



**Constant Head Permeability Test  
ASTM D2434**

CTL Job No: \_\_\_\_\_ Boring: \_\_\_\_\_ Date: \_\_\_\_\_  
 Client: \_\_\_\_\_ Sample: \_\_\_\_\_ By: PJ  
 Project Name: \_\_\_\_\_ Depth, ft: \_\_\_\_\_  
 Project No.: \_\_\_\_\_  
 Soil Description: Greenish Gray GRAVEL w/ Silt & Sand  
 Remolding Data: Target density = 92% of 138pcf.

		Constant Head Calculation, $K=QL/thA$				
Test #	Elapsed Time t, (sec)	Volume Q, (cc)	Head Loss h (cm)	Water Temp (°C)	Hydraulic Gradient	Coef. Of Permeability K, (cm/sec)
1	60	1132	0.9	19.3	0.06	1.8
2	60	1199	0.9	19.3	0.06	1.9
3	115	2171	0.9	19.3	0.06	1.8
4	145	2787	0.9	19.3	0.06	1.8

<b>Average Permeability (cm/sec):</b>						<b>1.8</b>
<b>Average Permeability (in/hr):</b>						<b>2618</b>

Sample Data:		Initial		Final	
Height, (L)	in.:	9.00		9.00	
Diameter,	in.:	6.00		6.00	
Area, (A)	in <sup>2</sup> :	28.27		28.27	
Volume,	in <sup>3</sup> :	254.47		254.47	
Total Volume.	cc:	4170		4170	
Vol. of Solids,	cc:	3201		3201	
Vol. of Voids,	cc:	969		969	
Void Ratio	e:	0.30		0.30	
Porosity,	%:	23.2		23.2	
Saturation,	%:	36.7		98.5	
Sp. Gravity:		2.65	assumed	2.65	assumed
Wet Weight,	gm:	8837.1		9435.9	
Dry Weight	gm:	8481.5		8481.5	
Moisture,	%:	4.2		11.3	
Density,	pcf:	127.0		127.0	

Remarks: