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Surrey, RH4 3JU

18th January 2024 Our Ref: TOHA/24/1206/6/SS

Your Ref: see below

Dear Sirs

Subsoil Analysis Report: Bury Hill Horsham Yard - Bury Hill Kent Subsoil

We have completed the analysis of the soil sample recently submitted, referenced *Bury Hill Kent Subsoil* and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the sample for use as subsoil in general landscape purposes (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Subsoil (BS8601:2013 – Specification for subsoil and requirements for use – Table 1, Multipurpose Subsoil), including analysis of potential contaminants.

This report presents the results of analysis for the sample submitted to our office, and it should be considered 'indicative' of the subsoil source. The report and results should therefore not be used by third parties as a means of verification or validation testing, or for any project-specific applications, especially after the subsoil has left the Bury Hill Landscape Supplies Ltd site.

SAMPLE EXAMINATION

The sample can be described as a yellowish brown (Munsell Colour, 10YR 5/6), moist, friable, non-calcareous SAND with a single grain structure. The sample was stone free, and no unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.



Plate 1: Bury Hill Kent Subsoil Sample

ANALYTICAL SCHEDULE

The sample was submitted to a UKAS and MCERTS accredited laboratory for a range of physical and chemical tests to confirm the composition of the soil. The following parameters were determined:

- detailed particle size analysis (5 sands, silt, clay);
- stone content (2-20mm, 20-75mm, >75mm);
- saturated hydraulic conductivity;
- pH and electrical conductivity (1:2.5 water extract);
- · exchangeable sodium percentage;
- calcium carbonate;
- · organic matter content;
- visible contaminants;
- heavy metals (Sb, As, B, Ba, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, V, Zn);
- total cyanide and total (mono) phenols;
- speciated PAHs (US EPA16 suite);
- aromatic and aliphatic TPH (C5-C35 banding);
- benzene, toluene, ethylbenzene, xylene (BTEX);
- asbestos screen.

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

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RESULTS OF ANALYSIS

Particle Size Analysis and Saturated Hydraulic Conductivity

The sample fell into the sand texture class. Further detailed particle size analysis revealed the sample to have a sufficiently narrow particle size distribution with a predominance of *medium sand* (0.25-0.50mm). This is acceptable for subsoil in general landscape applications as porosity levels are maintained in a compacted state and the risk of particle interpacking is minimised..

The subsoil represented by this sample would be described as 'free draining' which is confirmed by the high saturated hydraulic conductivity result (294 mm/hr).

The particle size distribution falls outside of the range indicated in *BS8601:2013 – Figure 1*, on account of the high sand content.

Stone Content

The sample was stone-free and, as such, stones should not restrict the use of the soil for use as subsoil in general landscape purposes.

pH and Electrical Conductivity Values

The sample was acid in reaction (pH 5.6), with a pH value that would be suitable as subsoil for general landscape purposes providing species with a wide pH tolerance or those known to prefer acid soils are selected for planting.

The electrical conductivity (salinity) value (water extract) was low, which indicates that soluble salts were not present at levels that would be harmful to plants.

The electrical conductivity value by CaSO₄ extract (*BS8601* requirement) fell below the maximum specified value (2800 µS/cm) given in *BS8601:2013 – Table 1*.

Organic Matter Content

The organic matter content was low (<0.5%) and compliant with BS8601:2013 - Table 1.

Potential Contaminants

With reference to *BS8601:2013 – Section 4.2: Note 2*, there is a requirement to confirm levels of potential contaminants in relation to the subsoil's proposed end use. This includes human health, environmental protection and metals considered toxic to plants. In the absence of site-specific assessment criteria, the concentrations of selected potential contaminants that affect human health have been assessed for the concentrations that affect human health have been assessed for *residential* end-use against the Suitable For Use Levels (S4ULs) presented in the LQM/CIEH S4Uls for Human Health Risk Assessment (2015) and the DEFRA SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Policy Companion Document (2014).

Of the potential contaminants determined, none exceeded their respective guideline values.

Phytotoxic Contaminants

Of the phytotoxic (toxic to plants) contaminants determined (copper, nickel, zinc), none was found at levels that exceeded the maximum permissible levels specified in BS8601:2013 – Table 1.

