



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

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Integrated Practical Solutions



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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

	Page
1. Introduction.....	1
2. Background	1
3. Scope of Works.....	3
4. Site Information	3
5. Site Assessment Criteria.....	4
5.1 Health Investigation and Screening Levels	5
5.2 Ecological Investigation and Screening Levels	6
5.3 Management Limits – Petroleum Hydrocarbons	7
5.4 Asbestos in Soil	7
6. Re-Assessment of Golder (2013) Data.....	7
7. Discussion	10
8. Conclusion and Recommendations	11
9. Limitations	12
 Appendix A: About This Report	
Appendix B: Golder (2013) Figures	
Appendix C: Golder (2013) Laboratory Certificates of Analysis	
Appendix D Laboratory Results Summary Table	

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 Golder 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 whether 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:

- sum of carcinogenic PAH
- non dioxin-like PCBs only.
- 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 result 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'.]
- 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/kg and for clay 20.83 cmol/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	

- 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 (C₁₆-C₃₄)

Of the 31 primary samples analysed for TRH, the reported concentrations of TRH F3 (>C₁₆-C₃₄) 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

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

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

COPYRIGHT
Base map data copyright MapInfo Australia Pty Ltd



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





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

COPYRIGHT

1. Imagery Copyright - Service Layer Credits: © 2010 DigitalGlobe © 2010 GeoEye © 2013 Microsoft Corporation
2. Base map data copyright MapInfo Australia Pty Ltd
3. Digital Cadastre Database, NSW Department of Lands, 2004



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





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.

COPYRIGHT

1. Imagery Copyright - Service Layer Credits: © 2010 DigitalGlobe © 2010 GeoEye © 2013 Microsoft Corporation
2. Base map data copyright MapInfo Australia Pty Ltd
3. Digital Cadastre Database, NSW Department of Lands, 2004



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



6,182,300
6,182,200
6,182,100
6,182,000

6,182,300
6,182,200
6,182,100
6,182,000

307,600 307,700 307,800 307,900 308,000

Appendix C

Golder (2013) Laboratory Certificates of Analysis

CERTIFICATE OF ANALYSIS

Work Order	EW1301886	Page	1 of 70
Client	PORT KEMBLA COPPER	Laboratory	Environmental Division NSW South Coast
Contact	MS CAROLINA OLMO	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	---	Date Samples Received	27-JUN-2013
C-O-C number	---	Issue Date	10-JUL-2013
Sampler	KE YE	No. of samples received	103
Site	PKC-PRIMARY SCHOOL	No. of samples analysed	64
Quote number	---		

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 analysis detections at or above the level of reporting

- EA200 Legend
- EA200 'Am' Amosite (brown asbestos)
- EA200 'CN' 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.
- EG095T: Poor precision and poor spike recovery was obtained for some elements on sample EW1301886 - 1. Results have been confirmed by re-extraction and reanalysis.
- EG095T: Poor precision was obtained for Lead on sample EW1301886 - 1. Results have been confirmed by re-extraction and reanalysis.
- EK057G/EK069G: LOR raised for Nitrite/NO_x 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 925

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 Owtter	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 Inthakson	Laboratory Manager - Organics	Sydney Organics



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Compound	CAS Number	LOR	Unit	TP30_0.0-0.1_25/06/1	TP30_0.5-0.6_25/06/1	TP29_0.3-0.4_25/06/1	TP29_0.9-1.0_25/06/1	TP27_0.0-0.1_25/06/1
				3	3	3	3	3
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
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)

Client sample ID

TP30_0.0-0.1_25/06/1 3
 TP30_0.5-0.6_25/06/1 3
 TP29_0.3-0.4_25/06/1 3
 TP29_0.9-1.0_25/06/1 3
 TP27_0.0-0.1_25/06/1 3

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 10:00

Compound	CAS Number	LOR	Unit	EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EP068A: Organochlorine Pesticides (OC) - Continued								
gamma-BHC	58-99-9	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	5103-71-6	0.05	mg/kg	<0.05	---	<0.05	---	---
Dieldrin	80-57-1	0.05	mg/kg	<0.05	---	<0.05	---	---
4,4'-DDE	72-95-9	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	72-54-6	0.05	mg/kg	<0.05	---	<0.05	---	---
Endrin aldehyde	7421-95-4	0.05	mg/kg	<0.05	---	<0.05	---	---
Endosulfan sulfate	1031-07-6	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

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP30_0.0-0.1_25/06/1	TP30_0.5-0.6_25/06/1	TP29_0.3-0.4_25/06/1	TP29_0.9-1.0_25/06/1	TP27_0.0-0.1_25/06/1
				3	3	3	3	3
				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
EP068: 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	4824-76-6	0.05	mg/kg	<0.05	---	<0.05	---	---
Fenamiphos	22224-82-6	0.05	mg/kg	<0.05	---	<0.05	---	---
Prothiofos	14643-46-4	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	106-95-2	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	85-75-5	0.5	mg/kg	<0.5	---	<0.5	---	---
2,4-Dimethylphenol	105-67-8	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	208-86-8	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_25/06/1	TP30_0.5-0.6_25/06/1	TP29_0.3-0.4_25/06/1	TP29_0.9-1.0_25/06/1	TP27_0.0-0.1_25/06/1
3	3	3	3	3

Client sampling date / time

| 25-JUN-2013 10:00 |
-------------------	-------------------	-------------------	-------------------	-------------------

Compound	CAS Number	LOD	Unit	EW1301886-001	EW1301886-002	EW1301886-005	EW1301886-007	EW1301886-008
EP076(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(k)fluoranthene	205-99-2	0.5	mg/kg	<0.5	---	<0.5	---	---
Benzo(i)fluoranthene	207-08-9	0.5	mg/kg	<0.5	---	<0.5	---	---
Benzo(a)pyrene	50-32-6	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 - C18 Fraction	---	10	mg/kg	<10	---	<10	---	---
* C6 - C18 Fraction minus BTEX (F1)	---	10	mg/kg	<10	---	<10	---	---
>C10 - C16 Fraction	---	50	mg/kg	<50	---	<50	---	---
>C18 - 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	106-38-3	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	81-20-3	1	mg/kg	<1	---	<1	---	---
EP065: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	81.7	---	74.0	---	---



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LDR	Unit	TP30_0.0-0.1_25/06/1	TP30_0.5-0.6_25/06/1	TP29_0.3-0.4_25/06/1	TP29_0.9-1.0_25/06/1	TP27_0.0-0.1_25/06/1
				3	3	3	3	3
				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								
DEP	78-46-8	0.1	%	93.0	---	87.8	---	---
EP076(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-86-3	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	---	---
EP076(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	98.8	---	95.9	---	---
Anthracene-d10	1719-06-8	0.1	%	95.4	---	95.3	---	---
4-Terphenyl-d14	1718-51-0	0.1	%	82.3	---	84.0	---	---
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	95.9	---	93.6	---	---
Toluene-D8	2037-26-6	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_0.0-0.6_25/06/1 3 25-JUN-2013 15:00	TP28_0.0-0.1_25/06/1 3 25-JUN-2013 15:00	TP28_0.9-1.0_25/06/1 3 25-JUN-2013 15:00	TP26_0.5-0.6_25/06/1 3 25-JUN-2013 15:00	TP26_1.5-1.6_25/06/1 3 25-JUN-2013 15:00
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Client sampling date / time

Compound	CAS Number	LOR	Unit	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	886
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)	116-74-1	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	58-99-9	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	959-86-8	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_25/06/1	TP28_0.0-0.1_26/06/1	TP28_0.9-1.0_25/06/1	TP26_0.5-0.6_25/06/1	TP26_1.5-1.6_25/06/1
3	3	3	3	3

Client sampling date / time

| 25-JUN-2013 15:00 |
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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	80-51-3	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
Phosphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	---	---	<0.05
Chlorfenvinphos	470-90-5	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
Prothiopus	34643-46-4	0.05	mg/kg	<0.05	<0.05	---	---	<0.05
Ethion	583-12-2	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	85-57-8	0.5	mg/kg	<0.5	<0.5	---	---	<0.5
2-Methylphenol	85-48-7	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	58-50-7	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
2,4,6-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	---	---	<0.5



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP27_0.5-0.6_25/06/1	TP28_0.0-0.1_25/06/1	TP28_0.9-1.0_25/06/1	TP26_0.5-0.6_26/06/1	TP26_1.5-1.6_26/06/1
				3 25-JUN-2013 15:00				
				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	81-20-3	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
Benzo(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 (P1)	---	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

Compound	CAS Number	LOR	Unit	TP27_0.5-0.6_25/06/1	TP28_0.0-0.1_25/06/1	TP28_0.9-1.0_25/06/1	TP26_0.5-0.6_26/06/1	TP26_1.5-1.6_26/06/1
				3	3	3	3	3
				25-JUN-2013 15:00				
Client sampling date / time				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	106-38-3 106-42-3	0.5	mg/kg	<0.5	0.6	—	—	<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	0.6	—	—	<0.5
Sum of BTEX	—	0.2	mg/kg	<0.2	1.1	—	—	<0.2
Naphthalene	81-20-3	1	mg/kg	<1	<1	—	—	<1
EP085: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	80.7	110	—	—	89.9
EP087: Organophosphorus Pesticide Surrogate								
DEF	78-49-8	0.1	%	91.6	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	66.4	—	—	92.6
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	17069-07-0	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	—	—	108

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID				
				QC400_26/06/13	TP25_0.0-0.1_26/06/13	TP25_0.5-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				3	3	3	3	3
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	---	6.6	---	---	---
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	---	1.0	%	21.6	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	621	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	614	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	0.6
EK055: Ammonia as N								
Ammonia as N	7804-41-7	20	mg/kg	<20	<20	---	<20	---
EP004: Organic Matter								
Organic Matter	---	0.5	%	---	6.8	---	---	---
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

Compound	CAS Number	LDR	Unit	QC400_26/06/13	TP25_0.0-0.1_26/06/1	TP25_0.5-1.0_26/06/1	QC100_26/06/13	TP24_0.0-0.1_26/06/1			
				3	3	3	3	3			
				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			
Client sampling date / time	EW1301886-023		EW1301886-024		EW1301886-026		EW1301886-029		EW1301886-030		
EP068A: Organochlorine Pesticides (OC) - Continued											
gamma-BHC	56-89-8	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	80-57-1	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	33213-85-6	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	309-00-2/80-57-1	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	82-73-7	0.05	mg/kg	<0.05	<0.05	—	<0.05	—			
Demeton-S-methyl	916-86-8	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	80-61-6	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	55-36-8	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_2506/13

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	LDR	Unit	EW1301886-023	EW1301886-024	EW1301886-025	EW1301886-029	EW1301886-030
EP068B: Organophosphorus Pesticides (OP) - Continued								
Parathion	59-39-2	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	---
Fenamphos	22224-82-6	0.05	mg/kg	<0.05	<0.05	---	<0.05	---
Prothiofos	34543-46-4	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	95-67-8	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	59-60-7	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	96-95-4	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	81-20-3	0.5	mg/kg	<0.5	<0.5	---	<0.5	---
Acenaphthylene	209-96-8	0.5	mg/kg	<0.5	<0.5	---	<0.5	---
Acenaphthene	83-32-8	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	85-01-6	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	0.6	---	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

