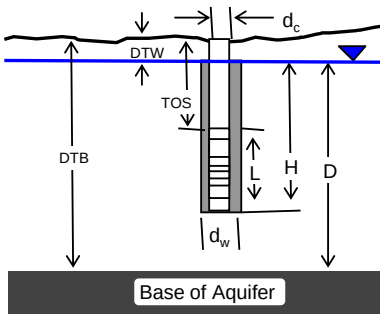
Appendix 9-2 – Aquifer Test Results

WELL ID: BH3 - Cloghercor

Local ID: Cloghercor
Date: 01/10/2022
Time: 00:00

INPUT

Construction:		
Casing dia. (d_c)	0.05	Meter
Annulus dia. (d_w)	0.2	Meter
Screen Length (L)	2	Meter
Depths to:		
water level (DTW)	1.4	Meter
top of screen (TOS)	5	Meter
Base of Aquifer (DTB)	30	Meter
Annular Fill:		
across screen --	Gravel	
above screen --	Backfill	
Aquifer Material --	Granite	



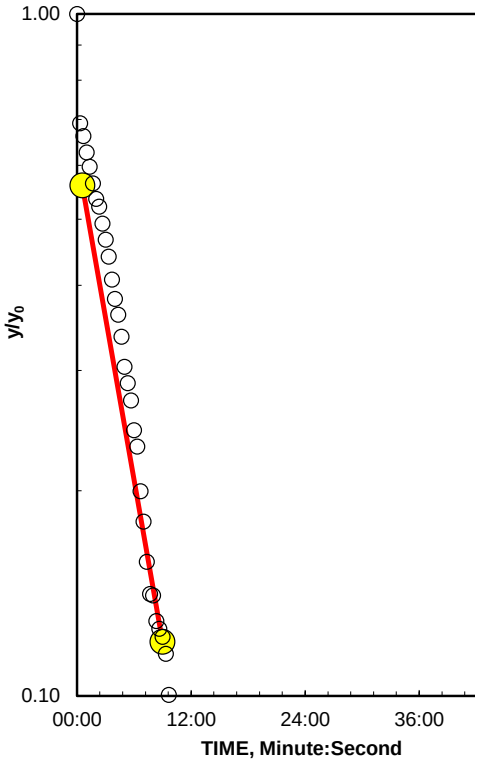
COMPUTED

L_{wetted}	3	Meter
D =	28.6	Meter
H =	4.6	Meter
L/r_w =	10.00	
$y_{0\text{-DISPLACEMENT}}$ =	1.48	Meter
$y_{0\text{-SLUG}}$ =	1.64	Meter
From look-up table using L/r_w		
Partial penetrate A =	1.881	
B =	0.268	
ln(Re/rw) =	1.607	
Re =	1.64	Meter
Slope =	0.00022	$\log_{10}$/sec
$t_{90\%}$ recovery =	4543	sec

Input is consistent.

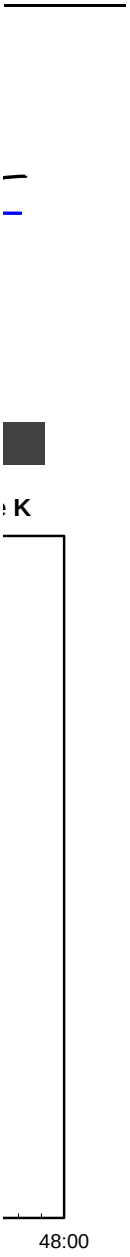
K =	2.5E-07	Meter/Second
	0.0216	

Adjust slope of line to estimate



REMARKS: Bouwer and Rice analysis of slug test, V

Slug test was conducted in Donegal grantie aquifer,



Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	0:00:00.0	0.12
2	0:02:00.0	0.58
3	0:04:00.0	0.62
4	0:06:00.0	0.68
5	0:08:00.0	0.72
6	0:10:00.0	0.77
7	0:12:00.0	0.81
8	0:14:00.0	0.83
9	0:16:00.0	0.87
10	0:18:00.0	0.91
11	0:20:00.0	0.95
12	0:22:00.0	1.00
13	0:24:00.0	1.04
14	0:26:00.0	1.07
15	0:28:00.0	1.10
16	0:30:00.0	1.15
17	0:32:00.0	1.18
18	0:34:00.0	1.20
19	0:36:00.0	1.24
20	0:38:00.0	1.26
21	0:40:00.0	1.31
22	0:42:00.0	1.33
23	0:44:00.0	1.37
24	0:46:00.0	1.39
25	0:48:00.0	1.39
26	0:50:00.0	1.41
27	0:52:00.0	1.42
28	0:54:00.0	1.42
29	0:56:00.0	1.43
30	0:58:00.0	1.45
31	1:06:40.0	1.48
32	2:13:20.0	1.50

*N*RR 1976