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CONCLUSION

The purpose of the analysis was to determine the suitability of the sample for use as subsoil in general landscape applications (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Subsoil (BS8601:2013 – Specification for subsoil and requirements for use – Table 1, Multipurpose Subsoil).

From the soil examination and subsequent laboratory analysis, the sample was described as an acid, non-saline sandy loam with a single grain structure and low stone content. The organic matter content was low and consistent with subsoil. Of the potential contaminants determined, none exceeded their respective guideline values.

To conclude, based on our findings, the subsoil represented by this sample would be considered suitable for landscape applications where a free-draining subsoil is required or where there will be a low drought risk.

The sample was largely compliant with the requirements of the British Standard for Subsoil (BS8601:2013 – Specification for subsoil and requirements for use – Table 1, Multipurpose Subsoil) with the exception of the high sand content. On this occasion, this non-compliance is considered minor provided the landscape application proposed for this subsoil requires a free-draining subsoil.

Soil Handling Recommendations

Reference should be made to Section 6.0 of *BS8601:2013* with regard to the handling and management of the subsoil:

"Soils generally lose strength and become less resistant to damage as they become wetter; therefore, it is essential that they are stripped, handled and trafficked only in the appropriate conditions of weather and soil moisture, and with suitable machinery. If sustained heavy rainfall (e.g. >10 mm in 24 h) occurs during soil stripping operations, work should be suspended and not restarted until the ground has had at least one dry day or until a suitable moisture content has been reached. A soil can be considered to have a suitable moisture content for stripping and handling if the whole thickness of the subsoil layer being stripped and/or handled is at a moisture content below the plastic limit as determined in accordance with BS 1377-2:1990 (incorporating Amendment No. 1).

Machinery should be selected and routed to minimise soil compaction."

Further guidance is provided in Clauses 6.1–6.5.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if we can be of further assistance.

Yours faithfully

Harriet MacRae BSc MSc

Graduate Soil Scientist

Matthew Heins

BSc (Hons) MISoilSci Senior Soil Scientist

For & on behalf of Tim O'Hare Associates LLP

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Client:	Bury Hill Landscape Supplies Ltd
Project	Bury Hil Horsham Yard
Job:	Subsoil Analysis - BS8601:2013
Date:	18/01/2024
Inh Ref No:	TOHA/24/1206/6/SS

