Douglas Partners
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Report on
Data Re-Assessment for Rezoning

Port Kembla Primary School
Lot 1 Military Road, Port Kembla

Prepared for
Mr Olly Vujic

Project 78564.02
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Douglas Partners
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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

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Executive Summary

This report presents the findings of a re-assessment of the data provided in Golders Associates Pty Ltd (Golder) report *Detailed Site Investigation Former Port Kembla Primary School, Military Road, Port Kembla, NSW,* reference 137629028-003-R-Rev0, dated 16 December 2013 (Golder, 2013). Golder (2013) was prepared for the former site owner, Port Kembla Copper Pty Ltd (PKC) in support of a proposed mixed business and medium density residential development.

It is understood that the current site owner, Mr Olly Vujic wishes to rezone the site from its current B4 Mixed Use to a mixed residential use including low to high density residential. Therefore this data re-assessment is required to re-assess the existing chemical laboratory analysis data provided in Golder (2013), against appropriate site assessment criteria (SAC) for the most sensitive residential land use, being residential with gardens or accessible soil.

The objective of this data re-assessment is to establish the site contamination issues relevant to the proposed rezoning to a mixed residential use (including low to high density residential) and assess if the site can be made suitable for the proposed rezoning.

Based on the findings of the Golder (2013) laboratory data re-assessment it is considered that the site has been impacted by widespread heavy metal contamination as well as localised TRH and asbestos contamination.

Therefore it is recommended that the following further investigation be undertaken in order to finalise the remediation strategies;

- Vertical delineation and leachability assessment of the heavy metal impacted soils;
- Further investigation of the localised TRH contamination in order to establish the source, its extent and the potential risk; and
- A detailed asbestos investigation.

It is noted that the above recommended further investigation could be undertaken once the land has been rezoned to mixed residential.

It is considered that the site can be rendered compatible for the proposed low to high density residential land use subject to the above further investigation, subsequent development of appropriate remediation strategies and subsequent completion of the appropriate remediation and validation in accordance with the finalised RAP.

Potential management strategies for the heavy metal, TRH and asbestos contamination could include off-site disposal, on-site treatment, off-site treatment or on-site containment.

Table of Contents

Report on Data Re-Assessment for Rezoning
Port Kembla Primary School
Lot 1 Military Road, Port Kembla

1. Introduction

This report presents the findings of a re-assessment of the data provided in Golders Associates Pty Ltd (Golder) report *Detailed Site Investigation Former Port Kembla Primary School, Military Road, Port Kembla, NSW,* reference 137629028-003-R-Rev0, dated 16 December 2013 (Golder, 2013). Golder (2013) was prepared for the former site owner, Port Kembla Copper Pty Ltd (PKC) in support of a proposed mixed business and medium density residential development.

The site is identified as Lot 1 Military Road, Port Kembla (Lot 1, Deposited Plan 811699), which has a footprint of 2.19 ha. The site is currently vacant and un-used.

It is understood that the current site owner, Mr Olly Vujic wishes to rezone the site from its current B4 Mixed Use to a mixed residential use including low to high density residential. Therefore this data re-assessment is required to re-assess the existing chemical laboratory analysis data provided in Golder (2013), against appropriate site assessment criteria (SAC) for the most sensitive residential land use, being residential with gardens or accessible soil.

The objective of this data re-assessment is to establish the site contamination issues relevant to the proposed rezoning to a mixed residential use (including low to high density residential) and assess if the site can be made suitable for the proposed rezoning.

2. Background

DP has previously prepared a conceptual remediation strategy for rezoning purposes as reported in:

- *Report on Conceptual Remediation Action Plan, Proposed Rezoning, Lot 1 Military Road, Port Kembla*, reference 78564.01.R.001.ConceptRAP.Rev1 dated 5 September 2016 (DP, 2016).

DP (2016) was prepared in order to support the previously proposed medium density rezoning which was defined as providing for medium density housing such as town houses, villas and residential flat buildings as well as supportive non-residential uses including neighbourhood shops.

DP (2016) comprised a review of site information, a review of previous reports, the preparation of a conceptual site model based on the findings of the previous reports, the development of conceptual remediation strategies, and recommendations for further assessment and site management requirements for the most likely remediation strategy.

Based on the review of previous reports and the medium density residential development previously proposed for the rezoning application, the following further assessment was recommended:

- Re-establish SAC if the proposed land use changes to the more sensitive residential with accessible soils land use;
- Re-assessment of the existing data if the proposed land use changes to the more sensitive residential with accessible soils land use;
- Detailed asbestos investigation in accordance with the National Environment Protection Council (NEPC) *National Environment Protection (Assessment of Site Contamination) Measure 1999,* amended 2013 (NEPC, 2013);
- Further assessment of fill comprising coal washery rejects, in accordance with Wollongong City Council DCP 2009 regarding assessment of pre-existing coal washery rejects and its suitability to remain on site; and
- Further development of an appropriate remediation strategy in a finalised remediation action plan (RAP), once the proposed development design is finalised and the further data and site assessments are undertaken.

DP (2016) considered that the site could be rendered compatible for the previously proposed medium density development subject to the recommended further assessment, finalisation of the remediation strategy and appropriate remediation in accordance with the finalised remediation strategy.

Since the preparation of DP (2016) the proposed development has changed to now comprise mixed residential use, which includes low to high density residential properties. As such a rezoning application to mixed residential use was lodged with Wollongong City Council (WCC).

Through the mixed residential use rezoning application pre-lodgement correspondence, WCC have expressed a concern that Golder (2013) does not address potential issues relevant to the proposed mixed residential including low density residential use.

WCC further indicated that in order to establish site contamination issues and wether the site can be made suitable for the proposed rezoning to a mixed residential use (including low to high density residential), the recommendations provided in DP (2016) regarding the re-establishment of appropriate SAC and the re-assessment of existing data should be undertaken prior to the proposed rezoning.

As such this report has been prepared to re-assess the existing chemical laboratory analysis data provided in Golder (2013), against appropriate site assessment criteria (SAC) for the most sensitive residential land use, being residential with gardens or accessible soil.

3. Scope of Works

Based on the recommendations of DP (2016) and the understanding of the intended change in proposed rezoning to comprise mixed density residential (i.e. including low to high density residential), this re-assessment of existing data comprises:

- Establishment of SAC appropriate for low density residential land use;
- Tabulation of the newly developed SAC and the data presented in the Certificates of Analysis provided in Golder (2013);
- Assessment of Golder (2013) laboratory data against the newly developed SAC;
- Preparation of this report detailing the findings of the re-assessment of the existing laboratory data presented in Golder (2013), potential management options required to render the site suitable for the proposed residential land use and any recommendations for further work if considered necessary.

4. Site Information

The site location is shown on the Golder (2013) Figures, refer to Appendix B. Table 1 presents a summary of the site identification details.

Table 1: Summary of Site Details

Site Identification	
Street Address	Lot 1 Military Road, Port Kembla, NSW, 2505. Australia
Lot Description	Lot 1 Deposited Plan 811699
County	Camden
Parish / Local Government Area	Wollongong
Suburb	Port Kembla
Ownership	Mr Olly Vujic
Zoning	B4 Mixed Use
Local Environmental Plan	Wollongong Local Environmental Plan 2009
Area	2.19 hectares

The site is approximately trapezoidal in shape and is vacant and fenced from public access.

The site is bound to the north by Electrolytic Street, to the north east by Reservoir Street, to the south east by Marine Street and to the south west by Military Road. The land use beyond the adjoining streets to the north and northeast is heavy industry and the land use beyond the adjoining streets to the east, south and west is residential.

The site is located approximately 900 m south of Port Kembla Outer Harbour, 750 m north east of Coomaditchy Lagoon and 700 m west of the Tasman Sea.

The site was used as a primary school from 1916 until 2002 after which the site has been unused with the majority of the former primary school infrastructure removed shortly after closure of the school, apart from a heritage listed building which was present at the site up until 2013.

The site surface is a mix of grass cover, hardstand areas and former building footprints. The heritage listed building that was recently demolished was located in the centre of the site on a small hill on the crest of a ridgeline trending north west to south east, with the ground surface sloping down from this area in every direction. Following review of the NSW 2 m contour map the crest of the ridge in the central portion of the site is approximately 34 m Australian Height Datum (AHD) with the north western point of the site being between 24 m and 26 m AHD and the southern corner of the site boundary being between 26 m and 28 m AHD.

Reference to the Wollongong-Port Hacking 1:100,000 Soils Landscape Sheet indicates that the site is underlain by residual soils of the Gwynneville soil landscape. Reference to the Wollongong-Port Hacking 1:100,000 Geology Sheet indicates that the residual soil in turn is underlain by the Dapto Latite Member of the Shoalhaven Group from the Permian age.

5. Site Assessment Criteria

The proposed development at the site will comprise a mixed density residential development, including low to high density residential properties. Therefore the site is proposed to be rezoned to a mixed residential land use, allowing low to high density residential development.

The proposed land use considered in Golder (2013) was residential with limited access to soils and commercial/industrial. Therefore, the site assessment criteria (SAC) need to be revised for the new proposed land use and the existing Golder (2013) data reassessed against the revised SAC.

As the selection of appropriate EIL and ESL is not impacted by the difference between residential with accessible soils and residential with limited access to soils land uses, the EIL and ESL provided in Golder (2013) could be considered to be suitable for this data re-assessment.

However, following a review of the Golder (2013) EIL and ESL, some discrepancies in the EIL and ESL determination process were noted, including incorrect ESL for benzo(a)Pyrene, inconsistent rounding of pH values and use of Ambient Background Concentrations (ABC) from nearby sites potentially impacted by similar fall out contamination. As such, it was considered prudent to re-establish the EIL and ESL based on the analytical Added Contaminant Limits (ACL) soil property data (pH, clay in soils and cation exchange capacity) provided in Golder (2013).

The SAC applied in the current data re-assessment are for the identified human and ecological receptors to potential contamination on the site (Golder, 2013). The Golder (2013) analytical results were assessed (as a Tier 1 assessment) against the SAC comprising the investigation and screening levels of Schedule B1, *National Environment Protection (Assessment of Site Contamination) Measure* 1999, as amended 2013 (NEPC, 2013). The NEPC guidelines are endorsed by the NSW EPA under the CLM Act 1997. Petroleum based health screening levels for direct contact have been adopted from the *Cooperative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE) Technical Report no.10 Health screening levels for petroleum hydrocarbons in soil and groundwater* (2011) as referenced by NEPC (2013).

5.1 Health Investigation and Screening Levels

The generic Health Investigation Levels (HIL) and Health Screening Levels (HSL) for residential with accessible soils (HILA and HASL A) are considered to be appropriate for the assessment of contamination at the site based on a re-assessment of the existing Golder (2013) data. The adopted soil HIL and HSL for the potential contaminants of concern are presented in Table 2.

Table 2: HIL and HSL in mg/kg unless otherwise indicated

Contaminants		HIL - A and HSL - A Direct Contact	HSL - A Vapour Intrusion[4]	
			Sand	Clay
Metals	Arsenic	100	-	-
	Cadmium	20	-	-
	Chromium (VI)	100	-	-
	Copper	6000	-	-
	Lead	300	-	-
	Mercury (inorganic)	40	-	-
	Nickel	400	-	-
	Zinc	7400	-	-
PAH	Benzo(a)pyrene TEQ[1]	3	-	-
	Naphthalene	1400	3	5
	Total PAH	300	-	-
TRH	C6 – C10 (less BTEX) [F1]	4400	45	50
	>C10-C16 (less Naphthalene) [F2]	3300	110	280
	>C16-C34 [F3]	4500	-	-
	>C34-C40 [F4]	6300	-	-
BTEX	Benzene	100	0.5	0.7
	Toluene	14000	160	480
	Ethylbenzene	4500	55	NL[3]
	Xylenes	12000	40	110
Phenol	Pentachlorophenol (used as an initial screen)	100	-	-
OCP	Aldrin + Dieldrin	6	-	-
	Chlordane	50	-	-
	DDT+DDE+DDD	240	-	-
	Endosulfan	270	-	-
	Endrin	10	-	-
	Heptachlor	6	-	-
	HCB	10	-	-
	Methoxychlor	300	-	-
OPP	Chlorpyrifos	160	-	-
PCB [2]		1	-	-

Notes:

1. sum of carcinogenic PAH
2. non dioxin-like PCBs only.
3. The soil saturation concentration (Csat) is defined as the soil concentration at which the porewater phase cannot dissolve any more of an individual chemical. The soil vapour that is in equilibrium with the porewater will be at its maximum. If the derived soil HSL exceeds Csat, a soil vapour source concentration for a petroleum mixture could not exceed a level that would results in the maximum allowable vapour risk for the given scenario. For these scenarios, no HSL is presented for these chemicals and the HSL is shown as 'not limiting' or 'NL'.]
4. The vapour intrusion HSL have been calculated for a clay and sand soil based on both soil types encountered during (Golder 2013) and an assumed depth to contamination 0 m to <1 m. The appropriate criteria will be selected based on material type of each sample

5.2 Ecological Investigation and Screening Levels

Ecological Investigation Levels (EIL) and Added Contaminant Limits (ACLs), where appropriate, have been derived in NEPC (2013) for only a short list of contaminants comprising As, Cu, Cr (III), DDT, naphthalene, Ni, Pb and Zn. The adopted EIL were derived using the ACL parameters established in Golder (2013) and the *Interactive (Excel) Calculation Spreadsheet* (Standing Council on Environment and Water (SCEW) website (http://www.scew.gov.au/node/941)) are shown in the following Table 3. The Calculation Spreadsheet are included in DP (2015).

The EIL and ESL have been calculated for both fine and coarse soil and will be selected based on material type of each sample.

Table 3: EIL in mg/kg

Analyte		EIL - Coarse	EIL - Fine	Comments
Metals	Arsenic	100	100	Adopted parameters from Golder (2013) pH = for sand 5.59 and for clay 5.83; CEC = for sand 9.78 $cmol_c/kg$ and for clay 20.83 $cmol_c/kg$; clay content = for sand 20.50% and for clay 43.57%; "Aged" (>2 years) source of contamination high for traffic volumes in NSW
	Copper	170	190	
	Nickel	160	280	
	Chromium III	520	660	
	Lead	1100	1100	
	Zinc	410	430	
PAH	Naphthalene	170	170	
OCP	DDT	180	180	

Ecological Screening Levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. The ESL adopted in DP (2015), which are considered appropriate for this assessment of contamination at the site, are shown in the following Table 4.

Table 4: ESL in mg/kg

Analyte		ESL - Coarse	ESL - Fine	Comments
TRH	C6 – C10 (less BTEX) [F1]	180*	180*	All ESLs are low reliability apart from those marked with * which are moderate reliability
	>C10-C16 (less Naphthalene) [F2]	120*	120*	
	>C16-C34 [F3]	300	1300	
	>C34-C40 [F4]	2800	5600	
BTEX	Benzene	50	65	
	Toluene	85	105	
	Ethylbenzene	70	125	
	Xylenes	105	45	
PAH	Benzo(a)pyrene	0.7	0.7	

1. The ESL have been calculated for urban residential/public open space and for both fine and coarse soil, which will be selected based on material type of each sample.

5.3 Management Limits – Petroleum Hydrocarbons

In addition to appropriate consideration and application of the HSL and ESL, there are additional considerations which reflect the nature and properties of petroleum hydrocarbons, including:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosion hazards;
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services.

The management limits adopted from Schedule B1 of NEPC (2013) for both coarse and fine soil types and are shown in Table 6.

Table 6: Management Limits in mg/kg

Analyte		Management Limit - Coarse	Management Limit - Fine	
TRH	C6 – C10 (F1) #	700	800	The management limits have been calculated for both fine and coarse soils (selected dependent upon the material type of the sample) and residential, parkland and public open space
	>C10-C16 (F2) #	1000	1000	
	>C16-C34 (F3)	2500	3500	
	>C34-C40 (F4)	10000	10000	

Separate management limits for BTEX and naphthalene are not available hence these have not been subtracted from the relevant fractions to obtain F1 and F2

5.4 Asbestos in Soil

Asbestos only poses a risk to human health when asbestos fibres are made airborne and inhaled. If asbestos is bound in a matrix such as cement or resin, it is not readily made airborne except through substantial physical damage. Bonded Asbestos-Containing Materials (ACM) in sound condition represents a low human health risk, whilst both Fibrous Asbestos (FA) and Asbestos Fines (AF) materials have the potential to generate, or be associated with, free asbestos fibres. Consequently, FA and AF must be carefully managed to prevent the release of asbestos fibres into the air.

A detailed asbestos assessment was not undertaken as part of Golder (2013). Therefore the presence or absence of asbestos at a limit of reporting of 0.1 g/kg has been adopted as an initial screen for this re-assessment of the Golder (2013) data.

6. Re-Assessment of Golder (2013) Data

Golder (2013) included laboratory analysis of 63 primary samples obtained from both fill and natural soils within the site.

In order for a re-assessment of the Golder (2013) laboratory analytical data to be undertaken, the analytical data reported in the Australian Laboratory Service (ALS) Certificates of Analysis included in Golder (2013) (refer to Appendix C) has been presented in a results summary table (refer to Appendix D) along with the adopted SAC as discussed in Section 5.

Based on the re-assessment of the existing Golder (2013) laboratory data the following exceedances of the revised SAC have been identified.

Arsenic
Of the 60 primary samples analysed for arsenic, the reported concentrations were either less than the laboratory practical quantitation limit (PQL) or SAC apart from the following samples which exceeded the HIL and EIL of 100 mg/kg:

- TP20_0.5-0.6 – fill silty clay – reported with an arsenic concentration of 166 mg/kg;
- TP25_0.9-1.0 – fill silty clay– reported with an arsenic concentration of 209 mg/kg; and
- TP30_0.0-0.1 – natural silty clay – reported with an arsenic concentration of 201 mg/kg.

Cadmium
Of the 60 primary samples analysed for cadmium, the reported concentrations were either less than the laboratory PQL or SAC apart from the following samples which exceeded the HIL of 20 mg/kg:

- TP6_0.2-0.3 – fill coal washery rejects – reported with a cadmium concentration of 27 mg/kg.

Copper
Of the 60 primary samples analysed for copper, approximately half of the reported concentrations were either less than the laboratory PQL or SAC with the remaining half exceeding either the EIL for coarse soil of 170 mg/kg or the EIL for fine soil of 190 mg/kg as follows:

- TP3_0.0-0.1 – fill sandy clay – reported with a copper concentration of 589 mg/kg;
- TP4_0.0-0.9 – fill sand – reported with a copper concentration of 287 mg/kg;
- TP5_0.5-0.6 – fill silty clay – reported with a copper concentration of 467 mg/kg;
- TP6_0.2-0.3 – fill coalwashery rejects – reported with a copper concentration of 2740 mg/kg;
- TP8_0.0-0.1 – natural sandy clay – reported with a copper concentration of 2280 mg/kg;
- TP9_0.3-0.4 – fill silty clay – reported with a copper concentration of 1020 mg/kg;
- TP10_0.0-0.1 – fill silty clay – reported with a copper concentration of 422 mg/kg;
- TP11_0.1-0.2 – fill sand – reported with a copper concentration of 201 mg/kg;
- TP12_0.0-0.1 – fill clayey sand – reported with a copper concentration of 961 mg/kg;
- TP13_0.5-0.6 – fill clayey sand – reported with a copper concentration of 171 mg/kg;
- TP14_0.0-0.1 – fill clayey sand – reported with a copper concentration of 660 mg/kg;
- TP15_0.0-0.1 – fill sandy clay – reported with a copper concentration of 1620 mg/kg;
- TP16A_0.2-0.3 – fill coalwashery rejects – reported with a copper concentration of 320 mg/kg;
- TP16A_0.5-0.6 – fill silty clay – reported with a copper concentration of 335 mg/kg;
- TP20_0.5-0.6 – fill silty clay – reported with a copper concentration of 1330 mg/kg;
- TP24_0.0-0.1 – fill silty clay – reported with a copper concentration of 1480 mg/kg;
- TP25_0.0-0.1 – fill silty clay – reported with a copper concentration of 791 mg/kg;
- TP25_0.9-1.0 – fill silty clay – reported with a copper concentration of 1060 mg/kg;
- TP26_1.5-1.6 – fill gravelly clay – reported with a copper concentration of 923 mg/kg;
- TP27_0.0-0.1 – fill silty clay – reported with a copper concentration of 262 mg/kg;
- TP27_0.5-0.6 – fill coalwashery rejects – reported with a copper concentration of 479 mg/kg;

- TP28_0.0-0.1 – fill silty clay – reported with a copper concentration of 2240 mg/kg;
- TP29_0.3-0.4 – natural silty clay – reported with a copper concentration of 333 mg/kg;
- TP30_0.0-0.1 – natural silty clay – reported with a copper concentration of 2820 mg/kg;
- TP30_0.5-0.6 – natural clay – reported with a copper concentration of 249 mg/kg;
- BH3-0.1 – fill gravelly sandy clay – reported with a copper concentration of 436 mg/kg;
- BH4-0.4 – fill gravelly sandy clay – reported with a copper concentration of 717 mg/kg; and
- BH5-0.1 – fill sand – reported with a copper concentration of 574 mg/kg;

Lead

Of the 60 primary samples analysed for lead, most of the reported concentrations were either less than the laboratory PQL or SAC apart from the following samples which exceeded the HIL of 300 mg/kg:

- TP8_0.0-0.1 – natural sandy clay – reported with a lead concentration of 677 mg/kg;
- TP14_0.0-0.1 – fill clayey sand – reported with a lead concentration of 415 mg/kg;
- TP20_0.5-0.6 – fill silty clay – reported with a lead concentration of 489 mg/kg;
- TP28_0.0-0.1 – fill silty clay – reported with a lead concentration of 397 mg/kg;
- TP30_0.0-0.1 – natural silty clay – reported with a lead concentration of 657 mg/kg;
- BH3-0.1 – fill gravelly sandy clay – reported with a lead concentration of 350mg/kg; and
- BH4-0.4 – fill gravelly sandy clay – reported with a lead concentration of 404 mg/kg;

Zinc

Of the 60 primary samples analysed for zinc, most of the reported concentrations were either less than the laboratory PQL or SAC apart from the following samples which exceeded the EIL for coarse soil of 410 mg/kg or the EIL for fine soil of 430 mg/kg as follows:

- TP6_0.2-0.3 – fill coalwashery rejects – reported with a zinc concentration of 500 mg/kg;
- TP9_0.3-0.4 – fill silty clay – reported with a zinc concentration of 443 mg/kg;
- TP25_0.0-0.1 – fill silty clay – reported with a zinc concentration of 514 mg/kg;
- BH2-0.1 – fill gravelly sandy clay – reported with a zinc concentration of 1150 mg/kg; and
- BH4-0.4 – fill gravelly sandy clay – reported with a zinc concentration of 798 mg/kg;

TRH Fraction 3 (C_{16}-C_{34})
Of the 31 primary samples analysed for TRH, the reported concentrations of TRH F3 (>C_{16}-C_{34}) were either less than the laboratory PQL or SAC apart from the following sample which exceeded the ESL for fine soils of 1300 mg/kg:

- TP28_0.0-0.1 – fill silty clay – reported with a TRH F3 concentration of 1330 mg/kg.

