

FYNOP - Point Dilution Test Results

DRAFT RELEASE

Determined from Core Hole Dimensions
 Determined from DI Water Slug Volume-----

DRAFT RESULTS FOR DISCUSSION PURPOSES ONLY.



Test #	Borehole MW145A	Test Interval in BGS	HQ Core-hole Dia ft	HQ Core-hole Radius ft	Interval Height ft	X-Section		Volume ft**3	Storage Volume of Injection Pipe ft**3	Volume of Tracer Slug Entering the Test Interval		time minutes	Background umhos/cm	Initial Conc umhos/cm	Final Conc umhos/cm	Co umhos/cm	C umhos/cm	Borehole velocity using core-hole diameter v* ft/min	Borehole velocity using slug volume v* ft/min	porosity** --	Adjustment Factor --	Formation Velocity using core-hole diameter		DI slug volume gals ft**3	
						A ft**2	W ft**3			A ft**2	W ft**3											v ft/min	v ft/min		
6		105 ft - 120.1 ft	0.314961	0.1574805	15.1	4.76	1.18	0.30	7.72	12.18	7.72	42.00	680.00	137.39	633.76	542.61	46.24	0.014504	0.037151	0.250000	1.000000	0.058016	0.148604	60	8.020747
5		160.8 ft - 164 ft	0.314961	0.1574805	2.2	0.69	0.17	0.50	3.90	3.31	3.90	41.00	606.00	78.50	409.80	527.50	196.20	0.005967	0.028462	0.250000	1.000000	0.023869	0.113849	32.9	4.398043
4		182 ft - 186 ft	0.314961	0.1574805	8	2.52	0.62	0.56	5.76	7.66	5.76	74.00	606.00	136.87	301.67	469.13	304.34	0.001447	0.004397	0.250000	1.000000	0.005787	0.017589	47.3	6.323022
3		190.5 ft - 194.0 ft	0.314961	0.1574805	4.2	1.32	0.33	0.59	3.45	4.29	3.45	37.00	606.00	225.72	553.107	380.28	52.89	0.013188	0.042805	0.250000	1.000000	0.052753	0.171222	30.2	4.037109
2		194.7 ft - 198.7 ft	0.314961	0.1574805	4.15	1.31	0.32	0.60	2.28	3.47	2.28	17.00	606.00	175.103	574.52	430.90	31.48	0.038073	0.101033	0.250000	1.000000	0.152293	0.404131	21.5	2.874101
1		199.7 ft - 201.6 ft	0.314961	0.1574805	1.9	0.60	0.15	0.61	1.34	1.80	1.34	33.00	535.00	54.664	412.841	480.34	122.16	0.010263	0.030855	0.250000	1.000000	0.041053	0.123418	14.6	1.951715

** Kennel porosity of 9.8, based on 246 samples, does not apply here. Darcy-Weisbach velocity and formation velocity are the same in effect.

***adopted from Freeze and Cherry (1979) Range is 0.5 to 4.

Eq'n 9.27; after Freeze and Cherry, p.429

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