Sample Reference				Bury Hill Kent Subsoil
		Accreditation	1	
Clay (<0.002mm)	%	UKAS		2
Silt (0.002-0.05mm)	%	UKAS		2
Very Fine Sand (0.05-0.15mm)	%	UKAS		4
Fine Sand (0.15-0.25mm) Medium Sand (0.25-0.50mm)	% %	UKAS UKAS		18 46
Coarse Sand (0.50-1.0mm)	%	UKAS		18
Very Coarse Sand (1.0-2.0mm)	%	UKAS		9
Total Sand (0.05-2mm)	%	UKAS		96
Texture Class (UK Classification)		UKAS		S
Stones (2-20mm)	% DW	GLP		0
Stones (20-75mm)	% DW % DW	GLP GLP		0
Stones (>75mm)	% DW	GLP] -	
Saturated Hydraulic Conductivity	mm/hr	A2LA]	294
pH Value (1:2.5 water extract)	units	UKAS		5.6
Calcium Carbonate	%	UKAS		<1.0
Electrical Conductivity (1:2.5 water extract)	uS/cm	UKAS		105
Electrical Conductivity (1:2 CaSO ₄ extract)	uS/cm	UKAS		2242
Organic Matter (LOI) Exchangeable Sodium Percentage	% %	UKAS UKAS	1	<0.5 0.7
Exchangeable Socium Fercentage	70	UNAS	l	0.7
Visible Contaminants: Plastics >2.00mm	%	UKAS		0
Visible Contaminants: Sharps >2.00mm	%	UKAS	J	0
Total Antimony (Sb)	mg/kg	MCERTS		< 1.0
Total Arsenic (As)	mg/kg	MCERTS		6.8
Total Barium (Ba)	mg/kg	MCERTS		6
Total Beryllium (Be)	mg/kg	MCERTS		0.2
Total Cadmium (Cd)	mg/kg	MCERTS		< 0.2
Total Chromium (Cr) Hexavalent Chromium (Cr VI)	mg/kg mg/kg	MCERTS MCERTS		13 < 1.8
Total Copper (Cu)	mg/kg	MCERTS		3.1
Total Lead (Pb)	mg/kg	MCERTS		1.8
Total Mercury (Hg)	mg/kg	MCERTS		< 0.3
Total Nickel (Ni)	mg/kg	MCERTS		8
Total Selenium (Se)	mg/kg	MCERTS		< 1.0
Total Vanadium (V)	mg/kg	MCERTS		30
Total Zinc (Zn)	mg/kg	MCERTS		9.7
Water Soluble Boron (B) Total Cyanide (CN)	mg/kg mg/kg	MCERTS MCERTS		< 0.2 < 1.0
Total (mono) Phenols	mg/kg	MCERTS		< 1.0
	mg/kg]	
Naphthalene	mg/kg	MCERTS		< 0.05
Naphthalene Acenaphthylene	mg/kg mg/kg	MCERTS MCERTS		< 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene	mg/kg mg/kg mg/kg	MCERTS MCERTS MCERTS		< 0.05 < 0.05 < 0.05
Naphthalene Acenaphthylene	mg/kg mg/kg	MCERTS MCERTS		< 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene	mg/kg mg/kg mg/kg mg/kg	MCERTS MCERTS MCERTS MCERTS		< 0.05 < 0.05 < 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	MCERTS		< 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benz(b)fluoranthene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	MCERTS		<0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene	mg/kg	MCERTS		< 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benz(b)fluoranthene	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,b)anthracene	mg/kg	MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05
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Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a)piperylene Total PAHs (sum USEPA16) Aliphatic TPH > C5 - C6	mg/kg mg/kq mg/kq mg/kq mg/kq mg/kq mg/kg	MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05
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Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1.2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene Total PAHs (sum USEPA16) Aliphatic TPH > C5 - C6 Aliphatic TPH > C6 - C8 Aliphatic TPH > C8 - C10	mg/kg	MCERTS		 < 0.05 < 0.05
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Benz(a)anthracene Chrysene Benz(a)(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c)thylene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a,h)pervlene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C8 - C10	mg/kg mg/kq mg/kq mg/kq mg/kq mg/kq mg/kg	MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.050 < 0.020 < 0.050 < 0.050 < 0.050
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a,h)aphtracene Benzo(a,h)aphtracene Benzo(a,h)aphtracene Benzo(a,h)aphtracene Benzo(a,h)aphtracene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c)fluoranthene	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.00 < 0.00 < 0.020 < 0.050 < 1.0 < 2.0
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)pliuoranthene Benzo(a)pliuoranthene Benzo(a)pyrene Indeno(1.2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C8 - C10 Aliphatic TPH >C8 - C10 Aliphatic TPH >C10 - C12 Aliphatic TPH >C12 - C16 Aliphatic TPH >C16 - C21	mg/kg	MCERTS		< 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.050 < 0.020 < 0.050 < 0.050 < 0.050