Benzo(a)pyrene
Of the 31 primary samples analysed for B(a)P, two samples were reported with concentrations of B(a)P greater than the laboratory PQL. One sample (TP10_0.0-0.1) was reported less than the SAC and the other sample (TP28_0.0-0.1 – fill silty clay) was reported with a concentration of B(a)P equal to the ESL of 0.7 mg/kg.

Asbestos
Of the 10 primary samples analysed for asbestos, seven primary samples were reported with ACM identified within the sample, with three of these also reported with AF identified. Asbestos was detected in the following samples:

- TP10_0.0-0.1 – fill silty clay – reported with ACM and AF identified;
- TP11_0.1-0.2 – fill sand – reported with ACM and AF identified;
- TP12A_0.1-0.2 – fill silty clay – reported with ACM identified;
- TP15_0.0-0.1 – fill sandy clay – reported with ACM and AF identified;
- TP16A_0.9-1.0 – fill silty clay – reported with ACM identified;
- TP16B_0.1-0.2 – fill sandy clay – reported with ACM identified; and
- TP20_0.5-0.6 – fill silty clay – reported with ACM identified.

7. Discussion

Based on the standard deviations and maximum concentrations of the individual data sets for each analyte, statistical analysis to determine the 95% upper confidence limit (UCL) of the individual analyte data sets was not considered to be appropriate.

The findings of the Golder (2013) laboratory data re-assessment indicate wide spread heavy metal contamination issues, predominantly copper and lead, in surface soils (both fill and natural) and in shallow and deep fill across the site. As reported in the Golder (2013) logs, fill was encountered to an average depth of 0.6 m bgl and a maximum depth of 2 m bgl.

The identified areas of heavy metal contamination will require delineation to determine the vertical extent (in order to inform appropriate management strategies) and subsequent management in accordance with an appropriate remediation action plan (RAP).

It is further considered that as part of the vertical delineation, leachability analysis of the heavy metal impacted soils should be undertaken to inform a preliminary waste classification for any potential materials to be disposed of off-site.

Furthermore this leachability data could also be used to assess the potential for the heavy metal contaminated soils to impact groundwater at the site. It is noted that Golder (2013) included a groundwater investigation. However, the further consideration of soil leachability data would assist in developing the groundwater discussion provided in Golder (2013) and assist the development of an appropriate heavy metal contaminated soil remediation strategy.

Benzo(a)pyrene was reported at concentrations greater than the laboratory PQL in two locations only. The greater of these reported concentrations (TP28_0.0-0.1 with a B(a)P concentration of 0.7 mg/kg) is equal to the adopted Tier 1 screening level (ESL of 0.7 mg/kg). Therefore, based on the Golder (2013) laboratory data, it is considered that B(a)P is not a site contamination issue.

Localised areas of TRH and asbestos contamination were also identified associated with fill.

The localised area identified to have been impacted by TRH will need to be further investigated and assessed in order to establish the source, its extent and the potential risk, prior to appropriate assessment / management in accordance with a RAP.

The site fill identified to have been impacted by ACM and / or AF will require a detailed asbestos investigation prior to appropriate management in accordance with a RAP.

8. Conclusion and Recommendations

Based on the findings of the Golder (2013) laboratory data re-assessment it is considered that the site has been impacted by widespread heavy metal contamination as well as localised TRH and asbestos contamination.

Therefore it is recommended that the following further investigation be undertaken in order to finalise the remediation strategies;

- Vertical delineation and leachability assessment of the heavy metal impacted soils;
- Further investigation of the localised TRH contamination in order to establish the source, its extent and the potential risk; and
- A detailed asbestos investigation.

It is noted that the above recommended further investigation could be undertaken once the land has been rezoned to mixed residential.

It is considered that the site can be rendered compatible for the proposed low to high density residential land use subject to the above further investigation, subsequent development of appropriate remediation strategies and subsequent completion of the appropriate remediation and validation in accordance with the finalised RAP.

Potential management strategies for the heavy metal, TRH and asbestos contamination could include off-site disposal, on-site treatment, off-site treatment or on-site containment.

9. Limitations

Douglas Partners (DP) has prepared this report for this project at Lot 1 Military Road, Port Kembla in accordance with DP's proposal dated 19 April 2016 and acceptance received from Mr Luke Rollison of MMJ on behalf of Mr Olly Vujic dated 28 April 2016. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of Mr Olly Vujic for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

DP's advice is based upon the conditions encountered during the Golder (2013) investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by the information provided by the client or others. This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report. This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the environmental components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

Douglas Partners Pty Ltd

Appendix A

About This Report

About this Report

Douglas Partners

Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix B

Golder (2013) Figures

PHASE II - ENVIRONMENTAL
SITE ASSESSMENT - FORMER
PORT KEMBLA PRIMARY SCHOOL

PORT KEMBLA COPPER PTY LTD

SITE LOCATION

LEGEND

Site Location

0 50 100 200 300 400 500 metres

SCALE (at A4) 1:15,000

Coordinate System: GDA 1994 MGA Zone 56

PROJECT: 137623028
DATE: 19/11/2013
DRAWN: FA
CHECKED: CO

FIGURE 1

Golder Associates

File Location: J:\IE\GIS\137623028_PH2Phase II Primary School\Port Kembla_NSW\Technical Docs\GIS\Project\137623028_F1001.mxd

PHASE II - ENVIRONMENTAL SITE ASSESSMENT - FORMER PORT KEMBLA PRIMARY SCHOOL

PORT KEMBLA COPPER PTY LTD

TEST PIT AND GROUNDWATER MONITORING WELL LOCATIONS

LEGEND

- Test Pit Locations
- Borehole Location
- Offsite Locations
- New Shallow Monitoring Wells
- Existing Monitoring Wells
- Site Location
- Cadastre

0 10 20 40 60 80 metres

SCALE (at A3) 1:1,500

Coordinate System: GDA 1994 MGA Zone 56

PROJECT: 137623028
DATE: 5/11/2013
DRAWN: FA
CHECKED: CO

FIGURE 2

Golder Associates

PHASE II - ENVIRONMENTAL SITE ASSESSMENT - FORMER PORT KEMBLA PRIMARY SCHOOL

PORT KEMBLA COPPER PTY LTD

LOCATIONS WITH ASBESTOS DETECTED

LEGEND

- Test Pit Locations
- Borehole Location
- Offsite Locations
- New Shallow Monitoring Wells
- Existing Monitoring Wells
- Site Location
- Cadastre

NOTE

Total metal concentrations expressed in mg/kg.

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0 10 20 40 60 80 metres

SCALE (at A3) 1:1,500

Coordinate System: GDA 1994 MGA Zone 56

PROJECT: 137623028
DATE: 10/12/2013
DRAWN: FA
CHECKED: OB

FIGURE 3

Golder Associates

Appendix C

Golder (2013) Laboratory Certificates of Analysis

ALS Group

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EW1301886	Page	: 1 of 70
Client	: PORT KEMBLA COPPER	Laboratory	: Environmental Division NSW South Coast
Contact	: MS CAROLINA OLMOS	Contact	: Client Services
Address	: SYDNEY	Address	: 99 Kenny Street, Wollongong 2500 Unit 4 / 13 Geary Place, PO Box 3105, North Nowra 2541 AUSTRALIA
E-mail	: colmos@golder.com.au	E-mail	: sydney@alsglobal.com
Telephone	: —	Telephone	: +61-2-8784 8555
Facsimile	: —	Facsimile	: +61-2-8784 8500
Project	: 137623028	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: —		
C-O-C number	: —	Date Samples Received	: 27-JUN-2013
Sampler	: KE YE	Issue Date	: 10-JUL-2013
Site	: PKC-PRIMARY SCHOOL		
		No. of samples received	: 103
Quote number	: —	No. of samples analysed	: 64

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key: CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EA200 Legend**
- **EA200 'Am' Amosite (brown asbestos)**
- **EA200 'Ch' Chrysotile (white asbestos)**
- **EA200 'Cr' Crocidolite (blue asbestos)**
- **EA200 'Trace' - Asbestos fibres detected at levels below 0.1g/kg. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres.**
- **EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.**
- **EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.**
- **EA200: Negative results for vinyl tiles should be confirmed by an independent analytical technique.**
- **EA200Q: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2011 NEPM for Assessment of Site Contamination**
- **EA200Q: Estimations of Asbestos weight and percentages are not covered under the Scope of NATA Accreditation. Weights and percentages of Asbestos are approximate estimates only. Weights are based on extracted fibre bundles and ACM, and percentages are estimated based on the NEPM default Asbestos content in ACM. All numerical results under this method are approximate and should be used as a guide only.**
- **EG005T: Poor precision and poor spike recovery was obtained for some elements on sample EW1301886 - 1. Results have been confirmed by re-extraction and reanalysis.**
- **EG005T: Poor precision was obtained for Lead on sample EW1301886 - 1. Results have been confirmed by re-extraction and reanalysis.**
- **EK057G/EK059G:LOR raised for Nitrite/NOx analysis on various samples due to sample matrix.**
- **EK067G: Poor duplicate precision due to sample heterogeneity. Confirmed by re-extraction and re-analysis.**

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Inorganic Chemist	Sydney Inorganics
		Sydney Inorganics
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Christopher Owler	Team Leader - Asbestos	Newcastle - Asbestos
Di-An Dao		Sydney Inorganics
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics
Hamish Murray	Supervisor - Soils	Newcastle - Inorganics
Hoa Nguyen	Senior Inorganic Chemist	Sydney Inorganics
Pabi Subba	Senior Organic Chemist	Sydney Inorganics
		Sydney Organics
		Sydney Organics
Phalak Inthaksone	Laboratory Manager - Organics	Sydney Organics
		Sydney Organics

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP30_0.0-0.1_25/06/13	TP30_0.5-0.6_25/06/13	TP29_0.3-0.4_25/06/13	TP29_0.9-1.0_25/06/13	TP27_0.0-0.1_25/06/13
				Client sampling date / time	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EA002 : pH (Soils)									
pH Value	----	0.1	pH Unit		----	----	6.3	----	----
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		33.4	35.9	21.3	25.1	30.5
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	----	1	%		----	----	11	----	----
ED008: Exchangeable Cations									
Exchangeable Calcium	----	0.1	meq/100g		----	----	1.2	----	----
Exchangeable Magnesium	----	0.1	meq/100g		----	----	1.1	----	----
Exchangeable Potassium	----	0.1	meq/100g		----	----	<0.1	----	----
Exchangeable Sodium	----	0.1	meq/100g		----	----	0.2	----	----
Cation Exchange Capacity	----	0.1	meq/100g		----	----	2.5	----	----
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		201	<5	13	6	<5
Cadmium	7440-43-9	1	mg/kg		10	1	13	<1	<1
Chromium	7440-47-3	2	mg/kg		13	21	5	17	6
Copper	7440-50-8	5	mg/kg		2820	249	333	99	262
Iron	7439-89-6	50	mg/kg		----	----	15500	----	----
Lead	7439-92-1	5	mg/kg		657	67	44	14	38
Manganese	7439-96-5	5	mg/kg		296	32	20	35	231
Nickel	7440-02-0	2	mg/kg		11	4	7	6	8
Selenium	7782-49-2	5	mg/kg		7	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		415	157	154	54	132
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		1.2	<0.1	0.1	<0.1	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	----	<20	----	----
EP004: Organic Matter									
Organic Matter	----	0.5	%		----	----	2.5	----	----
Total Organic Carbon	----	0.5	%		----	----	1.4	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	----	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	----	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	----	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP30_0.0-0.1_25/06/13	TP30_0.5-0.6_25/06/13	TP29_0.3-0.4_25/06/13	TP29_0.9-1.0_25/06/13	TP27_0.0-0.1_25/06/13
				Client sampling date / time: 25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
				EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EP068A: Organochlorine Pesticides (OC) - Continued								
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	—	<0.05	—	—
delta-BHC	319-86-8	0.05	mg/kg	<0.05	—	<0.05	—	—
Heptachlor	76-44-8	0.05	mg/kg	<0.05	—	<0.05	—	—
Aldrin	309-00-2	0.05	mg/kg	<0.05	—	<0.05	—	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	—	<0.05	—	—
Total Chlordane (sum)	—	0.05	mg/kg	<0.05	—	<0.05	—	—
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	—	<0.05	—	—
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	—	<0.05	—	—
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	—	<0.05	—	—
Dieldrin	60-57-1	0.05	mg/kg	<0.05	—	<0.05	—	—
4,4`-DDE	72-55-9	0.05	mg/kg	<0.05	—	<0.05	—	—
Endrin	72-20-8	0.05	mg/kg	<0.05	—	<0.05	—	—
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	—	<0.05	—	—
Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	—	<0.05	—	—
4,4`-DDD	72-54-8	0.05	mg/kg	<0.05	—	<0.05	—	—
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	—	<0.05	—	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	—	<0.05	—	—
4,4`-DDT	50-29-3	0.2	mg/kg	<0.2	—	<0.2	—	—
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	—	<0.2	—	—
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	—	<0.05	—	—
Sum of DDD + DDE + DDT	—	0.05	mg/kg	<0.05	—	<0.05	—	—
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	—	<0.05	—	—
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	—	<0.05	—	—
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	—	<0.2	—	—
Dimethoate	60-51-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Diazinon	333-41-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	—	<0.05	—	—
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	—	<0.2	—	—
Malathion	121-75-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Fenthion	55-38-9	0.05	mg/kg	<0.05	—	<0.05	—	—
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	—	<0.05	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP30_0.0-0.1_25/06/13	TP30_0.5-0.6_25/06/13	TP29_0.3-0.4_25/06/13	TP29_0.9-1.0_25/06/13	TP27_0.0-0.1_25/06/13
				Client sampling date / time: 25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
				EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EP068B: Organophosphorus Pesticides (OP) - Continued								
Parathion	56-38-2	0.2	mg/kg	<0.2	—	<0.2	—	—
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	—	<0.05	—	—
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	—	<0.05	—	—
Ethion	563-12-2	0.05	mg/kg	<0.05	—	<0.05	—	—
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	—	<0.05	—	—
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	—	<0.5	—	—
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	—	<0.5	—	—
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	—	<0.5	—	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	—	<1	—	—
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	—	<0.5	—	—
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	—	<0.5	—	—
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	—	<0.5	—	—
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	—	<0.5	—	—
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	—	<0.5	—	—
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	—	<0.5	—	—
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	—	<0.5	—	—
Pentachlorophenol	87-86-5	2	mg/kg	<2	—	<2	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	—	<0.5	—	—
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	—	<0.5	—	—
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	—	<0.5	—	—
Fluorene	86-73-7	0.5	mg/kg	<0.5	—	<0.5	—	—
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	—	<0.5	—	—
Anthracene	120-12-7	0.5	mg/kg	<0.5	—	<0.5	—	—
Fluoranthene	206-44-0	0.5	mg/kg	0.9	—	<0.5	—	—
Pyrene	129-00-0	0.5	mg/kg	0.9	—	<0.5	—	—
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	—	<0.5	—	—
Chrysene	218-01-9	0.5	mg/kg	<0.5	—	<0.5	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP30_0.0-0.1_25/06/13	TP30_0.5-0.6_25/06/13	TP29_0.3-0.4_25/06/13	TP29_0.9-1.0_25/06/13	TP27_0.0-0.1_25/06/13
				Client sampling date / time	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	—	<0.5	—	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	—	<0.5	—	—
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	—	<0.5	—	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	—	<0.5	—	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	—	<0.5	—	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	—	<0.5	—	—
Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		1.8	—	<0.5	—	—
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		<0.5	—	<0.5	—	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	—	<10	—	—
C10 - C14 Fraction	—	50	mg/kg		<50	—	<50	—	—
C15 - C28 Fraction	—	100	mg/kg		<100	—	<100	—	—
C29 - C36 Fraction	—	100	mg/kg		<100	—	<100	—	—
C10 - C36 Fraction (sum)	—	50	mg/kg		<50	—	<50	—	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	—	<10	—	—
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		<10	—	<10	—	—
>C10 - C16 Fraction	—	50	mg/kg		<50	—	<50	—	—
>C16 - C34 Fraction	—	100	mg/kg		<100	—	<100	—	—
>C34 - C40 Fraction	—	100	mg/kg		<100	—	<100	—	—
>C10 - C40 Fraction (sum)	—	50	mg/kg		<50	—	<50	—	—
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	—	<0.2	—	—
Toluene	108-88-3	0.5	mg/kg		<0.5	—	<0.5	—	—
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	—	<0.5	—	—
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	—	<0.5	—	—
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	—	<0.5	—	—
EP080: BTEXN									
Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	—	<0.5	—	—
Sum of BTEX	—	0.2	mg/kg		<0.2	—	<0.2	—	—
Naphthalene	91-20-3	1	mg/kg		<1	—	<1	—	—
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		81.7	—	74.0	—	—

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	TP30_0.0-0.1_25/06/13	TP30_0.5-0.6_25/06/13	TP29_0.3-0.4_25/06/13	TP29_0.9-1.0_25/06/13	TP27_0.0-0.1_25/06/13
				Client sampling date / time	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 10:00	25-JUN-2013 15:00
					EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		93.0	—	87.8	—	—
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		82.0	—	83.6	—	—
2-Chlorophenol-D4	93951-73-6	0.1	%		90.0	—	88.4	—	—
2.4.6-Tribromophenol	118-79-6	0.1	%		92.2	—	90.4	—	—
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		98.8	—	95.9	—	—
Anthracene-d10	1719-06-8	0.1	%		95.4	—	96.8	—	—
4-Terphenyl-d14	1718-51-0	0.1	%		82.3	—	94.0	—	—
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		95.9	—	93.6	—	—
Toluene-D8	2037-26-5	0.1	%		99.4	—	99.0	—	—
4-Bromofluorobenzene	460-00-4	0.1	%		92.6	—	97.2	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP27_0.5-0.6_25/06/13	TP28_0.0-0.1_25/06/13	TP28_0.9-1.0_25/06/13	TP26_0.5-0.6_25/06/13	TP26_1.5-1.6_25/06/13
				Client sampling date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EA002 : pH (Soils)									
pH Value	—	0.1	pH Unit		—	—	7.0	—	—
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	—	1.0	%		29.2	41.3	30.2	25.9	22.3
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	—	1	%		—	—	48	—	—
ED008: Exchangeable Cations									
Exchangeable Calcium	—	0.1	meq/100g		—	—	15.1	—	—
Exchangeable Magnesium	—	0.1	meq/100g		—	—	9.7	—	—
Exchangeable Potassium	—	0.1	meq/100g		—	—	0.2	—	—
Exchangeable Sodium	—	0.1	meq/100g		—	—	0.8	—	—
Cation Exchange Capacity	—	0.1	meq/100g		—	—	25.9	—	—
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		35	26	<5	9	22
Cadmium	7440-43-9	1	mg/kg		8	2	<1	<1	2
Chromium	7440-47-3	2	mg/kg		12	9	14	22	17
Copper	7440-50-8	5	mg/kg		479	2240	72	132	923
Iron	7439-89-6	50	mg/kg		—	—	42200	—	—
Lead	7439-92-1	5	mg/kg		155	397	22	66	156
Manganese	7439-96-5	5	mg/kg		89	442	142	121	334
Nickel	7440-02-0	2	mg/kg		13	12	6	5	22
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		404	176	107	154	179
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.2	0.4	<0.1	0.1	0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	<20	—	<20	<20
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N (Sol.)	—	0.1	mg/kg		—	—	—	<1.0	<0.1
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N (Sol.)	—	0.1	mg/kg		—	—	—	<1.0	<0.1
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N (Sol.)	—	0.1	mg/kg		—	—	—	<1.0	<0.1
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP27_0.5-0.6_25/06/13	TP28_0.0-0.1_25/06/13	TP28_0.9-1.0_25/06/13	TP26_0.5-0.6_25/06/13	TP26_1.5-1.6_25/06/13
Client sampling date / time				25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
				EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser - Continued								
Total Kjeldahl Nitrogen as N	—	20	mg/kg	—	—	—	1040	470
EK062: Total Nitrogen as N (TKN + NOx)								
^ Total Nitrogen as N	—	20	mg/kg	—	—	—	1040	470
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	—	2	mg/kg	—	—	—	261	888
EP004: Organic Matter								
Organic Matter	—	0.5	%	—	—	1.0	—	—
Total Organic Carbon	—	0.5	%	—	—	0.6	—	—
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
^ Total Chlordane (sum)	—	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
4,4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
4,4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
4,4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	—	—	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	—	—	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	—	—	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	—	—	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP27_0.5-0.6_25/06/13	TP28_0.0-0.1_25/06/13	TP28_0.9-1.0_25/06/13	TP26_0.5-0.6_25/06/13	TP26_1.5-1.6_25/06/13
				Client sampling date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EP068A: Organochlorine Pesticides (OC) - Continued									
Sum of DDD + DDE + DDT	---	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	---	---	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	---	---	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	---	---	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	---	---	<0.05
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	---	---	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2.4.5-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
2.4.6-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	---	---	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP27_0.5-0.6_25/06/13	TP28_0.0-0.1_25/06/13	TP28_0.9-1.0_25/06/13	TP26_0.5-0.6_25/06/13	TP26_1.5-1.6_25/06/13
				Client sampling date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EP075(SIM)A: Phenolic Compounds - Continued									
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	—	—	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	0.8	—	—	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	5.6	—	—	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	0.6	—	—	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	1.6	—	—	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	2.7	—	—	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	1.7	—	—	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	4.3	—	—	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	1.1	—	—	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	0.7	—	—	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	0.6	—	—	<0.5
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	19.7	—	—	<0.5
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		<0.5	1.0	—	—	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	<10	—	—	<10
C10 - C14 Fraction	—	50	mg/kg		<50	<50	—	—	<50
C15 - C28 Fraction	—	100	mg/kg		<100	1000	—	—	<100
C29 - C36 Fraction	—	100	mg/kg		<100	490	—	—	<100
^ C10 - C36 Fraction (sum)	—	50	mg/kg		<50	1490	—	—	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	<10	—	—	<10
^ C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		<10	<10	—	—	<10
>C10 - C16 Fraction	—	50	mg/kg		<50	70	—	—	<50
>C16 - C34 Fraction	—	100	mg/kg		<100	1330	—	—	<100
>C34 - C40 Fraction	—	100	mg/kg		<100	220	—	—	<100
^ >C10 - C40 Fraction (sum)	—	50	mg/kg		<50	1620	—	—	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP27_0.5-0.6_25/06/13	TP28_0.0-0.1_25/06/13	TP28_0.9-1.0_25/06/13	TP26_0.5-0.6_25/06/13	TP26_1.5-1.6_25/06/13
				Client sampling date / time	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00	25-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-009	EW1301886-012	EW1301886-014	EW1301886-017	EW1301886-019
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	—	—	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	0.6	—	—	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	0.5	—	—	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	—	—	<0.5
EP080: BTEXN									
Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	0.5	—	—	<0.5
Sum of BTEX	—	0.2	mg/kg		<0.2	1.1	—	—	<0.2
Naphthalene	91-20-3	1	mg/kg		<1	<1	—	—	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		80.7	110	—	—	89.9
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		91.5	96.2	—	—	88.6
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		76.0	82.9	—	—	83.4
2-Chlorophenol-D4	93951-73-6	0.1	%		69.5	90.2	—	—	88.9
2.4.6-Tribromophenol	118-79-6	0.1	%		43.4	86.4	—	—	92.5
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		98.4	103	—	—	99.4
Anthracene-d10	1719-06-8	0.1	%		87.0	92.3	—	—	98.4
4-Terphenyl-d14	1718-51-0	0.1	%		91.4	85.9	—	—	88.7
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		97.7	86.2	—	—	102
Toluene-D8	2037-26-5	0.1	%		98.3	91.0	—	—	116
4-Bromofluorobenzene	460-00-4	0.1	%		80.5	76.8	—	—	106

