

Suncor Energy		P300 RTBPH to SPA 8 Stage 5		BOREHOLE NO.: BH14-11	
Mobile Augers & Research Ltd.		SITE: Suncor Millenium		PROJECT NO.: EG10269	
M10 / Solid Stem		N:253576 E:147105		ELEVATION: 246 m	
SAMPLE TYPE		<input checked="" type="checkbox"/> Shelby Tube <input type="checkbox"/> No Recovery <input checked="" type="checkbox"/> SPT Test (N) <input type="checkbox"/> Grab Sample <input type="checkbox"/> Split-Pen <input type="checkbox"/> Core			
BACKFILL TYPE		<input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Pea Gravel <input type="checkbox"/> Slough <input type="checkbox"/> Grout <input checked="" type="checkbox"/> Drill Cuttings <input type="checkbox"/> Sand			

Depth (m)		SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	SPT (N)	SLOTTED PIEZOMETER	OTHER TESTS COMMENTS	ELEVATION (m)
0			FILL (CLEARWATER CLAY) some sand, stiff, medium plastic, dark grey to black		G1			Sieve Analysis (G1): Sand - 14.7% Fines - 85.3% Frozen to 0.8 m depth	245
1			... below 0.8 m, trace glauconitic sand		D1	9			244
2			FILL (LIMESTONE) ... below 2.3 m, clay, coarse gravel intermixed with limestone, compact		G2			From 2.3 to 2.8 m, very rocky drilling Corrosivity Test (G2/D2): pH = 8.02 Resistivity = 1920 ohms-cm Soluble Sulphates < 0.01% Soluble Chlorides = 0.007%	243
3					D2	22			242
4			... at 4 m, FREEWATER ... below 4 m, nodular, occasional bitumen infilled voids, calcareous clay matrix		G3			Water level 45 days after completion	241
5					D3	14			240
6			... below 5.3 m, dense		D4	39			239
7			... below 6 m, trace to some oil sand pockets		D5	50/125			238
8			... below 6.9 m, very dense						237
9			End of Borehole at 7.2 m due to Auger Refusal Borehole sloughed to 5.2 m upon completion Water level at 1.8 m at completion Installed 1" PVC standpipe to 7.2 m, slotted from 7.2 to 4.2 m, with 1 m stick up above ground Backfilled with drill cuttings from 7.2 to 2 m, and with bentonite from 2 m to surface Water level at 2.72 m on January 28, 2015						236
10									235
11									235
12									235

	Environment & Infrastructure	ENTERED BY: MF	COMPLETION DEPTH: 7.2 m
	5681 - 70 Street NW	LOGGED BY: KH	COMPLETION DATE: 14/12/14
	Edmonton, Alberta, T6B 3P6	REVIEWED BY: SP	Page 1 of 1