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-ed)pyrene Dibenzo(a,h)anthracene Benzo(a,h,i)pervlene Total PAHs (sum USEPA16) Aliphatic TPH > C5 - C6 Aliphatic TPH > C6 - C8 Aliphatic TPH > C10 - C12 Aliphatic TPH > C10 - C12 Aliphatic TPH > C10 - C12 Aliphatic TPH > C16 - C21 Aliphatic TPH > C16 - C35 Aliphatic TPH > C21 - C35	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.00
Naphthalene Acenaphthylene Acenaphthylene Fluorene Phenanthrene Anthracene Fluoranthene Pytene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-ed)pyrene Dibenzo(a,h)anthracene Benzo(g,h,h)anthracene Benzo(g,h,h)perylene Total PAHs (sum USEPA16) Aliphatic TPH >C8 - C6 Aliphatic TPH >C8 - C10 Aliphatic TPH >C9 - C14 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C14 Aliphatic TPH >C10 - C14 Aliphatic TPH >C10 - C14 Aliphatic TPH >C10 - C15 Aliphatic TPH >C10 - C14 Aliphatic TPH >C10 - C15 Aliphatic TPH >C10 - C35 Aliphatic TPH >C35 - C35 Aliphatic TPH >C5 - C35 Aromatic TPH >C5 - C7	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.00
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c)fluoranthene Benzo(a,h)anthracene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-c	mg/kg	MCERTS		<.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)aprevlene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C1 - C12 Aliphatic TPH >C1 - C12 Aliphatic TPH >C1 - C14 Aliphatic TPH >C1 - C16 Aliphatic TPH >C1 - C35 Aliphatic TPH >C3 - C35 Aliphatic TPH >C5 - C35 Aliphatic TPH >C5 - C35 Aliphatic TPH >C7 - C35 Aliphatic TPH >C7 - C8 Aromatic TPH >C8 - C10	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.00 < 0.00 < 0.00 < 0.020 < 0.020 < 0.020 < 0.020 < 2.0 < 8.0 17 20 < 0.010 < 0.050
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)hiloranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c)hiloranthene Benzo(c)hiloranthene Benzo(c)hiloranthene Indeno(1.2,3-cd)pyrene Indeno(1.2,3-cd)pyrene Indeno(1.2,3-cd)pyrene Indeno(1.2,3-cd)pyrene Total PAHs (sum USEPA16) Aliphatic TPH > C5 - C6 Aliphatic TPH > C6 - C8 Aliphatic TPH > C10 - C12 Aliphatic TPH > C10 - C12 Aliphatic TPH > C10 - C21 Aromatic TPH > C5 - C6 Aromatic TPH > C8 - C10	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.00 < 0.020 < 0.020 < 0.020 < 0.050 < 1.0 < 2.0 < 8.0 17 20 < 0.010 < 0.010 < 0.050 < 1.0
Naphthalene Acenaphthylene Acenaphthylene Fluorene Phenanthrene Anthracene Fluoranthene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)hjuoranthene Benzo(b)fluoranthene Benzo(c)pyrene Indeno(1,2,3-cd)pyrene Indeno(1,3-cd)pyrene Indeno(1,3-cd)pyre	mg/kg	MCERTS		<.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.0
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)hiloranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c)hiloranthene Benzo(c)hiloranthene Benzo(c)hiloranthene Indeno(1.2,3-cd)pyrene Indeno(1.2,3-cd)pyrene Indeno(1.2,3-cd)pyrene Indeno(1.2,3-cd)pyrene Total PAHs (sum USEPA16) Aliphatic TPH > C5 - C6 Aliphatic TPH > C6 - C8 Aliphatic TPH > C10 - C12 Aliphatic TPH > C10 - C12 Aliphatic TPH > C10 - C21 Aromatic TPH > C5 - C6 Aromatic TPH > C8 - C10	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.05 < 0.00 < 0.00 < 0.00 < 0.00 < 0.00 < 2.0 < 8.0 17 20 < 0.010 < 0.010 < 0.050 < 1.0 < 2.0 < 10
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)hlluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a,h,i)perylene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C20 - C35 Aliphatic TPH >C70 - C8 Aromatic TPH >C70 - C8 Aromatic TPH >C70 - C8 Aromatic TPH >C70 - C12 Aromatic TPH >C70 - C14 Aromatic TPH >C70 - C12 Aromatic TPH >C10 - C21	mg/kg	MCERTS		<.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.0
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)hillouranthene Benzo(b)fluoranthene Benzo(a)pyrene Dibenzo(a,h)anthracene Dibenzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)arerviene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C6 - C8 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C2 - C35 Aliphatic TPH >C35 - C7 Aromatic TPH >C7 - C8 Aromatic TPH >C8 - C10 Aromatic TPH >C10 - C12 Aromatic TPH >C12 - C16 Aromatic TPH >C12 - C35 Aromatic TPH >C13 - C35 Aromatic TPH >C12 - C35 Aromatic TPH >C12 - C35 Aromatic TPH >C12 - C35 Aromatic TPH >C13 - C35	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.05 < 0.020 < 0.020 < 0.020 < 0.020 < 0.020 < 0.050 < 1.0 < 0.010 < 0.050 < 1.0 < 2.0 < 1.0 < 1.0