Compound	CAS Number	LOR	Unit	QC400_25/06/13	TP25_0.0-0.1_26/06/1	TP25_0.9-1.0_26/06/1	QC100_26/06/13	TP24_0.0-0.1_26/06/1
				3	3	3	3	
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
				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	207-06-9	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)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	—	560	—
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	106-38-3 106-42-3	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	—
EP085: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	78.8	80.8	—	89.7	—

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LDR	Unit	QC400_25/06/13	TP25_0.0-0.1_26/06/13	TP25_0.5-1.0_26/06/13	QC100_26/06/13	TP24_0.0-0.1_26/06/13
				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
				EW1301886-023	EW1301886-024	EW1301886-025	EW1301886-029	EW1301886-030
EP068T: Organophosphorus Pesticide Surrogates								
DEF	78-48-9	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-Trichlorophenol	118-79-6	0.1	%	86.5	85.8	---	85.5	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-80-8	0.1	%	96.7	97.0	---	103	---
Anthracene-d10	1719-05-8	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	460-05-4	0.1	%	94.3	87.9	---	82.0	---

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time	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
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	26-JUN-2013 10:00

Compound	CAS Number	LOF	Unit	EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EA002 : pH (Soils)								
pH Value	---	0.1	pH Unit	5.0	4.3	---	---	---
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	---	1.0	%	27.1	29.8	32.8	44.0	36.3
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	6
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	66900	31700	---	---	---
Lead	7439-92-1	5	mg/kg	70	489	7	48	61
Manganese	7439-96-5	5	mg/kg	81	164	50	1580	122



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID				
				TP24_0.5-0.6_26/06/1	TP20_0.5-0.6_26/06/1	TP20_0.9-1.0_26/06/1	TP16A_0.2-0.3_26/06/1	TP16A_0.5-0.6_26/06/1
				3	3	3	13	13
				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
Client sampling date / time								
Compound	CAS Number	LOR	Unit	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	268	237	76	369	146
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	310-84-8	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	310-85-7	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	310-86-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Heptachlor	75-44-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	<0.05
Aldrin	300-00-2	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)

Client sample ID

TP24_0.5-0.6_26/06/1	TP20_0.5-0.6_26/06/1	TP20_0.9-1.0_26/06/1	TP16A_0.2-0.3_26/06/1	TP16A_0.5-0.6_26/06/1
3	3	3	13	13
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

Client sampling date / time

Compound	CAS Number	LOF	Unit	EW1301886-031	EW1301886-034	EW1301886-036	EW1301886-038	EW1301886-039
EP068A: Organochlorine Pesticides (OC) - Continued								
alpha-Endosulfan	959-89-8	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	80-57-1	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	33213-85-9	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	7421-83-4	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	309-00-280-57-1	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	82-73-7	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	8923-22-4	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	55-38-8	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	470-90-8	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
Prathios	34843-48-4	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: SOL (Matrix: SOL)

Client sample ID

Client sampling date / time

Concoid	CAS Number	LOR	Unit	TP24_0.5-0.6_26/06/1	TP20_0.5-0.6_26/06/1	TP20_0.9-1.0_26/06/1	TP16A_0.2-0.3_26/06/1	TP16A_0.5-0.6_26/06/1
				3	3	3	13	13
				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
EP063B: Organophosphorus Pesticides (OP) - Continued								
Carbophenothion	786-19-8	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	1310-77-3	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
2,4,6-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	---	<0.5	<0.5
Pentachlorophenol	87-86-6	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	85-01-6	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	205-96-2	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)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

Compound	CAS Number	LOR	Unit	TP20_0_5-0_6_26/06/1	TP20_0_5-0_6_26/06/1	TP20_0_9-1_0_26/06/1	TP16A_0_2-0_3_26/06/1	TP16A_0_5-0_6_26/06/1
				3	3	3	13	13
				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
Client sampling date / time				EW1301886-031	EW1301886-034	EW1301886-035	EW1301886-038	EW1301886-039
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benz(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
C16 - 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	106-38-3 106-42-3	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
EP088: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	86.1	77.9	—	73.2	86.8
EP089: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	102	83.0	—	80.3	96.4
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-86-3	0.1	%	83.9	87.4	—	73.8	81.1
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	—	70.6	92.2
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP24_0.5-0.6_26/06/1	TP20_0.5-0.6_26/06/1	TP20_0.9-1.0_26/06/1	TP16A_0.2-0.3_26/06/1	TP16A_0.6-0.6_26/06/1
				3	3	3	13	13
				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
EP074(SIM): PAH Surrogates - Continued								
2-Fluorobiphenyl	321-85-9	0.1	%	97.8	99.8	---	96.7	97.4
Anthracene-d10	1715-05-8	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
EP089S: 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

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	---	---	8.004	---	---
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	6.2
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)

Client sample ID

Client sampling date / time

Compound	CAS Number	LDR	Unit	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
				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	78-44-8	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)

Client sample ID

Compound	CAS Number	LOR	Unit	TP16A_0.9-1.0_26/06/	TP16B_0.1-0.2_26/06/	TP15_0.0-0.1_26/06/1	TP15_0.9-1.0_26/06/1	TP14_0.0-0.1_26/06/1
				13	13	3	3	3
				26-JUN-2013 10:00				
Client sampling date / time				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	53434-70-5	0.05	mg/kg	---	---	<0.05	---	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	---	---	<0.2	---	<0.2
Sum of Aldrin + Dieldrin	309-00-2/69-57-1	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	82-73-7	0.05	mg/kg	---	---	<0.05	---	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	---	---	<0.05	---	<0.05
Monocrotophos	6823-22-4	0.2	mg/kg	---	---	<0.2	---	<0.2
Dimethoate	66-51-5	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	35-36-9	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	4824-79-6	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	95-57-6	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	89-75-5	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_26/06/1 3	TP15_0.9-1.0_26/06/1 3	TP14_0.0-0.1_26/06/1 3
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

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP16A_0.9-1.0_26/06/ 13	TP16B_0.1-0.2_26/06/ 13	TP15_0.0-0.1_26/06/1 3	TP15_0.9-1.0_26/06/1 3	TP14_0.0-0.1_26/06/1 3
EP075(SIM)A: Phenolic Compounds - Continued								
2,6-Dichlorophenol	87-05-0	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	208-44-0	0.5	mg/kg	---	---	<0.5	---	<0.5
Pyrene	129-00-0	0.5	mg/kg	---	---	<0.5	---	<0.5
Benzo(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
Dibenzo(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)

Client sample ID

TP16A_0.9-1.0_26/06/ 13	TP16B_0.1-0.2_26/06/ 13	TP15_0.0-0.1_26/06/1 3	TP16_0.9-1.0_26/06/1 3	TP14_0.0-0.1_26/06/1 3
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

Client sampling date / time

Compound	CAS Number	LOR	Unit	EW1301886-040	EW1301886-041	EW1301886-042	EW1301886-044	EW1301886-045
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
>C10 - C16 Fractions	---	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	106-38-3 106-42-3	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	81-20-3	1	mg/kg	---	---	<1	---	<1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-ODE	21655-73-2	0.1	%	---	---	76.8	---	86.6
EP068T: Organophosphorus Pesticide Surrogate								
DEP	78-48-8	0.1	%	---	---	85.1	---	93.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-86-3	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	17080-07-0	0.1	%	---	---	97.6	---	93.9
Toluene-D8	2037-26-5	0.1	%	---	---	108	---	91.8
4-Bromofluorobenzene	460-00-4	0.1	%	---	---	98.8	---	86.6



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

TP14_0.5-0.6_26/06/1

TP13_0.5-0.6_26/06/1

TP13_1.5-1.6_26/06/1

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	LOD	Unit	EW1301886-048	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	319-86-9	0.05	mg/kg	—	<0.05	—	<0.05	—	
Heptachlor	75-44-8	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	72-42-5	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	8923-22-4	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	5598-15-0	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

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
EP068B: Organophosphorus Pesticides (OP) - Continued								
Parathion	36-38-2	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	85-57-8	0.5	mg/kg	---	<0.5	---	<0.5	---
3-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	---
EP076(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	208-44-0	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_28/06/13

3 3 3

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)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	—	
C16 - 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	—	
>C16 - 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	106-38-3 106-42-3	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	81-20-3	1	mg/kg	—	<1	—	<1	—	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DOE	21655-73-2	0.1	%	—	88.4	—	84.7	—	

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

TP14_0.5-0.6_26/06/1

TP13_0.5-0.6_26/06/1

TP13_1.5-1.6_26/06/1

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	%	---	84.5	---	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	---
EP076(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-90-8	0.1	%	---	86.2	---	93.9	---
Anthracene-d10	1719-08-8	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	---	96.4	---
Toluene-D8	2037-26-5	0.1	%	---	85.5	---	87.2	---
4-Bromofluorobenzene	460-00-4	0.1	%	---	83.5	---	83.0	---



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sample ID	TP10_0.0-0.1_26/06/1	TP10_0.5-0.6_26/06/1	TP11_0.1-0.2_26/06/1	TP11_0.9-1.0_26/06/1	TP12A_0.1-0.2_26/06/1
	3	3	3	3	13
Client sampling date / time	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	---
EA085: 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 4984 - 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	---	9.84	---	---
Asbestos Containing Material	1332-21-4	0.1	g	64.6	---	<0.1	---	---
Fibrous Asbestos	---	0.002	g	0.008	---	0.097	---	---
Asbestos Fines	1332-21-4	-	-	Yes	---	Yes	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%	---	---	<0.31	---	---
Asbestos Containing Material (ACM >7mm)	1332-21-4	0.01	%	6.10	---	---	---	---
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	19	14	---
Copper	7440-50-8	5	mg/kg	422	88	201	73	---



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP10_0.0-0.1_26/06/1	TP10_0.5-0.6_26/06/1	TP11_0.1-0.2_26/06/1	TP11_0.9-1.0_26/06/1	TP12A_0.1-0.2_26/06/1
				3	3	3	3	13
				26-JUN-2013 15:00				
				EW1301886-008	EW1301886-007	EW1301886-009	EW1301886-001	EW1301886-003
EG005T: Total Metals by ICP-AES - Continued								
Iron	7439-89-6	50	mg/kg	34800	---	---	22800	---
Lead	7439-02-1	5	mg/kg	124	9	21	5	---
Manganese	7439-96-5	5	mg/kg	88	15	38	21	---
Nickel	7440-02-0	2	mg/kg	5	4	5	5	---
Selenium	7782-49-2	5	mg/kg	<5	<5	<5	<5	---
Zinc	7440-66-6	5	mg/kg	266	27	82	38	---
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	<0.1	<0.1	<0.1	---
EK005: Ammonia as N								
Ammonia as N	7664-41-7	20	mg/kg	<20	---	<20	---	---
EP004: Organic Matter								
Organic Matter	---	0.5	%	5.5	---	---	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)

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
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Client sampling date / time

| 26-JUN-2013 15:00 |
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Compound	CAS Number	LOR	Unit	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	919-80-8	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	5596-13-0	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	55-38-8	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	---	---
Prinphos-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	---	---
Prothiotos	34643-46-4	0.05	mg/kg	<0.05	---	<0.05	---	---
Ethion	563-12-2	0.05	mg/kg	<0.05	---	<0.05	---	---
Carbofenthothion	786-19-6	0.05	mg/kg	<0.05	---	<0.05	---	---
Azinphos Methyl	86-60-0	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	95-57-6	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

