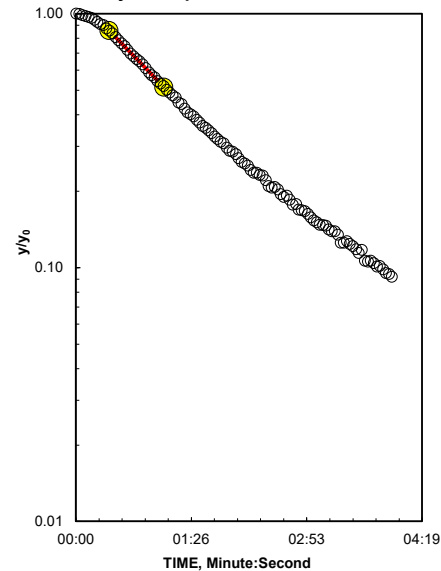
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	10 Feet
Depths to:	
water level (DTW)	27.03 Feet
top of screen (TOS)	58 Feet
Base of Aquifer (DTB)	68 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

L_{wetted}	10 Feet
D =	40.97 Feet
H =	40.97 Feet
L/r_w	106.67
Y_0 -DISPLACEMENT =	1.26 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	4.551
$\ln(Re/r_w)$ =	4.472
Re =	8.21 Feet
Slope =	0.005436 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	184 sec
Input is consistent.	
K =	0.24 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	11:40:29.5	25.77
2	11:40:54.2	25.95
3	11:41:19.0	26.24
4	11:41:43.9	26.44
5	11:42:08.5	26.59
6	11:42:33.2	26.70
7	11:42:58.0	26.77
8	11:43:22.7	26.83
9	11:43:47.5	26.87
10	11:44:12.2	26.90
11	0:48:37.0	26.92
12	0:49:01.7	26.94
13	0:49:26.5	26.95
14	0:49:51.2	26.96
15	0:50:16.0	26.97
16	0:50:40.7	26.97
17	0:51:05.5	26.98
18	0:51:30.2	26.98
19	0:51:55.0	27.00
20	0:52:19.7	26.99
21	0:52:44.6	27.00
22	0:53:09.5	26.99
23	0:53:34.0	27.00
24	0:53:58.7	27.00
25	0:54:23.5	27.00
26	0:54:48.2	27.01
27	0:55:13.0	27.00
28	0:55:37.7	27.00
29	0:56:02.5	27.01
30	0:56:27.2	27.01
31	0:56:52.0	27.01
32	0:57:16.7	27.01
33	0:57:41.5	27.02
34	0:58:06.2	27.02
35	0:58:31.0	27.02
36	0:58:55.7	27.02
37	0:59:20.5	27.02
38	0:59:45.3	27.01
39	1:00:10.2	27.02
40	1:00:34.7	27.02
41	1:00:59.5	27.02
42	1:01:24.2	27.01
43	1:01:49.0	27.02
44	1:02:13.7	27.02
45	1:02:38.5	27.02

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-3A (27-42')

HET Job #: 1009.A75
 Date: 6/28/2022
 Time: 10:41

INPUT

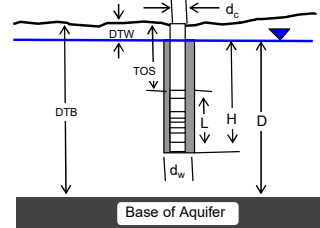
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	15 Feet
Depths to:	
water level (DTW)	14.7 Feet
top of screen (TOS)	27 Feet
Base of Aquifer (DTB)	42 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

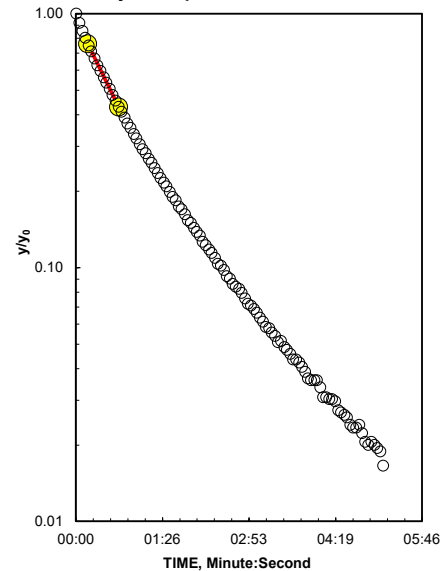
L_{wetted}	15 Feet
D =	27.3 Feet
H =	27.3 Feet
L/r_w	160.00
Y_0 -DISPLACEMENT =	1.75 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	6.133
$\ln(Re/r_w)$ =	4.307
Re =	6.96 Feet
Slope =	0.008026 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	125 sec

Input is consistent.

K = 0.22 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	10:41:08.1	12.95
2	10:41:26.4	13.53
3	10:41:44.3	13.86
4	10:42:02.3	14.08
5	10:42:20.6	14.23
6	10:42:38.3	14.34
7	10:42:56.6	14.42
8	10:43:14.4	14.48
9	10:43:32.5	14.52
10	10:43:50.7	14.56
11	10:44:08.4	14.58
12	10:44:26.7	14.61
13	10:44:44.5	14.62
14	10:45:02.6	14.64
15	10:45:20.9	14.65
16	10:45:38.5	14.66
17	10:45:56.8	14.66
18	10:46:14.7	14.67
19	0:10:32.7	14.67
20	0:10:51.0	14.68
21	0:11:08.7	14.67
22	0:11:26.9	14.68
23	0:11:44.8	14.69
24	0:12:02.9	14.69
25	0:12:21.1	14.68
26	0:12:38.8	14.69
27	0:12:57.1	14.69
28	0:13:14.9	14.70
29	0:13:33.0	14.70
30	0:13:51.3	14.70
31	0:14:08.9	14.70
32	0:14:27.2	14.70
33	0:14:45.1	14.70
34	0:15:03.1	14.70
35	0:15:21.4	14.70
36	0:15:39.1	14.70
37	0:15:57.3	14.70
38	0:16:15.2	14.70
39	0:16:33.3	14.70
40	0:16:51.5	14.70
41	0:17:09.2	14.70
42	0:17:27.5	14.70
43	0:17:45.3	14.70
44	0:18:03.4	14.70
45	0:18:21.7	14.70

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-3A (27-42')

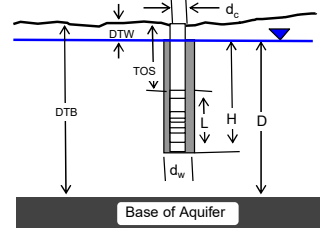
HET Job #: 1009.A75
 Date: 6/28/2022
 Time: 10:56

INPUT

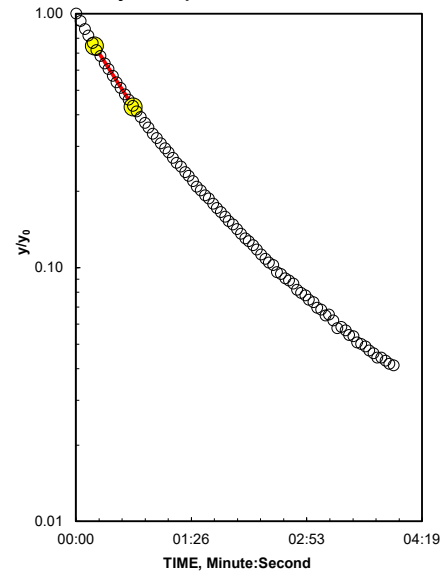
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	15 Feet
Depths to:	
water level (DTW)	14.7 Feet
top of screen (TOS)	27 Feet
Base of Aquifer (DTB)	42 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

L_{wetted}	15 Feet
D =	27.3 Feet
H =	27.3 Feet
L/r_w =	160.00
Y_0 -DISPLACEMENT =	1.70 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	6.133
$\ln(Re/r_w)$ =	4.307
Re =	6.96 Feet
Slope =	0.00828 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	121 sec
Input is consistent.	
K = 0.23 Feet/Day	



Adjust slope of line to estimate K



Entry	Time, Hr:Min:Sec	Water Level
1	10:56:10.6	13.00
2	10:56:37.8	13.73
3	10:57:04.6	14.10
4	10:57:32.0	14.30
5	10:57:58.8	14.42
6	10:58:25.8	14.50
7	10:58:53.0	14.55
8	10:59:19.8	14.59
9	10:59:47.2	14.62
10	0:24:14.0	14.64
11	0:24:41.0	14.65
12	0:25:08.2	14.66
13	0:25:34.9	14.66
14	0:26:02.4	14.67
15	0:26:29.2	14.68
16	0:26:56.2	14.68
17	0:27:23.4	14.68
18	0:27:50.1	14.68
19	0:28:17.6	14.68
20	0:28:44.4	14.69
21	0:29:11.4	14.69
22	0:29:38.6	14.69
23	0:30:05.4	14.69
24	0:30:32.7	14.69
25	0:30:59.5	14.69
26	0:31:26.6	14.69
27	0:31:53.7	14.69
28	0:32:20.5	14.69
29	0:32:48.0	14.69
30	0:33:14.7	14.70
31	0:33:41.8	14.70
32	0:34:09.0	14.70
33	0:34:35.8	14.70
34	0:35:03.2	14.70
35	0:35:30.0	14.70
36	0:35:57.0	14.70
37	0:36:24.2	14.70
38	0:36:51.0	14.70
39	0:37:18.4	14.70
40	0:37:45.2	14.70
41	0:38:12.2	14.70
42	0:38:39.4	14.70
43	0:39:06.2	14.70
44	0:39:33.6	14.70
45	0:40:00.4	14.70

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-3A (27-42')

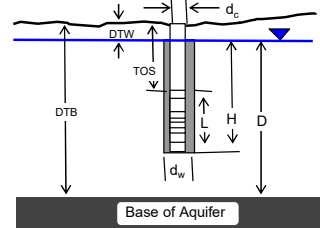
HET Job #: 1009.A75
 Date: 6/28/2022
 Time: 11:18

INPUT

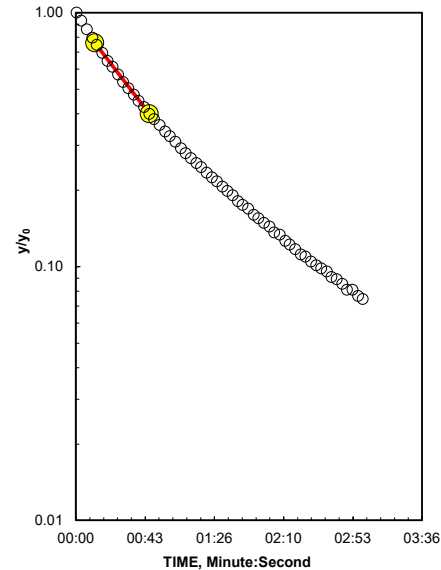
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	15 Feet
Depths to:	
water level (DTW)	14.7 Feet
top of screen (TOS)	27 Feet
Base of Aquifer (DTB)	42 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