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/13	TP25_0.9-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
EA002 : pH (Soils)									
pH Value	---	0.1	pH Unit		---	5.6	---	---	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		21.5	34.8	23.0	33.0	31.3
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	---	1	%		---	12	---	---	---
ED008: Exchangeable Cations									
Exchangeable Calcium	---	0.1	meq/100g		---	2.6	---	---	---
Exchangeable Magnesium	---	0.1	meq/100g		---	0.8	---	---	---
Exchangeable Potassium	---	0.1	meq/100g		---	0.1	---	---	---
Exchangeable Sodium	---	0.1	meq/100g		---	0.1	---	---	---
Cation Exchange Capacity	---	0.1	meq/100g		---	3.6	---	---	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	10	209	7	16
Cadmium	7440-43-9	1	mg/kg		<1	3	4	2	4
Chromium	7440-47-3	2	mg/kg		<2	9	11	6	13
Copper	7440-50-8	5	mg/kg		<5	791	1060	521	1480
Iron	7439-89-6	50	mg/kg		---	12000	---	---	---
Lead	7439-92-1	5	mg/kg		<5	243	253	124	191
Manganese	7439-96-5	5	mg/kg		10	296	164	319	475
Nickel	7440-02-0	2	mg/kg		<2	12	6	10	9
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	6
Zinc	7440-66-6	5	mg/kg		<5	514	200	190	286
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	0.2	0.4	0.1	0.5
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	<20	---	<20	---
EP004: Organic Matter									
Organic Matter	---	0.5	%		---	5.8	---	---	---
Total Organic Carbon	---	0.5	%		---	3.4	---	---	---
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	---	<0.05	---
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	---	<0.05	---
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	---	<0.05	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/13	TP25_0.9-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
EP068A: Organochlorine Pesticides (OC) - Continued									
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
^ Total Chlordane (sum)	—	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
^ Sum of DDD + DDE + DDT	—	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/13	TP25_0.9-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
EP068B: Organophosphorus Pesticides (OP) - Continued									
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	—	<1	—
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	—	<2	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	1.8	—	3.2	—
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	0.5	—	0.9	—
Pyrene	129-00-0	0.5	mg/kg		<0.5	0.8	—	1.4	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	—	0.7	—
Chrysene	218-01-9	0.5	mg/kg		<0.5	1.2	—	2.0	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/13	TP25_0.9-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-023	EW1301886-024	EW1301886-026	EW1301886-029	EW1301886-030
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	<0.5	—	0.5	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	4.3	—	8.7	—
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	<10	—	<10	—
C10 - C14 Fraction	—	50	mg/kg		<50	<50	—	<50	—
C15 - C28 Fraction	—	100	mg/kg		<100	360	—	550	—
C29 - C36 Fraction	—	100	mg/kg		<100	180	—	240	—
^ C10 - C36 Fraction (sum)	—	50	mg/kg		<50	540	—	790	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	<10	—	<10	—
^ C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		<10	<10	—	<10	—
>C10 - C16 Fraction	—	50	mg/kg		<50	<50	—	<50	—
>C16 - C34 Fraction	—	100	mg/kg		<100	480	—	700	—
>C34 - C40 Fraction	—	100	mg/kg		<100	<100	—	110	—
^ >C10 - C40 Fraction (sum)	—	50	mg/kg		<50	480	—	810	—
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
EP080: BTEXN									
^ Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
^ Sum of BTEX	—	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Naphthalene	91-20-3	1	mg/kg		<1	<1	—	<1	—
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		78.8	90.8	—	99.7	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC400_25/06/13	TP25_0.0-0.1_26/06/13	TP25_0.9-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-023	EW1301886-024	EW1301886-025	EW1301886-029	EW1301886-030
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		82.7	80.9	—	80.1	—
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		86.4	92.4	—	78.4	—
2-Chlorophenol-D4	93951-73-6	0.1	%		91.4	90.4	—	85.9	—
2,4,6-Tribromophenol	118-79-6	0.1	%		86.5	85.8	—	85.5	—
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		96.7	97.0	—	103	—
Anthracene-d10	1719-06-8	0.1	%		89.6	90.0	—	92.8	—
4-Terphenyl-d14	1718-51-0	0.1	%		88.6	87.5	—	88.7	—
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		97.3	93.8	—	88.9	—
Toluene-D8	2037-26-5	0.1	%		100	97.1	—	93.8	—
4-Bromofluorobenzene	460-00-4	0.1	%		94.3	87.9	—	82.0	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP24_0.5-0.6_26/06/13	TP20_0.5-0.6_26/06/13	TP20_0.9-1.0_26/06/13	TP16A_0.2-0.3_26/06/13	TP16A_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EA002 : pH (Soils)									
pH Value	---	0.1	pH Unit		5.0	4.8	---	---	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		27.1	29.8	32.8	44.0	35.3
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	---	1	%		47	29	---	---	---
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		---	Yes	---	---	---
Asbestos Type	1332-21-4	1	-		---	Ch	---	---	---
Sample weight (dry)	---	0.01	g		---	7840	---	---	---
APPROVED IDENTIFIER:	---	1	-		---	C.OWLER	---	---	---
EA200Q: Asbestos Quantification (non-NATA)									
Weight Used for % Calculation	---	0.0001	kg		---	7.84	---	---	---
Asbestos Containing Material	1332-21-4	0.1	g		---	<0.1	---	---	---
Fibrous Asbestos	---	0.002	g		---	0.023	---	---	---
Asbestos Fines	1332-21-4	-	-		---	Yes	---	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%		---	<0.01	---	---	---
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	%		---	0.001	---	---	---
ED008: Exchangeable Cations									
Exchangeable Calcium	---	0.1	meq/100g		3.8	7.7	---	---	---
Exchangeable Magnesium	---	0.1	meq/100g		8.3	2.1	---	---	---
Exchangeable Potassium	---	0.1	meq/100g		0.1	0.3	---	---	---
Exchangeable Sodium	---	0.1	meq/100g		1.1	0.2	---	---	---
Cation Exchange Capacity	---	0.1	meq/100g		13.3	10.4	---	---	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	166	<5	11	33
Cadmium	7440-43-9	1	mg/kg		<1	4	<1	10	5
Chromium	7440-47-3	2	mg/kg		29	19	27	12	13
Copper	7440-50-8	5	mg/kg		123	1330	110	320	336
Iron	7439-89-6	50	mg/kg		56900	31700	---	---	---
Lead	7439-92-1	5	mg/kg		70	489	7	48	61
Manganese	7439-96-5	5	mg/kg		61	164	50	1580	122

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP24_0.5-0.6_26/06/13	TP20_0.5-0.6_26/06/13	TP20_0.9-1.0_26/06/13	TP16A_0.2-0.3_26/06/13	TP16A_0.5-0.6_26/06/13
Client sampling date / time				26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
				EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EG005T: Total Metals by ICP-AES - Continued								
Nickel	7440-02-0	2	mg/kg	7	7	10	24	6
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg	258	237	76	369	145
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	0.8	<0.1	0.1	0.2
EK055: Ammonia as N								
Ammonia as N	7664-41-7	20	mg/kg	<20	<20	—	<20	<20
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N (Sol.)	—	0.1	mg/kg	—	<1.0	—	—	—
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N (Sol.)	—	0.1	mg/kg	—	<1.0	—	—	—
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N (Sol.)	—	0.1	mg/kg	—	<1.0	—	—	—
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	—	20	mg/kg	—	1590	—	—	—
EK062: Total Nitrogen as N (TKN + NOx)								
Total Nitrogen as N	—	20	mg/kg	—	1590	—	—	—
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	—	2	mg/kg	—	667	—	—	—
EP004: Organic Matter								
Organic Matter	—	0.5	%	1.3	2.7	—	—	—
Total Organic Carbon	—	0.5	%	0.8	1.6	—	—	—
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Total Chlordane (sum)	—	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP24_0.5-0.6_26/06/13	TP20_0.5-0.6_26/06/13	TP20_0.9-1.0_26/06/13	TP16A_0.2-0.3_26/06/13	TP16A_0.5-0.6_26/06/13
			Client sampling date / time:	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
				EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EP068A: Organochlorine Pesticides (OC) - Continued								
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
4,4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
4,4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
4,4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	—	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	—	<0.2	<0.2
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Sum of DDD + DDE + DDT	—	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	—	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	—	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	—	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP24_0.5-0.6_26/06/13	TP20_0.5-0.6_26/06/13	TP20_0.9-1.0_26/06/13	TP16A_0.2-0.3_26/06/13	TP16A_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EP068B: Organophosphorus Pesticides (OP) - Continued									
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	—	<0.05	<0.05
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	—	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	—	<2	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5
Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	<0.5	—	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP24_0.5-0.6_26/06/13	TP20_0.5-0.6_26/06/13	TP20_0.9-1.0_26/06/13	TP16A_0.2-0.3_26/06/13	TP16A_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(a)pyrene TEQ (WHO)	---	0.5	mg/kg		<0.5	<0.5	---	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	---	<10	<10
C10 - C14 Fraction	---	50	mg/kg		<50	<50	---	<50	<50
C15 - C28 Fraction	---	100	mg/kg		<100	<100	---	<100	<100
C29 - C36 Fraction	---	100	mg/kg		<100	<100	---	<100	<100
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	<50	---	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	---	10	mg/kg		<10	<10	---	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	---	10	mg/kg		<10	<10	---	<10	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	---	<50	<50
>C16 - C34 Fraction	---	100	mg/kg		<100	<100	---	<100	<100
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	---	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		<50	<50	---	<50	<50
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	---	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	---	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	---	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	---	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	---	<0.5	<0.5
EP080: BTEXN									
^ Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	<0.5	---	<0.5	<0.5
^ Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	---	<0.2	<0.2
Naphthalene	91-20-3	1	mg/kg		<1	<1	---	<1	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		86.1	77.9	---	73.2	86.8
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		102	83.0	---	80.3	98.4
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		83.9	87.4	---	73.8	91.1
2-Chlorophenol-D4	93951-73-6	0.1	%		87.9	91.1	---	76.9	87.8
2.4.6-Tribromophenol	118-79-6	0.1	%		90.4	92.1	---	70.0	92.2
EP075(SIM)T: PAH Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP24_0.5-0.6_26/06/13	TP20_0.5-0.6_26/06/13	TP20_0.9-1.0_26/06/13	TP16A_0.2-0.3_26/06/13	TP16A_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-031	EW1301886-034	EW1301886-036	EW1301886-038	EW1301886-039
EP075(SIM)T: PAH Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.1	%		97.0	99.8	—	96.7	97.4
Anthracene-d10	1719-06-8	0.1	%		96.6	94.3	—	90.3	97.4
4-Terphenyl-d14	1718-51-0	0.1	%		90.0	83.2	—	88.1	85.8
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		99.7	84.6	—	91.4	99.8
Toluene-D8	2037-26-5	0.1	%		106	87.2	—	90.6	104
4-Bromofluorobenzene	460-00-4	0.1	%		97.1	85.1	—	72.6	98.6

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP16A_0.9-1.0_26/06/13	TP16B_0.1-0.2_26/06/13	TP15_0.0-0.1_26/06/13	TP15_0.9-1.0_26/06/13	TP14_0.0-0.1_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EA002 : pH (Soils)									
pH Value	—	0.1	pH Unit		—	—	—	5.1	4.4
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	—	1.0	%		—	—	31.0	12.4	21.4
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	—	1	%		—	—	—	18	10
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		Yes	Yes	Yes	—	—
Asbestos Type	1332-21-4	0.1	-		Ch + Am	Ch + Am + Cr	—	—	—
Asbestos Type	1332-21-4	1	-		—	—	Ch + Am	—	—
Sample weight (dry)	—	0.01	g		86.3	28.5	6390	—	—
APPROVED IDENTIFIER:	—	1	-		—	—	C.OWLER	—	—
APPROVED IDENTIFIER:	—	-	-		C.OWLER	C.OWLER	—	—	—
EA200Q: Asbestos Quantification (non-NATA)									
Weight Used for % Calculation	—	0.0001	kg		—	—	6.39	—	—
Asbestos Containing Material	1332-21-4	0.1	g		—	—	<0.1	—	—
Fibrous Asbestos	—	0.002	g		—	—	0.004	—	—
Asbestos Fines	1332-21-4	-	-		—	—	Yes	—	—
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%		—	—	<0.01	—	—
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	%		—	—	<0.001	—	—
ED008: Exchangeable Cations									
Exchangeable Calcium	—	0.1	meq/100g		—	—	—	1.2	0.8
Exchangeable Magnesium	—	0.1	meq/100g		—	—	—	11.7	0.2
Exchangeable Potassium	—	0.1	meq/100g		—	—	—	0.2	<0.1
Exchangeable Sodium	—	0.1	meq/100g		—	—	—	0.6	<0.1
Cation Exchange Capacity	—	0.1	meq/100g		—	—	—	13.7	1.1
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		—	—	8	<5	11
Cadmium	7440-43-9	1	mg/kg		—	—	4	<1	<1
Chromium	7440-47-3	2	mg/kg		—	—	8	20	8
Copper	7440-50-8	5	mg/kg		—	—	1620	139	660
Iron	7439-89-6	50	mg/kg		—	—	—	50100	12000

