Apparatus Diameter (cm)

Area = (pi*(35/200)^2) 0.0962

Experiment #	Test #	Area (m^2)
1	1	0.0962
	2	0.0962
	3	0.0962
	4	0.0962
	5	0.0962
	6	0.0962
	7	0.0962
	8	0.0962
	9	0.0962
	10	0.0962

raulic Conductivity of Exp 1

2	1	0.0962
	2	0.0962
	3	0.0962
	4	0.0962
	5	0.0962
	6	0.0962

raulic Conductivity of Exp 2

3	1	0.0962
	2	0.0962
	3	0.0962
	4	0.0962

raulic Conductivity of Exp 3

4	1	0.0962
	2	0.0962
	3	0.0962

raulic Conductivity of Exp 4

5	1	0.0962
	2	0.0962
	3	0.0962
	4	0.0962
	5	0.0962
	6	0.0962
	7	0.0962
	8	0.0962
	9	0.0962
	10	0.0962
	11	0.0962
	12	0.0962

Hydraulic Conductivity of Exp 5

Experiment	Hydraulic Conductivity (mm/s)	Hydraulic Conductivity (m/day)
1	0.29	24.83
2	0.17	14.40
3	0.22	18.85
4	0.21	17.96
5	0.27	23.04

There is a change in **hydraulic conductivity (K)** from expe

Darcy Data

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Packed sand length (m)	Flow (L/min)	Inlet head (m)	Hydraulic Gradient
0.58	3.6	1.11	1.11
0.58	7.65	2.36	2.36
0.58	12	4	4
0.58	14.28	4.9	4.9
0.58	15.2	5.02	5.02
0.58	21.8	7.63	7.63
0.58	23.41	8.13	8.13
0.58	24.5	8.58	8.58
0.58	27.8	9.86	9.86
0.58	29.4	10.89	10.89
1.14	2.66	2.6	2.6
1.14	4.28	4.7	4.7
1.14	6.26	7.71	7.71
1.14	8.6	10.34	10.34
1.14	8.9	10.75	10.75
1.14	10.4	12.34	12.34
1.71	2.13	2.57	2.57
1.71	3.9	5.09	5.09
1.71	7.25	9.46	9.46
1.71	8.55	12.35	12.35
1.7	5.25	6.98	6.98
1.7	7	9.95	9.95
1.7	10.3	13.93	13.93

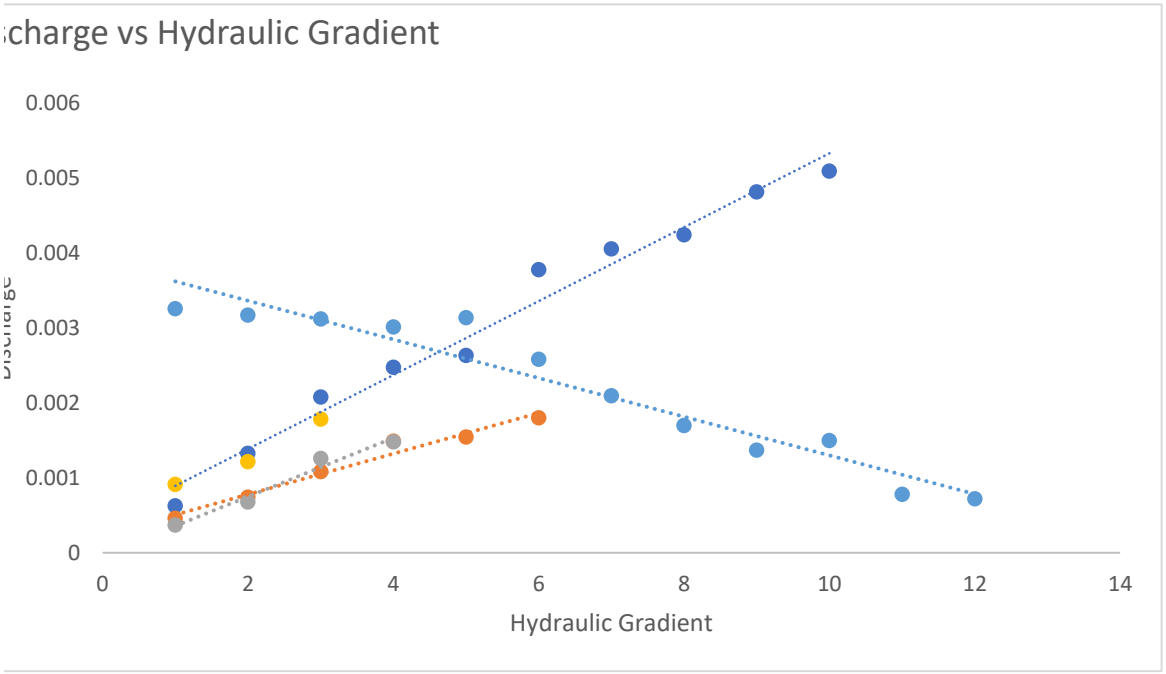
1.1	18.8	9.48	13.08
1.1	18.3	12.88	12.88
1.1	18	9.8	12.58
1.1	17.4	12.87	12.41
1.1	18.1	12.8	12.31
1.1	14.9	8.86	9.69
1.1	12.1	12.84	8.44
1.1	9.8	6.71	6.71
1.1	7.9	12.81	5.78
1.1	8.65	5.58	5.58
1.1	4.5	2.98	2.98
1.1	4.15	12.86	2.98