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP10_0.0-0.1_26/06/1	TP10_0.5-0.6_26/06/1	TP11_0.1-0.2_26/06/1	TP11_0.9-1.0_26/06/1	TP12A_0.1-0.2_26/06/13
				3 26-JUN-2013 15:00	3 26-JUN-2013 15:00	3 26-JUN-2013 15:00	3 26-JUN-2013 15:00	13 26-JUN-2013 15:00
				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	98-60-7	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	95-85-4	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	---	---
Benzo(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	50-32-6	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)

Client sample ID

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				

Compound	CAS Number	LOR	Unit	EW1301886-056	EW1301886-057	EW1301886-059	EW1301886-061	EW1301886-063
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
* C6 - C16 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	108-38-3 100-42-3	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	---	---
EP085: Organochlorine Pesticide Surrogate								
Dibromo-DDE	2185-73-2	0.1	%	94.5	---	72.5	---	---
EP087: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	91.8	---	75.6	---	---
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	119-79-6	0.1	%	97.5	---	92.4	---	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	99.0	---	95.4	---	---
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	---	95.6	---	---
4-Bromofluorobenzene	460-00-4	0.1	%	91.3	---	86.0	---	---



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID				
Client sampling date / time				TP12_0.0	TP12_0.9-1.0_26/06/1	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
				-0.1_26/06/13	3			
				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
EA002: pH (Soils)								
pH Value	---	0.1	pH Unit	---	---	5.7	---	---
EA005: 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	-	COWLER	---	---	---	---
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	---	---	8.4	---	---
Exchangeable Sodium	---	0.1	meq/100g	---	---	0.3	---	---
Cation Exchange Capacity	---	0.1	meq/100g	---	---	10.0	---	---
EG005T: Total Metals by ICP-AES								
Arsenic	7440-39-2	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	361	116	2280	76	1760
Iron	7439-89-8	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	26	492



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP12_0.0	TP12_0.9-1.0_26/06/13	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	GC101_26/06/13
				-0.1_26/06/13	3			
				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
EG0057: 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	5	<5	<5	<5	<5
Zinc	7440-66-6	5	mg/kg	187	88	397	31	529
EG0357: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	8.3	<0.1	8.3	<0.1	8.4
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	—	—
EP088A: 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	58-99-9	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	72-55-8	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)

Client sample ID

Client sampling date / time

Compound	CAS Number	LDR	Unit	TP12_0.0_	TP12_0.9-1.0_26/06/1	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
				-0.1_26/06/13	3			
				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	ng/kg	<0.05	---	<0.05	---	<0.05
Sum of DDD + DDE + DDT	---	0.05	ng/kg	<0.05	---	<0.05	---	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	82-73-7	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	ng/kg	<0.2	---	<0.2	---	<0.2
Dimethoate	80-51-5	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	ng/kg	<0.05	---	<0.05	---	<0.05
Parathion-methyl	298-00-0	0.2	ng/kg	<0.2	---	<0.2	---	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	---	<0.05	---	<0.05
Fenthion	55-38-8	0.05	mg/kg	<0.05	---	<0.05	---	<0.05
Chlorpyrifos	2921-88-2	0.05	ng/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	795-15-8	0.05	mg/kg	<0.05	---	<0.05	---	<0.05
Azinphos Methyl	89-50-0	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
3-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	105-87-9	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

Compound	CAS Number	LDR	Unit	TP12_0.0	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
				-0.1_26/06/13	3			
				Client sampling date / time	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
EP076(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	129-09-0	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
Benzo(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	207-06-9	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	183-39-5	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
EP980/071: 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
EP980/071: 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)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	TP12_0.0_	TP12_0.9-1.0_26/06/1	TP8_0.0-0.1_26/06/13	TP8_0.9-1.0_26/06/13	QC101_26/06/13
				-0.1_26/06/13	3			
				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
EP080071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
>C34 -C46 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	106-88-3	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	106-38-3 106-42-3	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	81-20-3	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								
DEP	78-48-8	0.1	%	107	---	88.0	---	98.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-86-3	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	17090-07-0	0.1	%	92.1	---	89.0	---	96.7
Toluene-D8	2037-26-5	0.1	%	91.5	---	89.2	---	101
4-Bromofluorobenzene	480-00-4	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
Constituent	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)	---	3	%	---	---	60	---	---
EA200: AS 4984 - 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	---	---	COWLER	---	---	---
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	---	---	---
ED006: Exchangeable Cations								
Exchangeable Calcium	---	0.1	meq/100g	---	---	17.5	---	---
Exchangeable Magnesium	---	0.1	meq/100g	---	---	10.5	---	---
Exchangeable Potassium	---	0.1	meq/100g	---	---	6.1	---	---
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	5	22
Copper	7440-50-8	5	mg/kg	<5	66	77	2740	61
Iron	7439-89-6	50	mg/kg	---	---	59200	---	---
Lead	7439-92-1	5	mg/kg	<5	19	5	216	7
Manganese	7439-95-5	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)				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
EQ005T: 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
EQ035T: 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	58-89-8	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	958-98-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	—
cis-Chlordane	5103-71-8	0.05	mg/kg	<0.05	<0.05	—	<0.05	—
Dieldrin	80-57-1	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	33213-85-9	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	7421-69-4	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

