

**CLIENT** CITY OF WINNIPEG  
**PROJECT** MONTCALM FORCE MAIN REPLACEMENT  
**SITE** MONTCALM FORCE MAIN  
**LOCATION** CENTRE OF RIVER, 5529412.5 N 635790.6 E  
**DRILLING METHOD** Ranger Coring

**JOB NO.** 03-107-17  
**GROUND ELEV.** 213.70 m  
**WATER ELEV.**  
**DATE DRILLED** 15 Jan 04

ELEVATION m (ft)	DEPTH		GRAPHICS	DESCRIPTION AND CLASSIFICATION	SAMPLE TYPE NUMBER	RECOVERY %	SPT (N) blows/0.30 m ▲	Cu TORVANE (kPa) ◆										
	(m)	(ft)						20	40	60	80	PL	MC	LL				
213	1			<u>SOFT SOIL</u>														
212.1	5			- Trace gravel below 0.81 m. - No Recovery. - 0.46 m of ice. Ice elevation 221.4 m. - Bottom of river is 7.72 m from top of ice. The above descriptions are based on driller's input.														
212	2			<u>SILT (TILL)</u> - Brown, moist, low plasticity, with fine to coarse grained angular gravel, some fine to coarse grained sand. - Trace to some cobbles at 1.78 m.	1													
211	3	10			2													
210	4			- Some to with cobbles at 3.25 m.														
209	5	15																
208	6	20																
207	7																	
206.9	8	25		<u>LIMESTONE BEDROCK</u>														
205.9																		
205	9																	
204.3		30																
204				END OF HOLE AT 9.40 m														

▲ 160  
Fbr 76 mm

SPT & TORVANE P:\PROJECTS\2003\03-107-17\GEOLOGS\03-107-17.GPJ

SAMPLE TYPE  Core Barrel  Split Spoon

CONTRACTOR **Paddock Drilling Ltd.** INSPECTOR **J. CHING** APPROVED \_\_\_\_\_ DATE 19/01/04