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID: TP16A_0.9-1.0_26/06/13	TP16B_0.1-0.2_26/06/13	TP15_0.0-0.1_26/06/13	TP15_0.9-1.0_26/06/13	TP14_0.0-0.1_26/06/13
				Client sampling date / time: 26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
				EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EG005T: Total Metals by ICP-AES - Continued								
Lead	7439-92-1	5	mg/kg	—	—	239	10	415
Manganese	7439-96-5	5	mg/kg	—	—	549	202	123
Nickel	7440-02-0	2	mg/kg	—	—	10	18	5
Selenium	7782-49-2	5	mg/kg	—	—	<5	<5	5
Zinc	7440-66-6	5	mg/kg	—	—	231	98	85
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	—	—	0.2	<0.1	0.3
EK055: Ammonia as N								
Ammonia as N	7664-41-7	20	mg/kg	—	—	<20	—	<20
EP004: Organic Matter								
Organic Matter	—	0.5	%	—	—	—	<0.5	1.5
Total Organic Carbon	—	0.5	%	—	—	—	<0.5	0.9
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	—	—	<0.05	—	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	—	—	<0.05	—	<0.05
beta-BHC	319-85-7	0.05	mg/kg	—	—	<0.05	—	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	—	—	<0.05	—	<0.05
delta-BHC	319-86-8	0.05	mg/kg	—	—	<0.05	—	<0.05
Heptachlor	76-44-8	0.05	mg/kg	—	—	<0.05	—	<0.05
Aldrin	309-00-2	0.05	mg/kg	—	—	<0.05	—	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	—	—	<0.05	—	<0.05
* Total Chlordane (sum)	—	0.05	mg/kg	—	—	<0.05	—	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	—	—	<0.05	—	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	—	—	<0.05	—	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	—	—	<0.05	—	<0.05
Dieldrin	60-57-1	0.05	mg/kg	—	—	<0.05	—	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg	—	—	<0.05	—	<0.05
Endrin	72-20-8	0.05	mg/kg	—	—	<0.05	—	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	—	—	<0.05	—	<0.05
* Endosulfan (sum)	115-29-7	0.05	mg/kg	—	—	<0.05	—	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg	—	—	<0.05	—	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	—	—	<0.05	—	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	—	—	<0.05	—	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP16A_0.9-1.0_26/06/13	TP16B_0.1-0.2_26/06/13	TP15_0.0-0.1_26/06/13	TP15_0.9-1.0_26/06/13	TP14_0.0-0.1_26/06/13
				Client sampling date / time: 26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
				EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	—	—	<0.2	—	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	—	—	<0.05	—	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	—	—	<0.2	—	<0.2
* Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	—	—	<0.05	—	<0.05
* Sum of DDD + DDE + DDT	—	0.05	mg/kg	—	—	<0.05	—	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	—	—	<0.05	—	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	—	—	<0.05	—	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	—	—	<0.2	—	<0.2
Dimethoate	60-51-5	0.05	mg/kg	—	—	<0.05	—	<0.05
Diazinon	333-41-5	0.05	mg/kg	—	—	<0.05	—	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	—	—	<0.05	—	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	—	—	<0.2	—	<0.2
Malathion	121-75-5	0.05	mg/kg	—	—	<0.05	—	<0.05
Fenthion	55-38-9	0.05	mg/kg	—	—	<0.05	—	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	—	—	<0.05	—	<0.05
Parathion	56-38-2	0.2	mg/kg	—	—	<0.2	—	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	—	—	<0.05	—	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	—	—	<0.05	—	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	—	—	<0.05	—	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	—	—	<0.05	—	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	—	—	<0.05	—	<0.05
Ethion	563-12-2	0.05	mg/kg	—	—	<0.05	—	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	—	—	<0.05	—	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	—	—	<0.05	—	<0.05
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	—	—	<0.5	—	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	—	—	<0.5	—	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	—	—	<0.5	—	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	—	—	<1	—	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	—	—	<0.5	—	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	—	—	<0.5	—	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	—	—	<0.5	—	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP16A_0.9-1.0_26/06/13	TP16B_0.1-0.2_26/06/13	TP15_0.0-0.1_26/06/13	TP15_0.9-1.0_26/06/13	TP14_0.0-0.1_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP075(SIM)A: Phenolic Compounds - Continued									
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		—	—	<0.5	—	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		—	—	<0.5	—	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		—	—	<0.5	—	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		—	—	<0.5	—	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		—	—	<2	—	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		—	—	<0.5	—	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		—	—	<0.5	—	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		—	—	<0.5	—	<0.5
Fluorene	86-73-7	0.5	mg/kg		—	—	<0.5	—	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		—	—	<0.5	—	<0.5
Anthracene	120-12-7	0.5	mg/kg		—	—	<0.5	—	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		—	—	<0.5	—	<0.5
Pyrene	129-00-0	0.5	mg/kg		—	—	<0.5	—	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		—	—	<0.5	—	<0.5
Chrysene	218-01-9	0.5	mg/kg		—	—	<0.5	—	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		—	—	<0.5	—	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		—	—	<0.5	—	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		—	—	<0.5	—	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		—	—	<0.5	—	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		—	—	<0.5	—	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		—	—	<0.5	—	<0.5
Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		—	—	<0.5	—	<0.5
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		—	—	<0.5	—	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		—	—	<10	—	<10
C10 - C14 Fraction	—	50	mg/kg		—	—	<50	—	<50
C15 - C28 Fraction	—	100	mg/kg		—	—	<100	—	<100
C29 - C36 Fraction	—	100	mg/kg		—	—	<100	—	<100
C10 - C36 Fraction (sum)	—	50	mg/kg		—	—	<50	—	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		—	—	<10	—	<10
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		—	—	<10	—	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	TP16A_0.9-1.0_26/06/13	TP16B_0.1-0.2_26/06/13	TP15_0.0-0.1_26/06/13	TP15_0.9-1.0_26/06/13	TP14_0.0-0.1_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00
					EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued									
>C10 - C16 Fraction	---	50	mg/kg		---	---	<50	---	<50
>C16 - C34 Fraction	---	100	mg/kg		---	---	<100	---	<100
>C34 - C40 Fraction	---	100	mg/kg		---	---	<100	---	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		---	---	<50	---	<50
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		---	---	<0.2	---	<0.2
Toluene	108-88-3	0.5	mg/kg		---	---	<0.5	---	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		---	---	<0.5	---	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		---	---	<0.5	---	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		---	---	<0.5	---	<0.5
EP080: BTEXN									
^ Total Xylenes	1330-20-7	0.5	mg/kg		---	---	<0.5	---	<0.5
^ Sum of BTEX	---	0.2	mg/kg		---	---	<0.2	---	<0.2
Naphthalene	91-20-3	1	mg/kg		---	---	<1	---	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		---	---	76.8	---	85.6
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		---	---	85.1	---	93.9
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		---	---	82.6	---	68.4
2-Chlorophenol-D4	93951-73-6	0.1	%		---	---	86.4	---	78.6
2,4,6-Tribromophenol	118-79-6	0.1	%		---	---	73.8	---	67.6
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		---	---	99.5	---	77.7
Anthracene-d10	1719-06-8	0.1	%		---	---	92.7	---	75.0
4-Terphenyl-d14	1718-51-0	0.1	%		---	---	86.2	---	67.1
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		---	---	97.5	---	93.9
Toluene-D8	2037-26-5	0.1	%		---	---	108	---	91.8
4-Bromofluorobenzene	460-00-4	0.1	%		---	---	98.8	---	86.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP14_0.5-0.6_26/06/13	TP13_0.5-0.6_26/06/13	TP13_1.5-1.6_26/06/13	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-045	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EA002 : pH (Soils)									
pH Value	—	0.1	pH Unit		—	—	—	—	5.1
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	—	1.0	%		28.5	24.1	29.0	26.1	30.1
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	—	1	%		—	—	—	—	60
ED008: Exchangeable Cations									
Exchangeable Calcium	—	0.1	meq/100g		—	—	—	—	11.2
Exchangeable Magnesium	—	0.1	meq/100g		—	—	—	—	12.2
Exchangeable Potassium	—	0.1	meq/100g		—	—	—	—	0.3
Exchangeable Sodium	—	0.1	meq/100g		—	—	—	—	1.8
Cation Exchange Capacity	—	0.1	meq/100g		—	—	—	—	25.4
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	17	<5	36	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	11	<1
Chromium	7440-47-3	2	mg/kg		18	10	18	21	21
Copper	7440-50-8	5	mg/kg		60	171	63	1020	82
Iron	7439-89-6	50	mg/kg		—	—	—	—	42400
Lead	7439-92-1	5	mg/kg		6	38	6	192	10
Manganese	7439-96-5	5	mg/kg		6	72	35	111	9
Nickel	7440-02-0	2	mg/kg		2	4	2	9	2
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		13	35	21	443	17
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	0.3	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		—	<20	—	<20	—
EP004: Organic Matter									
Organic Matter	—	0.5	%		—	—	—	—	1.2
Total Organic Carbon	—	0.5	%		—	—	—	—	0.7
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		—	<0.05	—	<0.05	—
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		—	<0.05	—	<0.05	—
beta-BHC	319-85-7	0.05	mg/kg		—	<0.05	—	<0.05	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP14_0.5-0.6_26/06/13	TP13_0.5-0.6_26/06/13	TP13_1.5-1.6_26/06/13	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-046	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EP068A: Organochlorine Pesticides (OC) - Continued									
gamma-BHC	58-89-9	0.05	mg/kg		—	<0.05	—	<0.05	—
delta-BHC	319-86-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Heptachlor	76-44-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Aldrin	309-00-2	0.05	mg/kg		—	<0.05	—	<0.05	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		—	<0.05	—	<0.05	—
Total Chlordane (sum)	—	0.05	mg/kg		—	<0.05	—	<0.05	—
trans-Chlordane	5103-74-2	0.05	mg/kg		—	<0.05	—	<0.05	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		—	<0.05	—	<0.05	—
cis-Chlordane	5103-71-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Dieldrin	60-57-1	0.05	mg/kg		—	<0.05	—	<0.05	—
4,4'-DDE	72-55-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Endrin	72-20-8	0.05	mg/kg		—	<0.05	—	<0.05	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Endosulfan (sum)	115-29-7	0.05	mg/kg		—	<0.05	—	<0.05	—
4,4'-DDD	72-54-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		—	<0.05	—	<0.05	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		—	<0.05	—	<0.05	—
4,4'-DDT	50-29-3	0.2	mg/kg		—	<0.2	—	<0.2	—
Endrin ketone	53494-70-5	0.05	mg/kg		—	<0.05	—	<0.05	—
Methoxychlor	72-43-5	0.2	mg/kg		—	<0.2	—	<0.2	—
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		—	<0.05	—	<0.05	—
Sum of DDD + DDE + DDT	—	0.05	mg/kg		—	<0.05	—	<0.05	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		—	<0.05	—	<0.05	—
Demeton-S-methyl	919-86-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Monocrotophos	6923-22-4	0.2	mg/kg		—	<0.2	—	<0.2	—
Dimethoate	60-51-5	0.05	mg/kg		—	<0.05	—	<0.05	—
Diazinon	333-41-5	0.05	mg/kg		—	<0.05	—	<0.05	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		—	<0.05	—	<0.05	—
Parathion-methyl	298-00-0	0.2	mg/kg		—	<0.2	—	<0.2	—
Malathion	121-75-5	0.05	mg/kg		—	<0.05	—	<0.05	—
Fenthion	55-38-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Chlorpyrifos	2921-88-2	0.05	mg/kg		—	<0.05	—	<0.05	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP14_0.5-0.6_26/06/13	TP13_0.5-0.6_26/06/13	TP13_1.5-1.6_26/06/13	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
				Client sampling date / time	25-JUN-2013 10:00	26-JUN-2013 10:00	25-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-046	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EP068B: Organophosphorus Pesticides (OP) - Continued									
Parathion	56-38-2	0.2	mg/kg		—	<0.2	—	<0.2	—
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		—	<0.05	—	<0.05	—
Chlorfenvinphos	470-90-6	0.05	mg/kg		—	<0.05	—	<0.05	—
Bromophos-ethyl	4824-78-6	0.05	mg/kg		—	<0.05	—	<0.05	—
Fenamiphos	22224-92-6	0.05	mg/kg		—	<0.05	—	<0.05	—
Prothiofos	34643-46-4	0.05	mg/kg		—	<0.05	—	<0.05	—
Ethion	563-12-2	0.05	mg/kg		—	<0.05	—	<0.05	—
Carbophenothion	786-19-6	0.05	mg/kg		—	<0.05	—	<0.05	—
Azinphos Methyl	86-50-0	0.05	mg/kg		—	<0.05	—	<0.05	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		—	<0.5	—	<0.5	—
2-Chlorophenol	95-57-8	0.5	mg/kg		—	<0.5	—	<0.5	—
2-Methylphenol	95-48-7	0.5	mg/kg		—	<0.5	—	<0.5	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg		—	<1	—	<1	—
2-Nitrophenol	88-75-5	0.5	mg/kg		—	<0.5	—	<0.5	—
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		—	<0.5	—	<0.5	—
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		—	<0.5	—	<0.5	—
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		—	<0.5	—	<0.5	—
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		—	<0.5	—	<0.5	—
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		—	<0.5	—	<0.5	—
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		—	<0.5	—	<0.5	—
Pentachlorophenol	87-86-5	2	mg/kg		—	<2	—	<2	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		—	<0.5	—	<0.5	—
Acenaphthylene	208-96-8	0.5	mg/kg		—	<0.5	—	<0.5	—
Acenaphthene	83-32-9	0.5	mg/kg		—	<0.5	—	<0.5	—
Fluorene	86-73-7	0.5	mg/kg		—	<0.5	—	<0.5	—
Phenanthrene	85-01-8	0.5	mg/kg		—	<0.5	—	<0.5	—
Anthracene	120-12-7	0.5	mg/kg		—	<0.5	—	<0.5	—
Fluoranthene	206-44-0	0.5	mg/kg		—	<0.5	—	<0.5	—
Pyrene	129-00-0	0.5	mg/kg		—	<0.5	—	<0.5	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		—	<0.5	—	<0.5	—
Chrysene	218-01-9	0.5	mg/kg		—	<0.5	—	<0.5	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP14_0.5-0.6_26/06/13	TP13_0.5-0.6_26/06/13	TP13_1.5-1.6_26/06/13	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-046	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	—	<0.5	—	<0.5	—	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	—	<0.5	—	<0.5	—	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	—	<0.5	—	<0.5	—	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	—	<0.5	—	<0.5	—	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	—	<0.5	—	<0.5	—	
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	—	<0.5	—	<0.5	—	
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg	—	<0.5	—	<0.5	—	
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg	—	<0.5	—	<0.5	—	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg	—	<10	—	<10	—	
C10 - C14 Fraction	—	50	mg/kg	—	<50	—	<50	—	
C15 - C28 Fraction	—	100	mg/kg	—	<100	—	<100	—	
C29 - C36 Fraction	—	100	mg/kg	—	<100	—	<100	—	
^ C10 - C36 Fraction (sum)	—	50	mg/kg	—	<50	—	<50	—	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg	—	<10	—	<10	—	
^ C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg	—	<10	—	<10	—	
>C10 - C16 Fraction	—	50	mg/kg	—	<50	—	<50	—	
>C16 - C34 Fraction	—	100	mg/kg	—	<100	—	<100	—	
>C34 - C40 Fraction	—	100	mg/kg	—	<100	—	<100	—	
^ >C10 - C40 Fraction (sum)	—	50	mg/kg	—	<50	—	<50	—	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	—	<0.2	—	<0.2	—	
Toluene	108-88-3	0.5	mg/kg	—	<0.5	—	<0.5	—	
Ethylbenzene	100-41-4	0.5	mg/kg	—	<0.5	—	<0.5	—	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	—	<0.5	—	<0.5	—	
ortho-Xylene	95-47-6	0.5	mg/kg	—	<0.5	—	<0.5	—	
EP080: BTEXN									
^ Total Xylenes	1330-20-7	0.5	mg/kg	—	<0.5	—	<0.5	—	
^ Sum of BTEX	—	0.2	mg/kg	—	<0.2	—	<0.2	—	
Naphthalene	91-20-3	1	mg/kg	—	<1	—	<1	—	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%	—	88.4	—	94.7	—	

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP14_0.5-0.6_26/06/13	TP13_0.5-0.6_26/06/13	TP13_1.5-1.6_26/06/13	TP9_0.3-0.4_26/06/13	TP9_0.5-0.6_26/06/13
				Client sampling date / time	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 10:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-046	EW1301886-050	EW1301886-052	EW1301886-054	EW1301886-055
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		---	84.6	---	96.4	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		---	79.6	---	86.6	---
2-Chlorophenol-D4	93951-73-6	0.1	%		---	82.9	---	88.7	---
2.4.6-Tribromophenol	118-79-6	0.1	%		---	77.0	---	91.0	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		---	86.2	---	93.9	---
Anthracene-d10	1719-06-8	0.1	%		---	89.8	---	98.2	---
4-Terphenyl-d14	1718-51-0	0.1	%		---	78.8	---	89.8	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		---	89.0	---	86.4	---
Toluene-D8	2037-26-5	0.1	%		---	85.5	---	87.2	---
4-Bromofluorobenzene	460-00-4	0.1	%		---	83.9	---	83.0	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP10_0.0-0.1_26/06/13	TP10_0.5-0.6_26/06/13	TP11_0.1-0.2_26/06/13	TP11_0.9-1.0_26/06/13	TP12A_0.1-0.2_26/06/13
				Client sampling date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EA002 : pH (Soils)									
pH Value	---	0.1	pH Unit		6.8	---	---	6.2	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		31.2	29.7	27.1	13.9	---
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	---	1	%		24	---	---	22	---
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		Yes	---	Yes	---	Yes
Asbestos Type	1332-21-4	0.1	-		---	---	---	---	Ch + Am
Asbestos Type	1332-21-4	1	-		Ch	---	Ch + Am	---	---
Sample weight (dry)	---	0.01	g		6290	---	9040	---	27.1
APPROVED IDENTIFIER:	---	1	-		C.OWLER	---	C.OWLER	---	---
APPROVED IDENTIFIER:	---	-	-		---	---	---	---	C.OWLER
EA200Q: Asbestos Quantification (non-NATA)									
Weight Used for % Calculation	---	0.0001	kg		6.29	---	9.04	---	---
Asbestos Containing Material	1332-21-4	0.1	g		54.6	---	<0.1	---	---
Fibrous Asbestos	---	0.002	g		0.008	---	0.007	---	---
Asbestos Fines	1332-21-4	-	-		Yes	---	Yes	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%		---	---	<0.01	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%		0.10	---	---	---	---
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	%		<0.001	---	<0.001	---	---
ED008: Exchangeable Cations									
Exchangeable Calcium	---	0.1	meq/100g		21.7	---	---	0.7	---
Exchangeable Magnesium	---	0.1	meq/100g		1.7	---	---	12.6	---
Exchangeable Potassium	---	0.1	meq/100g		0.7	---	---	<0.1	---
Exchangeable Sodium	---	0.1	meq/100g		0.2	---	---	6.3	---
Cation Exchange Capacity	---	0.1	meq/100g		24.3	---	---	19.7	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		31	<5	<5	<5	---
Cadmium	7440-43-9	1	mg/kg		3	<1	<1	<1	---
Chromium	7440-47-3	2	mg/kg		16	24	15	14	---
Copper	7440-50-8	5	mg/kg		422	88	201	73	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP10_0.0-0.1_26/06/13	TP10_0.5-0.6_26/06/13	TP11_0.1-0.2_26/06/13	TP11_0.9-1.0_26/06/13	TP12A_0.1-0.2_26/06/13
				Client sampling date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EG005T: Total Metals by ICP-AES - Continued									
Iron	7439-89-6	50	mg/kg		34800	—	—	22800	—
Lead	7439-92-1	5	mg/kg		124	9	21	6	—
Manganese	7439-96-5	5	mg/kg		88	15	39	21	—
Nickel	7440-02-0	2	mg/kg		6	4	6	5	—
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	—
Zinc	7440-66-6	5	mg/kg		256	27	92	38	—
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.2	<0.1	<0.1	<0.1	—
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	—	<20	—	—
EP004: Organic Matter									
Organic Matter	—	0.5	%		5.6	—	—	0.6	—
Total Organic Carbon	—	0.5	%		3.2	—	—	<0.5	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	—	<0.05	—	—
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	—	<0.05	—	—
beta-BHC	319-85-7	0.05	mg/kg		<0.05	—	<0.05	—	—
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	—	<0.05	—	—
delta-BHC	319-86-8	0.05	mg/kg		<0.05	—	<0.05	—	—
Heptachlor	76-44-8	0.05	mg/kg		<0.05	—	<0.05	—	—
Aldrin	309-00-2	0.05	mg/kg		<0.05	—	<0.05	—	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	—	<0.05	—	—
* Total Chlordane (sum)	—	0.05	mg/kg		<0.05	—	<0.05	—	—
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	—	<0.05	—	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	—	<0.05	—	—
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	—	<0.05	—	—
Dieldrin	60-57-1	0.05	mg/kg		<0.05	—	<0.05	—	—
4,4'-DDE	72-55-9	0.05	mg/kg		<0.05	—	<0.05	—	—
Endrin	72-20-8	0.05	mg/kg		<0.05	—	<0.05	—	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	—	<0.05	—	—
* Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	—	<0.05	—	—
4,4'-DDD	72-54-8	0.05	mg/kg		<0.05	—	<0.05	—	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	—	<0.05	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP10_0.0-0.1_26/06/13	TP10_0.5-0.6_26/06/13	TP11_0.1-0.2_26/06/13	TP11_0.9-1.0_26/06/13	TP12A_0.1-0.2_26/06/13
				Client sampling date / time: 26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
				EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EP068A: Organochlorine Pesticides (OC) - Continued								
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	—	<0.05	—	—
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	—	<0.2	—	—
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	—	<0.2	—	—
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	—	<0.05	—	—
Sum of DDD + DDE + DDT	—	0.05	mg/kg	<0.05	—	<0.05	—	—
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	—	<0.05	—	—
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	—	<0.05	—	—
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	—	<0.2	—	—
Dimethoate	60-51-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Diazinon	333-41-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	—	<0.05	—	—
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	—	<0.2	—	—
Malathion	121-75-5	0.05	mg/kg	<0.05	—	<0.05	—	—
Fenthion	55-38-9	0.05	mg/kg	<0.05	—	<0.05	—	—
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	—	<0.05	—	—
Parathion	56-38-2	0.2	mg/kg	<0.2	—	<0.2	—	—
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	—	<0.05	—	—
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	—	<0.05	—	—
Ethion	563-12-2	0.05	mg/kg	<0.05	—	<0.05	—	—
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	—	<0.05	—	—
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	—	<0.05	—	—
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	—	<0.5	—	—
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	—	<0.5	—	—
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	—	<0.5	—	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	—	<1	—	—
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	—	<0.5	—	—
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	—	<0.5	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP10_0.0-0.1_26/06/13	TP10_0.5-0.6_26/06/13	TP11_0.1-0.2_26/06/13	TP11_0.9-1.0_26/06/13	TP12A_0.1-0.2_26/06/13
				Client sampling date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EP075(SIM)A: Phenolic Compounds - Continued									
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	—	<0.5	—	—
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	—	<0.5	—	—
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		<0.5	—	<0.5	—	—
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	—	<0.5	—	—
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	—	<0.5	—	—
Pentachlorophenol	87-86-5	2	mg/kg		<2	—	<2	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	—	<0.5	—	—
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	—	<0.5	—	—
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	—	<0.5	—	—
Fluorene	86-73-7	0.5	mg/kg		<0.5	—	<0.5	—	—
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	—	<0.5	—	—
Anthracene	120-12-7	0.5	mg/kg		<0.5	—	<0.5	—	—
Fluoranthene	206-44-0	0.5	mg/kg		0.9	—	<0.5	—	—
Pyrene	129-00-0	0.5	mg/kg		1.1	—	<0.5	—	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	—	<0.5	—	—
Chrysene	218-01-9	0.5	mg/kg		0.5	—	<0.5	—	—
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		0.8	—	<0.5	—	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	—	<0.5	—	—
Benzo(a)pyrene	50-32-8	0.5	mg/kg		0.5	—	<0.5	—	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	—	<0.5	—	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	—	<0.5	—	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		0.6	—	<0.5	—	—
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		4.5	—	<0.5	—	—
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		0.7	—	<0.5	—	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	—	<10	—	—
C10 - C14 Fraction	—	50	mg/kg		<50	—	<50	—	—
C15 - C28 Fraction	—	100	mg/kg		<100	—	<100	—	—
C29 - C36 Fraction	—	100	mg/kg		<100	—	<100	—	—
^ C10 - C36 Fraction (sum)	—	50	mg/kg		<50	—	<50	—	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	—	<10	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP10_0.0-0.1_26/06/13	TP10_0.5-0.6_26/06/13	TP11_0.1-0.2_26/06/13	TP11_0.9-1.0_26/06/13	TP12A_0.1-0.2_26/06/13
				Client sampling date / time: 26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
				EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
C6 - C10 Fraction minus BTEX (F1)	---	10	mg/kg	<10	---	<10	---	---
>C10 - C16 Fraction	---	50	mg/kg	<50	---	<50	---	---
>C16 - C34 Fraction	---	100	mg/kg	<100	---	<100	---	---
>C34 - C40 Fraction	---	100	mg/kg	<100	---	<100	---	---
>C10 - C40 Fraction (sum)	---	50	mg/kg	<50	---	<50	---	---
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	---	<0.2	---	---
Toluene	108-88-3	0.5	mg/kg	<0.5	---	<0.5	---	---
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	---	<0.5	---	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	---	<0.5	---	---
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	---	<0.5	---	---
EP080: BTEXN								
Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	---	<0.5	---	---
Sum of BTEX	---	0.2	mg/kg	<0.2	---	<0.2	---	---
Naphthalene	91-20-3	1	mg/kg	<1	---	<1	---	---
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	94.5	---	72.5	---	---
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	91.8	---	76.5	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	85.4	---	78.7	---	---
2-Chlorophenol-D4	93951-73-6	0.1	%	92.3	---	91.9	---	---
2,4,6-Tribromophenol	118-79-6	0.1	%	97.5	---	92.4	---	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	99.0	---	98.4	---	---
Anthracene-d10	1719-06-8	0.1	%	102	---	97.4	---	---
4-Terphenyl-d14	1718-51-0	0.1	%	94.2	---	89.7	---	---
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	96.1	---	89.4	---	---
Toluene-D8	2037-26-5	0.1	%	99.0	---	89.8	---	---
4-Bromofluorobenzene	460-00-4	0.1	%	91.3	---	88.0	---	---

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID: TP12_0.0.-0.1_26/06/13	TP12_0.9-1.0_26/06/13	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
Client sampling date / time				26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
				EW1301886-064	EW1301886-066	EW1301886-067	EW1301886-069	EW1301886-070
EA002 : pH (Soils)								
pH Value	---	0.1	pH Unit	---	---	5.7	---	---
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	---	1.0	%	39.0	19.2	26.6	21.6	32.8
EA150: Soil Classification based on Particle Size								
Clay (<2 µm)	---	1	%	---	---	18	---	---
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples								
Asbestos Detected	1332-21-4	0.1	g/kg	No	---	---	---	---
Asbestos Type	1332-21-4	1	-	-	---	---	---	---
Sample weight (dry)	---	0.01	g	7660	---	---	---	---
APPROVED IDENTIFIER:	---	1	-	C.OWLER	---	---	---	---
EA200Q: Asbestos Quantification (non-NATA)								
Weight Used for % Calculation	---	0.0001	kg	7.66	---	---	---	---
Asbestos Containing Material	1332-21-4	0.1	g	<0.1	---	---	---	---
Fibrous Asbestos	---	0.002	g	<0.002	---	---	---	---
Asbestos Fines	1332-21-4	-	-	No	---	---	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%	<0.01	---	---	---	---
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	%	<0.001	---	---	---	---
ED008: Exchangeable Cations								
Exchangeable Calcium	---	0.1	meq/100g	---	---	7.2	---	---
Exchangeable Magnesium	---	0.1	meq/100g	---	---	2.0	---	---
Exchangeable Potassium	---	0.1	meq/100g	---	---	0.4	---	---
Exchangeable Sodium	---	0.1	meq/100g	---	---	0.3	---	---
Cation Exchange Capacity	---	0.1	meq/100g	---	---	10.0	---	---
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	<5	41	<5	44
Cadmium	7440-43-9	1	mg/kg	3	<1	10	<1	14
Chromium	7440-47-3	2	mg/kg	10	19	22	12	23
Copper	7440-50-8	5	mg/kg	961	116	2280	76	1760
Iron	7439-89-6	50	mg/kg	---	---	38600	---	---
Lead	7439-92-1	5	mg/kg	173	6	677	<5	628
Manganese	7439-96-5	5	mg/kg	456	64	609	28	492