Compound	CAS Number	LDR	Unit	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
				26-JUN-2013 15:00 EW1301886-071	27-JUN-2013 10:00 EW1301886-074	27-JUN-2013 10:00 EW1301886-075	27-JUN-2013 10:00 EW1301886-072	27-JUN-2013 10:00 EW1301886-073
EP068A: Organochlorine Pesticides (OC) - Continued								
Sum of Aldrin + Dieldrin	309-00-260-57-1	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	8923-22-4	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	58-38-2	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	4624-78-6	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	34543-46-4	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	788-19-6	0.05	mg/kg	<0.05	<0.05	—	<0.05	—
Azinphos Methyl	88-30-0	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	95-57-6	0.5	mg/kg	<0.5	<0.5	—	<0.5	—
2-Methylphenol	95-46-7	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				36-JUN-2013 15:00	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	EW1301886-071	EW1301886-074	EW1301886-075	EW1301886-078	EW1301886-078	EW1301886-079
EP075(SIM)A: Phenolic Compounds - Continued									
2,4,6-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	209-96-8	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	—	—
Dibenzo(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 - C8 Fraction	—	10	mg/kg	<10	<10	—	<10	—	—
C10 - C14 Fraction	—	50	mg/kg	<50	<50	—	<50	—	—
C16 - 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									
C8 - C10 Fraction	—	10	mg/kg	<10	<10	—	<10	—	—
C8 - 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	—	100	—
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	100	100	—	100	—
EP074(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-86-3	0.1	%	96.2	90.0	—	93.2	—
2-Chlorophenol-d4	93951-73-6	0.1	%	93.8	94.1	—	81.9	—
2,4,6-Tribromophenol	119-79-6	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	1718-91-0	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	---
EQ005T: 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	16	68	33
EQ035T: 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	3.0	---
Total Organic Carbon	---	0.5	%	---	---	0.6	2.2	---
EP048A: 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_0.9-0.1_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	LOQ	Unit	EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-086	EW1301886-088
EP068A: Organochlorine Pesticides (OC) - Continued								
gamma-BHC	56-89-9	0.05	mg/kg	<0.05	<0.05	—	<0.05	—
delta-BHC	319-85-8	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	5103-71-0	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	33213-05-9	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	5596-13-0	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

Contaminant	CAS Number	LOD	Unit	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
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued				EW1301886-082	EW1301886-083	EW1301886-084	EW1301886-085	EW1301886-086
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	183-39-5	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)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 - C8 Fraction	—	10	mg/kg	<10	<10	—	<10	—
C10 - C14 Fraction	—	50	mg/kg	<50	<50	—	<50	—
C16 - 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	105-41-4	0.5	mg/kg	<0.5	<0.5	—	<0.5	—
meta- & para-xylene	106-38-3 106-42-3	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	81-20-3	1	mg/kg	<1	<1	—	<1	—
EP0685: Organochlorine Pesticide Surrogate								
Dibrom-DDE	21655-73-2	0.1	%	97.3	88.8	—	88.0	—
EP0687: 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

Component	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	115-79-6	0.1	%	96.3	96.1	---	106	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	103	106	---	117	---
Anthracene-d10	1719-06-8	0.1	%	99.8	95.7	---	116	---
4-Terphenyl-d14	1718-51-0	0.1	%	92.5	85.9	---	108	---
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	52.0	52.3	---	112	---
Toluene-D8	2037-26-5	0.1	%	102	86.1	---	90.6	---
4-Bromofluorobenzene	460-00-4	0.1	%	98.4	80.7	---	84.4	---

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				
Corrosion	CAS Number	LOR	Unit	EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
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	38.5	30.9	26.5
EA150: Soil Classification based on Particle Size								
Clay (<2 µm)	---	1	%	---	---	---	54	---
EA200: AS 4984 - 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	---	---	---	16.8	---
EG005T: Total Metals by ICP-AES								
Arsenic	7440-39-2	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	3	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	8	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				
Compound	CAS Number	LOR	Unit	EW1301886-089	EW1301886-090	EW1301886-092	EW1301886-093	EW1301886-095
EQ005T: 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	162	26	32
EQ035T: 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	78-44-8	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	5103-71-5	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	33213-85-9	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	7421-83-4	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	305-00-280-57-1	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	919-85-8	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	470-90-8	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	786-18-6	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	89-75-5	0.5	mg/kg	—	<0.5	<0.5	—	<0.5
2,4-Dimethylphenol	105-87-8	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								
2,4,6-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	36-73-7	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 - C8 Fraction	---	10	mg/kg	---	<10	<10	---	<10
C10 - C14 Fraction	---	50	mg/kg	---	<50	<50	---	<50
C16 - 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	105-38-3	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
EP968: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	—	106	94.3	—	92.0
EP968T: Organophosphorus Pesticide Surrogate								
DEF	75-48-6	0.1	%	—	110	100	—	95.8
EP975(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
EP975(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	—	96.6
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)

Client sample ID

Compound	CAS Number	LOR	Unit	TP4_0.5-0.6_27/06/13	QC402_27/06/13	OL1_0.0-0.2_27/06/13	OL1_0.3-0.6_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
Sub-Matrix: SOIL (Matrix: SOIL)				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	86-57-1	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

Constituent	CAS Number	LDR	Unit	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	308-05-2/60-57-1	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	80-51-5	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	55-39-9	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	470-00-6	0.05	mg/kg	—	<0.05	—	—	—
Bromophos-ethyl	4624-78-6	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	86-90-0	0.05	mg/kg	—	<0.05	—	—	—
EP076(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	—	<0.5	—	—	—
2-Chlorophenol	95-67-8	0.5	mg/kg	—	<0.5	—	—	—
2-Methylphenol	65-48-7	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	EW1301886-096	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	—	—	—
Benzo(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_0.3-0.6_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	LCR	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	106-38-3 106-42-3	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-ODE	21655-73-2	0.1	%	---	104	---	---	---
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	---	102	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d8	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	321-80-8	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	480-00-4	0.1	%	---	95.8	---	---	---



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	DL2_0.3-0.5_27/06/13	---	---	---	---
				Client sampling date / time	27-JUN-2013 15:00	---	---	---	---
Compound	CAS Number	LOR	Unit	EW1301866-103	---	---	---	---	---
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	---	1.0	%	30.8	---	---	---	---	---
EQ005T: 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	---	---	---	---	---
EQ015T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-8	0.1	mg/kg	<0.1	---	---	---	---	---



