

Material: Intensive Lightweight Subsoil
Source: Bourne Amenity Ltd
Date: 18/08/2016
Tested Against: BS8601:2013 Subsoil
Tested By: Tim O'Hare Associates – TOHA/16/6768/2/SS

Parameter	Unit	BS8601:2013	Result	Compliance
Texture:				
Clay (<0.63mm)	% w/w	5 - 30%	24	Yes
Silt (0.002 – 0.63mm)	% w/w	0 - 65%	19	Yes
Sand (0.063 - 2.0mm)	% w/w	20 - 90%	57	Yes
Textual Class:	Sandy Loam			
Stones (2 - 20mm)	% w/w DW	0 - 40%	15	Yes
Stones (20-50mm)	% w/w DW	0 - 20%	0	Yes
Stones (>50mm)	% w/w DW	0%	0	Yes
Organic Matter (LOI)	% w/w	0.0 - 2.0	0.7	Yes
Ph		5.0 - 8.5	7.8	Yes
Exchangeable Sodium Percentage	%	< 15%	2.4	Yes
Phytotoxic Contaminants:				
Total Zinc	mg/kg	< 200	24	Yes
Total Copper	mg/kg	< 135	8	Yes
Total Nickel	mg/kg	< 75	30	Yes
Available Nutrients:				
Phosphorus	mg/l	<i>n/a</i>	19	<i>n/a</i>
Potassium	mg/l	<i>n/a</i>	92	<i>n/a</i>
Magnesium	mg/l	<i>n/a</i>	127	<i>n/a</i>
Additional Analysis:				
Electrical Conductivity (1:25 water extract)	µS/cm	<i>n/a</i>	379	<i>n/a</i>
Density:				
Bulk Density (at 'as received' Moisture Content)	mg/m ³	<i>n/a</i>	1.06	<i>n/a</i>
Bulk Density (at Field Capacity)	mg/m ³	<i>n/a</i>	1.38	<i>n/a</i>
Moisture Content (as received)	%	<i>n/a</i>	27	<i>n/a</i>
Moisture Content (at Field Capacity)	%	<i>n/a</i>	64	<i>n/a</i>
Falling Head Permeability (light tamp)	mm/hr	<i>n/a</i>	14	<i>n/a</i>
Total Porosity	%	<i>n/a</i>	57	<i>n/a</i>
Air-Filled Porosity	%	<i>n/a</i>	3	<i>n/a</i>
Capillary Porosity	%	<i>n/a</i>	54	<i>n/a</i>

Parameter	Unit	Guidelines	Value	Result	Compliance
Heavy Metals and Hydrocarbons					
Total Arsenic (As)	mg/kg	Soil Guideline Values CLEA 2009 (SGV)	<32	15	Yes
Total Cadmium (Cd)	mg/kg	SGV	<10	<0.2	Yes
Total Chromium (Cr)	mg/kg	SGV	<130	26	Yes
Hexavalent Chromium (Cr Vi)	mg/kg	Land Quality Management 2009 (LQM)	<4.3	<4.0	Yes
Total Cyanide (Cn)	mg/kg	Dutch Action Value (DAV)	<20	<1.0	Yes
Total Lead (Pb)	mg/kg	SGV	<450	4	Yes
Total Mercury (Hg)	mg/kg	SGV	<170	0.5	Yes
Total (mono) Phenols	mg/kg	SGV	<420	<1.0	Yes
Total Selenium (Se)	mg/kg	SGV	<350	<1.0	Yes
Water Soluble Baron (B)	mg/kg	TOHA	<5	0.4	Yes
Acenaphthylene	mg/kg	LQM	<400	<0.10	Yes
Acenaphthene	mg/kg	LQM	<480	<0.10	Yes
Anthracene	mg/kg	LQM	<4900	<0.10	Yes
Benzo (a) Anthracene	mg/kg	LQM	<4.7	<0.10	Yes
Benzo (a) Pyrene	mg/kg	LQM	<0.94	<0.10	Yes
Benzo (b) Fluoranthene	mg/kg	LQM	<6.5	<0.10	Yes
Benzo (g,h,i) Perylene	mg/kg	LQM	<46	<0.05	Yes
Benzo (k) Fluoranthene	mg/kg	LQM	<9.6	<0.10	Yes
Chrysene	mg/kg	LQM	<8.0	<0.05	Yes
Dibenzo (a,h) Anthracene	mg/kg	LQM	<0.86	<0.10	Yes
Fluoranthene	mg/kg	LQM	<460	<0.10	Yes
Fluorene	mg/kg	LQM	<380	<0.10	Yes
Indeno (1,2,3-cd) Pyrene	mg/kg	LQM	<3.9	<0.10	Yes
Naphthalene	mg/kg	LQM	<3.7	<0.05	Yes
Pyrene	mg/kg	LQM	<1000	<0.10	Yes
Total PAHs (sum SUEPA16)	mg/kg	TOHA	<40	<1.60	Yes
Aliphatic TPH (C5 – C35)	mg/kg	LQM	<1100	<10	Yes
Aromatic TPH (C5 – C35)	mg/kg	LQM	<1100	<10	Yes
Benzene	mg/kg	SGV	<0.33	<0.001	Yes
Toluene	mg/kg	SGV	<610	<0.001	Yes
Ethylbenzene	mg/kg	SGV	<350	<0.001	Yes
O-xylene	mg/kg	SGV	<230	<0.001	Yes
MTBE	mg/kg	SGV	<470	<0.001	Yes
Asbestos	mg/kg	Control of Asbestos Regulations 2006	P/A	Absent	Yes