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP12_0.0.-0.1_26/06/13	TP12_0.9-1.0_26/06/13	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
				Client sampling date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-064	EW1301886-066	EW1301886-067	EW1301886-069	EW1301886-070
EG005T: Total Metals by ICP-AES - Continued									
Nickel	7440-02-0	2	mg/kg		8	14	12	5	12
Selenium	7782-49-2	5	mg/kg		6	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		187	88	397	31	529
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.3	<0.1	0.3	<0.1	0.4
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	—	<20	—	<20
EP004: Organic Matter									
Organic Matter	—	0.5	%		—	—	5.1	—	—
Total Organic Carbon	—	0.5	%		—	—	3.0	—	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Total Chlordane (sum)	—	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
4,4'-DDT	50-29-3	0.2	mg/kg		<0.2	—	<0.2	—	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	—	<0.05	—	<0.05

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID: TP12_0.0.-0.1_26/06/13	TP12_0.9-1.0_26/06/13	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
				Client sampling date / time: 26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
				EW1301886-064	EW1301886-066	EW1301886-067	EW1301886-069	EW1301886-070
EP068A: Organochlorine Pesticides (OC) - Continued								
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	—	<0.2	—	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
^ Sum of DDD + DDE + DDT	—	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	—	<0.2	—	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	—	<0.2	—	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	—	<0.2	—	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	—	<0.05	—	<0.05
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	—	<1	—	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	—	<0.5	—	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP12_0.0-0.1_26/06/13	TP12_0.9-1.0_26/06/13	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
				Client sampling date / time	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-064	EW1301886-066	EW1301886-067	EW1301886-069	EW1301886-070
EP075(SIM)A: Phenolic Compounds - Continued									
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	—	<2	—	<2
EP076(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	—	<10	—	<10
C10 - C14 Fraction	—	50	mg/kg		<50	—	<50	—	<50
C15 - C28 Fraction	—	100	mg/kg		<100	—	<100	—	<100
C29 - C36 Fraction	—	100	mg/kg		<100	—	<100	—	<100
C10 - C36 Fraction (sum)	—	50	mg/kg		<50	—	<50	—	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	—	<10	—	<10
C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		<10	—	<10	—	<10
>C10 - C16 Fraction	—	50	mg/kg		<50	—	<50	—	<50
>C16 - C34 Fraction	—	100	mg/kg		<100	—	<100	—	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID: TP12_0.0.-0.1_26/06/13	TP12_0.9-1.0_26/06/13	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
Client sampling date / time				26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00	26-JUN-2013 15:00
				EW1301886-064	EW1301886-066	EW1301886-067	EW1301886-069	EW1301886-070
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
>C34 - C40 Fraction	---	100	mg/kg	<100	---	<100	---	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg	<50	---	<50	---	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	---	<0.2	---	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	---	<0.5	---	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	---	<0.5	---	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	---	<0.5	---	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	---	<0.5	---	<0.5
EP080: BTEXN								
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	---	<0.5	---	<0.5
^ Sum of BTEX	---	0.2	mg/kg	<0.2	---	<0.2	---	<0.2
Naphthalene	91-20-3	1	mg/kg	<1	---	<1	---	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	86.6	---	80.9	---	94.2
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	107	---	88.0	---	98.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	102	---	87.5	---	96.4
2-Chlorophenol-D4	93951-73-6	0.1	%	96.9	---	87.4	---	97.8
2.4.6-Tribromophenol	118-79-6	0.1	%	95.0	---	93.2	---	100
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	102	---	103	---	103
Anthracene-d10	1719-06-8	0.1	%	100	---	98.4	---	104
4-Terphenyl-d14	1718-51-0	0.1	%	92.5	---	88.0	---	94.6
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	92.1	---	89.0	---	96.7
Toluene-D8	2037-26-5	0.1	%	91.5	---	89.2	---	101
4-Bromofluorobenzene	460-00-4	0.1	%	85.4	---	85.5	---	100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC401_26/06/13	TP7_0.3-0.4_27/06/13	TP7_0.5-0.6_27/06/13	TP6_0.2-0.3_27/06/13	TP6_0.5-0.6_27/06/13
				Client sampling date / time	26-JUN-2013 15:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-071	EW1301886-074	EW1301886-075	EW1301886-078	EW1301886-079
EA002 : pH (Soils)									
pH Value	---	0.1	pH Unit		---	---	6.9	---	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		5.5	21.2	33.8	37.3	28.8
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	---	1	%		---	---	60	---	---
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		---	No	---	---	---
Asbestos Type	1332-21-4	1	-		---	-	---	---	---
Sample weight (dry)	---	0.01	g		---	7320	---	---	---
APPROVED IDENTIFIER:	---	1	-		---	C.OWLER	---	---	---
EA200Q: Asbestos Quantification (non-NATA)									
Weight Used for % Calculation	---	0.0001	kg		---	7.32	---	---	---
Asbestos Containing Material	1332-21-4	0.1	g		---	<0.1	---	---	---
Fibrous Asbestos	---	0.002	g		---	<0.002	---	---	---
Asbestos Fines	1332-21-4	-	-		---	No	---	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%		---	<0.01	---	---	---
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	%		---	<0.001	---	---	---
ED008: Exchangeable Cations									
Exchangeable Calcium	---	0.1	meq/100g		---	---	17.5	---	---
Exchangeable Magnesium	---	0.1	meq/100g		---	---	10.5	---	---
Exchangeable Potassium	---	0.1	meq/100g		---	---	0.1	---	---
Exchangeable Sodium	---	0.1	meq/100g		---	---	1.7	---	---
Cation Exchange Capacity	---	0.1	meq/100g		---	---	29.9	---	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	7	<5	37	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	27	<1
Chromium	7440-47-3	2	mg/kg		<2	20	24	6	22
Copper	7440-50-8	5	mg/kg		<5	66	77	2740	61
Iron	7439-89-6	50	mg/kg		---	---	89200	---	---
Lead	7439-92-1	5	mg/kg		<5	19	9	216	7
Manganese	7439-96-5	5	mg/kg		12	50	20	362	48
Nickel	7440-02-0	2	mg/kg		<2	3	4	14	4

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	QC401_26/06/13	TP7_0.3-0.4_27/06/13	TP7_0.5-0.6_27/06/13	TP6_0.2-0.3_27/06/13	TP6_0.5-0.6_27/06/13
				Client sampling date / time	26-JUN-2013 15:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
					EW1301886-071	EW1301886-074	EW1301886-075	EW1301886-078	EW1301886-079
EG005T: Total Metals by ICP-AES - Continued									
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		<5	41	24	500	9
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	<20	—	<20	—
EP004: Organic Matter									
Organic Matter	—	0.5	%		—	—	1.8	—	—
Total Organic Carbon	—	0.5	%		—	—	1.1	—	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Total Chlordane (sum)	—	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	—	<0.2	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC401_26/06/13	TP7_0.3-0.4_27/06/13	TP7_0.5-0.6_27/06/13	TP6_0.2-0.3_27/06/13	TP6_0.5-0.6_27/06/13
				Client sampling date / time	26-JUN-2013 15:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-071	EW1301886-074	EW1301886-075	EW1301886-078	EW1301886-079
EP068A: Organochlorine Pesticides (OC) - Continued									
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Sum of DDD + DDE + DDT	—	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	—	<1	—
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC401_26/06/13	TP7_0.3-0.4_27/06/13	TP7_0.5-0.6_27/06/13	TP6_0.2-0.3_27/06/13	TP6_0.5-0.6_27/06/13
				Client sampling date / time	26-JUN-2013 15:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-071	EW1301886-074	EW1301886-075	EW1301886-078	EW1301886-079
EP075(SIM)A: Phenolic Compounds - Continued									
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	—	<2	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	<10	—	<10	—
C10 - C14 Fraction	—	50	mg/kg		<50	<50	—	<50	—
C15 - C28 Fraction	—	100	mg/kg		<100	<100	—	<100	—
C29 - C36 Fraction	—	100	mg/kg		<100	<100	—	<100	—
^ C10 - C36 Fraction (sum)	—	50	mg/kg		<50	<50	—	<50	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	<10	—	<10	—
^ C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		<10	<10	—	<10	—
>C10 - C16 Fraction	—	50	mg/kg		<50	<50	—	<50	—
>C16 - C34 Fraction	—	100	mg/kg		<100	<100	—	<100	—
>C34 - C40 Fraction	—	100	mg/kg		<100	<100	—	<100	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC401_26/06/13	TP7_0.3-0.4_27/06/13	TP7_0.5-0.6_27/06/13	TP6_0.2-0.3_27/06/13	TP6_0.5-0.6_27/06/13
				Client sampling date / time	26-JUN-2013 15:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-071	EW1301886-074	EW1301886-075	EW1301886-078	EW1301886-079
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued									
>C10 - C40 Fraction (sum)	---	50	mg/kg		<50	<50	---	<50	---
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	---	<0.2	---
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	---	<0.5	---
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	---	<0.5	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	---	<0.5	---
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	---	<0.5	---
EP080: BTEXN									
Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	<0.5	---	<0.5	---
Sum of BTEX	---	0.2	mg/kg		<0.2	<0.2	---	<0.2	---
Naphthalene	91-20-3	1	mg/kg		<1	<1	---	<1	---
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		100	95.4	---	105	---
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		108	106	---	108	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		86.2	90.0	---	69.2	---
2-Chlorophenol-D4	93951-73-6	0.1	%		93.8	94.1	---	81.9	---
2.4.6-Tribromophenol	118-79-6	0.1	%		93.2	93.4	---	77.2	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		100	98.6	---	99.0	---
Anthracene-d10	1719-06-8	0.1	%		99.1	101	---	96.2	---
4-Terphenyl-d14	1718-51-0	0.1	%		91.7	93.8	---	91.3	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		110	96.6	---	81.1	---
Toluene-D8	2037-26-5	0.1	%		87.7	87.3	---	89.6	---
4-Bromofluorobenzene	460-00-4	0.1	%		89.7	85.0	---	86.0	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP5_0.5-0.6_27/06/13	QC102_27/06/13	TP5_0.9-1.0_27/06/13	TP1_0.0-0.1_27/06/13	TP1_0.9-1.0_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-088
EA002 : pH (Soils)									
pH Value	---	0.1	pH Unit		---	---	5.3	6.1	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		26.1	26.1	25.2	26.0	9.6
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	---	1	%		---	---	43	13	---
ED008: Exchangeable Cations									
Exchangeable Calcium	---	0.1	meq/100g		---	---	2.5	9.9	---
Exchangeable Magnesium	---	0.1	meq/100g		---	---	11.6	2.6	---
Exchangeable Potassium	---	0.1	meq/100g		---	---	0.2	0.3	---
Exchangeable Sodium	---	0.1	meq/100g		---	---	1.1	0.2	---
Cation Exchange Capacity	---	0.1	meq/100g		---	---	15.4	13.0	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		33	<5	<5	6	<5
Cadmium	7440-43-9	1	mg/kg		4	4	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		13	12	17	13	14
Copper	7440-50-8	5	mg/kg		467	59	69	140	87
Iron	7439-89-6	50	mg/kg		---	---	33500	20300	---
Lead	7439-92-1	5	mg/kg		71	9	<5	29	<5
Manganese	7439-96-5	5	mg/kg		94	37	<5	374	38
Nickel	7440-02-0	2	mg/kg		6	5	<2	11	9
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		112	104	15	58	33
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	<20	---	<20	---
EP004: Organic Matter									
Organic Matter	---	0.5	%		---	---	1.0	3.8	---
Total Organic Carbon	---	0.5	%		---	---	0.6	2.2	---
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	---	<0.05	---
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	---	<0.05	---
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	---	<0.05	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP5_0.5-0.6_27/06/13	QC102_27/06/13	TP5_0.9-1.0_27/06/13	TP1_0.0-0.1_27/06/13	TP1_0.9-1.0_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-088
EP068A: Organochlorine Pesticides (OC) - Continued									
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
* Total Chlordane (sum)	—	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4'-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
* Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4'-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
4,4'-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
* Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
* Sum of DDD + DDE + DDT	—	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	—	<0.05	—
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	—	<0.2	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP5_0.5-0.6_27/06/13	QC102_27/06/13	TP5_0.9-1.0_27/06/13	TP1_0.0-0.1_27/06/13	TP1_0.9-1.0_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-088
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
* Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	<10	—	<10	—
C10 - C14 Fraction	—	50	mg/kg		<50	<50	—	<50	—
C15 - C28 Fraction	—	100	mg/kg		<100	<100	—	<100	—
C29 - C36 Fraction	—	100	mg/kg		<100	<100	—	<100	—
* C10 - C36 Fraction (sum)	—	50	mg/kg		<50	<50	—	<50	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		<10	<10	—	<10	—
* C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		<10	<10	—	<10	—
>C10 - C16 Fraction	—	50	mg/kg		<50	<50	—	<50	—
>C16 - C34 Fraction	—	100	mg/kg		<100	<100	—	<100	—
>C34 - C40 Fraction	—	100	mg/kg		<100	<100	—	<100	—
* >C10 - C40 Fraction (sum)	—	50	mg/kg		<50	<50	—	<50	—
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
EP080: BTEXN									
* Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	<0.5	—	<0.5	—
* Sum of BTEX	—	0.2	mg/kg		<0.2	<0.2	—	<0.2	—
Naphthalene	91-20-3	1	mg/kg		<1	<1	—	<1	—
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		97.3	88.6	—	86.0	—
EP068T: Organophosphorus Pesticide Surrogate									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP5_0.5-0.6_27/06/13	QC102_27/06/13	TP5_0.9-1.0_27/06/13	TP1_0.0-0.1_27/06/13	TP1_0.9-1.0_27/06/13
			Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit	EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-088
EP068T: Organophosphorus Pesticide Surrogate - Continued								
DEF	78-48-8	0.1	%	104	97.8	—	92.3	—
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	92.5	91.6	—	99.0	—
2-Chlorophenol-D4	93951-73-6	0.1	%	95.4	97.9	—	107	—
2.4.6-Tribromophenol	118-79-6	0.1	%	96.3	96.1	—	106	—
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	103	105	—	117	—
Anthracene-d10	1719-06-8	0.1	%	99.8	95.7	—	116	—
4-Terphenyl-d14	1718-51-0	0.1	%	92.5	86.9	—	108	—
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	92.0	92.3	—	112	—
Toluene-D8	2037-26-5	0.1	%	102	86.1	—	90.8	—
4-Bromofluorobenzene	460-00-4	0.1	%	98.4	80.7	—	84.4	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	TP2_0.0-0.1_27/06/13	TP2_0.2-0.4_27/06/13	TP3_0.0-0.1_27/06/13	TP3_0.5-0.6_27/06/13	TP4_0.0-0.1_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
					EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-096
EA002 : pH (Soils)									
pH Value	---	0.1	pH Unit		---	---	---	5.2	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		17.1	31.6	30.5	30.9	26.5
EA150: Soil Classification based on Particle Size									
Clay (<2 µm)	---	1	%		---	---	---	54	---
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		---	---	No	---	---
Asbestos Type	1332-21-4	1	---		---	---	-	---	---
Sample weight (dry)	---	0.01	g		---	---	599	---	---
APPROVED IDENTIFIER:	---	1	---		---	---	C.OWLER	---	---
EA200Q: Asbestos Quantification (non-NATA)									
Weight Used for % Calculation	---	0.0001	kg		---	---	6.00	---	---
Asbestos Containing Material	1332-21-4	0.1	g		---	---	<0.1	---	---
Fibrous Asbestos	---	0.002	g		---	---	<0.002	---	---
Asbestos Fines	1332-21-4	-	-		---	---	No	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%		---	---	<0.01	---	---
Asbestos Fines and Fibrous Asbestos (<7mm)	1332-21-4	0.001	%		---	---	<0.001	---	---
ED008: Exchangeable Cations									
Exchangeable Calcium	---	0.1	meq/100g		---	---	---	3.6	---
Exchangeable Magnesium	---	0.1	meq/100g		---	---	---	9.1	---
Exchangeable Potassium	---	0.1	meq/100g		---	---	---	0.2	---
Exchangeable Sodium	---	0.1	meq/100g		---	---	---	2.9	---
Cation Exchange Capacity	---	0.1	meq/100g		---	---	---	15.8	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	8	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	3	<1	<1
Chromium	7440-47-3	2	mg/kg		10	20	7	25	3
Copper	7440-50-8	5	mg/kg		10	82	589	80	287
Iron	7439-89-6	50	mg/kg		---	---	---	59000	---
Lead	7439-92-1	5	mg/kg		9	7	120	12	126
Manganese	7439-96-5	5	mg/kg		428	<5	135	19	216
Nickel	7440-02-0	2	mg/kg		7	3	6	4	2

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP2_0.0-0.1_27/06/13	TP2_0.2-0.4_27/06/13	TP3_0.0-0.1_27/06/13	TP3_0.5-0.6_27/06/13	TP4_0.0-0.1_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
EG005T: Total Metals by ICP-AES - Continued									
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		18	12	152	25	32
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		—	<20	<20	—	<20
EP004: Organic Matter									
Organic Matter	—	0.5	%		—	—	—	1.9	—
Total Organic Carbon	—	0.5	%		—	—	—	1.1	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
beta-BHC	319-85-7	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
delta-BHC	319-86-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Heptachlor	76-44-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Aldrin	309-00-2	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
^ Total Chlordane (sum)	—	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Dieldrin	60-57-1	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Endrin	72-20-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
4,4'-DDT	50-29-3	0.2	mg/kg		—	<0.2	<0.2	—	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		—	<0.2	<0.2	—	<0.2

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP2_0.0-0.1_27/06/13	TP2_0.2-0.4_27/06/13	TP3_0.0-0.1_27/06/13	TP3_0.5-0.6_27/06/13	TP4_0.0-0.1_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
EP068A: Organochlorine Pesticides (OC) - Continued									
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Sum of DDD + DDE + DDT	—	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		—	<0.2	<0.2	—	<0.2
Dimethoate	60-51-5	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Diazinon	333-41-5	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		—	<0.2	<0.2	—	<0.2
Malathion	121-75-5	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Fenthion	55-38-9	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Parathion	56-38-2	0.2	mg/kg		—	<0.2	<0.2	—	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Ethion	563-12-2	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		—	<0.05	<0.05	—	<0.05
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		—	<1	<1	—	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		—	<0.5	<0.5	—	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP2_0.0-0.1_27/06/13	TP2_0.2-0.4_27/06/13	TP3_0.0-0.1_27/06/13	TP3_0.5-0.6_27/06/13	TP4_0.0-0.1_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
EP075(SIM)A: Phenolic Compounds - Continued									
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		—	<2	<2	—	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Fluorene	86-73-7	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Anthracene	120-12-7	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Pyrene	129-00-0	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Chrysene	218-01-9	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		—	<0.5	<0.5	—	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		—	<10	<10	—	<10
C10 - C14 Fraction	—	50	mg/kg		—	<50	<50	—	<50
C15 - C28 Fraction	—	100	mg/kg		—	<100	<100	—	<100
C29 - C36 Fraction	—	100	mg/kg		—	<100	<100	—	<100
^ C10 - C36 Fraction (sum)	—	50	mg/kg		—	<50	<50	—	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	10	mg/kg		—	<10	<10	—	<10
^ C6 - C10 Fraction minus BTEX (F1)	—	10	mg/kg		—	<10	<10	—	<10
>C10 - C16 Fraction	—	50	mg/kg		—	<50	<50	—	<50
>C16 - C34 Fraction	—	100	mg/kg		—	<100	<100	—	<100
>C34 - C40 Fraction	—	100	mg/kg		—	<100	<100	—	<100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP2_0.0-0.1_27/06/13	TP2_0.2-0.4_27/06/13	TP3_0.0-0.1_27/06/13	TP3_0.5-0.6_27/06/13	TP4_0.0-0.1_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 10:00
Compound	CAS Number	LOR	Unit		EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued									
>C10 - C40 Fraction (sum)	---	50	mg/kg	---	<50	<50	---	<50	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	---	<0.2	<0.2	---	<0.2	
Toluene	108-88-3	0.5	mg/kg	---	<0.5	<0.5	---	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	---	<0.5	<0.5	---	<0.5	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	---	<0.5	<0.5	---	<0.5	
ortho-Xylene	95-47-6	0.5	mg/kg	---	<0.5	<0.5	---	<0.5	
EP080: BTEXN									
Total Xylenes	1330-20-7	0.5	mg/kg	---	<0.5	<0.5	---	<0.5	
Sum of BTEX	---	0.2	mg/kg	---	<0.2	<0.2	---	<0.2	
Naphthalene	91-20-3	1	mg/kg	---	<1	<1	---	<1	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%	---	106	94.3	---	92.0	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%	---	110	100	---	99.8	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%	---	91.7	88.0	---	95.1	
2-Chlorophenol-D4	93951-73-6	0.1	%	---	92.4	97.6	---	103	
2.4.6-Tribromophenol	118-79-6	0.1	%	---	98.1	109	---	100	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%	---	110	106	---	112	
Anthracene-d10	1719-06-8	0.1	%	---	99.7	105	---	102	
4-Terphenyl-d14	1718-51-0	0.1	%	---	86.7	98.0	---	96.5	
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%	---	90.9	91.3	---	91.0	
Toluene-D8	2037-26-5	0.1	%	---	84.3	82.8	---	83.5	
4-Bromofluorobenzene	460-00-4	0.1	%	---	80.2	70.6	---	76.2	

