
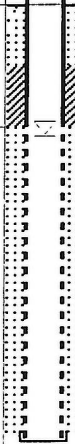
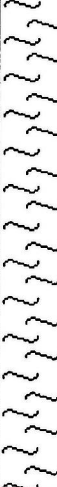


BOREHOLE LOG

LOGGED BY: Sushil Dogra
DRILLER: Beck Drilling

O.D. & TYPE: 150mm Solid Stem
RIG: Small Track Mounted

HOLE No: BH/MW13
WELL PIPE TOP EL. (m): 100.27m

Depth (m)	DESCRIPTION	Symbol	Depth / Elevation	Well	SAMPLE		VAPOUR ("COV") CONC.				COMMENTS	
					Type	Recovery (%)	■	%	LEL	■		●
	Silty Sand (Fill) Light grey/brown, damp, compact Trace to some fine gravel		99.1		▶	85						Surface EL 99.65 Water depth 1.27m from top of pipe and 0.65m from surface Water depth measured on Oct. 11, 2007
1	Peat (Native) Bark brown, wet, soft, fibrous Some rootlets				▶	100						
2					▶	100						
3					▶	100						
3	Bottom of Borehole		96.6									Soil caving between 2.13m to the bottom of borehole
4												
5												
6												



PROJECT: DSI
CLIENT: Ms. Han & Eva Sun

JOB No: 7902
Sheet No: 1 of 1
DATE: Oct. 9, 2007

Time Lag (T) Calculations

t = T when H/H ₀ =	0.37		
T (sec)	MW4	MW13	
	491.0	1435	
1-intercept	2486.0	1657.0	1988.0

Hydraulic Conductivity (k) Determination

Hvorslev case G (well point-filter in uniform soil) basic time lag formulas:

$$K_h = \frac{d^2 * \ln \{mL/D + \sqrt{1 + (mL/D)^2}\}}{8LT}$$

$$K_h = \frac{d^2 * \ln \{2mL/D\}}{8LT} \text{ for } mL/D > 4$$

d = standpipe internal diameter

= 0.051 m

D = diameter of the borehole = 0.152 m

m = anisotropy factor = sqrt(10) for more homogenous medium and sqrt(100) for bedded or structurally oriented sequence of rock

L (m) = length of well screen (wet)

MW4	MW13
3.05	1.61

Check if mL/D > 4	MW4	MW13
when m = 3.16	63.5	33.5
when m = 10	200.7	105.9

Thus, mL/D > 4 for all wells.

K _h (m/s)	MW4	MW13	Average
when m = 3.16	1.05E-06	5.92E-07	8.22E-07
when m = 10	1.30E-06	7.54E-07	1.03E-06
Average	1.18E-06	6.73E-07	9.25E-07