L_{wetted}	15 Feet
D =	27.3 Feet
H =	27.3 Feet
L/r_w	160.00
Y_0 -DISPLACEMENT =	1.83 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	6.133
$\ln(Re/r_w)$ =	4.307
Re =	6.96 Feet
Slope =	0.008214 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	122 sec
Input is consistent.	
K =	0.23 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	11:18:08.6	16.53
2	11:18:11.4	16.40
3	11:18:14.9	16.27
4	11:18:18.4	16.16
5	11:18:21.2	16.07
6	11:18:24.7	15.97
7	11:18:28.0	15.88
8	11:18:31.0	15.82
9	11:18:34.5	15.74
10	11:18:37.6	15.68
11	11:18:40.8	15.62
12	11:18:44.3	15.57
13	11:18:47.2	15.52
14	11:18:50.6	15.48
15	11:18:54.1	15.43
16	11:18:57.0	15.40
17	11:19:00.4	15.36
18	11:19:03.9	15.32
19	11:19:06.7	15.30
20	11:19:10.2	15.27
21	11:19:13.7	15.24
22	11:19:16.5	15.21
23	11:19:20.0	15.19
24	11:19:23.5	15.17
25	11:19:26.3	15.15
26	11:19:29.8	15.13
27	11:19:33.1	15.11
28	11:19:36.1	15.10
29	11:19:39.6	15.08
30	11:19:42.7	15.06
31	11:19:45.9	15.05
32	11:19:49.4	15.03
33	11:19:52.3	15.02
34	11:19:55.7	15.01
35	11:19:59.2	14.99
36	11:20:02.1	14.98
37	11:20:05.5	14.97
38	11:20:09.0	14.96
39	11:20:11.9	14.95
40	11:20:15.3	14.94
41	11:20:18.8	14.93
42	11:20:21.6	14.92
43	11:20:25.1	14.91
44	11:20:28.6	14.90
45	11:20:31.4	14.90

WELL ID: CD-4A (27-42')

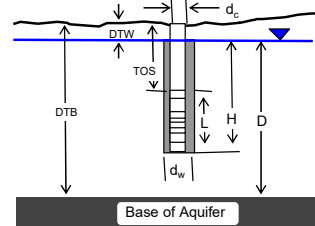
HET Job #: 1009.A75
 Date: 6/29/2022
 Time: 11:57

INPUT

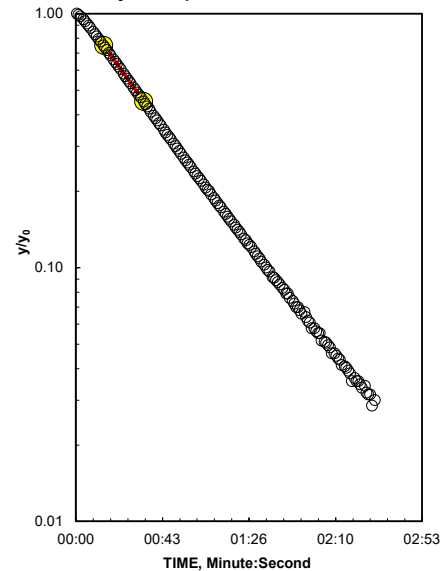
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	15 Feet
Depths to:	
water level (DTW)	17.62 Feet
top of screen (TOS)	28 Feet
Base of Aquifer (DTB)	43 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

L_{wetted}	15 Feet
D =	25.38 Feet
H =	25.38 Feet
L/r_w	160.00
Y_0 -DISPLACEMENT =	1.96 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	6.133
$\ln(Re/r_w)$ =	4.260
Re =	6.64 Feet
Slope =	0.011034 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	91 sec
Input is consistent.	
K =	0.3 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Reduced Data

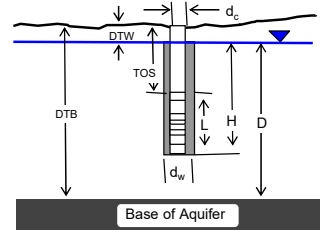
Entry	Time, Hr:Min:Sec	Water Level
1	11:57:55.9	15.66
2	11:57:59.2	15.76
3	11:58:01.8	15.86
4	11:58:05.1	15.99
5	11:58:07.8	16.10
6	11:58:11.0	16.21
7	11:58:14.3	16.32
8	11:58:16.9	16.41
9	11:58:20.2	16.51
10	11:58:22.8	16.58
11	11:58:26.1	16.66
12	11:58:29.3	16.74
13	11:58:32.0	16.79
14	11:58:35.2	16.86
15	11:58:37.9	16.91
16	11:58:41.1	16.97
17	11:58:44.4	17.02
18	11:58:47.0	17.06
19	11:58:50.3	17.10
20	11:58:52.9	17.13
21	11:58:56.2	17.17
22	11:58:59.4	17.20
23	11:59:02.1	17.23
24	11:59:05.3	17.26
25	11:59:08.0	17.28
26	11:59:11.2	17.31
27	11:59:14.5	17.33
28	11:59:17.1	17.35
29	11:59:20.4	17.37
30	11:59:23.0	17.38
31	11:59:26.3	17.40
32	11:59:29.5	17.42
33	11:59:32.2	17.43
34	11:59:35.4	17.45
35	11:59:38.7	17.46
36	11:59:41.3	17.47
37	11:59:44.6	17.48
38	11:59:47.2	17.49
39	11:59:50.5	17.50
40	11:59:53.1	17.51
41	11:59:56.4	17.51
42	11:59:59.6	17.52
43	12:00:02.3	17.53
44	12:00:05.5	17.53
45	12:00:08.2	17.54

WELL ID: CD-4A (27-42')

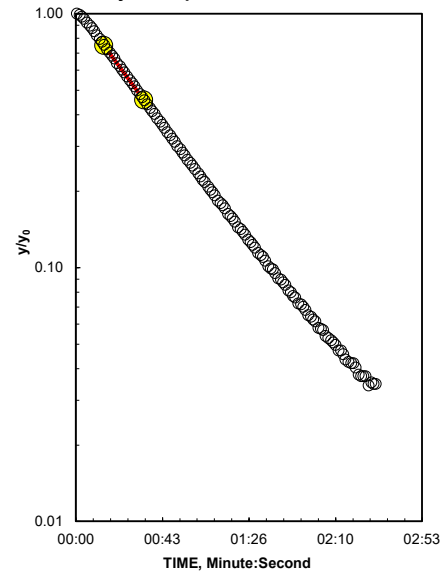
HET Job #: 1009.A75
 Date: 6/29/2022
 Time: 12:07

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	15 Feet
Depths to:	
water level (DTW)	17.62 Feet
top of screen (TOS)	28 Feet
Base of Aquifer (DTB)	43 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material -- Fine sand and silt	



Adjust slope of line to estimate K



COMPUTED

L_{wetted}	15 Feet
D =	25.38 Feet
H =	25.38 Feet
L/r_w	160.00
Y_0 -DISPLACEMENT =	1.96 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	6.133
$\ln(Re/r_w)$ =	4.260
Re =	6.64 Feet
Slope =	0.010747 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	93 sec

Input is consistent.

K = 0.3 Feet/Day

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

Entry	Time, Hr:Min:Sec	Water Level
1	12:07:39.3	15.66
2	12:07:41.9	15.72
3	12:07:44.3	15.82
4	12:07:46.9	15.91
5	12:07:49.3	16.01
6	12:07:51.9	16.11
7	12:07:54.3	16.20
8	12:07:56.9	16.28
9	12:07:59.3	16.37
10	12:08:01.9	16.44
11	12:08:04.3	16.52
12	12:08:07.0	16.58
13	12:08:09.4	16.65
14	12:08:12.0	16.70
15	12:08:14.4	16.76
16	12:08:17.0	16.81
17	12:08:19.4	16.86
18	12:08:22.0	16.91
19	12:08:24.4	16.95
20	12:08:27.0	16.99
21	12:08:29.5	17.03
22	12:08:32.1	17.07
23	12:08:34.5	17.10
24	12:08:37.1	17.13
25	12:08:39.9	17.16
26	12:08:42.1	17.19
27	12:08:44.9	17.21
28	12:08:47.1	17.23
29	12:08:49.7	17.26
30	12:08:52.2	17.28
31	12:08:54.8	17.30
32	12:08:57.2	17.32
33	12:08:59.8	17.34
34	12:09:02.2	17.35
35	12:09:04.8	17.37
36	12:09:07.2	17.38
37	12:09:09.8	17.40
38	12:09:12.3	17.41
39	12:09:14.9	17.42
40	12:09:17.3	17.43
41	12:09:19.9	17.44
42	12:09:22.3	17.45
43	12:09:24.9	17.46
44	12:09:27.3	17.47
45	12:09:29.9	17.48

WELL ID: CD-4A (27-42')

HET Job #: 1009.A75
 Date: 6/29/2022
 Time: 12:18

INPUT

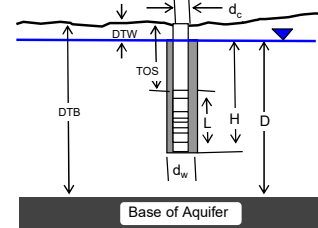
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	15 Feet
Depths to:	
water level (DTW)	17.62 Feet
top of screen (TOS)	28 Feet
Base of Aquifer (DTB)	43 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

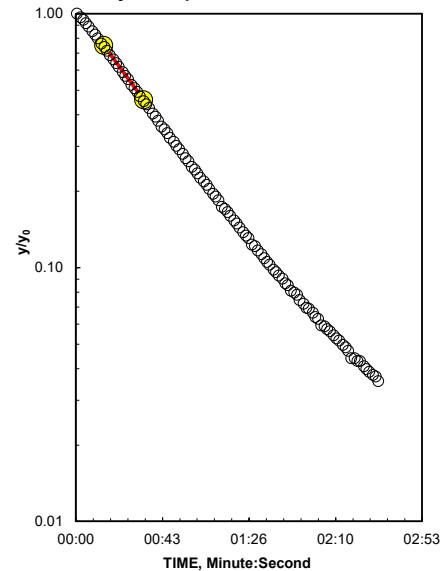
L_{wetted}	15 Feet
D =	25.38 Feet
H =	25.38 Feet
L/r_w	160.00
Y_0 -DISPLACEMENT =	1.96 Feet
Y_0 -SLUG =	2.72 Feet
From look-up table using L/r_w	
Fully penetrate C =	6.133
$\ln(Re/r_w)$ =	4.260
Re =	6.64 Feet
Slope =	0.010747 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	93 sec

Input is consistent.

K = 0.3 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:18:03.4	15.66
2	12:18:06.6	15.77
3	12:18:09.3	15.88
4	12:18:12.5	16.00
5	12:18:15.6	16.13
6	12:18:18.5	16.22
7	12:18:21.7	16.33
8	12:18:24.4	16.41
9	12:18:27.6	16.51
10	12:18:30.7	16.59
11	12:18:33.5	16.66
12	12:18:36.8	16.73
13	12:18:39.4	16.79
14	12:18:42.6	16.85
15	12:18:45.7	16.92
16	12:18:48.5	16.96
17	12:18:51.8	17.01
18	12:18:54.4	17.05
19	12:18:57.7	17.09
20	12:19:00.8	17.13
21	12:19:03.6	17.16
22	12:19:06.8	17.19
23	12:19:09.5	17.22
24	12:19:12.8	17.25
25	12:19:15.8	17.28
26	12:19:18.7	17.30
27	12:19:21.9	17.32
28	12:19:24.6	17.34
29	12:19:27.8	17.36
30	12:19:30.9	17.38
31	12:19:33.7	17.39
32	12:19:37.0	17.41
33	12:19:39.6	17.42
34	12:19:42.9	17.43
35	12:19:46.1	17.44
36	12:19:48.8	17.45
37	12:19:52.0	17.46
38	12:19:54.7	17.47
39	12:19:57.9	17.48
40	12:20:01.2	17.49
41	12:20:03.8	17.50
42	12:20:07.1	17.51
43	12:20:09.7	17.51
44	12:20:13.0	17.52
45	12:20:16.2	17.52

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer System Surficial Confining Unit (112CHCTC) located in Jefferson Davis Parish, Louisiana.

WELL ID: CD-5B (65-70')

HET Job #: 1009.A75

Date: 4/30/2025

Time: 12:01

INPUT

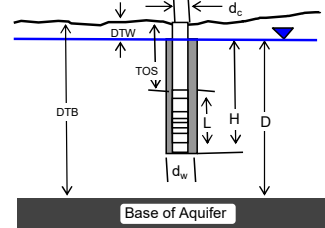
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	5 Feet
Depths to:	
water level (DTW)	60.17 Feet
top of screen (TOS)	65 Feet
Base of Aquifer (DTB)	70 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

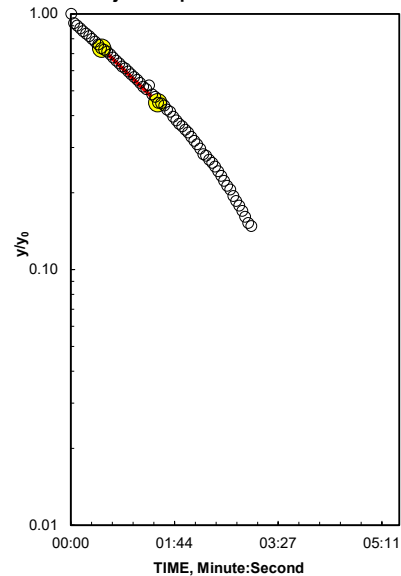
L_{wetted}	5 Feet
D =	9.83 Feet
H =	9.83 Feet
L/r_w =	53.33
Y_0 -DISPLACEMENT =	0.60 Feet
Y_0 -SLUG =	1.69 Feet
From look-up table using L/r_w	
Fully penetrate C =	2.869
$\ln(Re/r_w)$ =	3.446
Re =	2.94 Feet
Slope =	0.003801 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	263 sec

Input is consistent.

K = 0.25 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:01:30.5	61.12
2	12:01:33.5	61.17
3	12:01:36.5	61.18
4	12:01:39.5	61.19
5	12:01:42.5	61.21
6	12:01:45.5	61.22
7	12:01:48.5	61.23
8	12:01:51.5	61.24
9	12:01:54.5	61.25
10	12:01:57.5	61.26
11	12:02:00.5	61.28
12	12:02:03.5	61.29
13	12:02:06.5	61.29
14	12:02:09.5	61.30
15	12:02:12.5	61.31
16	12:02:15.5	61.33
17	12:02:18.5	61.34
18	12:02:21.5	61.35
19	12:02:24.5	61.35
20	12:02:27.5	61.36
21	12:02:30.5	61.37
22	12:02:33.5	61.38
23	12:02:36.5	61.39
24	12:02:39.5	61.40
25	12:02:42.5	61.41
26	12:02:45.5	61.41
27	12:02:48.5	61.40
28	12:02:51.5	61.43
29	12:02:54.5	61.44
30	12:02:57.5	61.45
31	12:03:00.5	61.45
32	12:03:03.5	61.46
33	12:03:06.5	61.47
34	12:03:09.5	61.47
35	12:03:12.5	61.48
36	12:03:15.5	61.49
37	12:03:18.5	61.50
38	12:03:21.5	61.50
39	12:03:24.5	61.51
40	12:03:27.5	61.51
41	12:03:30.5	61.52
42	12:03:33.5	61.53
43	12:03:36.5	61.53
44	12:03:39.5	61.54
45	12:03:42.5	61.55

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer Surficial Confining Unit (112CHCTC) located within Jefferson Davis Parish, Louisiana.

WELL ID: CD-5B (65-70')

HET Job #: 1009.A75

Date: 4/30/2025

Time: 12:25

INPUT

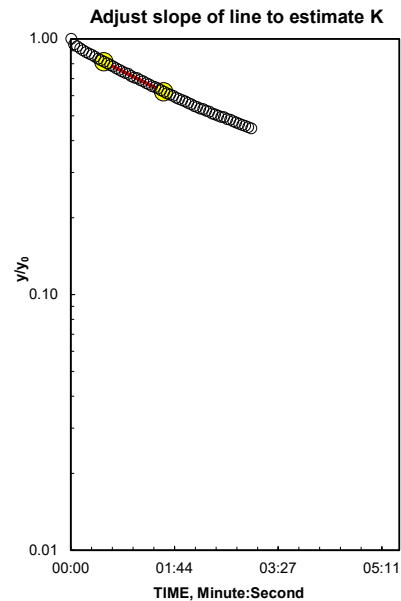
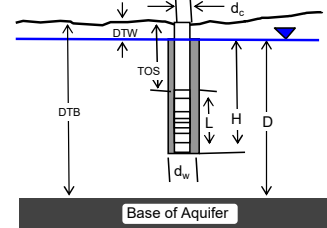
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	5 Feet
Depths to:	
water level (DTW)	60.17 Feet
top of screen (TOS)	65 Feet
Base of Aquifer (DTB)	70 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

L_{wetted}	5 Feet
D =	9.83 Feet
H =	9.83 Feet
L/r_w	53.33
Y_0 -DISPLACEMENT =	1.09 Feet
Y_0 -SLUG =	1.69 Feet
From look-up table using L/r_w	
Fully penetrate C =	2.869
$\ln(Re/rw)$ =	3.446
Re =	2.94 Feet
Slope =	0.001953 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	512 sec

Input is consistent.

