

FYNOP - Point Dilution Test Results

Determined from Borehole Dimensions Determined from DI Water Slug Volume-----



DRAFT RESULTS FOR DISCUSSION PURPOSES ONLY.

Borehole MW147A

Test #	Open-borehole test Interval, in feet BGS	Borehole diameter ft	Borehole Radius ft	Effective Test Interval Height (Voided) ft	Test Interval X-Section A ft**2	Test Interval Volume W ft**3	Storage Volume of Injection Pipe ft**3	Volume of Tracer Slug Entering the Test Interval X-Section		time to recovery minutes	Background Specific Conductance umhos/cm	Initial Spec. Cond. umhos/cm	Final Spec. Cond. umhos/cm	Co umhos/cm	C umhos/cm	v* ft/min	Borehole velocity using borehole diameter ft/min	Borehole velocity using slug volume ft/min	porosity (%)**	α***	Adjustment Factor	Formation Velocity using		DI slug volume gals ft**3	
								Test Interval X-Section A ft**2	Test Interval Volume W ft**3													Velocity using borehole diameter ft/min	Velocity using slug volume ft/min		
1	200 ft - 250 ft*	0.48958333	0.244791665	8	3.92	1.51	0.66	3.62	6.07	3.62	20.00	714.00	199	713.9	515.00	0.10	0.164319	0.254787	20.000000	1.000000	--	0.821595	1.273935	32	4.277732

* void/cavern from 207 to 215 ft BGS; contains some clay-filling material (from Steve Fisher/GSC 9/26/12 email).

** roughly estimated based on partial void filling.

***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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