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC306_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	---	---	
Conc/compound	CAS Number	LCR	Unit	EW1301886-022	EW1301886-072	EW1301886-096	---	---	
EG0201: Total Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	---	---	
Cadmium	7440-43-8	0.0001	mg/L	<0.0001	<0.0001	<0.5001	---	---	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	---	---	
Copper	7440-50-6	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	959-08-6	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	72-20-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---	
beta-Endosulfan	33213-65-0	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	1031-07-6	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	53484-70-5	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 Chloroane (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	309-00-280-57-1	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	90-51-5	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	5596-13-0	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	55-36-9	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	55-38-2	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	470-00-6	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	22224-93-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---	
Prothiofos	14643-46-4	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	88-75-1	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	87-05-0	1.0	µg/L	<1.0	<1.0	<1.0	---	---	
4-Chloro-3-Methylphenol	58-50-7	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	95-65-4	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	208-44-0	1.0	µg/L	<1.0	<1.0	<1.0	---	---	---	---
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	---	---	---	---
Benzo(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 - C8 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_26/06/13	QC301_26/06/13	QC302_27/06/13	---	---	
Compound		CAS Number	LOR	Unit	25-JUN-2013 15:00	26-JUN-2013 15:00	27-JUN-2013 10:00	---	---
					EW1301886-022	EW1301886-072	EW1301886-099	---	---
Client sampling date / time									
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		106-36-3 106-42-3	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-ODE		21655-73-2	0.1	%	106	58.9	90.0	---	---
EP068T: Organophosphorus Pesticide Surrogate									
DEF		78-49-8	0.1	%	78.8	57.5	85.5	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6		13127-89-3	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-D6		2937-26-5	0.1	%	85.9	88.8	87.1	---	---
4-Bromofluorobenzene		460-00-4	0.1	%	93.9	103	94.3	---	---



Analytical Results

Descriptive Results

Sub-Matrix: SOIL	Client sample ID - Client sampling date / time	Analytical Results
Method: Compound		
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200 Description	TP20_0.5-0.8_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
EP0685: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	145
EP0687: 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
EP0805: 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
EP0685: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	30	120
EP0687: 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
EP0805: 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

**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 2055	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	: —	Date Samples Received	: 10-OCT-2013
C-O-C number	: —	Issue Date	: 17-OCT-2013
Sampler	: KY	No. of samples received	: 28
Site	: PKG - PRIMARY SCHOOL	No. of samples analyzed	: 12
Quote number	: SY/493/13		

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.
- EK067G/EK069G/EK068G: 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)



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
Ankit Joshi	Inorganic Chemist	Sydney Inorganics
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Hoa Nguyen	Senior Inorganic Chemist	Sydney Inorganics
Pati 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	%	19.6	20.1	11.6	20.9	12.1
EG005T: Total Metals by ICP-AES								
Manganese	7439-96-5	5	mg/kg	248	76	161	103	660
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	6	<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	674	63	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	756	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)		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				
Compound	CAS Number	LOR	Unit	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	369-09-2	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	859-96-8	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	7421-03-4	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	309-06-2/60-57-1	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): Phenolic Compounds								
Phenol	106-95-2	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2-Chlorophenol	85-57-8	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
2-Methylphenol	85-48-7	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	—	<1	—	<1
2-Nitrophenol	86-75-5	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	85-95-4	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
Pentachlorophenol	87-86-3	2	mg/kg	<2	—	<2	—	<2



Analytical Results

Sub-Matrix: SOL (Matrix: SOL)

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	
EP078/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	36-73-7	0.5	mg/kg	<0.5	—	<0.5	—	<0.5	
Phenanthrene	85-01-6	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	207-06-8	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	
Dibenzo(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	—	<0.5	—	<0.5	
Benzo(g,h)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/Q71: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	—	10	mg/kg	<10	—	<10	—	<10	
C10 - C14 Fraction	—	50	mg/kg	<50	—	<50	—	<50	
C15 - C20 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/Q71: 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	
>C16 - C40 Fraction (sum)	—	50	mg/kg	<50	—	<50	—	<50	



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH4-6.4-09/10/13	BH4-1.0-09/10/13	BH6-0.1-09/10/13	BH6-1.0-09/10/13	BH6-0.3-09/10/13
				09-OCT-2013 15:00				
				ES1322093-002	ES1322093-004	ES1322093-007	ES1322093-009	ES1322093-012
EP089: 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	106-38-3 106-42-3	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	1330-29-7	0.5	mg/kg	<0.5	—	<0.5	—	<0.5
Naphthalene	81-20-3	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	13127-68-3	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	17090-07-0	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	%	109	—	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	LOF	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
EQ005T: 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
EQ035T: 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	58-89-3	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	959-99-8	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)

Client sample ID

Compound	CAS Number	LOR	Unit	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	08-OCT-2013 15:00	09-OCT-2013 15:00
				ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP068(A): 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	63494-70-5	0.05	mg/kg	—	<0.05	—	<0.05	—
Methoxychlor	72-43-5	0.2	mg/kg	—	<0.2	—	<0.2	—
Sum of Aldrin + Dieldrin	308-60-260-57-1	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	—
3-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	95-93-4	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	85-01-6	0.5	mg/kg	—	<0.5	—	<0.5	—
Anthracene	120-12-7	0.5	mg/kg	—	<0.5	—	<0.5	—
Fluoranthene	204-44-0	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	207-08-6	0.5	mg/kg	—	<0.5	—	<0.5	—



Analytical Results

Sub-Matrix: SOL (Matrix: SOIL)