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	TP4_0.5-0.6_27/06/13	QC402_27/06/13	OL1_0.0-0.2_27/06/13	OL1_0.3-0.5_27/06/13	OL2_0.0-0.2_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 15:00	27-JUN-2013 15:00	27-JUN-2013 15:00
					EW1301886-096	EW1301886-098	EW1301886-100	EW1301886-101	EW1301886-102
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		17.9	2.8	23.3	25.0	21.9
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		9	<5	<5	<5	32
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	8
Chromium	7440-47-3	2	mg/kg		16	<2	17	21	10
Copper	7440-50-8	5	mg/kg		78	<5	48	66	1150
Lead	7439-92-1	5	mg/kg		22	<5	10	9	383
Manganese	7439-96-5	5	mg/kg		21	8	24	12	148
Nickel	7440-02-0	2	mg/kg		3	<2	3	5	12
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg		16	<5	13	20	498
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	0.2
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		---	<20	---	---	---
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		---	<0.05	---	---	---
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		---	<0.05	---	---	---
beta-BHC	319-85-7	0.05	mg/kg		---	<0.05	---	---	---
gamma-BHC	58-89-9	0.05	mg/kg		---	<0.05	---	---	---
delta-BHC	319-86-8	0.05	mg/kg		---	<0.05	---	---	---
Heptachlor	76-44-8	0.05	mg/kg		---	<0.05	---	---	---
Aldrin	309-00-2	0.05	mg/kg		---	<0.05	---	---	---
Heptachlor epoxide	1024-57-3	0.05	mg/kg		---	<0.05	---	---	---
^ Total Chlordane (sum)	---	0.05	mg/kg		---	<0.05	---	---	---
trans-Chlordane	5103-74-2	0.05	mg/kg		---	<0.05	---	---	---
alpha-Endosulfan	959-98-8	0.05	mg/kg		---	<0.05	---	---	---
cis-Chlordane	5103-71-9	0.05	mg/kg		---	<0.05	---	---	---
Dieldrin	60-57-1	0.05	mg/kg		---	<0.05	---	---	---
4,4`-DDE	72-55-9	0.05	mg/kg		---	<0.05	---	---	---
Endrin	72-20-8	0.05	mg/kg		---	<0.05	---	---	---
beta-Endosulfan	33213-65-9	0.05	mg/kg		---	<0.05	---	---	---
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		---	<0.05	---	---	---

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	TP4_0.5-0.6_27/06/13	QC402_27/06/13	OL1_0.0-0.2_27/06/13	OL1_0.3-0.5_27/06/13	OL2_0.0-0.2_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 15:00	27-JUN-2013 15:00	27-JUN-2013 15:00
					EW1301886-096	EW1301886-098	EW1301886-100	EW1301886-101	EW1301886-102
EP068A: Organochlorine Pesticides (OC) - Continued									
4.4`-DDD	72-54-8	0.05	mg/kg		—	<0.05	—	—	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		—	<0.05	—	—	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		—	<0.05	—	—	—
4.4`-DDT	50-29-3	0.2	mg/kg		—	<0.2	—	—	—
Endrin ketone	53494-70-5	0.05	mg/kg		—	<0.05	—	—	—
Methoxychlor	72-43-5	0.2	mg/kg		—	<0.2	—	—	—
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		—	<0.05	—	—	—
^ Sum of DDD + DDE + DDT	—	0.05	mg/kg		—	<0.05	—	—	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		—	<0.05	—	—	—
Demeton-S-methyl	919-86-8	0.05	mg/kg		—	<0.05	—	—	—
Monocrotophos	6923-22-4	0.2	mg/kg		—	<0.2	—	—	—
Dimethoate	60-51-5	0.05	mg/kg		—	<0.05	—	—	—
Diazinon	333-41-5	0.05	mg/kg		—	<0.05	—	—	—
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		—	<0.05	—	—	—
Parathion-methyl	298-00-0	0.2	mg/kg		—	<0.2	—	—	—
Malathion	121-75-5	0.05	mg/kg		—	<0.05	—	—	—
Fenthion	55-38-9	0.05	mg/kg		—	<0.05	—	—	—
Chlorpyrifos	2921-88-2	0.05	mg/kg		—	<0.05	—	—	—
Parathion	56-38-2	0.2	mg/kg		—	<0.2	—	—	—
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		—	<0.05	—	—	—
Chlorfenvinphos	470-90-6	0.05	mg/kg		—	<0.05	—	—	—
Bromophos-ethyl	4824-78-6	0.05	mg/kg		—	<0.05	—	—	—
Fenamiphos	22224-92-6	0.05	mg/kg		—	<0.05	—	—	—
Prothiofos	34643-46-4	0.05	mg/kg		—	<0.05	—	—	—
Ethion	563-12-2	0.05	mg/kg		—	<0.05	—	—	—
Carbophenothion	786-19-6	0.05	mg/kg		—	<0.05	—	—	—
Azinphos Methyl	86-50-0	0.05	mg/kg		—	<0.05	—	—	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		—	<0.5	—	—	—
2-Chlorophenol	95-57-8	0.5	mg/kg		—	<0.5	—	—	—
2-Methylphenol	95-48-7	0.5	mg/kg		—	<0.5	—	—	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg		—	<1	—	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP4_0.5-0.6_27/06/13	QC402_27/06/13	OL1_0.0-0.2_27/06/13	OL1_0.3-0.5_27/06/13	OL2_0.0-0.2_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 15:00	27-JUN-2013 15:00	27-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-096	EW1301886-098	EW1301886-100	EW1301886-101	EW1301886-102
EP075(SIM)A: Phenolic Compounds - Continued									
2-Nitrophenol	88-75-5	0.5	mg/kg		—	<0.5	—	—	—
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		—	<0.5	—	—	—
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		—	<0.5	—	—	—
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		—	<0.5	—	—	—
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg		—	<0.5	—	—	—
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		—	<0.5	—	—	—
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		—	<0.5	—	—	—
Pentachlorophenol	87-86-5	2	mg/kg		—	<2	—	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		—	<0.5	—	—	—
Acenaphthylene	208-96-8	0.5	mg/kg		—	<0.5	—	—	—
Acenaphthene	83-32-9	0.5	mg/kg		—	<0.5	—	—	—
Fluorene	86-73-7	0.5	mg/kg		—	<0.5	—	—	—
Phenanthrene	85-01-8	0.5	mg/kg		—	<0.5	—	—	—
Anthracene	120-12-7	0.5	mg/kg		—	<0.5	—	—	—
Fluoranthene	206-44-0	0.5	mg/kg		—	<0.5	—	—	—
Pyrene	129-00-0	0.5	mg/kg		—	<0.5	—	—	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		—	<0.5	—	—	—
Chrysene	218-01-9	0.5	mg/kg		—	<0.5	—	—	—
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		—	<0.5	—	—	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		—	<0.5	—	—	—
Benzo(a)pyrene	50-32-8	0.5	mg/kg		—	<0.5	—	—	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		—	<0.5	—	—	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		—	<0.5	—	—	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		—	<0.5	—	—	—
Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		—	<0.5	—	—	—
Benzo(a)pyrene TEQ (WHO)	—	0.5	mg/kg		—	<0.5	—	—	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		—	<10	—	—	—
C10 - C14 Fraction	—	50	mg/kg		—	<50	—	—	—
C15 - C28 Fraction	—	100	mg/kg		—	<100	—	—	—
C29 - C36 Fraction	—	100	mg/kg		—	<100	—	—	—
C10 - C36 Fraction (sum)	—	50	mg/kg		—	<50	—	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TP4_0.5-0.6_27/06/13	QC402_27/06/13	OL1_0.0-0.2_27/06/13	OL1_0.3-0.5_27/06/13	OL2_0.0-0.2_27/06/13
				Client sampling date / time	27-JUN-2013 10:00	27-JUN-2013 10:00	27-JUN-2013 15:00	27-JUN-2013 15:00	27-JUN-2013 15:00
Compound	CAS Number	LOR	Unit		EW1301886-096	EW1301886-098	EW1301886-100	EW1301886-101	EW1301886-102
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	---	10	mg/kg		---	<10	---	---	---
C6 - C10 Fraction minus BTEX (F1)	---	10	mg/kg		---	<10	---	---	---
>C10 - C16 Fraction	---	50	mg/kg		---	<50	---	---	---
>C16 - C34 Fraction	---	100	mg/kg		---	<100	---	---	---
>C34 - C40 Fraction	---	100	mg/kg		---	<100	---	---	---
>C10 - C40 Fraction (sum)	---	50	mg/kg		---	<50	---	---	---
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg		---	<0.2	---	---	---
Toluene	108-88-3	0.5	mg/kg		---	<0.5	---	---	---
Ethylbenzene	100-41-4	0.5	mg/kg		---	<0.5	---	---	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		---	<0.5	---	---	---
ortho-Xylene	95-47-6	0.5	mg/kg		---	<0.5	---	---	---
EP080: BTEXN									
Total Xylenes	1330-20-7	0.5	mg/kg		---	<0.5	---	---	---
Sum of BTEX	---	0.2	mg/kg		---	<0.2	---	---	---
Naphthalene	91-20-3	1	mg/kg		---	<1	---	---	---
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		---	104	---	---	---
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		---	102	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		---	87.6	---	---	---
2-Chlorophenol-D4	93951-73-6	0.1	%		---	98.8	---	---	---
2.4.6-Tribromophenol	118-79-6	0.1	%		---	93.7	---	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		---	102	---	---	---
Anthracene-d10	1719-06-8	0.1	%		---	99.6	---	---	---
4-Terphenyl-d14	1718-51-0	0.1	%		---	94.5	---	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		---	116	---	---	---
Toluene-D8	2037-26-5	0.1	%		---	102	---	---	---
4-Bromofluorobenzene	460-00-4	0.1	%		---	95.8	---	---	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	OL2_0.3-0.5_27/06/13	---	---	---	---
				Client sampling date / time	27-JUN-2013 15:00	---	---	---	---
Compound	CAS Number	LOR	Unit		EW1301686-103	---	---	---	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		30.8	---	---	---	---
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	---	---	---	---
Cadmium	7440-43-9	1	mg/kg		<1	---	---	---	---
Chromium	7440-47-3	2	mg/kg		20	---	---	---	---
Copper	7440-50-8	5	mg/kg		111	---	---	---	---
Lead	7439-92-1	5	mg/kg		18	---	---	---	---
Manganese	7439-96-5	5	mg/kg		26	---	---	---	---
Nickel	7440-02-0	2	mg/kg		6	---	---	---	---
Selenium	7782-49-2	5	mg/kg		<5	---	---	---	---
Zinc	7440-66-6	5	mg/kg		78	---	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	---	---	---	---

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	—	—
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	27-JUN-2013 10:00	—	—
Compound	CAS Number	LOR	Unit		EW1301886-022	EW1301886-072	EW1301886-099	—	—
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	—	—
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	—	—
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	—	—
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	<0.001	—	—
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	—	—
Manganese	7439-96-5	0.001	mg/L		<0.001	<0.001	<0.001	—	—
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	—	—
Selenium	7782-49-2	0.01	mg/L		<0.01	<0.01	<0.01	—	—
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	<0.005	—	—
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	—	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	<0.5	<0.5	—	—
beta-BHC	319-85-7	0.5	µg/L		<0.5	<0.5	<0.5	—	—
gamma-BHC	58-89-9	0.5	µg/L		<0.5	<0.5	<0.5	—	—
delta-BHC	319-86-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Heptachlor	76-44-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Aldrin	309-00-2	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	<0.5	<0.5	—	—
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	<0.5	<0.5	—	—
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Dieldrin	60-57-1	0.5	µg/L		<0.5	<0.5	<0.5	—	—
4,4'-DDE	72-55-9	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Endrin	72-20-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	<0.5	<0.5	—	—
4,4'-DDD	72-54-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
4,4'-DDT	50-29-3	2.0	µg/L		<2.0	<2.0	<2.0	—	—
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Methoxychlor	72-43-5	2.0	µg/L		<2.0	<2.0	<2.0	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	—	—
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	27-JUN-2013 10:00	—	—
Compound	CAS Number	LOR	Unit		EW1301886-022	EW1301886-072	EW1301886-099	—	—
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Total Chlordane (sum)	—	0.5	µg/L		<0.5	<0.5	<0.5	—	—
^ Sum of DDD + DDE + DDT	—	0.5	µg/L		<0.5	<0.5	<0.5	—	—
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	<0.5	<0.5	—	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	<2.0	<2.0	—	—
Dimethoate	60-51-5	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Diazinon	333-41-5	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	<2.0	<2.0	—	—
Malathion	121-75-5	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Fenthion	55-38-9	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Parathion	56-38-2	2.0	µg/L		<2.0	<2.0	<2.0	—	—
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Prothiofos	34643-46-4	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Ethion	563-12-2	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Carbophenothion	786-19-6	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	<0.5	<0.5	—	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2-Chlorophenol	95-57-8	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2-Methylphenol	95-48-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—
3- & 4-Methylphenol	1319-77-3	2.0	µg/L		<2.0	<2.0	<2.0	—	—
2-Nitrophenol	88-75-5	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2.4-Dimethylphenol	105-67-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2.4-Dichlorophenol	120-83-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2.6-Dichlorophenol	87-65-0	1.0	µg/L		<1.0	<1.0	<1.0	—	—
4-Chloro-3-Methylphenol	59-50-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	—	—
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	27-JUN-2013 10:00	—	—
Compound	CAS Number	LOR	Unit		EW1301886-022	EW1301886-072	EW1301886-099	—	—
EP075(SIM)A: Phenolic Compounds - Continued									
2.4.6-Trichlorophenol	88-06-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2.4.5-Trichlorophenol	95-95-4	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Pentachlorophenol	87-86-5	2.0	µg/L		<2.0	<2.0	<2.0	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(b)fluoranthene	205-99-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
* Sum of polycyclic aromatic hydrocarbons	—	0.5	µg/L		<0.5	<0.5	<0.5	—	—
* Benzo(a)pyrene TEQ (WHO)	—	0.5	µg/L		<0.5	<0.5	<0.5	—	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	20	µg/L		<20	<20	<20	—	—
C10 - C14 Fraction	—	50	µg/L		<50	<50	<50	—	—
C15 - C28 Fraction	—	100	µg/L		<100	<100	<100	—	—
C29 - C36 Fraction	—	50	µg/L		<50	<50	<50	—	—
* C10 - C36 Fraction (sum)	—	50	µg/L		<50	<50	<50	—	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	20	µg/L		<20	<20	<20	—	—
* C6 - C10 Fraction minus BTEX (F1)	—	20	µg/L		<20	<20	<20	—	—
>C10 - C16 Fraction	—	100	µg/L		<100	<100	<100	—	—
>C16 - C34 Fraction	—	100	µg/L		<100	<100	<100	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC300_25/06/13	QC301_26/06/13	QC302_27/06/13	—	—
				Client sampling date / time	25-JUN-2013 15:00	26-JUN-2013 15:00	27-JUN-2013 10:00	—	—
Compound	CAS Number	LOR	Unit		EW1301886-022	EW1301886-072	EW1301886-099	—	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued									
>C34 - C40 Fraction	—	100	µg/L		<100	<100	<100	—	—
* >C10 - C40 Fraction (sum)	—	100	µg/L		<100	<100	<100	—	—
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	—	—
Toluene	108-88-3	2	µg/L		<2	<2	<2	—	—
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	—	—
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	—	—
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	—	—
* Total Xylenes	1330-20-7	2	µg/L		<2	<2	<2	—	—
* Sum of BTEX	—	1	µg/L		<1	<1	<1	—	—
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	—	—
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		106	58.9	90.0	—	—
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		78.8	57.5	85.5	—	—
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		40.3	41.7	40.2	—	—
2-Chlorophenol-D4	93951-73-6	0.1	%		63.7	61.2	78.2	—	—
2.4.6-Tribromophenol	118-79-6	0.1	%		80.0	89.2	79.4	—	—
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		75.6	85.7	76.6	—	—
Anthracene-d10	1719-06-8	0.1	%		75.1	84.8	77.1	—	—
4-Terphenyl-d14	1718-51-0	0.1	%		67.6	74.1	67.9	—	—
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		80.6	82.4	82.1	—	—
Toluene-D8	2037-26-5	0.1	%		85.9	89.8	87.1	—	—
4-Bromofluorobenzene	460-00-4	0.1	%		93.9	103	94.3	—	—

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	TP20_0.5-0.6_26/06/13 - 26-JUN-2013 10:00	Mid grey-brown clay soil with some grey rocks plus some glass debris and several small friable fragments of asbestos fibre board approx 5 x 5 x 2mm
EA200: Description	TP16A_0.9-1.0_26/06/13 - 26-JUN-2013 10:00	Three pieces of bonded asbestos cement sheeting approx 118 x 40 x 5mm
EA200: Description	TP16B_0.1-0.2_26/06/13 - 26-JUN-2013 10:00	Several pieces of bonded asbestos cement sheeting approx 45 x 30 x 5mm
EA200: Description	TP15_0.0-0.1_26/06/13 - 26-JUN-2013 10:00	Mid brown clay soil with some slag grains plus plenty of vegetation and one small piece of degraded and friable asbestos fibre board approx 6 x 5 x 3mm
EA200: Description	TP10_0.0-0.1_26/06/13 - 26-JUN-2013 15:00	Mid brown clay soil with some grey rocks plus some concrete debris and plenty of pieces of bonded asbestos vinyl tile like material approx 40 x 25 x 3mm and several small friable asbestos fibre bundles approx 4 x 1 x 1mm
EA200: Description	TP11_0.1-0.2_26/06/13 - 26-JUN-2013 15:00	Mid brown clay soil with some concrete debris plus some slag grains and two small fragments of bonded asbestos cement sheeting approx 8 x 4 x 3mm
EA200: Description	TP12A_0.1-0.2_26/06/13 - 26-JUN-2013 15:00	One piece of bonded asbestos cement sheeting approx 90 x 39 x 5mm
EA200: Description	TP12_0.0-0.1_26/06/13 - 26-JUN-2013 15:00	Mid grey-brown clay soil with some quartz and slag grains and plenty of vegetation
EA200: Description	TP7_0.3-0.4_27/06/13 - 27-JUN-2013 10:00	Dark grey-brown clay soil with some small red rocks plus some vegetation
EA200: Description	TP3_0.0-0.1_27/06/13 - 27-JUN-2013 10:00	Dark grey-brown clay soil with some small grey rocks plus some vegetation

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	145
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	32	142
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	127
2-Chlorophenol-D4	93951-73-6	64	126
2.4.6-Tribromophenol	118-79-6	36	136
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	64	130
Anthracene-d10	1719-06-8	69	135
4-Terphenyl-d14	1718-51-0	64	136
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72.8	133.2
Toluene-D8	2037-26-5	73.9	132.1
4-Bromofluorobenzene	460-00-4	71.6	130.0

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	30	120
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	26.8	129
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10.0	44
2-Chlorophenol-D4	93951-73-6	15.9	102
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20.4	112
Anthracene-d10	1719-06-8	29.6	118
4-Terphenyl-d14	1718-51-0	21.5	126
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1322093**	Page	: 1 of 15
Client	: **GOLDER ASSOCIATES**	Laboratory	: Environmental Division Sydney
Contact	: MS CAROLINA OLMOS	Contact	: Loren Schiavon
Address	: LEVEL 1, 124 PACIFIC HIGHWAY ST LEONARDS NSW, AUSTRALIA 2065	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: colmos@golder.com.au	E-mail	: loren.schiavon@alsglobal.com
Telephone	: +61 02 9478 3900	Telephone	: +61 2 8784 8503
Facsimile	: +61 02 9478 3901	Facsimile	: +61 2 8784 8500
Project	: 137623028	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: —		
C-O-C number	: —	Date Samples Received	: 10-OCT-2013
Sampler	: KY	Issue Date	: 17-OCT-2013
Site	: PKC - PRIMARY SCHOOL		
		No. of samples received	: 28
Quote number	: SY/493/13	No. of samples analysed	: 12

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **ALS is not NATA accredited for the analysis of Bifenthrin in soils when performed under ALS Method EP068D**
- **EG005T: Poor matrix spike recovery was obtained for Copper on sample ES1322093 - 2. Results have been confirmed by re-extraction and reanalysis.**
- **EG005T: Poor precision was obtained for Manganese on sample ES1322093 - 9 due to sample heterogeneity. Results have been confirmed by re-extraction and reanalysis.**
- **EK057G/EK059G/EK058G:LOR raised for Nitrite/NOx and Nitrate analysis on various samples due to sample matrix.**
- **EK067G: Spike failed for Total P analysis due to matrix interferences(Confirmed by re-digestion and re-analysis)**

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Alex Rossi	Organic Chemist	Sydney Organics
Ankit Joshi	Inorganic Chemist	Sydney Inorganics
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Hoa Nguyen	Senior Inorganic Chemist	Sydney Inorganics
Pabi Subba	Senior Organic Chemist	Sydney Organics

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH4-0.4-09/10/13	BH4-1.0-09/10/13	BH5-0.1-09/10/13	BH5-1.0-09/10/13	BH6-0.3-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Unit		ES1322093-002	ES1322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%		19.5	20.1	11.5	20.9	12.1
EG005T: Total Metals by ICP-AES									
Manganese	7439-96-5	5	mg/kg		248	75	161	103	550
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Arsenic	7440-38-2	5	mg/kg		73	<5	5	11	<5
Cadmium	7440-43-9	1	mg/kg		5	<1	1	<1	<1
Chromium	7440-47-3	2	mg/kg		26	31	6	26	32
Copper	7440-50-8	5	mg/kg		717	79	574	83	130
Lead	7439-92-1	5	mg/kg		404	14	92	44	10
Nickel	7440-02-0	2	mg/kg		24	9	3	7	30
Zinc	7440-66-6	5	mg/kg		798	76	190	31	111
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	0.1	<0.1	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		<20	30	<20	---	<20
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N (Sol.)	---	0.1	mg/kg		<1.0	<1.0	---	---	---
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N (Sol.)	---	0.1	mg/kg		<1.0	<1.0	---	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N (Sol.)	---	0.1	mg/kg		<1.0	<1.0	---	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	---	20	mg/kg		120	880	---	---	---
EK062: Total Nitrogen as N (TKN + NOx)									
Total Nitrogen as N	---	20	mg/kg		120	880	---	---	---
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	2	mg/kg		338	186	---	---	---
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	---	<0.05	---	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	---	<0.05	---	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	---	<0.05	---	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	---	<0.05	---	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	---	<0.05	---	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	BH4-0.4-09/10/13	BH4-1.0-09/10/13	BH5-0.1-09/10/13	BH5-1.0-09/10/13	BH6-0.3-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
					ES1322093-002	ES1322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EP068A: Organochlorine Pesticides (OC) - Continued									
Heptachlor	76-44-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Total Chlordane (sum)	—	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
4,4'-DDT	50-29-3	0.2	mg/kg		<0.2	—	<0.2	—	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	—	<0.2	—	<0.2
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
Sum of DDD + DDE + DDT	—	0.05	mg/kg		<0.05	—	<0.05	—	<0.05
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	—	<1	—	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	—	<2	—	<2