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(a)hioranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c)hyenee Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyrene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C7 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C21 Aliphatic TPH >C21 - C35 Aliphatic TPH >C5 - C6 Aromatic TPH >C7 - C8 Aromatic TPH >C7 - C8 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C35 Aromatic TPH >C21 - C35	mg/kg	MCERTS		<.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.000 <.0.00
Naphthalene Acenaphthylene Acenaphthylene Fluorene Phenanthrene Anthracene Fluoranthene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a,h,a)nthracene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C6 - C8 Aliphatic TPH >C12 - C16 Aliphatic TPH >C12 - C16 Aliphatic TPH >C12 - C35 Aliphatic TPH >C3 - C35 Aliphatic TPH >C3 - C8 Aromatic TPH >C3 - C8 Aromatic TPH >C1 - C12 Aromatic TPH >C1 - C13 Aromatic TPH >C1 - C14 Aromatic TPH >C1 - C15 Aromatic TPH >C1 - C16 Aromatic TPH >C1 - C16 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C21 Aromatic TPH >C10 - C25 Aromatic TPH >C10 - C35 Aromatic TPH >C10 - C35 Aromatic TPH >C21 - C35 Benzene Toluene	mg/kg	MCERTS		<0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.010 <0.010 <0.010 <0.010 <0.010 <0.010 <0.050 <0.010 <0.010 <0.050 <0.010 <0.010 <0.050 <0.010 <0.050 <0.010 <0.010 <0.050 <0.010 <0.050 <0.010 <0.010 <0.050 <0.010 <0.050 <0.010 <0.050 <0.010 <0.050 <0.010 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.050 <0.
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Phyrene Benz(a)anthracene Chrysene Benzo(a)hillouranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)arerviene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C6 - C8 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C21 - C35 Aliphatic TPH >C5 - C7 Aromatic TPH >C7 - C8 Aromatic TPH >C8 - C10 Aromatic TPH >C10 - C12 Aromatic TPH >C12 - C16 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C21 Aromatic TPH >C10 - C35 Aromatic TPH >C21 - C35	mg/kg	MCERTS		<.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.000 <.0.020 <.0.020 <.0.020 <.0.020 <.0.020 <.0.020 <.0.020 <.0.050 <.1.0 <.2.0 <.0.010 <.0.010 <.0.010 <.0.050 <.1.0 <.0.010 <.0.050 <.1.0 <.0.050 <.1.0 <.0.010 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0.050 <.0
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h,a)hracene Benzo(a,h,a)hracene Benzo(a,h,a)hracene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C21 Aliphatic TPH >C3 - C35 Aliphatic TPH >C10 - C35 Aliphatic TPH >C10 - C35 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C35 Aroma	mg/kg	MCERTS		 < 0.05 < 0.00 < 0.05 < 0.00 < 0.00 < 0.00 < 0.00 < 1.0 < 2.0 < 0.010 < 0.010 < 0.050 < 1.0 < 2.0 < 10 < 10 < 10 < 0.005 < 0.000 < 0.000
Naphthalene Acenaphthylene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Benzo(a)anthracene Chrysene Benzo(a)bfluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(ch)prene Indeno(1,2,3-cd)pyrene Indeno(1,2,3-cd)pyren	mg/kg	MCERTS		 < 0.05 < 0.01 < 0.05 < 0.05 < 0.05 < 0.020 < 0.050 < 1.0 < 0.010 < 0.010 < 0.010 < 1.0 < 2.0 < 10 < 10 < 0.005
Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h,a)hracene Benzo(a,h,a)hracene Benzo(a,h,a)hracene Total PAHs (sum USEPA16) Aliphatic TPH >C5 - C6 Aliphatic TPH >C6 - C8 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C12 Aliphatic TPH >C10 - C21 Aliphatic TPH >C3 - C35 Aliphatic TPH >C10 - C35 Aliphatic TPH >C10 - C35 Aromatic TPH >C10 - C12 Aromatic TPH >C10 - C35 Aroma	mg/kg	MCERTS		<.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.05 <.0.050 <.0.050 <.0.050 <.0.050 <.0.10 <.0.010 <.0.010 <.0.010 <.0.050 <.1.0 <.0.010 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.010 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.050 <.1.0 <.0.005 <.0.005 <.0.005 <.0.005 <.0.005

S = SAND

Visual Examination

The sample can be described as a yellowish brown (Munsell Colour, 10YR 5/6), moist, friable, non-calcareous SAND with a single grain structure. The sample was very slightly stony, and no unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were

Results of analysis should be read in conjunction with the report they were issued with.

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H.MacRae

Harriet MacRae BSc MSc Graduate Soil Scientist