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	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
				09-OCT-2013 15:00				
EP078(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued				ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
Benzo(a)pyrene	50-32-6	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)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 2012								
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	106-86-3	0.5	mg/kg	---	<0.5	---	<0.5	---
Ethylbenzene	100-41-4	0.5	mg/kg	---	<0.5	---	<0.5	---
meta- & para-Xylene	106-38-3 106-42-3	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)				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				
Compound	CAS Number	LQR	Unit	ES1322093-013	ES1322093-015	ES1322093-017	ES1322093-019	ES1322093-021
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-ODE	21955-73-2	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-d8	13127-88-3	0.1	%	—	108	—	112	—
2-Chlorophenol-D4	93951-73-6	0.1	%	—	112	—	102	—
2,4,6-Tribromophenol	118-79-6	0.1	%	—	93.3	—	84.6	—
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	—	98.2	—	101	—
Anthracene-d10	1719-08-8	0.1	%	—	92.7	—	90.6	—
4-Terphenyl-d14	1718-51-0	0.1	%	—	86.4	—	84.6	—
EP080S: TPH(V)BTX 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	LOD	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	959-99-8	0.05	mg/kg	---	<0.05	---	---	---
cis-Chlordane	5103-71-9	0.05	mg/kg	---	<0.05	---	---	---
Dieldrin	80-57-1	0.05	mg/kg	---	<0.05	---	---	---
4,4'-DDE	72-95-9	0.05	mg/kg	---	<0.05	---	---	---
Endrin	72-20-4	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: SOL (Matrix: SOL)				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	ES1322093-025	---	---	---	---
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	309-00-2/60-87-1	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	85-49-7	0.5	mg/kg	---	<0.5	---	---	---	---
3- & 4-Methylphenol	1319-77-3	1	mg/kg	---	<1	---	---	---	---
2-Nitrophenol	88-75-6	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	208-44-0	0.5	mg/kg	---	<0.5	---	---	---	---
Pyrene	129-00-0	0.5	mg/kg	---	<0.5	---	---	---	---
Benzo(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	207-06-9	0.5	mg/kg	---	<0.5	---	---	---	---



Analytical Results

Compound	CAS Number	LOR	Unit	Client sample ID		—	—	—
				BH1-0.5-09/10/13	BH1-1.0-09/10/13			
				Client sampling date / time				
Sub-Matrix: SOIL (Matrix: SOIL)				09-OCT-2013 15:00	09-OCT-2013 15:00	—	—	—
				ES1322093-025	ES1322093-026	—	—	—
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(a)pyrene	50-32-6	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)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: SOL (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	ES1322093-025	---	---	---
EP0685: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	---	74.9	---	---	---
EP0687: 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	%	---	160	---	---	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	---	98.9	---	---	---
Anthracene-d10	1719-05-9	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	2037-25-5	0.1	%	---	96.9	---	---	---
4-Bromofluorobenzene	480-00-4	0.1	%	---	104	---	---	---



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (µg)	
Compound	CAS Number	Low	High
EP0685: Organochlorine Pesticide Surrogate			
Dibromo-ODE	21855-73-2	49	147
EP0687: Organophosphorus Pesticide Surrogate			
DEF	78-49-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d8	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	126
4-Terphenyl-d14	1718-51-0	65	129
EP088S: TPH(V)BTX 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

CERTIFICATE OF ANALYSIS

Work Order	: ES1316167	Page	: 1 of 9
Client	: PORT KEMBLA COPPER	Laboratory	: Environmental Division Sydney
Contact	: MS CAROLINA OLMO	Contact	: Client Services
Address	: SYDNEY	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: colmos@goldier.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	: ---	Date Samples Received	: 17-JUL-2013
C-O-C number	: ---	Issue Date	: 24-JUL-2013
Sampler	: CO	No. of samples received	: 3
Site	: PHC-PRIMARY SCHOOL	No. of samples analysed	: 3
Quote number	: ---		

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 Accredited Laboratory #25

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	1660	---	---	---
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	14806-79-0	1	mg/L	122	697	---	---	---
ED045G: Chloride Discrete analyser								
Chloride	16987-00-0	1	mg/L	208	270	---	---	---
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	6	3	---	---	---
Magnesium	7439-95-4	1	mg/L	6	18	---	---	---
Sodium	7440-23-5	1	mg/L	189	682	---	---	---
Potassium	7440-09-7	1	mg/L	4	3	---	---	---
EG023F: 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	7782-48-2	0.01	mg/L	<0.01	<0.01	---	---	---
Zinc	7440-66-8	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	0.006	<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

Client sampling date / time

Compound	CAS Number	LOR	Unit	D1_17/07/13	D4_17/07/13	QC300_17/07/13	---	---
				17-JUL-2013 02:30	17-JUL-2013 03:30	17-JUL-2013 16:00	---	---
				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	0.016	<0.001	---	---
Lead	7439-92-1	0.001	mg/L	0.004	0.003	<0.001	---	---
Zinc	7440-66-6	0.005	mg/L	0.106	0.056	<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	0.46	<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	QC360_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	%	---	4.38	---	---	---	---	---
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	98-89-9	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	---	---
EP062B: 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	55-38-6	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	470-80-6	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	87-85-0	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	QC306_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	LDR	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	---	---
Benzo(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)lperylene	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								
C8 - 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	76-48-8	0.1	%	65.7	77.1	---	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-89-3	0.1	%	24.2	24.4	27.6	---	---	---
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	321-60-9	0.1	%	64.8	68.7	68.0	---	---	---
Anthracene-d10	1719-06-8	0.1	%	64.8	68.8	69.2	---	---	---
4-Terphenyl-d14	1718-51-0	0.1	%	64.2	62.4	64.6	---	---	---
EP060S: TPH(V)BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%	104	103	105	---	---	---
Toluene-D8	2037-26-5	0.1	%	113	116	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
EP066T: Organophosphorus Pesticide Surrogate			
DEF	78-48-6	26.8	129
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-89-3	10.0	44
2-Chlorophenol-D4	83951-73-6	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
EP060S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	490-00-4	70	128

Appendix D

Laboratory Results Summary Table