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH4-0.4-09/10/13	BH4-1.0-09/10/13	BH5-0.1-09/10/13	BH5-1.0-09/10/13	BH6-0.3-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Unit		ES1322093-002	ES1322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
^ Benzo(a)pyrene TEQ (zero)	—	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	—	0.5	mg/kg		0.6	—	0.6	—	0.6
^ Benzo(a)pyrene TEQ (LOR)	—	0.5	mg/kg		1.2	—	1.2	—	1.2
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		<10	—	<10	—	<10
C10 - C14 Fraction	—	50	mg/kg		<50	—	<50	—	<50
C15 - C28 Fraction	—	100	mg/kg		<100	—	<100	—	<100
C29 - C36 Fraction	—	100	mg/kg		<100	—	<100	—	<100
^ C10 - C36 Fraction (sum)	—	50	mg/kg		<50	—	<50	—	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	—	<10	—	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	—	<10	—	<10
>C10 - C16 Fraction	>C10_C16	50	mg/kg		<50	—	<50	—	<50
>C16 - C34 Fraction	—	100	mg/kg		<100	—	<100	—	<100
>C34 - C40 Fraction	—	100	mg/kg		<100	—	<100	—	<100
^ >C10 - C40 Fraction (sum)	—	50	mg/kg		<50	—	<50	—	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH4-0.4-09/10/13	BH4-1.0-09/10/13	BH5-0.1-09/10/13	BH5-1.0-09/10/13	BH6-0.3-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Unit		ES1322093-002	ES1322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 - Continued									
>C10 - C16 Fraction minus Naphthalene (F2)	—	50	mg/kg		<50	—	<50	—	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	—	<0.2	—	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Sum of BTEX	—	0.2	mg/kg		<0.2	—	<0.2	—	<0.2
Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	—	<0.5	—	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	—	<1	—	<1
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		77.1	—	86.9	—	79.2
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		64.4	—	85.2	—	74.6
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		110	—	110	—	110
2-Chlorophenol-D4	93951-73-6	0.1	%		110	—	103	—	109
2.4.6-Tribromophenol	118-79-6	0.1	%		96.7	—	95.8	—	104
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		95.8	—	97.6	—	100
Anthracene-d10	1719-06-8	0.1	%		91.2	—	89.6	—	94.1
4-Terphenyl-d14	1718-51-0	0.1	%		85.3	—	82.8	—	86.9
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		91.7	—	99.9	—	104
Toluene-D8	2037-26-5	0.1	%		96.6	—	104	—	102
4-Bromofluorobenzene	460-00-4	0.1	%		100	—	109	—	111

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH6-1.0-09/10/13	BH3-0.1-09/10/13	BH3-1.0-09/10/13	BH2-0.1-09/10/13	BH2-1.0-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Unit		ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	—	1.0	%		13.4	16.3	27.2	11.6	18.8
EG005T: Total Metals by ICP-AES									
Manganese	7439-96-5	5	mg/kg		87	147	16	92	21
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Arsenic	7440-38-2	5	mg/kg		<5	37	<5	6	<5
Cadmium	7440-43-9	1	mg/kg		<1	3	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		25	20	26	9	30
Copper	7440-50-8	5	mg/kg		137	436	102	82	68
Lead	7439-92-1	5	mg/kg		8	350	9	219	7
Nickel	7440-02-0	2	mg/kg		15	8	3	4	15
Zinc	7440-66-6	5	mg/kg		90	257	54	1150	38
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	0.2	<0.1	0.2	<0.1
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		—	<20	—	<20	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		—	<0.05	—	<0.05	—
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		—	<0.05	—	<0.05	—
beta-BHC	319-85-7	0.05	mg/kg		—	<0.05	—	<0.05	—
gamma-BHC	58-89-9	0.05	mg/kg		—	<0.05	—	<0.05	—
delta-BHC	319-86-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Heptachlor	76-44-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Aldrin	309-00-2	0.05	mg/kg		—	<0.05	—	<0.05	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		—	<0.05	—	<0.05	—
Total Chlordane (sum)	—	0.05	mg/kg		—	<0.05	—	<0.05	—
trans-Chlordane	5103-74-2	0.05	mg/kg		—	<0.05	—	<0.05	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		—	<0.05	—	<0.05	—
cis-Chlordane	5103-71-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Dieldrin	60-57-1	0.05	mg/kg		—	<0.05	—	<0.05	—
4,4'-DDE	72-55-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Endrin	72-20-8	0.05	mg/kg		—	<0.05	—	<0.05	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		—	<0.05	—	<0.05	—
Endosulfan (sum)	115-29-7	0.05	mg/kg		—	<0.05	—	<0.05	—

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	BH6-1.0-09/10/13	BH3-0.1-09/10/13	BH3-1.0-09/10/13	BH2-0.1-09/10/13	BH2-1.0-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
					ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP068A: Organochlorine Pesticides (OC) - Continued									
4.4'-DDD	72-54-8	0.05	mg/kg		—	<0.05	—	<0.05	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		—	<0.05	—	<0.05	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		—	<0.05	—	<0.05	—
4.4'-DDT	50-29-3	0.2	mg/kg		—	<0.2	—	<0.2	—
Endrin ketone	53494-70-5	0.05	mg/kg		—	<0.05	—	<0.05	—
Methoxychlor	72-43-5	0.2	mg/kg		—	<0.2	—	<0.2	—
Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		—	<0.05	—	<0.05	—
Sum of DDD + DDE + DDT	—	0.05	mg/kg		—	<0.05	—	<0.05	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		—	<0.5	—	<0.5	—
2-Chlorophenol	95-57-8	0.5	mg/kg		—	<0.5	—	<0.5	—
2-Methylphenol	95-48-7	0.5	mg/kg		—	<0.5	—	<0.5	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg		—	<1	—	<1	—
2-Nitrophenol	88-75-5	0.5	mg/kg		—	<0.5	—	<0.5	—
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		—	<0.5	—	<0.5	—
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		—	<0.5	—	<0.5	—
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		—	<0.5	—	<0.5	—
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		—	<0.5	—	<0.5	—
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		—	<0.5	—	<0.5	—
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		—	<0.5	—	<0.5	—
Pentachlorophenol	87-86-5	2	mg/kg		—	<2	—	<2	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		—	<0.5	—	<0.5	—
Acenaphthylene	208-96-8	0.5	mg/kg		—	<0.5	—	<0.5	—
Acenaphthene	83-32-9	0.5	mg/kg		—	<0.5	—	<0.5	—
Fluorene	86-73-7	0.5	mg/kg		—	<0.5	—	<0.5	—
Phenanthrene	85-01-8	0.5	mg/kg		—	<0.5	—	<0.5	—
Anthracene	120-12-7	0.5	mg/kg		—	<0.5	—	<0.5	—
Fluoranthene	206-44-0	0.5	mg/kg		—	<0.5	—	<0.5	—
Pyrene	129-00-0	0.5	mg/kg		—	<0.5	—	<0.5	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		—	<0.5	—	<0.5	—
Chrysene	218-01-9	0.5	mg/kg		—	<0.5	—	<0.5	—
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		—	<0.5	—	<0.5	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		—	<0.5	—	<0.5	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH6-1.0-09/10/13	BH3-0.1-09/10/13	BH3-1.0-09/10/13	BH2-0.1-09/10/13	BH2-1.0-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
Compound	CAS Number	LOR	Unit		ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(a)pyrene	50-32-8	0.5	mg/kg		—	<0.5	—	<0.5	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		—	<0.5	—	<0.5	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		—	<0.5	—	<0.5	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		—	<0.5	—	<0.5	—
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		—	<0.5	—	<0.5	—
^ Benzo(a)pyrene TEQ (zero)	—	0.5	mg/kg		—	<0.5	—	<0.5	—
^ Benzo(a)pyrene TEQ (half LOR)	—	0.5	mg/kg		—	0.6	—	0.6	—
^ Benzo(a)pyrene TEQ (LOR)	—	0.5	mg/kg		—	1.2	—	1.2	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		—	<10	—	<10	—
C10 - C14 Fraction	—	50	mg/kg		—	<50	—	<50	—
C15 - C28 Fraction	—	100	mg/kg		—	<100	—	<100	—
C29 - C36 Fraction	—	100	mg/kg		—	<100	—	<100	—
^ C10 - C36 Fraction (sum)	—	50	mg/kg		—	<50	—	<50	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013									
C6 - C10 Fraction	C6_C10	10	mg/kg		—	<10	—	<10	—
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		—	<10	—	<10	—
>C10 - C16 Fraction	>C10_C16	50	mg/kg		—	<50	—	<50	—
>C16 - C34 Fraction	—	100	mg/kg		—	<100	—	<100	—
>C34 - C40 Fraction	—	100	mg/kg		—	<100	—	<100	—
^ >C10 - C40 Fraction (sum)	—	50	mg/kg		—	<50	—	<50	—
^ >C10 - C16 Fraction minus Naphthalene (F2)	—	50	mg/kg		—	<50	—	<50	—
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		—	<0.2	—	<0.2	—
Toluene	108-88-3	0.5	mg/kg		—	<0.5	—	<0.5	—
Ethylbenzene	100-41-4	0.5	mg/kg		—	<0.5	—	<0.5	—
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		—	<0.5	—	<0.5	—
ortho-Xylene	95-47-6	0.5	mg/kg		—	<0.5	—	<0.5	—
^ Sum of BTEX	—	0.2	mg/kg		—	<0.2	—	<0.2	—
^ Total Xylenes	1330-20-7	0.5	mg/kg		—	<0.5	—	<0.5	—
Naphthalene	91-20-3	1	mg/kg		—	<1	—	<1	—

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	BH6-1.0-09/10/13	BH3-0.1-09/10/13	BH3-1.0-09/10/13	BH2-0.1-09/10/13	BH2-1.0-09/10/13
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00	09-OCT-2013 15:00
					ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		—	79.0	—	78.1	—
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		—	68.2	—	77.1	—
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		—	108	—	112	—
2-Chlorophenol-D4	93951-73-6	0.1	%		—	113	—	103	—
2,4,6-Tribromophenol	118-79-6	0.1	%		—	93.3	—	64.6	—
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		—	98.2	—	101	—
Anthracene-d10	1719-06-8	0.1	%		—	92.7	—	90.6	—
4-Terphenyl-d14	1718-51-0	0.1	%		—	86.4	—	84.5	—
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		—	96.0	—	96.8	—
Toluene-D8	2037-26-5	0.1	%		—	97.7	—	95.9	—
4-Bromofluorobenzene	460-00-4	0.1	%		—	104	—	98.3	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH1-0.5-09/10/13	BH1-1.0-09/10/13	—	—	—
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	—	—	—
Compound	CAS Number	LOR	Unit		ES1322093-025	ES1322093-026	—	—	—
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	—	1.0	%		29.2	19.0	—	—	—
EG005T: Total Metals by ICP-AES									
Manganese	7439-96-5	5	mg/kg		19	<5	—	—	—
Selenium	7782-49-2	5	mg/kg		<5	<5	—	—	—
Arsenic	7440-38-2	5	mg/kg		<5	<5	—	—	—
Cadmium	7440-43-9	1	mg/kg		<1	<1	—	—	—
Chromium	7440-47-3	2	mg/kg		32	11	—	—	—
Copper	7440-50-8	5	mg/kg		74	49	—	—	—
Lead	7439-92-1	5	mg/kg		8	7	—	—	—
Nickel	7440-02-0	2	mg/kg		6	<2	—	—	—
Zinc	7440-66-6	5	mg/kg		28	17	—	—	—
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	—	—	—
EK055: Ammonia as N									
Ammonia as N	7664-41-7	20	mg/kg		—	<20	—	—	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		—	<0.05	—	—	—
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		—	<0.05	—	—	—
beta-BHC	319-85-7	0.05	mg/kg		—	<0.05	—	—	—
gamma-BHC	58-89-9	0.05	mg/kg		—	<0.05	—	—	—
delta-BHC	319-86-8	0.05	mg/kg		—	<0.05	—	—	—
Heptachlor	76-44-8	0.05	mg/kg		—	<0.05	—	—	—
Aldrin	309-00-2	0.05	mg/kg		—	<0.05	—	—	—
Heptachlor epoxide	1024-57-3	0.05	mg/kg		—	<0.05	—	—	—
Total Chlordane (sum)	—	0.05	mg/kg		—	<0.05	—	—	—
trans-Chlordane	5103-74-2	0.05	mg/kg		—	<0.05	—	—	—
alpha-Endosulfan	959-98-8	0.05	mg/kg		—	<0.05	—	—	—
cis-Chlordane	5103-71-9	0.05	mg/kg		—	<0.05	—	—	—
Dieldrin	60-57-1	0.05	mg/kg		—	<0.05	—	—	—
4,4'-DDE	72-55-9	0.05	mg/kg		—	<0.05	—	—	—
Endrin	72-20-8	0.05	mg/kg		—	<0.05	—	—	—
beta-Endosulfan	33213-65-9	0.05	mg/kg		—	<0.05	—	—	—
Endosulfan (sum)	115-29-7	0.05	mg/kg		—	<0.05	—	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH1-0.5-09/10/13	BH1-1.0-09/10/13	—	—	—
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	—	—	—
Compound	CAS Number	LOR	Unit		ES1322093-025	ES1322093-026	—	—	—
EP068A: Organochlorine Pesticides (OC) - Continued									
4,4`-DDD	72-54-8	0.05	mg/kg		—	<0.05	—	—	—
Endrin aldehyde	7421-93-4	0.05	mg/kg		—	<0.05	—	—	—
Endosulfan sulfate	1031-07-8	0.05	mg/kg		—	<0.05	—	—	—
4,4`-DDT	50-29-3	0.2	mg/kg		—	<0.2	—	—	—
Endrin ketone	53494-70-5	0.05	mg/kg		—	<0.05	—	—	—
Methoxychlor	72-43-5	0.2	mg/kg		—	<0.2	—	—	—
* Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		—	<0.05	—	—	—
* Sum of DDD + DDE + DDT	—	0.05	mg/kg		—	<0.05	—	—	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		—	<0.5	—	—	—
2-Chlorophenol	95-57-8	0.5	mg/kg		—	<0.5	—	—	—
2-Methylphenol	95-48-7	0.5	mg/kg		—	<0.5	—	—	—
3- & 4-Methylphenol	1319-77-3	1	mg/kg		—	<1	—	—	—
2-Nitrophenol	88-75-5	0.5	mg/kg		—	<0.5	—	—	—
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		—	<0.5	—	—	—
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		—	<0.5	—	—	—
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		—	<0.5	—	—	—
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		—	<0.5	—	—	—
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		—	<0.5	—	—	—
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		—	<0.5	—	—	—
Pentachlorophenol	87-86-5	2	mg/kg		—	<2	—	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		—	<0.5	—	—	—
Acenaphthylene	208-96-8	0.5	mg/kg		—	<0.5	—	—	—
Acenaphthene	83-32-9	0.5	mg/kg		—	<0.5	—	—	—
Fluorene	86-73-7	0.5	mg/kg		—	<0.5	—	—	—
Phenanthrene	85-01-8	0.5	mg/kg		—	<0.5	—	—	—
Anthracene	120-12-7	0.5	mg/kg		—	<0.5	—	—	—
Fluoranthene	206-44-0	0.5	mg/kg		—	<0.5	—	—	—
Pyrene	129-00-0	0.5	mg/kg		—	<0.5	—	—	—
Benz(a)anthracene	56-55-3	0.5	mg/kg		—	<0.5	—	—	—
Chrysene	218-01-9	0.5	mg/kg		—	<0.5	—	—	—
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg		—	<0.5	—	—	—
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		—	<0.5	—	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH1-0.5-09/10/13	BH1-1.0-09/10/13	—	—	—
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	—	—	—
Compound	CAS Number	LOR	Unit		ES1322093-025	ES1322093-026	—	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(a)pyrene	50-32-8	0.5	mg/kg		—	<0.5	—	—	—
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		—	<0.5	—	—	—
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		—	<0.5	—	—	—
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		—	<0.5	—	—	—
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	mg/kg		—	<0.5	—	—	—
^ Benzo(a)pyrene TEQ (zero)	—	0.5	mg/kg		—	<0.5	—	—	—
^ Benzo(a)pyrene TEQ (half LOR)	—	0.5	mg/kg		—	0.6	—	—	—
^ Benzo(a)pyrene TEQ (LOR)	—	0.5	mg/kg		—	1.2	—	—	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg		—	<10	—	—	—
C10 - C14 Fraction	—	50	mg/kg		—	<50	—	—	—
C15 - C28 Fraction	—	100	mg/kg		—	<100	—	—	—
C29 - C36 Fraction	—	100	mg/kg		—	<100	—	—	—
^ C10 - C36 Fraction (sum)	—	50	mg/kg		—	<50	—	—	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013									
C6 - C10 Fraction	C6_C10	10	mg/kg		—	<10	—	—	—
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		—	<10	—	—	—
>C10 - C16 Fraction	>C10_C16	50	mg/kg		—	<50	—	—	—
>C16 - C34 Fraction	—	100	mg/kg		—	<100	—	—	—
>C34 - C40 Fraction	—	100	mg/kg		—	<100	—	—	—
^ >C10 - C40 Fraction (sum)	—	50	mg/kg		—	<50	—	—	—
^ >C10 - C16 Fraction minus Naphthalene (F2)	—	50	mg/kg		—	<50	—	—	—
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		—	<0.2	—	—	—
Toluene	108-88-3	0.5	mg/kg		—	<0.5	—	—	—
Ethylbenzene	100-41-4	0.5	mg/kg		—	<0.5	—	—	—
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		—	<0.5	—	—	—
ortho-Xylene	95-47-6	0.5	mg/kg		—	<0.5	—	—	—
^ Sum of BTEX	—	0.2	mg/kg		—	<0.2	—	—	—
^ Total Xylenes	1330-20-7	0.5	mg/kg		—	<0.5	—	—	—
Naphthalene	91-20-3	1	mg/kg		—	<1	—	—	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	BH1-0.5-09/10/13	BH1-1.0-09/10/13	—	—	—
				Client sampling date / time	09-OCT-2013 15:00	09-OCT-2013 15:00	—	—	—
Compound	CAS Number	LOR	Unit		ES1322093-025	ES1322093-026	—	—	—
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		—	74.9	—	—	—
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		—	65.0	—	—	—
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		—	106	—	—	—
2-Chlorophenol-D4	93951-73-6	0.1	%		—	111	—	—	—
2,4,6-Tribromophenol	118-79-6	0.1	%		—	100	—	—	—
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		—	98.9	—	—	—
Anthracene-d10	1719-06-8	0.1	%		—	90.0	—	—	—
4-Terphenyl-d14	1718-51-0	0.1	%		—	84.9	—	—	—
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		—	101	—	—	—
Toluene-D8	2037-26-5	0.1	%		—	96.9	—	—	—
4-Bromofluorobenzene	460-00-4	0.1	%		—	104	—	—	—

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	136
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72.6	133.2
Toluene-D8	2037-26-5	73.9	132.1
4-Bromofluorobenzene	460-00-4	71.6	130.0

ALS Group

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES1316167	Page	: 1 of 9
Client	: PORT KEMBLA COPPER	Laboratory	: Environmental Division Sydney
Contact	: MS CAROLINA OLMOS	Contact	: Client Services
Address	: SYDNEY	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: colmos@golder.com.au	E-mail	: sydney@alsglobal.com
Telephone	: ---	Telephone	: +61-2-8784 8555
Facsimile	: ---	Facsimile	: +61-2-8784 8500
Project	: 137623028	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: ---		
C-O-C number	: ---	Date Samples Received	: 17-JUL-2013
Sampler	: CO	Issue Date	: 24-JUL-2013
Site	: PHC-PRIMARY SCHOOL		
		No. of samples received	: 3
Quote number	: ---	No. of samples analysed	: 3

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

NATA

WORLD RECOGNISED ACCREDITATION

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Alex Rossi	Organic Chemist	Sydney Organics
Alex Rossi	Organic Chemist	Sydney Organics
Ankit Joshi	Inorganic Chemist	Sydney Inorganics
Ankit Joshi	Inorganic Chemist	Sydney Inorganics
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EG051G:Spike failed for Ferrous Iron analysis due to matrix interference(confirmed by re analysis)**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	—	—
				Client sampling date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	—	—
Compound	CAS Number	LOR	Unit		ES1316167-001	ES1316167-002	ES1316167-003	—	—
EA015: Total Dissolved Solids									
Total Dissolved Solids @180°C	—	10	mg/L		567	1860	—	—	—
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	<1	—	—	—
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	<1	—	—	—
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		20	9	—	—	—
Total Alkalinity as CaCO3	—	1	mg/L		20	9	—	—	—
ED038A: Acidity									
Acidity as CaCO3	—	1	mg/L		103	99	—	—	—
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		122	597	—	—	—
ED045G: Chloride Discrete analyser									
Chloride	16887-00-6	1	mg/L		208	270	—	—	—
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		5	3	—	—	—
Magnesium	7439-95-4	1	mg/L		5	18	—	—	—
Sodium	7440-23-5	1	mg/L		189	682	—	—	—
Potassium	7440-09-7	1	mg/L		4	3	—	—	—
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.38	0.26	—	—	—
Arsenic	7440-38-2	0.001	mg/L		0.002	0.001	—	—	—
Cadmium	7440-43-9	0.0001	mg/L		0.0009	<0.0001	—	—	—
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	—	—	—
Cobalt	7440-48-4	0.001	mg/L		0.003	0.013	—	—	—
Copper	7440-50-8	0.001	mg/L		0.082	0.033	—	—	—
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	—	—	—
Manganese	7439-96-5	0.001	mg/L		0.033	0.114	—	—	—
Nickel	7440-02-0	0.001	mg/L		0.004	0.012	—	—	—
Selenium	7782-49-2	0.01	mg/L		<0.01	<0.01	—	—	—
Zinc	7440-66-6	0.005	mg/L		0.082	0.041	—	—	—
Iron	7439-89-6	0.05	mg/L		0.48	<0.05	—	—	—
EG020T: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		0.004	0.005	<0.001	—	—
Cadmium	7440-43-9	0.0001	mg/L		0.0011	<0.0001	<0.0001	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	---	---
				Client sampling date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	---	---
Compound	CAS Number	LOR	Unit		ES1316167-001	ES1316167-002	ES1316167-003	---	---
EG020T: Total Metals by ICP-MS - Continued									
Chromium	7440-47-3	0.001	mg/L		0.003	0.003	<0.001	---	---
Copper	7440-50-8	0.001	mg/L		0.163	0.062	<0.001	---	---
Nickel	7440-02-0	0.001	mg/L		0.008	0.015	<0.001	---	---
Lead	7439-92-1	0.001	mg/L		0.004	0.003	<0.001	---	---
Zinc	7440-66-6	0.005	mg/L		0.105	0.055	<0.005	---	---
Manganese	7439-96-5	0.001	mg/L		0.042	0.150	<0.001	---	---
Selenium	7782-49-2	0.01	mg/L		<0.01	<0.01	<0.01	---	---
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	---	---
EG051G: Ferrous Iron by Discrete Analyser									
Ferrous Iron	---	0.05	mg/L		0.45	<0.05	---	---	---
EG052G: Silica by Discrete Analyser									
Reactive Silica	---	0.10	mg/L		64.1	112	---	---	---
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		0.08	<0.01	---	---	---
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	---	0.01	mg/L		<0.01	<0.01	---	---	---
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		0.02	120	---	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	---	0.01	mg/L		0.02	120	---	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	---	0.1	mg/L		0.8	29.8	---	---	---
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
Total Nitrogen as N	---	0.1	mg/L		0.8	150	---	---	---
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	0.01	mg/L		0.47	0.52	---	---	---
EN055: Ionic Balance									
Total Anions	---	0.01	meq/L		8.81	---	---	---	---
Total Anions	---	0.01	meq/L		---	28.8	---	---	---
Total Cations	---	0.01	meq/L		8.98	31.4	---	---	---