K = 0.13 Feet/Day



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:25:32.1	62.81
2	12:25:35.1	62.76
3	12:25:38.1	62.74
4	12:25:41.1	62.72
5	12:25:44.1	62.70
6	12:25:47.1	62.69
7	12:25:50.1	62.67
8	12:25:53.1	62.66
9	12:25:56.1	62.64
10	12:25:59.1	62.63
11	12:26:02.1	62.62
12	12:26:05.1	62.60
13	12:26:08.1	62.59
14	12:26:11.1	62.58
15	12:26:14.1	62.57
16	12:26:17.1	62.56
17	12:26:20.1	62.54
18	12:26:23.1	62.53
19	12:26:26.1	62.52
20	12:26:29.1	62.51
21	12:26:32.1	62.50
22	12:26:35.1	62.49
23	12:26:38.1	62.48
24	12:26:41.1	62.47
25	12:26:44.1	62.46
26	12:26:47.1	62.45
27	12:26:50.1	62.44
28	12:26:53.1	62.43
29	12:26:56.1	62.42
30	12:26:59.1	62.42
31	12:27:02.1	62.40
32	12:27:05.1	62.40
33	12:27:08.1	62.39
34	12:27:11.1	62.38
35	12:27:14.1	62.37
36	12:27:17.1	62.36
37	12:27:20.1	62.35
38	12:27:23.1	62.35
39	12:27:26.1	62.34
40	12:27:29.1	62.33
41	12:27:32.1	62.32
42	12:27:35.1	62.31
43	12:27:38.1	62.31
44	12:27:41.1	62.30
45	12:27:44.1	62.30

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer Surficial Confining Unit (112CHCTC) located within Jefferson Davis Parish, Louisiana.

WELL ID: CD-5B (65-70')

HET Job #: 1009.A75

Date: 4/30/2025

Time: 12:53

INPUT

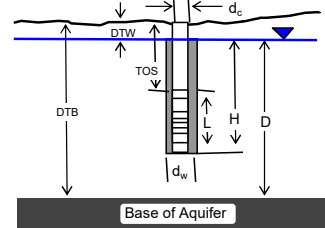
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	5 Feet
Depths to:	
water level (DTW)	60.17 Feet
top of screen (TOS)	65 Feet
Base of Aquifer (DTB)	70 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

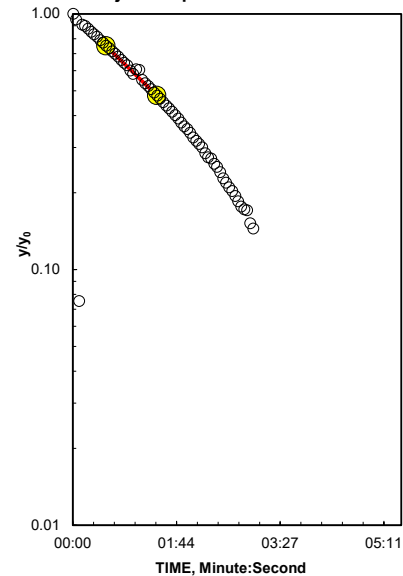
L_{wetted}	5 Feet
D =	9.83 Feet
H =	9.83 Feet
L/r_w =	53.33
Y_0 -DISPLACEMENT =	0.60 Feet
Y_0 -SLUG =	1.69 Feet
From look-up table using L/r_w	
Fully penetrate C =	2.869
$\ln(Re/r_w)$ =	3.446
Re =	2.94 Feet
Slope =	0.0038 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	263 sec

Input is consistent.

K = 0.25 Feet/Day



Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	12:53:41.3	61.12
2	12:53:44.3	61.15
3	12:53:47.3	61.68
4	12:53:50.3	61.18
5	12:53:53.3	61.19
6	12:53:56.3	61.20
7	12:53:59.3	61.21
8	12:54:02.3	61.22
9	12:54:05.3	61.24
10	12:54:08.3	61.25
11	12:54:11.3	61.26
12	12:54:14.3	61.27
13	12:54:17.3	61.28
14	12:54:20.3	61.29
15	12:54:23.3	61.30
16	12:54:26.3	61.31
17	12:54:29.3	61.33
18	12:54:32.3	61.34
19	12:54:35.3	61.34
20	12:54:38.3	61.36
21	12:54:41.3	61.37
22	12:54:44.3	61.36
23	12:54:47.3	61.36
24	12:54:50.3	61.39
25	12:54:53.3	61.40
26	12:54:56.3	61.41
27	12:54:59.3	61.42
28	12:55:02.3	61.43
29	12:55:05.3	61.43
30	12:55:08.3	61.44
31	12:55:11.3	61.45
32	12:55:14.3	61.46
33	12:55:17.3	61.47
34	12:55:20.3	61.47
35	12:55:23.3	61.48
36	12:55:26.3	61.49
37	12:55:29.3	61.50
38	12:55:32.3	61.50
39	12:55:35.3	61.51
40	12:55:38.3	61.52
41	12:55:41.3	61.52
42	12:55:44.3	61.53
43	12:55:47.3	61.54
44	12:55:50.3	61.54
45	12:55:53.3	61.55

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer Surficial Confining Unit (112CHCTC) located within Jefferson Davis Parish, Louisiana.