riment to experiment **because of the change in Height (H) and also the flow (Q)** since Area (A) a

Discharge (m/s)	Outlet head (m)	Hydraulic Conductivity (mm/s)	Hydraulic Conductivity (m/day)
0.000623701	0	0.325897623	28.15755464
0.001325364	0	0.325725008	27.14375066
0.002079002	0	0.301455301	25.12127512
0.002474012	0	0.292842293	24.4035244
0.002633403	0	0.304257675	25.35480623
0.003776854	0	0.287100287	23.92502393
0.004055787	0	0.289342706	24.11189219
0.004244629	0	0.286932979	23.9110816
0.004816355	0	0.283314989	23.60958243
0.005093555	0	0.271282089	22.60684079
			24.8345332
0.000460845	0	0.20206301	16.83858415
0.000741511	0	0.179855797	14.98798307
0.001084546	0	0.1603609	13.36340831
0.001489951	0	0.164269313	13.68910943
0.001541927	0	0.163515931	13.62632758
0.001801802	0	0.166454948	13.87124564
			14.3961097
0.000369023	0	0.245536617	20.46138476
0.000675676	0	0.226995168	18.916264
0.001256064	0	0.227047465	18.92062212
0.001481289	0	0.205101551	17.09179594
			18.84751671
0.000909563	0	0.221526905	18.46057541
0.001212751	0	0.207203725	17.26697707
0.001784477	0	0.217775343	18.14794528
			17.95849925

0.003257103	-3.6	0.273915412	22.82628429
0.003170478	0	0.270770651	22.56422093
0.003118503	-2.78	0.272683103	22.72359188
0.003014553	0.46	0.267204538	22.26704483
0.003135828	0.49	0.2802121	23.35100832
0.002581428	-0.83	0.293041315	24.42010956
0.002096327	4.4	0.273217986	22.76816554
0.001697852	0	0.278336344	23.19469533
0.001368676	7.03	0.260474741	21.70622845
0.001498614	0	0.295425699	24.61880822
0.000779626	0	0.287781328	23.98177734
0.000718988	9.88	0.265398336	22.11652799
			23.04487189

and length(L) do not change per experiment since we using the same bottle and same length of pack


charge vs Hydraulic Gradient
0.006
0.005
0.004
0.003
0.002
0.001
0
0
2
4
6
8
10
12
14
Hydraulic Gradient

‹ed gravel throughout the experiment.