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	—	—
				Client sampling date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	—	—
Compound	CAS Number	LOR	Unit		ES1316167-001	ES1316167-002	ES1316167-003	—	—
EN055: Ionic Balance - Continued									
Ionic Balance	—	0.01	%		0.97	—	—	—	—
Ionic Balance	—	0.01	%		—	4.28	—	—	—
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.5	µg/L		<0.5	<0.5	—	—	—
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L		<0.5	<0.5	—	—	—
beta-BHC	319-85-7	0.5	µg/L		<0.5	<0.5	—	—	—
gamma-BHC	58-89-9	0.5	µg/L		<0.5	<0.5	—	—	—
delta-BHC	319-86-8	0.5	µg/L		<0.5	<0.5	—	—	—
Heptachlor	76-44-8	0.5	µg/L		<0.5	<0.5	—	—	—
Aldrin	309-00-2	0.5	µg/L		<0.5	<0.5	—	—	—
Heptachlor epoxide	1024-57-3	0.5	µg/L		<0.5	<0.5	—	—	—
trans-Chlordane	5103-74-2	0.5	µg/L		<0.5	<0.5	—	—	—
alpha-Endosulfan	959-98-8	0.5	µg/L		<0.5	<0.5	—	—	—
cis-Chlordane	5103-71-9	0.5	µg/L		<0.5	<0.5	—	—	—
Dieldrin	60-57-1	0.5	µg/L		<0.5	<0.5	—	—	—
4.4`-DDE	72-55-9	0.5	µg/L		<0.5	<0.5	—	—	—
Endrin	72-20-8	0.5	µg/L		<0.5	<0.5	—	—	—
beta-Endosulfan	33213-65-9	0.5	µg/L		<0.5	<0.5	—	—	—
4.4`-DDD	72-54-8	0.5	µg/L		<0.5	<0.5	—	—	—
Endrin aldehyde	7421-93-4	0.5	µg/L		<0.5	<0.5	—	—	—
Endosulfan sulfate	1031-07-8	0.5	µg/L		<0.5	<0.5	—	—	—
4.4`-DDT	50-29-3	2.0	µg/L		<2.0	<2.0	—	—	—
Endrin ketone	53494-70-5	0.5	µg/L		<0.5	<0.5	—	—	—
Methoxychlor	72-43-5	2.0	µg/L		<2.0	<2.0	—	—	—
* Total Chlordane (sum)	—	0.5	µg/L		<0.5	<0.5	—	—	—
* Sum of DDD + DDE + DDT	—	0.5	µg/L		<0.5	<0.5	—	—	—
* Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L		<0.5	<0.5	—	—	—
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L		<0.5	<0.5	—	—	—
Demeton-S-methyl	919-86-8	0.5	µg/L		<0.5	<0.5	—	—	—
Monocrotophos	6923-22-4	2.0	µg/L		<2.0	<2.0	—	—	—
Dimethoate	60-51-5	0.5	µg/L		<0.5	<0.5	—	—	—
Diazinon	333-41-5	0.5	µg/L		<0.5	<0.5	—	—	—
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L		<0.5	<0.5	—	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	—	—
				Client sampling date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	—	—
Compound	CAS Number	LOR	Unit		ES1316167-001	ES1316167-002	ES1316167-003	—	—
EP068B: Organophosphorus Pesticides (OP) - Continued									
Parathion-methyl	298-00-0	2.0	µg/L		<2.0	<2.0	—	—	—
Malathion	121-75-5	0.5	µg/L		<0.5	<0.5	—	—	—
Fenthion	55-38-9	0.5	µg/L		<0.5	<0.5	—	—	—
Chlorpyrifos	2921-88-2	0.5	µg/L		<0.5	<0.5	—	—	—
Parathion	56-38-2	2.0	µg/L		<2.0	<2.0	—	—	—
Pirimphos-ethyl	23505-41-1	0.5	µg/L		<0.5	<0.5	—	—	—
Chlorfenvinphos	470-90-6	0.5	µg/L		<0.5	<0.5	—	—	—
Bromophos-ethyl	4824-78-6	0.5	µg/L		<0.5	<0.5	—	—	—
Fenamiphos	22224-92-6	0.5	µg/L		<0.5	<0.5	—	—	—
Prothiofos	34643-46-4	0.5	µg/L		<0.5	<0.5	—	—	—
Ethion	563-12-2	0.5	µg/L		<0.5	<0.5	—	—	—
Carbophenothion	786-19-6	0.5	µg/L		<0.5	<0.5	—	—	—
Azinphos Methyl	86-50-0	0.5	µg/L		<0.5	<0.5	—	—	—
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2-Chlorophenol	95-57-8	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2-Methylphenol	95-48-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—
3- & 4-Methylphenol	1319-77-3	2.0	µg/L		<2.0	<2.0	<2.0	—	—
2-Nitrophenol	88-75-5	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2,4-Dimethylphenol	105-67-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2,4-Dichlorophenol	120-83-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2,6-Dichlorophenol	87-65-0	1.0	µg/L		<1.0	<1.0	<1.0	—	—
4-Chloro-3-Methylphenol	59-50-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Pentachlorophenol	87-86-5	2.0	µg/L		<2.0	<2.0	<2.0	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	—	—
				Client sampling date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	—	—
Compound	CAS Number	LOR	Unit		ES1316167-001	ES1316167-002	ES1316167-003	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(b)fluoranthene	205-99-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	—	—
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	—	—
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	—	—
^ Sum of polycyclic aromatic hydrocarbons	—	0.5	µg/L		<0.5	<0.5	<0.5	—	—
^ Benzo(a)pyrene TEQ (WHO)	—	0.5	µg/L		<0.5	<0.5	<0.5	—	—
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	20	µg/L		<20	<20	<20	—	—
C10 - C14 Fraction	—	50	µg/L		<50	<50	<50	—	—
C15 - C28 Fraction	—	100	µg/L		<100	<100	<100	—	—
C29 - C36 Fraction	—	50	µg/L		<50	<50	<50	—	—
^ C10 - C36 Fraction (sum)	—	50	µg/L		<50	<50	<50	—	—
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
C6 - C10 Fraction	—	20	µg/L		<20	<20	<20	—	—
^ C6 - C10 Fraction minus BTEX (F1)	—	20	µg/L		<20	<20	<20	—	—
>C10 - C16 Fraction	—	100	µg/L		<100	<100	<100	—	—
>C16 - C34 Fraction	—	100	µg/L		<100	<100	<100	—	—
>C34 - C40 Fraction	—	100	µg/L		<100	<100	<100	—	—
^ >C10 - C40 Fraction (sum)	—	100	µg/L		<100	<100	<100	—	—
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	—	—
Toluene	108-88-3	2	µg/L		<2	<2	<2	—	—
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	—	—
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	—	—
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	—	—
^ Total Xylenes	1330-20-7	2	µg/L		<2	<2	<2	—	—
^ Sum of BTEX	—	1	µg/L		<1	<1	<1	—	—

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	D1_17/07/13	D4_17/07/13	QC300_17/07/13	---	---
				Client sampling date / time	17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 15:00	---	---
Compound	CAS Number	LOR	Unit		ES1316167-001	ES1316167-002	ES1316167-003	---	---
EP080: BTEXN - Continued									
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	---	---
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		74.3	69.7	---	---	---
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		85.7	77.1	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		24.2	24.4	27.5	---	---
2-Chlorophenol-D4	93951-73-6	0.1	%		56.9	55.8	59.4	---	---
2.4.6-Tribromophenol	118-79-6	0.1	%		62.5	61.4	68.2	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		64.8	68.7	68.0	---	---
Anthracene-d10	1719-06-8	0.1	%		64.8	68.6	69.2	---	---
4-Terphenyl-d14	1718-51-0	0.1	%		64.2	62.4	64.6	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		104	103	105	---	---
Toluene-D8	2037-26-5	0.1	%		113	115	110	---	---
4-Bromofluorobenzene	460-00-4	0.1	%		112	110	112	---	---

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	30	120
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	26.8	129
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10.0	44
2-Chlorophenol-D4	93951-73-6	15.9	102
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20.4	112
Anthracene-d10	1719-06-8	29.6	118
4-Terphenyl-d14	1718-51-0	21.5	126
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

Appendix D

Laboratory Results Summary Table

Douglas Partners
Geotechnics / Environment / Groundwater

Table 1: Laboratory Results Summary (All results in mg/kg unless otherwise stated)

Sample ID	Fill / Natural	Soil Type	Heavy Metals								TRH/BTEX								PAHs				Phenol	OCP								OPP	Asbestos ID
			As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	F1	F2	F3	F4	Benzene	Toluene	Ethyl benzene	Total Xylene	Total PAH	B(a)P TEQ	B(a)P	Napthalene		Aldrin + Dieldrin	Chlordane	DDT + DDD + DDE	Endosulfan	Endrin	Heptachlor	HCB	Methoxychlor	Chlorpyrifos	
Golder (2013) Lab Data																																	
TP1_0.0-0.1_27/06/13	Fill	sandy CLAY	6	<1	13	140	29	<0.1	11	68	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP1_0.9-1.0_27/06/13	Natural	BEDROCK	<5	<1	14	87	<5	<0.1	9	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP2_0.0-0.1_27/06/13	Fill	sandy CLAY	<5	<1	10	10	9	<0.1	7	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP2_0.2-0.4_27/06/13	Natural	CLAY	<5	<1	20	82	7	<0.1	3	12	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP3_0.0-0.1_27/06/13	Fill	sandy CLAY	8	3	7	589	120	<0.1	6	152	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	NO
TP3_0.5-0.6_27/06/13	Fill	CLAY	<5	<1	25	80	12	<0.1	4	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP4_0.0-0.1_27/06/13	Fill	SAND	<5	<1	3	287	126	<0.1	2	32	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP4_0.5-0.6_27/06/13	Natural	BEDROCK	9	<1	16	78	22	<0.1	3	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP5_0.5-0.6_27/06/13	Fill	silty CLAY	33	4	13	467	71	<0.1	6	112	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP5_0.9-1.0_27/06/13	Natural	gravelly CLAY	<5	<1	17	69	<5	<0.1	<2	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP6_0.2-0.3_27/06/13	Fill	CWR	37	27	5	2740	216	<0.1	14	500	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP6_0.5-0.6_27/06/13	Natural	silty CLAY	<5	<1	22	61	7	<0.1	4	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP7_0.3-0.4_27/06/13	Fill	gravelly CLAY	7	<1	20	66	19	<0.1	3	41	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	NO
TP7_0.5-0.6_27/06/13	Natural	CLAY	<5	<1	24	77	9	<0.1	4	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP8_0.0-0.1_26/06/13	Natural	(Topsoil) sandy CLAY	41	10	22	2280	677	0.3	12	397	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP8_0.9-1.0_26/06/13	Natural	BEDROCK	<5	<1	12	76	<5	<0.1	5	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP9_0.3-0.4_26/06/13	Fill	silty CLAY	36	11	21	1020	192	0.3	9	443	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP9_0.5-0.6_26/06/13	Natural	silty CLAY	<5	<1	21	82	10	<0.1	2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP10_0.0-0.1_26/06/13	Fill	silty CLAY	31	3	16	422	124	0.2	6	256	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	4.5	0.7	0.6	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	YES + AF
TP10_0.5-0.6_26/06/13	Natural	CLAY	<5	<1	24	88	9	<0.1	4	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP11_0.1-0.2_26/06/13	Fill	SAND	<5	<1	19	201	21	<0.1	6	92	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	YES + AF
TP11_0.9-1.0_26/06/13	Natural	CLAY	<5	<1	14	73	6	<0.1	5	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12_0.0-0.1_26/06/13	Fill	clayey SAND	10	3	10	961	173	0.3	8	187	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	NO
TP12_0.9-1.0_26/06/13	Natural	BEDROCK	<5	<1	19	116	6	<0.1	14	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP12A_0.1-0.2_26/06/13	Fill	silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	YES
TP13_0.5-0.6_26/06/13	Fill	clayey SAND	17	<1	10	171	38	<0.1	4	35	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP13_1.5-1.6_26/06/13	Natural	BEDROCK	<5	<1	15	63	6	<0.1	2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP14_0.0-0.1_26/06/13	Fill	clayey SAND	11	<1	8	660	415	0.3	5	85	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP14_0.5-0.6_26/06/13	Natural	silty CLAY	<5	<1	18	60	6	<0.1	2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP15_0.0-0.1_26/06/13	Fill	sandy CLAY	8	4	8	1620	239	0.2	10	231	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	YES + AF
TP15_0.9-1.0_26/06/13	Natural	BEDROCK	<5	<1	20	139	10	<0.1	18	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP16A_0.2-0.3_26/06/13	Fill	CWR	11	10	12	320	48	0.1	24	369	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP16A_0.5-0.6_26/06/13	Fill	silty CLAY	33	5	13	335	61	0.2	6	145	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP16A_0.9-1.0_26/06/13	Fill	silty CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	YES
TP16B_0.1-0.2_26/06/13	Fill	sandy CLAY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	YES
TP20_0.5-0.6_26/06/13	Fill	silty CLAY	166	4	19	1330	489	0.8	7	237	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	YES
TP20_0.9-1.0_26/06/13	Natural	gravelly CLAY	<5	<1	27	110	7	<0.1	10	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24_0.0-0.1_26/06/13	Fill	silty CLAY	16	4	13	1480	191	0.5	9	286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP24_0.5-0.6_26/06/13	Natural	CLAY	<5	<1	29	123	70	<0.1	7	258	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP25_0.0-0.1_26/06/13	Fill	silty CLAY	10	3	9	791	243	0.2	12	514	<10	<50	480	<100	<0.2	<0.5	<0.5	<0.5	4.3	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP25_0.9-1.0_26/06/13	Fill	silty CLAY	209	4	11	1060	253	0.4	6	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26_0.5-0.6_25/06/13	Fill	silty CLAY	9	<1	22	132	66	0.1	5	154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP26_1.5-1.6_25/06/13	Fill	gravelly CLAY	22	2	17	923	156	0.1	22	179	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP27_0.0-0.1_25/06/13	Fill	silty CLAY	<5	<1	6	262	38	<0.1	8	132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP27_0.5-0.6_25/06/13	Fill	CWR	35	8	12	479	155	0.2	13	404	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP28_0.0-0.1_25/06/13	Fill	silty CLAY	26	2	9	2240	397	0.4	12	176	<10	70	1330	220	<0.2	0.6	<0.5	0.5	19.7	1	0.7	0.8	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP28_0.9-1.0_25/06/13	Natural	silty CLAY	<5	<1	14	72	22	<0.1	6	107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP29_0.3-0.4_25/06/13	Natural	silty CLAY	13	13	5	333	44	0.1	7	154	<10	<50	<100	<100	<0.2	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP29_0.9-1.0_25/06/13	Natural	BEDROCK	6	<1	17	99	14	<0.1	6	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TP30_0.0-0.1_25/06/13	Natural	silty CLAY	201	10	13	2820	657	1.2	11	415	<10	<50	<100	<100	<0.2	<0.5	<0.5	<1.0	1.8	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
TP30_0.5-0.6_25/06/13	Natural	CLAY	<5	1	21	249	67	<0.1	4	157	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH1-0.5-09/10/16	Natural	sandy silty CLAY	<5	<1	32	74	8	<0.1	6	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH1-1.0-09/10/16	Natural	sandy silty CLAY	<5	<1	11	49	7	<0.1	<2	17	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	-
BH2-0.1-09/10/13	Fill	gravelly sandy CLAY	6	<1	9	82	219	0.2	4	1150	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	-
BH2-1.0-09/10/13	Natural	sandy CLAY	<5	<1	30	68	7	<0.1	15	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH3-0.1-09/10/13	Fill	gravelly sandy CLAY	37	3	20	436	350	0.2	8	257	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	-
BH3-1.0-09/10/13	Natural	silty CLAY	<5	<1	26	102	9	<0.1	3	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH4-0.4-09/10/13	Fill	gravelly silty CLAY	73	5	26	717	404	<0.1	24	798	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	-
BH4-1.0-09/10/13	Natural	gravelly silty CLAY	<5	<1	31	79	14	<0.1	9	76	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH5-0.1-09/10/13	Fill	SAND	5	1	6	574	92	0.1	3	190	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	-
BH5-1.0-09/10/13	Natural	gravelly silty CLAY	11	<1	26	83	44	<0.1	7	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BH6-0.3-09/10/13	Natural	gravelly silty CLAY	<5	<1	32	130	10	<0.1	30	111	<10	<50	<100	<100	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	-	-
BH6-1.0-09/10/13	Natural	gravelly silty CLAY	<5	<1	25	137	8	<0.1	15	90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Summary Statistics																																	
Min			5	1	3	10	6	0.1	2	9	<10	70	480	220	<0.2	0.6	<0.5	0.5	1.8	0.7	0.6	0.8	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
Max			209	27	32	2820	677	1.2	30	1150	<10	70	1330	220	<0.2	0.6	<0.5	0.5	19.7	1	0.7	0.8	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	-
Median			16	4	17	138	44	0	7	95	-	70	905	220	-	1	-	1	4	1	1	1	-	-	-	-	-	-	-	-	-	-	-
Arithmatic Mean			36.9	6.1	16.8	475.9	118.1	0.3	8.4	166.2	-	70.0	905.0	220.0	-	0.6	-	0.5	7.6	0.9	0.7	0.8	-	-	-	-	-	-	-	-	-	-	-
Standard Deviation			53	6	7	665	160	0.26	6	202	-	-	425	-	-	-	-	-	7	0.15	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Site Assessment Criteria																																	
HIL-A			100	20	100	6000	300	40	400	7400	-	-	-	-	-	-	-	-	300	3	-	-	100	6	50	240	270	10	6	10	300	160	NAD
HSL-A Direct Contact			-	-	-	-	-	-	-	-	4400	3300	4500	6300	100	14000	4500	12000	-	-	-	1400	-	-	-	-	-	-	-	-	-	-	-
HSL-A Vapour Intrusion - Sand			-	-	-	-	-	-	-	-	45	110	-	-	0.5	160	55	40	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-
HSL-A Vapour Intrusion - Clay			-	-	-	-	-	-	-	-	50	280	-	-	0.7	480	NL	110	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
EIL coarse soils			100	-	520	170	1100	-	160	410	-	-	-	-	-	-	-	-	-	-	-	170	-	-	-	180	-	-	-	-	-	-	-
EIL fine soil			100	-	660	190	1100	-	280	430	-	-	-	-	-	-	-	-	-	-	-	170	-	-	-	180	-	-	-	-	-	-	-
ESL coarse soils			-	-	-	-	-	-	-	-	180	120	300	2800	50	85	70	105	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-
ESL fine soil			-	-	-	-	-	-	-	-	180	120	1300	5600	65	105	125	45	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-
Management Limits coarse soils			-	-	-	-	-	-	-	-	700	1000	2500	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Management Limits fine soils			-	-	-	-	-	-	-	-	800	1000	3500	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

	Exceedance of HIL A
BOLD	Exceedance of or equal to EIL/ESL
-	Not tested/not available
*	Value recorded for Aroclor 1254. All other recorded PCBs below PQL.
CWR	Coal Washery Rejects
NAD	No asbestos detected
HIL - A	NEPC, *National Environment Protection (Assessment of Site Contamination) Measure 1999* (Amended 2013), Schedule B1, Table 1A (1) Health investigation levels for soil contaminants - HIL A, Residential with garden/accessible soil
HSL-A Direct Contact	CRC CARE *Cooperative Research Centre for Contamination Assessment and Remediation of the Environment Technical Report no.10 Health screening levels for petroleum hydrocarbons in soil and groundwater 2011* Table A4 Soil Health Screening Levels for Direct Contact - HSL A - Residential (low density)
HSL-A Vapour Intrusion	NEPC, *National Environment Protection (Assessment of Site Contamination) Measure 1999* (Amended 2013), Schedule B1, Table 1A (3) Soil health screening levels for vapour intrusion - HSL A & HSL B Low-High density residential for sadn or clay soils at depths of 0m to <1m.
EIL	EILs calculated using *Interactive Excel Spreadsheetfor both coarse and fine soil types*
ESL	NEPC, *National Environment Protection (Assessment of Site Contamination) Measure 1999* (Amended 2013), Schedule B1, Table 1B (6) ESLs for TPH fractions F1 - F4, BTEX and benzo(a)pyrene in soi - urban residential and public open space for coarse and fine soil types
Management Limits	NEPC, *National Environment Protection (Assessment of Site Contamination) Measure 1999* (Amended 2013), Schedule B1, Table 1B (7) Management Limits for TPH fractions F1-F4 in soil - Residential Parkland and public open space for coarse and fine soil types.
F1	Calculated as being TRH C_6-C_{10} minus BTEX
F2	Calculated as being TRH >C_{10}-C_{16} minus Napthalene
F3	TRH >C16-C34
F4	TRH >C34-C40