WELL ID: CD-5B (65-70')

HET Job #: 1009.A75

Date: 4/30/2025

Time: 13:11

INPUT

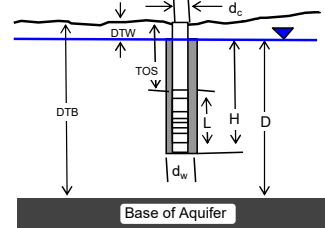
Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	5 Feet
Depths to:	
water level (DTW)	60.17 Feet
top of screen (TOS)	65 Feet
Base of Aquifer (DTB)	70 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

COMPUTED

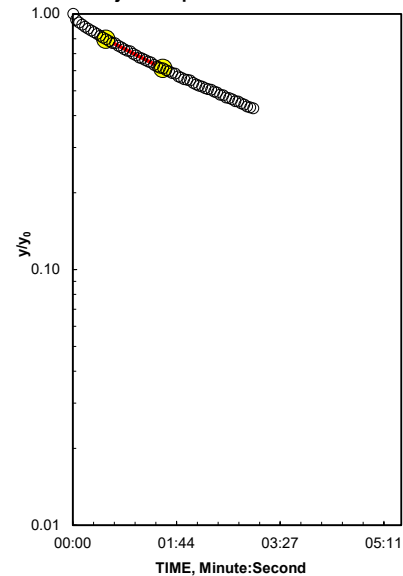
L_{wetted}	5 Feet
D =	9.83 Feet
H =	9.83 Feet
L/r_w	53.33
Y_0 -DISPLACEMENT =	1.10 Feet
Y_0 -SLUG =	1.69 Feet
From look-up table using L/r_w	
Fully penetrate C =	2.869
$\ln(Re/r_w)$ =	3.446
Re =	2.94 Feet
Slope =	0.001996 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	501 sec

Input is consistent.

K = 0.13 Feet/Day



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer Surficial Confining Unit (112CHCTC) located within Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	13:11:43.8	62.82
2	13:11:46.8	62.76
3	13:11:49.8	62.73
4	13:11:52.8	62.71
5	13:11:55.8	62.70
6	13:11:58.8	62.68
7	13:12:01.8	62.66
8	13:12:04.8	62.65
9	13:12:07.8	62.63
10	13:12:10.8	62.62
11	13:12:13.8	62.61
12	13:12:16.8	62.59
13	13:12:19.8	62.58
14	13:12:22.8	62.56
15	13:12:25.8	62.56
16	13:12:28.8	62.54
17	13:12:31.8	62.53
18	13:12:34.8	62.52
19	13:12:37.8	62.51
20	13:12:40.8	62.50
21	13:12:43.8	62.49
22	13:12:46.8	62.47
23	13:12:49.8	62.46
24	13:12:52.8	62.45
25	13:12:55.8	62.44
26	13:12:58.8	62.43
27	13:13:01.8	62.43
28	13:13:04.8	62.41
29	13:13:07.8	62.40
30	13:13:10.8	62.39
31	13:13:13.8	62.39
32	13:13:16.8	62.38
33	13:13:19.8	62.37
34	13:13:22.8	62.36
35	13:13:25.8	62.36
36	13:13:28.8	62.34
37	13:13:31.8	62.34
38	13:13:34.8	62.33
39	13:13:37.8	62.32
40	13:13:40.8	62.32
41	13:13:43.8	62.31
42	13:13:46.8	62.30
43	13:13:49.8	62.29
44	13:13:52.8	62.29
45	13:13:55.8	62.28

WELL ID: CD-5B (65-70')

HET Job #: 1009.A75

Date: 4/30/2025

Time: 13:35

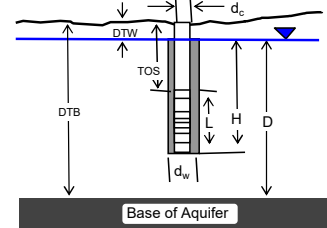
INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	5 Feet
Depths to:	
water level (DTW)	60.17 Feet
top of screen (TOS)	65 Feet
Base of Aquifer (DTB)	70 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

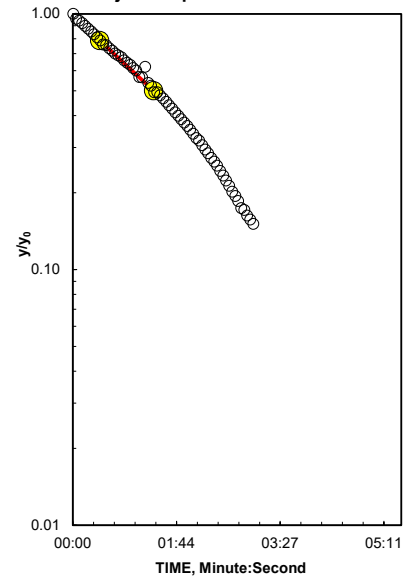
COMPUTED

L_{wetted}	5 Feet
D =	9.83 Feet
H =	9.83 Feet
L/r_w =	53.33
Y_0 -DISPLACEMENT =	0.60 Feet
Y_0 -SLUG =	1.69 Feet
From look-up table using L/r_w	
Fully penetrate C =	2.869
$\ln(Re/r_w)$ =	3.446
Re =	2.94 Feet
Slope =	0.003638 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	275 sec

Input is consistent.

K = 0.24 Feet/Day

Adjust slope of line to estimate K



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	13:35:14.9	61.12
2	13:35:50.9	61.28
3	13:36:26.9	61.35
4	13:37:02.9	61.49
5	13:37:38.9	61.57
6	13:38:14.9	61.63
7	1:57:50.9	61.68
8	1:58:26.9	61.73
9	1:59:02.9	61.75
10	1:59:38.9	61.79
11	2:00:14.9	61.81
12	2:00:50.9	61.82
13	2:01:26.9	61.84
14	2:02:02.9	61.85
15	2:02:38.9	61.85
16	2:03:14.9	61.86
17	2:03:50.9	61.87
18	2:04:26.9	61.88
19	2:05:02.9	61.88
20	2:05:38.9	61.89
21	2:06:14.9	61.89
22	2:06:50.9	61.89
23	2:07:26.9	61.90
24	2:08:02.9	61.89
25	2:08:38.9	61.90
26	2:09:14.9	61.90
27	2:09:50.9	61.90
28	2:10:26.9	61.90
29	2:11:02.9	61.90
30	2:11:38.9	61.90
31	2:12:14.9	61.90
32	2:12:50.9	61.90
33	2:13:26.9	61.90
34	2:14:02.9	61.90
35	2:14:38.9	61.90
36	2:15:14.9	61.90
37	2:15:50.9	61.91
38	2:16:26.9	61.91
39	2:17:02.9	61.91
40	2:17:38.9	61.90
41	2:18:14.9	61.90
42	2:18:50.9	61.90
43	2:19:26.9	61.90
44	2:20:02.9	61.91
45	2:20:38.9	61.90

REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer Surficial Confining Unit (112CHCTC) located within Jefferson Davis Parish, Louisiana.

WELL ID: CD-5B

INPUT

Construction:	
Casing dia. (d_c)	0.75 Inch
Annulus dia. (d_w)	2.25 Inch
Screen Length (L)	5 Feet
Depths to:	
water level (DTW)	60.17 Feet
top of screen (TOS)	65 Feet
Base of Aquifer (DTB)	70 Feet
Annular Fill:	
across screen --	Coarse Sand
above screen --	Bentonite
Aquifer Material --	
Fine sand and silt	

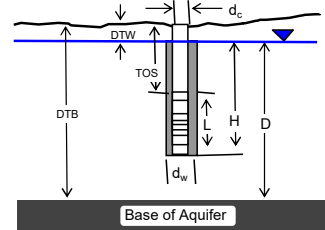
COMPUTED

L_{wetted}	5 Feet
D =	9.83 Feet
H =	9.83 Feet
L/r_w	53.33
Y_0 -DISPLACEMENT =	0.91 Feet
Y_0 -SLUG =	1.69 Feet
From look-up table using L/r_w	
Fully penetrate C =	2.869
$\ln(Re/r_w)$ =	3.446
Re =	2.94 Feet
Slope =	0.002504 $\log_{10}/\text{sec}$
$t_{90\%}$ recovery =	399 sec

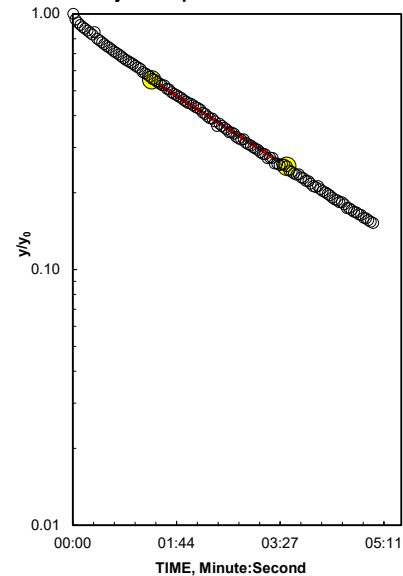
Input is consistent.

K = 0.17 Feet/Day

HET Job #: 1009.A75
 Date: 4/30/2025
 Time: 14:02



Adjust slope of line to estimate K



REMARKS:

Bouwer and Rice analysis of slug test, WRR 1976

This slug test was conducted in the shallow sediments of the Chicot Aquifer Surficial Confining Unit (112CHCTC) located within Jefferson Davis Parish, Louisiana.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	14:02:59.0	42.87
2	14:03:03.8	42.80
3	14:03:08.6	42.76
4	14:03:13.4	42.74
5	14:03:18.2	42.71
6	14:03:23.0	42.68
7	14:03:27.8	42.66
8	14:03:32.6	42.64
9	14:03:37.4	42.62
10	14:03:42.2	42.60
11	14:03:47.0	42.58
12	14:03:51.8	42.56
13	14:03:56.6	42.54
14	14:04:01.4	42.53
15	14:04:06.2	42.51
16	14:04:11.0	42.49
17	14:04:15.8	42.47
18	14:04:20.6	42.46
19	14:04:25.4	42.44
20	14:04:30.2	42.43
21	14:04:35.0	42.42
22	14:04:39.8	42.40
23	14:04:44.6	42.39
24	14:04:49.4	42.38
25	14:04:54.2	42.36
26	14:04:59.0	42.36
27	14:05:03.8	42.35
28	14:05:08.6	42.33
29	14:05:13.4	42.32
30	14:05:18.2	42.31
31	14:05:23.0	42.29
32	14:05:27.8	42.29
33	14:05:32.6	42.28
34	14:05:37.4	42.27
35	14:05:42.2	42.26
36	14:05:47.0	42.25
37	14:05:51.8	42.24
38	14:05:56.6	42.24
39	14:06:01.4	42.23
40	14:06:06.2	42.22
41	14:06:11.0	42.22
42	14:06:15.8	42.21
43	14:06:20.6	42.19
44	14:06:25.4	42.19
45	14:06:30.2	42.19